



Full wwPDB EM Validation Report ⓘ

Mar 28, 2026 – 07:24 PM UTC

PDB ID : 7WFD / pdb_00007wfd
EMDB ID : EMD-32462
Title : Left PSI in the cyclic electron transport supercomplex NDH-PSI from Arabidopsis
Authors : Pan, X.; Li, M.
Deposited on : 2021-12-26
Resolution : 3.25 Å(reported)

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

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

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

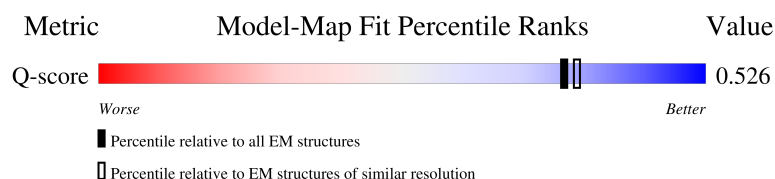
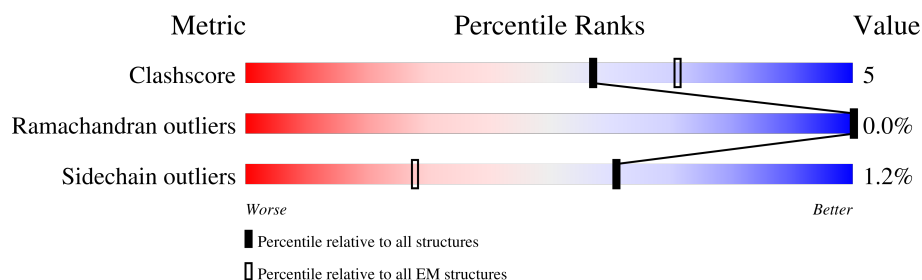
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 3.25 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	14599 (2.75 - 3.75)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. 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	AA	750	 88% 11% ..
2	AB	734	 86% 14%
3	AC	81	 77% 22% .
4	AD	204	 59% 9% 31%

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Mol	Chain	Length	Quality of chain
5	AE	143	
6	AF	221	
7	AG	160	
8	AH	145	
9	AI	37	
10	AJ	44	
11	AK	130	
12	AL	219	
13	A1	241	
14	A3	273	
15	A4	251	
16	A6	270	

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
17	CLA	A1	304	X	-	-	-
17	CLA	A1	305	X	-	-	-
17	CLA	A1	306	X	-	-	-
17	CLA	A1	307	X	-	-	-
17	CLA	A1	309	X	-	-	-
17	CLA	A1	310	X	-	-	-
17	CLA	A1	311	X	-	-	-
17	CLA	A1	312	X	-	-	-
17	CLA	A1	313	X	-	-	-
17	CLA	A1	314	X	-	-	-
17	CLA	A1	315	X	-	-	-
17	CLA	A1	316	X	-	-	-
17	CLA	A3	302	X	-	-	-
17	CLA	A3	303	X	-	-	-
17	CLA	A3	304	X	-	-	-
17	CLA	A3	305	X	-	-	-
17	CLA	A3	306	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
17	CLA	A3	308	X	-	-	-
17	CLA	A3	309	X	-	-	-
17	CLA	A3	310	X	-	-	-
17	CLA	A3	311	X	-	-	-
17	CLA	A3	312	X	-	-	-
17	CLA	A3	314	X	-	-	-
17	CLA	A3	315	X	-	-	-
17	CLA	A4	301	X	-	-	-
17	CLA	A4	302	X	-	-	-
17	CLA	A4	303	X	-	-	-
17	CLA	A4	307	X	-	-	-
17	CLA	A4	308	X	-	-	-
17	CLA	A4	309	X	-	-	-
17	CLA	A4	310	X	-	-	-
17	CLA	A4	311	X	-	-	-
17	CLA	A4	312	X	-	-	-
17	CLA	A4	313	X	-	-	-
17	CLA	A6	601	X	-	-	-
17	CLA	A6	602	X	-	-	-
17	CLA	A6	603	X	-	-	-
17	CLA	A6	604	X	-	-	-
17	CLA	A6	608	X	-	-	-
17	CLA	A6	609	X	-	-	-
17	CLA	A6	610	X	-	-	-
17	CLA	A6	611	X	-	-	-
17	CLA	A6	612	X	-	-	-
17	CLA	A6	613	X	-	-	-
17	CLA	AA	801	X	-	-	-
17	CLA	AA	802	X	-	-	-
17	CLA	AA	803	X	-	-	-
17	CLA	AA	805	X	-	-	-
17	CLA	AA	806	X	-	-	-
17	CLA	AA	807	X	-	-	-
17	CLA	AA	808	X	-	-	-
17	CLA	AA	809	X	-	-	-
17	CLA	AA	810	X	-	-	-
17	CLA	AA	811	X	-	-	-
17	CLA	AA	812	X	-	-	-
17	CLA	AA	813	X	-	-	-
17	CLA	AA	814	X	-	-	-
17	CLA	AA	816	X	-	-	-
17	CLA	AA	817	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
17	CLA	AA	819	X	-	-	-
17	CLA	AA	820	X	-	-	-
17	CLA	AA	821	X	-	-	-
17	CLA	AA	822	X	-	-	-
17	CLA	AA	823	X	-	-	-
17	CLA	AA	824	X	-	-	-
17	CLA	AA	825	X	-	-	-
17	CLA	AA	826	X	-	-	-
17	CLA	AA	827	X	-	-	-
17	CLA	AA	828	X	-	-	-
17	CLA	AA	829	X	-	-	-
17	CLA	AA	830	X	-	-	-
17	CLA	AA	831	X	-	-	-
17	CLA	AA	832	X	-	-	-
17	CLA	AA	833	X	-	-	-
17	CLA	AA	835	X	-	-	-
17	CLA	AA	837	X	-	-	-
17	CLA	AA	840	X	-	-	-
17	CLA	AA	842	X	-	-	-
17	CLA	AB	801	X	-	-	-
17	CLA	AB	802	X	-	-	-
17	CLA	AB	803	X	-	-	-
17	CLA	AB	804	X	-	-	-
17	CLA	AB	805	X	-	-	-
17	CLA	AB	806	X	-	-	-
17	CLA	AB	807	X	-	-	-
17	CLA	AB	809	X	-	-	-
17	CLA	AB	810	X	-	-	-
17	CLA	AB	811	X	-	-	-
17	CLA	AB	812	X	-	-	-
17	CLA	AB	813	X	-	-	-
17	CLA	AB	814	X	-	-	-
17	CLA	AB	815	X	-	-	-
17	CLA	AB	816	X	-	-	-
17	CLA	AB	817	X	-	-	-
17	CLA	AB	818	X	-	-	-
17	CLA	AB	819	X	-	-	-
17	CLA	AB	820	X	-	-	-
17	CLA	AB	821	X	-	-	-
17	CLA	AB	822	X	-	-	-
17	CLA	AB	824	X	-	-	-
17	CLA	AB	825	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
17	CLA	AB	826	X	-	-	-
17	CLA	AB	827	X	-	-	-
17	CLA	AB	828	X	-	-	-
17	CLA	AB	829	X	-	-	-
17	CLA	AB	830	X	-	-	-
17	CLA	AB	831	X	-	-	-
17	CLA	AB	833	X	-	-	-
17	CLA	AB	834	X	-	-	-
17	CLA	AB	837	X	-	-	-
17	CLA	AB	839	X	-	-	-
17	CLA	AB	840	X	-	-	-
17	CLA	AB	841	X	-	-	-
17	CLA	AB	842	X	-	-	-
17	CLA	AF	802	X	-	-	-
17	CLA	AF	803	X	-	-	-
17	CLA	AF	804	X	-	-	-
17	CLA	AG	201	X	-	-	-
17	CLA	AG	203	X	-	-	-
17	CLA	AG	204	X	-	-	-
17	CLA	AH	201	X	-	-	-
17	CLA	AJ	102	X	-	-	-
17	CLA	AK	201	X	-	-	-
17	CLA	AK	203	X	-	-	-
17	CLA	AK	204	X	-	-	-
17	CLA	AL	302	X	-	-	-
17	CLA	AL	304	X	-	-	-
26	CHL	A1	303	X	-	-	-
26	CHL	A1	308	X	-	-	-
26	CHL	A3	307	X	-	-	-
26	CHL	A3	320	X	-	-	-
26	CHL	A4	304	X	-	-	-
26	CHL	A4	305	X	-	-	-
26	CHL	A4	306	X	-	-	-
26	CHL	A4	314	X	-	-	-
26	CHL	A6	605	X	-	-	-
26	CHL	A6	606	X	-	-	-
26	CHL	A6	607	X	-	-	-

2 Entry composition

There are 27 unique types of molecules in this entry. The entry contains 35603 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called Photosystem I P700 chlorophyll a apoprotein A1.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	AA	742	Total	C	N	O	S	0	0
			5839	3826	992	1003	18		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
2	AB	734	Total	C	N	O	S	0	0
			5862	3847	999	1001	15		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
3	AC	80	Total	C	N	O	S	0	0
			615	381	107	116	11		

- Molecule 4 is a protein called Photosystem I reaction center subunit II-2, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	AD	141	Total	C	N	O	S	0	0
			1112	712	193	203	4		

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

Mol	Chain	Residues	Atoms				AltConf	Trace
5	AE	67	Total	C	N	O	0	0
			530	341	94	95		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
6	AF	153	Total	C	N	O	S	0	0
			1213	792	208	210	3		

- Molecule 7 is a protein called Photosystem I reaction center subunit V, chloroplastic.

Mol	Chain	Residues	Atoms				AltConf	Trace
7	AG	98	Total	C	N	O	0	0
			767	499	125	143		

- Molecule 8 is a protein called Photosystem I reaction center subunit VI-2, chloroplastic.

Mol	Chain	Residues	Atoms				AltConf	Trace
8	AH	95	Total	C	N	O	0	0
			730	476	119	135		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
9	AI	33	Total	C	N	O	S	0	0
			257	175	41	40	1		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
10	AJ	42	Total	C	N	O	S	0	0
			338	230	51	56	1		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
11	AK	65	Total	C	N	O	S	0	0
			451	290	74	84	3		

- Molecule 12 is a protein called Photosystem I reaction center subunit XI, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	AL	157	Total	C	N	O	S	0	0
			1173	775	187	209	2		

- Molecule 13 is a protein called Chlorophyll a-b binding protein 6, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	A1	196	Total	C	N	O	S	0	0
			1511	984	251	271	5		

- Molecule 14 is a protein called Photosystem I chlorophyll a/b-binding protein 3-1, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	A3	219	Total	C	N	O	S	0	0
			1675	1096	272	302	5		

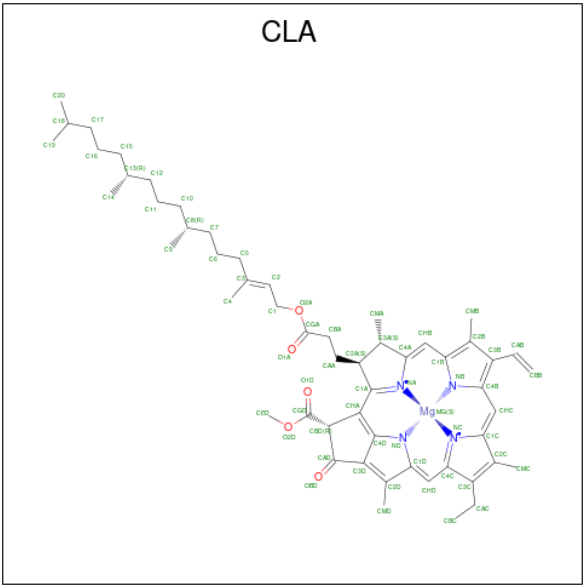
- Molecule 15 is a protein called Chlorophyll a-b binding protein 4, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	A4	197	Total	C	N	O	S	0	0
			1562	1022	254	283	3		

- Molecule 16 is a protein called Photosystem I chlorophyll a/b-binding protein 6, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	A6	212	Total	C	N	O	S	0	0
			1671	1088	272	299	12		

- Molecule 17 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
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			52	42	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			64	55	1	4	4	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
17	AA	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
17	AA	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
17	AA	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
17	AA	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AA	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			64	54	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
17	AB	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			51	42	1	4	4	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
17	AB	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
17	AB	1	Total	C	Mg	N	O	0
			62	52	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			62	52	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
17	AB	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AB	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	AF	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
17	AF	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
17	AF	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
17	AG	1	Total	C	Mg	N	O	0
			44	34	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
17	AG	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
17	AG	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
17	AH	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
17	AJ	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
17	AK	1	Total	C	Mg	N	O	0
			35	29	1	4	1	
17	AK	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
17	AK	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
17	AL	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
17	AL	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
17	AL	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
17	A1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
17	A1	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
17	A1	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
17	A1	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
17	A1	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
17	A1	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
17	A1	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
17	A1	1	Total	C	Mg	N	O	0
			38	30	1	4	3	
17	A1	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
17	A1	1	Total	C	Mg	N	O	0
			64	54	1	4	5	
17	A1	1	Total	C	Mg	N	O	0
			38	30	1	4	3	

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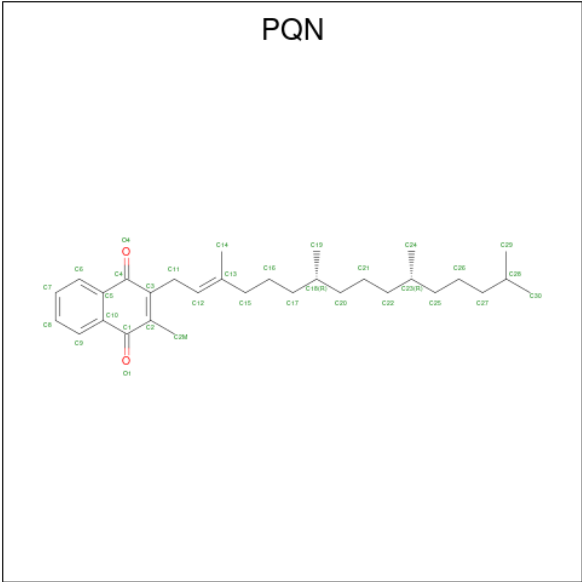
Mol	Chain	Residues	Atoms					AltConf
17	A1	1	Total	C	Mg	N	O	0
			43	33	1	4	5	
17	A3	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
17	A3	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
17	A3	1	Total	C	Mg	N	O	0
			42	32	1	4	5	
17	A3	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
17	A3	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
17	A3	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
17	A3	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
17	A3	1	Total	C	Mg	N	O	0
			37	31	1	4	1	
17	A3	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
17	A3	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
17	A3	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
17	A3	1	Total	C	Mg	N	O	0
			36	30	1	4	1	
17	A3	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
17	A4	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
17	A4	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
17	A4	1	Total	C	Mg	N	O	0
			43	33	1	4	5	
17	A4	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
17	A4	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
17	A4	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
17	A4	1	Total	C	Mg	N	O	0
			41	33	1	4	3	

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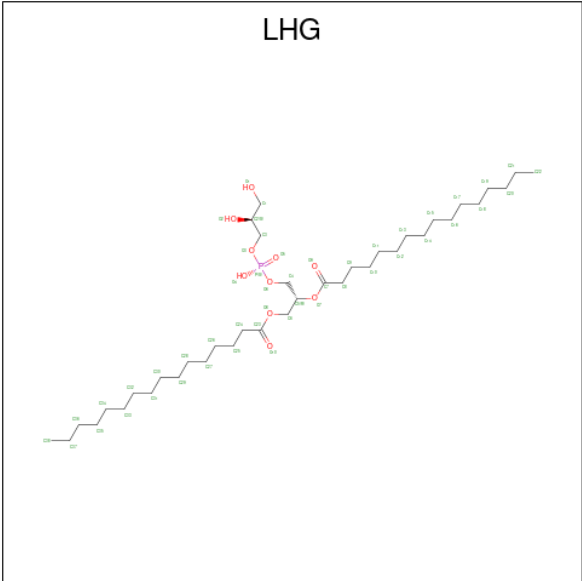
Mol	Chain	Residues	Atoms					AltConf
17	A4	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
17	A4	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
17	A4	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
17	A6	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
17	A6	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
17	A6	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
17	A6	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
17	A6	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
17	A6	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
17	A6	1	Total	C	Mg	N	O	0
			38	30	1	4	3	
17	A6	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
17	A6	1	Total	C	Mg	N	O	0
			64	55	1	4	4	
17	A6	1	Total	C	Mg	N	O	0
			43	35	1	4	3	

- Molecule 18 is PHYLLOQUINONE (CCD ID: PQN) (formula: $C_{31}H_{46}O_2$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms			AltConf
18	AA	1	Total	C	O	0
			33	31	2	
18	AB	1	Total	C	O	0
			33	31	2	

- Molecule 19 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (CCD ID: LHG) (formula: C₃₈H₇₅O₁₀P).



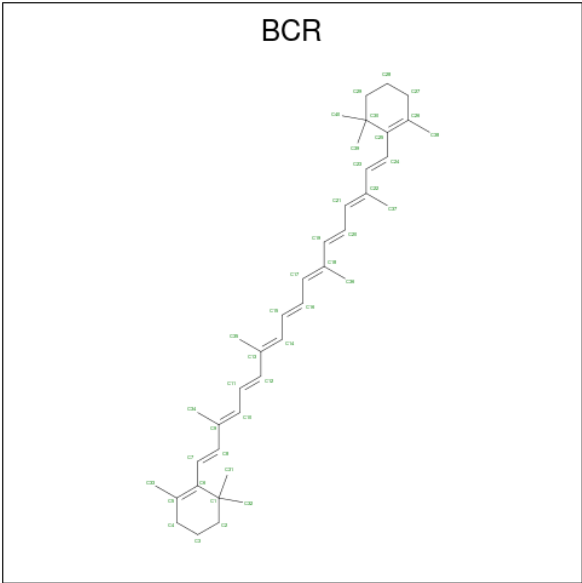
Mol	Chain	Residues	Atoms				AltConf
19	AA	1	Total	C	O	P	0
			49	38	10	1	

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Mol	Chain	Residues	Atoms				AltConf
19	AJ	1	Total	C	O	P	0
			40	29	10	1	
19	A1	1	Total	C	O	P	0
			38	27	10	1	
19	A1	1	Total	C	O	P	0
			36	25	10	1	
19	A1	1	Total	C	O	P	0
			49	38	10	1	
19	A3	1	Total	C	O	P	0
			36	25	10	1	
19	A3	1	Total	C	O	P	0
			23	12	10	1	
19	A6	1	Total	C	O	P	0
			36	25	10	1	

- Molecule 20 is BETA-CAROTENE (CCD ID: BCR) (formula: C₄₀H₅₆) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms		AltConf
20	AA	1	Total	C	0
			40	40	
20	AA	1	Total	C	0
			40	40	
20	AA	1	Total	C	0
			40	40	
20	AA	1	Total	C	0
			40	40	

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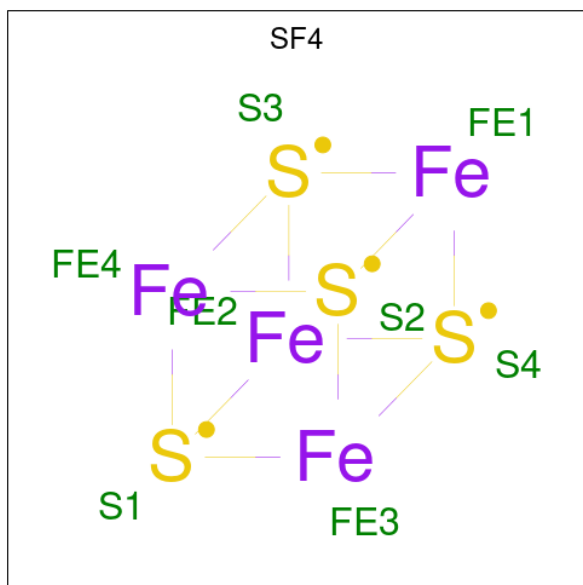
Mol	Chain	Residues	Atoms	AltConf
20	AA	1	Total C 40 40	0
20	AB	1	Total C 40 40	0
20	AB	1	Total C 40 40	0
20	AB	1	Total C 40 40	0
20	AB	1	Total C 40 40	0
20	AB	1	Total C 40 40	0
20	AB	1	Total C 40 40	0
20	AF	1	Total C 40 40	0
20	AF	1	Total C 40 40	0
20	AG	1	Total C 40 40	0
20	AI	1	Total C 40 40	0
20	AI	1	Total C 40 40	0
20	AJ	1	Total C 40 40	0
20	AJ	1	Total C 40 40	0
20	AK	1	Total C 40 40	0
20	AK	1	Total C 40 40	0
20	AL	1	Total C 40 40	0
20	AL	1	Total C 40 40	0
20	A1	1	Total C 40 40	0
20	A3	1	Total C 40 40	0
20	A4	1	Total C 40 40	0

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Mol	Chain	Residues	Atoms		AltConf
20	A6	1	Total	C	0
			40	40	

- Molecule 21 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4) (labeled as "Ligand of Interest" by depositor).



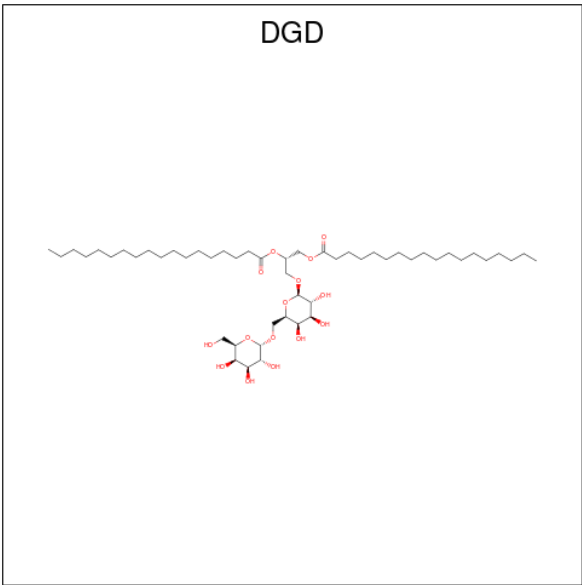
Mol	Chain	Residues	Atoms			AltConf
21	AA	1	Total	Fe	S	0
			8	4	4	
21	AC	1	Total	Fe	S	0
			8	4	4	
21	AC	1	Total	Fe	S	0
			8	4	4	

- Molecule 22 is DODECYL-ALPHA-D-MALTOSIDE (CCD ID: LMU) (formula: $\text{C}_{24}\text{H}_{46}\text{O}_{11}$).



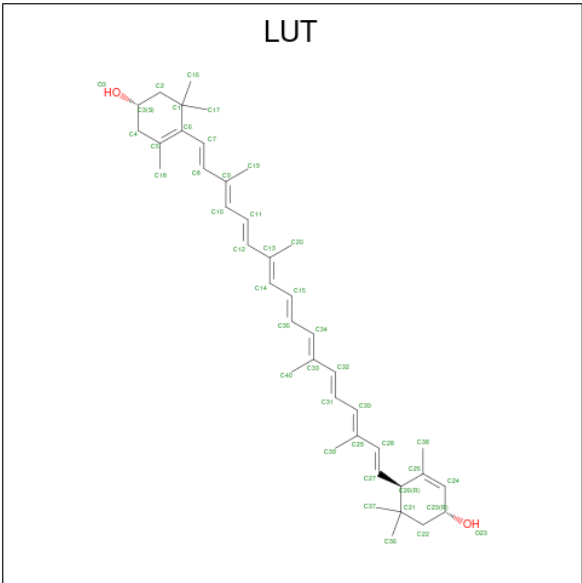
Mol	Chain	Residues	Atoms			AltConf
22	AA	1	Total 35	C 24	O 11	0
22	AB	1	Total 35	C 24	O 11	0
22	AB	1	Total 35	C 24	O 11	0
22	AB	1	Total 35	C 24	O 11	0
22	AL	1	Total 34	C 23	O 11	0

- Molecule 23 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (CCD ID: DGD) (formula: $C_{51}H_{96}O_{15}$).



Mol	Chain	Residues	Atoms			AltConf
23	AB	1	Total	C	O	0
			66	51	15	

- Molecule 24 is (3R,3'R,6S)-4,5-DIDEHYDRO-5,6-DIHYDRO-BETA,BETA-CAROTENE-3,3'-DIOL (CCD ID: LUT) (formula: C₄₀H₅₆O₂).



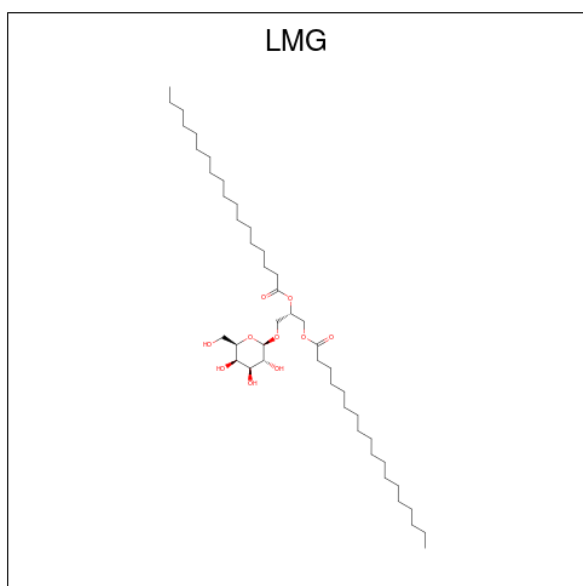
Mol	Chain	Residues	Atoms			AltConf
24	AF	1	Total	C	O	0
			42	40	2	
24	A1	1	Total	C	O	0
			42	40	2	

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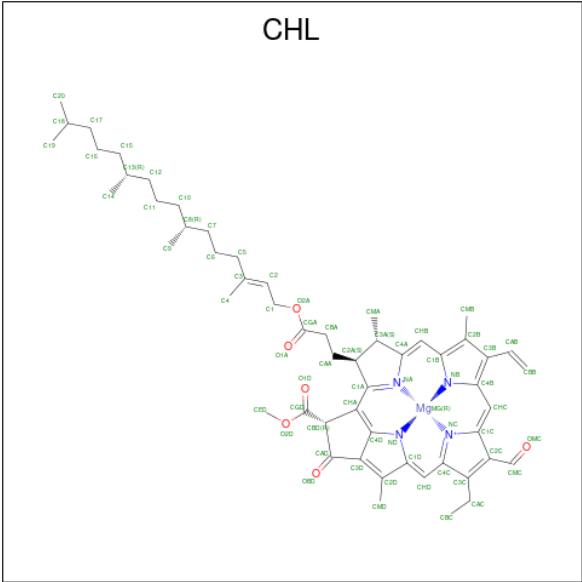
Mol	Chain	Residues	Atoms			AltConf
24	A3	1	Total	C	O	0
			42	40	2	
24	A4	1	Total	C	O	0
			42	40	2	
24	A6	1	Total	C	O	0
			42	40	2	

- Molecule 25 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (CCD ID: LMG) (formula: $C_{45}H_{86}O_{10}$).



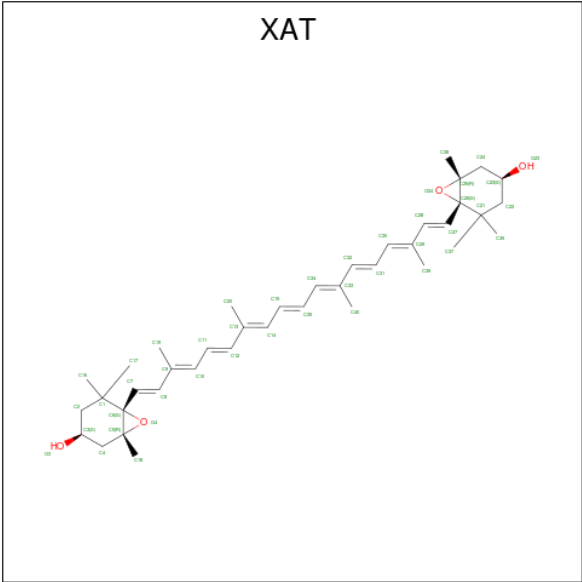
Mol	Chain	Residues	Atoms			AltConf
25	AG	1	Total	C	O	0
			38	28	10	
25	A1	1	Total	C	O	0
			44	34	10	
25	A4	1	Total	C	O	0
			39	29	10	

- Molecule 26 is CHLOROPHYLL B (CCD ID: CHL) (formula: $C_{55}H_{70}MgN_4O_6$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
26	A1	1	Total	C	Mg	N	O	0
			51	40	1	4	6	
26	A1	1	Total	C	Mg	N	O	0
			41	32	1	4	4	
26	A3	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
26	A3	1	Total	C	Mg	N	O	0
			52	41	1	4	6	
26	A4	1	Total	C	Mg	N	O	0
			41	32	1	4	4	
26	A4	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
26	A4	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
26	A4	1	Total	C	Mg	N	O	0
			41	32	1	4	4	
26	A6	1	Total	C	Mg	N	O	0
			42	33	1	4	4	
26	A6	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
26	A6	1	Total	C	Mg	N	O	0
			50	40	1	4	5	

- Molecule 27 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: C₄₀H₅₆O₄) (labeled as "Ligand of Interest" by depositor).

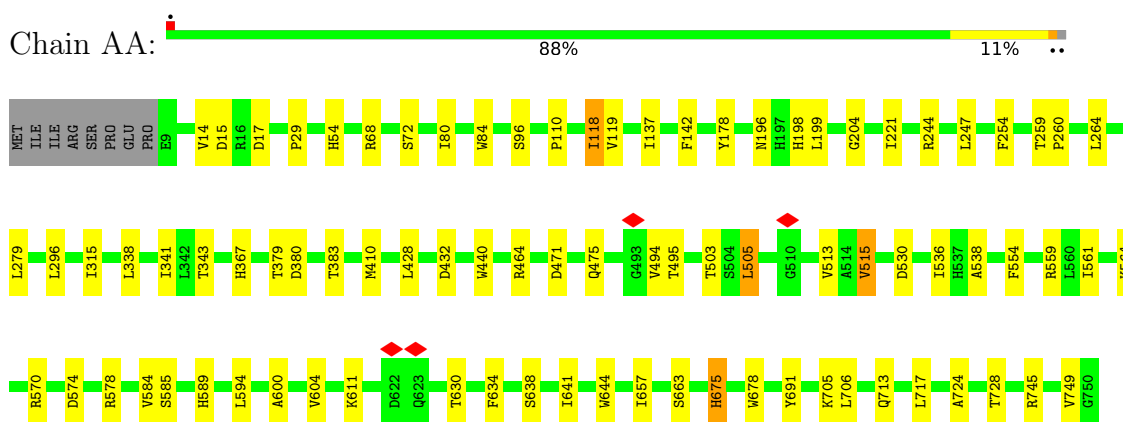


Mol	Chain	Residues	Atoms			AltConf
27	A1	1	Total	C	O	0
			44	40	4	
27	A3	1	Total	C	O	0
			44	40	4	
27	A4	1	Total	C	O	0
			44	40	4	
27	A6	1	Total	C	O	0
			44	40	4	

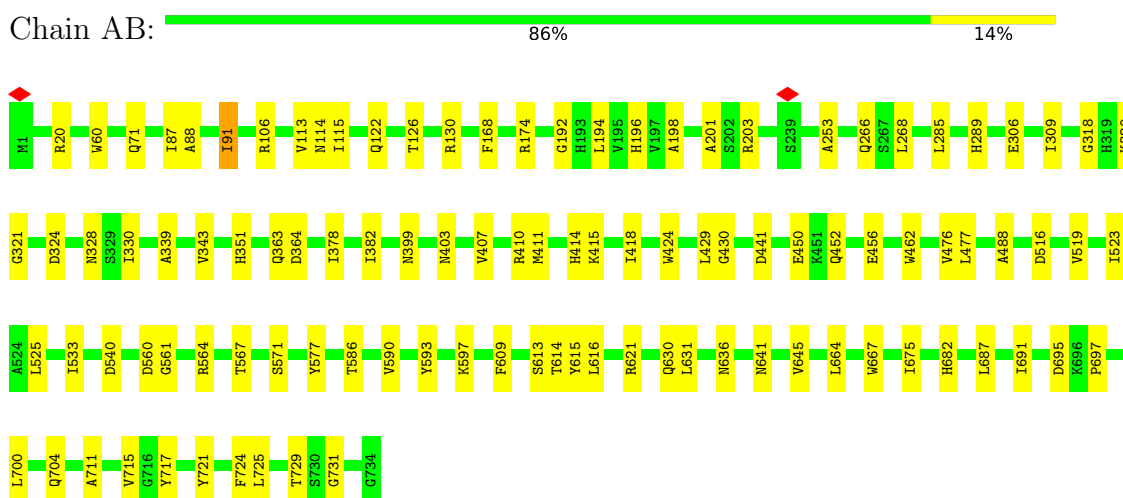
3 Residue-property plots

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

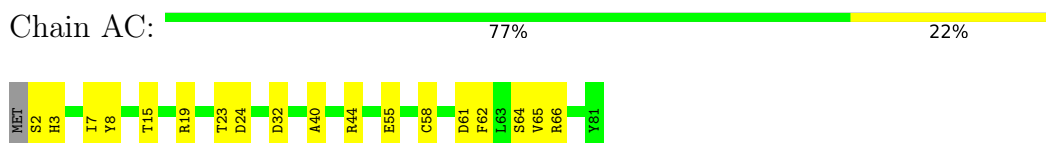
- Molecule 1: Photosystem I P700 chlorophyll a apoprotein A1




- Molecule 2: Photosystem I P700 chlorophyll a apoprotein A2



- Molecule 3: Photosystem I iron-sulfur center




- Molecule 9: Photosystem I reaction center subunit VIII

Chain AI:  89% 11%



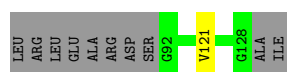
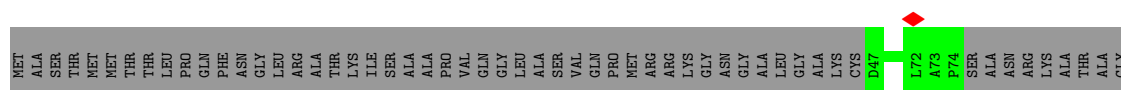
- Molecule 10: Photosystem I reaction center subunit IX

Chain AJ:  84% 11% 5%



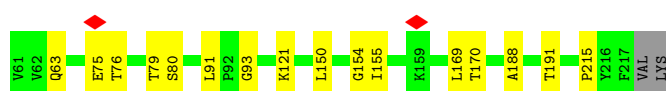
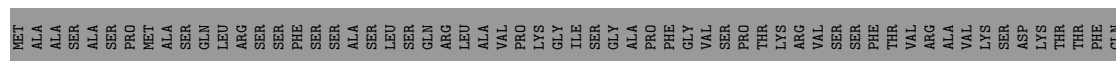
- Molecule 11: Photosystem I reaction center subunit psaK, chloroplastic

Chain AK:  49% 50%



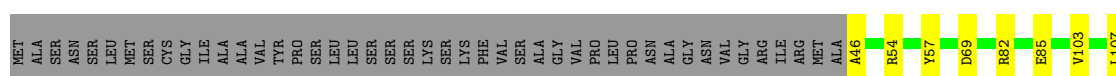
- Molecule 12: Photosystem I reaction center subunit XI, chloroplastic

Chain AL:  64% 7% 28%



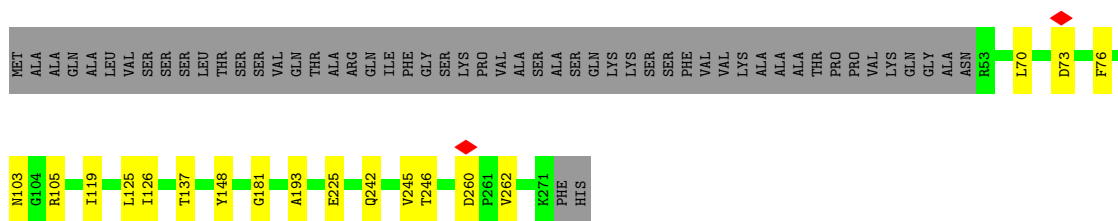
- Molecule 13: Chlorophyll a-b binding protein 6, chloroplastic

Chain A1:  71% 10% 19%



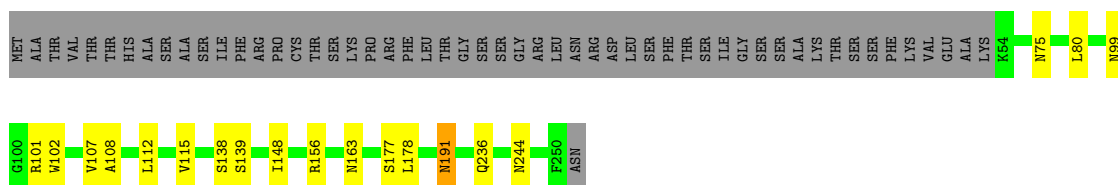
- Molecule 14: Photosystem I chlorophyll a/b-binding protein 3-1, chloroplastic

Chain A3:  74% 7% 20%



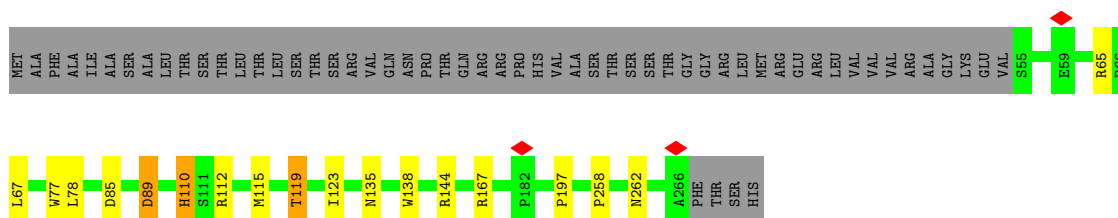
- Molecule 15: Chlorophyll a-b binding protein 4, chloroplastic

Chain A4: 71% 7% 22%



- Molecule 16: Photosystem I chlorophyll a/b-binding protein 6, chloroplastic

Chain A6: 72% 6% 21%



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	136022	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	60.0	Depositor
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	2500	Depositor
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.422	Depositor
Minimum map value	-0.153	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.007	Depositor
Recommended contour level	0.03	Depositor
Map size (Å)	416.0, 416.0, 416.0	wwPDB
Map dimensions	400, 400, 400	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.04, 1.04, 1.04	Depositor

5 Model quality [i](#)

5.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: LHG, BCR, CLA, LUT, LMU, XAT, PQN, DGD, LMG, SF4, CHL

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	AA	0.34	1/6037 (0.0%)	0.48	0/8236
2	AB	0.30	0/6073	0.44	0/8291
3	AC	0.23	0/628	0.43	0/852
4	AD	0.22	0/1140	0.45	0/1542
5	AE	0.20	0/542	0.36	0/736
6	AF	0.23	0/1243	0.44	0/1677
7	AG	0.41	1/787 (0.1%)	0.48	0/1067
8	AH	0.27	0/751	0.48	0/1018
9	AI	0.22	0/264	0.39	0/359
10	AJ	0.28	0/348	0.49	0/474
11	AK	0.22	0/456	0.40	0/617
12	AL	0.26	0/1208	0.47	1/1650 (0.1%)
13	A1	0.32	1/1562 (0.1%)	0.47	0/2131
14	A3	0.21	0/1726	0.41	0/2347
15	A4	0.27	0/1611	0.45	0/2194
16	A6	0.24	0/1732	0.46	0/2363
All	All	0.29	3/26108 (0.0%)	0.45	1/35554 (0.0%)

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	A1	103	VAL	CA-CB	8.52	1.58	1.54
7	AG	156	PRO	C-O	-6.93	1.15	1.24
1	AA	17	ASP	C-O	-5.00	1.21	1.23

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	AL	215	PRO	N-CA-C	-6.45	106.29	114.35

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts

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	AA	5839	0	5683	66	0
2	AB	5862	0	5649	93	0
3	AC	615	0	592	15	0
4	AD	1112	0	1122	10	0
5	AE	530	0	536	11	0
6	AF	1213	0	1243	9	0
7	AG	767	0	746	10	0
8	AH	730	0	720	7	0
9	AI	257	0	274	0	0
10	AJ	338	0	351	5	0
11	AK	451	0	462	1	0
12	AL	1173	0	1162	16	0
13	A1	1511	0	1464	13	0
14	A3	1675	0	1647	12	0
15	A4	1562	0	1516	16	0
16	A6	1671	0	1599	15	0
17	A1	575	0	447	7	0
17	A3	575	0	420	2	0
17	A4	480	0	376	6	0
17	A6	485	0	399	4	0
17	AA	2411	0	2371	30	0
17	AB	2452	0	2461	32	0
17	AF	140	0	113	1	0
17	AG	131	0	94	4	0
17	AH	60	0	59	0	0
17	AJ	42	0	31	0	0
17	AK	126	0	88	1	0
17	AL	143	0	119	1	0
18	AA	33	0	46	3	0
18	AB	33	0	46	2	0
19	A1	123	0	162	0	0
19	A3	59	0	58	1	0
19	A6	36	0	42	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
19	AA	49	0	74	1	0
19	AJ	40	0	53	0	0
20	A1	40	0	56	3	0
20	A3	40	0	56	2	0
20	A4	40	0	56	0	0
20	A6	40	0	56	3	0
20	AA	200	0	280	6	0
20	AB	240	0	336	9	0
20	AF	80	0	112	6	0
20	AG	40	0	56	1	0
20	AI	80	0	112	1	0
20	AJ	80	0	112	2	0
20	AK	80	0	112	2	0
20	AL	80	0	112	1	0
21	AA	8	0	0	0	0
21	AC	16	0	0	2	0
22	AA	35	0	46	0	0
22	AB	105	0	138	0	0
22	AL	34	0	41	1	0
23	AB	66	0	96	0	0
24	A1	42	0	56	1	0
24	A3	42	0	56	0	0
24	A4	42	0	56	3	0
24	A6	42	0	56	2	0
24	AF	42	0	56	2	0
25	A1	44	0	58	1	0
25	A4	39	0	48	4	0
25	AG	38	0	46	0	0
26	A1	92	0	60	2	0
26	A3	97	0	68	2	0
26	A4	169	0	100	2	0
26	A6	135	0	89	2	0
27	A1	44	0	56	1	0
27	A3	44	0	56	3	0
27	A4	44	0	56	2	0
27	A6	44	0	56	4	0
All	All	35603	0	34975	337	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 5.

All (337) 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)
2:AB:87:ILE:HG23	2:AB:113:VAL:CG1	1.58	1.33
7:AG:76:LEU:HD13	17:AG:204:CLA:HMB3	1.17	1.14
2:AB:87:ILE:CG2	2:AB:113:VAL:HG11	1.78	1.14
7:AG:76:LEU:HD13	17:AG:204:CLA:CMB	1.81	1.09
2:AB:106:ARG:CZ	2:AB:115:ILE:HG12	1.83	1.08
2:AB:687:LEU:HD21	12:AL:91:LEU:HD11	1.34	1.06
2:AB:87:ILE:HG23	2:AB:113:VAL:HG11	1.16	1.06
2:AB:476:VAL:HG12	2:AB:477:LEU:H	1.20	1.00
1:AA:247:LEU:HD21	1:AA:254:PHE:CE2	1.98	0.99
3:AC:7:ILE:HD12	3:AC:40:ALA:O	1.68	0.93
2:AB:87:ILE:CG2	2:AB:113:VAL:CG1	2.42	0.91
5:AE:87:VAL:HG21	5:AE:138:VAL:CG1	2.04	0.87
17:AA:801:CLA:HAA2	17:AA:801:CLA:HED2	1.60	0.83
3:AC:7:ILE:CD1	3:AC:40:ALA:O	2.28	0.81
2:AB:476:VAL:HG12	2:AB:477:LEU:N	1.95	0.80
2:AB:476:VAL:CG1	2:AB:477:LEU:H	1.94	0.80
5:AE:87:VAL:CG2	5:AE:138:VAL:CG1	2.65	0.73
4:AD:107:GLU:O	4:AD:137:ARG:NH1	2.21	0.73
1:AA:570:ARG:NH1	19:AA:844:LHG:O10	2.23	0.71
7:AG:88:ARG:NH2	7:AG:131:ASP:OD2	2.24	0.71
1:AA:713:GLN:NE2	5:AE:95:TYR:OH	2.23	0.71
3:AC:7:ILE:HG12	3:AC:65:VAL:HA	1.74	0.70
8:AH:71:TRP:HD1	12:AL:169:LEU:HD11	1.55	0.70
1:AA:118:ILE:HD13	1:AA:119:VAL:HG13	1.73	0.70
1:AA:247:LEU:CD2	1:AA:254:PHE:CE2	2.76	0.68
2:AB:106:ARG:CZ	2:AB:115:ILE:CG1	2.68	0.68
1:AA:247:LEU:CD2	1:AA:254:PHE:CD2	2.78	0.67
1:AA:96:SER:OG	1:AA:142:PHE:HZ	1.79	0.66
15:A4:101:ARG:NH2	26:A4:306:CHL:OBD	2.29	0.66
25:A4:318:LMG:H292	20:A6:616:BCR:H332	1.77	0.66
3:AC:55:GLU:OE2	3:AC:66:ARG:NH2	2.30	0.65
1:AA:338:LEU:HD23	1:AA:341:ILE:HD11	1.79	0.65
2:AB:87:ILE:HG23	2:AB:113:VAL:HG13	1.73	0.65
17:AB:834:CLA:O1A	10:AJ:30:ASN:ND2	2.29	0.65
2:AB:113:VAL:HG12	2:AB:114:ASN:N	2.10	0.65
2:AB:523:ILE:HG12	2:AB:590:VAL:HG12	1.78	0.64
13:A1:209:GLN:NE2	13:A1:213:PRO:O	2.30	0.64
2:AB:456:GLU:OE1	6:AF:137:HIS:ND1	2.31	0.64
1:AA:72:SER:OG	17:AA:811:CLA:HMD2	1.98	0.63
17:AF:803:CLA:HMB1	10:AJ:26:LEU:HD21	1.81	0.63
17:A4:311:CLA:HMB1	24:A4:315:LUT:H7	1.80	0.63
2:AB:87:ILE:HG21	2:AB:113:VAL:HG11	1.77	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:96:SER:OG	1:AA:142:PHE:CZ	2.53	0.62
2:AB:106:ARG:NH2	2:AB:115:ILE:HG12	2.15	0.62
1:AA:247:LEU:HD21	1:AA:254:PHE:CD2	2.35	0.61
4:AD:98:TRP:NE1	4:AD:116:MET:SD	2.72	0.61
2:AB:87:ILE:HD12	2:AB:113:VAL:HG11	1.82	0.61
1:AA:494:VAL:HG13	1:AA:495:THR:HG23	1.81	0.61
1:AA:536:ILE:HG23	17:AA:801:CLA:H193	1.83	0.61
2:AB:106:ARG:NH1	2:AB:115:ILE:HG12	2.15	0.61
1:AA:594:LEU:HD21	17:AA:830:CLA:HBC1	1.83	0.60
17:AB:801:CLA:O1D	20:AF:801:BCR:H401	2.00	0.60
2:AB:351:HIS:ND1	17:AB:818:CLA:OBD	2.35	0.60
2:AB:687:LEU:HD21	12:AL:91:LEU:CD1	2.20	0.60
13:A1:237:VAL:O	17:A1:316:CLA:NB	2.35	0.59
2:AB:87:ILE:HD12	2:AB:113:VAL:CG1	2.32	0.59
17:AB:822:CLA:CAD	20:AB:844:BCR:H312	2.33	0.59
5:AE:87:VAL:HG21	5:AE:138:VAL:HG12	1.84	0.59
16:A6:135:ASN:O	16:A6:144:ARG:NH2	2.36	0.59
7:AG:120:LYS:HG2	7:AG:120:LYS:O	2.03	0.59
1:AA:84:TRP:HZ3	20:AA:846:BCR:H322	1.68	0.58
13:A1:119:ALA:HB1	13:A1:138:LEU:HD13	1.85	0.58
8:AH:117:TYR:O	8:AH:121:ASN:ND2	2.36	0.58
13:A1:237:VAL:HG23	13:A1:238:ILE:HD12	1.86	0.58
5:AE:87:VAL:CG2	5:AE:138:VAL:HG12	2.33	0.58
6:AF:143:ASP:OD2	6:AF:145:ARG:NE	2.36	0.57
1:AA:259:THR:HG23	1:AA:260:PRO:HD3	1.84	0.57
20:AA:847:BCR:H383	20:AA:847:BCR:H23C	1.87	0.57
2:AB:122:GLN:NE2	2:AB:364:ASP:OD2	2.37	0.57
13:A1:46:ALA:O	13:A1:54:ARG:NH2	2.38	0.57
1:AA:72:SER:OG	17:AA:811:CLA:CMD	2.53	0.56
2:AB:266:GLN:OE1	2:AB:363:GLN:NE2	2.38	0.56
2:AB:450:GLU:OE2	6:AF:119:ARG:NE	2.38	0.56
17:AA:828:CLA:H11	20:AA:849:BCR:H323	1.88	0.56
2:AB:418:ILE:HG23	17:AB:839:CLA:CBB	2.36	0.56
12:AL:169:LEU:HD12	12:AL:170:THR:O	2.05	0.56
26:A1:303:CHL:OBD	15:A4:156:ARG:NH2	2.37	0.56
1:AA:675:HIS:HD1	17:AB:802:CLA:HED2	1.69	0.56
14:A3:245:VAL:HG13	14:A3:246:THR:HG23	1.86	0.56
17:AB:834:CLA:H41	10:AJ:26:LEU:HD23	1.88	0.56
15:A4:75:ASN:HD21	25:A4:318:LMG:HC61	1.69	0.56
12:AL:169:LEU:CD1	12:AL:170:THR:O	2.54	0.56
4:AD:203:ASP:O	4:AD:204:LEU:HG	2.04	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:AK:204:CLA:HMC3	20:AK:205:BCR:H332	1.88	0.56
19:A3:301:LHG:O3	19:A3:301:LHG:O1	2.22	0.55
17:AB:827:CLA:H142	20:AB:847:BCR:C21	2.36	0.55
1:AA:96:SER:HG	1:AA:142:PHE:HZ	1.45	0.55
13:A1:169:GLY:N	17:A1:311:CLA:OBD	2.39	0.55
14:A3:103:ASN:ND2	17:A3:308:CLA:OBD	2.40	0.55
2:AB:113:VAL:CG1	2:AB:114:ASN:N	2.70	0.55
2:AB:87:ILE:HG23	2:AB:113:VAL:HG12	1.76	0.55
1:AA:464:ARG:NH2	17:AA:834:CLA:O1D	2.41	0.54
1:AA:503:THR:HG21	17:AA:835:CLA:HMA2	1.90	0.54
20:AK:205:BCR:H383	20:AK:205:BCR:H23C	1.88	0.54
13:A1:107:LEU:HD12	13:A1:108:GLY:N	2.23	0.54
2:AB:415:LYS:NZ	2:AB:540:ASP:OD1	2.32	0.54
1:AA:247:LEU:HD23	1:AA:254:PHE:CD2	2.43	0.54
2:AB:418:ILE:HG23	17:AB:839:CLA:HBB2	1.90	0.54
2:AB:615:TYR:OH	2:AB:621:ARG:NH2	2.40	0.54
3:AC:7:ILE:HG22	3:AC:8:TYR:N	2.22	0.54
1:AA:244:ARG:NH2	17:AA:815:CLA:OBD	2.41	0.54
7:AG:76:LEU:HD13	17:AG:204:CLA:HMB2	1.81	0.54
13:A1:82:ARG:NH1	17:A1:305:CLA:O1A	2.41	0.53
1:AA:471:ASP:O	1:AA:475:GLN:NE2	2.42	0.53
8:AH:74:TYR:OH	12:AL:79:THR:OG1	2.25	0.53
4:AD:100:SER:OG	4:AD:102:LYS:O	2.27	0.53
2:AB:71:GLN:NE2	17:AB:808:CLA:O1D	2.40	0.53
2:AB:122:GLN:O	2:AB:126:THR:OG1	2.22	0.53
3:AC:64:SER:OG	21:AC:102:SF4:S3	2.67	0.53
15:A4:99:ASN:ND2	17:A4:307:CLA:OBD	2.42	0.52
15:A4:138:SER:OG	15:A4:139:SER:N	2.41	0.52
1:AA:247:LEU:HD21	1:AA:254:PHE:CZ	2.44	0.52
17:AB:833:CLA:CGA	20:AF:801:BCR:H353	2.39	0.52
16:A6:65:ARG:NH2	16:A6:78:LEU:O	2.43	0.52
2:AB:324:ASP:O	2:AB:328:ASN:ND2	2.43	0.52
3:AC:61:ASP:OD2	5:AE:91:ARG:NH1	2.42	0.52
2:AB:399:ASN:O	2:AB:403:ASN:ND2	2.43	0.52
2:AB:441:ASP:OD1	2:AB:616:LEU:N	2.42	0.52
12:AL:93:GLY:N	17:AL:303:CLA:OBD	2.42	0.52
1:AA:279:LEU:HD22	1:AA:505:LEU:HD11	1.91	0.52
12:AL:121:LYS:O	22:AL:301:LMU:O3'	2.27	0.51
2:AB:641:ASN:OD1	2:AB:641:ASN:N	2.43	0.51
3:AC:15:THR:O	3:AC:19:ARG:NH2	2.43	0.51
2:AB:168:PHE:O	2:AB:174:ARG:NH1	2.41	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:519:VAL:HG21	2:AB:593:TYR:HB2	1.92	0.51
1:AA:15:ASP:OD2	1:AA:68:ARG:NH2	2.44	0.51
17:A1:314:CLA:HMB1	24:A1:317:LUT:H7	1.92	0.51
1:AA:110:PRO:O	1:AA:137:ILE:N	2.44	0.50
2:AB:328:ASN:ND2	7:AG:100:ASN:OD1	2.44	0.50
2:AB:418:ILE:HG21	20:AB:847:BCR:H282	1.93	0.50
2:AB:452:GLN:NE2	2:AB:614:THR:OG1	2.43	0.50
5:AE:87:VAL:CG2	5:AE:138:VAL:HG13	2.39	0.50
20:AB:845:BCR:H382	20:AB:845:BCR:H23C	1.92	0.50
14:A3:105:ARG:NH1	26:A3:307:CHL:OBD	2.42	0.50
17:A3:304:CLA:NB	20:A3:318:BCR:H392	2.27	0.50
1:AA:644:TRP:HB3	17:AA:801:CLA:H101	1.94	0.50
15:A4:102:TRP:CE2	26:A4:306:CHL:HED2	2.46	0.50
2:AB:318:GLY:O	2:AB:407:VAL:N	2.42	0.50
2:AB:130:ARG:NH1	2:AB:201:ALA:O	2.40	0.50
15:A4:163:ASN:OD1	15:A4:163:ASN:N	2.44	0.50
2:AB:516:ASP:OD2	2:AB:597:LYS:NZ	2.42	0.50
8:AH:100:ARG:HD2	12:AL:155:ILE:HG13	1.94	0.50
17:AB:840:CLA:HAB	18:AB:843:PQN:H141	1.94	0.49
2:AB:410:ARG:O	2:AB:414:HIS:ND1	2.41	0.49
2:AB:630:GLN:NE2	2:AB:731:GLY:O	2.46	0.49
20:AB:846:BCR:H383	20:AB:846:BCR:H23C	1.94	0.49
1:AA:54:HIS:ND1	17:AA:806:CLA:O1A	2.38	0.49
2:AB:113:VAL:CG1	2:AB:114:ASN:H	2.26	0.49
13:A1:137:THR:HG23	13:A1:138:LEU:H	1.76	0.49
14:A3:181:GLY:HA3	14:A3:193:ALA:HB2	1.95	0.49
16:A6:119:THR:OG1	24:A6:614:LUT:H401	2.13	0.49
2:AB:339:ALA:HB2	20:AB:848:BCR:H372	1.94	0.49
1:AA:644:TRP:CZ2	17:AA:801:CLA:H142	2.48	0.48
14:A3:137:THR:HG21	27:A3:317:XAT:O3	2.12	0.48
16:A6:115:MET:O	16:A6:119:THR:OG1	2.28	0.48
20:AJ:101:BCR:H23C	20:AJ:101:BCR:H403	1.96	0.48
12:AL:169:LEU:HD12	12:AL:169:LEU:C	2.38	0.48
3:AC:2:SER:OG	3:AC:3:HIS:N	2.46	0.48
2:AB:488:ALA:HB2	7:AG:158:PHE:CE1	2.49	0.48
2:AB:700:LEU:HD21	18:AB:843:PQN:H152	1.94	0.48
1:AA:367:HIS:ND1	17:AA:818:CLA:OBD	2.47	0.48
2:AB:586:THR:O	2:AB:590:VAL:HG13	2.13	0.48
2:AB:609:PHE:O	2:AB:613:SER:OG	2.24	0.48
20:AI:102:BCR:HC8	20:AI:102:BCR:H311	1.95	0.48
3:AC:7:ILE:CG2	3:AC:8:TYR:N	2.77	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:131:ARG:NE	8:AH:134:GLN:OE1	2.46	0.48
15:A4:191:ASN:ND2	17:A4:308:CLA:HBD	2.29	0.48
3:AC:61:ASP:OD1	3:AC:62:PHE:N	2.45	0.47
1:AA:196:ASN:HB3	17:AA:820:CLA:HMD1	1.95	0.47
2:AB:462:TRP:NE1	2:AB:476:VAL:HG21	2.29	0.47
5:AE:137:GLU:C	5:AE:138:VAL:HG23	2.39	0.47
20:AF:805:BCR:H383	20:AF:805:BCR:H23C	1.96	0.47
20:AF:801:BCR:H383	20:AF:801:BCR:H23C	1.96	0.47
1:AA:198:HIS:ND1	17:AA:825:CLA:OBD	2.47	0.47
26:A3:320:CHL:HAB	19:A6:617:LHG:H301	1.96	0.47
16:A6:110:HIS:CE1	17:A6:603:CLA:NB	2.83	0.47
1:AA:561:ILE:HD12	1:AA:584:VAL:HG11	1.96	0.47
2:AB:106:ARG:NH1	2:AB:115:ILE:CG1	2.77	0.47
2:AB:462:TRP:CD1	2:AB:476:VAL:HG21	2.50	0.47
15:A4:177:SER:OG	15:A4:178:LEU:N	2.47	0.47
1:AA:14:VAL:HG11	17:AA:810:CLA:HED3	1.96	0.47
2:AB:91:ILE:HD12	17:AB:810:CLA:C2D	2.45	0.47
12:AL:188:ALA:O	12:AL:191:THR:OG1	2.26	0.47
2:AB:700:LEU:HD22	2:AB:704:GLN:NE2	2.31	0.47
16:A6:138:TRP:HE3	27:A6:615:XAT:H173	1.81	0.47
2:AB:60:TRP:NE1	17:AB:828:CLA:OBD	2.48	0.46
3:AC:58:CYS:SG	3:AC:64:SER:OG	2.73	0.46
20:AL:305:BCR:H392	20:AL:305:BCR:H23C	1.97	0.46
12:AL:63:GLN:O	12:AL:75:GLU:N	2.48	0.46
17:AA:801:CLA:HMB3	17:AB:802:CLA:OBD	2.14	0.46
4:AD:138:LEU:HD22	4:AD:144:ILE:HD11	1.97	0.46
2:AB:519:VAL:HG23	17:AB:803:CLA:H141	1.98	0.46
17:AA:801:CLA:HED3	17:AA:801:CLA:HBD	1.58	0.46
20:AB:844:BCR:H383	20:AB:844:BCR:H23C	1.97	0.46
16:A6:138:TRP:CE3	27:A6:615:XAT:H173	2.50	0.46
1:AA:440:TRP:NE1	17:AA:833:CLA:OBD	2.46	0.46
5:AE:87:VAL:HG22	5:AE:138:VAL:CG1	2.45	0.46
1:AA:678:TRP:HZ3	17:AB:802:CLA:HMD3	1.80	0.46
20:AA:849:BCR:H362	17:AB:802:CLA:H43	1.96	0.46
1:AA:343:THR:O	17:AA:825:CLA:H192	2.16	0.46
12:AL:76:THR:O	12:AL:80:SER:OG	2.30	0.46
25:A4:318:LMG:C29	20:A6:616:BCR:H332	2.46	0.46
1:AA:574:ASP:OD2	1:AA:578:ARG:NH2	2.45	0.46
3:AC:32:ASP:OD1	3:AC:32:ASP:N	2.44	0.46
20:AG:205:BCR:H383	20:AG:205:BCR:H23C	1.96	0.46
5:AE:87:VAL:HG22	5:AE:138:VAL:HG13	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:A6:77:TRP:NE1	16:A6:89:ASP:OD2	2.45	0.46
1:AA:538:ALA:HB2	17:AA:838:CLA:HMA1	1.98	0.45
3:AC:23:THR:OG1	21:AC:101:SF4:S1	2.74	0.45
1:AA:706:LEU:HD21	20:AF:805:BCR:C34	2.46	0.45
20:AA:848:BCR:H392	20:AA:848:BCR:H23C	1.97	0.45
2:AB:636:ASN:OD1	2:AB:636:ASN:N	2.47	0.45
17:AB:834:CLA:O1D	10:AJ:36:ALA:N	2.49	0.45
7:AG:76:LEU:CD1	17:AG:204:CLA:HMB3	2.12	0.45
14:A3:137:THR:OG1	14:A3:148:TYR:OH	2.32	0.45
1:AA:561:ILE:CD1	1:AA:584:VAL:HG11	2.47	0.45
17:AB:827:CLA:H142	20:AB:847:BCR:C22	2.46	0.45
17:AA:801:CLA:H102	17:AA:801:CLA:H62	1.69	0.45
8:AH:66:ASN:HA	8:AH:71:TRP:HE1	1.82	0.45
1:AA:264:LEU:HD13	11:AK:121:VAL:HG21	1.98	0.45
2:AB:561:GLY:O	2:AB:567:THR:OG1	2.34	0.45
8:AH:100:ARG:NH1	12:AL:154:GLY:O	2.50	0.45
17:AA:801:CLA:HMB1	17:AA:801:CLA:HBB1	1.98	0.45
2:AB:560:ASP:OD2	2:AB:564:ARG:NH1	2.49	0.45
5:AE:89:ILE:HG22	5:AE:91:ARG:H	1.81	0.45
15:A4:107:VAL:HG11	24:A4:315:LUT:H12	1.99	0.45
2:AB:411:MET:HE1	17:AB:831:CLA:CHD	2.47	0.45
12:AL:91:LEU:HD12	12:AL:93:GLY:H	1.81	0.44
13:A1:57:TYR:OH	13:A1:69:ASP:OD2	2.25	0.44
15:A4:75:ASN:N	17:A4:301:CLA:OBD	2.50	0.44
17:A4:309:CLA:HBC3	25:A4:318:LMG:H112	1.99	0.44
2:AB:645:VAL:HG21	17:AB:809:CLA:HAC1	1.98	0.44
13:A1:121:LEU:HD12	13:A1:121:LEU:O	2.16	0.44
2:AB:113:VAL:HG12	2:AB:114:ASN:H	1.79	0.44
6:AF:133:ASP:OD1	6:AF:133:ASP:N	2.50	0.44
15:A4:80:LEU:HD12	27:A4:316:XAT:H372	1.98	0.44
15:A4:191:ASN:HD22	15:A4:191:ASN:HA	1.64	0.44
2:AB:174:ARG:HB2	17:AB:814:CLA:HBC2	1.99	0.44
2:AB:343:VAL:CG2	20:AB:848:BCR:H362	2.47	0.44
4:AD:85:LEU:O	4:AD:89:GLN:NE2	2.51	0.44
1:AA:380:ASP:OD2	1:AA:383:THR:OG1	2.21	0.44
2:AB:721:TYR:HB2	17:AB:803:CLA:HED3	1.99	0.44
14:A3:260:ASP:O	14:A3:262:VAL:N	2.47	0.44
2:AB:115:ILE:O	17:AB:809:CLA:HMD2	2.18	0.44
2:AB:664:LEU:O	2:AB:667:TRP:NE1	2.51	0.44
27:A6:615:XAT:H35	27:A6:615:XAT:H401	1.87	0.44
2:AB:268:LEU:HD13	17:AB:818:CLA:HMA2	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:675:ILE:HG21	2:AB:697:PRO:O	2.18	0.43
24:AF:806:LUT:H373	25:A1:321:LMG:C28	2.48	0.43
10:AJ:7:TYR:O	10:AJ:10:VAL:HG12	2.17	0.43
13:A1:215:THR:OG1	13:A1:216:GLY:N	2.50	0.43
15:A4:236:GLN:O	15:A4:244:ASN:ND2	2.50	0.43
2:AB:20:ARG:NH2	2:AB:695:ASP:OD1	2.48	0.43
2:AB:88:ALA:N	2:AB:114:ASN:O	2.46	0.43
7:AG:99:GLN:N	7:AG:102:LYS:O	2.51	0.43
26:A1:303:CHL:HMB2	17:A4:313:CLA:O1D	2.18	0.43
17:A1:306:CLA:C1B	20:A1:319:BCR:H392	2.48	0.43
1:AA:379:THR:HG21	1:AA:515:VAL:HG22	2.00	0.43
1:AA:585:SER:O	1:AA:589:HIS:ND1	2.43	0.43
2:AB:717:TYR:CE1	17:AB:803:CLA:HED1	2.54	0.43
4:AD:132:LEU:HD23	4:AD:132:LEU:O	2.18	0.43
16:A6:197:PRO:HB3	26:A6:607:CHL:HBC2	2.00	0.43
14:A3:105:ARG:NH2	14:A3:225:GLU:OE2	2.51	0.43
1:AA:432:ASP:OD2	1:AA:559:ARG:NH2	2.48	0.43
6:AF:118:ARG:O	6:AF:122:ASN:ND2	2.48	0.43
17:AA:841:CLA:H143	18:AA:843:PQN:H291	2.00	0.43
2:AB:203:ARG:NH1	2:AB:253:ALA:O	2.47	0.43
1:AA:29:PRO:HA	17:AA:803:CLA:HBC1	2.01	0.43
20:A6:616:BCR:H321	20:A6:616:BCR:HC8	2.00	0.43
1:AA:634:PHE:O	1:AA:638:SER:OG	2.30	0.43
1:AA:536:ILE:HD12	17:AA:801:CLA:H172	2.01	0.43
1:AA:705:LYS:NZ	6:AF:220:ASP:OD2	2.51	0.43
1:AA:745:ARG:O	1:AA:749:VAL:HG22	2.19	0.43
20:A1:319:BCR:H382	20:A1:319:BCR:H23C	2.01	0.43
14:A3:125:LEU:O	14:A3:126:ILE:HG23	2.18	0.43
27:A4:316:XAT:C28	27:A4:316:XAT:H381	2.49	0.43
1:AA:530:ASP:OD2	1:AA:611:LYS:NZ	2.44	0.43
2:AB:429:LEU:HD11	17:AB:838:CLA:HMB2	2.01	0.43
2:AB:631:LEU:HD22	2:AB:724:PHE:HA	1.99	0.43
14:A3:76:PHE:CE2	27:A3:317:XAT:H383	2.54	0.42
17:AA:801:CLA:H2	17:AA:802:CLA:O1D	2.20	0.42
2:AB:378:ILE:HG22	2:AB:382:ILE:HD12	2.02	0.42
2:AB:309:ILE:HD11	2:AB:320:LYS:HB2	2.01	0.42
27:A3:317:XAT:H31	27:A3:317:XAT:H391	1.95	0.42
1:AA:199:LEU:O	1:AA:204:GLY:N	2.53	0.42
1:AA:513:VAL:HG23	1:AA:513:VAL:O	2.20	0.42
2:AB:285:LEU:O	2:AB:289:HIS:ND1	2.51	0.42
2:AB:351:HIS:CE1	17:AB:827:CLA:NB	2.88	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:430:GLY:HA2	2:AB:525:LEU:HD22	2.00	0.42
18:AA:843:PQN:H193	20:AF:801:BCR:H383	2.02	0.42
2:AB:725:LEU:O	2:AB:729:THR:OG1	2.29	0.42
14:A3:70:LEU:N	14:A3:73:ASP:OD2	2.49	0.42
1:AA:296:LEU:HD21	17:AA:817:CLA:HMB1	2.01	0.42
2:AB:519:VAL:HG11	2:AB:593:TYR:CD1	2.54	0.42
6:AF:104:ALA:HB3	6:AF:105:PRO:HD3	2.02	0.42
14:A3:242:GLN:HA	14:A3:245:VAL:HG12	2.02	0.42
15:A4:112:LEU:HA	15:A4:115:VAL:HG22	2.01	0.42
1:AA:724:ALA:O	1:AA:728:THR:OG1	2.34	0.41
7:AG:120:LYS:O	7:AG:120:LYS:CG	2.68	0.41
16:A6:112:ARG:NH1	26:A6:607:CHL:OBD	2.50	0.41
1:AA:178:TYR:OH	17:AA:811:CLA:O2D	2.38	0.41
1:AA:717:LEU:HD21	18:AA:843:PQN:C15	2.50	0.41
2:AB:306:GLU:OE1	2:AB:321:GLY:N	2.46	0.41
17:AB:824:CLA:HMA1	17:AB:842:CLA:O2D	2.20	0.41
1:AA:641:ILE:HG23	17:AA:801:CLA:H91	2.02	0.41
2:AB:424:TRP:NE1	17:AB:833:CLA:OBD	2.43	0.41
1:AA:600:ALA:O	1:AA:604:VAL:HG23	2.20	0.41
1:AA:691:TYR:OH	2:AB:533:ILE:HA	2.21	0.41
4:AD:161:HIS:HB3	4:AD:162:PRO:HD3	2.02	0.41
20:A3:318:BCR:H382	20:A3:318:BCR:H23C	2.03	0.41
16:A6:65:ARG:NH2	16:A6:85:ASP:OD1	2.53	0.41
16:A6:110:HIS:HD1	27:A6:615:XAT:H201	1.85	0.41
6:AF:141:ASN:OD1	6:AF:142:GLY:N	2.53	0.41
4:AD:74:SER:O	4:AD:117:ARG:NE	2.49	0.41
2:AB:682:HIS:NE2	2:AB:691:ILE:O	2.49	0.41
2:AB:711:ALA:O	2:AB:715:VAL:HG23	2.21	0.41
4:AD:127:ARG:NH2	4:AD:129:GLU:OE1	2.50	0.41
15:A4:108:ALA:HB2	24:A4:315:LUT:H401	2.02	0.41
16:A6:258:PRO:O	16:A6:262:ASN:ND2	2.47	0.41
1:AA:554:PHE:O	1:AA:564:LYS:NZ	2.51	0.41
2:AB:192:GLY:O	2:AB:196:HIS:ND1	2.43	0.41
16:A6:167:ARG:NE	17:A6:601:CLA:OBD	2.52	0.41
1:AA:657:ILE:HD12	2:AB:621:ARG:HG3	2.03	0.41
20:AA:848:BCR:H23C	20:AA:848:BCR:H403	2.02	0.41
24:AF:806:LUT:H31	24:AF:806:LUT:H391	1.93	0.41
12:AL:150:LEU:HB3	12:AL:191:THR:HG22	2.03	0.41
17:A6:612:CLA:HMB1	24:A6:614:LUT:H7	2.03	0.41
3:AC:24:ASP:O	3:AC:44:ARG:NE	2.49	0.41
27:A1:318:XAT:H35	27:A1:318:XAT:H401	1.92	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:77:ASP:O	6:AF:79:LYS:NZ	2.49	0.40
13:A1:172:PHE:HB3	17:A1:311:CLA:HMD2	2.03	0.40
2:AB:194:LEU:HA	2:AB:198:ALA:HB3	2.03	0.40
20:AJ:103:BCR:H23C	20:AJ:103:BCR:H382	2.04	0.40
17:AB:825:CLA:H71	17:AB:827:CLA:H42	2.03	0.40
1:AA:410:MET:HE1	1:AA:428:LEU:HD11	2.03	0.40
16:A6:110:HIS:HE1	17:A6:603:CLA:NC	2.20	0.40
17:A1:306:CLA:NB	20:A1:319:BCR:H392	2.37	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

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	AA	740/750 (99%)	688 (93%)	51 (7%)	1 (0%)	48	76
2	AB	732/734 (100%)	695 (95%)	37 (5%)	0	100	100
3	AC	78/81 (96%)	72 (92%)	6 (8%)	0	100	100
4	AD	139/204 (68%)	126 (91%)	13 (9%)	0	100	100
5	AE	65/143 (46%)	58 (89%)	7 (11%)	0	100	100
6	AF	151/221 (68%)	144 (95%)	7 (5%)	0	100	100
7	AG	96/160 (60%)	88 (92%)	8 (8%)	0	100	100
8	AH	93/145 (64%)	90 (97%)	3 (3%)	0	100	100
9	AI	31/37 (84%)	30 (97%)	1 (3%)	0	100	100
10	AJ	40/44 (91%)	38 (95%)	2 (5%)	0	100	100
11	AK	61/130 (47%)	57 (93%)	4 (7%)	0	100	100
12	AL	155/219 (71%)	145 (94%)	10 (6%)	0	100	100
13	A1	194/241 (80%)	178 (92%)	16 (8%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
14	A3	217/273 (80%)	191 (88%)	26 (12%)	0	100	100
15	A4	195/251 (78%)	185 (95%)	10 (5%)	0	100	100
16	A6	210/270 (78%)	198 (94%)	12 (6%)	0	100	100
All	All	3197/3903 (82%)	2983 (93%)	213 (7%)	1 (0%)	100	100

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	AA	663	SER

5.3.2 Protein sidechains ⓘ

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	AA	600/610 (98%)	592 (99%)	8 (1%)	61	73
2	AB	598/600 (100%)	594 (99%)	4 (1%)	76	79
3	AC	70/71 (99%)	70 (100%)	0	100	100
4	AD	120/170 (71%)	118 (98%)	2 (2%)	53	69
5	AE	56/114 (49%)	55 (98%)	1 (2%)	51	69
6	AF	125/185 (68%)	124 (99%)	1 (1%)	73	78
7	AG	83/133 (62%)	81 (98%)	2 (2%)	43	64
8	AH	77/113 (68%)	76 (99%)	1 (1%)	61	73
9	AI	29/33 (88%)	29 (100%)	0	100	100
10	AJ	37/39 (95%)	37 (100%)	0	100	100
11	AK	47/95 (50%)	47 (100%)	0	100	100
12	AL	119/174 (68%)	119 (100%)	0	100	100
13	A1	151/190 (80%)	147 (97%)	4 (3%)	40	62
14	A3	168/211 (80%)	167 (99%)	1 (1%)	78	81
15	A4	164/210 (78%)	162 (99%)	2 (1%)	63	74

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
16	A6	177/226 (78%)	172 (97%)	5 (3%)	38 60
All	All	2621/3174 (83%)	2590 (99%)	31 (1%)	61 74

All (31) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	AA	80	ILE
1	AA	118	ILE
1	AA	221	ILE
1	AA	315	ILE
1	AA	505	LEU
1	AA	515	VAL
1	AA	630	THR
1	AA	675	HIS
2	AB	91	ILE
2	AB	330	ILE
2	AB	571	SER
2	AB	577	TYR
4	AD	132	LEU
4	AD	178	VAL
5	AE	129	SER
6	AF	197	ILE
7	AG	91	VAL
7	AG	109	ASP
8	AH	73	VAL
13	A1	85	GLU
13	A1	112	TRP
13	A1	142	LEU
13	A1	153	GLU
14	A3	119	ILE
15	A4	148	ILE
15	A4	191	ASN
16	A6	67	LEU
16	A6	89	ASP
16	A6	110	HIS
16	A6	119	THR
16	A6	123	ILE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (24) such sidechains are listed below:

Mol	Chain	Res	Type
1	AA	628	HIS
1	AA	713	GLN
2	AB	220	GLN
2	AB	236	ASN
2	AB	363	GLN
2	AB	452	GLN
2	AB	504	ASN
4	AD	71	ASN
4	AD	200	GLN
6	AF	122	ASN
6	AF	213	ASN
7	AG	90	ASN
8	AH	86	GLN
11	AK	54	ASN
12	AL	66	ASN
13	A1	155	GLN
13	A1	208	GLN
13	A1	209	GLN
14	A3	207	ASN
15	A4	75	ASN
15	A4	191	ASN
15	A4	248	GLN
16	A6	245	GLN
16	A6	250	ASN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.6 Ligand geometry ⓘ

211 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	$\# Z > 2$
17	CLA	A3	314	-	40,44,73	1.49	8 (20%)	49,77,113	1.21	4 (8%)
19	LHG	A1	302	-	35,35,48	1.10	2 (5%)	38,41,54	1.06	2 (5%)
17	CLA	A6	611	16	48,52,73	1.40	8 (16%)	57,88,113	1.21	4 (7%)
17	CLA	A1	309	-	47,52,73	1.41	7 (14%)	55,88,113	1.23	5 (9%)
24	LUT	A6	614	-	42,43,43	0.91	1 (2%)	51,60,60	1.69	12 (23%)
17	CLA	A6	602	16	69,73,73	1.16	8 (11%)	82,113,113	1.17	6 (7%)
17	CLA	AB	827	-	66,70,73	1.19	9 (13%)	78,109,113	1.36	9 (11%)
17	CLA	AB	825	-	69,73,73	1.19	11 (15%)	82,113,113	1.23	7 (8%)
17	CLA	AA	816	-	49,53,73	1.39	7 (14%)	58,89,113	1.36	5 (8%)
19	LHG	AA	844	-	48,48,48	0.93	2 (4%)	51,54,54	0.90	2 (3%)
17	CLA	AA	803	-	69,73,73	1.15	7 (10%)	82,113,113	1.26	8 (9%)
20	BCR	AA	848	-	41,41,41	0.80	1 (2%)	56,56,56	1.99	17 (30%)
17	CLA	AB	801	-	69,73,73	1.15	7 (10%)	82,113,113	1.46	12 (14%)
26	CHL	A1	303	13	45,59,74	3.94	19 (42%)	39,96,114	2.73	18 (46%)
17	CLA	AB	818	-	63,67,73	1.22	8 (12%)	74,105,113	1.21	7 (9%)
27	XAT	A1	318	-	41,47,47	0.96	2 (4%)	54,74,74	2.25	24 (44%)
17	CLA	AB	805	-	45,49,73	1.40	6 (13%)	54,84,113	1.28	6 (11%)
20	BCR	A3	318	-	41,41,41	1.00	1 (2%)	56,56,56	2.85	19 (33%)
17	CLA	AA	823	-	45,49,73	1.46	7 (15%)	54,84,113	1.25	6 (11%)
19	LHG	A1	301	17	37,37,48	1.07	2 (5%)	40,43,54	0.99	3 (7%)
20	BCR	AB	844	-	41,41,41	0.86	1 (2%)	56,56,56	2.32	24 (42%)
17	CLA	A6	613	-	47,51,73	1.41	6 (12%)	55,86,113	1.23	4 (7%)
17	CLA	A1	312	19	41,46,73	1.57	8 (19%)	51,81,113	1.22	7 (13%)
24	LUT	A1	317	-	42,43,43	0.95	1 (2%)	51,60,60	1.97	14 (27%)
25	LMG	AG	202	-	38,38,55	1.15	3 (7%)	46,46,63	1.07	2 (4%)
17	CLA	AA	801	-	69,73,73	1.16	5 (7%)	82,113,113	1.18	6 (7%)
27	XAT	A4	316	-	41,47,47	1.03	2 (4%)	54,74,74	2.20	16 (29%)
17	CLA	A3	306	14	45,49,73	1.49	9 (20%)	54,84,113	1.42	6 (11%)
17	CLA	A3	302	14	64,68,73	1.20	8 (12%)	76,107,113	1.14	6 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
17	CLA	A6	609	16	59,63,73	1.26	8 (13%)	70,101,113	1.19	7 (10%)
17	CLA	AH	201	-	64,68,73	1.21	6 (9%)	76,107,113	1.25	8 (10%)
17	CLA	AA	808	1	69,73,73	1.16	7 (10%)	82,113,113	1.19	5 (6%)
18	PQN	AA	843	-	34,34,34	3.51	10 (29%)	43,45,45	1.71	7 (16%)
26	CHL	A6	605	-	36,50,74	4.08	18 (50%)	31,85,114	3.31	14 (45%)
17	CLA	AB	812	-	58,62,73	1.35	9 (15%)	71,100,113	1.34	7 (9%)
20	BCR	AK	202	-	41,41,41	0.94	2 (4%)	56,56,56	2.20	17 (30%)
25	LMG	A1	321	-	44,44,55	1.03	2 (4%)	52,52,63	1.19	5 (9%)
17	CLA	AK	204	-	50,54,73	1.34	8 (16%)	59,90,113	1.32	4 (6%)
17	CLA	A1	304	13	64,68,73	1.20	7 (10%)	75,106,113	1.17	5 (6%)
17	CLA	AB	824	-	47,51,73	1.37	8 (17%)	55,86,113	1.45	7 (12%)
20	BCR	AB	847	-	41,41,41	0.89	0	56,56,56	2.03	13 (23%)
24	LUT	AF	806	-	42,43,43	1.02	2 (4%)	51,60,60	1.75	12 (23%)
20	BCR	AB	846	-	41,41,41	0.88	0	56,56,56	1.99	16 (28%)
17	CLA	AB	810	2	69,73,73	1.17	8 (11%)	82,113,113	1.22	4 (4%)
17	CLA	AB	833	-	69,73,73	1.15	5 (7%)	82,113,113	1.13	7 (8%)
17	CLA	A6	610	19	40,45,73	2.63	10 (25%)	46,76,113	1.39	8 (17%)
21	SF4	AC	102	3	0,12,12	-	-	-	-	-
17	CLA	AB	835	-	64,68,73	1.19	6 (9%)	76,107,113	1.20	6 (7%)
17	CLA	AB	808	-	55,59,73	1.29	7 (12%)	63,95,113	1.29	5 (7%)
17	CLA	A6	604	-	46,51,73	1.40	7 (15%)	54,86,113	1.20	3 (5%)
17	CLA	AA	822	-	46,50,73	1.39	7 (15%)	53,85,113	1.31	4 (7%)
17	CLA	A4	309	-	46,50,73	1.35	6 (13%)	53,85,113	1.33	4 (7%)
17	CLA	AA	837	-	55,59,73	1.28	8 (14%)	64,96,113	1.43	9 (14%)
17	CLA	AB	836	-	46,50,73	1.41	6 (13%)	53,85,113	1.32	4 (7%)
19	LHG	A3	301	-	35,35,48	1.10	2 (5%)	38,41,54	1.02	2 (5%)
25	LMG	A4	318	-	39,39,55	1.01	3 (7%)	47,47,63	1.41	7 (14%)
20	BCR	A4	317	-	41,41,41	0.83	0	56,56,56	2.41	22 (39%)
17	CLA	A1	313	13	49,53,73	1.38	8 (16%)	58,89,113	1.37	4 (6%)
17	CLA	A3	310	19	39,45,73	1.49	7 (17%)	51,79,113	1.26	5 (9%)
17	CLA	A4	302	15	48,52,73	1.49	8 (16%)	59,88,113	1.43	7 (11%)
17	CLA	A4	307	15	49,53,73	1.40	7 (14%)	58,89,113	1.20	4 (6%)
17	CLA	AA	829	-	69,73,73	1.19	7 (10%)	82,113,113	1.38	11 (13%)
17	CLA	AG	203	-	46,50,73	1.39	7 (15%)	53,85,113	1.25	4 (7%)
17	CLA	AK	201	11	38,43,73	1.68	7 (18%)	49,75,113	1.44	7 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
17	CLA	AA	815	-	43,49,73	1.35	5 (11%)	48,83,113	1.40	5 (10%)
20	BCR	AL	306	-	41,41,41	0.95	1 (2%)	56,56,56	2.01	21 (37%)
22	LMU	AB	852	-	36,36,36	1.14	2 (5%)	47,47,47	0.95	1 (2%)
17	CLA	A3	308	14	49,53,73	1.38	6 (12%)	58,89,113	1.23	5 (8%)
17	CLA	AB	822	-	51,55,73	1.34	7 (13%)	60,91,113	1.18	3 (5%)
17	CLA	AB	830	-	60,64,73	1.26	7 (11%)	71,102,113	1.23	4 (5%)
17	CLA	A4	311	-	59,64,73	1.25	7 (11%)	69,102,113	1.16	4 (5%)
17	CLA	AA	819	-	69,73,73	1.17	8 (11%)	82,113,113	1.26	5 (6%)
17	CLA	AA	831	-	51,55,73	1.34	8 (15%)	60,91,113	1.27	5 (8%)
17	CLA	AK	203	-	49,53,73	1.38	7 (14%)	58,89,113	1.21	4 (6%)
17	CLA	AG	204	7	49,53,73	1.41	8 (16%)	58,89,113	1.31	4 (6%)
17	CLA	A3	304	-	45,50,73	1.53	9 (20%)	55,86,113	1.28	5 (9%)
17	CLA	A3	309	14	45,49,73	1.42	8 (17%)	54,84,113	1.28	7 (12%)
17	CLA	AB	838	-	69,73,73	1.13	9 (13%)	82,113,113	1.19	5 (6%)
17	CLA	A4	312	-	49,53,73	1.37	7 (14%)	58,89,113	1.22	5 (8%)
20	BCR	AA	845	-	41,41,41	1.04	2 (4%)	56,56,56	1.93	13 (23%)
26	CHL	A4	314	15	36,49,74	4.25	16 (44%)	30,84,114	2.79	11 (36%)
17	CLA	AA	812	-	58,62,73	1.28	8 (13%)	68,99,113	1.33	6 (8%)
17	CLA	A6	612	16	68,72,73	1.19	7 (10%)	80,111,113	1.10	4 (5%)
26	CHL	A3	320	16	46,60,74	3.82	18 (39%)	40,97,114	2.56	14 (35%)
17	CLA	AB	816	-	47,51,73	1.37	7 (14%)	55,86,113	1.20	3 (5%)
17	CLA	AA	820	-	49,53,73	1.37	8 (16%)	58,89,113	1.30	3 (5%)
17	CLA	AB	811	-	69,73,73	1.16	8 (11%)	82,113,113	1.37	8 (9%)
17	CLA	AL	302	12	45,49,73	1.42	6 (13%)	54,84,113	1.25	5 (9%)
20	BCR	AI	101	-	41,41,41	0.95	2 (4%)	56,56,56	2.06	20 (35%)
17	CLA	AA	821	-	69,73,73	1.16	9 (13%)	82,113,113	1.22	8 (9%)
20	BCR	AG	205	-	41,41,41	0.94	0	56,56,56	2.00	19 (33%)
26	CHL	A3	307	-	38,53,74	3.83	18 (47%)	36,89,114	2.90	13 (36%)
26	CHL	A4	305	-	35,49,74	3.87	16 (45%)	33,84,114	3.06	16 (48%)
21	SF4	AA	850	2,1	0,12,12	-	-	-	-	-
17	CLA	AB	807	2	69,73,73	1.18	8 (11%)	82,113,113	1.24	5 (6%)
22	LMU	AB	850	-	36,36,36	1.13	2 (5%)	47,47,47	1.09	4 (8%)
17	CLA	AB	842	19	69,73,73	1.15	8 (11%)	82,113,113	1.28	7 (8%)
23	DGD	AB	851	-	67,67,67	0.81	2 (2%)	81,81,81	1.00	4 (4%)
17	CLA	AA	818	-	63,67,73	1.22	7 (11%)	74,105,113	1.23	7 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
20	BCR	A6	616	-	41,41,41	1.00	2 (4%)	56,56,56	2.04	16 (28%)
17	CLA	AA	834	-	69,73,73	1.16	7 (10%)	82,113,113	1.36	11 (13%)
17	CLA	AA	807	-	54,58,73	1.30	8 (14%)	64,95,113	1.23	7 (10%)
19	LHG	AJ	104	-	39,39,48	1.06	2 (5%)	42,45,54	0.93	2 (4%)
20	BCR	AF	805	-	41,41,41	0.82	0	56,56,56	1.85	14 (25%)
17	CLA	AA	839	-	56,60,73	1.28	7 (12%)	65,97,113	1.27	6 (9%)
17	CLA	AA	806	1	69,73,73	1.17	8 (11%)	82,113,113	1.28	5 (6%)
17	CLA	AB	832	-	69,73,73	1.16	6 (8%)	82,113,113	1.18	6 (7%)
17	CLA	A6	603	-	45,50,73	1.44	7 (15%)	52,85,113	1.41	4 (7%)
17	CLA	A3	303	14	59,63,73	1.29	8 (13%)	70,101,113	1.32	7 (10%)
19	LHG	A6	617	17	35,35,48	1.06	2 (5%)	38,41,54	0.98	2 (5%)
17	CLA	AJ	102	10	46,50,73	1.39	7 (15%)	53,85,113	1.28	3 (5%)
20	BCR	AA	846	-	41,41,41	0.82	0	56,56,56	2.12	20 (35%)
17	CLA	AA	810	-	68,72,73	1.23	8 (11%)	82,111,113	1.18	5 (6%)
17	CLA	AB	803	-	69,73,73	1.16	8 (11%)	82,113,113	1.13	6 (7%)
22	LMU	AB	853	-	36,36,36	1.13	2 (5%)	47,47,47	1.05	2 (4%)
17	CLA	AA	833	-	69,73,73	1.19	8 (11%)	82,113,113	1.29	8 (9%)
17	CLA	AB	841	-	69,73,73	1.18	8 (11%)	82,113,113	1.14	4 (4%)
17	CLA	AA	835	-	47,52,73	1.41	8 (17%)	55,88,113	1.26	4 (7%)
20	BCR	AB	845	-	41,41,41	0.87	1 (2%)	56,56,56	1.90	17 (30%)
26	CHL	A6	607	-	43,58,74	3.68	17 (39%)	42,95,114	2.77	17 (40%)
17	CLA	AB	813	-	47,51,73	1.35	7 (14%)	55,86,113	1.26	5 (9%)
17	CLA	AB	826	-	66,70,73	1.17	7 (10%)	78,109,113	1.16	6 (7%)
17	CLA	AA	832	-	60,64,73	1.23	6 (10%)	71,102,113	1.23	6 (8%)
17	CLA	AB	840	-	69,73,73	1.19	8 (11%)	82,113,113	1.10	6 (7%)
17	CLA	A1	316	13	47,51,73	1.52	9 (19%)	58,87,113	1.41	6 (10%)
17	CLA	A1	310	13	44,48,73	1.51	8 (18%)	55,83,113	1.42	7 (12%)
17	CLA	AB	815	-	69,73,73	1.13	9 (13%)	82,113,113	1.24	9 (10%)
17	CLA	AB	837	-	54,58,73	1.33	10 (18%)	64,95,113	1.34	6 (9%)
17	CLA	AB	806	-	69,73,73	1.17	8 (11%)	82,113,113	1.20	5 (6%)
17	CLA	AL	304	-	46,50,73	1.40	7 (15%)	53,85,113	1.39	4 (7%)
17	CLA	A4	313	-	54,58,73	1.32	7 (12%)	64,95,113	1.33	6 (9%)
17	CLA	A1	314	-	67,72,73	1.18	7 (10%)	79,112,113	1.14	5 (6%)
17	CLA	AA	802	-	69,73,73	1.17	8 (11%)	82,113,113	1.19	5 (6%)
17	CLA	AF	802	-	61,65,73	1.25	8 (13%)	72,103,113	1.29	7 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
17	CLA	A4	310	15	44,49,73	1.43	8 (18%)	50,84,113	1.28	4 (8%)
20	BCR	AB	849	-	41,41,41	0.82	0	56,56,56	2.45	25 (44%)
17	CLA	AB	820	-	59,63,73	1.29	8 (13%)	70,101,113	1.14	5 (7%)
17	CLA	AB	831	-	47,51,73	1.39	9 (19%)	55,86,113	1.18	5 (9%)
17	CLA	AB	821	-	54,58,73	1.31	8 (14%)	64,95,113	1.30	6 (9%)
24	LUT	A3	316	-	42,43,43	0.85	0	51,60,60	1.80	15 (29%)
17	CLA	A3	305	-	44,49,73	1.44	7 (15%)	50,84,113	1.26	5 (10%)
26	CHL	A6	606	-	37,51,74	4.37	18 (48%)	30,86,114	3.17	15 (50%)
17	CLA	AA	809	1	54,58,73	1.35	8 (14%)	64,95,113	1.33	8 (12%)
27	XAT	A3	317	-	41,47,47	1.02	2 (4%)	54,74,74	2.24	18 (33%)
17	CLA	AF	803	-	46,50,73	1.41	8 (17%)	53,85,113	1.37	4 (7%)
17	CLA	AA	825	-	69,73,73	1.19	9 (13%)	82,113,113	1.18	3 (3%)
17	CLA	AA	817	-	64,68,73	1.20	6 (9%)	76,107,113	1.21	6 (7%)
17	CLA	AA	827	-	69,73,73	1.17	7 (10%)	82,113,113	1.23	6 (7%)
20	BCR	AA	849	-	41,41,41	0.94	2 (4%)	56,56,56	2.08	21 (37%)
17	CLA	AA	842	-	69,73,73	1.17	6 (8%)	82,113,113	1.27	9 (10%)
17	CLA	AB	804	-	69,73,73	1.17	10 (14%)	82,113,113	1.57	13 (15%)
17	CLA	AA	836	1	49,53,73	1.40	7 (14%)	58,89,113	1.32	6 (10%)
17	CLA	AG	201	-	47,52,73	1.41	7 (14%)	55,88,113	1.26	3 (5%)
20	BCR	AB	848	-	41,41,41	0.90	1 (2%)	56,56,56	1.99	17 (30%)
17	CLA	A4	308	15	58,62,73	1.26	8 (13%)	68,99,113	1.14	5 (7%)
17	CLA	A1	311	13	63,67,73	1.22	7 (11%)	75,106,113	1.11	5 (6%)
20	BCR	AJ	101	-	41,41,41	0.90	1 (2%)	56,56,56	2.00	17 (30%)
17	CLA	A3	315	-	43,48,73	1.42	6 (13%)	51,83,113	1.20	5 (9%)
17	CLA	AA	814	-	49,53,73	1.38	7 (14%)	58,89,113	1.32	6 (10%)
17	CLA	AB	829	-	69,73,73	1.18	7 (10%)	82,113,113	1.18	10 (12%)
20	BCR	AK	205	-	41,41,41	1.02	3 (7%)	56,56,56	2.07	15 (26%)
19	LHG	A3	319	17	22,22,48	1.46	2 (9%)	25,28,54	1.31	2 (8%)
20	BCR	AJ	103	-	41,41,41	0.75	0	56,56,56	2.41	21 (37%)
17	CLA	AL	303	-	64,68,73	1.23	7 (10%)	76,107,113	1.24	9 (11%)
17	CLA	A6	601	15	50,54,73	1.34	8 (16%)	59,90,113	1.30	5 (8%)
26	CHL	A1	308	13	35,49,74	4.40	18 (51%)	28,84,114	2.61	12 (42%)
20	BCR	A1	319	-	41,41,41	0.91	1 (2%)	56,56,56	3.23	21 (37%)
17	CLA	A1	305	-	59,63,73	1.26	6 (10%)	70,101,113	1.45	6 (8%)
26	CHL	A4	304	-	35,49,74	4.16	18 (51%)	30,84,114	2.86	14 (46%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
17	CLA	A1	306	-	53,57,73	1.31	8 (15%)	61,93,113	1.27	4 (6%)
18	PQN	AB	843	-	34,34,34	3.48	10 (29%)	43,45,45	1.78	6 (13%)
19	LHG	A1	320	17	48,48,48	0.93	2 (4%)	51,54,54	0.85	2 (3%)
17	CLA	AA	828	-	69,73,73	1.16	7 (10%)	82,113,113	1.35	8 (9%)
26	CHL	A4	306	-	40,54,74	4.22	19 (47%)	34,90,114	3.06	17 (50%)
17	CLA	AB	814	-	69,73,73	1.18	10 (14%)	82,113,113	1.20	4 (4%)
17	CLA	AB	819	-	64,68,73	1.20	7 (10%)	76,107,113	1.46	10 (13%)
17	CLA	A3	313	-	43,48,73	1.44	7 (16%)	51,83,113	1.25	5 (9%)
17	CLA	AA	805	-	69,73,73	1.17	8 (11%)	82,113,113	1.26	9 (10%)
17	CLA	AA	813	-	69,73,73	1.16	8 (11%)	82,113,113	1.25	5 (6%)
21	SF4	AC	101	3	0,12,12	-	-	-	-	-
17	CLA	AA	838	-	59,63,73	1.22	8 (13%)	70,101,113	1.18	7 (10%)
17	CLA	A4	301	15	64,68,73	1.18	8 (12%)	76,107,113	1.21	7 (9%)
17	CLA	AA	841	-	69,73,73	1.18	8 (11%)	82,113,113	1.24	5 (6%)
20	BCR	AF	801	-	41,41,41	0.88	1 (2%)	56,56,56	1.57	10 (17%)
20	BCR	AL	305	-	41,41,41	0.88	0	56,56,56	2.60	18 (32%)
20	BCR	AI	102	-	41,41,41	0.80	0	56,56,56	2.23	22 (39%)
17	CLA	A6	608	16	49,53,73	1.37	8 (16%)	58,89,113	1.22	4 (6%)
17	CLA	AA	826	-	63,67,73	1.21	9 (14%)	74,105,113	1.14	5 (6%)
17	CLA	AA	840	-	69,73,73	1.17	8 (11%)	82,113,113	1.22	6 (7%)
17	CLA	AB	802	-	68,72,73	1.29	8 (11%)	83,112,113	1.22	6 (7%)
17	CLA	A1	315	-	41,46,73	1.56	8 (19%)	51,81,113	1.41	8 (15%)
20	BCR	AA	847	-	41,41,41	0.99	2 (4%)	56,56,56	2.28	25 (44%)
17	CLA	A3	311	14	47,51,73	1.39	6 (12%)	55,86,113	1.30	5 (9%)
17	CLA	AA	804	-	56,60,73	1.27	8 (14%)	65,97,113	1.34	7 (10%)
17	CLA	AB	828	-	69,73,73	1.14	8 (11%)	82,113,113	1.27	6 (7%)
17	CLA	AF	804	-	45,49,73	1.42	7 (15%)	54,84,113	1.41	5 (9%)
17	CLA	AB	823	-	69,73,73	1.15	7 (10%)	82,113,113	1.17	6 (7%)
22	LMU	AA	851	-	36,36,36	1.15	2 (5%)	47,47,47	1.04	2 (4%)
17	CLA	AB	839	-	51,55,73	1.34	7 (13%)	60,91,113	1.39	7 (11%)
17	CLA	AB	834	-	69,73,73	1.15	7 (10%)	82,113,113	1.10	5 (6%)
17	CLA	AB	809	-	69,73,73	1.15	7 (10%)	82,113,113	1.25	9 (10%)
22	LMU	AL	301	-	35,35,36	1.23	2 (5%)	46,46,47	1.06	5 (10%)
17	CLA	A3	312	-	57,62,73	1.28	7 (12%)	67,100,113	1.23	5 (7%)
17	CLA	A4	303	-	47,51,73	1.49	9 (19%)	58,87,113	1.36	6 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
17	CLA	A1	307	-	44,48,73	1.44	8 (18%)	51,82,113	1.53	8 (15%)
27	XAT	A6	615	-	41,47,47	1.05	2 (4%)	54,74,74	2.37	21 (38%)
17	CLA	AA	824	-	57,62,73	1.29	8 (14%)	67,100,113	1.32	9 (13%)
24	LUT	A4	315	-	42,43,43	0.96	2 (4%)	51,60,60	1.95	17 (33%)
17	CLA	AB	817	-	59,63,73	1.25	8 (13%)	70,101,113	1.17	5 (7%)
17	CLA	AA	830	-	69,73,73	1.20	7 (10%)	82,113,113	1.18	5 (6%)
17	CLA	AA	811	-	69,73,73	1.16	6 (8%)	82,113,113	1.16	4 (4%)

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
17	CLA	A3	314	-	1/1/8/20	2/2/74/115	-
19	LHG	A1	302	-	-	16/40/40/53	-
17	CLA	A6	611	16	1/1/11/20	8/13/89/115	-
17	CLA	A1	309	-	1/1/11/20	9/13/89/115	-
24	LUT	A6	614	-	-	0/29/67/67	0/2/2/2
17	CLA	A6	602	16	1/1/15/20	11/39/115/115	-
17	CLA	AB	827	-	1/1/14/20	11/36/112/115	-
17	CLA	AB	825	-	1/1/15/20	13/39/115/115	-
17	CLA	AA	816	-	1/1/11/20	6/15/91/115	-
19	LHG	AA	844	-	-	16/53/53/53	-
17	CLA	AA	803	-	1/1/15/20	14/39/115/115	-
20	BCR	AA	848	-	-	4/29/63/63	0/2/2/2
17	CLA	AB	801	-	1/1/15/20	16/39/115/115	-
26	CHL	A1	303	13	3/3/17/26	3/21/119/137	-
17	CLA	AB	818	-	1/1/13/20	12/32/108/115	-
27	XAT	A1	318	-	-	0/31/93/93	0/4/4/4
17	CLA	AB	805	-	1/1/10/20	2/10/86/115	-
20	BCR	A3	318	-	-	4/29/63/63	0/2/2/2
17	CLA	AA	823	-	1/1/10/20	4/10/86/115	-
19	LHG	A1	301	17	-	11/42/42/53	-
20	BCR	AB	844	-	-	5/29/63/63	0/2/2/2
17	CLA	A6	613	-	1/1/10/20	4/13/89/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
17	CLA	A1	312	19	1/1/10/20	0/4/80/115	-
24	LUT	A1	317	-	-	0/29/67/67	0/2/2/2
25	LMG	AG	202	-	-	5/33/53/70	0/1/1/1
17	CLA	AA	801	-	1/1/15/20	13/39/115/115	-
27	XAT	A4	316	-	-	0/31/93/93	0/4/4/4
17	CLA	A3	306	14	1/1/10/20	0/10/86/115	-
17	CLA	A3	302	14	1/1/14/20	8/33/109/115	-
17	CLA	A6	609	16	1/1/13/20	6/27/103/115	-
17	CLA	AH	201	-	1/1/14/20	11/33/109/115	-
17	CLA	AA	808	1	1/1/15/20	10/39/115/115	-
18	PQN	AA	843	-	-	6/23/43/43	0/2/2/2
26	CHL	A6	605	-	3/3/15/26	2/10/108/137	-
17	CLA	AB	812	-	1/1/13/20	8/25/101/115	-
20	BCR	AK	202	-	-	5/29/63/63	0/2/2/2
25	LMG	A1	321	-	-	16/39/59/70	0/1/1/1
17	CLA	AK	204	-	1/1/11/20	10/17/93/115	-
17	CLA	A1	304	13	1/1/13/20	9/33/109/115	-
17	CLA	AB	824	-	1/1/10/20	3/13/89/115	-
20	BCR	AB	847	-	-	0/29/63/63	0/2/2/2
24	LUT	AF	806	-	-	0/29/67/67	0/2/2/2
20	BCR	AB	846	-	-	6/29/63/63	0/2/2/2
17	CLA	AB	810	2	1/1/15/20	13/39/115/115	-
17	CLA	AB	833	-	1/1/15/20	9/39/115/115	-
17	CLA	A6	610	19	1/1/7/20	4/10/70/115	-
21	SF4	AC	102	3	-	-	0/6/5/5
17	CLA	AB	808	-	-	4/22/98/115	-
17	CLA	AB	835	-	-	7/33/109/115	-
17	CLA	A6	604	-	1/1/10/20	4/12/88/115	-
17	CLA	AA	822	-	1/1/10/20	6/12/88/115	-
17	CLA	A4	309	-	1/1/10/20	4/12/88/115	-
17	CLA	AA	837	-	1/1/12/20	6/23/99/115	-
17	CLA	AB	836	-	-	3/12/88/115	-
19	LHG	A3	301	-	-	10/40/40/53	-
25	LMG	A4	318	-	-	15/34/54/70	0/1/1/1
20	BCR	A4	317	-	-	2/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
17	CLA	A1	313	13	1/1/11/20	5/15/91/115	-
17	CLA	A3	310	19	1/1/9/20	2/2/78/115	-
17	CLA	A4	302	15	1/1/11/20	6/13/89/115	-
17	CLA	A4	307	15	1/1/11/20	2/15/91/115	-
17	CLA	AA	829	-	1/1/15/20	15/39/115/115	-
17	CLA	AG	203	-	1/1/10/20	2/12/88/115	-
17	CLA	AK	201	11	1/1/8/20	0/2/74/115	-
17	CLA	AA	815	-	-	2/12/88/115	-
20	BCR	AL	306	-	-	5/29/63/63	0/2/2/2
22	LMU	AB	852	-	-	11/21/61/61	0/2/2/2
17	CLA	A3	308	14	1/1/11/20	6/15/91/115	-
17	CLA	AB	822	-	1/1/11/20	6/18/94/115	-
17	CLA	AB	830	-	1/1/13/20	9/29/105/115	-
17	CLA	A4	311	-	1/1/13/20	7/28/104/115	-
17	CLA	AA	819	-	1/1/15/20	13/39/115/115	-
17	CLA	AA	831	-	1/1/11/20	10/18/94/115	-
17	CLA	AK	203	-	1/1/11/20	8/15/91/115	-
17	CLA	AG	204	7	1/1/11/20	6/15/91/115	-
17	CLA	A3	304	-	1/1/11/20	0/9/85/115	-
17	CLA	A3	309	14	1/1/10/20	4/10/86/115	-
17	CLA	A4	312	-	1/1/11/20	5/15/91/115	-
26	CHL	A4	314	15	3/3/15/26	0/10/106/137	-
17	CLA	AB	838	-	-	7/39/115/115	-
20	BCR	AA	845	-	-	2/29/63/63	0/2/2/2
17	CLA	AA	812	-	1/1/12/20	8/26/102/115	-
17	CLA	A6	612	16	1/1/14/20	7/37/113/115	-
26	CHL	A3	320	16	3/3/17/26	5/22/120/137	-
17	CLA	AB	816	-	1/1/10/20	2/13/89/115	-
17	CLA	AA	820	-	1/1/11/20	6/15/91/115	-
17	CLA	AB	811	-	1/1/15/20	12/39/115/115	-
17	CLA	AL	302	12	1/1/10/20	6/10/86/115	-
26	CHL	A3	307	-	3/3/16/26	4/13/111/137	-
17	CLA	AA	821	-	1/1/15/20	13/39/115/115	-
20	BCR	AG	205	-	-	2/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
20	BCR	AI	101	-	-	6/29/63/63	0/2/2/2
26	CHL	A4	305	-	3/3/15/26	0/10/106/137	-
21	SF4	AA	850	2,1	-	-	0/6/5/5
17	CLA	AB	807	2	1/1/15/20	10/39/115/115	-
22	LMU	AB	850	-	-	9/21/61/61	0/2/2/2
17	CLA	AB	842	19	1/1/15/20	19/39/115/115	-
23	DGD	AB	851	-	-	21/55/95/95	0/2/2/2
17	CLA	AA	818	-	-	8/32/108/115	-
20	BCR	A6	616	-	-	2/29/63/63	0/2/2/2
17	CLA	AA	834	-	-	15/39/115/115	-
17	CLA	AA	807	-	1/1/12/20	3/21/97/115	-
19	LHG	AJ	104	-	-	15/44/44/53	-
20	BCR	AF	805	-	-	6/29/63/63	0/2/2/2
17	CLA	AA	839	-	-	3/24/100/115	-
17	CLA	AA	806	1	1/1/15/20	12/39/115/115	-
17	CLA	AB	832	-	-	9/39/115/115	-
17	CLA	A6	603	-	1/1/10/20	2/11/87/115	-
17	CLA	A3	303	14	1/1/13/20	10/27/103/115	-
19	LHG	A6	617	17	-	17/40/40/53	-
17	CLA	AJ	102	10	1/1/10/20	3/12/88/115	-
20	BCR	AA	846	-	-	6/29/63/63	0/2/2/2
17	CLA	AA	810	-	1/1/14/20	10/39/111/115	-
17	CLA	AB	803	-	1/1/15/20	17/39/115/115	-
22	LMU	AB	853	-	-	13/21/61/61	0/2/2/2
17	CLA	AA	833	-	1/1/15/20	19/39/115/115	-
17	CLA	AB	841	-	1/1/15/20	10/39/115/115	-
17	CLA	AA	835	-	1/1/11/20	2/13/89/115	-
26	CHL	A6	607	-	3/3/17/26	8/19/117/137	-
20	BCR	AB	845	-	-	6/29/63/63	0/2/2/2
17	CLA	AB	813	-	1/1/10/20	3/13/89/115	-
17	CLA	AB	826	-	1/1/14/20	6/36/112/115	-
17	CLA	AA	832	-	1/1/13/20	7/29/105/115	-
17	CLA	AB	840	-	1/1/15/20	7/39/115/115	-
17	CLA	A1	316	13	1/1/11/20	8/11/87/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
17	CLA	A1	310	13	1/1/10/20	2/8/84/115	-
17	CLA	AB	815	-	1/1/15/20	16/39/115/115	-
17	CLA	AB	837	-	1/1/12/20	6/21/97/115	-
17	CLA	AB	806	-	1/1/15/20	13/39/115/115	-
17	CLA	AL	304	-	1/1/10/20	5/12/88/115	-
17	CLA	A4	313	-	1/1/12/20	9/21/97/115	-
17	CLA	A1	314	-	1/1/15/20	12/37/113/115	-
17	CLA	AA	802	-	1/1/15/20	7/39/115/115	-
17	CLA	AF	802	-	1/1/13/20	9/30/106/115	-
17	CLA	A4	310	15	1/1/10/20	6/10/86/115	-
20	BCR	AB	849	-	-	5/29/63/63	0/2/2/2
17	CLA	AB	820	-	1/1/13/20	8/27/103/115	-
17	CLA	AB	831	-	1/1/10/20	4/13/89/115	-
17	CLA	AB	821	-	1/1/12/20	7/21/97/115	-
24	LUT	A3	316	-	-	0/29/67/67	0/2/2/2
17	CLA	A3	305	-	1/1/10/20	5/10/86/115	-
26	CHL	A6	606	-	3/3/15/26	4/12/110/137	-
17	CLA	AA	809	1	1/1/12/20	6/21/97/115	-
27	XAT	A3	317	-	-	0/31/93/93	0/4/4/4
17	CLA	AF	803	-	1/1/10/20	3/12/88/115	-
17	CLA	AA	825	-	1/1/15/20	9/39/115/115	-
17	CLA	AA	817	-	1/1/14/20	5/33/109/115	-
17	CLA	AA	827	-	1/1/15/20	15/39/115/115	-
20	BCR	AA	849	-	-	7/29/63/63	0/2/2/2
17	CLA	AA	842	-	1/1/15/20	19/39/115/115	-
17	CLA	AB	804	-	1/1/15/20	16/39/115/115	-
17	CLA	AA	836	1	-	7/15/91/115	-
17	CLA	AG	201	-	1/1/11/20	5/13/89/115	-
20	BCR	AB	848	-	-	2/29/63/63	0/2/2/2
17	CLA	A4	308	15	1/1/12/20	6/26/102/115	-
17	CLA	A1	311	13	1/1/14/20	2/31/107/115	-
20	BCR	AJ	101	-	-	1/29/63/63	0/2/2/2
17	CLA	A3	315	-	1/1/10/20	0/8/84/115	-
17	CLA	AA	814	-	1/1/11/20	4/15/91/115	-
17	CLA	AB	829	-	1/1/15/20	14/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
20	BCR	AK	205	-	-	6/29/63/63	0/2/2/2
19	LHG	A3	319	17	-	14/26/26/53	-
20	BCR	AJ	103	-	-	5/29/63/63	0/2/2/2
17	CLA	A6	601	15	1/1/11/20	1/17/93/115	-
17	CLA	AL	303	-	-	9/33/109/115	-
26	CHL	A1	308	13	3/3/15/26	2/8/106/137	-
20	BCR	A1	319	-	-	4/29/63/63	0/2/2/2
17	CLA	A1	305	-	1/1/13/20	7/27/103/115	-
26	CHL	A4	304	-	3/3/15/26	1/8/106/137	-
17	CLA	A1	306	-	1/1/11/20	7/20/96/115	-
18	PQN	AB	843	-	-	8/23/43/43	0/2/2/2
19	LHG	A1	320	17	-	15/53/53/53	-
17	CLA	AA	828	-	1/1/15/20	14/39/115/115	-
26	CHL	A4	306	-	3/3/16/26	4/15/113/137	-
17	CLA	AB	814	-	1/1/15/20	14/39/115/115	-
17	CLA	AB	819	-	1/1/14/20	14/33/109/115	-
17	CLA	A3	313	-	-	3/8/84/115	-
17	CLA	AA	805	-	1/1/15/20	15/39/115/115	-
17	CLA	AA	813	-	1/1/15/20	16/39/115/115	-
21	SF4	AC	101	3	-	-	0/6/5/5
17	CLA	AA	838	-	-	8/27/103/115	-
17	CLA	A4	301	15	1/1/14/20	8/33/109/115	-
17	CLA	AA	841	-	-	11/39/115/115	-
20	BCR	AF	801	-	-	2/29/63/63	0/2/2/2
20	BCR	AL	305	-	-	3/29/63/63	0/2/2/2
20	BCR	AI	102	-	-	5/29/63/63	0/2/2/2
17	CLA	A6	608	16	1/1/11/20	3/15/91/115	-
17	CLA	AA	826	-	1/1/13/20	11/32/108/115	-
17	CLA	AA	840	-	1/1/15/20	13/39/115/115	-
17	CLA	AB	802	-	1/1/15/20	14/37/113/115	-
17	CLA	A1	315	-	1/1/10/20	0/4/80/115	-
20	BCR	AA	847	-	-	13/29/63/63	0/2/2/2
17	CLA	A3	311	14	1/1/10/20	1/13/89/115	-
17	CLA	AF	804	-	1/1/10/20	2/10/86/115	-
17	CLA	AB	828	-	1/1/15/20	12/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
17	CLA	AA	804	-	-	7/24/100/115	-
17	CLA	AB	823	-	-	17/39/115/115	-
22	LMU	AA	851	-	-	10/21/61/61	0/2/2/2
17	CLA	AB	839	-	1/1/11/20	3/18/94/115	-
17	CLA	AB	834	-	1/1/15/20	16/39/115/115	-
17	CLA	AB	809	-	1/1/15/20	14/39/115/115	-
22	LMU	AL	301	-	-	11/20/60/61	0/2/2/2
17	CLA	A3	312	-	1/1/13/20	11/25/101/115	-
17	CLA	A4	303	-	1/1/11/20	4/11/87/115	-
17	CLA	A1	307	-	1/1/9/20	4/10/82/115	-
27	XAT	A6	615	-	-	0/31/93/93	0/4/4/4
17	CLA	AA	824	-	1/1/13/20	9/25/101/115	-
24	LUT	A4	315	-	-	1/29/67/67	0/2/2/2
17	CLA	AB	817	-	1/1/13/20	7/27/103/115	-
17	CLA	AA	830	-	1/1/15/20	12/39/115/115	-
17	CLA	AA	811	-	1/1/15/20	13/39/115/115	-

