



## Full wwPDB EM Validation Report ⓘ

Dec 12, 2022 – 02:59 am GMT

PDB ID : 6TRA  
EMDB ID : EMD-10557  
Title : Cryo- EM structure of the Thermosynechococcus elongatus photosystem I in the presence of cytochrome c6  
Authors : Koelsch, A.; Radon, C.; Baumert, A.; Buerger, J.; Miehke, T.; Lisdat, F.; Zouni, A.; Wendler, P.  
Deposited on : 2019-12-18  
Resolution : 2.85 Å (reported)  
Based on initial model : 1JB0

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

We welcome your comments at [validation@mail.wwpdb.org](mailto: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>.

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

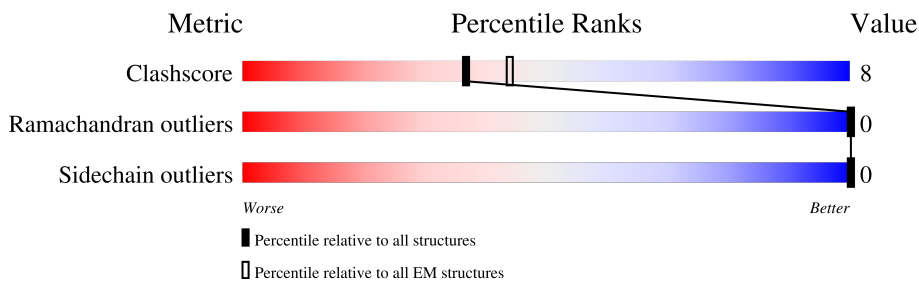
EMDB validation analysis : 0.0.1.dev43  
Mogul : 1.8.4, CSD as541be (2020)  
MolProbity : 4.02b-467  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
MapQ : 1.9.9  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.31.3

# 1 Overall quality at a glance

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

The reported resolution of this entry is 2.85 Å.

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



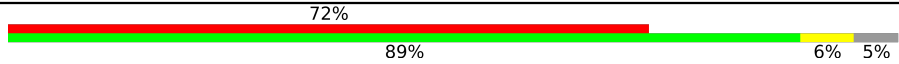
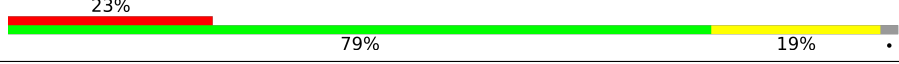
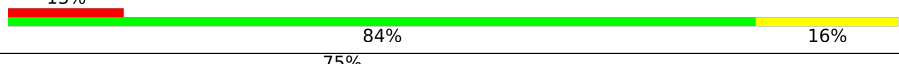

Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

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  $\geq 3$ , 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	A	755	
2	B	741	
3	C	81	
4	D	139	
5	E	76	
6	F	141	
7	I	38	
8	J	41	

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Mol	Chain	Length	Quality of chain
9	K	83	
10	L	155	
11	M	31	
12	X	36	

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
13	CL0	A	801	X	-	-	-
14	CLA	A	802	X	-	-	-
14	CLA	A	803	X	-	-	-
14	CLA	A	804	X	-	-	-
14	CLA	A	805	X	-	-	-
14	CLA	A	806	X	-	-	-
14	CLA	A	807	X	-	-	-
14	CLA	A	808	X	-	-	-
14	CLA	A	809	X	-	-	-
14	CLA	A	810	X	-	-	-
14	CLA	A	811	X	-	-	-
14	CLA	A	812	X	-	-	-
14	CLA	A	813	X	-	-	-
14	CLA	A	814	X	-	-	-
14	CLA	A	815	X	-	-	-
14	CLA	A	816	X	-	-	-
14	CLA	A	817	X	-	-	-
14	CLA	A	818	X	-	-	-
14	CLA	A	819	X	-	-	-
14	CLA	A	820	X	-	-	-
14	CLA	A	821	X	-	-	-
14	CLA	A	822	X	-	-	-
14	CLA	A	823	X	-	-	-
14	CLA	A	824	X	-	-	-
14	CLA	A	825	X	-	-	-
14	CLA	A	826	X	-	-	-
14	CLA	A	827	X	-	-	-
14	CLA	A	828	X	-	-	-
14	CLA	A	829	X	-	-	-
14	CLA	A	830	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	A	831	X	-	-	-
14	CLA	A	832	X	-	-	-
14	CLA	A	833	X	-	-	-
14	CLA	A	834	X	-	-	-
14	CLA	A	835	X	-	-	-
14	CLA	A	836	X	-	-	-
14	CLA	A	837	X	-	-	-
14	CLA	A	838	X	-	-	-
14	CLA	A	839	X	-	-	-
14	CLA	A	840	X	-	-	-
14	CLA	A	841	X	-	-	-
14	CLA	A	842	X	-	-	-
14	CLA	A	843	X	-	-	-
14	CLA	A	854	X	-	-	-
14	CLA	B	801	X	-	-	-
14	CLA	B	804	X	-	-	-
14	CLA	B	805	X	-	-	-
14	CLA	B	806	X	-	-	-
14	CLA	B	807	X	-	-	-
14	CLA	B	808	X	-	-	-
14	CLA	B	809	X	-	-	-
14	CLA	B	810	X	-	-	-
14	CLA	B	811	X	-	-	-
14	CLA	B	812	X	-	-	-
14	CLA	B	813	X	-	-	-
14	CLA	B	814	X	-	-	-
14	CLA	B	815	X	-	-	-
14	CLA	B	816	X	-	-	-
14	CLA	B	817	X	-	-	-
14	CLA	B	818	X	-	-	-
14	CLA	B	819	X	-	-	-
14	CLA	B	820	X	-	-	-
14	CLA	B	821	X	-	-	-
14	CLA	B	822	X	-	-	-
14	CLA	B	823	X	-	-	-
14	CLA	B	824	X	-	-	-
14	CLA	B	825	X	-	-	-
14	CLA	B	826	X	-	-	-
14	CLA	B	827	X	-	-	-
14	CLA	B	828	X	-	-	-
14	CLA	B	829	X	-	-	-
14	CLA	B	830	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	B	831	X	-	-	-
14	CLA	B	832	X	-	-	-
14	CLA	B	833	X	-	-	-
14	CLA	B	834	X	-	-	-
14	CLA	B	835	X	-	-	-
14	CLA	B	836	X	-	-	-
14	CLA	B	837	X	-	-	-
14	CLA	B	838	X	-	-	-
14	CLA	B	839	X	-	-	-
14	CLA	B	840	X	-	-	-
14	CLA	B	841	X	-	-	-
14	CLA	B	842	X	-	-	-
14	CLA	F	201	X	-	-	-
14	CLA	F	203	X	-	-	-
14	CLA	F	204	X	-	-	-
14	CLA	J	101	X	-	-	-
14	CLA	J	102	X	-	-	-
14	CLA	K	101	X	-	-	-
14	CLA	K	102	X	-	-	-
14	CLA	L	201	X	-	-	-
14	CLA	L	204	X	-	-	-
14	CLA	L	205	X	-	-	-
14	CLA	L	206	X	-	-	-
14	CLA	M	102	X	-	-	-
14	CLA	X	1701	X	-	-	-

## 2 Entry composition

There are 21 unique types of molecules in this entry. The entry contains 25197 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
			Total	C	N	O	S		
1	A	746	5826	3823	995	982	26	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	B	740	5894	3878	988	1007	21	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	C	80	598	367	103	117	11	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	D	138	1075	682	186	204	3	0	0

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

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
5	E	70	546	347	94	105	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	F	141	1065	680	184	197	4	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
7	I	38	303	209	40	49	5	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
8	J	41	340	232	51	55	2	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
9	K	79	571	377	92	101	1	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
10	L	152	1124	738	180	202	4	0	0

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
L	143	LEU	SER	conflict	UNP Q8DGB4

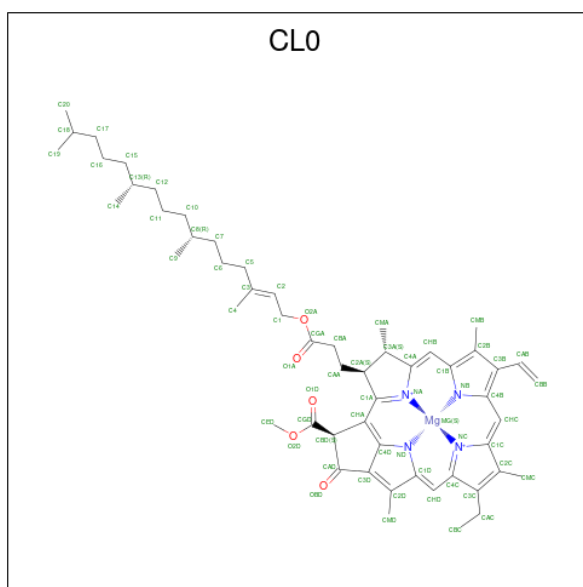
- Molecule 11 is a protein called Photosystem I reaction center subunit XII.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
11	M	31	241	161	36	43	1	0	0

- Molecule 12 is a protein called Photosystem I 4.8K protein.

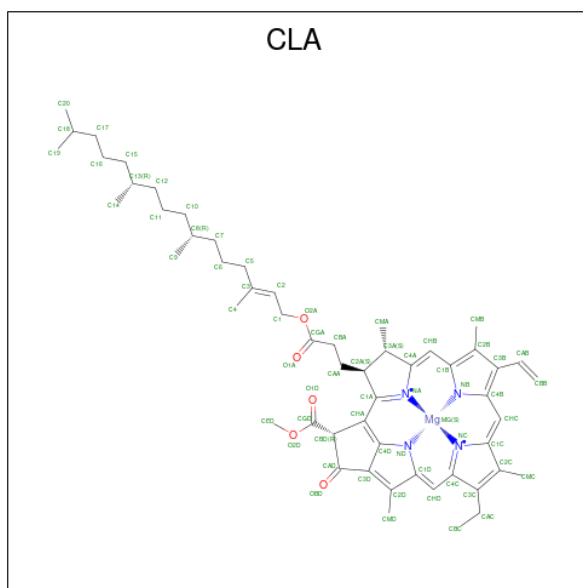
Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
12	X	27	228	163	33	32	0	0

- Molecule 13 is CHLOROPHYLL A ISOMER (three-letter code: CL0) (formula: C<sub>55</sub>H<sub>72</sub>MgN<sub>4</sub>O<sub>5</sub>).



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

- Molecule 14 is CHLOROPHYLL A (three-letter code: CLA) (formula:  $C_{55}H_{72}MgN_4O_5$ ).



Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	A	1	2674	2244	43	172	215	0
14	A	1	2674	2244	43	172	215	0
14	A	1	2674	2244	43	172	215	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	A	1	Total 2674	C 2244	Mg 43	N 172	O 215	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0

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<b>Mol</b>	<b>Chain</b>	<b>Residues</b>	<b>Atoms</b>					<b>AltConf</b>
			Total	C	Mg	N	O	
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0
14	B	1	2446	2046	40	160	200	0

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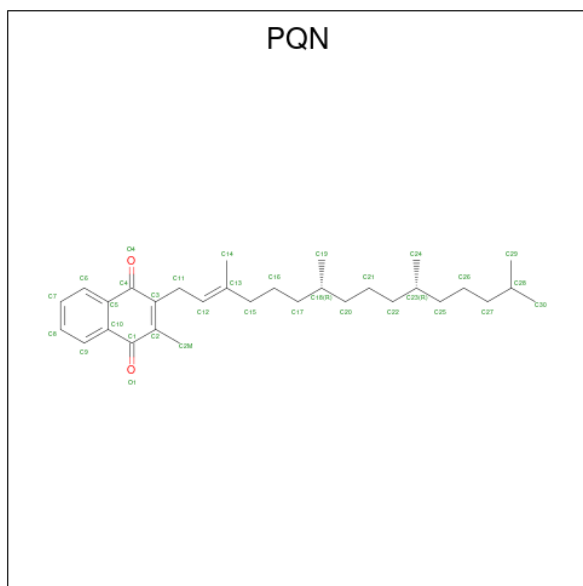
Mol	Chain	Residues	Atoms					AltConf
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	B	1	Total 2446	C 2046	Mg 40	N 160	O 200	0
14	F	1	Total 153	C 123	Mg 3	N 12	O 15	0
14	F	1	Total 153	C 123	Mg 3	N 12	O 15	0
14	F	1	Total 153	C 123	Mg 3	N 12	O 15	0
14	J	1	Total 82	C 66	Mg 2	N 8	O 6	0

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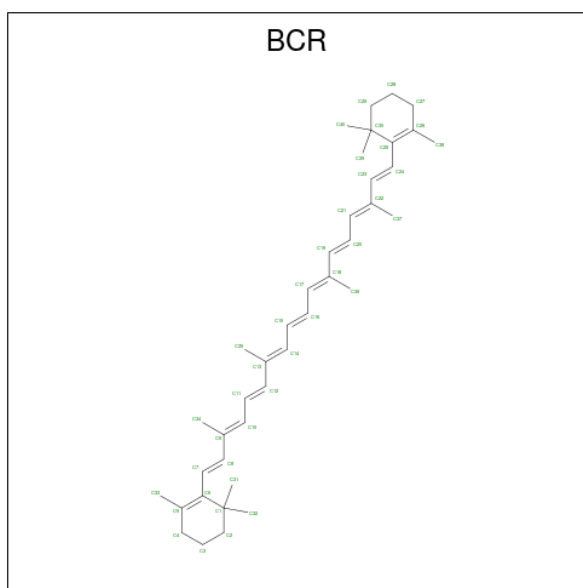
Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	J	1	Total 82	C 66	Mg 2	N 8	O 6	0
14	K	1	Total 104	C 84	Mg 2	N 8	O 10	0
14	K	1	Total 104	C 84	Mg 2	N 8	O 10	0
14	L	1	Total 260	C 220	Mg 4	N 16	O 20	0
14	L	1	Total 260	C 220	Mg 4	N 16	O 20	0
14	L	1	Total 260	C 220	Mg 4	N 16	O 20	0
14	L	1	Total 260	C 220	Mg 4	N 16	O 20	0
14	M	1	Total 36	C 30	Mg 1	N 4	O 1	0
14	X	1	Total 45	C 35	Mg 1	N 4	O 5	0

- Molecule 15 is PHYLLOQUINONE (three-letter code: PQN) (formula: C<sub>31</sub>H<sub>46</sub>O<sub>2</sub>).



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

- Molecule 16 is BETA-CAROTENE (three-letter code: BCR) (formula:  $C_{40}H_{56}$ ).



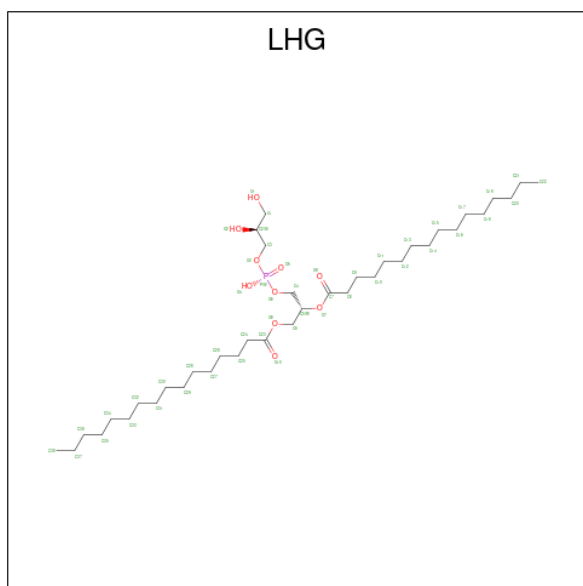
Mol	Chain	Residues	Atoms	AltConf
16	A	1	Total C 265 265	0
16	A	1	Total C 265 265	0
16	A	1	Total C 265 265	0
16	A	1	Total C 265 265	0
16	A	1	Total C 265 265	0
16	A	1	Total C 265 265	0
16	A	1	Total C 265 265	0
16	B	1	Total C 320 320	0
16	B	1	Total C 320 320	0
16	B	1	Total C 320 320	0
16	B	1	Total C 320 320	0
16	B	1	Total C 320 320	0
16	B	1	Total C 320 320	0

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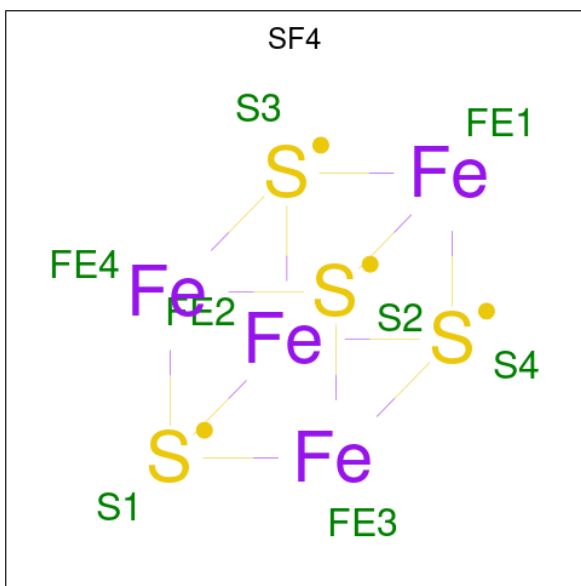
Mol	Chain	Residues	Atoms		AltConf
16	B	1	Total 320	C 320	0
16	B	1	Total 320	C 320	0
16	F	1	Total 80	C 80	0
16	F	1	Total 80	C 80	0
16	I	1	Total 80	C 80	0
16	I	1	Total 80	C 80	0
16	J	1	Total 80	C 80	0
16	J	1	Total 80	C 80	0
16	K	1	Total 25	C 25	0
16	L	1	Total 80	C 80	0
16	L	1	Total 80	C 80	0

- Molecule 17 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula:  $C_{38}H_{75}O_{10}P$ ).



Mol	Chain	Residues	Atoms			AltConf	
17	A	1	Total	C	O	P	0
			90	68	20	2	
17	A	1	Total	C	O	P	0
			90	68	20	2	
17	B	1	Total	C	O	P	0
			49	38	10	1	
17	I	1	Total	C	O	P	0
			39	28	10	1	
17	M	1	Total	C	O	P	0
			49	38	10	1	

- Molecule 18 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe<sub>4</sub>S<sub>4</sub>).



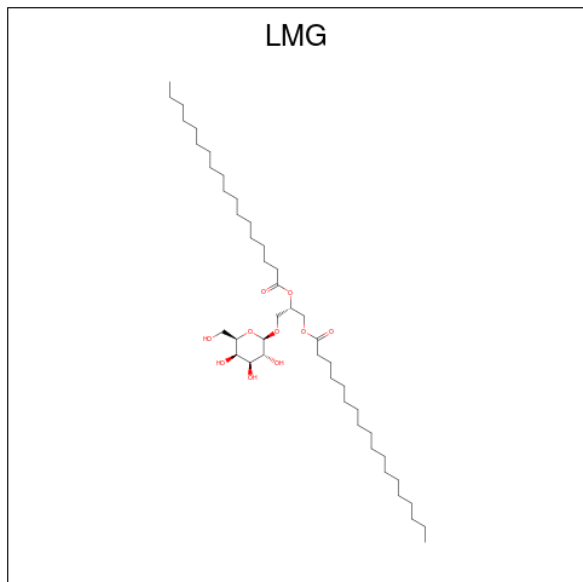
Mol	Chain	Residues	Atoms		AltConf
18	B	1	Total	Fe S	0
			8	4 4	
18	C	1	Total	Fe S	0
			16	8 8	
18	C	1	Total	Fe S	0
			16	8 8	

- Molecule 19 is CALCIUM ION (three-letter code: CA) (formula: Ca).

Mol	Chain	Residues	Atoms	AltConf
19	B	1	Total Ca	0
			1 1	
19	L	1	Total Ca	0
			1 1	



- Molecule 20 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula:  $C_{45}H_{86}O_{10}$ ).



Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
20	B	1	55	45	10	0

- Molecule 21 is water.

Mol	Chain	Residues	Atoms		AltConf
21	A	65	Total	O	0
			65	65	
21	B	77	Total	O	0
			77	77	
21	C	25	Total	O	0
			25	25	
21	D	23	Total	O	0
			23	23	
21	E	9	Total	O	0
			9	9	
21	F	4	Total	O	0
			4	4	
21	I	1	Total	O	0
			1	1	
21	J	1	Total	O	0
			1	1	
21	K	1	Total	O	0
			1	1	

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<b>Mol</b>	<b>Chain</b>	<b>Residues</b>	<b>Atoms</b>		<b>AltConf</b>
21	L	10	Total 10	O 10	0
21	M	1	Total 1	O 1	0

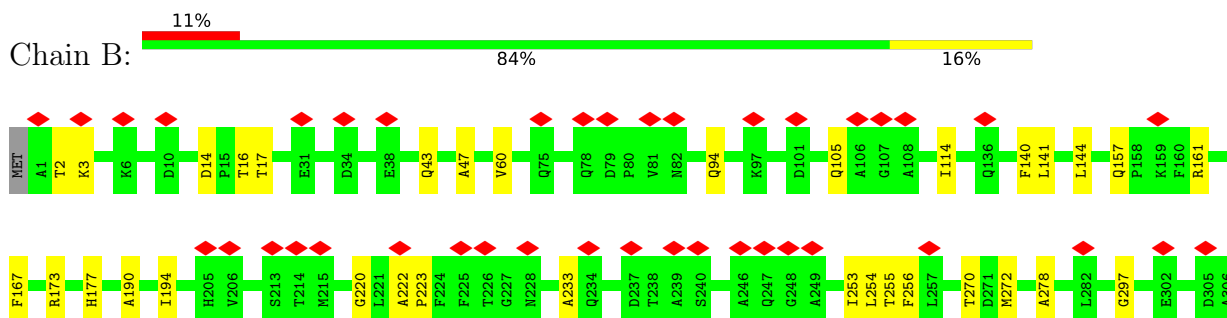
### 3 Residue-property plots

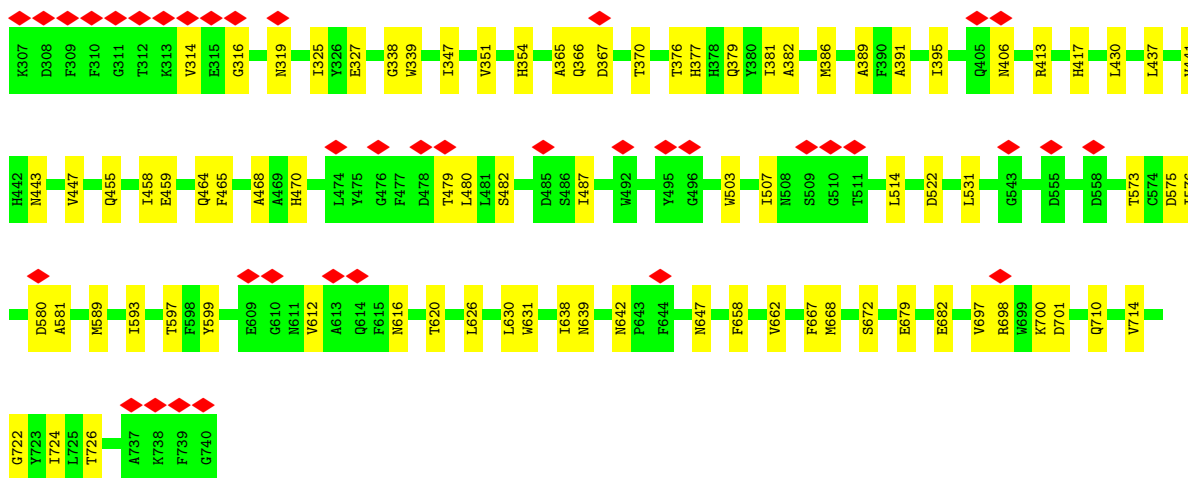
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion 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

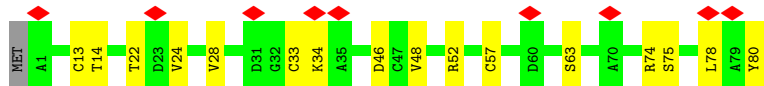
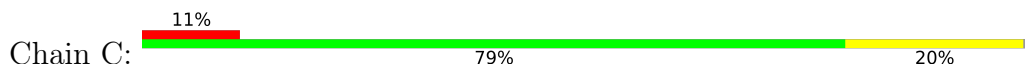


- Molecule 2: Photosystem I P700 chlorophyll a apoprotein A2

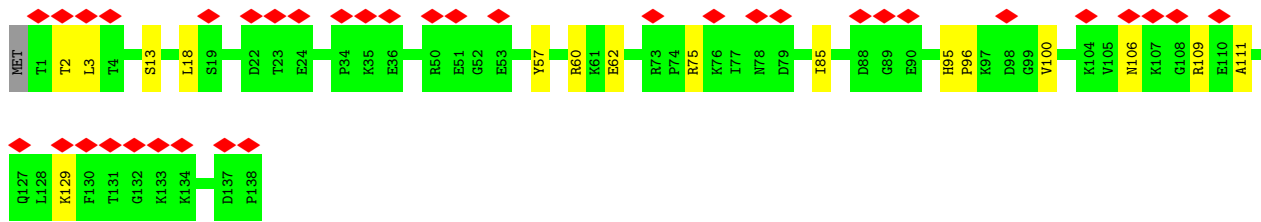
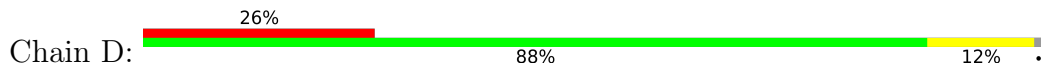




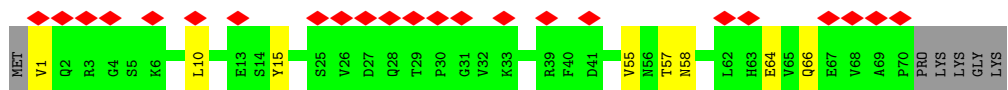
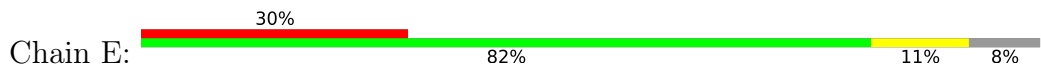
• Molecule 3: Photosystem I iron-sulfur center



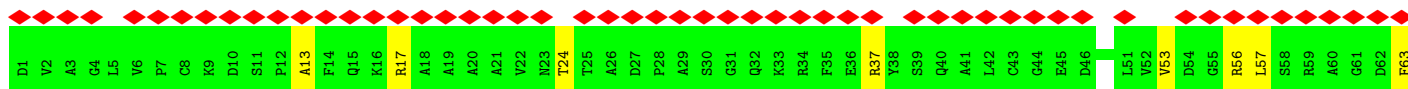
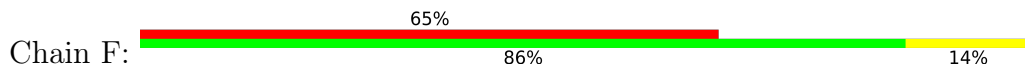
• Molecule 4: Photosystem I reaction center subunit II

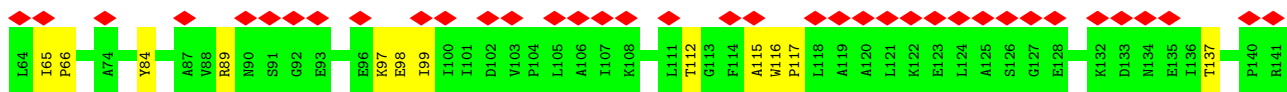


• Molecule 5: Photosystem I reaction center subunit IV



• Molecule 6: Photosystem I reaction center subunit III

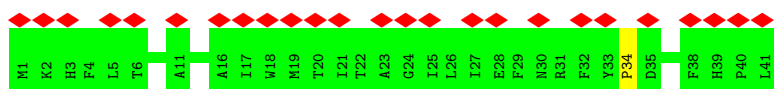




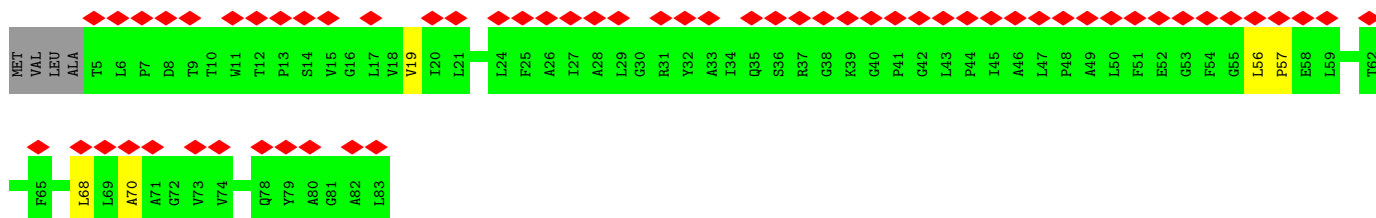
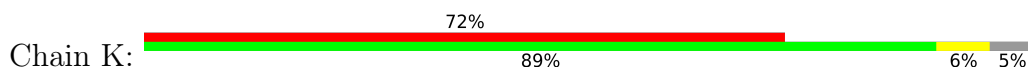
- Molecule 7: Photosystem I reaction center subunit VIII



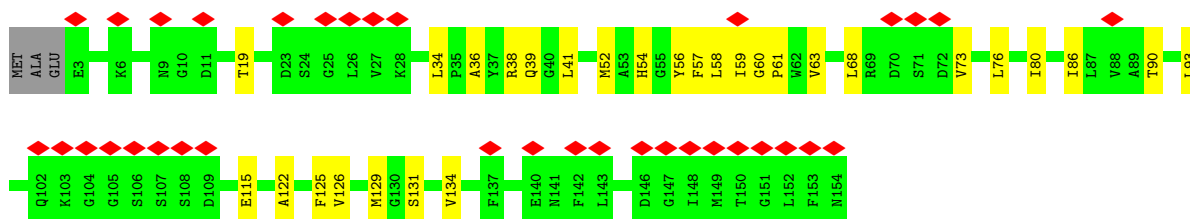
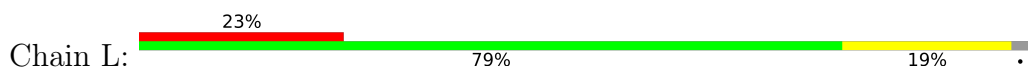
- Molecule 8: Photosystem I reaction center subunit IX



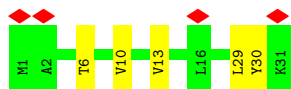
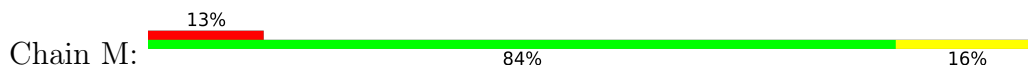
- Molecule 9: Photosystem I reaction center subunit PsaK



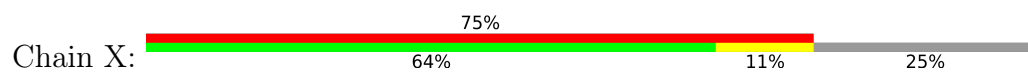
- Molecule 10: Photosystem I reaction center subunit XI



- Molecule 11: Photosystem I reaction center subunit XII



- Molecule 12: Photosystem I 4.8K protein



MET	ALA	THR	LYS	SER	ALA	LYS	PRO	THR	Y9	A10	F11	R12	T13	F14	M15	A16	V17	L18	L19	L20	A21	I22	N23	F24	L25	V26	A27	A28	Y29	Y30	F31	G32	I33	L34	K35
-----	-----	-----	-----	-----	-----	-----	-----	-----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	175999	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION; CTFFIND4 was used to estimate contrast transfer function parameters. CTF correction was done in Relion 3.0.	Depositor
Microscope	FEI POLARA 300	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	32	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.071	Depositor
Minimum map value	-0.049	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.001	Depositor
Recommended contour level	0.017	Depositor
Map size ( $\text{\AA}$ )	351.68002, 351.68002, 351.68002	wwPDB
Map dimensions	560, 560, 560	wwPDB
Map angles ( $^\circ$ )	90.0, 90.0, 90.0	wwPDB
Pixel spacing ( $\text{\AA}$ )	0.628, 0.628, 0.628	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: PQN, LMG, CL0, BCR, CLA, FME, SF4, CA, LHG

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with  $|Z| > 5$  is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
1	A	0.30	0/6027	0.43	0/8220
2	B	0.31	0/6112	0.43	0/8350
3	C	0.32	0/608	0.45	0/824
4	D	0.30	0/1101	0.47	0/1492
5	E	0.31	0/559	0.42	0/762
6	F	0.27	0/1087	0.44	0/1476
7	I	0.31	0/304	0.45	0/415
8	J	0.27	0/342	0.40	0/467
9	K	0.27	0/585	0.45	0/800
10	L	0.30	0/1153	0.42	0/1565
11	M	0.31	0/244	0.43	0/332
12	X	0.27	0/236	0.38	0/321
All	All	0.30	0/18358	0.44	0/25024

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

### 5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	5826	0	5692	106	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	B	5894	0	5653	99	0
3	C	598	0	580	13	0
4	D	1075	0	1077	18	0
5	E	546	0	535	7	0
6	F	1065	0	1077	15	0
7	I	303	0	305	9	0
8	J	340	0	346	1	0
9	K	571	0	593	3	0
10	L	1124	0	1127	22	0
11	M	241	0	264	5	0
12	X	228	0	234	4	0
13	A	65	0	72	1	0
14	A	2674	0	2849	82	0
14	B	2446	0	2562	64	0
14	F	153	0	127	4	0
14	J	82	0	58	2	0
14	K	104	0	88	4	0
14	L	260	0	288	7	0
14	M	36	0	24	0	0
14	X	45	0	33	1	0
15	A	33	0	46	2	0
15	B	33	0	46	0	0
16	A	265	0	369	18	0
16	B	320	0	448	13	0
16	F	80	0	112	1	0
16	I	80	0	112	3	0
16	J	80	0	112	6	0
16	K	25	0	33	4	0
16	L	80	0	112	1	0
17	A	90	0	129	4	0
17	B	49	0	74	1	0
17	I	39	0	51	2	0
17	M	49	0	74	1	0
18	B	8	0	0	0	0
18	C	16	0	0	0	0
19	B	1	0	0	0	0
19	L	1	0	0	0	0
20	B	55	0	86	3	0
21	A	65	0	0	21	0
21	B	77	0	0	10	0
21	C	25	0	0	5	0
21	D	23	0	0	7	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
21	E	9	0	0	5	0
21	F	4	0	0	1	0
21	I	1	0	0	1	0
21	J	1	0	0	0	0
21	K	1	0	0	0	0
21	L	10	0	0	6	0
21	M	1	0	0	0	0
All	All	25197	0	25388	419	0