All (1365) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	A6	610	CLA	C1A-NA	13.20	1.40	1.29
26	A3	320	CHL	C2C-C3C	11.91	1.47	1.36
26	A4	314	CHL	C2C-C3C	11.65	1.47	1.36
26	A1	303	CHL	C2C-C3C	11.52	1.47	1.36
26	A1	308	CHL	C2C-C3C	11.30	1.47	1.36
26	A6	606	CHL	C2C-C3C	11.01	1.47	1.36
26	A4	306	CHL	C2C-C3C	10.81	1.46	1.36
26	A4	306	CHL	C3B-C4B	9.97	1.51	1.41
18	AA	843	PQN	C12-C13	9.92	1.55	1.33
26	A6	606	CHL	C3B-C4B	9.85	1.51	1.41
26	A6	607	CHL	C3B-C4B	9.73	1.50	1.41
18	AB	843	PQN	C12-C13	9.71	1.55	1.33
26	A6	605	CHL	C3B-C4B	9.67	1.50	1.41
26	A1	303	CHL	C3B-C4B	9.60	1.50	1.41
26	A4	304	CHL	C1B-C2B	9.31	1.50	1.39
26	A4	305	CHL	C1B-C2B	9.23	1.50	1.39
26	A1	308	CHL	C3B-C4B	9.20	1.50	1.41
26	A3	307	CHL	C3B-C4B	9.10	1.50	1.41
26	A4	314	CHL	C1B-C2B	9.08	1.49	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	A6	607	CHL	C1B-C2B	8.78	1.49	1.39
26	A4	304	CHL	C3B-C4B	8.78	1.49	1.41
26	A6	606	CHL	C1B-C2B	8.71	1.49	1.39
26	A3	320	CHL	C1B-C2B	8.63	1.49	1.39
26	A4	314	CHL	C1D-C2D	8.58	1.49	1.39
26	A4	306	CHL	C1B-C2B	8.55	1.49	1.39
26	A6	605	CHL	C1B-C2B	8.49	1.49	1.39
26	A6	605	CHL	C1D-C2D	8.49	1.49	1.39
26	A4	304	CHL	C1D-C2D	8.42	1.49	1.39
26	A4	306	CHL	C1D-C2D	8.34	1.49	1.39
26	A4	305	CHL	C1D-C2D	8.33	1.49	1.39
26	A6	606	CHL	C1D-C2D	8.32	1.49	1.39
26	A3	320	CHL	C1D-C2D	8.28	1.49	1.39
26	A3	307	CHL	C1D-C2D	8.27	1.49	1.39
26	A1	303	CHL	C1B-C2B	8.25	1.48	1.39
26	A1	308	CHL	C1B-C2B	8.21	1.48	1.39
26	A6	607	CHL	C1D-C2D	8.16	1.48	1.39
26	A1	308	CHL	C1D-C2D	8.10	1.48	1.39
18	AB	843	PQN	O4-C4	7.89	1.39	1.23
18	AA	843	PQN	O4-C4	7.88	1.39	1.23
26	A3	307	CHL	C1B-C2B	7.82	1.48	1.39
26	A4	305	CHL	C1A-CHA	7.76	1.48	1.40
26	A4	305	CHL	C4B-C3B	7.69	1.48	1.39
18	AB	843	PQN	O1-C1	7.60	1.39	1.23
18	AA	843	PQN	C9-C10	7.60	1.51	1.39
26	A3	320	CHL	C3B-C4B	7.56	1.48	1.41
26	A1	303	CHL	C1D-C2D	7.56	1.48	1.39
26	A4	314	CHL	C4B-C3B	7.53	1.48	1.39
26	A4	314	CHL	C1A-CHA	7.44	1.48	1.40
26	A6	607	CHL	C1A-CHA	7.44	1.48	1.40
18	AA	843	PQN	O1-C1	7.44	1.38	1.23
26	A6	606	CHL	C1A-CHA	7.41	1.48	1.40
26	A4	304	CHL	C1A-CHA	7.38	1.48	1.40
26	A1	303	CHL	C1A-CHA	7.36	1.48	1.40
18	AA	843	PQN	C6-C5	7.28	1.51	1.39
26	A1	308	CHL	C1A-CHA	7.20	1.48	1.40
18	AB	843	PQN	C6-C5	7.20	1.50	1.39
18	AB	843	PQN	C9-C10	7.19	1.50	1.39
26	A3	307	CHL	C1A-CHA	7.16	1.48	1.40
26	A6	605	CHL	C1A-CHA	7.02	1.48	1.40
26	A3	320	CHL	C1A-CHA	6.96	1.47	1.40
26	A4	306	CHL	C1A-CHA	6.94	1.47	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	AB	843	PQN	C10-C5	-6.84	1.29	1.40
18	AA	843	PQN	C10-C5	-6.72	1.29	1.40
26	A4	304	CHL	C3B-C2B	5.98	1.48	1.40
26	A6	605	CHL	C3A-C2A	-5.68	1.49	1.54
26	A6	607	CHL	C3B-C2B	5.66	1.48	1.40
26	A4	306	CHL	C3A-C2A	-5.61	1.49	1.54
26	A3	320	CHL	C3D-C2D	5.53	1.49	1.39
26	A4	304	CHL	C3A-C2A	-5.49	1.50	1.54
26	A6	606	CHL	C3B-C2B	5.48	1.47	1.40
26	A3	307	CHL	CHB-C4A	-5.45	1.32	1.38
26	A1	303	CHL	CHB-C4A	-5.38	1.32	1.38
26	A3	307	CHL	C3A-C2A	-5.38	1.50	1.54
26	A6	605	CHL	C3B-C2B	5.36	1.47	1.40
26	A4	305	CHL	C3D-C2D	5.33	1.48	1.39
26	A6	606	CHL	C3A-C2A	-5.33	1.50	1.54
26	A4	306	CHL	C3B-C2B	5.31	1.47	1.40
26	A6	606	CHL	C3D-C2D	5.29	1.48	1.39
26	A4	314	CHL	C3D-C2D	5.28	1.48	1.39
26	A6	605	CHL	C3D-C2D	5.26	1.48	1.39
26	A1	303	CHL	C3D-C2D	5.23	1.48	1.39
26	A6	605	CHL	CHB-C4A	-5.22	1.32	1.38
26	A1	308	CHL	C2A-C3A	-5.22	1.50	1.54
26	A1	308	CHL	C3D-C2D	5.22	1.48	1.39
26	A4	306	CHL	CHB-C4A	-5.18	1.32	1.38
26	A3	320	CHL	C3B-C2B	5.18	1.47	1.40
26	A4	304	CHL	C3D-C2D	5.13	1.48	1.39
26	A4	305	CHL	O2D-CGD	5.13	1.45	1.33
26	A6	607	CHL	C3D-C2D	5.13	1.48	1.39
26	A6	606	CHL	O2D-CGD	5.11	1.45	1.33
26	A4	305	CHL	OBD-CAD	5.10	1.29	1.22
26	A1	308	CHL	CHB-C4A	-5.09	1.32	1.38
26	A3	307	CHL	C3D-C2D	5.09	1.48	1.39
26	A6	606	CHL	CHB-C4A	-5.09	1.32	1.38
26	A6	605	CHL	O2D-CGD	5.08	1.45	1.33
26	A4	304	CHL	C2C-C3C	5.07	1.47	1.37
26	A4	314	CHL	C3A-C2A	-5.05	1.50	1.54
26	A1	308	CHL	OBD-CAD	5.05	1.28	1.22
26	A4	304	CHL	CHC-C4B	5.04	1.47	1.39
26	A6	607	CHL	O2D-CGD	5.03	1.45	1.33
26	A1	308	CHL	C3B-C2B	5.03	1.47	1.40
26	A3	320	CHL	C3A-C2A	-5.02	1.50	1.54
26	A6	606	CHL	OBD-CAD	5.01	1.28	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	A1	303	CHL	C3B-C2B	5.01	1.47	1.40
26	A1	308	CHL	CHC-C4B	5.00	1.47	1.39
26	A1	303	CHL	C3A-C2A	-5.00	1.50	1.54
26	A4	306	CHL	CHC-C4B	5.00	1.47	1.39
26	A3	307	CHL	C3B-C2B	4.99	1.47	1.40
26	A6	605	CHL	OBD-CAD	4.99	1.28	1.22
26	A4	306	CHL	C3D-C2D	4.99	1.48	1.39
26	A4	314	CHL	OBD-CAD	4.98	1.28	1.22
26	A4	306	CHL	O2D-CGD	4.95	1.45	1.33
26	A4	304	CHL	OBD-CAD	4.93	1.28	1.22
26	A6	606	CHL	CHC-C4B	4.91	1.47	1.39
26	A3	307	CHL	O2D-CGD	4.90	1.45	1.33
26	A4	304	CHL	CHB-C4A	-4.89	1.32	1.38
17	AK	201	CLA	C1B-C2B	4.89	1.49	1.41
26	A6	607	CHL	OBD-CAD	4.89	1.28	1.22
26	A1	303	CHL	CHC-C4B	4.88	1.47	1.39
26	A4	305	CHL	C3A-C2A	-4.84	1.50	1.54
19	A3	319	LHG	O7-C7	4.83	1.45	1.35
26	A6	605	CHL	C2C-C3C	4.80	1.46	1.37
26	A4	304	CHL	CHB-C1B	4.79	1.47	1.39
26	A4	314	CHL	O2D-CGD	4.76	1.45	1.30
26	A4	304	CHL	O2D-CGD	4.74	1.45	1.30
26	A3	307	CHL	OBD-CAD	4.74	1.28	1.22
26	A1	308	CHL	O2D-CGD	4.73	1.45	1.30
26	A4	314	CHL	CHD-C4C	4.71	1.48	1.39
26	A4	306	CHL	CHB-C1B	4.68	1.47	1.39
26	A6	607	CHL	CHC-C4B	4.68	1.47	1.39
26	A1	303	CHL	O2D-CGD	4.67	1.45	1.30
26	A3	307	CHL	CHC-C4B	4.65	1.47	1.39
26	A6	607	CHL	CHB-C1B	4.63	1.47	1.39
17	AK	201	CLA	C3B-C4B	4.62	1.49	1.39
26	A4	304	CHL	CHD-C4C	4.60	1.48	1.39
26	A6	605	CHL	CHC-C4B	4.58	1.47	1.39
26	A3	320	CHL	CHB-C1B	4.57	1.47	1.39
26	A6	607	CHL	CHB-C4A	-4.57	1.33	1.38
26	A3	320	CHL	O2D-CGD	4.57	1.45	1.30
26	A1	303	CHL	OBD-CAD	4.56	1.28	1.22
26	A4	306	CHL	O2A-CGA	4.56	1.45	1.30
26	A4	314	CHL	CHB-C4A	-4.55	1.33	1.38
26	A4	305	CHL	CHB-C4A	-4.54	1.33	1.38
26	A4	305	CHL	CHB-C1B	4.54	1.47	1.39
26	A3	320	CHL	CHD-C4C	4.53	1.48	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	A3	307	CHL	O2A-CGA	4.52	1.45	1.30
26	A4	306	CHL	OBD-CAD	4.52	1.28	1.22
26	A4	305	CHL	CHD-C4C	4.49	1.48	1.39
26	A1	303	CHL	O2A-CGA	4.49	1.46	1.33
26	A1	308	CHL	CHD-C1D	4.49	1.46	1.39
26	A4	306	CHL	CHC-C1C	4.48	1.48	1.39
26	A4	314	CHL	CHD-C1D	4.47	1.46	1.39
26	A1	308	CHL	CHB-C1B	4.45	1.46	1.39
26	A3	320	CHL	CHD-C1D	4.45	1.46	1.39
26	A6	606	CHL	CHD-C4C	4.45	1.47	1.39
26	A4	314	CHL	CHB-C1B	4.45	1.46	1.39
26	A3	320	CHL	CHC-C4B	4.44	1.46	1.39
26	A1	308	CHL	CHD-C4C	4.42	1.47	1.39
26	A6	607	CHL	CHD-C4C	4.38	1.47	1.39
25	AG	202	LMG	O7-C10	4.38	1.46	1.34
26	A4	305	CHL	CHD-C1D	4.37	1.46	1.39
26	A6	606	CHL	CHB-C1B	4.36	1.46	1.39
26	A4	305	CHL	CHC-C4B	4.36	1.46	1.39
26	A6	605	CHL	CHD-C4C	4.35	1.47	1.39
26	A3	307	CHL	CHB-C1B	4.35	1.46	1.39
26	A6	607	CHL	CHD-C1D	4.35	1.46	1.39
26	A1	303	CHL	CHD-C4C	4.34	1.47	1.39
26	A6	606	CHL	CHD-C1D	4.32	1.46	1.39
26	A4	304	CHL	CHD-C1D	4.31	1.46	1.39
19	AJ	104	LHG	O8-C23	4.30	1.45	1.33
25	AG	202	LMG	O8-C28	4.29	1.45	1.33
26	A6	607	CHL	O2A-CGA	4.29	1.45	1.33
19	A1	302	LHG	O8-C23	4.28	1.45	1.33
19	AA	844	LHG	O8-C23	4.27	1.45	1.33
19	A1	301	LHG	O7-C7	4.27	1.46	1.34
19	AJ	104	LHG	O7-C7	4.26	1.46	1.34
19	A3	301	LHG	O8-C23	4.26	1.45	1.33
26	A4	306	CHL	CHD-C4C	4.26	1.47	1.39
26	A3	307	CHL	CHD-C1D	4.25	1.46	1.39
19	A1	320	LHG	O8-C23	4.25	1.45	1.33
26	A6	605	CHL	CHD-C1D	4.24	1.46	1.39
25	A1	321	LMG	O8-C28	4.23	1.45	1.33
26	A4	314	CHL	CHC-C4B	4.22	1.46	1.39
26	A6	605	CHL	CHB-C1B	4.21	1.46	1.39
25	A1	321	LMG	O7-C10	4.20	1.46	1.34
26	A1	303	CHL	CHB-C1B	4.18	1.46	1.39
26	A3	320	CHL	O2A-CGA	4.18	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	A6	607	CHL	C3A-C2A	-4.18	1.51	1.54
26	A1	303	CHL	CHC-C1C	4.16	1.47	1.39
26	A6	605	CHL	CHC-C1C	4.16	1.47	1.39
26	A4	314	CHL	CHC-C1C	4.16	1.47	1.39
26	A3	320	CHL	CHB-C4A	-4.13	1.33	1.38
19	A1	302	LHG	O7-C7	4.13	1.46	1.34
26	A3	307	CHL	CHD-C4C	4.13	1.47	1.39
26	A3	320	CHL	CHC-C1C	4.12	1.47	1.39
19	A3	301	LHG	O7-C7	4.11	1.45	1.34
19	A1	301	LHG	O8-C23	4.10	1.45	1.33
19	A3	319	LHG	O8-C23	4.10	1.45	1.33
26	A1	308	CHL	CHC-C1C	4.07	1.47	1.39
23	AB	851	DGD	O1G-C1A	4.07	1.45	1.33
19	A1	320	LHG	O7-C7	4.06	1.45	1.34
26	A6	607	CHL	CHC-C1C	4.06	1.47	1.39
26	A4	305	CHL	CHC-C1C	4.05	1.47	1.39
26	A1	303	CHL	CHD-C1D	4.03	1.46	1.39
19	A6	617	LHG	O7-C7	4.01	1.45	1.34
19	A6	617	LHG	O8-C23	3.96	1.44	1.33
26	A4	304	CHL	CHC-C1C	3.95	1.47	1.39
26	A3	320	CHL	OBD-CAD	3.90	1.27	1.22
25	A4	318	LMG	O8-C28	3.90	1.44	1.33
19	AA	844	LHG	O7-C7	3.90	1.45	1.34
26	A6	606	CHL	CHC-C1C	3.89	1.46	1.39
23	AB	851	DGD	O2G-C1B	3.85	1.45	1.34
26	A4	306	CHL	CHD-C1D	3.73	1.45	1.39
17	AA	823	CLA	C1D-ND	3.70	1.42	1.37
17	A6	613	CLA	C1D-ND	3.68	1.42	1.37
26	A3	307	CHL	CHA-CBD	-3.65	1.47	1.51
22	AL	301	LMU	O5B-C1B	3.63	1.51	1.41
17	AA	801	CLA	C1D-ND	3.59	1.42	1.37
26	A6	605	CHL	CHA-CBD	-3.58	1.47	1.51
17	A3	311	CLA	C1D-ND	3.57	1.42	1.37
26	A3	307	CHL	CHC-C1C	3.56	1.46	1.39
25	A4	318	LMG	O7-C10	3.55	1.44	1.34
17	A4	302	CLA	C1D-ND	3.54	1.42	1.37
17	AB	802	CLA	CAB-C3B	-3.53	1.43	1.50
17	A3	313	CLA	C1D-ND	3.53	1.42	1.37
17	AK	201	CLA	C1D-ND	3.52	1.42	1.37
17	A3	312	CLA	C1D-ND	3.51	1.42	1.37
17	A1	316	CLA	C1D-ND	3.50	1.42	1.37
17	AL	303	CLA	C1D-ND	3.50	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	A1	305	CLA	C1D-ND	3.50	1.42	1.37
17	AH	201	CLA	C1D-ND	3.50	1.42	1.37
17	AB	836	CLA	C1D-ND	3.49	1.42	1.37
17	AF	804	CLA	C1D-ND	3.49	1.42	1.37
17	A1	313	CLA	C1D-ND	3.48	1.42	1.37
17	AG	204	CLA	C1D-ND	3.48	1.42	1.37
17	AA	836	CLA	C1D-ND	3.47	1.42	1.37
17	AA	816	CLA	C1D-ND	3.47	1.42	1.37
17	A3	303	CLA	C1D-ND	3.47	1.42	1.37
17	AB	817	CLA	C1D-ND	3.46	1.42	1.37
22	AL	301	LMU	O5'-C1'	3.45	1.50	1.41
17	AA	812	CLA	C1D-ND	3.44	1.42	1.37
17	A6	612	CLA	C1D-ND	3.44	1.42	1.37
17	A1	309	CLA	C1D-ND	3.44	1.42	1.37
17	A1	307	CLA	C1D-ND	3.44	1.42	1.37
17	AK	204	CLA	C1D-ND	3.43	1.42	1.37
17	AK	203	CLA	C1D-ND	3.43	1.42	1.37
17	A3	306	CLA	C1D-ND	3.43	1.42	1.37
17	A1	312	CLA	CAB-C3B	-3.43	1.43	1.50
17	A1	306	CLA	C1D-ND	3.41	1.42	1.37
17	A4	310	CLA	C1D-ND	3.41	1.42	1.37
17	A3	305	CLA	C1D-ND	3.41	1.42	1.37
17	A6	613	CLA	C4B-NB	3.41	1.42	1.37
17	A1	315	CLA	C1D-ND	3.40	1.42	1.37
22	AB	852	LMU	O5B-C1B	3.40	1.50	1.41
26	A1	303	CHL	CHA-CBD	-3.40	1.47	1.51
17	AG	201	CLA	C1D-ND	3.40	1.42	1.37
17	A4	312	CLA	C1D-ND	3.40	1.42	1.37
17	AB	808	CLA	C1D-ND	3.39	1.42	1.37
17	AJ	102	CLA	C1D-ND	3.39	1.42	1.37
17	AA	822	CLA	C1D-ND	3.38	1.42	1.37
17	AA	832	CLA	C1D-ND	3.38	1.42	1.37
17	A6	604	CLA	C1D-ND	3.38	1.42	1.37
17	AL	304	CLA	C1D-ND	3.38	1.42	1.37
17	A3	314	CLA	C1D-ND	3.36	1.42	1.37
17	AA	835	CLA	C1D-ND	3.36	1.42	1.37
17	A3	310	CLA	C1D-ND	3.36	1.42	1.37
17	AA	819	CLA	C1D-ND	3.35	1.42	1.37
17	A4	308	CLA	C1D-ND	3.35	1.42	1.37
22	AB	853	LMU	O5'-C1'	3.34	1.50	1.41
17	AF	803	CLA	C4B-NB	3.32	1.42	1.37
17	AG	204	CLA	C4B-NB	3.32	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	A4	303	CLA	C1D-ND	3.32	1.42	1.37
17	AB	841	CLA	C1D-ND	3.32	1.42	1.37
26	A3	320	CHL	CHA-CBD	-3.31	1.47	1.51
17	AB	839	CLA	CMD-C2D	-3.31	1.44	1.50
22	AA	851	LMU	O5'-C1'	3.31	1.50	1.41
17	AA	810	CLA	CAD-C3D	-3.31	1.45	1.50
17	A3	309	CLA	C1D-ND	3.30	1.42	1.37
17	A4	307	CLA	C1D-ND	3.30	1.42	1.37
17	AH	201	CLA	C4B-NB	3.30	1.42	1.37
17	AA	822	CLA	C4B-NB	3.30	1.42	1.37
17	AB	827	CLA	C1D-ND	3.30	1.42	1.37
17	AA	807	CLA	C1D-ND	3.30	1.42	1.37
22	AB	853	LMU	O5B-C1B	3.30	1.50	1.41
17	A1	311	CLA	C1D-ND	3.29	1.42	1.37
17	A3	304	CLA	C1D-ND	3.29	1.42	1.37
17	AA	809	CLA	C1D-ND	3.28	1.42	1.37
17	AA	820	CLA	C1D-ND	3.28	1.42	1.37
17	AB	812	CLA	C1D-ND	3.28	1.42	1.37
17	AB	816	CLA	C1D-ND	3.28	1.42	1.37
17	AB	819	CLA	C1D-ND	3.28	1.42	1.37
17	A4	309	CLA	C1D-ND	3.28	1.42	1.37
17	AB	832	CLA	C1D-ND	3.28	1.42	1.37
17	AA	806	CLA	C1D-ND	3.28	1.42	1.37
17	AL	302	CLA	C1D-ND	3.28	1.42	1.37
17	A6	609	CLA	C1D-ND	3.28	1.42	1.37
17	A6	610	CLA	C1D-ND	3.27	1.42	1.37
17	AA	828	CLA	C1D-ND	3.27	1.42	1.37
17	A6	611	CLA	C1D-ND	3.26	1.42	1.37
22	AB	850	LMU	O5'-C1'	3.26	1.50	1.41
17	A4	311	CLA	C1D-ND	3.26	1.42	1.37
17	A3	304	CLA	CAB-C3B	-3.26	1.44	1.50
17	A1	312	CLA	C1D-ND	3.26	1.42	1.37
17	AA	836	CLA	C4B-NB	3.25	1.42	1.37
17	A4	307	CLA	C4B-NB	3.25	1.42	1.37
26	A4	306	CHL	CHA-CBD	-3.25	1.47	1.51
17	A4	308	CLA	C4B-NB	3.25	1.42	1.37
17	AA	803	CLA	C1D-ND	3.25	1.42	1.37
17	AA	827	CLA	C1D-ND	3.25	1.42	1.37
17	A4	313	CLA	C1D-ND	3.25	1.42	1.37
17	A6	601	CLA	C1D-ND	3.25	1.42	1.37
17	AA	829	CLA	CMD-C2D	-3.24	1.44	1.50
17	AB	818	CLA	C1D-ND	3.24	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	A6	610	CLA	CAB-C3B	-3.24	1.44	1.50
17	AB	809	CLA	C4B-NB	3.24	1.42	1.37
17	AA	813	CLA	C1D-ND	3.24	1.42	1.37
26	A6	606	CHL	CHA-CBD	-3.24	1.47	1.51
17	A6	603	CLA	C1D-ND	3.24	1.42	1.37
17	AA	811	CLA	C1D-ND	3.24	1.42	1.37
17	AB	842	CLA	C1D-ND	3.24	1.42	1.37
17	AA	839	CLA	C1D-ND	3.23	1.42	1.37
17	AA	814	CLA	C1D-ND	3.23	1.42	1.37
26	A1	308	CHL	CHA-CBD	-3.23	1.47	1.51
17	AK	203	CLA	C4B-NB	3.22	1.42	1.37
17	A1	309	CLA	C4B-NB	3.22	1.42	1.37
17	A3	308	CLA	C1D-ND	3.22	1.42	1.37
17	A1	314	CLA	C1D-ND	3.21	1.42	1.37
17	AA	831	CLA	C1D-ND	3.21	1.42	1.37
17	A4	303	CLA	CAB-C3B	-3.21	1.44	1.50
17	AF	803	CLA	C1D-ND	3.21	1.42	1.37
17	AB	806	CLA	C1D-ND	3.21	1.42	1.37
17	A4	302	CLA	CAB-C3B	-3.20	1.44	1.50
17	AA	823	CLA	C4B-NB	3.20	1.42	1.37
17	AB	822	CLA	C4B-NB	3.20	1.42	1.37
17	AB	820	CLA	C4B-NB	3.20	1.42	1.37
17	AB	837	CLA	C1D-ND	3.20	1.42	1.37
17	A6	608	CLA	C1D-ND	3.20	1.42	1.37
17	AA	809	CLA	C4B-NB	3.20	1.42	1.37
17	AA	837	CLA	C1D-ND	3.19	1.42	1.37
17	AB	821	CLA	C1D-ND	3.19	1.42	1.37
17	AG	201	CLA	C4B-NB	3.19	1.42	1.37
17	A6	603	CLA	C4B-NB	3.19	1.42	1.37
17	A6	610	CLA	C4B-NB	3.19	1.42	1.37
17	AL	302	CLA	C4B-NB	3.19	1.42	1.37
17	AG	203	CLA	C4B-NB	3.19	1.42	1.37
17	A1	310	CLA	CAB-C3B	-3.18	1.44	1.50
17	AA	821	CLA	C1D-ND	3.18	1.42	1.37
18	AB	843	PQN	C11-C12	3.18	1.55	1.50
17	A1	311	CLA	C4B-NB	3.17	1.42	1.37
17	A1	316	CLA	CAB-C3B	-3.17	1.44	1.50
17	AB	811	CLA	C1D-ND	3.17	1.42	1.37
17	AA	824	CLA	C4B-NB	3.17	1.42	1.37
22	AB	852	LMU	O5'-C1'	3.17	1.50	1.41
17	AB	828	CLA	C1D-ND	3.17	1.42	1.37
17	A4	311	CLA	C4B-NB	3.16	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AB	812	CLA	CAB-C3B	-3.16	1.44	1.50
17	A3	302	CLA	C1D-ND	3.16	1.42	1.37
17	AA	818	CLA	C1D-ND	3.16	1.42	1.37
17	A3	304	CLA	C4B-NB	3.16	1.42	1.37
17	AB	802	CLA	C1D-ND	3.15	1.42	1.37
17	A1	305	CLA	C4B-NB	3.15	1.42	1.37
17	A1	310	CLA	C1D-ND	3.15	1.42	1.37
17	AA	815	CLA	C2D-C1D	3.15	1.48	1.42
22	AB	850	LMU	O5B-C1B	3.15	1.49	1.41
17	A6	609	CLA	C4B-NB	3.15	1.42	1.37
22	AA	851	LMU	O5B-C1B	3.15	1.49	1.41
26	A4	314	CHL	CHA-CBD	-3.15	1.48	1.51
17	A3	306	CLA	CAB-C3B	-3.14	1.44	1.50
18	AA	843	PQN	C11-C12	3.14	1.55	1.50
17	A3	314	CLA	C4B-NB	3.14	1.42	1.37
17	A4	310	CLA	C4B-NB	3.14	1.42	1.37
17	AA	805	CLA	C1D-ND	3.14	1.42	1.37
17	AA	810	CLA	C1D-ND	3.13	1.42	1.37
17	A3	311	CLA	C4B-NB	3.12	1.42	1.37
17	AG	203	CLA	C1D-ND	3.12	1.42	1.37
17	A3	305	CLA	C4B-NB	3.12	1.42	1.37
17	A3	310	CLA	C4B-NB	3.12	1.42	1.37
17	AB	826	CLA	C1D-ND	3.12	1.42	1.37
17	A6	612	CLA	C4B-NB	3.11	1.42	1.37
17	AJ	102	CLA	C4B-NB	3.11	1.41	1.37
17	AA	804	CLA	C1D-ND	3.11	1.41	1.37
26	A6	607	CHL	CHA-CBD	-3.11	1.48	1.51
17	AA	831	CLA	C4B-NB	3.10	1.41	1.37
17	A6	611	CLA	C4B-NB	3.10	1.41	1.37
17	A6	602	CLA	C1D-ND	3.10	1.41	1.37
17	AA	808	CLA	C4B-NB	3.10	1.41	1.37
17	AB	833	CLA	C1D-ND	3.10	1.41	1.37
17	A1	315	CLA	CAB-C3B	-3.10	1.44	1.50
17	AB	835	CLA	C1D-ND	3.09	1.41	1.37
17	A1	310	CLA	C4B-NB	3.09	1.41	1.37
17	A4	313	CLA	C4B-NB	3.09	1.41	1.37
17	A3	303	CLA	C4B-NB	3.09	1.41	1.37
17	AA	842	CLA	C1D-ND	3.09	1.41	1.37
17	AA	829	CLA	C1D-ND	3.08	1.41	1.37
17	AL	304	CLA	C4B-NB	3.08	1.41	1.37
26	A4	305	CHL	CHA-CBD	-3.08	1.48	1.51
17	AB	823	CLA	C1D-ND	3.08	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AF	804	CLA	C4B-NB	3.08	1.41	1.37
17	AB	822	CLA	C1D-ND	3.07	1.41	1.37
17	AA	801	CLA	C4B-NB	3.07	1.41	1.37
17	A4	312	CLA	C4B-NB	3.07	1.41	1.37
17	AB	805	CLA	C1D-ND	3.06	1.41	1.37
17	AB	830	CLA	C4B-NB	3.06	1.41	1.37
17	AB	840	CLA	C4B-NB	3.06	1.41	1.37
17	A3	306	CLA	C4B-NB	3.06	1.41	1.37
17	AA	810	CLA	C4B-NB	3.06	1.41	1.37
17	AB	802	CLA	C4B-NB	3.06	1.41	1.37
17	AB	836	CLA	C4B-NB	3.06	1.41	1.37
17	A1	306	CLA	C4B-NB	3.06	1.41	1.37
17	A1	315	CLA	C4B-NB	3.06	1.41	1.37
17	AA	824	CLA	C1D-ND	3.05	1.41	1.37
20	AA	849	BCR	C30-C25	-3.05	1.49	1.53
17	AA	841	CLA	C1D-ND	3.05	1.41	1.37
17	AA	817	CLA	C1D-ND	3.04	1.41	1.37
17	AB	803	CLA	C1D-ND	3.04	1.41	1.37
17	AB	820	CLA	C1D-ND	3.04	1.41	1.37
17	AA	816	CLA	C4B-NB	3.03	1.41	1.37
17	A3	312	CLA	C4B-NB	3.02	1.41	1.37
17	A3	313	CLA	C4B-NB	3.02	1.41	1.37
17	AB	813	CLA	C1D-ND	3.02	1.41	1.37
17	AB	814	CLA	C1D-ND	3.02	1.41	1.37
17	AA	838	CLA	C1D-ND	3.01	1.41	1.37
17	AA	811	CLA	C4B-NB	3.01	1.41	1.37
17	AA	833	CLA	C4B-NB	3.01	1.41	1.37
17	AA	808	CLA	C1D-ND	3.00	1.41	1.37
17	AA	834	CLA	C1D-ND	3.00	1.41	1.37
17	A3	315	CLA	C1D-ND	3.00	1.41	1.37
17	A4	309	CLA	C4B-NB	3.00	1.41	1.37
17	AA	817	CLA	C4B-NB	3.00	1.41	1.37
17	AA	802	CLA	C1D-ND	2.99	1.41	1.37
17	AA	827	CLA	C4B-NB	2.99	1.41	1.37
17	AA	830	CLA	C4B-NB	2.99	1.41	1.37
17	A1	312	CLA	C4B-NB	2.99	1.41	1.37
17	A6	608	CLA	C4B-NB	2.99	1.41	1.37
17	AB	830	CLA	CMD-C2D	-2.98	1.44	1.50
17	A6	604	CLA	C4B-NB	2.98	1.41	1.37
17	AA	815	CLA	C4B-NB	2.98	1.41	1.37
17	AB	829	CLA	C1D-ND	2.98	1.41	1.37
17	AB	803	CLA	C4B-NB	2.97	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AB	837	CLA	C4B-NB	2.97	1.41	1.37
17	A3	309	CLA	C4B-NB	2.97	1.41	1.37
20	A3	318	BCR	C40-C30	2.97	1.59	1.53
17	AA	821	CLA	C4B-NB	2.97	1.41	1.37
27	A6	615	XAT	O4-C5	-2.97	1.42	1.46
17	A1	313	CLA	C4B-NB	2.97	1.41	1.37
17	AB	810	CLA	C1D-ND	2.97	1.41	1.37
17	AB	812	CLA	C4B-NB	2.97	1.41	1.37
17	AB	821	CLA	C4B-NB	2.96	1.41	1.37
17	AK	204	CLA	C4B-NB	2.96	1.41	1.37
17	AA	828	CLA	C3B-C4B	2.96	1.51	1.42
17	AA	826	CLA	C1D-ND	2.96	1.41	1.37
17	AA	840	CLA	C1D-ND	2.96	1.41	1.37
17	AB	831	CLA	C1D-ND	2.96	1.41	1.37
17	A1	307	CLA	C4B-NB	2.95	1.41	1.37
17	AA	825	CLA	CMD-C2D	-2.95	1.44	1.50
17	AA	825	CLA	C4B-NB	2.95	1.41	1.37
17	AB	834	CLA	C4B-NB	2.95	1.41	1.37
17	A1	316	CLA	C4B-NB	2.95	1.41	1.37
17	AA	833	CLA	C1D-ND	2.95	1.41	1.37
17	AA	835	CLA	C4B-NB	2.95	1.41	1.37
17	AA	820	CLA	C4B-NB	2.94	1.41	1.37
17	AB	841	CLA	C4B-NB	2.94	1.41	1.37
17	AA	825	CLA	C1D-ND	2.94	1.41	1.37
17	AA	814	CLA	C4B-NB	2.94	1.41	1.37
17	A4	303	CLA	C4B-NB	2.92	1.41	1.37
17	A3	302	CLA	C4B-NB	2.92	1.41	1.37
17	AB	815	CLA	C1D-ND	2.92	1.41	1.37
17	A4	302	CLA	C4B-NB	2.92	1.41	1.37
17	AA	802	CLA	CMD-C2D	-2.92	1.44	1.50
17	AB	831	CLA	C4B-NB	2.92	1.41	1.37
17	AH	201	CLA	C1B-C2B	2.92	1.50	1.43
17	A1	316	CLA	C1B-C2B	2.91	1.50	1.43
17	AA	830	CLA	C1D-ND	2.91	1.41	1.37
17	AA	802	CLA	C4B-NB	2.90	1.41	1.37
17	A1	304	CLA	C1D-ND	2.90	1.41	1.37
17	AA	830	CLA	CMB-C2B	-2.89	1.44	1.50
17	AA	828	CLA	C4B-NB	2.89	1.41	1.37
17	AB	839	CLA	C1D-ND	2.89	1.41	1.37
17	AB	816	CLA	C4B-NB	2.88	1.41	1.37
17	A4	313	CLA	C1B-C2B	2.88	1.49	1.43
17	A3	308	CLA	C4B-NB	2.88	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AB	823	CLA	C4B-NB	2.87	1.41	1.37
17	AB	838	CLA	C4B-NB	2.87	1.41	1.37
17	AB	824	CLA	C1D-ND	2.87	1.41	1.37
17	AB	840	CLA	CMD-C2D	-2.87	1.44	1.50
17	AB	835	CLA	C4B-NB	2.86	1.41	1.37
17	AA	801	CLA	C1B-C2B	2.86	1.49	1.43
17	AB	834	CLA	C1D-ND	2.86	1.41	1.37
17	AA	841	CLA	CMC-C2C	-2.86	1.44	1.50
17	AB	840	CLA	C1D-ND	2.85	1.41	1.37
17	A4	301	CLA	C4B-NB	2.85	1.41	1.37
17	AB	813	CLA	C4B-NB	2.85	1.41	1.37
17	AA	804	CLA	C4B-NB	2.85	1.41	1.37
17	AB	827	CLA	C4B-NB	2.84	1.41	1.37
17	AB	820	CLA	CMB-C2B	-2.84	1.44	1.50
17	A1	314	CLA	C4B-NB	2.84	1.41	1.37
17	AB	807	CLA	C1D-ND	2.84	1.41	1.37
17	A6	602	CLA	C4B-NB	2.84	1.41	1.37
17	AA	833	CLA	CMB-C2B	-2.83	1.45	1.50
17	AA	832	CLA	C4B-NB	2.83	1.41	1.37
17	AF	802	CLA	CMB-C2B	-2.83	1.45	1.50
17	AB	826	CLA	C4B-NB	2.83	1.41	1.37
17	AB	801	CLA	CMD-C2D	-2.83	1.45	1.50
17	AA	839	CLA	C1B-C2B	2.82	1.49	1.43
17	AB	839	CLA	C4B-NB	2.82	1.41	1.37
17	AB	825	CLA	CMD-C2D	-2.82	1.45	1.50
17	A3	304	CLA	C4B-C3B	2.82	1.49	1.43
17	AG	203	CLA	C1B-C2B	2.82	1.49	1.43
17	AB	809	CLA	C1D-ND	2.82	1.41	1.37
17	AB	817	CLA	C4B-NB	2.82	1.41	1.37
17	AB	838	CLA	C1D-ND	2.82	1.41	1.37
17	AA	839	CLA	C4B-NB	2.82	1.41	1.37
17	AA	838	CLA	C4B-NB	2.81	1.41	1.37
17	AA	803	CLA	C4B-NB	2.81	1.41	1.37
17	A1	310	CLA	C1B-C2B	2.80	1.49	1.43
17	A3	312	CLA	C1B-C2B	2.80	1.49	1.43
17	AB	829	CLA	CMB-C2B	-2.79	1.45	1.50
17	AB	807	CLA	C1B-C2B	2.79	1.49	1.43
17	AB	825	CLA	C4B-NB	2.79	1.41	1.37
17	AB	829	CLA	CMD-C2D	-2.79	1.45	1.50
17	AB	833	CLA	C1B-C2B	2.79	1.49	1.43
17	A3	315	CLA	C4B-NB	2.78	1.41	1.37
18	AA	843	PQN	C10-C1	2.78	1.53	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AF	802	CLA	C1D-ND	2.78	1.41	1.37
17	AA	807	CLA	C4B-NB	2.78	1.41	1.37
26	A4	304	CHL	CHA-CBD	-2.78	1.48	1.51
17	AA	841	CLA	C4B-NB	2.77	1.41	1.37
17	A3	315	CLA	CMD-C2D	-2.77	1.45	1.50
17	AL	304	CLA	C1B-C2B	2.76	1.49	1.43
17	AB	805	CLA	CMD-C2D	-2.76	1.45	1.50
17	AB	830	CLA	CMB-C2B	-2.76	1.45	1.50
17	AA	842	CLA	C4B-NB	2.75	1.41	1.37
17	AB	806	CLA	C4B-NB	2.75	1.41	1.37
17	AA	819	CLA	CMB-C2B	-2.75	1.45	1.50
17	AB	823	CLA	C1B-C2B	2.75	1.49	1.43
17	AK	203	CLA	C1B-C2B	2.75	1.49	1.43
17	AA	842	CLA	C1B-C2B	2.75	1.49	1.43
17	A4	302	CLA	C1B-C2B	2.75	1.49	1.43
17	AB	832	CLA	C4B-NB	2.75	1.41	1.37
17	AB	840	CLA	CMB-C2B	-2.75	1.45	1.50
17	A3	311	CLA	C1B-C2B	2.74	1.49	1.43
17	AB	805	CLA	C4B-NB	2.74	1.41	1.37
17	AK	204	CLA	C1B-C2B	2.74	1.49	1.43
17	A1	306	CLA	C1B-C2B	2.74	1.49	1.43
20	AA	847	BCR	C8-C9	2.74	1.51	1.46
17	AB	815	CLA	C4B-NB	2.74	1.41	1.37
17	A3	310	CLA	C1B-C2B	2.73	1.49	1.43
17	AB	810	CLA	CMB-C2B	-2.73	1.45	1.50
17	AA	805	CLA	C1B-C2B	2.73	1.49	1.43
17	AB	803	CLA	C1B-C2B	2.73	1.49	1.43
17	AJ	102	CLA	C1B-C2B	2.73	1.49	1.43
17	AB	828	CLA	C4B-NB	2.72	1.41	1.37
17	AA	830	CLA	CMC-C2C	-2.72	1.45	1.50
17	AB	802	CLA	C4B-C3B	2.72	1.49	1.43
17	AB	818	CLA	C4B-NB	2.72	1.41	1.37
17	AA	826	CLA	C4B-NB	2.72	1.41	1.37
17	AB	819	CLA	C4B-NB	2.71	1.41	1.37
17	A1	315	CLA	C1B-C2B	2.71	1.49	1.43
17	AA	818	CLA	C4B-NB	2.70	1.41	1.37
17	A3	305	CLA	C1B-C2B	2.70	1.49	1.43
17	A4	301	CLA	C1D-ND	2.70	1.41	1.37
17	AB	801	CLA	C4B-NB	2.70	1.41	1.37
17	AB	832	CLA	C1B-C2B	2.70	1.49	1.43
17	AA	814	CLA	C1B-C2B	2.70	1.49	1.43
17	AA	820	CLA	C1B-C2B	2.70	1.49	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AB	804	CLA	CMD-C2D	-2.69	1.45	1.50
17	AB	816	CLA	C1B-C2B	2.69	1.49	1.43
17	A1	311	CLA	C3B-C4B	2.69	1.50	1.42
17	AA	806	CLA	C4B-NB	2.69	1.41	1.37
17	A6	604	CLA	C1B-C2B	2.69	1.49	1.43
17	AB	812	CLA	C4B-C3B	2.69	1.49	1.43
17	AB	830	CLA	C1B-C2B	2.69	1.49	1.43
17	A3	314	CLA	C1B-C2B	2.69	1.49	1.43
17	A4	309	CLA	C1B-C2B	2.68	1.49	1.43
17	A6	601	CLA	CMC-C2C	-2.68	1.45	1.50
17	AB	824	CLA	C1B-C2B	2.68	1.49	1.43
17	AB	808	CLA	C4B-NB	2.68	1.41	1.37
17	AB	830	CLA	C1D-ND	2.68	1.41	1.37
17	AA	818	CLA	CMD-C2D	-2.68	1.45	1.50
17	A6	610	CLA	C4B-C3B	2.67	1.49	1.43
17	A1	304	CLA	C4B-NB	2.67	1.41	1.37
17	AB	822	CLA	C1B-C2B	2.67	1.49	1.43
17	AA	822	CLA	C1B-C2B	2.66	1.49	1.43
17	AA	810	CLA	C1B-C2B	2.66	1.49	1.43
17	AB	833	CLA	C4B-NB	2.66	1.41	1.37
17	AA	823	CLA	C1B-C2B	2.66	1.49	1.43
17	AA	827	CLA	C1B-C2B	2.66	1.49	1.43
17	AA	830	CLA	C1B-C2B	2.65	1.49	1.43
17	AA	805	CLA	C4B-NB	2.65	1.41	1.37
17	AA	811	CLA	C1B-C2B	2.65	1.49	1.43
17	A1	305	CLA	C1B-C2B	2.65	1.49	1.43
17	AL	303	CLA	C4B-NB	2.64	1.41	1.37
17	A1	311	CLA	C1B-C2B	2.64	1.49	1.43
17	AA	840	CLA	CMD-C2D	-2.64	1.45	1.50
17	AA	834	CLA	C1B-C2B	2.64	1.49	1.43
17	AA	836	CLA	CMB-C2B	-2.63	1.45	1.50
17	AB	812	CLA	C1B-C2B	2.63	1.49	1.43
17	A4	303	CLA	C4B-C3B	2.63	1.49	1.43
17	A6	610	CLA	C1B-C2B	2.63	1.49	1.43
17	A4	303	CLA	C1B-C2B	2.63	1.49	1.43
17	AA	817	CLA	C1B-C2B	2.62	1.49	1.43
17	AB	807	CLA	CMD-C2D	-2.62	1.45	1.50
17	A1	313	CLA	C1B-C2B	2.62	1.49	1.43
17	AB	824	CLA	C4B-NB	2.62	1.41	1.37
17	AF	804	CLA	C1B-C2B	2.62	1.49	1.43
17	A3	313	CLA	C1B-C2B	2.62	1.49	1.43
18	AA	843	PQN	C5-C4	2.62	1.53	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AB	813	CLA	C1B-C2B	2.61	1.49	1.43
17	AA	812	CLA	C1B-C2B	2.61	1.49	1.43
17	AG	201	CLA	C1B-C2B	2.61	1.49	1.43
17	A1	314	CLA	C1B-C2B	2.61	1.49	1.43
17	AA	808	CLA	C1B-C2B	2.61	1.49	1.43
17	AB	801	CLA	CMB-C2B	-2.60	1.45	1.50
17	AF	802	CLA	C4B-NB	2.60	1.41	1.37
17	AB	841	CLA	C1B-C2B	2.60	1.49	1.43
17	A4	312	CLA	C1B-C2B	2.60	1.49	1.43
17	AA	824	CLA	C1B-C2B	2.60	1.49	1.43
17	A3	304	CLA	C1B-C2B	2.60	1.49	1.43
17	AB	811	CLA	C4B-NB	2.60	1.41	1.37
17	AB	829	CLA	C4B-NB	2.60	1.41	1.37
17	A3	306	CLA	C1B-C2B	2.60	1.49	1.43
17	AA	829	CLA	MG-NB	-2.60	2.00	2.05
17	AA	840	CLA	C4B-NB	2.60	1.41	1.37
17	AB	834	CLA	C1B-C2B	2.59	1.49	1.43
17	AA	813	CLA	C4B-NB	2.59	1.41	1.37
17	A3	306	CLA	C4B-C3B	2.59	1.49	1.43
17	AB	842	CLA	CMD-C2D	-2.59	1.45	1.50
17	A1	311	CLA	CMC-C2C	-2.59	1.45	1.50
17	AL	302	CLA	CMB-C2B	-2.58	1.45	1.50
17	AA	832	CLA	C1B-C2B	2.58	1.49	1.43
17	AA	834	CLA	C4B-NB	2.58	1.41	1.37
17	A1	310	CLA	C4B-C3B	2.58	1.49	1.43
17	AA	815	CLA	C1B-C2B	2.58	1.49	1.43
18	AB	843	PQN	C5-C4	2.58	1.53	1.48
17	AB	831	CLA	CMB-C2B	-2.58	1.45	1.50
17	A1	315	CLA	C4B-C3B	2.58	1.49	1.43
17	A6	612	CLA	C1B-C2B	2.58	1.49	1.43
17	AA	812	CLA	C4B-NB	2.58	1.41	1.37
17	AB	806	CLA	C3B-C4B	2.58	1.50	1.42
17	A4	310	CLA	C1B-C2B	2.58	1.49	1.43
17	AA	803	CLA	C1B-C2B	2.58	1.49	1.43
17	AB	806	CLA	C1B-C2B	2.58	1.49	1.43
17	A6	613	CLA	C1B-C2B	2.58	1.49	1.43
17	AA	839	CLA	CMD-C2D	-2.57	1.45	1.50
17	A4	307	CLA	CMD-C2D	-2.57	1.45	1.50
17	AA	837	CLA	C4B-NB	2.57	1.41	1.37
17	A3	308	CLA	C1B-C2B	2.56	1.49	1.43
17	AB	809	CLA	C1B-C2B	2.56	1.49	1.43
17	A3	309	CLA	CMD-C2D	-2.56	1.45	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	A1	312	CLA	C4B-C3B	2.56	1.49	1.43
17	A6	603	CLA	C1B-C2B	2.56	1.49	1.43
17	AA	809	CLA	CMD-C2D	-2.56	1.45	1.50
27	A4	316	XAT	O24-C25	-2.56	1.42	1.46
17	AB	839	CLA	C1B-C2B	2.55	1.49	1.43
17	AB	842	CLA	C4B-NB	2.55	1.41	1.37
17	A1	304	CLA	C1B-C2B	2.55	1.49	1.43
17	AB	837	CLA	C1B-C2B	2.55	1.49	1.43
17	AA	829	CLA	CMB-C2B	-2.55	1.45	1.50
17	AG	204	CLA	C1B-C2B	2.55	1.49	1.43
17	A6	601	CLA	C4B-NB	2.55	1.41	1.37
17	AB	836	CLA	CMB-C2B	-2.55	1.45	1.50
17	AB	824	CLA	CMD-C2D	-2.55	1.45	1.50
17	AA	827	CLA	CMD-C2D	-2.54	1.45	1.50
17	A1	312	CLA	C1B-C2B	2.54	1.49	1.43
17	A6	611	CLA	C1B-C2B	2.54	1.49	1.43
17	AB	825	CLA	C1B-C2B	2.54	1.49	1.43
17	AB	819	CLA	C1B-C2B	2.54	1.49	1.43
17	AB	802	CLA	C1B-C2B	2.53	1.49	1.43
17	AB	805	CLA	C1B-C2B	2.53	1.49	1.43
17	AF	802	CLA	CMD-C2D	-2.53	1.45	1.50
17	A1	309	CLA	C1B-C2B	2.52	1.49	1.43
17	A3	315	CLA	C1B-C2B	2.52	1.49	1.43
17	AA	841	CLA	CMD-C2D	-2.52	1.45	1.50
17	AB	821	CLA	C1B-C2B	2.52	1.49	1.43
27	A1	318	XAT	O24-C25	-2.52	1.43	1.46
17	A3	309	CLA	C1B-C2B	2.51	1.49	1.43
20	AI	101	BCR	C30-C25	-2.51	1.50	1.53
17	A6	608	CLA	CMD-C2D	-2.51	1.45	1.50
17	AB	825	CLA	C1D-ND	2.51	1.41	1.37
17	A6	608	CLA	C1B-C2B	2.51	1.49	1.43
17	AB	831	CLA	CMD-C2D	-2.51	1.45	1.50
17	A4	308	CLA	C1B-C2B	2.51	1.49	1.43
20	AA	847	BCR	C12-C13	2.50	1.51	1.46
17	AA	819	CLA	C4B-NB	2.50	1.41	1.37
17	A4	302	CLA	C4B-C3B	2.50	1.49	1.43
17	AB	814	CLA	C4B-NB	2.49	1.41	1.37
17	AA	835	CLA	C1B-C2B	2.49	1.49	1.43
17	A6	602	CLA	C1B-C2B	2.49	1.49	1.43
17	A1	307	CLA	C1B-C2B	2.49	1.49	1.43
17	A6	601	CLA	C1B-C2B	2.49	1.49	1.43
17	A4	311	CLA	C1B-C2B	2.49	1.49	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	AA	849	BCR	C1-C6	-2.48	1.50	1.53
17	AB	801	CLA	CMC-C2C	-2.48	1.45	1.50
17	AB	821	CLA	CMB-C2B	-2.48	1.45	1.50
17	AA	840	CLA	CMB-C2B	-2.48	1.45	1.50
17	AB	804	CLA	CMC-C2C	-2.48	1.45	1.50
17	AB	819	CLA	CMB-C2B	-2.47	1.45	1.50
17	A1	316	CLA	C4B-C3B	2.47	1.48	1.43
17	AB	808	CLA	C1B-C2B	2.47	1.48	1.43
17	AB	835	CLA	C1B-C2B	2.47	1.48	1.43
17	AB	814	CLA	CMB-C2B	-2.47	1.45	1.50
17	AA	808	CLA	CMD-C2D	-2.47	1.45	1.50
17	A3	308	CLA	CMD-C2D	-2.47	1.45	1.50
17	AA	841	CLA	C1B-C2B	2.47	1.48	1.43
17	AA	809	CLA	CMB-C2B	-2.47	1.45	1.50
17	AA	819	CLA	C1B-C2B	2.46	1.48	1.43
17	AA	816	CLA	CMB-C2B	-2.46	1.45	1.50
17	AB	826	CLA	C1B-C2B	2.46	1.48	1.43
17	AB	821	CLA	CMD-C2D	-2.46	1.45	1.50
17	AA	818	CLA	CMB-C2B	-2.46	1.45	1.50
17	AL	303	CLA	CMB-C2B	-2.46	1.45	1.50
17	AA	821	CLA	CMB-C2B	-2.46	1.45	1.50
26	A1	308	CHL	CMC-C2C	2.46	1.49	1.44
17	AA	806	CLA	C1B-C2B	2.46	1.48	1.43
17	AB	811	CLA	C1B-C2B	2.46	1.48	1.43
27	A6	615	XAT	O24-C25	-2.45	1.43	1.46
17	AB	826	CLA	C3B-C4B	2.45	1.49	1.42
17	AA	825	CLA	C1B-C2B	2.45	1.48	1.43
17	A3	302	CLA	C1B-C2B	2.45	1.48	1.43
17	AF	803	CLA	C1B-C2B	2.45	1.48	1.43
17	AB	842	CLA	C1B-C2B	2.45	1.48	1.43
17	AB	810	CLA	MG-NB	-2.45	2.00	2.05
17	AA	831	CLA	CMB-C2B	-2.45	1.45	1.50
17	A1	304	CLA	CMD-C2D	-2.45	1.45	1.50
17	AB	807	CLA	C4B-NB	2.45	1.41	1.37
17	AB	841	CLA	CMB-C2B	-2.44	1.45	1.50
17	AB	835	CLA	CMD-C2D	-2.44	1.45	1.50
17	A4	311	CLA	C3B-C4B	2.44	1.49	1.42
17	A6	609	CLA	C3B-C4B	2.44	1.49	1.42
17	AA	807	CLA	C1B-C2B	2.44	1.48	1.43
17	AA	831	CLA	C1B-C2B	2.44	1.48	1.43
17	AB	834	CLA	CMD-C2D	-2.44	1.45	1.50
17	A4	301	CLA	CMC-C2C	-2.44	1.45	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AB	815	CLA	CMD-C2D	-2.43	1.45	1.50
17	AB	817	CLA	C1B-C2B	2.43	1.48	1.43
17	A6	602	CLA	CMD-C2D	-2.43	1.45	1.50
17	AA	838	CLA	C1B-C2B	2.43	1.48	1.43
17	AB	838	CLA	C1B-C2B	2.43	1.48	1.43
17	AB	836	CLA	C1B-C2B	2.43	1.48	1.43
17	AA	821	CLA	CMD-C2D	-2.43	1.45	1.50
17	AA	827	CLA	C3B-C4B	2.43	1.49	1.42
17	AA	811	CLA	CMD-C2D	-2.42	1.45	1.50
17	AA	826	CLA	CMD-C2D	-2.42	1.45	1.50
17	AB	809	CLA	CMD-C2D	-2.42	1.45	1.50
17	AA	828	CLA	CMD-C2D	-2.42	1.45	1.50
17	AA	842	CLA	CMB-C2B	-2.42	1.45	1.50
17	AA	803	CLA	CMC-C2C	-2.42	1.45	1.50
17	AA	812	CLA	CMB-C2B	-2.42	1.45	1.50
17	AA	828	CLA	C1B-C2B	2.42	1.48	1.43
17	AB	820	CLA	CMD-C2D	-2.41	1.45	1.50
17	AB	832	CLA	CMD-C2D	-2.41	1.45	1.50
17	AA	833	CLA	C1B-C2B	2.41	1.48	1.43
17	AF	802	CLA	C1B-C2B	2.41	1.48	1.43
17	AA	825	CLA	C3B-C4B	2.41	1.49	1.42
17	AA	804	CLA	C1B-C2B	2.41	1.48	1.43
17	AA	806	CLA	CMD-C2D	-2.41	1.45	1.50
24	A4	315	LUT	C8-C9	2.41	1.51	1.46
17	AF	803	CLA	CMB-C2B	-2.41	1.45	1.50
17	A6	602	CLA	CMC-C2C	-2.41	1.45	1.50
17	AB	804	CLA	C1B-C2B	2.41	1.48	1.43
17	A4	307	CLA	C1B-C2B	2.41	1.48	1.43
17	A3	303	CLA	CMB-C2B	-2.41	1.45	1.50
17	AB	819	CLA	CMD-C2D	-2.40	1.45	1.50
18	AB	843	PQN	C10-C1	2.40	1.52	1.48
17	AB	837	CLA	CMB-C2B	-2.40	1.45	1.50
17	AL	302	CLA	C1B-C2B	2.40	1.48	1.43
17	AB	828	CLA	C1B-C2B	2.39	1.48	1.43
17	AB	802	CLA	CMD-C2D	-2.39	1.45	1.50
17	AB	826	CLA	CMD-C2D	-2.39	1.45	1.50
17	A1	304	CLA	CMB-C2B	-2.39	1.45	1.50
17	A3	303	CLA	C1B-C2B	2.39	1.48	1.43
17	AB	829	CLA	MG-NB	-2.39	2.01	2.05
17	AA	834	CLA	CMC-C2C	-2.39	1.45	1.50
17	AB	825	CLA	CMC-C2C	-2.39	1.45	1.50
17	AF	803	CLA	CMD-C2D	-2.39	1.45	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AB	803	CLA	CMD-C2D	-2.39	1.45	1.50
17	A6	609	CLA	CMD-C2D	-2.39	1.45	1.50
17	AG	204	CLA	C3B-C4B	2.39	1.49	1.42
17	AA	812	CLA	CMD-C2D	-2.39	1.45	1.50
17	AB	835	CLA	CMB-C2B	-2.39	1.45	1.50
24	AF	806	LUT	C12-C13	2.39	1.51	1.46
17	AB	810	CLA	C4B-NB	2.39	1.41	1.37
17	A4	309	CLA	C3B-C4B	2.38	1.49	1.42
17	AA	837	CLA	C1B-C2B	2.38	1.48	1.43
17	A3	308	CLA	CMB-C2B	-2.38	1.45	1.50
17	AA	802	CLA	CMC-C2C	-2.38	1.45	1.50
17	AA	835	CLA	CMB-C2B	-2.38	1.45	1.50
17	AF	803	CLA	C3B-C4B	2.38	1.49	1.42
17	AA	820	CLA	CMD-C2D	-2.38	1.45	1.50
17	AA	834	CLA	CMB-C2B	-2.38	1.45	1.50
17	AA	830	CLA	CMD-C2D	-2.38	1.45	1.50
17	AA	803	CLA	CMD-C2D	-2.38	1.45	1.50
17	AL	303	CLA	C1B-C2B	2.38	1.48	1.43
17	AG	204	CLA	CMB-C2B	-2.37	1.45	1.50
17	AA	805	CLA	CMD-C2D	-2.37	1.45	1.50
17	AB	809	CLA	CMC-C2C	-2.37	1.45	1.50
17	AB	827	CLA	CMD-C2D	-2.37	1.45	1.50
17	A4	301	CLA	C1B-C2B	2.37	1.48	1.43
17	AB	827	CLA	C1B-C2B	2.37	1.48	1.43
17	A4	307	CLA	C3B-C4B	2.37	1.49	1.42
17	AB	838	CLA	CMC-C2C	-2.37	1.45	1.50
17	A6	612	CLA	CMB-C2B	-2.36	1.45	1.50
17	AB	827	CLA	C3B-C4B	2.36	1.49	1.42
17	AA	829	CLA	MG-ND	-2.36	2.01	2.05
17	AA	824	CLA	CMD-C2D	-2.36	1.45	1.50
17	AA	826	CLA	C1B-C2B	2.36	1.48	1.43
17	A6	603	CLA	CHC-C1C	2.36	1.43	1.38
17	AA	838	CLA	CMD-C2D	-2.36	1.45	1.50
17	AB	814	CLA	MG-NB	-2.36	2.01	2.05
17	AB	818	CLA	CMD-C2D	-2.36	1.45	1.50
17	AB	811	CLA	CMD-C2D	-2.35	1.45	1.50
17	AB	828	CLA	C3B-C4B	2.35	1.49	1.42
17	AA	807	CLA	C3B-C4B	2.35	1.49	1.42
26	A6	606	CHL	CMC-C2C	2.35	1.49	1.44
17	AA	825	CLA	CMB-C2B	-2.35	1.46	1.50
17	AB	832	CLA	CMB-C2B	-2.35	1.46	1.50
17	AA	814	CLA	CMD-C2D	-2.35	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AA	821	CLA	C1B-C2B	2.35	1.48	1.43
27	A3	317	XAT	O24-C25	-2.35	1.43	1.46
17	A1	309	CLA	C3B-C4B	2.35	1.49	1.42
25	AG	202	LMG	O1-C1	2.34	1.44	1.40
17	AB	810	CLA	CMD-C2D	-2.34	1.46	1.50
17	A4	308	CLA	C3B-C4B	2.34	1.49	1.42
17	AL	304	CLA	CMD-C2D	-2.34	1.46	1.50
17	A3	302	CLA	C3B-C4B	2.34	1.49	1.42
17	A6	613	CLA	C3B-C4B	2.34	1.49	1.42
17	AB	837	CLA	C3B-C4B	2.34	1.49	1.42
17	AA	818	CLA	C1B-C2B	2.34	1.48	1.43
17	AA	832	CLA	C3B-C4B	2.34	1.49	1.42
17	AA	813	CLA	CMB-C2B	-2.34	1.46	1.50
17	AA	813	CLA	C1B-C2B	2.34	1.48	1.43
17	A6	613	CLA	CHC-C1C	2.34	1.43	1.38
17	AB	805	CLA	CMB-C2B	-2.33	1.46	1.50
17	AB	824	CLA	CMB-C2B	-2.33	1.46	1.50
17	AB	809	CLA	CMB-C2B	-2.33	1.46	1.50
17	A6	611	CLA	CMD-C2D	-2.33	1.46	1.50
17	A3	315	CLA	C3B-C4B	2.33	1.49	1.42
17	AB	818	CLA	CMB-C2B	-2.33	1.46	1.50
17	AB	837	CLA	CMC-C2C	-2.33	1.46	1.50
17	AB	817	CLA	CMD-C2D	-2.33	1.46	1.50
17	AB	801	CLA	C1D-ND	2.33	1.40	1.37
26	A4	304	CHL	CMC-C2C	2.33	1.49	1.44
17	AB	832	CLA	CMC-C2C	-2.33	1.46	1.50
17	AA	801	CLA	CMB-C2B	-2.33	1.46	1.50
17	AA	802	CLA	CMB-C2B	-2.33	1.46	1.50
17	AA	829	CLA	C1B-C2B	2.33	1.48	1.43
17	AA	821	CLA	C3B-C4B	2.32	1.49	1.42
17	A4	310	CLA	CMD-C2D	-2.32	1.46	1.50
17	AB	817	CLA	C3B-C4B	2.32	1.49	1.42
17	AB	841	CLA	CMD-C2D	-2.32	1.46	1.50
17	AB	801	CLA	MG-ND	-2.32	2.01	2.05
17	AA	807	CLA	CMC-C2C	-2.32	1.46	1.50
17	AA	823	CLA	CMD-C2D	-2.32	1.46	1.50
17	A6	603	CLA	CMB-C2B	-2.32	1.46	1.50
17	AB	814	CLA	CMD-C2D	-2.32	1.46	1.50
17	A1	305	CLA	C3B-C4B	2.32	1.49	1.42
17	AA	831	CLA	CMD-C2D	-2.32	1.46	1.50
17	AA	808	CLA	C3B-C4B	2.32	1.49	1.42
17	A1	316	CLA	CMB-C2B	-2.32	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AF	802	CLA	MG-NB	-2.32	2.01	2.05
17	AB	813	CLA	CMD-C2D	-2.32	1.46	1.50
17	AF	803	CLA	CMC-C2C	-2.31	1.46	1.50
17	AB	809	CLA	C3B-C4B	2.31	1.49	1.42
17	AB	842	CLA	MG-NB	-2.31	2.01	2.05
20	A6	616	BCR	C8-C9	2.31	1.50	1.46
17	AL	304	CLA	CMC-C2C	-2.31	1.46	1.50
17	AB	823	CLA	CMD-C2D	-2.31	1.46	1.50
17	AB	816	CLA	CMC-C2C	-2.31	1.46	1.50
17	AA	811	CLA	CMB-C2B	-2.31	1.46	1.50
17	AB	802	CLA	CMC-C2C	-2.31	1.46	1.50
17	AA	814	CLA	CMB-C2B	-2.31	1.46	1.50
17	AA	842	CLA	CMD-C2D	-2.31	1.46	1.50
17	A4	307	CLA	CMB-C2B	-2.30	1.46	1.50
17	AA	837	CLA	CMD-C2D	-2.30	1.46	1.50
17	A4	301	CLA	CMD-C2D	-2.30	1.46	1.50
17	AA	808	CLA	CMB-C2B	-2.30	1.46	1.50
17	AA	823	CLA	CMB-C2B	-2.30	1.46	1.50
17	AB	811	CLA	C3B-C4B	2.30	1.49	1.42
17	A6	610	CLA	C1A-CHA	-2.30	1.36	1.40
26	A3	307	CHL	CBD-CGD	-2.30	1.49	1.52
17	AA	833	CLA	MG-NB	-2.30	2.01	2.05
17	AA	804	CLA	CMD-C2D	-2.30	1.46	1.50
17	AB	830	CLA	CMC-C2C	-2.29	1.46	1.50
17	AA	836	CLA	C1B-C2B	2.29	1.48	1.43
17	AB	823	CLA	CMB-C2B	-2.29	1.46	1.50
17	A3	311	CLA	C3B-C4B	2.29	1.49	1.42
17	AA	805	CLA	CMB-C2B	-2.29	1.46	1.50
17	AA	819	CLA	CMD-C2D	-2.29	1.46	1.50
17	AA	834	CLA	CMD-C2D	-2.29	1.46	1.50
17	AL	303	CLA	CMD-C2D	-2.29	1.46	1.50
17	A6	604	CLA	CMB-C2B	-2.29	1.46	1.50
17	AA	804	CLA	C3B-C4B	2.29	1.49	1.42
17	AB	804	CLA	C4B-NB	2.29	1.40	1.37
24	A4	315	LUT	C22-C21	-2.29	1.51	1.54
17	AB	831	CLA	C1B-C2B	2.29	1.48	1.43
17	AB	838	CLA	C3B-C4B	2.29	1.49	1.42
17	A1	313	CLA	C3B-C4B	2.29	1.49	1.42
17	A4	312	CLA	C3B-C4B	2.29	1.49	1.42
17	AB	804	CLA	MG-ND	-2.29	2.01	2.05
17	A1	314	CLA	CMD-C2D	-2.28	1.46	1.50
17	AB	813	CLA	CMB-C2B	-2.28	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	A6	609	CLA	CHC-C1C	2.28	1.43	1.38
17	AB	834	CLA	CMC-C2C	-2.28	1.46	1.50
27	A4	316	XAT	O4-C5	-2.28	1.43	1.46
17	A4	313	CLA	CMD-C2D	-2.28	1.46	1.50
17	AB	825	CLA	MG-NB	-2.28	2.01	2.05
17	AB	812	CLA	CMD-C2D	-2.28	1.46	1.50
17	A6	609	CLA	C1B-C2B	2.28	1.48	1.43
17	AB	811	CLA	MG-NB	-2.27	2.01	2.05
17	AB	803	CLA	CMB-C2B	-2.27	1.46	1.50
17	A1	314	CLA	CMB-C2B	-2.27	1.46	1.50
17	AB	802	CLA	CHC-C1C	2.27	1.43	1.38
17	AA	822	CLA	C3B-C4B	2.27	1.49	1.42
17	AB	836	CLA	CMD-C2D	-2.27	1.46	1.50
17	A3	305	CLA	CMD-C2D	-2.27	1.46	1.50
17	A1	306	CLA	C3B-C4B	2.27	1.49	1.42
17	A4	302	CLA	CMD-C2D	-2.27	1.46	1.50
17	AB	810	CLA	MG-ND	-2.27	2.01	2.05
17	AB	808	CLA	CMC-C2C	-2.27	1.46	1.50
17	A1	307	CLA	CMD-C2D	-2.27	1.46	1.50
17	A6	610	CLA	CMB-C2B	-2.27	1.46	1.50
17	AA	817	CLA	CMD-C2D	-2.26	1.46	1.50
17	AB	815	CLA	C1B-C2B	2.26	1.48	1.43
17	AA	809	CLA	C3B-C4B	2.26	1.49	1.42
17	AK	203	CLA	C3B-C4B	2.26	1.49	1.42
17	AB	827	CLA	CMC-C2C	-2.26	1.46	1.50
17	AK	204	CLA	CMC-C2C	-2.26	1.46	1.50
17	AB	806	CLA	CMD-C2D	-2.26	1.46	1.50
17	A3	302	CLA	CHC-C1C	2.26	1.43	1.38
17	AA	813	CLA	CMC-C2C	-2.26	1.46	1.50
17	AA	816	CLA	C1B-C2B	2.26	1.48	1.43
17	A1	316	CLA	CMD-C2D	-2.26	1.46	1.50
17	AB	817	CLA	CHC-C1C	2.26	1.43	1.38
17	AA	806	CLA	C3B-C4B	2.25	1.49	1.42
17	A6	601	CLA	CMB-C2B	-2.25	1.46	1.50
17	AB	816	CLA	CMD-C2D	-2.25	1.46	1.50
17	AB	808	CLA	CMD-C2D	-2.25	1.46	1.50
17	A6	611	CLA	C3B-C4B	2.25	1.49	1.42
17	A4	310	CLA	C3B-C4B	2.25	1.49	1.42
17	A6	609	CLA	CMB-C2B	-2.25	1.46	1.50
17	AB	824	CLA	MG-NB	-2.25	2.01	2.05
17	AG	203	CLA	CMD-C2D	-2.25	1.46	1.50
17	A3	305	CLA	C3B-C4B	2.25	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	A3	313	CLA	C3B-C4B	2.25	1.49	1.42
17	AL	302	CLA	CMD-C2D	-2.25	1.46	1.50
17	A3	309	CLA	C3B-C4B	2.25	1.49	1.42
17	A4	308	CLA	CMD-C2D	-2.25	1.46	1.50
17	AA	805	CLA	CMC-C2C	-2.25	1.46	1.50
17	AB	801	CLA	C3B-C4B	2.25	1.49	1.42
17	A6	603	CLA	CMD-C2D	-2.25	1.46	1.50
20	AK	205	BCR	C12-C13	2.25	1.50	1.46
17	AA	835	CLA	CMD-C2D	-2.24	1.46	1.50
17	A3	303	CLA	CMD-C2D	-2.24	1.46	1.50
17	AL	304	CLA	CMB-C2B	-2.24	1.46	1.50
17	AA	802	CLA	C3B-C4B	2.24	1.49	1.42
17	AA	827	CLA	CHC-C1C	2.24	1.43	1.38
17	AB	822	CLA	CMB-C2B	-2.24	1.46	1.50
17	AB	807	CLA	CMB-C2B	-2.24	1.46	1.50
17	AB	812	CLA	CMB-C2B	-2.24	1.46	1.50
17	AA	838	CLA	CMB-C2B	-2.24	1.46	1.50
17	A3	314	CLA	C3B-C4B	2.24	1.49	1.42
17	A6	602	CLA	CMB-C2B	-2.24	1.46	1.50
17	AA	826	CLA	C3B-C4B	2.24	1.49	1.42
17	AB	804	CLA	CMB-C2B	-2.24	1.46	1.50
17	A3	315	CLA	CHC-C1C	2.24	1.43	1.38
17	A6	611	CLA	CMB-C2B	-2.24	1.46	1.50
17	AG	203	CLA	CHC-C1C	2.24	1.43	1.38
17	AA	819	CLA	CMC-C2C	-2.24	1.46	1.50
17	A3	306	CLA	CMD-C2D	-2.24	1.46	1.50
17	A4	307	CLA	CHC-C1C	2.24	1.43	1.38
17	AB	838	CLA	CMD-C2D	-2.23	1.46	1.50
17	AA	810	CLA	CMB-C2B	-2.23	1.46	1.50
17	AB	826	CLA	CHC-C1C	2.23	1.43	1.38
17	A1	312	CLA	CHC-C1C	2.23	1.43	1.38
20	A1	319	BCR	C40-C30	2.23	1.58	1.53
17	AA	813	CLA	C3B-C4B	2.23	1.49	1.42
17	AB	815	CLA	CMC-C2C	-2.23	1.46	1.50
17	AB	841	CLA	CMC-C2C	-2.23	1.46	1.50
17	AB	814	CLA	CHC-C1C	2.23	1.43	1.38
17	AB	811	CLA	CMC-C2C	-2.23	1.46	1.50
17	AB	842	CLA	CMB-C2B	-2.23	1.46	1.50
17	A4	313	CLA	CMB-C2B	-2.23	1.46	1.50
18	AB	843	PQN	C2-C1	2.23	1.52	1.47
17	AB	814	CLA	CMC-C2C	-2.23	1.46	1.50
17	AG	201	CLA	CMB-C2B	-2.23	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AB	810	CLA	C1B-C2B	2.23	1.48	1.43
26	A6	605	CHL	CMC-C2C	2.23	1.49	1.44
17	A4	311	CLA	CMD-C2D	-2.23	1.46	1.50
17	A6	601	CLA	MG-NB	-2.23	2.01	2.05
17	AA	832	CLA	CMD-C2D	-2.22	1.46	1.50
17	A4	303	CLA	CMD-C2D	-2.22	1.46	1.50
27	A1	318	XAT	O4-C5	-2.22	1.43	1.46
17	A1	310	CLA	CMD-C2D	-2.22	1.46	1.50
17	A1	307	CLA	C3B-C4B	2.22	1.49	1.42
17	AB	825	CLA	CHC-C1C	2.22	1.42	1.38
17	AB	807	CLA	CAC-C3C	-2.22	1.45	1.51
17	AB	804	CLA	C1D-ND	2.22	1.40	1.37
17	A6	612	CLA	CMD-C2D	-2.22	1.46	1.50
17	A4	301	CLA	CMB-C2B	-2.22	1.46	1.50
17	AA	828	CLA	CMB-C2B	-2.22	1.46	1.50
17	AB	808	CLA	CMB-C2B	-2.22	1.46	1.50
17	AA	837	CLA	C3B-C4B	2.22	1.49	1.42
17	AF	804	CLA	C3B-C4B	2.22	1.49	1.42
17	AL	303	CLA	CMC-C2C	-2.22	1.46	1.50
17	A6	608	CLA	CMB-C2B	-2.22	1.46	1.50
17	A3	309	CLA	CMB-C2B	-2.22	1.46	1.50
17	AB	820	CLA	C1B-C2B	2.22	1.48	1.43
17	AA	841	CLA	CMB-C2B	-2.22	1.46	1.50
17	AA	841	CLA	C3B-C4B	2.22	1.49	1.42
17	AJ	102	CLA	C3B-C4B	2.21	1.49	1.42
17	A6	613	CLA	CMD-C2D	-2.21	1.46	1.50
17	A6	608	CLA	C3B-C4B	2.21	1.49	1.42
27	A3	317	XAT	O4-C5	-2.21	1.43	1.46
17	A1	305	CLA	CMD-C2D	-2.21	1.46	1.50
17	AG	203	CLA	C3B-C4B	2.21	1.49	1.42
17	AA	810	CLA	C3B-C4B	2.21	1.49	1.42
17	AG	201	CLA	CMD-C2D	-2.21	1.46	1.50
17	AL	302	CLA	C3B-C4B	2.21	1.49	1.42
17	AF	804	CLA	CMD-C2D	-2.21	1.46	1.50
17	A6	601	CLA	CHC-C1C	2.20	1.42	1.38
17	A1	313	CLA	CMD-C2D	-2.20	1.46	1.50
17	AH	201	CLA	CMD-C2D	-2.20	1.46	1.50
17	AB	825	CLA	C3B-C4B	2.20	1.49	1.42
17	AF	804	CLA	CMB-C2B	-2.20	1.46	1.50
17	A1	312	CLA	CMD-C2D	-2.20	1.46	1.50
17	AA	837	CLA	MG-NB	-2.20	2.01	2.05
17	A3	310	CLA	C3B-C4B	2.20	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	AB	848	BCR	C19-C18	2.20	1.50	1.46
17	AK	203	CLA	CMD-C2D	-2.20	1.46	1.50
17	AB	815	CLA	CHC-C1C	2.20	1.42	1.38
17	AB	811	CLA	CMB-C2B	-2.20	1.46	1.50
17	A3	305	CLA	CMB-C2B	-2.19	1.46	1.50
17	AB	834	CLA	C3B-C4B	2.19	1.49	1.42
17	A4	310	CLA	CHC-C1C	2.19	1.42	1.38
17	AA	809	CLA	C1B-C2B	2.19	1.48	1.43
17	AB	827	CLA	CHC-C1C	2.19	1.42	1.38
17	AG	201	CLA	C3B-C4B	2.19	1.49	1.42
17	A3	304	CLA	CHC-C1C	2.19	1.42	1.38
17	AB	838	CLA	CMB-C2B	-2.19	1.46	1.50
17	AA	839	CLA	C3B-C4B	2.19	1.49	1.42
17	A6	603	CLA	C3B-C4B	2.19	1.49	1.42
17	A6	612	CLA	C3B-C4B	2.19	1.49	1.42
20	AA	848	BCR	C1-C6	-2.19	1.51	1.53
17	AA	810	CLA	CMD-C2D	-2.19	1.46	1.50
17	A4	312	CLA	CMB-C2B	-2.19	1.46	1.50
17	AB	822	CLA	CMD-C2D	-2.19	1.46	1.50
17	A6	604	CLA	CMD-C2D	-2.18	1.46	1.50
17	AA	840	CLA	C3B-C4B	2.18	1.49	1.42
17	AF	802	CLA	CMC-C2C	-2.18	1.46	1.50
17	AA	833	CLA	CMD-C2D	-2.18	1.46	1.50
17	A3	314	CLA	CMB-C2B	-2.18	1.46	1.50
17	AB	805	CLA	C3B-C4B	2.18	1.49	1.42
20	AA	845	BCR	C8-C9	2.18	1.50	1.46
17	A3	313	CLA	CMD-C2D	-2.18	1.46	1.50
17	A6	601	CLA	CMD-C2D	-2.18	1.46	1.50
17	AB	833	CLA	CMD-C2D	-2.18	1.46	1.50
26	A1	303	CHL	CMC-C2C	2.18	1.49	1.44
17	A4	312	CLA	CHC-C1C	2.18	1.42	1.38
17	AA	826	CLA	CMB-C2B	-2.18	1.46	1.50
17	A3	312	CLA	C3B-C4B	2.18	1.49	1.42
17	AB	825	CLA	MG-ND	-2.18	2.01	2.05
17	AL	304	CLA	C3B-C4B	2.18	1.49	1.42
17	A4	301	CLA	C3B-C4B	2.18	1.49	1.42
17	AB	815	CLA	CMB-C2B	-2.18	1.46	1.50
17	AK	201	CLA	CBD-CAD	2.18	1.56	1.51
17	AK	204	CLA	CMD-C2D	-2.18	1.46	1.50
17	A1	309	CLA	CMD-C2D	-2.18	1.46	1.50
17	AA	825	CLA	C1B-NB	-2.18	1.35	1.37
17	AB	828	CLA	CMD-C2D	-2.18	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AA	817	CLA	C3B-C4B	2.17	1.49	1.42
17	AA	821	CLA	CMC-C2C	-2.17	1.46	1.50
17	AA	806	CLA	CMC-C2C	-2.17	1.46	1.50
17	A4	308	CLA	CHC-C1C	2.17	1.42	1.38
17	AB	824	CLA	MG-ND	-2.17	2.01	2.05
17	A1	307	CLA	CMC-C2C	-2.17	1.46	1.50
17	AB	813	CLA	C3B-C4B	2.17	1.49	1.42
17	AB	820	CLA	C3B-C4B	2.17	1.49	1.42
17	A3	309	CLA	CHC-C1C	2.17	1.42	1.38
17	AA	815	CLA	C3B-C4B	2.17	1.49	1.42
17	AA	838	CLA	CMC-C2C	-2.17	1.46	1.50
17	A1	315	CLA	CMB-C2B	-2.17	1.46	1.50
17	AB	820	CLA	MG-NB	-2.17	2.01	2.05
17	AA	804	CLA	CMC-C2C	-2.17	1.46	1.50
17	AB	824	CLA	CMC-C2C	-2.17	1.46	1.50
17	AB	837	CLA	CMD-C2D	-2.17	1.46	1.50
17	A4	303	CLA	CMB-C2B	-2.17	1.46	1.50
17	AA	816	CLA	CMD-C2D	-2.17	1.46	1.50
17	A3	312	CLA	CMB-C2B	-2.17	1.46	1.50
17	AA	817	CLA	CMB-C2B	-2.17	1.46	1.50
17	AA	816	CLA	C3B-C4B	2.17	1.49	1.42
17	AA	806	CLA	CMB-C2B	-2.17	1.46	1.50
17	AA	823	CLA	C3B-C4B	2.16	1.49	1.42
17	AB	814	CLA	C3B-C4B	2.16	1.49	1.42
17	A3	303	CLA	C3B-C4B	2.16	1.49	1.42
17	AA	820	CLA	CMC-C2C	-2.16	1.46	1.50
17	A4	302	CLA	CMC-C2C	-2.16	1.46	1.50
17	AB	828	CLA	CMB-C2B	-2.16	1.46	1.50
17	A3	310	CLA	CMD-C2D	-2.16	1.46	1.50
17	A3	312	CLA	CMC-C2C	-2.16	1.46	1.50
17	AB	834	CLA	CMB-C2B	-2.16	1.46	1.50
17	AA	828	CLA	CMC-C2C	-2.16	1.46	1.50
17	AA	824	CLA	CMB-C2B	-2.16	1.46	1.50
17	AF	802	CLA	MG-ND	-2.16	2.01	2.05
17	AB	839	CLA	C3B-C4B	2.16	1.49	1.42
17	AA	840	CLA	C1B-C2B	2.16	1.48	1.43
17	AA	827	CLA	CMC-C2C	-2.16	1.46	1.50
17	AB	840	CLA	MG-NB	-2.16	2.01	2.05
17	AA	822	CLA	CMD-C2D	-2.15	1.46	1.50
17	AB	821	CLA	CMC-C2C	-2.15	1.46	1.50
17	AB	815	CLA	MG-NB	-2.15	2.01	2.05
17	AA	812	CLA	CMC-C2C	-2.15	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AA	824	CLA	C3B-C4B	2.15	1.49	1.42
17	A1	306	CLA	CMD-C2D	-2.15	1.46	1.50
17	A4	312	CLA	CMD-C2D	-2.15	1.46	1.50
17	A6	604	CLA	C3B-C4B	2.15	1.49	1.42
17	AB	829	CLA	C1B-C2B	2.15	1.48	1.43
17	AG	204	CLA	CHC-C1C	2.15	1.42	1.38
17	A1	312	CLA	CMB-C2B	-2.15	1.46	1.50
17	AB	815	CLA	C3B-C4B	2.15	1.49	1.42
17	A1	313	CLA	CMC-C2C	-2.15	1.46	1.50
17	AB	807	CLA	CMC-C2C	-2.15	1.46	1.50
17	A3	302	CLA	CMD-C2D	-2.15	1.46	1.50
17	AG	204	CLA	CMD-C2D	-2.15	1.46	1.50
17	AB	807	CLA	MG-NB	-2.15	2.01	2.05
17	AB	821	CLA	C3B-C4B	2.14	1.49	1.42
17	A6	610	CLA	CMD-C2D	-2.14	1.46	1.50
17	A1	311	CLA	CMD-C2D	-2.14	1.46	1.50
17	AA	820	CLA	CMB-C2B	-2.14	1.46	1.50
17	AA	815	CLA	CMB-C2B	-2.14	1.46	1.50
17	A1	306	CLA	CMB-C2B	-2.14	1.46	1.50
17	A3	306	CLA	CMB-C2B	-2.14	1.46	1.50
17	A6	612	CLA	CMC-C2C	-2.14	1.46	1.50
17	AA	820	CLA	C3B-C4B	2.14	1.49	1.42
17	AA	823	CLA	CHC-C1C	2.14	1.42	1.38
17	AK	201	CLA	CHC-C1C	2.14	1.42	1.38
17	AA	813	CLA	CMD-C2D	-2.14	1.46	1.50
17	A1	313	CLA	CMB-C2B	-2.14	1.46	1.50
24	A6	614	LUT	C22-C21	-2.14	1.52	1.54
17	A4	308	CLA	CMB-C2B	-2.14	1.46	1.50
17	AB	814	CLA	C1B-C2B	2.13	1.48	1.43
17	AA	813	CLA	MG-NB	-2.13	2.01	2.05
17	AA	837	CLA	CMB-C2B	-2.13	1.46	1.50
17	AB	828	CLA	CMC-C2C	-2.13	1.46	1.50
17	AA	818	CLA	MG-NB	-2.13	2.01	2.05
17	AH	201	CLA	CMB-C2B	-2.13	1.46	1.50
17	A3	314	CLA	CMD-C2D	-2.13	1.46	1.50
17	AB	818	CLA	CHC-C1C	2.13	1.42	1.38
17	AK	203	CLA	CHC-C1C	2.13	1.42	1.38
17	AA	805	CLA	C3B-C4B	2.13	1.48	1.42
17	AA	822	CLA	CHC-C1C	2.13	1.42	1.38
17	AB	837	CLA	MG-NB	-2.13	2.01	2.05
17	AB	833	CLA	CMB-C2B	-2.13	1.46	1.50
17	AA	826	CLA	CHC-C1C	2.13	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AB	831	CLA	CMC-C2C	-2.13	1.46	1.50
17	A1	315	CLA	CMD-C2D	-2.13	1.46	1.50
17	AB	804	CLA	CHC-C1C	2.13	1.42	1.38
17	AA	839	CLA	CMB-C2B	-2.13	1.46	1.50
17	A4	310	CLA	CMB-C2B	-2.13	1.46	1.50
17	A6	604	CLA	CMC-C2C	-2.13	1.46	1.50
17	A1	309	CLA	CHC-C1C	2.12	1.42	1.38
17	AB	838	CLA	CHC-C1C	2.12	1.42	1.38
17	AA	835	CLA	C3B-C4B	2.12	1.48	1.42
17	A3	313	CLA	CHC-C1C	2.12	1.42	1.38
17	AA	804	CLA	CHC-C1C	2.12	1.42	1.38
20	AK	205	BCR	C8-C9	2.12	1.50	1.46
17	A6	602	CLA	C3B-C4B	2.12	1.48	1.42
17	AA	807	CLA	CMD-C2D	-2.12	1.46	1.50
17	A4	302	CLA	CMB-C2B	-2.12	1.46	1.50
17	AB	804	CLA	C3B-C4B	2.12	1.48	1.42
17	AA	806	CLA	CHC-C1C	2.12	1.42	1.38
17	AK	204	CLA	C3B-C4B	2.12	1.48	1.42
17	AA	831	CLA	C3B-C4B	2.12	1.48	1.42
17	AB	813	CLA	CHC-C1C	2.12	1.42	1.38
17	A3	312	CLA	CHC-C1C	2.12	1.42	1.38
17	A1	311	CLA	CHC-C1C	2.12	1.42	1.38
17	AB	819	CLA	CMC-C2C	-2.12	1.46	1.50
17	AL	303	CLA	C3B-C4B	2.12	1.48	1.42
17	AB	839	CLA	MG-NB	-2.12	2.01	2.05
17	A1	304	CLA	MG-NB	-2.12	2.01	2.05
17	AA	803	CLA	CMB-C2B	-2.12	1.46	1.50
17	AA	801	CLA	CMD-C2D	-2.12	1.46	1.50
17	AB	818	CLA	C1B-C2B	2.11	1.48	1.43
17	AB	826	CLA	CMC-C2C	-2.11	1.46	1.50
17	AB	825	CLA	CMB-C2B	-2.11	1.46	1.50
17	AB	806	CLA	CHC-C1C	2.11	1.42	1.38
17	AA	802	CLA	C1B-C2B	2.11	1.48	1.43
17	A4	313	CLA	C3B-C4B	2.11	1.48	1.42
17	AB	812	CLA	CMC-C2C	-2.11	1.46	1.50
17	AB	808	CLA	C3B-C4B	2.11	1.48	1.42
17	AJ	102	CLA	CHC-C1C	2.11	1.42	1.38
17	AA	805	CLA	CHC-C1C	2.11	1.42	1.38
17	A1	309	CLA	CMB-C2B	-2.11	1.46	1.50
17	AB	841	CLA	MG-NB	-2.11	2.01	2.05
17	AA	810	CLA	CMC-C2C	-2.11	1.46	1.50
17	A3	304	CLA	CMD-C2D	-2.11	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AB	804	CLA	MG-NB	-2.11	2.01	2.05
17	A4	311	CLA	CHC-C1C	2.11	1.42	1.38
24	A1	317	LUT	C22-C21	-2.11	1.52	1.54
17	AB	842	CLA	C3B-C4B	2.11	1.48	1.42
17	AA	821	CLA	CHC-C1C	2.11	1.42	1.38
17	A1	314	CLA	C3B-C4B	2.11	1.48	1.42
17	A3	304	CLA	CMB-C2B	-2.11	1.46	1.50
17	AG	203	CLA	CMB-C2B	-2.11	1.46	1.50
17	AA	825	CLA	MG-NB	-2.11	2.01	2.05
17	AA	826	CLA	CMC-C2C	-2.11	1.46	1.50
17	AB	835	CLA	C3B-C4B	2.11	1.48	1.42
17	A4	310	CLA	CMC-C2C	-2.10	1.46	1.50
17	AA	840	CLA	MG-NB	-2.10	2.01	2.05
17	AA	811	CLA	C3B-C4B	2.10	1.48	1.42
25	A4	318	LMG	O7-C8	-2.10	1.41	1.46
17	AB	822	CLA	C3B-C4B	2.10	1.48	1.42
17	AB	836	CLA	C3B-C4B	2.10	1.48	1.42
17	A4	309	CLA	CMB-C2B	-2.10	1.46	1.50
17	AA	836	CLA	C3B-C4B	2.10	1.48	1.42
17	AB	830	CLA	C3B-C4B	2.10	1.48	1.42
17	AB	816	CLA	CMB-C2B	-2.10	1.46	1.50
20	AK	202	BCR	C12-C13	2.10	1.50	1.46
17	A3	303	CLA	CMC-C2C	-2.10	1.46	1.50
17	AA	818	CLA	CMC-C2C	-2.10	1.46	1.50
17	AB	831	CLA	C3B-C4B	2.10	1.48	1.42
26	A4	306	CHL	CBD-CGD	-2.10	1.49	1.52
17	AB	816	CLA	C3B-C4B	2.09	1.48	1.42
17	A3	302	CLA	CMB-C2B	-2.09	1.46	1.50
17	AK	201	CLA	CMC-C2C	-2.09	1.46	1.50
17	AH	201	CLA	C3B-C4B	2.09	1.48	1.42
17	AA	824	CLA	CMC-C2C	-2.09	1.46	1.50
17	AA	807	CLA	CMB-C2B	-2.09	1.46	1.50
17	AB	829	CLA	MG-ND	-2.09	2.01	2.05
17	AA	831	CLA	CMC-C2C	-2.09	1.46	1.50
17	AA	826	CLA	MG-NB	-2.09	2.01	2.05
17	AB	840	CLA	C1B-C2B	2.09	1.48	1.43
17	AA	807	CLA	CHC-C1C	2.09	1.42	1.38
17	A4	313	CLA	CMC-C2C	-2.09	1.46	1.50
17	AB	842	CLA	CHC-C1C	2.09	1.42	1.38
17	A6	609	CLA	CMC-C2C	-2.09	1.46	1.50
17	AA	836	CLA	CMD-C2D	-2.09	1.46	1.50
20	AB	844	BCR	C30-C25	-2.09	1.51	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	A6	610	CLA	CHC-C1C	2.08	1.42	1.38
17	A1	306	CLA	CMC-C2C	-2.08	1.46	1.50
17	AA	803	CLA	C3B-C4B	2.08	1.48	1.42
17	A3	314	CLA	CBD-CAD	2.08	1.56	1.51
17	AB	803	CLA	CMC-C2C	-2.08	1.46	1.50
20	AB	845	BCR	C8-C9	2.08	1.50	1.46
17	AB	827	CLA	CMB-C2B	-2.08	1.46	1.50
17	AK	203	CLA	CMB-C2B	-2.08	1.46	1.50
17	AA	841	CLA	CHC-C1C	2.08	1.42	1.38
17	A6	611	CLA	CHC-C1C	2.08	1.42	1.38
17	A4	308	CLA	CMC-C2C	-2.08	1.46	1.50
17	AA	814	CLA	MG-NB	-2.08	2.01	2.05
17	AA	809	CLA	CHC-C1C	2.08	1.42	1.38
17	A3	313	CLA	CMB-C2B	-2.08	1.46	1.50
17	AB	828	CLA	CHC-C1C	2.08	1.42	1.38
17	A1	305	CLA	CMB-C2B	-2.08	1.46	1.50
17	AG	201	CLA	CHC-C1C	2.08	1.42	1.38
17	AB	806	CLA	CMB-C2B	-2.08	1.46	1.50
17	A3	314	CLA	CHC-C1C	2.08	1.42	1.38
17	AA	812	CLA	C3B-C4B	2.08	1.48	1.42
20	AF	801	BCR	C23-C22	2.08	1.50	1.46
17	A3	305	CLA	CHC-C1C	2.07	1.42	1.38
17	AA	831	CLA	CHC-C1C	2.07	1.42	1.38
17	A3	306	CLA	CHC-C1C	2.07	1.42	1.38
24	AF	806	LUT	C8-C9	2.07	1.50	1.46
17	A6	608	CLA	CMC-C2C	-2.07	1.46	1.50
17	AA	830	CLA	C3B-C4B	2.07	1.48	1.42
18	AA	843	PQN	C2-C1	2.07	1.52	1.47
17	AA	840	CLA	CHC-C1C	2.07	1.42	1.38
17	AA	820	CLA	CHC-C1C	2.07	1.42	1.38
17	AK	201	CLA	CMD-C2D	-2.07	1.46	1.50
17	A4	303	CLA	CHC-C1C	2.07	1.42	1.38
17	AA	809	CLA	CMC-C2C	-2.07	1.46	1.50
17	A6	602	CLA	CHC-C1C	2.07	1.42	1.38
17	A1	307	CLA	CHC-C1C	2.06	1.42	1.38
17	AA	839	CLA	CMC-C2C	-2.06	1.46	1.50
17	AA	816	CLA	CMC-C2C	-2.06	1.46	1.50
17	AB	827	CLA	MG-NB	-2.06	2.01	2.05
17	AB	810	CLA	CMC-C2C	-2.06	1.46	1.50
17	AB	831	CLA	CHC-C1C	2.06	1.42	1.38
17	AA	804	CLA	CMB-C2B	-2.06	1.46	1.50
20	AA	845	BCR	C12-C13	2.06	1.50	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	AA	812	CLA	CHC-C4B	-2.06	1.34	1.39
17	AB	840	CLA	CMC-C2C	-2.06	1.46	1.50
17	AB	823	CLA	CMC-C2C	-2.06	1.46	1.50
17	AA	808	CLA	CHC-C1C	2.06	1.42	1.38
17	AA	814	CLA	CMC-C2C	-2.06	1.46	1.50
17	AA	819	CLA	C3B-C4B	2.06	1.48	1.42
17	A3	310	CLA	CHC-C1C	2.06	1.42	1.38
17	AA	842	CLA	C3B-C4B	2.06	1.48	1.42
17	AA	825	CLA	CMC-C2C	-2.05	1.46	1.50
17	AA	837	CLA	CMC-C2C	-2.05	1.46	1.50
17	A4	309	CLA	CMD-C2D	-2.05	1.46	1.50
17	A1	313	CLA	CHC-C1C	2.05	1.42	1.38
17	A3	309	CLA	CMC-C2C	-2.05	1.46	1.50
17	A3	310	CLA	CMB-C2B	-2.05	1.46	1.50
17	AB	803	CLA	CHC-C1C	2.05	1.42	1.38
17	AA	822	CLA	CMB-C2B	-2.05	1.46	1.50
17	A3	303	CLA	MG-NB	-2.05	2.01	2.05
17	A3	311	CLA	CHC-C1C	2.05	1.42	1.38
17	AB	814	CLA	MG-ND	-2.05	2.01	2.05
20	A6	616	BCR	C12-C13	2.05	1.50	1.46
17	AB	817	CLA	CMC-C2C	-2.04	1.46	1.50
17	AB	823	CLA	C3B-C4B	2.04	1.48	1.42
17	AB	803	CLA	C3B-C4B	2.04	1.48	1.42
17	AG	204	CLA	CMC-C2C	-2.04	1.46	1.50
17	A6	611	CLA	CMC-C2C	-2.04	1.46	1.50
17	AA	835	CLA	CHC-C1C	2.04	1.42	1.38
17	AA	829	CLA	C4B-NB	2.04	1.40	1.37
17	AB	840	CLA	C3B-C4B	2.04	1.48	1.42
17	AB	837	CLA	C1B-NB	-2.04	1.35	1.37
17	AA	838	CLA	C3B-C4B	2.04	1.48	1.42
17	AB	806	CLA	CMC-C2C	-2.04	1.46	1.50
17	AA	824	CLA	CHC-C1C	2.04	1.42	1.38
26	A4	305	CHL	CBD-CGD	-2.04	1.49	1.52
17	AA	834	CLA	C3B-C4B	2.04	1.48	1.42
17	A1	314	CLA	CHC-C1C	2.04	1.42	1.38
17	AA	802	CLA	MG-ND	-2.03	2.01	2.05
17	AK	204	CLA	CHC-C1C	2.03	1.42	1.38
17	A1	307	CLA	CMB-C2B	-2.03	1.46	1.50
17	AJ	102	CLA	CMB-C2B	-2.03	1.46	1.50
17	A1	316	CLA	CMC-C2C	-2.03	1.46	1.50
17	AJ	102	CLA	CMD-C2D	-2.03	1.46	1.50
17	A4	303	CLA	CMC-C2C	-2.03	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	A6	608	CLA	CHC-C1C	2.03	1.42	1.38
17	AB	825	CLA	CMA-C3A	-2.03	1.48	1.53
17	AB	820	CLA	CMC-C2C	-2.03	1.46	1.50
17	AF	803	CLA	CHC-C1C	2.03	1.42	1.38
17	A1	306	CLA	CHC-C1C	2.03	1.42	1.38
17	A4	301	CLA	CHC-C1C	2.03	1.42	1.38
17	A3	302	CLA	CMC-C2C	-2.03	1.46	1.50
17	AB	812	CLA	CHC-C1C	2.03	1.42	1.38
20	AJ	101	BCR	C23-C22	2.03	1.50	1.46
20	AK	202	BCR	C23-C22	2.03	1.50	1.46
17	AB	839	CLA	CMB-C2B	-2.03	1.46	1.50
17	AB	818	CLA	CMC-C2C	-2.03	1.46	1.50
17	AB	817	CLA	CMB-C2B	-2.03	1.46	1.50
17	AB	819	CLA	MG-NB	-2.02	2.01	2.05
17	AA	833	CLA	C3B-C4B	2.02	1.48	1.42
17	A4	311	CLA	CMB-C2B	-2.02	1.46	1.50
17	A3	311	CLA	CMD-C2D	-2.02	1.46	1.50
17	AA	833	CLA	CMC-C2C	-2.02	1.46	1.50
17	AA	836	CLA	MG-NB	-2.02	2.01	2.05
20	AI	101	BCR	C1-C6	-2.02	1.51	1.53
17	AB	818	CLA	C3B-C4B	2.02	1.48	1.42
20	AL	306	BCR	C12-C13	2.02	1.50	1.46
17	AB	831	CLA	MG-NB	-2.02	2.01	2.05
17	A3	304	CLA	CMC-C2C	-2.02	1.46	1.50
17	A3	306	CLA	CMC-C2C	-2.02	1.46	1.50
17	AF	804	CLA	CHC-C1C	2.02	1.42	1.38
17	AA	832	CLA	CHC-C1C	2.01	1.42	1.38
17	A1	310	CLA	CHC-C1C	2.01	1.42	1.38
17	AB	821	CLA	MG-NB	-2.01	2.01	2.05
17	AB	838	CLA	MG-NB	-2.01	2.01	2.05
17	AA	821	CLA	MG-NB	-2.01	2.01	2.05
17	A1	316	CLA	CHC-C1C	2.01	1.42	1.38
17	A1	315	CLA	CHC-C1C	2.01	1.42	1.38
17	AA	819	CLA	MG-NB	-2.01	2.01	2.05
17	AB	837	CLA	MG-ND	-2.01	2.01	2.05
17	AB	841	CLA	C3B-C4B	2.01	1.48	1.42
17	AK	204	CLA	CMB-C2B	-2.01	1.46	1.50
17	A1	304	CLA	C3B-C4B	2.01	1.48	1.42
17	A3	308	CLA	MG-NB	-2.01	2.01	2.05
17	AB	822	CLA	CHC-C1C	2.00	1.42	1.38
20	AK	205	BCR	C19-C18	2.00	1.50	1.46
17	AA	838	CLA	MG-NB	-2.00	2.01	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	A1	310	CLA	CMB-C2B	-2.00	1.46	1.50
17	AA	835	CLA	CMC-C2C	-2.00	1.46	1.50