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

All (419) 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)
1:A:18:ASN:OD1	1:A:183:ARG:NH1	2.08	0.87
4:D:95:HIS:O	21:D:201:HOH:O	1.96	0.84
7:I:33:TYR:OH	11:M:30:TYR:OH	1.92	0.84
4:D:60:ARG:NH2	4:D:62:GLU:OE1	2.11	0.82
7:I:33:TYR:HH	11:M:30:TYR:HH	1.18	0.82
1:A:569:LYS:NZ	2:B:679:GLU:OE2	2.13	0.82
1:A:579:ASP:O	21:A:901:HOH:O	1.98	0.81
2:B:255:THR:HG1	2:B:270:THR:HG1	1.10	0.81
1:A:460:VAL:HG12	14:A:835:CLA:HBC2	1.61	0.81
2:B:698:ARG:NH1	21:B:906:HOH:O	2.13	0.81
2:B:43:GLN:OE1	2:B:161:ARG:NH2	2.16	0.79
6:F:98:GLU:OE2	21:F:301:HOH:O	2.01	0.79
2:B:167:PHE:O	2:B:173:ARG:NH2	2.16	0.78
1:A:263:GLY:O	1:A:275:TYR:OH	2.02	0.78
2:B:580:ASP:OD1	2:B:581:ALA:N	2.17	0.77
1:A:657:GLN:OE1	21:A:902:HOH:O	2.03	0.76
10:L:63:VAL:O	21:L:301:HOH:O	2.03	0.76
1:A:94:GLY:O	1:A:98:SER:OG	2.02	0.76
1:A:344:LEU:HD23	14:A:825:CLA:HMD3	1.67	0.76
4:D:75:ARG:NH1	21:D:205:HOH:O	2.18	0.76
14:A:803:CLA:OBD	14:B:804:CLA:HMB3	1.86	0.75
14:B:827:CLA:HBB1	14:B:827:CLA:HMB1	1.68	0.75
3:C:13:CYS:O	3:C:14:THR:OG1	2.02	0.75
3:C:46:ASP:OD1	21:C:201:HOH:O	2.03	0.75
1:A:472:GLN:OE1	21:A:904:HOH:O	2.05	0.74
1:A:564:ARG:O	4:D:60:ARG:NH1	2.20	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:M:6:THR:O	11:M:10:VAL:HG23	1.88	0.74
5:E:58:ASN:OD1	21:E:101:HOH:O	2.06	0.74
14:B:815:CLA:HBC3	14:B:815:CLA:HHD	1.70	0.73
4:D:129:LYS:NZ	21:D:206:HOH:O	2.20	0.73
1:A:647:ASN:OD1	21:A:903:HOH:O	2.04	0.73
2:B:616:ASN:OD1	21:B:901:HOH:O	2.06	0.73
6:F:84:TYR:OH	6:F:97:LYS:O	2.07	0.73
13:A:801:CL0:H13	14:A:854:CLA:OBD	1.87	0.73
2:B:443:ASN:O	2:B:447:VAL:HG12	1.89	0.73
1:A:314:MET:SD	21:A:945:HOH:O	2.46	0.72
2:B:367:ASP:OD2	2:B:370:THR:OG1	2.06	0.72
14:A:833:CLA:HMB1	14:A:833:CLA:HBB1	1.71	0.72
4:D:57:TYR:OH	21:D:202:HOH:O	2.07	0.72
14:A:805:CLA:OBD	21:A:907:HOH:O	2.07	0.72
10:L:36:ALA:O	21:L:302:HOH:O	2.07	0.72
14:A:809:CLA:H91	14:A:812:CLA:H191	1.71	0.72
2:B:701:ASP:OD1	21:B:902:HOH:O	2.07	0.72
1:A:120:ILE:O	21:A:908:HOH:O	2.08	0.72
17:A:852:LHG:O5	21:A:905:HOH:O	2.06	0.72
2:B:573:THR:HG22	2:B:576:ILE:HG21	1.72	0.71
14:L:205:CLA:HBC2	14:L:205:CLA:HHD	1.72	0.71
2:B:278:ALA:HA	14:B:817:CLA:HMC3	1.71	0.71
14:A:833:CLA:O1A	21:A:906:HOH:O	2.07	0.71
3:C:57:CYS:O	21:C:202:HOH:O	2.08	0.70
7:I:1:FME:O	21:I:201:HOH:O	2.08	0.70
1:A:219:VAL:HG13	1:A:239:PRO:HB3	1.74	0.70
5:E:1:VAL:N	21:E:105:HOH:O	2.25	0.70
1:A:501:THR:OG1	14:A:836:CLA:OBD	2.07	0.70
2:B:406:ASN:ND2	21:B:909:HOH:O	2.25	0.70
14:A:802:CLA:HBB1	14:A:802:CLA:HMB1	1.75	0.69
2:B:365:ALA:O	21:B:904:HOH:O	2.10	0.69
10:L:41:LEU:O	21:L:303:HOH:O	2.09	0.69
1:A:68:ILE:O	1:A:72:ILE:HD12	1.93	0.69
14:A:827:CLA:HBB1	14:A:827:CLA:HMB1	1.74	0.69
2:B:658:PHE:O	2:B:662:VAL:HG23	1.93	0.69
3:C:80:TYR:O	21:C:203:HOH:O	2.09	0.69
1:A:366:LEU:O	1:A:370:VAL:HG23	1.92	0.68
16:B:853:BCR:H23C	16:B:853:BCR:H392	1.75	0.68
14:A:819:CLA:HBC2	14:A:836:CLA:H42	1.76	0.68
7:I:20:TRP:O	7:I:24:THR:OG1	2.09	0.68
1:A:657:GLN:O	21:A:911:HOH:O	2.12	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:718:GLN:OE1	21:A:909:HOH:O	2.10	0.68
10:L:39:GLN:NE2	21:L:305:HOH:O	2.26	0.68
2:B:682:GLU:OE2	21:B:905:HOH:O	2.11	0.68
14:B:834:CLA:HMB1	14:B:834:CLA:HBB1	1.76	0.68
1:A:335:PRO:O	21:A:910:HOH:O	2.10	0.67
2:B:514:LEU:O	21:B:903:HOH:O	2.10	0.67
1:A:121:VAL:HG23	1:A:122:GLY:H	1.58	0.67
1:A:373:HIS:ND1	14:A:819:CLA:OBD	2.28	0.67
16:A:850:BCR:H362	14:A:854:CLA:C4	2.25	0.66
14:A:836:CLA:O1D	21:A:912:HOH:O	2.12	0.66
14:A:821:CLA:HBC2	14:A:821:CLA:HHD	1.78	0.66
4:D:18:LEU:O	21:D:203:HOH:O	2.14	0.66
14:A:854:CLA:HBB1	14:A:854:CLA:HMB1	1.78	0.65
2:B:468:ALA:O	2:B:482:SER:OG	2.15	0.65
14:B:805:CLA:HBC3	14:B:805:CLA:HHD	1.78	0.65
16:I:103:BCR:H23C	16:I:103:BCR:H403	1.78	0.65
1:A:386:ASP:OD2	1:A:389:THR:OG1	2.13	0.65
2:B:354:HIS:ND1	14:B:818:CLA:OBD	2.29	0.65
4:D:13:SER:OG	21:D:204:HOH:O	2.15	0.65
6:F:53:VAL:HG12	6:F:63:PHE:HB2	1.78	0.65
2:B:700:LYS:O	21:B:907:HOH:O	2.14	0.64
14:A:838:CLA:HBC2	14:A:838:CLA:HHD	1.80	0.64
2:B:14:ASP:OD2	2:B:16:THR:OG1	2.16	0.64
1:A:17:ASP:OD2	1:A:186:LYS:NZ	2.31	0.64
1:A:50:ASN:ND2	21:A:920:HOH:O	2.27	0.63
14:A:843:CLA:HBB1	14:A:843:CLA:HMB1	1.80	0.63
1:A:219:VAL:O	1:A:223:ILE:HD12	1.98	0.63
14:A:820:CLA:HMB1	14:A:820:CLA:HBB1	1.80	0.63
2:B:222:ALA:HB3	2:B:223:PRO:HD3	1.81	0.62
16:J:103:BCR:HC8	16:J:103:BCR:H311	1.82	0.62
1:A:687:LEU:HB2	14:A:802:CLA:HMC3	1.80	0.62
1:A:429:VAL:HG23	14:A:825:CLA:HBC2	1.80	0.62
14:A:838:CLA:HBB1	14:A:838:CLA:HMB1	1.82	0.61
14:B:814:CLA:HBC2	14:B:814:CLA:HHD	1.80	0.61
14:A:830:CLA:HMB1	14:A:830:CLA:HBB1	1.82	0.61
1:A:720:ARG:NH1	21:A:921:HOH:O	2.33	0.61
1:A:713:VAL:HG12	1:A:713:VAL:O	2.01	0.61
14:B:835:CLA:HMB1	14:B:835:CLA:HBB1	1.82	0.61
1:A:702:GLU:OE2	21:A:913:HOH:O	2.17	0.61
2:B:377:HIS:CE1	2:B:381:ILE:HD11	2.35	0.61
1:A:583:ARG:NH2	4:D:62:GLU:OE2	2.34	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:B:823:CLA:HMB1	14:B:823:CLA:HBB1	1.82	0.60
2:B:327:GLU:OE1	2:B:327:GLU:N	2.33	0.60
14:B:839:CLA:HBB1	14:B:839:CLA:HMB1	1.83	0.60
1:A:501:THR:HG21	14:A:836:CLA:HMD1	1.83	0.60
6:F:37:ARG:NH2	8:J:34:PRO:O	2.35	0.60
2:B:413:ARG:NH2	14:B:831:CLA:OBD	2.33	0.59
14:A:825:CLA:H141	17:A:853:LHG:H342	1.84	0.59
10:L:90:THR:HA	10:L:93:LEU:HD12	1.84	0.59
2:B:105:GLN:NE2	21:B:912:HOH:O	2.31	0.59
6:F:53:VAL:O	6:F:53:VAL:HG23	2.01	0.59
2:B:480:LEU:HD23	14:B:836:CLA:HBC2	1.83	0.59
14:A:833:CLA:OBD	10:L:19:THR:HG21	2.03	0.58
2:B:255:THR:OG1	2:B:270:THR:OG1	1.93	0.58
2:B:710:GLN:O	2:B:714:VAL:HG23	2.03	0.58
14:A:804:CLA:HMD1	6:F:99:ILE:HD11	1.85	0.58
14:B:832:CLA:HMB1	14:B:832:CLA:HBB1	1.85	0.57
2:B:668:MET:O	2:B:672:SER:OG	2.20	0.57
1:A:219:VAL:HG13	1:A:239:PRO:CB	2.34	0.57
2:B:314:VAL:HG13	2:B:316:GLY:H	1.69	0.57
14:B:816:CLA:HBB1	14:B:816:CLA:HMB1	1.87	0.56
14:A:829:CLA:HBB1	14:A:829:CLA:HMB1	1.87	0.56
14:B:828:CLA:H202	20:B:850:LMG:H273	1.85	0.56
14:B:818:CLA:HBB1	14:B:818:CLA:HMB1	1.87	0.56
1:A:427:ASN:OD1	1:A:432:ARG:NH1	2.39	0.56
2:B:325:ILE:CG2	14:B:824:CLA:HMD3	2.36	0.56
14:B:814:CLA:HMB1	14:B:814:CLA:HBB1	1.88	0.56
1:A:466:ARG:NE	21:A:923:HOH:O	2.37	0.55
14:B:807:CLA:HMB1	14:B:807:CLA:HBB1	1.89	0.55
14:A:802:CLA:HBA2	2:B:430:LEU:HD23	1.88	0.55
9:K:68:LEU:CD2	16:K:103:BCR:H311	2.37	0.55
1:A:118:TRP:HE1	16:A:851:BCR:H332	1.72	0.55
2:B:177:HIS:ND1	14:B:825:CLA:O1D	2.37	0.55
2:B:647:ASN:ND2	21:B:917:HOH:O	2.40	0.54
14:A:822:CLA:HMB1	14:A:822:CLA:HBB1	1.88	0.54
7:I:26:VAL:HG13	17:I:102:LHG:H152	1.88	0.54
2:B:465:PHE:CE1	2:B:479:THR:HG21	2.43	0.54
4:D:95:HIS:HB3	4:D:96:PRO:HD3	1.89	0.54
16:A:848:BCR:C8	16:A:848:BCR:H331	2.37	0.53
14:L:201:CLA:H2A	14:L:201:CLA:O2A	2.08	0.53
14:B:833:CLA:HBC2	14:B:833:CLA:HHD	1.89	0.53
1:A:726:GLN:O	1:A:730:VAL:HG23	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:L:68:LEU:HD23	10:L:73:VAL:HG23	1.89	0.53
14:A:829:CLA:O1D	14:A:830:CLA:HMA1	2.09	0.53
1:A:270:PHE:CE2	14:K:101:CLA:HMD2	2.43	0.53
1:A:346:GLU:OE1	1:A:346:GLU:N	2.39	0.53
14:A:807:CLA:HBB1	14:A:807:CLA:HMB1	1.89	0.53
2:B:697:VAL:HG11	14:B:801:CLA:HAB	1.91	0.53
1:A:565:LEU:HB3	1:A:566:ILE:HD12	1.91	0.52
16:B:853:BCR:H321	16:B:853:BCR:HC8	1.91	0.52
1:A:714:ALA:O	6:F:89:ARG:NH1	2.40	0.52
14:A:842:CLA:H41	15:A:844:PQN:H18	1.89	0.52
1:A:325:LEU:HD12	14:A:822:CLA:HED3	1.91	0.52
2:B:325:ILE:HG21	14:B:824:CLA:HMD3	1.92	0.52
2:B:480:LEU:CD2	14:B:836:CLA:HBC2	2.40	0.52
10:L:54:HIS:HA	10:L:57:PHE:CE1	2.43	0.52
16:A:845:BCR:H332	16:A:846:BCR:H21C	1.90	0.52
2:B:724:ILE:HD13	14:B:828:CLA:HMC2	1.92	0.52
16:A:850:BCR:H393	16:J:103:BCR:H322	1.92	0.52
14:B:808:CLA:HBB1	14:B:808:CLA:HMB1	1.91	0.52
10:L:59:ILE:HG13	10:L:59:ILE:O	2.08	0.52
3:C:28:VAL:HG12	4:D:109:ARG:HB3	1.92	0.52
6:F:115:ALA:HB2	14:F:204:CLA:HMB2	1.90	0.52
3:C:52:ARG:NH2	21:C:207:HOH:O	2.42	0.51
14:B:821:CLA:H143	14:B:821:CLA:HMC2	1.91	0.51
4:D:3:LEU:HD11	4:D:85:ILE:HD11	1.91	0.51
17:A:852:LHG:O1	21:A:914:HOH:O	2.19	0.51
1:A:309:ILE:O	1:A:313:HIS:ND1	2.41	0.51
2:B:573:THR:HG22	2:B:576:ILE:CG2	2.39	0.51
1:A:647:ASN:ND2	2:B:638:ILE:O	2.44	0.51
14:A:805:CLA:HMB1	14:A:805:CLA:HBB1	1.92	0.51
2:B:573:THR:CG2	2:B:576:ILE:HG21	2.40	0.51
14:B:826:CLA:HBB1	14:B:826:CLA:HMB1	1.93	0.51
14:B:826:CLA:H191	12:X:25:LEU:HD23	1.93	0.51
10:L:125:PHE:O	10:L:129:MET:HG2	2.11	0.51
14:L:204:CLA:CBC	14:L:204:CLA:HHD	2.41	0.51
14:B:805:CLA:HMB1	14:B:805:CLA:HBB1	1.92	0.51
9:K:19:VAL:HG22	9:K:70:ALA:HB1	1.92	0.51
14:A:819:CLA:H42	14:A:828:CLA:HBB2	1.93	0.51
4:D:3:LEU:CD1	4:D:85:ILE:HD11	2.40	0.51
5:E:64:GLU:OE2	21:E:103:HOH:O	2.19	0.51
14:A:816:CLA:H101	16:A:846:BCR:H402	1.93	0.50
1:A:120:ILE:HG12	16:J:104:BCR:H322	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:737:LEU:HD11	16:A:850:BCR:HC8	1.93	0.50
2:B:114:ILE:O	14:B:810:CLA:HMD3	2.11	0.50
14:J:101:CLA:HMD3	16:J:104:BCR:H333	1.93	0.50
14:J:102:CLA:HBB1	14:J:102:CLA:HMB1	1.93	0.50
1:A:177:TRP:HB2	14:A:812:CLA:HMC3	1.93	0.50
5:E:57:THR:O	21:E:102:HOH:O	2.18	0.50
14:A:816:CLA:HBB1	14:A:816:CLA:HMB1	1.92	0.50
6:F:65:ILE:HB	6:F:66:PRO:HD3	1.93	0.50
1:A:344:LEU:HD21	14:A:825:CLA:HBC3	1.93	0.50
2:B:256:PHE:CD1	14:B:818:CLA:HMB2	2.46	0.50
2:B:297:GLY:O	14:B:822:CLA:HED3	2.11	0.50
10:L:60:GLY:H	10:L:61:PRO:CD	2.25	0.50
14:L:204:CLA:HMD2	14:L:204:CLA:H143	1.93	0.50
14:B:827:CLA:H122	16:B:847:BCR:H373	1.93	0.49
1:A:113:SER:OG	1:A:130:VAL:HG11	2.12	0.49
7:I:28:GLY:O	7:I:32:LEU:HD23	2.12	0.49
1:A:470:ARG:NH2	14:A:835:CLA:OBD	2.44	0.49
1:A:432:ARG:O	1:A:436:HIS:ND1	2.42	0.49
2:B:17:THR:OG1	14:B:841:CLA:HMB3	2.11	0.49
2:B:194:ILE:HD12	2:B:253:ILE:HB	1.93	0.49
1:A:718:GLN:NE2	5:E:15:TYR:OH	2.46	0.49
14:B:806:CLA:HMB1	14:B:806:CLA:HBB1	1.92	0.49
1:A:120:ILE:CG1	16:J:104:BCR:H322	2.42	0.49
1:A:460:VAL:CG1	14:A:835:CLA:HBC2	2.40	0.49
2:B:726:THR:HG23	14:B:804:CLA:O1D	2.13	0.49
1:A:504:ASN:HB2	14:A:837:CLA:HED2	1.95	0.49
1:A:432:ARG:NE	14:A:832:CLA:OBD	2.45	0.48
10:L:76:LEU:O	10:L:80:ILE:HG12	2.14	0.48
14:A:825:CLA:H91	14:A:825:CLA:H193	1.95	0.48
16:B:847:BCR:C8	16:B:847:BCR:H331	2.43	0.48
1:A:121:VAL:HG23	1:A:122:GLY:N	2.27	0.48
14:A:835:CLA:HBB1	14:A:835:CLA:HMB1	1.95	0.48
2:B:487:ILE:O	14:B:836:CLA:HMD3	2.13	0.48
2:B:522:ASP:OD1	2:B:599:TYR:OH	2.25	0.48
2:B:593:ILE:O	2:B:597:THR:HG23	2.14	0.48
2:B:722:GLY:O	2:B:726:THR:HG22	2.12	0.48
1:A:285:LEU:HD21	1:A:378:PRO:HD2	1.96	0.48
1:A:501:THR:O	14:A:837:CLA:ND	2.47	0.48
6:F:116:TRP:N	6:F:117:PRO:CD	2.77	0.48
10:L:115:GLU:OE1	10:L:115:GLU:N	2.44	0.48
1:A:482:LEU:HB2	1:A:533:THR:HG23	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:575:ARG:O	21:A:905:HOH:O	2.20	0.48
2:B:140:PHE:CZ	2:B:144:LEU:HD11	2.49	0.48
10:L:39:GLN:NE2	21:L:307:HOH:O	2.47	0.47
1:A:630:THR:HG23	1:A:630:THR:O	2.14	0.47
14:A:825:CLA:H202	17:A:853:LHG:H242	1.96	0.47
2:B:626:LEU:HD12	2:B:630:LEU:HD12	1.96	0.47
1:A:470:ARG:NH1	2:B:94:GLN:O	2.41	0.47
17:M:101:LHG:O3	17:M:101:LHG:O1	2.16	0.47
1:A:270:PHE:CD2	14:K:101:CLA:HMD2	2.49	0.47
14:F:203:CLA:HBB1	14:F:203:CLA:HMB1	1.95	0.47
10:L:131:SER:HA	10:L:134:VAL:HG12	1.95	0.47
14:A:825:CLA:HED3	14:A:825:CLA:H2A	1.96	0.47
2:B:612:VAL:O	2:B:616:ASN:ND2	2.47	0.47
5:E:10:LEU:HD11	5:E:66:GLN:HB2	1.95	0.47
1:A:605:CYS:O	1:A:609:VAL:HG23	2.15	0.47
1:A:651:ARG:HG3	2:B:638:ILE:HD12	1.97	0.47
1:A:679:ALA:HB1	1:A:738:GLY:O	2.14	0.47
15:A:844:PQN:H241	15:A:844:PQN:C27	2.45	0.47
4:D:100:VAL:HG21	4:D:106:ASN:ND2	2.29	0.47
16:I:101:BCR:H382	16:I:101:BCR:H23C	1.97	0.47
9:K:56:LEU:N	9:K:57:PRO:CD	2.78	0.47
14:A:829:CLA:H93	16:J:103:BCR:H361	1.95	0.47
7:I:21:LEU:O	7:I:25:VAL:HG23	2.15	0.47
1:A:199:HIS:O	1:A:203:GLY:N	2.47	0.47
2:B:60:VAL:HG13	2:B:141:LEU:HD13	1.96	0.47
14:A:814:CLA:HMB1	14:A:814:CLA:HBB1	1.97	0.46
2:B:220:GLY:HA2	14:B:816:CLA:HMD1	1.98	0.46
16:B:852:BCR:H331	16:B:852:BCR:C8	2.44	0.46
16:A:846:BCR:H362	16:A:847:BCR:H10C	1.96	0.46
14:A:807:CLA:H193	14:A:807:CLA:H151	1.97	0.46
10:L:34:LEU:O	10:L:38:ARG:N	2.45	0.46
5:E:55:VAL:HG11	21:E:102:HOH:O	2.15	0.46
2:B:391:ALA:O	2:B:395:ILE:HG13	2.16	0.46
2:B:667:PHE:HB2	14:B:805:CLA:HMC3	1.97	0.46
1:A:614:SER:OG	1:A:618:GLN:OE1	2.33	0.46
3:C:28:VAL:HG21	4:D:111:ALA:HB2	1.98	0.46
14:B:829:CLA:HHC	14:B:829:CLA:HBB1	1.98	0.46
3:C:57:CYS:SG	3:C:63:SER:OG	2.73	0.46
1:A:120:ILE:CD1	14:A:810:CLA:HMA3	2.46	0.46
2:B:233:ALA:HB2	2:B:254:LEU:O	2.16	0.46
14:B:826:CLA:H111	14:B:835:CLA:H193	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:K:101:CLA:CMC	16:K:103:BCR:H332	2.46	0.46
10:L:52:MET:HA	10:L:131:SER:OG	2.16	0.46
16:A:851:BCR:C8	16:A:851:BCR:H331	2.46	0.45
6:F:112:THR:O	6:F:112:THR:HG22	2.17	0.45
1:A:702:GLU:O	21:A:915:HOH:O	2.21	0.45
14:B:810:CLA:C1A	14:B:810:CLA:CGA	2.94	0.45
14:B:815:CLA:HMB1	14:B:815:CLA:HBB1	1.98	0.45
11:M:10:VAL:HA	11:M:13:VAL:HG22	1.98	0.45
2:B:458:ILE:HD11	16:B:852:BCR:C34	2.47	0.45
14:B:809:CLA:HMC2	14:B:809:CLA:H92	1.98	0.45
1:A:406:VAL:HG12	1:A:595:VAL:HG13	1.98	0.45
14:A:822:CLA:HMB2	14:A:826:CLA:HMA3	1.98	0.45
14:A:828:CLA:HBB1	14:A:828:CLA:HMB1	1.99	0.45
1:A:86:TRP:NE1	14:A:829:CLA:OBD	2.49	0.45
2:B:381:ILE:HG23	14:B:808:CLA:H143	1.99	0.45
4:D:109:ARG:NH2	21:D:209:HOH:O	2.50	0.45
1:A:659:SER:HG	2:B:631:TRP:HZ2	1.65	0.45
1:A:141:SER:OG	14:A:829:CLA:HED2	2.17	0.44
1:A:256:VAL:HG12	1:A:257:ASP:N	2.32	0.44
14:A:802:CLA:O1A	2:B:531:LEU:HD11	2.17	0.44
14:A:821:CLA:H192	16:A:847:BCR:C31	2.47	0.44
16:L:202:BCR:H20C	16:L:202:BCR:H361	1.87	0.44
14:A:854:CLA:O1D	14:A:854:CLA:H2A	2.17	0.44
1:A:405:VAL:HG13	16:A:849:BCR:H343	2.00	0.44
2:B:339:TRP:HE1	14:B:825:CLA:C2B	2.30	0.44
1:A:46:THR:HG22	21:A:922:HOH:O	2.17	0.44
1:A:364:GLY:HA2	1:A:401:GLY:HA2	2.00	0.44
14:A:820:CLA:O2A	14:A:830:CLA:HMD1	2.18	0.44
10:L:54:HIS:O	10:L:58:LEU:HB2	2.18	0.44
1:A:396:HIS:CE1	14:A:829:CLA:ND	2.85	0.44
2:B:465:PHE:HE1	2:B:479:THR:HG21	1.83	0.44
14:B:825:CLA:HMB1	14:B:825:CLA:HBB1	2.00	0.44
16:B:844:BCR:H392	16:B:844:BCR:H371	1.99	0.44
3:C:78:LEU:HD22	3:C:80:TYR:CZ	2.52	0.44
10:L:122:ALA:O	10:L:126:VAL:HG23	2.17	0.44
1:A:106:ASP:HB3	1:A:110:ILE:HD12	2.00	0.44
1:A:413:ALA:O	1:A:417:VAL:HG23	2.18	0.44
14:A:820:CLA:H92	14:A:830:CLA:H91	1.98	0.44
2:B:503:TRP:O	2:B:507:ILE:HG22	2.16	0.44
16:K:103:BCR:H15C	16:K:103:BCR:H351	1.84	0.43
1:A:59:ASP:OD1	1:A:60:THR:N	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:121:VAL:O	6:F:24:THR:HG22	2.18	0.43
14:B:814:CLA:H203	14:B:829:CLA:CAD	2.48	0.43
1:A:701:ILE:O	1:A:705:VAL:HG23	2.18	0.43
14:A:809:CLA:HMC3	14:A:810:CLA:HMD2	2.01	0.43
14:A:841:CLA:HMC3	14:F:201:CLA:ND	2.33	0.43
16:A:849:BCR:H20C	16:A:849:BCR:H361	1.91	0.43
2:B:377:HIS:ND1	14:B:828:CLA:NB	2.67	0.43
2:B:256:PHE:HD1	14:B:818:CLA:HMB2	1.84	0.43
14:B:825:CLA:CGA	14:B:825:CLA:HMA2	2.49	0.43
1:A:159:TYR:CE2	1:A:163:ILE:HD11	2.54	0.42
14:A:841:CLA:HMC3	14:F:201:CLA:C4D	2.48	0.42
2:B:190:ALA:O	2:B:194:ILE:HG12	2.18	0.42
3:C:75:SER:O	21:C:204:HOH:O	2.22	0.42
1:A:117:VAL:HG11	1:A:123:GLN:HB3	2.00	0.42
1:A:429:VAL:O	1:A:433:VAL:HG13	2.18	0.42
2:B:140:PHE:O	2:B:144:LEU:HD13	2.19	0.42
2:B:338:GLY:HA2	2:B:389:ALA:HA	2.01	0.42
2:B:455:GLN:NE2	2:B:620:THR:OG1	2.52	0.42
14:A:820:CLA:CGA	14:A:830:CLA:HMD1	2.49	0.42
14:B:826:CLA:HMA1	16:B:848:BCR:H14C	2.00	0.42
14:B:828:CLA:C20	20:B:850:LMG:H273	2.50	0.42
16:B:849:BCR:H24C	16:B:849:BCR:H371	1.86	0.42
3:C:22:THR:OG1	3:C:24:VAL:HG23	2.18	0.42
2:B:589:MET:O	2:B:593:ILE:HG12	2.19	0.42
14:B:830:CLA:H142	14:B:842:CLA:HAA2	2.00	0.42
16:B:846:BCR:H371	16:B:846:BCR:H24C	1.79	0.42
1:A:410:ALA:O	1:A:414:ILE:HG13	2.19	0.42
2:B:377:HIS:CE1	14:B:828:CLA:ND	2.87	0.42
14:B:828:CLA:HHC	14:B:828:CLA:HBB1	2.02	0.42
16:B:848:BCR:C8	16:B:848:BCR:H331	2.50	0.42
1:A:193:VAL:HB	14:A:826:CLA:HMD3	2.01	0.42
1:A:252:LEU:HD23	1:A:252:LEU:H	1.83	0.42
2:B:459:GLU:OE1	2:B:464:GLN:NE2	2.42	0.42
2:B:573:THR:HG23	2:B:576:ILE:HD13	2.02	0.42
14:B:801:CLA:H192	14:B:801:CLA:H162	1.94	0.42
14:B:838:CLA:H143	12:X:19:LEU:HB3	2.01	0.42
1:A:348:LEU:HD22	1:A:355:GLN:OE1	2.20	0.42
2:B:2:THR:HG22	2:B:3:LYS:H	1.84	0.42
1:A:191:GLN:OE1	1:A:349:THR:O	2.38	0.42
14:A:811:CLA:HHC	14:A:811:CLA:HBB1	2.02	0.42
10:L:86:ILE:HG21	10:L:129:MET:SD	2.60	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:275:TYR:O	1:A:279:LEU:HB2	2.20	0.42
14:A:816:CLA:C4	14:A:816:CLA:O2A	2.68	0.42
2:B:575:ASP:O	2:B:580:ASP:OD2	2.38	0.42
4:D:2:THR:O	4:D:2:THR:HG22	2.20	0.42
10:L:56:TYR:O	21:L:304:HOH:O	2.21	0.42
2:B:366:GLN:OE1	2:B:366:GLN:N	2.48	0.42
3:C:48:VAL:HG12	3:C:74:ARG:O	2.19	0.42
14:A:813:CLA:HHC	14:A:813:CLA:HBB1	2.01	0.41
2:B:47:ALA:HB3	11:M:29:LEU:HD21	2.02	0.41
16:B:847:BCR:H24C	16:B:847:BCR:H371	1.83	0.41
16:B:853:BCR:H15C	16:B:853:BCR:H351	1.90	0.41
16:A:846:BCR:H362	16:A:847:BCR:C10	2.50	0.41
14:L:201:CLA:CBB	14:L:201:CLA:HHC	2.50	0.41
1:A:72:ILE:HG23	1:A:76:HIS:NE2	2.35	0.41
1:A:430:LEU:O	1:A:433:VAL:HG22	2.21	0.41
14:A:822:CLA:OBD	14:A:824:CLA:HMD3	2.20	0.41
2:B:272:MET:SD	14:B:819:CLA:HED2	2.61	0.41
14:B:830:CLA:H143	20:B:850:LMG:H212	2.02	0.41
7:I:22:MET:N	7:I:23:PRO:HD2	2.34	0.41
14:B:839:CLA:C1A	14:B:839:CLA:CGA	2.98	0.41
3:C:33:CYS:SG	3:C:34:LYS:N	2.93	0.41
7:I:19:CYS:HB3	14:L:201:CLA:CBB	2.50	0.41
14:L:204:CLA:HHC	14:L:204:CLA:HBB1	2.02	0.41
1:A:35:ASP:OD1	1:A:36:ARG:N	2.53	0.41
1:A:684:ALA:HB3	14:A:802:CLA:HBB2	2.03	0.41
2:B:319:ASN:HB3	17:B:851:LHG:H112	2.03	0.41
16:F:205:BCR:H20C	16:F:205:BCR:H361	1.88	0.41
1:A:245:ASN:O	1:A:248:LEU:HD23	2.20	0.41
14:A:821:CLA:H141	16:A:846:BCR:H393	2.03	0.41
2:B:437:LEU:O	2:B:441:VAL:HG23	2.20	0.41
2:B:470:HIS:NE2	14:B:835:CLA:NA	2.68	0.41
6:F:56:ARG:HG2	6:F:57:LEU:O	2.21	0.41
14:K:101:CLA:HMC2	16:K:103:BCR:H332	2.03	0.41
14:X:1701:CLA:O1D	14:X:1701:CLA:H2A	2.21	0.41
1:A:546:ILE:O	1:A:550:VAL:HG23	2.20	0.41
14:A:804:CLA:CGA	14:A:842:CLA:H43	2.51	0.41
14:A:807:CLA:CBB	14:A:830:CLA:HMC2	2.51	0.41
14:A:822:CLA:CMB	14:A:826:CLA:HMA3	2.51	0.41
16:A:850:BCR:H20C	16:A:850:BCR:H361	1.90	0.41
2:B:347:ILE:O	2:B:351:VAL:HG23	2.20	0.41
2:B:376:THR:HG23	2:B:597:THR:HG21	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:382:ALA:O	2:B:386:MET:HG2	2.20	0.41
2:B:417:HIS:O	2:B:417:HIS:CD2	2.74	0.41
6:F:137:THR:O	6:F:137:THR:HG23	2.21	0.41
1:A:550:VAL:HG11	14:A:840:CLA:HMB3	2.03	0.41
1:A:681:PHE:CD1	16:A:850:BCR:H363	2.56	0.41
2:B:639:ASN:OD1	2:B:642:ASN:ND2	2.49	0.41
6:F:13:ALA:O	6:F:17:ARG:HG2	2.21	0.41
12:X:20:LEU:HD11	12:X:24:PHE:CE1	2.56	0.41
12:X:20:LEU:HD11	12:X:24:PHE:CZ	2.56	0.41
1:A:337:THR:O	1:A:337:THR:HG22	2.19	0.40
1:A:497:ALA:HB3	1:A:498:PRO:HD3	2.03	0.40
16:A:850:BCR:H362	14:A:854:CLA:H41	2.01	0.40
2:B:2:THR:HG22	2:B:3:LYS:N	2.36	0.40
2:B:314:VAL:O	2:B:319:ASN:HA	2.21	0.40
16:I:101:BCR:H332	17:I:102:LHG:H223	2.03	0.40
14:A:840:CLA:O1A	14:A:840:CLA:C2	2.69	0.40
16:A:848:BCR:H15C	16:A:848:BCR:H351	1.89	0.40
2:B:573:THR:HG22	2:B:573:THR:O	2.22	0.40
4:D:95:HIS:CB	4:D:96:PRO:HD3	2.51	0.40
10:L:57:PHE:CD2	10:L:57:PHE:C	2.95	0.40
1:A:371:ALA:HB2	1:A:397:HIS:HB2	2.03	0.40
14:A:802:CLA:CBA	2:B:430:LEU:HD23	2.52	0.40
2:B:157:GLN:O	2:B:161:ARG:HG3	2.20	0.40
2:B:379:GLN:OE1	2:B:379:GLN:HA	2.20	0.40

There are no symmetry-related clashes.

## 5.3 Torsion angles [\(i\)](#)

### 5.3.1 Protein backbone [\(i\)](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	A	744/755 (98%)	712 (96%)	32 (4%)	0	<b>100</b> <b>100</b>

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	B	738/741 (100%)	706 (96%)	32 (4%)	0	100	100
3	C	78/81 (96%)	73 (94%)	5 (6%)	0	100	100
4	D	136/139 (98%)	124 (91%)	12 (9%)	0	100	100
5	E	68/76 (90%)	68 (100%)	0	0	100	100
6	F	139/141 (99%)	129 (93%)	10 (7%)	0	100	100
7	I	36/38 (95%)	33 (92%)	3 (8%)	0	100	100
8	J	39/41 (95%)	39 (100%)	0	0	100	100
9	K	77/83 (93%)	72 (94%)	5 (6%)	0	100	100
10	L	150/155 (97%)	145 (97%)	5 (3%)	0	100	100
11	M	29/31 (94%)	28 (97%)	1 (3%)	0	100	100
12	X	25/36 (69%)	25 (100%)	0	0	100	100
All	All	2259/2317 (98%)	2154 (95%)	105 (5%)	0	100	100

There are no Ramachandran outliers to report.

### 5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	594/603 (98%)	594 (100%)	0	100	100
2	B	597/598 (100%)	597 (100%)	0	100	100
3	C	67/68 (98%)	67 (100%)	0	100	100
4	D	115/116 (99%)	115 (100%)	0	100	100
5	E	60/65 (92%)	60 (100%)	0	100	100
6	F	109/109 (100%)	109 (100%)	0	100	100
7	I	31/31 (100%)	31 (100%)	0	100	100
8	J	35/35 (100%)	35 (100%)	0	100	100
9	K	58/61 (95%)	58 (100%)	0	100	100
10	L	117/120 (98%)	117 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
11	M	26/26 (100%)	26 (100%)	0	100	100
12	X	21/28 (75%)	21 (100%)	0	100	100
All	All	1830/1860 (98%)	1830 (100%)	0	100	100

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

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

Mol	Chain	Res	Type
1	A	93	HIS
1	A	192	ASN
1	A	718	GLN
2	B	13	GLN
2	B	33	HIS
2	B	155	HIS
2	B	195	HIS
2	B	210	ASN
2	B	261	HIS
2	B	298	HIS
2	B	406	ASN
2	B	455	GLN
2	B	611	ASN
2	B	616	ASN
2	B	647	ASN
4	D	71	GLN
4	D	106	ASN
5	E	58	ASN
9	K	23	ASN
9	K	78	GLN
10	L	16	HIS
10	L	33	ASN
10	L	39	GLN
10	L	75	ASN

### 5.3.3 RNA

There are no RNA molecules in this entry.

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

2 non-standard protein/DNA/RNA residues 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
7	FME	I	1	7	8,9,10	0.97	0	7,9,11	0.82	0
8	FME	J	1	8	8,9,10	0.93	0	7,9,11	0.90	0

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
7	FME	I	1	7	-	0/7/9/11	-
8	FME	J	1	8	-	1/7/9/11	-

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (1) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
8	J	1	FME	CB-CG-SD-CE

There are no ring outliers.

1 monomer is involved in 1 short contact:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
7	I	1	FME	1	0

## 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry

Of 134 ligands modelled in this entry, 2 are monoatomic - leaving 132 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	A	809	1	65,73,73	1.44	6 (9%)	76,113,113	1.38	7 (9%)
14	CLA	A	819	-	65,73,73	1.50	9 (13%)	76,113,113	1.32	8 (10%)
14	CLA	B	807	-	65,73,73	1.46	7 (10%)	76,113,113	1.35	7 (9%)
16	BCR	A	851	-	25,25,41	1.16	1 (4%)	33,33,56	1.46	5 (15%)
14	CLA	A	808	-	51,59,73	1.65	7 (13%)	59,96,113	1.43	7 (11%)
14	CLA	A	825	-	65,73,73	1.48	6 (9%)	76,113,113	1.30	8 (10%)
14	CLA	B	801	21	65,73,73	1.48	7 (10%)	76,113,113	1.32	6 (7%)
14	CLA	A	841	-	65,73,73	1.47	6 (9%)	76,113,113	1.32	7 (9%)
14	CLA	B	817	-	65,73,73	1.49	6 (9%)	76,113,113	1.32	8 (10%)
14	CLA	B	812	-	65,73,73	1.47	7 (10%)	76,113,113	1.36	7 (9%)
17	LHG	B	851	-	48,48,48	0.66	1 (2%)	51,54,54	1.19	5 (9%)
16	BCR	L	202	-	41,41,41	1.20	2 (4%)	56,56,56	1.30	8 (14%)
14	CLA	A	843	17	45,53,73	1.77	7 (15%)	52,89,113	1.55	7 (13%)
14	CLA	A	803	21	65,73,73	1.54	8 (12%)	76,113,113	1.24	6 (7%)
14	CLA	B	814	-	65,73,73	1.44	7 (10%)	76,113,113	1.50	11 (14%)
14	CLA	A	806	-	65,73,73	1.44	8 (12%)	76,113,113	1.37	8 (10%)
14	CLA	B	821	-	65,73,73	1.51	6 (9%)	76,113,113	1.29	7 (9%)
14	CLA	A	807	-	65,73,73	1.45	6 (9%)	76,113,113	1.31	7 (9%)
14	CLA	A	833	-	65,73,73	1.45	7 (10%)	76,113,113	1.31	6 (7%)
14	CLA	J	102	-	38,45,73	1.92	6 (15%)	43,78,113	1.58	6 (13%)
14	CLA	B	829	-	65,73,73	1.50	8 (12%)	76,113,113	1.34	9 (11%)
14	CLA	B	820	21	65,73,73	1.49	7 (10%)	76,113,113	1.42	8 (10%)
14	CLA	B	825	2	65,73,73	1.47	7 (10%)	76,113,113	1.28	7 (9%)
14	CLA	J	101	8	45,53,73	1.79	6 (13%)	52,89,113	1.52	7 (13%)
14	CLA	A	829	-	65,73,73	1.45	7 (10%)	76,113,113	1.38	6 (7%)
14	CLA	F	204	-	50,58,73	1.68	6 (12%)	58,95,113	1.50	8 (13%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	A	823	-	45,53,73	1.76	6 (13%)	52,89,113	1.57	8 (15%)
14	CLA	B	835	-	65,73,73	1.47	7 (10%)	76,113,113	1.36	6 (7%)
16	BCR	F	205	-	41,41,41	1.12	2 (4%)	56,56,56	1.29	8 (14%)
14	CLA	B	833	-	65,73,73	1.50	7 (10%)	76,113,113	1.33	8 (10%)
14	CLA	B	841	21	65,73,73	1.48	6 (9%)	76,113,113	1.31	8 (10%)
14	CLA	A	826	21	65,73,73	1.46	6 (9%)	76,113,113	1.34	6 (7%)
14	CLA	B	842	-	65,73,73	1.50	8 (12%)	76,113,113	1.35	7 (9%)
14	CLA	A	813	-	45,53,73	1.82	8 (17%)	52,89,113	1.47	7 (13%)
18	SF4	C	102	3	0,12,12	-	-	-	-	-
16	BCR	J	103	-	41,41,41	1.16	3 (7%)	56,56,56	1.25	7 (12%)
14	CLA	A	842	-	65,73,73	1.49	7 (10%)	76,113,113	1.32	7 (9%)
14	CLA	F	203	21	45,53,73	1.76	7 (15%)	52,89,113	1.58	7 (13%)
14	CLA	B	832	-	49,57,73	1.69	6 (12%)	55,93,113	1.52	7 (12%)
15	PQN	A	844	-	34,34,34	0.40	0	42,45,45	0.37	0
18	SF4	B	802	2,1	0,12,12	-	-	-	-	-
14	CLA	B	811	2	65,73,73	1.47	7 (10%)	76,113,113	1.36	8 (10%)
14	CLA	M	102	-	36,44,73	1.96	7 (19%)	40,76,113	1.59	6 (15%)
14	CLA	K	101	-	46,54,73	1.76	6 (13%)	53,90,113	1.53	6 (11%)
14	CLA	A	838	-	65,73,73	1.46	6 (9%)	76,113,113	1.40	8 (10%)
14	CLA	A	804	-	65,73,73	1.44	6 (9%)	76,113,113	1.36	7 (9%)
14	CLA	A	811	-	49,57,73	1.72	7 (14%)	55,93,113	1.41	7 (12%)
16	BCR	B	847	-	41,41,41	1.17	2 (4%)	56,56,56	1.22	8 (14%)
14	CLA	B	828	-	65,73,73	1.51	7 (10%)	76,113,113	1.27	8 (10%)
14	CLA	A	840	-	65,73,73	1.51	6 (9%)	76,113,113	1.34	8 (10%)
14	CLA	A	817	21	65,73,73	1.50	6 (9%)	76,113,113	1.35	8 (10%)
16	BCR	A	846	-	41,41,41	1.15	2 (4%)	56,56,56	1.26	9 (16%)
14	CLA	A	827	21	65,73,73	1.46	6 (9%)	76,113,113	1.40	11 (14%)
14	CLA	A	837	1	45,53,73	1.77	6 (13%)	52,89,113	1.60	8 (15%)
14	CLA	A	802	-	65,73,73	1.45	6 (9%)	76,113,113	1.35	9 (11%)
14	CLA	B	824	-	45,53,73	1.80	5 (11%)	52,89,113	1.54	8 (15%)
14	CLA	B	831	-	55,63,73	1.60	6 (10%)	64,101,113	1.42	7 (10%)
14	CLA	A	830	-	65,73,73	1.47	8 (12%)	76,113,113	1.31	6 (7%)
14	CLA	B	836	21	50,58,73	1.71	7 (14%)	58,95,113	1.51	8 (13%)
14	CLA	A	821	-	65,73,73	1.45	6 (9%)	76,113,113	1.37	7 (9%)
16	BCR	B	845	-	41,41,41	1.12	3 (7%)	56,56,56	1.17	4 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	A	824	-	65,73,73	1.53	7 (10%)	76,113,113	1.26	6 (7%)
14	CLA	A	831	-	65,73,73	1.47	7 (10%)	76,113,113	1.40	8 (10%)
14	CLA	B	840	-	47,55,73	1.75	8 (17%)	54,91,113	1.51	9 (16%)
14	CLA	A	820	-	65,73,73	1.47	7 (10%)	76,113,113	1.39	9 (11%)
14	CLA	B	823	21	55,63,73	1.61	6 (10%)	64,101,113	1.39	6 (9%)
16	BCR	F	202	-	41,41,41	1.19	2 (4%)	56,56,56	1.25	8 (14%)
14	CLA	A	836	-	65,73,73	1.49	9 (13%)	76,113,113	1.34	8 (10%)
14	CLA	B	816	-	65,73,73	1.45	7 (10%)	76,113,113	1.35	7 (9%)
16	BCR	J	104	-	41,41,41	1.21	2 (4%)	56,56,56	1.38	10 (17%)
16	BCR	I	103	-	41,41,41	1.11	2 (4%)	56,56,56	1.29	7 (12%)
14	CLA	B	804	-	65,73,73	1.44	8 (12%)	76,113,113	1.31	6 (7%)
14	CLA	A	816	-	65,73,73	1.45	7 (10%)	76,113,113	1.36	6 (7%)
14	CLA	B	818	-	65,73,73	1.45	6 (9%)	76,113,113	1.47	8 (10%)
16	BCR	B	848	-	41,41,41	1.18	2 (4%)	56,56,56	1.26	6 (10%)
14	CLA	B	822	-	45,53,73	1.76	6 (13%)	52,89,113	1.58	7 (13%)
13	CL0	A	801	-	65,73,73	1.44	6 (9%)	76,113,113	1.32	8 (10%)
14	CLA	B	813	-	45,53,73	1.77	7 (15%)	52,89,113	1.55	6 (11%)
14	CLA	B	837	21	45,53,73	1.81	6 (13%)	52,89,113	1.52	6 (11%)
16	BCR	K	103	-	25,25,41	1.14	1 (4%)	33,33,56	1.34	5 (15%)
14	CLA	B	810	-	65,73,73	1.50	8 (12%)	76,113,113	1.41	8 (10%)
14	CLA	L	206	21	65,73,73	1.47	7 (10%)	76,113,113	1.41	9 (11%)
14	CLA	L	201	2	65,73,73	1.45	7 (10%)	76,113,113	1.39	7 (9%)
16	BCR	L	207	-	41,41,41	1.13	2 (4%)	56,56,56	1.19	7 (12%)
14	CLA	A	832	-	60,68,73	1.53	9 (15%)	70,107,113	1.39	7 (10%)
17	LHG	M	101	-	48,48,48	0.60	0	51,54,54	1.17	5 (9%)
14	CLA	A	812	14	65,73,73	1.47	7 (10%)	76,113,113	1.32	6 (7%)
14	CLA	A	815	-	65,73,73	1.47	7 (10%)	76,113,113	1.35	6 (7%)
14	CLA	B	805	-	65,73,73	1.43	7 (10%)	76,113,113	1.42	7 (9%)
14	CLA	L	205	-	65,73,73	1.45	6 (9%)	76,113,113	1.38	9 (11%)
14	CLA	B	806	-	65,73,73	1.48	8 (12%)	76,113,113	1.34	8 (10%)
14	CLA	B	827	-	65,73,73	1.46	7 (10%)	76,113,113	1.34	7 (9%)
18	SF4	C	101	3	0,12,12	-	-	-	-	-
16	BCR	A	847	-	41,41,41	1.16	4 (9%)	56,56,56	1.38	8 (14%)
14	CLA	A	828	-	65,73,73	1.47	7 (10%)	76,113,113	1.36	8 (10%)
14	CLA	B	819	-	65,73,73	1.46	6 (9%)	76,113,113	1.42	8 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	A	805	14	59,67,73	1.53	6 (10%)	68,105,113	1.42	9 (13%)
14	CLA	A	818	-	65,73,73	1.46	7 (10%)	76,113,113	1.38	8 (10%)
14	CLA	B	808	-	65,73,73	1.47	7 (10%)	76,113,113	1.34	7 (9%)
14	CLA	B	834	-	65,73,73	1.48	7 (10%)	76,113,113	1.31	7 (9%)
16	BCR	B	846	-	41,41,41	1.17	2 (4%)	56,56,56	1.28	8 (14%)
14	CLA	A	814	-	65,73,73	1.47	7 (10%)	76,113,113	1.34	6 (7%)
14	CLA	K	102	21	58,66,73	1.58	5 (8%)	67,104,113	1.39	8 (11%)
17	LHG	A	852	-	48,48,48	0.65	1 (2%)	51,54,54	1.21	5 (9%)
14	CLA	A	854	21	65,73,73	1.44	7 (10%)	76,113,113	1.43	9 (11%)
14	CLA	A	835	-	65,73,73	1.44	7 (10%)	76,113,113	1.40	7 (9%)
14	CLA	A	834	-	65,73,73	1.45	6 (9%)	76,113,113	1.44	8 (10%)
14	CLA	B	839	-	65,73,73	1.47	7 (10%)	76,113,113	1.35	8 (10%)
14	CLA	L	204	10	65,73,73	1.51	7 (10%)	76,113,113	1.51	11 (14%)
16	BCR	A	845	-	41,41,41	1.13	2 (4%)	56,56,56	1.29	7 (12%)
14	CLA	A	810	1	65,73,73	1.47	7 (10%)	76,113,113	1.37	7 (9%)
16	BCR	B	853	-	41,41,41	1.15	2 (4%)	56,56,56	1.19	4 (7%)
14	CLA	B	830	-	65,73,73	1.48	6 (9%)	76,113,113	1.42	8 (10%)
16	BCR	B	852	-	41,41,41	1.19	2 (4%)	56,56,56	1.36	9 (16%)
16	BCR	A	850	-	41,41,41	1.19	2 (4%)	56,56,56	1.45	12 (21%)
16	BCR	A	848	-	41,41,41	1.11	2 (4%)	56,56,56	1.16	5 (8%)
16	BCR	I	101	-	41,41,41	1.20	3 (7%)	56,56,56	1.24	7 (12%)
14	CLA	A	839	-	65,73,73	1.45	7 (10%)	76,113,113	1.36	8 (10%)
14	CLA	B	838	-	60,68,73	1.57	8 (13%)	70,107,113	1.36	7 (10%)
14	CLA	B	826	21	65,73,73	1.49	8 (12%)	76,113,113	1.43	10 (13%)
20	LMG	B	850	-	55,55,55	0.70	0	63,63,63	1.33	7 (11%)
14	CLA	F	201	21	58,66,73	1.58	6 (10%)	67,104,113	1.36	8 (11%)
16	BCR	B	849	-	41,41,41	1.18	2 (4%)	56,56,56	1.19	6 (10%)
16	BCR	B	844	-	41,41,41	1.17	2 (4%)	56,56,56	1.23	7 (12%)
17	LHG	I	102	-	38,38,48	0.70	0	41,44,54	1.26	4 (9%)
17	LHG	A	853	14	40,40,48	0.71	1 (2%)	43,46,54	1.19	4 (9%)
14	CLA	A	822	21	65,73,73	1.46	7 (10%)	76,113,113	1.34	6 (7%)
14	CLA	B	809	-	65,73,73	1.47	7 (10%)	76,113,113	1.36	7 (9%)
15	PQN	B	843	-	34,34,34	0.41	0	42,45,45	0.38	0
14	CLA	B	815	-	65,73,73	1.46	6 (9%)	76,113,113	1.34	8 (10%)
16	BCR	A	849	-	41,41,41	1.16	2 (4%)	56,56,56	1.19	5 (8%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	X	1701	12	45,53,73	1.79	6 (13%)	52,89,113	1.56	7 (13%)

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
14	CLA	A	809	1	1/1/15/20	7/37/115/115	-
14	CLA	A	819	-	1/1/15/20	12/37/115/115	-
14	CLA	B	807	-	1/1/15/20	19/37/115/115	-
16	BCR	A	851	-	-	13/18/35/63	0/1/1/2
14	CLA	A	808	-	1/1/12/20	4/21/99/115	-
14	CLA	A	825	-	1/1/15/20	13/37/115/115	-
14	CLA	B	801	21	1/1/15/20	16/37/115/115	-
14	CLA	A	841	-	1/1/15/20	12/37/115/115	-
14	CLA	B	817	-	1/1/15/20	17/37/115/115	-
14	CLA	B	812	-	1/1/15/20	8/37/115/115	-
17	LHG	B	851	-	-	28/53/53/53	-
16	BCR	L	202	-	-	12/29/63/63	0/2/2/2
14	CLA	A	843	17	1/1/11/20	5/13/91/115	-
14	CLA	A	803	21	1/1/15/20	11/37/115/115	-
14	CLA	B	814	-	1/1/15/20	19/37/115/115	-
14	CLA	A	806	-	1/1/15/20	25/37/115/115	-
14	CLA	B	821	-	1/1/15/20	14/37/115/115	-
14	CLA	A	807	-	1/1/15/20	14/37/115/115	-
14	CLA	A	833	-	1/1/15/20	13/37/115/115	-
14	CLA	J	102	-	1/1/8/20	0/2/76/115	-
14	CLA	B	829	-	1/1/15/20	14/37/115/115	-
14	CLA	B	820	21	1/1/15/20	16/37/115/115	-
14	CLA	B	825	2	1/1/15/20	13/37/115/115	-
14	CLA	J	101	8	1/1/11/20	2/13/91/115	-
14	CLA	A	829	-	1/1/15/20	14/37/115/115	-
14	CLA	F	204	-	1/1/12/20	8/19/97/115	-
14	CLA	A	823	-	1/1/11/20	6/13/91/115	-
14	CLA	B	835	-	1/1/15/20	11/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
16	BCR	F	205	-	-	10/29/63/63	0/2/2/2
14	CLA	B	833	-	1/1/15/20	12/37/115/115	-
14	CLA	B	841	21	1/1/15/20	9/37/115/115	-
14	CLA	A	826	21	1/1/15/20	15/37/115/115	-
14	CLA	B	842	-	1/1/15/20	8/37/115/115	-
14	CLA	A	813	-	1/1/11/20	3/13/91/115	-
18	SF4	C	102	3	-	-	0/6/5/5
16	BCR	J	103	-	-	13/29/63/63	0/2/2/2
14	CLA	A	842	-	1/1/15/20	6/37/115/115	-
14	CLA	F	203	21	1/1/11/20	4/13/91/115	-
14	CLA	B	832	-	1/1/11/20	5/18/96/115	-
15	PQN	A	844	-	-	1/23/43/43	0/2/2/2
18	SF4	B	802	2,1	-	-	0/6/5/5
14	CLA	B	811	2	1/1/15/20	8/37/115/115	-
14	CLA	M	102	-	1/1/7/20	0/2/72/115	-
14	CLA	K	101	-	1/1/11/20	6/15/93/115	-
14	CLA	A	838	-	1/1/15/20	14/37/115/115	-
14	CLA	A	804	-	1/1/15/20	11/37/115/115	-
14	CLA	A	811	-	1/1/11/20	7/18/96/115	-
16	BCR	B	847	-	-	10/29/63/63	0/2/2/2
14	CLA	B	828	-	1/1/15/20	20/37/115/115	-
14	CLA	A	840	-	1/1/15/20	8/37/115/115	-
14	CLA	A	817	21	1/1/15/20	9/37/115/115	-
16	BCR	A	846	-	-	11/29/63/63	0/2/2/2
14	CLA	A	827	21	1/1/15/20	12/37/115/115	-
14	CLA	A	837	1	1/1/11/20	5/13/91/115	-
14	CLA	A	802	-	1/1/15/20	13/37/115/115	-
14	CLA	B	824	-	1/1/11/20	6/13/91/115	-
14	CLA	B	831	-	1/1/13/20	10/25/103/115	-
14	CLA	A	830	-	1/1/15/20	10/37/115/115	-
14	CLA	B	836	21	1/1/12/20	5/19/97/115	-
14	CLA	A	821	-	1/1/15/20	12/37/115/115	-
16	BCR	B	845	-	-	15/29/63/63	0/2/2/2
14	CLA	A	824	-	1/1/15/20	7/37/115/115	-
14	CLA	A	831	-	1/1/15/20	7/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	B	840	-	1/1/11/20	3/16/94/115	-
14	CLA	A	820	-	1/1/15/20	8/37/115/115	-
14	CLA	B	823	21	1/1/13/20	6/25/103/115	-
16	BCR	F	202	-	-	8/29/63/63	0/2/2/2
14	CLA	A	836	-	1/1/15/20	14/37/115/115	-
14	CLA	B	816	-	1/1/15/20	13/37/115/115	-
16	BCR	J	104	-	-	10/29/63/63	0/2/2/2
16	BCR	I	103	-	-	10/29/63/63	0/2/2/2
14	CLA	B	804	-	1/1/15/20	13/37/115/115	-
14	CLA	A	816	-	1/1/15/20	15/37/115/115	-
14	CLA	B	818	-	1/1/15/20	12/37/115/115	-
16	BCR	B	848	-	-	6/29/63/63	0/2/2/2
14	CLA	B	822	-	1/1/11/20	7/13/91/115	-
13	CL0	A	801	-	3/3/20/25	9/37/135/135	-
14	CLA	B	813	-	1/1/11/20	5/13/91/115	-
14	CLA	B	837	21	1/1/11/20	5/13/91/115	-
16	BCR	K	103	-	-	5/18/35/63	0/1/1/2
14	CLA	B	810	-	1/1/15/20	6/37/115/115	-
14	CLA	L	206	21	1/1/15/20	7/37/115/115	-
14	CLA	L	201	2	1/1/15/20	15/37/115/115	-
16	BCR	L	207	-	-	17/29/63/63	0/2/2/2
14	CLA	A	832	-	1/1/14/20	9/31/109/115	-
17	LHG	M	101	-	-	19/53/53/53	-
14	CLA	A	812	14	1/1/15/20	13/37/115/115	-
14	CLA	A	815	-	1/1/15/20	14/37/115/115	-
14	CLA	B	805	-	1/1/15/20	14/37/115/115	-
14	CLA	L	205	-	1/1/15/20	14/37/115/115	-
14	CLA	B	806	-	1/1/15/20	10/37/115/115	-
14	CLA	B	827	-	1/1/15/20	10/37/115/115	-
18	SF4	C	101	3	-	-	0/6/5/5
16	BCR	A	847	-	-	13/29/63/63	0/2/2/2
14	CLA	A	828	-	1/1/15/20	6/37/115/115	-
14	CLA	B	819	-	1/1/15/20	15/37/115/115	-
14	CLA	A	805	14	1/1/13/20	9/30/108/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	A	818	-	1/1/15/20	12/37/115/115	-
14	CLA	B	808	-	1/1/15/20	8/37/115/115	-
14	CLA	B	834	-	1/1/15/20	9/37/115/115	-
16	BCR	B	846	-	-	8/29/63/63	0/2/2/2
14	CLA	A	814	-	1/1/15/20	14/37/115/115	-
14	CLA	K	102	21	1/1/13/20	12/29/107/115	-
17	LHG	A	852	-	-	23/53/53/53	-
14	CLA	A	854	21	1/1/15/20	17/37/115/115	-
14	CLA	A	835	-	1/1/15/20	7/37/115/115	-
14	CLA	A	834	-	1/1/15/20	14/37/115/115	-
14	CLA	B	839	-	1/1/15/20	10/37/115/115	-
14	CLA	L	204	10	1/1/15/20	16/37/115/115	-
16	BCR	A	845	-	-	4/29/63/63	0/2/2/2
14	CLA	A	810	1	1/1/15/20	13/37/115/115	-
16	BCR	B	853	-	-	13/29/63/63	0/2/2/2
14	CLA	B	830	-	1/1/15/20	8/37/115/115	-
16	BCR	B	852	-	-	12/29/63/63	0/2/2/2
16	BCR	A	850	-	-	18/29/63/63	0/2/2/2
16	BCR	A	848	-	-	7/29/63/63	0/2/2/2
16	BCR	I	101	-	-	11/29/63/63	0/2/2/2
14	CLA	A	839	-	1/1/15/20	16/37/115/115	-
14	CLA	B	838	-	1/1/14/20	7/31/109/115	-
14	CLA	B	826	21	1/1/15/20	15/37/115/115	-
20	LMG	B	850	-	-	23/50/70/70	0/1/1/1
14	CLA	F	201	21	1/1/13/20	12/29/107/115	-
16	BCR	B	849	-	-	4/29/63/63	0/2/2/2
16	BCR	B	844	-	-	12/29/63/63	0/2/2/2
17	LHG	I	102	-	-	23/43/43/53	-
17	LHG	A	853	14	-	13/45/45/53	-
14	CLA	A	822	21	1/1/15/20	8/37/115/115	-
14	CLA	B	809	-	1/1/15/20	10/37/115/115	-
15	PQN	B	843	-	-	2/23/43/43	0/2/2/2
14	CLA	B	815	-	1/1/15/20	20/37/115/115	-
16	BCR	A	849	-	-	5/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	X	1701	12	1/1/11/20	7/13/91/115	-