All (1694) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	A1	319	BCR	C40-C30-C25	-14.39	87.67	110.24
20	A3	318	BCR	C40-C30-C25	-10.46	93.83	110.24
20	AL	305	BCR	C7-C8-C9	-10.01	111.42	126.23
20	A1	319	BCR	C39-C30-C25	9.81	125.63	110.24
26	A6	605	CHL	O2D-CGD-CBD	9.80	121.72	110.95
20	AJ	103	BCR	C28-C27-C26	-8.86	98.26	114.06
20	AB	844	BCR	C3-C4-C5	-8.34	99.18	114.06
26	A4	305	CHL	O2D-CGD-CBD	8.28	120.04	110.95
26	A4	306	CHL	CHA-C1A-C2A	-7.80	115.00	133.31
26	A4	304	CHL	CHA-C1A-C2A	-7.77	115.06	133.31
26	A6	605	CHL	CHA-C1A-C2A	-7.66	115.33	133.31
26	A4	306	CHL	OBD-CAD-C3D	-7.64	115.98	127.89
26	A6	606	CHL	O2D-CGD-CBD	7.51	119.19	110.95
26	A6	607	CHL	O2D-CGD-CBD	7.46	119.14	110.95
26	A4	306	CHL	O2D-CGD-CBD	7.45	119.13	110.95
26	A4	314	CHL	CHA-C1A-C2A	-7.45	115.82	133.31
26	A1	303	CHL	OBD-CAD-C3D	-7.43	116.30	127.89
26	A3	307	CHL	O2D-CGD-CBD	7.42	119.10	110.95
26	A1	303	CHL	CHA-C1A-C2A	-7.42	115.89	133.31
26	A3	307	CHL	CHA-C1A-C2A	-7.42	115.90	133.31
26	A6	606	CHL	CHA-C1A-C2A	-7.30	116.17	133.31
20	A3	318	BCR	C39-C30-C25	7.24	121.60	110.24
26	A3	320	CHL	CHA-C1A-C2A	-7.23	116.32	133.31
27	A4	316	XAT	O4-C5-C4	7.20	120.24	113.49
26	A3	307	CHL	OBD-CAD-C3D	-7.18	116.69	127.89
20	A3	318	BCR	C40-C30-C39	-7.09	88.33	108.63
26	A4	305	CHL	CHA-C1A-C2A	-7.09	116.67	133.31
26	A6	607	CHL	OBD-CAD-C3D	-7.04	116.91	127.89
26	A6	606	CHL	OBD-CAD-C3D	-7.02	116.94	127.89
26	A6	607	CHL	CHA-C1A-C2A	-7.02	116.83	133.31
26	A4	314	CHL	OBD-CAD-C3D	-6.93	117.08	127.89
26	A1	308	CHL	OBD-CAD-C3D	-6.90	117.12	127.89
20	A1	319	BCR	C40-C30-C39	-6.90	88.87	108.63
26	A4	305	CHL	OBD-CAD-C3D	-6.89	117.15	127.89
27	A1	318	XAT	O4-C5-C4	6.81	119.87	113.49
27	A6	615	XAT	O4-C5-C4	6.78	119.85	113.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	A6	605	CHL	OBD-CAD-C3D	-6.75	117.36	127.89
20	AK	205	BCR	C28-C27-C26	-6.73	102.06	114.06
24	A4	315	LUT	C8-C7-C6	-6.69	109.13	127.00
20	AG	205	BCR	C3-C4-C5	-6.59	102.31	114.06
17	AB	811	CLA	C4A-NA-C1A	6.59	109.69	106.68
26	A4	304	CHL	OBD-CAD-C3D	-6.55	117.67	127.89
17	A1	305	CLA	C4A-NA-C1A	6.50	109.64	106.68
26	A3	320	CHL	OBD-CAD-C3D	-6.50	117.76	127.89
20	A6	616	BCR	C40-C30-C25	-6.46	100.12	110.24
20	AA	845	BCR	C38-C26-C25	-6.44	117.46	124.48
20	AB	849	BCR	C24-C23-C22	-6.44	116.71	126.23
20	AA	848	BCR	C28-C27-C26	-6.36	102.72	114.06
20	AK	202	BCR	C3-C4-C5	-6.27	102.88	114.06
20	AK	205	BCR	C3-C4-C5	-6.26	102.89	114.06
24	A1	317	LUT	C17-C1-C6	-6.26	100.43	110.24
26	A3	320	CHL	C4D-ND-C1D	6.25	109.96	105.22
17	AB	825	CLA	C4A-NA-C1A	6.22	109.52	106.68
17	AL	304	CLA	C4A-NA-C1A	6.22	109.52	106.68
27	A3	317	XAT	O4-C5-C4	6.21	119.31	113.49
17	AA	841	CLA	C4A-NA-C1A	6.21	109.51	106.68
20	A4	317	BCR	C28-C27-C26	-6.16	103.08	114.06
17	AB	807	CLA	C4A-NA-C1A	6.14	109.48	106.68
17	AB	804	CLA	CAC-C3C-C4C	6.10	132.73	124.79
20	AB	849	BCR	C3-C4-C5	-6.08	103.22	114.06
17	AB	827	CLA	C4A-NA-C1A	6.06	109.45	106.68
20	AB	846	BCR	C37-C22-C21	-6.03	113.05	122.82
17	AA	820	CLA	C4A-NA-C1A	6.01	109.42	106.68
17	AA	813	CLA	C4A-NA-C1A	6.01	109.42	106.68
20	AB	849	BCR	C37-C22-C23	5.99	127.24	118.09
24	A3	316	LUT	C17-C1-C6	-5.97	100.88	110.24
17	AF	802	CLA	C4A-NA-C1A	5.93	109.38	106.68
17	AA	837	CLA	C4A-NA-C1A	5.91	109.38	106.68
20	AL	306	BCR	C38-C26-C25	-5.88	118.07	124.48
17	AB	828	CLA	C4A-NA-C1A	5.88	109.36	106.68
17	AA	806	CLA	C4A-NA-C1A	5.87	109.36	106.68
17	AF	803	CLA	C4A-NA-C1A	5.87	109.36	106.68
27	A4	316	XAT	O24-C25-C38	5.86	121.60	115.05
26	A1	308	CHL	C4D-ND-C1D	5.86	109.66	105.22
17	A6	603	CLA	C4A-NA-C1A	5.84	109.34	106.68
17	AB	824	CLA	C4A-NA-C1A	5.82	109.33	106.68
17	AB	832	CLA	C4A-NA-C1A	5.79	109.32	106.68
17	AB	839	CLA	C4A-NA-C1A	5.75	109.30	106.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AB	810	CLA	C4A-NA-C1A	5.74	109.30	106.68
20	AB	847	BCR	C38-C26-C25	-5.73	118.24	124.48
17	A1	316	CLA	C4A-NA-C1A	5.71	109.28	106.68
20	AI	102	BCR	C28-C27-C26	-5.70	103.90	114.06
17	AB	842	CLA	C4A-NA-C1A	5.69	109.28	106.68
17	AB	804	CLA	C4A-NA-C1A	5.69	109.27	106.68
20	A3	318	BCR	C30-C25-C26	-5.67	114.88	122.64
20	AL	305	BCR	C8-C7-C6	-5.65	111.92	127.00
18	AB	843	PQN	C15-C13-C12	-5.63	108.53	121.17
17	AA	834	CLA	C4A-NA-C1A	5.63	109.25	106.68
17	AK	204	CLA	C4A-NA-C1A	5.61	109.24	106.68
17	AA	833	CLA	C4A-NA-C1A	5.60	109.23	106.68
17	AB	841	CLA	C4A-NA-C1A	5.60	109.23	106.68
20	AA	845	BCR	C23-C24-C25	-5.60	112.04	127.00
26	A4	305	CHL	C4D-ND-C1D	5.59	109.47	105.22
17	AA	808	CLA	C4A-NA-C1A	5.58	109.23	106.68
17	AA	828	CLA	C4A-NA-C1A	5.58	109.22	106.68
27	A1	318	XAT	O24-C25-C24	5.58	118.72	113.49
20	A4	317	BCR	C32-C1-C6	5.58	118.99	110.24
17	AB	837	CLA	C4A-NA-C1A	5.56	109.22	106.68
17	AA	812	CLA	C4A-NA-C1A	5.56	109.21	106.68
20	AI	102	BCR	C31-C1-C6	5.55	118.94	110.24
17	A1	313	CLA	C4A-NA-C1A	5.54	109.21	106.68
20	AK	205	BCR	C32-C1-C6	-5.54	101.55	110.24
17	A4	313	CLA	C4A-NA-C1A	5.54	109.21	106.68
20	A6	616	BCR	C28-C27-C26	-5.52	104.21	114.06
20	AB	848	BCR	C23-C24-C25	-5.51	112.27	127.00
27	A3	317	XAT	O24-C25-C38	5.50	121.19	115.05
20	AA	847	BCR	C7-C8-C9	-5.49	118.11	126.23
17	AB	830	CLA	C4A-NA-C1A	5.49	109.18	106.68
26	A6	607	CHL	C4D-ND-C1D	5.49	109.38	105.22
17	AA	842	CLA	C4A-NA-C1A	5.48	109.18	106.68
20	A3	318	BCR	C3-C4-C5	-5.48	104.29	114.06
17	AA	810	CLA	C4A-NA-C1A	5.47	109.17	106.68
20	A4	317	BCR	C1-C6-C5	-5.46	115.18	122.64
26	A4	314	CHL	C4D-ND-C1D	5.46	109.36	105.22
20	AA	847	BCR	C31-C1-C6	5.45	118.78	110.24
17	AK	201	CLA	C4A-NA-C1A	5.44	109.16	106.68
17	AA	814	CLA	C4A-NA-C1A	5.44	109.16	106.68
17	A3	306	CLA	C4A-NA-C1A	5.41	109.15	106.68
17	AG	203	CLA	C4A-NA-C1A	5.38	109.13	106.68
17	A6	601	CLA	C4A-NA-C1A	5.37	109.13	106.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	A3	307	CHL	C4D-ND-C1D	5.37	109.29	105.22
18	AA	843	PQN	C15-C13-C12	-5.35	109.15	121.17
17	AA	839	CLA	C4A-NA-C1A	5.35	109.12	106.68
20	AI	101	BCR	C38-C26-C25	-5.35	118.65	124.48
17	AB	802	CLA	C4A-NA-C1A	5.33	109.11	106.68
17	A4	309	CLA	C4A-NA-C1A	5.32	109.11	106.68
18	AB	843	PQN	C11-C12-C13	-5.32	117.67	126.83
17	AG	201	CLA	C4A-NA-C1A	5.31	109.10	106.68
17	AA	830	CLA	C4A-NA-C1A	5.31	109.10	106.68
20	AL	305	BCR	C27-C26-C25	-5.30	115.54	122.70
17	AB	814	CLA	C4A-NA-C1A	5.30	109.10	106.68
17	AB	822	CLA	C4A-NA-C1A	5.30	109.10	106.68
17	A1	310	CLA	C4A-NA-C1A	5.28	109.09	106.68
20	AA	847	BCR	C28-C27-C26	-5.28	104.64	114.06
17	AB	821	CLA	C4A-NA-C1A	5.27	109.08	106.68
17	AB	812	CLA	C4A-NA-C1A	5.27	109.08	106.68
20	AA	846	BCR	C36-C18-C19	5.24	126.10	118.09
17	AJ	102	CLA	C4A-NA-C1A	5.24	109.07	106.68
26	A6	606	CHL	C4D-ND-C1D	5.23	109.19	105.22
17	AA	825	CLA	C4A-NA-C1A	5.22	109.06	106.68
17	A1	306	CLA	C4A-NA-C1A	5.21	109.05	106.68
17	AA	811	CLA	C4A-NA-C1A	5.20	109.05	106.68
17	AA	822	CLA	C4A-NA-C1A	5.19	109.05	106.68
17	AB	808	CLA	C4A-NA-C1A	5.15	109.03	106.68
26	A4	306	CHL	OBD-CAD-CBD	5.15	133.38	125.82
17	AA	805	CLA	C4A-NA-C1A	5.13	109.02	106.68
20	AJ	103	BCR	C39-C30-C25	-5.12	102.21	110.24
17	AF	804	CLA	C4A-NA-C1A	5.12	109.02	106.68
17	AA	804	CLA	C4A-NA-C1A	5.09	109.00	106.68
26	A1	303	CHL	C4D-ND-C1D	5.09	109.08	105.22
20	AL	305	BCR	C33-C5-C6	5.09	130.03	124.48
17	AB	838	CLA	C4A-NA-C1A	5.08	109.00	106.68
17	AA	827	CLA	C4A-NA-C1A	5.05	108.98	106.68
17	AA	815	CLA	C4A-NA-C1A	5.05	108.98	106.68
26	A3	307	CHL	OBD-CAD-CBD	5.02	133.20	125.82
20	AK	202	BCR	C36-C18-C19	5.00	125.73	118.09
17	A3	312	CLA	C4A-NA-C1A	5.00	108.96	106.68
17	A4	302	CLA	C4A-NA-C1A	4.97	108.95	106.68
20	AK	202	BCR	C30-C25-C26	-4.96	115.86	122.64
17	A6	612	CLA	C4A-NA-C1A	4.96	108.94	106.68
17	AB	819	CLA	C4A-NA-C1A	4.94	108.94	106.68
26	A4	304	CHL	C4D-ND-C1D	4.94	108.97	105.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	A1	307	CLA	C4A-NA-C1A	4.94	108.93	106.68
20	AA	849	BCR	C34-C9-C10	-4.93	114.83	122.82
17	AG	204	CLA	C4A-NA-C1A	4.93	108.93	106.68
26	A6	605	CHL	C4D-ND-C1D	4.91	108.95	105.22
17	AB	813	CLA	C4A-NA-C1A	4.91	108.92	106.68
17	A4	310	CLA	C4A-NA-C1A	4.91	108.92	106.68
17	AB	809	CLA	C4A-NA-C1A	4.91	108.92	106.68
20	A1	319	BCR	C29-C30-C25	4.90	117.55	110.44
17	AA	821	CLA	C4A-NA-C1A	4.90	108.91	106.68
26	A1	303	CHL	OBD-CAD-CBD	4.85	132.95	125.82
20	AB	847	BCR	C28-C27-C26	-4.84	105.42	114.06
17	AA	817	CLA	C4A-NA-C1A	4.84	108.89	106.68
17	A4	311	CLA	C4A-NA-C1A	4.83	108.88	106.68
17	A3	305	CLA	C4A-NA-C1A	4.82	108.88	106.68
17	AA	816	CLA	C4A-NA-C1A	4.81	108.87	106.68
17	A1	314	CLA	C4A-NA-C1A	4.80	108.87	106.68
17	A3	311	CLA	C4A-NA-C1A	4.80	108.87	106.68
17	AB	801	CLA	C4A-NA-C1A	4.79	108.86	106.68
20	A4	317	BCR	C23-C24-C25	-4.79	114.21	127.00
20	A4	317	BCR	C40-C30-C25	-4.77	102.75	110.24
17	AB	836	CLA	C4A-NA-C1A	4.77	108.85	106.68
26	A6	607	CHL	OBD-CAD-CBD	4.76	132.81	125.82
17	AA	818	CLA	C4A-NA-C1A	4.75	108.84	106.68
27	A1	318	XAT	C6-C7-C8	-4.71	116.04	125.99
17	AB	803	CLA	C4A-NA-C1A	4.69	108.82	106.68
17	AA	803	CLA	C4A-NA-C1A	4.68	108.81	106.68
26	A4	314	CHL	OBD-CAD-CBD	4.68	132.69	125.82
17	AA	801	CLA	C4A-NA-C1A	4.68	108.81	106.68
17	AB	834	CLA	C4A-NA-C1A	4.66	108.81	106.68
26	A6	606	CHL	OBD-CAD-CBD	4.64	132.63	125.82
20	AJ	101	BCR	C34-C9-C8	4.63	125.16	118.09
20	AB	847	BCR	C36-C18-C19	4.63	125.16	118.09
27	A6	615	XAT	C6-C7-C8	-4.63	116.21	125.99
17	A3	303	CLA	C4A-NA-C1A	4.63	108.79	106.68
19	A3	319	LHG	O7-C7-C8	4.63	119.34	111.09
20	AB	845	BCR	C34-C9-C10	-4.63	115.32	122.82
17	AA	835	CLA	C4A-NA-C1A	4.62	108.79	106.68
26	A1	308	CHL	OBD-CAD-CBD	4.62	132.61	125.82
17	AB	816	CLA	C4A-NA-C1A	4.62	108.79	106.68
17	AA	831	CLA	C4A-NA-C1A	4.62	108.79	106.68
17	A1	315	CLA	C4A-NA-C1A	4.61	108.78	106.68
17	AA	836	CLA	C4A-NA-C1A	4.60	108.78	106.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	A4	305	CHL	OBD-CAD-CBD	4.60	132.57	125.82
20	AJ	101	BCR	C3-C4-C5	-4.59	105.88	114.06
27	A6	615	XAT	C18-C5-C6	-4.58	114.76	122.30
17	A3	304	CLA	C4A-NA-C1A	4.58	108.77	106.68
20	AK	202	BCR	C28-C27-C26	-4.58	105.89	114.06
17	AA	829	CLA	C4A-NA-C1A	4.57	108.76	106.68
17	AA	809	CLA	C4A-NA-C1A	4.57	108.76	106.68
20	AL	306	BCR	C33-C5-C6	-4.56	119.51	124.48
20	AI	102	BCR	C8-C7-C6	-4.55	114.83	127.00
20	AI	101	BCR	C36-C18-C19	4.55	125.03	118.09
17	A6	602	CLA	C4A-NA-C1A	4.54	108.75	106.68
17	AH	201	CLA	C4A-NA-C1A	4.52	108.74	106.68
20	AA	846	BCR	C32-C1-C6	4.52	117.33	110.24
20	AJ	101	BCR	C32-C1-C6	-4.52	103.16	110.24
17	A3	310	CLA	C4A-NA-C1A	4.52	108.74	106.68
20	AA	847	BCR	C35-C13-C14	-4.51	115.50	122.82
20	AB	848	BCR	C33-C5-C6	-4.50	119.57	124.48
17	A4	303	CLA	C4A-NA-C1A	4.50	108.73	106.68
17	AA	840	CLA	C4A-NA-C1A	4.50	108.73	106.68
26	A6	605	CHL	OBD-CAD-CBD	4.49	132.41	125.82
17	AK	203	CLA	C4A-NA-C1A	4.49	108.73	106.68
18	AA	843	PQN	C11-C12-C13	-4.48	119.11	126.83
20	AA	845	BCR	C32-C1-C6	-4.48	103.22	110.24
20	A6	616	BCR	C3-C4-C5	-4.47	106.08	114.06
17	A4	301	CLA	C4A-NA-C1A	4.46	108.71	106.68
20	AA	846	BCR	C24-C23-C22	-4.42	119.69	126.23
26	A4	304	CHL	OBD-CAD-CBD	4.41	132.30	125.82
20	AK	202	BCR	C37-C22-C23	4.41	124.83	118.09
24	AF	806	LUT	C40-C33-C32	4.40	124.82	118.09
20	AJ	103	BCR	C36-C18-C19	4.40	124.81	118.09
27	A6	615	XAT	C39-C29-C28	4.40	124.80	118.09
20	A1	319	BCR	C1-C6-C5	-4.39	116.63	122.64
20	AB	844	BCR	C34-C9-C8	4.39	124.80	118.09
17	AA	838	CLA	C4A-NA-C1A	4.38	108.68	106.68
17	AB	815	CLA	C4A-NA-C1A	4.38	108.67	106.68
20	AF	805	BCR	C37-C22-C23	4.37	124.77	118.09
20	AJ	103	BCR	C32-C1-C6	-4.37	103.39	110.24
20	AK	202	BCR	C27-C26-C25	-4.36	116.81	122.70
17	A3	313	CLA	C4A-NA-C1A	4.35	108.66	106.68
20	AA	848	BCR	C37-C22-C23	4.34	124.72	118.09
20	AF	801	BCR	C37-C22-C23	4.34	124.72	118.09
27	A3	317	XAT	O4-C5-C18	4.34	119.90	115.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	A6	614	LUT	C8-C7-C6	-4.33	115.43	127.00
20	AI	102	BCR	C38-C26-C25	-4.33	119.76	124.48
20	AA	847	BCR	C1-C6-C5	-4.32	116.73	122.64
20	AJ	103	BCR	C31-C1-C6	4.32	117.02	110.24
20	AA	846	BCR	C3-C4-C5	-4.32	106.35	114.06
17	A6	604	CLA	C4A-NA-C1A	4.32	108.65	106.68
20	AJ	101	BCR	C37-C22-C23	4.32	124.68	118.09
17	A3	308	CLA	C4A-NA-C1A	4.32	108.65	106.68
20	A6	616	BCR	C37-C22-C23	4.31	124.68	118.09
17	AB	819	CLA	C4-C3-C5	4.30	122.70	115.23
20	AA	849	BCR	C39-C30-C25	-4.30	103.51	110.24
27	A3	317	XAT	C6-C7-C8	-4.29	116.92	125.99
17	AB	823	CLA	C4A-NA-C1A	4.28	108.63	106.68
27	A3	317	XAT	C38-C25-C26	-4.27	115.28	122.30
18	AB	843	PQN	C14-C13-C12	-4.27	112.67	123.63
17	AA	819	CLA	C4A-NA-C1A	4.27	108.63	106.68
20	A4	317	BCR	C36-C18-C19	4.26	124.60	118.09
20	AL	305	BCR	C40-C30-C25	-4.26	103.57	110.24
20	AG	205	BCR	C28-C27-C26	-4.25	106.47	114.06
27	A6	615	XAT	O24-C25-C38	4.25	119.80	115.05
24	AF	806	LUT	C39-C29-C28	4.24	124.56	118.09
17	AB	840	CLA	C4A-NA-C1A	4.23	108.61	106.68
26	A4	306	CHL	C4D-ND-C1D	4.23	108.43	105.22
20	A4	317	BCR	C3-C4-C5	-4.23	106.51	114.06
17	AB	817	CLA	C4A-NA-C1A	4.22	108.61	106.68
20	AB	847	BCR	C37-C22-C23	4.20	124.51	118.09
26	A6	606	CHL	C1C-C2C-CMC	4.20	134.38	126.80
20	AF	805	BCR	C35-C13-C14	-4.20	116.01	122.82
17	AA	832	CLA	C4A-NA-C1A	4.20	108.60	106.68
17	A3	314	CLA	C4A-NA-C1A	4.20	108.59	106.68
20	AB	844	BCR	C38-C26-C25	-4.19	119.91	124.48
17	A4	312	CLA	C4A-NA-C1A	4.18	108.59	106.68
20	AI	102	BCR	C3-C4-C5	-4.17	106.62	114.06
20	A4	317	BCR	C37-C22-C23	4.17	124.46	118.09
25	A4	318	LMG	C8-O7-C10	-4.17	107.82	117.80
17	AA	829	CLA	C4-C3-C5	4.16	122.44	115.23
20	AI	101	BCR	C7-C8-C9	-4.14	120.11	126.23
26	A1	308	CHL	C1C-C2C-CMC	4.14	134.27	126.80
20	AI	101	BCR	C31-C1-C6	-4.14	103.75	110.24
27	A4	316	XAT	C39-C29-C28	4.13	124.40	118.09
17	AA	802	CLA	C4A-NA-C1A	4.13	108.56	106.68
24	A1	317	LUT	C16-C1-C6	4.12	116.71	110.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	A6	615	XAT	C40-C33-C32	4.11	124.37	118.09
26	A4	306	CHL	C1C-C2C-CMC	4.11	134.21	126.80
17	AA	824	CLA	C4-C3-C5	4.11	122.36	115.23
20	AG	205	BCR	C36-C18-C19	4.08	124.33	118.09
20	AB	849	BCR	C32-C1-C6	-4.08	103.85	110.24
20	A1	319	BCR	C30-C25-C26	-4.08	117.06	122.64
20	A3	318	BCR	C40-C30-C29	-4.07	93.31	108.95
20	AB	845	BCR	C37-C22-C23	4.07	124.31	118.09
20	AB	846	BCR	C37-C22-C23	4.07	124.31	118.09
20	AL	305	BCR	C1-C6-C5	-4.06	117.09	122.64
20	AI	102	BCR	C37-C22-C23	4.05	124.28	118.09
17	AA	828	CLA	CMB-C2B-C1B	-4.03	119.28	125.42
17	AB	805	CLA	C4A-NA-C1A	4.03	108.52	106.68
20	AA	849	BCR	C37-C22-C23	4.02	124.23	118.09
20	AB	845	BCR	C36-C18-C19	4.02	124.23	118.09
20	AB	846	BCR	C33-C5-C6	-4.02	120.10	124.48
17	AA	826	CLA	C4A-NA-C1A	4.01	108.51	106.68
17	AF	804	CLA	CAA-C2A-C3A	-4.01	107.03	116.23
19	A3	301	LHG	O7-C7-C8	4.01	120.16	111.48
26	A6	607	CHL	C1A-CHA-C4D	-4.01	112.29	118.98
20	AB	847	BCR	C3-C4-C5	-3.99	106.94	114.06
20	AA	846	BCR	C38-C26-C25	-3.98	120.14	124.48
20	A1	319	BCR	C37-C22-C23	3.98	124.17	118.09
17	A6	611	CLA	C4A-NA-C1A	3.98	108.49	106.68
19	A1	301	LHG	O7-C7-C8	3.97	120.08	111.48
20	AB	846	BCR	C34-C9-C10	-3.96	116.39	122.82
17	AB	833	CLA	C4A-NA-C1A	3.95	108.48	106.68
17	AB	835	CLA	C4A-NA-C1A	3.94	108.48	106.68
17	AA	807	CLA	C4A-NA-C1A	3.93	108.47	106.68
17	A1	309	CLA	C4A-NA-C1A	3.93	108.47	106.68
26	A1	308	CHL	C1A-CHA-C4D	-3.93	112.43	118.98
20	AL	305	BCR	C28-C27-C26	-3.92	107.06	114.06
20	AA	847	BCR	C24-C23-C22	-3.92	120.43	126.23
17	AB	811	CLA	O2D-CGD-O1D	-3.92	116.21	123.85
20	AJ	103	BCR	C8-C9-C10	-3.92	112.84	119.01
26	A4	306	CHL	C1A-CHA-C4D	-3.91	112.46	118.98
17	A4	307	CLA	C4A-NA-C1A	3.90	108.46	106.68
26	A4	304	CHL	C1A-CHA-C4D	-3.90	112.47	118.98
26	A4	304	CHL	CMA-C3A-C4A	-3.89	106.22	114.61
20	AF	805	BCR	C7-C8-C9	-3.89	120.48	126.23
24	A4	315	LUT	C21-C26-C27	-3.88	108.37	112.83
26	A6	605	CHL	C1C-C2C-CMC	3.87	133.78	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	A1	304	CLA	C4A-NA-C1A	3.86	108.44	106.68
17	AB	806	CLA	C4A-NA-C1A	3.86	108.44	106.68
20	A1	319	BCR	C36-C18-C19	3.86	123.98	118.09
18	AB	843	PQN	C12-C11-C3	-3.85	102.59	112.08
17	A4	308	CLA	C4A-NA-C1A	3.85	108.43	106.68
26	A3	320	CHL	C1B-CHB-C4A	-3.85	118.85	121.32
19	A1	302	LHG	O7-C7-C8	3.85	119.80	111.48
26	A1	303	CHL	C1A-CHA-C4D	-3.85	112.57	118.98
17	AL	302	CLA	C4A-NA-C1A	3.83	108.42	106.68
17	AL	303	CLA	C4A-NA-C1A	3.83	108.42	106.68
26	A1	303	CHL	O2A-CGA-CBA	3.82	123.48	111.83
26	A1	303	CHL	C1C-C2C-CMC	3.82	133.69	126.80
17	A3	302	CLA	C4A-NA-C1A	3.82	108.42	106.68
20	AJ	103	BCR	C1-C6-C5	-3.82	117.42	122.64
24	A4	315	LUT	C26-C27-C28	-3.81	118.66	124.58
26	A4	305	CHL	C1A-CHA-C4D	-3.79	112.66	118.98
27	A3	317	XAT	C39-C29-C28	3.78	123.86	118.09
23	AB	851	DGD	O2G-C1B-C2B	3.77	119.64	111.48
17	AA	829	CLA	C6-C5-C3	3.77	122.65	113.47
26	A3	307	CHL	CMC-C2C-C1C	3.76	131.51	124.73
26	A4	304	CHL	C1C-C2C-CMC	3.74	133.55	126.80
20	AL	305	BCR	C37-C22-C23	3.74	123.80	118.09
23	AB	851	DGD	C2G-O2G-C1B	-3.74	108.84	117.80
26	A3	320	CHL	C1A-CHA-C4D	-3.74	112.74	118.98
24	A1	317	LUT	C26-C27-C28	-3.74	118.76	124.58
26	A6	607	CHL	CMC-C2C-C1C	3.74	131.46	124.73
17	A6	608	CLA	C4A-NA-C1A	3.73	108.38	106.68
20	A3	318	BCR	C39-C30-C29	3.72	123.24	108.95
26	A4	314	CHL	C1A-CHA-C4D	-3.72	112.78	118.98
26	A6	606	CHL	C1A-CHA-C4D	-3.72	112.78	118.98
26	A6	605	CHL	C1A-CHA-C4D	-3.72	112.78	118.98
20	AL	305	BCR	C30-C25-C26	-3.71	117.56	122.64
20	AB	844	BCR	C7-C8-C9	-3.70	120.75	126.23
27	A6	615	XAT	C8-C9-C10	-3.69	113.20	119.01
20	AG	205	BCR	C32-C1-C6	-3.68	104.47	110.24
20	AA	849	BCR	C27-C26-C25	-3.68	117.73	122.70
27	A6	615	XAT	O24-C25-C24	3.68	116.94	113.49
20	A3	318	BCR	C38-C26-C25	-3.67	120.48	124.48
20	AA	848	BCR	C36-C18-C19	3.67	123.70	118.09
20	A1	319	BCR	C4-C5-C6	-3.67	117.75	122.70
18	AB	843	PQN	C11-C3-C4	-3.66	114.72	118.58
20	AI	102	BCR	C34-C9-C10	-3.66	116.88	122.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	A3	318	BCR	C1-C6-C5	-3.66	117.64	122.64
20	AB	848	BCR	C36-C18-C19	3.65	123.67	118.09
20	AG	205	BCR	C36-C18-C17	-3.65	116.90	122.82
27	A3	317	XAT	C19-C9-C8	3.65	123.67	118.09
20	A1	319	BCR	C40-C30-C29	-3.62	95.06	108.95
20	AB	849	BCR	C23-C22-C21	-3.62	113.32	119.01
20	AL	306	BCR	C28-C27-C26	-3.61	107.62	114.06
17	AB	818	CLA	C4A-NA-C1A	3.60	108.32	106.68
17	A6	613	CLA	C4A-NA-C1A	3.59	108.32	106.68
25	A1	321	LMG	O7-C10-C11	3.59	119.25	111.48
17	A1	311	CLA	C4A-NA-C1A	3.58	108.31	106.68
17	A3	309	CLA	C4A-NA-C1A	3.56	108.31	106.68
17	AA	803	CLA	O2D-CGD-O1D	-3.56	116.91	123.85
20	AA	848	BCR	C30-C25-C24	3.56	125.31	115.65
17	AB	801	CLA	O2D-CGD-O1D	-3.55	116.94	123.85
26	A6	605	CHL	O1D-CGD-CBD	-3.55	119.34	124.72
17	AA	816	CLA	O2D-CGD-O1D	-3.54	116.95	123.85
20	AL	306	BCR	C30-C25-C24	3.54	125.25	115.65
20	AB	847	BCR	C23-C24-C25	-3.54	117.55	127.00
25	A4	318	LMG	O7-C10-C11	3.53	119.12	111.48
27	A1	318	XAT	C8-C9-C10	-3.53	113.46	119.01
20	AB	849	BCR	C16-C15-C14	-3.53	116.31	123.52
20	AI	102	BCR	C2-C1-C6	-3.52	105.33	110.44
20	AJ	101	BCR	C8-C7-C6	-3.51	117.61	127.00
24	AF	806	LUT	C15-C35-C34	-3.51	116.34	123.52
20	AB	844	BCR	C4-C5-C6	-3.51	117.97	122.70
20	AA	847	BCR	C36-C18-C19	3.50	123.44	118.09
20	A6	616	BCR	C23-C24-C25	-3.50	117.65	127.00
20	AL	305	BCR	C30-C25-C24	3.49	125.12	115.65
24	A6	614	LUT	C26-C27-C28	-3.47	119.18	124.58
26	A4	314	CHL	C1C-C2C-CMC	3.47	133.06	126.80
20	AA	849	BCR	C31-C1-C6	-3.47	104.81	110.24
20	AB	848	BCR	C15-C16-C17	-3.46	116.43	123.52
20	AA	846	BCR	C15-C16-C17	-3.46	116.43	123.52
26	A1	303	CHL	CMD-C2D-C3D	3.46	131.60	124.68
17	AB	801	CLA	CAA-C2A-C1A	-3.46	100.64	111.97
17	AA	822	CLA	O2D-CGD-O1D	-3.46	117.12	123.85
20	AB	844	BCR	C37-C22-C23	3.45	123.36	118.09
26	A3	320	CHL	OBD-CAD-CBD	3.45	130.89	125.82
24	A1	317	LUT	C3-C4-C5	-3.45	103.58	112.18
20	AI	101	BCR	C37-C22-C23	3.45	123.36	118.09
17	A3	315	CLA	C4A-NA-C1A	3.44	108.25	106.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	A4	316	XAT	C35-C15-C14	-3.44	116.49	123.52
17	AA	837	CLA	O2D-CGD-O1D	-3.43	117.16	123.85
20	AI	102	BCR	C35-C13-C12	3.43	123.33	118.09
17	AA	832	CLA	C4-C3-C5	3.43	121.18	115.23
24	A3	316	LUT	C39-C29-C28	3.43	123.33	118.09
17	A1	312	CLA	C4A-NA-C1A	3.43	108.24	106.68
20	AA	848	BCR	C38-C26-C25	-3.42	120.75	124.48
20	AF	801	BCR	C35-C13-C12	3.42	123.32	118.09
20	AB	846	BCR	C36-C18-C19	3.42	123.31	118.09
26	A3	307	CHL	C1A-CHA-C4D	-3.41	113.29	118.98
20	AJ	101	BCR	C4-C5-C6	-3.41	118.09	122.70
25	AG	202	LMG	O7-C10-C11	3.41	118.86	111.48
20	AB	845	BCR	C8-C7-C6	-3.40	117.91	127.00
26	A3	320	CHL	C1-C2-C3	-3.40	120.62	126.20
20	AB	849	BCR	C24-C25-C26	3.40	129.39	121.56
24	A1	317	LUT	C8-C7-C6	-3.39	117.94	127.00
17	A6	609	CLA	C4A-NA-C1A	3.39	108.22	106.68
17	AB	842	CLA	O2D-CGD-O1D	-3.39	117.25	123.85
27	A1	318	XAT	C18-C5-C6	-3.39	116.73	122.30
17	AB	819	CLA	O2D-CGD-O1D	-3.38	117.26	123.85
20	AF	805	BCR	C16-C15-C14	-3.38	116.60	123.52
20	AK	202	BCR	C15-C16-C17	-3.38	116.61	123.52
20	AK	205	BCR	C29-C30-C25	3.37	115.34	110.44
17	A6	610	CLA	O2D-CGD-O1D	-3.37	117.28	123.85
20	AK	205	BCR	C30-C25-C26	-3.37	118.03	122.64
17	AB	804	CLA	CHB-C4A-NA	3.37	129.26	124.40
20	AB	849	BCR	C39-C30-C25	-3.37	104.96	110.24
20	AG	205	BCR	C8-C7-C6	-3.36	118.01	127.00
17	AB	831	CLA	C4A-NA-C1A	3.36	108.21	106.68
20	AI	101	BCR	C24-C23-C22	-3.35	121.27	126.23
17	AB	813	CLA	O2D-CGD-O1D	-3.35	117.32	123.85
17	AA	833	CLA	O2D-CGD-O1D	-3.35	117.33	123.85
24	A6	614	LUT	C21-C26-C27	-3.35	108.97	112.83
20	AB	849	BCR	C4-C5-C6	-3.35	118.18	122.70
17	AA	829	CLA	C3B-C4B-NB	-3.34	107.55	110.53
20	AI	101	BCR	C39-C30-C25	-3.34	105.00	110.24
17	AB	827	CLA	O2D-CGD-O1D	-3.34	117.35	123.85
19	A6	617	LHG	O7-C7-C8	3.33	118.68	111.48
24	AF	806	LUT	C8-C7-C6	-3.32	118.12	127.00
27	A3	317	XAT	C26-C27-C28	-3.32	118.98	125.99
20	AA	849	BCR	C36-C18-C17	-3.32	117.44	122.82
17	AA	827	CLA	O2D-CGD-O1D	-3.32	117.39	123.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	A4	316	XAT	C38-C25-C26	-3.31	116.85	122.30
17	AB	809	CLA	O2D-CGD-O1D	-3.31	117.40	123.85
17	AA	809	CLA	CAA-C2A-C3A	-3.31	104.06	113.00
17	AA	819	CLA	O2D-CGD-O1D	-3.30	117.42	123.85
20	AF	801	BCR	C30-C25-C26	-3.30	118.13	122.64
17	AA	839	CLA	O2D-CGD-O1D	-3.30	117.43	123.85
20	A1	319	BCR	C38-C26-C25	-3.30	120.88	124.48
17	AA	824	CLA	C4A-NA-C1A	3.30	108.18	106.68
25	A4	318	LMG	C7-O1-C1	-3.30	106.73	113.80
17	AB	806	CLA	O2D-CGD-O1D	-3.29	117.44	123.85
17	AA	827	CLA	CAA-CBA-CGA	-3.28	103.88	113.21
17	AB	804	CLA	CAC-C3C-C2C	-3.28	121.53	127.56
17	AB	835	CLA	O2D-CGD-O1D	-3.28	117.47	123.85
20	AJ	103	BCR	C15-C16-C17	-3.28	116.81	123.52
20	AB	848	BCR	C38-C26-C25	-3.28	120.91	124.48
17	AB	819	CLA	C6-C5-C3	3.27	121.44	113.47
20	A4	317	BCR	C33-C5-C6	-3.27	120.91	124.48
17	AB	839	CLA	O2D-CGD-O1D	-3.27	117.48	123.85
17	A1	307	CLA	O2D-CGD-O1D	-3.27	117.49	123.85
17	AA	806	CLA	O2D-CGD-O1D	-3.27	117.49	123.85
17	AA	803	CLA	O2D-CGD-CBD	3.26	116.94	111.23
17	AF	802	CLA	O2D-CGD-O1D	-3.26	117.50	123.85
27	A4	316	XAT	C6-C7-C8	-3.26	119.10	125.99
20	AL	306	BCR	C38-C26-C27	3.26	120.54	113.60
17	AA	830	CLA	O2D-CGD-O1D	-3.25	117.52	123.85
20	AB	848	BCR	C8-C9-C10	-3.25	113.89	119.01
27	A6	615	XAT	C15-C35-C34	-3.25	116.86	123.52
20	AB	846	BCR	C3-C4-C5	-3.25	108.26	114.06
20	AB	844	BCR	C33-C5-C6	3.25	128.03	124.48
27	A1	318	XAT	C40-C33-C32	3.24	123.05	118.09
27	A3	317	XAT	C35-C15-C14	-3.23	116.91	123.52
22	AA	851	LMU	O5B-C5B-C4B	3.23	115.51	109.70
17	AA	836	CLA	O2D-CGD-O1D	-3.22	117.58	123.85
27	A1	318	XAT	C39-C29-C28	3.21	123.00	118.09
17	AB	801	CLA	CMD-C2D-C1D	-3.21	119.07	124.73
17	AA	811	CLA	O2D-CGD-O1D	-3.21	117.61	123.85
20	AA	849	BCR	C28-C27-C26	-3.20	108.34	114.06
27	A4	316	XAT	C28-C29-C30	-3.20	113.97	119.01
20	AA	848	BCR	C33-C5-C6	-3.20	120.99	124.48
20	AB	844	BCR	C30-C25-C26	-3.20	118.27	122.64
20	AB	846	BCR	C1-C6-C5	-3.19	118.27	122.64
20	AJ	103	BCR	C7-C8-C9	-3.19	121.52	126.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	A3	310	CLA	CBD-CHA-C1A	3.19	132.19	127.38
17	A4	313	CLA	O2D-CGD-O1D	-3.19	117.65	123.85
17	AA	840	CLA	C3B-C4B-NB	-3.18	107.69	110.53
17	AA	812	CLA	O2D-CGD-O1D	-3.18	117.66	123.85
17	AB	812	CLA	O2D-CGD-O1D	-3.18	117.67	123.85
20	AB	845	BCR	C3-C4-C5	-3.17	108.40	114.06
17	AA	815	CLA	O2D-CGD-O1D	-3.17	117.67	123.85
17	AA	824	CLA	CBA-CAA-C2A	3.17	123.23	113.79
17	A3	311	CLA	O2D-CGD-O1D	-3.17	117.67	123.85
18	AA	843	PQN	O1-C1-C2	-3.15	116.31	120.45
27	A4	316	XAT	O4-C5-C18	3.15	118.57	115.05
17	AB	808	CLA	O2D-CGD-O1D	-3.15	117.72	123.85
20	AB	845	BCR	C8-C9-C10	3.14	123.95	119.01
17	AA	834	CLA	O2D-CGD-O1D	-3.14	117.73	123.85
17	AA	823	CLA	C4A-NA-C1A	3.14	108.11	106.68
17	AB	825	CLA	O2D-CGD-O1D	-3.14	117.74	123.85
17	AB	814	CLA	C3B-C4B-NB	-3.14	107.73	110.53
20	AL	306	BCR	C30-C25-C26	-3.13	118.36	122.64
18	AA	843	PQN	C14-C13-C12	-3.13	115.58	123.63
24	AF	806	LUT	C37-C21-C36	3.13	112.42	107.87
17	AB	818	CLA	O2D-CGD-O1D	-3.12	117.77	123.85
17	AB	817	CLA	O2D-CGD-O1D	-3.12	117.77	123.85
17	A3	302	CLA	C3B-C4B-NB	-3.12	107.75	110.53
20	AA	847	BCR	C10-C11-C12	3.12	132.24	123.20
17	AK	201	CLA	CHB-C1B-C2B	-3.12	123.91	130.51
17	A1	304	CLA	CAC-C3C-C4C	3.12	128.85	124.79
20	AK	205	BCR	C23-C22-C21	3.11	123.91	119.01
20	AF	805	BCR	C36-C18-C19	3.11	122.84	118.09
20	AL	305	BCR	C4-C5-C6	-3.11	118.50	122.70
20	AL	306	BCR	C36-C18-C19	3.11	122.84	118.09
20	AA	848	BCR	C30-C25-C26	-3.11	118.39	122.64
17	AA	832	CLA	O2D-CGD-O1D	-3.11	117.80	123.85
20	AA	849	BCR	C38-C26-C27	3.10	120.22	113.60
24	A3	316	LUT	C16-C1-C6	3.10	115.11	110.24
24	A4	315	LUT	C39-C29-C28	3.10	122.83	118.09
17	AA	821	CLA	O2D-CGD-O1D	-3.10	117.81	123.85
17	AA	813	CLA	O2D-CGD-O1D	-3.10	117.82	123.85
24	A3	316	LUT	C26-C27-C28	-3.10	119.76	124.58
17	A4	301	CLA	O2D-CGD-O1D	-3.10	117.82	123.85
17	AA	828	CLA	O2D-CGD-O1D	-3.10	117.82	123.85
17	AB	801	CLA	CHB-C4A-NA	3.09	128.86	124.40
20	AA	849	BCR	C2-C3-C4	-3.09	104.48	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AB	811	CLA	CAA-C2A-C3A	-3.09	104.65	113.00
20	AJ	101	BCR	C36-C18-C19	3.09	122.81	118.09
17	AA	810	CLA	O2D-CGD-O1D	-3.08	117.85	123.85
20	AA	849	BCR	C8-C9-C10	3.08	123.85	119.01
20	AB	844	BCR	C32-C1-C6	-3.08	105.42	110.24
17	AB	828	CLA	CHB-C4A-NA	3.08	128.84	124.40
17	AB	806	CLA	CHB-C4A-NA	3.08	128.84	124.40
18	AA	843	PQN	C16-C15-C13	-3.08	105.98	113.47
26	A4	305	CHL	CMC-C2C-C1C	3.07	130.26	124.73
17	AA	842	CLA	O2D-CGD-O1D	-3.07	117.87	123.85
17	AA	821	CLA	CMB-C2B-C1B	-3.07	120.75	125.42
17	A6	604	CLA	O2D-CGD-O1D	-3.07	117.87	123.85
17	A6	610	CLA	O2D-CGD-CBD	3.06	116.58	111.23
17	AA	828	CLA	CMB-C2B-C3B	3.06	133.75	126.55
17	AB	803	CLA	O2D-CGD-O1D	-3.06	117.89	123.85
20	A3	318	BCR	C29-C30-C25	3.06	114.88	110.44
24	A6	614	LUT	C8-C9-C10	-3.05	114.21	119.01
17	A4	309	CLA	O2D-CGD-O1D	-3.05	117.92	123.85
20	AA	849	BCR	C30-C25-C26	-3.05	118.47	122.64
20	A4	317	BCR	C27-C26-C25	-3.05	118.59	122.70
20	A3	318	BCR	C24-C23-C22	-3.04	121.73	126.23
17	AA	817	CLA	O2D-CGD-O1D	-3.04	117.93	123.85
17	AA	807	CLA	O2D-CGD-O1D	-3.04	117.93	123.85
27	A4	316	XAT	C26-C27-C28	-3.04	119.57	125.99
17	AB	818	CLA	CHB-C4A-NA	3.04	128.78	124.40
20	AK	202	BCR	C37-C22-C21	-3.04	117.90	122.82
17	AA	841	CLA	CHB-C4A-NA	3.03	128.78	124.40
17	AA	822	CLA	O2D-CGD-CBD	3.03	116.53	111.23
17	AA	834	CLA	C4-C3-C5	3.03	120.48	115.23
17	AL	304	CLA	O2D-CGD-O1D	-3.02	117.97	123.85
17	AB	815	CLA	C3B-C4B-NB	-3.02	107.84	110.53
27	A6	615	XAT	C20-C13-C12	3.01	122.69	118.09
20	AB	849	BCR	C36-C18-C19	3.01	122.68	118.09
17	AH	201	CLA	O2D-CGD-O1D	-3.00	118.00	123.85
17	AB	829	CLA	O2D-CGD-O1D	-3.00	118.01	123.85
17	A4	303	CLA	O2D-CGD-O1D	-3.00	118.01	123.85
17	AA	820	CLA	O2D-CGD-O1D	-3.00	118.01	123.85
20	AK	202	BCR	C24-C23-C22	-3.00	121.80	126.23
20	AA	845	BCR	C37-C22-C23	2.99	122.66	118.09
17	AA	804	CLA	O2D-CGD-O1D	-2.99	118.03	123.85
20	A3	318	BCR	C37-C22-C23	2.99	122.65	118.09
20	AA	846	BCR	C35-C13-C12	2.98	122.65	118.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AB	826	CLA	C4A-NA-C1A	2.98	108.04	106.68
20	A6	616	BCR	C1-C6-C5	-2.98	118.57	122.64
17	A1	313	CLA	O2D-CGD-O1D	-2.97	118.06	123.85
27	A1	318	XAT	C12-C13-C14	-2.97	114.34	119.01
19	AA	844	LHG	O7-C7-C8	2.97	117.90	111.48
26	A4	305	CHL	O1D-CGD-CBD	-2.97	120.23	124.72
20	AA	846	BCR	C31-C1-C6	-2.96	105.60	110.24
26	A3	320	CHL	O2A-CGA-CBA	2.96	120.87	111.83
17	AA	805	CLA	CAA-C2A-C1A	-2.96	102.27	111.97
20	AJ	101	BCR	C16-C15-C14	-2.96	117.46	123.52
17	AA	806	CLA	CHB-C4A-NA	2.95	128.66	124.40
17	AB	820	CLA	O2D-CGD-O1D	-2.95	118.11	123.85
26	A6	607	CHL	O2A-CGA-CBA	2.95	120.83	111.83
18	AA	843	PQN	C12-C11-C3	-2.95	104.82	112.08
20	AA	847	BCR	C32-C1-C6	-2.95	105.62	110.24
20	A4	317	BCR	C15-C16-C17	-2.94	117.50	123.52
17	AF	803	CLA	O2D-CGD-O1D	-2.94	118.12	123.85
17	A1	306	CLA	O2D-CGD-O1D	-2.94	118.13	123.85
20	AJ	103	BCR	C34-C9-C8	2.94	122.58	118.09
20	A6	616	BCR	C1-C6-C7	2.94	123.62	115.65
20	AB	844	BCR	C40-C30-C25	-2.94	105.64	110.24
24	A4	315	LUT	C28-C29-C30	-2.93	114.40	119.01
17	AB	814	CLA	O2D-CGD-O1D	-2.93	118.14	123.85
17	AB	824	CLA	CBA-CAA-C2A	2.93	120.10	114.05
20	AB	846	BCR	C8-C9-C10	2.93	123.61	119.01
17	AA	831	CLA	O2D-CGD-O1D	-2.92	118.16	123.85
24	A1	317	LUT	C1-C6-C5	-2.92	118.64	122.64
20	A4	317	BCR	C1-C6-C7	2.92	123.58	115.65
20	AB	848	BCR	C28-C27-C26	-2.92	108.84	114.06
20	AB	844	BCR	C16-C15-C14	-2.92	117.54	123.52
17	AK	203	CLA	O2D-CGD-O1D	-2.92	118.17	123.85
17	AB	828	CLA	O2D-CGD-O1D	-2.92	118.17	123.85
17	AK	204	CLA	O2D-CGD-O1D	-2.91	118.18	123.85
17	AA	812	CLA	C4-C3-C5	2.91	120.28	115.23
17	A1	316	CLA	O2D-CGD-O1D	-2.91	118.18	123.85
17	AB	801	CLA	O2D-CGD-CBD	2.91	116.32	111.23
17	A6	603	CLA	C3B-C4B-NB	-2.91	107.93	110.53
26	A6	605	CHL	CAC-C3C-C4C	2.91	129.97	124.73
27	A6	615	XAT	C10-C11-C12	-2.91	114.77	123.20
17	AB	823	CLA	CHB-C4A-NA	2.91	128.60	124.40
17	AB	820	CLA	C4A-NA-C1A	2.91	108.01	106.68
17	A1	307	CLA	O2D-CGD-CBD	2.91	116.31	111.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	AJ	104	LHG	O8-C23-C24	2.91	120.69	111.83
25	A1	321	LMG	C8-O7-C10	-2.90	110.86	117.80
17	AB	829	CLA	C3B-C4B-NB	-2.90	107.94	110.53
17	AB	801	CLA	C1-O2A-CGA	2.89	123.65	116.65
17	AB	841	CLA	O2D-CGD-O1D	-2.89	118.22	123.85
17	AB	832	CLA	O2D-CGD-O1D	-2.89	118.22	123.85
27	A1	318	XAT	O24-C25-C38	2.89	118.28	115.05
20	AB	849	BCR	C23-C24-C25	2.89	134.72	127.00
20	AA	849	BCR	C20-C21-C22	-2.89	123.23	127.28
27	A6	615	XAT	C12-C13-C14	-2.89	114.47	119.01
24	A1	317	LUT	C21-C26-C27	-2.88	109.51	112.83
17	AA	809	CLA	CHB-C4A-NA	2.88	128.56	124.40
20	A6	616	BCR	C27-C26-C25	-2.88	118.81	122.70
17	AB	802	CLA	O2D-CGD-O1D	-2.88	118.25	123.85
17	AA	828	CLA	C14-C13-C15	2.88	121.52	111.27
25	AG	202	LMG	O8-C28-C29	2.87	120.60	111.83
17	A4	302	CLA	O2D-CGD-O1D	-2.87	118.27	123.85
17	A3	306	CLA	CMB-C2B-C3B	2.86	131.15	123.53
20	AA	848	BCR	C7-C8-C9	-2.86	122.00	126.23
17	AB	842	CLA	C3B-C4B-NB	-2.86	107.97	110.53
20	AJ	101	BCR	C8-C9-C10	-2.86	114.51	119.01
17	A3	306	CLA	O2D-CGD-O1D	-2.86	118.28	123.85
26	A3	320	CHL	CMD-C2D-C3D	2.86	130.40	124.68
26	A4	305	CHL	C4C-C3C-C2C	-2.86	102.08	113.37
17	AA	801	CLA	O2D-CGD-O1D	-2.86	118.29	123.85
27	A4	316	XAT	C18-C5-C6	-2.86	117.60	122.30
20	AA	848	BCR	C23-C22-C21	-2.86	114.52	119.01
24	A6	614	LUT	C1-C6-C5	-2.85	118.74	122.64
20	A3	318	BCR	C36-C18-C19	2.85	122.44	118.09
20	AA	846	BCR	C40-C30-C25	-2.84	105.78	110.24
27	A3	317	XAT	C8-C9-C10	-2.84	114.54	119.01
17	AJ	102	CLA	O2D-CGD-O1D	-2.84	118.32	123.85
20	AB	847	BCR	C15-C16-C17	-2.84	117.70	123.52
17	AB	834	CLA	O2D-CGD-O1D	-2.84	118.32	123.85
26	A3	320	CHL	C3D-CAD-CBD	2.84	111.34	107.61
24	A1	317	LUT	C39-C29-C28	2.84	122.43	118.09
17	AB	824	CLA	C3B-C4B-NB	-2.84	108.00	110.53
20	AA	847	BCR	C7-C6-C5	2.84	128.09	121.56
26	A1	303	CHL	O2A-CGA-O1A	-2.84	116.53	123.63
17	A6	612	CLA	O2D-CGD-O1D	-2.84	118.33	123.85
20	AB	849	BCR	C16-C17-C18	-2.84	123.30	127.28
17	AB	821	CLA	O2D-CGD-O1D	-2.84	118.33	123.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AG	204	CLA	O2D-CGD-O1D	-2.84	118.33	123.85
22	AA	851	LMU	C3B-C4B-C5B	2.84	115.37	110.23
24	A1	317	LUT	C28-C29-C30	-2.83	114.55	119.01
20	AF	801	BCR	C16-C15-C14	-2.83	117.72	123.52
17	AA	824	CLA	C6-C5-C3	2.83	120.37	113.47
17	AB	805	CLA	O2D-CGD-O1D	-2.83	118.34	123.85
17	AA	826	CLA	C3B-C4B-NB	-2.83	108.00	110.53
17	A6	613	CLA	O2D-CGD-O1D	-2.83	118.34	123.85
26	A6	606	CHL	CBC-CAC-C3C	-2.83	108.82	112.87
20	AB	848	BCR	C1-C6-C5	-2.83	118.78	122.64
20	AB	845	BCR	C38-C26-C25	2.82	127.56	124.48
17	AA	813	CLA	CHB-C4A-NA	2.82	128.47	124.40
20	AK	205	BCR	C40-C30-C25	-2.82	105.82	110.24
17	AB	807	CLA	O2D-CGD-O1D	-2.82	118.36	123.85
20	AG	205	BCR	C37-C22-C23	2.82	122.40	118.09
26	A6	605	CHL	OMC-CMC-C2C	-2.82	120.22	125.12
17	A3	309	CLA	O2D-CGD-O1D	-2.82	118.36	123.85
26	A6	607	CHL	C4C-C3C-C2C	-2.82	102.24	113.37
24	A3	316	LUT	C40-C33-C32	2.82	122.39	118.09
20	AA	845	BCR	C16-C15-C14	-2.82	117.76	123.52
26	A3	307	CHL	CBC-CAC-C3C	-2.82	108.84	112.87
17	AB	827	CLA	CHB-C4A-NA	2.81	128.46	124.40
17	A4	302	CLA	CAB-C3B-C2B	2.81	131.00	123.53
17	AA	818	CLA	O2D-CGD-O1D	-2.81	118.38	123.85
17	A1	315	CLA	CAB-C3B-C2B	2.81	131.00	123.53
17	AB	820	CLA	C3B-C4B-NB	-2.81	108.03	110.53
17	AA	802	CLA	CMB-C2B-C1B	-2.80	121.15	125.42
20	AB	845	BCR	C30-C25-C26	-2.80	118.81	122.64
20	AB	849	BCR	C30-C25-C26	-2.80	118.81	122.64
17	AA	804	CLA	CHB-C4A-NA	2.80	128.44	124.40
17	AB	831	CLA	C3B-C4B-NB	-2.80	108.03	110.53
24	A6	614	LUT	C28-C29-C30	-2.80	114.61	119.01
17	A3	312	CLA	O2D-CGD-O1D	-2.80	117.73	124.08
17	A3	302	CLA	C6-C5-C3	2.80	120.28	113.47
20	AI	101	BCR	C30-C25-C26	-2.80	118.81	122.64
26	A3	320	CHL	C1C-C2C-CMC	2.80	131.84	126.80
17	A1	310	CLA	O2D-CGD-O1D	-2.79	118.41	123.85
24	A4	315	LUT	C40-C33-C32	2.79	122.36	118.09
17	A1	304	CLA	O2D-CGD-O1D	-2.79	118.41	123.85
17	AB	833	CLA	O2D-CGD-O1D	-2.79	118.41	123.85
17	AB	823	CLA	O2D-CGD-O1D	-2.79	118.42	123.85
20	A1	319	BCR	C33-C5-C4	2.79	119.54	113.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	A6	602	CLA	O2D-CGD-O1D	-2.79	118.42	123.85
17	AA	838	CLA	C3B-C4B-NB	-2.79	108.04	110.53
20	AJ	103	BCR	C7-C6-C5	2.78	127.97	121.56
17	AA	810	CLA	CBD-CHA-C1A	2.78	132.74	127.58
17	AB	825	CLA	CHB-C4A-NA	2.78	128.41	124.40
17	A6	609	CLA	CHB-C4A-NA	2.78	128.41	124.40
24	A4	315	LUT	C37-C21-C22	-2.78	104.23	109.41
17	AA	825	CLA	O2D-CGD-O1D	-2.78	118.44	123.85
26	A3	320	CHL	C4-C3-C5	2.78	120.05	115.23
17	AA	809	CLA	C2A-C1A-CHA	2.78	128.69	123.87
20	AI	101	BCR	C16-C15-C14	-2.78	117.84	123.52
17	AA	806	CLA	C3B-C4B-NB	-2.78	108.05	110.53
20	AI	101	BCR	C20-C21-C22	-2.78	123.39	127.28
20	AB	848	BCR	C8-C7-C6	-2.77	119.59	127.00
17	AB	815	CLA	O2D-CGD-O1D	-2.77	118.45	123.85
17	AB	811	CLA	O1D-CGD-CBD	2.77	129.98	124.52
17	A1	315	CLA	O2D-CGD-O1D	-2.77	117.80	124.08
20	AA	849	BCR	C23-C22-C21	-2.77	114.66	119.01
17	AB	842	CLA	C6-C5-C3	2.77	120.21	113.47
17	AB	836	CLA	O2D-CGD-O1D	-2.76	118.47	123.85
17	AB	811	CLA	C3B-C4B-NB	-2.76	108.06	110.53
20	AB	848	BCR	C37-C22-C23	2.76	122.30	118.09
20	AL	306	BCR	C37-C22-C23	2.76	122.30	118.09
20	AB	845	BCR	C16-C15-C14	-2.76	117.88	123.52
17	A4	312	CLA	O2D-CGD-O1D	-2.75	118.49	123.85
17	AB	822	CLA	O2D-CGD-O1D	-2.75	118.49	123.85
17	A1	316	CLA	CAB-C3B-C2B	2.75	130.85	123.53
26	A4	314	CHL	CBC-CAC-C3C	-2.75	108.93	112.87
19	AJ	104	LHG	O7-C7-C8	2.75	117.44	111.48
17	A6	610	CLA	C1A-CHA-C4D	-2.75	121.89	125.69
20	AA	847	BCR	C35-C13-C12	2.75	122.29	118.09
17	A3	302	CLA	O2D-CGD-O1D	-2.75	118.50	123.85
17	AG	204	CLA	CHB-C4A-NA	2.74	128.36	124.40
17	A4	309	CLA	CHB-C4A-NA	2.74	128.36	124.40
20	AB	844	BCR	C31-C1-C6	2.74	114.54	110.24
17	A1	307	CLA	CAC-C3C-C4C	2.74	128.35	124.79
17	A4	307	CLA	C3B-C4B-NB	-2.74	108.09	110.53
22	AB	853	LMU	C2'-C3'-C4'	2.73	115.89	109.68
17	AK	201	CLA	CAA-C2A-C3A	-2.73	109.96	116.23
17	AB	810	CLA	O2D-CGD-O1D	-2.73	118.53	123.85
17	A4	303	CLA	CAB-C3B-C2B	2.73	130.79	123.53
17	AA	802	CLA	O2D-CGD-O1D	-2.73	118.53	123.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	AF	806	LUT	C26-C27-C28	-2.73	120.34	124.58
20	AA	846	BCR	C36-C18-C17	-2.72	118.40	122.82
20	A3	318	BCR	C23-C22-C21	-2.72	114.73	119.01
17	A4	303	CLA	CMB-C2B-C3B	2.72	130.76	123.53
20	A4	317	BCR	C12-C13-C14	-2.72	114.73	119.01
17	A3	306	CLA	CAB-C3B-C2B	2.72	130.76	123.53
23	AB	851	DGD	O1G-C1A-C2A	2.72	120.13	111.83
17	AA	832	CLA	C3B-C4B-NB	-2.72	108.10	110.53
17	A3	311	CLA	CHB-C4A-NA	2.72	128.32	124.40
17	A6	602	CLA	CHB-C4A-NA	2.71	128.32	124.40
24	AF	806	LUT	C1-C6-C5	-2.71	118.93	122.64
26	A3	307	CHL	C4C-C3C-C2C	-2.71	102.67	113.37
20	AF	805	BCR	C12-C13-C14	2.71	123.27	119.01
20	AL	306	BCR	C3-C4-C5	-2.71	109.23	114.06
26	A4	306	CHL	CAC-C3C-C4C	2.71	130.99	124.03
17	A6	602	CLA	CAC-C3C-C4C	2.71	128.31	124.79
17	AB	816	CLA	O2D-CGD-O1D	-2.71	118.58	123.85
17	AF	804	CLA	O2D-CGD-O1D	-2.71	118.58	123.85
19	A1	320	LHG	O8-C23-C24	2.71	120.08	111.83
20	A1	319	BCR	C23-C22-C21	-2.70	114.75	119.01
17	AA	805	CLA	O2D-CGD-O1D	-2.70	118.59	123.85
20	AA	848	BCR	C40-C30-C25	-2.70	106.00	110.24
17	AA	837	CLA	CHB-C4A-NA	2.70	128.30	124.40
17	A1	311	CLA	O2D-CGD-O1D	-2.70	118.60	123.85
17	AL	302	CLA	O2D-CGD-O1D	-2.70	118.60	123.85
17	A1	305	CLA	O2D-CGD-O1D	-2.70	118.60	123.85
17	A1	314	CLA	O2D-CGD-O1D	-2.70	117.96	124.08
20	AF	801	BCR	C8-C9-C10	-2.70	114.77	119.01
17	A1	307	CLA	C3A-C2A-C1A	-2.70	103.54	106.30
17	A6	608	CLA	O2D-CGD-O1D	-2.69	118.61	123.85
17	AA	834	CLA	CHB-C4A-NA	2.69	128.28	124.40
17	AB	827	CLA	C3B-C4B-NB	-2.69	108.13	110.53
20	AL	305	BCR	C31-C1-C6	2.69	114.46	110.24
22	AL	301	LMU	O5B-C5B-C4B	2.69	114.54	109.70
20	AB	847	BCR	C39-C30-C25	-2.69	106.03	110.24
20	A6	616	BCR	C2-C3-C4	-2.69	105.37	111.28
17	A3	315	CLA	O2D-CGD-O1D	-2.69	117.99	124.08
20	AJ	103	BCR	C3-C4-C5	-2.69	109.27	114.06
17	AB	840	CLA	O2D-CGD-O1D	-2.69	118.62	123.85
17	A6	609	CLA	C3B-C4B-NB	-2.69	108.13	110.53
20	AB	844	BCR	C36-C18-C19	2.68	122.19	118.09
20	AI	101	BCR	C38-C26-C27	2.68	119.31	113.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AA	823	CLA	O2D-CGD-O1D	-2.68	118.63	123.85
17	AA	808	CLA	O2D-CGD-O1D	-2.68	118.63	123.85
17	AA	814	CLA	O2D-CGD-O1D	-2.68	118.63	123.85
17	A4	301	CLA	C3B-C4B-NB	-2.68	108.14	110.53
27	A4	316	XAT	C8-C9-C10	-2.68	114.79	119.01
17	AB	818	CLA	C3B-C4B-NB	-2.68	108.14	110.53
17	AA	840	CLA	O2D-CGD-O1D	-2.68	118.63	123.85
26	A4	304	CHL	O2D-CGD-CBD	2.68	120.47	113.90
17	AB	837	CLA	O2D-CGD-O1D	-2.68	118.64	123.85
20	AB	848	BCR	C20-C21-C22	-2.67	123.53	127.28
17	AG	203	CLA	O2D-CGD-O1D	-2.67	118.64	123.85
20	AA	846	BCR	C30-C25-C26	-2.67	118.98	122.64
20	AB	844	BCR	C8-C9-C10	-2.67	114.81	119.01
17	AB	826	CLA	O2D-CGD-O1D	-2.67	118.65	123.85
17	A1	309	CLA	O2D-CGD-O1D	-2.67	118.03	124.08
20	AF	801	BCR	C24-C25-C26	2.67	127.70	121.56
17	AB	808	CLA	O2D-CGD-CBD	2.67	115.89	111.23
17	AB	829	CLA	C4A-NA-C1A	2.66	107.89	106.68
17	AA	834	CLA	C6-C5-C3	2.66	119.95	113.47
17	A3	303	CLA	O2D-CGD-O1D	-2.66	118.67	123.85
17	AA	840	CLA	CHB-C4A-NA	2.66	128.24	124.40
25	A4	318	LMG	O7-C10-O9	-2.66	117.49	123.70
17	AA	802	CLA	CMB-C2B-C3B	2.66	132.80	126.55
19	A1	320	LHG	O7-C7-C8	2.66	117.23	111.48
17	AB	809	CLA	O2D-CGD-CBD	2.66	115.87	111.23
17	AA	803	CLA	CAC-C3C-C4C	2.66	128.25	124.79
20	AB	848	BCR	C15-C14-C13	-2.65	123.56	127.28
17	AB	825	CLA	C3B-C4B-NB	-2.65	108.16	110.53
20	AA	849	BCR	C24-C23-C22	-2.65	122.31	126.23
17	AA	818	CLA	C3B-C4B-NB	-2.65	108.17	110.53
17	AA	827	CLA	C3B-C4B-NB	-2.65	108.17	110.53
17	AB	830	CLA	O2D-CGD-O1D	-2.65	118.70	123.85
22	AB	850	LMU	C3B-C4B-C5B	2.65	115.03	110.23
27	A3	317	XAT	C10-C11-C12	-2.65	115.54	123.20
17	AB	824	CLA	O2D-CGD-O1D	-2.64	118.70	123.85
24	A3	316	LUT	C3-C4-C5	-2.64	105.59	112.18
26	A4	314	CHL	O2D-CGD-CBD	2.64	120.39	113.90
17	A6	609	CLA	C6-C5-C3	2.64	119.91	113.47
26	A3	307	CHL	O1D-CGD-CBD	-2.64	120.72	124.72
17	AB	804	CLA	CBC-CAC-C3C	2.64	119.58	112.42
17	A1	313	CLA	CHB-C4A-NA	2.64	128.21	124.40
22	AL	301	LMU	O1B-C4'-C3'	2.64	113.95	107.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	AA	846	BCR	C20-C21-C22	-2.64	123.57	127.28
20	AB	846	BCR	C33-C5-C4	2.64	119.23	113.60
20	AK	205	BCR	C27-C26-C25	-2.64	119.14	122.70
17	AB	835	CLA	CHB-C4A-NA	2.64	128.21	124.40
17	AF	802	CLA	CHB-C4A-NA	2.64	128.20	124.40
26	A3	320	CHL	CMA-C3A-C4A	-2.63	108.94	114.61
17	AB	804	CLA	O2D-CGD-O1D	-2.63	118.73	123.85
17	AA	819	CLA	CHB-C4A-NA	2.63	128.19	124.40
17	AH	201	CLA	C4-C3-C5	2.63	119.79	115.23
17	A4	311	CLA	O2D-CGD-O1D	-2.63	118.12	124.08
17	AA	824	CLA	O2D-CGD-O1D	-2.63	118.12	124.08
17	A6	602	CLA	C3B-C4B-NB	-2.63	108.19	110.53
26	A6	606	CHL	CAC-C3C-C4C	2.62	130.77	124.03
17	AB	812	CLA	CAB-C3B-C2B	2.62	130.50	123.53
17	A6	611	CLA	O2D-CGD-O1D	-2.62	118.75	123.85
20	A6	616	BCR	C23-C22-C21	-2.62	114.89	119.01
20	AL	306	BCR	C1-C6-C5	-2.62	119.06	122.64
17	A6	603	CLA	O2D-CGD-O1D	-2.62	118.15	124.08
20	AJ	103	BCR	C19-C18-C17	-2.61	114.90	119.01
17	AA	838	CLA	O2D-CGD-O1D	-2.61	118.76	123.85
17	AA	835	CLA	O2D-CGD-O1D	-2.61	118.15	124.08
26	A4	306	CHL	CBC-CAC-C3C	-2.61	109.13	112.87
17	A4	311	CLA	C3B-C4B-NB	-2.61	108.20	110.53
20	AA	846	BCR	C8-C9-C10	-2.61	114.90	119.01
20	AF	805	BCR	C23-C22-C21	-2.61	114.90	119.01
17	AA	805	CLA	CMC-C2C-C1C	-2.61	120.96	125.03
20	AA	847	BCR	C3-C4-C5	-2.61	109.41	114.06
17	AA	829	CLA	CHB-C4A-NA	2.61	128.16	124.40
17	AB	804	CLA	C3B-C4B-NB	-2.61	108.20	110.53
17	A4	302	CLA	CAC-C3C-C4C	2.61	128.18	124.79
26	A4	305	CHL	CMD-C2D-C3D	2.60	129.88	124.68
20	AA	847	BCR	C8-C9-C10	-2.60	114.92	119.01
17	A1	310	CLA	CAB-C3B-C2B	2.60	130.44	123.53
17	A3	313	CLA	O2D-CGD-O1D	-2.60	118.19	124.08
17	AA	840	CLA	O2A-CGA-O1A	-2.60	117.13	123.63
17	AA	833	CLA	C4-C3-C2	-2.59	116.96	123.63
20	AI	101	BCR	C15-C16-C17	-2.59	118.21	123.52
17	A4	310	CLA	CHB-C4A-NA	2.59	128.14	124.40
17	AL	303	CLA	O2D-CGD-O1D	-2.59	118.80	123.85
17	A3	304	CLA	CMB-C2B-C3B	2.59	130.42	123.53
17	A1	305	CLA	C5-C3-C2	2.59	126.99	121.17
17	A1	314	CLA	CHB-C4A-NA	2.59	128.14	124.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	A1	311	CLA	CHB-C4A-NA	2.59	128.14	124.40
17	A4	308	CLA	CHB-C4A-NA	2.59	128.14	124.40
24	A1	317	LUT	C37-C21-C36	2.59	111.64	107.87
17	AA	842	CLA	CHB-C4A-NA	2.59	128.13	124.40
22	AB	850	LMU	O5B-C5B-C4B	2.59	114.36	109.70
17	AL	304	CLA	CHB-C4A-NA	2.59	128.13	124.40
20	AJ	103	BCR	C38-C26-C25	-2.59	121.66	124.48
26	A4	306	CHL	OMC-CMC-C2C	-2.59	120.63	125.12
17	AB	801	CLA	CMD-C2D-C3D	2.58	133.62	127.69
20	AF	805	BCR	C33-C5-C6	-2.58	121.67	124.48
17	A3	305	CLA	O2D-CGD-O1D	-2.58	118.22	124.08
25	A1	321	LMG	O8-C28-C29	2.58	119.71	111.83
20	AA	848	BCR	C31-C1-C6	-2.58	106.20	110.24
27	A1	318	XAT	C26-C27-C28	-2.58	120.54	125.99
17	AA	828	CLA	CHB-C4A-NA	2.58	128.12	124.40
20	A3	318	BCR	C30-C25-C24	2.58	122.64	115.65
17	A1	315	CLA	CMB-C2B-C3B	2.58	130.38	123.53
26	A6	606	CHL	O1D-CGD-CBD	-2.58	120.82	124.72
20	AK	202	BCR	C36-C18-C17	-2.57	118.65	122.82
20	AK	205	BCR	C36-C18-C19	2.57	122.02	118.09
17	AB	829	CLA	CMB-C2B-C1B	-2.57	121.50	125.42
17	AB	812	CLA	CMB-C2B-C3B	2.57	130.36	123.53
17	A3	309	CLA	CHB-C4A-NA	2.57	128.11	124.40
17	AB	827	CLA	O2D-CGD-CBD	2.57	115.72	111.23
17	AA	803	CLA	C1-C2-C3	-2.57	121.99	126.20
20	AF	801	BCR	C37-C22-C21	-2.57	118.66	122.82
19	A1	302	LHG	O8-C23-C24	2.57	119.66	111.83
17	AB	802	CLA	CHB-C4A-NA	2.57	128.10	124.40
24	A4	315	LUT	C1-C6-C5	-2.56	119.13	122.64
20	AF	801	BCR	C12-C13-C14	-2.56	114.98	119.01
17	AA	817	CLA	C4-C3-C2	-2.56	117.05	123.63
17	AL	304	CLA	O2D-CGD-CBD	2.56	115.70	111.23
17	AA	827	CLA	CHB-C4A-NA	2.56	128.09	124.40
20	AA	848	BCR	C15-C16-C17	-2.56	118.29	123.52
20	A1	319	BCR	C23-C24-C25	-2.56	120.17	127.00
20	AI	101	BCR	C34-C9-C8	2.56	121.99	118.09
17	AL	303	CLA	CBA-CAA-C2A	2.55	121.39	113.79
20	AL	305	BCR	C39-C30-C25	2.55	114.25	110.24
20	AA	845	BCR	C7-C8-C9	-2.55	122.46	126.23
17	AA	839	CLA	O2D-CGD-CBD	2.55	115.69	111.23
20	AB	847	BCR	C38-C26-C27	2.55	119.03	113.60
17	A4	307	CLA	O2D-CGD-O1D	-2.55	118.89	123.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	AB	844	BCR	C24-C23-C22	-2.55	122.47	126.23
20	AJ	101	BCR	C37-C22-C21	-2.54	118.69	122.82
20	AA	847	BCR	C27-C26-C25	-2.54	119.27	122.70
17	AA	841	CLA	C3B-C4B-NB	-2.54	108.26	110.53
17	AA	812	CLA	CHB-C4A-NA	2.54	128.07	124.40
20	AB	844	BCR	C15-C16-C17	-2.54	118.32	123.52
26	A1	303	CHL	O2D-CGD-CBD	2.54	120.13	113.90
17	AB	811	CLA	CHB-C4A-NA	2.54	128.06	124.40
17	AA	837	CLA	O2D-CGD-CBD	2.54	115.67	111.23
20	AI	102	BCR	C30-C25-C26	-2.54	119.17	122.64
20	AJ	101	BCR	C30-C25-C26	-2.54	119.17	122.64
17	A1	307	CLA	CHB-C4A-NA	2.54	128.06	124.40
17	AB	831	CLA	O2D-CGD-O1D	-2.53	118.92	123.85
20	AA	846	BCR	C1-C6-C5	-2.53	119.17	122.64
17	AA	815	CLA	CHB-C4A-NA	2.53	128.06	124.40
20	A1	319	BCR	C15-C16-C17	-2.53	118.34	123.52
17	A6	601	CLA	CHB-C4A-NA	2.53	128.05	124.40
20	A6	616	BCR	C29-C30-C25	2.53	114.11	110.44
17	AB	838	CLA	O2D-CGD-O1D	-2.53	118.92	123.85
17	AA	814	CLA	C3B-C4B-NB	-2.53	108.27	110.53
20	AB	847	BCR	C30-C25-C26	-2.53	119.18	122.64
17	A3	315	CLA	C3B-C4B-NB	-2.53	108.28	110.53
26	A1	308	CHL	O2D-CGD-CBD	2.53	120.09	113.90
17	A4	313	CLA	CHB-C4A-NA	2.53	128.04	124.40
17	A6	609	CLA	O2D-CGD-O1D	-2.52	118.94	123.85
26	A6	605	CHL	O2D-CGD-O1D	-2.52	118.94	123.85
17	AA	831	CLA	C3B-C4B-NB	-2.52	108.28	110.53
20	AB	845	BCR	C19-C18-C17	-2.52	115.04	119.01
20	AB	849	BCR	C29-C30-C25	2.52	114.10	110.44
17	A3	312	CLA	C4-C3-C5	2.52	119.61	115.23
17	AB	834	CLA	CHB-C4A-NA	2.52	128.04	124.40
20	AA	846	BCR	C38-C26-C27	2.52	118.97	113.60
25	A1	321	LMG	C7-O1-C1	2.52	119.20	113.80
17	A3	304	CLA	O2D-CGD-O1D	-2.52	118.37	124.08
20	AF	805	BCR	C29-C28-C27	-2.52	105.74	111.28
20	AL	305	BCR	C2-C3-C4	-2.52	105.74	111.28
17	AB	826	CLA	C3B-C4B-NB	-2.52	108.28	110.53
27	A1	318	XAT	C10-C11-C12	-2.52	115.91	123.20
24	A6	614	LUT	C39-C29-C28	2.52	121.93	118.09
17	A1	307	CLA	C3B-C4B-NB	-2.52	108.28	110.53
17	AB	817	CLA	C3B-C4B-NB	-2.52	108.28	110.53
17	AA	815	CLA	O2D-CGD-CBD	2.52	115.63	111.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	AB	848	BCR	C34-C9-C8	2.52	121.93	118.09
17	AA	834	CLA	CMC-C2C-C1C	-2.51	121.11	125.03
17	AB	806	CLA	CMC-C2C-C1C	-2.51	121.11	125.03
26	A6	607	CHL	CAC-C3C-C4C	2.51	130.49	124.03
17	AH	201	CLA	CHB-C4A-NA	2.51	128.03	124.40
24	A3	316	LUT	C8-C7-C6	-2.51	120.29	127.00
20	AG	205	BCR	C16-C15-C14	-2.51	118.38	123.52
20	AJ	103	BCR	C10-C11-C12	-2.51	115.92	123.20
27	A3	317	XAT	C36-C21-C22	-2.51	104.57	108.97
20	AK	202	BCR	C29-C30-C25	2.51	114.08	110.44
24	A3	316	LUT	C28-C29-C30	-2.50	115.07	119.01
20	AK	202	BCR	C40-C30-C25	-2.50	106.32	110.24
17	A1	310	CLA	CHB-C4A-NA	2.50	128.01	124.40
17	A3	304	CLA	CHB-C4A-NA	2.50	128.01	124.40
17	AA	823	CLA	CAA-C2A-C3A	-2.50	110.50	116.23
24	AF	806	LUT	C32-C33-C34	-2.50	115.08	119.01
20	A3	318	BCR	C33-C5-C6	-2.49	121.76	124.48
20	AB	849	BCR	C2-C1-C6	2.49	114.06	110.44
17	AK	204	CLA	CHB-C4A-NA	2.49	128.00	124.40
17	A1	305	CLA	CHB-C4A-NA	2.49	127.99	124.40
20	AB	848	BCR	C19-C18-C17	-2.49	115.09	119.01
20	A6	616	BCR	C4-C5-C6	-2.49	119.34	122.70
20	AI	102	BCR	C19-C18-C17	-2.49	115.09	119.01
17	AF	803	CLA	CHB-C4A-NA	2.49	127.99	124.40
17	A3	302	CLA	CHB-C4A-NA	2.49	127.99	124.40
26	A6	607	CHL	C1A-CHA-CBD	2.49	138.73	132.36
17	AB	824	CLA	CHB-C4A-NA	2.49	127.99	124.40
17	AB	838	CLA	C3B-C4B-NB	-2.49	108.31	110.53
17	AA	813	CLA	C3B-C4B-NB	-2.49	108.31	110.53
17	A3	305	CLA	CHB-C4A-NA	2.49	127.99	124.40
20	AA	848	BCR	C38-C26-C27	2.48	118.89	113.60
17	A4	301	CLA	CHB-C4A-NA	2.48	127.98	124.40
20	AG	205	BCR	C2-C1-C6	2.48	114.04	110.44
17	AB	810	CLA	CHB-C4A-NA	2.48	127.98	124.40
20	AA	846	BCR	C37-C22-C23	2.48	121.88	118.09
17	AA	837	CLA	C3B-C4B-NB	-2.48	108.32	110.53
17	AB	807	CLA	CHB-C4A-NA	2.48	127.97	124.40
26	A4	304	CHL	C1B-CHB-C4A	-2.48	119.73	121.32
26	A6	605	CHL	C4C-C3C-C2C	-2.48	102.72	108.42
17	A4	301	CLA	CAC-C3C-C4C	2.47	128.01	124.79
20	AG	205	BCR	C20-C21-C22	-2.47	123.81	127.28
22	AL	301	LMU	C1B-O5B-C5B	2.47	118.55	113.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	AA	847	BCR	C37-C22-C23	2.47	121.86	118.09
20	AB	848	BCR	C24-C23-C22	-2.47	122.58	126.23
17	A4	310	CLA	O2D-CGD-O1D	-2.47	118.48	124.08
20	AL	306	BCR	C37-C22-C21	-2.47	118.82	122.82
20	A6	616	BCR	C36-C18-C19	2.47	121.86	118.09
24	A3	316	LUT	C19-C9-C8	2.47	121.86	118.09
27	A3	317	XAT	C24-C23-C22	-2.47	106.18	110.79
27	A6	615	XAT	C38-C25-C26	-2.46	118.25	122.30
17	AA	841	CLA	O2D-CGD-O1D	-2.46	119.05	123.85
17	AA	817	CLA	CHB-C4A-NA	2.46	127.95	124.40
27	A6	615	XAT	C36-C21-C26	2.46	116.69	110.05
20	AB	849	BCR	C21-C20-C19	-2.46	116.07	123.20
17	AB	812	CLA	CHB-C4A-NA	2.46	127.95	124.40
20	AA	845	BCR	C16-C17-C18	-2.46	123.83	127.28
20	AA	847	BCR	C37-C22-C21	-2.46	118.83	122.82
20	AF	805	BCR	C19-C18-C17	-2.46	115.15	119.01
20	AI	101	BCR	C12-C13-C14	-2.46	115.15	119.01
17	AB	819	CLA	O2D-CGD-CBD	2.45	115.52	111.23
20	AA	847	BCR	C29-C30-C25	2.45	114.00	110.44
27	A3	317	XAT	C12-C13-C14	-2.45	115.15	119.01
17	AB	804	CLA	CMD-C2D-C1D	-2.45	120.41	124.73
17	AB	839	CLA	O2D-CGD-CBD	2.45	115.52	111.23
17	AG	201	CLA	O2D-CGD-O1D	-2.45	118.52	124.08
17	A1	304	CLA	CHB-C4A-NA	2.45	127.94	124.40
17	A1	312	CLA	O2D-CGD-O1D	-2.45	118.52	124.08
26	A4	305	CHL	C1A-CHA-CBD	2.45	138.63	132.36
17	AA	818	CLA	O2A-CGA-O1A	-2.45	117.50	123.63
17	AB	815	CLA	O2A-CGA-O1A	-2.45	117.50	123.63
26	A1	308	CHL	CAC-C3C-C4C	2.45	130.32	124.03
17	AB	831	CLA	CAC-C3C-C4C	2.45	127.97	124.79
17	A3	303	CLA	CAC-C3C-C4C	2.44	127.97	124.79
17	AB	819	CLA	CHB-C4A-NA	2.44	127.93	124.40
17	AB	801	CLA	C4-C3-C5	2.44	119.47	115.23
17	AH	201	CLA	CAA-C2A-C3A	2.44	119.60	113.00
19	AA	844	LHG	O8-C23-C24	2.44	119.27	111.83
20	AA	845	BCR	C8-C7-C6	-2.44	120.48	127.00
20	AF	801	BCR	C36-C18-C19	2.44	121.81	118.09
24	AF	806	LUT	C8-C9-C10	-2.44	115.17	119.01
26	A6	606	CHL	CMD-C2D-C3D	2.44	129.55	124.68
20	AB	845	BCR	C24-C25-C26	2.44	127.17	121.56
17	AA	827	CLA	O2D-CGD-CBD	2.44	115.49	111.23
17	A3	306	CLA	CHB-C4A-NA	2.43	127.91	124.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AB	828	CLA	C3B-C4B-NB	-2.43	108.36	110.53
20	AI	102	BCR	C23-C22-C21	-2.43	115.18	119.01
17	AA	831	CLA	CHB-C4A-NA	2.43	127.91	124.40
17	AA	833	CLA	CMD-C2D-C3D	2.43	133.27	127.69
20	AK	202	BCR	C11-C10-C9	-2.43	123.87	127.28
17	A4	308	CLA	O2D-CGD-O1D	-2.43	119.12	123.85
17	AB	815	CLA	CHB-C4A-NA	2.43	127.91	124.40
17	AF	804	CLA	CHB-C4A-NA	2.43	127.91	124.40
17	AA	830	CLA	O2A-CGA-O1A	-2.43	117.55	123.63
17	AK	201	CLA	CMB-C2B-C1B	-2.43	123.52	125.94
20	AA	849	BCR	C38-C26-C25	-2.43	121.84	124.48
20	AI	101	BCR	C28-C27-C26	-2.42	109.73	114.06
17	AL	303	CLA	CHB-C4A-NA	2.42	127.90	124.40
17	AB	819	CLA	CMB-C2B-C1B	-2.42	121.73	125.42
17	A1	309	CLA	C3B-C4B-NB	-2.42	108.37	110.53
20	AA	846	BCR	C15-C14-C13	-2.42	123.88	127.28
20	AB	844	BCR	C12-C13-C14	-2.42	115.20	119.01
20	A4	317	BCR	C21-C20-C19	-2.42	116.19	123.20
20	A4	317	BCR	C2-C1-C6	-2.42	106.92	110.44
17	A1	310	CLA	CAA-C2A-C3A	-2.42	110.69	116.23
17	AA	806	CLA	O2D-CGD-CBD	2.42	115.46	111.23
17	AA	809	CLA	O2D-CGD-O1D	-2.42	119.14	123.85
26	A4	304	CHL	C4C-C3C-C2C	-2.42	102.86	108.42
24	AF	806	LUT	C38-C25-C24	-2.42	117.64	123.36
17	AB	842	CLA	CHB-C4A-NA	2.42	127.89	124.40
17	AB	817	CLA	CHB-C4A-NA	2.41	127.89	124.40
17	A6	603	CLA	CHB-C4A-NA	2.41	127.89	124.40
20	AB	849	BCR	C12-C13-C14	-2.41	115.21	119.01
20	AB	844	BCR	C23-C22-C21	-2.41	115.21	119.01
17	A1	315	CLA	CHB-C4A-NA	2.41	127.88	124.40
22	AB	852	LMU	C1B-O1B-C4'	-2.41	112.26	117.98
27	A3	317	XAT	C4-C3-C2	-2.41	106.28	110.79
24	A4	315	LUT	C35-C15-C14	-2.41	118.59	123.52
17	A1	306	CLA	O2A-CGA-O1A	-2.41	117.60	123.63
26	A1	303	CHL	C1-O2A-CGA	2.41	122.48	116.65
17	AB	832	CLA	CHC-C4B-NB	2.41	127.66	124.05
17	AA	833	CLA	C3B-C4B-NB	-2.41	108.38	110.53
20	AA	847	BCR	C11-C12-C13	2.40	132.96	126.36
20	AA	849	BCR	C12-C13-C14	-2.40	115.23	119.01
17	A4	312	CLA	C3B-C4B-NB	-2.40	108.39	110.53
17	AA	805	CLA	CBA-CAA-C2A	2.40	120.94	113.79
20	AB	845	BCR	C15-C16-C17	-2.40	118.60	123.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AB	809	CLA	CBA-CAA-C2A	2.40	120.94	113.79
17	AB	842	CLA	O2D-CGD-CBD	2.40	115.43	111.23
17	AA	801	CLA	C1D-ND-C4D	-2.40	104.63	106.31
20	AA	845	BCR	C11-C10-C9	-2.40	123.92	127.28
17	AB	827	CLA	CMB-C2B-C1B	-2.40	121.77	125.42
17	A1	310	CLA	CMA-C3A-C2A	-2.40	110.74	116.23
26	A1	303	CHL	C3D-CAD-CBD	2.39	110.76	107.61
24	A4	315	LUT	C8-C9-C10	-2.39	115.25	119.01
20	AL	305	BCR	C38-C26-C25	2.39	127.09	124.48
26	A1	303	CHL	C4-C3-C5	2.39	118.94	116.13
20	AK	202	BCR	C32-C1-C6	-2.39	106.49	110.24
17	AA	819	CLA	CBA-CAA-C2A	2.39	120.90	113.79
17	AA	810	CLA	CHB-C4A-NA	2.39	127.85	124.40
20	AA	848	BCR	C19-C18-C17	-2.39	115.25	119.01
20	AJ	101	BCR	C12-C13-C14	-2.39	115.25	119.01
20	AI	102	BCR	C8-C9-C10	2.39	122.76	119.01
17	AA	821	CLA	CMB-C2B-C3B	2.39	132.16	126.55
17	AB	832	CLA	CHB-C4A-NA	2.38	127.84	124.40
17	AA	804	CLA	C3B-C4B-NB	-2.38	108.40	110.53
17	A4	303	CLA	CHB-C4A-NA	2.38	127.84	124.40
17	AA	835	CLA	CHB-C4A-NA	2.38	127.84	124.40
17	AB	805	CLA	CHB-C4A-NA	2.38	127.84	124.40
20	AB	847	BCR	C19-C18-C17	-2.38	115.26	119.01
17	AA	824	CLA	CHD-C1D-ND	-2.38	121.45	124.80
17	A3	303	CLA	C5-C3-C2	2.38	126.50	121.17
17	AB	818	CLA	O2A-CGA-O1A	-2.38	117.68	123.63
17	AA	829	CLA	C2D-C1D-ND	-2.38	107.77	110.13
20	AA	848	BCR	C24-C25-C26	-2.38	116.08	121.56
27	A1	318	XAT	C20-C13-C12	2.37	121.72	118.09
17	AA	821	CLA	CHB-C4A-NA	2.37	127.83	124.40
20	AB	845	BCR	C12-C13-C14	-2.37	115.28	119.01
17	AA	839	CLA	CHB-C4A-NA	2.37	127.82	124.40
20	AI	101	BCR	C11-C10-C9	-2.37	123.95	127.28
20	A4	317	BCR	C8-C9-C10	-2.37	115.28	119.01
17	AA	820	CLA	CHB-C4A-NA	2.37	127.82	124.40
20	AB	845	BCR	C40-C30-C25	-2.37	106.53	110.24
27	A6	615	XAT	C24-C23-C22	-2.37	106.36	110.79
20	AJ	103	BCR	C16-C15-C14	-2.37	118.67	123.52
17	AA	842	CLA	C4-C3-C5	-2.37	111.12	115.23
17	AA	826	CLA	O2D-CGD-O1D	-2.37	119.24	123.85
17	AB	816	CLA	CHB-C4A-NA	2.37	127.81	124.40
17	A6	610	CLA	CMB-C2B-C3B	2.37	129.82	123.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
18	AB	843	PQN	C14-C13-C15	-2.36	111.12	115.23
17	AA	803	CLA	CHB-C4A-NA	2.36	127.81	124.40
24	A1	317	LUT	C35-C15-C14	-2.36	118.68	123.52
24	A4	315	LUT	C19-C9-C8	2.36	121.70	118.09
17	AB	829	CLA	CBA-CAA-C2A	2.36	120.82	113.79
17	AB	814	CLA	CHB-C4A-NA	2.36	127.81	124.40
20	AB	849	BCR	C7-C8-C9	-2.36	122.74	126.23
20	AB	849	BCR	C8-C9-C10	-2.36	115.30	119.01
17	A4	312	CLA	CHB-C4A-NA	2.36	127.81	124.40
17	AA	836	CLA	O2D-CGD-CBD	2.36	115.36	111.23
17	AA	836	CLA	CHB-C4A-NA	2.36	127.80	124.40
17	A4	311	CLA	CHB-C4A-NA	2.36	127.80	124.40
17	A1	312	CLA	CAA-C2A-C3A	-2.36	110.82	116.23
17	AB	841	CLA	O2A-CGA-O1A	-2.36	117.73	123.63
20	AB	849	BCR	C29-C28-C27	-2.35	106.10	111.28
17	A6	610	CLA	CHA-C1A-NA	-2.35	124.09	126.67
27	A6	615	XAT	C19-C9-C8	2.35	121.68	118.09
20	AJ	101	BCR	C16-C17-C18	-2.35	123.98	127.28
20	A1	319	BCR	C8-C9-C10	-2.35	115.31	119.01
17	A6	604	CLA	CHB-C4A-NA	2.35	127.79	124.40
20	AI	101	BCR	C32-C1-C6	2.35	113.92	110.24
17	A1	305	CLA	CBC-CAC-C3C	-2.35	106.06	112.42
20	A6	616	BCR	C8-C9-C10	-2.35	115.32	119.01
17	A1	307	CLA	C2A-C1A-CHA	2.34	126.35	122.71
19	A3	319	LHG	O8-C23-C24	2.34	118.98	111.83
20	AB	849	BCR	C2-C3-C4	-2.34	106.13	111.28
17	AB	838	CLA	O2A-CGA-O1A	-2.34	117.77	123.63
23	AB	851	DGD	O2G-C1B-O1B	-2.34	118.23	123.70
17	AB	827	CLA	O2A-CGA-O1A	-2.34	117.77	123.63
20	AK	205	BCR	C36-C18-C17	-2.34	119.02	122.82
17	A6	612	CLA	CMB-C2B-C1B	-2.34	121.86	125.42
17	A1	310	CLA	CMB-C2B-C3B	2.34	129.75	123.53
17	AB	837	CLA	CMB-C2B-C1B	-2.34	121.86	125.42
17	AB	827	CLA	CAA-C2A-C3A	-2.34	106.68	113.00
20	AA	847	BCR	C15-C16-C17	-2.34	118.74	123.52
24	A6	614	LUT	C37-C21-C22	-2.33	105.05	109.41
17	AF	803	CLA	C3B-C4B-NB	-2.33	108.45	110.53
20	AB	849	BCR	C37-C22-C21	-2.33	119.03	122.82
20	AK	205	BCR	C7-C8-C9	-2.33	122.78	126.23
17	A4	301	CLA	O2D-CGD-CBD	2.33	115.31	111.23
20	AB	845	BCR	C7-C8-C9	-2.33	122.78	126.23
24	A3	316	LUT	C15-C35-C34	-2.33	118.75	123.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	A6	601	CLA	O2D-CGD-O1D	-2.33	119.31	123.85
26	A1	303	CHL	CBC-CAC-C3C	-2.33	109.54	112.87
17	A6	608	CLA	CHB-C4A-NA	2.33	127.76	124.40
19	A3	301	LHG	O8-C23-C24	2.33	118.92	111.83
17	A3	312	CLA	CHB-C4A-NA	2.32	127.75	124.40
17	A3	309	CLA	CMA-C3A-C2A	-2.32	110.90	116.23
20	AB	844	BCR	C35-C13-C12	2.32	121.64	118.09
24	A1	317	LUT	C8-C9-C10	-2.32	115.36	119.01
17	AB	823	CLA	CHD-C1D-ND	-2.32	121.53	124.80
26	A1	303	CHL	C1A-CHA-CBD	2.32	138.31	132.36
20	A6	616	BCR	C15-C16-C17	-2.32	118.77	123.52
20	AB	849	BCR	C33-C5-C4	2.32	118.54	113.60
26	A4	304	CHL	O2D-CGD-O1D	-2.32	118.82	124.08
17	AB	821	CLA	CHB-C4A-NA	2.32	127.75	124.40
27	A6	615	XAT	C36-C21-C22	-2.32	104.89	108.97
20	A4	317	BCR	C19-C18-C17	-2.32	115.36	119.01
17	AA	829	CLA	O2A-CGA-O1A	-2.32	117.83	123.63
17	AB	801	CLA	C3B-C4B-NB	-2.32	108.46	110.53
17	A3	303	CLA	CHB-C1B-NB	2.32	127.53	124.05
17	A4	309	CLA	O2D-CGD-CBD	2.32	115.28	111.23
20	AI	101	BCR	C16-C17-C18	-2.31	124.03	127.28
20	AI	102	BCR	C7-C6-C5	-2.31	116.22	121.56
17	AF	804	CLA	C3B-C4B-NB	-2.31	108.46	110.53
17	AH	201	CLA	CBA-CAA-C2A	2.31	120.68	113.79
20	AI	102	BCR	C1-C6-C7	2.31	121.93	115.65
27	A1	318	XAT	C19-C9-C8	2.31	121.62	118.09
17	AA	808	CLA	O2D-CGD-CBD	2.31	115.28	111.23
17	A3	313	CLA	CAA-C2A-C3A	-2.31	110.92	116.23
17	AB	823	CLA	CBA-CAA-C2A	2.31	120.68	113.79
17	AA	807	CLA	CHD-C1D-ND	-2.31	121.55	124.80
17	AB	835	CLA	C3B-C4B-NB	-2.31	108.47	110.53
17	AA	824	CLA	CHB-C4A-NA	2.31	127.74	124.40
27	A4	316	XAT	C10-C11-C12	-2.31	116.50	123.20
17	AB	815	CLA	CMB-C2B-C3B	2.31	131.99	126.55
20	AL	306	BCR	C29-C30-C25	-2.31	107.08	110.44
27	A1	318	XAT	C36-C21-C22	-2.31	104.91	108.97
17	AB	833	CLA	CHB-C4A-NA	2.31	127.73	124.40
20	AL	306	BCR	C35-C13-C12	2.31	121.61	118.09
26	A4	304	CHL	C1A-CHA-CBD	2.31	138.27	132.36
17	AA	809	CLA	C3B-C4B-NB	-2.31	108.47	110.53
17	AA	832	CLA	CHB-C4A-NA	2.31	127.73	124.40
17	AL	302	CLA	CMA-C3A-C2A	-2.31	110.94	116.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	AG	205	BCR	C40-C30-C25	-2.31	106.63	110.24
17	A3	315	CLA	CAA-C2A-C3A	-2.31	110.94	116.23
17	AB	815	CLA	CMB-C2B-C1B	-2.30	121.91	125.42
17	AA	840	CLA	C1-C2-C3	-2.30	122.42	126.20
27	A1	318	XAT	C35-C15-C14	-2.30	118.81	123.52
17	A1	315	CLA	CAA-C2A-C3A	-2.30	110.95	116.23
26	A4	306	CHL	C3D-CAD-CBD	2.30	110.64	107.61
27	A4	316	XAT	C35-C34-C33	-2.30	124.05	127.28
17	A6	612	CLA	CHB-C4A-NA	2.30	127.72	124.40
17	AA	835	CLA	C3B-C4B-NB	-2.30	108.48	110.53
27	A3	317	XAT	O4-C5-C6	-2.30	57.11	58.93
17	AB	828	CLA	O2A-CGA-O1A	-2.30	117.88	123.63
26	A1	303	CHL	OMC-CMC-C2C	-2.30	121.13	125.12
17	AA	841	CLA	CBA-CAA-C2A	2.30	120.63	113.79
24	A3	316	LUT	C1-C6-C5	-2.30	119.50	122.64
17	AA	811	CLA	CHB-C4A-NA	2.30	127.72	124.40
26	A3	320	CHL	C1A-CHA-CBD	2.30	138.25	132.36
17	AA	819	CLA	O2D-CGD-CBD	2.30	115.25	111.23
17	AG	201	CLA	CHB-C4A-NA	2.30	127.71	124.40
20	AJ	101	BCR	C1-C6-C5	-2.30	119.50	122.64
17	A6	611	CLA	C3B-C4B-NB	-2.30	108.48	110.53
20	AL	305	BCR	C36-C18-C19	2.29	121.59	118.09
17	A3	311	CLA	O2D-CGD-CBD	2.29	115.24	111.23
20	AK	205	BCR	C2-C3-C4	-2.29	106.24	111.28
20	AJ	103	BCR	C24-C23-C22	-2.29	122.85	126.23
17	AB	802	CLA	O2D-CGD-CBD	2.29	115.23	111.23
20	AG	205	BCR	C29-C30-C25	2.29	113.76	110.44
22	AB	850	LMU	C2'-C3'-C4'	2.29	114.87	109.68
26	A6	607	CHL	CBC-CAC-C3C	-2.29	109.60	112.87
17	A3	310	CLA	CHB-C4A-NA	2.28	127.70	124.40
17	AA	808	CLA	CHB-C4A-NA	2.28	127.69	124.40
17	A6	610	CLA	CAB-C3B-C2B	2.28	129.60	123.53
17	A3	308	CLA	CHB-C4A-NA	2.28	127.69	124.40
17	AB	817	CLA	CHD-C1D-ND	-2.28	121.59	124.80
17	AK	201	CLA	CHB-C4A-NA	2.28	127.69	124.40
26	A1	308	CHL	C1A-CHA-CBD	2.28	138.20	132.36
17	AL	303	CLA	CHD-C1D-ND	-2.28	121.60	124.80
17	AA	821	CLA	O2D-CGD-CBD	2.28	115.21	111.23
18	AA	843	PQN	C17-C16-C15	-2.28	107.19	113.26
25	A4	318	LMG	O8-C28-C29	2.28	118.78	111.83
27	A6	615	XAT	C40-C33-C34	-2.28	119.13	122.82
17	AB	813	CLA	C3B-C4B-NB	-2.28	108.50	110.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AB	809	CLA	O2A-CGA-O1A	-2.28	117.94	123.63
17	AA	818	CLA	CHB-C4A-NA	2.27	127.68	124.40
17	AG	203	CLA	CHB-C4A-NA	2.27	127.68	124.40
17	AA	834	CLA	CBC-CAC-C3C	2.27	118.58	112.42
17	A4	310	CLA	C3B-C4B-NB	-2.27	108.50	110.53
20	AL	305	BCR	C15-C16-C17	-2.27	118.87	123.52
20	AB	845	BCR	C32-C1-C6	-2.27	106.68	110.24
17	A3	314	CLA	CHB-C4A-NA	2.27	127.68	124.40
24	A1	317	LUT	C37-C21-C22	-2.27	105.17	109.41
25	A1	321	LMG	O4-C4-C3	-2.27	105.03	110.38
17	AA	814	CLA	O2D-CGD-CBD	2.27	115.20	111.23
17	A3	308	CLA	O2D-CGD-O1D	-2.27	119.44	123.85
17	AB	809	CLA	CHB-C4A-NA	2.27	127.67	124.40
17	AB	820	CLA	CHB-C1B-NB	2.27	127.45	124.05
17	AB	827	CLA	CMB-C2B-C3B	2.27	131.88	126.55
17	AB	837	CLA	O2A-CGA-O1A	-2.26	117.96	123.63
26	A4	306	CHL	C1A-CHA-CBD	2.26	138.16	132.36
22	AB	850	LMU	C1'-C2'-C3'	2.26	114.77	110.01
17	AB	811	CLA	C2A-C1A-CHA	2.26	127.79	123.87
17	AG	203	CLA	C3B-C4B-NB	-2.26	108.51	110.53
20	AI	102	BCR	C2-C3-C4	-2.26	106.30	111.28
17	A6	602	CLA	O1D-CGD-CBD	2.26	128.98	124.52
26	A4	306	CHL	O2A-CGA-CBA	2.26	121.14	114.00
17	AB	833	CLA	C3B-C4B-NB	-2.26	108.51	110.53
17	AA	833	CLA	CHB-C4A-NA	2.26	127.66	124.40
17	AA	814	CLA	O2A-CGA-O1A	-2.26	117.52	123.33
17	AA	805	CLA	CHB-C4A-NA	2.26	127.66	124.40
17	AB	826	CLA	CHB-C4A-NA	2.26	127.66	124.40
17	A6	613	CLA	CHB-C4A-NA	2.26	127.66	124.40
17	AB	832	CLA	O2A-CGA-O1A	-2.26	117.98	123.63
17	A4	312	CLA	CHD-C1D-ND	-2.26	121.62	124.80
25	A4	318	LMG	O1-C1-C2	2.26	111.70	108.27
17	A1	309	CLA	CHB-C4A-NA	2.26	127.66	124.40
17	AB	804	CLA	CMD-C2D-C3D	2.26	132.87	127.69
17	A6	608	CLA	C3B-C4B-NB	-2.26	108.52	110.53
17	A6	610	CLA	C3A-C4A-CHB	-2.26	118.95	125.05
17	AA	834	CLA	O2D-CGD-CBD	2.26	115.17	111.23
17	AB	807	CLA	CHD-C1D-ND	-2.26	121.63	124.80
27	A4	316	XAT	C19-C9-C8	2.25	121.53	118.09
17	A1	316	CLA	CMB-C2B-C3B	2.25	129.52	123.53
17	AA	809	CLA	CHA-C1A-NA	-2.25	121.29	126.39
26	A6	607	CHL	O1D-CGD-CBD	-2.25	121.31	124.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	AA	846	BCR	C19-C18-C17	-2.25	115.47	119.01
17	AB	805	CLA	CMA-C3A-C2A	-2.25	111.07	116.23
17	AJ	102	CLA	CHB-C4A-NA	2.25	127.65	124.40
20	AL	306	BCR	C20-C21-C22	-2.25	124.12	127.28
17	AA	822	CLA	CHB-C4A-NA	2.25	127.64	124.40
17	A1	305	CLA	C4-C3-C2	-2.25	117.85	123.63
17	AA	833	CLA	CMD-C2D-C1D	-2.25	120.77	124.73
22	AL	301	LMU	O5B-C1B-C2B	2.25	114.98	110.37
27	A1	318	XAT	C36-C21-C26	2.25	116.11	110.05
17	A4	302	CLA	CHB-C4A-NA	2.25	127.64	124.40
17	AB	841	CLA	CAC-C3C-C4C	2.24	127.71	124.79
26	A4	314	CHL	C1A-CHA-CBD	2.24	138.11	132.36
17	AA	825	CLA	CMB-C2B-C1B	-2.24	122.00	125.42
20	AI	102	BCR	C38-C26-C27	2.24	118.38	113.60
17	AB	825	CLA	O2D-CGD-CBD	2.24	115.15	111.23
27	A1	318	XAT	C31-C30-C29	-2.24	124.14	127.28
20	AJ	103	BCR	C30-C25-C26	-2.24	119.57	122.64
17	AB	809	CLA	C11-C10-C8	-2.24	108.52	115.97
17	AB	804	CLA	CHD-C4C-C3C	2.24	128.04	124.77
26	A4	306	CHL	O2D-CGD-O1D	-2.24	119.49	123.85
20	AL	306	BCR	C24-C25-C26	-2.24	116.40	121.56
20	AG	205	BCR	C34-C9-C8	2.24	121.51	118.09
17	A3	304	CLA	CAB-C3B-C2B	2.24	129.48	123.53
17	AA	821	CLA	C3B-C4B-NB	-2.24	108.53	110.53
17	AA	804	CLA	CMB-C2B-C1B	-2.23	122.02	125.42
17	A3	308	CLA	O1D-CGD-CBD	2.23	128.92	124.52
17	AA	816	CLA	CHB-C4A-NA	2.23	127.62	124.40
17	A3	313	CLA	CHB-C4A-NA	2.23	127.62	124.40
24	A6	614	LUT	C15-C35-C34	-2.23	118.95	123.52
24	AF	806	LUT	C37-C21-C22	-2.23	105.25	109.41
26	A4	306	CHL	CMA-C3A-C4A	-2.23	109.81	114.61
17	A4	307	CLA	CHB-C4A-NA	2.23	127.62	124.40
17	AA	807	CLA	CMB-C2B-C1B	-2.23	122.03	125.42
20	A3	318	BCR	C20-C21-C22	-2.23	124.16	127.28
24	A3	316	LUT	C38-C25-C24	-2.23	118.09	123.36
20	AJ	101	BCR	C2-C3-C4	-2.23	106.38	111.28
20	AK	202	BCR	C38-C26-C25	2.23	126.91	124.48
20	AB	846	BCR	C23-C22-C21	2.23	122.51	119.01
17	AB	830	CLA	O1D-CGD-CBD	2.22	128.91	124.52
20	AL	306	BCR	C11-C10-C9	-2.22	124.16	127.28
17	AB	821	CLA	C3B-C4B-NB	-2.22	108.55	110.53
27	A1	318	XAT	C37-C21-C36	-2.22	104.14	107.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	AB	844	BCR	C1-C6-C5	-2.22	119.60	122.64
17	AH	201	CLA	O2A-CGA-O1A	-2.22	118.07	123.63
20	AF	805	BCR	C11-C10-C9	-2.22	124.16	127.28
17	AB	825	CLA	C1-O2A-CGA	2.22	122.03	116.65
19	A1	301	LHG	O8-C23-C24	2.22	118.61	111.83
17	AB	829	CLA	O2D-CGD-CBD	2.22	115.11	111.23
27	A1	318	XAT	O4-C5-C18	2.22	117.53	115.05
20	AB	844	BCR	C15-C14-C13	-2.22	124.17	127.28
17	AA	830	CLA	O1D-CGD-CBD	2.22	128.90	124.52
24	A6	614	LUT	C40-C33-C32	2.22	121.48	118.09
17	A3	302	CLA	O1D-CGD-CBD	2.22	128.89	124.52
17	A6	611	CLA	CHB-C4A-NA	2.22	127.60	124.40
17	AA	837	CLA	CMB-C2B-C3B	2.22	131.76	126.55
17	AA	842	CLA	CAA-CBA-CGA	-2.22	106.92	113.21
20	AK	205	BCR	C20-C21-C22	-2.21	124.17	127.28
17	AB	829	CLA	CHB-C4A-NA	2.21	127.60	124.40
26	A1	303	CHL	O2D-CGD-O1D	-2.21	119.06	124.08
26	A4	306	CHL	O1D-CGD-CBD	-2.21	121.36	124.72
27	A1	318	XAT	C24-C23-C22	-2.21	106.65	110.79
17	AB	805	CLA	CMB-C2B-C1B	-2.21	122.05	125.42
26	A6	607	CHL	O2D-CGD-O1D	-2.21	119.54	123.85
17	A3	309	CLA	C3B-C4B-NB	-2.21	108.56	110.53
17	AA	805	CLA	CHD-C1D-ND	-2.21	121.69	124.80
20	A1	319	BCR	C3-C4-C5	-2.21	110.12	114.06
17	A3	315	CLA	CHB-C4A-NA	2.21	127.59	124.40
17	A3	314	CLA	C3B-C4B-NB	-2.21	108.56	110.53
17	AA	829	CLA	CHC-C4B-NB	2.21	127.36	124.05
24	A6	614	LUT	C17-C1-C6	-2.21	106.78	110.24
20	AB	846	BCR	C24-C25-C26	2.21	126.64	121.56
20	A4	317	BCR	C23-C22-C21	-2.20	115.54	119.01
17	AA	809	CLA	O1D-CGD-CBD	2.20	128.87	124.52
17	AB	823	CLA	O2A-CGA-O1A	-2.20	118.12	123.63
24	A6	614	LUT	C19-C9-C8	2.20	121.45	118.09
17	AB	839	CLA	CHB-C4A-NA	2.20	127.58	124.40
20	AL	305	BCR	C37-C22-C21	-2.20	119.25	122.82
17	A1	312	CLA	CMB-C2B-C3B	2.20	129.38	123.53
20	AI	102	BCR	C16-C15-C14	-2.20	119.02	123.52
27	A6	615	XAT	C39-C29-C30	-2.20	119.26	122.82
17	AB	818	CLA	O2D-CGD-CBD	2.20	115.07	111.23
20	AA	846	BCR	C28-C27-C26	-2.20	110.14	114.06
26	A1	308	CHL	C1B-CHB-C4A	-2.20	119.91	121.32
17	AB	837	CLA	CHA-C1A-NA	-2.19	121.42	126.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	A1	314	CLA	CBC-CAC-C3C	2.19	118.37	112.42
17	AA	842	CLA	O2D-CGD-CBD	2.19	115.06	111.23
17	AA	808	CLA	O2A-CGA-O1A	-2.19	118.15	123.63
17	AA	816	CLA	O2D-CGD-CBD	2.19	115.06	111.23
27	A4	316	XAT	C12-C13-C14	-2.19	115.57	119.01
20	AI	101	BCR	C36-C18-C17	-2.19	119.27	122.82
20	A4	317	BCR	C38-C26-C27	2.19	118.26	113.60
27	A4	316	XAT	C32-C33-C34	-2.19	115.57	119.01
17	AB	824	CLA	CAA-C2A-C1A	2.19	119.14	111.97
17	AA	805	CLA	O1D-CGD-CBD	2.19	128.83	124.52
17	AL	302	CLA	CHB-C4A-NA	2.19	127.56	124.40
17	A4	301	CLA	O2A-CGA-O1A	-2.19	118.16	123.63
20	AB	846	BCR	C24-C23-C22	-2.19	123.00	126.23
17	AL	302	CLA	C3B-C4B-NB	-2.18	108.58	110.53
26	A6	605	CHL	CMD-C2D-C3D	2.18	129.05	124.68
17	A1	312	CLA	CHB-C4A-NA	2.18	127.55	124.40
26	A6	606	CHL	C1A-CHA-CBD	2.18	137.95	132.36
17	A4	302	CLA	CMB-C2B-C3B	2.18	129.33	123.53
26	A4	314	CHL	O2D-CGD-O1D	-2.18	119.13	124.08
17	AA	817	CLA	C3B-C4B-NB	-2.18	108.58	110.53
17	AA	829	CLA	C5-C3-C2	-2.18	116.27	121.17
17	A3	314	CLA	CAA-C2A-C3A	-2.18	111.23	116.23
17	AB	812	CLA	O2A-CGA-O1A	-2.18	118.18	123.63
17	AB	834	CLA	CAC-C3C-C4C	2.18	127.62	124.79
24	A3	316	LUT	C35-C15-C14	-2.18	119.06	123.52
19	A6	617	LHG	O8-C23-C24	2.18	118.47	111.83
17	AB	839	CLA	C3B-C4B-NB	-2.18	108.59	110.53
27	A6	615	XAT	C26-C27-C28	-2.18	121.39	125.99
17	AA	805	CLA	CMC-C2C-C3C	2.18	132.03	126.15
20	AG	205	BCR	C1-C6-C5	-2.17	119.66	122.64
17	AA	834	CLA	CHD-C1D-ND	-2.17	121.74	124.80
17	AB	835	CLA	CHD-C1D-ND	-2.17	121.74	124.80
17	AB	834	CLA	O2A-CGA-O1A	-2.17	118.19	123.63
17	AB	802	CLA	C4-C3-C5	2.17	119.00	115.23
17	AA	816	CLA	CAC-C3C-C4C	2.17	127.61	124.79
17	A3	313	CLA	C3B-C4B-NB	-2.17	108.59	110.53
24	A3	316	LUT	C32-C33-C34	-2.17	115.60	119.01
17	AB	813	CLA	O2D-CGD-CBD	2.17	115.02	111.23
17	AB	831	CLA	CHB-C4A-NA	2.17	127.53	124.40
17	A6	601	CLA	CMC-C2C-C1C	-2.17	121.65	125.03
20	AA	845	BCR	C36-C18-C19	2.17	121.40	118.09
20	AK	202	BCR	C19-C18-C17	-2.17	115.60	119.01

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AB	826	CLA	CHD-C1D-ND	-2.17	121.75	124.80
17	AB	842	CLA	C3A-C2A-C1A	2.17	104.58	101.34
20	AB	844	BCR	C20-C21-C22	-2.16	124.24	127.28
17	AB	809	CLA	C3B-C4B-NB	-2.16	108.60	110.53
19	A1	301	LHG	O8-C23-O10	-2.16	118.22	123.63
17	AA	823	CLA	C3B-C4B-NB	-2.16	108.60	110.53
27	A1	318	XAT	C28-C29-C30	-2.16	115.61	119.01
17	AF	802	CLA	O2A-CGA-O1A	-2.16	118.23	123.63
17	AB	813	CLA	CHB-C4A-NA	2.16	127.51	124.40
17	A3	309	CLA	CAA-C2A-C3A	-2.15	111.29	116.23
20	AA	847	BCR	C29-C28-C27	-2.15	106.54	111.28
20	AB	844	BCR	C16-C17-C18	-2.15	124.26	127.28
20	AI	102	BCR	C23-C24-C25	-2.15	121.24	127.00
17	AB	822	CLA	CHB-C4A-NA	2.15	127.51	124.40
17	AA	804	CLA	CMB-C2B-C3B	2.15	131.62	126.55
17	A3	303	CLA	CHB-C1B-C2B	-2.15	121.17	127.43
20	AB	847	BCR	C36-C18-C17	-2.15	119.33	122.82
20	AJ	103	BCR	C27-C26-C25	-2.15	119.80	122.70
26	A4	305	CHL	CAC-C3C-C4C	2.15	129.56	124.03
20	AK	202	BCR	C20-C21-C22	-2.15	124.26	127.28
20	AA	849	BCR	C16-C15-C14	-2.15	119.12	123.52
17	AA	837	CLA	O2A-CGA-O1A	-2.15	118.25	123.63
17	AA	802	CLA	C2B-C1B-NB	2.15	112.55	110.33
17	AA	818	CLA	CAA-C2A-C3A	2.15	118.80	113.00
17	AA	838	CLA	O2A-CGA-O1A	-2.15	118.25	123.63
24	A4	315	LUT	C3-C4-C5	-2.15	106.83	112.18
17	AA	837	CLA	CMB-C2B-C1B	-2.15	122.15	125.42
26	A3	307	CHL	CMD-C2D-C3D	2.15	128.97	124.68
17	AB	829	CLA	CMB-C2B-C3B	2.15	131.60	126.55
20	AB	845	BCR	C10-C11-C12	-2.15	116.98	123.20
20	AB	846	BCR	C12-C13-C14	-2.15	115.64	119.01
20	AF	805	BCR	C40-C30-C25	-2.14	106.88	110.24
17	AA	834	CLA	C7-C6-C5	-2.14	107.55	113.26
17	AB	808	CLA	C3B-C4B-NB	-2.14	108.62	110.53
17	AB	804	CLA	CMC-C2C-C1C	-2.14	121.69	125.03
26	A6	606	CHL	CMA-C3A-C4A	-2.14	110.00	114.61
20	AL	306	BCR	C16-C15-C14	-2.14	119.14	123.52
27	A1	318	XAT	C17-C1-C16	-2.14	104.26	107.37
17	AA	823	CLA	CHD-C1D-ND	-2.14	121.79	124.80
17	AB	808	CLA	CHD-C1D-ND	-2.14	121.79	124.80
26	A3	307	CHL	C1A-CHA-CBD	2.14	137.84	132.36
17	AA	803	CLA	CAA-CBA-CGA	-2.14	107.13	113.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	AF	805	BCR	C28-C27-C26	-2.14	110.24	114.06
17	AB	836	CLA	CHB-C4A-NA	2.14	127.49	124.40
24	A4	315	LUT	C37-C21-C26	2.14	112.78	109.55
17	AA	832	CLA	O2D-CGD-CBD	2.14	114.97	111.23
26	A4	306	CHL	CMD-C2D-C3D	2.14	128.95	124.68
26	A6	606	CHL	C3D-CAD-CBD	2.14	110.42	107.61
27	A1	318	XAT	C38-C25-C26	-2.14	118.78	122.30
17	AB	804	CLA	O2D-CGD-CBD	2.13	114.96	111.23
20	AG	205	BCR	C16-C17-C18	-2.13	124.28	127.28
20	AA	846	BCR	C2-C3-C4	-2.13	106.58	111.28
27	A3	317	XAT	C38-C25-C24	2.13	116.64	114.24
26	A4	305	CHL	O2D-CGD-O1D	-2.13	119.70	123.85
17	A1	313	CLA	CMB-C2B-C1B	-2.13	122.17	125.42
26	A6	607	CHL	CMD-C2D-C3D	2.13	128.94	124.68
17	AK	201	CLA	CMA-C3A-C2A	-2.13	111.34	116.23
17	AL	303	CLA	C3B-C4B-NB	-2.13	108.63	110.53
17	AA	838	CLA	O2D-CGD-CBD	2.13	114.95	111.23
26	A1	308	CHL	CMD-C2D-C3D	2.13	128.94	124.68
25	A4	318	LMG	C13-C12-C11	-2.13	105.31	113.13
17	AB	825	CLA	CMA-C3A-C4A	-2.13	106.06	111.77
17	AA	826	CLA	O2A-CGA-O1A	-2.13	118.31	123.63
17	AL	303	CLA	O2A-CGA-O1A	-2.13	118.31	123.63
17	AA	829	CLA	O2D-CGD-O1D	-2.13	119.71	123.85
20	AA	845	BCR	C20-C21-C22	-2.13	124.30	127.28
17	A3	305	CLA	C3B-C4B-NB	-2.13	108.63	110.53
20	AA	848	BCR	C1-C6-C5	-2.12	119.73	122.64
17	A1	315	CLA	CAB-C3B-C4B	-2.12	122.18	125.42
26	A1	308	CHL	O2D-CGD-O1D	-2.12	119.26	124.08
20	AA	845	BCR	C34-C9-C10	-2.12	119.38	122.82
17	AB	835	CLA	CAA-C2A-C3A	-2.12	107.26	113.00
20	AA	848	BCR	C21-C20-C19	-2.12	117.05	123.20
27	A1	318	XAT	C35-C34-C33	-2.12	124.30	127.28
27	A3	317	XAT	C28-C29-C30	-2.12	115.67	119.01
20	A6	616	BCR	C30-C25-C26	-2.12	119.74	122.64
17	A1	315	CLA	CMA-C3A-C2A	-2.12	111.37	116.23
17	A1	316	CLA	CHB-C4A-NA	2.12	127.46	124.40
20	AA	847	BCR	C34-C9-C8	2.12	121.32	118.09
17	A4	302	CLA	CAB-C3B-C4B	-2.12	122.19	125.42
20	AB	846	BCR	C16-C15-C14	-2.12	119.19	123.52
20	AA	849	BCR	C34-C9-C8	2.12	121.32	118.09
17	AB	819	CLA	CMB-C2B-C3B	2.11	131.52	126.55
17	A3	310	CLA	CAA-C2A-C3A	-2.11	111.38	116.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	A1	312	CLA	C3B-C4B-NB	-2.11	108.14	110.33
20	AI	101	BCR	C19-C18-C17	-2.11	115.69	119.01
17	AA	824	CLA	C3B-C4B-NB	-2.11	108.64	110.53
17	AB	838	CLA	CHD-C1D-ND	-2.11	121.83	124.80
26	A4	305	CHL	CBC-CAC-C3C	-2.11	109.85	112.87
20	AK	205	BCR	C8-C7-C6	-2.11	121.36	127.00
17	AA	810	CLA	C3B-C4B-NB	-2.11	108.65	110.53
17	A3	303	CLA	O2A-CGA-O1A	-2.11	118.35	123.63
17	AB	821	CLA	CMB-C2B-C1B	-2.11	122.21	125.42
17	AB	819	CLA	O2A-CGA-O1A	-2.11	118.36	123.63
17	A1	312	CLA	CAB-C3B-C2B	2.11	129.13	123.53
17	A4	313	CLA	O2A-CGA-O1A	-2.11	118.36	123.63
20	A3	318	BCR	C15-C16-C17	-2.10	119.21	123.52
17	AB	829	CLA	C2D-C1D-ND	-2.10	108.04	110.13
17	AB	833	CLA	CHC-C4B-NB	2.10	127.21	124.05
17	AA	834	CLA	CMC-C2C-C3C	2.10	131.84	126.15
17	AB	840	CLA	CMB-C2B-C1B	-2.10	122.22	125.42
17	AB	806	CLA	CMC-C2C-C3C	2.10	131.84	126.15
17	A1	306	CLA	CHB-C4A-NA	2.10	127.44	124.40
17	AB	803	CLA	CHC-C4B-NB	2.10	127.20	124.05
20	AA	849	BCR	C15-C16-C17	-2.10	119.22	123.52
17	AB	840	CLA	CHB-C4A-NA	2.10	127.43	124.40
20	A4	317	BCR	C35-C13-C12	2.10	121.30	118.09
17	AA	842	CLA	CAC-C3C-C4C	2.10	127.52	124.79
17	A3	311	CLA	CAA-C2A-C3A	-2.10	107.33	113.00
17	A1	311	CLA	O2A-CGA-O1A	-2.10	118.38	123.63
17	A1	314	CLA	O2A-CGA-O1A	-2.10	118.38	123.63
17	AB	803	CLA	C3B-C4B-NB	-2.10	108.66	110.53
17	AB	830	CLA	CHB-C4A-NA	2.10	127.42	124.40
17	AB	804	CLA	C2A-C1A-CHA	2.09	127.50	123.87
20	AB	849	BCR	C8-C7-C6	-2.09	121.41	127.00
17	AB	801	CLA	C2A-C1A-CHA	2.09	127.50	123.87
20	AB	848	BCR	C3-C4-C5	-2.09	110.32	114.06
26	A4	304	CHL	CMD-C2D-C3D	2.09	128.86	124.68
17	AB	837	CLA	CHB-C4A-NA	2.09	127.42	124.40
22	AL	301	LMU	C1-O1'-C1'	2.09	117.25	113.68
17	AA	801	CLA	O1D-CGD-CBD	2.09	128.64	124.52
17	AB	840	CLA	C3B-C4B-NB	-2.09	108.66	110.53
24	A4	315	LUT	C36-C21-C26	2.09	112.71	109.55
20	AL	306	BCR	C29-C28-C27	-2.09	106.68	111.28
17	AB	807	CLA	CAA-C2A-C1A	-2.09	105.13	111.97
17	AA	813	CLA	CAA-C2A-C3A	-2.09	107.36	113.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AA	814	CLA	CHB-C4A-NA	2.09	127.41	124.40
17	AB	821	CLA	O2A-CGA-O1A	-2.09	118.41	123.63
17	AB	811	CLA	CHA-C1A-NA	-2.09	121.67	126.39
20	AI	102	BCR	C20-C21-C22	-2.08	124.35	127.28
20	A1	319	BCR	C20-C21-C22	-2.08	124.35	127.28
20	AA	849	BCR	C10-C11-C12	-2.08	117.16	123.20
17	A4	313	CLA	O2D-CGD-CBD	2.08	114.87	111.23
26	A4	304	CHL	CAC-C3C-C4C	2.08	128.48	124.73
20	A3	318	BCR	C28-C27-C26	-2.08	110.34	114.06
17	AA	804	CLA	CHD-C1D-ND	-2.08	121.87	124.80
26	A6	606	CHL	CED-O2D-CGD	2.08	120.64	115.92
17	AB	803	CLA	O1D-CGD-CBD	2.08	128.62	124.52
20	AL	306	BCR	C34-C9-C8	2.08	121.27	118.09
17	A3	306	CLA	CMB-C2B-C1B	-2.08	122.25	125.42
17	A4	308	CLA	C1D-ND-C4D	-2.08	104.85	106.31
17	AA	811	CLA	O1D-CGD-CBD	2.08	128.62	124.52
17	AA	836	CLA	C3B-C4B-NB	-2.08	108.68	110.53
17	AB	818	CLA	CAC-C3C-C4C	2.08	127.49	124.79
20	AJ	103	BCR	C20-C21-C22	-2.08	124.37	127.28
26	A6	605	CHL	C1A-CHA-CBD	2.08	137.68	132.36
26	A4	314	CHL	CMD-C2D-C3D	2.07	128.82	124.68
20	AJ	101	BCR	C19-C18-C17	-2.07	115.75	119.01
17	AA	838	CLA	C5-C3-C2	2.07	125.82	121.17
17	AA	836	CLA	CHB-C1B-NB	2.07	127.16	124.05
17	AA	831	CLA	CHD-C1D-ND	-2.07	121.89	124.80
17	AB	802	CLA	C1-O2A-CGA	2.07	121.66	116.65
17	A4	303	CLA	CAB-C3B-C4B	-2.07	122.27	125.42
20	AF	805	BCR	C24-C25-C26	2.07	126.32	121.56
17	AB	826	CLA	CMB-C2B-C3B	2.07	131.41	126.55
17	AA	838	CLA	CHB-C4A-NA	2.07	127.38	124.40
20	A1	319	BCR	C12-C13-C14	-2.07	115.76	119.01
17	A4	308	CLA	O2A-CGA-O1A	-2.07	118.46	123.63
17	AF	802	CLA	O1D-CGD-CBD	2.07	128.59	124.52
17	A6	610	CLA	C1D-ND-C4D	-2.07	104.86	106.31
17	AA	807	CLA	CMB-C2B-C3B	2.06	131.41	126.55
17	A3	312	CLA	CHD-C1D-ND	-2.06	121.90	124.80
17	A6	609	CLA	CBA-CAA-C2A	2.06	119.93	113.79
17	AA	828	CLA	CAA-CBA-CGA	-2.06	107.36	113.21
20	AB	846	BCR	C32-C1-C6	-2.06	107.01	110.24
17	AH	201	CLA	C1-C2-C3	-2.06	122.82	126.20
20	AB	847	BCR	C23-C22-C21	-2.06	115.77	119.01
17	AB	801	CLA	C3A-C2A-C1A	2.06	104.42	101.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	A4	317	BCR	C34-C9-C8	2.06	121.23	118.09
17	AA	830	CLA	CHB-C4A-NA	2.06	127.37	124.40
17	AB	815	CLA	C1-C2-C3	-2.06	122.82	126.20
17	A1	311	CLA	C3B-C4B-NB	-2.06	108.69	110.53
17	AA	818	CLA	CHC-C4B-NB	2.06	127.13	124.05
17	A6	609	CLA	O2A-CGA-O1A	-2.06	118.49	123.63
20	A1	319	BCR	C21-C20-C19	-2.06	117.25	123.20
17	AF	802	CLA	CMD-C2D-C3D	2.05	132.40	127.69
17	AB	839	CLA	CHC-C4B-NB	2.05	127.13	124.05
17	AA	821	CLA	C7-C6-C5	-2.05	107.79	113.26
17	AB	805	CLA	CAA-C2A-C3A	-2.05	111.52	116.23
26	A1	303	CHL	CBA-CAA-C2A	2.05	119.81	113.78
17	AA	812	CLA	O2D-CGD-CBD	2.05	114.81	111.23
20	AA	847	BCR	C8-C7-C6	2.05	132.47	127.00
20	AA	847	BCR	C16-C15-C14	-2.05	119.33	123.52
26	A3	307	CHL	CAC-C3C-C4C	2.05	129.29	124.03
20	AG	205	BCR	C29-C28-C27	-2.05	106.78	111.28
17	AA	803	CLA	O2A-CGA-O1A	-2.05	118.51	123.63
17	AF	802	CLA	C6-C5-C3	2.05	118.45	113.47
17	AA	815	CLA	C3B-C4B-NB	-2.05	108.70	110.53
20	AA	845	BCR	C4-C5-C6	2.05	125.47	122.70
17	A1	309	CLA	CAC-C3C-C4C	2.05	127.45	124.79
20	A1	319	BCR	C39-C30-C29	2.04	116.80	108.95
17	AB	832	CLA	CMC-C2C-C3C	2.04	131.68	126.15
17	AK	204	CLA	C3B-C4B-NB	-2.04	108.71	110.53
17	AA	829	CLA	CMB-C2B-C3B	2.04	131.36	126.55
20	AF	801	BCR	C39-C30-C25	-2.04	107.04	110.24
22	AB	853	LMU	O5B-C5B-C4B	2.04	113.38	109.70
20	AA	849	BCR	C19-C18-C17	2.04	122.22	119.01
20	AJ	103	BCR	C12-C13-C14	-2.04	115.80	119.01
20	AL	306	BCR	C12-C13-C14	-2.04	115.80	119.01
24	A4	315	LUT	C12-C13-C14	-2.04	115.80	119.01
17	AA	839	CLA	C3B-C4B-NB	-2.04	108.71	110.53
17	AB	840	CLA	CHB-C1B-NB	2.04	127.11	124.05
20	AI	102	BCR	C12-C13-C14	-2.04	115.80	119.01
17	AB	815	CLA	C16-C15-C13	2.04	122.74	115.97
17	AA	807	CLA	O2D-CGD-CBD	2.04	114.79	111.23
17	AA	826	CLA	CHB-C4A-NA	2.04	127.34	124.40
17	AB	824	CLA	CHC-C4B-NB	2.04	127.10	124.05
26	A4	305	CHL	CMA-C3A-C4A	-2.04	110.23	114.61
17	AK	201	CLA	CMB-C2B-C3B	2.03	129.50	124.63
17	AB	809	CLA	C5-C3-C2	2.03	125.73	121.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AB	820	CLA	CMB-C2B-C1B	-2.03	122.32	125.42
17	AA	833	CLA	O2D-CGD-CBD	2.03	114.78	111.23
26	A6	607	CHL	C3D-CAD-CBD	2.03	110.28	107.61
17	A1	304	CLA	O1D-CGD-CBD	2.03	128.52	124.52
17	AA	807	CLA	C3B-C4B-NB	-2.03	108.72	110.53
17	A6	601	CLA	C3B-C4B-NB	-2.03	108.72	110.53
20	AL	306	BCR	C34-C9-C10	-2.03	119.53	122.82
17	AA	801	CLA	CHC-C4B-NB	2.03	127.09	124.05
20	AA	847	BCR	C12-C13-C14	2.03	122.20	119.01
20	AB	846	BCR	C15-C16-C17	-2.03	119.37	123.52
17	AG	204	CLA	C3B-C4B-NB	-2.03	108.72	110.53
20	AG	205	BCR	C33-C5-C6	-2.03	122.27	124.48
20	AG	205	BCR	C39-C30-C25	-2.03	107.06	110.24
17	AA	824	CLA	O2A-CGA-O1A	-2.03	118.56	123.63
17	A3	310	CLA	C3B-C4B-NB	-2.03	108.72	110.53
17	A1	316	CLA	CAB-C3B-C4B	-2.03	122.33	125.42
17	A4	313	CLA	CBA-CAA-C2A	2.03	119.82	113.79
20	AK	205	BCR	C4-C5-C6	-2.03	119.97	122.70
20	AG	205	BCR	C27-C26-C25	-2.02	119.97	122.70
20	AI	102	BCR	C15-C16-C17	-2.02	119.38	123.52
17	AA	837	CLA	C2A-C1A-CHA	2.02	127.38	123.87
17	AA	812	CLA	CHD-C1D-ND	-2.02	121.95	124.80
17	A3	305	CLA	CHD-C1D-ND	-2.02	121.95	124.80
27	A6	615	XAT	C35-C34-C33	-2.02	124.44	127.28
26	A4	305	CHL	C3D-CAD-CBD	2.02	110.27	107.61
20	AJ	101	BCR	C2-C1-C6	2.02	113.38	110.44
26	A1	308	CHL	C3D-CAD-CBD	2.02	110.27	107.61
17	AK	203	CLA	O2A-CGA-O1A	-2.02	118.13	123.33
17	AB	829	CLA	CHC-C4B-NB	2.02	127.08	124.05
17	AL	303	CLA	C1-O2A-CGA	2.02	121.54	116.65
24	A4	315	LUT	C15-C35-C34	-2.02	119.38	123.52
17	A3	309	CLA	O2D-CGD-CBD	2.02	114.76	111.23
17	AL	303	CLA	CHD-C1D-C2D	2.02	129.69	125.49
17	AB	828	CLA	CMB-C2B-C3B	2.02	131.30	126.55
20	A4	317	BCR	C16-C15-C14	-2.02	119.39	123.52
24	AF	806	LUT	C39-C29-C30	-2.02	119.55	122.82
17	AB	839	CLA	O2A-CGA-O1A	-2.02	118.58	123.63
26	A6	607	CHL	C5-C3-C4	2.02	119.23	114.59
17	AB	833	CLA	O2A-CGA-O1A	-2.02	118.59	123.63
24	A1	317	LUT	C18-C5-C6	2.02	126.68	124.48
17	AK	203	CLA	O2D-CGD-CBD	2.01	114.75	111.23
17	AB	836	CLA	CHB-C1B-NB	2.01	127.07	124.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AA	828	CLA	C16-C15-C13	2.01	122.66	115.97
17	AA	842	CLA	O2A-CGA-O1A	-2.01	118.59	123.63
17	AA	839	CLA	CAA-CBA-CGA	-2.01	107.50	113.21
17	AB	812	CLA	C5-C3-C2	2.01	125.68	121.17
20	AB	848	BCR	C37-C22-C21	-2.01	119.56	122.82
17	AA	817	CLA	O2A-CGA-O1A	-2.01	118.60	123.63
17	A6	613	CLA	CHD-C1D-ND	-2.01	121.97	124.80
17	AA	823	CLA	CHB-C4A-NA	2.01	127.30	124.40
17	AB	803	CLA	CHB-C4A-NA	2.01	127.30	124.40
20	AB	844	BCR	C11-C10-C9	-2.01	124.46	127.28
17	AB	819	CLA	CAA-C2A-C3A	2.01	118.43	113.00
17	A3	308	CLA	C3B-C4B-NB	-2.01	108.74	110.53
17	AB	833	CLA	C4-C3-C5	2.01	118.71	115.23
24	A4	315	LUT	C38-C25-C24	-2.01	118.61	123.36
20	AB	849	BCR	C15-C16-C17	-2.00	119.42	123.52
17	AA	801	CLA	O2A-CGA-O1A	-2.00	118.62	123.63
17	AA	842	CLA	C1-C2-C3	-2.00	122.92	126.20
20	AA	847	BCR	C19-C18-C17	-2.00	115.86	119.01
24	A3	316	LUT	C21-C26-C27	-2.00	110.53	112.83
17	AB	810	CLA	C2A-C1A-CHA	2.00	127.34	123.87

All (160) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
17	AA	801	CLA	ND
17	AA	802	CLA	ND
17	AA	803	CLA	ND
17	AA	805	CLA	ND
17	AA	806	CLA	ND
17	AA	807	CLA	ND
17	AA	808	CLA	ND
17	AA	809	CLA	ND
17	AA	810	CLA	ND
17	AA	811	CLA	ND
17	AA	812	CLA	ND
17	AA	813	CLA	ND
17	AA	814	CLA	ND
17	AA	816	CLA	ND
17	AA	817	CLA	ND
17	AA	819	CLA	ND
17	AA	820	CLA	ND
17	AA	821	CLA	ND

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Mol	Chain	Res	Type	Atom
17	AA	822	CLA	ND
17	AA	823	CLA	ND
17	AA	824	CLA	ND
17	AA	825	CLA	ND
17	AA	826	CLA	ND
17	AA	827	CLA	ND
17	AA	828	CLA	ND
17	AA	829	CLA	ND
17	AA	830	CLA	ND
17	AA	831	CLA	ND
17	AA	832	CLA	ND
17	AA	833	CLA	ND
17	AA	835	CLA	ND
17	AA	837	CLA	ND
17	AA	840	CLA	ND
17	AA	842	CLA	ND
17	AB	801	CLA	ND
17	AB	802	CLA	ND
17	AB	803	CLA	ND
17	AB	804	CLA	ND
17	AB	805	CLA	ND
17	AB	806	CLA	ND
17	AB	807	CLA	ND
17	AB	809	CLA	ND
17	AB	810	CLA	ND
17	AB	811	CLA	ND
17	AB	812	CLA	ND
17	AB	813	CLA	ND
17	AB	814	CLA	ND
17	AB	815	CLA	ND
17	AB	816	CLA	ND
17	AB	817	CLA	ND
17	AB	818	CLA	ND
17	AB	819	CLA	ND
17	AB	820	CLA	ND
17	AB	821	CLA	ND
17	AB	822	CLA	ND
17	AB	824	CLA	ND
17	AB	825	CLA	ND
17	AB	826	CLA	ND
17	AB	827	CLA	ND
17	AB	828	CLA	ND

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Mol	Chain	Res	Type	Atom
17	AB	829	CLA	ND
17	AB	830	CLA	ND
17	AB	831	CLA	ND
17	AB	833	CLA	ND
17	AB	834	CLA	ND
17	AB	837	CLA	ND
17	AB	839	CLA	ND
17	AB	840	CLA	ND
17	AB	841	CLA	ND
17	AB	842	CLA	ND
17	AF	802	CLA	ND
17	AF	803	CLA	ND
17	AF	804	CLA	ND
17	AG	201	CLA	ND
17	AG	203	CLA	ND
17	AG	204	CLA	ND
17	AH	201	CLA	ND
17	AJ	102	CLA	ND
17	AK	201	CLA	ND
17	AK	203	CLA	ND
17	AK	204	CLA	ND
17	AL	302	CLA	ND
17	AL	304	CLA	ND
17	A1	304	CLA	ND
17	A1	305	CLA	ND
17	A1	306	CLA	ND
17	A1	307	CLA	ND
17	A1	309	CLA	ND
17	A1	310	CLA	ND
17	A1	311	CLA	ND
17	A1	312	CLA	ND
17	A1	313	CLA	ND
17	A1	314	CLA	ND
17	A1	315	CLA	ND
17	A1	316	CLA	ND
17	A3	302	CLA	ND
17	A3	303	CLA	ND
17	A3	304	CLA	ND
17	A3	305	CLA	ND
17	A3	306	CLA	ND
17	A3	308	CLA	ND
17	A3	309	CLA	ND

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Mol	Chain	Res	Type	Atom
17	A3	310	CLA	ND
17	A3	311	CLA	ND
17	A3	312	CLA	ND
17	A3	314	CLA	ND
17	A3	315	CLA	ND
17	A4	301	CLA	ND
17	A4	302	CLA	ND
17	A4	303	CLA	ND
17	A4	307	CLA	ND
17	A4	308	CLA	ND
17	A4	309	CLA	ND
17	A4	310	CLA	ND
17	A4	311	CLA	ND
17	A4	312	CLA	ND
17	A4	313	CLA	ND
17	A6	601	CLA	ND
17	A6	602	CLA	ND
17	A6	603	CLA	ND
17	A6	604	CLA	ND
17	A6	608	CLA	ND
17	A6	609	CLA	ND
17	A6	610	CLA	ND
17	A6	611	CLA	ND
17	A6	612	CLA	ND
17	A6	613	CLA	ND
26	A1	303	CHL	NC
26	A1	303	CHL	ND
26	A1	303	CHL	NA
26	A1	308	CHL	NC
26	A1	308	CHL	ND
26	A1	308	CHL	NA
26	A3	307	CHL	NC
26	A3	307	CHL	ND
26	A3	307	CHL	NA
26	A3	320	CHL	NC
26	A3	320	CHL	ND
26	A3	320	CHL	NA
26	A4	304	CHL	NC
26	A4	304	CHL	ND
26	A4	304	CHL	NA
26	A4	305	CHL	NC
26	A4	305	CHL	ND

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Mol	Chain	Res	Type	Atom
26	A4	305	CHL	NA
26	A4	306	CHL	NC
26	A4	306	CHL	ND
26	A4	306	CHL	NA
26	A4	314	CHL	NC
26	A4	314	CHL	ND
26	A4	314	CHL	NA
26	A6	605	CHL	NC
26	A6	605	CHL	ND
26	A6	605	CHL	NA
26	A6	606	CHL	NC
26	A6	606	CHL	ND
26	A6	606	CHL	NA
26	A6	607	CHL	NC
26	A6	607	CHL	ND
26	A6	607	CHL	NA

All (1509) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
17	AA	801	CLA	CBD-CGD-O2D-CED
17	AA	802	CLA	CBD-CGD-O2D-CED
17	AA	803	CLA	CHA-CBD-CGD-O1D
17	AA	803	CLA	CHA-CBD-CGD-O2D
17	AA	804	CLA	C1A-C2A-CAA-CBA
17	AA	804	CLA	C3A-C2A-CAA-CBA
17	AA	805	CLA	CAD-CBD-CGD-O2D
17	AA	808	CLA	CHA-CBD-CGD-O1D
17	AA	808	CLA	CHA-CBD-CGD-O2D
17	AA	813	CLA	CAD-CBD-CGD-O1D
17	AA	813	CLA	CAD-CBD-CGD-O2D
17	AA	816	CLA	CAD-CBD-CGD-O1D
17	AA	816	CLA	CAD-CBD-CGD-O2D
17	AA	818	CLA	C3A-C2A-CAA-CBA
17	AA	818	CLA	C2B-C3B-CAB-CBB
17	AA	818	CLA	C4B-C3B-CAB-CBB
17	AA	819	CLA	C3A-C2A-CAA-CBA
17	AA	820	CLA	C2B-C3B-CAB-CBB
17	AA	820	CLA	C4B-C3B-CAB-CBB
17	AA	822	CLA	C1A-C2A-CAA-CBA
17	AA	822	CLA	C4B-C3B-CAB-CBB
17	AA	822	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
17	AA	823	CLA	C2B-C3B-CAB-CBB
17	AA	823	CLA	C4B-C3B-CAB-CBB
17	AA	824	CLA	C1A-C2A-CAA-CBA
17	AA	824	CLA	C3A-C2A-CAA-CBA
17	AA	825	CLA	C1A-C2A-CAA-CBA
17	AA	828	CLA	CBD-CGD-O2D-CED
17	AA	828	CLA	C14-C13-C15-C16
17	AA	831	CLA	C1A-C2A-CAA-CBA
17	AA	831	CLA	C3A-C2A-CAA-CBA
17	AA	831	CLA	CHA-CBD-CGD-O2D
17	AA	833	CLA	C2B-C3B-CAB-CBB
17	AA	833	CLA	C4B-C3B-CAB-CBB
17	AA	833	CLA	CAD-CBD-CGD-O1D
17	AA	833	CLA	CAD-CBD-CGD-O2D
17	AA	833	CLA	CBD-CGD-O2D-CED
17	AA	837	CLA	CHA-CBD-CGD-O1D
17	AA	837	CLA	CHA-CBD-CGD-O2D
17	AA	837	CLA	C4-C3-C5-C6
17	AA	840	CLA	C2B-C3B-CAB-CBB
17	AA	840	CLA	C4B-C3B-CAB-CBB
17	AA	842	CLA	C4B-C3B-CAB-CBB
17	AB	804	CLA	C1A-C2A-CAA-CBA
17	AB	804	CLA	C3A-C2A-CAA-CBA
17	AB	804	CLA	C2C-C3C-CAC-CBC
17	AB	804	CLA	C4C-C3C-CAC-CBC
17	AB	804	CLA	CBD-CGD-O2D-CED
17	AB	804	CLA	C11-C10-C8-C7
17	AB	806	CLA	C1A-C2A-CAA-CBA
17	AB	806	CLA	C3A-C2A-CAA-CBA
17	AB	806	CLA	CAD-CBD-CGD-O1D
17	AB	806	CLA	CAD-CBD-CGD-O2D
17	AB	807	CLA	CBD-CGD-O2D-CED
17	AB	809	CLA	C1A-C2A-CAA-CBA
17	AB	809	CLA	C3A-C2A-CAA-CBA
17	AB	809	CLA	CHA-CBD-CGD-O1D
17	AB	809	CLA	CHA-CBD-CGD-O2D
17	AB	810	CLA	CBD-CGD-O2D-CED
17	AB	811	CLA	C1A-C2A-CAA-CBA
17	AB	811	CLA	CAD-CBD-CGD-O1D
17	AB	811	CLA	CAD-CBD-CGD-O2D
17	AB	812	CLA	CBD-CGD-O2D-CED
17	AB	812	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
17	AB	814	CLA	C1A-C2A-CAA-CBA
17	AB	814	CLA	C3A-C2A-CAA-CBA
17	AB	815	CLA	CBD-CGD-O2D-CED
17	AB	816	CLA	CBD-CGD-O2D-CED
17	AB	818	CLA	C2B-C3B-CAB-CBB
17	AB	818	CLA	C4B-C3B-CAB-CBB
17	AB	819	CLA	C3A-C2A-CAA-CBA
17	AB	820	CLA	C2B-C3B-CAB-CBB
17	AB	820	CLA	C4B-C3B-CAB-CBB
17	AB	824	CLA	C1A-C2A-CAA-CBA
17	AB	824	CLA	C3A-C2A-CAA-CBA
17	AB	825	CLA	CHA-CBD-CGD-O1D
17	AB	825	CLA	CHA-CBD-CGD-O2D
17	AB	828	CLA	C1A-C2A-CAA-CBA
17	AB	829	CLA	C1A-C2A-CAA-CBA
17	AB	834	CLA	C2B-C3B-CAB-CBB
17	AB	834	CLA	C4B-C3B-CAB-CBB
17	AB	834	CLA	CBD-CGD-O2D-CED
17	AB	834	CLA	C6-C7-C8-C9
17	AB	836	CLA	CBD-CGD-O2D-CED
17	AB	839	CLA	CHA-CBD-CGD-O1D
17	AB	839	CLA	CHA-CBD-CGD-O2D
17	AB	841	CLA	C6-C7-C8-C9
17	AF	802	CLA	C3A-C2A-CAA-CBA
17	AF	803	CLA	CBD-CGD-O2D-CED
17	AG	203	CLA	CBD-CGD-O2D-CED
17	AG	204	CLA	CBD-CGD-O2D-CED
17	AH	201	CLA	C3A-C2A-CAA-CBA
17	AH	201	CLA	C2B-C3B-CAB-CBB
17	AH	201	CLA	C4B-C3B-CAB-CBB
17	AH	201	CLA	CBD-CGD-O2D-CED
17	AJ	102	CLA	C1A-C2A-CAA-CBA
17	AK	203	CLA	C4B-C3B-CAB-CBB
17	AK	204	CLA	C1A-C2A-CAA-CBA
17	AK	204	CLA	CBD-CGD-O2D-CED
17	AL	304	CLA	C1A-C2A-CAA-CBA
17	AL	304	CLA	CHA-CBD-CGD-O1D
17	AL	304	CLA	CHA-CBD-CGD-O2D
17	A1	306	CLA	CAD-CBD-CGD-O1D
17	A1	306	CLA	CAD-CBD-CGD-O2D
17	A1	306	CLA	CBD-CGD-O2D-CED
17	A1	307	CLA	C4B-C3B-CAB-CBB

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Mol	Chain	Res	Type	Atoms
17	A1	307	CLA	CBD-CGD-O2D-CED
17	A1	309	CLA	C1A-C2A-CAA-CBA
17	A1	310	CLA	CBD-CGD-O2D-CED
17	A1	313	CLA	CBD-CGD-O2D-CED
17	A1	314	CLA	C11-C10-C8-C9
17	A3	303	CLA	C1A-C2A-CAA-CBA
17	A3	303	CLA	C3A-C2A-CAA-CBA
17	A3	305	CLA	C1A-C2A-CAA-CBA
17	A3	305	CLA	C2B-C3B-CAB-CBB
17	A3	305	CLA	C4B-C3B-CAB-CBB
17	A3	308	CLA	C2B-C3B-CAB-CBB
17	A3	308	CLA	C4B-C3B-CAB-CBB
17	A3	309	CLA	CBD-CGD-O2D-CED
17	A3	310	CLA	C4B-C3B-CAB-CBB
17	A3	313	CLA	C2B-C3B-CAB-CBB
17	A3	313	CLA	C4B-C3B-CAB-CBB
17	A4	302	CLA	CBD-CGD-O2D-CED
17	A4	303	CLA	CBD-CGD-O2D-CED
17	A4	308	CLA	C2B-C3B-CAB-CBB
17	A4	308	CLA	C4B-C3B-CAB-CBB
17	A4	309	CLA	C1A-C2A-CAA-CBA
17	A4	309	CLA	C3A-C2A-CAA-CBA
17	A4	310	CLA	C1A-C2A-CAA-CBA
17	A4	310	CLA	C3A-C2A-CAA-CBA
17	A4	310	CLA	CAD-CBD-CGD-O2D
17	A4	312	CLA	C2B-C3B-CAB-CBB
17	A4	312	CLA	C4B-C3B-CAB-CBB
17	A4	312	CLA	CBD-CGD-O2D-CED
17	A4	313	CLA	C1A-C2A-CAA-CBA
17	A4	313	CLA	C4B-C3B-CAB-CBB
17	A4	313	CLA	CBD-CGD-O2D-CED
17	A6	604	CLA	CAA-CBA-CGA-O1A
17	A6	608	CLA	C1A-C2A-CAA-CBA
17	A6	608	CLA	C3A-C2A-CAA-CBA
17	A6	610	CLA	CMA-C3A-C4A-CHB
17	A6	610	CLA	CMA-C3A-C4A-NA
17	A6	611	CLA	C4B-C3B-CAB-CBB
18	AB	843	PQN	C19-C18-C20-C21
19	AA	844	LHG	C4-O6-P-O4
19	AJ	104	LHG	C4-O6-P-O3
19	AJ	104	LHG	C4-O6-P-O4
19	AJ	104	LHG	C4-O6-P-O5

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Mol	Chain	Res	Type	Atoms
19	A1	302	LHG	C3-O3-P-O6
19	A1	320	LHG	C4-O6-P-O3
19	A1	320	LHG	C4-O6-P-O4
19	A1	320	LHG	C4-O6-P-O5
19	A3	301	LHG	C3-O3-P-O5
19	A3	301	LHG	C4-O6-P-O3
19	A3	301	LHG	C4-O6-P-O4
19	A3	301	LHG	C4-O6-P-O5
19	A3	319	LHG	C3-O3-P-O4
19	A3	319	LHG	C3-O3-P-O5
19	A3	319	LHG	C3-O3-P-O6
19	A6	617	LHG	C3-O3-P-O4
19	A6	617	LHG	C3-O3-P-O6
19	A6	617	LHG	C4-O6-P-O3
19	A6	617	LHG	C4-O6-P-O5
20	AA	845	BCR	C7-C8-C9-C10
20	AA	846	BCR	C21-C22-C23-C24
20	AA	846	BCR	C23-C24-C25-C26
20	AA	847	BCR	C5-C6-C7-C8
20	AA	847	BCR	C7-C8-C9-C10
20	AA	847	BCR	C21-C22-C23-C24
20	AA	849	BCR	C23-C24-C25-C26
20	AB	844	BCR	C5-C6-C7-C8
20	AB	845	BCR	C7-C8-C9-C10
20	AB	845	BCR	C23-C24-C25-C26
20	AB	845	BCR	C23-C24-C25-C30
20	AB	848	BCR	C21-C22-C23-C24
20	AB	849	BCR	C21-C22-C23-C24
20	AB	849	BCR	C37-C22-C23-C24
20	AB	849	BCR	C23-C24-C25-C26
20	AB	849	BCR	C23-C24-C25-C30
20	AF	801	BCR	C23-C24-C25-C26
20	AF	801	BCR	C23-C24-C25-C30
20	AF	805	BCR	C7-C8-C9-C10
20	AI	101	BCR	C7-C8-C9-C10
20	AI	102	BCR	C1-C6-C7-C8
20	AI	102	BCR	C5-C6-C7-C8
20	AJ	103	BCR	C5-C6-C7-C8
20	AK	202	BCR	C23-C24-C25-C26
20	AK	202	BCR	C23-C24-C25-C30
20	AL	305	BCR	C7-C8-C9-C10
20	AL	305	BCR	C7-C8-C9-C34

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Mol	Chain	Res	Type	Atoms
20	A1	319	BCR	C1-C6-C7-C8
20	A1	319	BCR	C5-C6-C7-C8
20	A3	318	BCR	C21-C22-C23-C24
20	A6	616	BCR	C5-C6-C7-C8
22	AA	851	LMU	O5'-C1'-O1'-C1
22	AB	852	LMU	C2'-C1'-O1'-C1
22	AB	852	LMU	O5'-C1'-O1'-C1
23	AB	851	DGD	C2B-C1B-O2G-C2G
23	AB	851	DGD	O2G-C2G-C3G-O3G
25	A1	321	LMG	O9-C10-O7-C8
25	A1	321	LMG	C11-C10-O7-C8
25	A4	318	LMG	O6-C1-O1-C7
25	A4	318	LMG	C11-C10-O7-C8
26	A1	308	CHL	CAD-CBD-CGD-O2D
26	A3	307	CHL	CBD-CGD-O2D-CED
26	A3	320	CHL	C3A-C2A-CAA-CBA
26	A6	606	CHL	CBD-CGD-O2D-CED
17	AA	823	CLA	O1D-CGD-O2D-CED
17	AB	803	CLA	O1D-CGD-O2D-CED
17	AH	201	CLA	O1D-CGD-O2D-CED
17	AK	204	CLA	O1D-CGD-O2D-CED
17	A1	305	CLA	O1D-CGD-O2D-CED
17	A1	307	CLA	O1D-CGD-O2D-CED
17	A1	310	CLA	O1D-CGD-O2D-CED
17	A1	311	CLA	O1D-CGD-O2D-CED
17	A3	303	CLA	O1D-CGD-O2D-CED
17	AA	834	CLA	C4C-C3C-CAC-CBC
17	AA	802	CLA	O1D-CGD-O2D-CED
17	AA	810	CLA	O1D-CGD-O2D-CED
17	AB	804	CLA	O1D-CGD-O2D-CED
17	AB	807	CLA	O1D-CGD-O2D-CED
17	AB	815	CLA	O1D-CGD-O2D-CED
17	AB	830	CLA	O1D-CGD-O2D-CED
17	AB	836	CLA	O1D-CGD-O2D-CED
17	AG	204	CLA	O1D-CGD-O2D-CED
17	A4	303	CLA	O1D-CGD-O2D-CED
19	A3	319	LHG	C8-C7-O7-C5
17	AA	810	CLA	CBD-CGD-O2D-CED
17	AA	811	CLA	CBD-CGD-O2D-CED
17	AA	813	CLA	CBD-CGD-O2D-CED
17	AA	814	CLA	CBD-CGD-O2D-CED
17	AA	815	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
17	AA	823	CLA	CBD-CGD-O2D-CED
17	AA	834	CLA	CBD-CGD-O2D-CED
17	AA	842	CLA	CBD-CGD-O2D-CED
17	AB	801	CLA	CBD-CGD-O2D-CED
17	AB	803	CLA	CBD-CGD-O2D-CED
17	AB	822	CLA	CBD-CGD-O2D-CED
17	AB	823	CLA	CBD-CGD-O2D-CED
17	AB	830	CLA	CBD-CGD-O2D-CED
17	AF	802	CLA	CBD-CGD-O2D-CED
17	A1	305	CLA	CBD-CGD-O2D-CED
17	A1	311	CLA	CBD-CGD-O2D-CED
17	A3	302	CLA	CBD-CGD-O2D-CED
17	A3	303	CLA	CBD-CGD-O2D-CED
17	A6	602	CLA	CBD-CGD-O2D-CED
26	A4	306	CHL	CBD-CGD-O2D-CED
26	A6	607	CHL	CBD-CGD-O2D-CED
17	AB	830	CLA	O1A-CGA-O2A-C1
26	A3	320	CHL	O1A-CGA-O2A-C1
17	AK	204	CLA	CBA-CGA-O2A-C1
17	AA	801	CLA	O1D-CGD-O2D-CED
17	AA	814	CLA	O1D-CGD-O2D-CED
17	AB	801	CLA	O1D-CGD-O2D-CED
26	A4	306	CHL	O1D-CGD-O2D-CED
26	A3	320	CHL	CBA-CGA-O2A-C1
17	AA	817	CLA	O1A-CGA-O2A-C1
17	AA	821	CLA	O1A-CGA-O2A-C1
17	AL	303	CLA	O1A-CGA-O2A-C1
17	A3	303	CLA	O1A-CGA-O2A-C1
19	A1	301	LHG	O10-C23-O8-C6
19	A6	617	LHG	O10-C23-O8-C6
26	A1	303	CHL	O1A-CGA-O2A-C1
17	AA	834	CLA	C2C-C3C-CAC-CBC
17	AA	811	CLA	O1D-CGD-O2D-CED
17	AA	833	CLA	O1D-CGD-O2D-CED
17	AB	816	CLA	O1D-CGD-O2D-CED
17	AF	802	CLA	O1D-CGD-O2D-CED
17	AF	803	CLA	O1D-CGD-O2D-CED
17	AG	203	CLA	O1D-CGD-O2D-CED
26	A3	307	CHL	O1D-CGD-O2D-CED
26	A6	607	CHL	O1D-CGD-O2D-CED
17	AA	828	CLA	O1D-CGD-O2D-CED
17	A1	306	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
17	A1	313	CLA	O1D-CGD-O2D-CED
17	A4	302	CLA	O1D-CGD-O2D-CED
17	A4	312	CLA	O1D-CGD-O2D-CED
17	A4	313	CLA	O1D-CGD-O2D-CED
17	AB	837	CLA	CBD-CGD-O2D-CED
22	AL	301	LMU	O5B-C1B-O1B-C4'
17	AA	833	CLA	O1A-CGA-O2A-C1
23	AB	851	DGD	O1B-C1B-O2G-C2G
17	A3	309	CLA	O1D-CGD-O2D-CED
17	AA	829	CLA	C3-C5-C6-C7
17	AB	810	CLA	C3-C5-C6-C7
17	AB	812	CLA	C3-C5-C6-C7
17	AB	820	CLA	C3-C5-C6-C7
17	AB	835	CLA	C3-C5-C6-C7
17	AB	840	CLA	C3-C5-C6-C7
17	AB	841	CLA	C3-C5-C6-C7
17	AH	201	CLA	C3-C5-C6-C7
17	A1	314	CLA	C3-C5-C6-C7
17	A6	602	CLA	C3-C5-C6-C7
17	A6	612	CLA	C3-C5-C6-C7
26	A6	606	CHL	O1D-CGD-O2D-CED
17	AA	811	CLA	CBA-CGA-O2A-C1
17	AA	812	CLA	CBA-CGA-O2A-C1
17	AA	842	CLA	CBA-CGA-O2A-C1
17	AB	830	CLA	CBA-CGA-O2A-C1
17	AL	303	CLA	CBA-CGA-O2A-C1
17	A1	314	CLA	CBA-CGA-O2A-C1
19	A1	301	LHG	C24-C23-O8-C6
26	A1	303	CHL	CBA-CGA-O2A-C1
17	AA	820	CLA	CBD-CGD-O2D-CED
17	AA	821	CLA	CBD-CGD-O2D-CED
17	AA	826	CLA	CBD-CGD-O2D-CED
17	AA	829	CLA	CBD-CGD-O2D-CED
17	AA	831	CLA	CBD-CGD-O2D-CED
17	AA	836	CLA	CBD-CGD-O2D-CED
17	AB	802	CLA	CBD-CGD-O2D-CED
17	AB	811	CLA	CBD-CGD-O2D-CED
17	AB	820	CLA	CBD-CGD-O2D-CED
17	AB	832	CLA	CBD-CGD-O2D-CED
17	AB	838	CLA	CBD-CGD-O2D-CED
17	AL	304	CLA	CBD-CGD-O2D-CED
17	A4	308	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
17	A6	612	CLA	CBD-CGD-O2D-CED
17	AA	815	CLA	O1D-CGD-O2D-CED
17	AB	810	CLA	O1D-CGD-O2D-CED
17	AB	834	CLA	O1D-CGD-O2D-CED
17	AK	204	CLA	O1A-CGA-O2A-C1
17	AA	829	CLA	C4-C3-C5-C6
17	AA	832	CLA	C4-C3-C5-C6
17	AB	802	CLA	C4-C3-C5-C6
17	AB	819	CLA	C4-C3-C5-C6
17	AA	829	CLA	C2-C3-C5-C6
17	AA	832	CLA	C2-C3-C5-C6
17	AB	802	CLA	C2-C3-C5-C6
17	AB	822	CLA	O1D-CGD-O2D-CED
26	A3	320	CHL	C2A-CAA-CBA-CGA
17	AB	811	CLA	O1A-CGA-O2A-C1
17	AB	823	CLA	C3-C5-C6-C7
17	AB	833	CLA	C3-C5-C6-C7
17	AA	817	CLA	CBA-CGA-O2A-C1
17	AA	821	CLA	CBA-CGA-O2A-C1
17	AA	826	CLA	CBA-CGA-O2A-C1
17	AA	832	CLA	CBA-CGA-O2A-C1
17	AA	833	CLA	CBA-CGA-O2A-C1
17	AA	838	CLA	CBA-CGA-O2A-C1
17	AB	817	CLA	CBA-CGA-O2A-C1
17	A1	306	CLA	CBA-CGA-O2A-C1
17	A3	303	CLA	CBA-CGA-O2A-C1
19	A6	617	LHG	C24-C23-O8-C6
18	AB	843	PQN	C11-C12-C13-C14
19	A3	319	LHG	O9-C7-O7-C5
22	AB	852	LMU	O5'-C5'-C6'-O6'
17	AA	810	CLA	O1A-CGA-O2A-C1
17	AA	811	CLA	O1A-CGA-O2A-C1
17	AA	837	CLA	O1A-CGA-O2A-C1
17	AB	803	CLA	O1A-CGA-O2A-C1
17	AB	842	CLA	O1A-CGA-O2A-C1
17	A1	314	CLA	O1A-CGA-O2A-C1
25	A4	318	LMG	O9-C10-O7-C8
23	AB	851	DGD	C4E-C5E-C6E-O5E
17	AA	805	CLA	C3-C5-C6-C7
17	AA	833	CLA	C3-C5-C6-C7
17	AF	802	CLA	C3-C5-C6-C7
17	AB	825	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
17	A6	613	CLA	CBD-CGD-O2D-CED
19	AJ	104	LHG	O2-C2-C3-O3
17	AA	813	CLA	O1D-CGD-O2D-CED
17	AA	810	CLA	CBA-CGA-O2A-C1
17	AA	837	CLA	CBA-CGA-O2A-C1
17	AB	827	CLA	CBA-CGA-O2A-C1
19	A3	319	LHG	C24-C23-O8-C6
17	AA	812	CLA	O1A-CGA-O2A-C1
17	AA	842	CLA	O1A-CGA-O2A-C1
17	AB	817	CLA	O1A-CGA-O2A-C1
22	AB	850	LMU	O5'-C5'-C6'-O6'
22	AB	852	LMU	C4'-C5'-C6'-O6'
17	AA	832	CLA	CBD-CGD-O2D-CED
19	A3	319	LHG	O10-C23-O8-C6
22	AB	853	LMU	O5'-C5'-C6'-O6'
17	AA	842	CLA	O1D-CGD-O2D-CED
17	AB	823	CLA	O1D-CGD-O2D-CED
17	AA	828	CLA	C3-C5-C6-C7
17	AA	838	CLA	CBD-CGD-O2D-CED
17	A1	304	CLA	CBD-CGD-O2D-CED
17	A1	316	CLA	CBD-CGD-O2D-CED
17	AA	834	CLA	O1D-CGD-O2D-CED
17	A3	302	CLA	O1D-CGD-O2D-CED
17	AB	803	CLA	CBA-CGA-O2A-C1
17	AB	811	CLA	CBA-CGA-O2A-C1
17	AB	815	CLA	CBA-CGA-O2A-C1
17	AB	842	CLA	CBA-CGA-O2A-C1
17	AA	812	CLA	C4-C3-C5-C6
17	AA	824	CLA	C4-C3-C5-C6
17	AA	824	CLA	C2-C3-C5-C6
17	AA	826	CLA	O1A-CGA-O2A-C1
17	AA	832	CLA	O1A-CGA-O2A-C1
22	AA	851	LMU	O5B-C5B-C6B-O6B
17	A6	602	CLA	O1D-CGD-O2D-CED
22	AB	850	LMU	C4'-C5'-C6'-O6'
17	AA	812	CLA	CBD-CGD-O2D-CED
17	AA	830	CLA	CBD-CGD-O2D-CED
17	AB	805	CLA	CBD-CGD-O2D-CED
17	AA	838	CLA	O1A-CGA-O2A-C1
17	AB	819	CLA	O1A-CGA-O2A-C1
17	AB	827	CLA	O1A-CGA-O2A-C1
17	A1	306	CLA	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
23	AB	851	DGD	O6D-C1D-O3G-C3G
17	A4	308	CLA	O1D-CGD-O2D-CED
17	AA	827	CLA	CBA-CGA-O2A-C1
17	AB	819	CLA	CBA-CGA-O2A-C1
17	AB	832	CLA	CBA-CGA-O2A-C1
17	AB	838	CLA	CBA-CGA-O2A-C1
17	AA	819	CLA	CBD-CGD-O2D-CED
17	AA	840	CLA	CBD-CGD-O2D-CED
17	AB	814	CLA	CBD-CGD-O2D-CED
17	AB	819	CLA	CBD-CGD-O2D-CED
17	AB	840	CLA	CBD-CGD-O2D-CED
17	AB	842	CLA	CBD-CGD-O2D-CED
23	AB	851	DGD	O6E-C5E-C6E-O5E
17	AB	815	CLA	O1A-CGA-O2A-C1
17	AB	832	CLA	O1A-CGA-O2A-C1
17	AA	806	CLA	CBA-CGA-O2A-C1
17	AA	808	CLA	CBA-CGA-O2A-C1
17	AA	819	CLA	CBA-CGA-O2A-C1
17	AA	834	CLA	CBA-CGA-O2A-C1
17	AA	839	CLA	CBA-CGA-O2A-C1
17	AB	812	CLA	CBA-CGA-O2A-C1
17	AB	818	CLA	CBA-CGA-O2A-C1
17	AB	822	CLA	CBA-CGA-O2A-C1
17	AB	829	CLA	CBA-CGA-O2A-C1
17	AB	834	CLA	CBA-CGA-O2A-C1
17	AB	841	CLA	CBA-CGA-O2A-C1
17	AF	802	CLA	CBA-CGA-O2A-C1
19	A1	302	LHG	C24-C23-O8-C6
17	AL	302	CLA	CBD-CGD-O2D-CED
17	AA	831	CLA	O1D-CGD-O2D-CED
17	AB	832	CLA	O1D-CGD-O2D-CED
17	AB	837	CLA	O1D-CGD-O2D-CED
17	AA	812	CLA	C2-C3-C5-C6
17	AB	819	CLA	C2-C3-C5-C6
17	AA	813	CLA	C3-C5-C6-C7
17	AA	821	CLA	C11-C10-C8-C9
17	AA	827	CLA	C6-C7-C8-C9
17	AA	840	CLA	C11-C12-C13-C14
17	AB	801	CLA	C6-C7-C8-C9
17	AB	804	CLA	C11-C12-C13-C14
17	AB	815	CLA	C14-C13-C15-C16
17	AB	823	CLA	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
17	AB	829	CLA	C14-C13-C15-C16
17	AB	842	CLA	C14-C13-C15-C16
22	AL	301	LMU	C5'-C4'-O1B-C1B
17	AA	821	CLA	O1D-CGD-O2D-CED
22	AA	851	LMU	C2'-C1'-O1'-C1
22	AL	301	LMU	C2'-C1'-O1'-C1
19	A3	319	LHG	O2-C2-C3-O3
17	AB	834	CLA	O1A-CGA-O2A-C1
22	AB	853	LMU	C4'-C5'-C6'-O6'
17	AB	838	CLA	O1D-CGD-O2D-CED
20	AA	847	BCR	C7-C8-C9-C34
20	AA	847	BCR	C37-C22-C23-C24
20	AB	848	BCR	C37-C22-C23-C24
20	AF	805	BCR	C7-C8-C9-C34
20	AI	101	BCR	C7-C8-C9-C34
20	AK	205	BCR	C37-C22-C23-C24
20	AK	205	BCR	C21-C22-C23-C24
17	AA	817	CLA	C2A-CAA-CBA-CGA
17	AA	842	CLA	C2A-CAA-CBA-CGA
17	AB	810	CLA	C2A-CAA-CBA-CGA
17	AA	808	CLA	O1A-CGA-O2A-C1
17	AA	819	CLA	O1A-CGA-O2A-C1
17	AB	812	CLA	O1A-CGA-O2A-C1
17	AB	818	CLA	O1A-CGA-O2A-C1
17	AF	802	CLA	O1A-CGA-O2A-C1
17	AB	807	CLA	C3-C5-C6-C7
17	AB	826	CLA	CBA-CGA-O2A-C1
17	A4	311	CLA	CBA-CGA-O2A-C1
17	AA	825	CLA	C2-C1-O2A-CGA
17	AA	820	CLA	O1D-CGD-O2D-CED
17	AA	829	CLA	O1D-CGD-O2D-CED
17	AA	836	CLA	O1D-CGD-O2D-CED
17	AB	811	CLA	O1D-CGD-O2D-CED
17	A6	612	CLA	O1D-CGD-O2D-CED
17	AA	827	CLA	C15-C16-C17-C18
17	AA	832	CLA	C5-C6-C7-C8
17	AB	838	CLA	C5-C6-C7-C8
22	AB	850	LMU	O5B-C1B-O1B-C4'
17	AA	806	CLA	C11-C12-C13-C15
17	AB	826	CLA	C11-C10-C8-C7
17	AH	201	CLA	CBA-CGA-O2A-C1
17	AB	802	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
17	AB	820	CLA	O1D-CGD-O2D-CED
17	AB	827	CLA	C3-C5-C6-C7
17	AB	835	CLA	C8-C10-C11-C12
17	AB	838	CLA	C15-C16-C17-C18
25	A1	321	LMG	C28-C29-C30-C31
17	AA	806	CLA	O1A-CGA-O2A-C1
17	AA	827	CLA	O1A-CGA-O2A-C1
17	AA	834	CLA	O1A-CGA-O2A-C1
17	AB	829	CLA	O1A-CGA-O2A-C1
17	AB	841	CLA	O1A-CGA-O2A-C1
19	A1	302	LHG	O10-C23-O8-C6
17	AA	826	CLA	O1D-CGD-O2D-CED
17	AL	304	CLA	O1D-CGD-O2D-CED
17	AA	842	CLA	C5-C6-C7-C8
17	AB	801	CLA	C13-C15-C16-C17
17	AB	823	CLA	C8-C10-C11-C12
17	AB	825	CLA	C10-C11-C12-C13
17	AB	825	CLA	C13-C15-C16-C17
17	A6	612	CLA	C13-C15-C16-C17
22	AL	301	LMU	O5B-C5B-C6B-O6B
17	AA	821	CLA	C2A-CAA-CBA-CGA
17	AA	833	CLA	C2A-CAA-CBA-CGA
17	AB	811	CLA	C2A-CAA-CBA-CGA
17	AG	201	CLA	C2A-CAA-CBA-CGA
17	A6	601	CLA	C2A-CAA-CBA-CGA
22	AB	852	LMU	O1'-C1-C2-C3
17	AA	803	CLA	C15-C16-C17-C18
17	AA	840	CLA	C5-C6-C7-C8
17	A6	602	CLA	C13-C15-C16-C17
17	AA	839	CLA	O1A-CGA-O2A-C1
17	AB	822	CLA	O1A-CGA-O2A-C1
18	AA	843	PQN	C13-C15-C16-C17
22	AL	301	LMU	O5'-C1'-O1'-C1
17	AA	805	CLA	C8-C10-C11-C12
17	AA	806	CLA	C5-C6-C7-C8
17	AA	833	CLA	C15-C16-C17-C18
17	AA	841	CLA	C15-C16-C17-C18
17	AB	801	CLA	C15-C16-C17-C18
17	AB	802	CLA	C15-C16-C17-C18
17	AB	803	CLA	C10-C11-C12-C13
17	AB	806	CLA	C13-C15-C16-C17
17	AB	815	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
17	A3	302	CLA	C10-C11-C12-C13
18	AB	843	PQN	C15-C16-C17-C18
17	AA	830	CLA	CBA-CGA-O2A-C1
17	AB	833	CLA	CBD-CGD-O2D-CED
17	AA	810	CLA	C13-C15-C16-C17
17	AB	803	CLA	C13-C15-C16-C17
17	AB	811	CLA	C8-C10-C11-C12
17	AB	829	CLA	C8-C10-C11-C12
18	AB	843	PQN	C25-C26-C27-C28
17	AA	805	CLA	C13-C15-C16-C17
18	AA	843	PQN	C25-C26-C27-C28
17	AB	838	CLA	O1A-CGA-O2A-C1
17	AH	201	CLA	O1A-CGA-O2A-C1
17	A4	311	CLA	O1A-CGA-O2A-C1
25	A1	321	LMG	C10-C11-C12-C13
22	AB	850	LMU	O1'-C1-C2-C3
17	AA	827	CLA	C10-C11-C12-C13
17	AB	807	CLA	C13-C15-C16-C17
17	AA	803	CLA	CBA-CGA-O2A-C1
17	A4	308	CLA	CBA-CGA-O2A-C1
26	A6	605	CHL	CBD-CGD-O2D-CED
17	AB	801	CLA	C3-C5-C6-C7
17	AB	808	CLA	CAA-CBA-CGA-O2A
19	AJ	104	LHG	C1-C2-C3-O3
17	AA	836	CLA	C2A-CAA-CBA-CGA
17	A4	313	CLA	C2A-CAA-CBA-CGA
17	AB	804	CLA	CBA-CGA-O2A-C1
17	AB	823	CLA	CBA-CGA-O2A-C1
17	A4	313	CLA	CBA-CGA-O2A-C1
17	AA	828	CLA	C8-C10-C11-C12
17	AA	829	CLA	C8-C10-C11-C12
17	AA	829	CLA	C10-C11-C12-C13
17	AA	833	CLA	C5-C6-C7-C8
17	AB	829	CLA	C10-C11-C12-C13
17	AB	832	CLA	C13-C15-C16-C17
17	AB	834	CLA	C15-C16-C17-C18
18	AA	843	PQN	C20-C21-C22-C23
17	A6	613	CLA	O1D-CGD-O2D-CED
22	AL	301	LMU	C3'-C4'-O1B-C1B
17	AA	813	CLA	C8-C10-C11-C12
17	AA	826	CLA	C5-C6-C7-C8
17	AA	828	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
17	AA	841	CLA	C13-C15-C16-C17
17	AB	827	CLA	C10-C11-C12-C13
17	AB	834	CLA	C8-C10-C11-C12
17	AA	801	CLA	CBA-CGA-O2A-C1
17	AA	838	CLA	O1D-CGD-O2D-CED
17	AB	825	CLA	O1D-CGD-O2D-CED
17	AA	819	CLA	C13-C15-C16-C17
17	AB	842	CLA	C8-C10-C11-C12
17	AA	825	CLA	C11-C12-C13-C14
17	AA	832	CLA	O1D-CGD-O2D-CED
17	AB	826	CLA	O1A-CGA-O2A-C1
18	AA	843	PQN	C11-C12-C13-C14
17	AB	827	CLA	C5-C6-C7-C8
17	AA	809	CLA	CBA-CGA-O2A-C1
17	AB	806	CLA	CBA-CGA-O2A-C1
17	A1	305	CLA	CBA-CGA-O2A-C1
17	AA	806	CLA	C16-C17-C18-C19
17	AA	830	CLA	C8-C10-C11-C12
20	AA	845	BCR	C7-C8-C9-C34
20	AA	846	BCR	C37-C22-C23-C24
20	AB	845	BCR	C7-C8-C9-C34
17	A4	313	CLA	O1A-CGA-O2A-C1
17	AA	802	CLA	C2A-CAA-CBA-CGA
17	AB	802	CLA	C2A-CAA-CBA-CGA
17	AB	840	CLA	C2A-CAA-CBA-CGA
17	A3	312	CLA	C2A-CAA-CBA-CGA
17	AB	815	CLA	C13-C15-C16-C17
19	A3	301	LHG	O1-C1-C2-C3
17	AB	805	CLA	O1D-CGD-O2D-CED
17	AA	819	CLA	C16-C17-C18-C19
17	AA	819	CLA	C16-C17-C18-C20
17	AB	810	CLA	C16-C17-C18-C19
17	AB	817	CLA	C6-C7-C8-C10
17	AA	830	CLA	O1D-CGD-O2D-CED
17	A1	304	CLA	O1D-CGD-O2D-CED
17	A1	316	CLA	O1D-CGD-O2D-CED
17	AA	801	CLA	C3-C5-C6-C7
17	AA	827	CLA	C3-C5-C6-C7
17	AA	828	CLA	C13-C15-C16-C17
19	A6	617	LHG	C8-C7-O7-C5
17	AA	806	CLA	C13-C15-C16-C17
17	AA	825	CLA	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
17	AA	812	CLA	O1D-CGD-O2D-CED
17	AA	804	CLA	CBA-CGA-O2A-C1
17	AB	821	CLA	CBA-CGA-O2A-C1
17	AA	828	CLA	C15-C16-C17-C18
17	AA	833	CLA	C13-C15-C16-C17
17	AB	804	CLA	C2-C1-O2A-CGA
17	AB	810	CLA	C16-C17-C18-C20
17	AB	817	CLA	C6-C7-C8-C9
17	A3	312	CLA	C6-C7-C8-C10
17	A4	301	CLA	C11-C12-C13-C15
19	AJ	104	LHG	C18-C19-C20-C21
25	A4	318	LMG	C12-C13-C14-C15
19	A1	320	LHG	C11-C12-C13-C14
17	AB	832	CLA	C8-C10-C11-C12
17	AA	803	CLA	O1A-CGA-O2A-C1
17	AA	830	CLA	O1A-CGA-O2A-C1
17	AB	823	CLA	O1A-CGA-O2A-C1
17	A4	308	CLA	O1A-CGA-O2A-C1
17	AA	831	CLA	CBA-CGA-O2A-C1
23	AB	851	DGD	CAA-CBA-CCA-CDA
17	AA	819	CLA	O1D-CGD-O2D-CED
17	AA	840	CLA	O1D-CGD-O2D-CED
17	AA	809	CLA	C4B-C3B-CAB-CBB
17	AA	811	CLA	C4B-C3B-CAB-CBB
17	AA	813	CLA	C4B-C3B-CAB-CBB
17	AA	831	CLA	C4B-C3B-CAB-CBB
17	AA	834	CLA	C4B-C3B-CAB-CBB
17	AA	836	CLA	C4B-C3B-CAB-CBB
17	AB	831	CLA	C4B-C3B-CAB-CBB
17	AB	842	CLA	C4B-C3B-CAB-CBB
17	AG	201	CLA	C4B-C3B-CAB-CBB
17	AG	204	CLA	C4B-C3B-CAB-CBB
17	AK	204	CLA	C4B-C3B-CAB-CBB
17	A3	303	CLA	C4B-C3B-CAB-CBB
17	A3	309	CLA	C4B-C3B-CAB-CBB
17	A3	314	CLA	C4B-C3B-CAB-CBB
17	A4	310	CLA	C4B-C3B-CAB-CBB
17	A6	604	CLA	C4B-C3B-CAB-CBB
17	A6	609	CLA	C4B-C3B-CAB-CBB
17	AA	808	CLA	C16-C17-C18-C19
17	AB	812	CLA	C6-C7-C8-C9
17	A4	301	CLA	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
17	AA	808	CLA	C2A-CAA-CBA-CGA
19	A1	301	LHG	C24-C25-C26-C27
17	AA	817	CLA	C10-C11-C12-C13
17	A6	602	CLA	C10-C11-C12-C13
22	AB	850	LMU	C1-C2-C3-C4
17	AA	813	CLA	C6-C7-C8-C10
17	AB	834	CLA	C11-C12-C13-C15
18	AB	843	PQN	C21-C22-C23-C25
17	AA	829	CLA	C5-C6-C7-C8
23	AB	851	DGD	C3A-C4A-C5A-C6A
25	A4	318	LMG	C13-C14-C15-C16
17	A1	305	CLA	O1A-CGA-O2A-C1
17	AA	803	CLA	C3A-C2A-CAA-CBA
17	AA	825	CLA	C3A-C2A-CAA-CBA
17	AB	828	CLA	C3A-C2A-CAA-CBA
17	AB	829	CLA	C3A-C2A-CAA-CBA
17	AB	834	CLA	C3A-C2A-CAA-CBA
17	AK	204	CLA	C3A-C2A-CAA-CBA
17	A1	316	CLA	C3A-C2A-CAA-CBA
17	A6	611	CLA	C3A-C2A-CAA-CBA
19	A1	320	LHG	C33-C34-C35-C36
19	AJ	104	LHG	C7-C8-C9-C10
17	AB	812	CLA	C6-C7-C8-C10
17	AB	835	CLA	C11-C12-C13-C14
17	AB	835	CLA	C11-C12-C13-C15
22	AB	853	LMU	O5B-C5B-C6B-O6B
17	AA	801	CLA	O1A-CGA-O2A-C1
17	AA	809	CLA	O1A-CGA-O2A-C1
17	AB	804	CLA	O1A-CGA-O2A-C1
17	AB	806	CLA	O1A-CGA-O2A-C1
17	AB	831	CLA	CBD-CGD-O2D-CED
17	AB	804	CLA	C5-C6-C7-C8
17	AB	840	CLA	O1D-CGD-O2D-CED
19	AA	844	LHG	C10-C11-C12-C13
22	AA	851	LMU	C3-C4-C5-C6
25	A4	318	LMG	C29-C30-C31-C32
17	AB	821	CLA	O1A-CGA-O2A-C1
22	AA	851	LMU	C4-C5-C6-C7
17	AA	805	CLA	C16-C17-C18-C19
17	AA	804	CLA	O1A-CGA-O2A-C1
17	AA	809	CLA	C2B-C3B-CAB-CBB
17	AA	813	CLA	C2B-C3B-CAB-CBB