All (711) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	A	824	CLA	C4B-NB	7.81	1.42	1.35
14	A	811	CLA	C4B-NB	7.72	1.42	1.35
14	B	828	CLA	C4B-NB	7.71	1.42	1.35
14	L	204	CLA	C4B-NB	7.70	1.42	1.35
14	A	803	CLA	C4B-NB	7.64	1.42	1.35
14	B	821	CLA	C4B-NB	7.62	1.42	1.35
14	B	837	CLA	C4B-NB	7.61	1.42	1.35
14	A	817	CLA	C4B-NB	7.61	1.42	1.35
14	J	102	CLA	C4B-NB	7.61	1.42	1.35
14	B	838	CLA	C4B-NB	7.59	1.42	1.35
14	B	829	CLA	C4B-NB	7.58	1.42	1.35
14	B	833	CLA	C4B-NB	7.56	1.42	1.35
14	B	842	CLA	C4B-NB	7.56	1.42	1.35
14	A	813	CLA	C4B-NB	7.55	1.41	1.35
14	J	101	CLA	C4B-NB	7.52	1.41	1.35
14	M	102	CLA	C4B-NB	7.48	1.41	1.35
14	F	201	CLA	C4B-NB	7.47	1.41	1.35
14	K	101	CLA	C4B-NB	7.45	1.41	1.35
14	A	842	CLA	C4B-NB	7.45	1.41	1.35
14	B	801	CLA	C4B-NB	7.45	1.41	1.35
14	F	204	CLA	C4B-NB	7.44	1.41	1.35
14	B	810	CLA	C4B-NB	7.44	1.41	1.35
14	B	824	CLA	C4B-NB	7.44	1.41	1.35
14	B	836	CLA	C4B-NB	7.42	1.41	1.35
14	K	102	CLA	C4B-NB	7.42	1.41	1.35
14	X	1701	CLA	C4B-NB	7.41	1.41	1.35
14	A	840	CLA	C4B-NB	7.41	1.41	1.35
14	B	823	CLA	C4B-NB	7.41	1.41	1.35
14	B	840	CLA	C4B-NB	7.40	1.41	1.35
14	B	834	CLA	C4B-NB	7.39	1.41	1.35
14	A	843	CLA	C4B-NB	7.36	1.41	1.35
14	A	819	CLA	C4B-NB	7.34	1.41	1.35
14	B	817	CLA	C4B-NB	7.34	1.41	1.35
14	B	832	CLA	C4B-NB	7.33	1.41	1.35
14	B	820	CLA	C4B-NB	7.33	1.41	1.35
14	B	835	CLA	C4B-NB	7.30	1.41	1.35
14	A	808	CLA	C4B-NB	7.29	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	B	826	CLA	C4B-NB	7.28	1.41	1.35
14	B	841	CLA	C4B-NB	7.28	1.41	1.35
14	A	837	CLA	C4B-NB	7.27	1.41	1.35
14	B	818	CLA	C4B-NB	7.27	1.41	1.35
14	B	813	CLA	C4B-NB	7.27	1.41	1.35
14	A	815	CLA	C4B-NB	7.26	1.41	1.35
14	F	203	CLA	C4B-NB	7.25	1.41	1.35
14	A	823	CLA	C4B-NB	7.22	1.41	1.35
14	A	812	CLA	C4B-NB	7.22	1.41	1.35
14	A	836	CLA	C4B-NB	7.22	1.41	1.35
14	B	839	CLA	C4B-NB	7.22	1.41	1.35
14	A	841	CLA	C4B-NB	7.21	1.41	1.35
14	A	825	CLA	C4B-NB	7.21	1.41	1.35
14	B	830	CLA	C4B-NB	7.20	1.41	1.35
14	A	820	CLA	C4B-NB	7.20	1.41	1.35
14	B	812	CLA	C4B-NB	7.20	1.41	1.35
14	B	806	CLA	C4B-NB	7.19	1.41	1.35
14	A	810	CLA	C4B-NB	7.19	1.41	1.35
14	B	808	CLA	C4B-NB	7.18	1.41	1.35
14	A	805	CLA	C4B-NB	7.16	1.41	1.35
14	B	822	CLA	C4B-NB	7.15	1.41	1.35
14	B	807	CLA	C4B-NB	7.15	1.41	1.35
14	B	809	CLA	C4B-NB	7.14	1.41	1.35
14	A	818	CLA	C4B-NB	7.14	1.41	1.35
14	A	814	CLA	C4B-NB	7.14	1.41	1.35
14	A	828	CLA	C4B-NB	7.13	1.41	1.35
14	A	821	CLA	C4B-NB	7.11	1.41	1.35
14	B	815	CLA	C4B-NB	7.10	1.41	1.35
14	B	825	CLA	C4B-NB	7.09	1.41	1.35
14	B	831	CLA	C4B-NB	7.08	1.41	1.35
14	B	827	CLA	C4B-NB	7.08	1.41	1.35
14	L	206	CLA	C4B-NB	7.06	1.41	1.35
14	A	827	CLA	C4B-NB	7.06	1.41	1.35
14	A	807	CLA	C4B-NB	7.06	1.41	1.35
14	B	816	CLA	C4B-NB	7.05	1.41	1.35
14	A	816	CLA	C4B-NB	7.05	1.41	1.35
14	A	833	CLA	C4B-NB	7.04	1.41	1.35
14	A	835	CLA	C4B-NB	7.03	1.41	1.35
14	A	838	CLA	C4B-NB	7.02	1.41	1.35
14	A	854	CLA	C4B-NB	7.01	1.41	1.35
14	A	822	CLA	C4B-NB	7.01	1.41	1.35
14	A	830	CLA	C4B-NB	7.00	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	A	834	CLA	C4B-NB	7.00	1.41	1.35
14	A	802	CLA	C4B-NB	6.99	1.41	1.35
14	B	819	CLA	C4B-NB	6.99	1.41	1.35
14	A	829	CLA	C4B-NB	6.98	1.41	1.35
14	A	831	CLA	C4B-NB	6.97	1.41	1.35
14	A	826	CLA	C4B-NB	6.96	1.41	1.35
14	A	832	CLA	C4B-NB	6.95	1.41	1.35
14	L	201	CLA	C4B-NB	6.94	1.41	1.35
14	B	811	CLA	C4B-NB	6.93	1.41	1.35
14	B	804	CLA	C4B-NB	6.84	1.41	1.35
14	L	205	CLA	C4B-NB	6.84	1.41	1.35
14	B	814	CLA	C4B-NB	6.83	1.41	1.35
14	A	839	CLA	C4B-NB	6.83	1.41	1.35
14	A	809	CLA	C4B-NB	6.82	1.41	1.35
14	A	806	CLA	C4B-NB	6.79	1.41	1.35
13	A	801	CL0	C4B-NB	6.76	1.41	1.35
14	A	804	CLA	C4B-NB	6.75	1.41	1.35
14	B	805	CLA	C4B-NB	6.71	1.41	1.35
16	B	847	BCR	C30-C25	-4.02	1.48	1.53
16	J	104	BCR	C1-C6	-3.94	1.48	1.53
14	X	1701	CLA	C1D-ND	3.90	1.42	1.37
14	B	837	CLA	C1D-ND	3.87	1.42	1.37
16	B	848	BCR	C1-C6	-3.85	1.48	1.53
14	J	102	CLA	C1D-ND	3.85	1.42	1.37
14	K	101	CLA	C1D-ND	3.84	1.42	1.37
14	B	824	CLA	C1D-ND	3.83	1.42	1.37
16	A	847	BCR	C1-C6	-3.81	1.48	1.53
14	K	102	CLA	C1D-ND	3.80	1.42	1.37
14	A	817	CLA	C1D-ND	3.77	1.42	1.37
16	B	844	BCR	C1-C6	-3.76	1.48	1.53
14	A	824	CLA	C1D-ND	3.76	1.42	1.37
14	M	102	CLA	C1D-ND	3.76	1.42	1.37
14	B	806	CLA	C1D-ND	3.76	1.42	1.37
14	A	839	CLA	C1D-ND	3.76	1.42	1.37
14	A	837	CLA	C1D-ND	3.75	1.42	1.37
16	F	202	BCR	C1-C6	-3.75	1.48	1.53
14	A	825	CLA	C1D-ND	3.74	1.42	1.37
14	B	832	CLA	C1D-ND	3.74	1.42	1.37
14	J	101	CLA	C1D-ND	3.73	1.42	1.37
14	B	828	CLA	C1D-ND	3.72	1.42	1.37
14	F	203	CLA	C1D-ND	3.71	1.42	1.37
14	B	808	CLA	C1D-ND	3.71	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	B	813	CLA	C1D-ND	3.71	1.42	1.37
14	B	836	CLA	C1D-ND	3.71	1.42	1.37
16	J	103	BCR	C1-C6	-3.70	1.48	1.53
16	I	101	BCR	C1-C6	-3.70	1.48	1.53
14	B	840	CLA	C1D-ND	3.70	1.42	1.37
14	B	809	CLA	C1D-ND	3.69	1.42	1.37
16	A	849	BCR	C1-C6	-3.68	1.48	1.53
16	A	850	BCR	C1-C6	-3.67	1.48	1.53
14	A	820	CLA	C1D-ND	3.67	1.42	1.37
14	B	820	CLA	C1D-ND	3.67	1.42	1.37
14	A	804	CLA	C1D-ND	3.66	1.42	1.37
14	A	841	CLA	C1D-ND	3.66	1.42	1.37
14	F	204	CLA	C1D-ND	3.66	1.42	1.37
14	B	823	CLA	C1D-ND	3.66	1.42	1.37
14	B	841	CLA	C1D-ND	3.65	1.42	1.37
14	L	201	CLA	C1D-ND	3.65	1.42	1.37
14	A	833	CLA	C1D-ND	3.65	1.42	1.37
14	B	821	CLA	C1D-ND	3.65	1.42	1.37
14	L	206	CLA	C1D-ND	3.64	1.42	1.37
14	B	839	CLA	C1D-ND	3.64	1.42	1.37
14	F	201	CLA	C1D-ND	3.64	1.42	1.37
14	A	813	CLA	C1D-ND	3.64	1.42	1.37
16	A	846	BCR	C1-C6	-3.64	1.48	1.53
16	B	845	BCR	C1-C6	-3.63	1.48	1.53
14	A	834	CLA	C1D-ND	3.63	1.42	1.37
14	A	828	CLA	C1D-ND	3.63	1.42	1.37
14	B	818	CLA	C1D-ND	3.63	1.42	1.37
14	B	842	CLA	C1D-ND	3.63	1.42	1.37
16	B	846	BCR	C1-C6	-3.63	1.48	1.53
16	B	852	BCR	C1-C6	-3.62	1.48	1.53
14	A	838	CLA	C1D-ND	3.62	1.42	1.37
14	A	843	CLA	C1D-ND	3.62	1.42	1.37
14	A	815	CLA	C1D-ND	3.62	1.42	1.37
14	A	842	CLA	C1D-ND	3.62	1.42	1.37
14	B	827	CLA	C1D-ND	3.61	1.42	1.37
14	A	814	CLA	C1D-ND	3.61	1.42	1.37
14	A	812	CLA	C1D-ND	3.61	1.42	1.37
14	A	823	CLA	C1D-ND	3.61	1.42	1.37
14	A	811	CLA	C1D-ND	3.61	1.42	1.37
14	A	835	CLA	C1D-ND	3.60	1.42	1.37
14	A	819	CLA	C1D-ND	3.60	1.42	1.37
14	B	831	CLA	C1D-ND	3.60	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	B	822	CLA	C1D-ND	3.60	1.42	1.37
14	B	825	CLA	C1D-ND	3.60	1.42	1.37
16	B	853	BCR	C1-C6	-3.60	1.48	1.53
14	A	826	CLA	C1D-ND	3.59	1.42	1.37
14	A	840	CLA	C1D-ND	3.59	1.42	1.37
14	B	817	CLA	C1D-ND	3.59	1.42	1.37
14	B	811	CLA	C1D-ND	3.59	1.42	1.37
16	L	202	BCR	C1-C6	-3.59	1.48	1.53
14	A	829	CLA	C1D-ND	3.57	1.42	1.37
14	A	802	CLA	C1D-ND	3.57	1.42	1.37
14	A	803	CLA	C1D-ND	3.57	1.42	1.37
14	A	807	CLA	C1D-ND	3.57	1.42	1.37
14	A	836	CLA	C1D-ND	3.57	1.42	1.37
14	A	808	CLA	C1D-ND	3.57	1.42	1.37
14	B	830	CLA	C1D-ND	3.55	1.42	1.37
14	B	807	CLA	C1D-ND	3.55	1.42	1.37
14	B	834	CLA	C1D-ND	3.55	1.42	1.37
14	A	810	CLA	C1D-ND	3.55	1.42	1.37
14	B	833	CLA	C1D-ND	3.55	1.42	1.37
14	B	816	CLA	C1D-ND	3.55	1.42	1.37
14	B	812	CLA	C1D-ND	3.54	1.42	1.37
14	A	854	CLA	C1D-ND	3.54	1.42	1.37
14	A	818	CLA	C1D-ND	3.54	1.42	1.37
14	B	801	CLA	C1D-ND	3.54	1.42	1.37
14	B	826	CLA	C1D-ND	3.53	1.42	1.37
14	A	809	CLA	C1D-ND	3.53	1.42	1.37
14	A	832	CLA	C1D-ND	3.53	1.42	1.37
14	B	838	CLA	C1D-ND	3.53	1.42	1.37
14	A	821	CLA	C1D-ND	3.52	1.42	1.37
14	B	819	CLA	C1D-ND	3.52	1.42	1.37
16	A	851	BCR	C1-C6	-3.51	1.48	1.53
14	A	831	CLA	C1D-ND	3.50	1.42	1.37
14	B	810	CLA	C1D-ND	3.50	1.42	1.37
16	L	207	BCR	C1-C6	-3.49	1.49	1.53
14	A	822	CLA	C1D-ND	3.49	1.42	1.37
14	B	835	CLA	C1D-ND	3.49	1.42	1.37
16	I	103	BCR	C1-C6	-3.48	1.49	1.53
13	A	801	CL0	C1D-ND	3.47	1.42	1.37
14	L	205	CLA	C1D-ND	3.47	1.42	1.37
14	A	816	CLA	C1D-ND	3.46	1.42	1.37
14	A	827	CLA	C1D-ND	3.46	1.42	1.37
14	A	805	CLA	C1D-ND	3.46	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	A	848	BCR	C1-C6	-3.45	1.49	1.53
14	L	204	CLA	C1D-ND	3.45	1.42	1.37
14	A	806	CLA	C1D-ND	3.45	1.42	1.37
14	B	814	CLA	C1D-ND	3.43	1.42	1.37
14	B	805	CLA	C1D-ND	3.43	1.42	1.37
16	F	205	BCR	C1-C6	-3.43	1.49	1.53
16	B	849	BCR	C1-C6	-3.41	1.49	1.53
14	B	815	CLA	C1D-ND	3.41	1.42	1.37
14	A	830	CLA	C1D-ND	3.40	1.42	1.37
14	B	829	CLA	C1D-ND	3.38	1.41	1.37
16	L	202	BCR	C30-C25	-3.37	1.49	1.53
14	B	804	CLA	C1D-ND	3.37	1.41	1.37
16	B	849	BCR	C30-C25	-3.36	1.49	1.53
16	A	845	BCR	C1-C6	-3.36	1.49	1.53
16	F	202	BCR	C30-C25	-3.34	1.49	1.53
16	J	104	BCR	C30-C25	-3.29	1.49	1.53
14	B	826	CLA	C4D-ND	-3.29	1.33	1.37
16	B	847	BCR	C1-C6	-3.28	1.49	1.53
16	B	846	BCR	C30-C25	-3.28	1.49	1.53
16	B	844	BCR	C30-C25	-3.27	1.49	1.53
16	K	103	BCR	C1-C6	-3.27	1.49	1.53
16	B	852	BCR	C30-C25	-3.26	1.49	1.53
14	L	205	CLA	C4D-ND	-3.26	1.33	1.37
14	B	836	CLA	CHC-C1C	3.25	1.43	1.35
14	A	803	CLA	C4D-ND	-3.25	1.33	1.37
16	B	848	BCR	C30-C25	-3.24	1.49	1.53
14	B	817	CLA	CHC-C1C	3.24	1.43	1.35
14	A	802	CLA	CHC-C1C	3.23	1.43	1.35
14	A	819	CLA	CHC-C1C	3.23	1.43	1.35
14	J	102	CLA	CHC-C1C	3.21	1.43	1.35
14	A	833	CLA	C4D-ND	-3.20	1.33	1.37
14	A	813	CLA	CHC-C1C	3.20	1.43	1.35
14	A	813	CLA	C4D-ND	-3.18	1.33	1.37
14	X	1701	CLA	CHC-C1C	3.18	1.43	1.35
16	I	101	BCR	C30-C25	-3.18	1.49	1.53
14	A	821	CLA	CHC-C1C	3.18	1.43	1.35
14	A	842	CLA	CHC-C1C	3.16	1.43	1.35
14	A	840	CLA	CHC-C1C	3.16	1.43	1.35
14	M	102	CLA	CHC-C1C	3.16	1.43	1.35
14	B	810	CLA	CHC-C1C	3.16	1.43	1.35
14	L	206	CLA	C4D-ND	-3.16	1.33	1.37
14	B	833	CLA	C4D-ND	-3.15	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	A	811	CLA	CHC-C1C	3.15	1.43	1.35
14	A	830	CLA	C4D-ND	-3.15	1.33	1.37
14	A	842	CLA	C4D-ND	-3.15	1.33	1.37
14	A	803	CLA	CHC-C1C	3.15	1.43	1.35
14	B	840	CLA	C4D-ND	-3.15	1.33	1.37
14	B	828	CLA	CHC-C1C	3.14	1.43	1.35
14	B	833	CLA	CHC-C1C	3.14	1.43	1.35
14	A	831	CLA	CMB-C2B	-3.14	1.45	1.51
14	A	837	CLA	CHC-C1C	3.14	1.43	1.35
14	B	831	CLA	C4D-ND	-3.13	1.33	1.37
14	B	839	CLA	C4D-ND	-3.13	1.33	1.37
14	B	806	CLA	CHC-C1C	3.13	1.43	1.35
14	B	824	CLA	CHC-C1C	3.13	1.43	1.35
14	A	841	CLA	CHC-C1C	3.12	1.43	1.35
14	B	841	CLA	CHC-C1C	3.12	1.43	1.35
14	F	201	CLA	CHC-C1C	3.12	1.43	1.35
16	B	853	BCR	C30-C25	-3.12	1.49	1.53
14	B	826	CLA	CHC-C1C	3.12	1.43	1.35
14	K	102	CLA	CHC-C1C	3.11	1.42	1.35
14	J	101	CLA	CHC-C1C	3.11	1.42	1.35
14	A	812	CLA	C4D-ND	-3.11	1.33	1.37
14	A	827	CLA	C4D-ND	-3.11	1.33	1.37
14	A	836	CLA	C4D-ND	-3.11	1.33	1.37
14	B	813	CLA	C4D-ND	-3.11	1.33	1.37
14	A	814	CLA	CHC-C1C	3.10	1.42	1.35
14	A	828	CLA	CHC-C1C	3.10	1.42	1.35
14	B	807	CLA	C4D-ND	-3.10	1.33	1.37
14	A	831	CLA	C4D-ND	-3.10	1.33	1.37
14	A	826	CLA	C4D-ND	-3.10	1.33	1.37
14	B	827	CLA	C4D-ND	-3.10	1.33	1.37
14	B	823	CLA	CHC-C1C	3.09	1.42	1.35
14	B	829	CLA	CHC-C1C	3.09	1.42	1.35
14	A	822	CLA	C4D-ND	-3.09	1.33	1.37
14	A	816	CLA	C4D-ND	-3.09	1.33	1.37
14	A	828	CLA	C4D-ND	-3.09	1.33	1.37
14	K	102	CLA	C4D-ND	-3.09	1.33	1.37
14	B	832	CLA	CHC-C1C	3.09	1.42	1.35
14	A	818	CLA	C4D-ND	-3.09	1.33	1.37
14	B	820	CLA	C4D-ND	-3.09	1.33	1.37
14	A	832	CLA	C4D-ND	-3.09	1.33	1.37
14	L	201	CLA	C4D-ND	-3.09	1.33	1.37
14	B	820	CLA	CHC-C1C	3.09	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	B	838	CLA	CHC-C1C	3.09	1.42	1.35
14	A	806	CLA	C4D-ND	-3.09	1.33	1.37
14	B	822	CLA	CHC-C1C	3.08	1.42	1.35
16	A	846	BCR	C30-C25	-3.08	1.49	1.53
14	B	834	CLA	CHC-C1C	3.08	1.42	1.35
14	L	205	CLA	CHC-C1C	3.08	1.42	1.35
14	B	838	CLA	C4D-ND	-3.08	1.33	1.37
14	A	805	CLA	CHC-C1C	3.08	1.42	1.35
16	A	849	BCR	C30-C25	-3.08	1.49	1.53
14	B	840	CLA	CHC-C1C	3.08	1.42	1.35
14	B	814	CLA	CHC-C1C	3.08	1.42	1.35
14	A	815	CLA	CHC-C1C	3.08	1.42	1.35
14	B	837	CLA	CHC-C1C	3.08	1.42	1.35
14	B	812	CLA	C4D-ND	-3.07	1.33	1.37
14	A	843	CLA	CHC-C1C	3.07	1.42	1.35
14	B	842	CLA	C4D-ND	-3.07	1.33	1.37
14	B	813	CLA	CHC-C1C	3.07	1.42	1.35
14	B	825	CLA	CHC-C1C	3.07	1.42	1.35
14	B	828	CLA	C4D-ND	-3.07	1.33	1.37
14	B	809	CLA	CHC-C1C	3.07	1.42	1.35
14	B	821	CLA	CHC-C1C	3.07	1.42	1.35
16	L	207	BCR	C30-C25	-3.07	1.49	1.53
14	B	806	CLA	C4D-ND	-3.07	1.33	1.37
14	L	204	CLA	CHC-C1C	3.07	1.42	1.35
14	B	804	CLA	CHC-C1C	3.07	1.42	1.35
14	A	840	CLA	C4D-ND	-3.06	1.33	1.37
14	F	203	CLA	CHC-C1C	3.06	1.42	1.35
14	A	810	CLA	C4D-ND	-3.06	1.33	1.37
14	A	809	CLA	CHC-C1C	3.06	1.42	1.35
14	B	818	CLA	C4D-ND	-3.06	1.33	1.37
14	B	819	CLA	C4D-ND	-3.06	1.33	1.37
14	K	101	CLA	CHC-C1C	3.06	1.42	1.35
14	A	819	CLA	C4D-ND	-3.06	1.33	1.37
14	A	824	CLA	CHC-C1C	3.06	1.42	1.35
14	A	804	CLA	C4D-ND	-3.05	1.33	1.37
14	A	808	CLA	CHC-C1C	3.05	1.42	1.35
14	A	823	CLA	C4D-ND	-3.05	1.33	1.37
14	B	815	CLA	CHC-C1C	3.05	1.42	1.35
14	L	206	CLA	CHC-C1C	3.05	1.42	1.35
14	A	838	CLA	C4D-ND	-3.05	1.33	1.37
14	A	820	CLA	C4D-ND	-3.05	1.33	1.37
14	B	808	CLA	C4D-ND	-3.05	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	A	812	CLA	CHC-C1C	3.05	1.42	1.35
14	B	842	CLA	CHC-C1C	3.05	1.42	1.35
14	A	826	CLA	CHC-C1C	3.05	1.42	1.35
16	A	848	BCR	C30-C25	-3.05	1.49	1.53
14	B	814	CLA	C4D-ND	-3.05	1.33	1.37
14	B	841	CLA	C4D-ND	-3.05	1.33	1.37
14	A	829	CLA	CHC-C1C	3.05	1.42	1.35
14	A	825	CLA	CHC-C1C	3.05	1.42	1.35
14	A	820	CLA	CHC-C1C	3.04	1.42	1.35
14	B	810	CLA	C4D-ND	-3.04	1.33	1.37
14	B	816	CLA	C4D-ND	-3.04	1.33	1.37
14	B	816	CLA	CHC-C1C	3.04	1.42	1.35
14	A	837	CLA	C4D-ND	-3.03	1.33	1.37
14	A	825	CLA	C4D-ND	-3.03	1.33	1.37
14	A	810	CLA	CHC-C1C	3.03	1.42	1.35
14	B	807	CLA	CHC-C1C	3.03	1.42	1.35
14	A	836	CLA	CHC-C1C	3.03	1.42	1.35
14	A	818	CLA	CHC-C1C	3.03	1.42	1.35
13	A	801	CL0	C4D-ND	-3.03	1.33	1.37
14	A	834	CLA	C4D-ND	-3.03	1.33	1.37
14	B	831	CLA	CHC-C1C	3.03	1.42	1.35
14	A	823	CLA	CHC-C1C	3.03	1.42	1.35
14	B	832	CLA	C4D-ND	-3.03	1.33	1.37
16	F	205	BCR	C30-C25	-3.03	1.49	1.53
14	A	808	CLA	C4D-ND	-3.03	1.33	1.37
14	F	204	CLA	CHC-C1C	3.03	1.42	1.35
14	A	817	CLA	CHC-C1C	3.02	1.42	1.35
14	A	839	CLA	CHC-C1C	3.02	1.42	1.35
14	B	822	CLA	C4D-ND	-3.02	1.33	1.37
14	B	834	CLA	C4D-ND	-3.02	1.33	1.37
14	B	815	CLA	C4D-ND	-3.02	1.33	1.37
14	A	815	CLA	C4D-ND	-3.02	1.33	1.37
14	B	829	CLA	C4D-ND	-3.02	1.33	1.37
14	A	827	CLA	CHC-C1C	3.02	1.42	1.35
14	A	833	CLA	CHC-C1C	3.01	1.42	1.35
14	A	809	CLA	C4D-ND	-3.01	1.33	1.37
14	B	808	CLA	CHC-C1C	3.01	1.42	1.35
14	A	832	CLA	CHC-C1C	3.01	1.42	1.35
14	A	807	CLA	C4D-ND	-3.01	1.33	1.37
14	A	829	CLA	C4D-ND	-3.01	1.33	1.37
14	A	814	CLA	C4D-ND	-3.01	1.33	1.37
14	B	827	CLA	CHC-C1C	3.00	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	A	822	CLA	CHC-C1C	3.00	1.42	1.35
14	A	843	CLA	C4D-ND	-3.00	1.33	1.37
14	B	819	CLA	CHC-C1C	2.99	1.42	1.35
14	F	201	CLA	C4D-ND	-2.99	1.33	1.37
14	B	801	CLA	CHC-C1C	2.99	1.42	1.35
14	B	825	CLA	C4D-ND	-2.99	1.33	1.37
14	A	821	CLA	C4D-ND	-2.99	1.33	1.37
14	A	854	CLA	CHC-C1C	2.98	1.42	1.35
14	A	802	CLA	C4D-ND	-2.98	1.33	1.37
14	A	805	CLA	C4D-ND	-2.98	1.33	1.37
14	A	811	CLA	C4D-ND	-2.98	1.33	1.37
14	B	812	CLA	CHC-C1C	2.98	1.42	1.35
14	A	816	CLA	CHC-C1C	2.98	1.42	1.35
14	B	823	CLA	C4D-ND	-2.97	1.33	1.37
14	B	804	CLA	C4D-ND	-2.97	1.33	1.37
14	A	817	CLA	C4D-ND	-2.97	1.33	1.37
14	A	807	CLA	CHC-C1C	2.97	1.42	1.35
14	A	835	CLA	CHC-C1C	2.97	1.42	1.35
14	B	835	CLA	CHC-C1C	2.97	1.42	1.35
14	B	809	CLA	C4D-ND	-2.97	1.33	1.37
14	B	811	CLA	C4D-ND	-2.97	1.33	1.37
14	B	824	CLA	C4D-ND	-2.97	1.33	1.37
14	B	818	CLA	CHC-C1C	2.97	1.42	1.35
14	F	203	CLA	C4D-ND	-2.97	1.33	1.37
14	A	839	CLA	C4D-ND	-2.97	1.33	1.37
14	A	830	CLA	CHC-C1C	2.97	1.42	1.35
14	B	830	CLA	C4D-ND	-2.96	1.33	1.37
13	A	801	CL0	CHC-C1C	2.96	1.42	1.35
14	A	838	CLA	CHC-C1C	2.96	1.42	1.35
14	A	824	CLA	C4D-ND	-2.95	1.33	1.37
14	L	204	CLA	C4D-ND	-2.95	1.33	1.37
14	K	101	CLA	C4D-ND	-2.95	1.33	1.37
14	B	839	CLA	CHC-C1C	2.94	1.42	1.35
14	A	834	CLA	CHC-C1C	2.93	1.42	1.35
16	J	103	BCR	C30-C25	-2.93	1.49	1.53
16	A	850	BCR	C30-C25	-2.93	1.49	1.53
14	B	811	CLA	CHC-C1C	2.93	1.42	1.35
14	A	835	CLA	C4D-ND	-2.92	1.33	1.37
14	B	801	CLA	C4D-ND	-2.92	1.33	1.37
14	J	102	CLA	C4D-ND	-2.91	1.33	1.37
14	B	805	CLA	C4D-ND	-2.91	1.33	1.37
14	F	204	CLA	C4D-ND	-2.91	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	B	836	CLA	C4D-ND	-2.91	1.33	1.37
14	M	102	CLA	C4D-ND	-2.90	1.33	1.37
14	A	806	CLA	CHC-C1C	2.89	1.42	1.35
14	B	830	CLA	CHC-C1C	2.89	1.42	1.35
14	A	854	CLA	C4D-ND	-2.88	1.33	1.37
14	B	830	CLA	CMB-C2B	-2.87	1.45	1.51
14	B	805	CLA	CHC-C1C	2.87	1.42	1.35
14	B	821	CLA	C4D-ND	-2.87	1.33	1.37
14	A	804	CLA	CHC-C1C	2.85	1.42	1.35
16	B	845	BCR	C30-C25	-2.85	1.49	1.53
14	A	841	CLA	C4D-ND	-2.84	1.33	1.37
14	B	817	CLA	C4D-ND	-2.84	1.33	1.37
16	A	847	BCR	C30-C25	-2.83	1.49	1.53
14	B	837	CLA	C4D-ND	-2.82	1.33	1.37
14	J	101	CLA	C4D-ND	-2.81	1.33	1.37
14	A	831	CLA	CHC-C1C	2.80	1.42	1.35
14	A	832	CLA	CMB-C2B	-2.79	1.45	1.51
14	A	836	CLA	CMB-C2B	-2.78	1.45	1.51
16	A	845	BCR	C30-C25	-2.78	1.49	1.53
14	L	201	CLA	CHC-C1C	2.78	1.42	1.35
14	X	1701	CLA	C4D-ND	-2.77	1.33	1.37
14	B	811	CLA	CMB-C2B	-2.76	1.45	1.51
14	B	835	CLA	C4D-ND	-2.75	1.33	1.37
14	B	812	CLA	CMB-C2B	-2.73	1.46	1.51
14	A	822	CLA	CMB-C2B	-2.72	1.46	1.51
14	B	810	CLA	CMB-C2B	-2.71	1.46	1.51
14	B	831	CLA	CMB-C2B	-2.69	1.46	1.51
14	B	819	CLA	CMB-C2B	-2.67	1.46	1.51
14	A	809	CLA	CMB-C2B	-2.67	1.46	1.51
14	B	829	CLA	CMB-C2B	-2.66	1.46	1.51
14	B	820	CLA	CMB-C2B	-2.66	1.46	1.51
14	A	805	CLA	CMB-C2B	-2.65	1.46	1.51
14	A	817	CLA	CMB-C2B	-2.65	1.46	1.51
14	A	810	CLA	CMB-C2B	-2.64	1.46	1.51
14	B	835	CLA	CMB-C2B	-2.64	1.46	1.51
17	B	851	LHG	O7-C5	-2.64	1.40	1.46
14	B	842	CLA	CMB-C2B	-2.64	1.46	1.51
14	A	813	CLA	CMB-C2B	-2.63	1.46	1.51
14	A	819	CLA	CMB-C2B	-2.63	1.46	1.51
14	A	828	CLA	CMB-C2B	-2.63	1.46	1.51
14	A	830	CLA	CMB-C2B	-2.62	1.46	1.51
14	L	204	CLA	CMB-C2B	-2.61	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	B	838	CLA	CMB-C2B	-2.61	1.46	1.51
14	B	817	CLA	CMB-C2B	-2.59	1.46	1.51
14	A	811	CLA	CMB-C2B	-2.59	1.46	1.51
14	A	838	CLA	CMB-C2B	-2.59	1.46	1.51
14	A	806	CLA	CMB-C2B	-2.59	1.46	1.51
14	A	842	CLA	CMB-C2B	-2.58	1.46	1.51
14	B	822	CLA	CMB-C2B	-2.57	1.46	1.51
14	A	816	CLA	CMB-C2B	-2.57	1.46	1.51
14	A	826	CLA	CMB-C2B	-2.55	1.46	1.51
14	A	824	CLA	CMB-C2B	-2.55	1.46	1.51
14	B	836	CLA	CMB-C2B	-2.55	1.46	1.51
14	A	823	CLA	CMB-C2B	-2.55	1.46	1.51
14	B	839	CLA	CMB-C2B	-2.54	1.46	1.51
14	B	807	CLA	CMB-C2B	-2.54	1.46	1.51
14	A	820	CLA	CMB-C2B	-2.54	1.46	1.51
14	A	803	CLA	CMB-C2B	-2.53	1.46	1.51
14	A	818	CLA	CMB-C2B	-2.53	1.46	1.51
14	B	801	CLA	CMB-C2B	-2.53	1.46	1.51
14	B	815	CLA	CMB-C2B	-2.53	1.46	1.51
14	B	828	CLA	CMB-C2B	-2.52	1.46	1.51
14	A	834	CLA	CMB-C2B	-2.52	1.46	1.51
14	K	101	CLA	CMB-C2B	-2.51	1.46	1.51
14	A	804	CLA	CMB-C2B	-2.51	1.46	1.51
14	B	809	CLA	CMB-C2B	-2.51	1.46	1.51
14	B	834	CLA	CMB-C2B	-2.51	1.46	1.51
14	B	818	CLA	CMB-C2B	-2.50	1.46	1.51
14	B	805	CLA	CMB-C2B	-2.50	1.46	1.51
14	B	826	CLA	CMB-C2B	-2.50	1.46	1.51
14	L	201	CLA	CMB-C2B	-2.50	1.46	1.51
14	B	837	CLA	CMB-C2B	-2.50	1.46	1.51
14	A	814	CLA	CMB-C2B	-2.49	1.46	1.51
14	A	827	CLA	CMB-C2B	-2.49	1.46	1.51
14	A	837	CLA	CMB-C2B	-2.49	1.46	1.51
14	A	829	CLA	CMB-C2B	-2.48	1.46	1.51
14	A	840	CLA	CMB-C2B	-2.48	1.46	1.51
14	B	804	CLA	CMB-C2B	-2.48	1.46	1.51
14	A	812	CLA	CMB-C2B	-2.48	1.46	1.51
13	A	801	CL0	CMB-C2B	-2.47	1.46	1.51
14	B	813	CLA	CMB-C2B	-2.47	1.46	1.51
14	F	201	CLA	CMB-C2B	-2.47	1.46	1.51
14	B	821	CLA	CMB-C2B	-2.47	1.46	1.51
14	B	816	CLA	CMB-C2B	-2.47	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	A	839	CLA	CMB-C2B	-2.46	1.46	1.51
14	A	830	CLA	CMD-C2D	-2.46	1.45	1.50
14	B	814	CLA	CMB-C2B	-2.46	1.46	1.51
14	B	832	CLA	CMB-C2B	-2.46	1.46	1.51
14	L	206	CLA	CMB-C2B	-2.45	1.46	1.51
14	B	806	CLA	CMB-C2B	-2.45	1.46	1.51
17	A	852	LHG	O7-C5	-2.45	1.40	1.46
14	A	854	CLA	CMB-C2B	-2.44	1.46	1.51
14	B	840	CLA	CMB-C2B	-2.44	1.46	1.51
14	B	841	CLA	CMB-C2B	-2.44	1.46	1.51
14	B	823	CLA	CMB-C2B	-2.44	1.46	1.51
14	B	833	CLA	CMB-C2B	-2.44	1.46	1.51
14	B	808	CLA	CMB-C2B	-2.44	1.46	1.51
14	A	807	CLA	CMB-C2B	-2.44	1.46	1.51
17	A	853	LHG	O7-C5	-2.43	1.40	1.46
14	A	843	CLA	CMB-C2B	-2.43	1.46	1.51
14	X	1701	CLA	CMB-C2B	-2.43	1.46	1.51
14	J	101	CLA	CMB-C2B	-2.42	1.46	1.51
14	A	803	CLA	C3B-C2B	-2.42	1.37	1.40
14	A	825	CLA	CMB-C2B	-2.40	1.46	1.51
14	F	204	CLA	CMB-C2B	-2.40	1.46	1.51
14	B	829	CLA	CMD-C2D	-2.40	1.45	1.50
14	A	802	CLA	CMB-C2B	-2.40	1.46	1.51
14	M	102	CLA	CMB-C2B	-2.39	1.46	1.51
14	A	826	CLA	CMD-C2D	-2.39	1.45	1.50
14	B	825	CLA	CMB-C2B	-2.39	1.46	1.51
14	K	102	CLA	CMB-C2B	-2.38	1.46	1.51
14	L	205	CLA	CMB-C2B	-2.37	1.46	1.51
14	A	815	CLA	CMB-C2B	-2.37	1.46	1.51
14	F	203	CLA	CMB-C2B	-2.36	1.46	1.51
14	J	102	CLA	CMB-C2B	-2.36	1.46	1.51
14	A	814	CLA	CMC-C2C	-2.36	1.45	1.50
14	B	827	CLA	CMB-C2B	-2.36	1.46	1.51
14	A	841	CLA	CMB-C2B	-2.36	1.46	1.51
14	B	804	CLA	CMD-C2D	-2.35	1.45	1.50
14	B	830	CLA	CMD-C2D	-2.35	1.45	1.50
14	A	813	CLA	C3B-C2B	-2.35	1.37	1.40
14	A	833	CLA	CMB-C2B	-2.34	1.46	1.51
14	A	808	CLA	CMB-C2B	-2.34	1.46	1.51
14	A	816	CLA	CMD-C2D	-2.34	1.45	1.50
14	A	835	CLA	CMB-C2B	-2.34	1.46	1.51
14	A	803	CLA	CMC-C2C	-2.34	1.45	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	A	831	CLA	CMD-C2D	-2.32	1.45	1.50
14	B	824	CLA	CMB-C2B	-2.32	1.46	1.51
14	B	821	CLA	CMD-C2D	-2.31	1.45	1.50
14	A	821	CLA	CMB-C2B	-2.31	1.46	1.51
14	A	810	CLA	CMD-C2D	-2.30	1.45	1.50
14	A	836	CLA	C3B-C2B	-2.29	1.37	1.40
14	A	832	CLA	CMD-C2D	-2.29	1.46	1.50
14	A	842	CLA	CMC-C2C	-2.28	1.46	1.50
14	A	822	CLA	CMD-C2D	-2.28	1.46	1.50
14	B	810	CLA	CMC-C2C	-2.27	1.46	1.50
14	B	809	CLA	CMD-C2D	-2.26	1.46	1.50
13	A	801	CL0	CMD-C2D	-2.25	1.46	1.50
14	B	810	CLA	CMD-C2D	-2.25	1.46	1.50
14	B	801	CLA	CMD-C2D	-2.25	1.46	1.50
14	B	815	CLA	CMD-C2D	-2.25	1.46	1.50
14	A	819	CLA	C3B-C2B	-2.24	1.37	1.40
16	I	103	BCR	C30-C25	-2.22	1.50	1.53
14	B	825	CLA	CMD-C2D	-2.22	1.46	1.50
14	A	840	CLA	CMD-C2D	-2.21	1.46	1.50
14	B	827	CLA	CMD-C2D	-2.20	1.46	1.50
14	A	842	CLA	CMD-C2D	-2.20	1.46	1.50
14	A	815	CLA	CMC-C2C	-2.20	1.46	1.50
14	A	824	CLA	C3B-C2B	-2.20	1.37	1.40
14	A	818	CLA	CMD-C2D	-2.20	1.46	1.50
14	A	819	CLA	CMD-C2D	-2.20	1.46	1.50
14	A	820	CLA	CMD-C2D	-2.20	1.46	1.50
14	A	807	CLA	CMD-C2D	-2.19	1.46	1.50
14	A	814	CLA	CMD-C2D	-2.19	1.46	1.50
14	B	835	CLA	CMD-C2D	-2.19	1.46	1.50
14	J	101	CLA	CMD-C2D	-2.19	1.46	1.50
14	A	806	CLA	CMD-C2D	-2.18	1.46	1.50
14	B	819	CLA	CMD-C2D	-2.18	1.46	1.50
14	B	840	CLA	C3B-C2B	-2.18	1.37	1.40
14	A	812	CLA	CMC-C2C	-2.18	1.46	1.50
14	A	836	CLA	CMD-C2D	-2.18	1.46	1.50
14	A	838	CLA	CMD-C2D	-2.17	1.46	1.50
14	F	201	CLA	CMD-C2D	-2.17	1.46	1.50
14	A	820	CLA	CMC-C2C	-2.17	1.46	1.50
14	A	834	CLA	CMD-C2D	-2.17	1.46	1.50
14	A	839	CLA	CMD-C2D	-2.17	1.46	1.50
14	B	807	CLA	CMD-C2D	-2.17	1.46	1.50
14	A	835	CLA	CMD-C2D	-2.16	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	A	815	CLA	CMD-C2D	-2.16	1.46	1.50
14	A	804	CLA	CMD-C2D	-2.16	1.46	1.50
14	A	841	CLA	CMD-C2D	-2.16	1.46	1.50
14	A	821	CLA	CMD-C2D	-2.16	1.46	1.50
14	B	804	CLA	CMC-C2C	-2.16	1.46	1.50
14	A	802	CLA	CMD-C2D	-2.16	1.46	1.50
14	F	204	CLA	CMD-C2D	-2.16	1.46	1.50
14	B	836	CLA	C3B-C2B	-2.16	1.37	1.40
14	B	841	CLA	CMD-C2D	-2.16	1.46	1.50
14	B	842	CLA	C3B-C2B	-2.16	1.37	1.40
14	B	836	CLA	CMD-C2D	-2.16	1.46	1.50
14	A	829	CLA	CMD-C2D	-2.16	1.46	1.50
14	B	813	CLA	CMD-C2D	-2.16	1.46	1.50
14	A	827	CLA	CMD-C2D	-2.16	1.46	1.50
14	B	838	CLA	CMD-C2D	-2.16	1.46	1.50
14	L	204	CLA	CMD-C2D	-2.16	1.46	1.50
14	J	102	CLA	CBD-CAD	2.15	1.56	1.51
14	L	205	CLA	CMD-C2D	-2.15	1.46	1.50
14	M	102	CLA	CBD-CAD	2.14	1.56	1.51
14	A	833	CLA	CMD-C2D	-2.14	1.46	1.50
14	B	816	CLA	CMD-C2D	-2.14	1.46	1.50
14	A	803	CLA	CMD-C2D	-2.14	1.46	1.50
14	B	842	CLA	CMD-C2D	-2.14	1.46	1.50
14	B	811	CLA	C3B-C2B	-2.14	1.37	1.40
14	B	810	CLA	C3B-C2B	-2.14	1.37	1.40
14	B	814	CLA	CMC-C2C	-2.14	1.46	1.50
14	A	813	CLA	CMD-C2D	-2.14	1.46	1.50
14	A	819	CLA	CMC-C2C	-2.13	1.46	1.50
14	B	833	CLA	CMD-C2D	-2.13	1.46	1.50
14	A	854	CLA	CMD-C2D	-2.13	1.46	1.50
14	B	806	CLA	CMD-C2D	-2.13	1.46	1.50
14	A	805	CLA	CMD-C2D	-2.13	1.46	1.50
14	B	826	CLA	CMD-C2D	-2.13	1.46	1.50
14	B	805	CLA	CMD-C2D	-2.13	1.46	1.50
14	L	201	CLA	CMD-C2D	-2.13	1.46	1.50
14	B	806	CLA	CMC-C2C	-2.13	1.46	1.50
14	A	812	CLA	CMD-C2D	-2.12	1.46	1.50
14	B	817	CLA	CMD-C2D	-2.12	1.46	1.50
14	L	201	CLA	CMC-C2C	-2.12	1.46	1.50
14	A	836	CLA	C3B-CAB	-2.12	1.43	1.47
14	A	822	CLA	CMC-C2C	-2.12	1.46	1.50
14	L	206	CLA	CMD-C2D	-2.12	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	B	814	CLA	CMD-C2D	-2.12	1.46	1.50
14	B	811	CLA	CMD-C2D	-2.11	1.46	1.50
14	A	808	CLA	CMD-C2D	-2.11	1.46	1.50
14	B	804	CLA	C3B-CAB	-2.11	1.43	1.47
14	B	805	CLA	CMC-C2C	-2.11	1.46	1.50
14	B	826	CLA	CMC-C2C	-2.11	1.46	1.50
14	B	813	CLA	CMC-C2C	-2.11	1.46	1.50
14	B	825	CLA	CMC-C2C	-2.10	1.46	1.50
14	B	822	CLA	CMD-C2D	-2.10	1.46	1.50
14	L	204	CLA	C3B-C2B	-2.10	1.37	1.40
14	A	809	CLA	CMD-C2D	-2.10	1.46	1.50
14	B	808	CLA	CMC-C2C	-2.10	1.46	1.50
14	A	811	CLA	CMD-C2D	-2.10	1.46	1.50
14	A	828	CLA	CMD-C2D	-2.10	1.46	1.50
14	B	834	CLA	CMD-C2D	-2.10	1.46	1.50
14	B	832	CLA	CMD-C2D	-2.10	1.46	1.50
14	A	836	CLA	CMC-C2C	-2.10	1.46	1.50
14	B	823	CLA	CMD-C2D	-2.10	1.46	1.50
14	B	828	CLA	CMC-C2C	-2.09	1.46	1.50
14	B	838	CLA	CMC-C2C	-2.09	1.46	1.50
14	K	101	CLA	CMD-C2D	-2.09	1.46	1.50
14	A	835	CLA	CMC-C2C	-2.09	1.46	1.50
14	B	820	CLA	CMD-C2D	-2.09	1.46	1.50
14	A	824	CLA	CMD-C2D	-2.09	1.46	1.50
14	B	818	CLA	CMD-C2D	-2.09	1.46	1.50
14	A	843	CLA	CMC-C2C	-2.09	1.46	1.50
14	B	828	CLA	C3B-C2B	-2.09	1.37	1.40
14	B	840	CLA	CMC-C2C	-2.08	1.46	1.50
14	A	839	CLA	C3B-CAB	-2.08	1.43	1.47
14	A	843	CLA	CMD-C2D	-2.08	1.46	1.50
14	B	840	CLA	CMD-C2D	-2.08	1.46	1.50
14	F	203	CLA	CMD-C2D	-2.07	1.46	1.50
14	A	811	CLA	C3B-C2B	-2.07	1.37	1.40
16	I	101	BCR	C33-C5	-2.07	1.47	1.50
14	B	839	CLA	CMD-C2D	-2.07	1.46	1.50
14	A	832	CLA	C3B-CAB	-2.07	1.43	1.47
16	J	103	BCR	C33-C5	-2.07	1.47	1.50
14	B	831	CLA	CMD-C2D	-2.06	1.46	1.50
14	A	823	CLA	CMD-C2D	-2.06	1.46	1.50
14	B	812	CLA	CMC-C2C	-2.06	1.46	1.50
14	B	833	CLA	CMC-C2C	-2.06	1.46	1.50
14	A	828	CLA	CMC-C2C	-2.06	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	A	808	CLA	CMC-C2C	-2.06	1.46	1.50
14	A	817	CLA	CMD-C2D	-2.06	1.46	1.50
14	B	820	CLA	CMC-C2C	-2.06	1.46	1.50
14	B	842	CLA	CMC-C2C	-2.05	1.46	1.50
14	B	808	CLA	CMD-C2D	-2.05	1.46	1.50
14	B	829	CLA	C3B-C2B	-2.05	1.37	1.40
14	A	831	CLA	CMC-C2C	-2.05	1.46	1.50
14	B	827	CLA	CMC-C2C	-2.05	1.46	1.50
14	A	829	CLA	CMC-C2C	-2.05	1.46	1.50
14	A	832	CLA	CMC-C2C	-2.05	1.46	1.50
14	A	816	CLA	CMC-C2C	-2.05	1.46	1.50
14	B	838	CLA	C3B-C2B	-2.05	1.37	1.40
14	A	806	CLA	CMC-C2C	-2.04	1.46	1.50
14	B	835	CLA	CMC-C2C	-2.04	1.46	1.50
14	B	807	CLA	CMC-C2C	-2.04	1.46	1.50
14	A	854	CLA	CMC-C2C	-2.04	1.46	1.50
14	B	839	CLA	CMC-C2C	-2.04	1.46	1.50
14	A	830	CLA	CMC-C2C	-2.04	1.46	1.50
14	B	816	CLA	CMC-C2C	-2.04	1.46	1.50
14	B	829	CLA	CMC-C2C	-2.03	1.46	1.50
16	A	847	BCR	C33-C5	-2.03	1.47	1.50
14	B	806	CLA	C3B-CAB	-2.03	1.43	1.47
14	A	813	CLA	CMC-C2C	-2.03	1.46	1.50
14	B	837	CLA	CMD-C2D	-2.03	1.46	1.50
14	B	812	CLA	CMD-C2D	-2.03	1.46	1.50
14	X	1701	CLA	CMD-C2D	-2.02	1.46	1.50
14	L	206	CLA	CMC-C2C	-2.02	1.46	1.50
16	A	847	BCR	C38-C26	-2.02	1.47	1.50
14	B	801	CLA	CMC-C2C	-2.02	1.46	1.50
14	B	826	CLA	C3B-C2B	-2.02	1.37	1.40
14	A	825	CLA	CMD-C2D	-2.02	1.46	1.50
14	F	203	CLA	CMC-C2C	-2.02	1.46	1.50
14	A	832	CLA	C3B-C2B	-2.02	1.37	1.40
14	A	830	CLA	C3B-CAB	-2.01	1.43	1.47
14	A	819	CLA	C3B-CAB	-2.01	1.43	1.47
16	B	845	BCR	C33-C5	-2.01	1.47	1.50
14	B	834	CLA	CMC-C2C	-2.01	1.46	1.50
14	M	102	CLA	CMD-C2D	-2.01	1.46	1.50
14	A	833	CLA	CMC-C2C	-2.01	1.46	1.50
14	A	818	CLA	CMC-C2C	-2.01	1.46	1.50
14	A	810	CLA	CMC-C2C	-2.00	1.46	1.50
14	A	837	CLA	CMD-C2D	-2.00	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	B	809	CLA	CMC-C2C	-2.00	1.46	1.50
14	A	806	CLA	C3B-CAB	-2.00	1.43	1.47

All (923) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	A	835	CLA	C4A-NA-C1A	7.46	110.06	106.71
14	L	201	CLA	C4A-NA-C1A	7.34	110.01	106.71
14	B	805	CLA	C4A-NA-C1A	7.06	109.88	106.71
14	A	837	CLA	C4A-NA-C1A	6.98	109.85	106.71
14	B	839	CLA	C4A-NA-C1A	6.97	109.84	106.71
14	B	801	CLA	C4A-NA-C1A	6.96	109.83	106.71
14	A	831	CLA	C4A-NA-C1A	6.91	109.81	106.71
14	A	816	CLA	C4A-NA-C1A	6.90	109.81	106.71
14	B	804	CLA	C4A-NA-C1A	6.88	109.80	106.71
14	A	841	CLA	C4A-NA-C1A	6.88	109.80	106.71
14	B	806	CLA	C4A-NA-C1A	6.87	109.80	106.71
14	B	837	CLA	C4A-NA-C1A	6.86	109.79	106.71
14	A	817	CLA	C4A-NA-C1A	6.85	109.79	106.71
14	A	843	CLA	C4A-NA-C1A	6.78	109.75	106.71
14	A	804	CLA	C4A-NA-C1A	6.77	109.75	106.71
13	A	801	CL0	C4A-NA-C1A	6.77	109.75	106.71
14	F	203	CLA	C4A-NA-C1A	6.77	109.75	106.71
14	B	835	CLA	C4A-NA-C1A	6.75	109.74	106.71
14	A	834	CLA	C4A-NA-C1A	6.75	109.74	106.71
14	A	809	CLA	C4A-NA-C1A	6.74	109.73	106.71
14	B	838	CLA	C4A-NA-C1A	6.71	109.72	106.71
14	B	808	CLA	C4A-NA-C1A	6.69	109.71	106.71
14	A	842	CLA	C4A-NA-C1A	6.65	109.69	106.71
14	A	828	CLA	C4A-NA-C1A	6.64	109.69	106.71
14	B	816	CLA	C4A-NA-C1A	6.63	109.69	106.71
14	A	827	CLA	C4A-NA-C1A	6.62	109.68	106.71
14	B	811	CLA	C4A-NA-C1A	6.61	109.68	106.71
14	A	806	CLA	C4A-NA-C1A	6.61	109.68	106.71
14	L	205	CLA	C4A-NA-C1A	6.61	109.68	106.71
14	A	810	CLA	C4A-NA-C1A	6.60	109.67	106.71
14	B	820	CLA	C4A-NA-C1A	6.60	109.67	106.71
14	A	815	CLA	C4A-NA-C1A	6.60	109.67	106.71
14	B	842	CLA	C4A-NA-C1A	6.59	109.67	106.71
14	A	812	CLA	C4A-NA-C1A	6.59	109.67	106.71
14	B	841	CLA	C4A-NA-C1A	6.58	109.67	106.71
14	B	813	CLA	C4A-NA-C1A	6.58	109.67	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	A	807	CLA	C4A-NA-C1A	6.58	109.66	106.71
14	B	822	CLA	C4A-NA-C1A	6.57	109.66	106.71
14	B	823	CLA	C4A-NA-C1A	6.56	109.65	106.71
14	B	818	CLA	C4A-NA-C1A	6.55	109.65	106.71
14	B	809	CLA	C4A-NA-C1A	6.53	109.64	106.71
14	B	815	CLA	C4A-NA-C1A	6.52	109.64	106.71
14	A	820	CLA	C4A-NA-C1A	6.52	109.64	106.71
14	J	101	CLA	C4A-NA-C1A	6.52	109.64	106.71
14	B	807	CLA	C4A-NA-C1A	6.51	109.63	106.71
14	A	823	CLA	C4A-NA-C1A	6.50	109.63	106.71
14	B	833	CLA	C4A-NA-C1A	6.50	109.63	106.71
14	A	802	CLA	C4A-NA-C1A	6.49	109.62	106.71
14	A	836	CLA	C4A-NA-C1A	6.48	109.62	106.71
14	A	818	CLA	C4A-NA-C1A	6.46	109.61	106.71
14	B	824	CLA	C4A-NA-C1A	6.46	109.61	106.71
14	B	834	CLA	C4A-NA-C1A	6.45	109.61	106.71
14	A	838	CLA	C4A-NA-C1A	6.45	109.61	106.71
14	A	805	CLA	C4A-NA-C1A	6.44	109.60	106.71
14	A	840	CLA	C4A-NA-C1A	6.43	109.60	106.71
14	A	825	CLA	C4A-NA-C1A	6.43	109.59	106.71
14	K	101	CLA	C4A-NA-C1A	6.42	109.59	106.71
14	B	840	CLA	C4A-NA-C1A	6.42	109.59	106.71
14	A	839	CLA	C4A-NA-C1A	6.41	109.59	106.71
14	A	814	CLA	C4A-NA-C1A	6.39	109.58	106.71
14	B	812	CLA	C4A-NA-C1A	6.38	109.58	106.71
14	A	854	CLA	C4A-NA-C1A	6.37	109.57	106.71
14	B	830	CLA	C4A-NA-C1A	6.33	109.55	106.71
14	A	808	CLA	C4A-NA-C1A	6.31	109.55	106.71
14	M	102	CLA	C4A-NA-C1A	6.31	109.54	106.71
14	A	832	CLA	C4A-NA-C1A	6.27	109.53	106.71
14	F	201	CLA	C4A-NA-C1A	6.27	109.52	106.71
14	B	827	CLA	C4A-NA-C1A	6.25	109.52	106.71
14	A	822	CLA	C4A-NA-C1A	6.24	109.51	106.71
14	B	832	CLA	C4A-NA-C1A	6.24	109.51	106.71
14	F	204	CLA	C4A-NA-C1A	6.24	109.51	106.71
14	K	102	CLA	C4A-NA-C1A	6.22	109.50	106.71
14	L	206	CLA	C4A-NA-C1A	6.22	109.50	106.71
14	B	826	CLA	C4A-NA-C1A	6.21	109.50	106.71
14	A	826	CLA	C4A-NA-C1A	6.21	109.50	106.71
14	A	829	CLA	C4A-NA-C1A	6.20	109.49	106.71
14	A	833	CLA	C4A-NA-C1A	6.19	109.49	106.71
14	B	825	CLA	C4A-NA-C1A	6.19	109.49	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	A	830	CLA	C4A-NA-C1A	6.18	109.49	106.71
14	B	821	CLA	C4A-NA-C1A	6.18	109.48	106.71
14	J	102	CLA	C4A-NA-C1A	6.15	109.47	106.71
14	B	831	CLA	C4A-NA-C1A	6.13	109.46	106.71
14	A	824	CLA	C4A-NA-C1A	6.12	109.46	106.71
14	A	821	CLA	C4A-NA-C1A	6.11	109.45	106.71
14	B	829	CLA	C4A-NA-C1A	6.10	109.45	106.71
14	B	836	CLA	C4A-NA-C1A	6.10	109.45	106.71
14	B	819	CLA	C4A-NA-C1A	6.09	109.44	106.71
14	B	814	CLA	C4A-NA-C1A	6.09	109.44	106.71
14	B	810	CLA	C4A-NA-C1A	6.02	109.41	106.71
14	X	1701	CLA	C4A-NA-C1A	6.02	109.41	106.71
14	A	811	CLA	C4A-NA-C1A	5.97	109.39	106.71
14	B	828	CLA	C4A-NA-C1A	5.90	109.36	106.71
14	B	817	CLA	C4A-NA-C1A	5.90	109.36	106.71
14	A	813	CLA	C4A-NA-C1A	5.79	109.31	106.71
14	L	204	CLA	C4A-NA-C1A	5.77	109.30	106.71
14	A	803	CLA	C4A-NA-C1A	5.66	109.25	106.71
14	A	819	CLA	C4A-NA-C1A	5.66	109.25	106.71
14	L	204	CLA	CAC-C3C-C4C	4.85	131.11	124.81
14	A	829	CLA	CMB-C2B-C1B	-4.37	121.75	128.46
14	B	818	CLA	CMB-C2B-C1B	-4.32	121.83	128.46
17	A	853	LHG	O4-P-O5	4.27	133.37	112.24
14	B	814	CLA	CAC-C3C-C4C	4.26	130.33	124.81
17	A	852	LHG	O4-P-O5	4.25	133.23	112.24
17	M	101	LHG	O4-P-O5	4.22	133.12	112.24
17	I	102	LHG	O4-P-O5	4.21	133.05	112.24
17	B	851	LHG	O4-P-O5	4.19	132.96	112.24
16	A	845	BCR	C2-C1-C6	4.14	116.86	110.48
14	A	834	CLA	CMB-C2B-C1B	-4.14	122.10	128.46
14	B	819	CLA	CMB-C2B-C1B	-4.12	122.13	128.46
14	B	820	CLA	CMB-C2B-C1B	-4.11	122.15	128.46
14	A	818	CLA	CMB-C2B-C1B	-4.05	122.24	128.46
14	B	810	CLA	CMB-C2B-C1B	-4.01	122.30	128.46
14	A	831	CLA	CMB-C2B-C1B	-3.97	122.36	128.46
14	B	818	CLA	C4-C3-C5	3.95	121.92	115.27
14	A	821	CLA	CMB-C2B-C1B	-3.93	122.42	128.46
14	L	206	CLA	CMB-C2B-C1B	-3.93	122.42	128.46
16	A	851	BCR	C15-C14-C13	-3.89	121.75	127.31
14	A	829	CLA	CMB-C2B-C3B	3.88	131.94	124.68
14	B	822	CLA	CMB-C2B-C1B	-3.87	122.52	128.46
14	A	826	CLA	CMB-C2B-C1B	-3.86	122.53	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	A	819	CLA	CMB-C2B-C1B	-3.78	122.65	128.46
14	A	832	CLA	CMB-C2B-C1B	-3.72	122.74	128.46
14	A	834	CLA	CMB-C2B-C3B	3.72	131.63	124.68
14	J	102	CLA	CMB-C2B-C1B	-3.70	122.78	128.46
16	B	848	BCR	C15-C16-C17	-3.69	115.91	123.47
14	A	854	CLA	C4-C3-C5	3.69	121.48	115.27
14	B	829	CLA	CMB-C2B-C1B	-3.67	122.82	128.46
14	A	822	CLA	CMB-C2B-C1B	-3.65	122.86	128.46
14	B	830	CLA	CMB-C2B-C1B	-3.63	122.88	128.46
14	B	832	CLA	CMB-C2B-C1B	-3.63	122.89	128.46
14	B	826	CLA	O2D-CGD-O1D	-3.62	116.75	123.84
14	A	839	CLA	O2D-CGD-O1D	-3.62	116.75	123.84
14	B	812	CLA	CMB-C2B-C1B	-3.62	122.91	128.46
14	A	807	CLA	CMB-C2B-C1B	-3.60	122.92	128.46
14	A	810	CLA	CMB-C2B-C1B	-3.60	122.93	128.46
14	X	1701	CLA	CMB-C2B-C1B	-3.59	122.95	128.46
14	A	815	CLA	CMB-C2B-C1B	-3.58	122.96	128.46
14	A	809	CLA	CMB-C2B-C1B	-3.57	122.97	128.46
14	B	830	CLA	O2D-CGD-O1D	-3.57	116.87	123.84
14	A	805	CLA	CMB-C2B-C1B	-3.56	122.99	128.46
14	A	816	CLA	CMB-C2B-C1B	-3.51	123.07	128.46
14	A	828	CLA	CMB-C2B-C1B	-3.51	123.07	128.46
14	A	814	CLA	CMB-C2B-C1B	-3.47	123.12	128.46
14	X	1701	CLA	O2D-CGD-O1D	-3.47	117.06	123.84
14	B	819	CLA	CMB-C2B-C3B	3.47	131.16	124.68
16	A	850	BCR	C2-C1-C6	3.46	115.81	110.48
14	A	854	CLA	O2D-CGD-O1D	-3.45	117.10	123.84
14	B	807	CLA	CMB-C2B-C1B	-3.44	123.17	128.46
14	B	831	CLA	CMB-C2B-C1B	-3.44	123.18	128.46
14	B	818	CLA	CMB-C2B-C3B	3.44	131.10	124.68
14	A	838	CLA	CMB-C2B-C1B	-3.43	123.19	128.46
14	F	204	CLA	CMB-C2B-C1B	-3.42	123.20	128.46
14	A	818	CLA	CMB-C2B-C3B	3.40	131.03	124.68
14	L	204	CLA	CMB-C2B-C1B	-3.39	123.25	128.46
16	A	847	BCR	C15-C14-C13	-3.39	122.47	127.31
14	B	840	CLA	O2D-CGD-O1D	-3.39	117.22	123.84
14	B	826	CLA	CMB-C2B-C1B	-3.38	123.26	128.46
14	A	830	CLA	CMB-C2B-C1B	-3.38	123.27	128.46
14	F	201	CLA	CMB-C2B-C1B	-3.38	123.28	128.46
16	B	848	BCR	C15-C14-C13	-3.37	122.50	127.31
14	A	821	CLA	CMB-C2B-C3B	3.37	130.99	124.68
14	B	817	CLA	CMB-C2B-C1B	-3.37	123.28	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	L	206	CLA	CMB-C2B-C3B	3.37	130.97	124.68
14	B	827	CLA	O2D-CGD-O1D	-3.36	117.26	123.84
14	B	817	CLA	O2D-CGD-O1D	-3.36	117.27	123.84
16	F	205	BCR	C2-C1-C6	3.35	115.64	110.48
14	A	842	CLA	CMB-C2B-C1B	-3.33	123.34	128.46
16	L	202	BCR	C15-C16-C17	-3.33	116.65	123.47
14	B	820	CLA	CMB-C2B-C3B	3.32	130.89	124.68
14	F	203	CLA	CMB-C2B-C1B	-3.31	123.37	128.46
14	B	833	CLA	CMB-C2B-C1B	-3.31	123.38	128.46
14	A	802	CLA	CMB-C2B-C1B	-3.30	123.40	128.46
14	B	814	CLA	CMB-C2B-C1B	-3.28	123.43	128.46
14	A	819	CLA	CMB-C2B-C3B	3.27	130.80	124.68
14	A	826	CLA	CMB-C2B-C3B	3.26	130.79	124.68
14	A	837	CLA	CMB-C2B-C1B	-3.26	123.46	128.46
14	K	101	CLA	CMB-C2B-C1B	-3.26	123.46	128.46
14	A	806	CLA	CMB-C2B-C1B	-3.25	123.46	128.46
14	M	102	CLA	CMB-C2B-C1B	-3.25	123.47	128.46
14	B	825	CLA	O2D-CGD-O1D	-3.25	117.49	123.84
14	B	812	CLA	O2D-CGD-O1D	-3.24	117.50	123.84
14	L	201	CLA	CMB-C2B-C1B	-3.24	123.49	128.46
14	B	816	CLA	O2D-CGD-O1D	-3.24	117.51	123.84
14	A	820	CLA	CMB-C2B-C1B	-3.23	123.49	128.46
14	B	809	CLA	CMB-C2B-C1B	-3.23	123.50	128.46
14	B	808	CLA	CMB-C2B-C1B	-3.22	123.52	128.46
16	B	852	BCR	C11-C10-C9	-3.21	122.73	127.31
14	A	835	CLA	O2D-CGD-O1D	-3.20	117.58	123.84
16	B	844	BCR	C24-C23-C22	-3.20	121.40	126.23
14	A	804	CLA	O2D-CGD-O1D	-3.18	117.62	123.84
14	B	822	CLA	CMB-C2B-C3B	3.18	130.62	124.68
14	B	833	CLA	O2D-CGD-O1D	-3.18	117.63	123.84
14	A	833	CLA	CMB-C2B-C1B	-3.18	123.58	128.46
14	B	807	CLA	O2D-CGD-O1D	-3.17	117.64	123.84
14	A	823	CLA	CMB-C2B-C1B	-3.17	123.60	128.46
14	B	827	CLA	CMB-C2B-C1B	-3.17	123.60	128.46
14	B	820	CLA	O2D-CGD-O1D	-3.17	117.65	123.84
14	A	808	CLA	CMB-C2B-C1B	-3.16	123.61	128.46
14	B	825	CLA	CMB-C2B-C1B	-3.16	123.61	128.46
16	J	104	BCR	C15-C16-C17	-3.16	117.00	123.47
14	B	816	CLA	CMB-C2B-C1B	-3.16	123.61	128.46
14	B	828	CLA	CMB-C2B-C1B	-3.16	123.61	128.46
14	B	809	CLA	O2D-CGD-O1D	-3.16	117.67	123.84
14	L	205	CLA	O2D-CGD-O1D	-3.14	117.70	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	A	828	CLA	O2D-CGD-O1D	-3.14	117.70	123.84
14	B	835	CLA	O2D-CGD-O1D	-3.14	117.70	123.84
14	B	813	CLA	O2D-CGD-O1D	-3.13	117.72	123.84
14	B	810	CLA	CMB-C2B-C3B	3.13	130.53	124.68
14	J	102	CLA	CMB-C2B-C3B	3.11	130.50	124.68
14	K	102	CLA	O2D-CGD-O1D	-3.11	117.75	123.84
14	B	815	CLA	CMB-C2B-C1B	-3.10	123.69	128.46
14	A	805	CLA	O2D-CGD-O1D	-3.10	117.78	123.84
14	A	820	CLA	O2D-CGD-O1D	-3.09	117.79	123.84
14	A	803	CLA	O2D-CGD-O1D	-3.09	117.80	123.84
14	B	805	CLA	O2D-CGD-O1D	-3.09	117.80	123.84
14	B	830	CLA	O2D-CGD-CBD	3.08	116.74	111.27
14	A	804	CLA	CMB-C2B-C1B	-3.08	123.74	128.46
14	A	826	CLA	O2D-CGD-O1D	-3.08	117.82	123.84
16	J	104	BCR	C33-C5-C6	-3.08	121.07	124.53
14	B	813	CLA	CMB-C2B-C1B	-3.07	123.74	128.46
14	B	834	CLA	CMB-C2B-C1B	-3.07	123.75	128.46
16	F	202	BCR	C2-C1-C6	3.06	115.20	110.48
14	A	817	CLA	CMB-C2B-C1B	-3.06	123.76	128.46
14	A	831	CLA	O2D-CGD-O1D	-3.06	117.86	123.84
14	A	840	CLA	O2D-CGD-O1D	-3.05	117.87	123.84
14	A	809	CLA	O2D-CGD-O1D	-3.05	117.88	123.84
14	B	810	CLA	O2D-CGD-O1D	-3.04	117.89	123.84
14	A	843	CLA	CMB-C2B-C1B	-3.04	123.79	128.46
14	B	835	CLA	CMB-C2B-C1B	-3.03	123.80	128.46
14	B	832	CLA	CMB-C2B-C3B	3.03	130.34	124.68
14	K	101	CLA	O2D-CGD-O1D	-3.02	117.93	123.84
14	A	813	CLA	CMB-C2B-C1B	-3.02	123.82	128.46
14	A	807	CLA	CMB-C2B-C3B	3.02	130.32	124.68
14	B	821	CLA	O2D-CGD-O1D	-3.02	117.94	123.84
14	A	815	CLA	CMB-C2B-C3B	3.02	130.32	124.68
14	K	102	CLA	CMB-C2B-C1B	-3.02	123.83	128.46
16	K	103	BCR	C2-C1-C6	3.01	115.12	110.48
14	B	815	CLA	O2D-CGD-O1D	-3.01	117.95	123.84
14	A	836	CLA	CMB-C2B-C1B	-3.01	123.83	128.46
14	X	1701	CLA	CMB-C2B-C3B	3.01	130.31	124.68
14	A	816	CLA	O2D-CGD-O1D	-3.01	117.95	123.84
14	J	101	CLA	CMB-C2B-C1B	-3.01	123.84	128.46
14	B	839	CLA	O2D-CGD-O1D	-3.01	117.96	123.84
14	B	839	CLA	CMB-C2B-C1B	-3.01	123.84	128.46
14	B	801	CLA	O2D-CGD-O1D	-3.00	117.97	123.84
14	B	826	CLA	CAA-C2A-C1A	-3.00	102.14	111.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	L	204	CLA	O2D-CGD-O1D	-3.00	117.98	123.84
16	A	849	BCR	C33-C5-C6	-3.00	121.16	124.53
16	K	103	BCR	C15-C16-C17	-3.00	117.33	123.47
14	B	841	CLA	CMB-C2B-C1B	-2.99	123.86	128.46
14	B	823	CLA	O2D-CGD-O1D	-2.99	117.98	123.84
14	A	827	CLA	O2D-CGD-O1D	-2.99	117.99	123.84
14	A	832	CLA	CMB-C2B-C3B	2.99	130.28	124.68
14	B	832	CLA	O2D-CGD-O1D	-2.99	117.99	123.84
14	A	854	CLA	CMB-C2B-C1B	-2.99	123.87	128.46
14	B	836	CLA	CMB-C2B-C1B	-2.98	123.88	128.46
14	A	809	CLA	CMB-C2B-C3B	2.98	130.25	124.68
14	A	810	CLA	CMB-C2B-C3B	2.97	130.24	124.68
14	A	840	CLA	CMB-C2B-C1B	-2.97	123.90	128.46
14	A	830	CLA	CMB-C2B-C3B	2.96	130.22	124.68
14	A	835	CLA	CHB-C4A-NA	2.96	128.61	124.51
14	F	204	CLA	O2D-CGD-O1D	-2.96	118.05	123.84
14	B	826	CLA	CMB-C2B-C3B	2.96	130.22	124.68
14	A	821	CLA	O2D-CGD-O1D	-2.95	118.06	123.84
16	A	849	BCR	C15-C16-C17	-2.95	117.43	123.47
14	B	823	CLA	CMB-C2B-C1B	-2.94	123.94	128.46
14	A	829	CLA	O2D-CGD-O1D	-2.94	118.09	123.84
16	A	850	BCR	C15-C16-C17	-2.94	117.45	123.47
16	L	202	BCR	C2-C1-C6	2.94	115.00	110.48
14	B	805	CLA	CMB-C2B-C1B	-2.93	123.95	128.46
14	B	808	CLA	O2D-CGD-O1D	-2.93	118.10	123.84
14	B	806	CLA	CMB-C2B-C1B	-2.93	123.96	128.46
14	A	822	CLA	CMB-C2B-C3B	2.92	130.15	124.68
14	B	814	CLA	C1-C2-C3	-2.92	120.99	126.04
14	L	204	CLA	CAC-C3C-C2C	-2.92	122.54	127.53
13	A	801	CL0	O2D-CGD-O1D	-2.92	118.13	123.84
14	A	808	CLA	O2D-CGD-O1D	-2.92	118.13	123.84
16	F	205	BCR	C35-C13-C14	-2.92	118.83	122.92
14	L	205	CLA	CMB-C2B-C1B	-2.92	123.98	128.46
14	B	838	CLA	CMB-C2B-C1B	-2.91	123.99	128.46
14	B	819	CLA	O2D-CGD-O1D	-2.91	118.15	123.84
14	A	831	CLA	CMB-C2B-C3B	2.91	130.12	124.68
14	B	812	CLA	CMB-C2B-C3B	2.90	130.11	124.68
14	B	841	CLA	O2D-CGD-O1D	-2.90	118.16	123.84
16	A	851	BCR	C35-C13-C14	-2.90	118.86	122.92
14	A	842	CLA	O2D-CGD-O1D	-2.90	118.17	123.84
16	A	847	BCR	C15-C16-C17	-2.90	117.53	123.47
14	A	833	CLA	O2D-CGD-O1D	-2.89	118.18	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	A	816	CLA	CMB-C2B-C3B	2.89	130.09	124.68
14	A	834	CLA	O2D-CGD-O1D	-2.89	118.19	123.84
14	A	814	CLA	CMB-C2B-C3B	2.89	130.08	124.68
14	A	827	CLA	CMB-C2B-C1B	-2.89	124.03	128.46
14	A	838	CLA	CMB-C2B-C3B	2.88	130.07	124.68
14	F	203	CLA	O2D-CGD-O1D	-2.88	118.21	123.84
14	A	815	CLA	O2D-CGD-O1D	-2.88	118.22	123.84
14	A	838	CLA	CHB-C4A-NA	2.88	128.49	124.51
14	A	805	CLA	CMB-C2B-C3B	2.87	130.05	124.68
14	B	829	CLA	O2D-CGD-O1D	-2.87	118.23	123.84
16	J	104	BCR	C15-C14-C13	-2.87	123.22	127.31
16	I	103	BCR	C24-C23-C22	-2.86	121.91	126.23
16	B	847	BCR	C30-C25-C26	-2.86	118.58	122.61
14	A	825	CLA	O2D-CGD-O1D	-2.86	118.25	123.84
14	B	804	CLA	CMB-C2B-C1B	-2.86	124.07	128.46
14	B	837	CLA	O2D-CGD-O1D	-2.86	118.25	123.84
14	B	807	CLA	CMB-C2B-C3B	2.86	130.02	124.68
14	L	206	CLA	O2D-CGD-O1D	-2.85	118.26	123.84
14	A	823	CLA	O2D-CGD-O1D	-2.84	118.28	123.84
16	F	205	BCR	C16-C15-C14	-2.84	117.66	123.47
14	A	802	CLA	CMB-C2B-C3B	2.84	129.99	124.68
14	B	821	CLA	CMB-C2B-C1B	-2.84	124.11	128.46
14	A	811	CLA	O2D-CGD-O1D	-2.83	118.30	123.84
14	A	806	CLA	O2D-CGD-O1D	-2.83	118.31	123.84
16	A	847	BCR	C37-C22-C21	-2.83	118.96	122.92
14	B	824	CLA	CMB-C2B-C1B	-2.82	124.13	128.46
16	A	850	BCR	C28-C27-C26	-2.82	109.04	114.08
14	A	828	CLA	CMB-C2B-C3B	2.82	129.95	124.68
14	B	801	CLA	CMB-C2B-C1B	-2.82	124.13	128.46
14	B	814	CLA	O2D-CGD-O1D	-2.82	118.33	123.84
14	A	824	CLA	O2D-CGD-O1D	-2.81	118.33	123.84
14	B	814	CLA	CMB-C2B-C3B	2.81	129.94	124.68
14	B	811	CLA	CMB-C2B-C1B	-2.81	124.14	128.46
14	A	810	CLA	O2D-CGD-O1D	-2.81	118.34	123.84
14	A	841	CLA	O2D-CGD-O1D	-2.81	118.34	123.84
16	L	207	BCR	C15-C16-C17	-2.81	117.72	123.47
14	A	822	CLA	O2D-CGD-O1D	-2.80	118.36	123.84
14	B	805	CLA	CHB-C4A-NA	2.80	128.39	124.51
14	F	203	CLA	CMB-C2B-C3B	2.80	129.92	124.68
14	F	204	CLA	CMB-C2B-C3B	2.80	129.92	124.68
14	B	809	CLA	CMB-C2B-C3B	2.80	129.92	124.68
16	J	103	BCR	C7-C8-C9	-2.80	122.01	126.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	B	834	CLA	O2D-CGD-O1D	-2.80	118.37	123.84
14	B	818	CLA	O2D-CGD-O1D	-2.79	118.38	123.84
14	B	825	CLA	CMB-C2B-C3B	2.78	129.88	124.68
14	B	831	CLA	CMB-C2B-C3B	2.78	129.88	124.68
14	J	101	CLA	O2D-CGD-O1D	-2.78	118.40	123.84
16	B	846	BCR	C15-C16-C17	-2.78	117.78	123.47
14	A	838	CLA	O2D-CGD-O1D	-2.78	118.40	123.84
16	A	847	BCR	C33-C5-C6	-2.78	121.41	124.53
16	A	848	BCR	C15-C16-C17	-2.78	117.78	123.47
14	B	806	CLA	O2D-CGD-O1D	-2.77	118.42	123.84
14	A	811	CLA	CMB-C2B-C1B	-2.77	124.21	128.46
14	A	802	CLA	CHB-C4A-NA	2.77	128.34	124.51
14	L	201	CLA	CHB-C4A-NA	2.77	128.34	124.51
14	A	806	CLA	CMB-C2B-C3B	2.77	129.86	124.68
16	A	850	BCR	C2-C3-C4	2.77	117.56	111.38
16	A	846	BCR	C33-C5-C6	-2.77	121.42	124.53
14	A	803	CLA	C1B-CHB-C4A	-2.76	124.64	130.12
14	A	812	CLA	O2D-CGD-O1D	-2.76	118.44	123.84
16	A	847	BCR	C35-C13-C14	-2.76	119.05	122.92
14	B	830	CLA	CMB-C2B-C3B	2.76	129.84	124.68
14	L	201	CLA	O2D-CGD-O1D	-2.76	118.44	123.84
14	A	819	CLA	O2D-CGD-O1D	-2.75	118.45	123.84
14	B	827	CLA	CMB-C2B-C3B	2.75	129.83	124.68
16	B	852	BCR	C15-C16-C17	-2.75	117.84	123.47
14	B	810	CLA	O2A-CGA-O1A	-2.75	116.66	123.59
14	A	833	CLA	CMB-C2B-C3B	2.74	129.81	124.68
14	A	830	CLA	O2D-CGD-O1D	-2.74	118.47	123.84
14	A	814	CLA	O2D-CGD-O1D	-2.74	118.48	123.84
14	A	813	CLA	O2D-CGD-O1D	-2.74	118.48	123.84
14	B	826	CLA	C1B-CHB-C4A	-2.74	124.69	130.12
14	B	817	CLA	CMB-C2B-C3B	2.74	129.80	124.68
14	B	836	CLA	CHB-C4A-NA	2.73	128.29	124.51
14	B	828	CLA	O2D-CGD-O1D	-2.73	118.50	123.84
14	A	808	CLA	CMB-C2B-C3B	2.73	129.78	124.68
14	B	828	CLA	CMB-C2B-C3B	2.73	129.78	124.68
14	B	831	CLA	O2D-CGD-O1D	-2.72	118.52	123.84
16	B	845	BCR	C11-C10-C9	-2.72	123.43	127.31
14	F	201	CLA	O2D-CGD-O1D	-2.72	118.52	123.84
16	B	844	BCR	C15-C16-C17	-2.72	117.91	123.47
16	B	853	BCR	C33-C5-C6	-2.72	121.48	124.53
14	F	201	CLA	CMB-C2B-C3B	2.72	129.76	124.68
14	B	842	CLA	O2D-CGD-O1D	-2.71	118.54	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	B	844	BCR	C33-C5-C6	-2.71	121.48	124.53
14	B	829	CLA	CMB-C2B-C3B	2.71	129.75	124.68
14	A	837	CLA	O2D-CGD-O1D	-2.71	118.54	123.84
14	B	836	CLA	O2D-CGD-O1D	-2.71	118.54	123.84
14	A	818	CLA	O2D-CGD-O1D	-2.71	118.55	123.84
14	A	839	CLA	O2D-CGD-CBD	2.70	116.07	111.27
14	B	806	CLA	CHB-C4A-NA	2.70	128.25	124.51
14	A	802	CLA	O2D-CGD-O1D	-2.70	118.56	123.84
14	A	829	CLA	C1B-CHB-C4A	-2.70	124.77	130.12
16	I	103	BCR	C15-C16-C17	-2.70	117.95	123.47
14	B	838	CLA	O2D-CGD-O1D	-2.70	118.56	123.84
16	K	103	BCR	C35-C13-C14	-2.69	119.15	122.92
16	A	845	BCR	C24-C23-C22	-2.69	122.16	126.23
14	A	834	CLA	CHB-C4A-NA	2.69	128.24	124.51
20	B	850	LMG	O6-C1-O1	-2.69	103.60	109.97
14	A	817	CLA	O2D-CGD-O1D	-2.69	118.58	123.84
14	A	837	CLA	CMB-C2B-C3B	2.69	129.71	124.68
14	B	804	CLA	CMB-C2B-C3B	2.69	129.71	124.68
14	B	804	CLA	O2D-CGD-O1D	-2.69	118.58	123.84
14	B	840	CLA	CMB-C2B-C1B	-2.68	124.34	128.46
14	L	201	CLA	CMB-C2B-C3B	2.68	129.69	124.68
14	L	205	CLA	CMB-C2B-C3B	2.68	129.69	124.68
14	A	804	CLA	CMB-C2B-C3B	2.68	129.68	124.68
14	B	816	CLA	CMB-C2B-C3B	2.68	129.68	124.68
13	A	801	CL0	CMB-C2B-C1B	-2.67	124.36	128.46
14	M	102	CLA	CMB-C2B-C3B	2.67	129.68	124.68
16	B	846	BCR	C24-C23-C22	-2.67	122.20	126.23
14	B	808	CLA	CMB-C2B-C3B	2.66	129.66	124.68
14	B	826	CLA	O2D-CGD-CBD	2.66	116.00	111.27
14	A	836	CLA	O2D-CGD-O1D	-2.66	118.64	123.84
14	B	808	CLA	CHB-C4A-NA	2.65	128.18	124.51
14	B	828	CLA	C1B-CHB-C4A	-2.65	124.86	130.12
14	A	835	CLA	CMB-C2B-C1B	-2.65	124.39	128.46
17	B	851	LHG	O8-C23-C24	2.65	120.22	111.91
14	B	819	CLA	C1B-CHB-C4A	-2.65	124.87	130.12
14	A	812	CLA	CMB-C2B-C1B	-2.65	124.39	128.46
16	J	103	BCR	C33-C5-C6	-2.65	121.56	124.53
13	A	801	CL0	CHB-C4A-NA	2.64	128.16	124.51
14	A	854	CLA	CMB-C2B-C3B	2.64	129.62	124.68
16	B	853	BCR	C27-C26-C25	2.64	126.56	122.73
14	B	811	CLA	CHB-C4A-NA	2.63	128.15	124.51
16	I	103	BCR	C2-C1-C6	2.63	114.53	110.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	F	202	BCR	C15-C16-C17	-2.63	118.09	123.47
14	A	820	CLA	CMB-C2B-C3B	2.63	129.59	124.68
16	B	845	BCR	C33-C5-C6	-2.62	121.58	124.53
14	B	835	CLA	CHB-C4A-NA	2.62	128.14	124.51
14	B	810	CLA	C1B-CHB-C4A	-2.62	124.93	130.12
14	B	833	CLA	CMB-C2B-C3B	2.62	129.57	124.68
14	A	843	CLA	O2D-CGD-O1D	-2.62	118.72	123.84
14	A	806	CLA	CHB-C4A-NA	2.61	128.12	124.51
14	B	842	CLA	CHD-C1D-ND	-2.61	122.06	124.45
14	A	840	CLA	CMB-C2B-C3B	2.61	129.56	124.68
14	A	814	CLA	CHB-C4A-NA	2.61	128.12	124.51
14	A	839	CLA	CMB-C2B-C1B	-2.61	124.46	128.46
14	A	823	CLA	CMB-C2B-C3B	2.60	129.54	124.68
16	F	202	BCR	C33-C5-C6	-2.59	121.61	124.53
16	A	850	BCR	C24-C23-C22	-2.59	122.32	126.23
14	B	842	CLA	CMB-C2B-C1B	-2.59	124.48	128.46
14	F	204	CLA	C1-C2-C3	-2.59	122.56	126.75
14	F	203	CLA	CHB-C4A-NA	2.59	128.09	124.51
14	A	820	CLA	CHB-C4A-NA	2.58	128.09	124.51
14	A	827	CLA	CHB-C4A-NA	2.58	128.09	124.51
14	A	835	CLA	O2D-CGD-CBD	2.58	115.86	111.27
14	L	204	CLA	CMB-C2B-C3B	2.58	129.50	124.68
14	A	837	CLA	CHB-C4A-NA	2.58	128.08	124.51
14	A	819	CLA	C1B-CHB-C4A	-2.58	125.01	130.12
16	L	207	BCR	C24-C23-C22	-2.58	122.34	126.23
16	B	847	BCR	C24-C23-C22	-2.58	122.34	126.23
14	K	101	CLA	CMB-C2B-C3B	2.58	129.50	124.68
14	A	809	CLA	C1B-CHB-C4A	-2.58	125.02	130.12
14	B	813	CLA	CMB-C2B-C3B	2.57	129.49	124.68
16	B	852	BCR	C7-C8-C9	-2.57	122.35	126.23
14	A	804	CLA	CHB-C4A-NA	2.57	128.07	124.51
14	A	807	CLA	CHB-C4A-NA	2.57	128.07	124.51
14	B	815	CLA	CMB-C2B-C3B	2.57	129.48	124.68
14	B	822	CLA	O2D-CGD-O1D	-2.57	118.82	123.84
16	J	104	BCR	C29-C30-C25	2.56	114.42	110.48
14	B	823	CLA	CHB-C4A-NA	2.56	128.05	124.51
14	A	842	CLA	CMB-C2B-C3B	2.56	129.46	124.68
14	A	822	CLA	CHB-C4A-NA	2.56	128.05	124.51
14	A	834	CLA	C1B-CHB-C4A	-2.56	125.05	130.12
14	B	826	CLA	CHD-C1D-ND	-2.55	122.11	124.45
14	B	817	CLA	O2D-CGD-CBD	2.55	115.81	111.27
14	B	804	CLA	CHB-C4A-NA	2.55	128.04	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	A	839	CLA	CHB-C4A-NA	2.55	128.04	124.51
14	B	806	CLA	CMB-C2B-C3B	2.55	129.45	124.68
14	A	816	CLA	CHB-C4A-NA	2.55	128.04	124.51
16	A	847	BCR	C27-C26-C25	2.55	126.43	122.73
16	J	103	BCR	C15-C14-C13	-2.54	123.68	127.31