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Mol	Chain	Res	Type	Atoms
17	AA	822	CLA	C2B-C3B-CAB-CBB
17	AA	834	CLA	C2B-C3B-CAB-CBB
17	AA	836	CLA	C2B-C3B-CAB-CBB
17	AA	842	CLA	C2B-C3B-CAB-CBB
17	AK	203	CLA	C2B-C3B-CAB-CBB
17	AK	204	CLA	C2B-C3B-CAB-CBB
17	A1	307	CLA	C2B-C3B-CAB-CBB
17	A3	303	CLA	C2B-C3B-CAB-CBB
17	A3	310	CLA	C2B-C3B-CAB-CBB
17	A4	313	CLA	C2B-C3B-CAB-CBB
17	A6	611	CLA	C2B-C3B-CAB-CBB
20	AA	846	BCR	C23-C24-C25-C30
20	AA	847	BCR	C1-C6-C7-C8
20	AA	847	BCR	C23-C24-C25-C26
20	AA	848	BCR	C1-C6-C7-C8
20	AA	848	BCR	C5-C6-C7-C8
20	AA	849	BCR	C5-C6-C7-C8
20	AA	849	BCR	C23-C24-C25-C30
20	AB	844	BCR	C1-C6-C7-C8
20	AB	844	BCR	C23-C24-C25-C26
20	AB	844	BCR	C23-C24-C25-C30
20	AB	846	BCR	C1-C6-C7-C8
20	AB	846	BCR	C5-C6-C7-C8
20	AF	805	BCR	C1-C6-C7-C8
20	AF	805	BCR	C5-C6-C7-C8
20	AI	101	BCR	C23-C24-C25-C26
20	AJ	103	BCR	C1-C6-C7-C8
20	AJ	103	BCR	C23-C24-C25-C26
20	AK	202	BCR	C5-C6-C7-C8
20	AK	205	BCR	C23-C24-C25-C26
20	AK	205	BCR	C23-C24-C25-C30
20	AL	306	BCR	C1-C6-C7-C8
20	AL	306	BCR	C5-C6-C7-C8
20	A3	318	BCR	C1-C6-C7-C8
20	A3	318	BCR	C5-C6-C7-C8
20	A4	317	BCR	C1-C6-C7-C8
20	A4	317	BCR	C5-C6-C7-C8
20	A6	616	BCR	C1-C6-C7-C8
17	AB	821	CLA	CBD-CGD-O2D-CED
22	AB	850	LMU	C3'-C4'-O1B-C1B
17	AB	814	CLA	O1D-CGD-O2D-CED
17	AA	824	CLA	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
17	AA	831	CLA	O1A-CGA-O2A-C1
22	AB	850	LMU	C5'-C4'-O1B-C1B
19	A6	617	LHG	O9-C7-O7-C5
20	AA	847	BCR	C10-C11-C12-C13
17	AA	834	CLA	C2-C3-C5-C6
17	A3	312	CLA	C6-C7-C8-C9
19	AA	844	LHG	C16-C17-C18-C19
17	AA	803	CLA	C3-C5-C6-C7
22	AB	852	LMU	C11-C10-C9-C8
23	AB	851	DGD	C9B-CAB-CBB-CCB
17	AA	811	CLA	C3-C5-C6-C7
17	AB	811	CLA	C3-C5-C6-C7
17	AA	805	CLA	C16-C17-C18-C20
17	AA	806	CLA	C16-C17-C18-C20
17	AL	303	CLA	C11-C12-C13-C14
19	AA	844	LHG	C8-C7-O7-C5
19	A1	301	LHG	C23-C24-C25-C26
17	AA	827	CLA	C8-C10-C11-C12
20	AA	847	BCR	C11-C12-C13-C35
22	AL	301	LMU	C2-C3-C4-C5
20	AI	101	BCR	C21-C22-C23-C24
20	A1	319	BCR	C21-C22-C23-C24
26	A6	607	CHL	C2A-CAA-CBA-CGA
17	AA	801	CLA	C16-C17-C18-C19
17	AB	815	CLA	C16-C17-C18-C20
17	AA	834	CLA	C4-C3-C5-C6
17	AB	809	CLA	C3-C5-C6-C7
17	AB	802	CLA	C5-C6-C7-C8
17	AB	819	CLA	O1D-CGD-O2D-CED
19	A1	301	LHG	C7-C8-C9-C10
19	AA	844	LHG	O9-C7-O7-C5
17	AB	835	CLA	CBD-CGD-O2D-CED
17	AB	806	CLA	C8-C10-C11-C12
17	AA	810	CLA	CAD-CBD-CGD-O2D
17	AB	802	CLA	C3-C5-C6-C7
17	AL	303	CLA	C3-C5-C6-C7
19	AA	844	LHG	C33-C34-C35-C36
17	AB	803	CLA	C16-C17-C18-C20
17	AB	823	CLA	C16-C17-C18-C20
19	AJ	104	LHG	C14-C15-C16-C17
17	AA	812	CLA	C2A-CAA-CBA-CGA
17	AB	814	CLA	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
17	A1	314	CLA	C2C-C3C-CAC-CBC
17	AB	842	CLA	O1D-CGD-O2D-CED
17	AL	302	CLA	O1D-CGD-O2D-CED
17	A6	612	CLA	C2-C1-O2A-CGA
17	AB	817	CLA	C3-C5-C6-C7
17	A6	612	CLA	C2A-CAA-CBA-CGA
17	AA	803	CLA	C1A-C2A-CAA-CBA
17	AA	805	CLA	C1A-C2A-CAA-CBA
17	AA	807	CLA	C1A-C2A-CAA-CBA
17	AA	810	CLA	C1A-C2A-CAA-CBA
17	AA	818	CLA	C1A-C2A-CAA-CBA
17	AA	819	CLA	C1A-C2A-CAA-CBA
17	AA	839	CLA	C1A-C2A-CAA-CBA
17	AB	819	CLA	C1A-C2A-CAA-CBA
17	AB	821	CLA	C1A-C2A-CAA-CBA
17	AB	833	CLA	C1A-C2A-CAA-CBA
17	AB	834	CLA	C1A-C2A-CAA-CBA
17	AB	839	CLA	C1A-C2A-CAA-CBA
17	AF	802	CLA	C1A-C2A-CAA-CBA
17	AH	201	CLA	C1A-C2A-CAA-CBA
17	AL	303	CLA	C1A-C2A-CAA-CBA
17	A1	316	CLA	C1A-C2A-CAA-CBA
17	A4	312	CLA	C1A-C2A-CAA-CBA
17	A6	611	CLA	C1A-C2A-CAA-CBA
17	AA	803	CLA	C10-C11-C12-C13
19	A1	320	LHG	C30-C31-C32-C33
19	A6	617	LHG	C9-C10-C11-C12
25	AG	202	LMG	C10-C11-C12-C13
17	AA	801	CLA	C12-C13-C15-C16
17	AA	813	CLA	C11-C10-C8-C7
17	AA	819	CLA	C6-C7-C8-C10
17	AA	825	CLA	C11-C10-C8-C7
17	AA	827	CLA	C12-C13-C15-C16
17	AA	828	CLA	C6-C7-C8-C10
17	AB	802	CLA	C12-C13-C15-C16
17	AB	803	CLA	C6-C7-C8-C10
17	AB	806	CLA	C11-C10-C8-C7
17	AB	807	CLA	C11-C12-C13-C15
17	AB	819	CLA	C11-C10-C8-C7
17	AB	825	CLA	C12-C13-C15-C16
17	AB	841	CLA	C6-C7-C8-C10
17	A1	304	CLA	C11-C10-C8-C7

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Mol	Chain	Res	Type	Atoms
18	AB	843	PQN	C17-C18-C20-C21
17	AA	822	CLA	C3A-C2A-CAA-CBA
17	A3	305	CLA	C3A-C2A-CAA-CBA
17	AA	827	CLA	C4-C3-C5-C6
17	AB	815	CLA	C4-C3-C5-C6
17	AB	815	CLA	C2-C3-C5-C6
17	AA	803	CLA	C5-C6-C7-C8
17	AA	829	CLA	C15-C16-C17-C18
19	A1	320	LHG	C8-C7-O7-C5
17	A1	314	CLA	C2A-CAA-CBA-CGA
17	AA	808	CLA	C11-C12-C13-C14
17	AA	813	CLA	C11-C12-C13-C14
17	AA	825	CLA	C11-C10-C8-C9
17	AA	827	CLA	C14-C13-C15-C16
17	AA	830	CLA	C14-C13-C15-C16
17	AB	810	CLA	C11-C10-C8-C9
17	AB	826	CLA	C11-C10-C8-C9
25	AG	202	LMG	C11-C12-C13-C14
22	AB	853	LMU	C2'-C1'-O1'-C1
19	A3	301	LHG	C4-C5-C6-O8
25	AG	202	LMG	O1-C7-C8-C9
25	A1	321	LMG	O1-C7-C8-C9
19	A3	301	LHG	C11-C10-C9-C8
23	AB	851	DGD	C9A-CAA-CBA-CCA
22	AB	850	LMU	C5-C6-C7-C8
17	AB	801	CLA	C16-C17-C18-C20
17	AB	823	CLA	C16-C17-C18-C19
17	AL	303	CLA	C11-C12-C13-C15
26	A4	306	CHL	CHA-CBD-CGD-O1D
26	A4	306	CHL	CHA-CBD-CGD-O2D
26	A6	606	CHL	CHA-CBD-CGD-O1D
26	A6	606	CHL	CHA-CBD-CGD-O2D
18	AB	843	PQN	C14-C13-C15-C16
17	AA	821	CLA	C2-C3-C5-C6
17	AA	827	CLA	C2-C3-C5-C6
25	AG	202	LMG	C30-C31-C32-C33
17	AL	303	CLA	C8-C10-C11-C12
22	AB	852	LMU	C5-C6-C7-C8
17	AA	825	CLA	CBA-CGA-O2A-C1
17	AB	840	CLA	CBA-CGA-O2A-C1
17	A6	609	CLA	CBA-CGA-O2A-C1
17	A1	314	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
17	A6	603	CLA	C2A-CAA-CBA-CGA
17	AB	801	CLA	C5-C6-C7-C8
17	AB	802	CLA	C8-C10-C11-C12
17	AB	809	CLA	CBA-CGA-O2A-C1
19	A1	301	LHG	C30-C31-C32-C33
17	AA	826	CLA	C2-C3-C5-C6
22	AB	852	LMU	C4-C5-C6-C7
23	AB	851	DGD	CCA-CDA-CEA-CFA
19	A3	301	LHG	O7-C5-C6-O8
25	A4	318	LMG	O1-C7-C8-O7
17	AA	841	CLA	CBA-CGA-O2A-C1
17	AB	828	CLA	C10-C11-C12-C13
17	AB	829	CLA	C2A-CAA-CBA-CGA
17	AA	840	CLA	C3-C5-C6-C7
17	AB	829	CLA	C5-C6-C7-C8
17	AA	824	CLA	CBA-CGA-O2A-C1
17	AB	820	CLA	CBA-CGA-O2A-C1
23	AB	851	DGD	CDA-CEA-CFA-CGA
17	A1	314	CLA	C15-C16-C17-C18
17	AA	842	CLA	C13-C15-C16-C17
17	AB	807	CLA	C5-C6-C7-C8
17	AA	804	CLA	C4-C3-C5-C6
17	AA	821	CLA	C4-C3-C5-C6
17	AB	833	CLA	C4-C3-C5-C6
17	AA	829	CLA	CBA-CGA-O2A-C1
26	A6	607	CHL	CBA-CGA-O2A-C1
17	AB	808	CLA	C2-C1-O2A-CGA
19	A3	301	LHG	O1-C1-C2-O2
17	AA	803	CLA	C11-C10-C8-C9
17	AA	819	CLA	C6-C7-C8-C9
17	AA	828	CLA	C6-C7-C8-C9
17	AA	842	CLA	C11-C10-C8-C9
17	AB	802	CLA	C14-C13-C15-C16
17	AB	803	CLA	C6-C7-C8-C9
17	AB	806	CLA	C11-C10-C8-C9
17	AB	807	CLA	C11-C12-C13-C14
17	AB	807	CLA	C14-C13-C15-C16
17	AB	819	CLA	C11-C10-C8-C9
17	AB	825	CLA	C14-C13-C15-C16
17	AB	830	CLA	C6-C7-C8-C9
17	AB	834	CLA	C11-C12-C13-C14
17	A1	304	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
17	AB	826	CLA	C10-C11-C12-C13
17	AA	824	CLA	C4B-C3B-CAB-CBB
17	AA	835	CLA	C4B-C3B-CAB-CBB
17	AA	841	CLA	C4B-C3B-CAB-CBB
17	AB	803	CLA	C4B-C3B-CAB-CBB
17	AB	814	CLA	C4B-C3B-CAB-CBB
17	AB	821	CLA	C4B-C3B-CAB-CBB
17	AB	822	CLA	C4B-C3B-CAB-CBB
17	AB	832	CLA	C4B-C3B-CAB-CBB
17	AF	804	CLA	C4B-C3B-CAB-CBB
17	AL	302	CLA	C4B-C3B-CAB-CBB
17	A1	314	CLA	C4B-C3B-CAB-CBB
17	A3	302	CLA	C4B-C3B-CAB-CBB
17	A3	312	CLA	C4B-C3B-CAB-CBB
23	AB	851	DGD	CCB-CDB-CEB-CFB
17	AA	805	CLA	C10-C11-C12-C13
17	A3	303	CLA	C6-C7-C8-C10
17	AB	809	CLA	O1A-CGA-O2A-C1
17	A4	311	CLA	C2A-CAA-CBA-CGA
19	A1	320	LHG	O6-C4-C5-C6
26	A6	605	CHL	O1D-CGD-O2D-CED
17	AA	803	CLA	C11-C10-C8-C7
17	AA	808	CLA	C11-C12-C13-C15
17	AA	810	CLA	C6-C7-C8-C10
17	AA	813	CLA	C11-C12-C13-C15
17	AA	827	CLA	C6-C7-C8-C10
17	AA	828	CLA	C12-C13-C15-C16
17	AA	829	CLA	C11-C12-C13-C15
17	AA	830	CLA	C12-C13-C15-C16
17	AA	842	CLA	C11-C10-C8-C7
17	AB	801	CLA	C11-C10-C8-C7
17	AB	802	CLA	C6-C7-C8-C10
17	AB	807	CLA	C12-C13-C15-C16
17	AB	810	CLA	C11-C10-C8-C7
17	AB	815	CLA	C11-C10-C8-C7
17	AB	815	CLA	C12-C13-C15-C16
17	AB	818	CLA	C6-C7-C8-C10
17	AB	823	CLA	C6-C7-C8-C10
17	AB	830	CLA	C6-C7-C8-C10
17	AB	834	CLA	C6-C7-C8-C10
17	A1	314	CLA	C11-C10-C8-C7
17	A6	602	CLA	C11-C12-C13-C15

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Mol	Chain	Res	Type	Atoms
17	AB	817	CLA	C5-C6-C7-C8
17	AB	830	CLA	C5-C6-C7-C8
17	AA	805	CLA	C3A-C2A-CAA-CBA
17	AA	805	CLA	C4-C3-C5-C6
17	AA	826	CLA	C4-C3-C5-C6
17	AB	810	CLA	C3A-C2A-CAA-CBA
17	AB	842	CLA	C4-C3-C5-C6
17	AF	802	CLA	C4-C3-C5-C6
17	A1	309	CLA	C3A-C2A-CAA-CBA
17	A4	313	CLA	C3A-C2A-CAA-CBA
17	AA	825	CLA	O1A-CGA-O2A-C1
17	AB	840	CLA	O1A-CGA-O2A-C1
20	AA	848	BCR	C7-C8-C9-C34
17	A6	609	CLA	O1A-CGA-O2A-C1
26	A6	607	CHL	O1A-CGA-O2A-C1
17	AB	833	CLA	O1D-CGD-O2D-CED
20	AJ	103	BCR	C7-C8-C9-C10
23	AB	851	DGD	C4A-C5A-C6A-C7A
22	AA	851	LMU	C7-C8-C9-C10
23	AB	851	DGD	C1G-C2G-C3G-O3G
17	AA	811	CLA	C13-C15-C16-C17
26	A3	320	CHL	C1A-C2A-CAA-CBA
17	AA	804	CLA	C2-C3-C5-C6
17	AB	833	CLA	C2-C3-C5-C6
17	AB	808	CLA	C2A-CAA-CBA-CGA
19	A1	320	LHG	O9-C7-O7-C5
19	A1	320	LHG	O6-C4-C5-O7
17	AB	822	CLA	C2B-C3B-CAB-CBB
20	AA	846	BCR	C5-C6-C7-C8
20	AG	205	BCR	C23-C24-C25-C26
20	AK	202	BCR	C1-C6-C7-C8
24	A4	315	LUT	C1-C6-C7-C8
22	AB	850	LMU	C9-C10-C11-C12
17	AA	801	CLA	C16-C17-C18-C20
17	A3	303	CLA	C6-C7-C8-C9
25	AG	202	LMG	O1-C7-C8-O7
25	A1	321	LMG	O1-C7-C8-O7
25	A1	321	LMG	O7-C8-C9-O8
17	AA	805	CLA	C2-C3-C5-C6
17	AB	842	CLA	C2-C3-C5-C6
17	AF	802	CLA	C2-C3-C5-C6
17	AA	808	CLA	C16-C17-C18-C20

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Mol	Chain	Res	Type	Atoms
25	A4	318	LMG	C29-C28-O8-C9
17	AA	803	CLA	C11-C12-C13-C14
17	AA	840	CLA	C11-C10-C8-C9
17	AB	802	CLA	C6-C7-C8-C9
17	AB	804	CLA	C11-C10-C8-C9
17	AB	810	CLA	C11-C12-C13-C14
17	AB	814	CLA	C11-C12-C13-C14
17	AB	818	CLA	C6-C7-C8-C9
17	AB	828	CLA	C11-C10-C8-C9
19	A1	320	LHG	C34-C35-C36-C37
22	AA	851	LMU	C1-C2-C3-C4
23	AB	851	DGD	C4B-C5B-C6B-C7B
17	AA	841	CLA	O1A-CGA-O2A-C1
17	AA	801	CLA	CAA-CBA-CGA-O2A
19	AA	844	LHG	C23-C24-C25-C26
17	A1	304	CLA	CBA-CGA-O2A-C1
17	AB	819	CLA	C11-C12-C13-C15
17	AB	821	CLA	O1D-CGD-O2D-CED
17	AB	818	CLA	C8-C10-C11-C12
17	AB	826	CLA	C8-C10-C11-C12
17	AB	833	CLA	C10-C11-C12-C13
17	AA	840	CLA	CBA-CGA-O2A-C1
17	AA	802	CLA	C15-C16-C17-C18
23	AB	851	DGD	C7A-C8A-C9A-CAA
19	AJ	104	LHG	O6-C4-C5-C6
17	AB	815	CLA	C16-C17-C18-C19
20	A3	318	BCR	C37-C22-C23-C24
25	A1	321	LMG	C11-C12-C13-C14
17	AA	803	CLA	C11-C12-C13-C15
17	AA	811	CLA	C12-C13-C15-C16
17	AA	821	CLA	C6-C7-C8-C10
17	AA	840	CLA	C11-C10-C8-C7
17	AB	801	CLA	C6-C7-C8-C10
17	AB	809	CLA	C6-C7-C8-C10
17	AB	814	CLA	C11-C12-C13-C15
17	AB	828	CLA	C11-C10-C8-C7
17	A4	301	CLA	C11-C10-C8-C7
22	AL	301	LMU	C1-C2-C3-C4
19	A1	320	LHG	C11-C10-C9-C8
17	AH	201	CLA	C5-C6-C7-C8
20	AA	847	BCR	C11-C12-C13-C14
20	AA	848	BCR	C7-C8-C9-C10

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Mol	Chain	Res	Type	Atoms
20	AB	849	BCR	C7-C8-C9-C10
20	AJ	101	BCR	C17-C18-C19-C20
20	AK	205	BCR	C7-C8-C9-C10
17	AA	829	CLA	O1A-CGA-O2A-C1
17	AB	820	CLA	O1A-CGA-O2A-C1
17	A1	304	CLA	O1A-CGA-O2A-C1
17	A4	301	CLA	CBD-CGD-O2D-CED
17	AB	831	CLA	O1D-CGD-O2D-CED
17	AA	816	CLA	CBD-CGD-O2D-CED
17	AB	814	CLA	C15-C16-C17-C18
19	A3	319	LHG	C6-C5-O7-C7
17	AA	824	CLA	O1A-CGA-O2A-C1
17	AB	803	CLA	C16-C17-C18-C19
22	AB	853	LMU	C3'-C4'-O1B-C1B
19	A1	320	LHG	C7-C8-C9-C10
23	AB	851	DGD	C5A-C6A-C7A-C8A
17	AA	830	CLA	C5-C6-C7-C8
17	AB	819	CLA	C5-C6-C7-C8
19	AJ	104	LHG	O6-C4-C5-O7
17	AB	801	CLA	C16-C17-C18-C19
19	A1	301	LHG	C11-C12-C13-C14
17	AB	828	CLA	C4-C3-C5-C6
17	AA	830	CLA	C10-C11-C12-C13
17	AB	823	CLA	C5-C6-C7-C8
18	AA	843	PQN	C18-C20-C21-C22
17	AA	805	CLA	C2C-C3C-CAC-CBC
19	A6	617	LHG	O7-C5-C6-O8
17	AA	810	CLA	C6-C7-C8-C9
17	AA	811	CLA	C14-C13-C15-C16
17	AB	827	CLA	C11-C12-C13-C14
17	A4	301	CLA	C11-C10-C8-C9
17	AB	842	CLA	C16-C17-C18-C19
22	AL	301	LMU	C5-C6-C7-C8
19	AA	844	LHG	C31-C32-C33-C34
19	A6	617	LHG	C26-C27-C28-C29
22	AL	301	LMU	C3-C4-C5-C6
17	A6	611	CLA	CBD-CGD-O2D-CED
19	AA	844	LHG	C25-C26-C27-C28
25	A1	321	LMG	C30-C31-C32-C33
17	AA	834	CLA	C5-C6-C7-C8
19	AA	844	LHG	C30-C31-C32-C33
19	A6	617	LHG	C5-C4-O6-P

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Mol	Chain	Res	Type	Atoms
17	A6	612	CLA	CBA-CGA-O2A-C1
19	A1	302	LHG	C10-C11-C12-C13
22	AA	851	LMU	C4'-C5'-C6'-O6'
25	A4	318	LMG	O10-C28-O8-C9
19	A1	320	LHG	C25-C26-C27-C28
17	AA	813	CLA	CBA-CGA-O2A-C1
17	AB	835	CLA	O1D-CGD-O2D-CED
22	AL	301	LMU	C2-C1-O1'-C1'
17	AA	805	CLA	C5-C6-C7-C8
17	AA	830	CLA	C1A-C2A-CAA-CBA
17	AA	838	CLA	C4B-C3B-CAB-CBB
17	AB	810	CLA	C1A-C2A-CAA-CBA
17	AB	841	CLA	C1A-C2A-CAA-CBA
17	AB	841	CLA	C4B-C3B-CAB-CBB
17	A1	309	CLA	C4B-C3B-CAB-CBB
17	A3	308	CLA	C1A-C2A-CAA-CBA
17	A4	307	CLA	C4B-C3B-CAB-CBB
17	A4	309	CLA	C4B-C3B-CAB-CBB
18	AA	843	PQN	C14-C13-C15-C16
19	AJ	104	LHG	C16-C17-C18-C19
23	AB	851	DGD	C8B-C9B-CAB-CBB
17	AB	804	CLA	C15-C16-C17-C18
17	AB	829	CLA	C13-C15-C16-C17
17	AA	837	CLA	C2-C3-C5-C6
17	AA	811	CLA	C6-C7-C8-C10
17	AA	830	CLA	C11-C10-C8-C7
17	AA	841	CLA	C11-C10-C8-C7
17	AB	815	CLA	C11-C12-C13-C15
17	AB	823	CLA	C11-C10-C8-C7
17	AB	823	CLA	C12-C13-C15-C16
17	AB	825	CLA	C6-C7-C8-C10
17	AB	829	CLA	C12-C13-C15-C16
25	A1	321	LMG	C33-C34-C35-C36
22	AA	851	LMU	C4B-C5B-C6B-O6B
17	AA	813	CLA	O1A-CGA-O2A-C1
17	AA	829	CLA	CAA-CBA-CGA-O2A
19	A6	617	LHG	C29-C30-C31-C32
17	AB	809	CLA	C4-C3-C5-C6
17	A3	308	CLA	C3A-C2A-CAA-CBA
17	AA	813	CLA	C11-C10-C8-C9
17	AB	801	CLA	C11-C10-C8-C9
17	AB	809	CLA	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
17	AB	825	CLA	C6-C7-C8-C9
17	A6	602	CLA	C11-C12-C13-C14
17	AA	817	CLA	C5-C6-C7-C8
17	AB	810	CLA	C8-C10-C11-C12
17	AB	828	CLA	C15-C16-C17-C18
17	A1	306	CLA	C1-C2-C3-C4
17	A3	305	CLA	CAD-CBD-CGD-O1D
17	AB	829	CLA	C4-C3-C5-C6
19	AA	844	LHG	C35-C36-C37-C38
17	AA	814	CLA	CAD-CBD-CGD-O2D
17	AB	814	CLA	CAD-CBD-CGD-O2D
17	AB	827	CLA	CAD-CBD-CGD-O2D
17	AB	837	CLA	CAD-CBD-CGD-O2D
17	AB	842	CLA	CAD-CBD-CGD-O2D
17	AL	302	CLA	CAD-CBD-CGD-O2D
17	A1	305	CLA	CAD-CBD-CGD-O2D
17	A1	316	CLA	CAD-CBD-CGD-O2D
17	A6	610	CLA	CAD-CBD-CGD-O2D
17	AA	840	CLA	O1A-CGA-O2A-C1
17	AB	837	CLA	CBA-CGA-O2A-C1
22	AB	853	LMU	C5'-C4'-O1B-C1B
17	AB	837	CLA	O1A-CGA-O2A-C1
17	AA	805	CLA	CAD-CBD-CGD-O1D
17	AA	814	CLA	CAD-CBD-CGD-O1D
17	AA	820	CLA	CHA-CBD-CGD-O1D
17	AA	820	CLA	CHA-CBD-CGD-O2D
17	AA	822	CLA	CHA-CBD-CGD-O1D
17	AA	831	CLA	CHA-CBD-CGD-O1D
17	AB	814	CLA	CAD-CBD-CGD-O1D
17	AB	827	CLA	CAD-CBD-CGD-O1D
17	AB	837	CLA	CAD-CBD-CGD-O1D
17	AB	842	CLA	CAD-CBD-CGD-O1D
17	AK	203	CLA	CHA-CBD-CGD-O1D
17	AK	203	CLA	CHA-CBD-CGD-O2D
17	AK	204	CLA	CHA-CBD-CGD-O1D
17	AK	204	CLA	CHA-CBD-CGD-O2D
17	AL	302	CLA	CAD-CBD-CGD-O1D
17	A1	305	CLA	CAD-CBD-CGD-O1D
17	A1	309	CLA	CHA-CBD-CGD-O2D
17	A1	309	CLA	CAD-CBD-CGD-O2D
17	A1	313	CLA	CHA-CBD-CGD-O1D
17	A1	316	CLA	CAD-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
17	A4	302	CLA	CHA-CBD-CGD-O1D
17	A4	302	CLA	CHA-CBD-CGD-O2D
17	A4	310	CLA	CHA-CBD-CGD-O2D
17	A6	610	CLA	CAD-CBD-CGD-O1D
19	AA	844	LHG	C4-O6-P-O3
19	AJ	104	LHG	C3-O3-P-O5
19	A1	301	LHG	C3-O3-P-O4
19	A1	302	LHG	C3-O3-P-O5
19	A1	302	LHG	C4-O6-P-O3
19	A1	302	LHG	C4-O6-P-O4
19	A1	302	LHG	C4-O6-P-O5
19	A3	319	LHG	C4-O6-P-O3
19	A6	617	LHG	C4-O6-P-O4
26	A1	308	CHL	CHA-CBD-CGD-O2D
26	A4	304	CHL	CHA-CBD-CGD-O2D
17	A3	312	CLA	C4-C3-C5-C6
17	AA	811	CLA	C2B-C3B-CAB-CBB
17	AA	831	CLA	C2B-C3B-CAB-CBB
17	AA	838	CLA	C2B-C3B-CAB-CBB
17	AA	841	CLA	C2B-C3B-CAB-CBB
17	AB	831	CLA	C2B-C3B-CAB-CBB
17	AB	832	CLA	C2B-C3B-CAB-CBB
17	AB	842	CLA	C2B-C3B-CAB-CBB
17	AF	804	CLA	C2B-C3B-CAB-CBB
17	AG	204	CLA	C2B-C3B-CAB-CBB
17	A3	302	CLA	C2B-C3B-CAB-CBB
17	A3	309	CLA	C2B-C3B-CAB-CBB
17	A4	309	CLA	C2B-C3B-CAB-CBB
17	A4	310	CLA	C2B-C3B-CAB-CBB
17	A6	604	CLA	C2B-C3B-CAB-CBB
17	A6	609	CLA	C2B-C3B-CAB-CBB
20	AA	847	BCR	C23-C24-C25-C30
20	AI	101	BCR	C5-C6-C7-C8
20	AJ	103	BCR	C23-C24-C25-C30
17	AB	809	CLA	C2-C3-C5-C6
19	A1	302	LHG	C7-C8-C9-C10
19	AJ	104	LHG	C2-C3-O3-P
20	AI	101	BCR	C37-C22-C23-C24
20	AK	205	BCR	C7-C8-C9-C34
20	A1	319	BCR	C37-C22-C23-C24
17	AA	816	CLA	O1D-CGD-O2D-CED
17	AA	818	CLA	CAA-CBA-CGA-O2A

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Mol	Chain	Res	Type	Atoms
17	AB	828	CLA	CAA-CBA-CGA-O2A
19	AA	844	LHG	C29-C30-C31-C32
17	AB	818	CLA	C10-C11-C12-C13
23	AB	851	DGD	CBB-CCB-CDB-CEB
17	AB	833	CLA	CAA-CBA-CGA-O2A
17	AB	819	CLA	C11-C12-C13-C14
17	AA	826	CLA	C8-C10-C11-C12
17	A3	312	CLA	O1A-CGA-O2A-C1
17	AA	829	CLA	C11-C12-C13-C14
17	AB	815	CLA	C11-C10-C8-C9
17	AB	823	CLA	C14-C13-C15-C16
17	AA	842	CLA	C12-C13-C15-C16
17	A6	611	CLA	O1D-CGD-O2D-CED
17	AB	818	CLA	C5-C6-C7-C8
19	A1	302	LHG	O9-C7-O7-C5
19	AA	844	LHG	C32-C33-C34-C35
17	AB	828	CLA	C2C-C3C-CAC-CBC
17	AA	838	CLA	C5-C6-C7-C8
17	AB	809	CLA	C2A-CAA-CBA-CGA
17	AA	828	CLA	C2-C1-O2A-CGA
17	AB	833	CLA	C2-C1-O2A-CGA
17	AA	802	CLA	C4-C3-C5-C6
17	AA	806	CLA	C4-C3-C5-C6
25	A4	318	LMG	O1-C7-C8-C9
17	AB	838	CLA	C8-C10-C11-C12
17	AB	818	CLA	CAA-CBA-CGA-O2A
20	AK	202	BCR	C21-C22-C23-C24
17	AB	806	CLA	C2C-C3C-CAC-CBC
19	AJ	104	LHG	C19-C20-C21-C22
17	AA	813	CLA	C2A-CAA-CBA-CGA
17	AB	817	CLA	C2A-CAA-CBA-CGA
17	AB	830	CLA	C4-C3-C5-C6
17	AB	829	CLA	C2-C3-C5-C6
22	AB	853	LMU	C3-C4-C5-C6
22	AB	853	LMU	C2-C1-O1'-C1'
17	AA	811	CLA	C6-C7-C8-C9
17	AA	830	CLA	C11-C10-C8-C9
17	A4	311	CLA	C6-C7-C8-C9
17	A4	301	CLA	O1D-CGD-O2D-CED
17	AA	816	CLA	C4B-C3B-CAB-CBB
17	AB	808	CLA	C4B-C3B-CAB-CBB
17	A1	305	CLA	C4B-C3B-CAB-CBB

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Mol	Chain	Res	Type	Atoms
19	A1	302	LHG	C23-C24-C25-C26
17	AA	826	CLA	C10-C11-C12-C13
17	A1	309	CLA	CAA-CBA-CGA-O2A
17	AA	826	CLA	C11-C12-C13-C14
17	A3	312	CLA	CBA-CGA-O2A-C1
17	AA	806	CLA	C2-C3-C5-C6
17	AB	828	CLA	C2-C3-C5-C6
17	A3	312	CLA	C2-C3-C5-C6
17	A3	312	CLA	C3-C5-C6-C7
17	AB	827	CLA	C11-C10-C8-C7
17	AB	840	CLA	C11-C10-C8-C7
17	AA	842	CLA	C10-C11-C12-C13
17	AB	814	CLA	C5-C6-C7-C8
25	A1	321	LMG	C31-C32-C33-C34
17	A1	304	CLA	C2-C3-C5-C6
17	AA	809	CLA	C3A-C2A-CAA-CBA
17	AB	811	CLA	C3A-C2A-CAA-CBA
22	AA	851	LMU	C2-C3-C4-C5
20	AA	847	BCR	C35-C13-C14-C15
20	AA	849	BCR	C11-C10-C9-C34
20	AA	849	BCR	C16-C17-C18-C36
20	AB	845	BCR	C11-C10-C9-C34
20	AB	846	BCR	C11-C10-C9-C34
20	AB	846	BCR	C20-C21-C22-C37
20	AF	805	BCR	C35-C13-C14-C15
20	AI	102	BCR	C11-C10-C9-C34
22	AB	853	LMU	O5'-C1'-O1'-C1
19	A3	319	LHG	C23-C24-C25-C26
22	AB	853	LMU	C5-C6-C7-C8
17	AB	842	CLA	C3-C5-C6-C7
26	A1	303	CHL	C4-C3-C5-C6
17	A3	308	CLA	CAA-CBA-CGA-O1A
17	AA	802	CLA	C2-C3-C5-C6
19	A1	320	LHG	C15-C16-C17-C18
23	AB	851	DGD	CBA-CCA-CDA-CEA
17	AA	833	CLA	C8-C10-C11-C12
17	AB	841	CLA	C5-C6-C7-C8
17	AB	842	CLA	C10-C11-C12-C13
17	A1	309	CLA	CAA-CBA-CGA-O1A
17	AB	803	CLA	C11-C12-C13-C14
17	AB	830	CLA	C2-C3-C5-C6
17	AA	841	CLA	C1A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
17	AB	820	CLA	C1A-C2A-CAA-CBA
17	AK	203	CLA	C1A-C2A-CAA-CBA
20	AA	847	BCR	C12-C13-C14-C15
20	AA	849	BCR	C11-C10-C9-C8
20	AA	849	BCR	C16-C17-C18-C19
20	AB	845	BCR	C11-C10-C9-C8
20	AB	846	BCR	C11-C10-C9-C8
20	AB	846	BCR	C20-C21-C22-C23
20	AF	805	BCR	C12-C13-C14-C15
20	AI	102	BCR	C11-C10-C9-C8
22	AB	853	LMU	O5B-C1B-O1B-C4'
17	AA	835	CLA	C2B-C3B-CAB-CBB
17	AB	814	CLA	C2B-C3B-CAB-CBB
17	AB	841	CLA	C2B-C3B-CAB-CBB
17	AF	803	CLA	C2B-C3B-CAB-CBB
17	AG	201	CLA	C2B-C3B-CAB-CBB
17	AL	302	CLA	C2B-C3B-CAB-CBB
17	A1	309	CLA	C2B-C3B-CAB-CBB
17	A3	314	CLA	C2B-C3B-CAB-CBB
17	A4	301	CLA	C2B-C3B-CAB-CBB
17	A4	307	CLA	C2B-C3B-CAB-CBB
20	AA	846	BCR	C1-C6-C7-C8
20	AL	305	BCR	C1-C6-C7-C8
19	A1	302	LHG	C8-C7-O7-C5
17	A6	609	CLA	C3-C5-C6-C7
17	A3	308	CLA	CAA-CBA-CGA-O2A
17	AB	803	CLA	C4-C3-C5-C6
17	AB	827	CLA	C4-C3-C5-C6
17	AA	833	CLA	C11-C12-C13-C15
17	AB	842	CLA	C12-C13-C15-C16
17	A4	311	CLA	C6-C7-C8-C10
25	A4	318	LMG	O7-C8-C9-O8
17	AB	818	CLA	C3-C5-C6-C7
19	A3	319	LHG	C1-C2-C3-O3
17	AA	808	CLA	C15-C16-C17-C18
22	AB	852	LMU	C4B-C5B-C6B-O6B
17	AB	801	CLA	C2-C1-O2A-CGA
19	A1	302	LHG	C27-C28-C29-C30
17	AA	821	CLA	C13-C15-C16-C17
17	A6	611	CLA	CAA-CBA-CGA-O1A
17	A6	611	CLA	CAA-CBA-CGA-O2A
17	AB	811	CLA	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
17	AB	802	CLA	C10-C11-C12-C13
26	A3	307	CHL	CAA-CBA-CGA-O2A
25	A4	318	LMG	C7-C8-C9-O8
17	A1	316	CLA	CAA-CBA-CGA-O2A
17	AA	810	CLA	CAD-CBD-CGD-O1D
17	AA	806	CLA	C2A-CAA-CBA-CGA
17	AB	828	CLA	C2A-CAA-CBA-CGA
17	AB	813	CLA	C4B-C3B-CAB-CBB
17	AB	836	CLA	C4B-C3B-CAB-CBB
17	AJ	102	CLA	C4B-C3B-CAB-CBB
17	A3	311	CLA	C4B-C3B-CAB-CBB
17	A4	301	CLA	C4B-C3B-CAB-CBB
17	AG	204	CLA	CAA-CBA-CGA-O2A
17	AG	204	CLA	CAA-CBA-CGA-O1A
17	A4	302	CLA	CAA-CBA-CGA-O2A
17	AB	809	CLA	C16-C17-C18-C19
17	AA	801	CLA	CAA-CBA-CGA-O1A
17	AA	842	CLA	C4-C3-C5-C6
19	A3	319	LHG	O7-C5-C6-O8
17	AB	827	CLA	C2-C3-C5-C6
17	AA	828	CLA	C5-C6-C7-C8
17	AB	813	CLA	O1D-CGD-O2D-CED
17	AA	836	CLA	CAA-CBA-CGA-O2A
25	A1	321	LMG	C34-C35-C36-C37
17	AA	819	CLA	C11-C12-C13-C14
17	AA	821	CLA	C6-C7-C8-C9
17	AB	823	CLA	C11-C12-C13-C14
17	A1	314	CLA	C6-C7-C8-C9
17	AA	833	CLA	C2-C1-O2A-CGA
17	AB	818	CLA	C2-C1-O2A-CGA
17	AH	201	CLA	C2-C1-O2A-CGA
26	A6	607	CHL	C2-C1-O2A-CGA
17	AA	841	CLA	C3A-C2A-CAA-CBA
19	A3	301	LHG	O7-C7-C8-C9
17	AB	801	CLA	O1A-CGA-O2A-C1
17	AB	804	CLA	O2A-C1-C2-C3
19	A6	617	LHG	C4-C5-O7-C7
17	A1	316	CLA	CAA-CBA-CGA-O1A
17	A6	602	CLA	C2A-CAA-CBA-CGA
26	A3	307	CHL	CAA-CBA-CGA-O1A
17	AB	825	CLA	C8-C10-C11-C12
17	A4	302	CLA	CAA-CBA-CGA-O1A

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Mol	Chain	Res	Type	Atoms
17	AA	821	CLA	C10-C11-C12-C13
17	AA	818	CLA	C10-C11-C12-C13
17	AK	203	CLA	CAA-CBA-CGA-O1A
19	A6	617	LHG	C4-C5-C6-O8
25	A1	321	LMG	C7-C8-C9-O8
17	AB	842	CLA	C2A-CAA-CBA-CGA
17	AA	836	CLA	CAA-CBA-CGA-O1A
17	AB	813	CLA	CBD-CGD-O2D-CED
17	A1	304	CLA	C4C-C3C-CAC-CBC
17	AB	801	CLA	C11-C12-C13-C14
17	AB	803	CLA	C11-C10-C8-C9
17	AL	303	CLA	C11-C10-C8-C9
17	A3	302	CLA	C6-C7-C8-C9
17	AA	833	CLA	CAA-CBA-CGA-O2A
26	A6	607	CHL	CAA-CBA-CGA-O2A
19	AA	844	LHG	O6-C4-C5-C6
19	A1	301	LHG	O6-C4-C5-C6
17	AA	809	CLA	C2A-CAA-CBA-CGA
17	A1	304	CLA	C2A-CAA-CBA-CGA
17	AA	801	CLA	C11-C10-C8-C7
17	A3	302	CLA	C8-C10-C11-C12
17	AA	816	CLA	C2B-C3B-CAB-CBB
17	AA	824	CLA	C2B-C3B-CAB-CBB
17	AB	803	CLA	C2B-C3B-CAB-CBB
17	AB	821	CLA	C2B-C3B-CAB-CBB
17	AJ	102	CLA	C2B-C3B-CAB-CBB
17	A1	314	CLA	C2B-C3B-CAB-CBB
17	A3	312	CLA	C2B-C3B-CAB-CBB
17	A6	602	CLA	C2B-C3B-CAB-CBB
17	A6	613	CLA	C2B-C3B-CAB-CBB
20	AG	205	BCR	C23-C24-C25-C30
20	AI	102	BCR	C23-C24-C25-C26
20	AL	306	BCR	C23-C24-C25-C26
20	AL	306	BCR	C23-C24-C25-C30
17	AB	812	CLA	C2-C1-O2A-CGA
17	AB	829	CLA	C2-C1-O2A-CGA
22	AB	853	LMU	C2-C3-C4-C5
25	A4	318	LMG	O7-C10-C11-C12
17	AB	819	CLA	C3-C5-C6-C7
17	AA	842	CLA	C2-C3-C5-C6
17	A1	313	CLA	CAA-CBA-CGA-O2A
22	AB	853	LMU	C2B-C1B-O1B-C4'

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Mol	Chain	Res	Type	Atoms
17	AA	834	CLA	CAA-CBA-CGA-O2A
17	AG	201	CLA	CAA-CBA-CGA-O2A
19	AJ	104	LHG	C17-C18-C19-C20
17	AB	801	CLA	C2A-CAA-CBA-CGA
17	A4	303	CLA	CAA-CBA-CGA-O1A
19	AA	844	LHG	C12-C13-C14-C15
17	AA	833	CLA	C11-C12-C13-C14
17	AA	842	CLA	C14-C13-C15-C16
18	AB	843	PQN	C21-C22-C23-C24
17	AA	827	CLA	CAA-CBA-CGA-O2A
17	AB	834	CLA	CAA-CBA-CGA-O2A
25	A1	321	LMG	O8-C28-C29-C30
17	AA	834	CLA	C15-C16-C17-C18
17	AA	826	CLA	C4B-C3B-CAB-CBB
17	AA	827	CLA	C1A-C2A-CAA-CBA
17	AB	803	CLA	C1A-C2A-CAA-CBA
17	AB	824	CLA	C4B-C3B-CAB-CBB
17	A4	311	CLA	C4B-C3B-CAB-CBB
17	A6	602	CLA	C4B-C3B-CAB-CBB
17	A6	613	CLA	C4B-C3B-CAB-CBB
19	A1	302	LHG	O8-C23-C24-C25
17	A4	303	CLA	CAA-CBA-CGA-O2A
20	AB	844	BCR	C17-C18-C19-C20
20	AL	306	BCR	C7-C8-C9-C10
17	AB	842	CLA	C16-C17-C18-C20
22	AB	852	LMU	C3'-C4'-O1B-C1B
17	A3	302	CLA	C5-C6-C7-C8
17	AB	842	CLA	C5-C6-C7-C8
17	AB	806	CLA	CAA-CBA-CGA-O2A
17	AB	828	CLA	C8-C10-C11-C12
17	A6	604	CLA	O1D-CGD-O2D-CED
17	AB	815	CLA	C2-C1-O2A-CGA
17	AA	840	CLA	C12-C13-C15-C16
17	AB	804	CLA	C11-C12-C13-C15
17	AB	823	CLA	C11-C12-C13-C15
17	AB	825	CLA	C11-C10-C8-C7
17	AB	841	CLA	C11-C12-C13-C15
17	AA	818	CLA	O1A-CGA-O2A-C1
17	AA	829	CLA	C2A-CAA-CBA-CGA
17	AK	203	CLA	CAA-CBA-CGA-O2A
17	A1	313	CLA	CAA-CBA-CGA-O1A
17	AA	827	CLA	C3A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
17	AB	823	CLA	C3A-C2A-CAA-CBA
17	AB	835	CLA	C3A-C2A-CAA-CBA
17	AL	303	CLA	C3A-C2A-CAA-CBA
17	A3	312	CLA	CHA-CBD-CGD-O1D
17	A3	313	CLA	CHA-CBD-CGD-O1D
19	A1	301	LHG	O6-C4-C5-O7
17	AA	840	CLA	C2A-CAA-CBA-CGA
17	AA	801	CLA	C11-C10-C8-C9
17	AA	801	CLA	C14-C13-C15-C16
17	AA	821	CLA	C11-C12-C13-C14
17	AA	841	CLA	C11-C10-C8-C9
17	AB	814	CLA	C6-C7-C8-C9
17	AB	809	CLA	C15-C16-C17-C18
17	AA	842	CLA	C8-C10-C11-C12
17	A6	609	CLA	C4-C3-C5-C6
17	A4	311	CLA	C2-C3-C5-C6
17	A1	309	CLA	CAD-CBD-CGD-O1D
17	A6	603	CLA	CAD-CBD-CGD-O1D
17	AB	806	CLA	CAA-CBA-CGA-O1A
26	A6	607	CHL	CAA-CBA-CGA-O1A
17	AA	807	CLA	O1D-CGD-O2D-CED
19	A6	617	LHG	O8-C23-C24-C25
17	AG	201	CLA	CAA-CBA-CGA-O1A
17	AA	807	CLA	CBD-CGD-O2D-CED
17	AA	833	CLA	CAA-CBA-CGA-O1A
17	A6	608	CLA	CAA-CBA-CGA-O2A
17	AA	819	CLA	C5-C6-C7-C8
17	AA	828	CLA	C2A-CAA-CBA-CGA
17	AB	825	CLA	C2A-CAA-CBA-CGA
19	A1	302	LHG	C4-C5-C6-O8
19	A3	319	LHG	C4-C5-C6-O8
17	AA	834	CLA	CAA-CBA-CGA-O1A
17	AA	802	CLA	C8-C10-C11-C12
17	AB	832	CLA	C10-C11-C12-C13
17	AA	841	CLA	CAA-CBA-CGA-O2A
17	AB	803	CLA	C2-C3-C5-C6
22	AB	852	LMU	C5'-C4'-O1B-C1B
25	A4	318	LMG	O9-C10-C11-C12
17	AA	804	CLA	CAD-CBD-CGD-O2D
17	AA	806	CLA	CAD-CBD-CGD-O2D
17	AA	811	CLA	CAD-CBD-CGD-O2D
17	AB	810	CLA	CAA-CBA-CGA-O2A

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Mol	Chain	Res	Type	Atoms
25	A1	321	LMG	C14-C15-C16-C17
17	AA	806	CLA	C3-C5-C6-C7
17	AB	834	CLA	CAA-CBA-CGA-O1A
17	AK	203	CLA	O1D-CGD-O2D-CED
17	AA	834	CLA	C2-C1-O2A-CGA
17	AA	838	CLA	C2-C1-O2A-CGA
25	A1	321	LMG	O10-C28-C29-C30
17	AA	842	CLA	C16-C17-C18-C19
19	A1	301	LHG	C29-C30-C31-C32
17	AA	818	CLA	CBA-CGA-O2A-C1
17	AA	812	CLA	CAA-CBA-CGA-O2A
25	A4	318	LMG	O8-C28-C29-C30
19	A1	302	LHG	O10-C23-C24-C25
17	AA	805	CLA	CAA-CBA-CGA-O2A
17	AA	842	CLA	CAA-CBA-CGA-O2A
17	AB	807	CLA	CAA-CBA-CGA-O2A
17	A6	602	CLA	O1A-CGA-O2A-C1

There are no ring outliers.

101 monomers are involved in 142 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	A6	614	LUT	2	0
17	AB	827	CLA	4	0
17	AB	825	CLA	1	0
19	AA	844	LHG	1	0
17	AA	803	CLA	1	0
20	AA	848	BCR	2	0
17	AB	801	CLA	1	0
26	A1	303	CHL	2	0
17	AB	818	CLA	2	0
27	A1	318	XAT	1	0
20	A3	318	BCR	2	0
20	AB	844	BCR	2	0
24	A1	317	LUT	1	0
17	AA	801	CLA	11	0
27	A4	316	XAT	2	0
18	AA	843	PQN	3	0
25	A1	321	LMG	1	0
17	AK	204	CLA	1	0
17	AB	824	CLA	1	0
20	AB	847	BCR	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	AF	806	LUT	2	0
20	AB	846	BCR	1	0
17	AB	810	CLA	1	0
17	AB	833	CLA	2	0
21	AC	102	SF4	1	0
17	AB	808	CLA	1	0
17	A4	309	CLA	1	0
19	A3	301	LHG	1	0
25	A4	318	LMG	4	0
17	A4	307	CLA	1	0
17	AA	815	CLA	1	0
17	A3	308	CLA	1	0
17	AB	822	CLA	1	0
17	A4	311	CLA	1	0
17	AG	204	CLA	4	0
17	A3	304	CLA	1	0
17	AB	838	CLA	1	0
17	A6	612	CLA	1	0
26	A3	320	CHL	1	0
17	AA	820	CLA	1	0
20	AG	205	BCR	1	0
26	A3	307	CHL	1	0
17	AB	842	CLA	1	0
17	AA	818	CLA	1	0
20	A6	616	BCR	3	0
17	AA	834	CLA	1	0
20	AF	805	BCR	2	0
17	AA	806	CLA	1	0
17	A6	603	CLA	2	0
19	A6	617	LHG	1	0
20	AA	846	BCR	1	0
17	AA	810	CLA	1	0
17	AB	803	CLA	3	0
17	AA	833	CLA	1	0
17	AA	835	CLA	1	0
20	AB	845	BCR	1	0
26	A6	607	CHL	2	0
17	AB	840	CLA	1	0
17	A1	316	CLA	1	0
17	A4	313	CLA	1	0
17	A1	314	CLA	1	0
17	AA	802	CLA	1	0

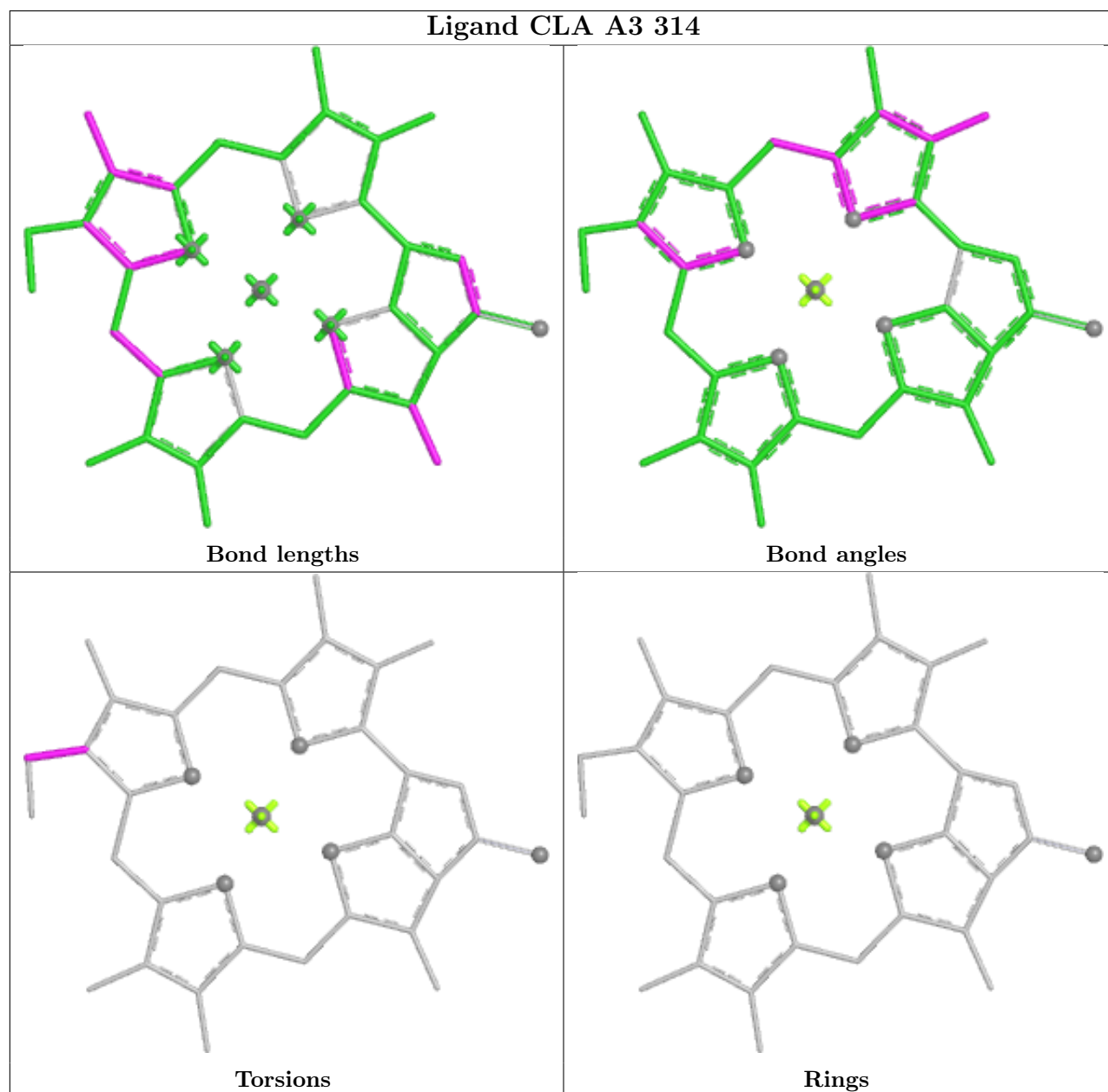
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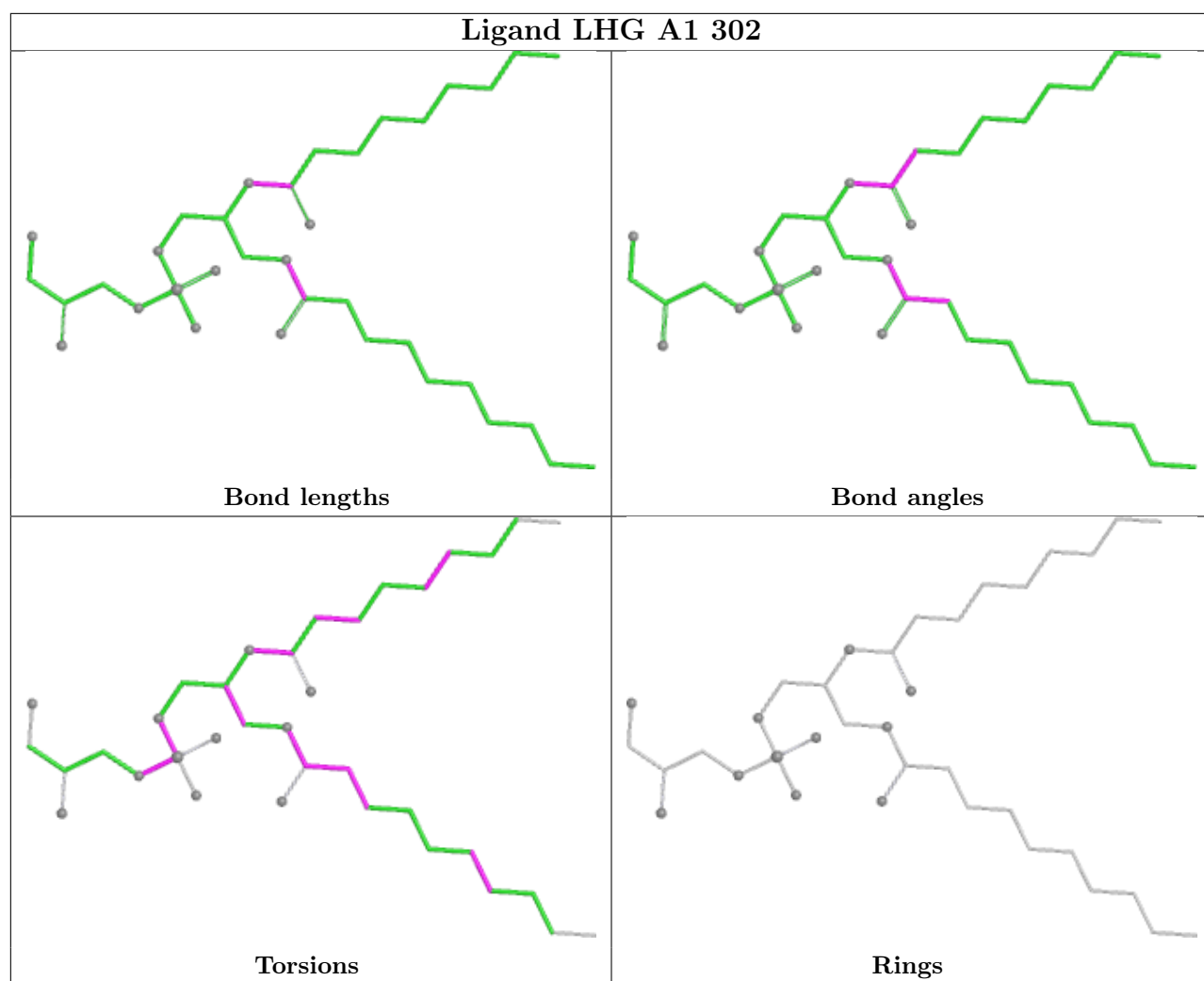
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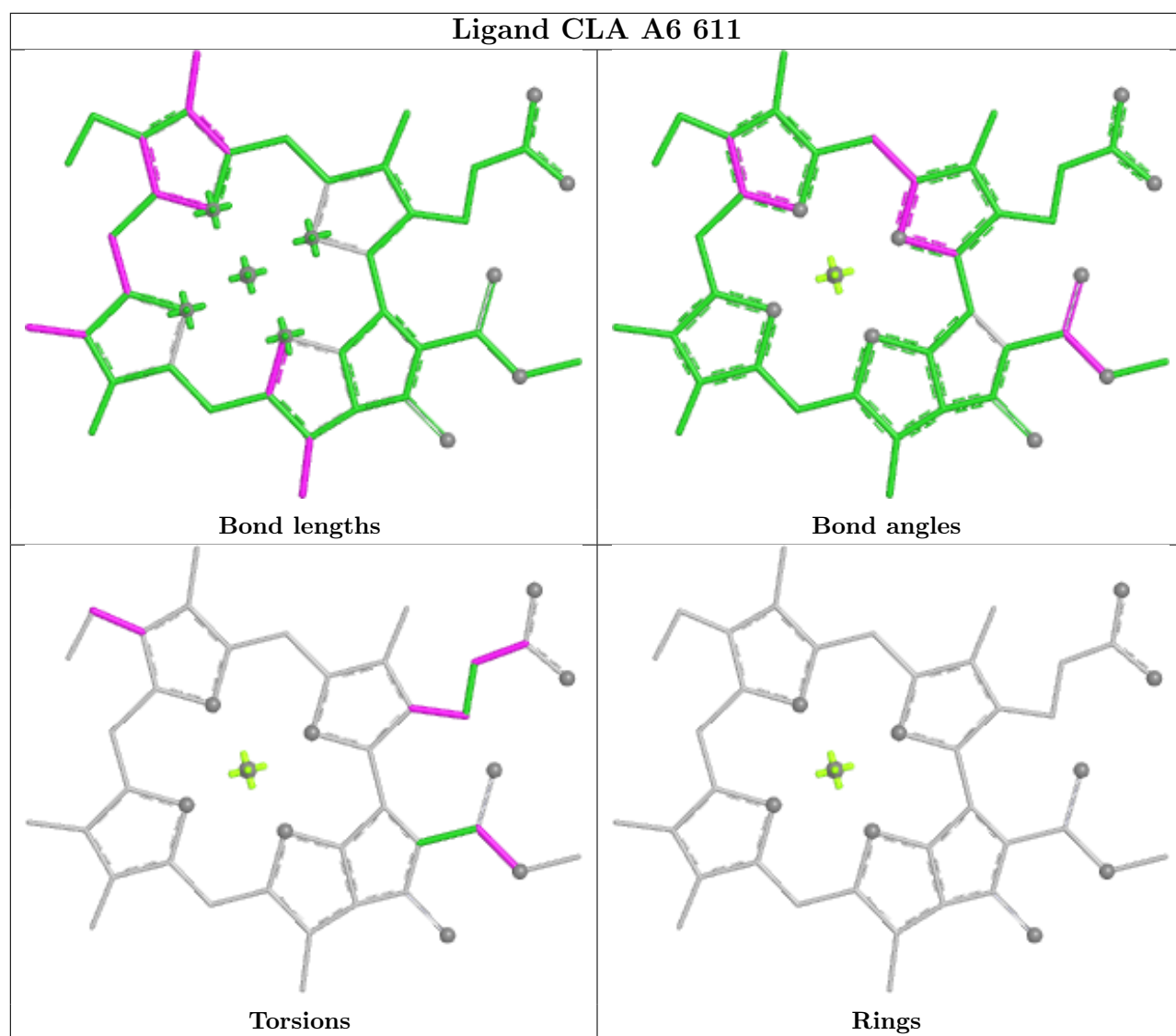
Mol	Chain	Res	Type	Clashes	Symm-Clashes
17	AB	831	CLA	1	0
27	A3	317	XAT	3	0
17	AF	803	CLA	1	0
17	AA	825	CLA	2	0
17	AA	817	CLA	1	0
20	AA	849	BCR	2	0
20	AB	848	BCR	2	0
17	A4	308	CLA	1	0
17	A1	311	CLA	2	0
20	AJ	101	BCR	1	0
20	AK	205	BCR	2	0
20	AJ	103	BCR	1	0
17	AL	303	CLA	1	0
17	A6	601	CLA	1	0
20	A1	319	BCR	3	0
17	A1	305	CLA	1	0
17	A1	306	CLA	2	0
18	AB	843	PQN	2	0
17	AA	828	CLA	1	0
26	A4	306	CHL	2	0
17	AB	814	CLA	1	0
21	AC	101	SF4	1	0
17	AA	838	CLA	1	0
17	A4	301	CLA	1	0
17	AA	841	CLA	1	0
20	AF	801	BCR	4	0
20	AL	305	BCR	1	0
20	AI	102	BCR	1	0
17	AB	802	CLA	4	0
20	AA	847	BCR	1	0
17	AB	828	CLA	1	0
17	AB	839	CLA	2	0
17	AB	834	CLA	3	0
17	AB	809	CLA	2	0
22	AL	301	LMU	1	0
27	A6	615	XAT	4	0
24	A4	315	LUT	3	0
17	AA	830	CLA	1	0
17	AA	811	CLA	3	0

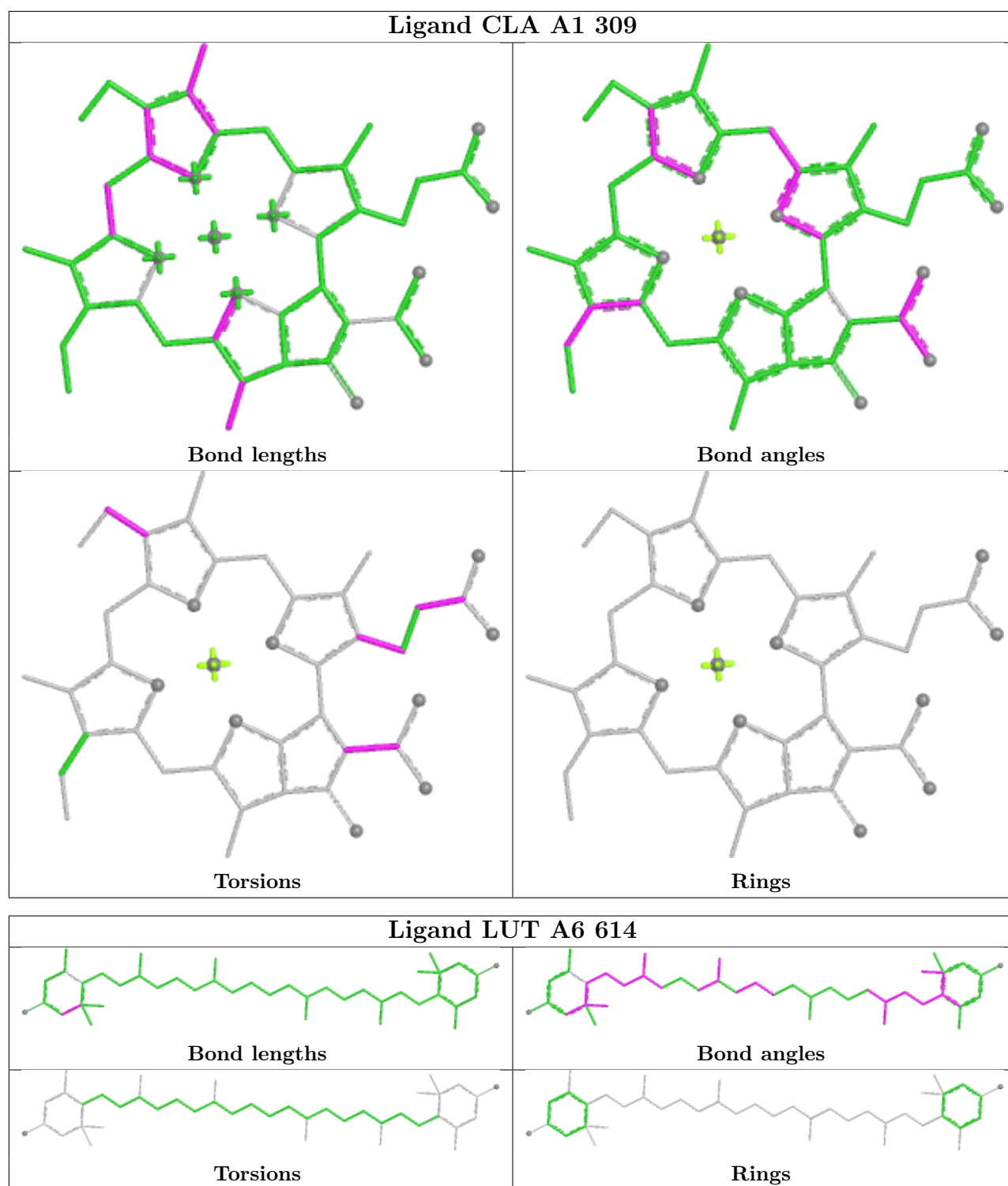
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will

also be included. For torsion angles, if less than 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.

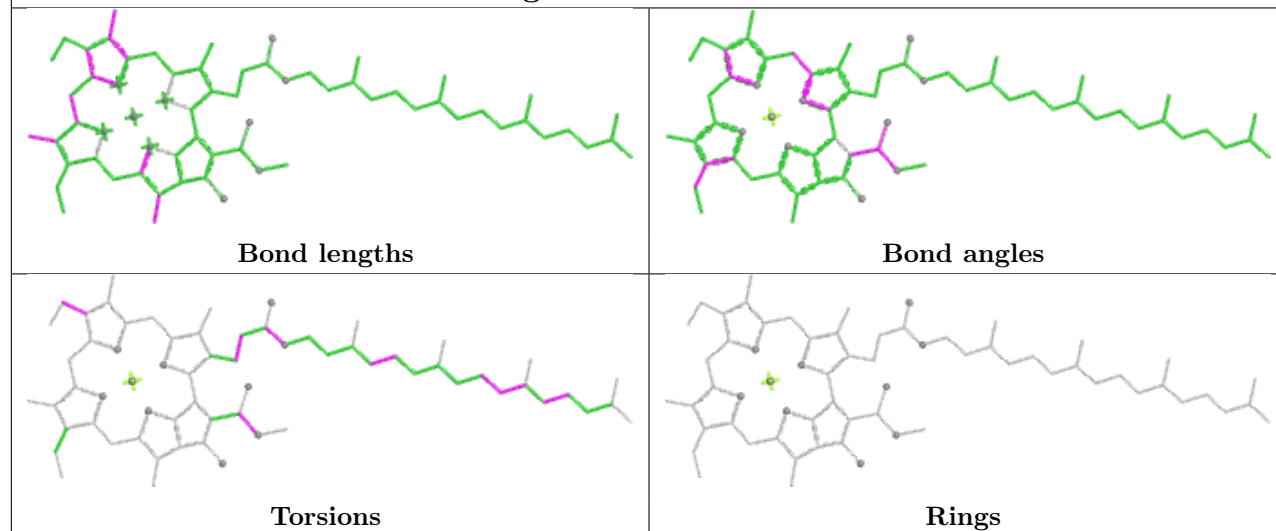




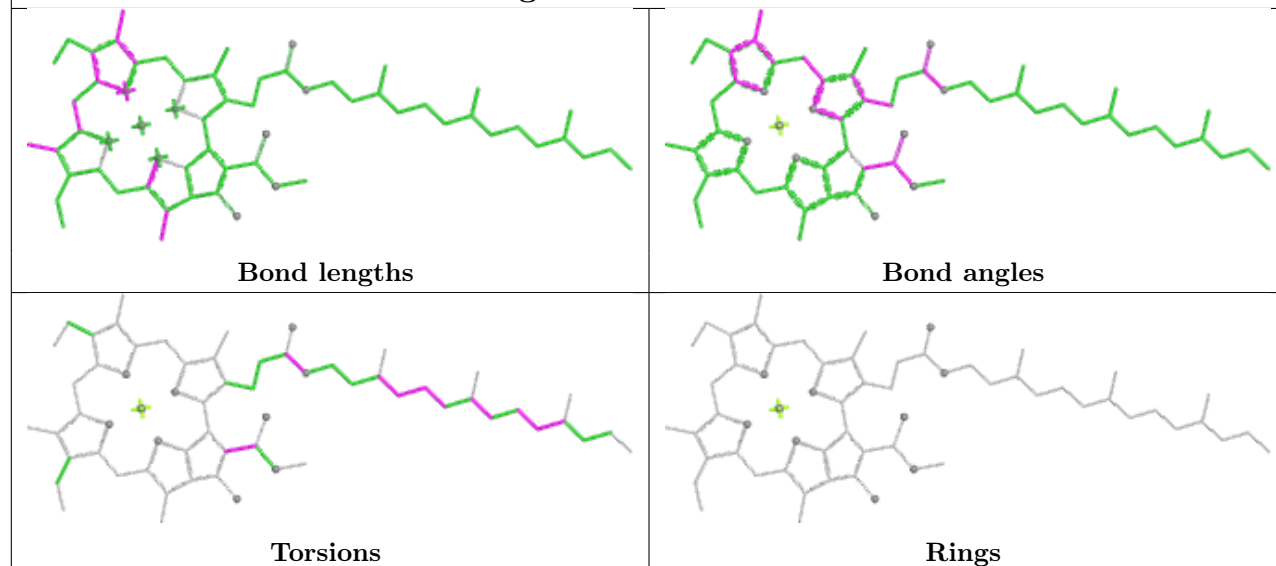




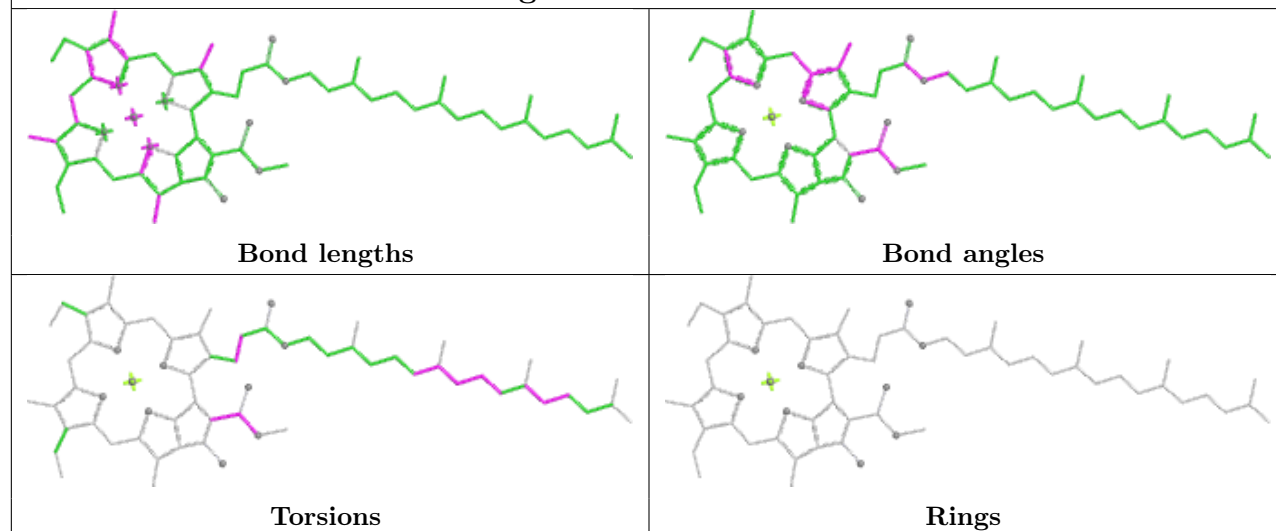
Ligand CLA A6 602



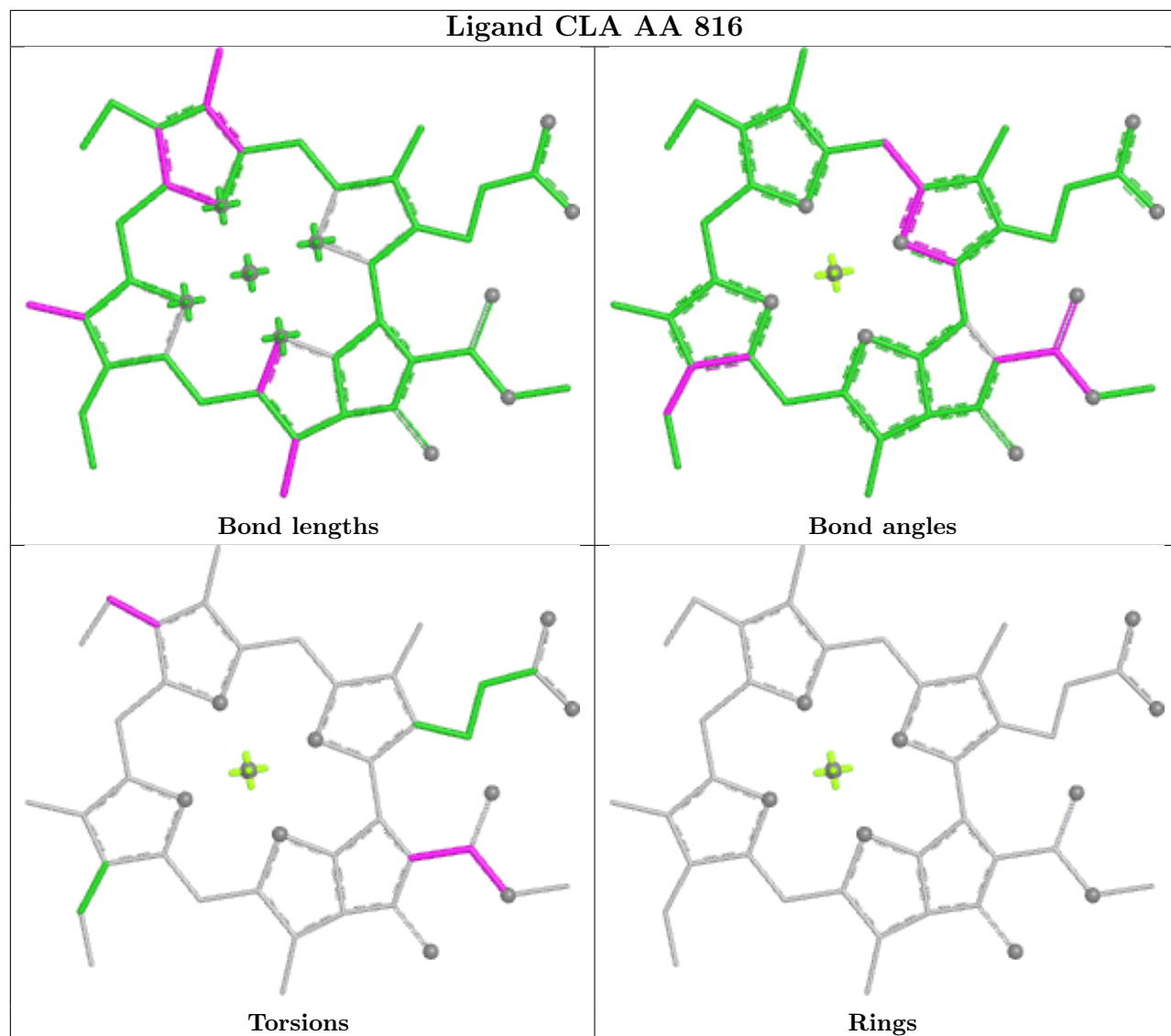
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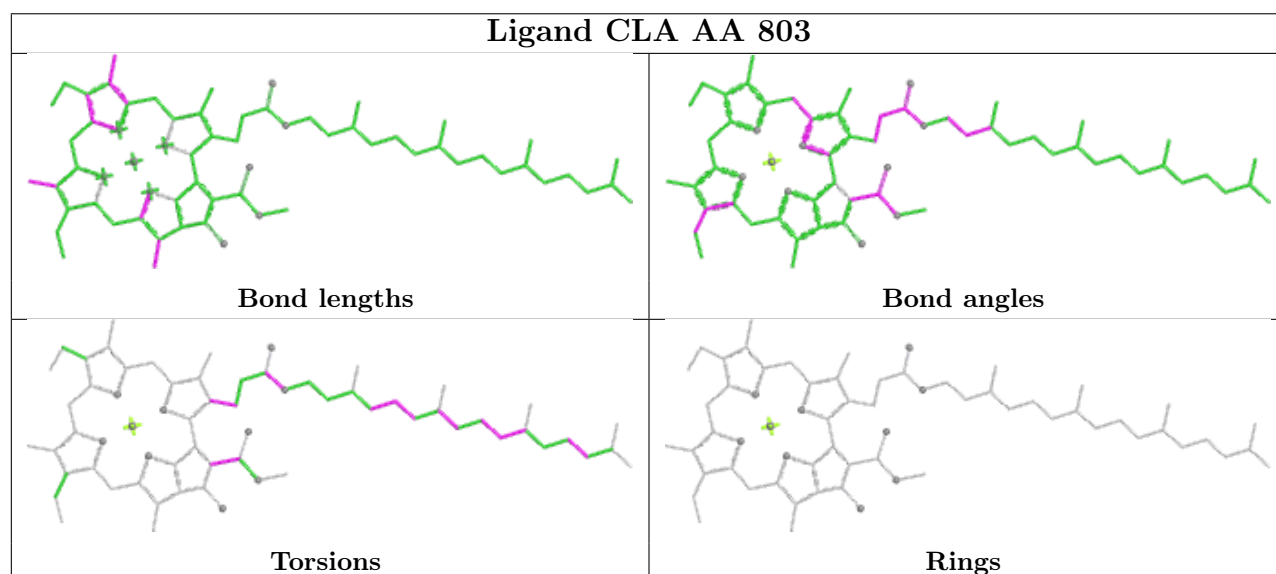
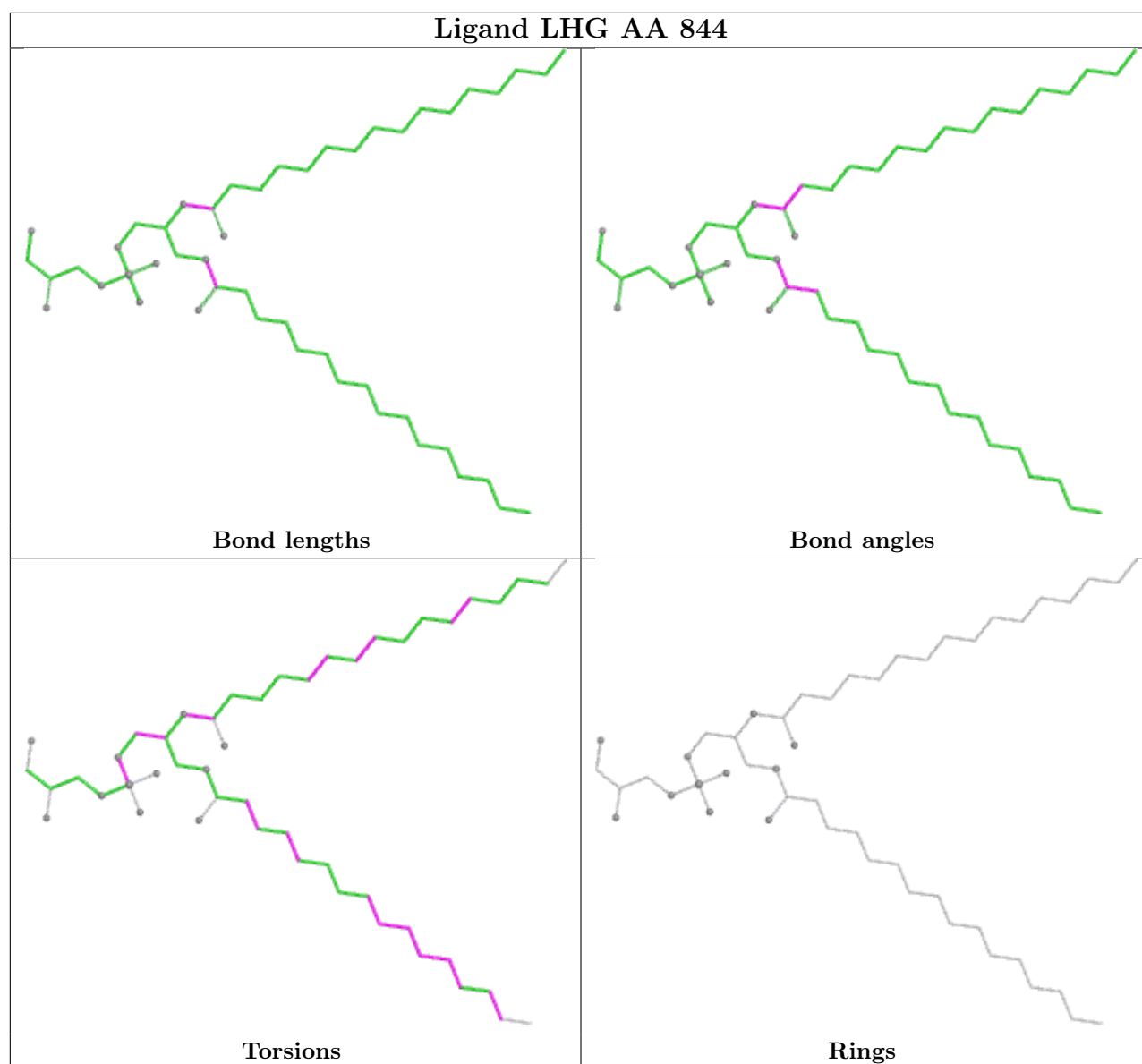


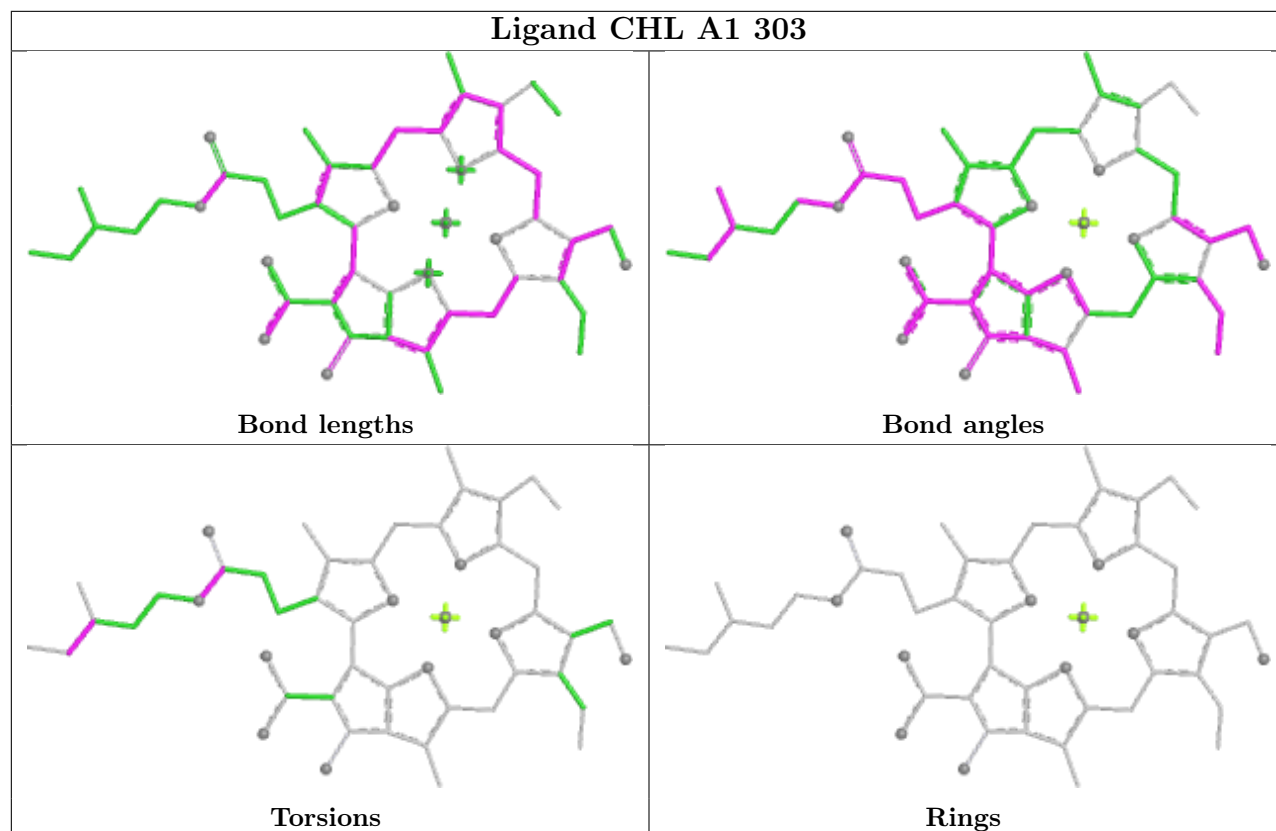
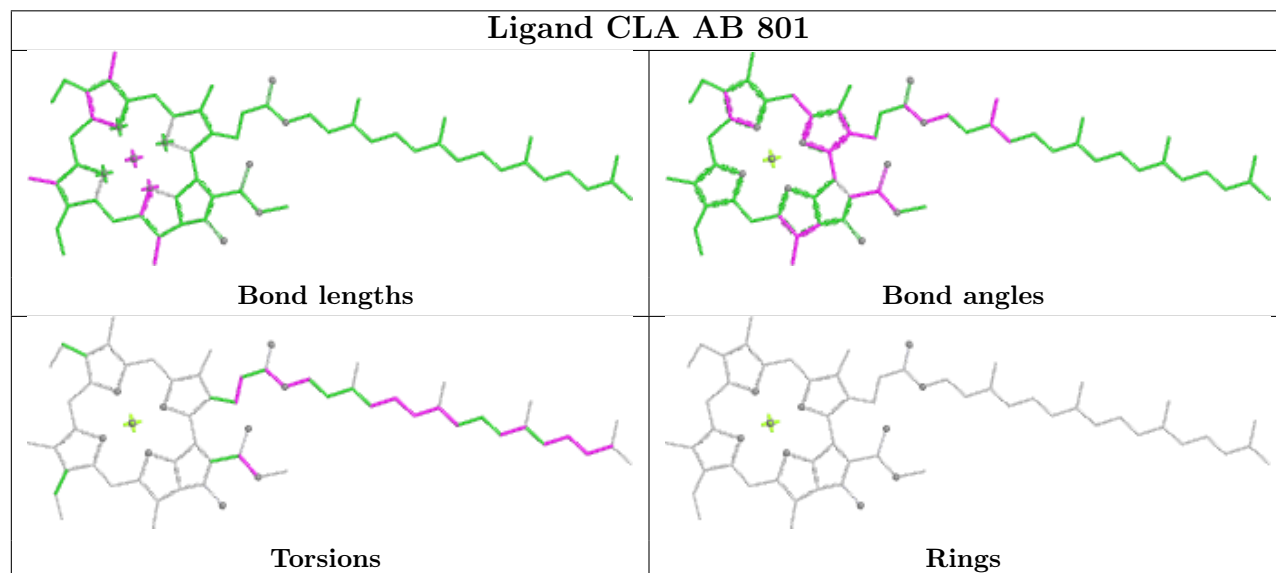
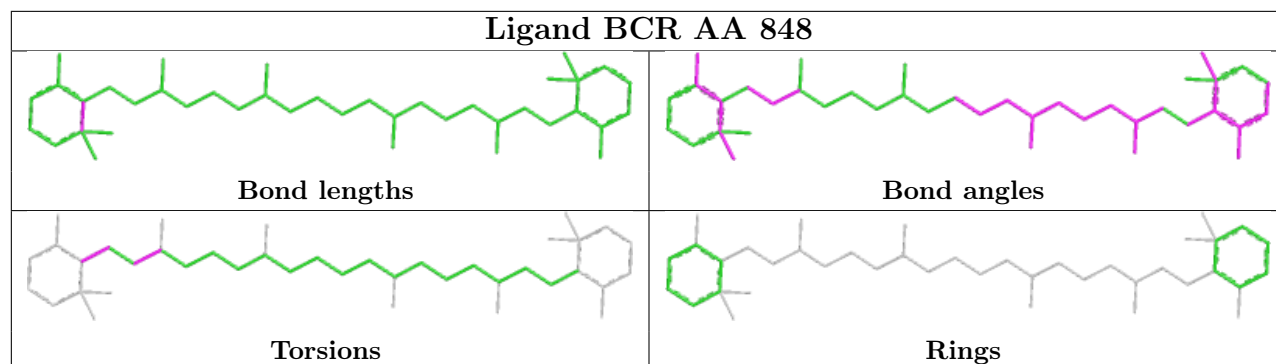
Ligand CLA AB 825



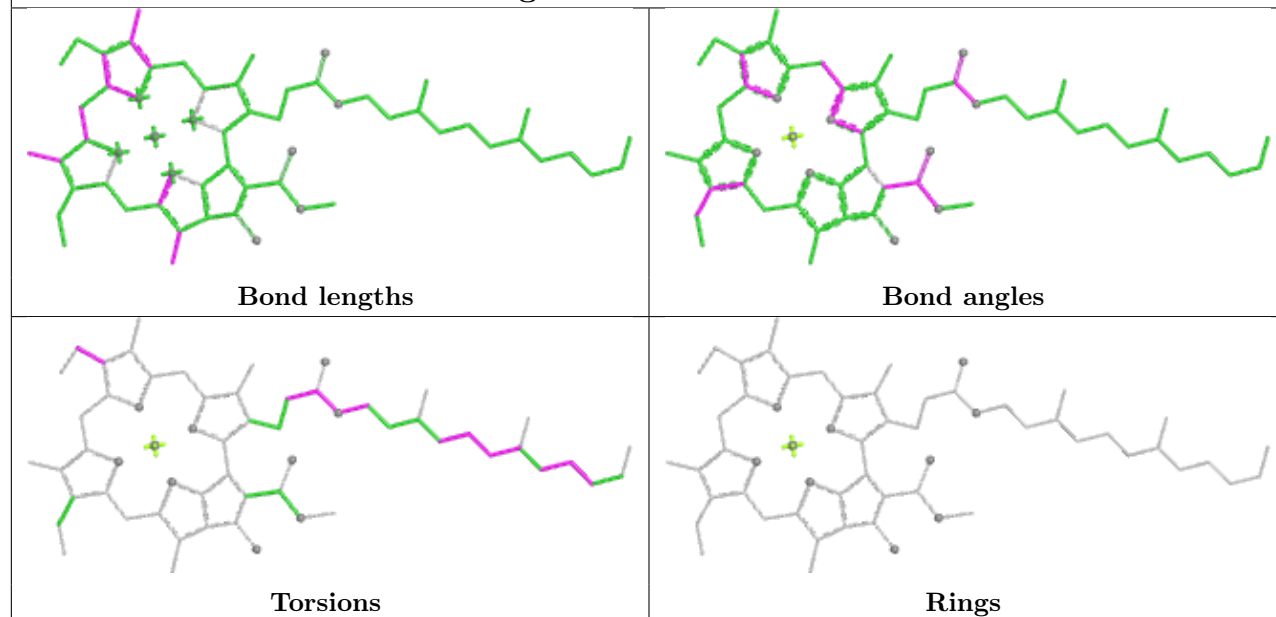
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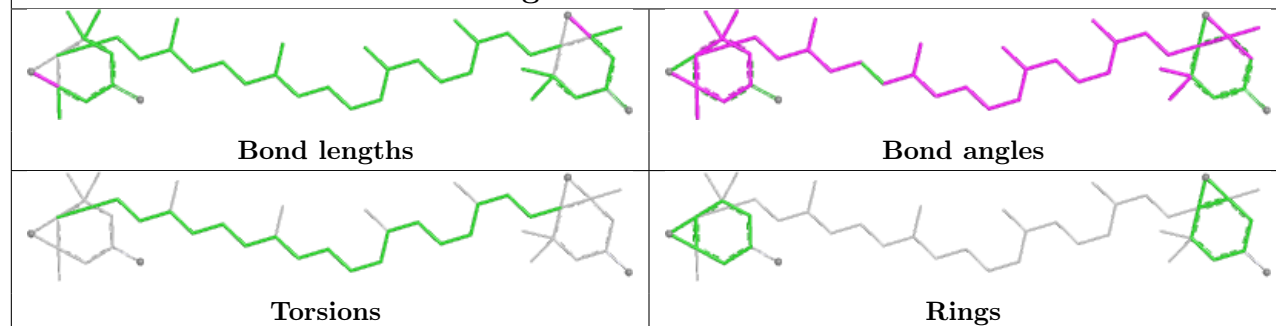




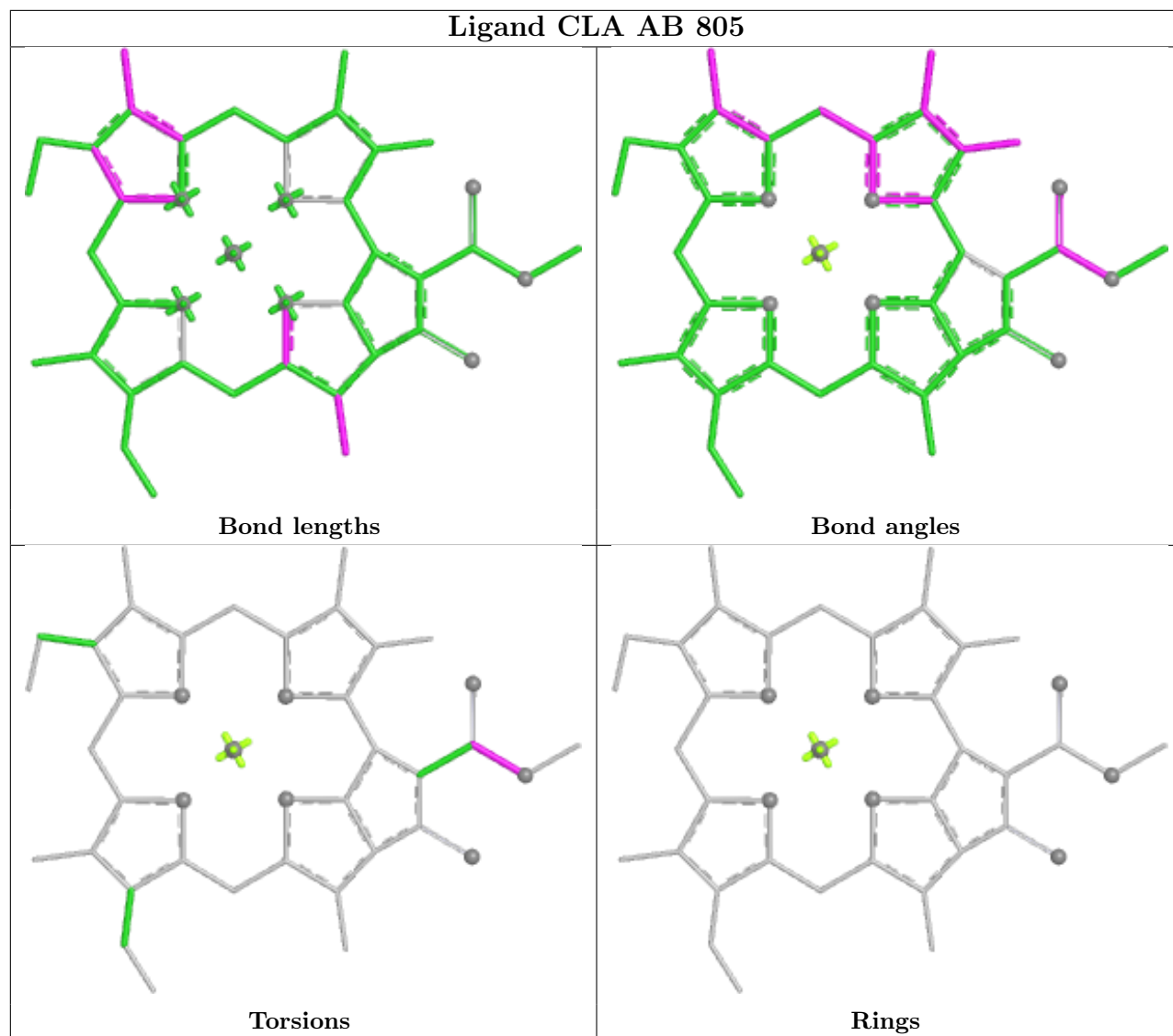
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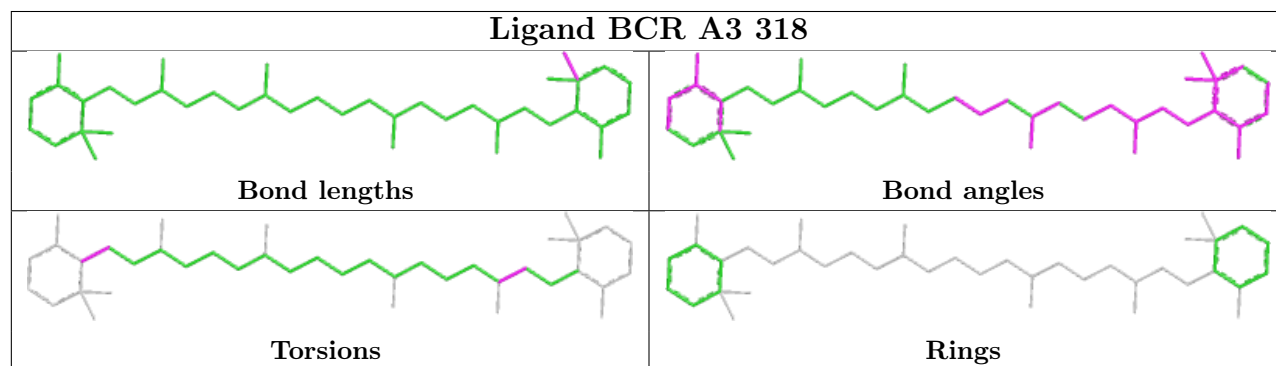
Ligand XAT A1 318



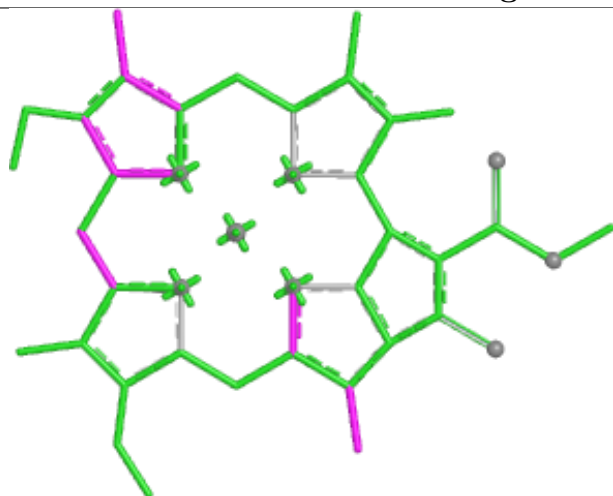
Ligand CLA AB 805



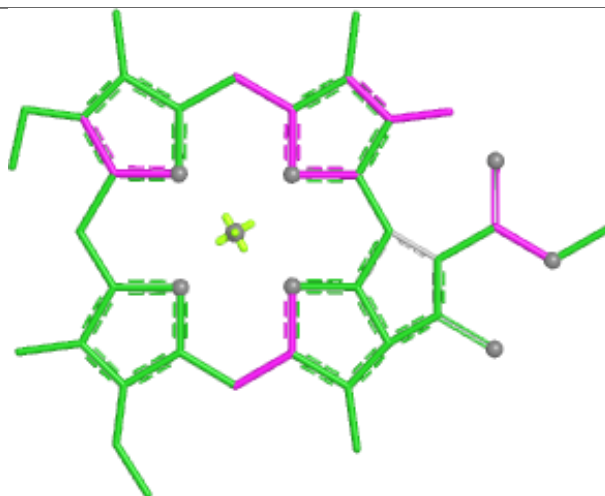
Ligand BCR A3 318



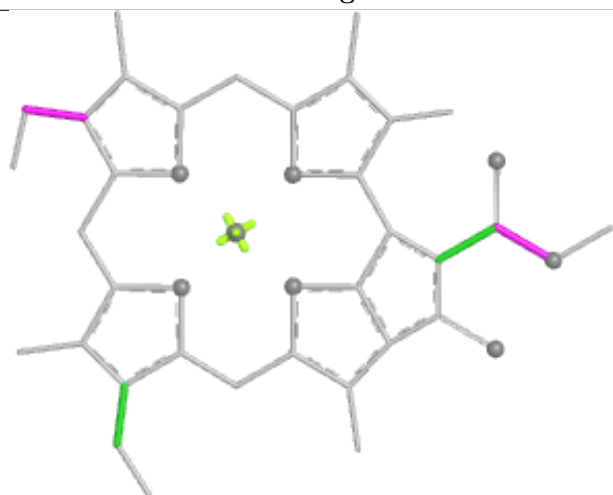
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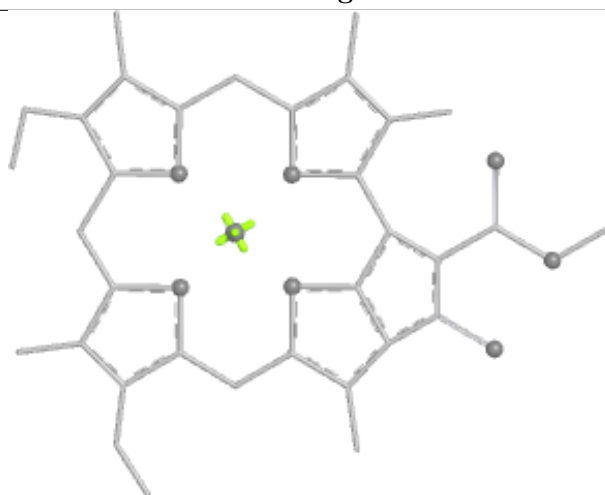
Bond lengths



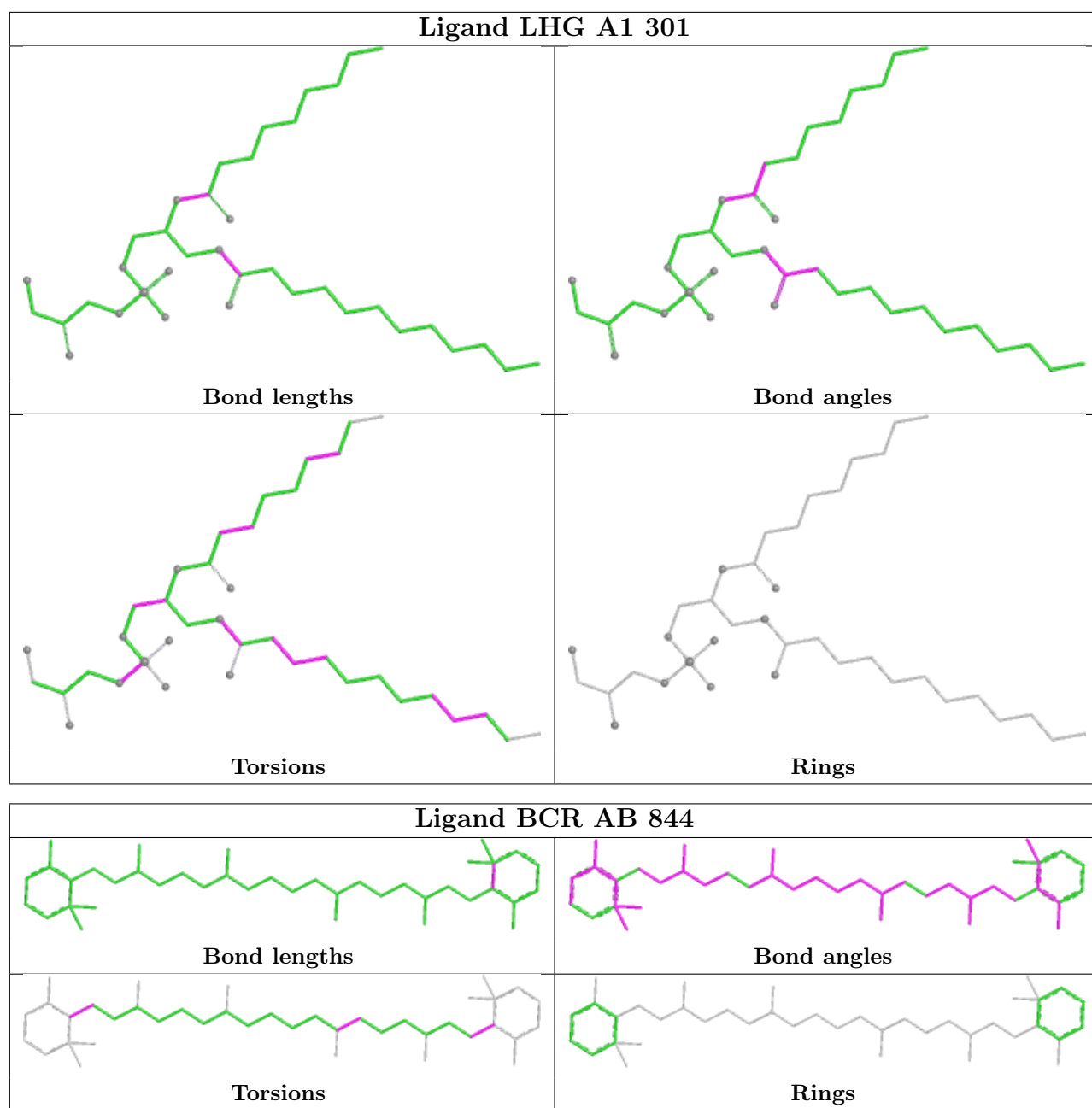
Bond angles



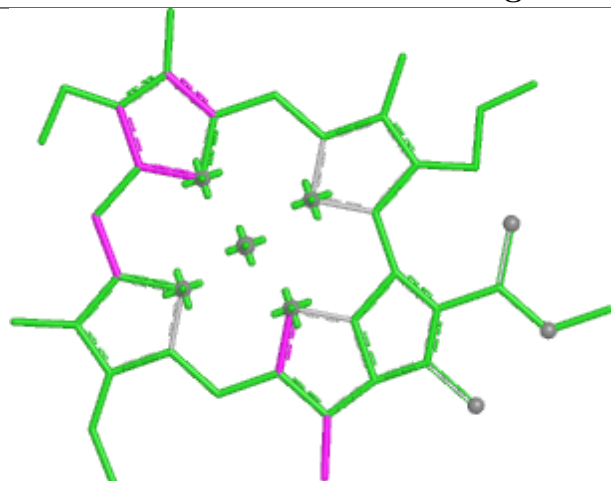
Torsions



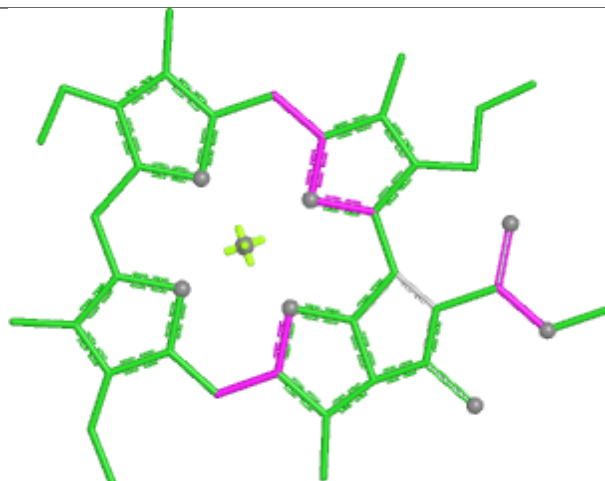
Rings



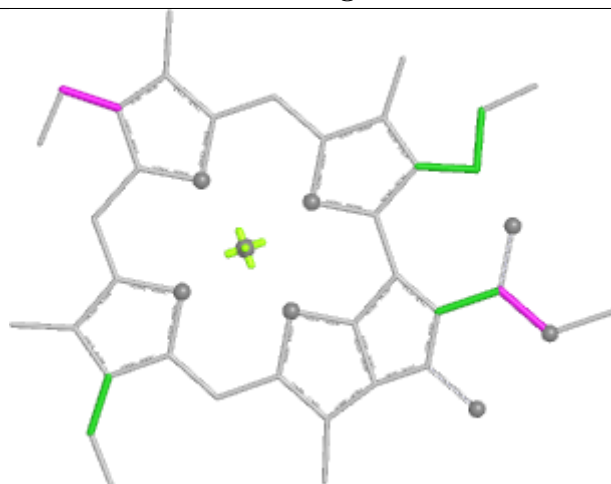
Ligand CLA A6 613



Bond lengths



Bond angles

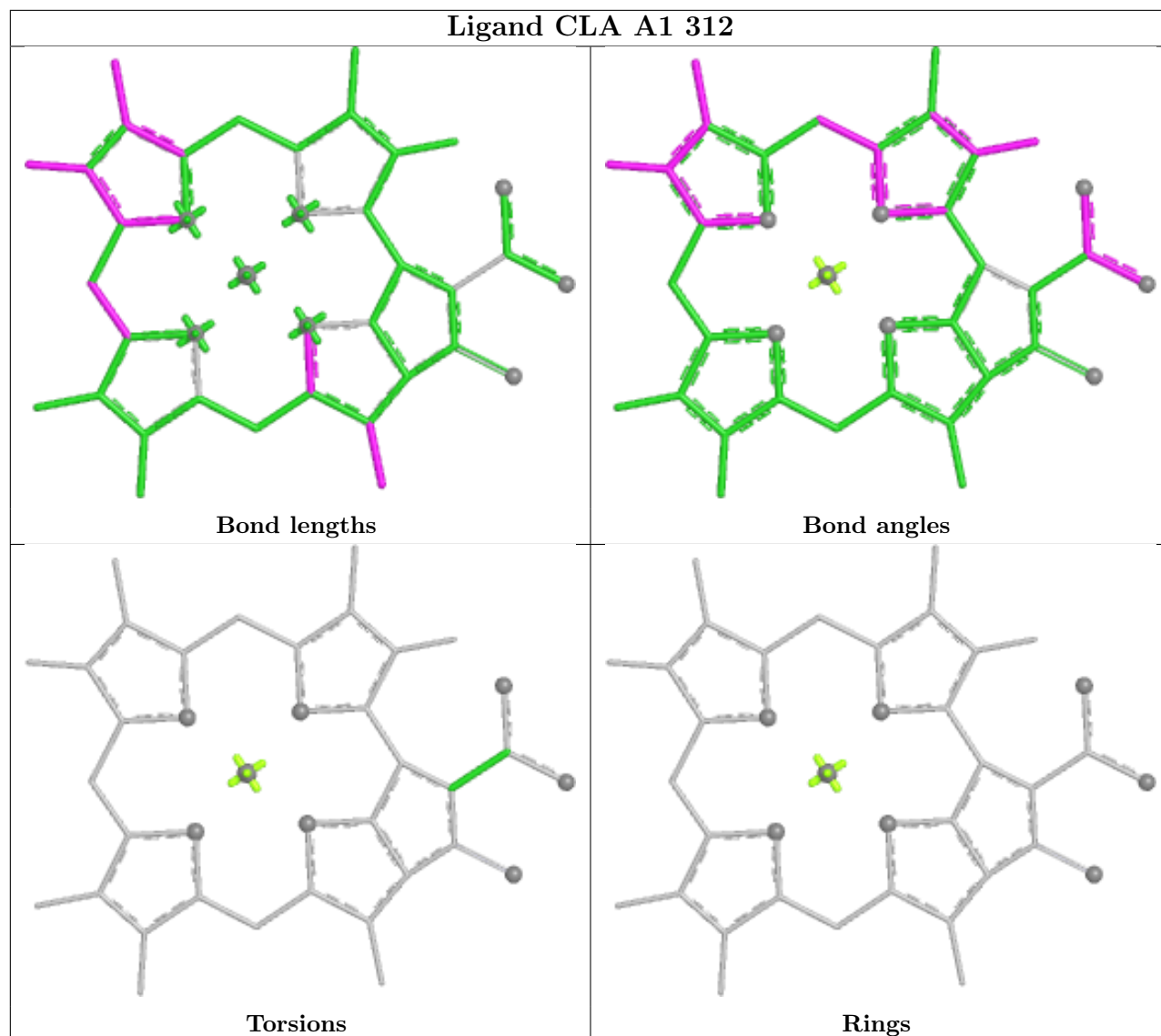


Torsions

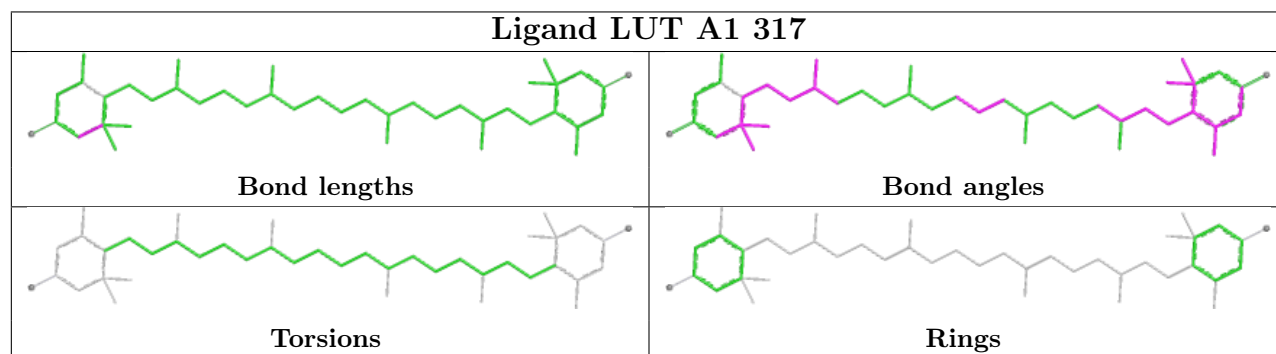


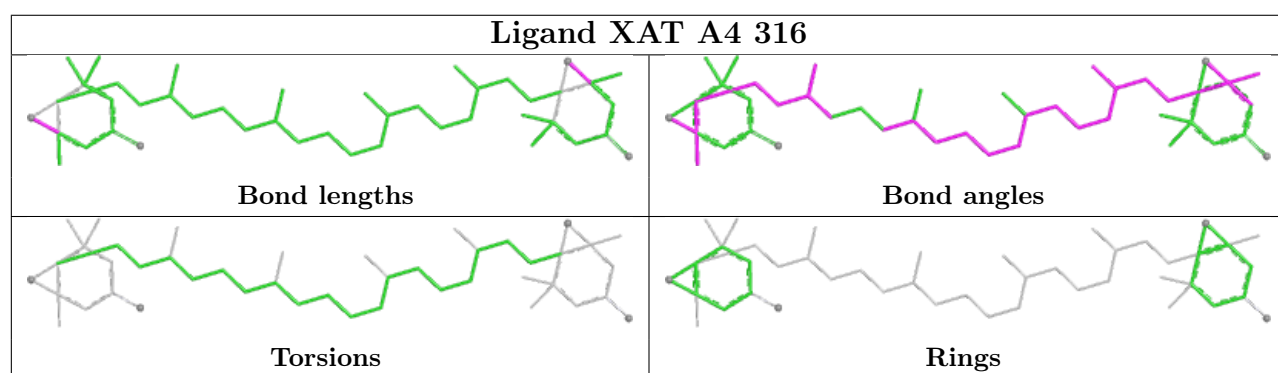
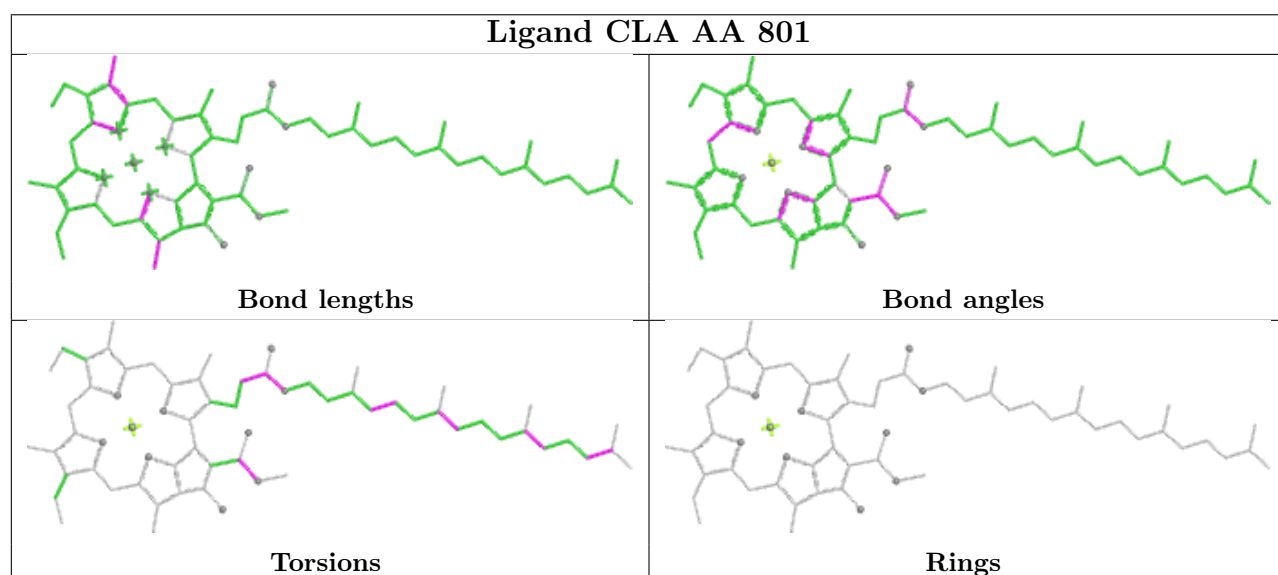
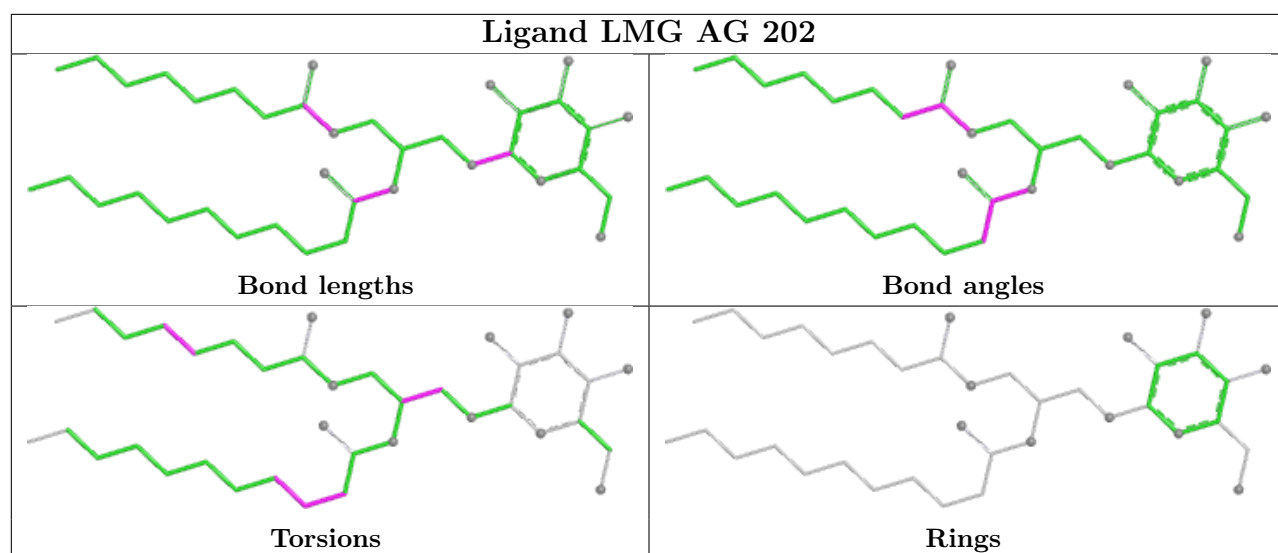
Rings