14	B	814	CLA	CHB-C4A-NA	2.54	128.03	124.51
14	B	824	CLA	CMB-C2B-C3B	2.54	129.43	124.68
16	L	202	BCR	C8-C7-C6	-2.54	120.06	127.20
14	B	820	CLA	C1B-CHB-C4A	-2.54	125.09	130.12
14	A	841	CLA	CHB-C4A-NA	2.54	128.02	124.51
14	B	841	CLA	CMB-C2B-C3B	2.54	129.43	124.68
14	B	805	CLA	CMB-C2B-C3B	2.54	129.42	124.68
14	A	843	CLA	CMB-C2B-C3B	2.54	129.42	124.68
14	B	816	CLA	CHB-C4A-NA	2.53	128.01	124.51
14	L	205	CLA	CHB-C4A-NA	2.53	128.01	124.51
16	A	851	BCR	C15-C16-C17	-2.53	118.29	123.47
14	B	807	CLA	CHB-C4A-NA	2.53	128.01	124.51
14	K	102	CLA	CMB-C2B-C3B	2.53	129.41	124.68
14	A	843	CLA	CHB-C4A-NA	2.53	128.01	124.51
16	B	846	BCR	C27-C26-C25	2.53	126.40	122.73
14	A	821	CLA	CHB-C4A-NA	2.52	128.00	124.51
14	B	824	CLA	CHB-C4A-NA	2.52	128.00	124.51
17	A	852	LHG	O8-C23-C24	2.52	119.82	111.91
14	A	836	CLA	CHB-C4A-NA	2.52	128.00	124.51
14	A	831	CLA	CHB-C4A-NA	2.52	127.99	124.51
14	J	101	CLA	CHB-C4A-NA	2.52	127.99	124.51
14	A	822	CLA	C1B-CHB-C4A	-2.51	125.14	130.12
14	A	812	CLA	CHB-C4A-NA	2.51	127.99	124.51
14	A	827	CLA	CAA-C2A-C1A	-2.51	103.74	111.97
14	A	805	CLA	CHB-C4A-NA	2.51	127.98	124.51
14	A	809	CLA	CHB-C4A-NA	2.51	127.98	124.51
14	B	827	CLA	CHB-C4A-NA	2.51	127.98	124.51
16	B	847	BCR	C27-C26-C25	2.51	126.37	122.73
14	A	841	CLA	CMB-C2B-C1B	-2.51	124.61	128.46
14	B	824	CLA	O2D-CGD-O1D	-2.50	118.94	123.84
14	L	204	CLA	CHB-C4A-NA	2.50	127.97	124.51
14	A	837	CLA	CHD-C1D-ND	-2.50	122.16	124.45
14	A	827	CLA	CMB-C2B-C3B	2.50	129.35	124.68
16	L	202	BCR	C15-C14-C13	-2.50	123.75	127.31
14	A	837	CLA	C1B-CHB-C4A	-2.49	125.18	130.12
14	B	813	CLA	CHB-C4A-NA	2.49	127.96	124.51
14	B	834	CLA	CMB-C2B-C3B	2.49	129.34	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	A	835	CLA	CMB-C2B-C3B	2.49	129.33	124.68
16	J	103	BCR	C15-C16-C17	-2.49	118.38	123.47
14	A	833	CLA	CHB-C4A-NA	2.49	127.95	124.51
14	B	829	CLA	CHB-C4A-NA	2.48	127.95	124.51
14	B	839	CLA	CMB-C2B-C3B	2.48	129.33	124.68
14	B	842	CLA	CHB-C4A-NA	2.48	127.94	124.51
14	B	837	CLA	CHB-C4A-NA	2.47	127.93	124.51
16	B	852	BCR	C33-C5-C6	-2.47	121.75	124.53
14	A	840	CLA	C1B-CHB-C4A	-2.47	125.23	130.12
14	B	815	CLA	CHB-C4A-NA	2.47	127.92	124.51
16	I	103	BCR	C33-C5-C6	-2.46	121.76	124.53
14	B	823	CLA	CMB-C2B-C3B	2.46	129.29	124.68
14	B	838	CLA	CHB-C4A-NA	2.46	127.92	124.51
14	A	810	CLA	O2A-CGA-O1A	-2.46	117.38	123.59
14	A	830	CLA	CHB-C4A-NA	2.46	127.91	124.51
14	B	830	CLA	C1B-CHB-C4A	-2.46	125.25	130.12
16	L	202	BCR	C37-C22-C21	-2.46	119.48	122.92
14	A	825	CLA	CHB-C4A-NA	2.46	127.91	124.51
16	B	849	BCR	C33-C5-C6	-2.45	121.77	124.53
16	B	846	BCR	C33-C5-C6	-2.45	121.77	124.53
17	A	853	LHG	O8-C23-C24	2.45	119.60	111.91
16	I	101	BCR	C15-C16-C17	-2.45	118.45	123.47
17	I	102	LHG	O8-C23-C24	2.45	119.59	111.91
14	B	839	CLA	CHB-C4A-NA	2.45	127.90	124.51
14	A	836	CLA	C1B-CHB-C4A	-2.45	125.27	130.12
16	I	101	BCR	C16-C15-C14	-2.44	118.47	123.47
14	B	824	CLA	C1B-CHB-C4A	-2.44	125.28	130.12
14	A	832	CLA	CHB-C4A-NA	2.44	127.89	124.51
16	B	852	BCR	C38-C26-C25	-2.44	121.79	124.53
16	B	849	BCR	C27-C26-C25	2.44	126.28	122.73
16	B	852	BCR	C15-C14-C13	-2.44	123.83	127.31
14	B	836	CLA	CMB-C2B-C3B	2.44	129.24	124.68
16	A	845	BCR	C15-C16-C17	-2.44	118.48	123.47
16	A	846	BCR	C15-C16-C17	-2.44	118.48	123.47
14	B	801	CLA	CHB-C4A-NA	2.44	127.88	124.51
14	B	811	CLA	O2D-CGD-O1D	-2.43	119.08	123.84
14	A	824	CLA	C1B-CHB-C4A	-2.43	125.30	130.12
14	J	101	CLA	CMB-C2B-C3B	2.43	129.23	124.68
13	A	801	CL0	CMB-C2B-C3B	2.43	129.23	124.68
16	I	101	BCR	C33-C5-C6	-2.43	121.80	124.53
14	A	836	CLA	CMB-C2B-C3B	2.43	129.23	124.68
14	B	840	CLA	O2D-CGD-CBD	2.43	115.59	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	B	849	BCR	C15-C16-C17	-2.43	118.50	123.47
14	B	809	CLA	C1B-CHB-C4A	-2.43	125.30	130.12
14	A	819	CLA	CHB-C4A-NA	2.43	127.87	124.51
14	A	828	CLA	CHB-C4A-NA	2.43	127.87	124.51
14	A	815	CLA	CHB-C4A-NA	2.43	127.87	124.51
14	B	809	CLA	CHB-C4A-NA	2.43	127.87	124.51
14	A	818	CLA	C1B-CHB-C4A	-2.42	125.31	130.12
14	B	806	CLA	C1B-CHB-C4A	-2.42	125.31	130.12
14	B	822	CLA	CHB-C4A-NA	2.42	127.86	124.51
14	B	840	CLA	C1B-CHB-C4A	-2.42	125.32	130.12
14	B	819	CLA	CHB-C4A-NA	2.42	127.86	124.51
14	B	831	CLA	CHB-C4A-NA	2.42	127.86	124.51
14	B	817	CLA	CHB-C4A-NA	2.41	127.85	124.51
14	B	832	CLA	CHB-C4A-NA	2.41	127.85	124.51
16	B	848	BCR	C27-C26-C25	2.41	126.23	122.73
14	A	823	CLA	CHB-C4A-NA	2.41	127.84	124.51
16	A	850	BCR	C29-C30-C25	2.41	114.19	110.48
14	L	205	CLA	CAC-C3C-C4C	2.41	127.94	124.81
14	L	206	CLA	C1B-CHB-C4A	-2.41	125.35	130.12
14	A	839	CLA	CMB-C2B-C3B	2.41	129.18	124.68
14	B	821	CLA	CHB-C4A-NA	2.41	127.84	124.51
14	A	825	CLA	CMB-C2B-C1B	-2.40	124.77	128.46
14	B	836	CLA	O2A-CGA-O1A	-2.40	117.52	123.59
16	A	847	BCR	C36-C18-C17	-2.40	119.56	122.92
14	A	838	CLA	CAC-C3C-C4C	2.40	127.93	124.81
14	B	824	CLA	CHD-C1D-ND	-2.40	122.25	124.45
16	K	103	BCR	C15-C14-C13	-2.40	123.89	127.31
16	B	845	BCR	C15-C16-C17	-2.40	118.56	123.47
16	B	847	BCR	C33-C5-C6	-2.40	121.84	124.53
14	B	835	CLA	CMB-C2B-C3B	2.40	129.16	124.68
14	M	102	CLA	CHB-C4A-NA	2.40	127.83	124.51
14	B	811	CLA	C1B-CHB-C4A	-2.40	125.37	130.12
14	B	828	CLA	O2A-CGA-O1A	-2.39	117.55	123.59
17	I	102	LHG	C20-C19-C18	-2.39	102.28	114.42
16	F	205	BCR	C38-C26-C25	-2.39	121.84	124.53
16	B	846	BCR	C38-C26-C25	-2.39	121.84	124.53
14	A	832	CLA	C1B-CHB-C4A	-2.39	125.38	130.12
14	B	833	CLA	C1B-CHB-C4A	-2.39	125.39	130.12
14	X	1701	CLA	O2D-CGD-CBD	2.39	115.51	111.27
14	B	840	CLA	CMB-C2B-C3B	2.39	129.14	124.68
16	I	103	BCR	C28-C27-C26	-2.39	109.82	114.08
14	A	812	CLA	C1B-CHB-C4A	-2.39	125.39	130.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	K	101	CLA	CHB-C4A-NA	2.38	127.81	124.51
14	B	839	CLA	CHD-C1D-ND	-2.38	122.26	124.45
14	A	803	CLA	CMB-C2B-C1B	-2.38	124.80	128.46
14	B	818	CLA	C5-C3-C2	-2.38	116.30	121.12
14	B	837	CLA	CMB-C2B-C1B	-2.38	124.81	128.46
14	A	832	CLA	O2D-CGD-O1D	-2.38	119.19	123.84
14	B	805	CLA	C1B-CHB-C4A	-2.38	125.41	130.12
14	B	842	CLA	C1B-CHB-C4A	-2.38	125.41	130.12
14	A	817	CLA	CHB-C4A-NA	2.38	127.80	124.51
14	A	854	CLA	C1B-CHB-C4A	-2.37	125.41	130.12
14	A	831	CLA	C1B-CHB-C4A	-2.37	125.42	130.12
20	B	850	LMG	O1-C7-C8	-2.37	105.18	110.90
16	A	846	BCR	C27-C26-C25	2.37	126.17	122.73
14	A	820	CLA	O2A-CGA-O1A	-2.37	117.61	123.59
14	X	1701	CLA	CHB-C4A-NA	2.37	127.79	124.51
14	X	1701	CLA	C1B-CHB-C4A	-2.37	125.43	130.12
14	A	839	CLA	C1B-CHB-C4A	-2.36	125.43	130.12
14	A	811	CLA	CHB-C4A-NA	2.36	127.78	124.51
14	A	840	CLA	CHB-C4A-NA	2.36	127.78	124.51
16	F	202	BCR	C8-C7-C6	-2.36	120.56	127.20
14	B	804	CLA	C1B-CHB-C4A	-2.36	125.44	130.12
16	B	846	BCR	C7-C8-C9	-2.36	122.67	126.23
14	B	829	CLA	C1B-CHB-C4A	-2.36	125.44	130.12
14	B	836	CLA	C1B-CHB-C4A	-2.36	125.44	130.12
14	A	824	CLA	CMB-C2B-C1B	-2.36	124.84	128.46
14	B	831	CLA	C1B-CHB-C4A	-2.35	125.46	130.12
14	A	818	CLA	CHB-C4A-NA	2.35	127.76	124.51
16	A	850	BCR	C15-C14-C13	-2.35	123.95	127.31
16	F	202	BCR	C27-C26-C25	2.35	126.14	122.73
14	K	102	CLA	CHD-C1D-ND	-2.35	122.29	124.45
14	J	101	CLA	C1B-CHB-C4A	-2.35	125.46	130.12
14	A	806	CLA	O2A-CGA-O1A	-2.35	117.66	123.59
16	F	202	BCR	C38-C26-C25	-2.35	121.89	124.53
14	B	813	CLA	C1B-CHB-C4A	-2.34	125.47	130.12
14	A	830	CLA	C1B-CHB-C4A	-2.34	125.48	130.12
14	B	833	CLA	CHB-C4A-NA	2.34	127.75	124.51
14	B	833	CLA	CHD-C1D-ND	-2.34	122.30	124.45
14	A	824	CLA	CHD-C1D-ND	-2.34	122.30	124.45
14	B	820	CLA	CHB-C4A-NA	2.34	127.75	124.51
14	A	805	CLA	O2D-CGD-CBD	2.34	115.42	111.27
16	A	846	BCR	C15-C14-C13	-2.34	123.98	127.31
14	A	827	CLA	C1B-CHB-C4A	-2.33	125.49	130.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	B	821	CLA	C1B-CHB-C4A	-2.33	125.50	130.12
14	A	827	CLA	C1-C2-C3	-2.33	122.01	126.04
14	B	841	CLA	C1B-CHB-C4A	-2.33	125.50	130.12
14	B	814	CLA	CAC-C3C-C2C	-2.33	123.54	127.53
14	A	818	CLA	CHD-C1D-ND	-2.33	122.31	124.45
16	I	101	BCR	C8-C7-C6	-2.33	120.66	127.20
16	B	852	BCR	C27-C26-C25	2.33	126.11	122.73
16	B	847	BCR	C35-C13-C14	-2.33	119.66	122.92
14	B	834	CLA	CHB-C4A-NA	2.32	127.73	124.51
14	A	819	CLA	O2A-CGA-O1A	-2.32	117.73	123.59
14	A	804	CLA	O2D-CGD-CBD	2.32	115.39	111.27
16	B	848	BCR	C8-C7-C6	-2.32	120.68	127.20
14	A	827	CLA	CHD-C1D-ND	-2.32	122.32	124.45
16	A	846	BCR	C24-C23-C22	-2.32	122.73	126.23
16	A	847	BCR	C8-C7-C6	-2.32	120.69	127.20
14	B	839	CLA	C1B-CHB-C4A	-2.32	125.53	130.12
14	L	201	CLA	C1B-CHB-C4A	-2.32	125.53	130.12
14	A	802	CLA	O2A-CGA-O1A	-2.32	117.75	123.59
14	B	827	CLA	O2D-CGD-CBD	2.31	115.38	111.27
14	A	808	CLA	CHB-C4A-NA	2.31	127.71	124.51
14	L	205	CLA	C1B-CHB-C4A	-2.31	125.54	130.12
16	A	850	BCR	C35-C13-C14	-2.31	119.69	122.92
14	A	842	CLA	CHB-C4A-NA	2.31	127.70	124.51
14	A	835	CLA	C1B-CHB-C4A	-2.30	125.56	130.12
14	B	810	CLA	C1-C2-C3	-2.30	122.06	126.04
14	B	817	CLA	C1B-CHB-C4A	-2.30	125.56	130.12
14	B	840	CLA	CHB-C4A-NA	2.30	127.69	124.51
14	A	814	CLA	C1B-CHB-C4A	-2.29	125.57	130.12
16	F	205	BCR	C24-C23-C22	-2.29	122.77	126.23
14	B	812	CLA	C1B-CHB-C4A	-2.29	125.58	130.12
16	I	101	BCR	C2-C1-C6	2.29	114.01	110.48
16	J	104	BCR	C37-C22-C21	-2.29	119.72	122.92
16	B	852	BCR	C2-C1-C6	2.29	114.00	110.48
14	B	830	CLA	CHB-C4A-NA	2.29	127.68	124.51
14	B	826	CLA	CHB-C4A-NA	2.29	127.67	124.51
14	L	206	CLA	CHB-C4A-NA	2.29	127.67	124.51
14	A	823	CLA	CHD-C1D-ND	-2.28	122.36	124.45
14	A	842	CLA	C1B-CHB-C4A	-2.28	125.59	130.12
16	A	851	BCR	C33-C5-C6	-2.28	121.97	124.53
16	F	205	BCR	C33-C5-C6	-2.28	121.97	124.53
16	A	846	BCR	C8-C7-C6	-2.28	120.80	127.20
16	A	848	BCR	C33-C5-C6	-2.28	121.97	124.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	B	821	CLA	O2A-CGA-O1A	-2.28	117.85	123.59
14	A	807	CLA	O1D-CGD-CBD	2.28	129.14	124.48
14	A	811	CLA	C1B-CHB-C4A	-2.28	125.61	130.12
16	A	845	BCR	C15-C14-C13	-2.28	124.06	127.31
14	B	821	CLA	CMB-C2B-C3B	2.27	128.93	124.68
14	B	829	CLA	O2A-CGA-O1A	-2.27	117.86	123.59
14	F	201	CLA	CHD-C1D-ND	-2.27	122.37	124.45
14	B	832	CLA	C1B-CHB-C4A	-2.27	125.62	130.12
16	A	850	BCR	C11-C10-C9	-2.27	124.07	127.31
14	A	826	CLA	C1B-CHB-C4A	-2.27	125.62	130.12
14	A	813	CLA	C1B-CHB-C4A	-2.27	125.62	130.12
14	L	204	CLA	C1B-CHB-C4A	-2.27	125.62	130.12
14	A	806	CLA	C1B-CHB-C4A	-2.27	125.63	130.12
14	A	817	CLA	CMB-C2B-C3B	2.27	128.92	124.68
14	A	841	CLA	CMB-C2B-C3B	2.27	128.92	124.68
17	A	853	LHG	C11-C10-C9	-2.27	102.93	114.42
14	B	828	CLA	CHB-C4A-NA	2.26	127.64	124.51
14	B	818	CLA	CHB-C4A-NA	2.26	127.64	124.51
14	L	201	CLA	O2A-CGA-O1A	-2.26	117.88	123.59
16	B	844	BCR	C27-C26-C25	2.26	126.02	122.73
14	L	206	CLA	C5-C3-C2	2.26	125.69	121.12
14	B	822	CLA	C1B-CHB-C4A	-2.26	125.64	130.12
14	F	201	CLA	C1B-CHB-C4A	-2.26	125.64	130.12
14	M	102	CLA	C1B-CHB-C4A	-2.26	125.64	130.12
14	B	841	CLA	CHB-C4A-NA	2.26	127.64	124.51
14	B	838	CLA	C1B-CHB-C4A	-2.26	125.64	130.12
14	J	102	CLA	C1B-CHB-C4A	-2.26	125.65	130.12
14	A	820	CLA	C1B-CHB-C4A	-2.25	125.66	130.12
14	A	810	CLA	CHB-C4A-NA	2.25	127.63	124.51
14	A	815	CLA	C1B-CHB-C4A	-2.25	125.66	130.12
16	A	848	BCR	C27-C26-C25	2.25	126.00	122.73
14	B	814	CLA	C1B-CHB-C4A	-2.25	125.67	130.12
14	J	102	CLA	CHB-C4A-NA	2.25	127.62	124.51
14	A	802	CLA	C1B-CHB-C4A	-2.25	125.67	130.12
14	A	813	CLA	CMB-C2B-C3B	2.25	128.88	124.68
14	F	204	CLA	CHB-C4A-NA	2.25	127.62	124.51
14	F	204	CLA	C1B-CHB-C4A	-2.25	125.67	130.12
14	B	816	CLA	C1B-CHB-C4A	-2.24	125.67	130.12
14	A	808	CLA	O2A-CGA-O1A	-2.24	117.94	123.59
16	I	101	BCR	C27-C26-C25	2.24	125.98	122.73
14	A	805	CLA	C1B-CHB-C4A	-2.24	125.68	130.12
17	M	101	LHG	C11-C10-C9	-2.24	103.06	114.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	A	820	CLA	CHD-C1D-ND	-2.24	122.40	124.45
14	A	854	CLA	CHB-C4A-NA	2.24	127.60	124.51
16	B	853	BCR	C15-C16-C17	-2.24	118.89	123.47
14	A	824	CLA	CHB-C4A-NA	2.24	127.60	124.51
20	B	850	LMG	C40-C39-C38	-2.24	103.08	114.42
14	B	832	CLA	CHD-C1D-ND	-2.24	122.40	124.45
14	K	101	CLA	C1B-CHB-C4A	-2.24	125.69	130.12
17	M	101	LHG	C20-C19-C18	-2.23	103.09	114.42
14	A	813	CLA	CHD-C1D-ND	-2.23	122.40	124.45
14	M	102	CLA	CHD-C1D-ND	-2.23	122.40	124.45
14	A	825	CLA	C1B-CHB-C4A	-2.23	125.70	130.12
14	B	806	CLA	O2A-CGA-O1A	-2.23	117.96	123.59
14	F	201	CLA	CHB-C4A-NA	2.23	127.59	124.51
16	B	847	BCR	C38-C26-C25	-2.23	122.03	124.53
16	J	104	BCR	C28-C27-C26	-2.23	110.10	114.08
16	B	849	BCR	C24-C23-C22	-2.23	122.87	126.23
14	B	811	CLA	CMB-C2B-C3B	2.23	128.84	124.68
16	F	205	BCR	C8-C7-C6	-2.23	120.95	127.20
14	A	825	CLA	CHD-C1D-ND	-2.22	122.41	124.45
13	A	801	CL0	C1B-CHB-C4A	-2.22	125.71	130.12
16	A	849	BCR	C8-C7-C6	-2.22	120.96	127.20
14	B	840	CLA	O2A-CGA-O1A	-2.22	117.98	123.59
14	B	805	CLA	CAC-C3C-C4C	2.22	127.69	124.81
14	B	815	CLA	CAC-C3C-C4C	2.22	127.69	124.81
20	B	850	LMG	O3-C3-C2	-2.22	105.22	110.35
14	B	825	CLA	O2D-CGD-CBD	2.22	115.21	111.27
14	B	812	CLA	CHB-C4A-NA	2.22	127.58	124.51
16	K	103	BCR	C8-C7-C6	-2.22	120.98	127.20
16	B	848	BCR	C2-C1-C6	2.21	113.89	110.48
14	B	819	CLA	CHD-C1D-ND	-2.21	122.42	124.45
16	L	207	BCR	C33-C5-C6	-2.21	122.05	124.53
14	A	841	CLA	C1B-CHB-C4A	-2.21	125.74	130.12
14	B	808	CLA	C1B-CHB-C4A	-2.21	125.74	130.12
16	B	844	BCR	C35-C13-C14	-2.21	119.83	122.92
14	B	830	CLA	C2D-C1D-ND	-2.21	108.48	110.10
14	A	804	CLA	C1B-CHB-C4A	-2.20	125.75	130.12
16	A	850	BCR	C33-C5-C6	-2.20	122.05	124.53
14	B	825	CLA	CHB-C4A-NA	2.20	127.56	124.51
14	B	825	CLA	C1B-CHB-C4A	-2.20	125.76	130.12
14	K	102	CLA	C1B-CHB-C4A	-2.20	125.76	130.12
14	A	813	CLA	CHB-C4A-NA	2.20	127.55	124.51
14	B	826	CLA	C1-C2-C3	-2.20	122.25	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	A	846	BCR	C35-C13-C14	-2.20	119.85	122.92
14	A	827	CLA	O2D-CGD-CBD	2.20	115.17	111.27
14	A	840	CLA	CHD-C1D-ND	-2.19	122.44	124.45
14	B	841	CLA	O2A-CGA-O1A	-2.19	118.05	123.59
16	F	202	BCR	C16-C15-C14	-2.19	118.98	123.47
16	F	205	BCR	C27-C26-C25	2.19	125.92	122.73
14	L	204	CLA	CBC-CAC-C3C	2.19	118.48	112.43
14	A	854	CLA	O2D-CGD-CBD	2.19	115.16	111.27
14	K	102	CLA	CHB-C4A-NA	2.19	127.54	124.51
14	A	829	CLA	CHB-C4A-NA	2.19	127.54	124.51
14	A	821	CLA	C1B-CHB-C4A	-2.19	125.78	130.12
17	A	852	LHG	C20-C19-C18	-2.19	103.31	114.42
14	A	838	CLA	C1B-CHB-C4A	-2.19	125.78	130.12
14	L	204	CLA	C1-C2-C3	-2.19	122.26	126.04
14	J	102	CLA	CHD-C1D-ND	-2.18	122.45	124.45
14	B	820	CLA	CHD-C1D-ND	-2.18	122.45	124.45
14	B	819	CLA	O2A-CGA-O1A	-2.18	118.10	123.59
16	B	849	BCR	C8-C7-C6	-2.17	121.09	127.20
16	B	846	BCR	C37-C22-C21	-2.17	119.88	122.92
14	A	812	CLA	CMB-C2B-C3B	2.17	128.75	124.68
14	A	839	CLA	O2A-CGA-O1A	-2.17	118.11	123.59
14	A	831	CLA	O2D-CGD-CBD	2.17	115.13	111.27
16	J	104	BCR	C11-C10-C9	-2.17	124.21	127.31
14	A	832	CLA	O2A-CGA-O1A	-2.17	118.12	123.59
14	A	838	CLA	O2A-CGA-O1A	-2.17	118.12	123.59
13	A	801	CL0	O2A-CGA-O1A	-2.17	118.13	123.59
14	B	823	CLA	C1B-CHB-C4A	-2.16	125.83	130.12
16	L	207	BCR	C27-C26-C25	2.16	125.87	122.73
14	A	802	CLA	CHD-C1D-ND	-2.16	122.47	124.45
14	A	805	CLA	O2A-CGA-O1A	-2.16	118.14	123.59
14	B	837	CLA	C1B-CHB-C4A	-2.16	125.84	130.12
16	B	845	BCR	C8-C7-C6	-2.16	121.13	127.20
14	B	828	CLA	CHD-C1D-ND	-2.16	122.47	124.45
14	B	801	CLA	CMB-C2B-C3B	2.16	128.71	124.68
16	B	847	BCR	C15-C14-C13	-2.16	124.23	127.31
14	A	810	CLA	C1B-CHB-C4A	-2.16	125.85	130.12
16	B	847	BCR	C8-C7-C6	-2.15	121.15	127.20
14	B	801	CLA	C1B-CHB-C4A	-2.15	125.85	130.12
14	B	835	CLA	C1B-CHB-C4A	-2.15	125.85	130.12
14	A	823	CLA	C1B-CHB-C4A	-2.15	125.86	130.12
16	J	104	BCR	C35-C13-C12	2.15	121.47	118.08
14	B	810	CLA	CHB-C4A-NA	2.15	127.48	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	B	815	CLA	C1B-CHB-C4A	-2.15	125.86	130.12
14	B	812	CLA	O2D-CGD-CBD	2.15	115.09	111.27
16	A	850	BCR	C7-C8-C9	-2.15	122.99	126.23
14	B	841	CLA	CHD-C1D-ND	-2.15	122.48	124.45
13	A	801	CL0	C2A-C1A-CHA	2.14	127.61	123.86
14	A	828	CLA	C1B-CHB-C4A	-2.14	125.87	130.12
14	B	814	CLA	O2A-CGA-O1A	-2.14	118.18	123.59
14	A	836	CLA	CHD-C1D-ND	-2.14	122.48	124.45
16	J	103	BCR	C11-C10-C9	-2.14	124.25	127.31
17	B	851	LHG	C27-C26-C25	-2.14	103.56	114.42
14	A	816	CLA	C1B-CHB-C4A	-2.14	125.88	130.12
14	B	838	CLA	CMB-C2B-C3B	2.14	128.68	124.68
17	M	101	LHG	O8-C23-C24	2.14	118.61	111.91
14	B	811	CLA	CBA-CAA-C2A	-2.14	107.55	113.86
14	F	203	CLA	C1B-CHB-C4A	-2.14	125.89	130.12
16	L	207	BCR	C15-C14-C13	-2.13	124.26	127.31
14	B	829	CLA	CHD-C1D-ND	-2.13	122.49	124.45
14	A	843	CLA	C1B-CHB-C4A	-2.13	125.89	130.12
16	A	848	BCR	C38-C26-C25	-2.13	122.13	124.53
14	A	817	CLA	C1B-CHB-C4A	-2.13	125.90	130.12
16	A	846	BCR	C11-C10-C9	-2.13	124.27	127.31
16	I	103	BCR	C8-C7-C6	-2.13	121.22	127.20
14	A	811	CLA	O2A-CGA-O1A	-2.13	118.22	123.59
14	B	807	CLA	O1D-CGD-CBD	2.13	128.84	124.48
14	L	206	CLA	C6-C5-C3	2.13	119.03	113.45
14	F	204	CLA	O2A-CGA-O1A	-2.12	118.23	123.59
14	B	831	CLA	CHD-C1D-ND	-2.12	122.50	124.45
14	B	807	CLA	C1B-CHB-C4A	-2.12	125.92	130.12
14	A	823	CLA	O2A-CGA-O1A	-2.12	118.02	123.30
14	B	817	CLA	O2A-CGA-O1A	-2.12	118.24	123.59
14	B	834	CLA	C1B-CHB-C4A	-2.12	125.92	130.12
14	A	827	CLA	O2A-CGA-O1A	-2.12	118.24	123.59
14	A	811	CLA	CHD-C1D-ND	-2.12	122.51	124.45
14	B	837	CLA	CHD-C1D-ND	-2.12	122.51	124.45
14	B	839	CLA	O2A-CGA-O1A	-2.11	118.26	123.59
16	B	844	BCR	C15-C14-C13	-2.11	124.30	127.31
16	A	845	BCR	C33-C5-C6	-2.11	122.16	124.53
16	A	845	BCR	C8-C7-C6	-2.11	121.28	127.20
14	B	814	CLA	C5-C3-C2	2.11	125.38	121.12
16	L	202	BCR	C35-C13-C14	-2.11	119.97	122.92
14	A	819	CLA	CHD-C1D-ND	-2.11	122.52	124.45
16	I	101	BCR	C15-C14-C13	-2.11	124.31	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	A	848	BCR	C2-C1-C6	2.10	113.72	110.48
16	A	849	BCR	C2-C1-C6	2.10	113.72	110.48
14	A	807	CLA	C1B-CHB-C4A	-2.10	125.96	130.12
14	L	204	CLA	O2A-CGA-O1A	-2.10	118.29	123.59
16	L	207	BCR	C8-C7-C6	-2.10	121.31	127.20
14	A	806	CLA	CHD-C1D-ND	-2.10	122.53	124.45
14	A	808	CLA	C1B-CHB-C4A	-2.10	125.96	130.12
20	B	850	LMG	O2-C2-C1	-2.10	104.95	110.05
20	B	850	LMG	O1-C1-C2	-2.10	105.03	108.30
14	B	806	CLA	CHD-C1D-ND	-2.10	122.53	124.45
14	B	834	CLA	CHD-C1D-ND	-2.10	122.53	124.45
16	A	846	BCR	C38-C26-C25	-2.10	122.17	124.53
16	B	852	BCR	C35-C13-C14	-2.09	119.99	122.92
14	A	825	CLA	CMB-C2B-C3B	2.09	128.59	124.68
16	I	103	BCR	C29-C30-C25	2.08	113.69	110.48
14	L	205	CLA	O2D-CGD-CBD	2.08	114.97	111.27
16	B	853	BCR	C38-C26-C25	-2.08	122.20	124.53
14	B	836	CLA	CBA-CAA-C2A	2.07	119.98	113.86
14	A	833	CLA	C1B-CHB-C4A	-2.07	126.01	130.12
17	A	852	LHG	C27-C26-C25	-2.07	103.91	114.42
14	B	808	CLA	CHD-C1D-ND	-2.07	122.55	124.45
16	J	104	BCR	C35-C13-C14	-2.07	120.02	122.92
14	B	818	CLA	C6-C5-C3	2.07	118.88	113.45
17	A	853	LHG	C27-C26-C25	-2.07	103.92	114.42
14	A	809	CLA	CHD-C1D-ND	-2.07	122.55	124.45
14	A	842	CLA	O2A-CGA-O1A	-2.07	118.38	123.59
14	A	831	CLA	O2A-CGA-O1A	-2.06	118.38	123.59
14	A	817	CLA	O2A-CGA-O1A	-2.06	118.39	123.59
14	A	843	CLA	CHD-C1D-ND	-2.06	122.56	124.45
14	A	826	CLA	CHB-C4A-NA	2.06	127.36	124.51
16	B	849	BCR	C16-C15-C14	-2.06	119.26	123.47
14	A	834	CLA	CHD-C1D-ND	-2.06	122.56	124.45
14	A	834	CLA	O2A-CGA-O1A	-2.06	118.40	123.59
14	K	102	CLA	O2A-CGA-O1A	-2.06	118.40	123.59
14	B	809	CLA	CHD-C1D-ND	-2.06	122.56	124.45
14	B	842	CLA	C1-C2-C3	-2.05	122.49	126.04
14	A	836	CLA	O2A-CGA-O1A	-2.05	118.41	123.59
14	B	815	CLA	O2A-CGA-O1A	-2.05	118.41	123.59
16	A	851	BCR	C8-C7-C6	-2.05	121.44	127.20
16	L	202	BCR	C20-C21-C22	-2.05	124.38	127.31
14	A	854	CLA	CHD-C1D-ND	-2.05	122.57	124.45
14	A	837	CLA	O2A-CGA-O1A	-2.05	118.18	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	J	101	CLA	O2A-CGA-O1A	-2.05	118.19	123.30
14	L	205	CLA	CHD-C1D-ND	-2.05	122.57	124.45
14	A	820	CLA	O2D-CGD-CBD	2.05	114.91	111.27
14	A	802	CLA	O1D-CGD-CBD	2.05	128.68	124.48
16	B	844	BCR	C8-C7-C6	-2.05	121.45	127.20
16	F	202	BCR	C24-C23-C22	-2.05	123.14	126.23
14	B	838	CLA	O2A-CGA-O1A	-2.05	118.43	123.59
14	B	816	CLA	CHD-C1D-ND	-2.05	122.57	124.45
14	B	824	CLA	O2A-CGA-O1A	-2.04	118.20	123.30
16	B	848	BCR	C33-C5-C6	-2.04	122.23	124.53
14	A	817	CLA	CHD-C1D-ND	-2.04	122.58	124.45
14	B	827	CLA	C1B-CHB-C4A	-2.04	126.08	130.12
14	B	840	CLA	CHD-C1D-ND	-2.04	122.58	124.45
20	B	850	LMG	C38-C37-C36	-2.04	104.08	114.42
14	F	201	CLA	O2A-CGA-O1A	-2.04	118.45	123.59
14	A	825	CLA	C1-C2-C3	-2.04	122.52	126.04
14	A	840	CLA	C5-C3-C2	2.04	125.24	121.12
16	B	846	BCR	C16-C15-C14	-2.03	119.31	123.47
16	A	850	BCR	C8-C7-C6	-2.03	121.50	127.20
14	B	822	CLA	O2A-CGA-O1A	-2.03	118.24	123.30
14	A	818	CLA	O2A-CGA-O1A	-2.03	118.47	123.59
14	F	203	CLA	O2A-CGA-O1A	-2.03	118.24	123.30
16	A	845	BCR	C28-C27-C26	-2.03	110.45	114.08
16	J	104	BCR	C8-C7-C6	-2.03	121.51	127.20
14	B	833	CLA	O2D-CGD-CBD	2.03	114.87	111.27
14	B	820	CLA	O2A-CGA-O1A	-2.03	118.48	123.59
14	A	803	CLA	CHB-C4A-NA	2.03	127.31	124.51
17	M	101	LHG	C27-C26-C25	-2.03	104.14	114.42
14	A	821	CLA	O2A-CGA-O1A	-2.03	118.48	123.59
14	A	807	CLA	O2D-CGD-O1D	-2.02	119.88	123.84
16	J	103	BCR	C27-C26-C25	2.02	125.67	122.73
14	A	805	CLA	C1-C2-C3	-2.02	122.54	126.04
14	A	828	CLA	O2D-CGD-CBD	2.02	114.86	111.27
17	A	852	LHG	C18-C17-C16	-2.02	104.16	114.42
17	B	851	LHG	C20-C19-C18	-2.02	104.16	114.42
17	B	851	LHG	C11-C10-C9	-2.02	104.17	114.42
14	B	811	CLA	O1D-CGD-CBD	2.02	128.61	124.48
17	I	102	LHG	C11-C10-C9	-2.02	104.18	114.42
16	A	849	BCR	C28-C27-C26	-2.02	110.48	114.08
16	L	202	BCR	C27-C26-C25	2.02	125.66	122.73
16	L	207	BCR	C7-C8-C9	-2.01	123.19	126.23
14	A	841	CLA	CHD-C1D-ND	-2.01	122.60	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	J	103	BCR	C35-C13-C14	-2.01	120.11	122.92
14	A	803	CLA	O2A-CGA-O1A	-2.01	118.53	123.59
14	A	828	CLA	CHD-C1D-ND	-2.01	122.61	124.45
14	B	829	CLA	C2D-C1D-ND	-2.00	108.63	110.10
14	L	206	CLA	CHD-C1D-ND	-2.00	122.61	124.45