Ligand CLA A1 312

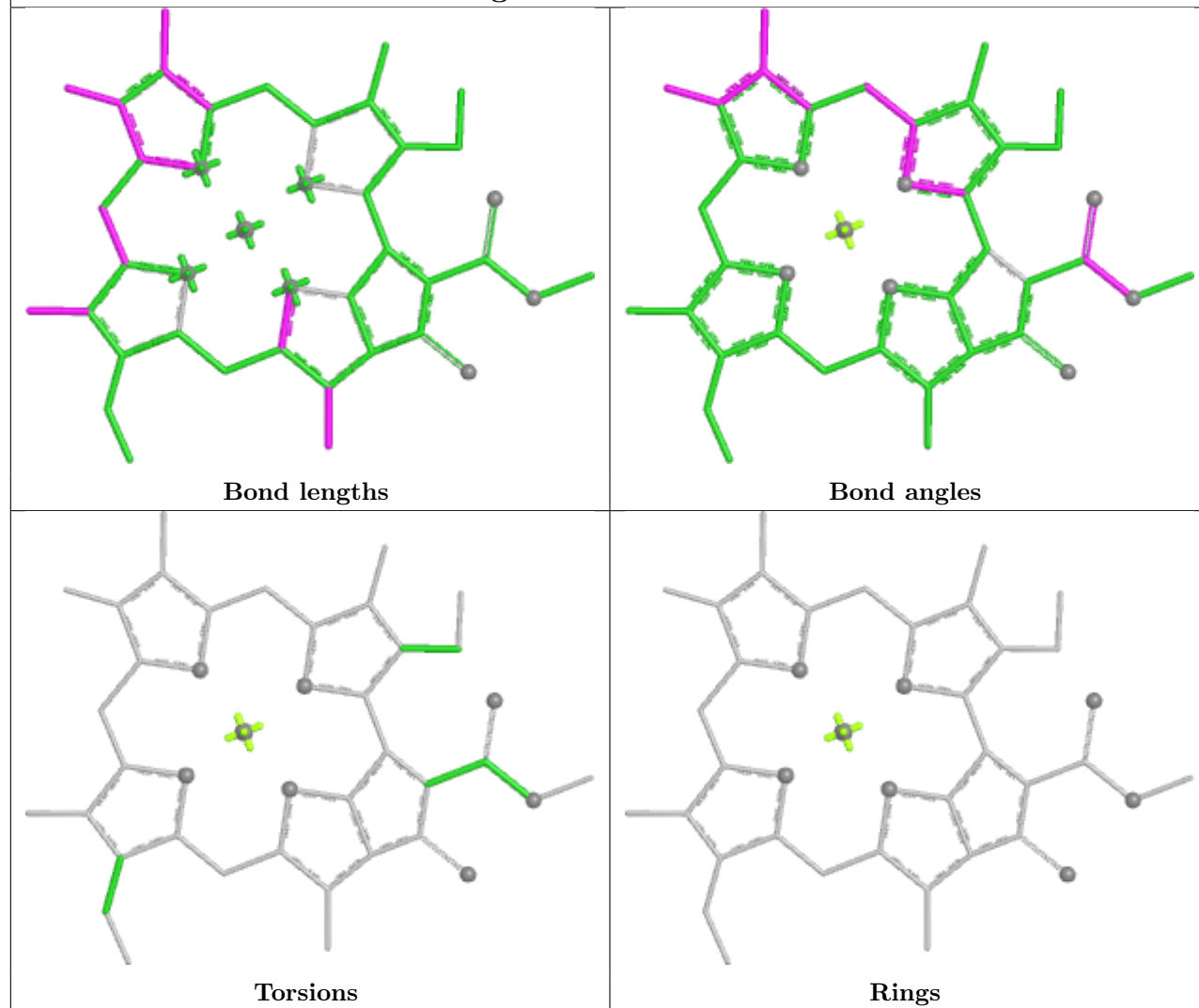


Ligand LUT A1 317

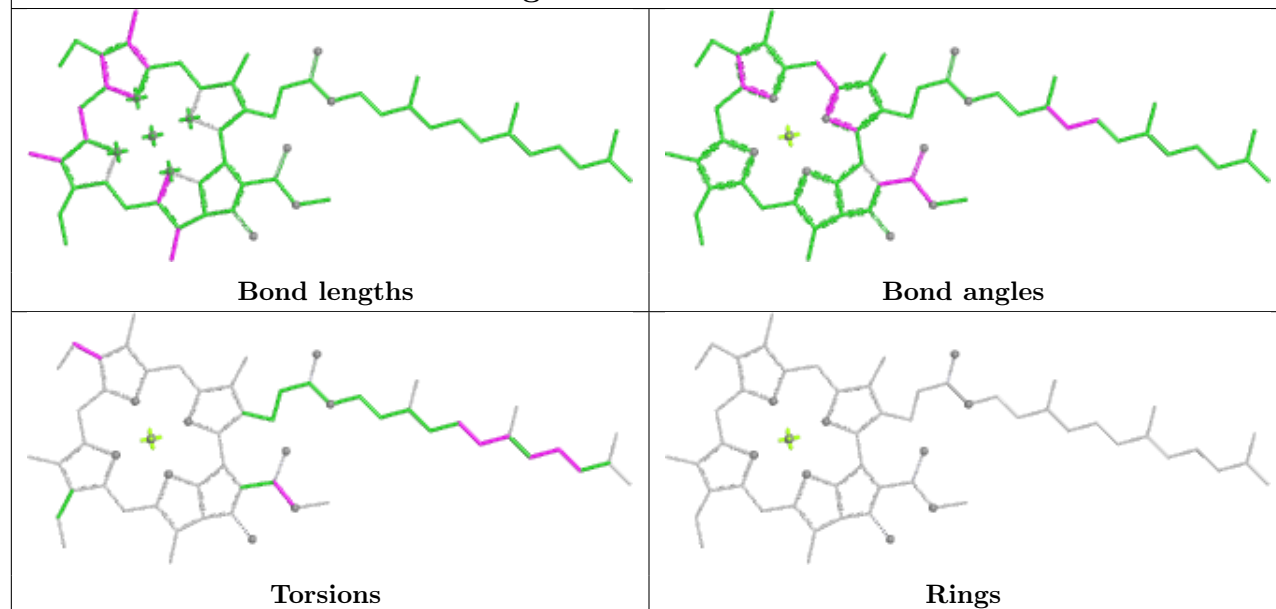




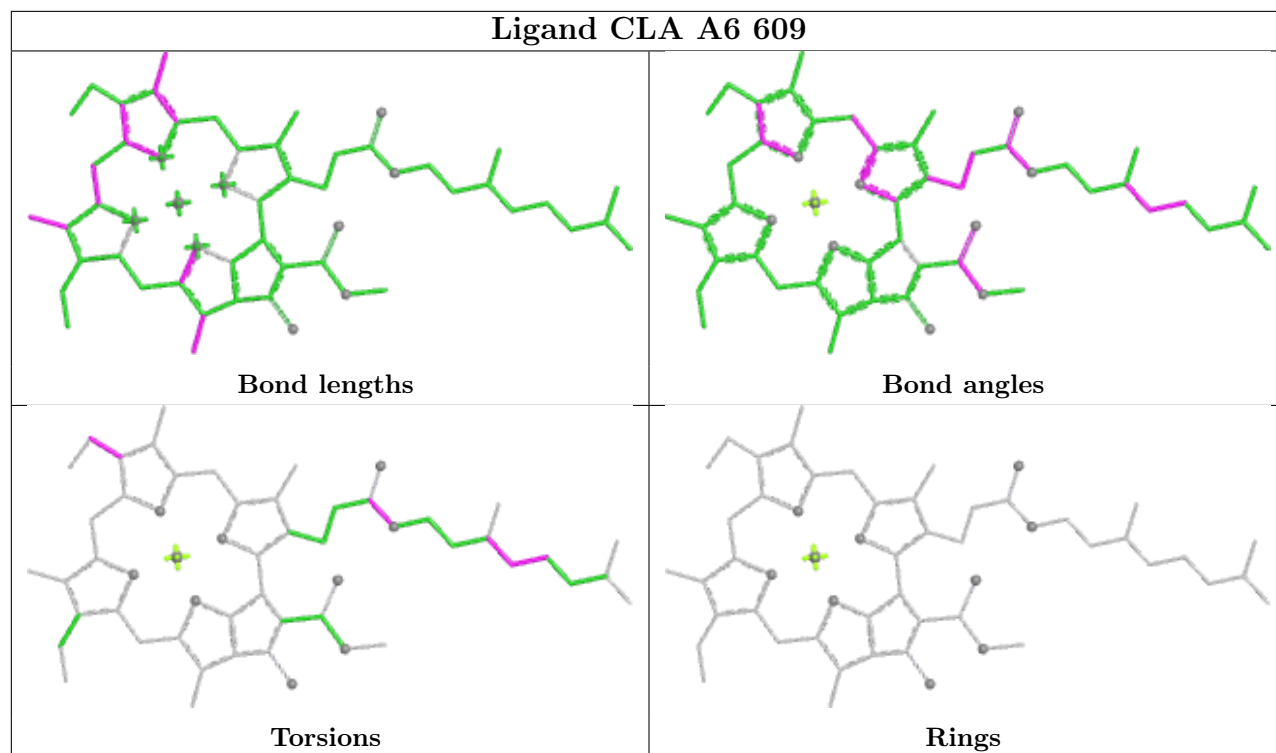
Ligand CLA A3 306



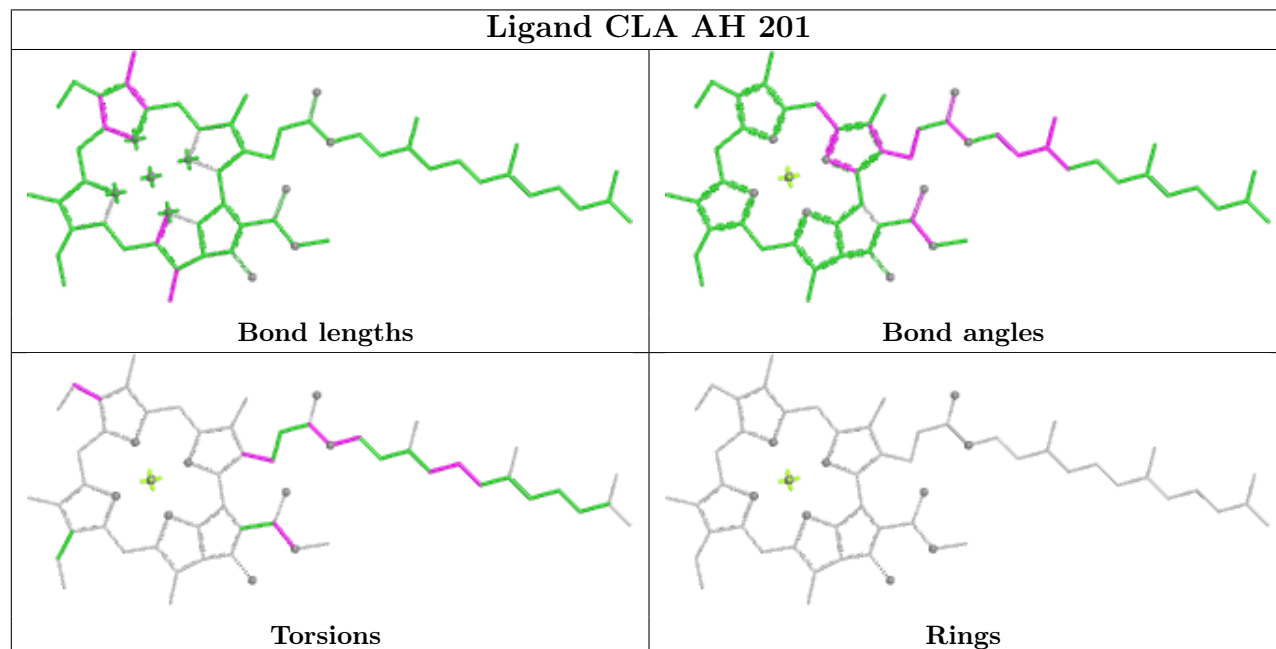
Ligand CLA A3 302

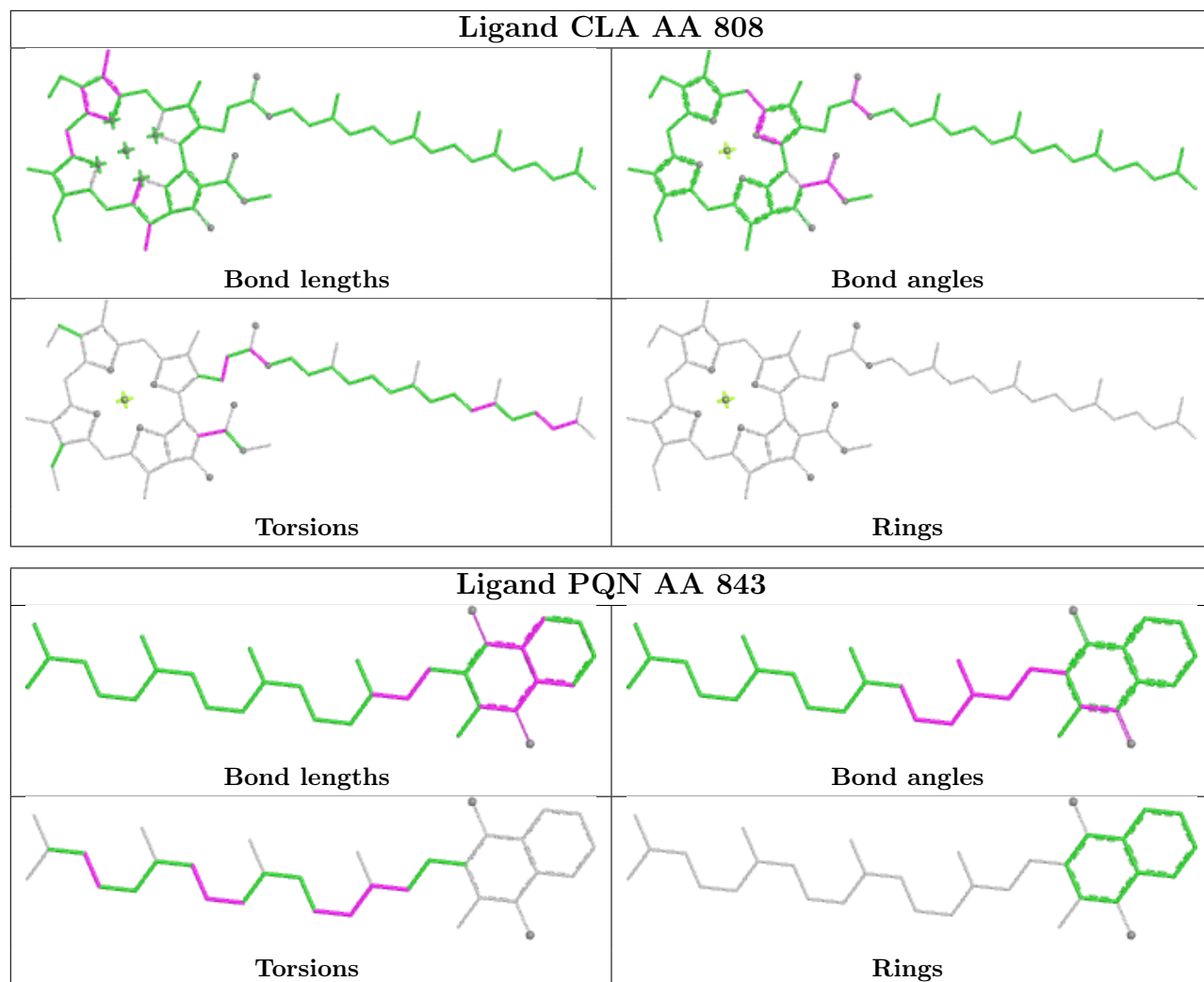


Ligand CLA A6 609

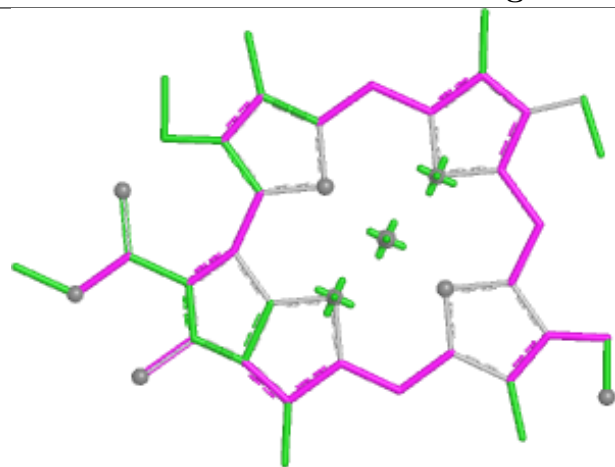


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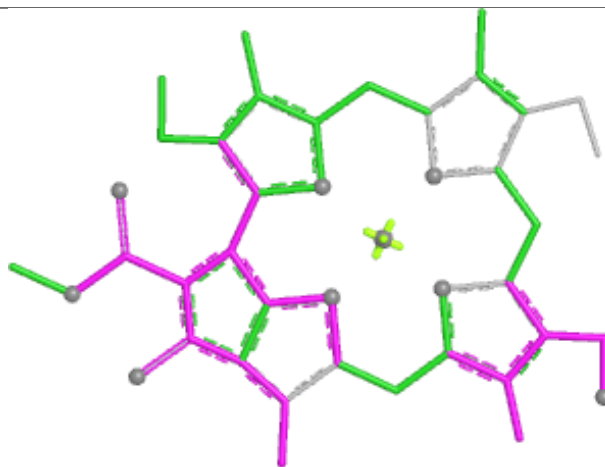




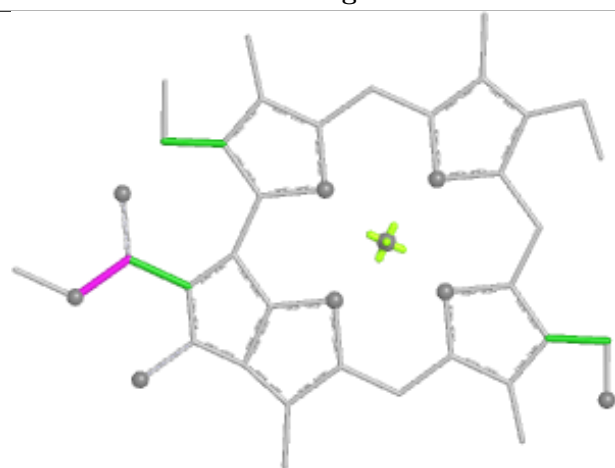
Ligand CHL A6 605



Bond lengths



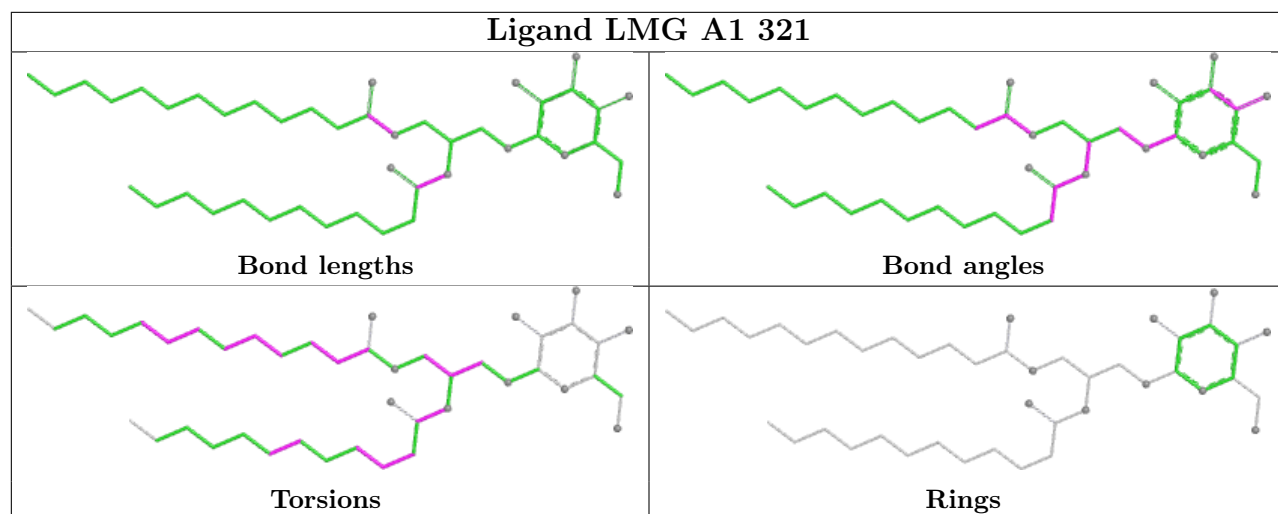
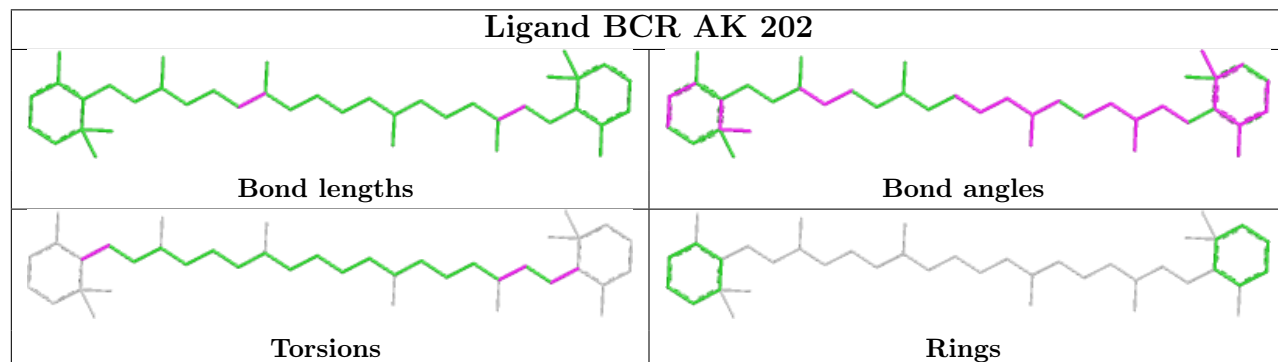
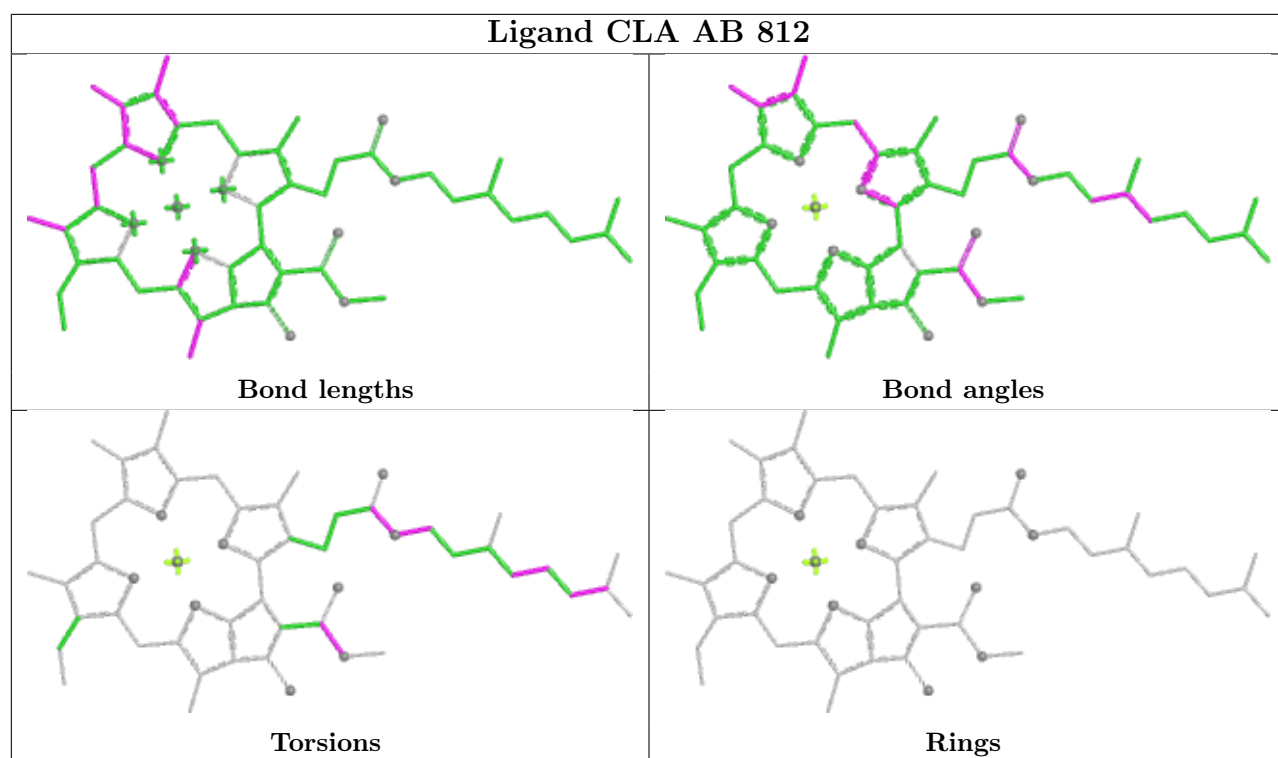
Bond angles



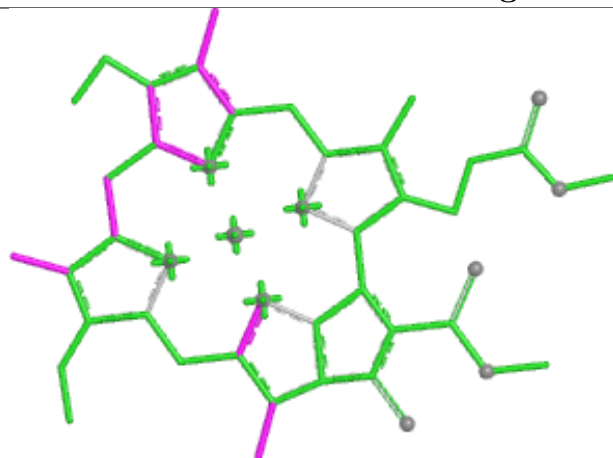
Torsions



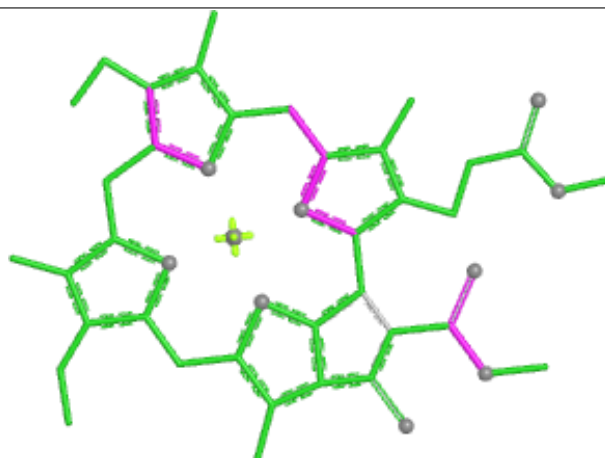
Rings



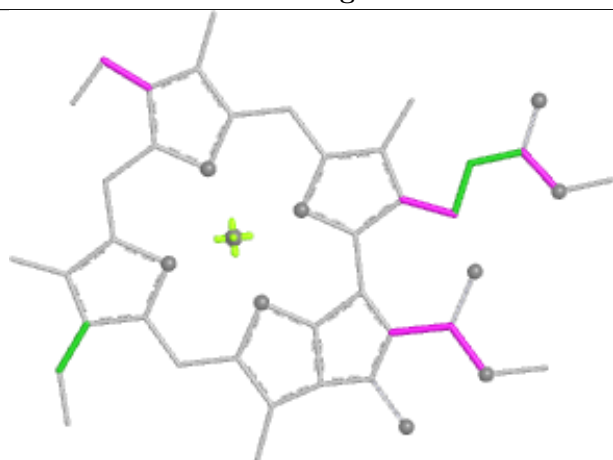
Ligand CLA AK 204



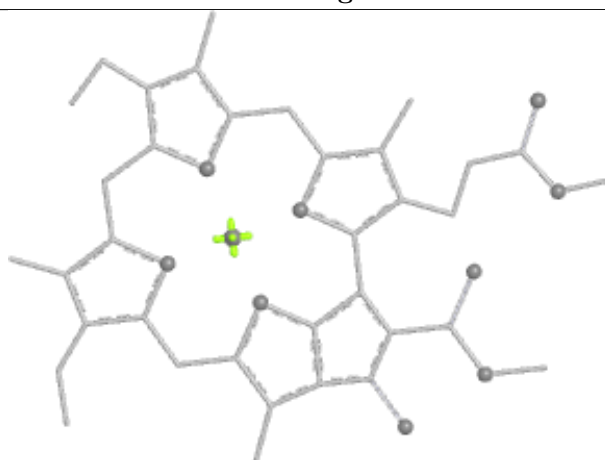
Bond lengths



Bond angles

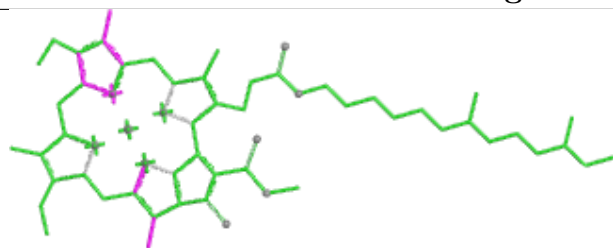


Torsions

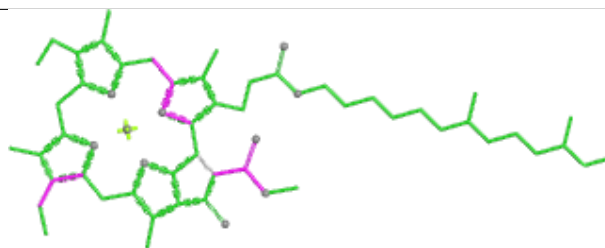


Rings

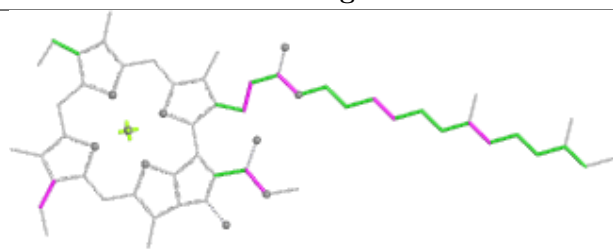
Ligand CLA A1 304



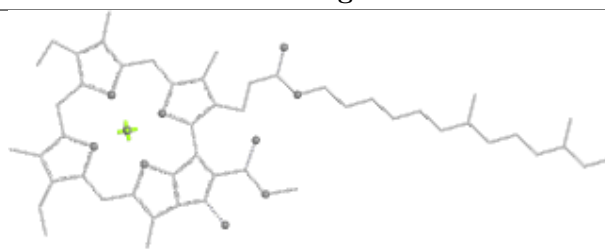
Bond lengths



Bond angles

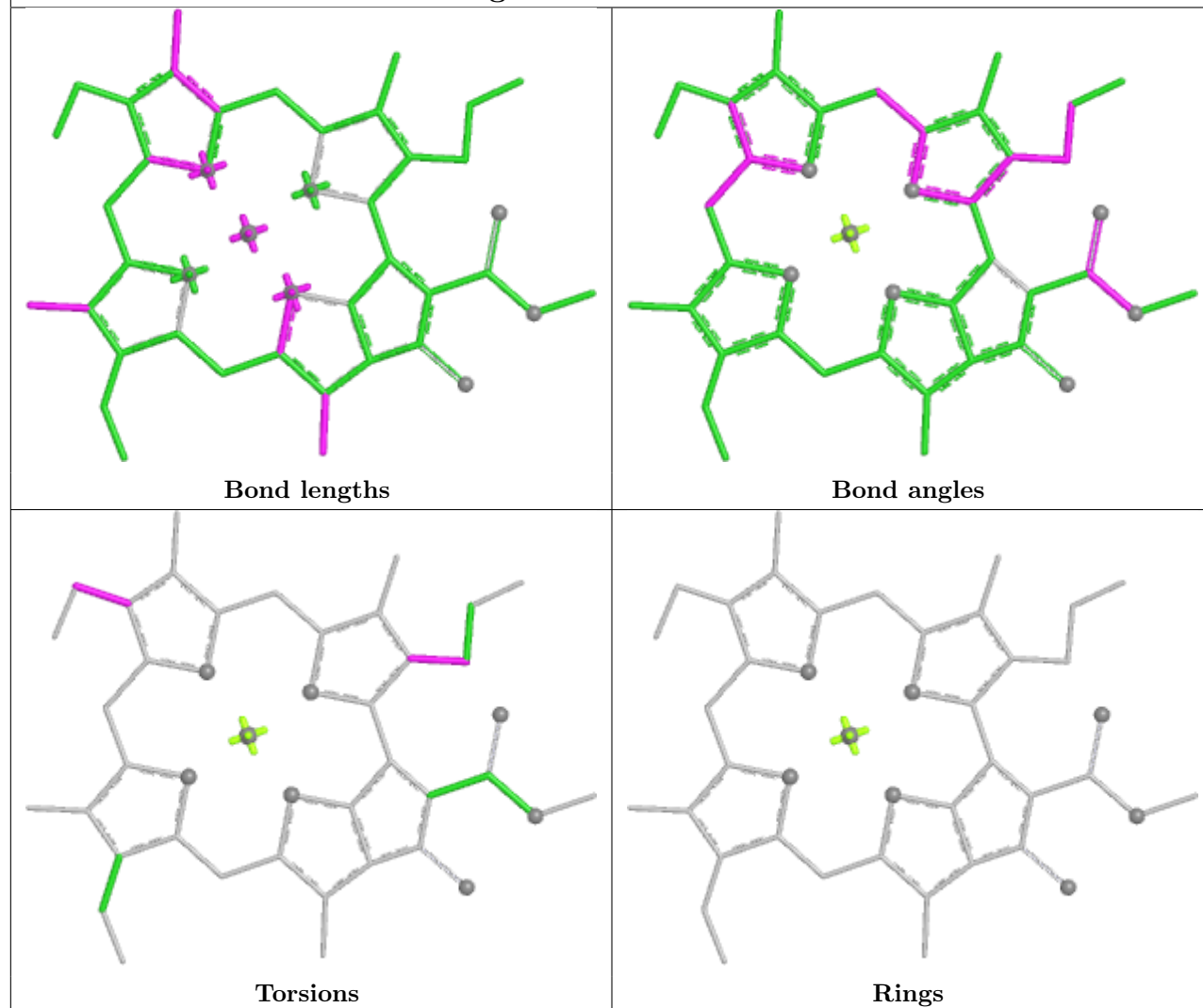


Torsions

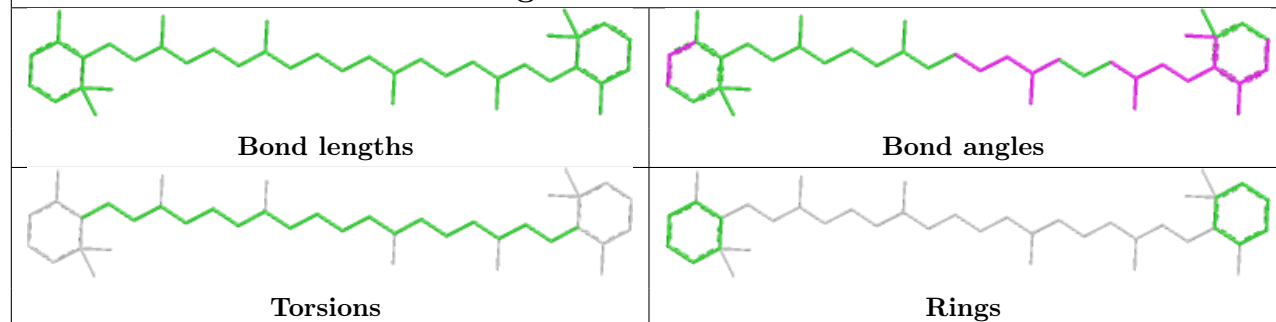


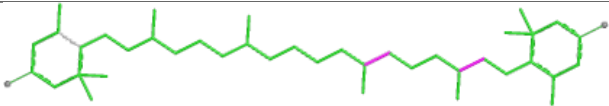
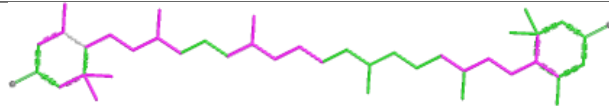

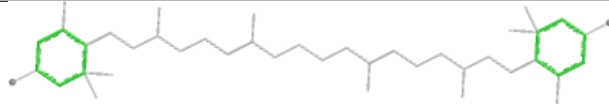
Rings

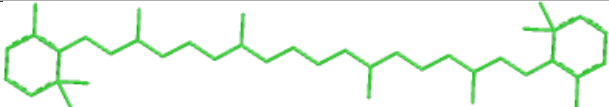
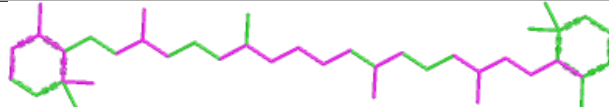
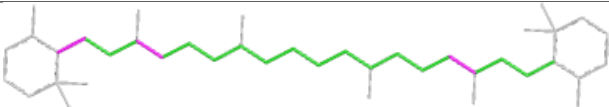
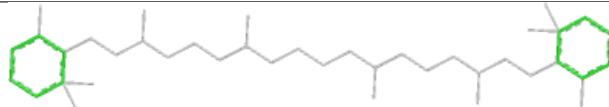
Ligand CLA AB 824

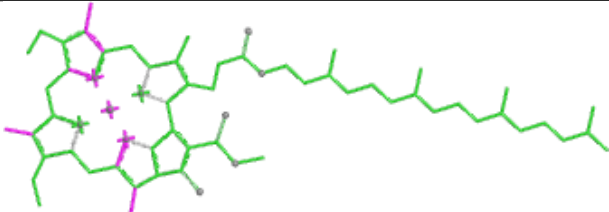
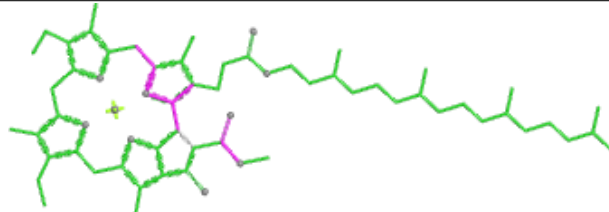
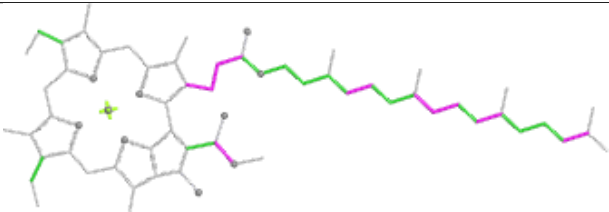
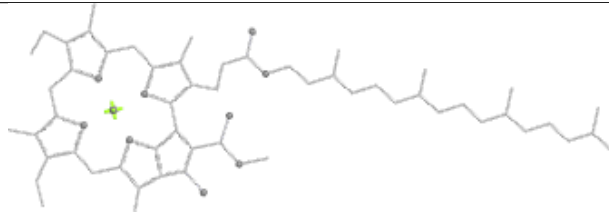


Ligand BCR AB 847

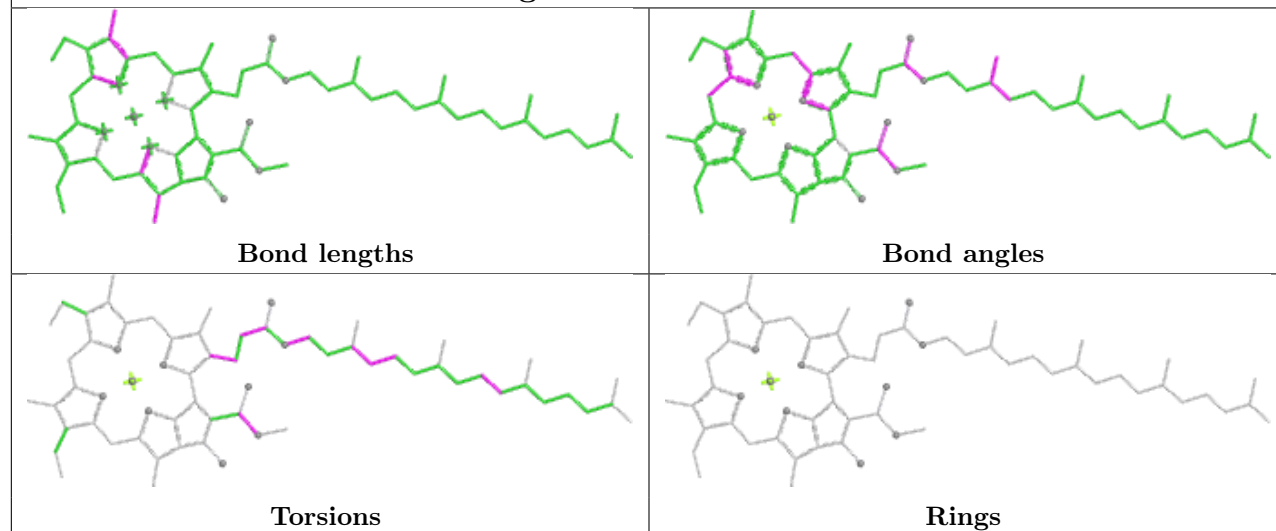


Ligand LUT AF 806	
	
Bond lengths	Bond angles
	
Torsions	Rings

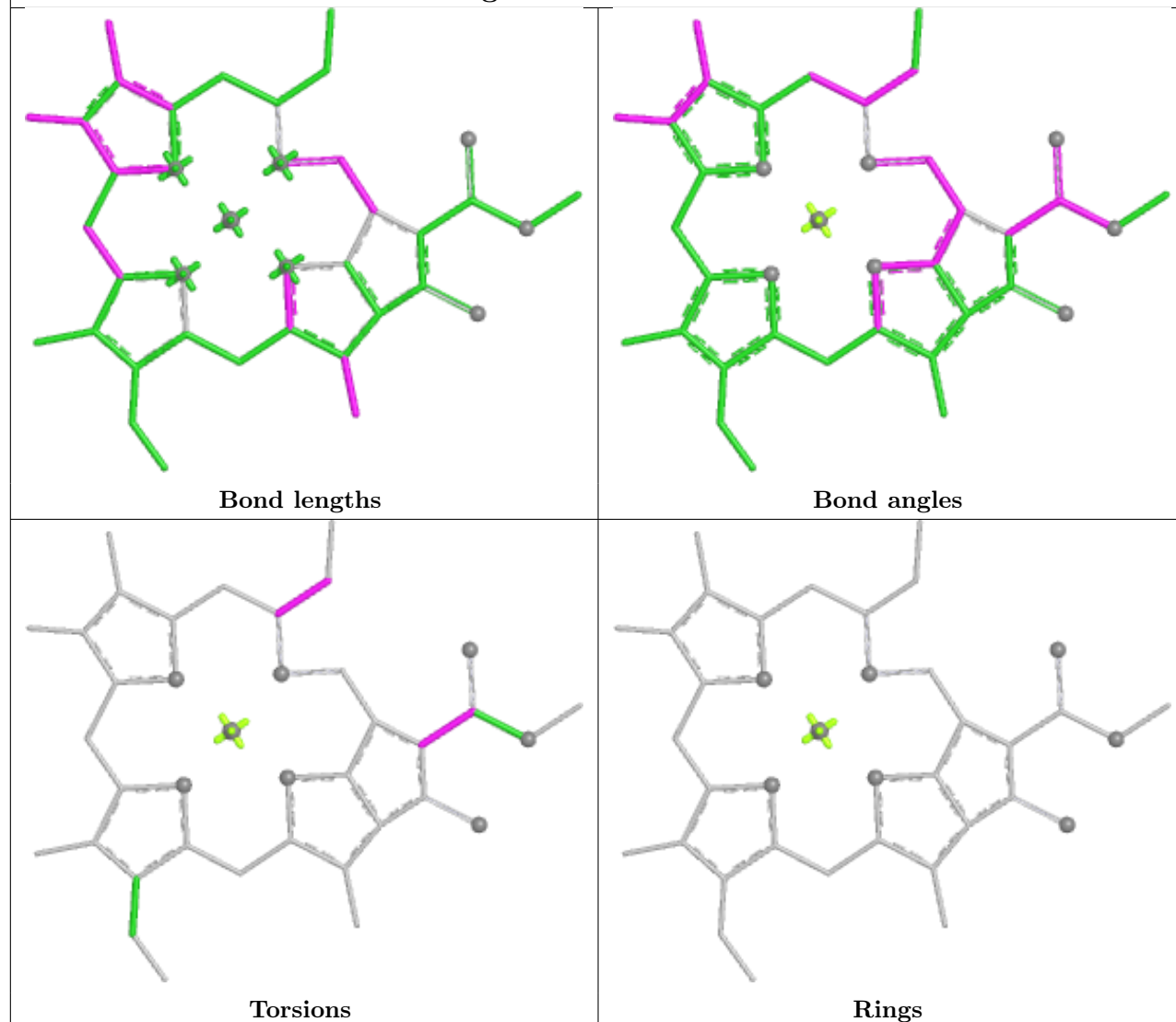
Ligand BCR AB 846	
	
Bond lengths	Bond angles
	
Torsions	Rings

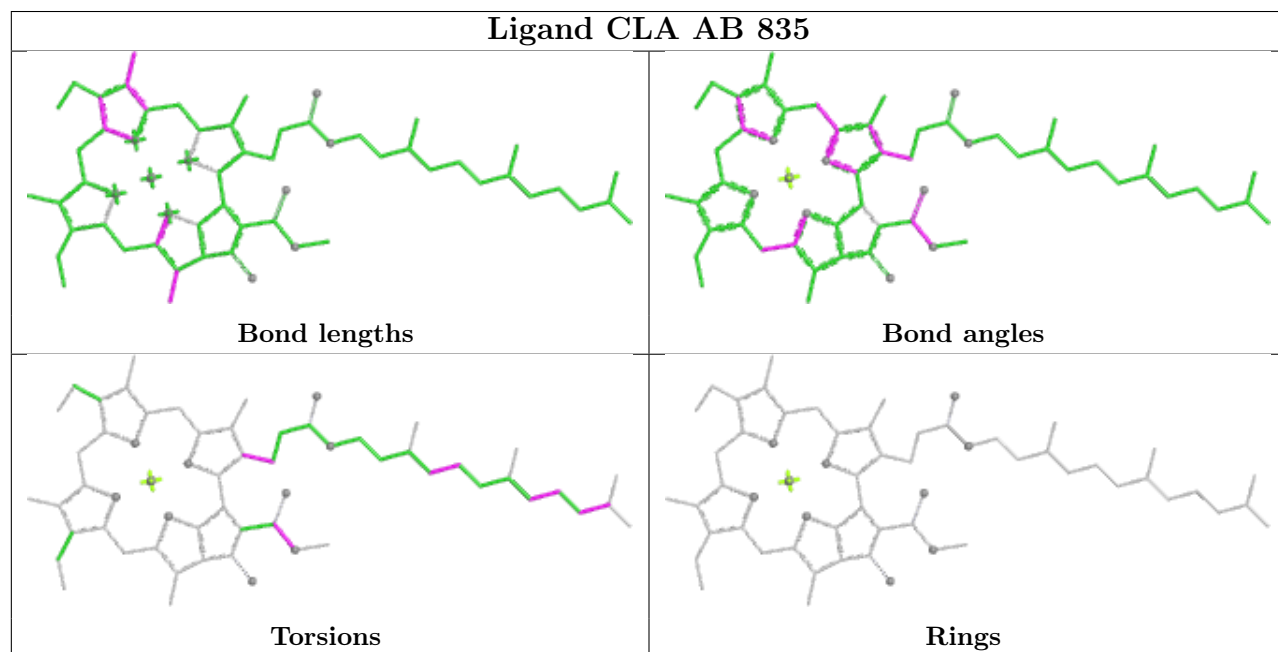
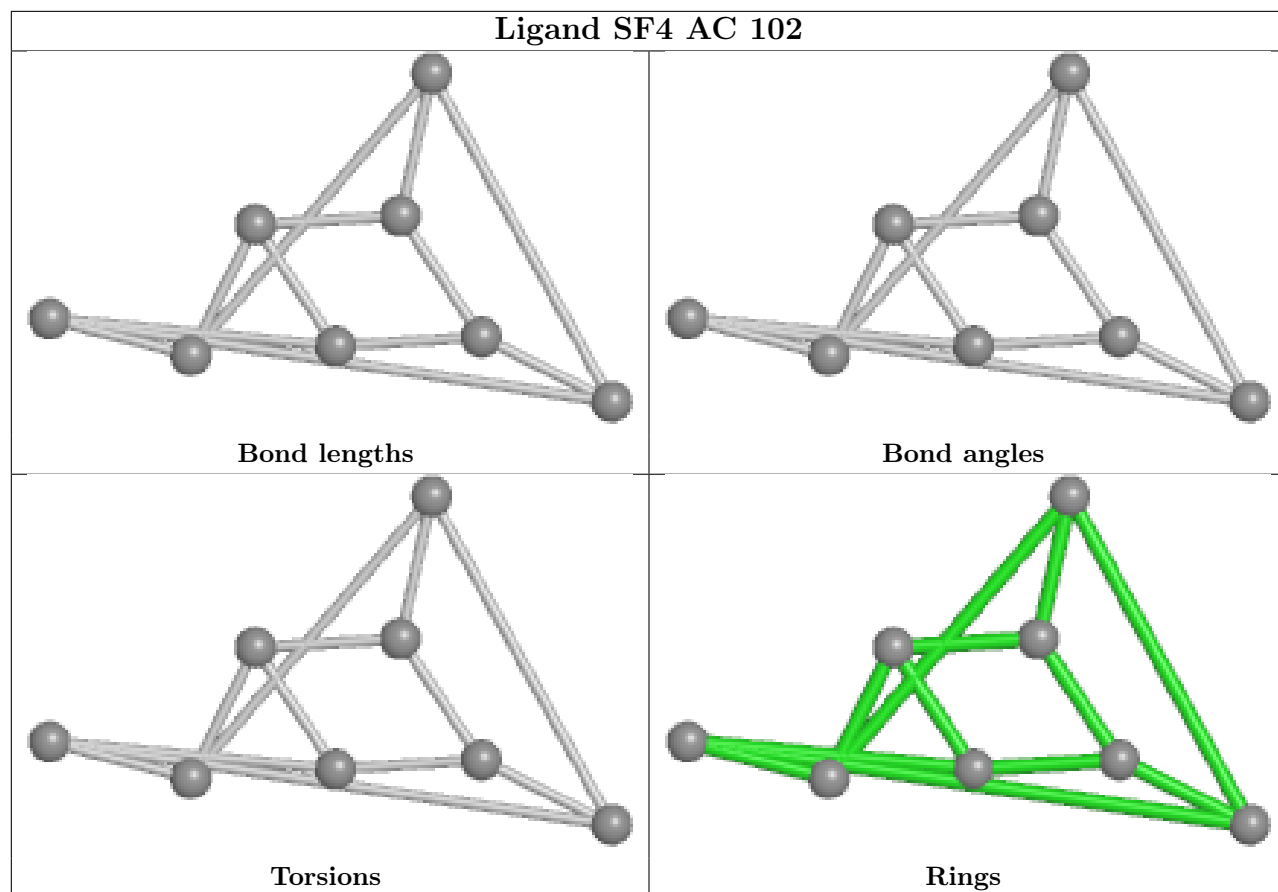
Ligand CLA AB 810	
	
Bond lengths	Bond angles
	
Torsions	Rings

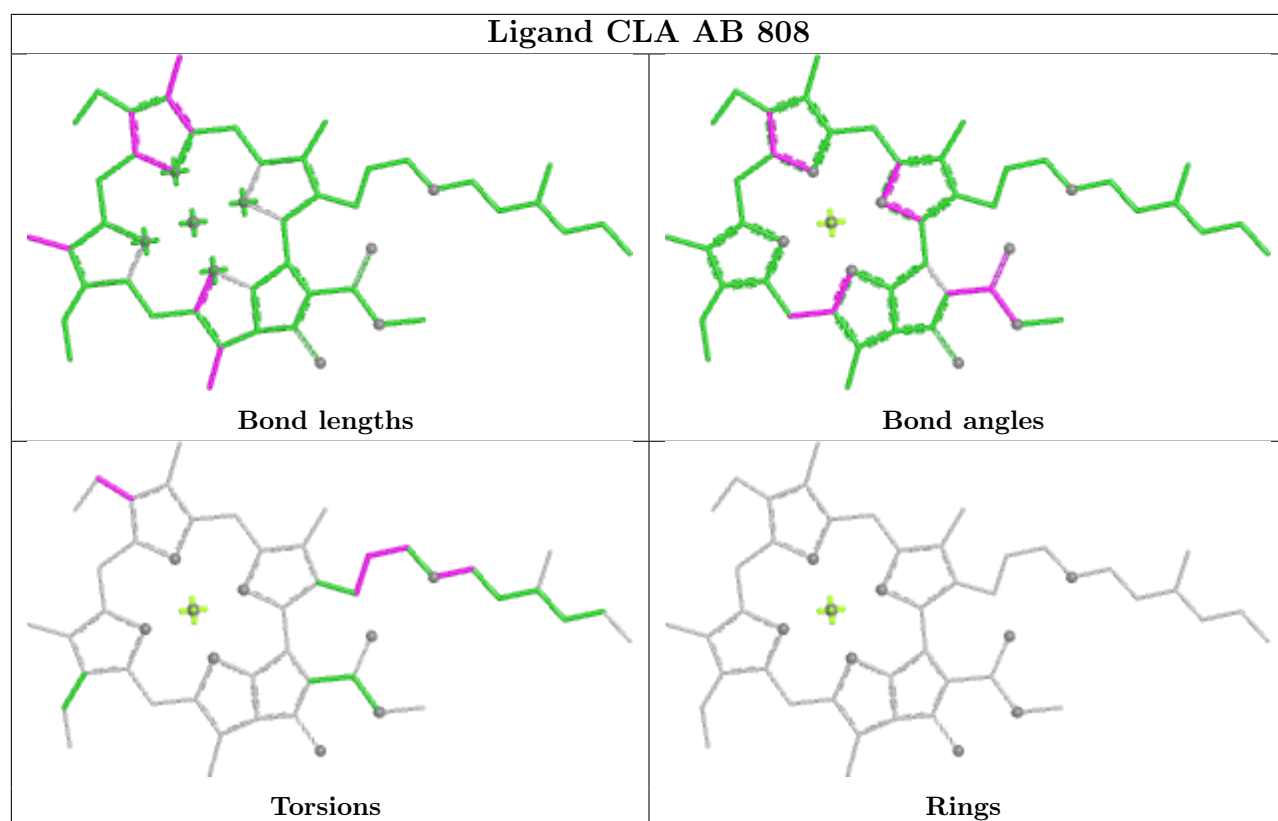
Ligand CLA AB 833



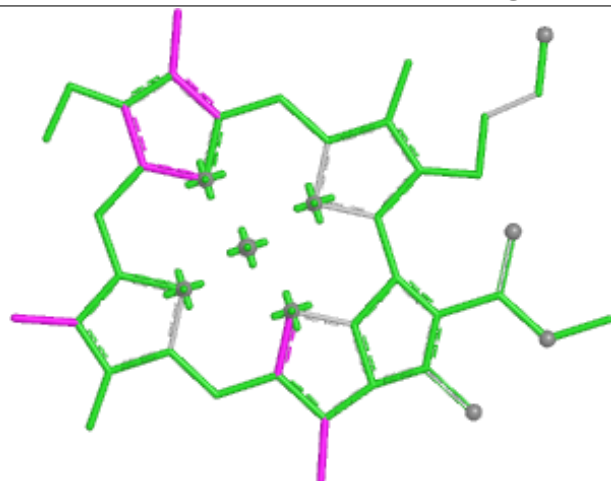
Ligand CLA A6 610



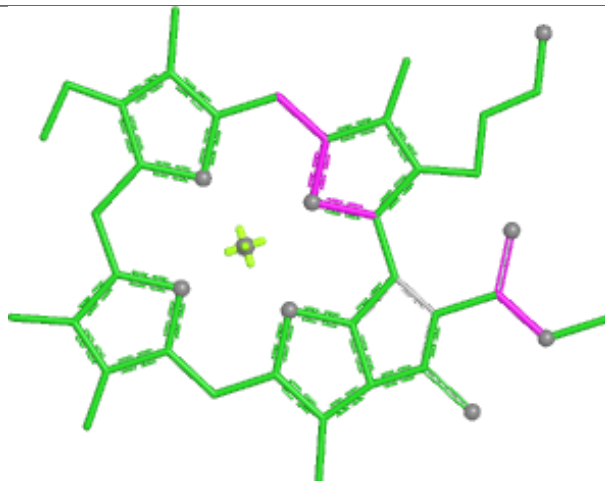




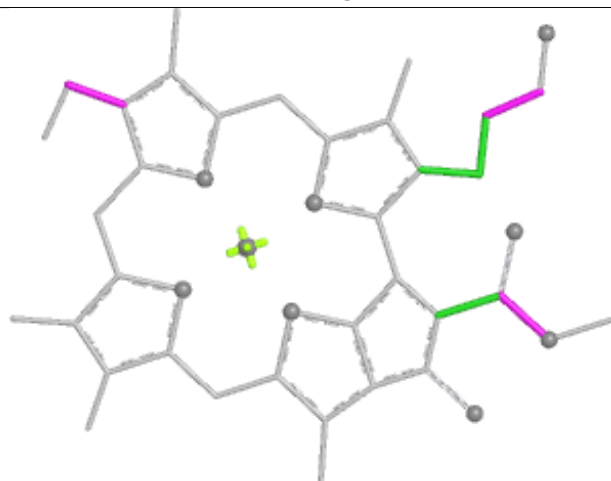
Ligand CLA A6 604



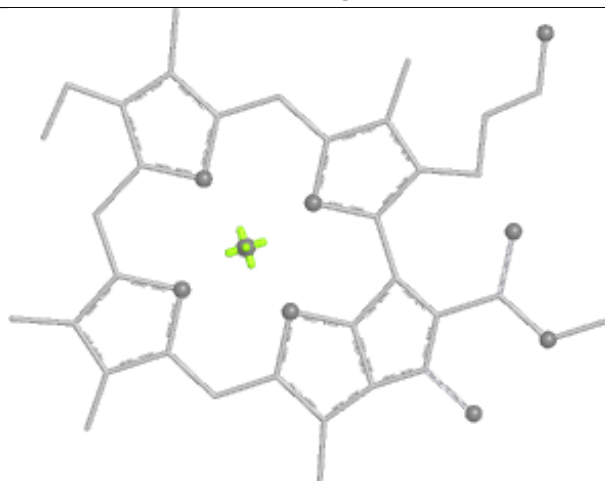
Bond lengths



Bond angles

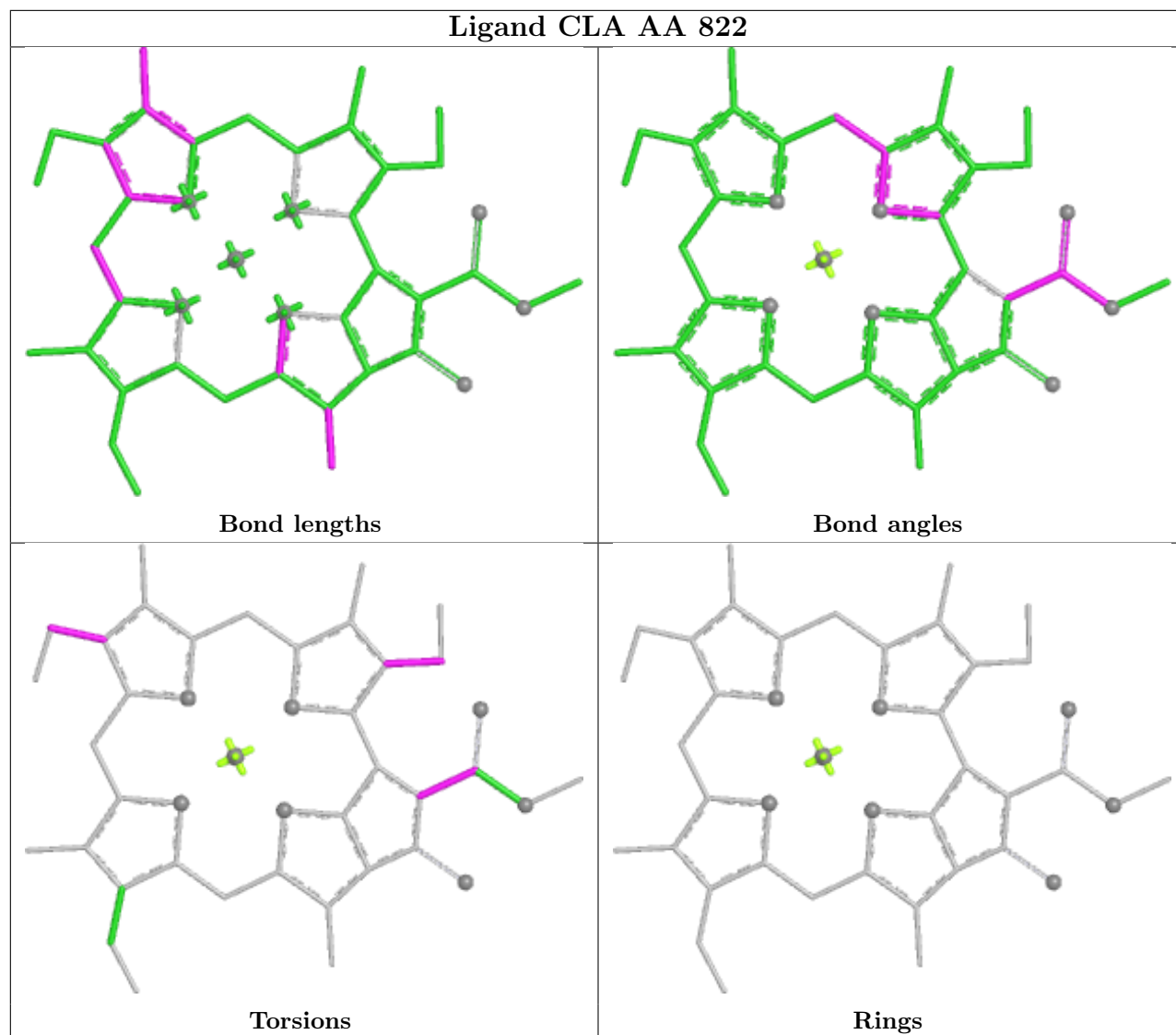


Torsions

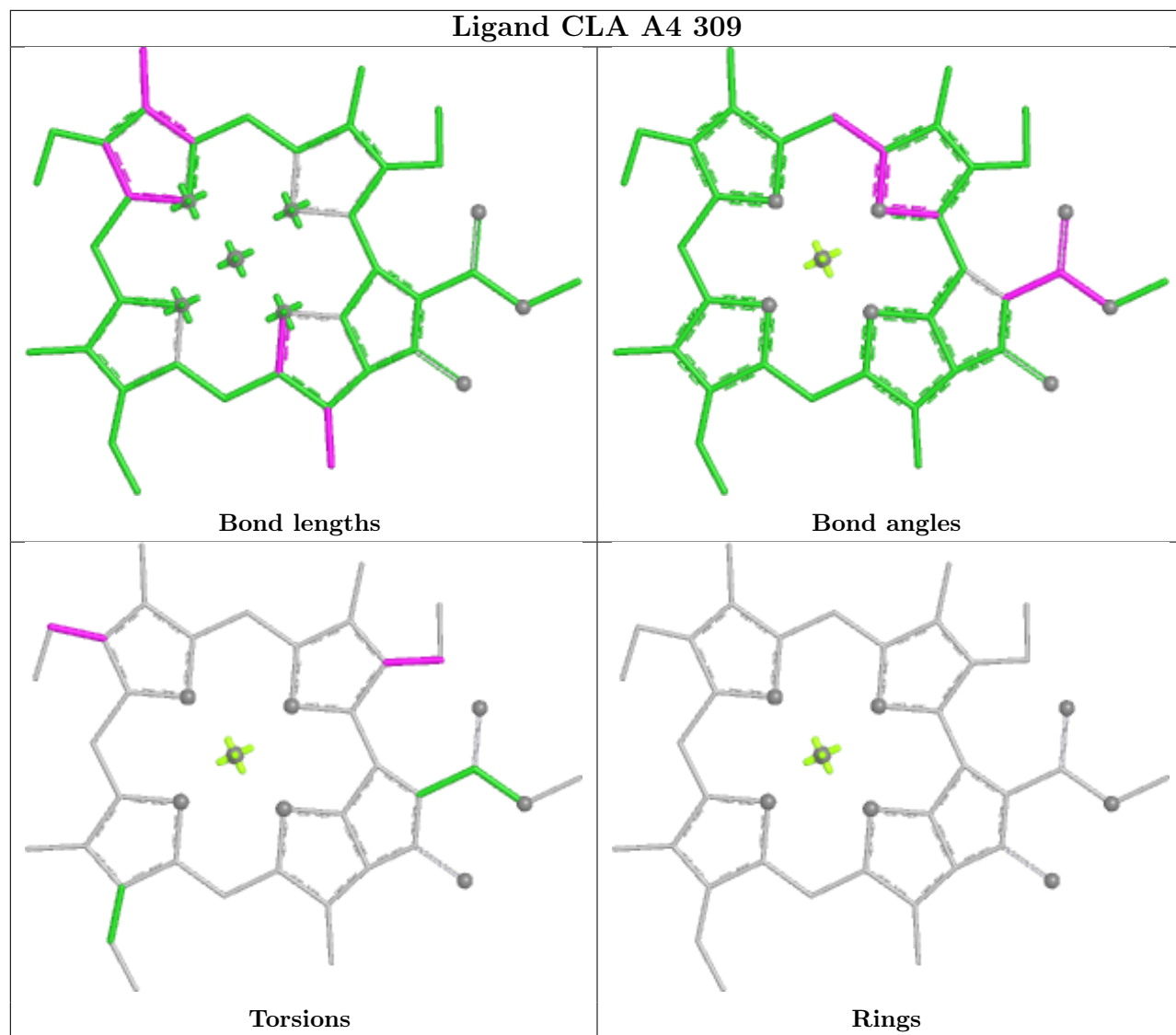


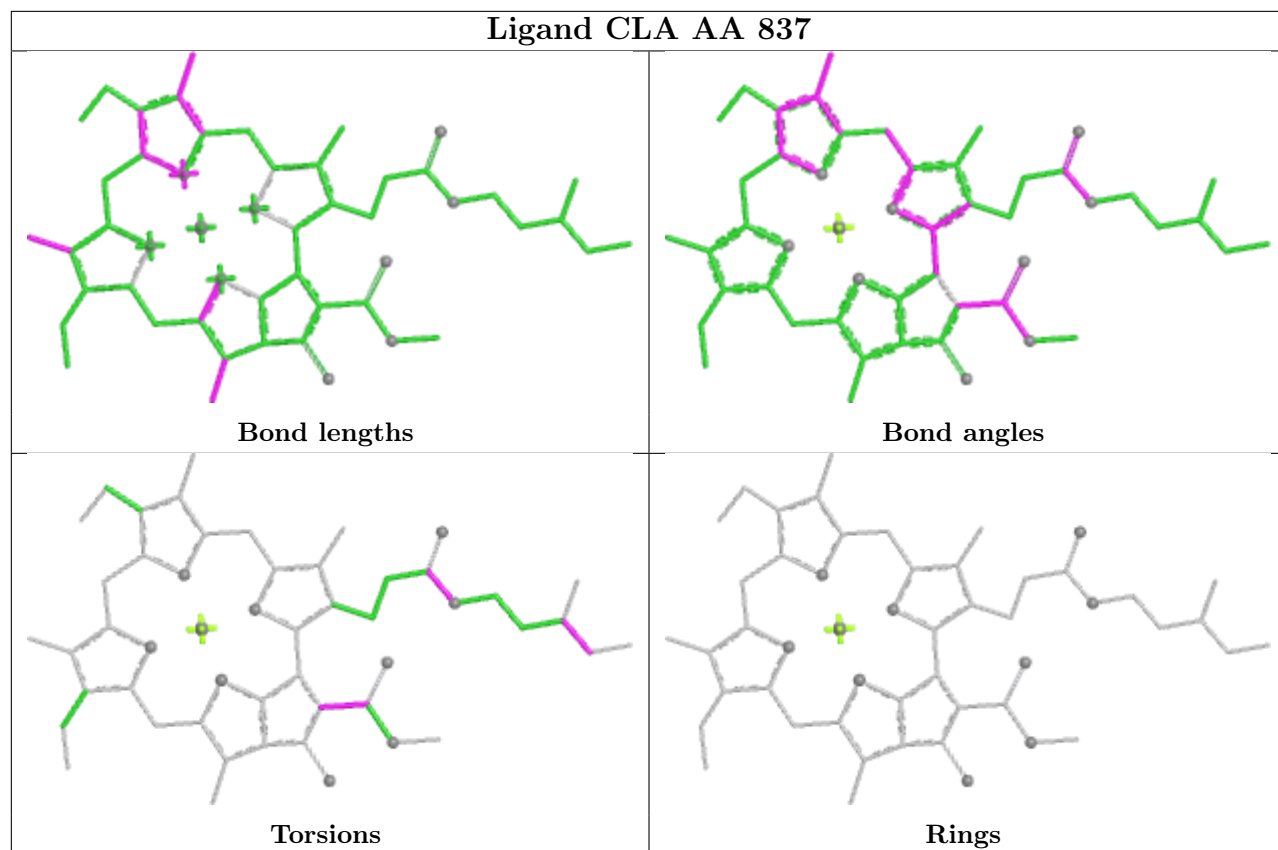
Rings

Ligand CLA AA 822

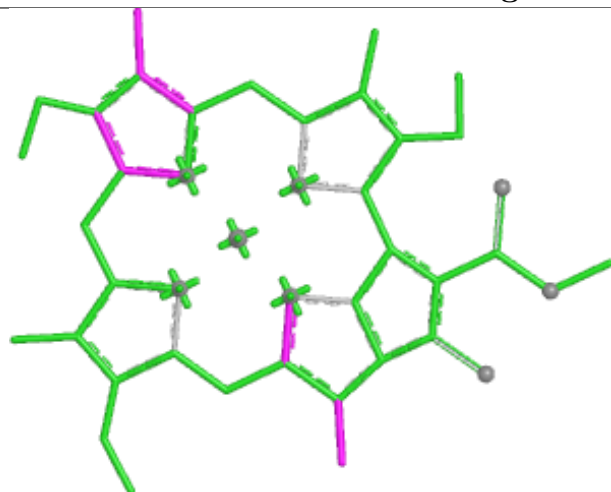


Ligand CLA A4 309

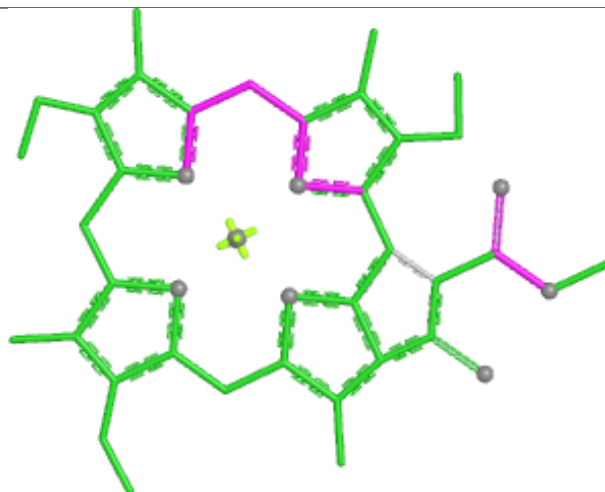




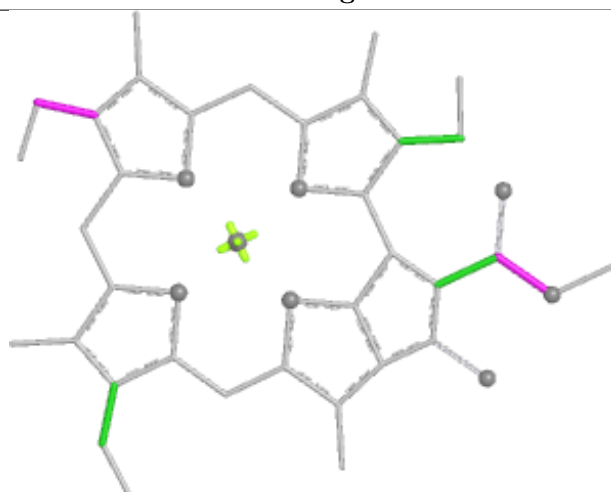
Ligand CLA AB 836



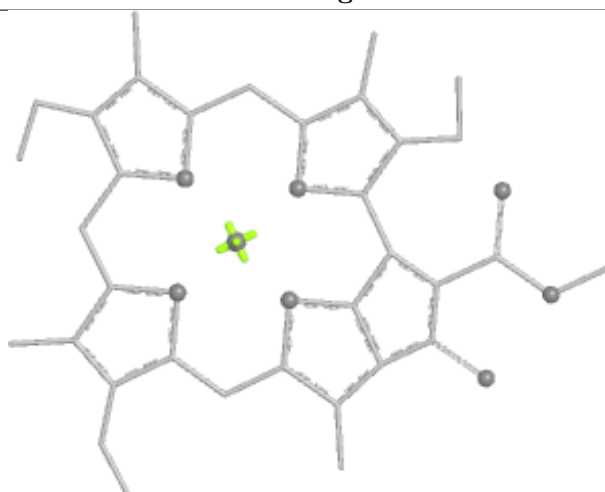
Bond lengths



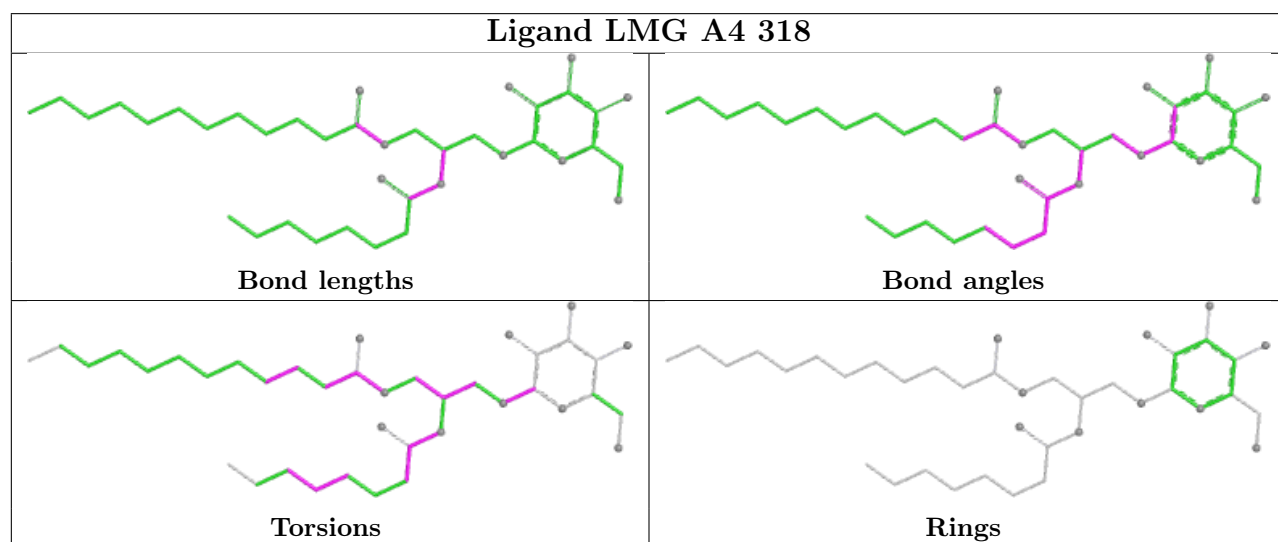
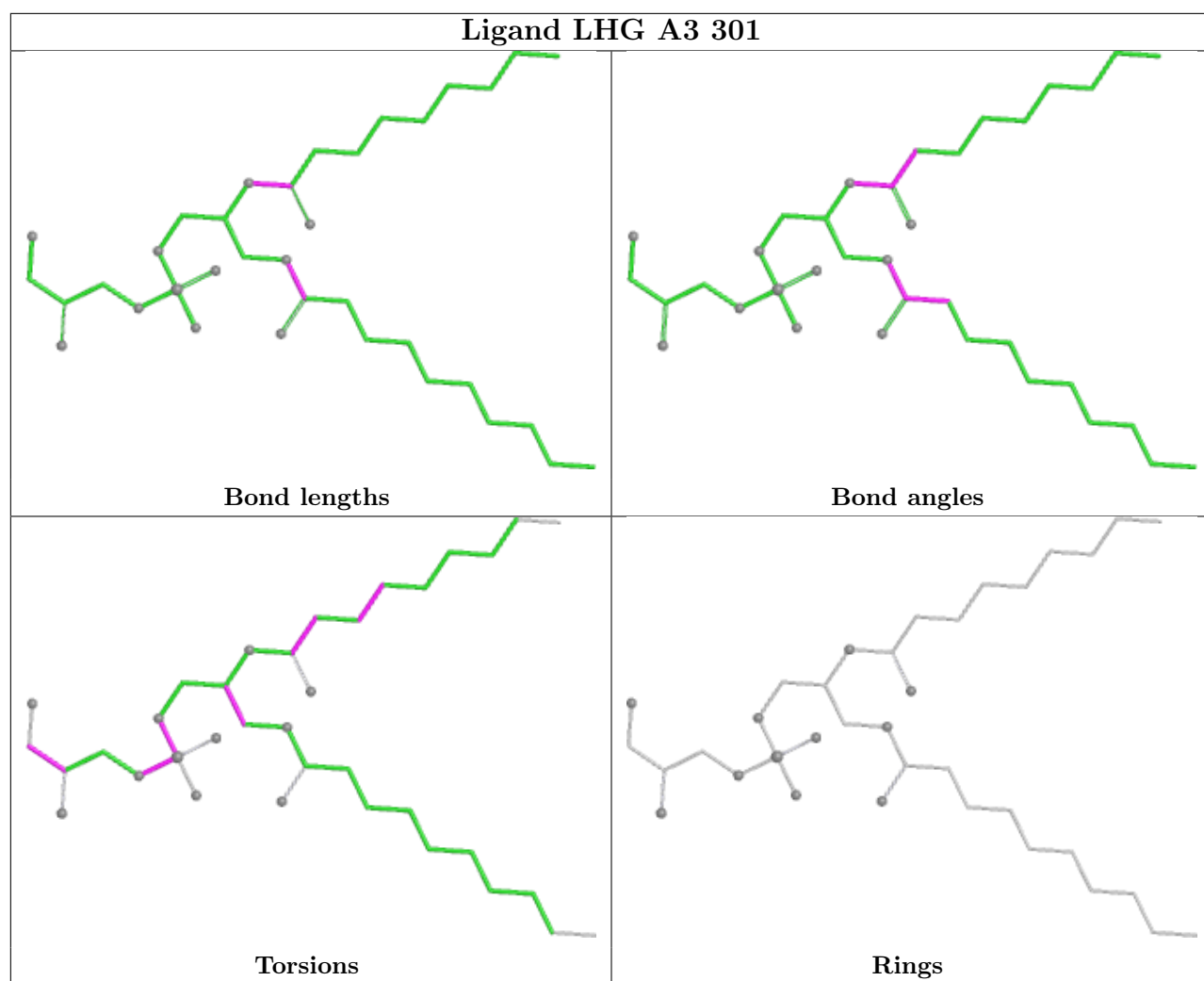
Bond angles

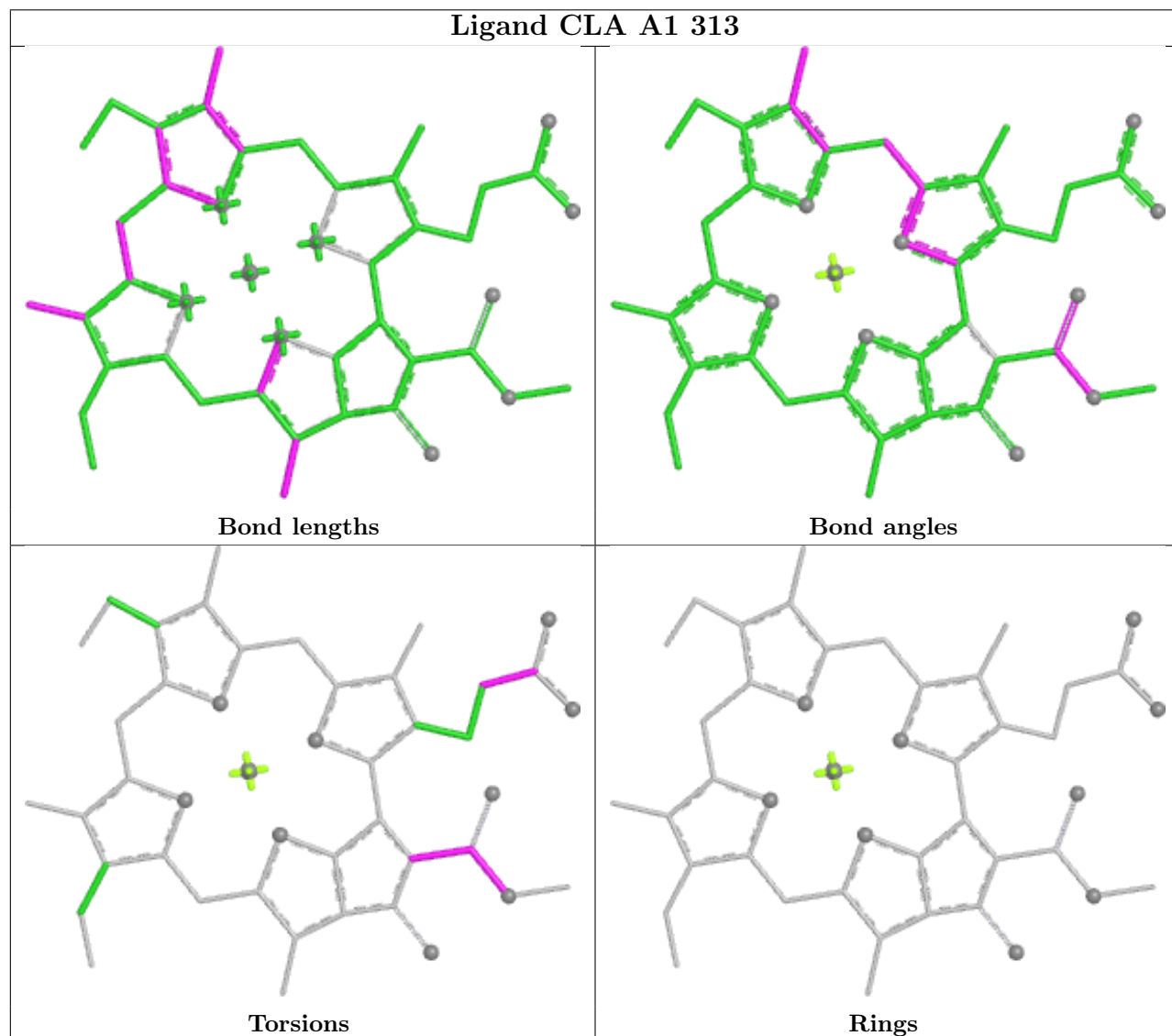
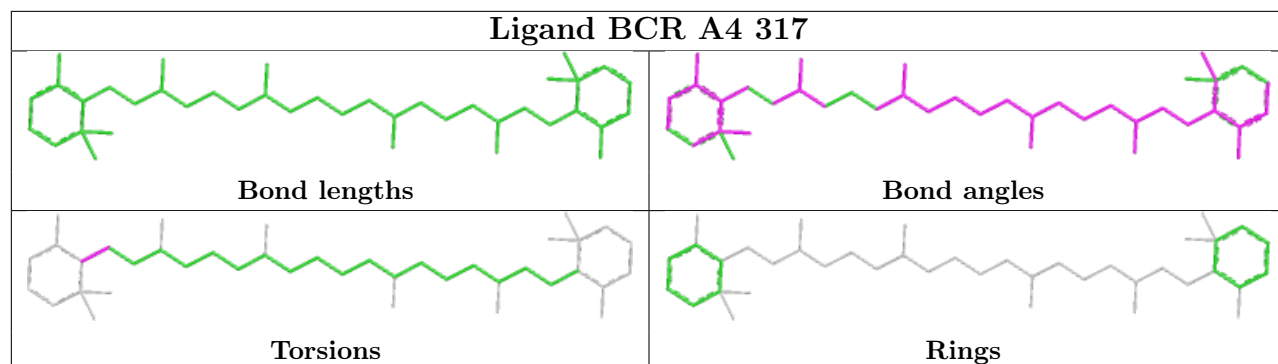