All (99) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
13	A	801	CL0	ND
13	A	801	CL0	NA
13	A	801	CL0	NC
14	A	802	CLA	ND
14	A	803	CLA	ND
14	A	804	CLA	ND
14	A	805	CLA	ND
14	A	806	CLA	ND
14	A	807	CLA	ND
14	A	808	CLA	ND
14	A	809	CLA	ND
14	A	810	CLA	ND
14	A	811	CLA	ND
14	A	812	CLA	ND
14	A	813	CLA	ND
14	A	814	CLA	ND
14	A	815	CLA	ND
14	A	816	CLA	ND
14	A	817	CLA	ND
14	A	818	CLA	ND
14	A	819	CLA	ND
14	A	820	CLA	ND
14	A	821	CLA	ND
14	A	822	CLA	ND
14	A	823	CLA	ND
14	A	824	CLA	ND
14	A	825	CLA	ND
14	A	826	CLA	ND
14	A	827	CLA	ND
14	A	828	CLA	ND
14	A	829	CLA	ND
14	A	830	CLA	ND
14	A	831	CLA	ND

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Atom</b>
14	A	832	CLA	ND
14	A	833	CLA	ND
14	A	834	CLA	ND
14	A	835	CLA	ND
14	A	836	CLA	ND
14	A	837	CLA	ND
14	A	838	CLA	ND
14	A	839	CLA	ND
14	A	840	CLA	ND
14	A	841	CLA	ND
14	A	842	CLA	ND
14	A	843	CLA	ND
14	A	854	CLA	ND
14	B	801	CLA	ND
14	B	804	CLA	ND
14	B	805	CLA	ND
14	B	806	CLA	ND
14	B	807	CLA	ND
14	B	808	CLA	ND
14	B	809	CLA	ND
14	B	810	CLA	ND
14	B	811	CLA	ND
14	B	812	CLA	ND
14	B	813	CLA	ND
14	B	814	CLA	ND
14	B	815	CLA	ND
14	B	816	CLA	ND
14	B	817	CLA	ND
14	B	818	CLA	ND
14	B	819	CLA	ND
14	B	820	CLA	ND
14	B	821	CLA	ND
14	B	822	CLA	ND
14	B	823	CLA	ND
14	B	824	CLA	ND
14	B	825	CLA	ND
14	B	826	CLA	ND
14	B	827	CLA	ND
14	B	828	CLA	ND
14	B	829	CLA	ND
14	B	830	CLA	ND
14	B	831	CLA	ND

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Mol	Chain	Res	Type	Atom
14	B	832	CLA	ND
14	B	833	CLA	ND
14	B	834	CLA	ND
14	B	835	CLA	ND
14	B	836	CLA	ND
14	B	837	CLA	ND
14	B	838	CLA	ND
14	B	839	CLA	ND
14	B	840	CLA	ND
14	B	841	CLA	ND
14	B	842	CLA	ND
14	F	201	CLA	ND
14	F	203	CLA	ND
14	F	204	CLA	ND
14	J	101	CLA	ND
14	J	102	CLA	ND
14	K	101	CLA	ND
14	K	102	CLA	ND
14	L	201	CLA	ND
14	L	204	CLA	ND
14	L	205	CLA	ND
14	L	206	CLA	ND
14	M	102	CLA	ND
14	X	1701	CLA	ND

All (1391) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
14	A	804	CLA	C1A-C2A-CAA-CBA
14	A	804	CLA	C3A-C2A-CAA-CBA
14	A	804	CLA	CHA-CBD-CGD-O1D
14	A	804	CLA	CHA-CBD-CGD-O2D
14	A	805	CLA	C1A-C2A-CAA-CBA
14	A	805	CLA	C3A-C2A-CAA-CBA
14	A	806	CLA	CHA-CBD-CGD-O1D
14	A	806	CLA	CHA-CBD-CGD-O2D
14	A	807	CLA	C1A-C2A-CAA-CBA
14	A	809	CLA	C1A-C2A-CAA-CBA
14	A	809	CLA	C3A-C2A-CAA-CBA
14	A	810	CLA	CBD-CGD-O2D-CED
14	A	811	CLA	CHA-CBD-CGD-O1D
14	A	811	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
14	A	811	CLA	CBD-CGD-O2D-CED
14	A	812	CLA	CBD-CGD-O2D-CED
14	A	814	CLA	CHA-CBD-CGD-O1D
14	A	814	CLA	CHA-CBD-CGD-O2D
14	A	814	CLA	CAD-CBD-CGD-O1D
14	A	815	CLA	CHA-CBD-CGD-O1D
14	A	816	CLA	C1A-C2A-CAA-CBA
14	A	816	CLA	O2A-C1-C2-C3
14	A	818	CLA	C4-C3-C5-C6
14	A	819	CLA	C1A-C2A-CAA-CBA
14	A	819	CLA	C3A-C2A-CAA-CBA
14	A	819	CLA	C11-C10-C8-C9
14	A	820	CLA	C1A-C2A-CAA-CBA
14	A	820	CLA	C3A-C2A-CAA-CBA
14	A	820	CLA	CHA-CBD-CGD-O1D
14	A	820	CLA	CHA-CBD-CGD-O2D
14	A	821	CLA	C1A-C2A-CAA-CBA
14	A	821	CLA	C3A-C2A-CAA-CBA
14	A	822	CLA	CHA-CBD-CGD-O1D
14	A	822	CLA	CHA-CBD-CGD-O2D
14	A	823	CLA	C3A-C2A-CAA-CBA
14	A	823	CLA	CBD-CGD-O2D-CED
14	A	826	CLA	CBD-CGD-O2D-CED
14	A	829	CLA	CBD-CGD-O2D-CED
14	A	829	CLA	O2A-C1-C2-C3
14	A	834	CLA	CBD-CGD-O2D-CED
14	A	835	CLA	CHA-CBD-CGD-O1D
14	A	835	CLA	CHA-CBD-CGD-O2D
14	A	836	CLA	C2-C3-C5-C6
14	A	836	CLA	C4-C3-C5-C6
14	A	837	CLA	CHA-CBD-CGD-O1D
14	A	837	CLA	CHA-CBD-CGD-O2D
14	A	839	CLA	CHA-CBD-CGD-O1D
14	A	839	CLA	CHA-CBD-CGD-O2D
14	A	839	CLA	CAD-CBD-CGD-O1D
14	A	843	CLA	CHA-CBD-CGD-O1D
14	A	843	CLA	CHA-CBD-CGD-O2D
14	A	843	CLA	CAD-CBD-CGD-O1D
14	A	843	CLA	CAD-CBD-CGD-O2D
14	A	854	CLA	CAD-CBD-CGD-O1D
14	A	854	CLA	CAD-CBD-CGD-O2D
14	B	804	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
14	B	805	CLA	CBD-CGD-O2D-CED
14	B	807	CLA	C3A-C2A-CAA-CBA
14	B	807	CLA	CHA-CBD-CGD-O1D
14	B	807	CLA	CHA-CBD-CGD-O2D
14	B	807	CLA	CAD-CBD-CGD-O1D
14	B	807	CLA	CAD-CBD-CGD-O2D
14	B	817	CLA	O2A-C1-C2-C3
14	B	818	CLA	C2-C3-C5-C6
14	B	818	CLA	C4-C3-C5-C6
14	B	819	CLA	C1A-C2A-CAA-CBA
14	B	819	CLA	C3A-C2A-CAA-CBA
14	B	820	CLA	C1A-C2A-CAA-CBA
14	B	822	CLA	C2A-CAA-CBA-CGA
14	B	825	CLA	CBD-CGD-O2D-CED
14	B	828	CLA	C1A-C2A-CAA-CBA
14	B	828	CLA	C3A-C2A-CAA-CBA
14	B	831	CLA	CBD-CGD-O2D-CED
14	B	835	CLA	CBD-CGD-O2D-CED
14	B	836	CLA	C1A-C2A-CAA-CBA
14	B	842	CLA	C1A-C2A-CAA-CBA
14	B	842	CLA	C3A-C2A-CAA-CBA
14	F	201	CLA	CHA-CBD-CGD-O1D
14	F	201	CLA	CHA-CBD-CGD-O2D
14	L	204	CLA	C1A-C2A-CAA-CBA
14	L	204	CLA	C3A-C2A-CAA-CBA
14	L	204	CLA	C2C-C3C-CAC-CBC
14	L	204	CLA	C4C-C3C-CAC-CBC
14	X	1701	CLA	CAD-CBD-CGD-O1D
14	X	1701	CLA	CAD-CBD-CGD-O2D
16	A	846	BCR	C1-C6-C7-C8
16	A	846	BCR	C18-C19-C20-C21
16	A	846	BCR	C20-C21-C22-C23
16	A	846	BCR	C20-C21-C22-C37
16	A	847	BCR	C7-C8-C9-C34
16	A	847	BCR	C35-C13-C14-C15
16	A	847	BCR	C13-C14-C15-C16
16	A	847	BCR	C14-C15-C16-C17
16	A	847	BCR	C16-C17-C18-C19
16	A	847	BCR	C16-C17-C18-C36
16	A	848	BCR	C21-C22-C23-C24
16	A	849	BCR	C20-C21-C22-C37
16	A	850	BCR	C7-C8-C9-C10

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Mol	Chain	Res	Type	Atoms
16	A	850	BCR	C11-C10-C9-C8
16	A	850	BCR	C11-C12-C13-C35
16	A	850	BCR	C12-C13-C14-C15
16	A	850	BCR	C35-C13-C14-C15
16	A	850	BCR	C14-C15-C16-C17
16	A	850	BCR	C16-C17-C18-C36
16	A	850	BCR	C21-C22-C23-C24
16	A	850	BCR	C37-C22-C23-C24
16	A	851	BCR	C7-C8-C9-C10
16	A	851	BCR	C7-C8-C9-C34
16	A	851	BCR	C9-C10-C11-C12
16	A	851	BCR	C11-C12-C13-C35
16	A	851	BCR	C12-C13-C14-C15
16	A	851	BCR	C14-C15-C16-C17
16	A	851	BCR	C16-C17-C18-C19
16	A	851	BCR	C16-C17-C18-C36
16	B	844	BCR	C7-C8-C9-C10
16	B	844	BCR	C7-C8-C9-C34
16	B	844	BCR	C35-C13-C14-C15
16	B	844	BCR	C21-C22-C23-C24
16	B	844	BCR	C37-C22-C23-C24
16	B	844	BCR	C22-C23-C24-C25
16	B	845	BCR	C7-C8-C9-C10
16	B	845	BCR	C7-C8-C9-C34
16	B	845	BCR	C11-C10-C9-C8
16	B	845	BCR	C11-C10-C9-C34
16	B	845	BCR	C36-C18-C19-C20
16	B	845	BCR	C21-C22-C23-C24
16	B	845	BCR	C37-C22-C23-C24
16	B	846	BCR	C7-C8-C9-C10
16	B	846	BCR	C7-C8-C9-C34
16	B	847	BCR	C11-C12-C13-C35
16	B	847	BCR	C12-C13-C14-C15
16	B	847	BCR	C14-C15-C16-C17
16	B	847	BCR	C23-C24-C25-C30
16	B	848	BCR	C7-C8-C9-C34
16	B	849	BCR	C1-C6-C7-C8
16	B	852	BCR	C7-C8-C9-C34
16	B	852	BCR	C11-C12-C13-C35
16	B	852	BCR	C35-C13-C14-C15
16	B	852	BCR	C16-C17-C18-C19
16	B	852	BCR	C16-C17-C18-C36

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Mol	Chain	Res	Type	Atoms
16	B	852	BCR	C18-C19-C20-C21
16	B	853	BCR	C5-C6-C7-C8
16	B	853	BCR	C23-C24-C25-C26
16	B	853	BCR	C23-C24-C25-C30
16	F	202	BCR	C7-C8-C9-C34
16	F	202	BCR	C37-C22-C23-C24
16	F	205	BCR	C1-C6-C7-C8
16	I	101	BCR	C16-C17-C18-C19
16	I	101	BCR	C16-C17-C18-C36
16	I	103	BCR	C7-C8-C9-C10
16	I	103	BCR	C16-C17-C18-C36
16	I	103	BCR	C21-C22-C23-C24
16	J	103	BCR	C1-C6-C7-C8
16	J	103	BCR	C5-C6-C7-C8
16	J	103	BCR	C6-C7-C8-C9
16	J	103	BCR	C7-C8-C9-C10
16	J	103	BCR	C7-C8-C9-C34
16	J	103	BCR	C35-C13-C14-C15
16	J	103	BCR	C16-C17-C18-C36
16	J	103	BCR	C36-C18-C19-C20
16	J	103	BCR	C37-C22-C23-C24
16	J	104	BCR	C1-C6-C7-C8
16	J	104	BCR	C5-C6-C7-C8
16	J	104	BCR	C7-C8-C9-C34
16	J	104	BCR	C22-C23-C24-C25
16	J	104	BCR	C23-C24-C25-C26
16	K	103	BCR	C6-C7-C8-C9
16	K	103	BCR	C16-C17-C18-C19
16	K	103	BCR	C16-C17-C18-C36
16	L	202	BCR	C7-C8-C9-C34
16	L	202	BCR	C11-C10-C9-C34
16	L	202	BCR	C11-C12-C13-C35
16	L	202	BCR	C20-C21-C22-C23
16	L	202	BCR	C20-C21-C22-C37
16	L	207	BCR	C1-C6-C7-C8
16	L	207	BCR	C6-C7-C8-C9
16	L	207	BCR	C7-C8-C9-C34
16	L	207	BCR	C11-C10-C9-C34
16	L	207	BCR	C11-C12-C13-C14
16	L	207	BCR	C11-C12-C13-C35
16	L	207	BCR	C16-C17-C18-C36
16	L	207	BCR	C17-C18-C19-C20

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Mol	Chain	Res	Type	Atoms
16	L	207	BCR	C20-C21-C22-C37
16	L	207	BCR	C22-C23-C24-C25
17	A	852	LHG	C3-O3-P-O5
17	A	852	LHG	C3-O3-P-O6
17	B	851	LHG	C1-C2-C3-O3
17	B	851	LHG	C3-O3-P-O5
17	B	851	LHG	C4-O6-P-O5
17	I	102	LHG	O1-C1-C2-C3
17	I	102	LHG	C1-C2-C3-O3
17	I	102	LHG	C4-O6-P-O4
17	M	101	LHG	C24-C23-O8-C6
14	B	814	CLA	C2C-C3C-CAC-CBC
14	A	814	CLA	O1D-CGD-O2D-CED
14	A	830	CLA	O1D-CGD-O2D-CED
14	B	804	CLA	O1D-CGD-O2D-CED
14	B	805	CLA	O1D-CGD-O2D-CED
14	B	835	CLA	O1D-CGD-O2D-CED
14	F	201	CLA	O1D-CGD-O2D-CED
14	A	814	CLA	CBD-CGD-O2D-CED
14	A	821	CLA	CBD-CGD-O2D-CED
14	A	822	CLA	CBD-CGD-O2D-CED
14	A	830	CLA	CBD-CGD-O2D-CED
14	B	808	CLA	CBD-CGD-O2D-CED
14	B	814	CLA	CBD-CGD-O2D-CED
14	B	828	CLA	CBD-CGD-O2D-CED
14	B	836	CLA	CBD-CGD-O2D-CED
14	F	201	CLA	CBD-CGD-O2D-CED
14	F	203	CLA	CBD-CGD-O2D-CED
14	J	101	CLA	CBD-CGD-O2D-CED
14	K	101	CLA	CBD-CGD-O2D-CED
14	L	201	CLA	CBD-CGD-O2D-CED
14	A	809	CLA	O1A-CGA-O2A-C1
17	M	101	LHG	O10-C23-O8-C6
14	B	814	CLA	C4C-C3C-CAC-CBC
14	F	203	CLA	O1D-CGD-O2D-CED
14	A	834	CLA	O1D-CGD-O2D-CED
14	B	831	CLA	O1D-CGD-O2D-CED
14	A	809	CLA	CBA-CGA-O2A-C1
14	A	825	CLA	CBD-CGD-O2D-CED
14	A	841	CLA	CBD-CGD-O2D-CED
14	B	801	CLA	CBD-CGD-O2D-CED
14	B	807	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
14	B	815	CLA	CBD-CGD-O2D-CED
14	B	819	CLA	CBD-CGD-O2D-CED
14	B	820	CLA	CBD-CGD-O2D-CED
14	B	822	CLA	CBD-CGD-O2D-CED
14	B	823	CLA	CBD-CGD-O2D-CED
14	B	841	CLA	CBD-CGD-O2D-CED
14	X	1701	CLA	CBD-CGD-O2D-CED
14	A	802	CLA	O1A-CGA-O2A-C1
14	A	806	CLA	O1A-CGA-O2A-C1
14	A	820	CLA	O1A-CGA-O2A-C1
14	B	819	CLA	O1A-CGA-O2A-C1
14	B	820	CLA	O1A-CGA-O2A-C1
14	B	821	CLA	O1A-CGA-O2A-C1
14	A	812	CLA	O1D-CGD-O2D-CED
14	A	823	CLA	O1D-CGD-O2D-CED
14	B	825	CLA	O1D-CGD-O2D-CED
14	A	829	CLA	O1D-CGD-O2D-CED
14	B	815	CLA	C2C-C3C-CAC-CBC
14	B	821	CLA	CBD-CGD-O2D-CED
14	A	810	CLA	O1D-CGD-O2D-CED
14	A	811	CLA	O1D-CGD-O2D-CED
14	A	826	CLA	O1D-CGD-O2D-CED
14	B	808	CLA	O1D-CGD-O2D-CED
17	B	851	LHG	O9-C7-O7-C5
14	A	833	CLA	O1A-CGA-O2A-C1
14	L	205	CLA	C2C-C3C-CAC-CBC
14	A	802	CLA	C3-C5-C6-C7
14	A	809	CLA	C3-C5-C6-C7
14	A	827	CLA	C3-C5-C6-C7
14	A	839	CLA	C3-C5-C6-C7
14	B	806	CLA	C3-C5-C6-C7
14	B	815	CLA	C3-C5-C6-C7
14	B	816	CLA	C3-C5-C6-C7
14	B	819	CLA	C3-C5-C6-C7
14	B	821	CLA	C3-C5-C6-C7
14	A	806	CLA	CBA-CGA-O2A-C1
14	A	811	CLA	CBA-CGA-O2A-C1
14	A	825	CLA	CBA-CGA-O2A-C1
14	A	836	CLA	CBA-CGA-O2A-C1
14	B	820	CLA	CBA-CGA-O2A-C1
14	B	821	CLA	CBA-CGA-O2A-C1
17	B	851	LHG	C24-C23-O8-C6

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Mol	Chain	Res	Type	Atoms
14	A	838	CLA	C2C-C3C-CAC-CBC
14	B	805	CLA	C2C-C3C-CAC-CBC
14	B	818	CLA	O1A-CGA-O2A-C1
14	L	205	CLA	C4C-C3C-CAC-CBC
14	A	818	CLA	C2-C3-C5-C6
14	A	807	CLA	CBD-CGD-O2D-CED
14	A	802	CLA	C2A-CAA-CBA-CGA
14	A	809	CLA	C2A-CAA-CBA-CGA
14	A	854	CLA	C2A-CAA-CBA-CGA
14	B	801	CLA	C2A-CAA-CBA-CGA
14	B	818	CLA	C2A-CAA-CBA-CGA
14	B	841	CLA	C2A-CAA-CBA-CGA
14	A	817	CLA	O1A-CGA-O2A-C1
14	A	810	CLA	C3-C5-C6-C7
14	A	824	CLA	C3-C5-C6-C7
14	B	811	CLA	C3-C5-C6-C7
14	L	206	CLA	C3-C5-C6-C7
14	A	802	CLA	CBA-CGA-O2A-C1
14	A	820	CLA	CBA-CGA-O2A-C1
14	A	833	CLA	CBA-CGA-O2A-C1
14	B	818	CLA	CBA-CGA-O2A-C1
14	B	819	CLA	CBA-CGA-O2A-C1
14	B	829	CLA	CBA-CGA-O2A-C1
14	B	832	CLA	CBA-CGA-O2A-C1
14	A	821	CLA	C2C-C3C-CAC-CBC
14	J	101	CLA	O1D-CGD-O2D-CED
14	L	204	CLA	CBD-CGD-O2D-CED
14	B	815	CLA	C4C-C3C-CAC-CBC
14	B	814	CLA	O1D-CGD-O2D-CED
14	L	201	CLA	O1D-CGD-O2D-CED
14	A	805	CLA	O1A-CGA-O2A-C1
14	A	811	CLA	O1A-CGA-O2A-C1
14	A	836	CLA	O1A-CGA-O2A-C1
14	A	838	CLA	O1A-CGA-O2A-C1
14	B	832	CLA	O1A-CGA-O2A-C1
17	B	851	LHG	O10-C23-O8-C6
16	A	847	BCR	C15-C16-C17-C18
20	B	850	LMG	O6-C5-C6-O5
14	A	806	CLA	CBD-CGD-O2D-CED
14	A	816	CLA	CBD-CGD-O2D-CED
14	A	833	CLA	CBD-CGD-O2D-CED
14	A	836	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
14	A	854	CLA	CBD-CGD-O2D-CED
14	A	821	CLA	O1D-CGD-O2D-CED
17	A	852	LHG	O2-C2-C3-O3
17	A	853	LHG	O2-C2-C3-O3
17	B	851	LHG	O2-C2-C3-O3
17	I	102	LHG	O2-C2-C3-O3
17	M	101	LHG	O2-C2-C3-O3
14	A	819	CLA	C3-C5-C6-C7
14	A	833	CLA	C3-C5-C6-C7
14	B	810	CLA	C3-C5-C6-C7
14	B	818	CLA	C3-C5-C6-C7
14	A	805	CLA	CBA-CGA-O2A-C1
14	A	817	CLA	CBA-CGA-O2A-C1
14	B	817	CLA	CBA-CGA-O2A-C1
14	A	825	CLA	O1A-CGA-O2A-C1
14	B	817	CLA	O1A-CGA-O2A-C1
14	B	829	CLA	O1A-CGA-O2A-C1
14	K	101	CLA	O1D-CGD-O2D-CED
14	A	815	CLA	CBD-CGD-O2D-CED
14	B	824	CLA	CBD-CGD-O2D-CED
14	B	837	CLA	CBD-CGD-O2D-CED
14	A	822	CLA	O1D-CGD-O2D-CED
14	B	828	CLA	O1D-CGD-O2D-CED
14	B	836	CLA	O1D-CGD-O2D-CED
14	A	838	CLA	CBA-CGA-O2A-C1
14	A	817	CLA	C4-C3-C5-C6
14	A	854	CLA	C4-C3-C5-C6
14	A	817	CLA	C2-C3-C5-C6
14	A	854	CLA	C2-C3-C5-C6
14	A	803	CLA	CBD-CGD-O2D-CED
14	B	813	CLA	C2A-CAA-CBA-CGA
14	L	206	CLA	C2A-CAA-CBA-CGA
14	A	818	CLA	O1A-CGA-O2A-C1
14	A	818	CLA	CBA-CGA-O2A-C1
14	B	801	CLA	CBA-CGA-O2A-C1
14	B	823	CLA	O1D-CGD-O2D-CED
17	A	853	LHG	C1-C2-C3-O3
14	B	805	CLA	C4C-C3C-CAC-CBC
13	A	801	CL0	C3-C5-C6-C7
14	A	825	CLA	O1D-CGD-O2D-CED
14	A	827	CLA	CBA-CGA-O2A-C1
14	B	831	CLA	CBA-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
14	L	204	CLA	CBA-CGA-O2A-C1
16	B	852	BCR	C9-C10-C11-C12
17	B	851	LHG	C23-C24-C25-C26
14	A	815	CLA	C10-C11-C12-C13
14	B	807	CLA	O1D-CGD-O2D-CED
14	A	831	CLA	C5-C6-C7-C8
14	B	801	CLA	C5-C6-C7-C8
14	A	834	CLA	CBA-CGA-O2A-C1
14	A	802	CLA	C11-C12-C13-C14
14	A	803	CLA	C6-C7-C8-C9
14	A	812	CLA	C6-C7-C8-C9
14	A	817	CLA	C11-C10-C8-C9
14	A	824	CLA	C11-C12-C13-C14
14	A	842	CLA	C14-C13-C15-C16
14	B	805	CLA	C11-C12-C13-C14
14	B	806	CLA	C14-C13-C15-C16
14	B	811	CLA	C14-C13-C15-C16
14	B	814	CLA	C14-C13-C15-C16
14	B	817	CLA	C14-C13-C15-C16
14	B	835	CLA	C14-C13-C15-C16
14	B	841	CLA	C6-C7-C8-C9
14	L	205	CLA	C6-C7-C8-C9
14	B	815	CLA	O1D-CGD-O2D-CED
14	B	820	CLA	O1D-CGD-O2D-CED
14	B	822	CLA	O1D-CGD-O2D-CED
16	A	845	BCR	C37-C22-C23-C24
16	A	846	BCR	C11-C12-C13-C35
16	A	846	BCR	C37-C22-C23-C24
16	A	847	BCR	C37-C22-C23-C24
16	A	850	BCR	C7-C8-C9-C34
16	B	845	BCR	C11-C12-C13-C35
16	F	205	BCR	C37-C22-C23-C24
16	I	101	BCR	C11-C12-C13-C35
16	I	103	BCR	C7-C8-C9-C34
16	K	103	BCR	C11-C12-C13-C35
17	M	101	LHG	C8-C7-O7-C5
14	A	838	CLA	C4C-C3C-CAC-CBC
14	B	831	CLA	O1A-CGA-O2A-C1
14	L	204	CLA	O1A-CGA-O2A-C1
14	A	828	CLA	C8-C10-C11-C12
17	A	853	LHG	C29-C30-C31-C32
14	A	838	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
14	A	829	CLA	CBA-CGA-O2A-C1
17	I	102	LHG	C24-C23-O8-C6
14	A	819	CLA	C13-C15-C16-C17
14	B	815	CLA	C8-C10-C11-C12
14	B	817	CLA	C5-C6-C7-C8
14	B	826	CLA	C10-C11-C12-C13
14	B	834	CLA	C13-C15-C16-C17
14	L	204	CLA	C10-C11-C12-C13
14	A	821	CLA	C5-C6-C7-C8
14	A	824	CLA	C10-C11-C12-C13
14	A	825	CLA	C8-C10-C11-C12
14	B	807	CLA	C13-C15-C16-C17
14	B	809	CLA	C13-C15-C16-C17
14	B	835	CLA	C8-C10-C11-C12
14	A	821	CLA	C4C-C3C-CAC-CBC
14	B	801	CLA	O1D-CGD-O2D-CED
17	B	851	LHG	O1-C1-C2-O2
17	I	102	LHG	C23-C24-C25-C26
20	B	850	LMG	C28-C29-C30-C31
14	B	804	CLA	C10-C11-C12-C13
14	B	805	CLA	C15-C16-C17-C18
14	B	819	CLA	C5-C6-C7-C8
14	B	828	CLA	C10-C11-C12-C13
14	L	204	CLA	C13-C15-C16-C17
14	A	816	CLA	CBA-CGA-O2A-C1
14	B	840	CLA	C2-C1-O2A-CGA
14	A	841	CLA	O1D-CGD-O2D-CED
14	A	807	CLA	C13-C15-C16-C17
14	A	838	CLA	C13-C15-C16-C17
17	I	102	LHG	C2-C3-O3-P
20	B	850	LMG	C4-C5-C6-O5
14	A	806	CLA	C13-C15-C16-C17
14	A	812	CLA	C11-C12-C13-C15
14	A	816	CLA	C12-C13-C15-C16
14	A	819	CLA	C11-C12-C13-C15
14	A	824	CLA	C11-C12-C13-C15
14	A	833	CLA	C6-C7-C8-C10
14	B	805	CLA	C11-C10-C8-C7
14	B	833	CLA	C12-C13-C15-C16
14	A	834	CLA	C3-C5-C6-C7
14	A	827	CLA	O1A-CGA-O2A-C1
16	A	851	BCR	C13-C14-C15-C16