Torsions

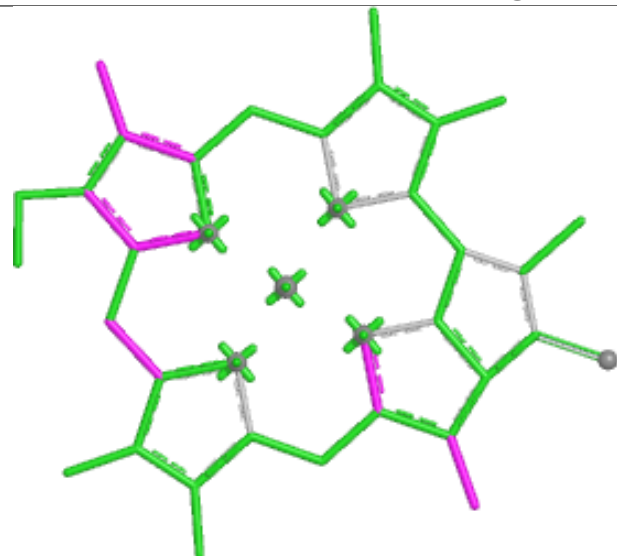


Rings

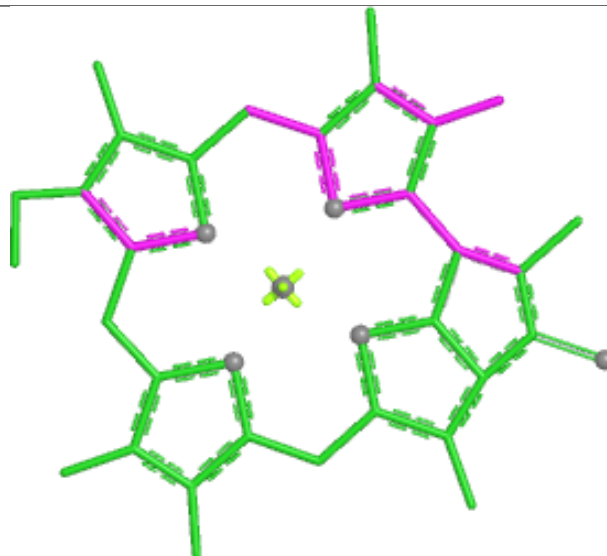




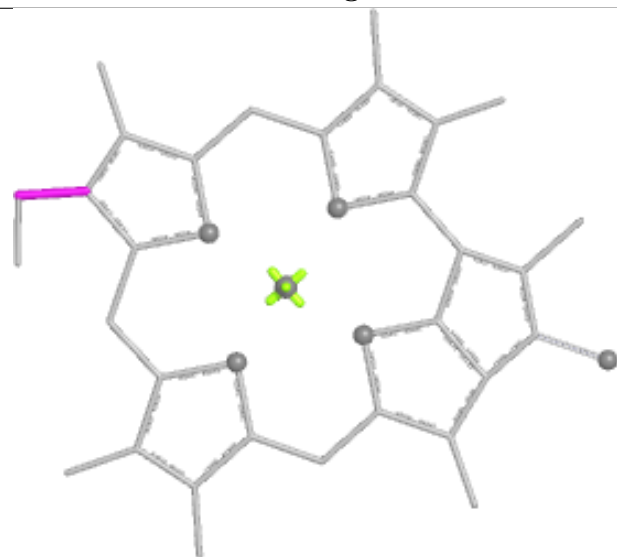
Ligand CLA A3 310



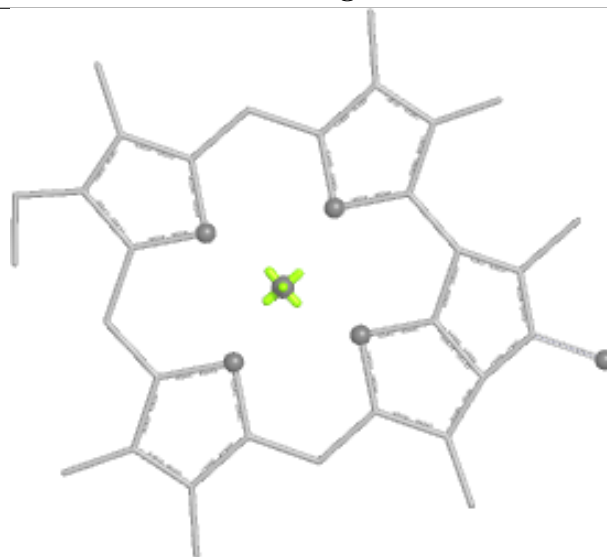
Bond lengths



Bond angles

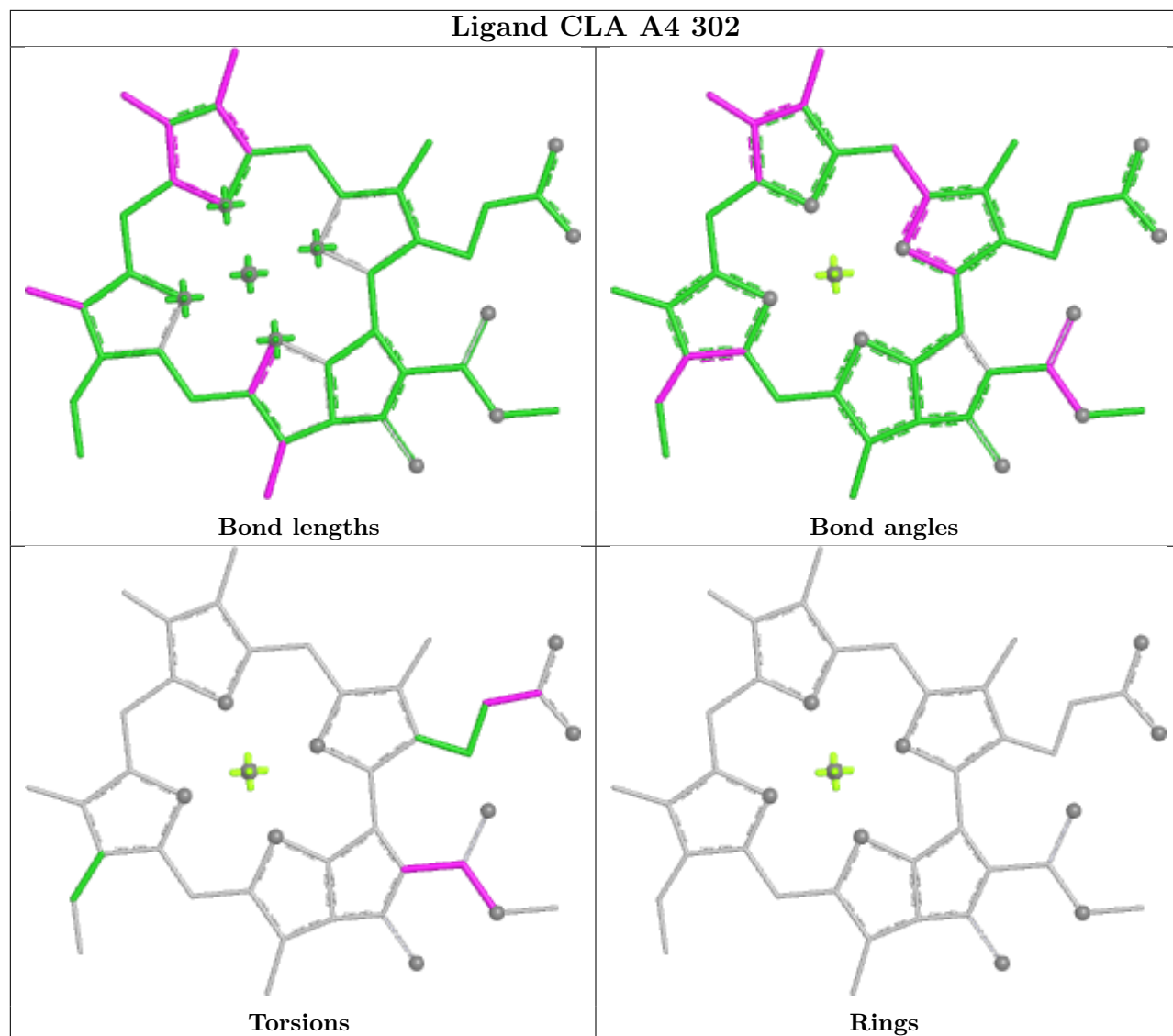


Torsions

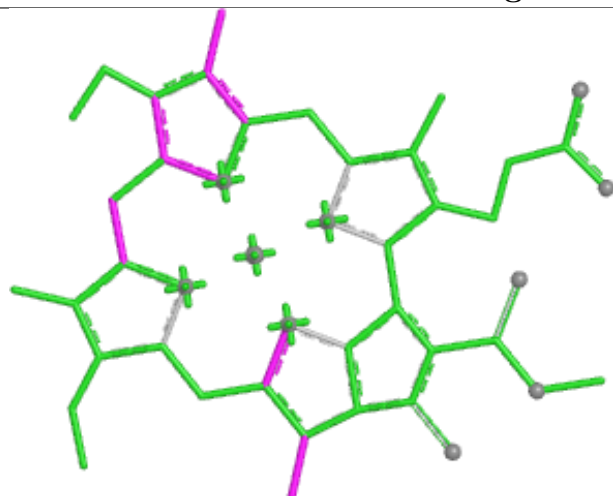


Rings

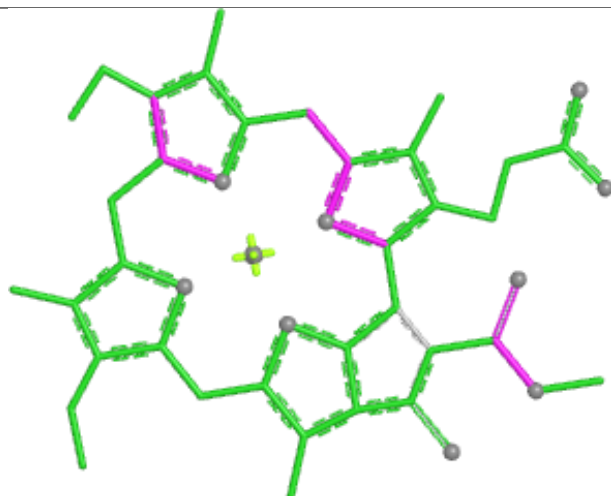
Ligand CLA A4 302



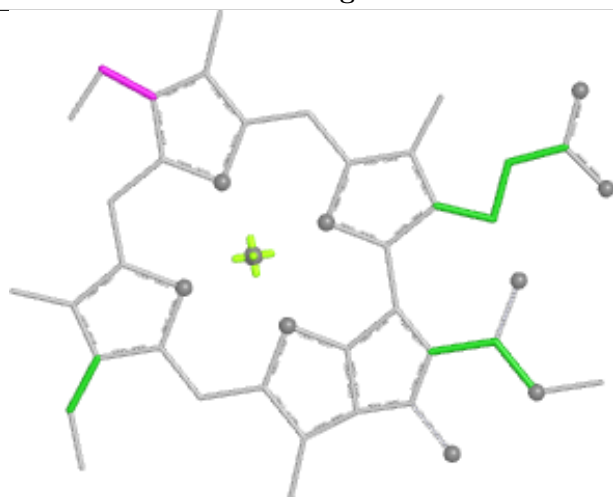
Ligand CLA A4 307



Bond lengths



Bond angles

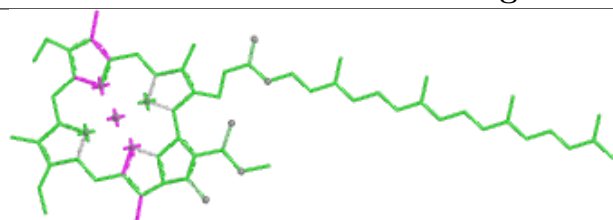


Torsions

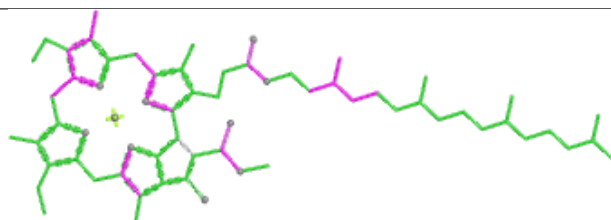


Rings

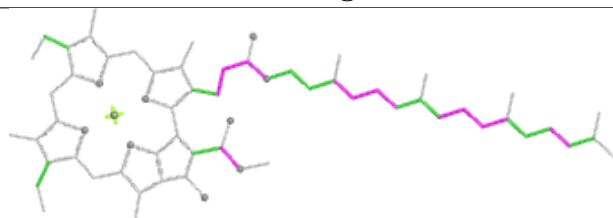
Ligand CLA AA 829



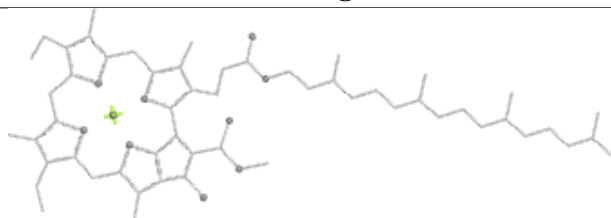
Bond lengths



Bond angles

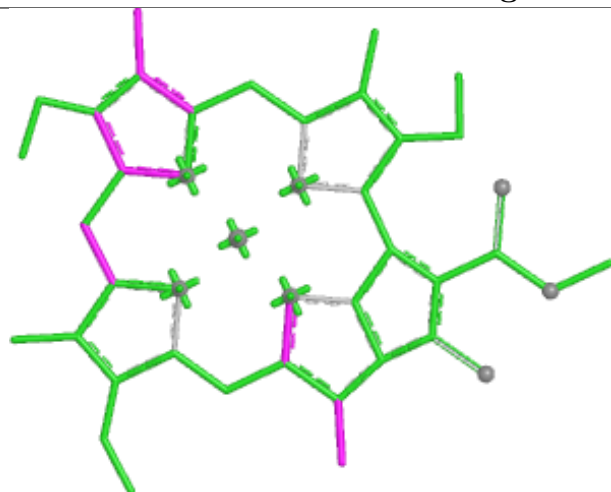


Torsions

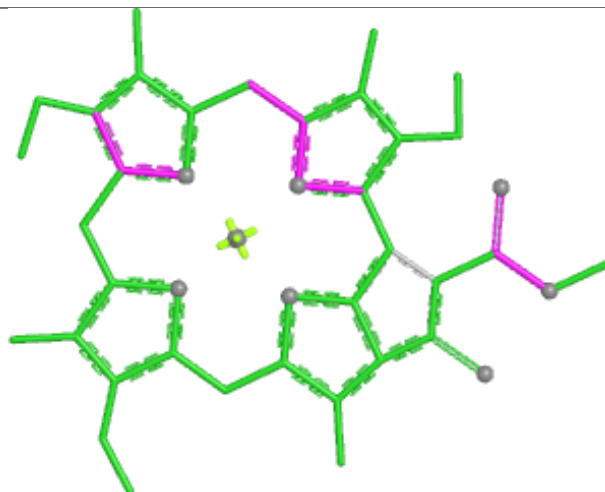


Rings

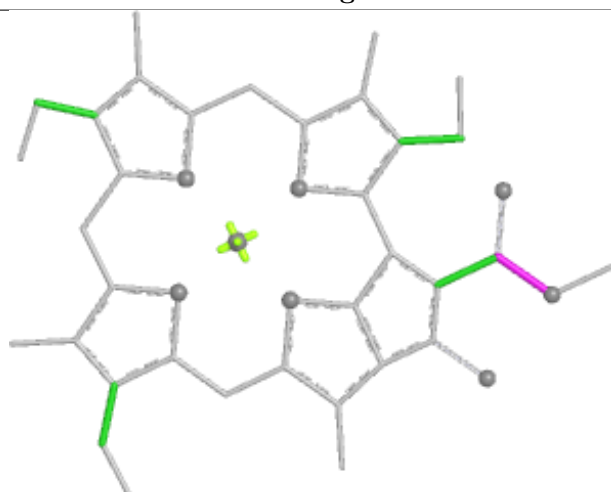
Ligand CLA AG 203



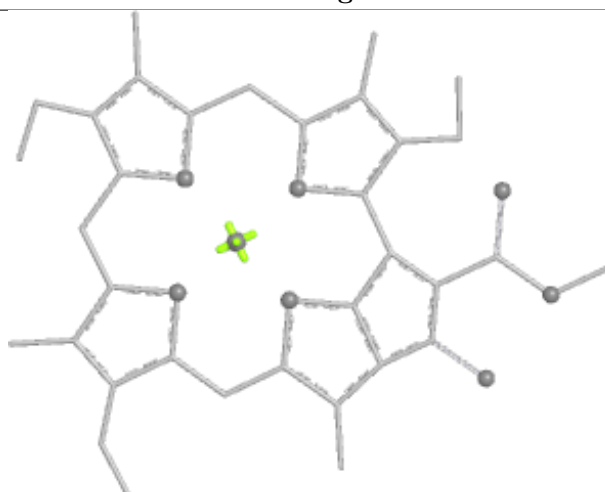
Bond lengths



Bond angles

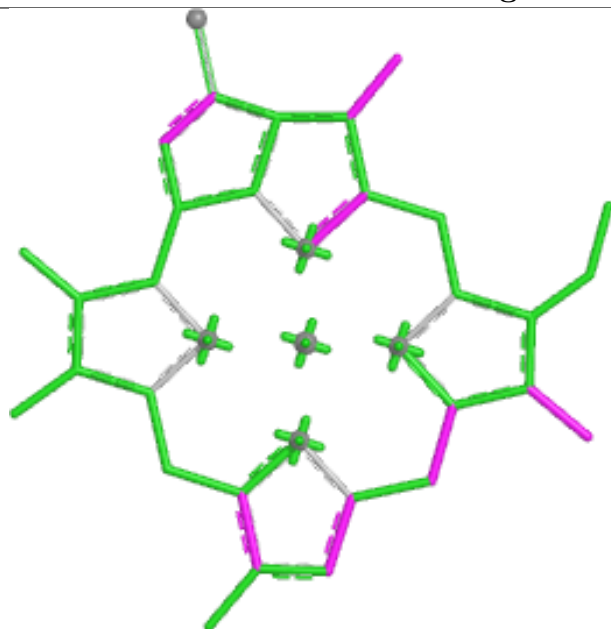


Torsions

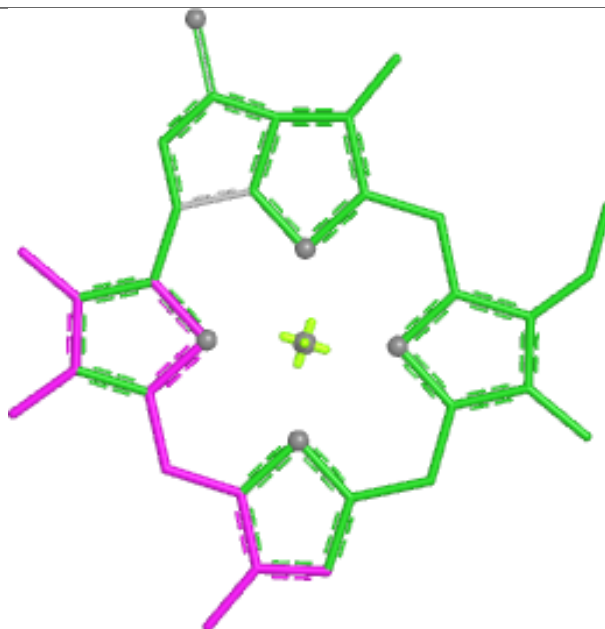


Rings

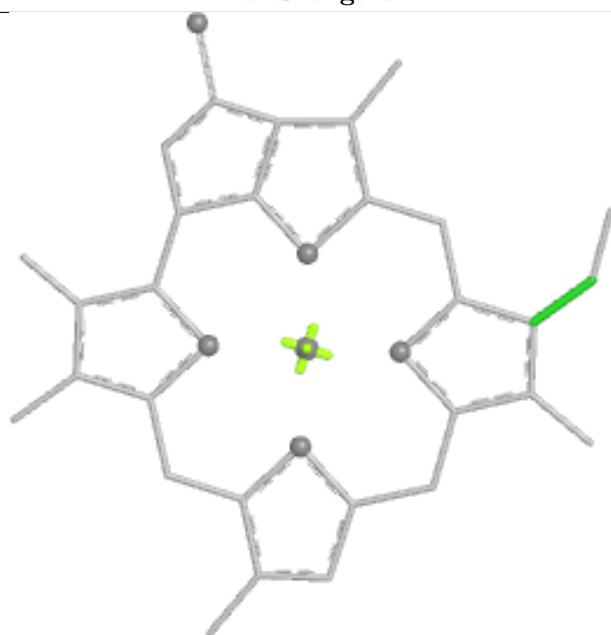
Ligand CLA AK 201



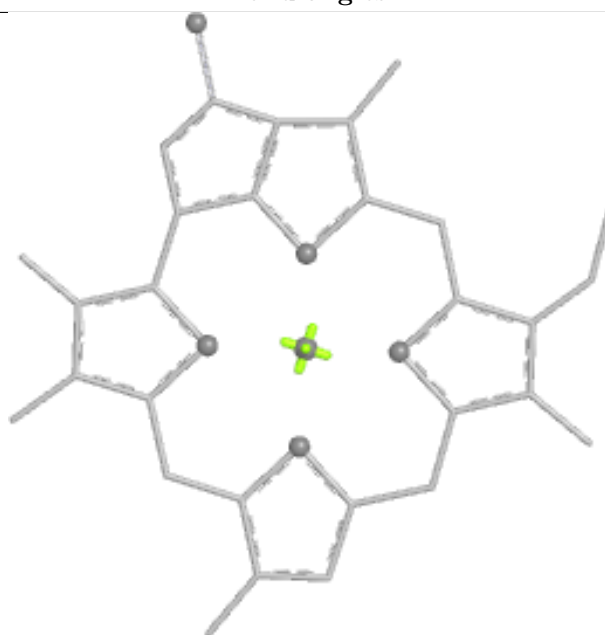
Bond lengths



Bond angles

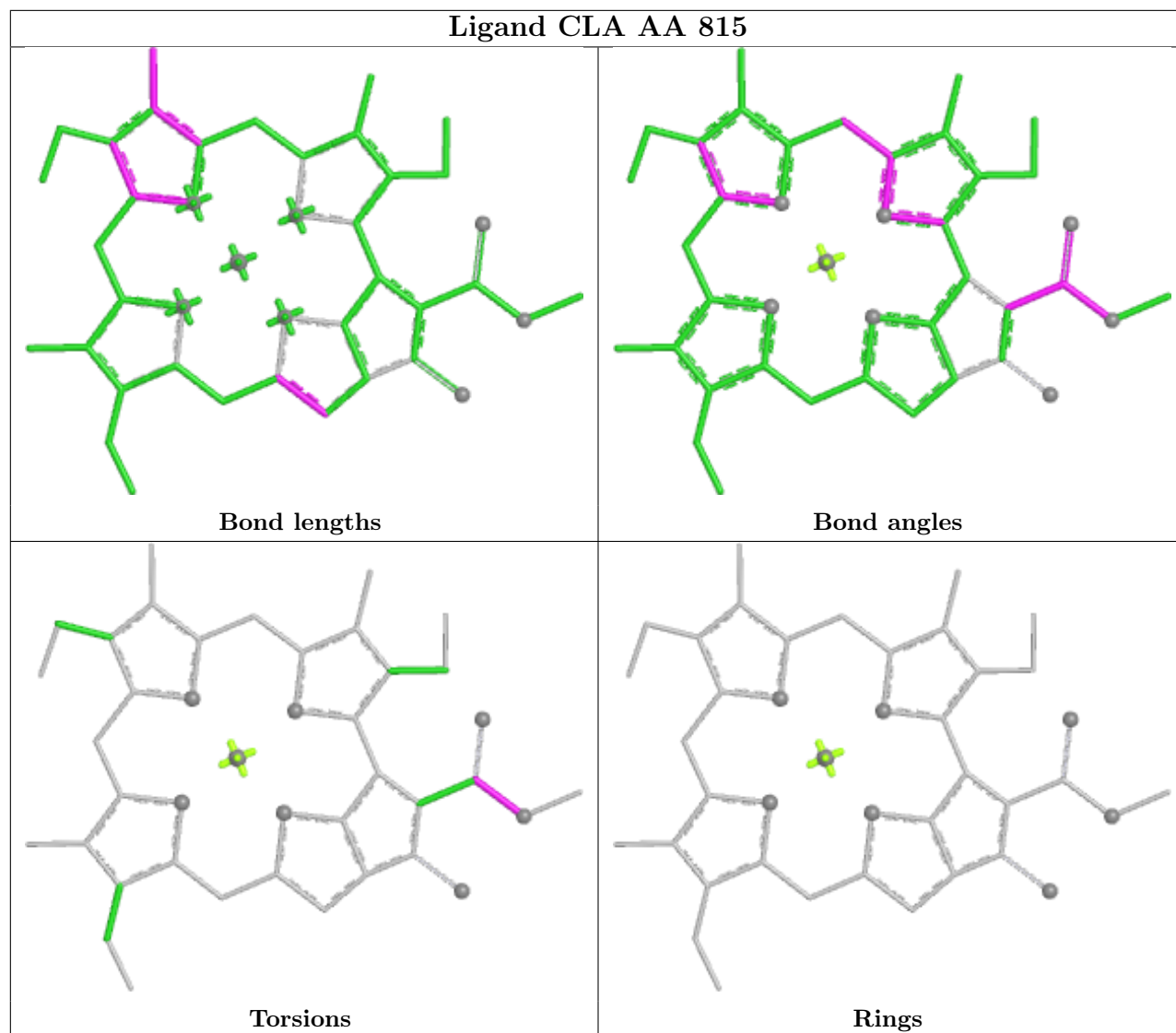


Torsions

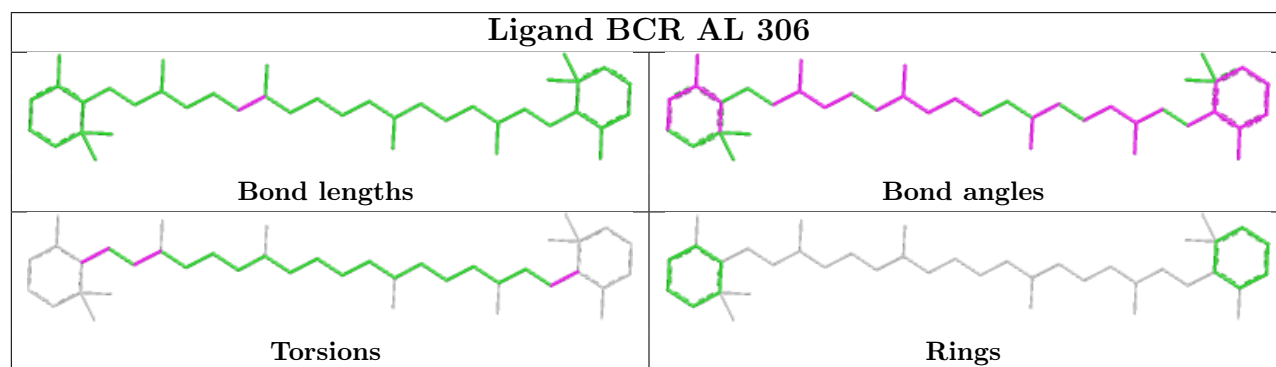


Rings

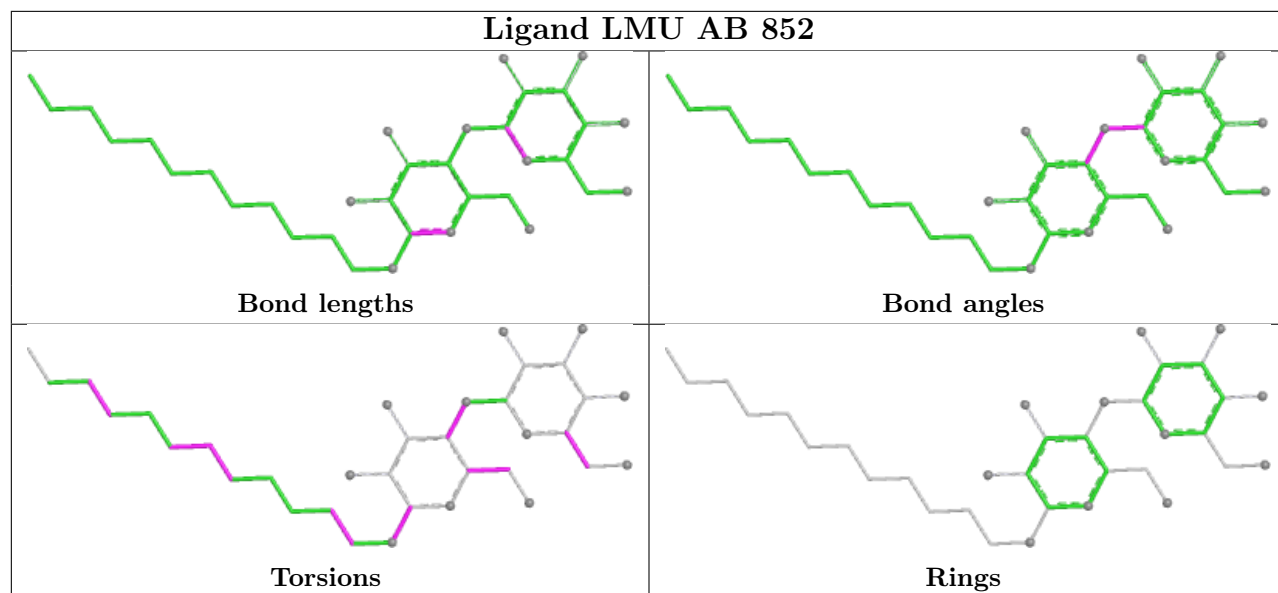
Ligand CLA AA 815



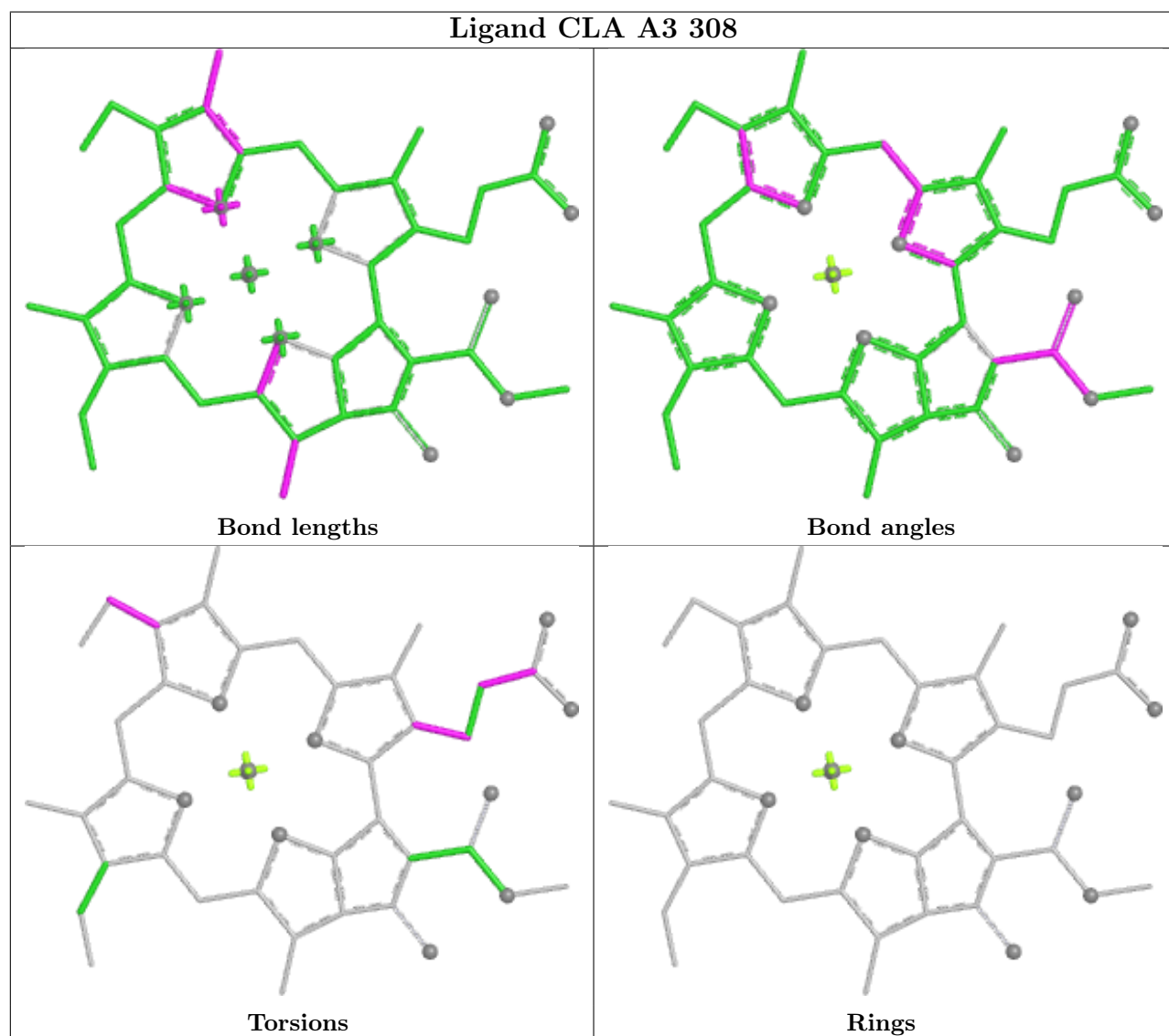
Ligand BCR AL 306



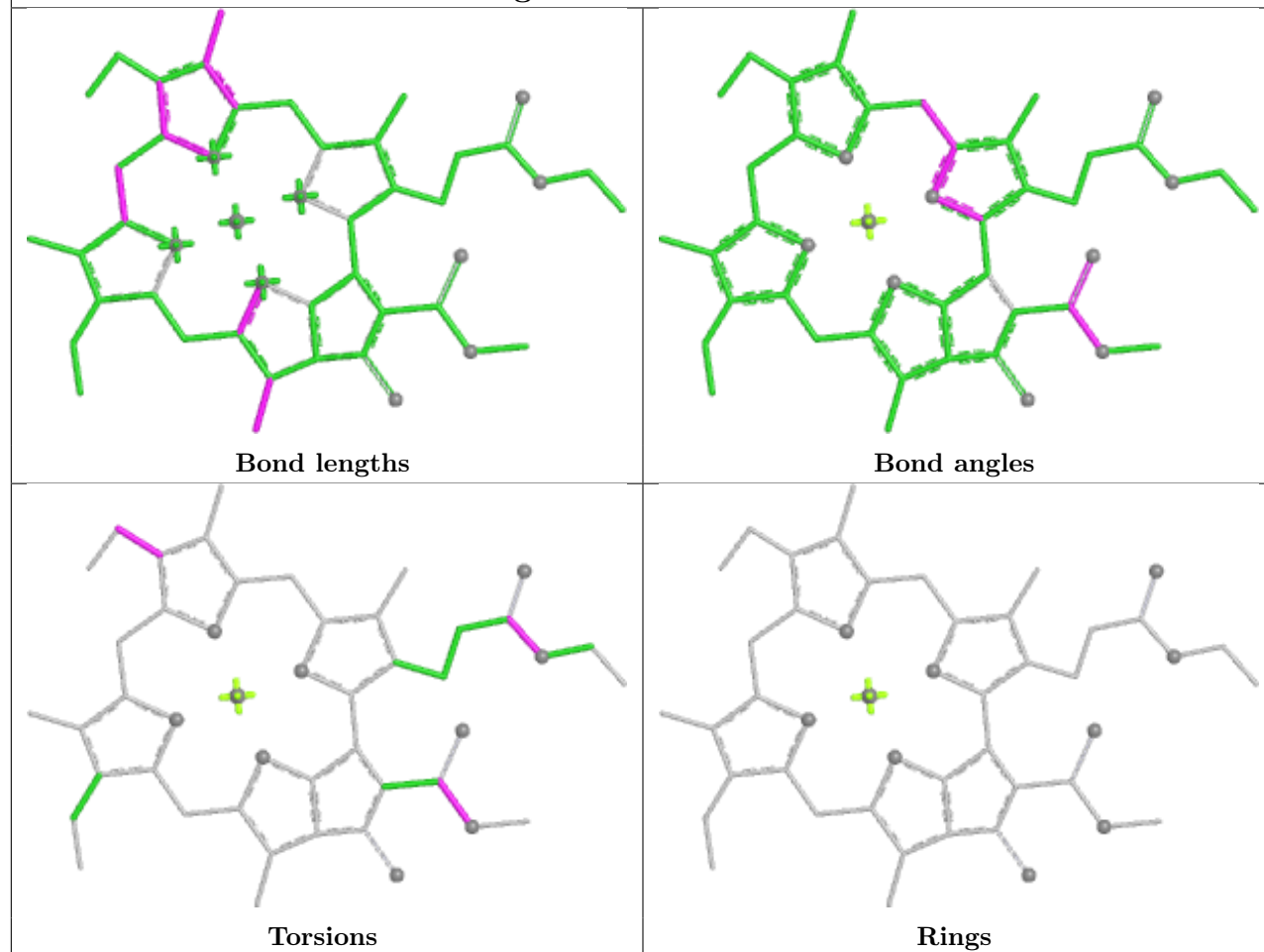
Ligand LMU AB 852



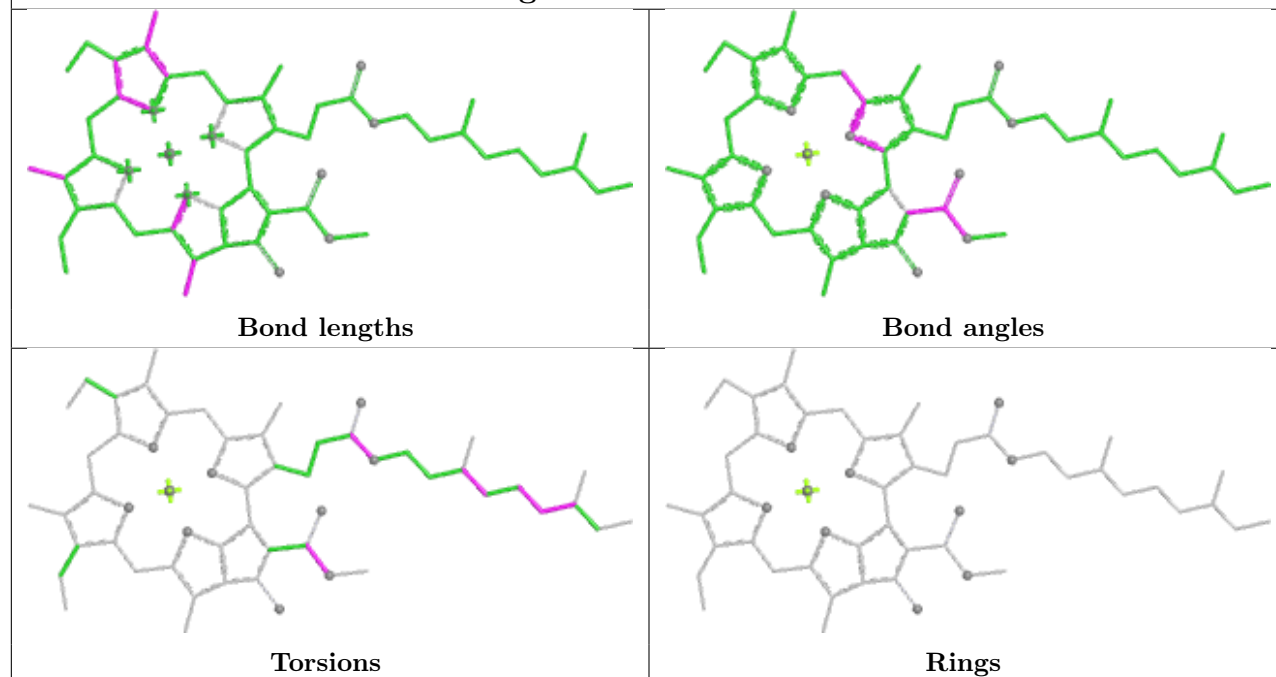
Ligand CLA A3 308

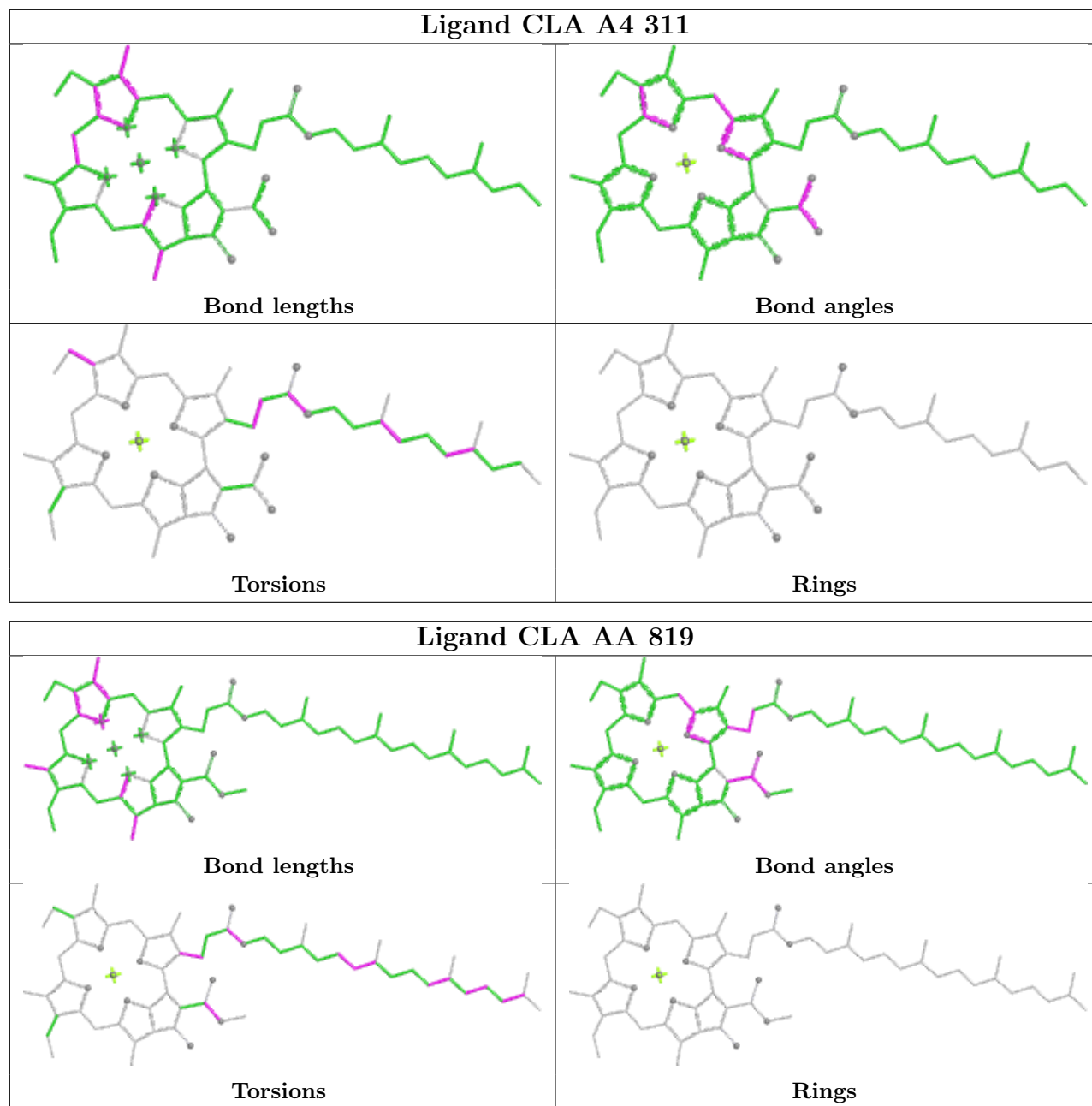


Ligand CLA AB 822

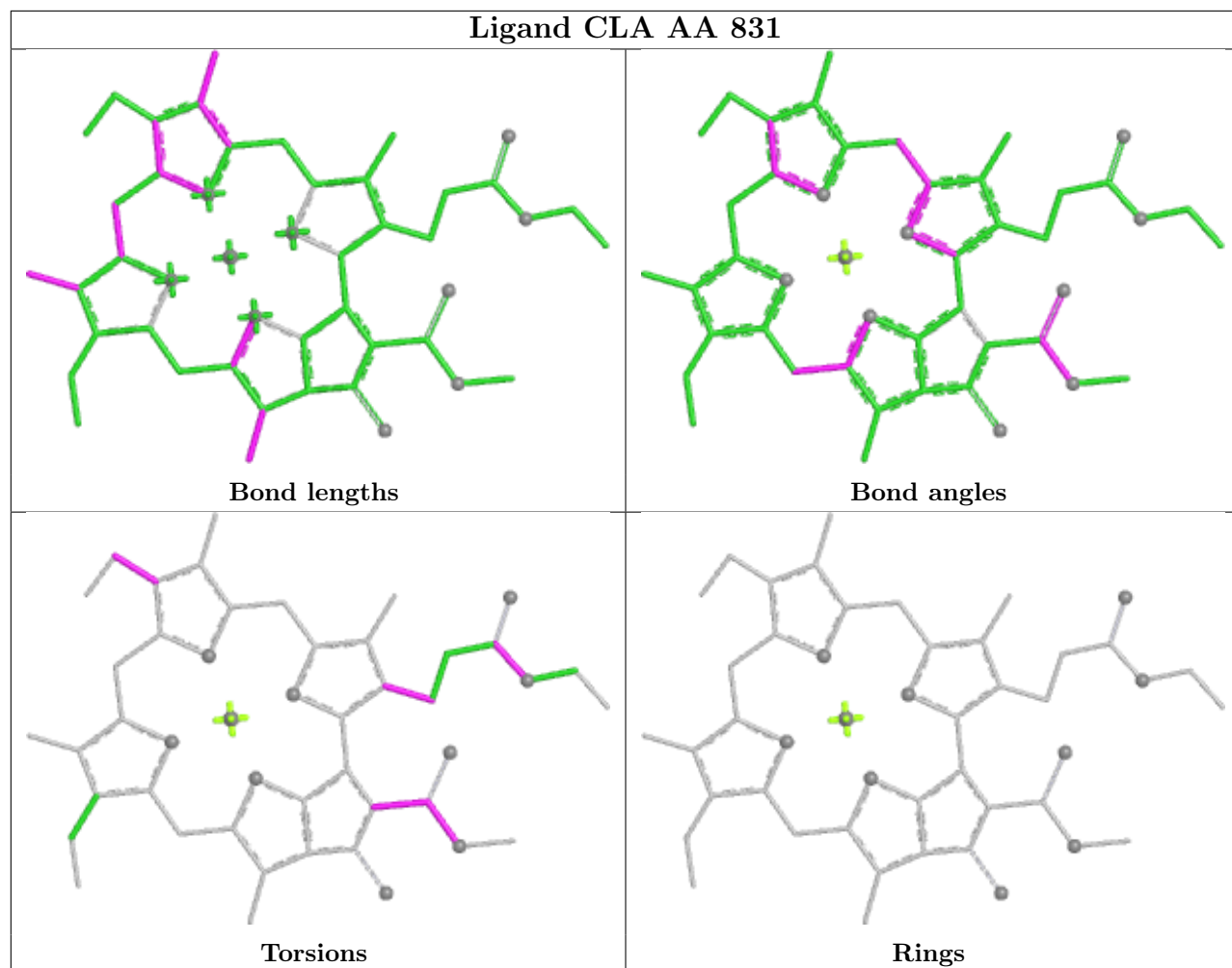


Ligand CLA AB 830

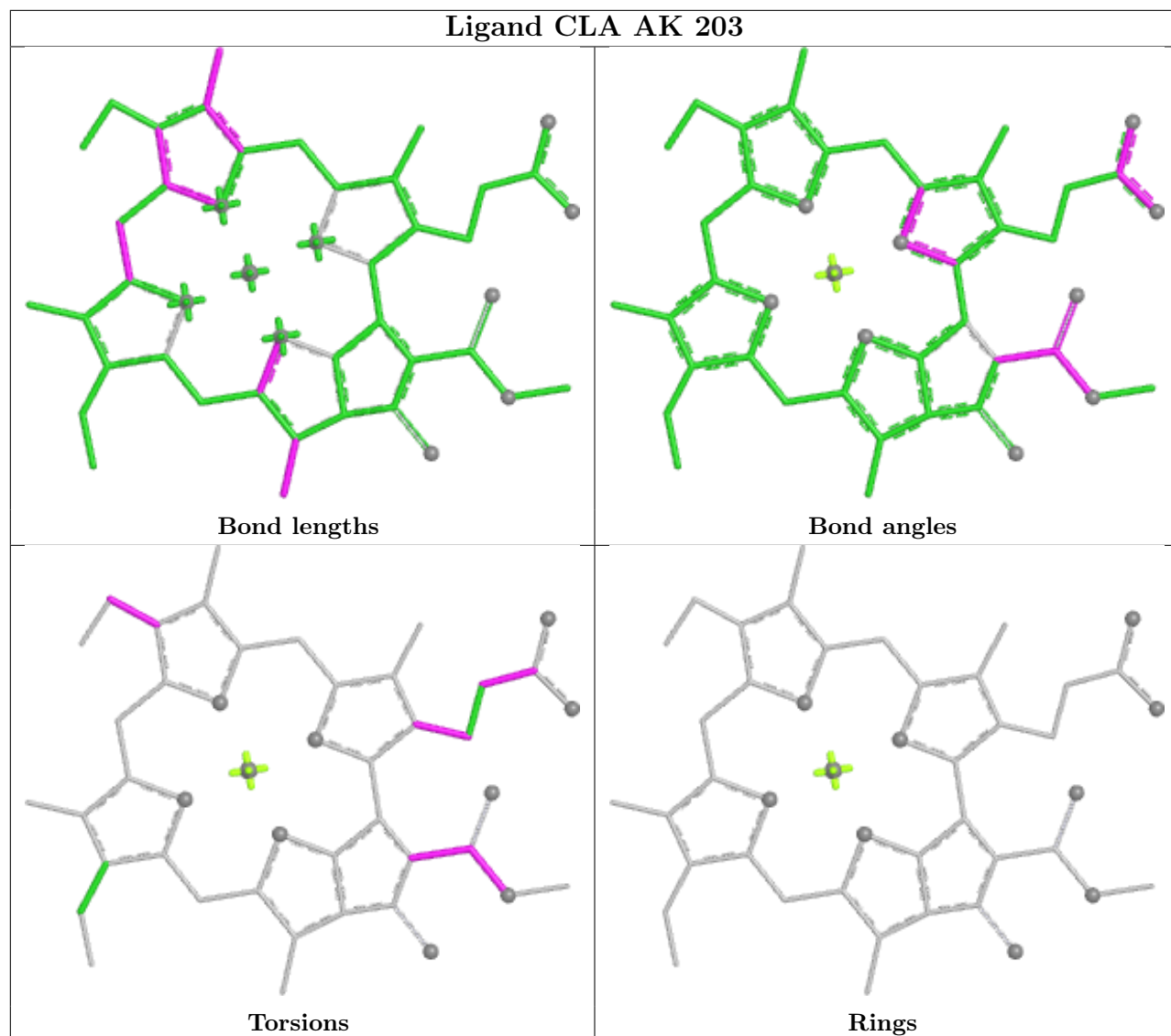




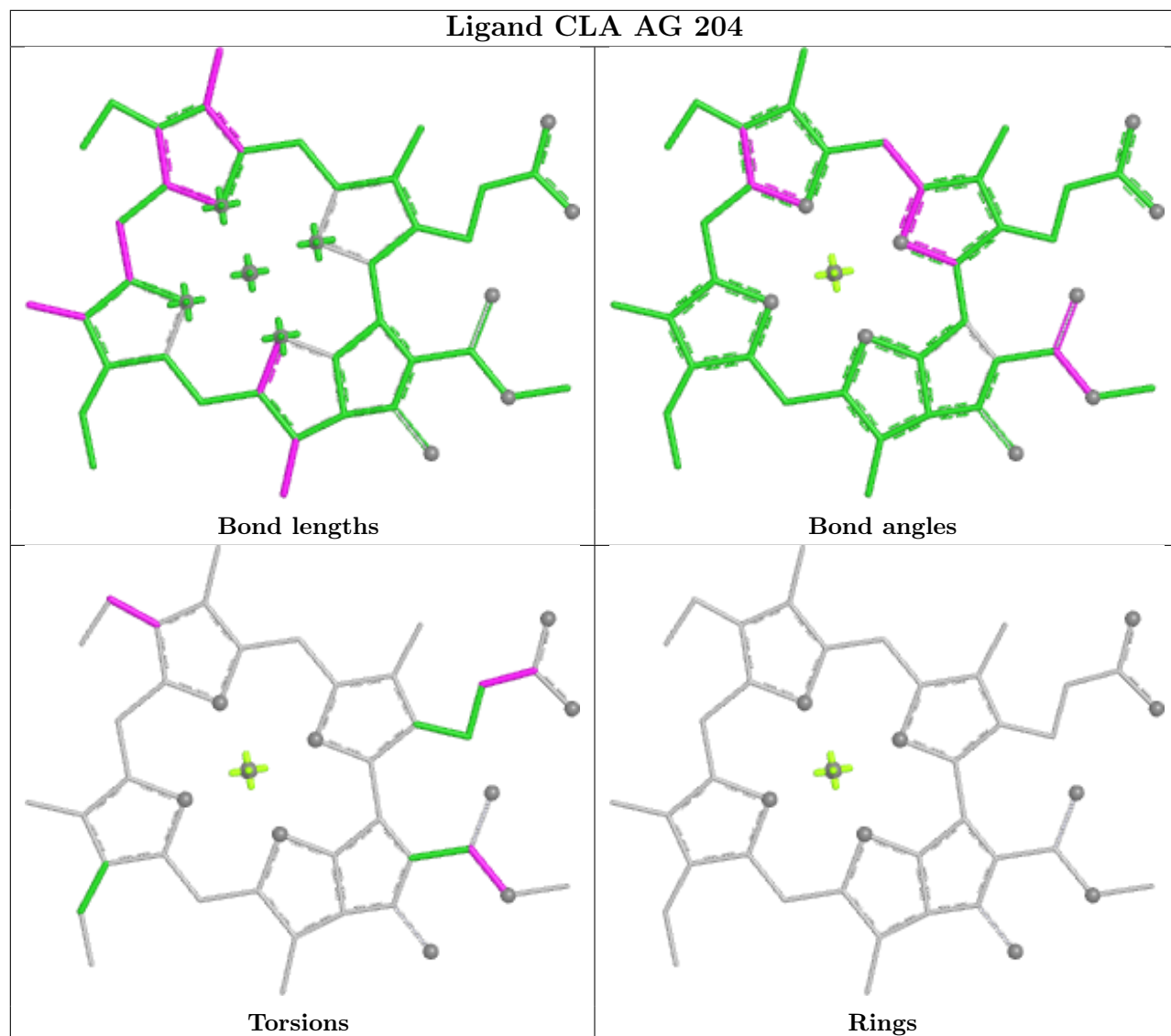
Ligand CLA AA 831

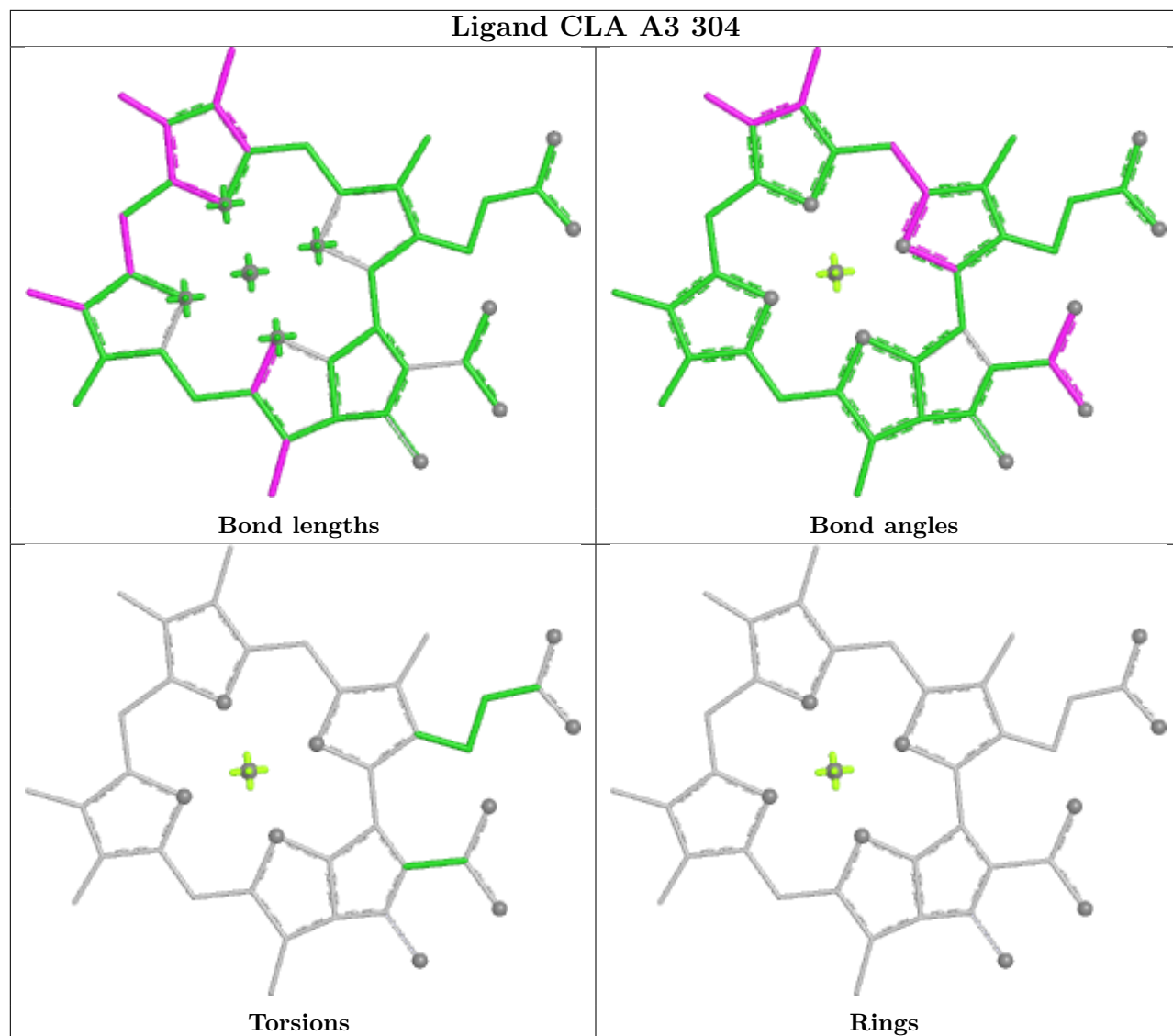


Ligand CLA AK 203

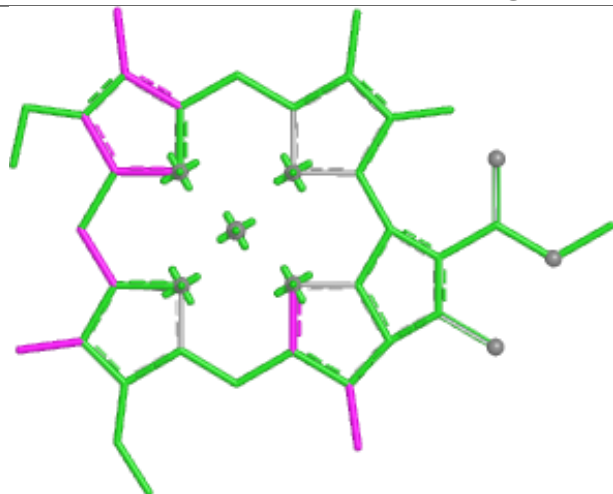


Ligand CLA AG 204

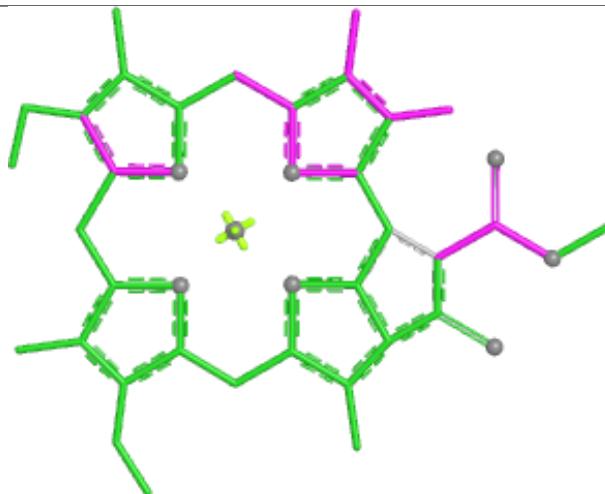




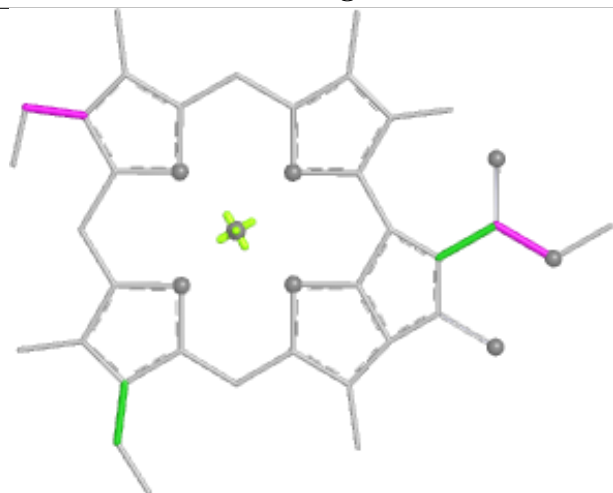
Ligand CLA A3 309



Bond lengths



Bond angles

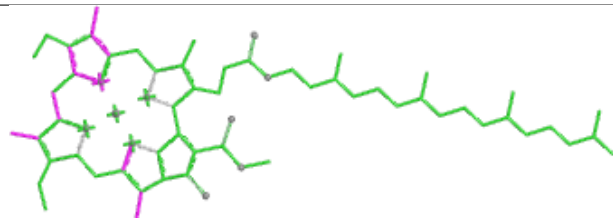


Torsions

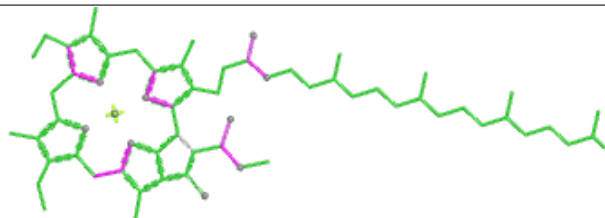


Rings

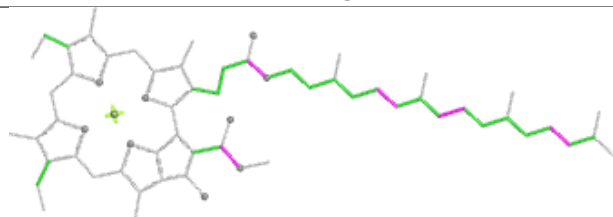
Ligand CLA AB 838



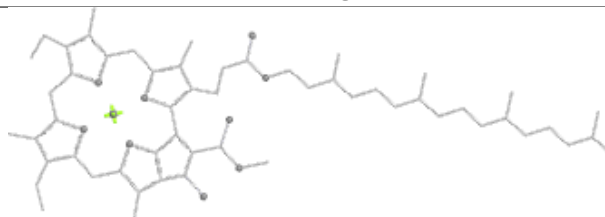
Bond lengths



Bond angles

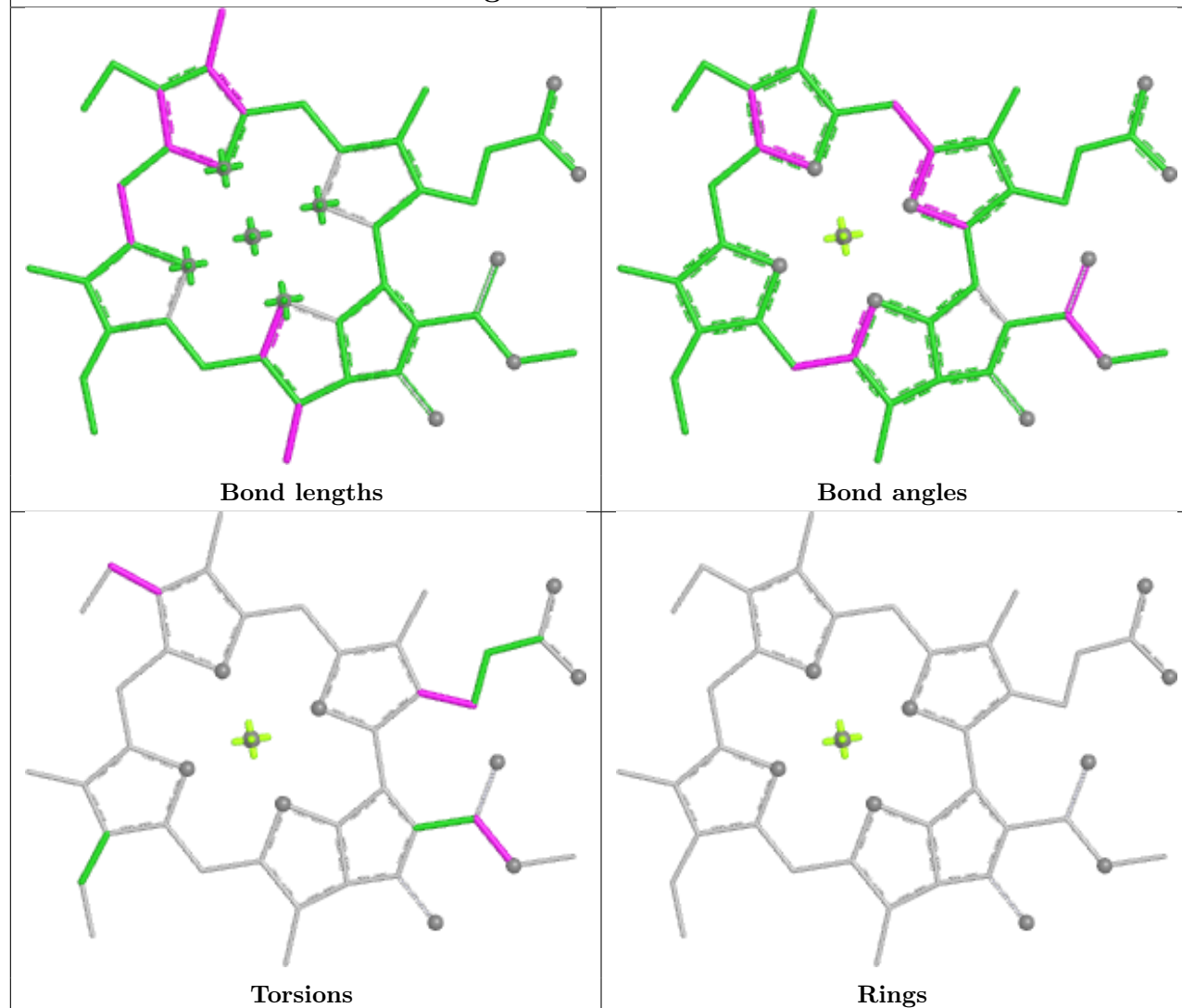


Torsions

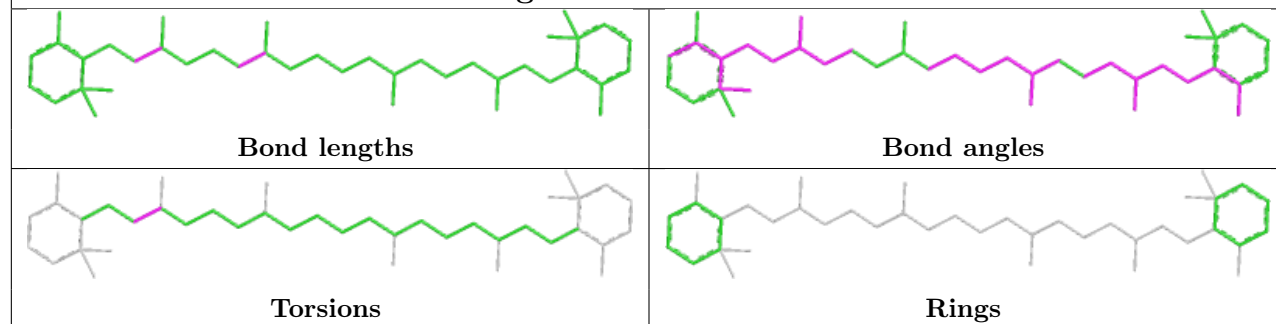


Rings

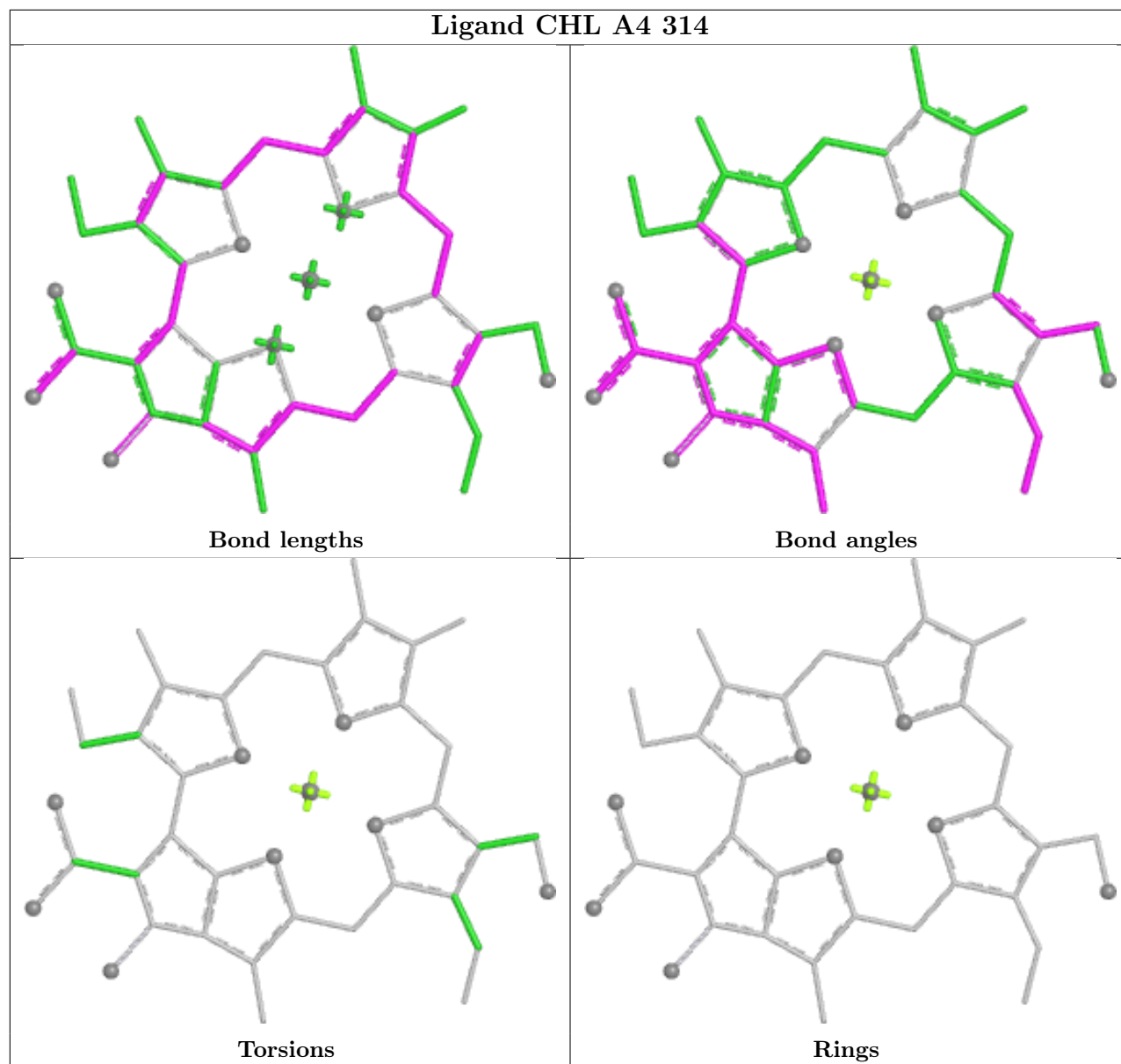
Ligand CLA A4 312



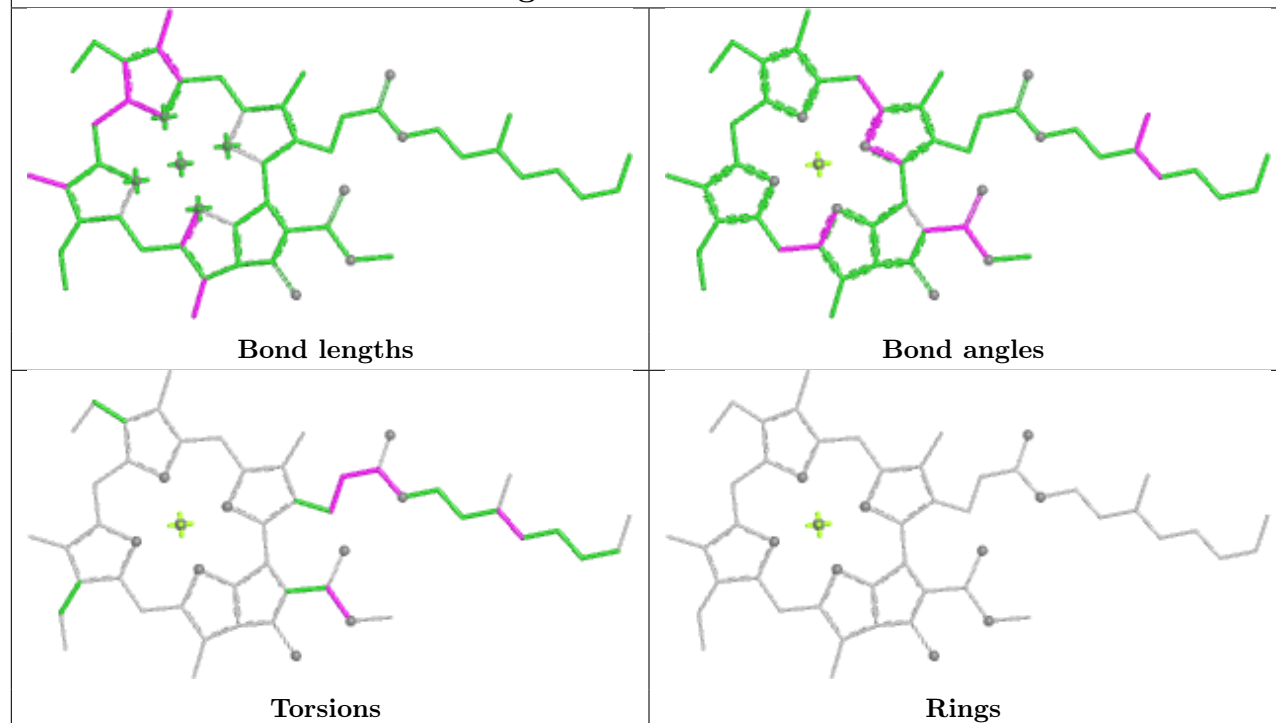
Ligand BCR AA 845



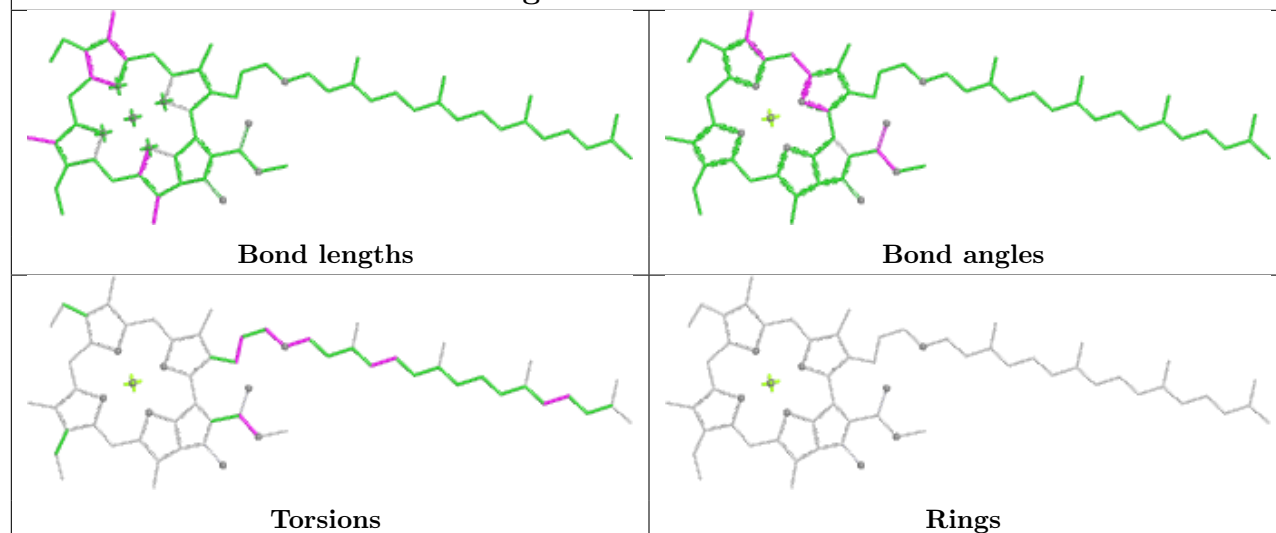
Ligand CHL A4 314

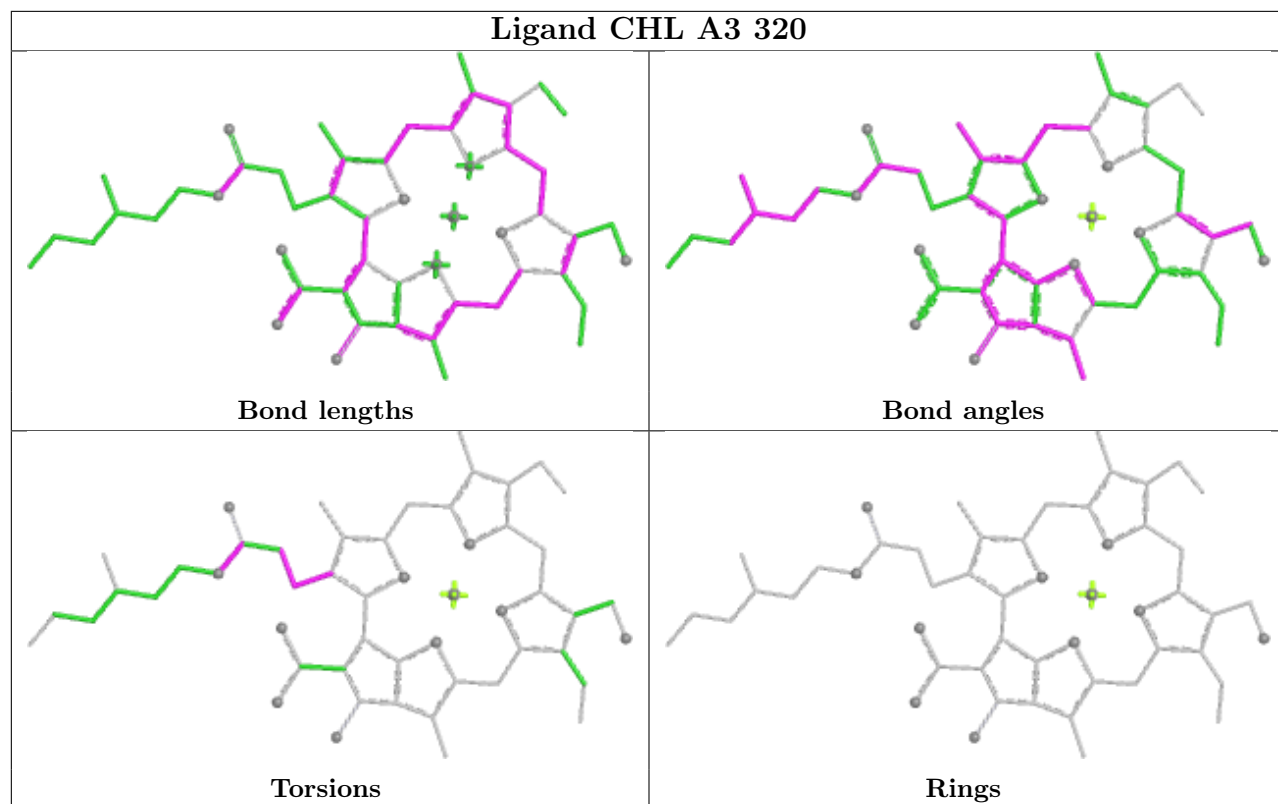


Ligand CLA AA 812

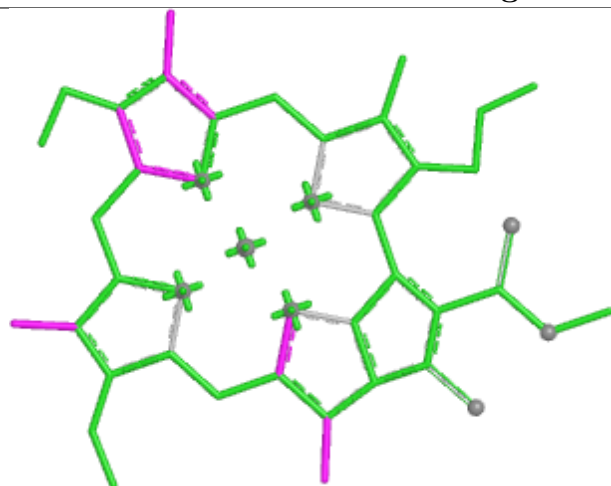


Ligand CLA A6 612

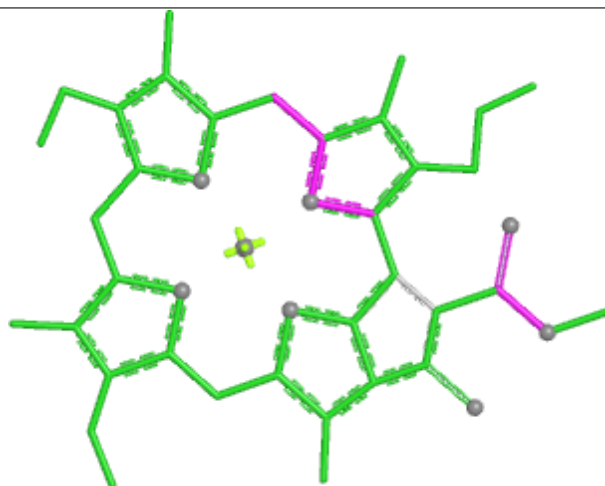




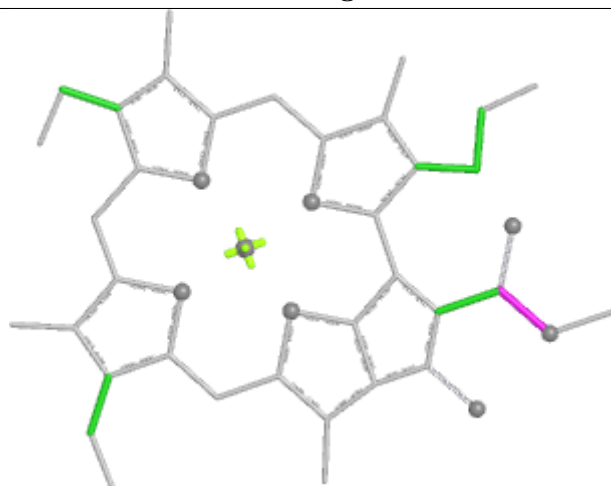
Ligand CLA AB 816



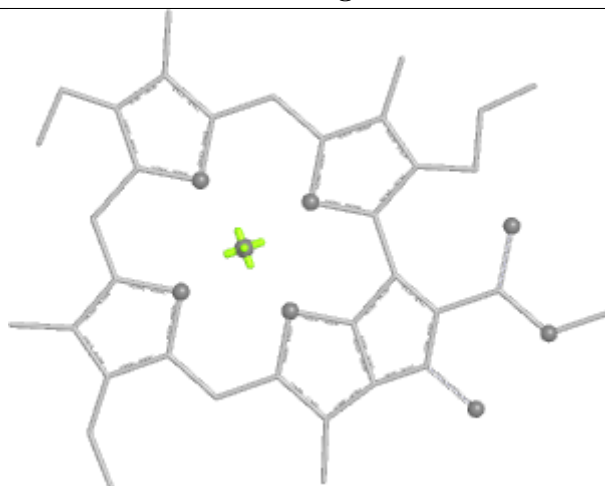
Bond lengths



Bond angles

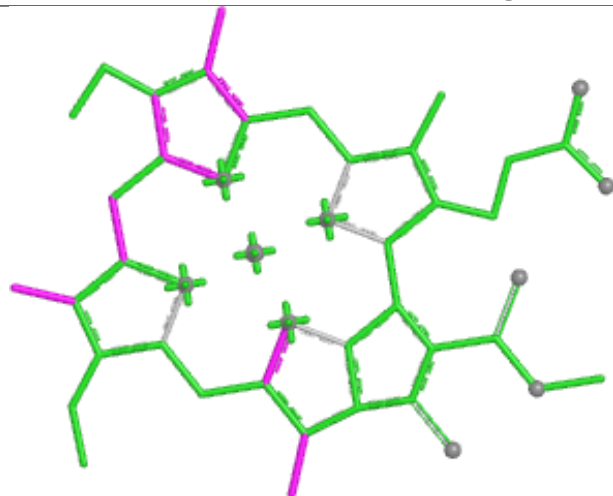


Torsions

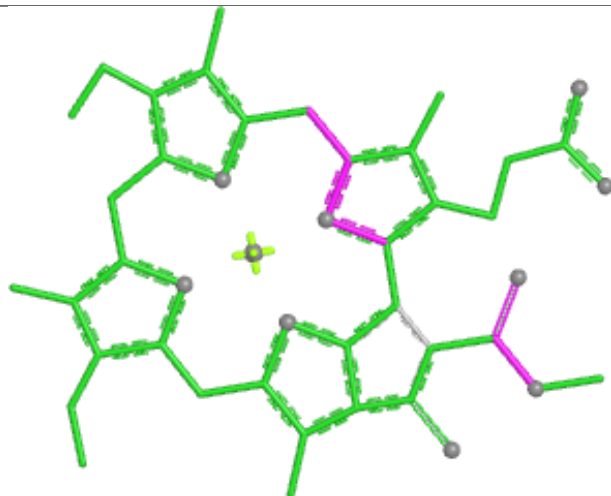


Rings

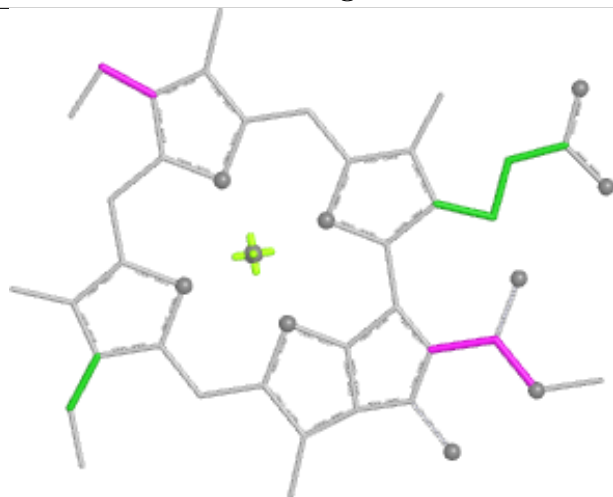
Ligand CLA AA 820



Bond lengths



Bond angles

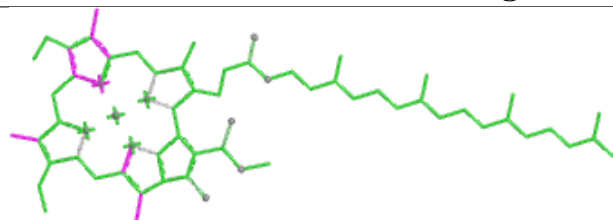


Torsions

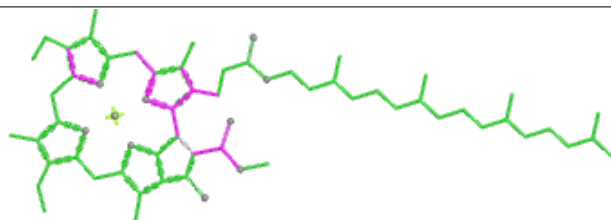


Rings

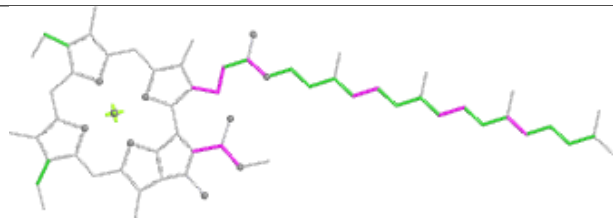
Ligand CLA AB 811



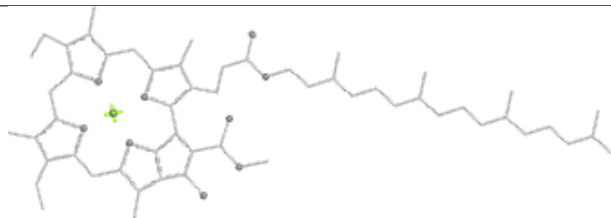
Bond lengths



Bond angles

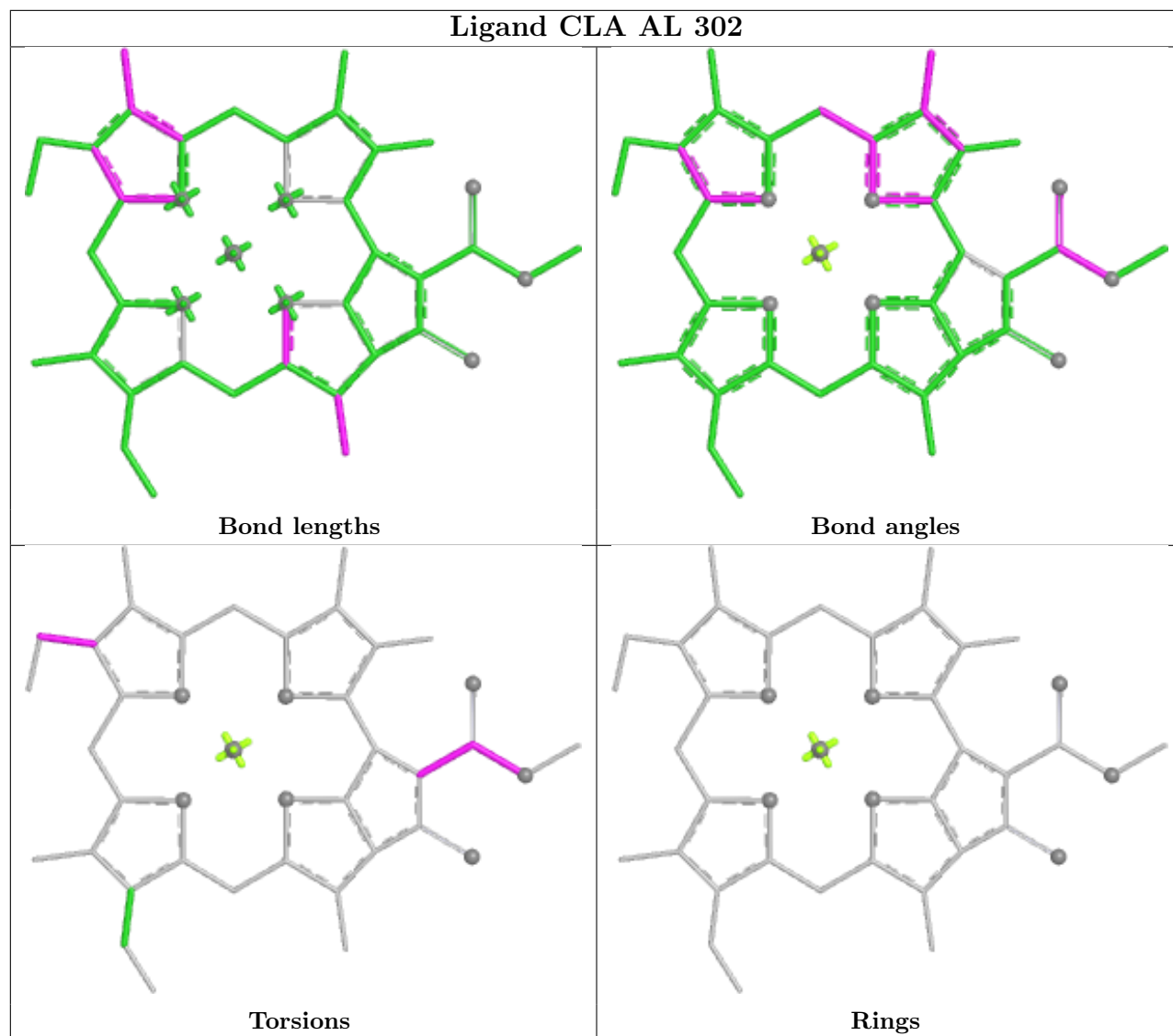


Torsions

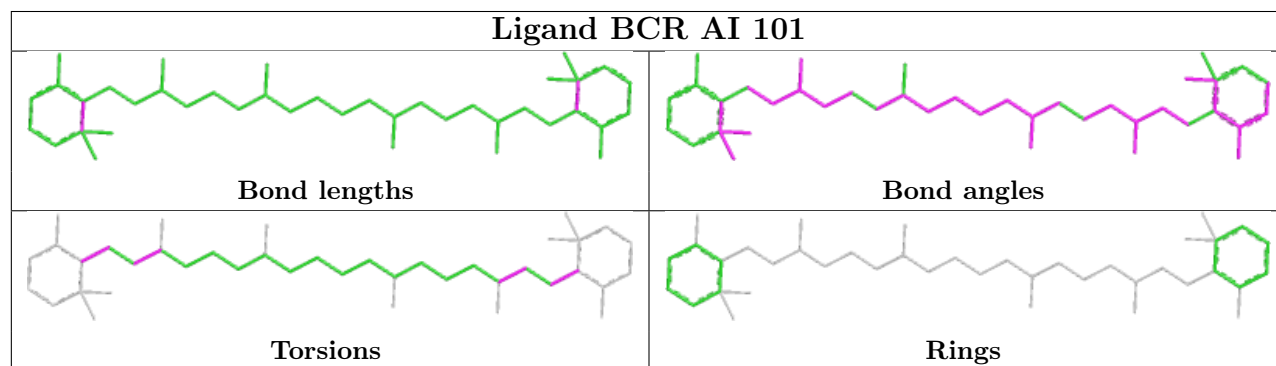


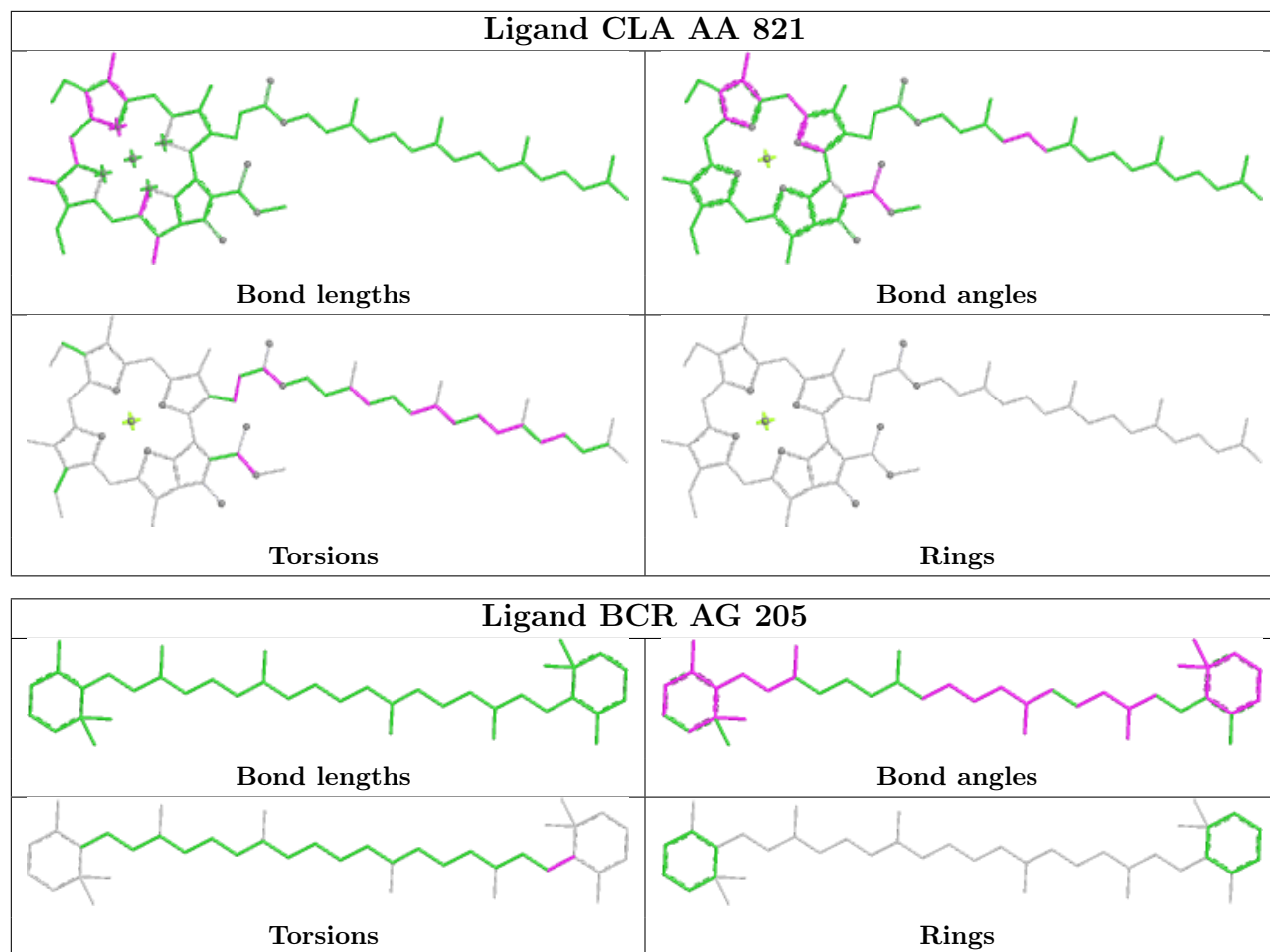
Rings

Ligand CLA AL 302

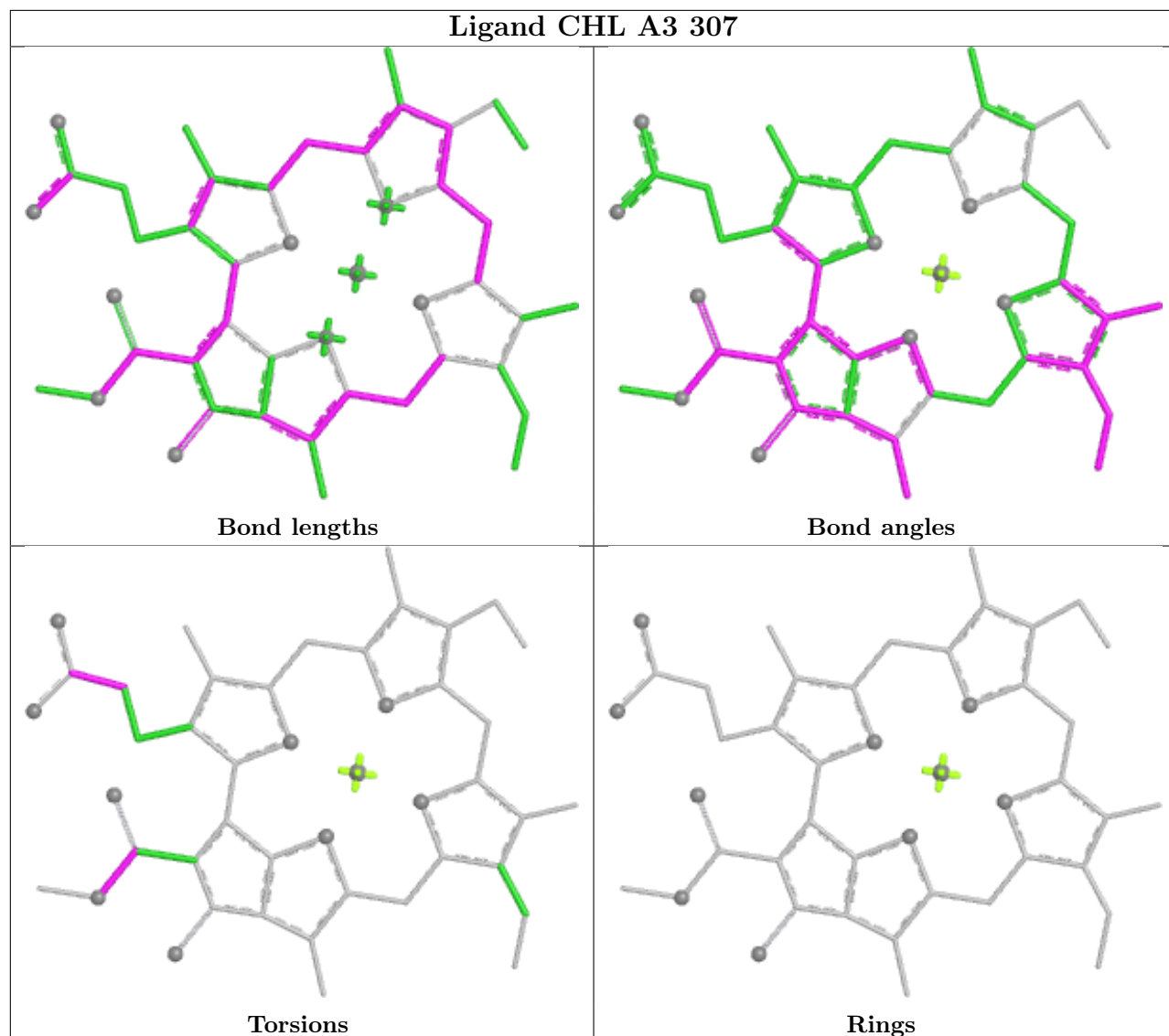


Ligand BCR AI 101

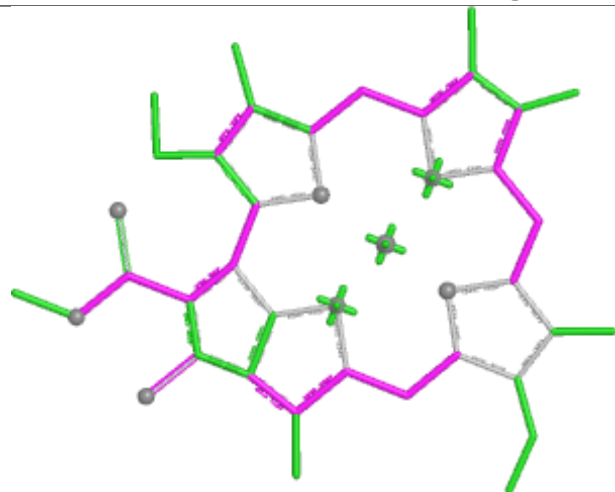




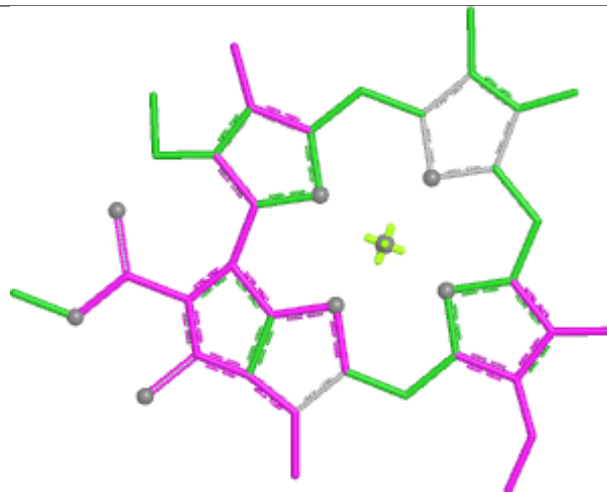
Ligand CHL A3 307



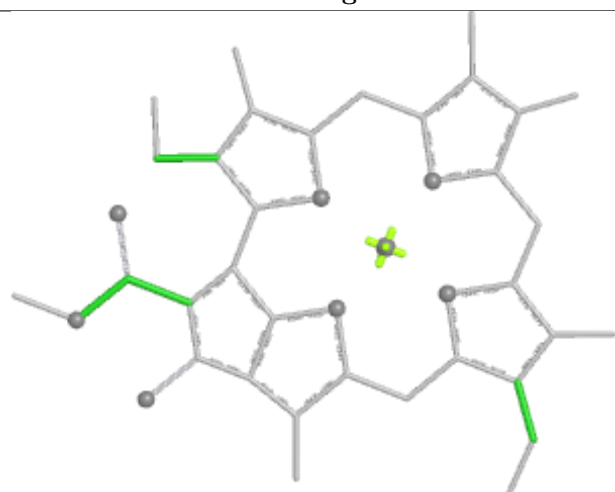
Ligand CHL A4 305



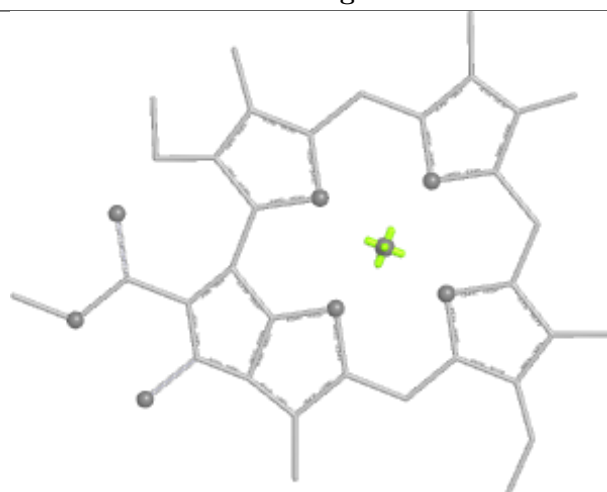
Bond lengths



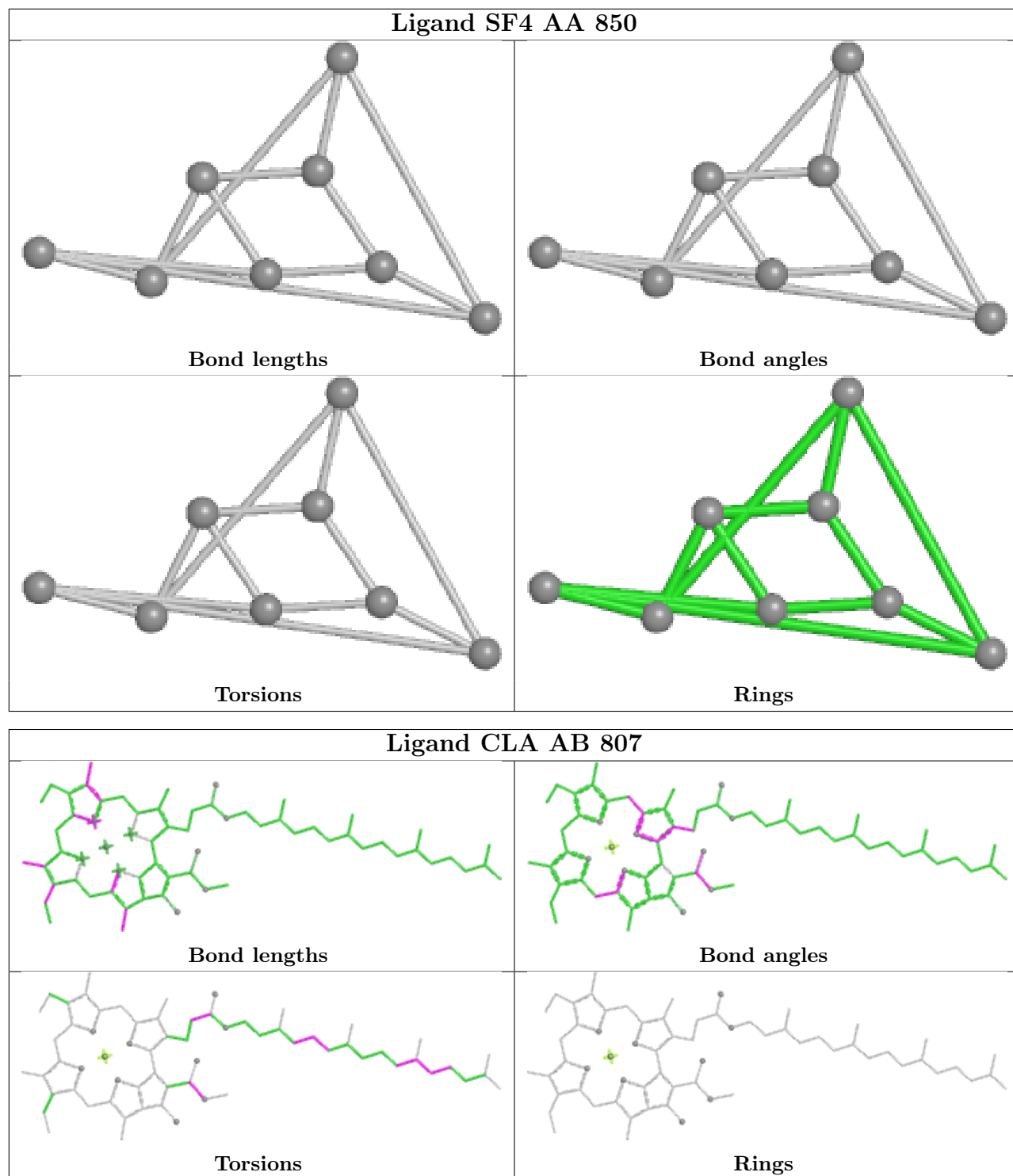
Bond angles

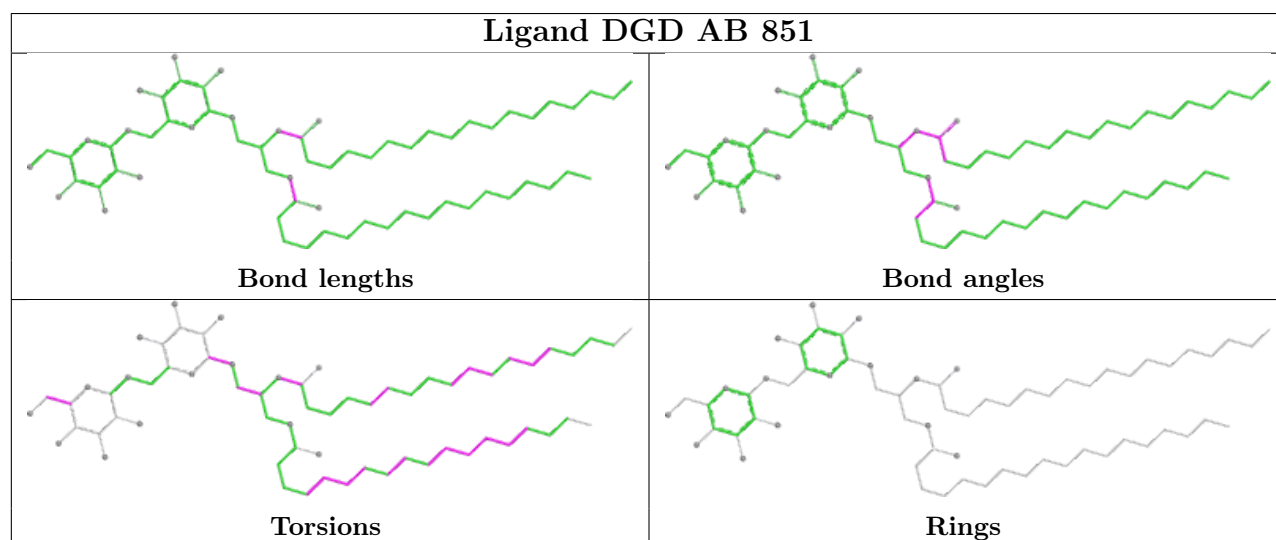
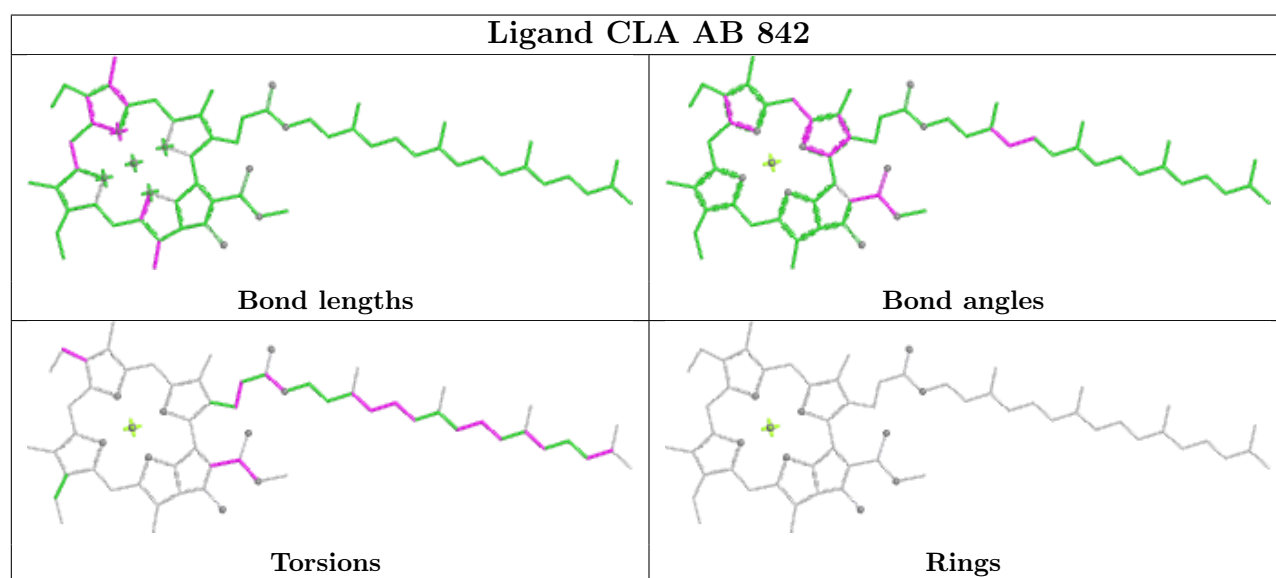
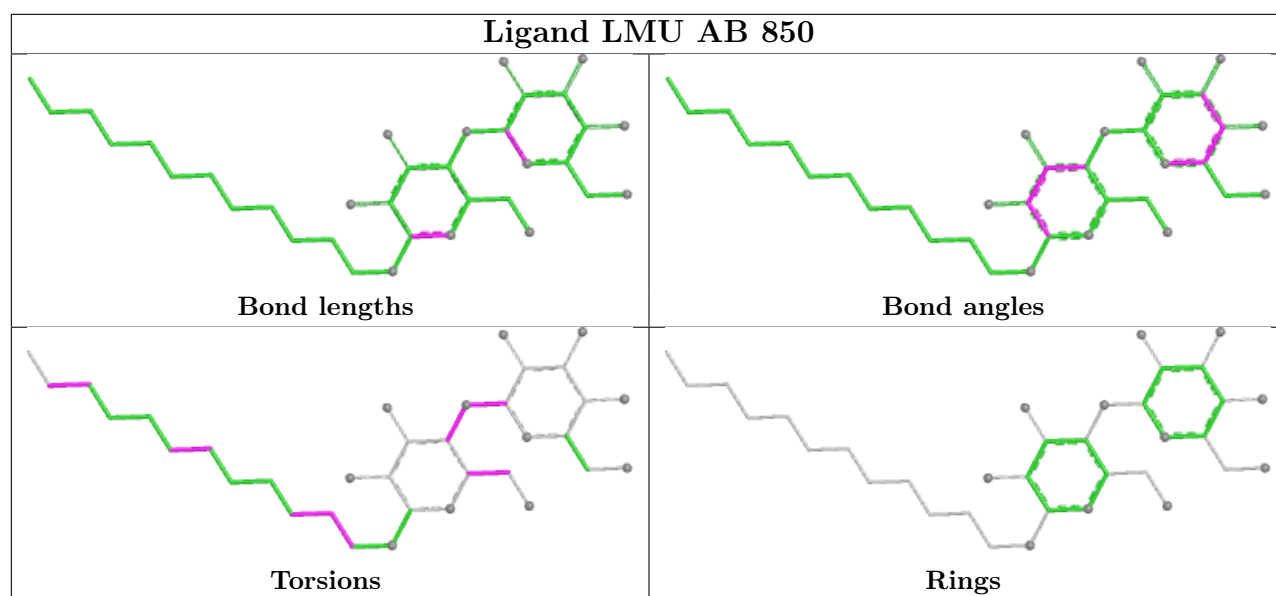


Torsions

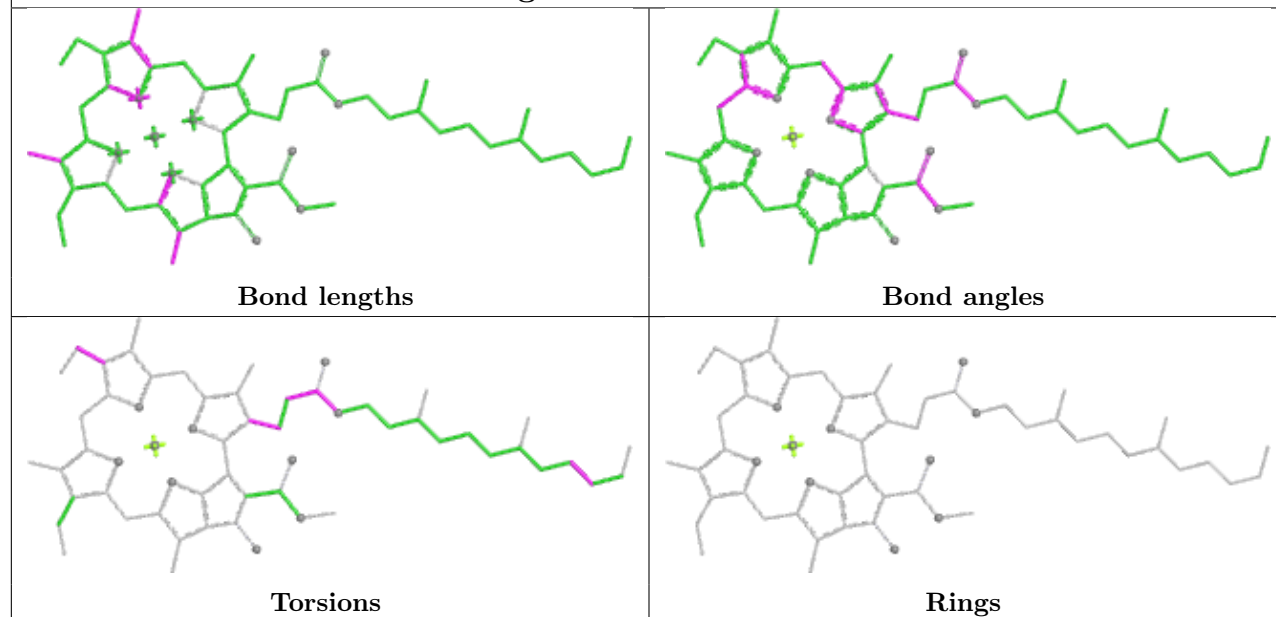


Rings

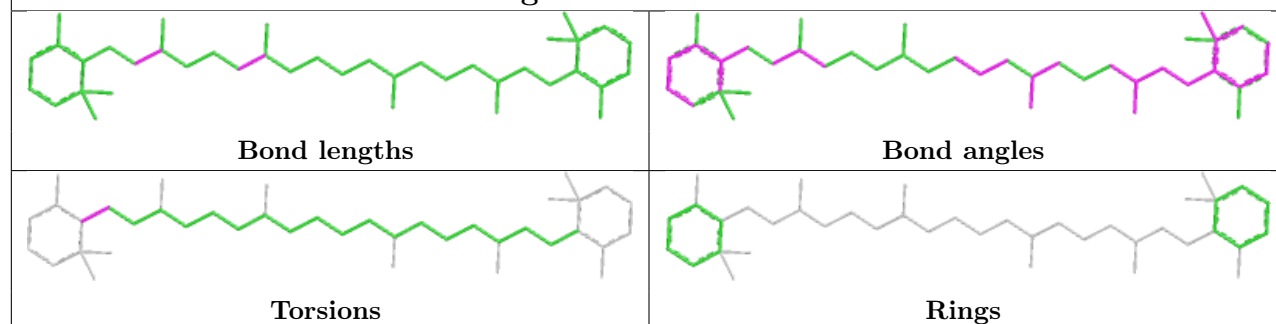




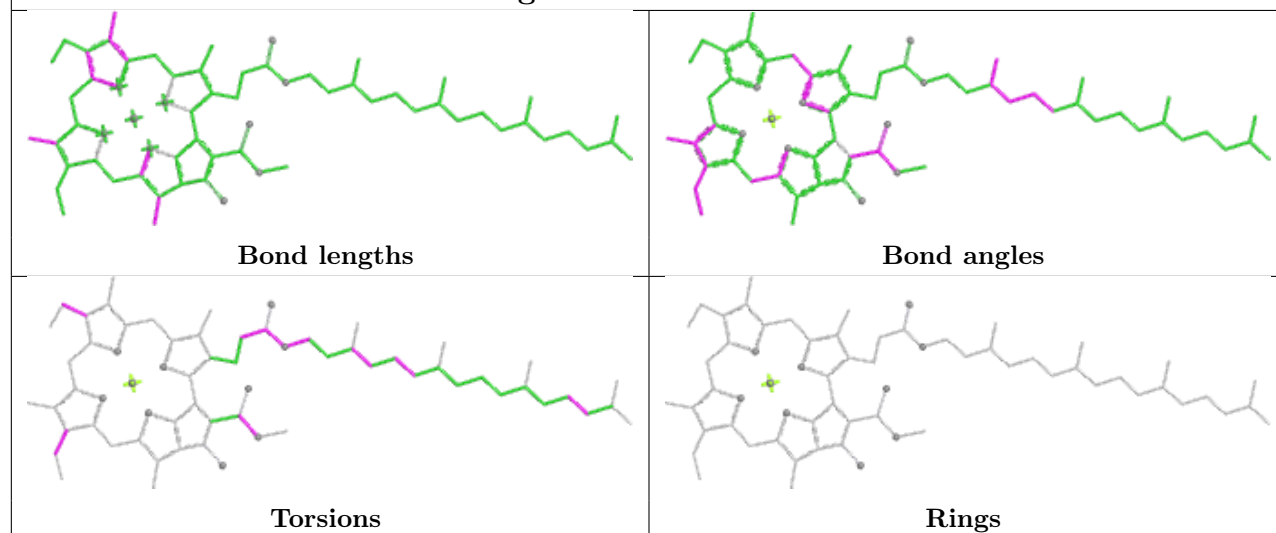
Ligand CLA AA 818



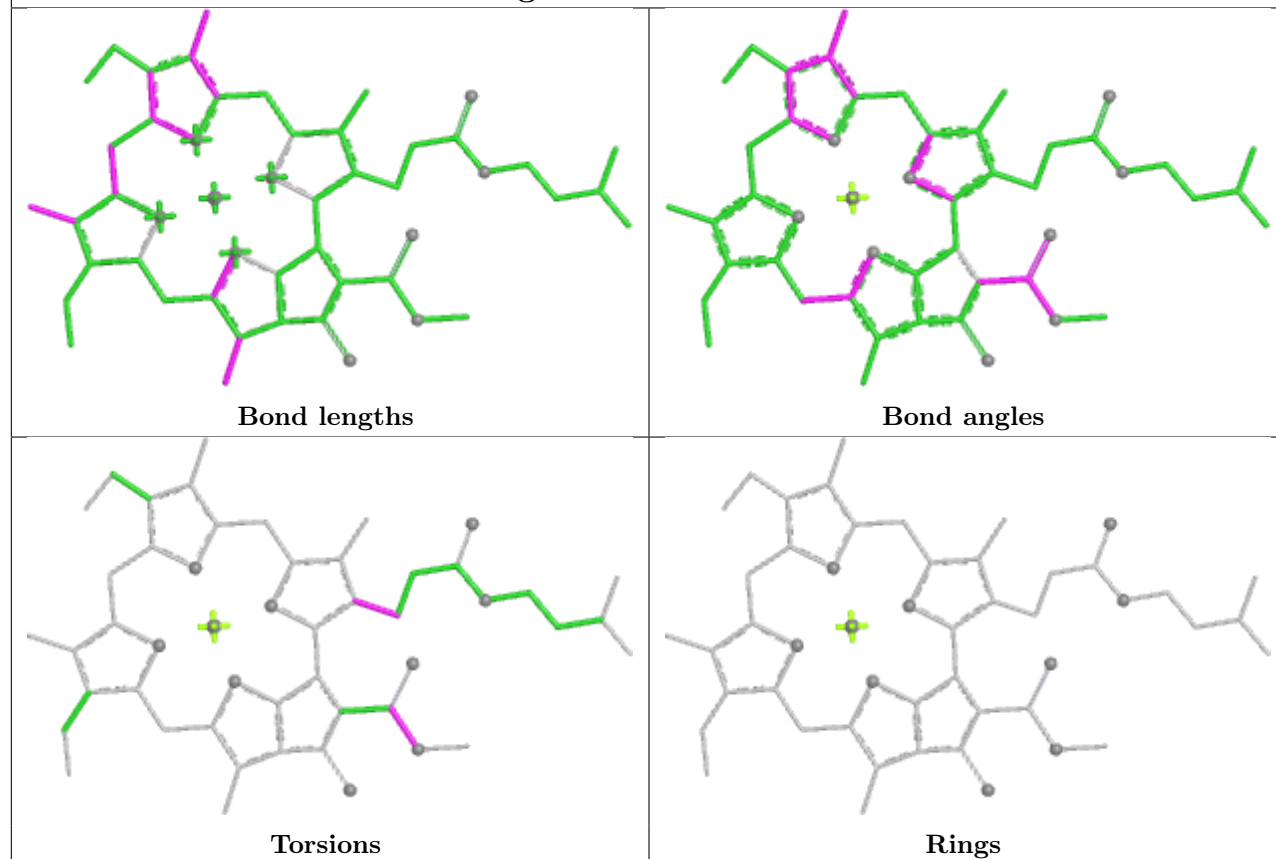
Ligand BCR A6 616



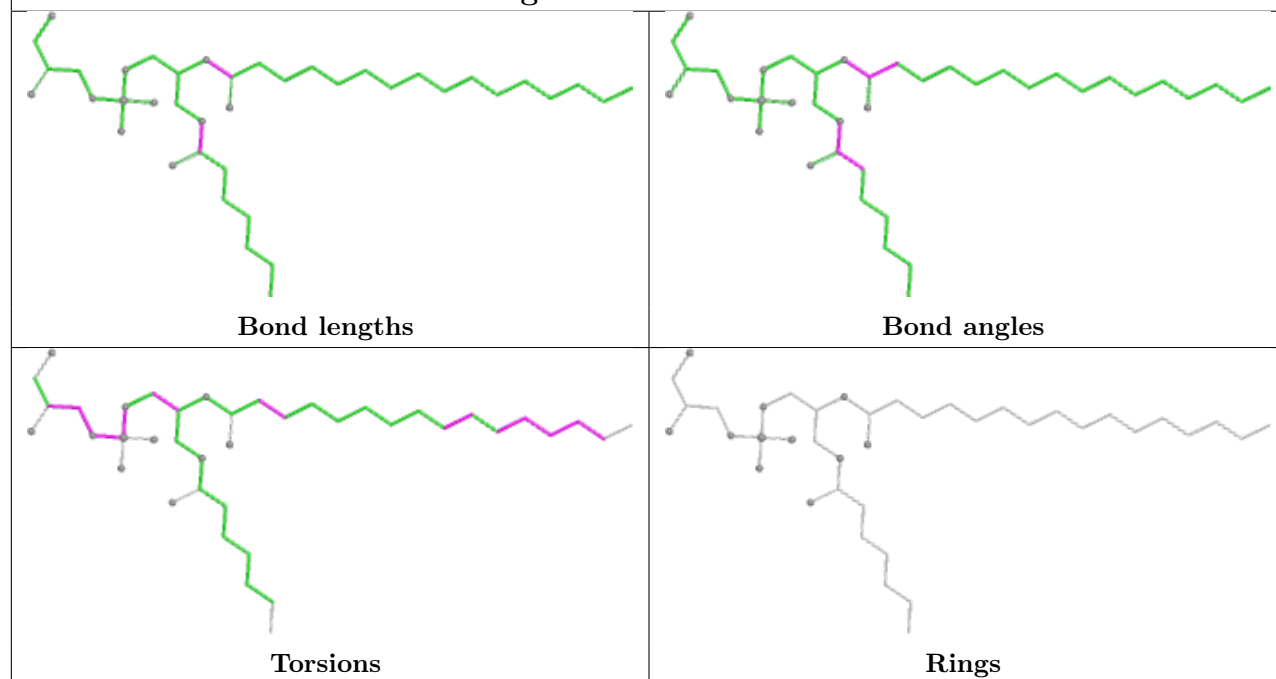
Ligand CLA AA 834



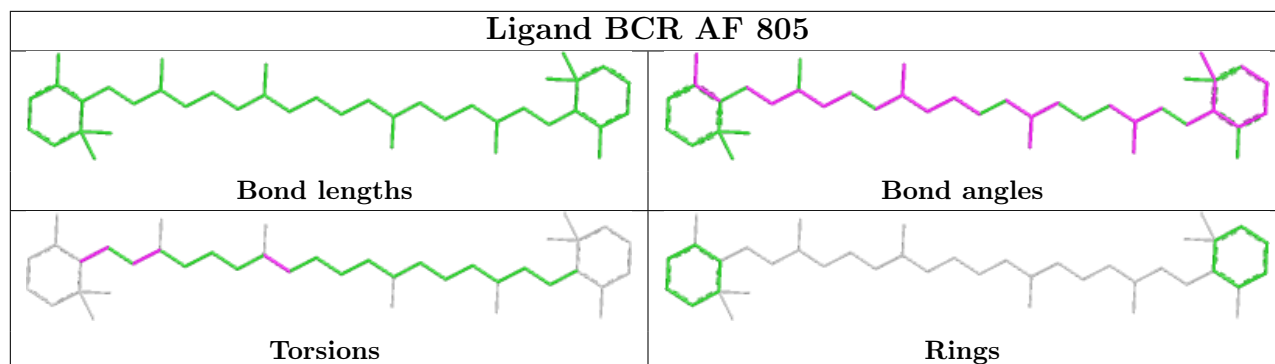
Ligand CLA AA 807



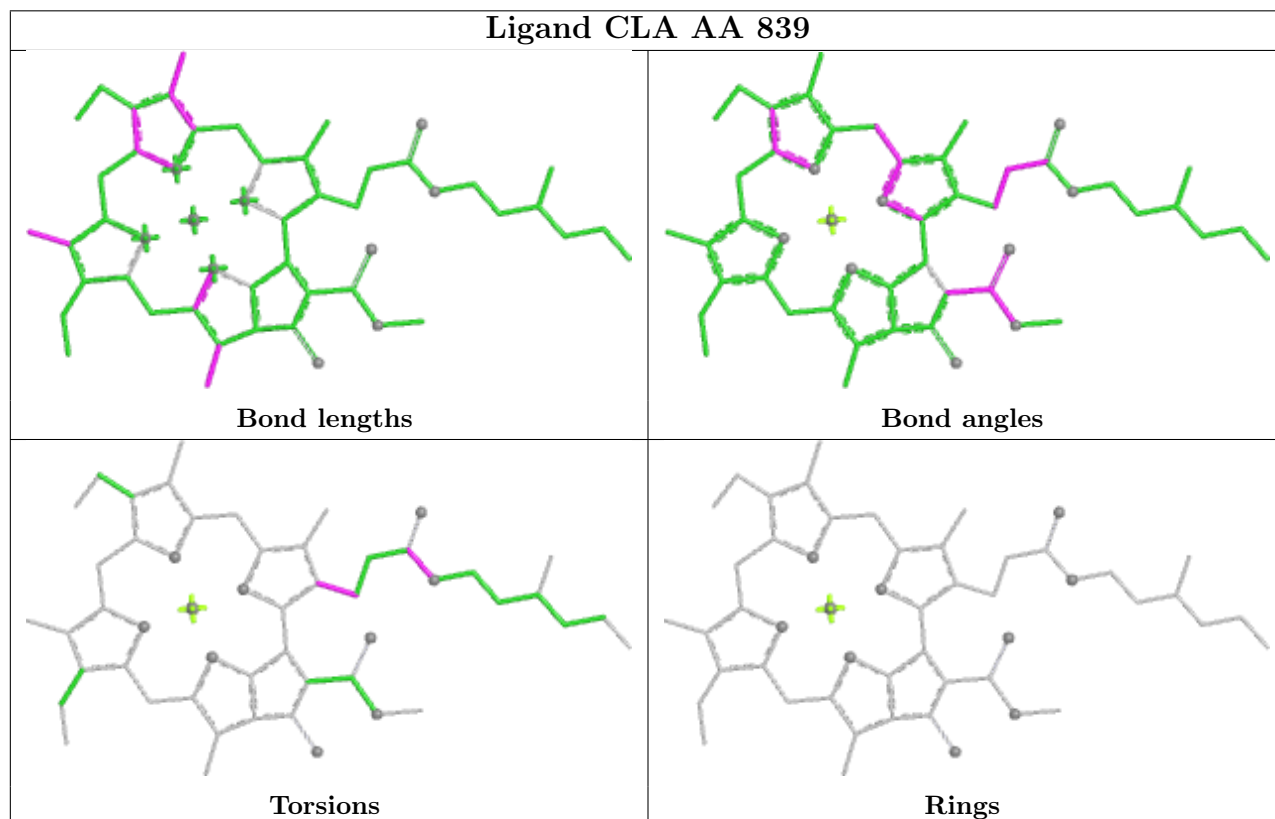
Ligand LHG AJ 104



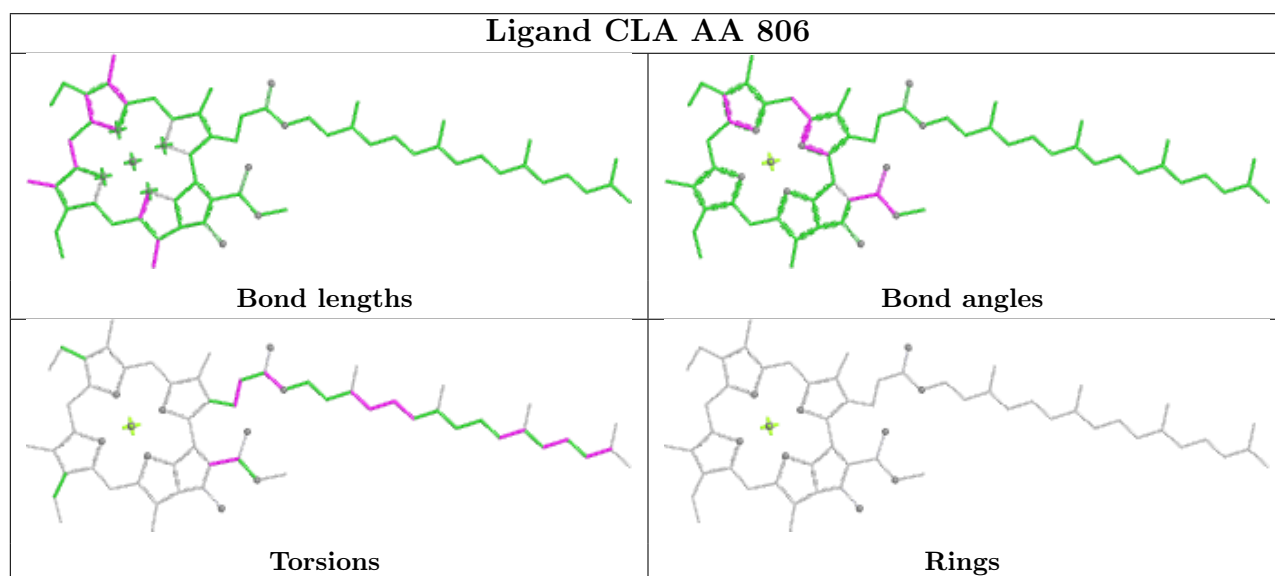
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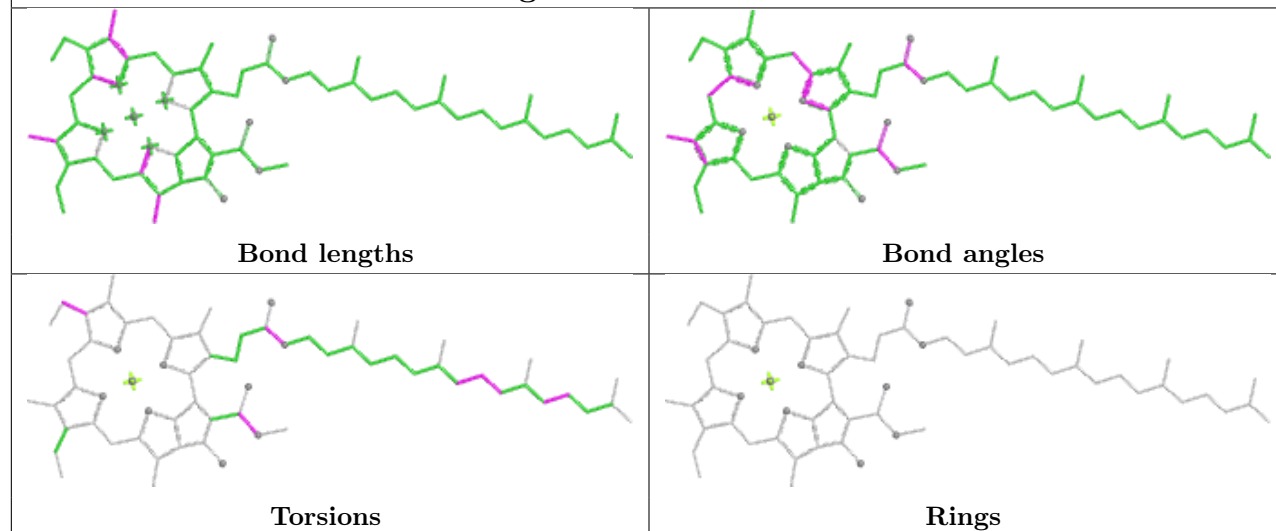
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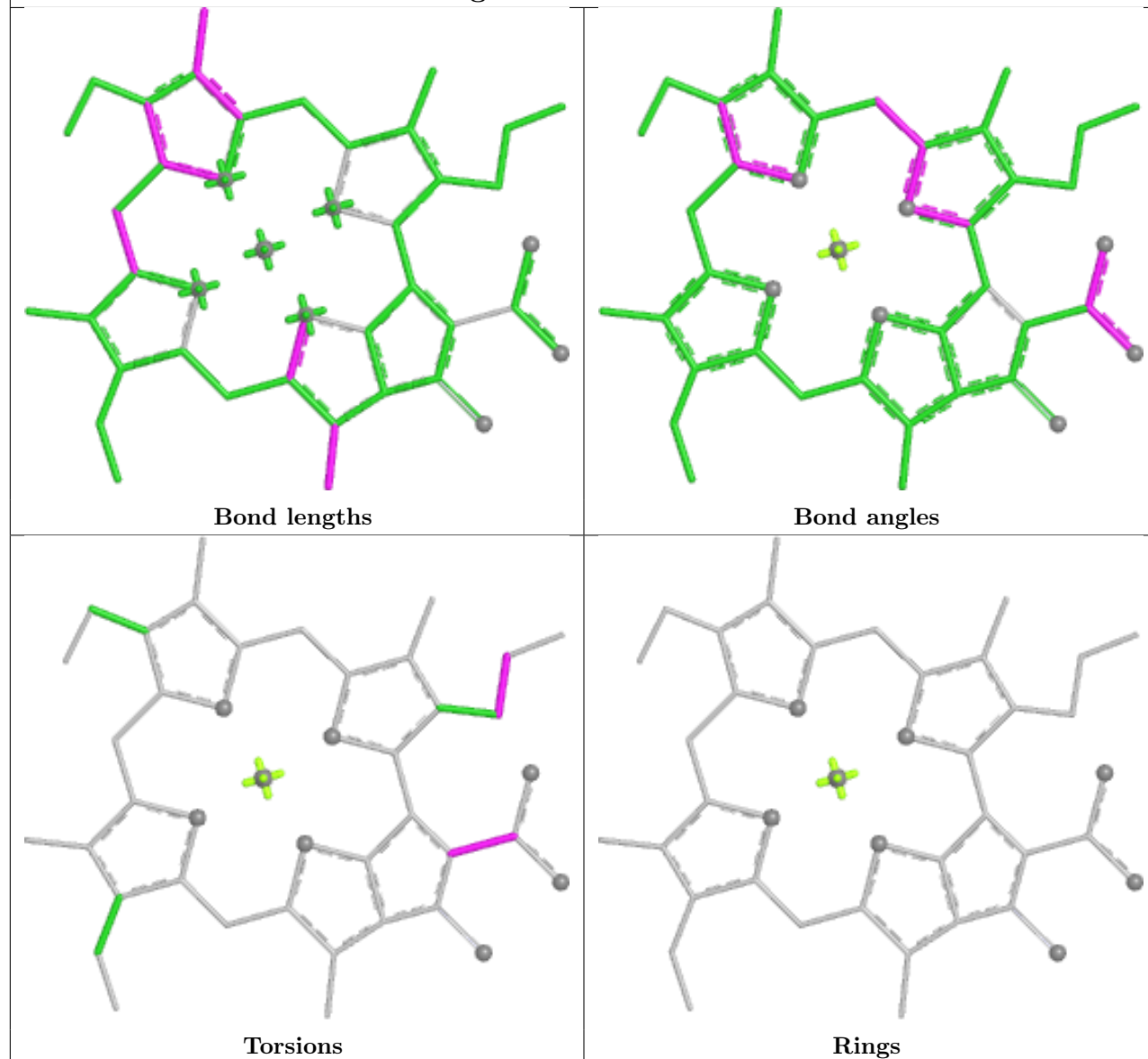
Ligand CLA AA 806



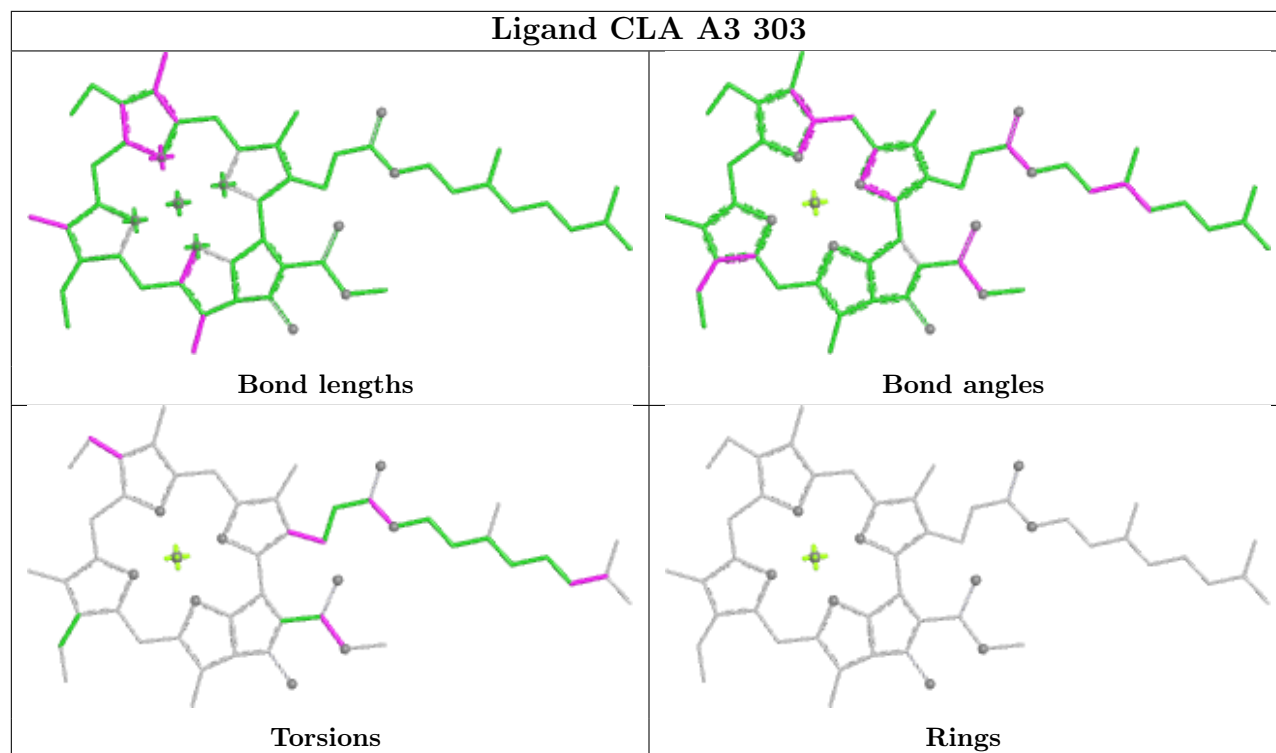
Ligand CLA AB 832



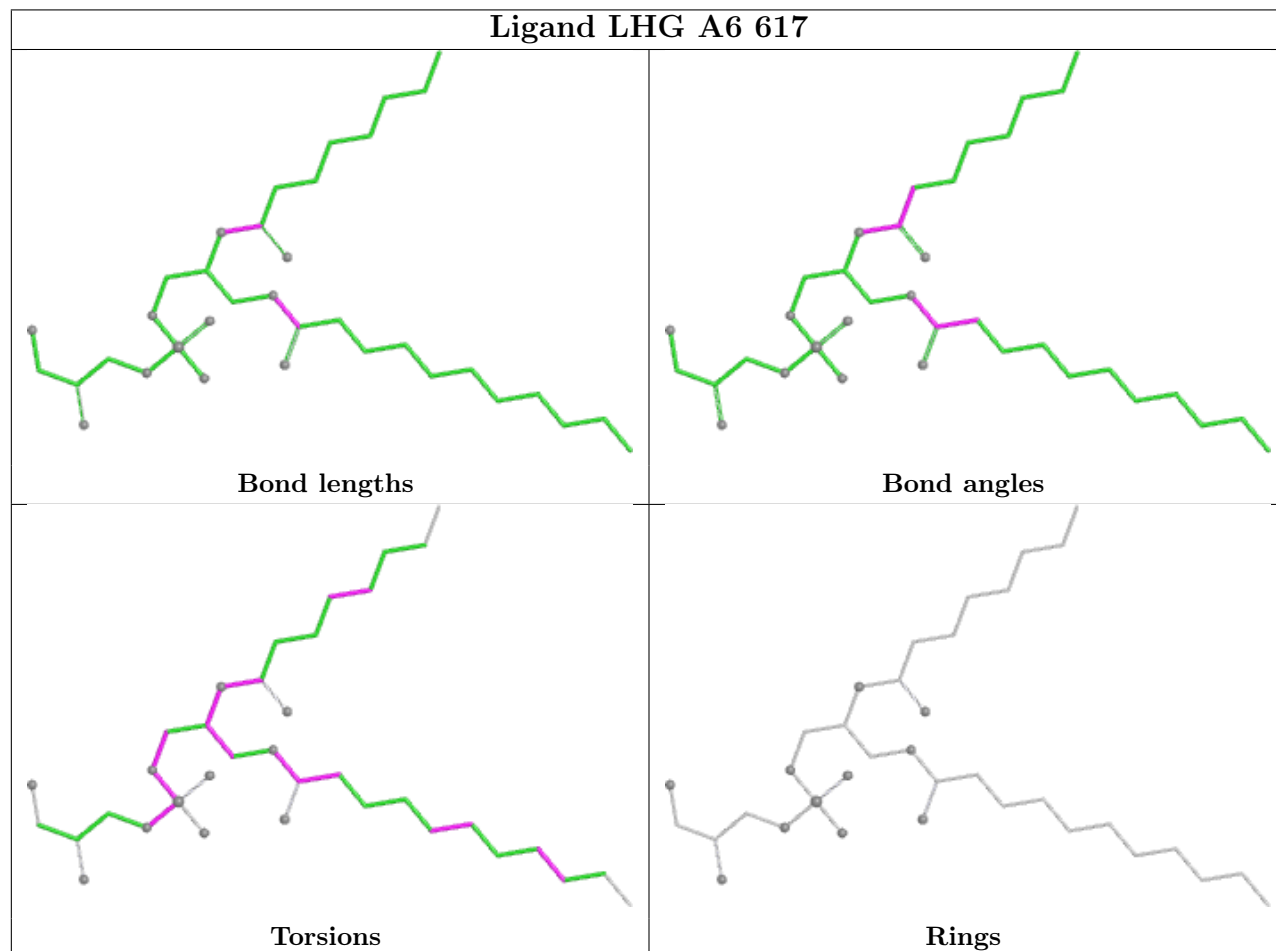
Ligand CLA A6 603



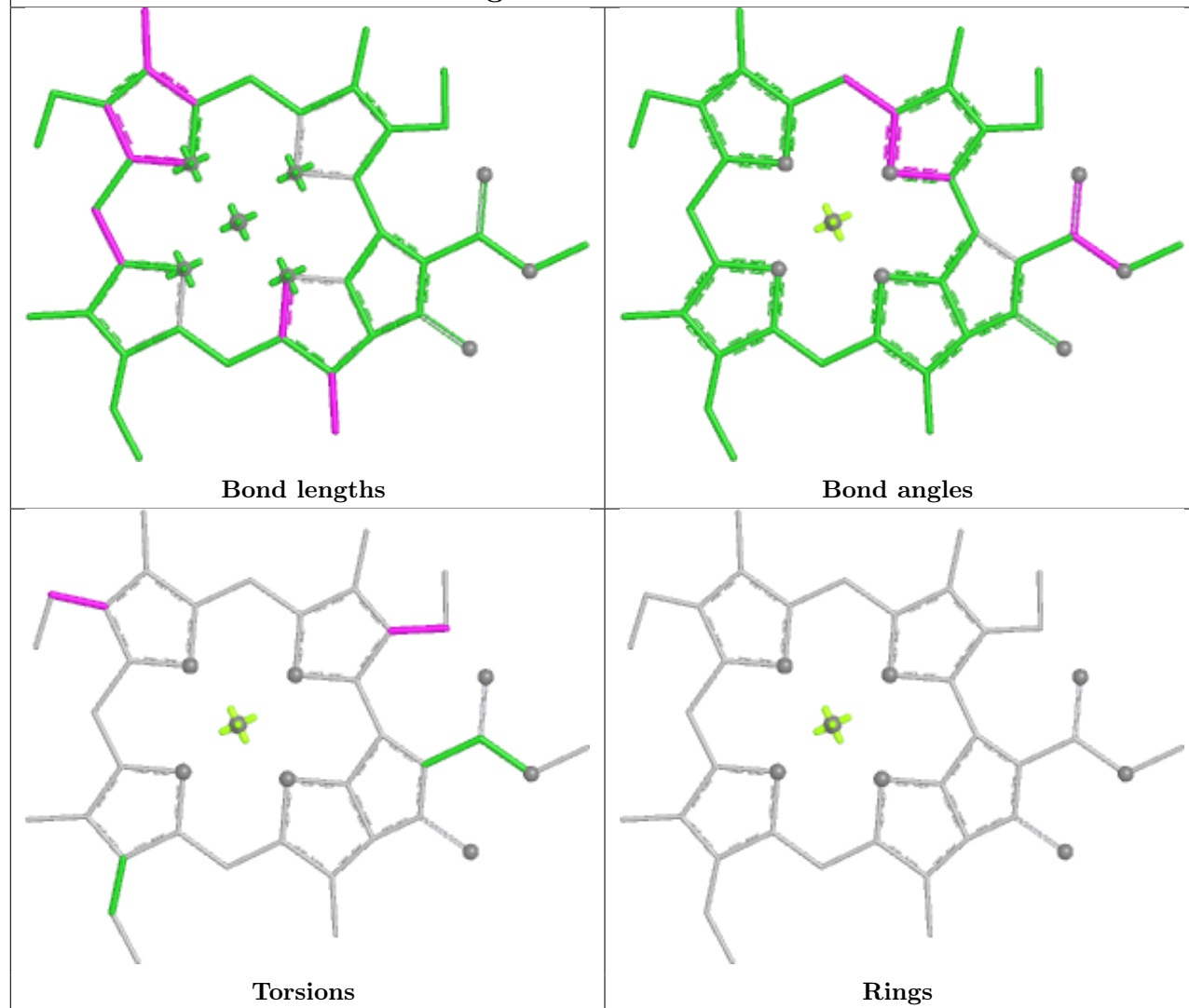
Ligand CLA A3 303



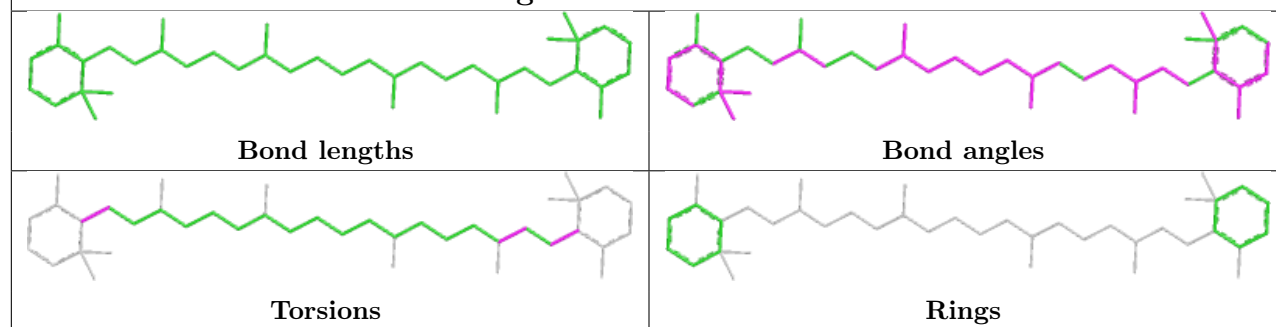
Ligand LHG A6 617

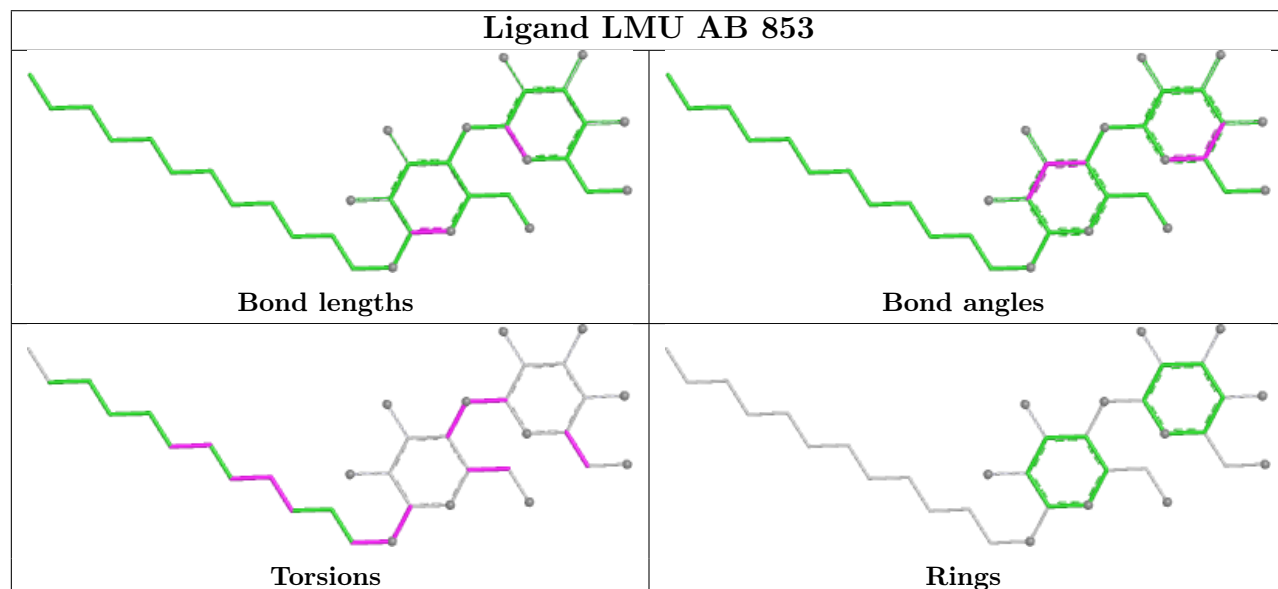
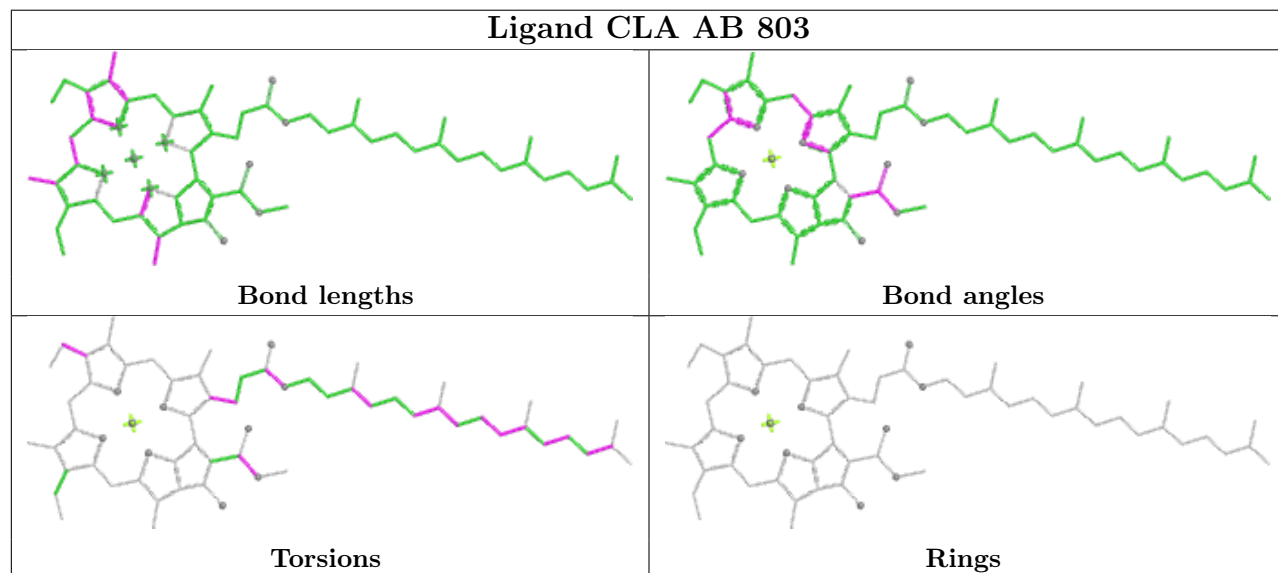
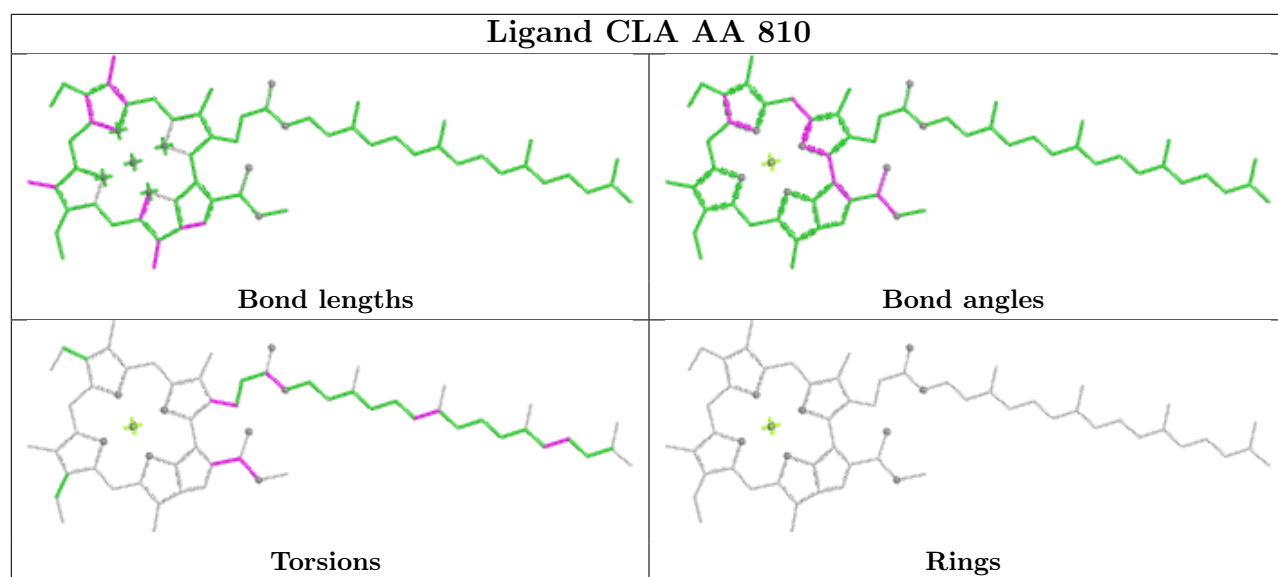


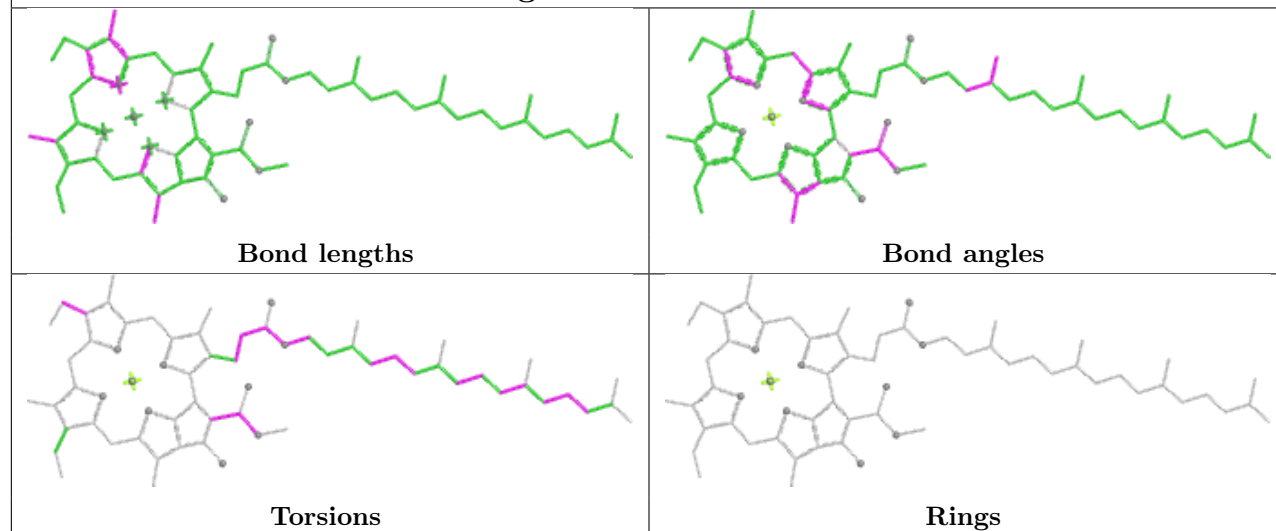
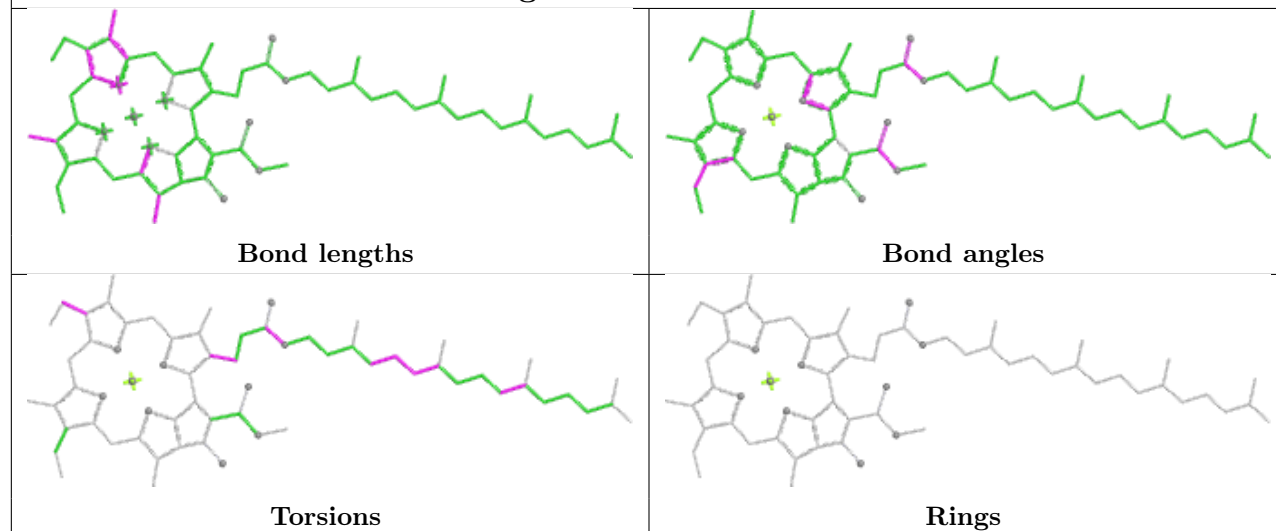
Ligand CLA AJ 102



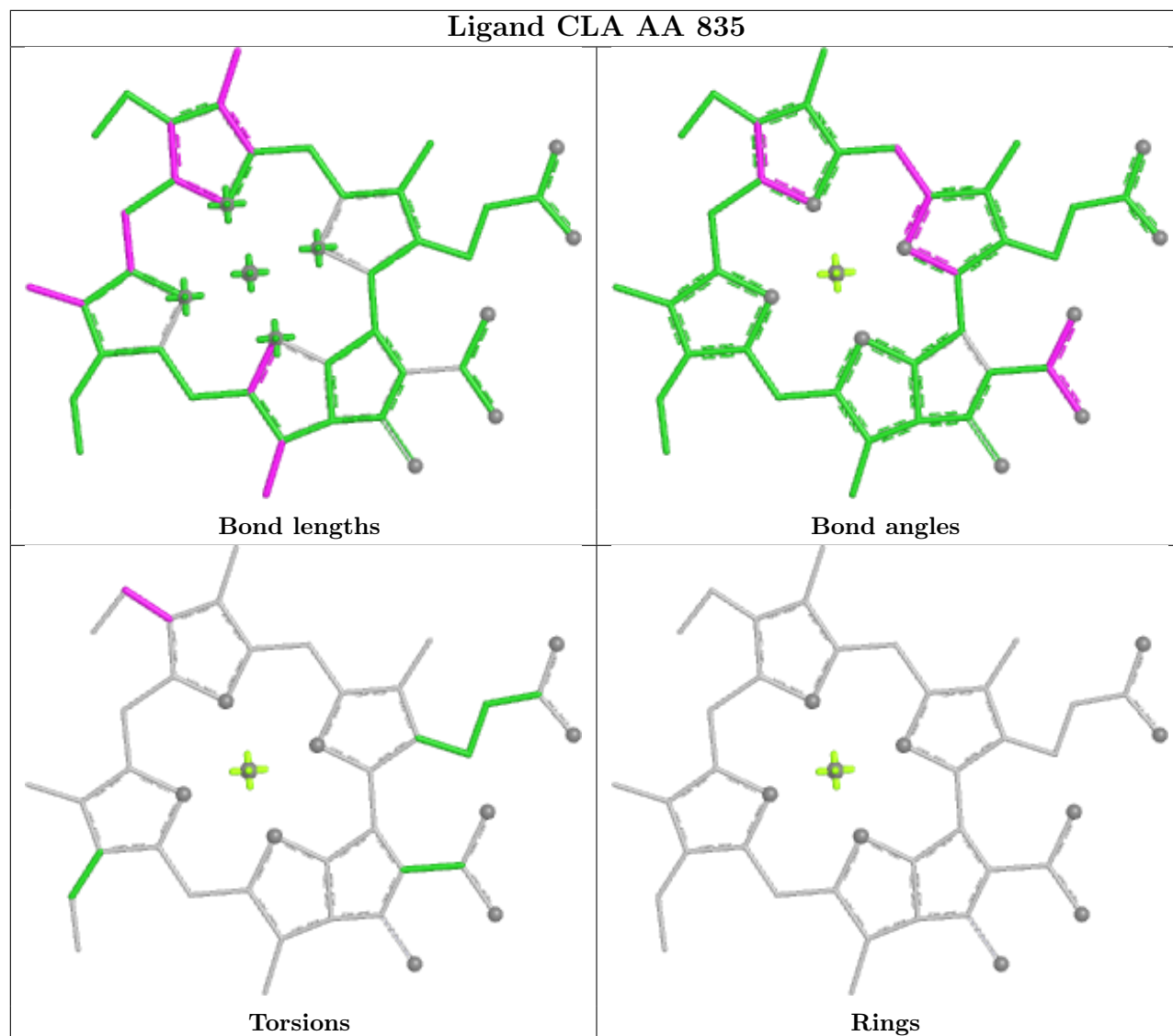
Ligand BCR AA 846



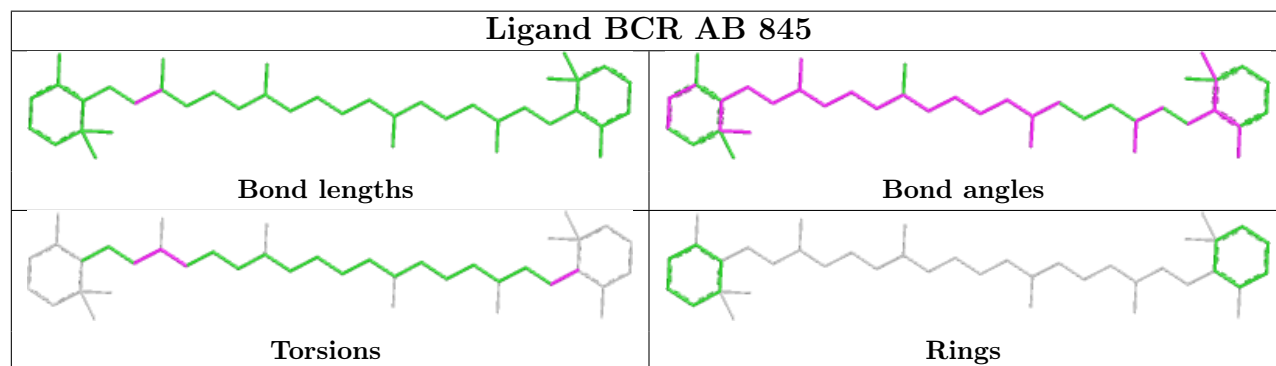


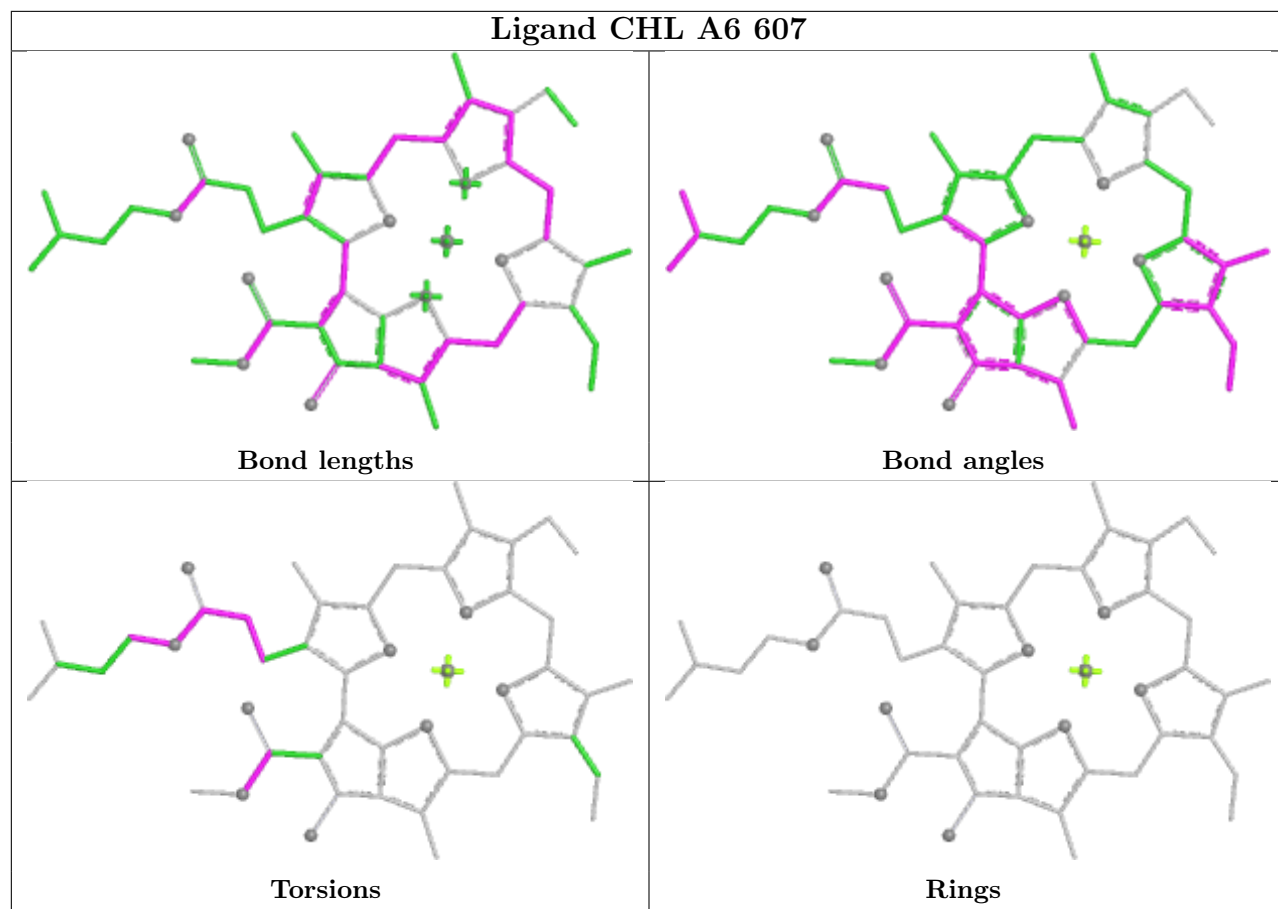
Ligand CLA AA 833**Ligand CLA AB 841**

Ligand CLA AA 835

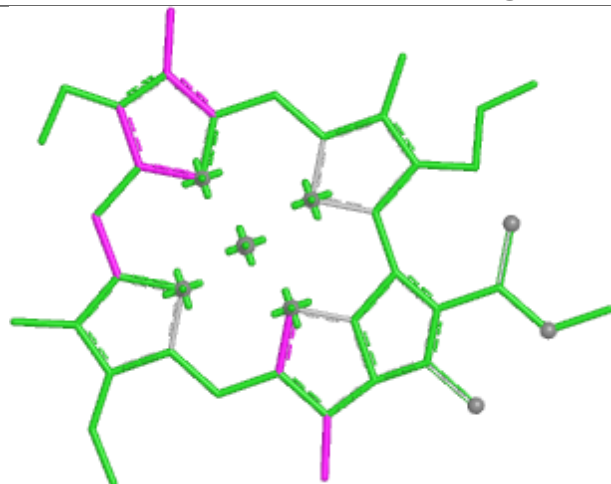


Ligand BCR AB 845

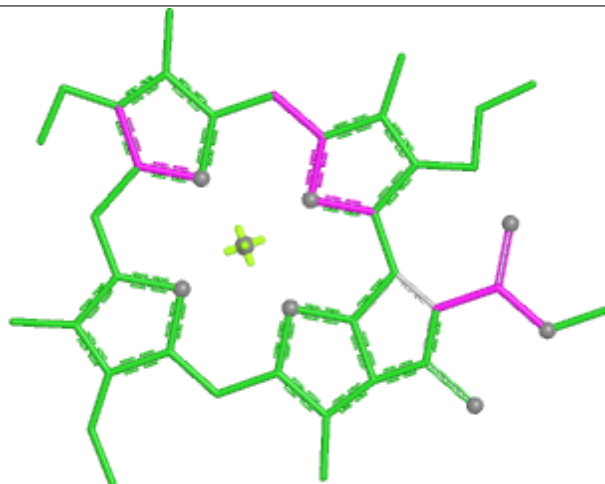




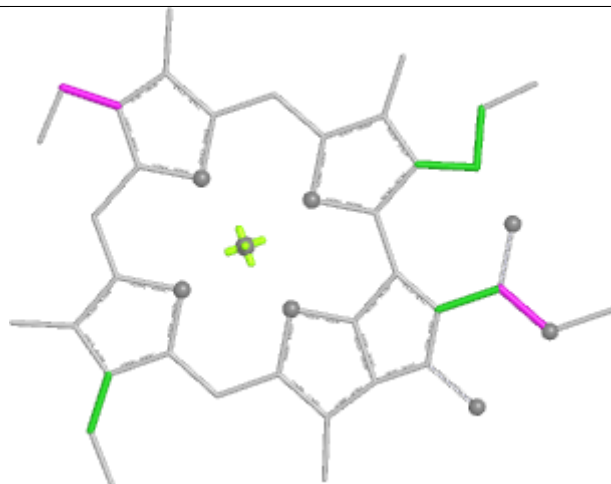
Ligand CLA AB 813



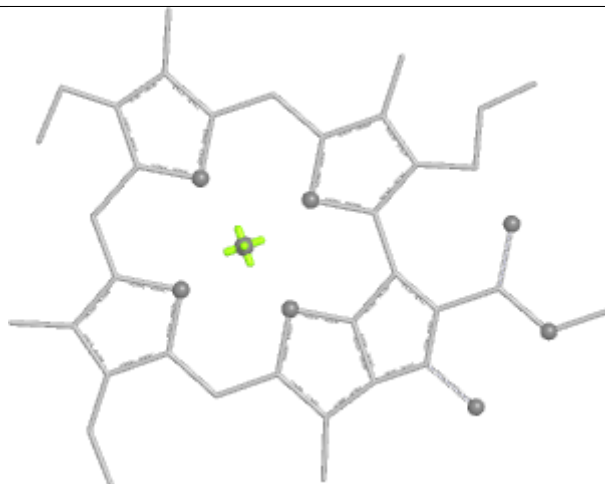
Bond lengths



Bond angles

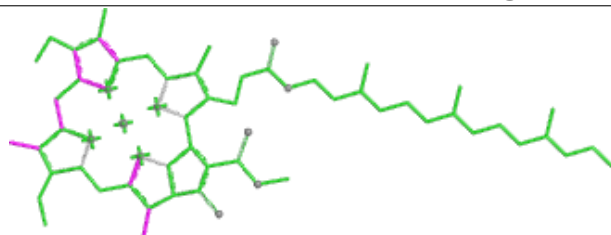


Torsions

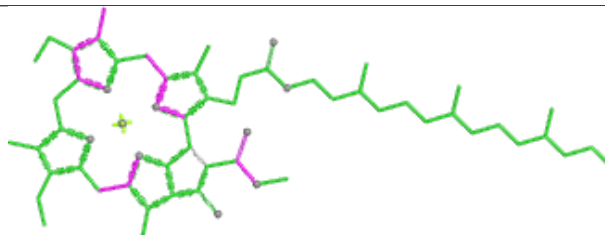


Rings

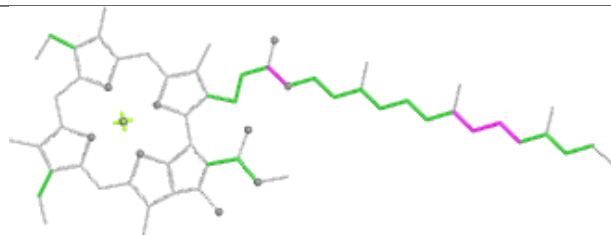
Ligand CLA AB 826



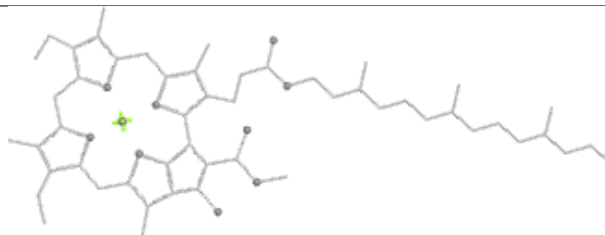
Bond lengths



Bond angles

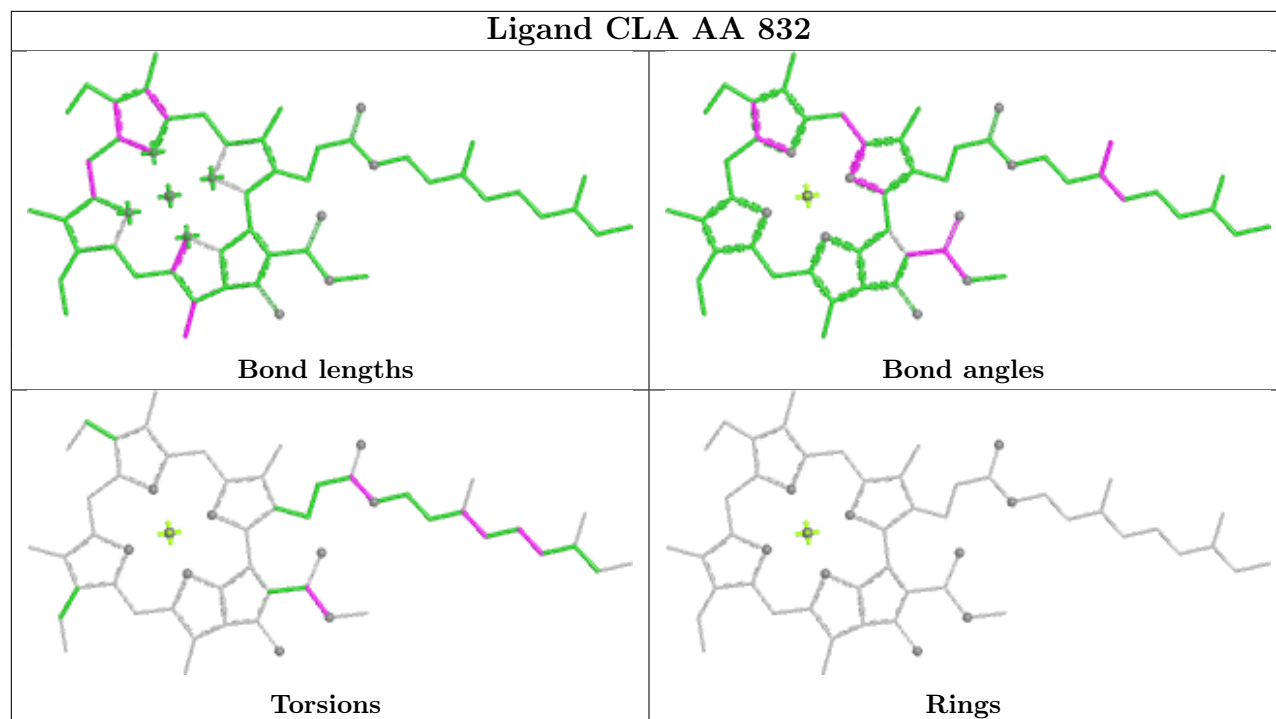


Torsions

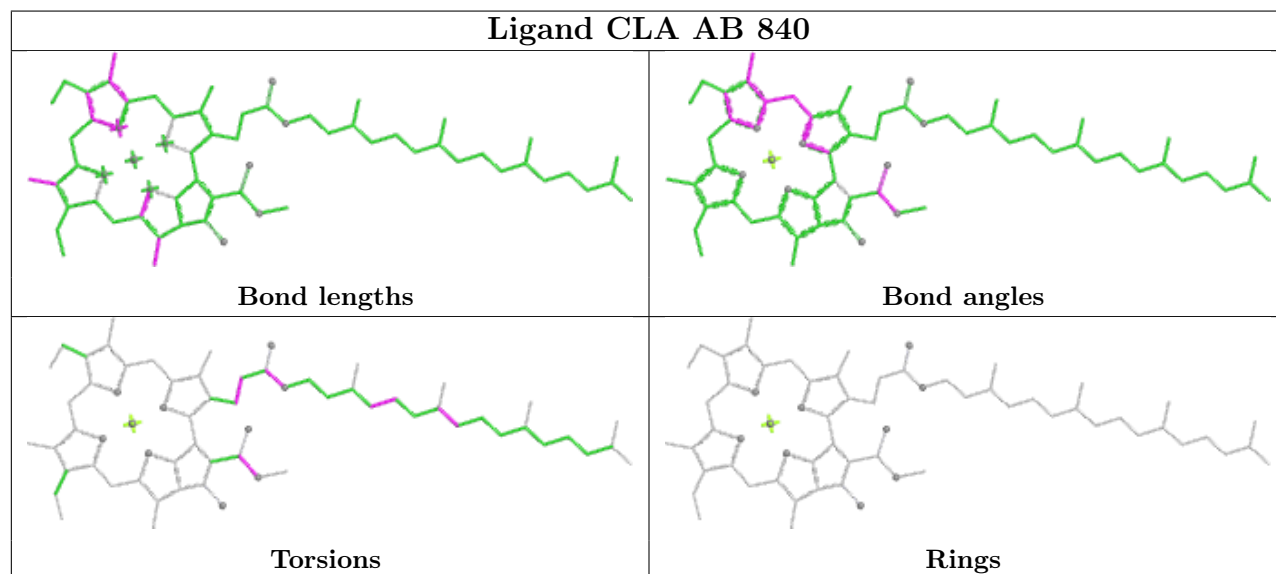


Rings

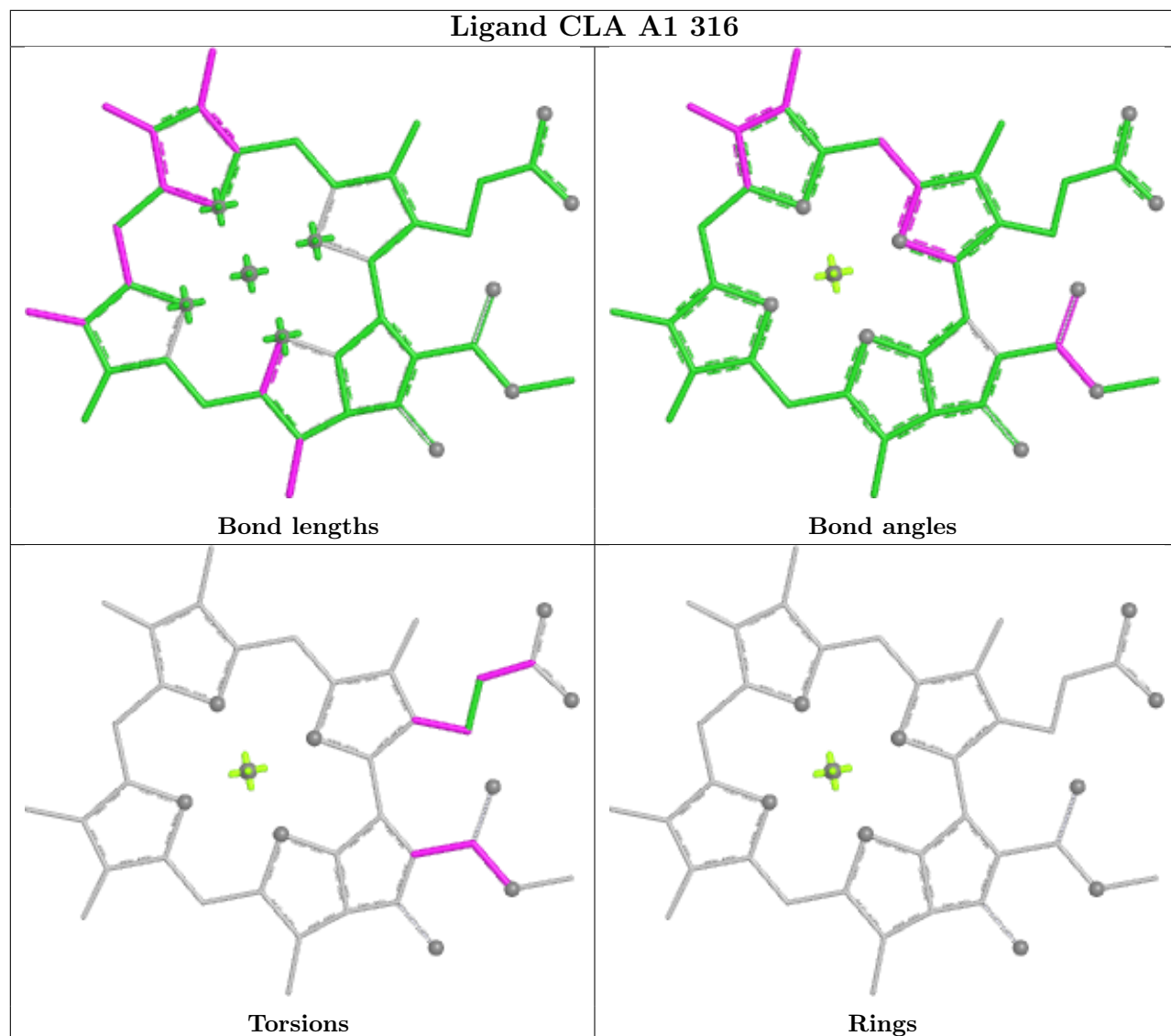
Ligand CLA AA 832



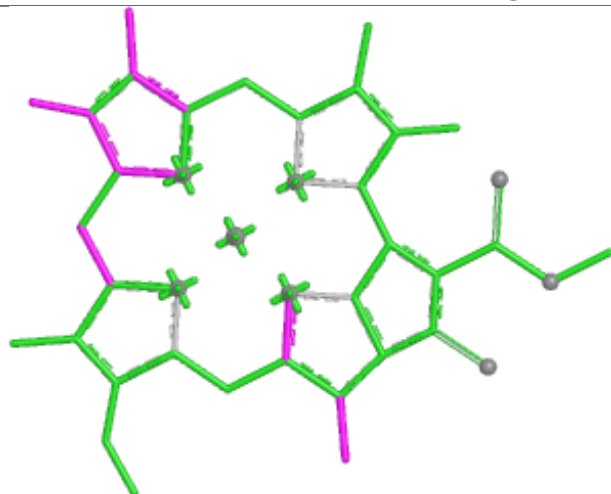
Ligand CLA AB 840



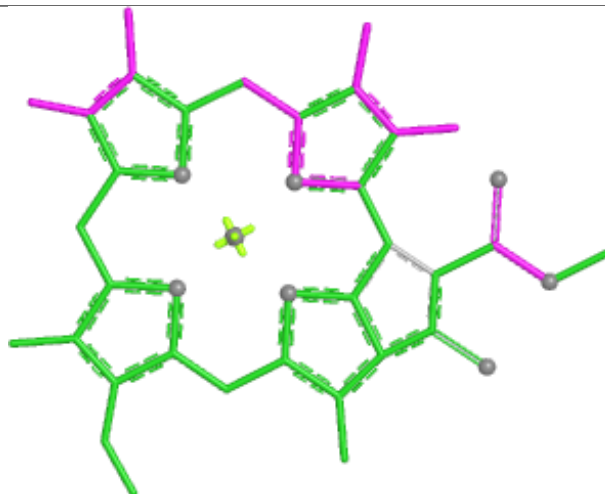
Ligand CLA A1 316



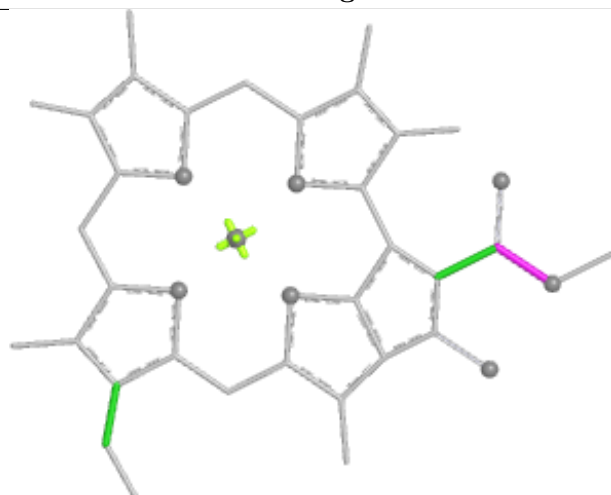
Ligand CLA A1 310



Bond lengths



Bond angles

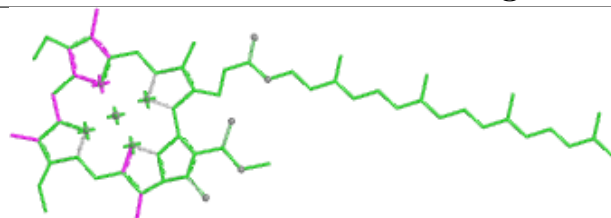


Torsions

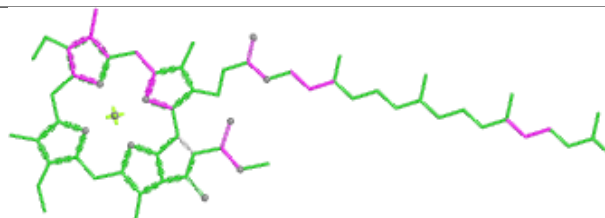


Rings

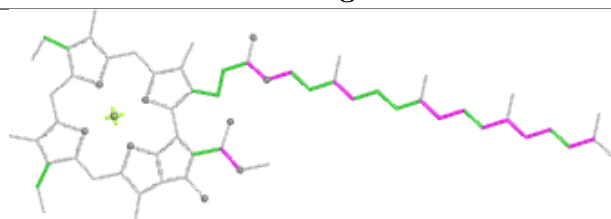
Ligand CLA AB 815



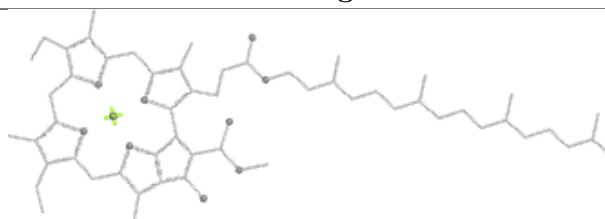
Bond lengths



Bond angles

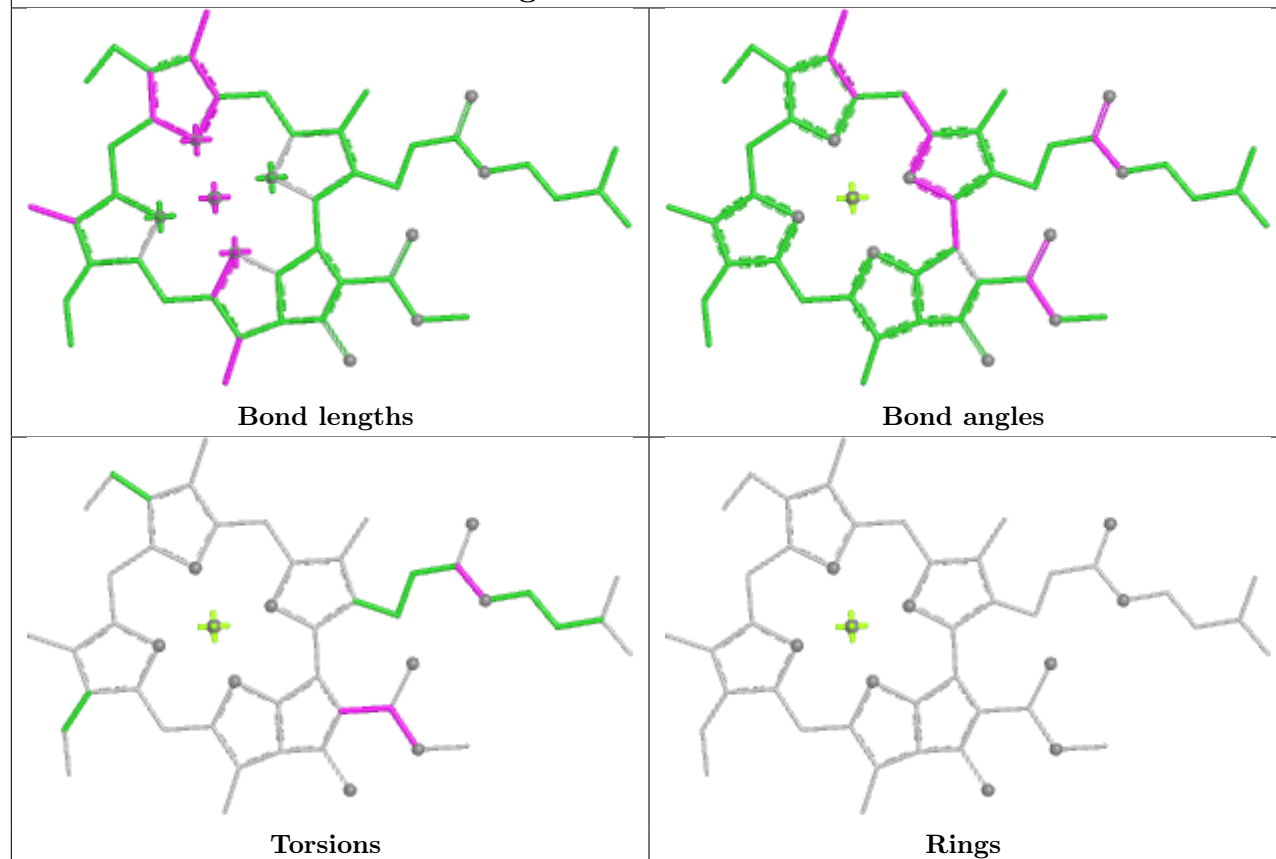


Torsions

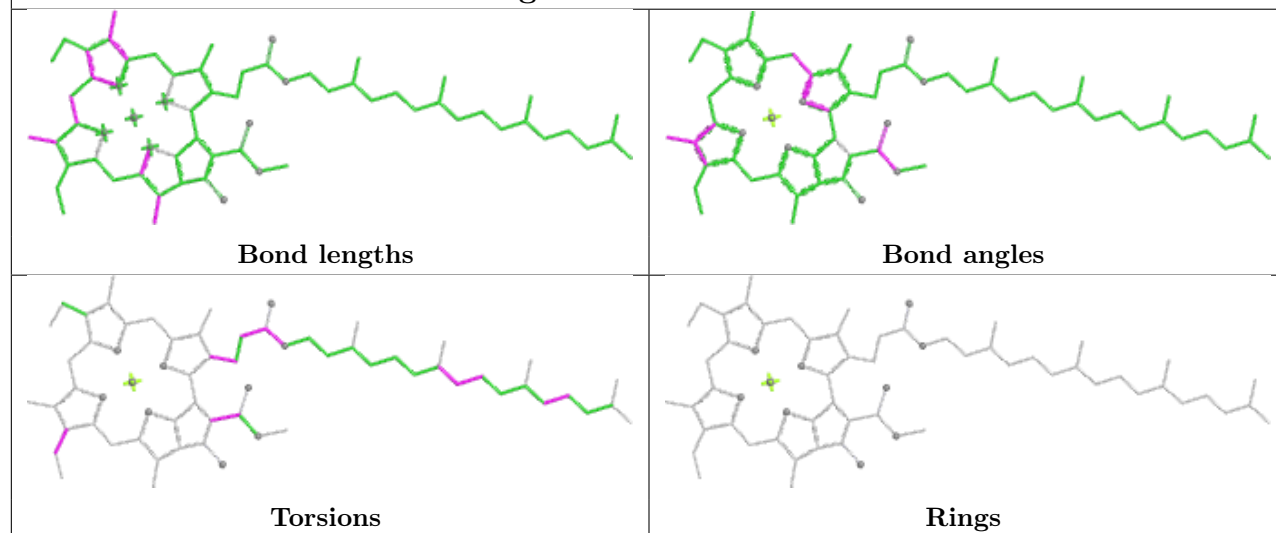


Rings

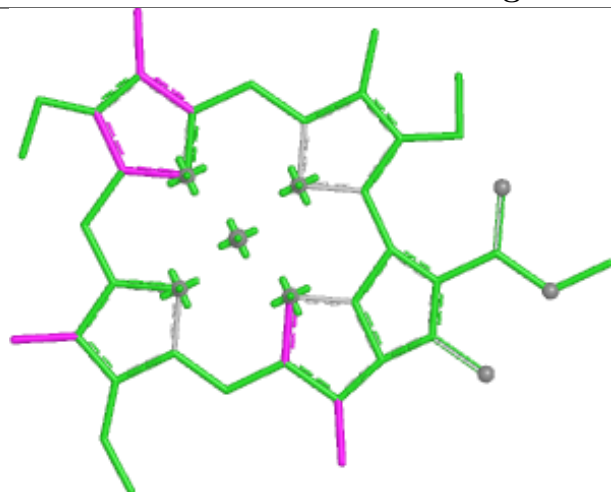
Ligand CLA AB 837



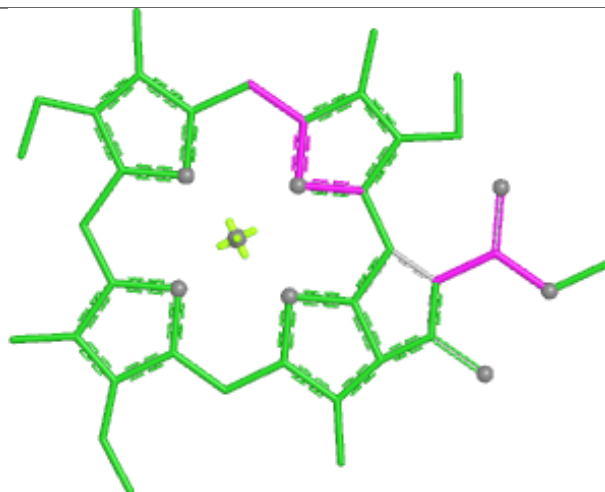
Ligand CLA AB 806



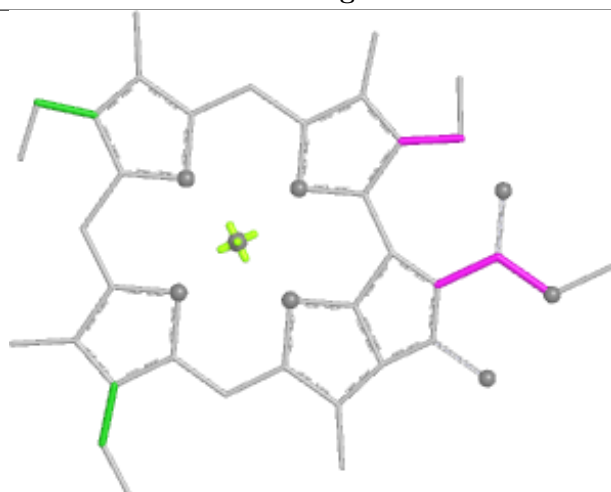
Ligand CLA AL 304



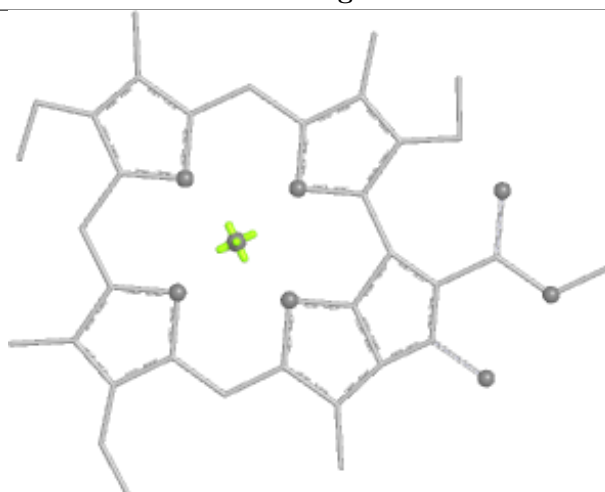
Bond lengths



Bond angles

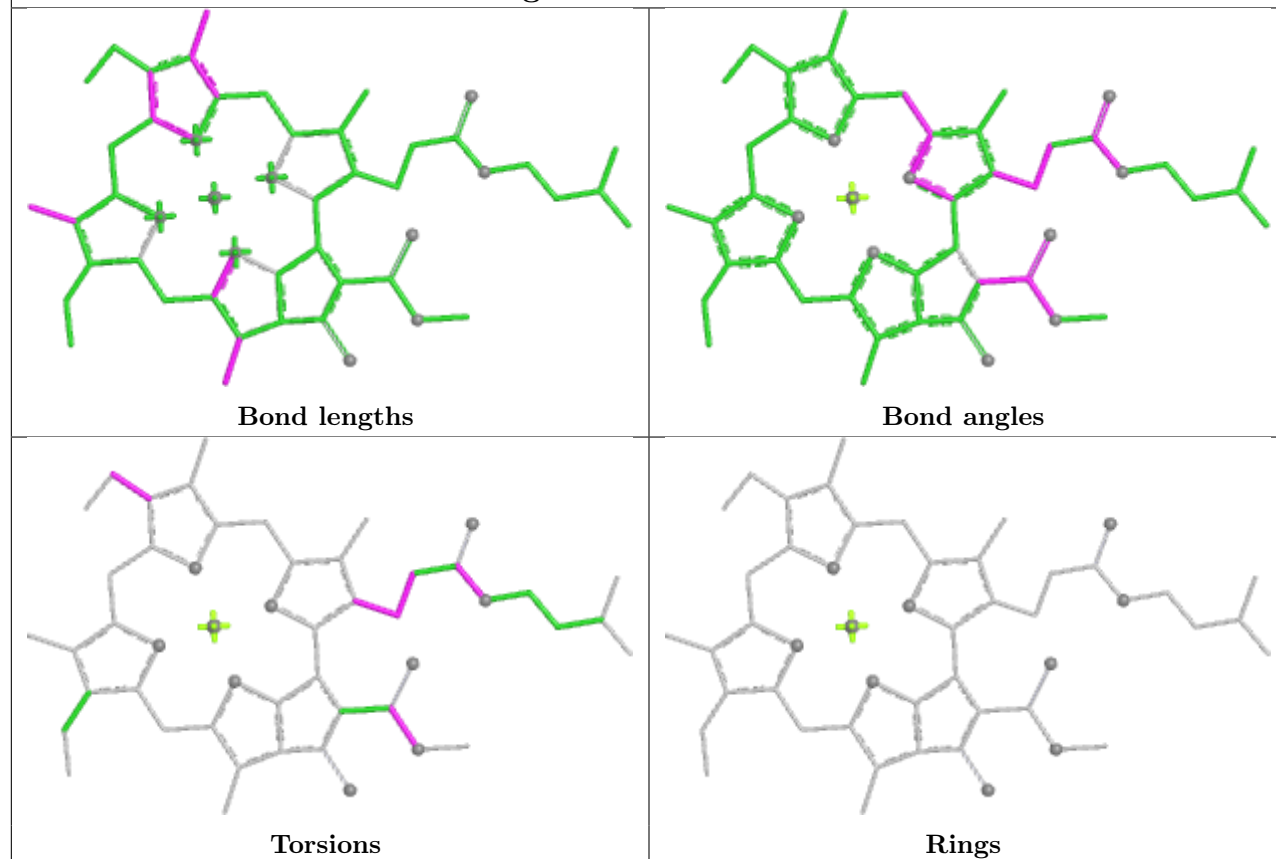


Torsions

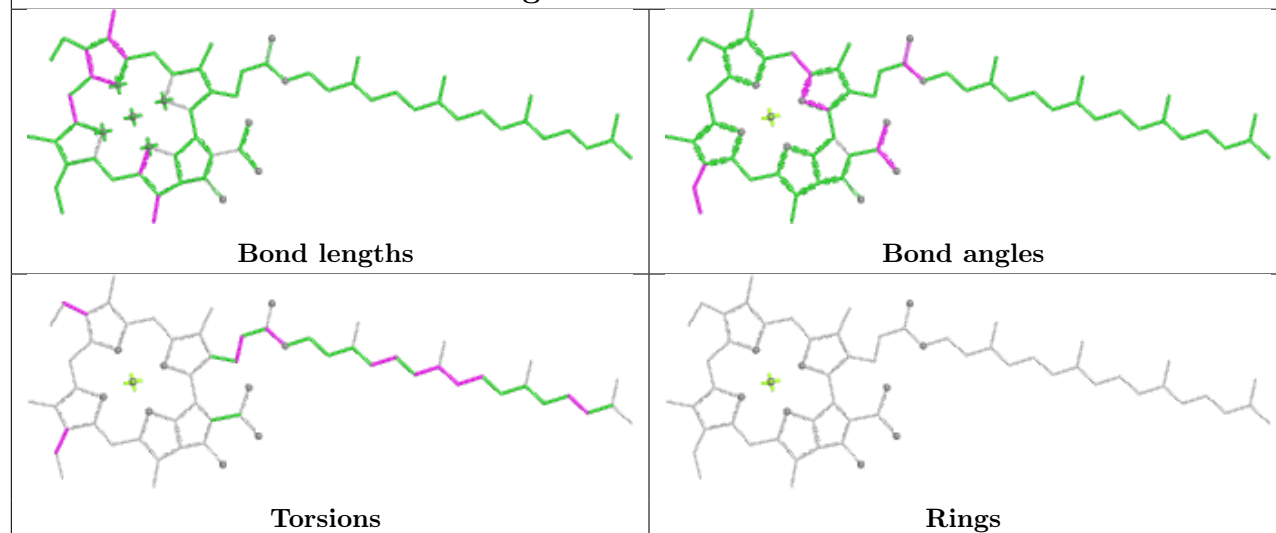


Rings

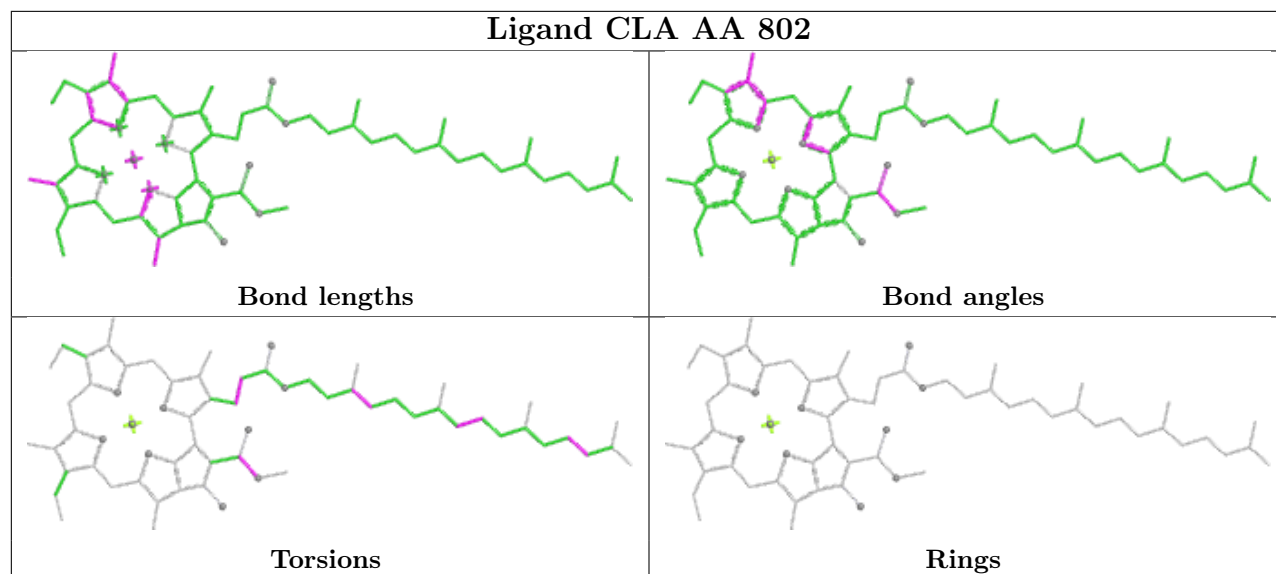
Ligand CLA A4 313



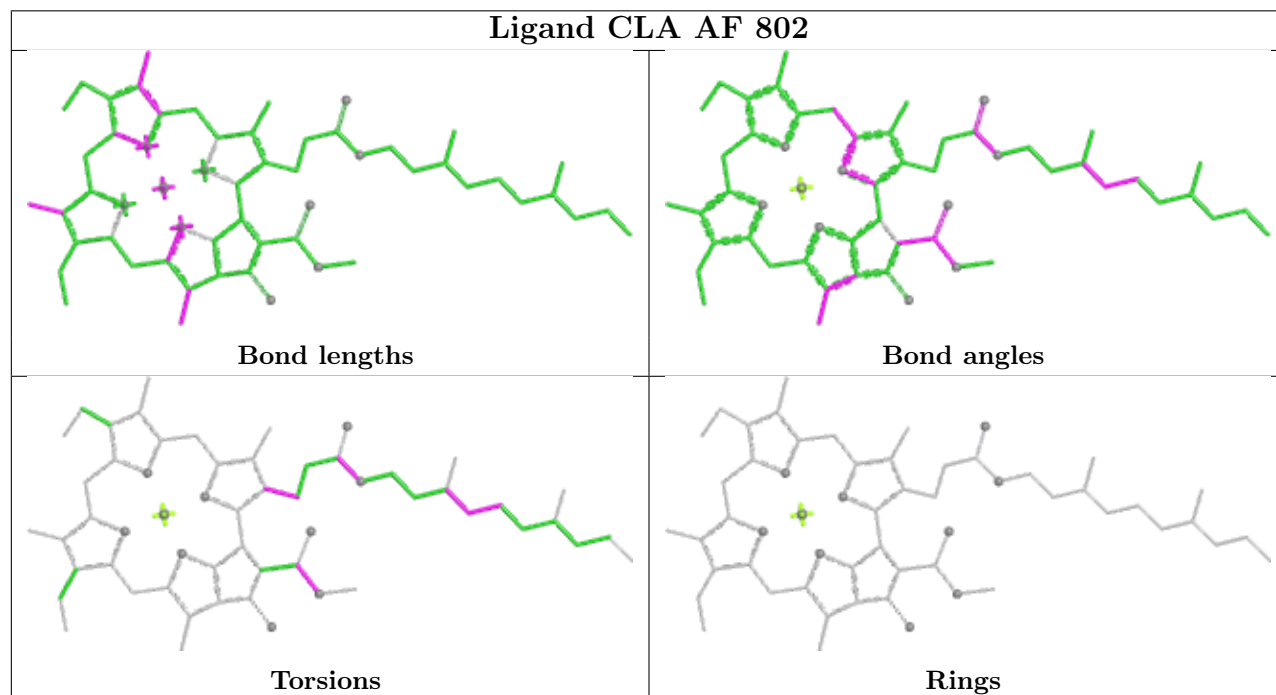
Ligand CLA A1 314



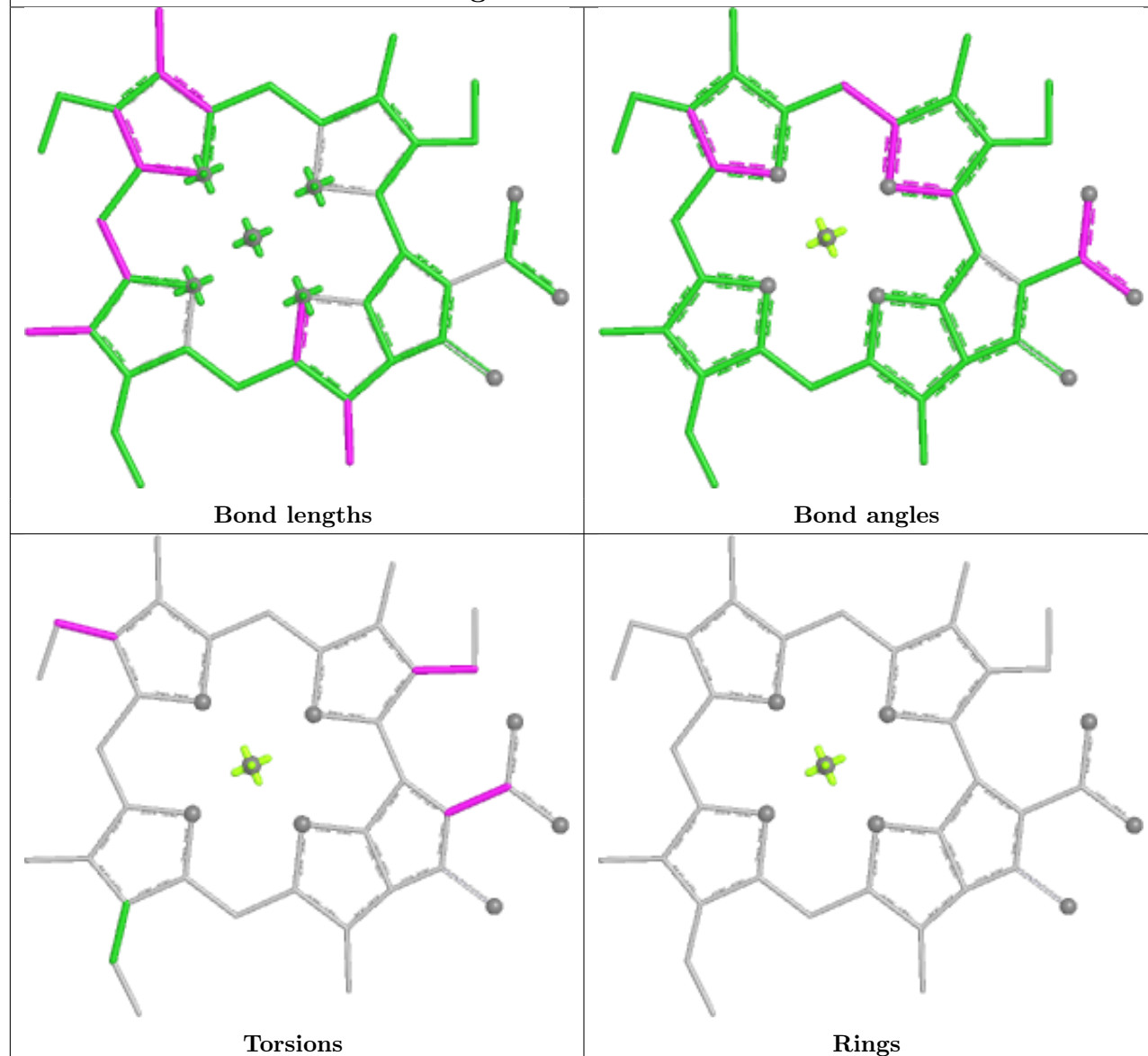
Ligand CLA AA 802



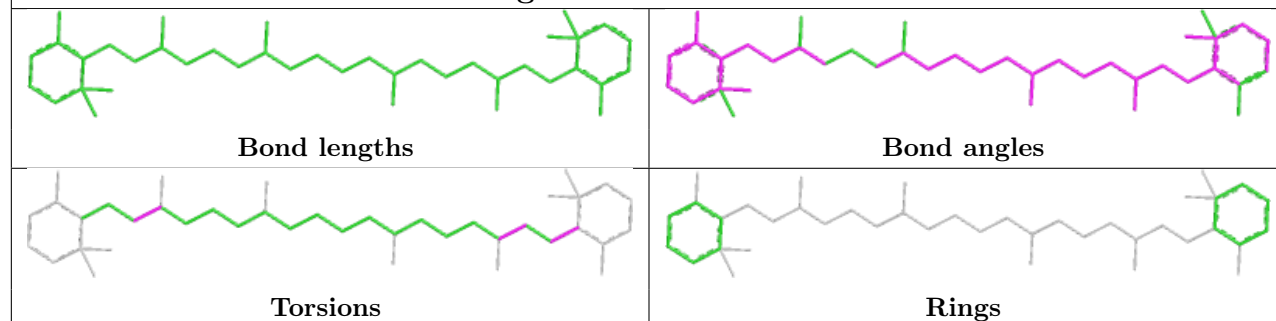
Ligand CLA AF 802

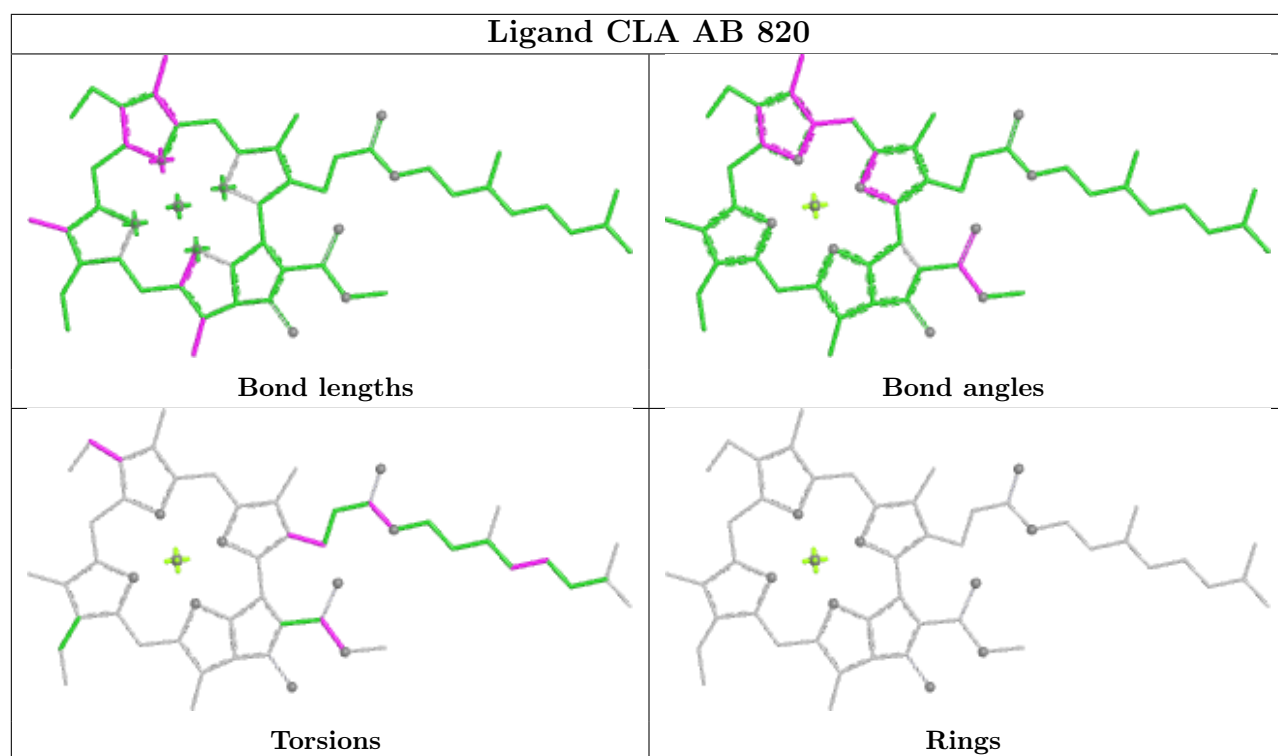


Ligand CLA A4 310

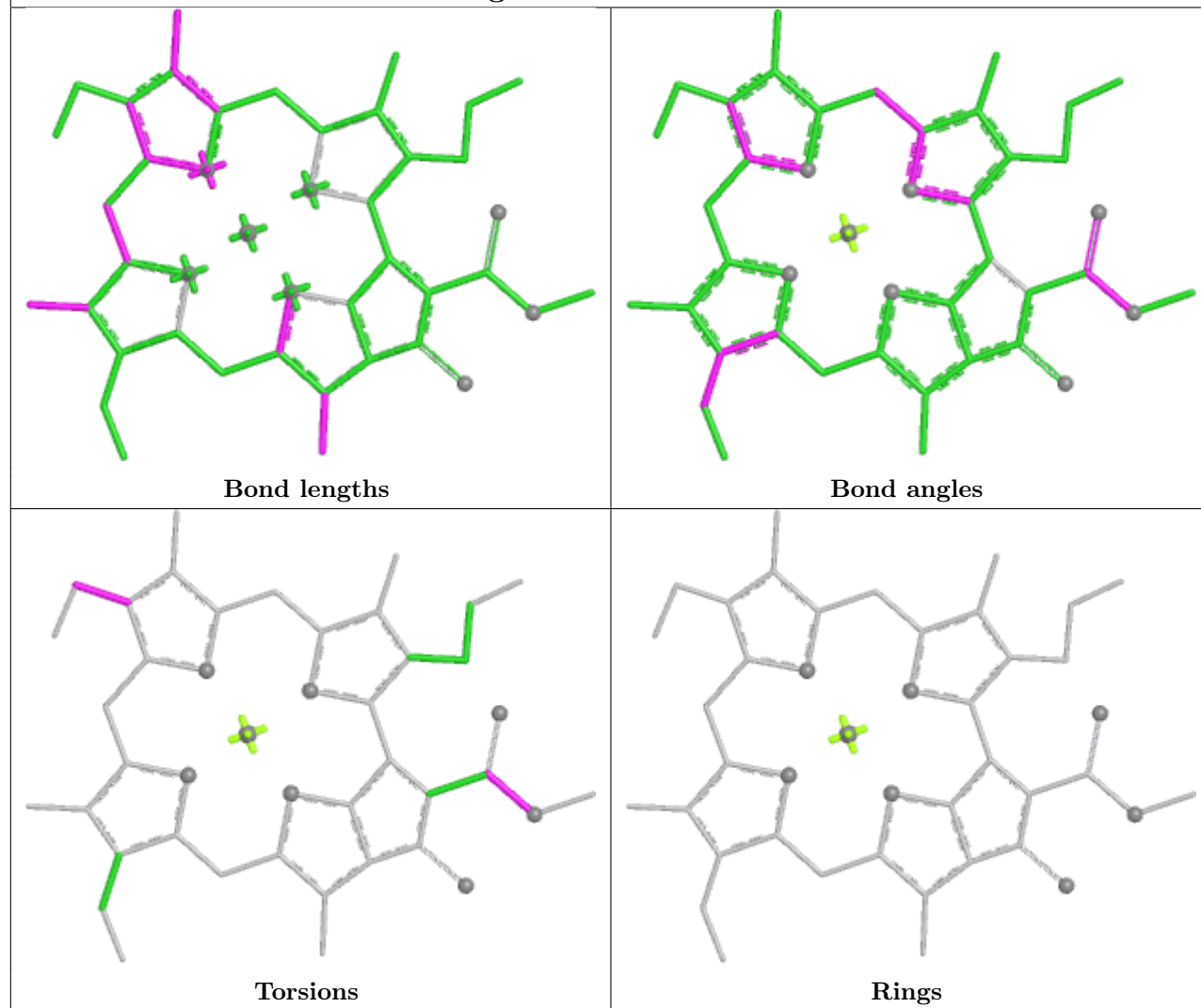


Ligand BCR AB 849

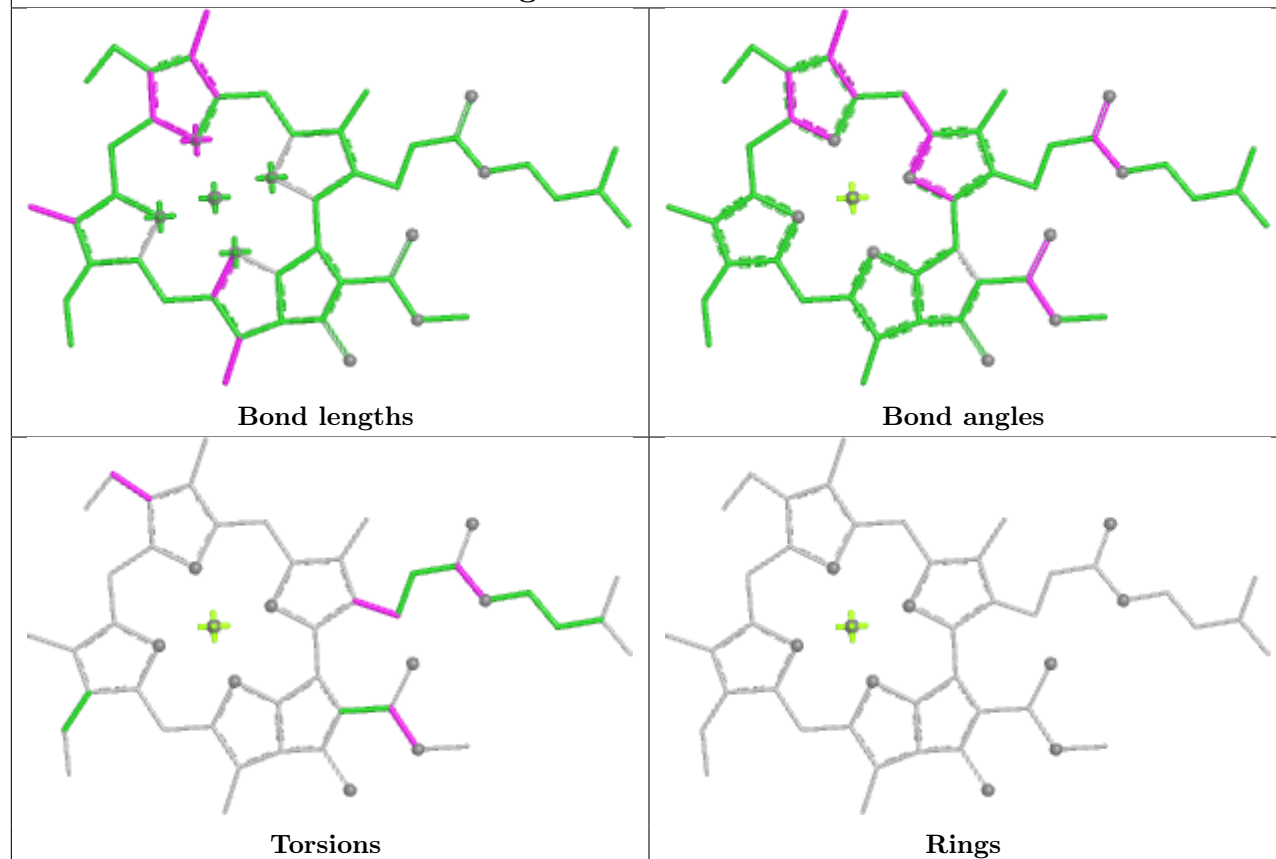




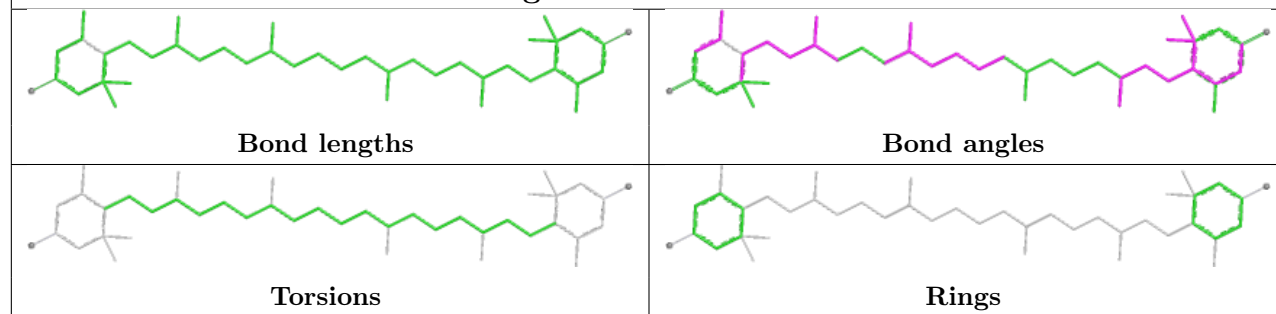
Ligand CLA AB 831



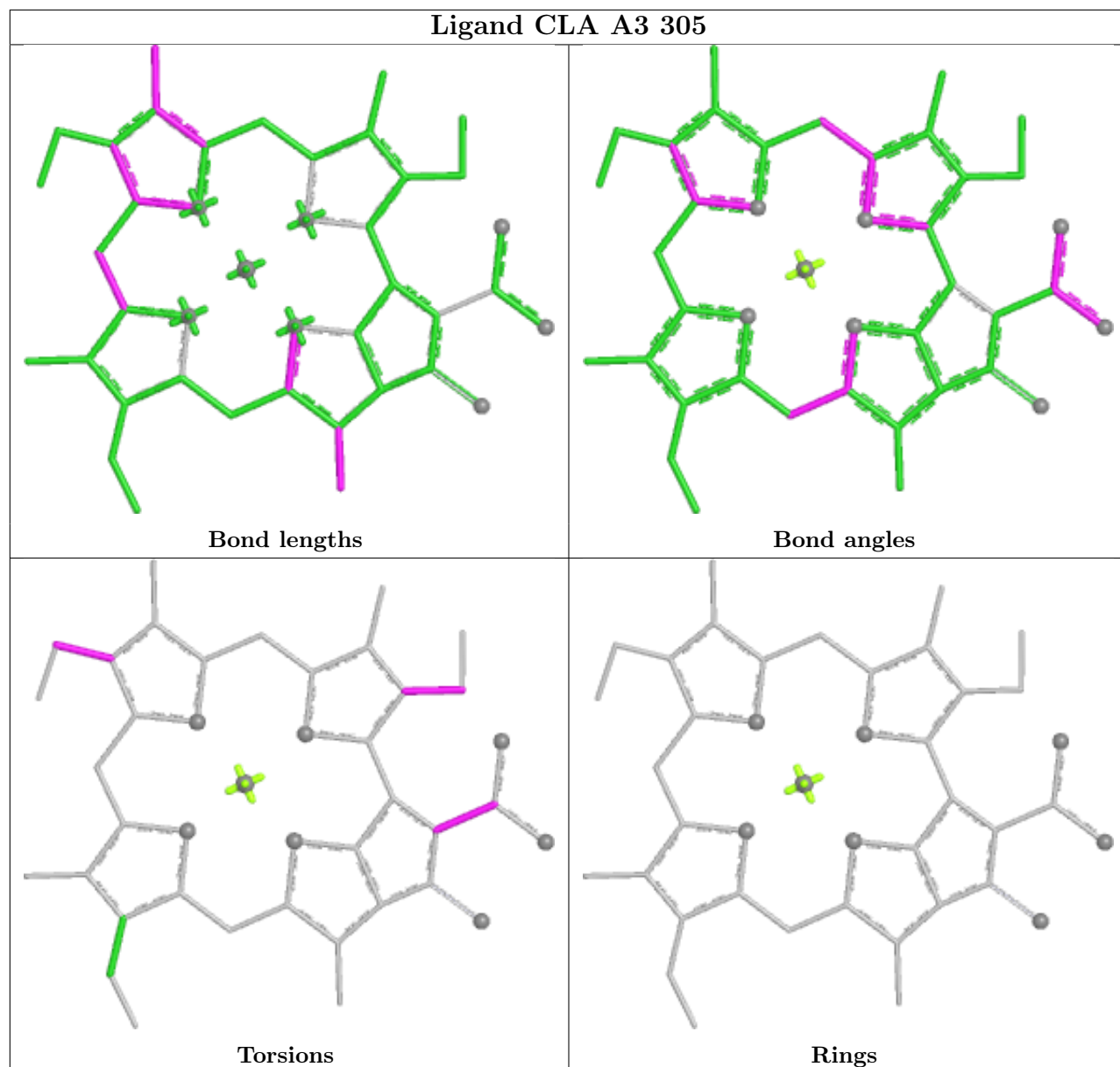
Ligand CLA AB 821



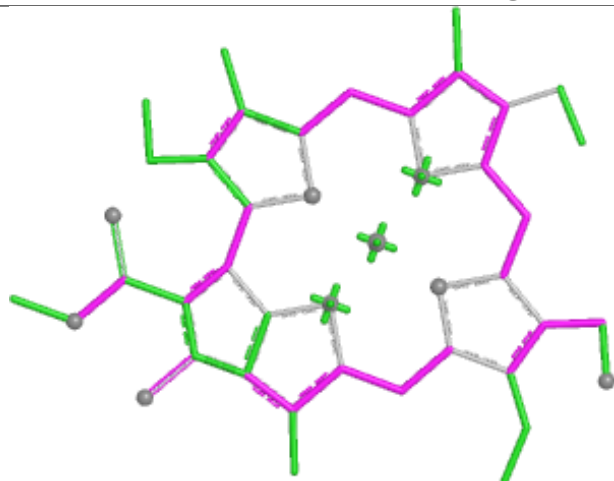
Ligand LUT A3 316



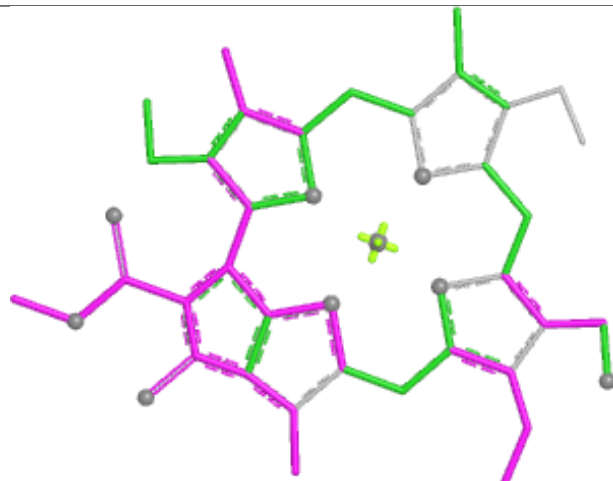
Ligand CLA A3 305



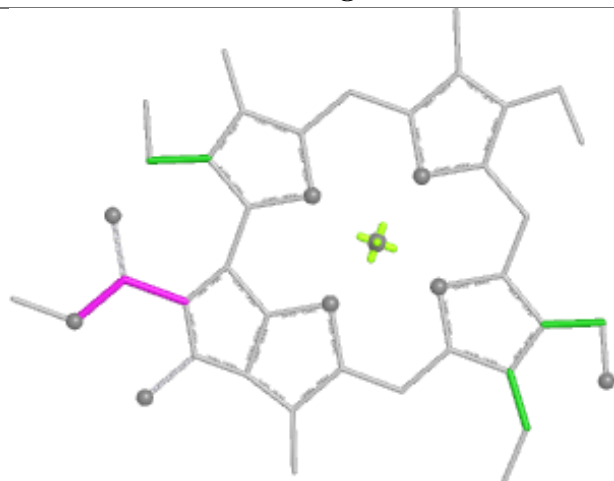
Ligand CHL A6 606



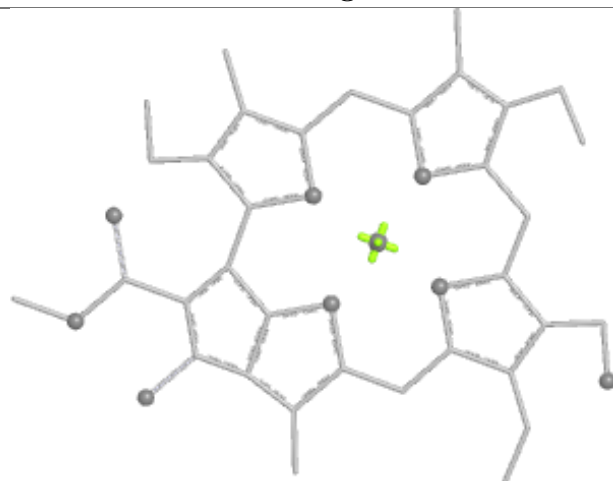
Bond lengths



Bond angles

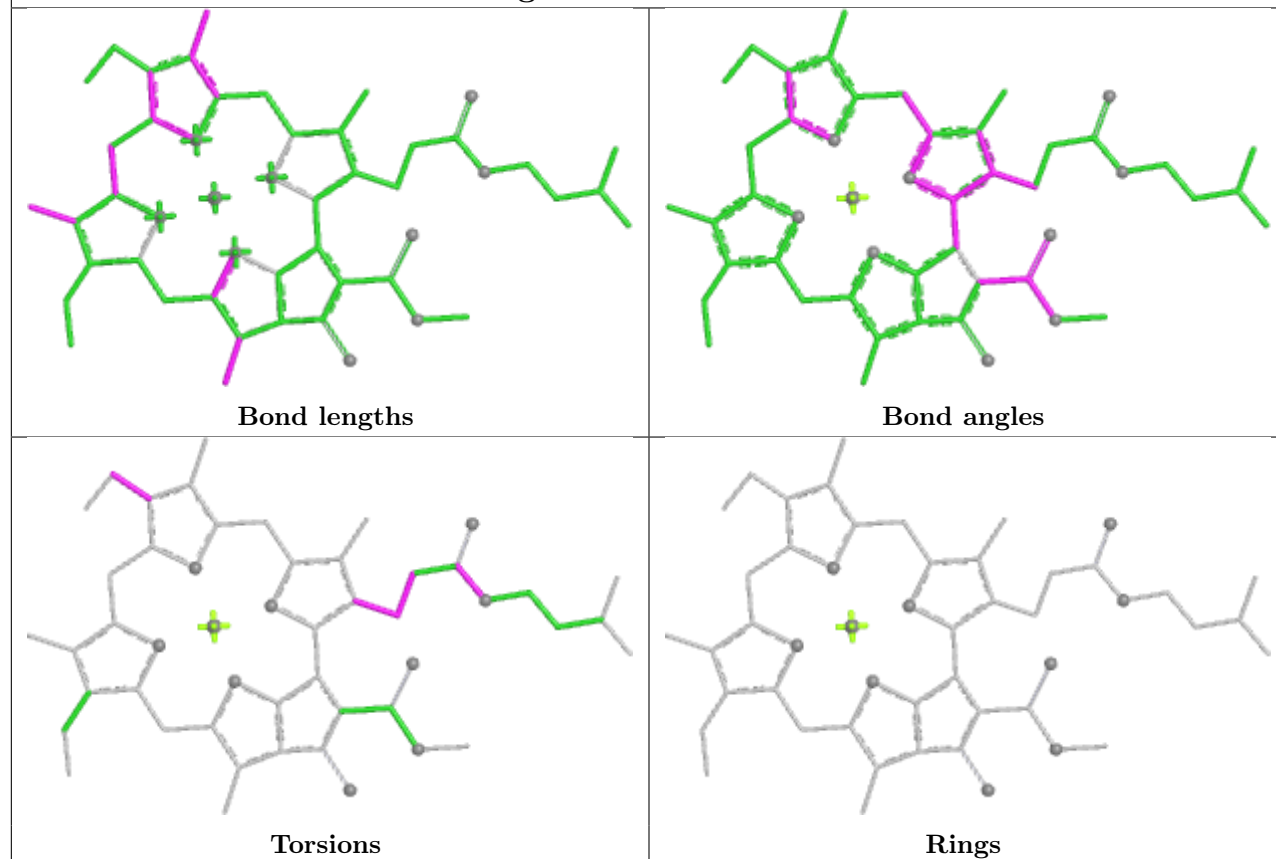


Torsions

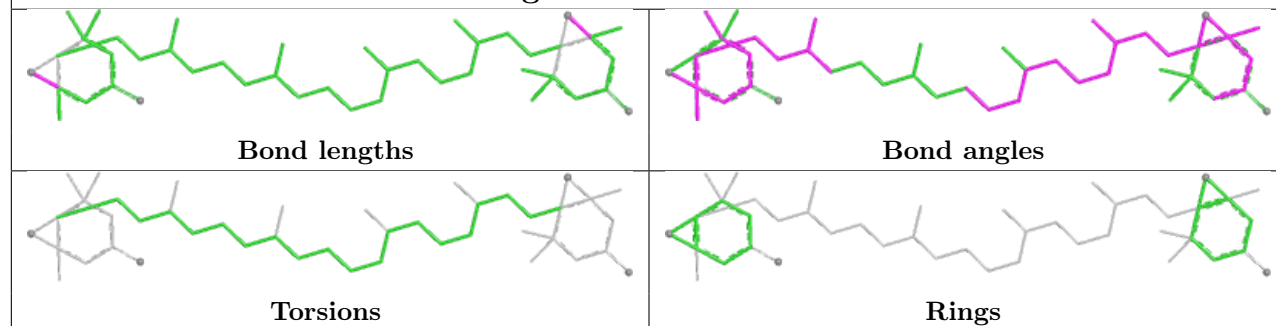


Rings

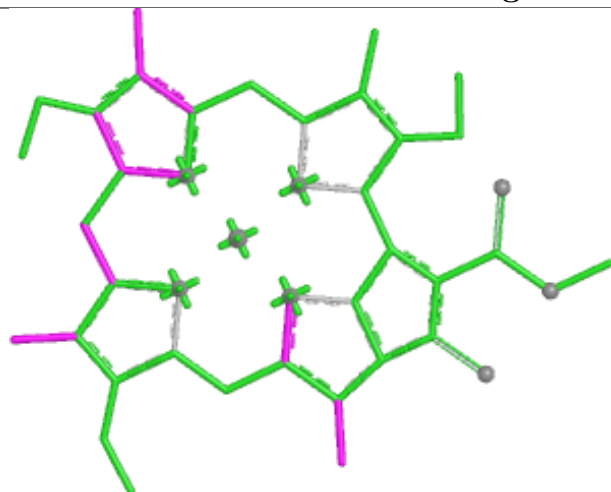
Ligand CLA AA 809



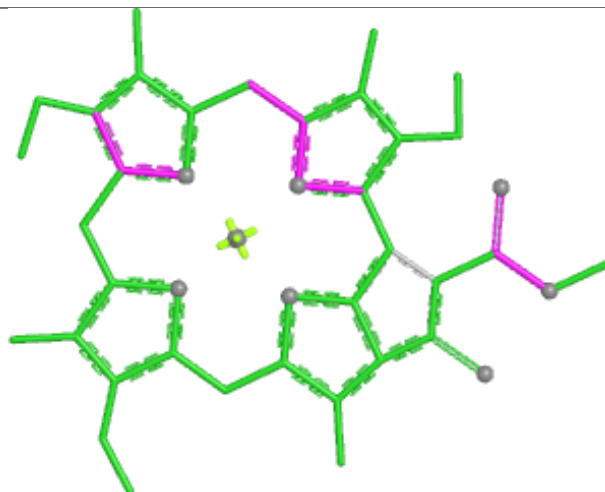
Ligand XAT A3 317



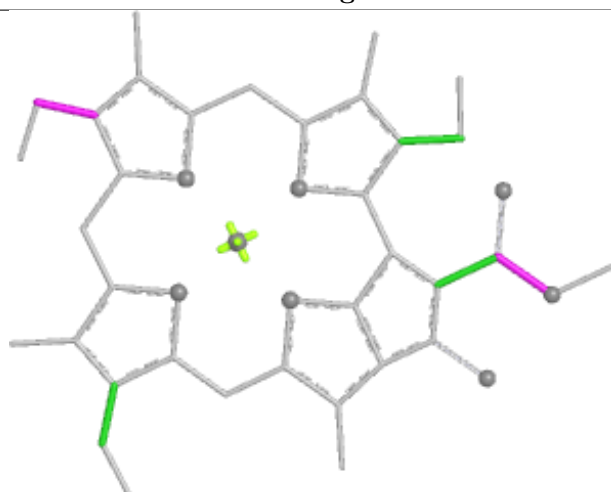
Ligand CLA AF 803



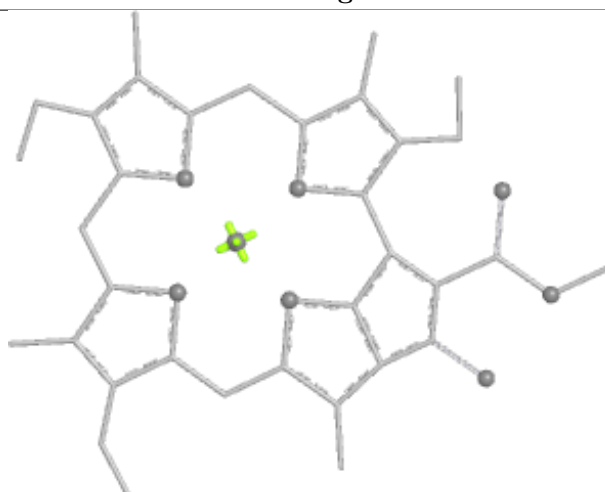
Bond lengths



Bond angles

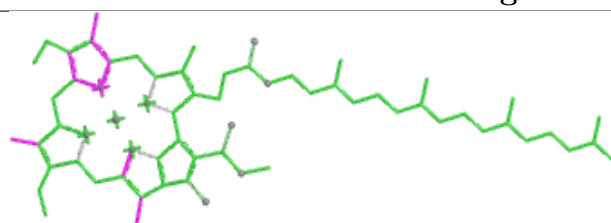


Torsions

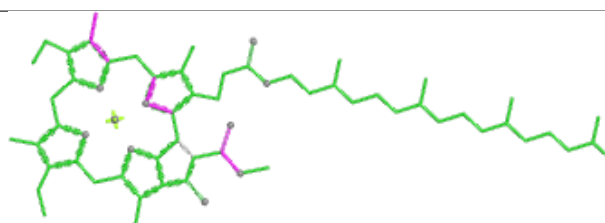


Rings

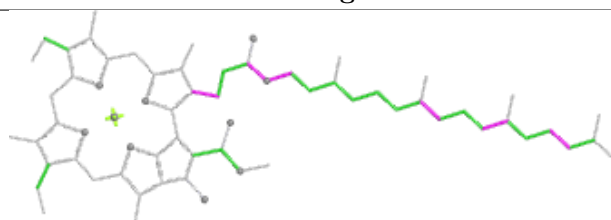
Ligand CLA AA 825



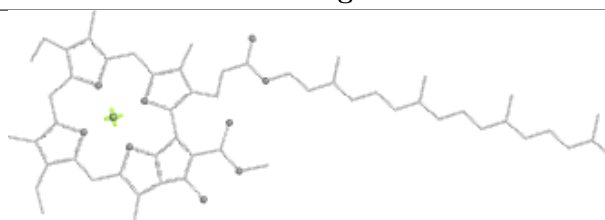
Bond lengths



Bond angles

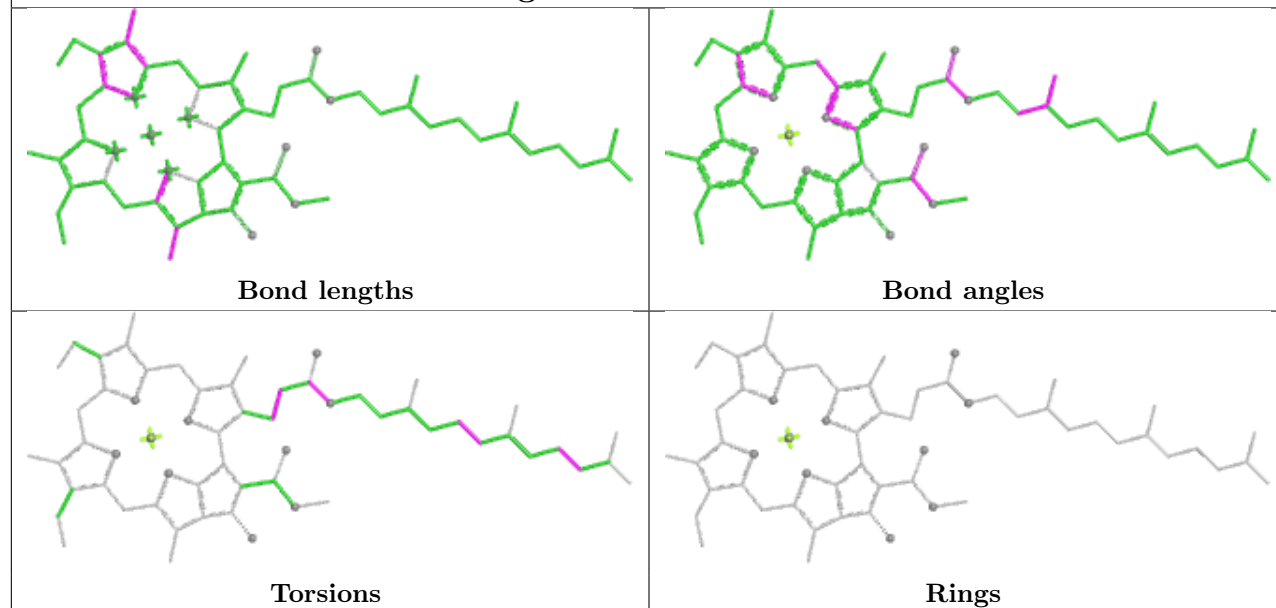


Torsions

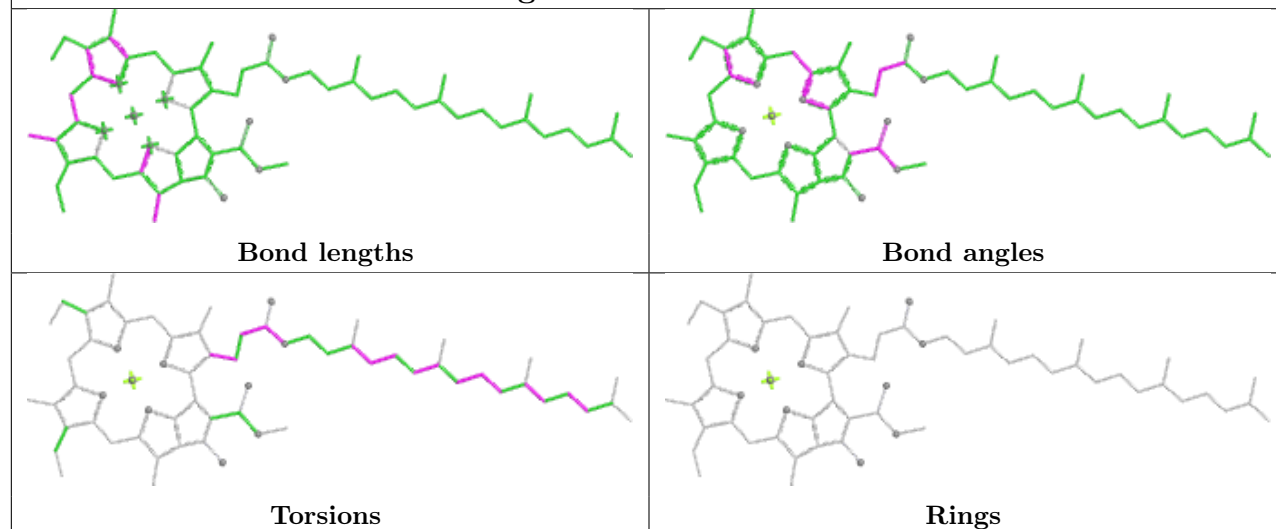


Rings

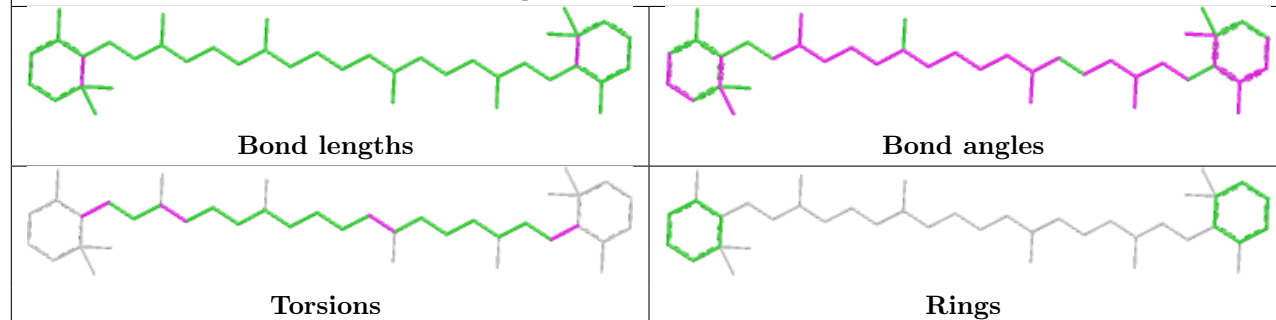
Ligand CLA AA 817



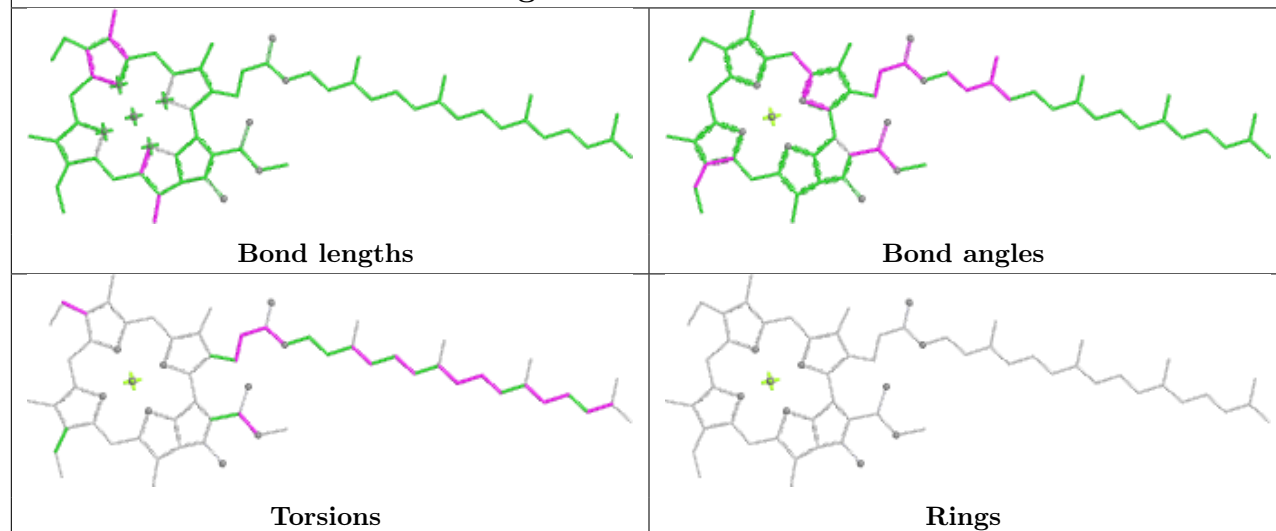
Ligand CLA AA 827



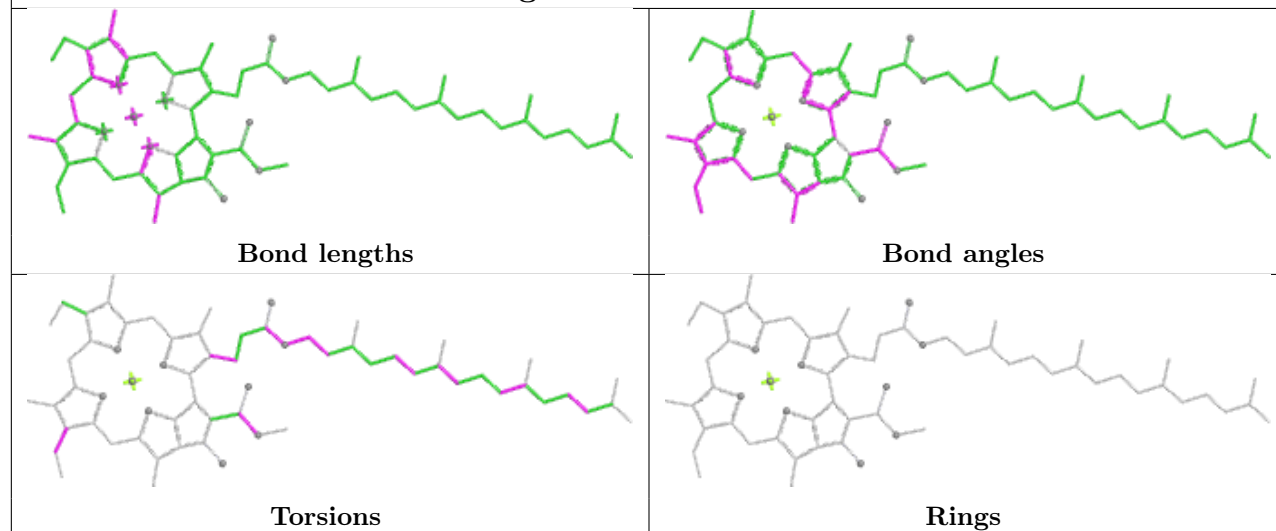
Ligand BCR AA 849



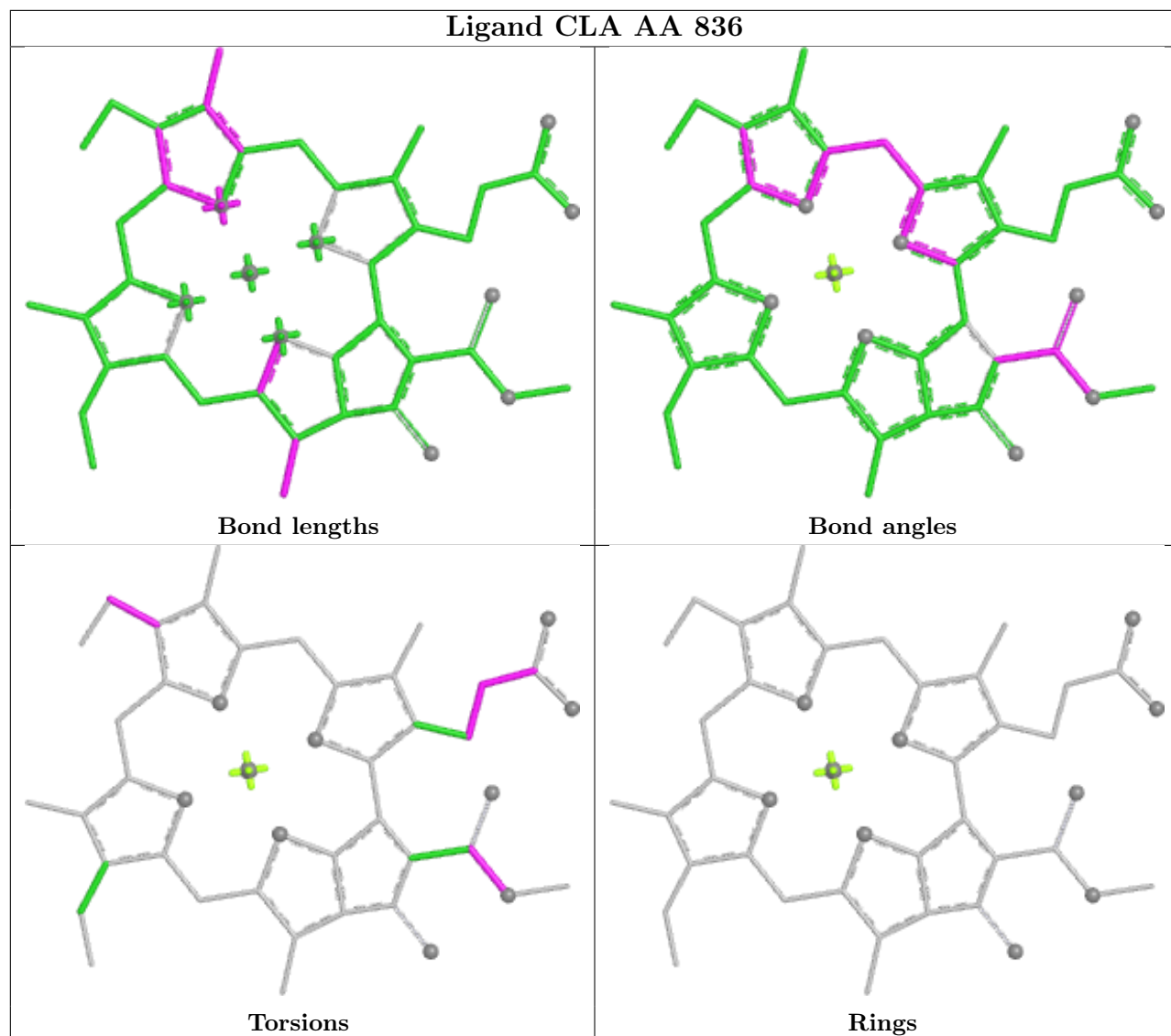
Ligand CLA AA 842



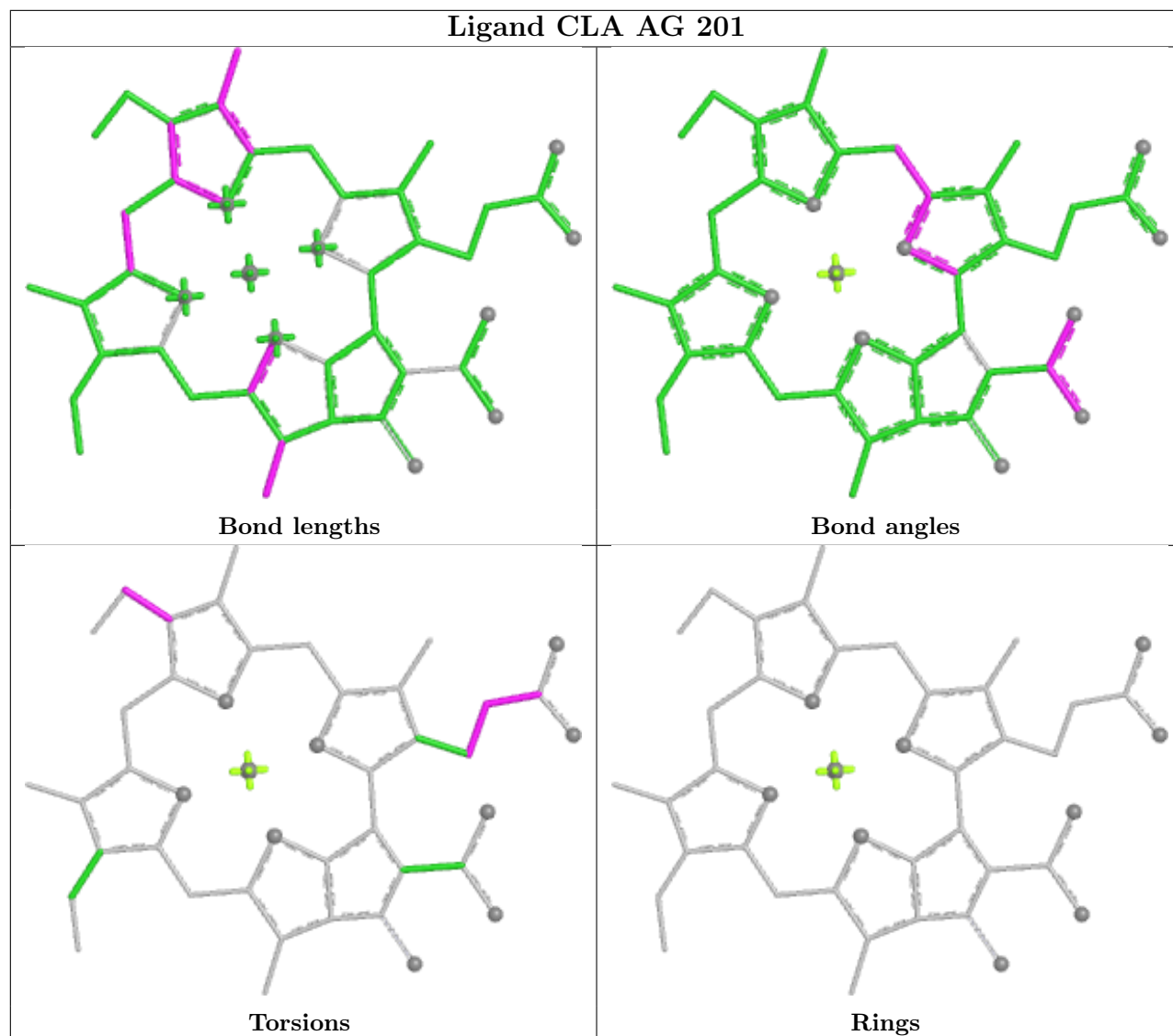
Ligand CLA AB 804



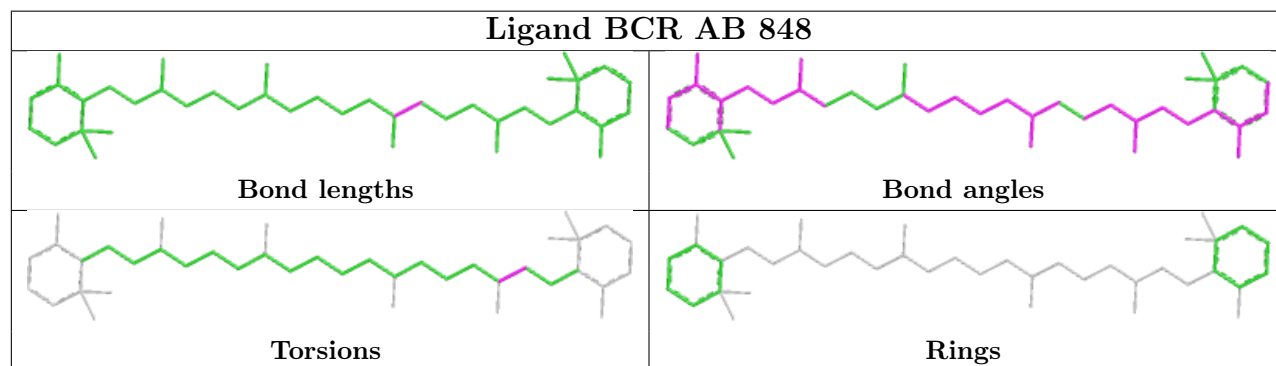
Ligand CLA AA 836

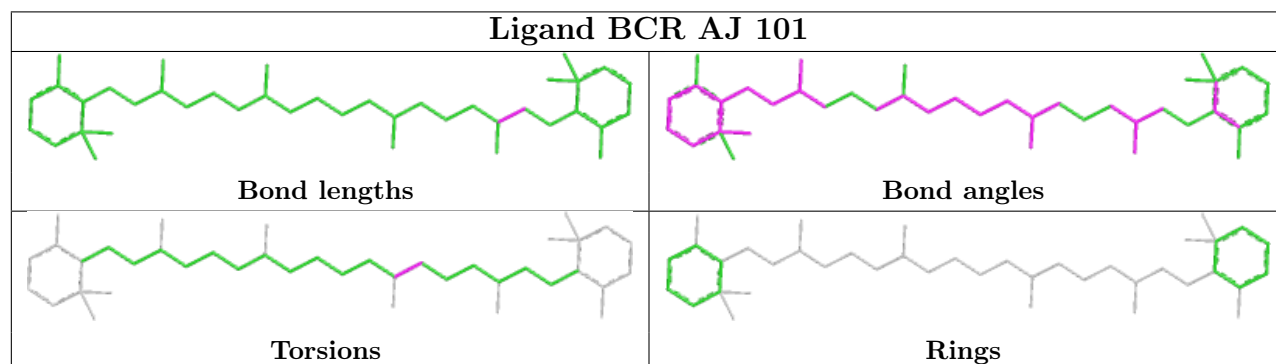
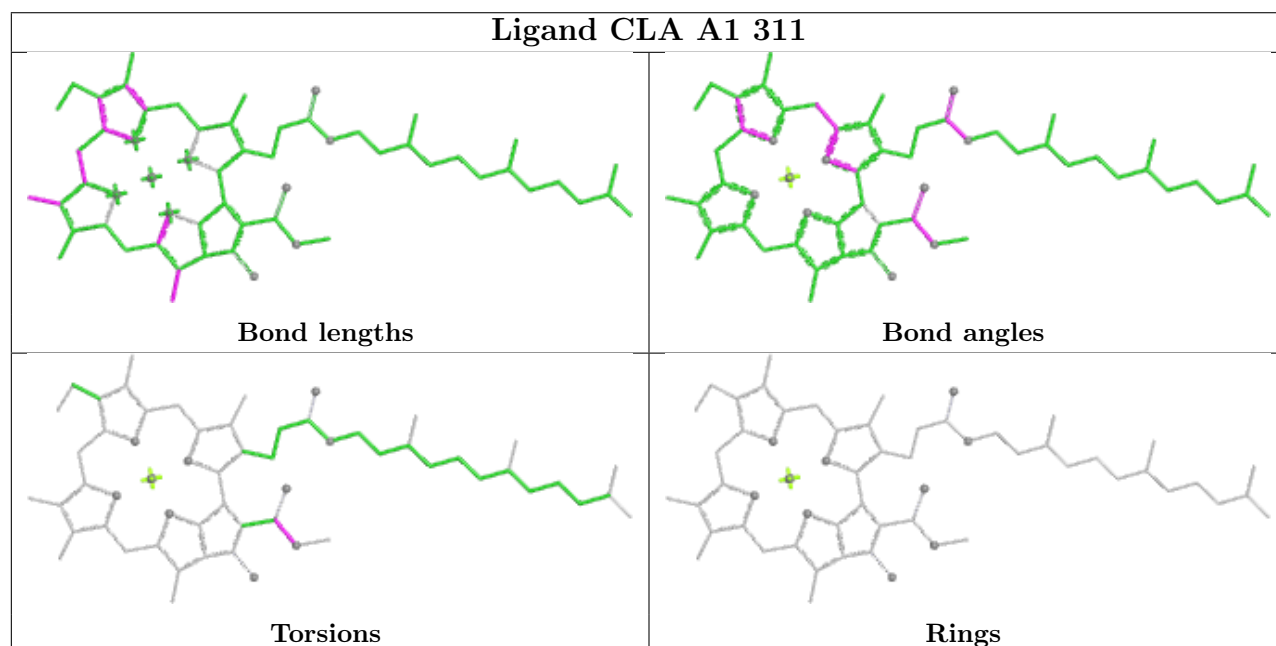
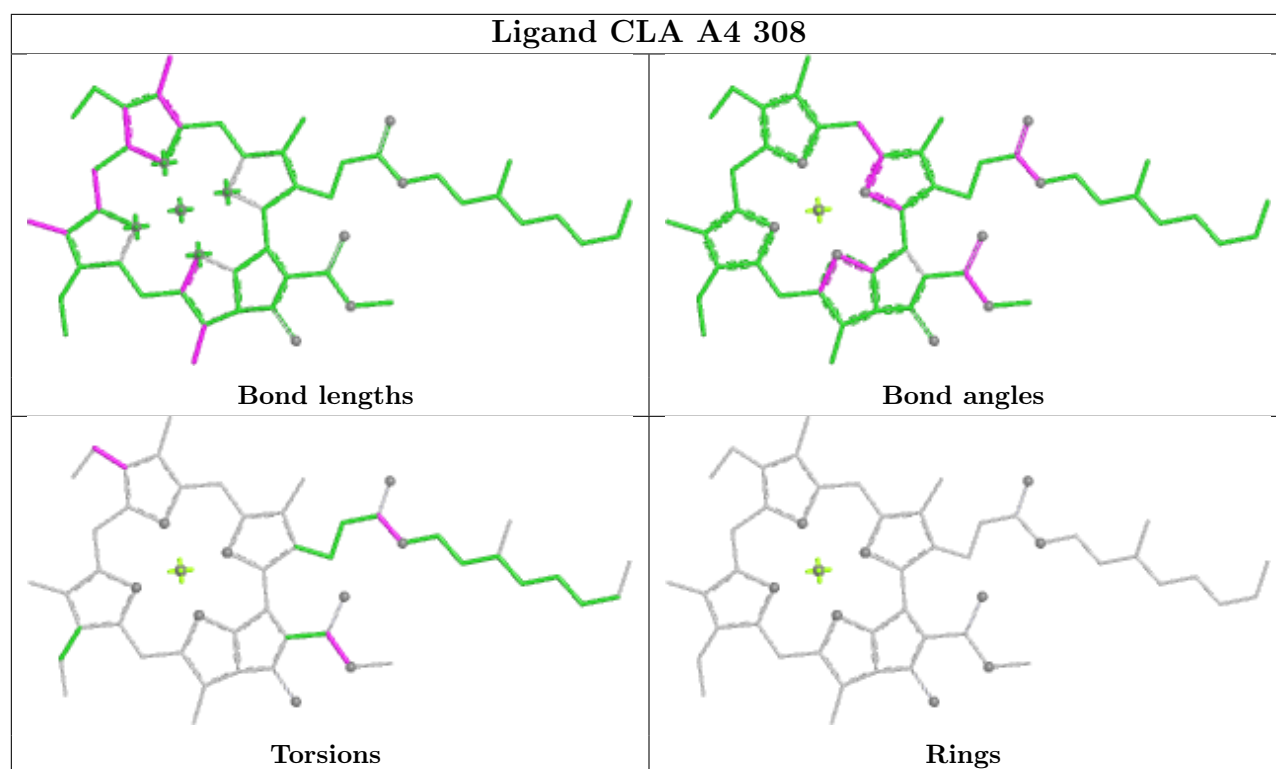


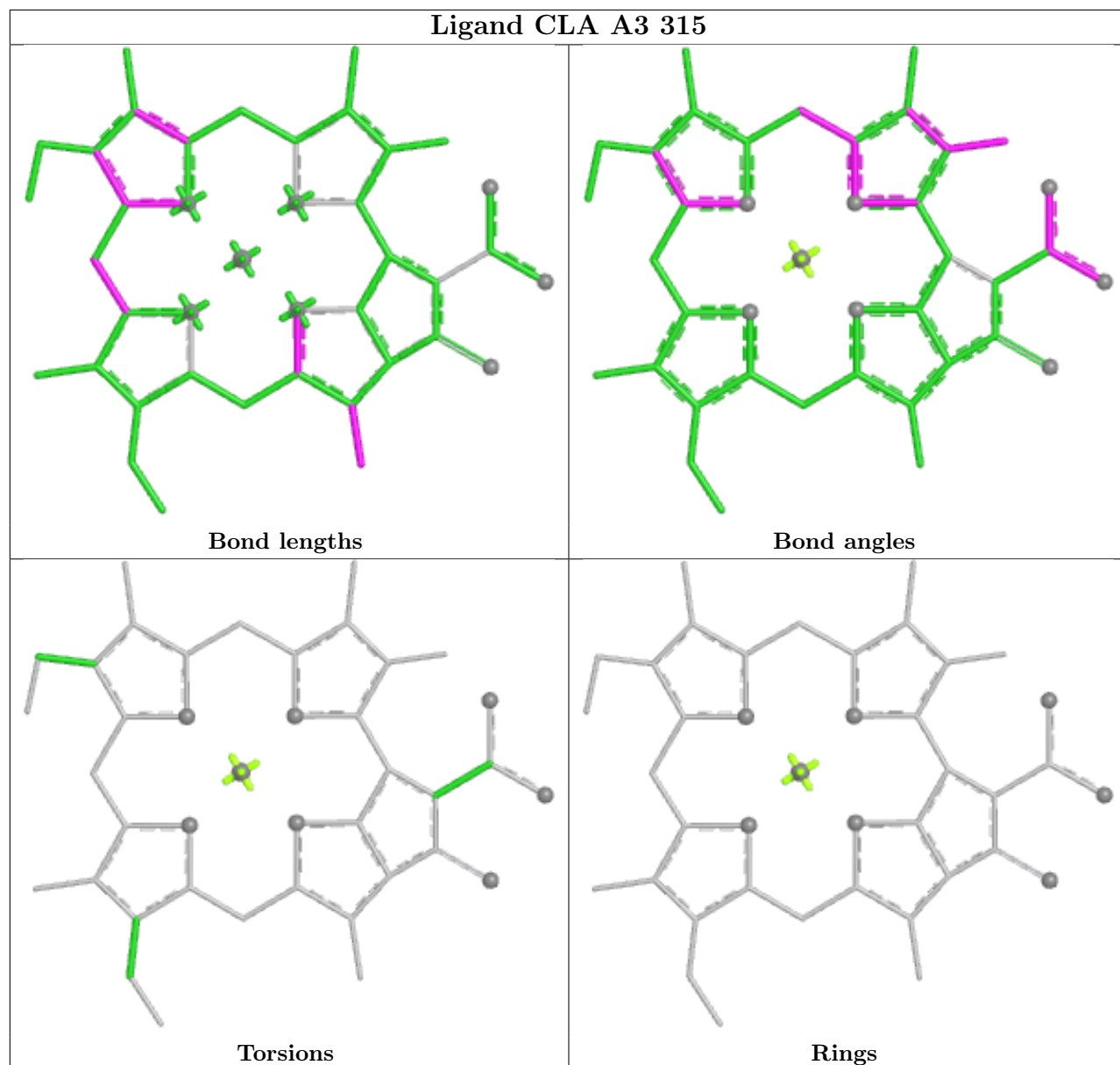
Ligand CLA AG 201



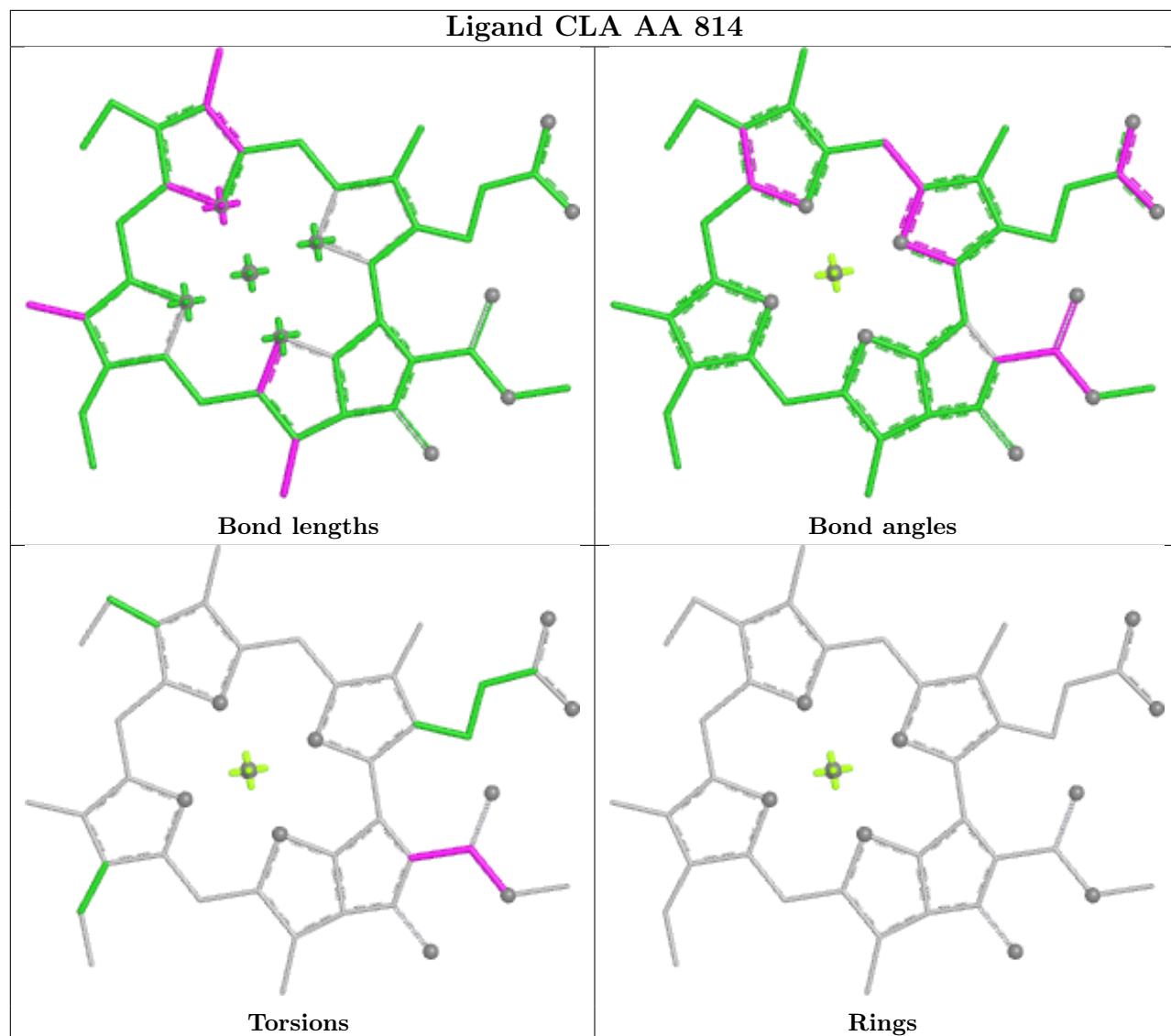
Ligand BCR AB 848



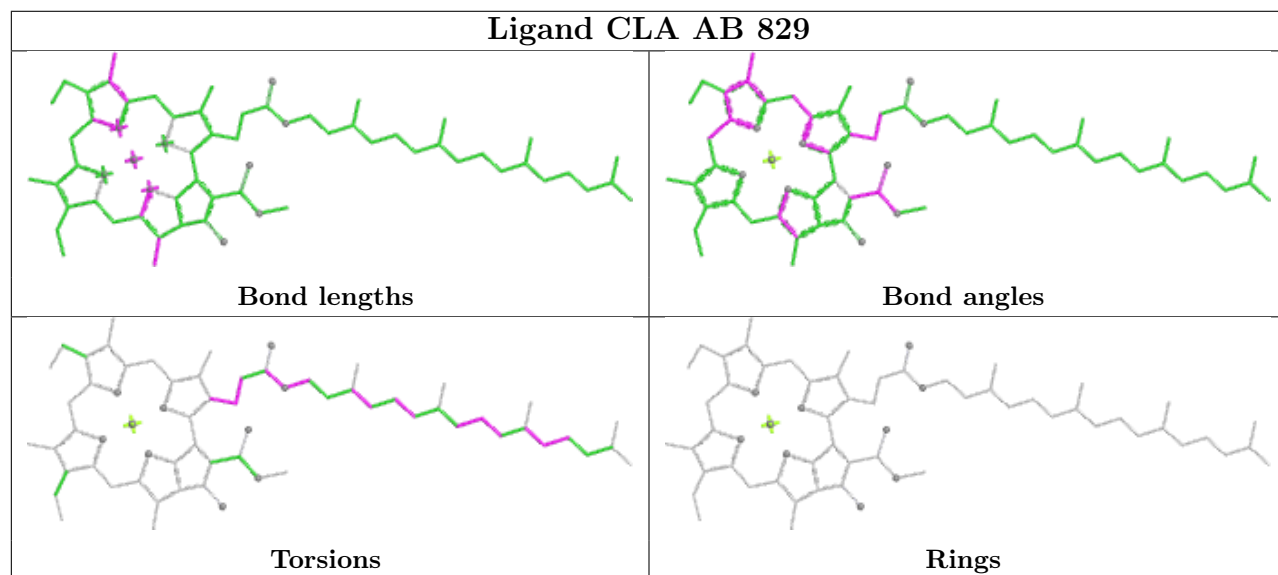




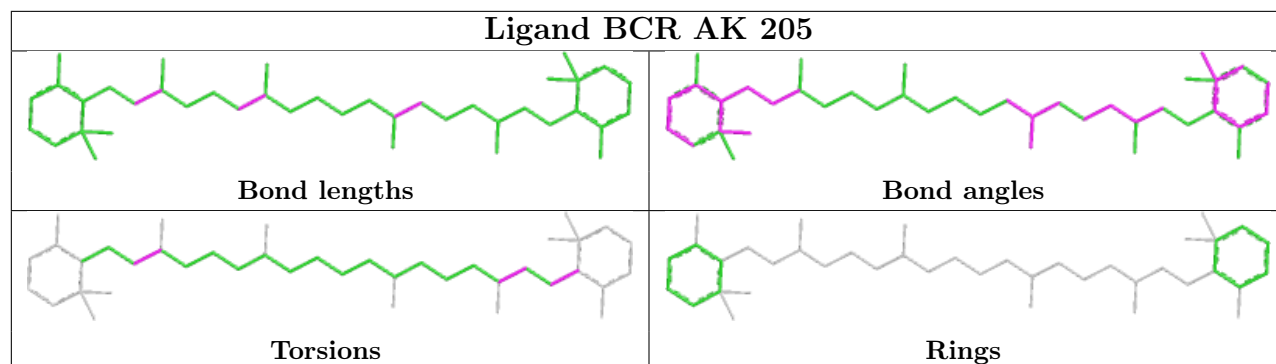
Ligand CLA AA 814



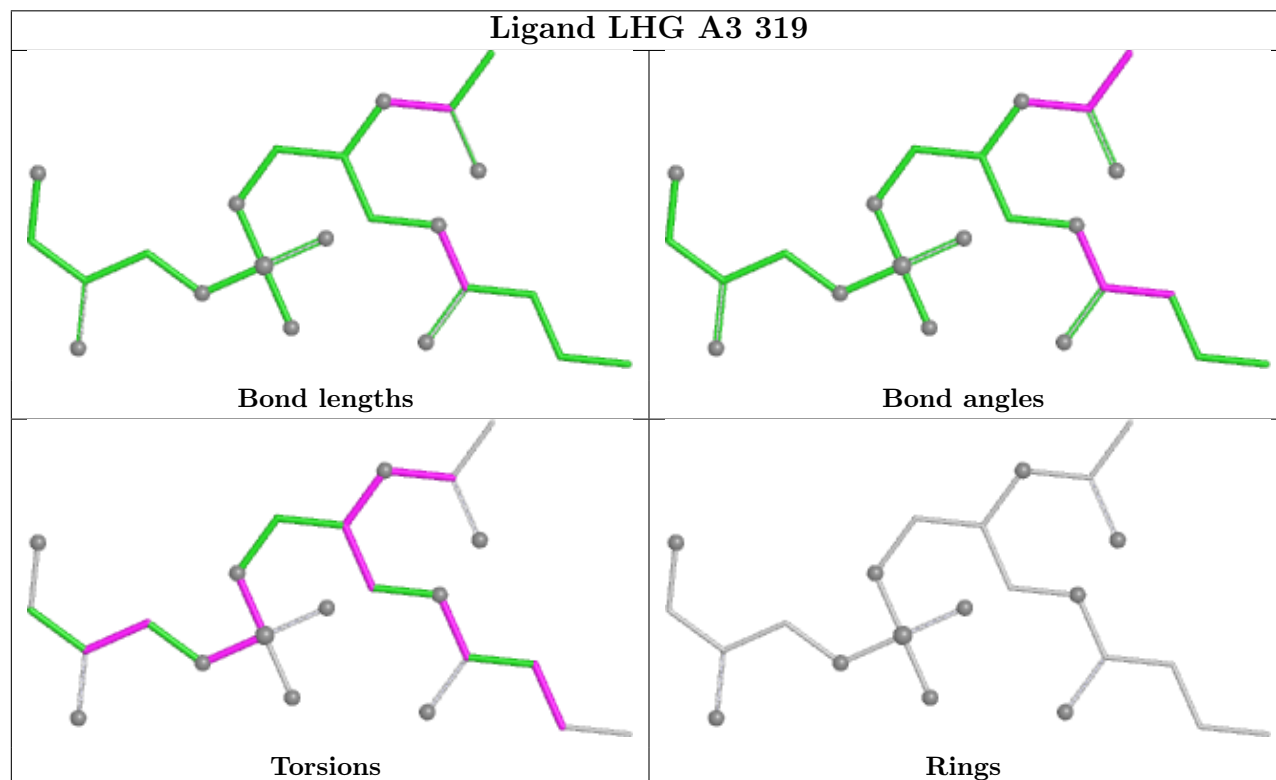
Ligand CLA AB 829



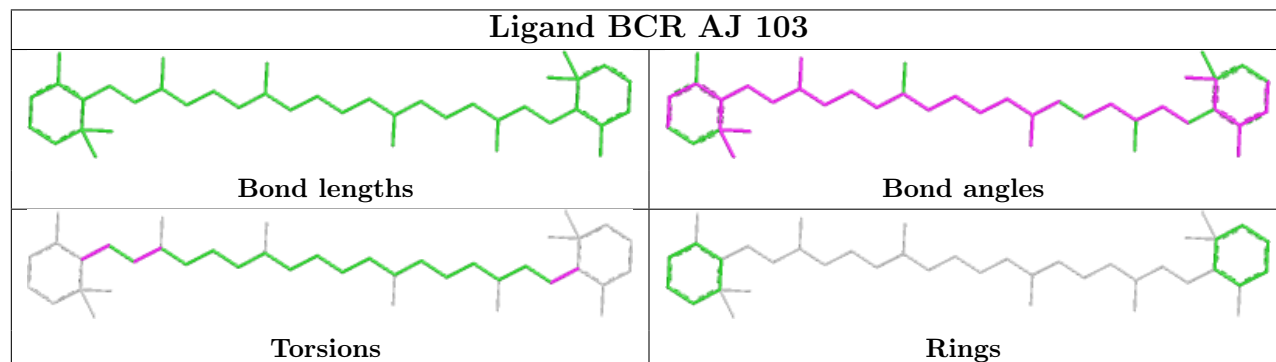
Ligand BCR AK 205



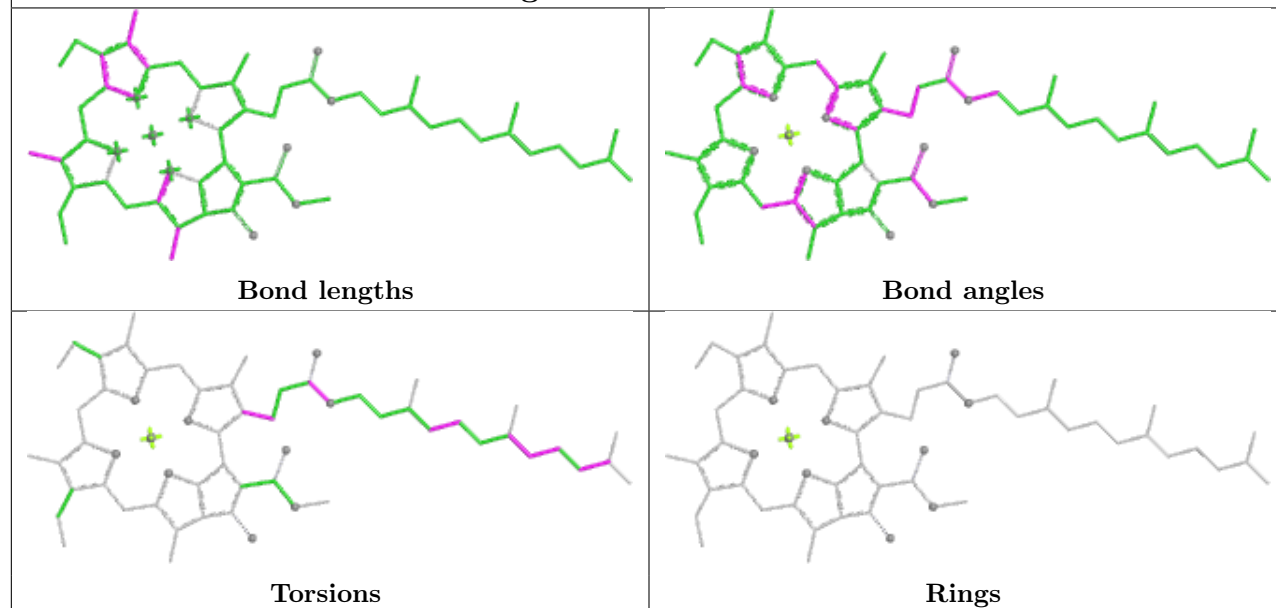
Ligand LHG A3 319



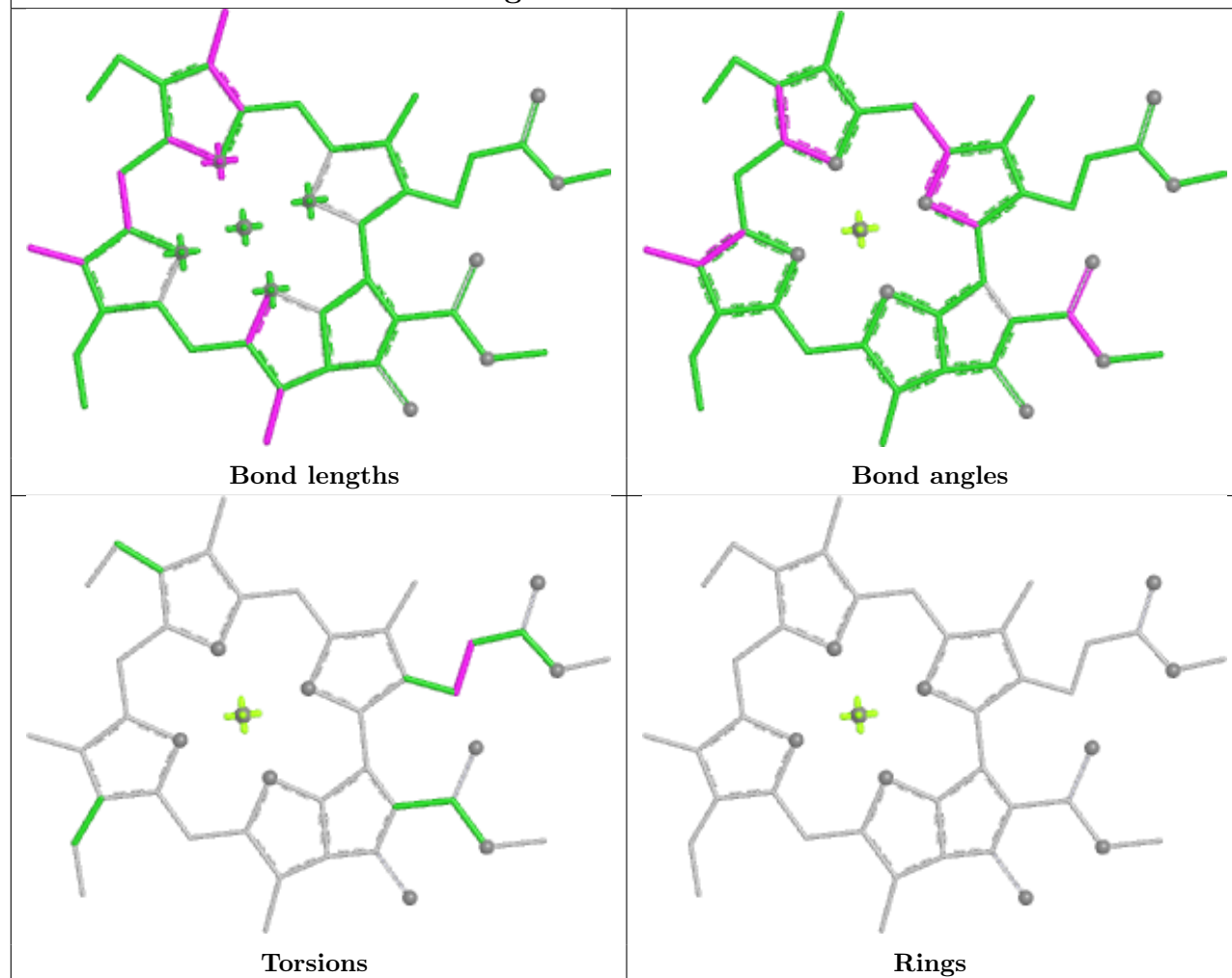
Ligand BCR AJ 103

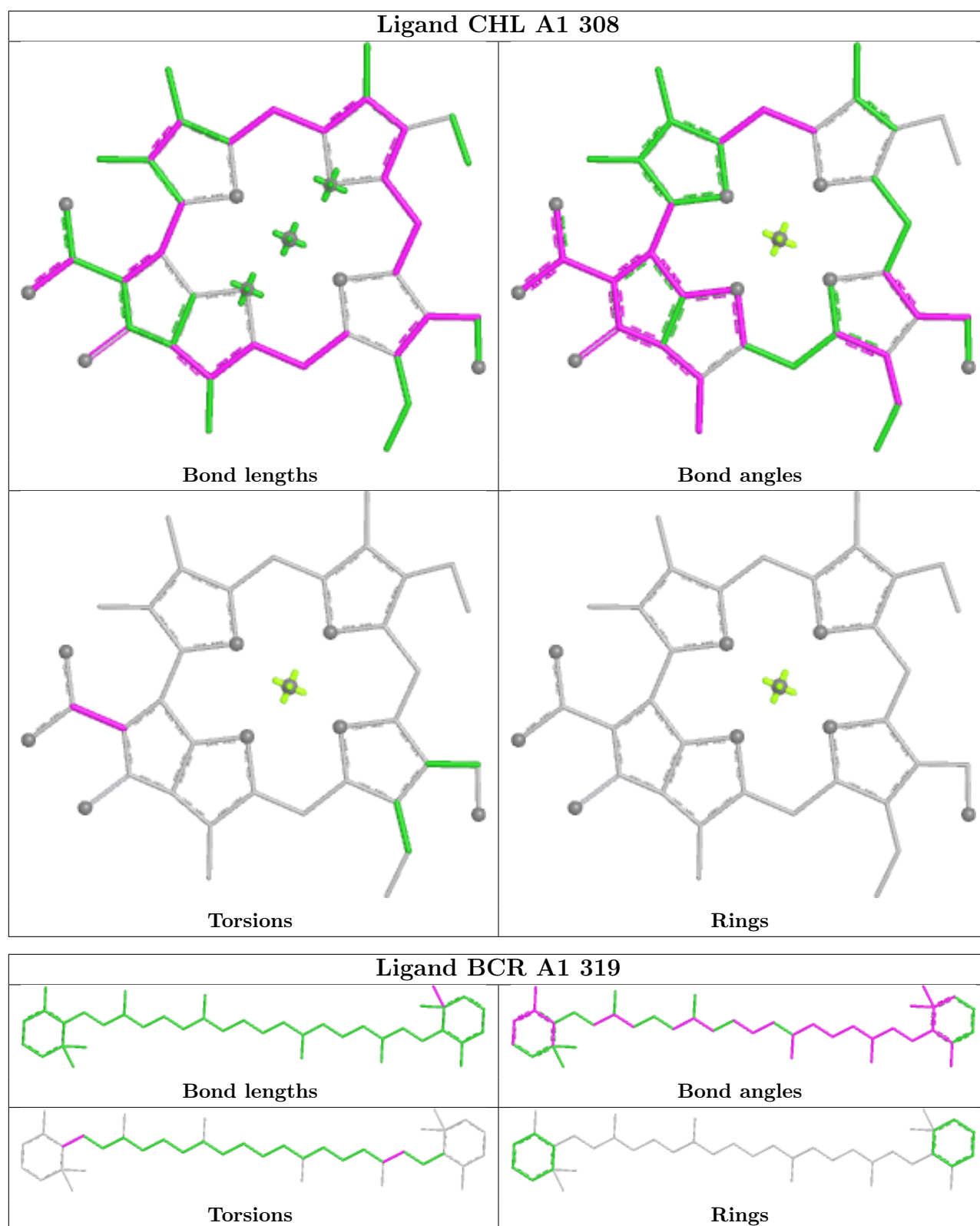


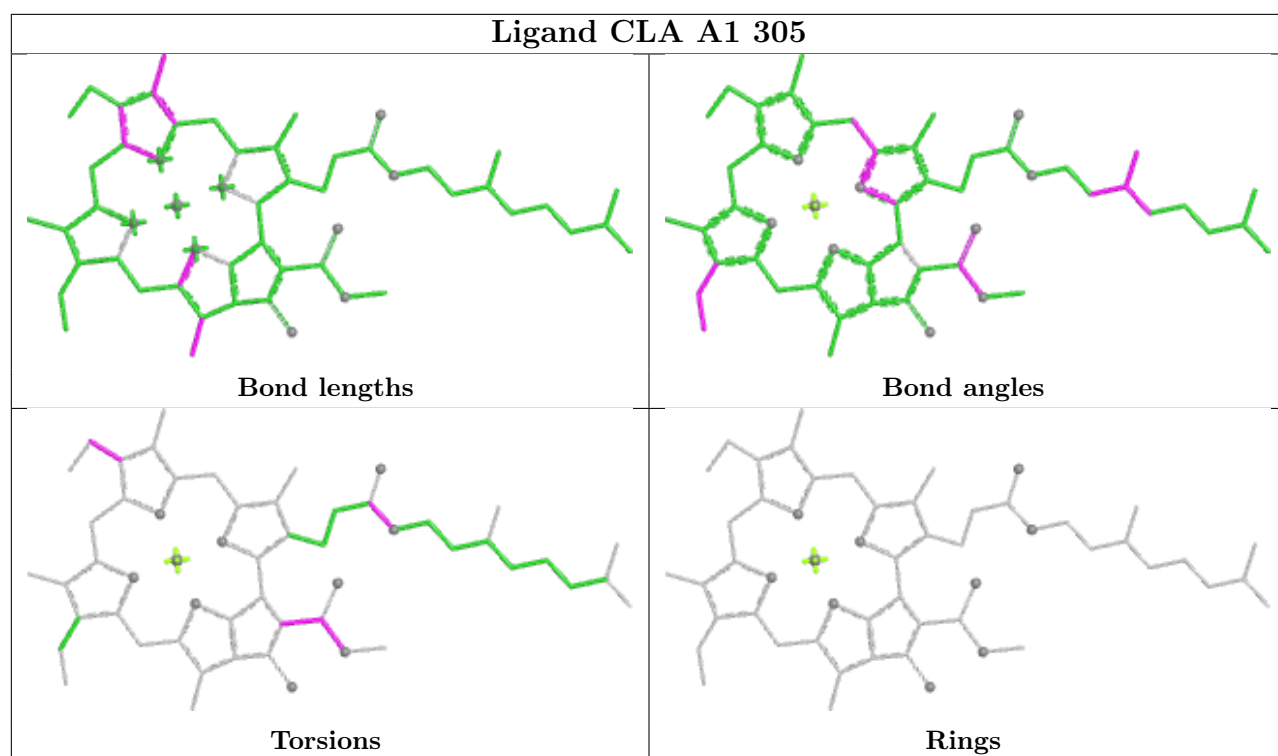
Ligand CLA AL 303

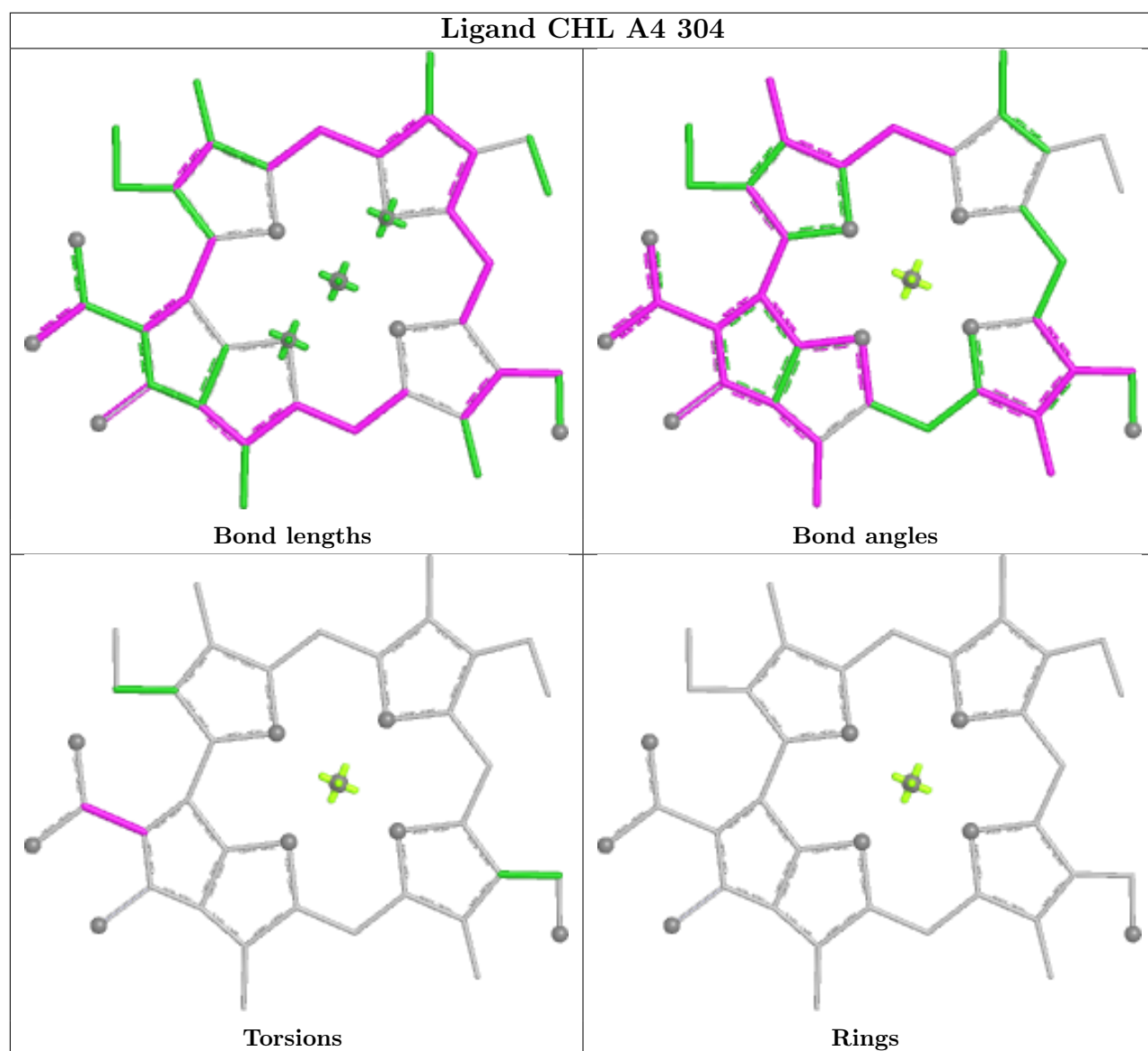


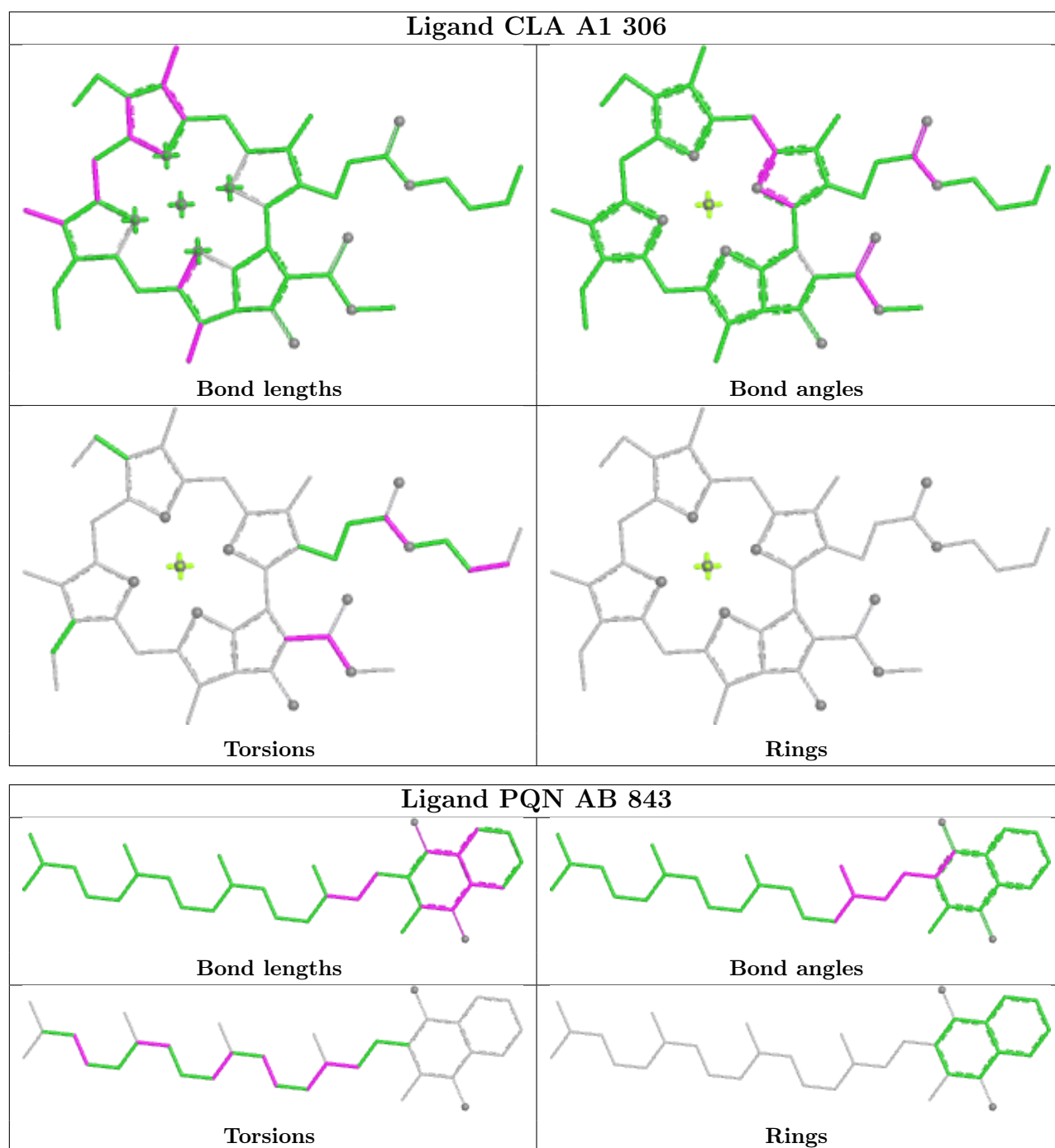
Ligand CLA A6 601

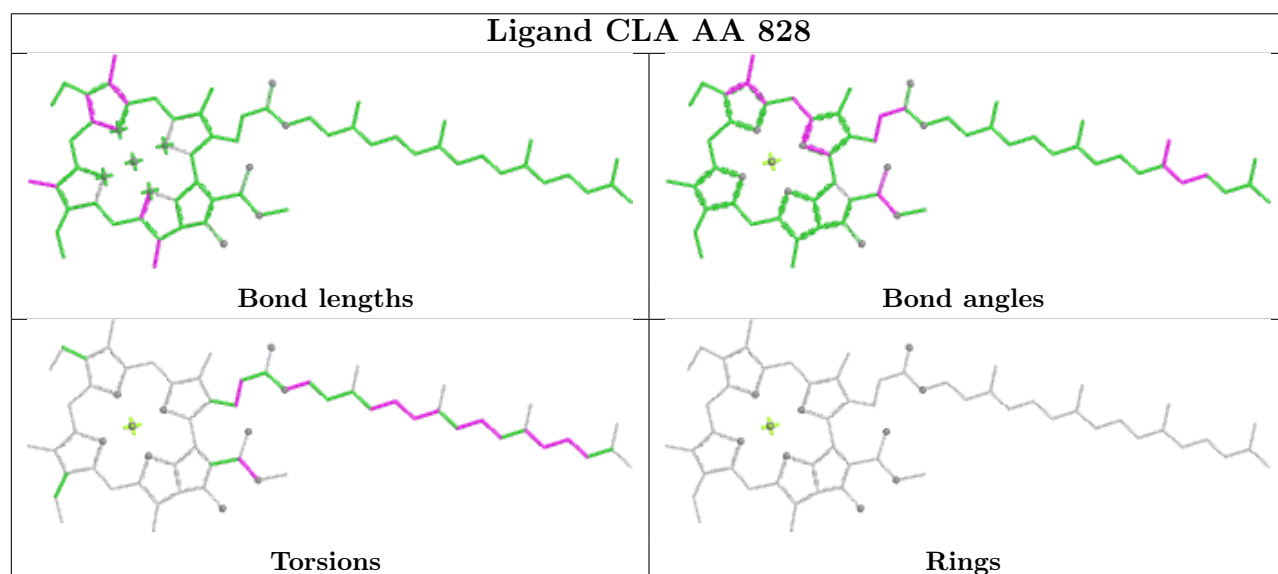
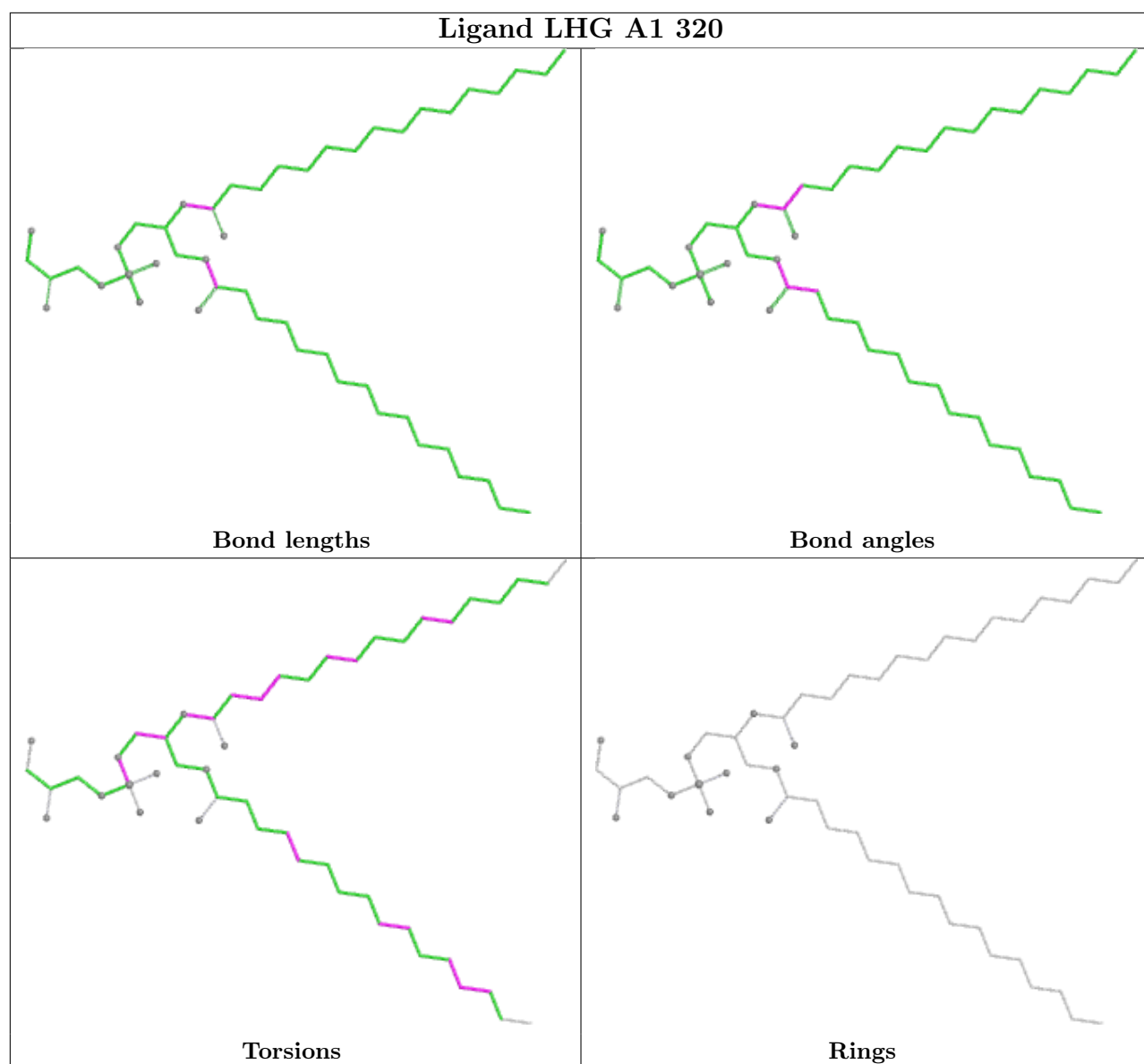




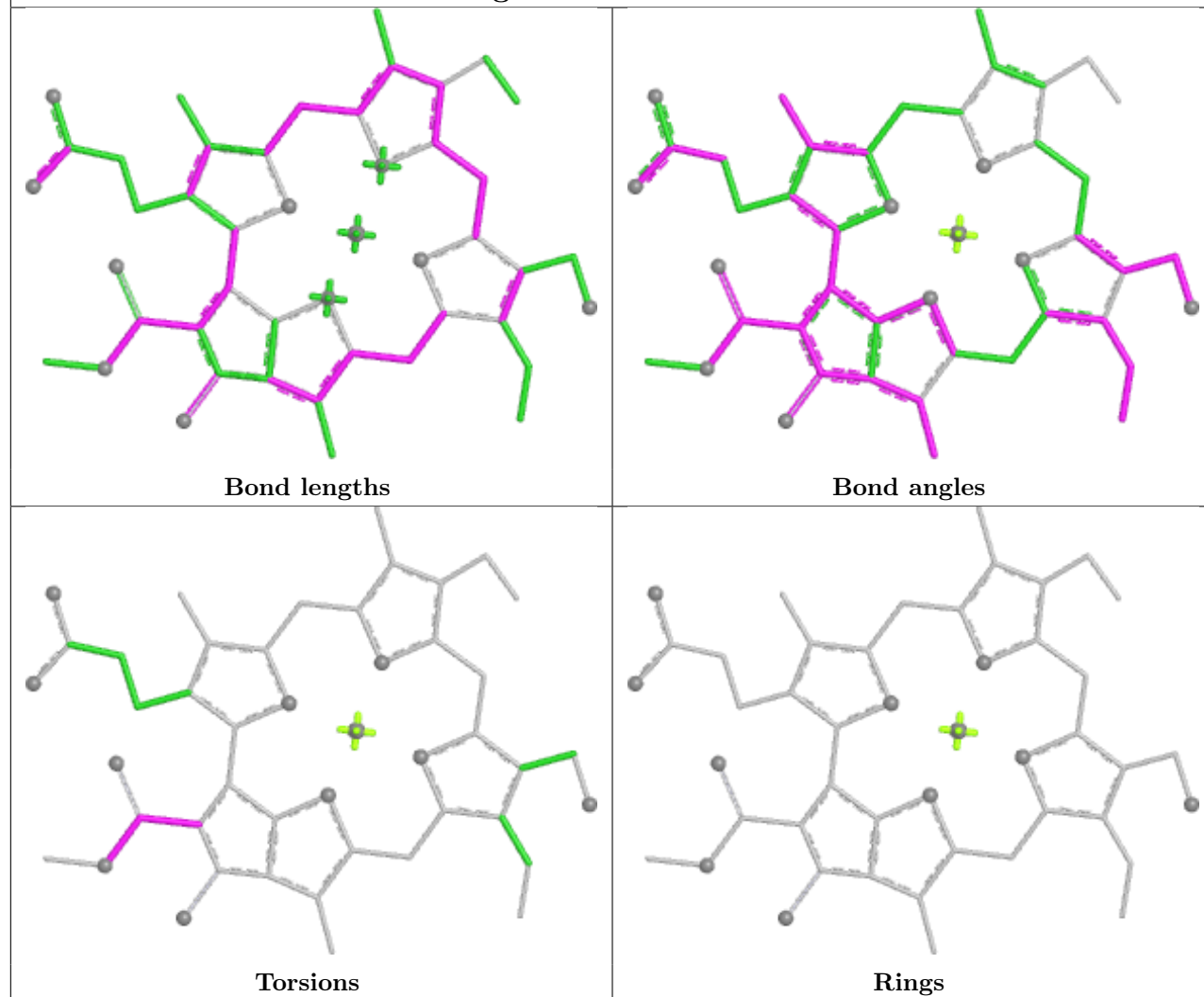




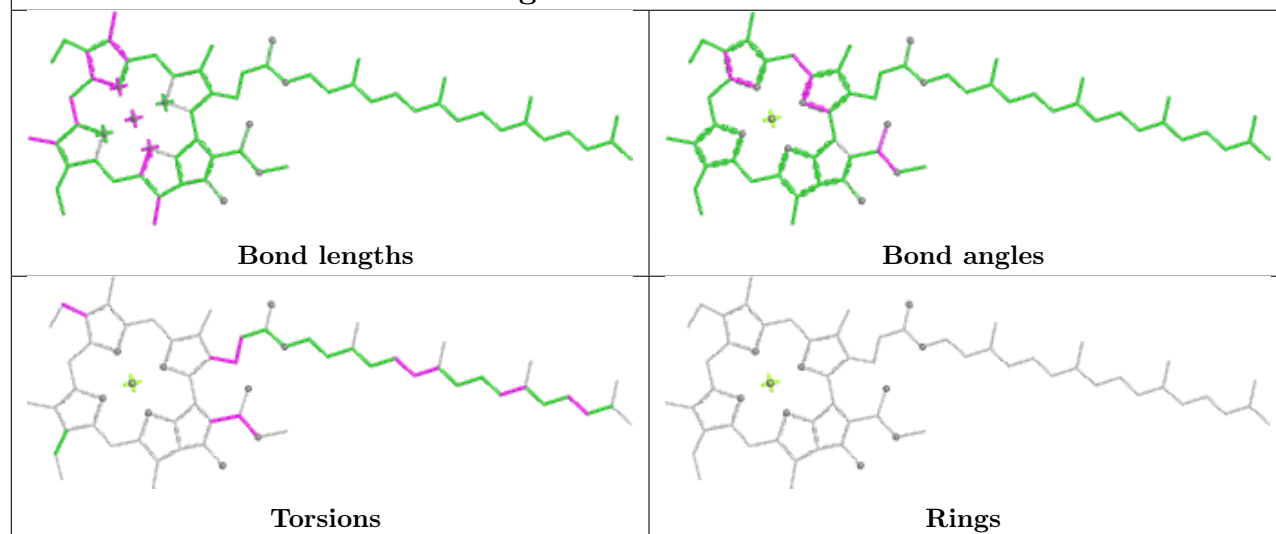


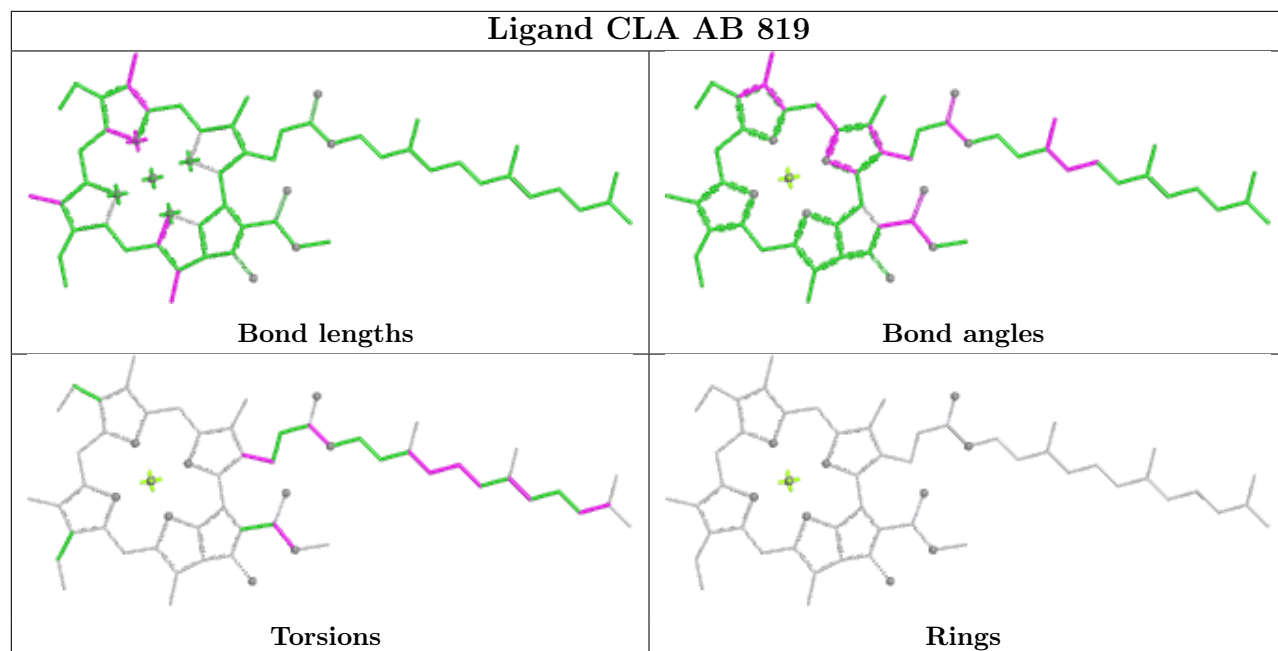


Ligand CHL A4 306

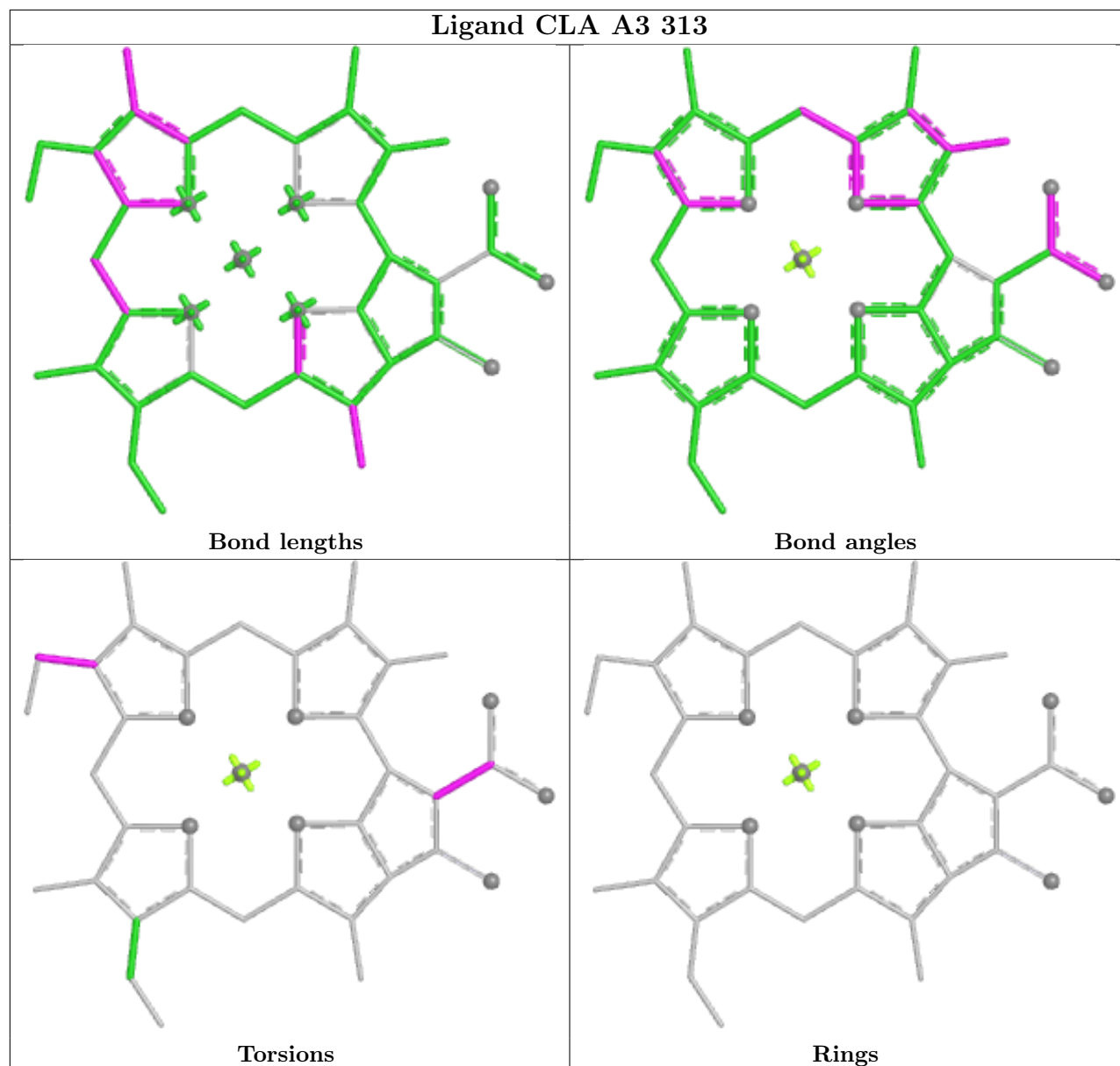


Ligand CLA AB 814

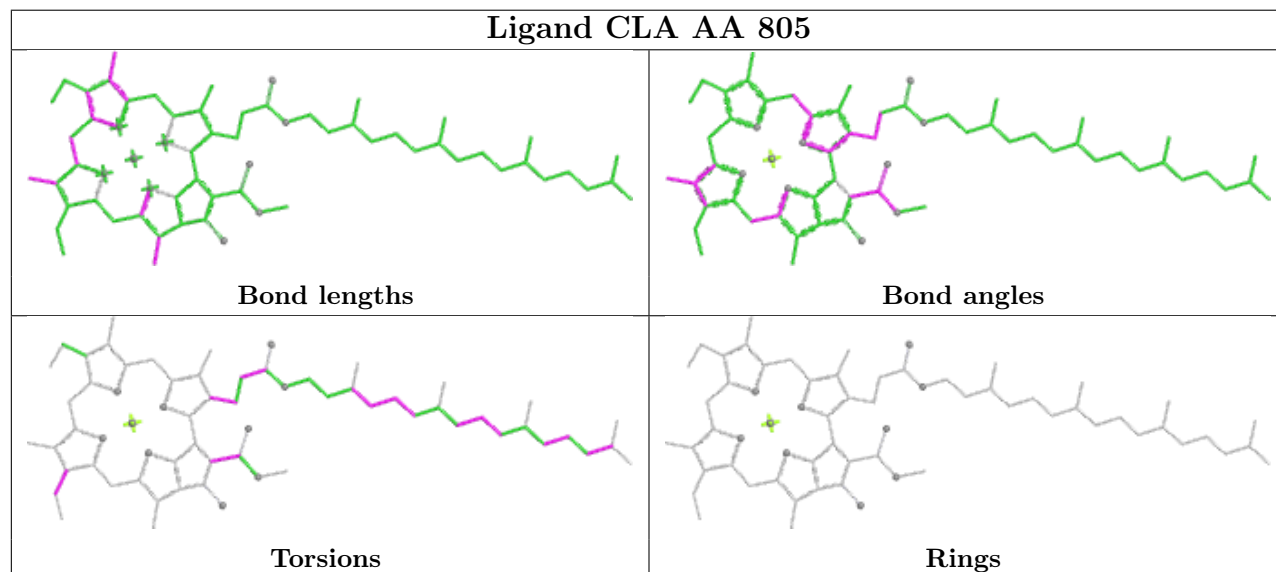




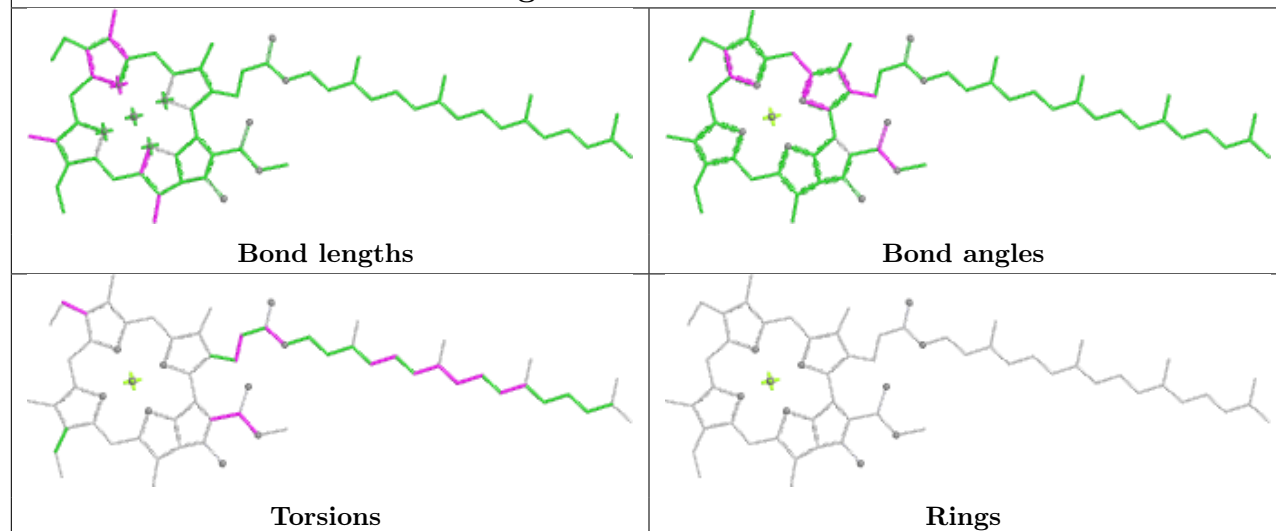
Ligand CLA A3 313



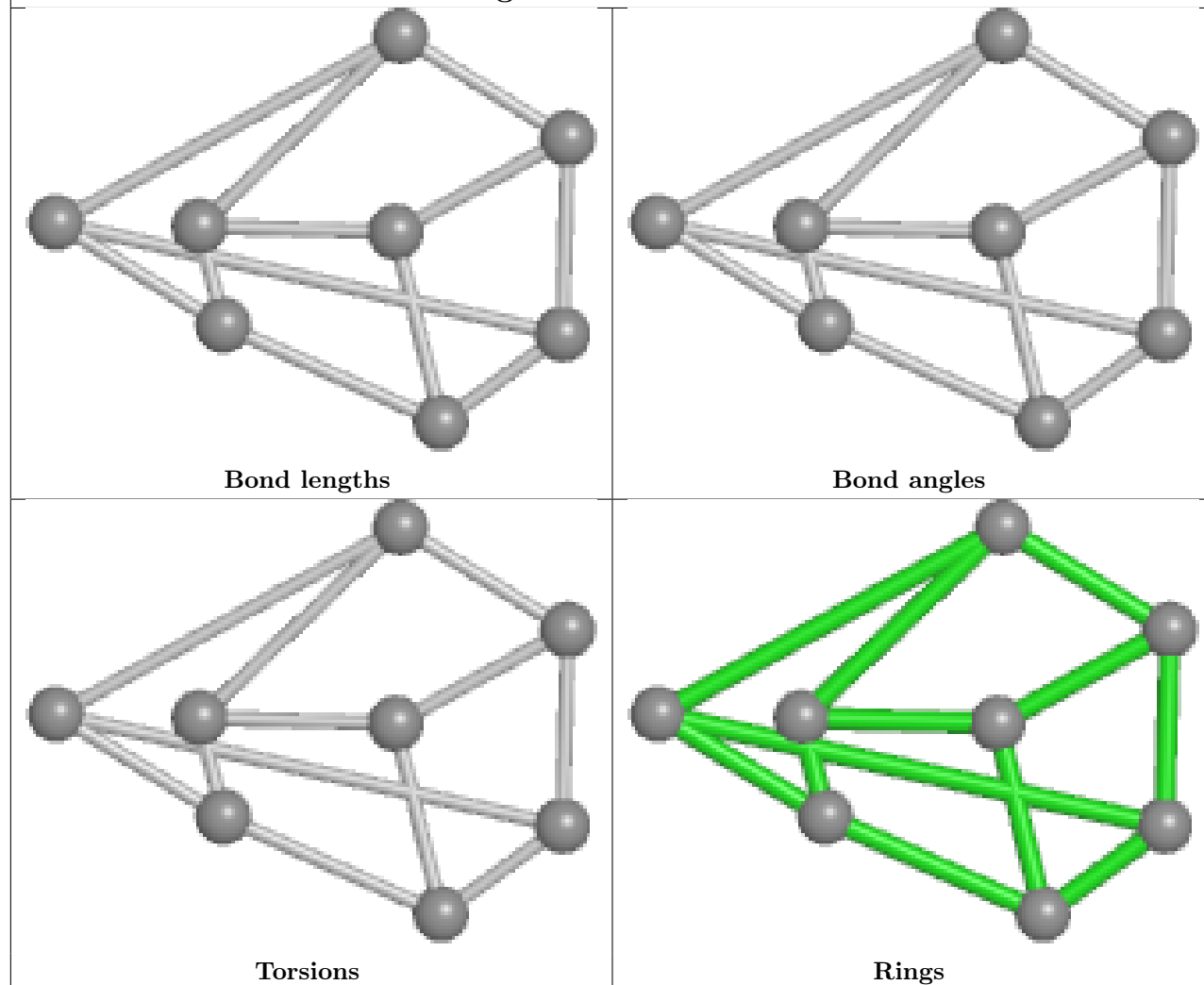
Ligand CLA AA 805



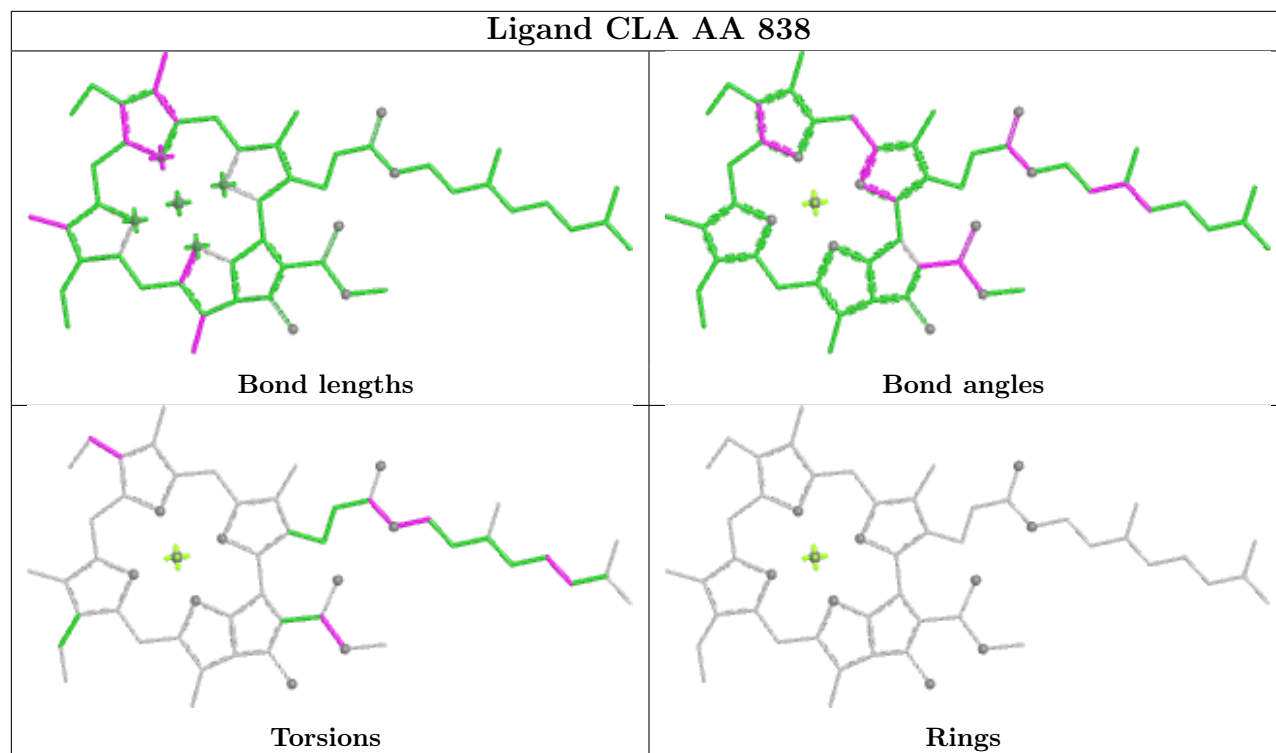
Ligand CLA AA 813



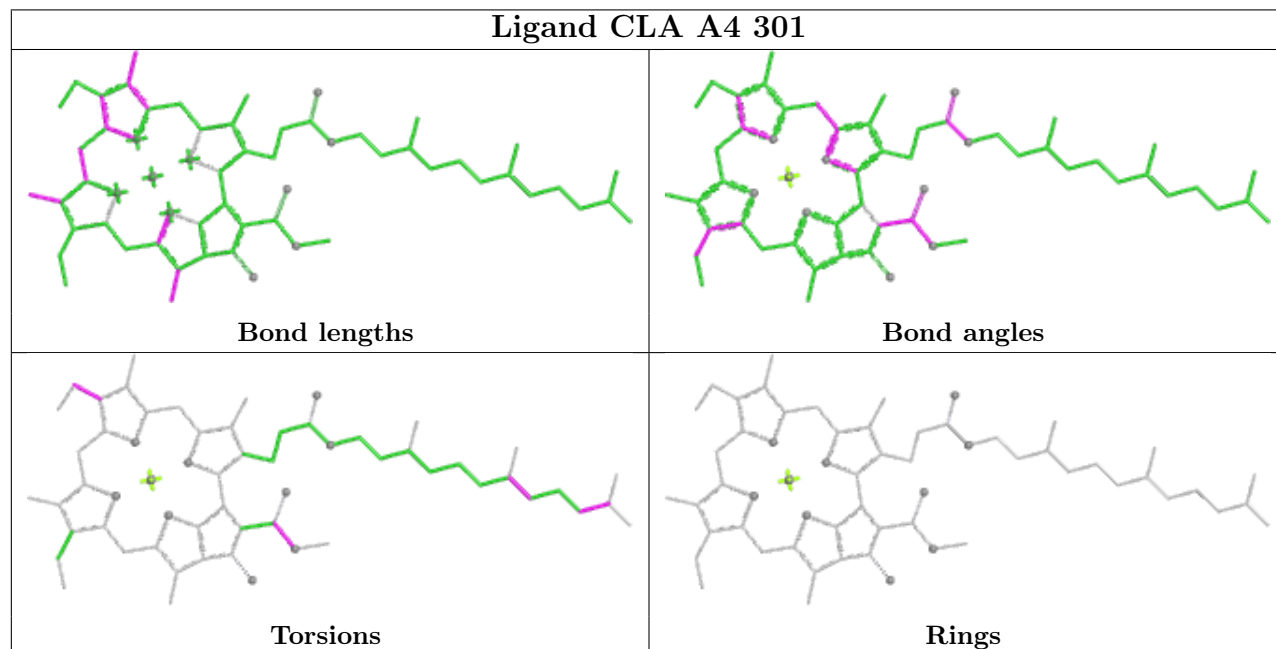
Ligand SF4 AC 101

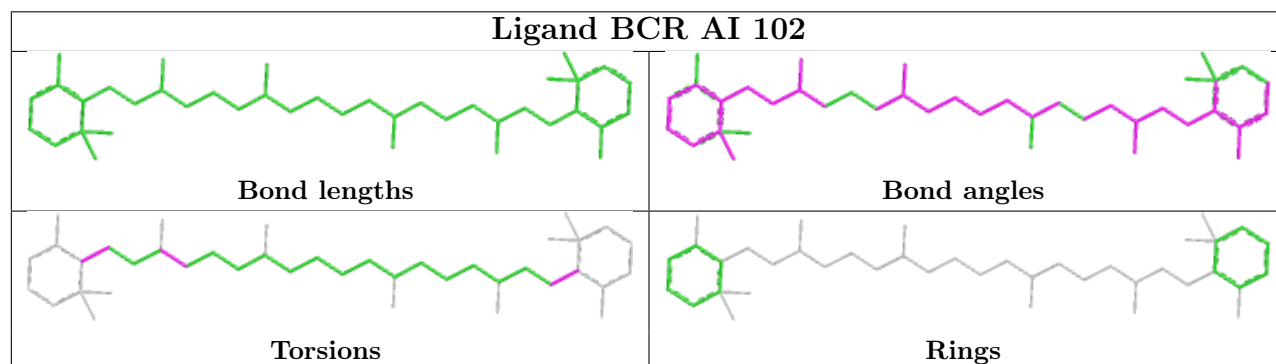
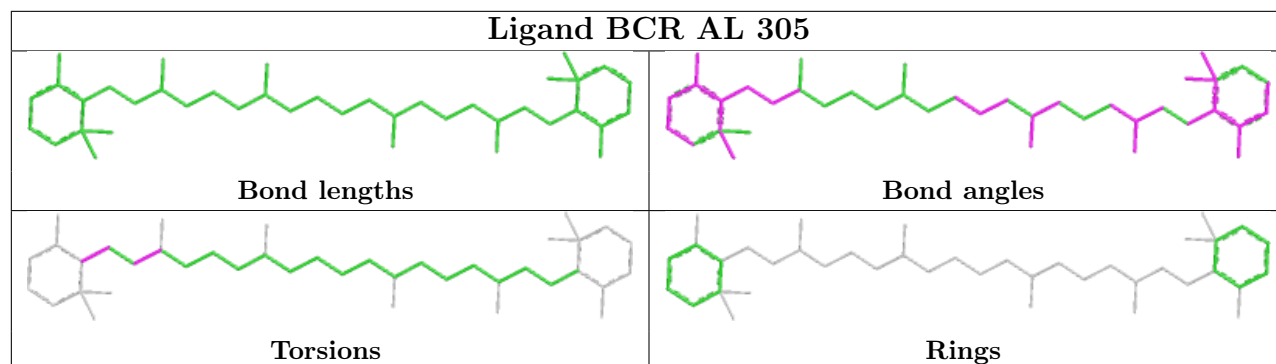
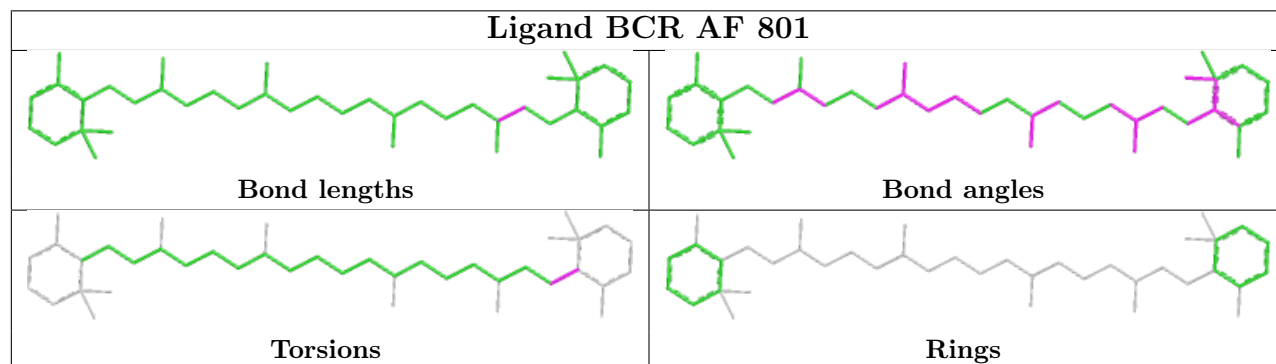
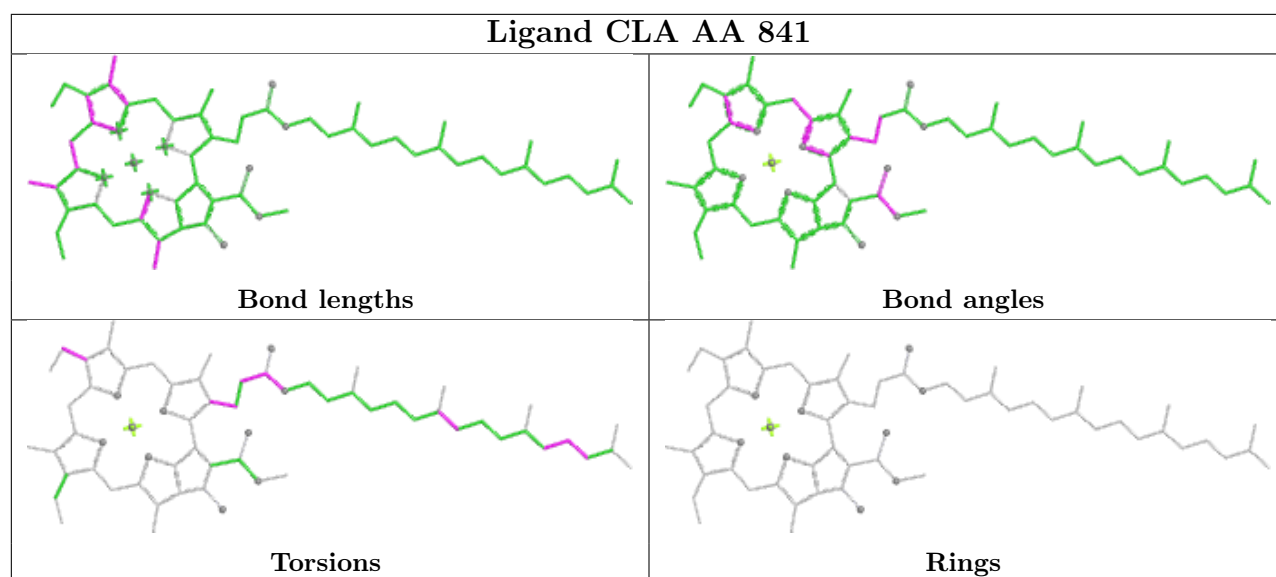


Ligand CLA AA 838

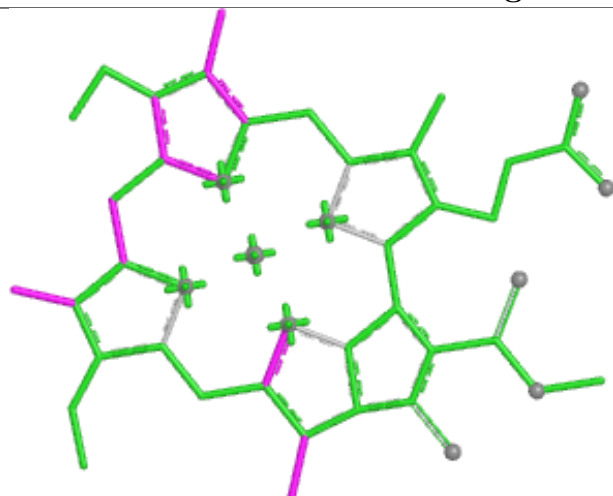


Ligand CLA A4 301





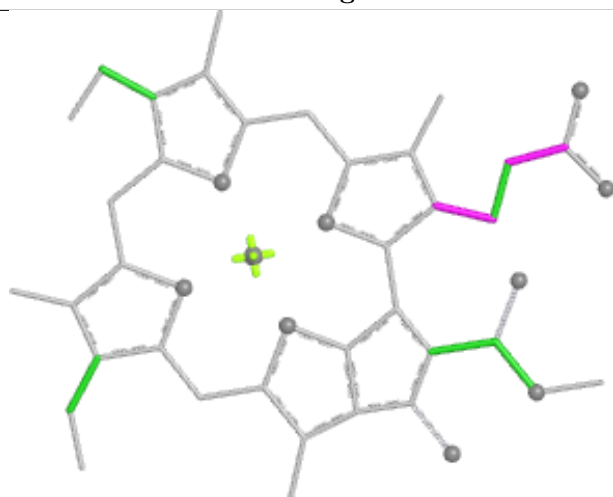
Ligand CLA A6 608



Bond lengths



Bond angles

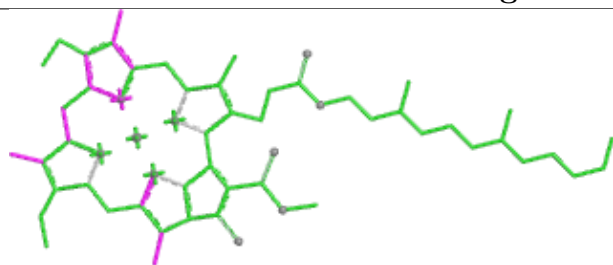


Torsions

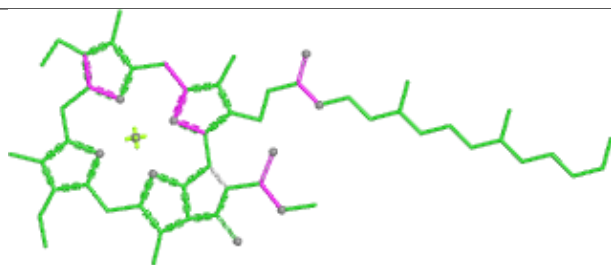


Rings

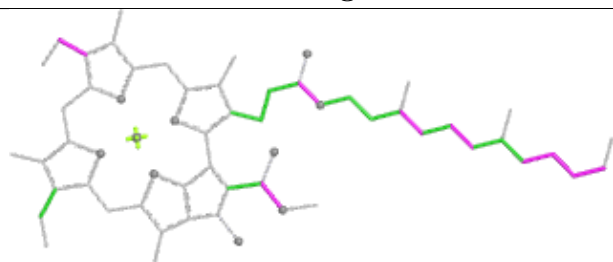
Ligand CLA AA 826



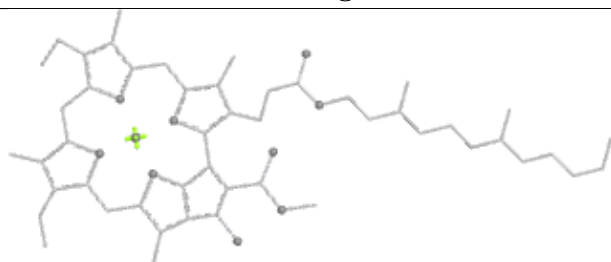
Bond lengths



Bond angles

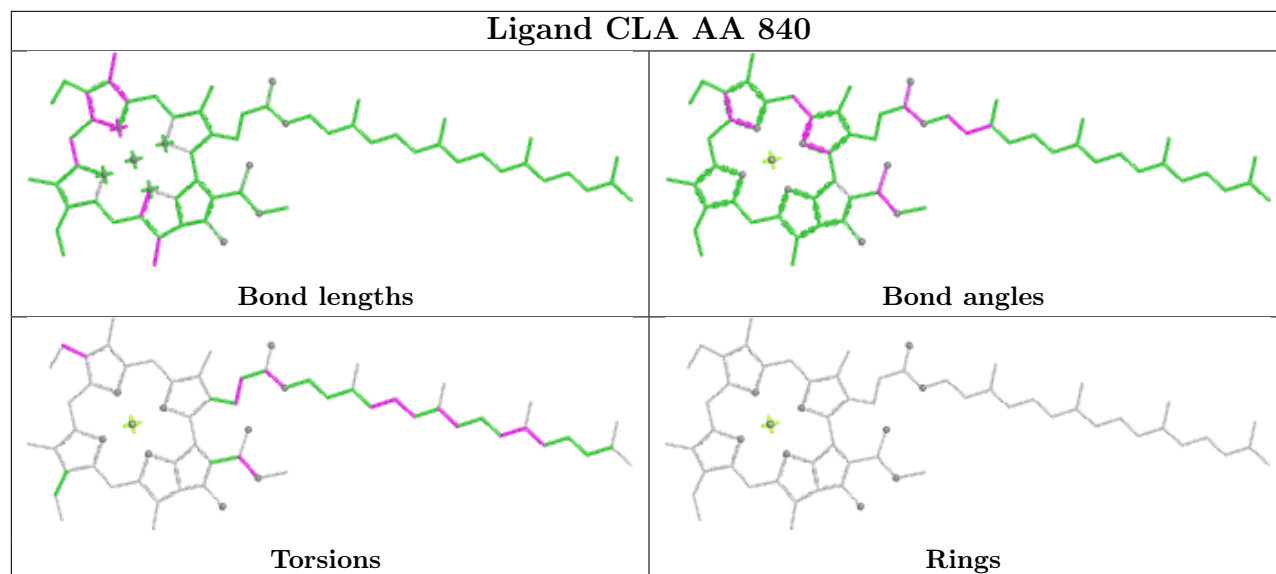


Torsions

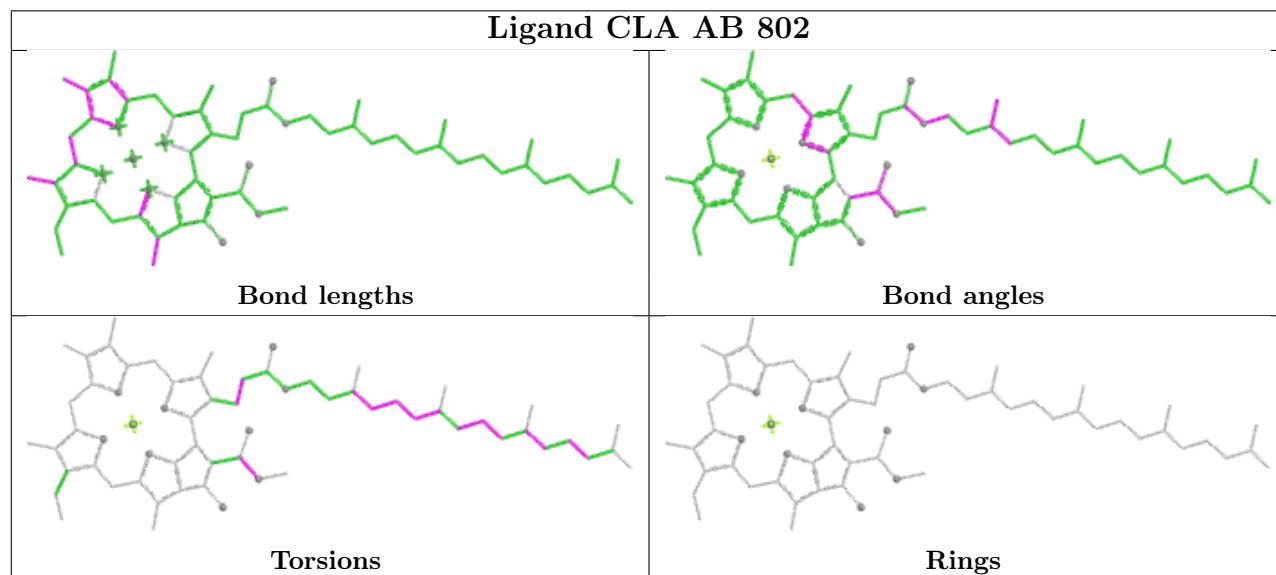


Rings

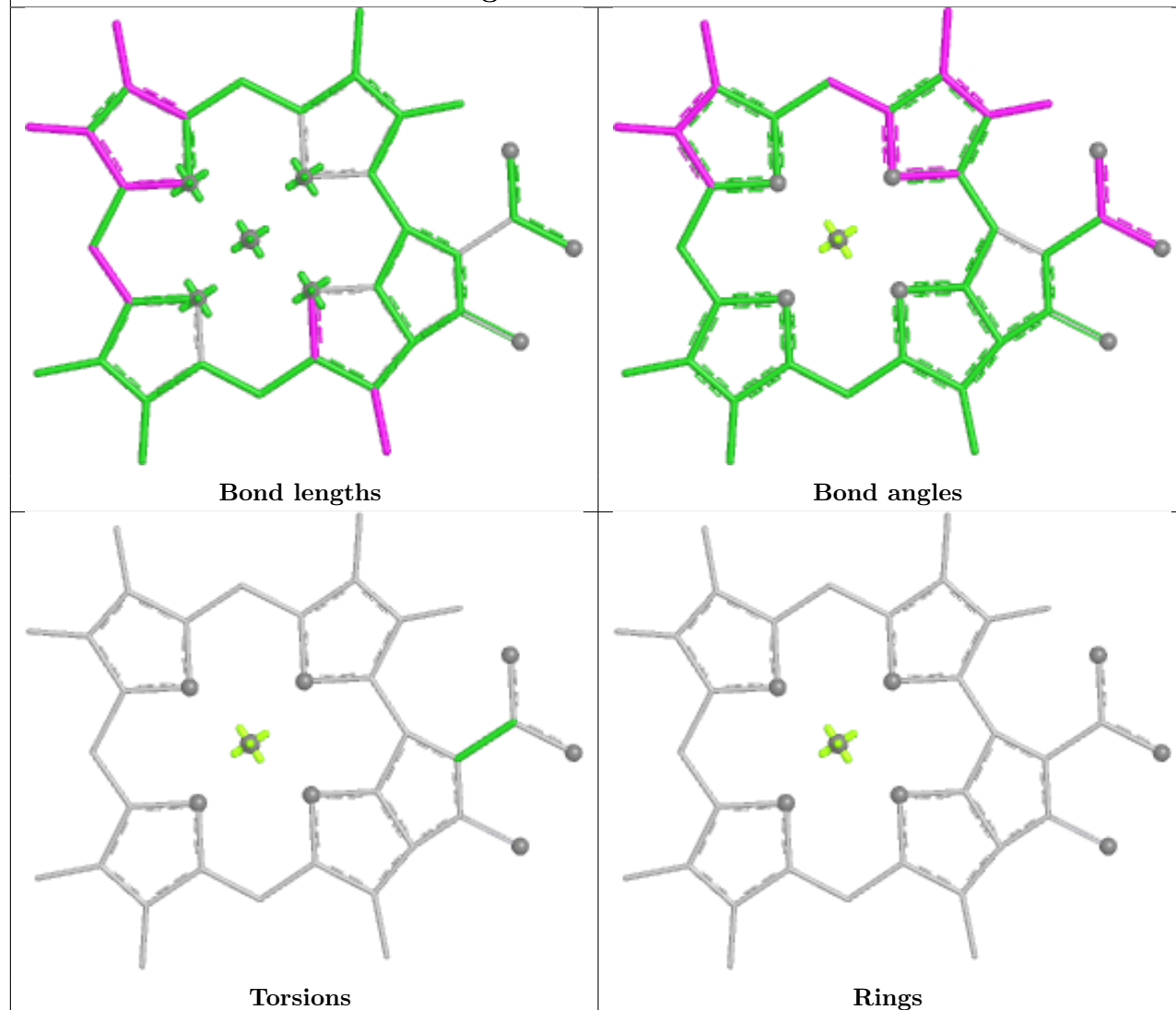
Ligand CLA AA 840



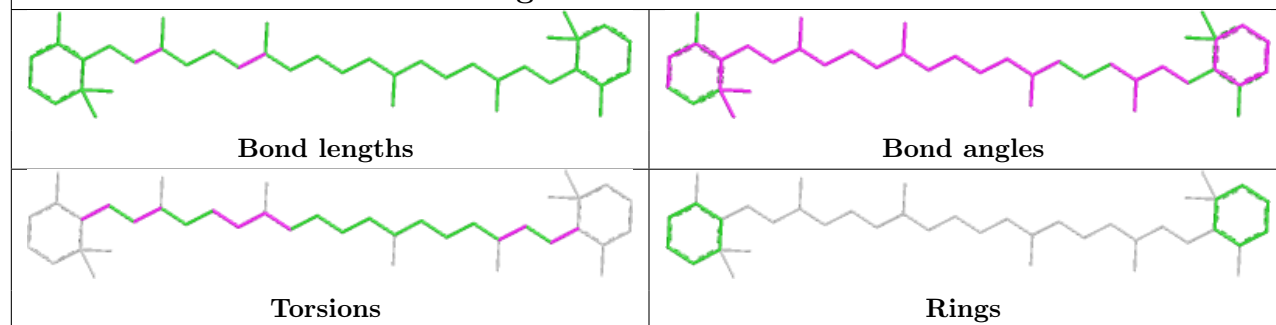
Ligand CLA AB 802



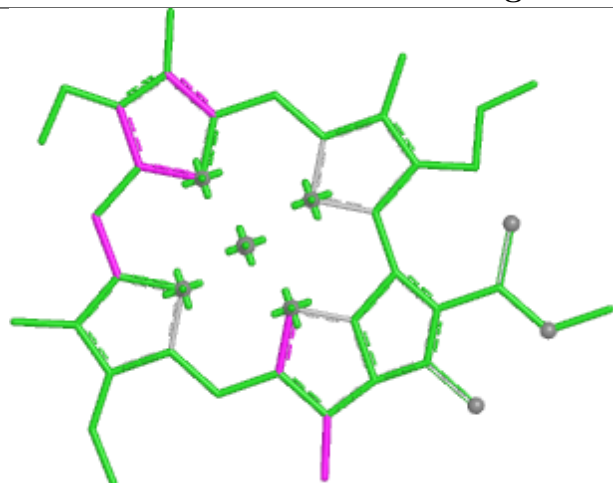
Ligand CLA A1 315



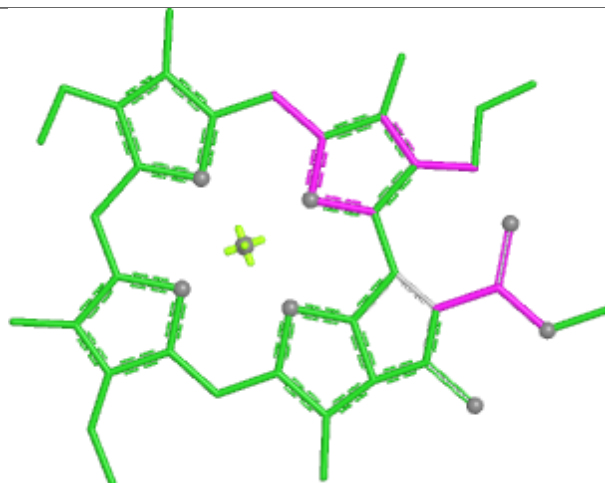
Ligand BCR AA 847



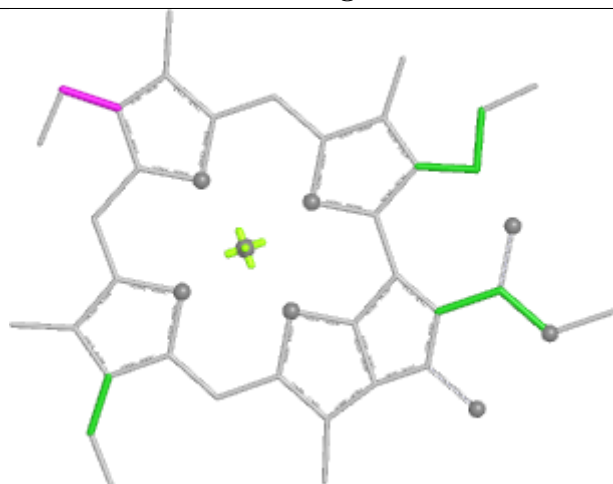
Ligand CLA A3 311



Bond lengths



Bond angles

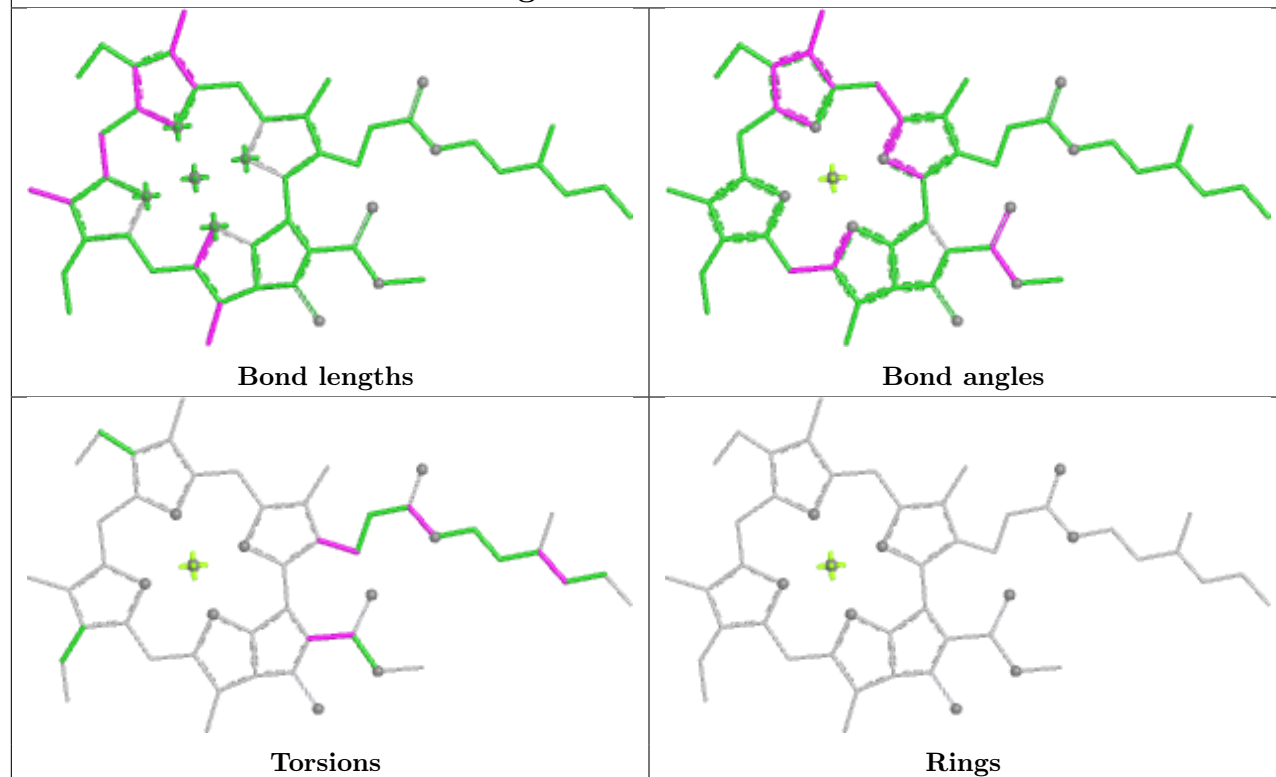


Torsions

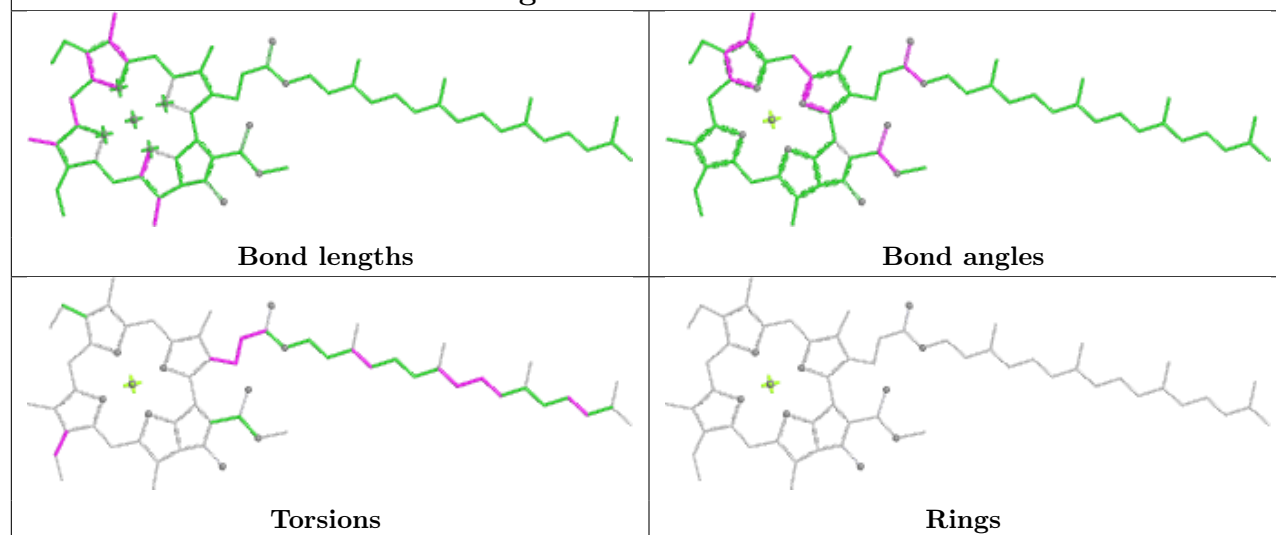


Rings

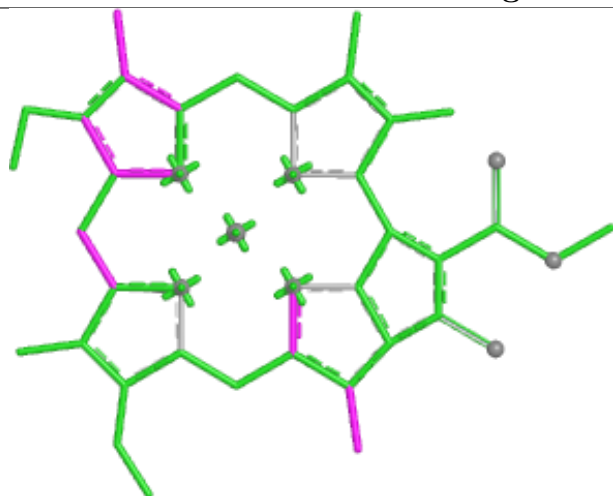
Ligand CLA AA 804



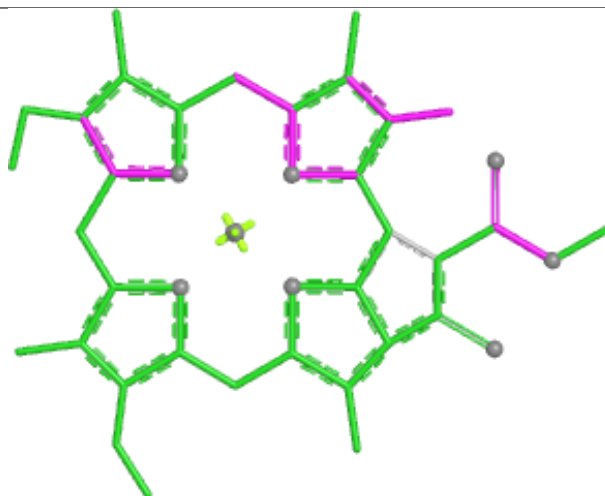
Ligand CLA AB 828



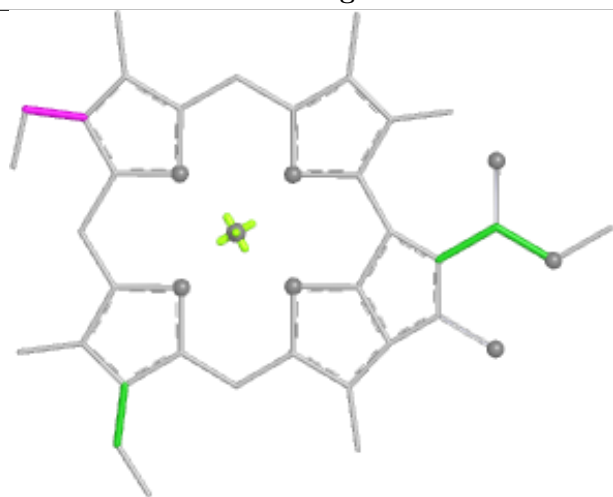
Ligand CLA AF 804



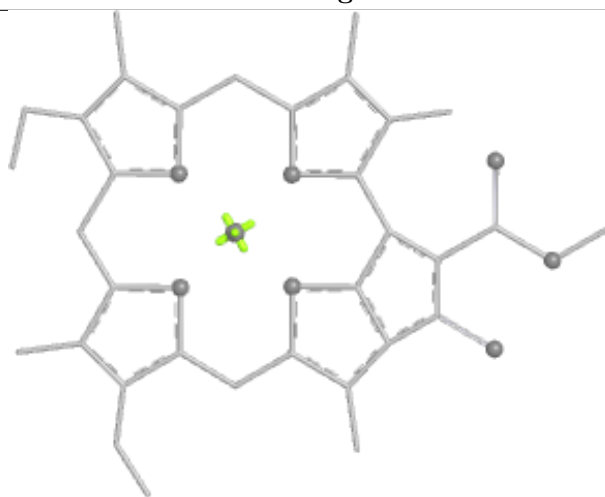
Bond lengths



Bond angles

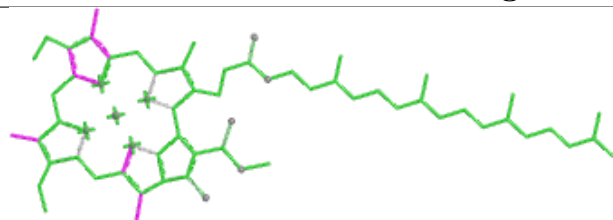


Torsions

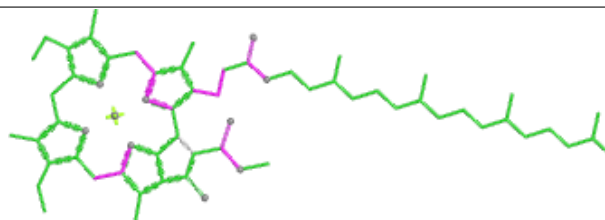


Rings

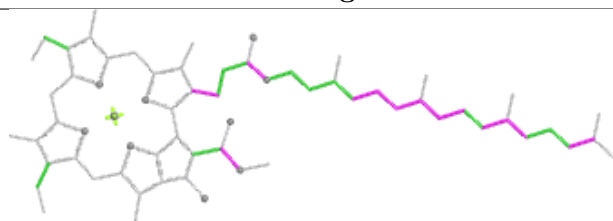
Ligand CLA AB 823



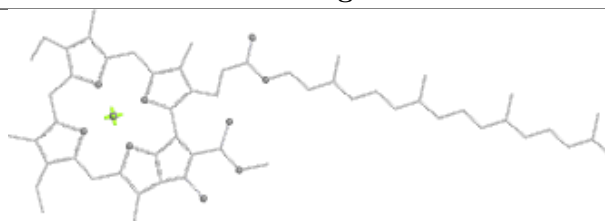
Bond lengths



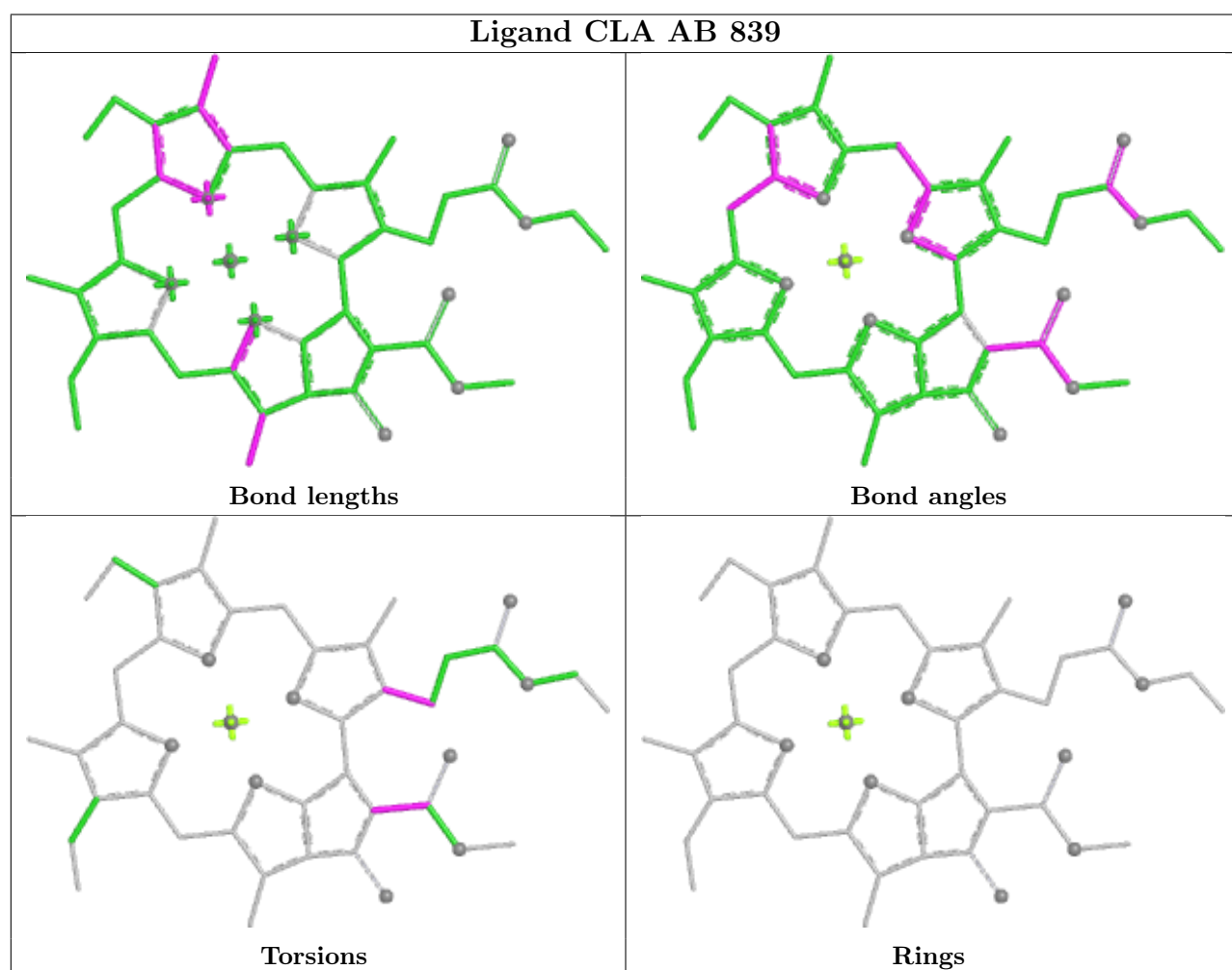
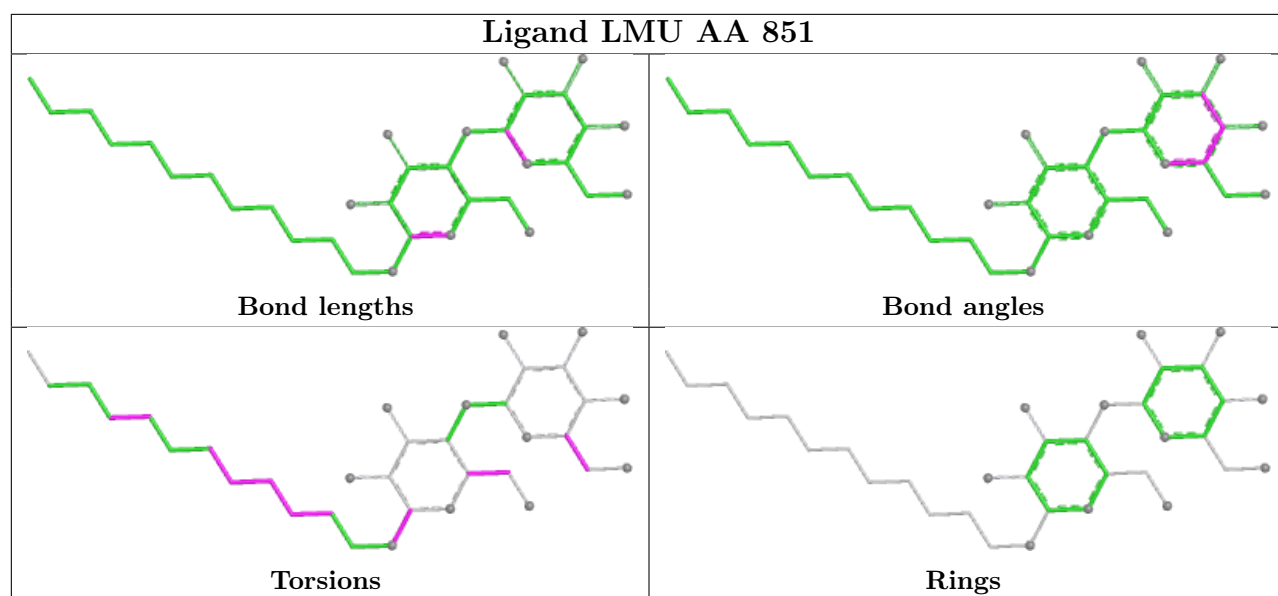
Bond angles



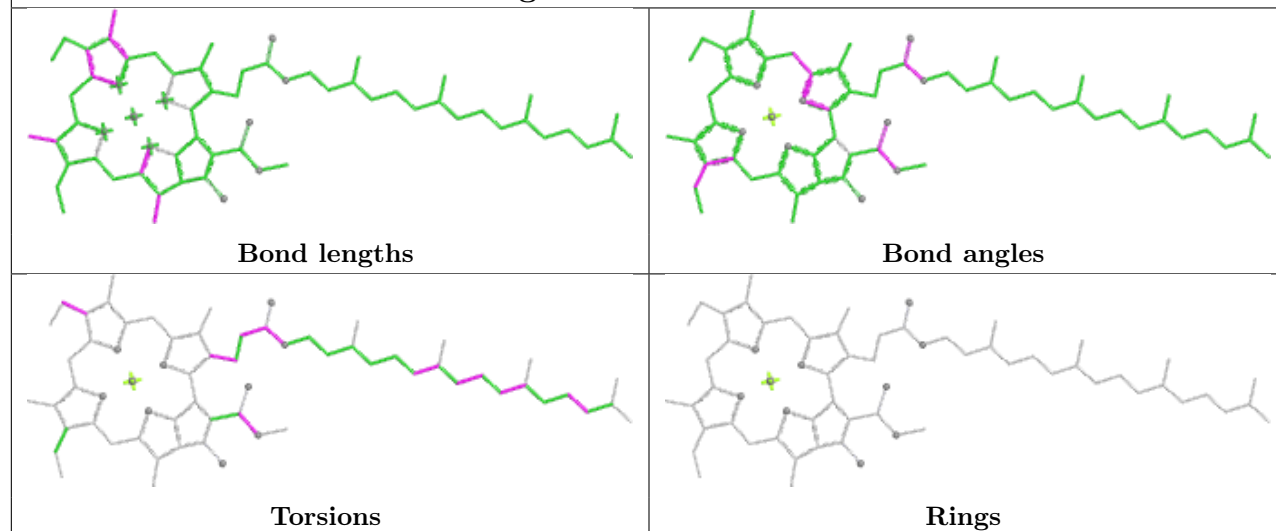
Torsions



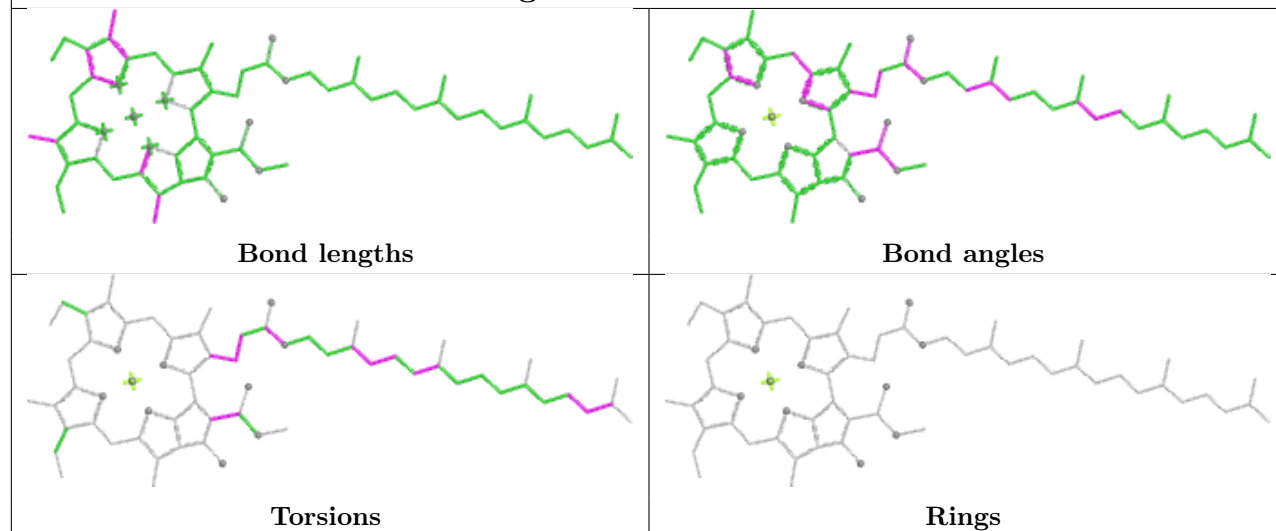
Rings



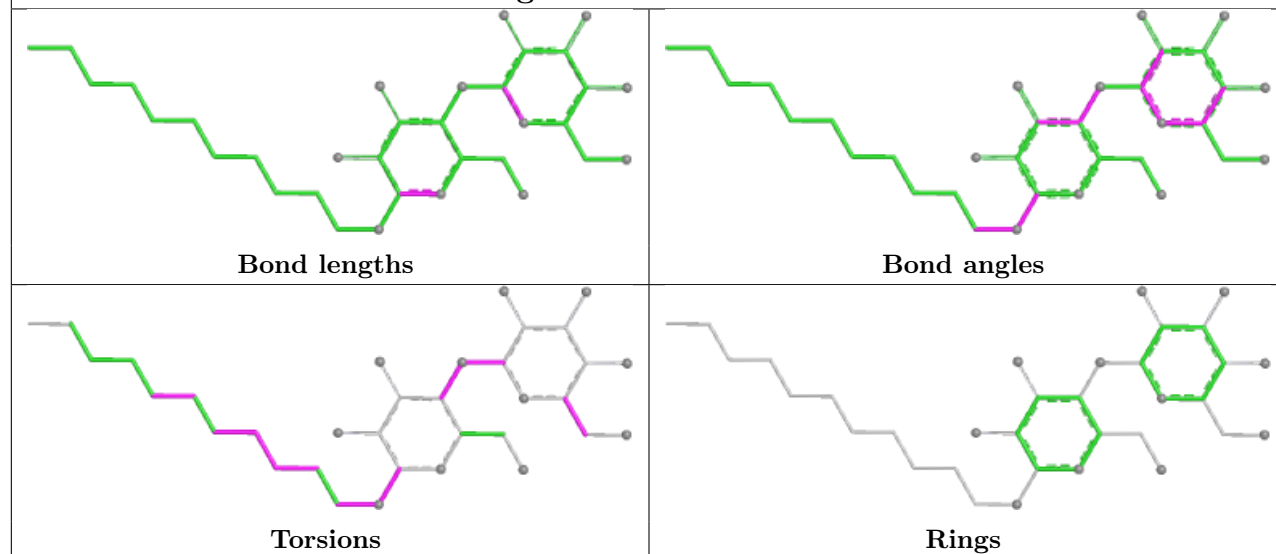
Ligand CLA AB 834

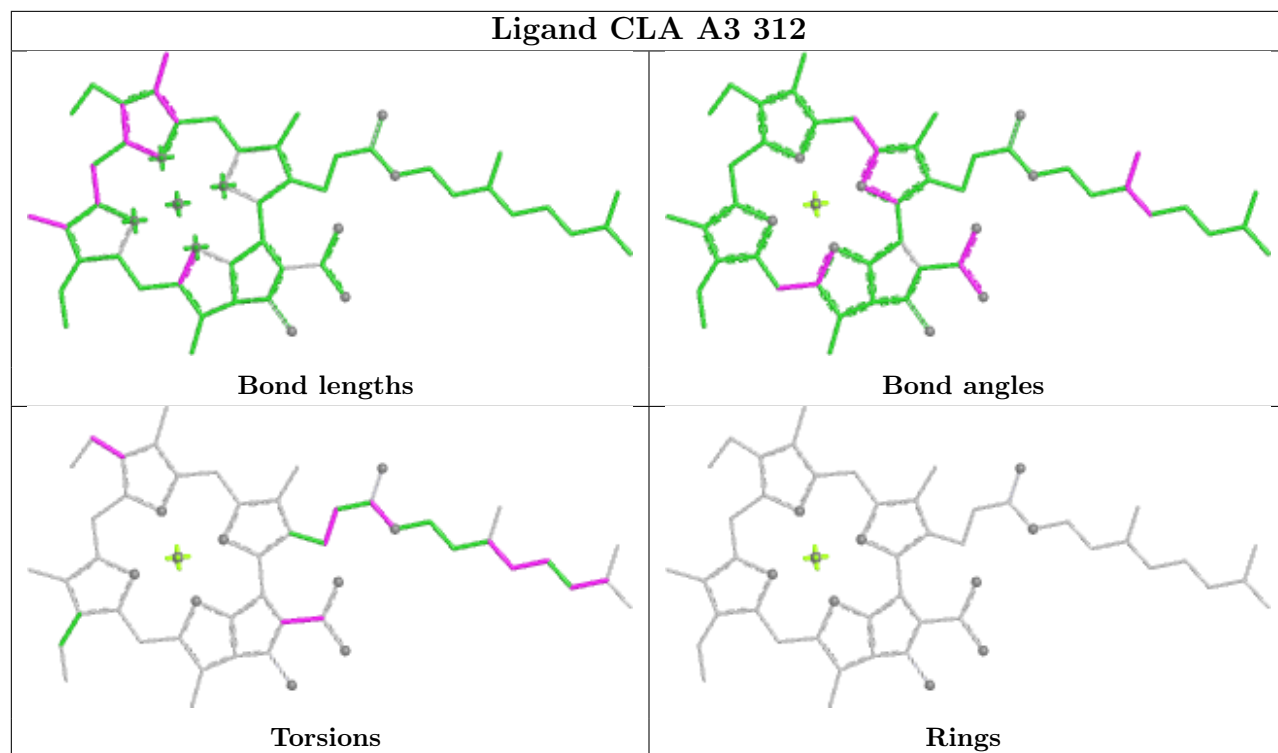


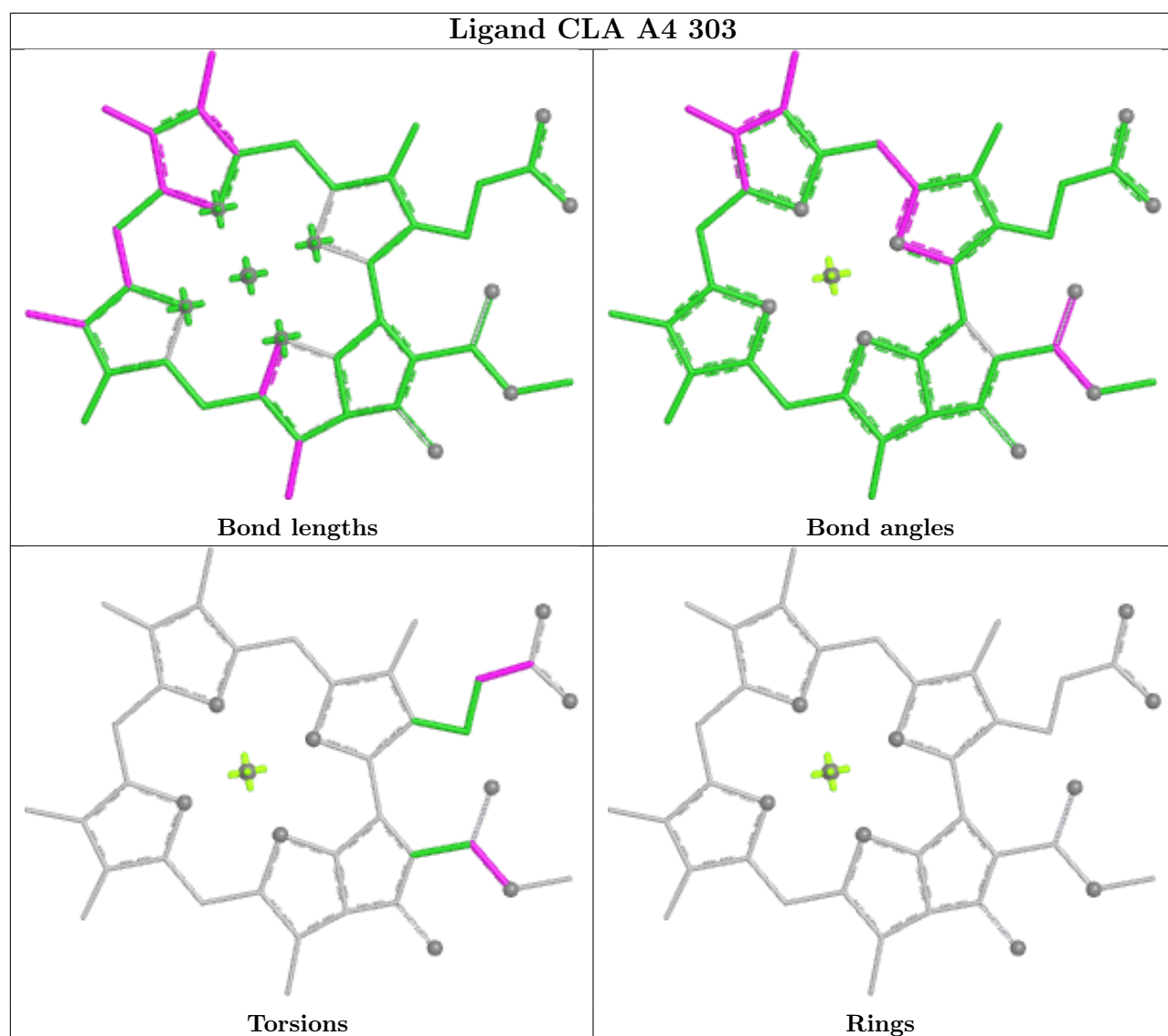
Ligand CLA AB 809



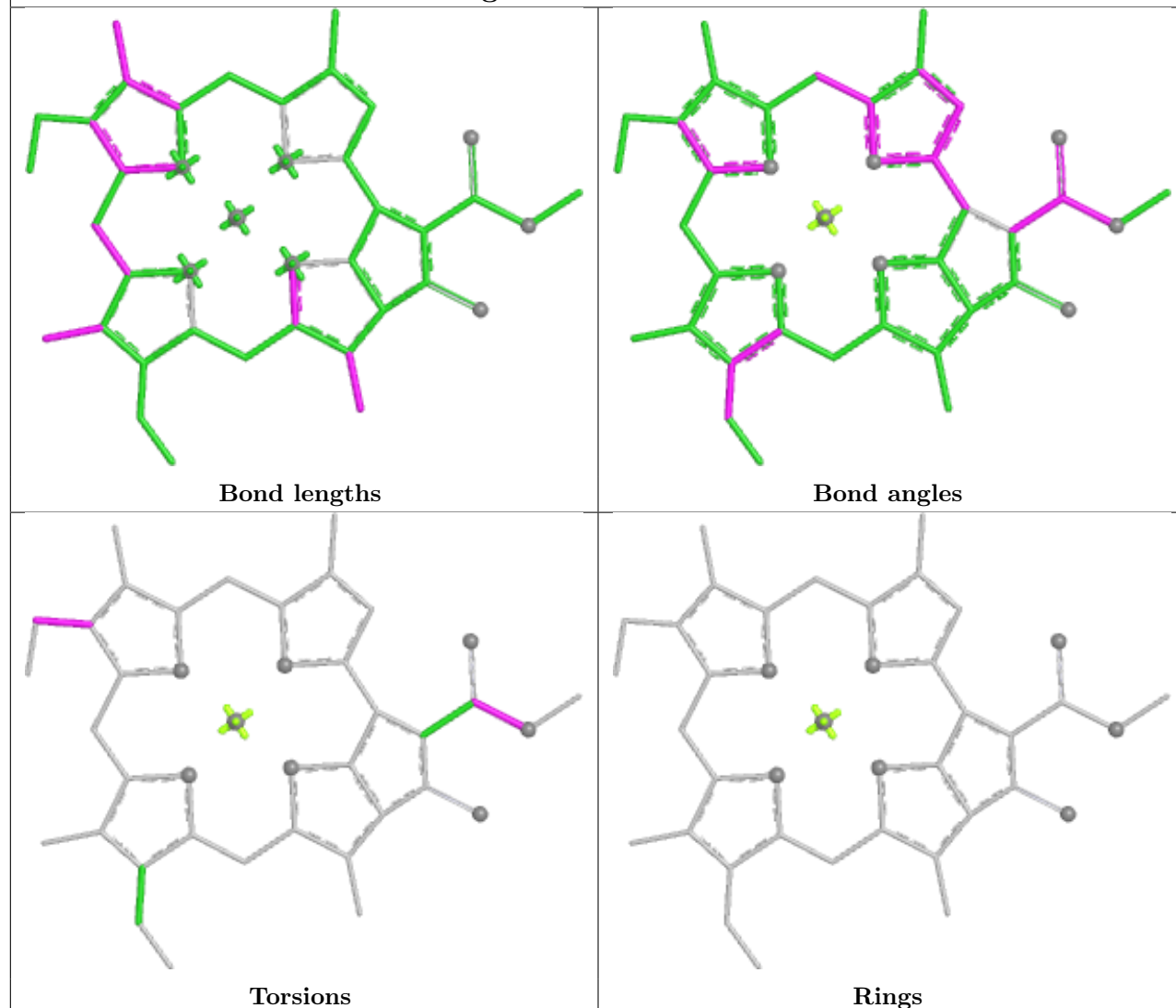
Ligand LMU AL 301



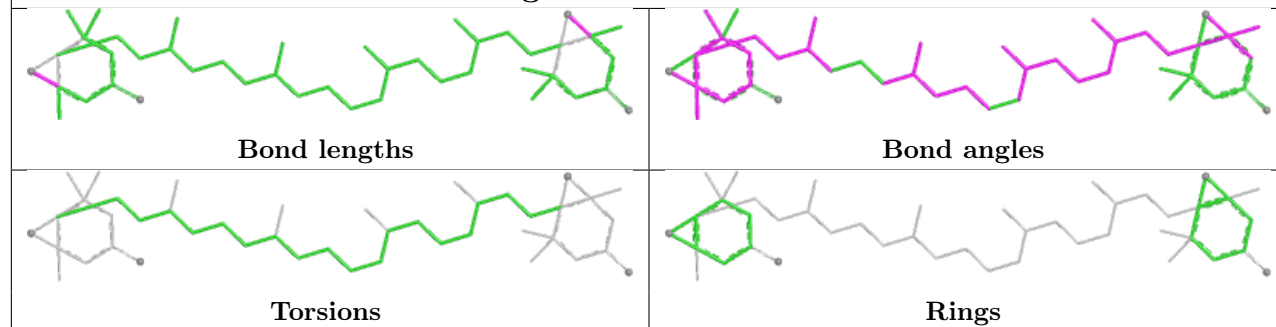


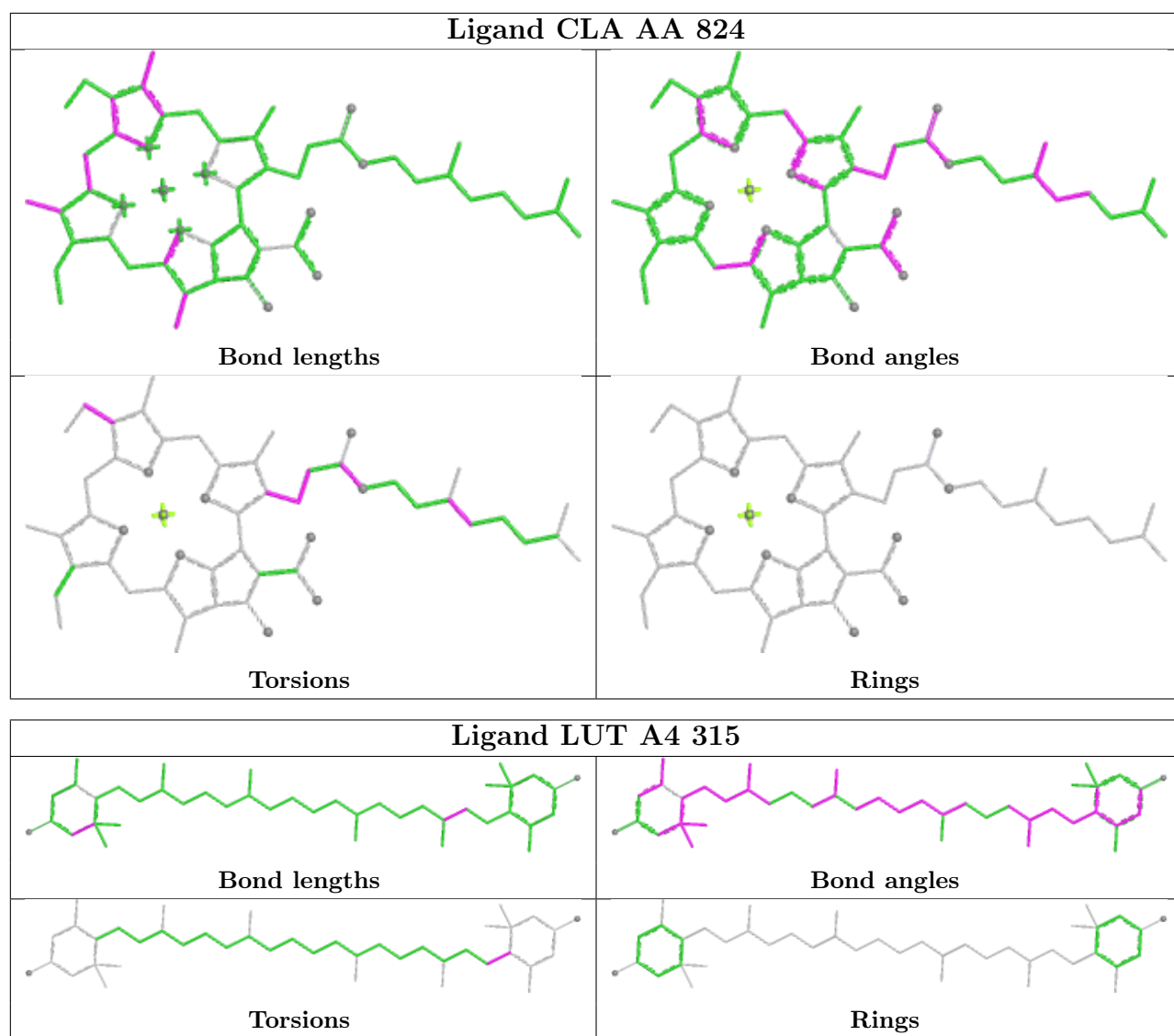


Ligand CLA A1 307

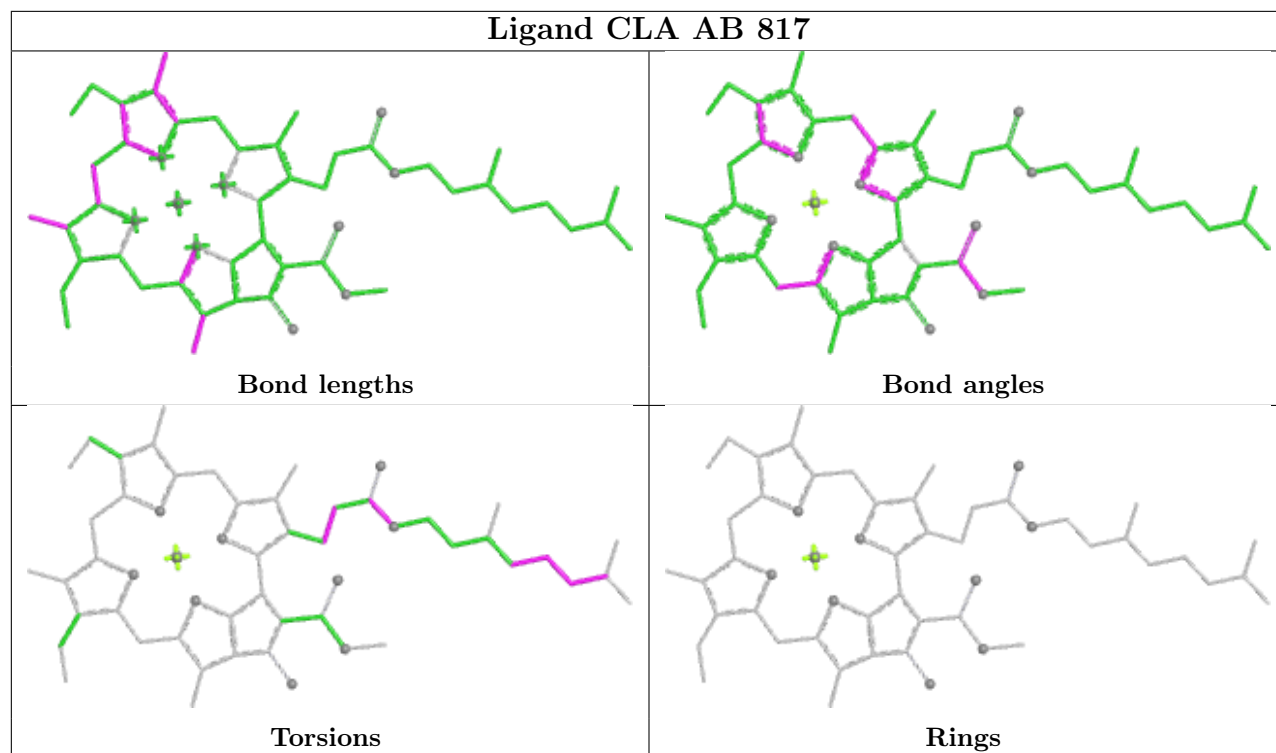


Ligand XAT A6 615

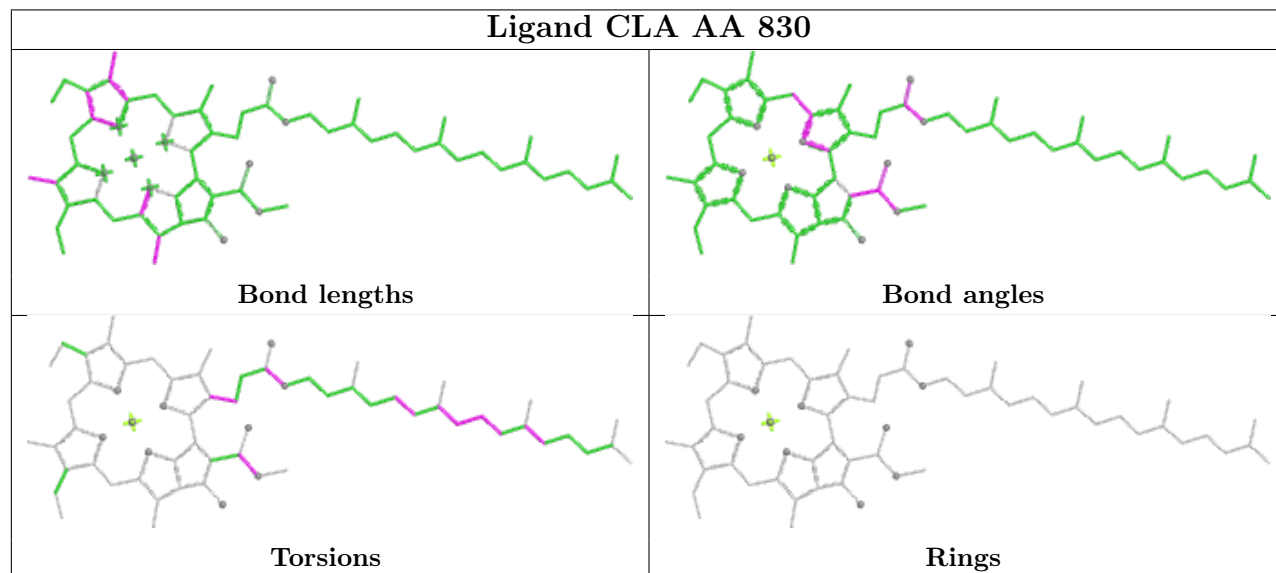


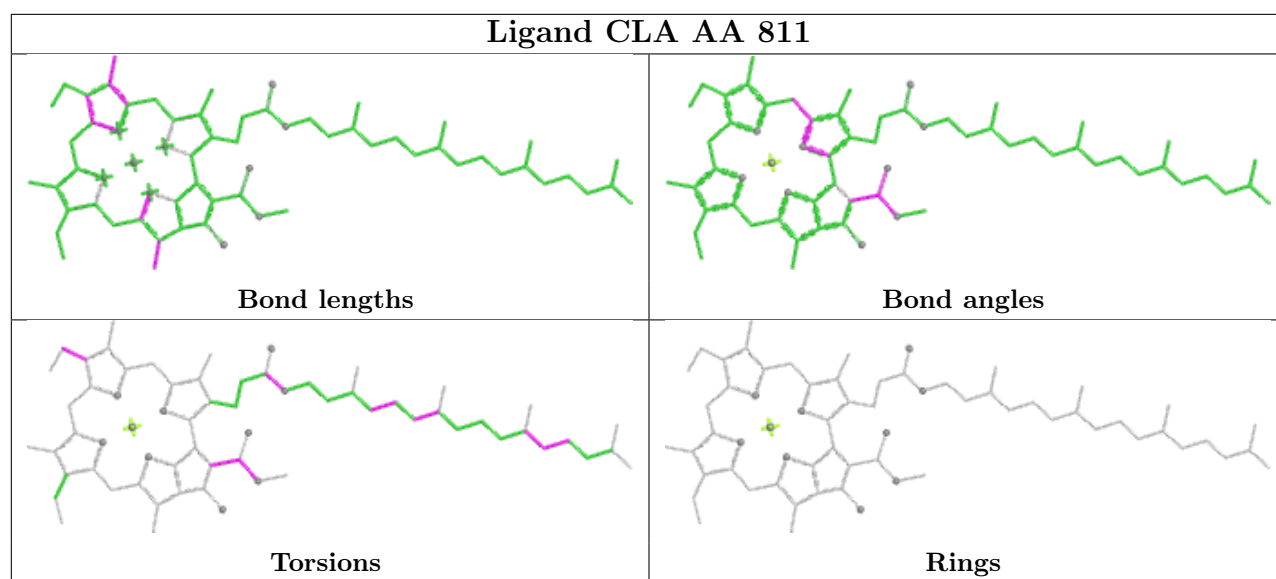


Ligand CLA AB 817



Ligand CLA AA 830





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.

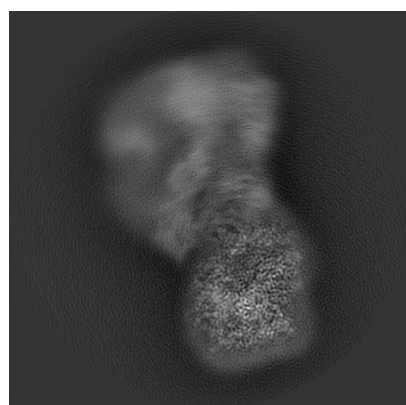
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-32462. These allow visual inspection of the internal detail of the map and identification of artifacts.

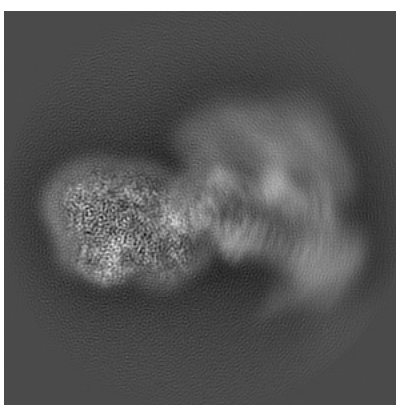
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

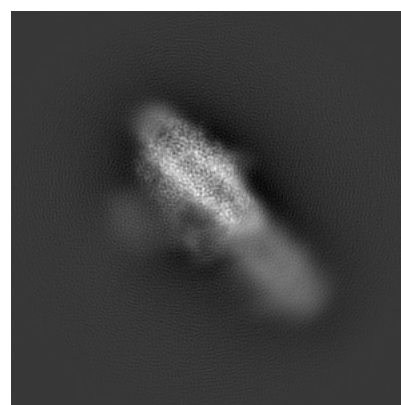
6.1.1 Primary map



X



Y

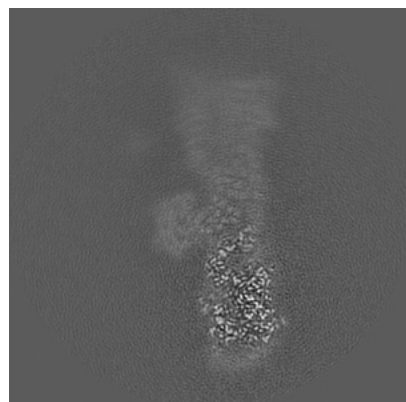


Z

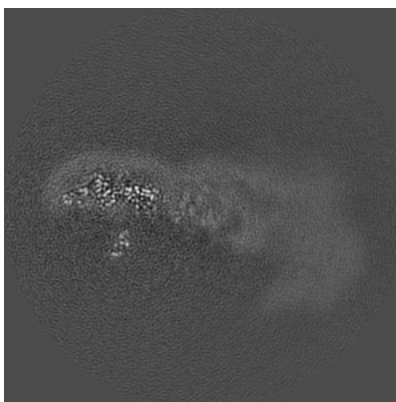
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

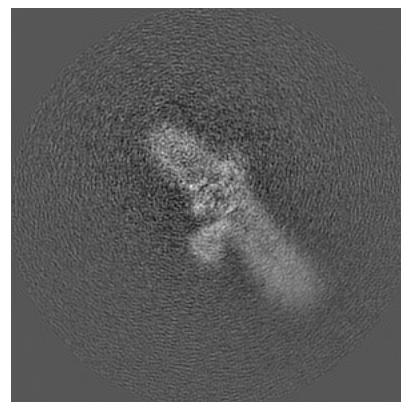
6.2.1 Primary map



X Index: 200



Y Index: 200

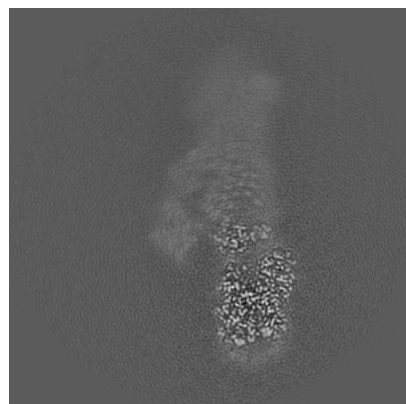


Z Index: 200

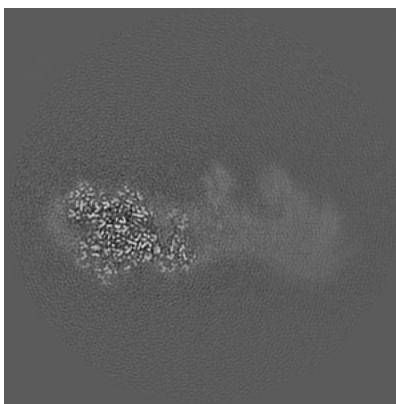
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

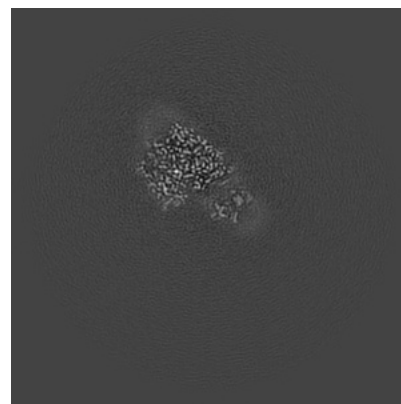
6.3.1 Primary map



X Index: 185



Y Index: 251

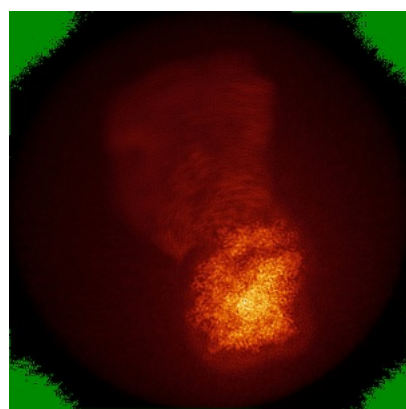


Z Index: 109

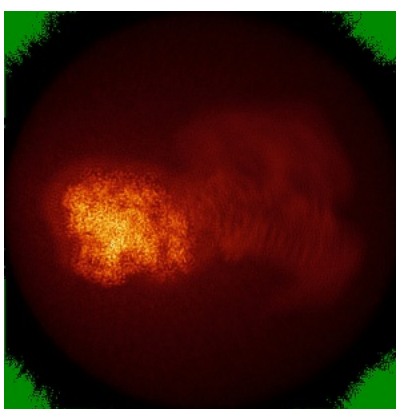
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

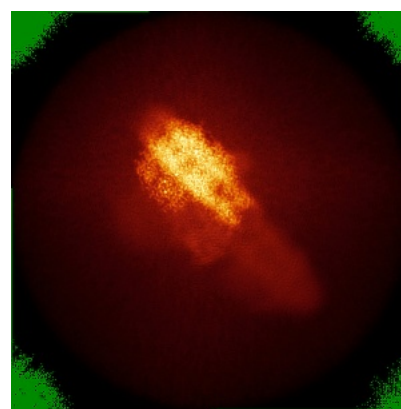
6.4.1 Primary map



X



Y



Z

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

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.03. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

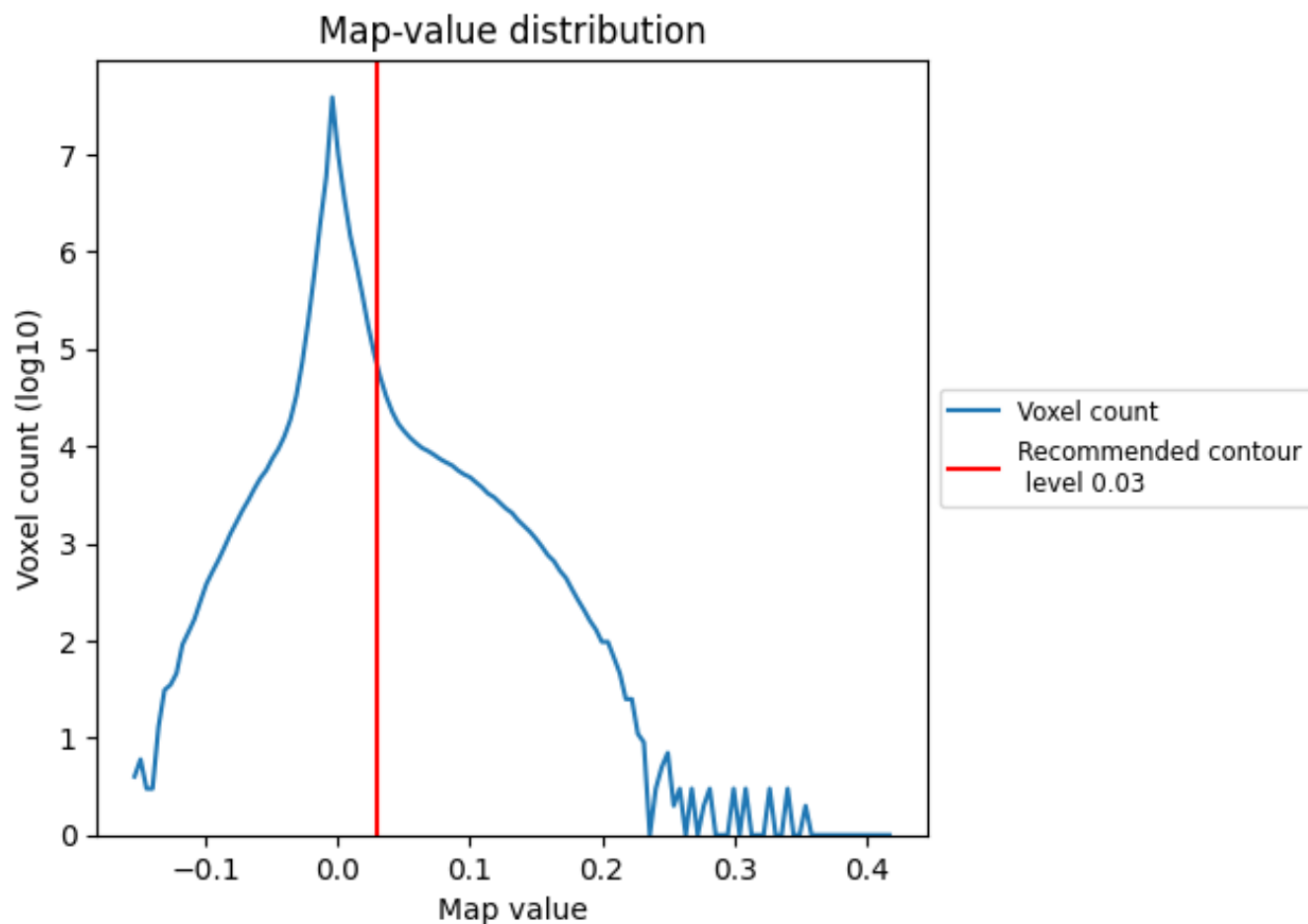
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

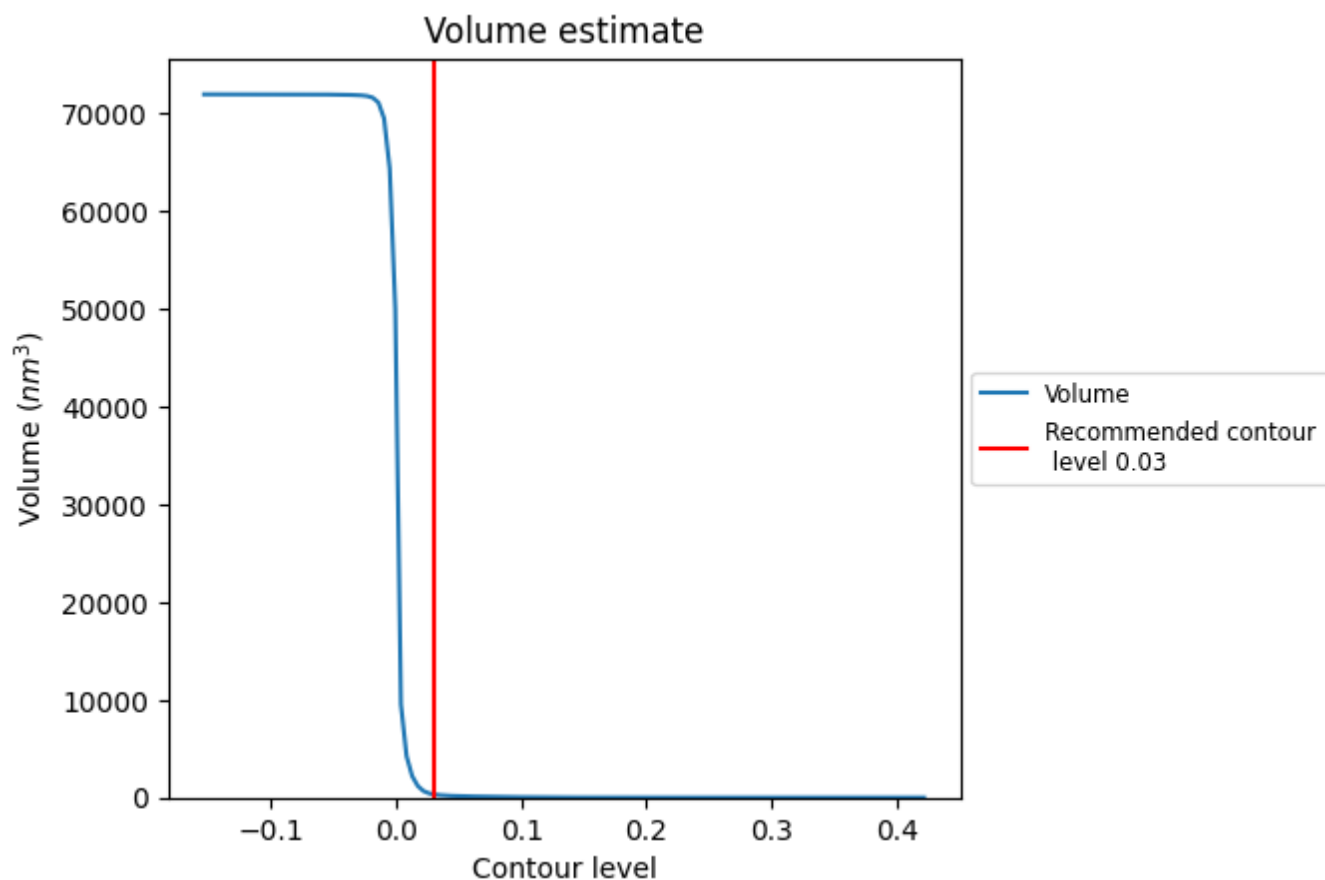
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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

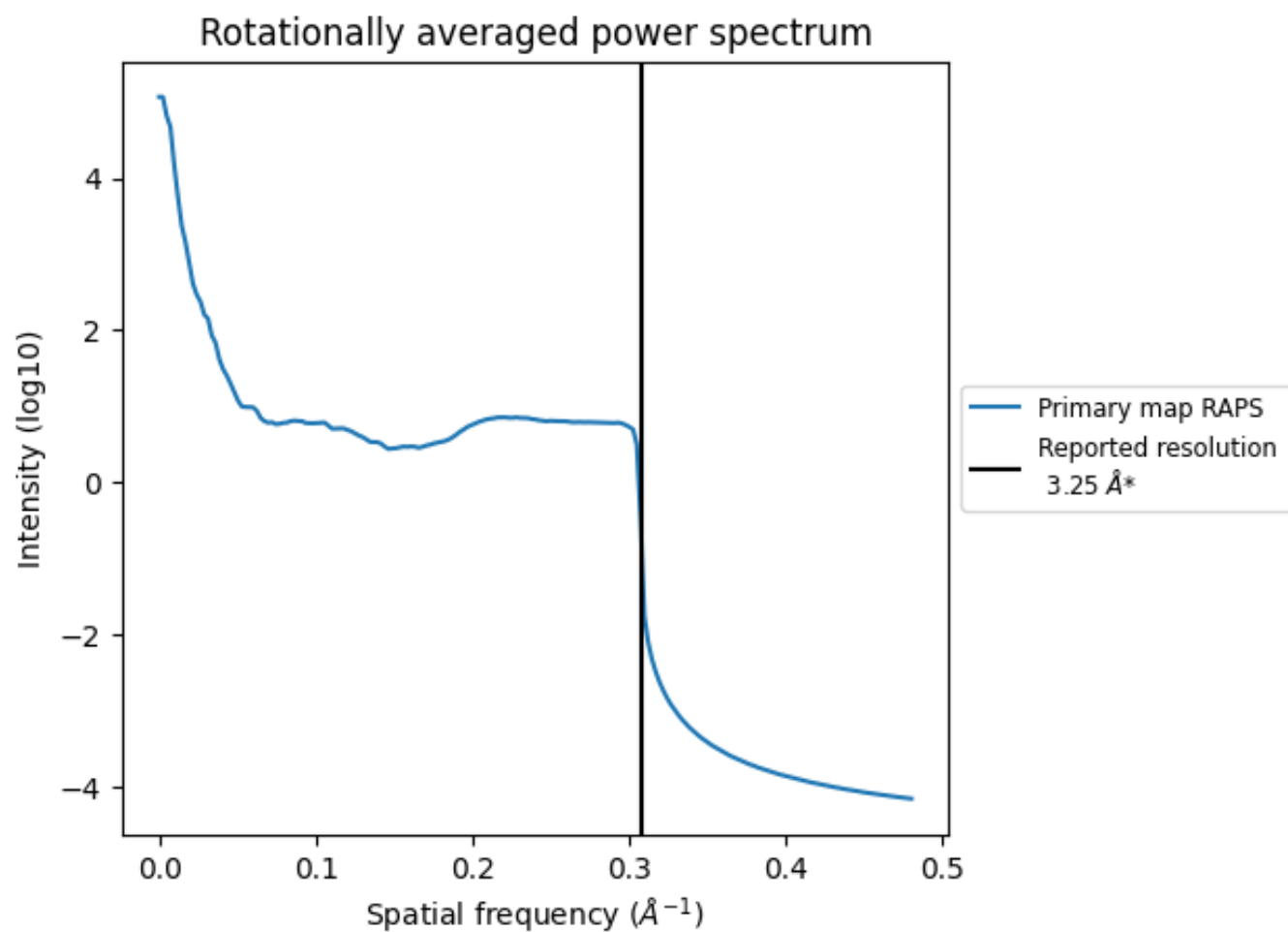
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 338 nm^3 ; this corresponds to an approximate mass of 305 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 ⓘ



*Reported resolution corresponds to spatial frequency of 0.308 Å⁻¹

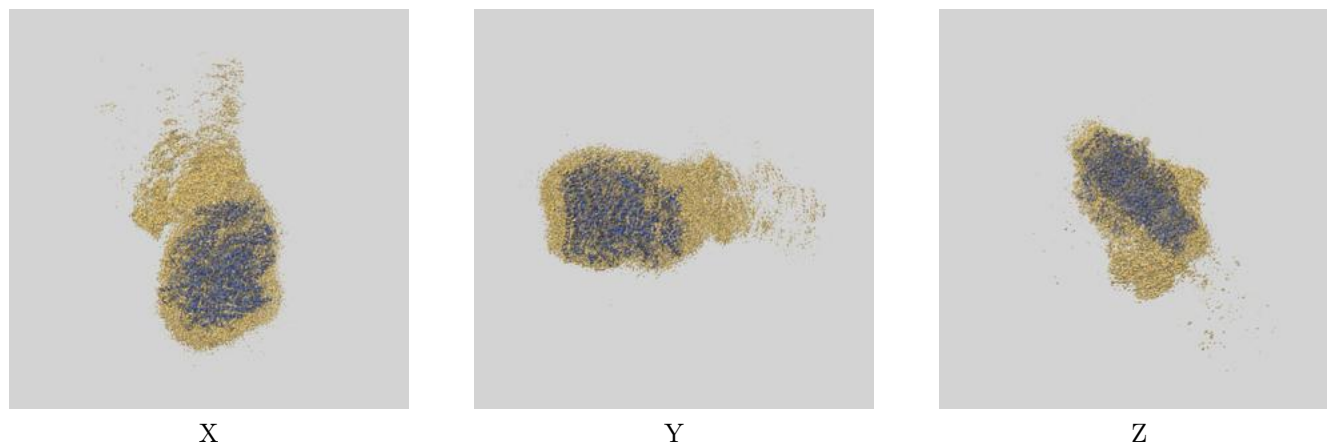
8 Fourier-Shell correlation ⓘ

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

9 Map-model fit [i](#)

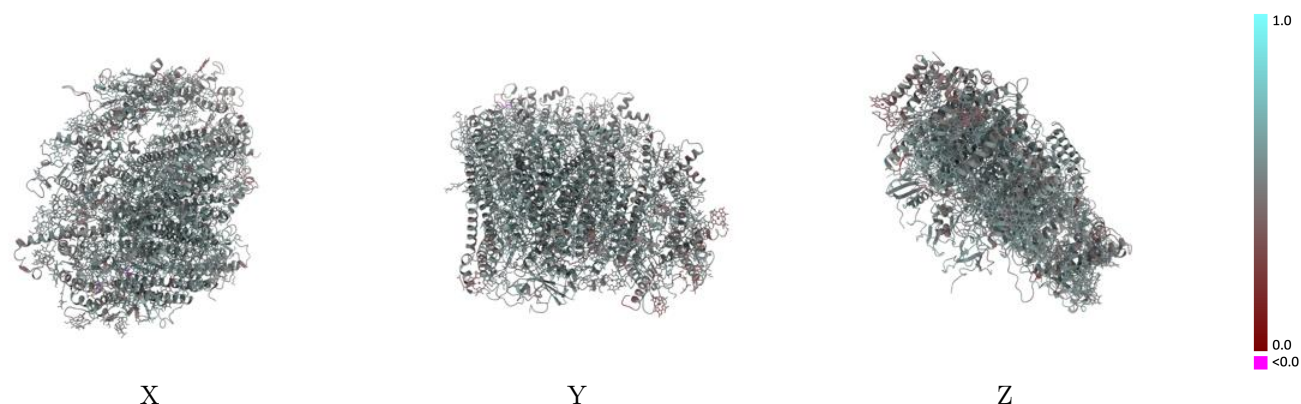
This section contains information regarding the fit between EMDB map EMD-32462 and PDB model 7WFD. Per-residue inclusion information can be found in section [3](#) on page [26](#).

9.1 Map-model overlay [i](#)



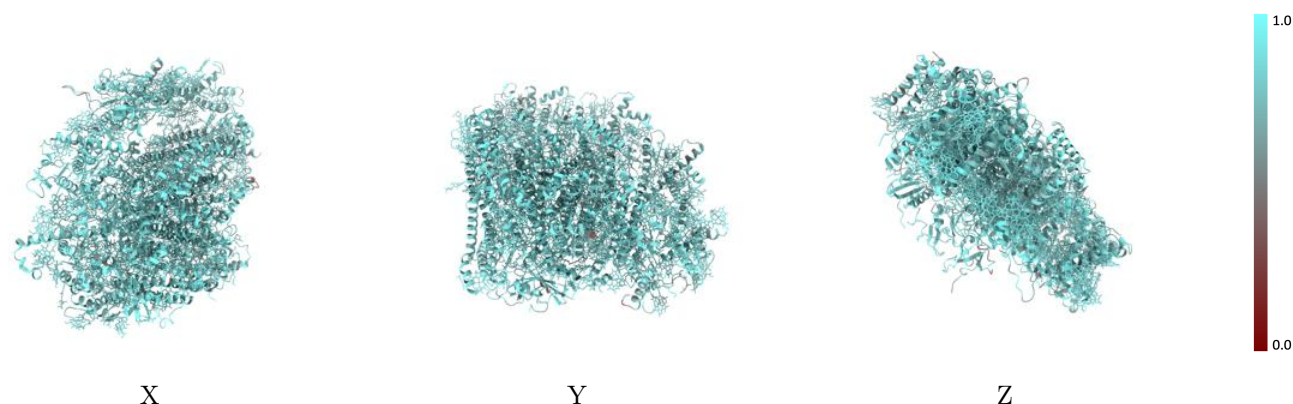
The images above show the 3D surface view of the map at the recommended contour level 0.03 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



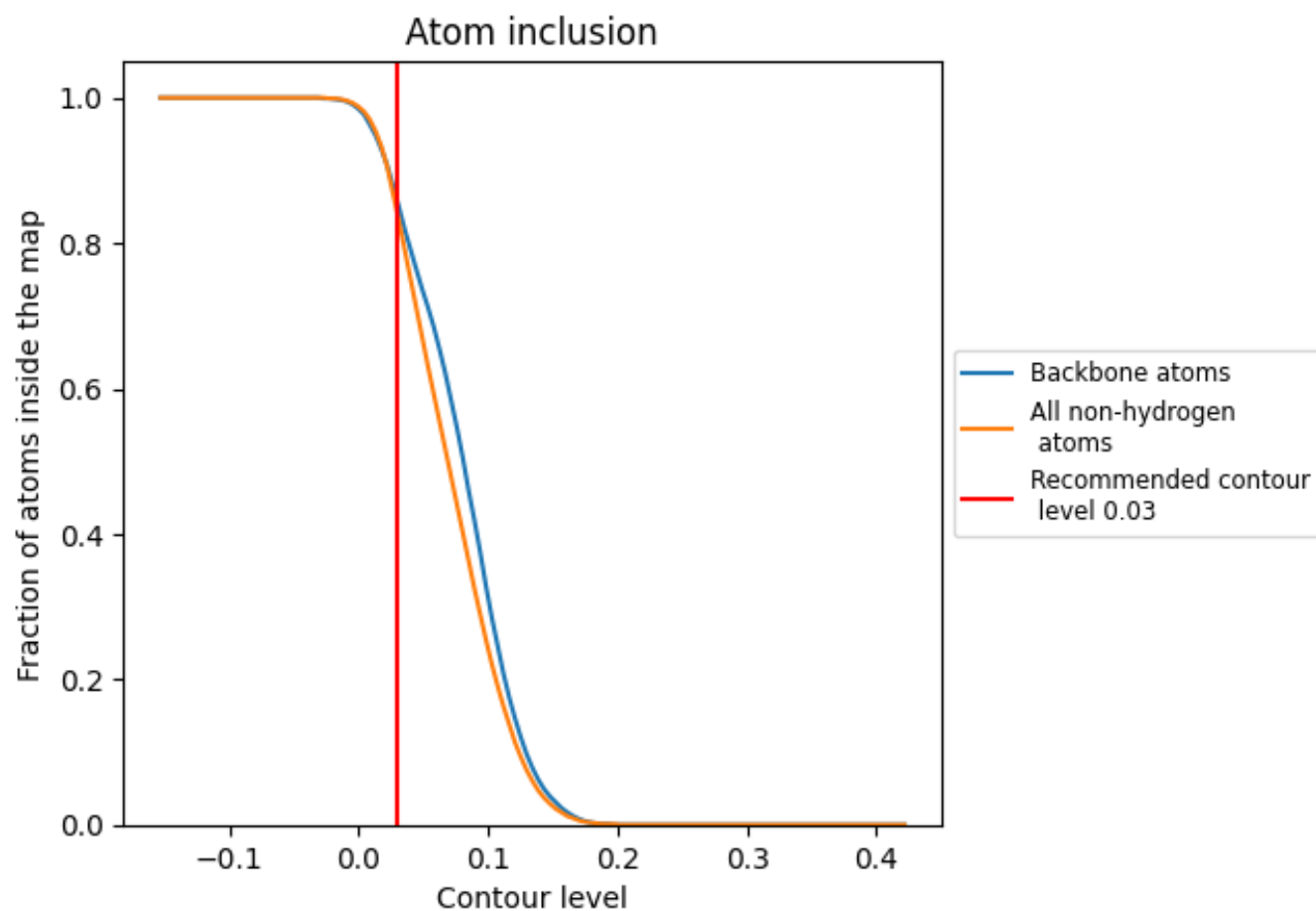
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.03).

9.4 Atom inclusion [i](#)



At the recommended contour level, 86% of all backbone atoms, 84% 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 (0.03) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	<div><div></div></div> 0.8400	<div><div></div></div> 0.5260
A1	<div><div></div></div> 0.8080	<div><div></div></div> 0.4950
A3	<div><div></div></div> 0.8200	<div><div></div></div> 0.4920
A4	<div><div></div></div> 0.8260	<div><div></div></div> 0.5120
A6	<div><div></div></div> 0.7940	<div><div></div></div> 0.5080
AA	<div><div></div></div> 0.8520	<div><div></div></div> 0.5410
AB	<div><div></div></div> 0.8730	<div><div></div></div> 0.5510
AC	<div><div></div></div> 0.9040	<div><div></div></div> 0.5380
AD	<div><div></div></div> 0.8780	<div><div></div></div> 0.5350
AE	<div><div></div></div> 0.8330	<div><div></div></div> 0.5360
AF	<div><div></div></div> 0.8530	<div><div></div></div> 0.5450
AG	<div><div></div></div> 0.8030	<div><div></div></div> 0.4920
AH	<div><div></div></div> 0.8220	<div><div></div></div> 0.4920
AI	<div><div></div></div> 0.8040	<div><div></div></div> 0.5050
AJ	<div><div></div></div> 0.7780	<div><div></div></div> 0.5130
AK	<div><div></div></div> 0.7230	<div><div></div></div> 0.4550
AL	<div><div></div></div> 0.8090	<div><div></div></div> 0.5000