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Mol	Chain	Res	Type	Atoms
14	B	835	CLA	CBA-CGA-O2A-C1
14	K	102	CLA	CBA-CGA-O2A-C1
14	A	830	CLA	C2A-CAA-CBA-CGA
14	A	843	CLA	C2A-CAA-CBA-CGA
14	B	815	CLA	C2A-CAA-CBA-CGA
14	B	819	CLA	O1D-CGD-O2D-CED
14	B	821	CLA	O1D-CGD-O2D-CED
14	B	841	CLA	O1D-CGD-O2D-CED
14	X	1701	CLA	O1D-CGD-O2D-CED
13	A	801	CL0	C8-C10-C11-C12
14	A	839	CLA	C8-C10-C11-C12
14	B	806	CLA	C10-C11-C12-C13
14	L	205	CLA	C8-C10-C11-C12
16	I	103	BCR	C22-C23-C24-C25
14	B	816	CLA	CBD-CGD-O2D-CED
14	A	828	CLA	C5-C6-C7-C8
14	B	835	CLA	C15-C16-C17-C18
16	A	845	BCR	C18-C19-C20-C21
16	A	851	BCR	C10-C11-C12-C13
16	B	844	BCR	C10-C11-C12-C13
16	B	845	BCR	C10-C11-C12-C13
16	L	202	BCR	C10-C11-C12-C13
14	B	807	CLA	C10-C11-C12-C13
14	B	812	CLA	C13-C15-C16-C17
14	B	821	CLA	C10-C11-C12-C13
14	B	839	CLA	C13-C15-C16-C17
14	A	834	CLA	O1A-CGA-O2A-C1
14	B	801	CLA	O1A-CGA-O2A-C1
14	A	810	CLA	C15-C16-C17-C18
14	A	825	CLA	C15-C16-C17-C18
14	A	826	CLA	C8-C10-C11-C12
14	B	810	CLA	C13-C15-C16-C17
14	B	827	CLA	C8-C10-C11-C12
14	B	830	CLA	C13-C15-C16-C17
14	A	807	CLA	O1D-CGD-O2D-CED
17	B	851	LHG	C8-C7-O7-C5
14	A	828	CLA	C15-C16-C17-C18
14	B	825	CLA	C13-C15-C16-C17
14	B	829	CLA	C15-C16-C17-C18
14	B	830	CLA	C5-C6-C7-C8
14	K	102	CLA	C5-C6-C7-C8
17	B	851	LHG	C4-O6-P-O3

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Mol	Chain	Res	Type	Atoms
17	I	102	LHG	C3-O3-P-O6
17	M	101	LHG	C3-O3-P-O6
14	B	814	CLA	C3-C5-C6-C7
14	B	806	CLA	C8-C10-C11-C12
14	B	825	CLA	C8-C10-C11-C12
14	B	829	CLA	C13-C15-C16-C17
14	B	833	CLA	C15-C16-C17-C18
17	M	101	LHG	C1-C2-C3-O3
14	A	817	CLA	C13-C15-C16-C17
14	B	834	CLA	C10-C11-C12-C13
14	A	816	CLA	C16-C17-C18-C19
14	A	836	CLA	C16-C17-C18-C19
14	A	803	CLA	C3-C5-C6-C7
14	A	840	CLA	C3-C5-C6-C7
14	B	823	CLA	C3-C5-C6-C7
14	A	831	CLA	CBA-CGA-O2A-C1
14	B	830	CLA	CBA-CGA-O2A-C1
14	B	816	CLA	C13-C15-C16-C17
20	B	850	LMG	C11-C10-O7-C8
14	A	840	CLA	C10-C11-C12-C13
14	B	827	CLA	C13-C15-C16-C17
16	A	848	BCR	C20-C21-C22-C37
16	A	850	BCR	C11-C10-C9-C34
16	B	844	BCR	C11-C10-C9-C34
16	B	844	BCR	C16-C17-C18-C36
16	B	844	BCR	C20-C21-C22-C37
16	B	845	BCR	C20-C21-C22-C37
16	B	847	BCR	C35-C13-C14-C15
16	B	847	BCR	C20-C21-C22-C37
16	B	848	BCR	C20-C21-C22-C37
16	B	849	BCR	C35-C13-C14-C15
16	B	849	BCR	C16-C17-C18-C36
16	B	852	BCR	C11-C10-C9-C34
16	B	852	BCR	C20-C21-C22-C37
16	B	853	BCR	C11-C10-C9-C34
16	B	853	BCR	C16-C17-C18-C36
16	B	853	BCR	C20-C21-C22-C37
16	F	202	BCR	C35-C13-C14-C15
16	F	202	BCR	C20-C21-C22-C37
16	F	205	BCR	C16-C17-C18-C36
16	I	101	BCR	C11-C10-C9-C34
16	I	103	BCR	C35-C13-C14-C15

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Mol	Chain	Res	Type	Atoms
16	J	103	BCR	C20-C21-C22-C37
16	L	202	BCR	C35-C13-C14-C15
17	M	101	LHG	C30-C31-C32-C33
20	B	850	LMG	C29-C30-C31-C32
14	A	833	CLA	C16-C17-C18-C19
14	B	839	CLA	C16-C17-C18-C20
14	L	205	CLA	C16-C17-C18-C20
20	B	850	LMG	C16-C17-C18-C19
14	A	818	CLA	C10-C11-C12-C13
14	A	836	CLA	C5-C6-C7-C8
14	L	204	CLA	O1D-CGD-O2D-CED
14	A	829	CLA	O1A-CGA-O2A-C1
17	A	852	LHG	C33-C34-C35-C36
17	A	853	LHG	C27-C28-C29-C30
14	A	816	CLA	O1D-CGD-O2D-CED
20	B	850	LMG	C39-C40-C41-C42
17	M	101	LHG	C7-C8-C9-C10
14	A	806	CLA	O1D-CGD-O2D-CED
16	A	846	BCR	C11-C10-C9-C8
16	A	847	BCR	C12-C13-C14-C15
16	A	849	BCR	C20-C21-C22-C23
16	A	850	BCR	C16-C17-C18-C19
16	B	845	BCR	C12-C13-C14-C15
16	B	847	BCR	C16-C17-C18-C19
16	B	848	BCR	C11-C10-C9-C8
16	B	853	BCR	C11-C10-C9-C8
16	F	205	BCR	C16-C17-C18-C19
16	I	101	BCR	C20-C21-C22-C23
16	J	103	BCR	C12-C13-C14-C15
16	L	207	BCR	C16-C17-C18-C19
16	L	207	BCR	C20-C21-C22-C23
17	A	852	LHG	C9-C10-C11-C12
14	A	806	CLA	C16-C17-C18-C19
14	A	829	CLA	C16-C17-C18-C19
14	A	833	CLA	C16-C17-C18-C20
14	A	833	CLA	O1D-CGD-O2D-CED
14	A	825	CLA	C4-C3-C5-C6
14	B	815	CLA	C4-C3-C5-C6
17	A	852	LHG	C10-C11-C12-C13
14	B	815	CLA	C2-C3-C5-C6
14	A	804	CLA	C14-C13-C15-C16
14	A	820	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
14	A	836	CLA	O1D-CGD-O2D-CED
17	I	102	LHG	C16-C17-C18-C19
14	A	832	CLA	C2A-CAA-CBA-CGA
14	A	834	CLA	C2A-CAA-CBA-CGA
14	B	836	CLA	C2A-CAA-CBA-CGA
14	A	816	CLA	O1A-CGA-O2A-C1
14	B	835	CLA	O1A-CGA-O2A-C1
14	K	102	CLA	O1A-CGA-O2A-C1
16	B	853	BCR	C37-C22-C23-C24
17	A	852	LHG	C27-C28-C29-C30
17	M	101	LHG	C26-C27-C28-C29
17	B	851	LHG	O1-C1-C2-C3
16	B	852	BCR	C11-C12-C13-C14
16	L	207	BCR	C21-C22-C23-C24
14	A	854	CLA	C13-C15-C16-C17
17	A	852	LHG	C32-C33-C34-C35
17	A	853	LHG	C32-C33-C34-C35
17	I	102	LHG	C15-C16-C17-C18
20	B	850	LMG	C11-C12-C13-C14
14	B	817	CLA	C16-C17-C18-C20
14	B	825	CLA	C16-C17-C18-C19
14	B	825	CLA	C16-C17-C18-C20
14	B	829	CLA	C16-C17-C18-C20
14	B	839	CLA	C16-C17-C18-C19
14	A	815	CLA	C15-C16-C17-C18
14	B	839	CLA	C8-C10-C11-C12
17	B	851	LHG	C13-C14-C15-C16
17	B	851	LHG	C31-C32-C33-C34
14	B	826	CLA	C8-C10-C11-C12
14	B	831	CLA	C5-C6-C7-C8
14	A	821	CLA	CBA-CGA-O2A-C1
14	B	806	CLA	CBA-CGA-O2A-C1
14	A	806	CLA	C3A-C2A-CAA-CBA
14	A	807	CLA	C3A-C2A-CAA-CBA
14	B	836	CLA	C3A-C2A-CAA-CBA
14	B	837	CLA	C3A-C2A-CAA-CBA
14	A	810	CLA	C13-C15-C16-C17
14	A	832	CLA	C5-C6-C7-C8
14	A	829	CLA	C16-C17-C18-C20
14	B	817	CLA	C16-C17-C18-C19
14	B	829	CLA	C16-C17-C18-C19
14	A	806	CLA	O2A-C1-C2-C3

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Mol	Chain	Res	Type	Atoms
14	B	819	CLA	O2A-C1-C2-C3
14	A	804	CLA	C8-C10-C11-C12
14	L	204	CLA	C4-C3-C5-C6
14	A	826	CLA	C2-C3-C5-C6
14	B	829	CLA	C2-C3-C5-C6
14	B	833	CLA	C2-C3-C5-C6
14	L	204	CLA	C2-C3-C5-C6
14	B	824	CLA	O1D-CGD-O2D-CED
17	I	102	LHG	O1-C1-C2-O2
14	B	830	CLA	C10-C11-C12-C13
14	B	830	CLA	O1A-CGA-O2A-C1
14	A	806	CLA	C16-C17-C18-C20
14	B	812	CLA	C16-C17-C18-C20
14	L	205	CLA	C16-C17-C18-C19
14	L	201	CLA	CBA-CGA-O2A-C1
17	A	852	LHG	C15-C16-C17-C18
20	B	850	LMG	C22-C23-C24-C25
14	A	831	CLA	O1A-CGA-O2A-C1
14	B	826	CLA	C5-C6-C7-C8
14	K	102	CLA	CBD-CGD-O2D-CED
14	A	806	CLA	C2-C1-O2A-CGA
17	A	852	LHG	C23-C24-C25-C26
14	B	812	CLA	C3-C5-C6-C7
16	A	846	BCR	C5-C6-C7-C8
16	A	846	BCR	C23-C24-C25-C26
16	A	846	BCR	C23-C24-C25-C30
16	A	848	BCR	C23-C24-C25-C26
16	A	848	BCR	C23-C24-C25-C30
16	A	850	BCR	C1-C6-C7-C8
16	A	850	BCR	C5-C6-C7-C8
16	A	850	BCR	C23-C24-C25-C26
16	A	850	BCR	C23-C24-C25-C30
16	B	847	BCR	C23-C24-C25-C26
16	B	848	BCR	C23-C24-C25-C26
16	B	848	BCR	C23-C24-C25-C30
16	B	853	BCR	C1-C6-C7-C8
16	F	205	BCR	C5-C6-C7-C8
16	F	205	BCR	C23-C24-C25-C26
16	F	205	BCR	C23-C24-C25-C30
16	I	103	BCR	C23-C24-C25-C26
16	I	103	BCR	C23-C24-C25-C30
16	J	104	BCR	C23-C24-C25-C30

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Mol	Chain	Res	Type	Atoms
16	L	207	BCR	C5-C6-C7-C8
14	B	807	CLA	CBA-CGA-O2A-C1
14	F	201	CLA	CBA-CGA-O2A-C1
14	B	806	CLA	C5-C6-C7-C8
14	B	818	CLA	C15-C16-C17-C18
17	M	101	LHG	C28-C29-C30-C31
17	M	101	LHG	C31-C32-C33-C34
14	B	806	CLA	O1A-CGA-O2A-C1
14	A	812	CLA	C8-C10-C11-C12
17	B	851	LHG	C12-C13-C14-C15
14	B	829	CLA	C4-C3-C5-C6
14	A	807	CLA	C11-C12-C13-C15
14	A	815	CLA	C12-C13-C15-C16
14	A	820	CLA	C11-C10-C8-C7
14	A	825	CLA	C2-C3-C5-C6
14	B	805	CLA	C11-C12-C13-C15
14	B	834	CLA	C6-C7-C8-C10
14	B	839	CLA	C12-C13-C15-C16
14	B	841	CLA	C11-C12-C13-C15
14	B	807	CLA	O1A-CGA-O2A-C1
14	B	833	CLA	C2C-C3C-CAC-CBC
14	A	816	CLA	C8-C10-C11-C12
14	A	833	CLA	C8-C10-C11-C12
14	B	837	CLA	O1D-CGD-O2D-CED
15	A	844	PQN	C25-C26-C27-C28
14	L	206	CLA	C13-C15-C16-C17
17	A	852	LHG	C11-C10-C9-C8
16	B	845	BCR	C6-C7-C8-C9
16	B	847	BCR	C22-C23-C24-C25
16	L	202	BCR	C22-C23-C24-C25
14	A	821	CLA	O1A-CGA-O2A-C1
14	A	854	CLA	O1D-CGD-O2D-CED
14	A	815	CLA	O1D-CGD-O2D-CED
14	B	819	CLA	C15-C16-C17-C18
14	L	201	CLA	O1A-CGA-O2A-C1
17	B	851	LHG	C27-C28-C29-C30
14	A	816	CLA	C16-C17-C18-C20
17	B	851	LHG	C32-C33-C34-C35
14	A	814	CLA	C10-C11-C12-C13
14	A	826	CLA	C4-C3-C5-C6
14	B	833	CLA	C4-C3-C5-C6
14	A	812	CLA	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
14	A	815	CLA	C14-C13-C15-C16
14	A	816	CLA	C14-C13-C15-C16
14	A	819	CLA	C11-C12-C13-C14
14	A	839	CLA	C11-C12-C13-C14
14	B	809	CLA	C11-C12-C13-C14
14	B	828	CLA	C11-C12-C13-C14
14	B	833	CLA	C14-C13-C15-C16
14	B	834	CLA	C6-C7-C8-C9
14	A	803	CLA	O1D-CGD-O2D-CED
14	B	828	CLA	C2A-CAA-CBA-CGA
17	I	102	LHG	C12-C13-C14-C15
16	B	853	BCR	C11-C12-C13-C35
16	B	853	BCR	C21-C22-C23-C24
14	F	201	CLA	O1A-CGA-O2A-C1
14	A	812	CLA	C1A-C2A-CAA-CBA
14	A	823	CLA	C1A-C2A-CAA-CBA
14	B	807	CLA	C1A-C2A-CAA-CBA
14	B	817	CLA	C1A-C2A-CAA-CBA
14	B	833	CLA	C1A-C2A-CAA-CBA
14	K	102	CLA	C1A-C2A-CAA-CBA
14	A	836	CLA	C16-C17-C18-C20
14	A	839	CLA	C16-C17-C18-C20
14	B	812	CLA	C16-C17-C18-C19
14	B	814	CLA	C16-C17-C18-C19
17	M	101	LHG	O9-C7-O7-C5
20	B	850	LMG	O9-C10-O7-C8
17	A	853	LHG	C24-C25-C26-C27
20	B	850	LMG	C37-C38-C39-C40
14	B	804	CLA	C13-C15-C16-C17
14	B	819	CLA	C8-C10-C11-C12
14	A	807	CLA	C8-C10-C11-C12
14	A	841	CLA	C8-C10-C11-C12
14	B	808	CLA	C8-C10-C11-C12
14	B	821	CLA	C15-C16-C17-C18
14	L	205	CLA	C13-C15-C16-C17
14	A	830	CLA	C4-C3-C5-C6
20	B	850	LMG	C18-C19-C20-C21
14	A	807	CLA	C16-C17-C18-C20
14	A	838	CLA	O1D-CGD-O2D-CED
20	B	850	LMG	C41-C42-C43-C44
17	A	853	LHG	C23-C24-C25-C26
14	B	820	CLA	C3-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
14	A	812	CLA	CBA-CGA-O2A-C1
14	B	838	CLA	C10-C11-C12-C13
17	B	851	LHG	C11-C12-C13-C14
16	A	848	BCR	C16-C17-C18-C36
16	A	850	BCR	C20-C21-C22-C37
16	A	851	BCR	C35-C13-C14-C15
17	B	851	LHG	C9-C10-C11-C12
14	B	815	CLA	CBA-CGA-O2A-C1
14	L	205	CLA	C2A-CAA-CBA-CGA
14	B	809	CLA	C16-C17-C18-C20
14	L	206	CLA	C5-C6-C7-C8
14	F	201	CLA	C10-C11-C12-C13
14	A	824	CLA	C15-C16-C17-C18
16	A	848	BCR	C11-C10-C9-C8
16	F	202	BCR	C11-C10-C9-C8
16	J	103	BCR	C11-C10-C9-C8
16	L	207	BCR	C12-C13-C14-C15
17	I	102	LHG	C19-C20-C21-C22
14	A	805	CLA	C4-C3-C5-C6
14	A	805	CLA	C2-C3-C5-C6
14	A	806	CLA	C11-C10-C8-C7
14	A	806	CLA	C11-C12-C13-C15
14	A	818	CLA	C12-C13-C15-C16
14	A	819	CLA	C11-C10-C8-C7
14	A	827	CLA	C11-C12-C13-C15
14	A	828	CLA	C6-C7-C8-C10
14	A	830	CLA	C2-C3-C5-C6
14	A	833	CLA	C11-C10-C8-C7
14	A	835	CLA	C12-C13-C15-C16
14	A	836	CLA	C11-C12-C13-C15
14	A	839	CLA	C11-C12-C13-C15
14	A	841	CLA	C11-C10-C8-C7
14	A	841	CLA	C11-C12-C13-C15
14	B	804	CLA	C11-C10-C8-C7
14	B	807	CLA	C11-C10-C8-C7
14	B	807	CLA	C12-C13-C15-C16
14	B	812	CLA	C11-C10-C8-C7
14	B	814	CLA	C11-C10-C8-C7
14	B	816	CLA	C6-C7-C8-C10
14	B	820	CLA	C6-C7-C8-C10
14	B	820	CLA	C11-C12-C13-C15
14	B	825	CLA	C11-C12-C13-C15

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Mol	Chain	Res	Type	Atoms
14	B	827	CLA	C12-C13-C15-C16
14	B	828	CLA	C11-C12-C13-C15
14	K	102	CLA	C11-C10-C8-C7
14	L	204	CLA	C12-C13-C15-C16
14	B	804	CLA	CAA-CBA-CGA-O2A
14	B	841	CLA	C3-C5-C6-C7
14	A	806	CLA	C11-C10-C8-C9
14	A	807	CLA	C11-C12-C13-C14
14	A	810	CLA	C11-C12-C13-C14
14	A	815	CLA	C11-C10-C8-C9
14	A	818	CLA	C14-C13-C15-C16
14	A	826	CLA	C14-C13-C15-C16
14	A	827	CLA	C11-C12-C13-C14
14	A	828	CLA	C6-C7-C8-C9
14	A	835	CLA	C14-C13-C15-C16
14	A	838	CLA	C6-C7-C8-C9
14	A	841	CLA	C11-C10-C8-C9
14	A	841	CLA	C11-C12-C13-C14
14	B	801	CLA	C6-C7-C8-C9
14	B	804	CLA	C11-C10-C8-C9
14	B	804	CLA	C14-C13-C15-C16
14	B	805	CLA	C11-C10-C8-C9
14	B	808	CLA	C14-C13-C15-C16
14	B	812	CLA	C11-C10-C8-C9
14	B	814	CLA	C11-C10-C8-C9
14	B	816	CLA	C6-C7-C8-C9
14	B	820	CLA	C6-C7-C8-C9
14	B	820	CLA	C14-C13-C15-C16
14	B	827	CLA	C14-C13-C15-C16
14	B	829	CLA	C14-C13-C15-C16
14	B	839	CLA	C14-C13-C15-C16
14	B	841	CLA	C11-C12-C13-C14
14	K	102	CLA	C11-C10-C8-C9
14	L	204	CLA	C14-C13-C15-C16
16	B	845	BCR	C9-C10-C11-C12
14	A	814	CLA	CBA-CGA-O2A-C1
14	B	841	CLA	C8-C10-C11-C12
16	A	848	BCR	C7-C8-C9-C34
16	B	846	BCR	C11-C12-C13-C35
13	A	801	CL0	C16-C17-C18-C19
14	A	807	CLA	C16-C17-C18-C19
16	A	847	BCR	C17-C18-C19-C20

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Mol	Chain	Res	Type	Atoms
16	L	202	BCR	C11-C12-C13-C14
14	B	828	CLA	C3-C5-C6-C7
17	A	852	LHG	C14-C15-C16-C17
14	A	840	CLA	CBA-CGA-O2A-C1
14	F	204	CLA	CBA-CGA-O2A-C1
14	A	807	CLA	C10-C11-C12-C13
14	B	816	CLA	O1D-CGD-O2D-CED
13	A	801	CL0	C16-C17-C18-C20
14	B	812	CLA	C10-C11-C12-C13
17	B	851	LHG	O6-C4-C5-C6
13	A	801	CL0	CAA-CBA-CGA-O2A
14	A	822	CLA	C4-C3-C5-C6
14	B	810	CLA	C4-C3-C5-C6
14	B	810	CLA	C2-C3-C5-C6
14	A	816	CLA	C5-C6-C7-C8
14	L	201	CLA	C5-C6-C7-C8
14	A	812	CLA	O1A-CGA-O2A-C1
14	A	854	CLA	C16-C17-C18-C20
14	B	816	CLA	CBA-CGA-O2A-C1
14	B	820	CLA	C3A-C2A-CAA-CBA
14	B	826	CLA	C3A-C2A-CAA-CBA
16	A	851	BCR	C15-C16-C17-C18
17	A	852	LHG	C19-C20-C21-C22
14	B	801	CLA	C3-C5-C6-C7
14	A	841	CLA	CBA-CGA-O2A-C1
17	I	102	LHG	C4-C5-C6-O8
17	M	101	LHG	C4-C5-C6-O8
17	M	101	LHG	C17-C18-C19-C20
14	B	815	CLA	O1A-CGA-O2A-C1
14	B	839	CLA	C5-C6-C7-C8
14	A	822	CLA	C2-C3-C5-C6
17	M	101	LHG	C9-C10-C11-C12
14	A	837	CLA	C2A-CAA-CBA-CGA
14	A	832	CLA	C8-C10-C11-C12
14	B	809	CLA	C16-C17-C18-C19
14	B	814	CLA	C16-C17-C18-C20
14	B	820	CLA	C16-C17-C18-C20
14	A	802	CLA	C8-C10-C11-C12
14	A	802	CLA	C15-C16-C17-C18
14	B	818	CLA	C13-C15-C16-C17
17	A	852	LHG	C8-C7-O7-C5
14	L	201	CLA	C16-C17-C18-C20

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Mol	Chain	Res	Type	Atoms
15	B	843	PQN	C18-C20-C21-C22
17	A	852	LHG	C1-C2-C3-O3
14	A	803	CLA	C4-C3-C5-C6
14	A	829	CLA	C11-C12-C13-C14
14	A	830	CLA	C14-C13-C15-C16
14	A	839	CLA	C6-C7-C8-C9
14	B	815	CLA	C11-C12-C13-C14
14	B	834	CLA	C11-C10-C8-C9
14	B	838	CLA	C6-C7-C8-C9
14	L	201	CLA	C14-C13-C15-C16
14	L	205	CLA	C11-C12-C13-C14
14	A	807	CLA	CBA-CGA-O2A-C1
17	I	102	LHG	C5-C4-O6-P
14	A	814	CLA	O1A-CGA-O2A-C1
14	A	840	CLA	O1A-CGA-O2A-C1
17	I	102	LHG	C17-C18-C19-C20
14	B	828	CLA	C16-C17-C18-C20
16	A	849	BCR	C1-C6-C7-C8
16	A	849	BCR	C5-C6-C7-C8
16	B	849	BCR	C5-C6-C7-C8
16	I	101	BCR	C1-C6-C7-C8
16	I	101	BCR	C5-C6-C7-C8
16	A	846	BCR	C21-C22-C23-C24
16	A	849	BCR	C21-C22-C23-C24
16	B	852	BCR	C7-C8-C9-C10
16	F	202	BCR	C7-C8-C9-C10
16	J	104	BCR	C7-C8-C9-C10
14	A	830	CLA	C8-C10-C11-C12
14	A	839	CLA	C16-C17-C18-C19
14	A	854	CLA	C16-C17-C18-C19
14	F	204	CLA	O1A-CGA-O2A-C1
14	A	803	CLA	C2-C3-C5-C6
14	A	803	CLA	C6-C7-C8-C10
14	A	810	CLA	C11-C12-C13-C15
14	A	815	CLA	C11-C10-C8-C7
14	A	826	CLA	C12-C13-C15-C16
14	A	829	CLA	C11-C12-C13-C15
14	A	830	CLA	C12-C13-C15-C16
14	A	838	CLA	C6-C7-C8-C10
14	A	839	CLA	C6-C7-C8-C10
14	B	801	CLA	C6-C7-C8-C10
14	B	804	CLA	C12-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
14	B	808	CLA	C12-C13-C15-C16
14	B	814	CLA	C12-C13-C15-C16
14	B	815	CLA	C6-C7-C8-C10
14	B	815	CLA	C11-C12-C13-C15
14	B	816	CLA	C11-C12-C13-C15
14	B	819	CLA	C12-C13-C15-C16
14	B	826	CLA	C11-C10-C8-C7
14	B	829	CLA	C12-C13-C15-C16
14	B	834	CLA	C11-C10-C8-C7
14	B	841	CLA	C6-C7-C8-C10
14	B	842	CLA	C11-C10-C8-C7
14	B	842	CLA	C12-C13-C15-C16
14	L	201	CLA	C12-C13-C15-C16
17	A	853	LHG	C11-C10-C9-C8
14	A	842	CLA	C16-C17-C18-C20
14	A	804	CLA	C10-C11-C12-C13
14	A	812	CLA	C13-C15-C16-C17
14	B	805	CLA	C2A-CAA-CBA-CGA
16	A	845	BCR	C35-C13-C14-C15
16	B	846	BCR	C16-C17-C18-C36
16	B	847	BCR	C16-C17-C18-C36
16	I	101	BCR	C35-C13-C14-C15
16	I	101	BCR	C20-C21-C22-C37
16	I	103	BCR	C20-C21-C22-C37
16	J	104	BCR	C20-C21-C22-C37
14	L	205	CLA	C3-C5-C6-C7
14	F	204	CLA	CBD-CGD-O2D-CED
14	L	201	CLA	C16-C17-C18-C19
14	A	839	CLA	CBA-CGA-O2A-C1
14	B	811	CLA	CBA-CGA-O2A-C1
17	A	853	LHG	C24-C23-O8-C6
14	A	828	CLA	C10-C11-C12-C13
14	B	828	CLA	C5-C6-C7-C8
14	A	808	CLA	CAD-CBD-CGD-O2D
14	A	813	CLA	CAD-CBD-CGD-O2D
14	A	817	CLA	CAD-CBD-CGD-O2D
14	A	818	CLA	CAD-CBD-CGD-O2D
14	A	827	CLA	CAD-CBD-CGD-O2D
14	A	832	CLA	CAD-CBD-CGD-O2D
14	A	839	CLA	CAD-CBD-CGD-O2D
14	A	842	CLA	CAD-CBD-CGD-O2D
14	B	821	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
14	B	832	CLA	CAD-CBD-CGD-O2D
14	L	204	CLA	CAD-CBD-CGD-O2D
14	A	810	CLA	C8-C10-C11-C12
14	B	801	CLA	C8-C10-C11-C12
14	B	811	CLA	C10-C11-C12-C13
14	B	839	CLA	CBA-CGA-O2A-C1
14	B	828	CLA	C4-C3-C5-C6
14	B	828	CLA	C2-C3-C5-C6
17	A	853	LHG	O6-C4-C5-O7
14	A	809	CLA	C5-C6-C7-C8
14	A	815	CLA	CHA-CBD-CGD-O2D
14	A	826	CLA	CHA-CBD-CGD-O1D
14	A	826	CLA	CHA-CBD-CGD-O2D
14	A	831	CLA	CHA-CBD-CGD-O1D
14	A	831	CLA	CHA-CBD-CGD-O2D
14	A	838	CLA	CHA-CBD-CGD-O1D
14	A	838	CLA	CHA-CBD-CGD-O2D
14	A	840	CLA	CHA-CBD-CGD-O1D
14	A	840	CLA	CHA-CBD-CGD-O2D
14	B	804	CLA	CHA-CBD-CGD-O1D
14	B	804	CLA	CHA-CBD-CGD-O2D
14	B	805	CLA	CHA-CBD-CGD-O1D
14	B	805	CLA	CHA-CBD-CGD-O2D
14	B	806	CLA	CHA-CBD-CGD-O1D
14	B	806	CLA	CHA-CBD-CGD-O2D
14	B	814	CLA	CHA-CBD-CGD-O1D
14	B	814	CLA	CHA-CBD-CGD-O2D
14	B	815	CLA	CHA-CBD-CGD-O1D
14	B	815	CLA	CHA-CBD-CGD-O2D
14	B	822	CLA	CHA-CBD-CGD-O1D
14	B	822	CLA	CHA-CBD-CGD-O2D
14	B	825	CLA	CHA-CBD-CGD-O1D
14	B	825	CLA	CHA-CBD-CGD-O2D
14	B	827	CLA	CHA-CBD-CGD-O1D
14	B	835	CLA	CHA-CBD-CGD-O1D
14	B	835	CLA	CHA-CBD-CGD-O2D
14	K	102	CLA	CHA-CBD-CGD-O1D
14	K	102	CLA	CHA-CBD-CGD-O2D
14	A	841	CLA	O1A-CGA-O2A-C1
17	I	102	LHG	O10-C23-O8-C6
16	B	844	BCR	C20-C21-C22-C23
16	J	103	BCR	C16-C17-C18-C19

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Mol	Chain	Res	Type	Atoms
17	I	102	LHG	O7-C5-C6-O8
17	M	101	LHG	O7-C5-C6-O8
14	A	839	CLA	O1A-CGA-O2A-C1
14	B	811	CLA	O1A-CGA-O2A-C1
14	B	816	CLA	O1A-CGA-O2A-C1
14	K	102	CLA	O1D-CGD-O2D-CED
13	A	801	CL0	C11-C12-C13-C14
14	A	827	CLA	C11-C10-C8-C9
14	A	854	CLA	C14-C13-C15-C16
14	B	801	CLA	C14-C13-C15-C16
14	B	821	CLA	C6-C7-C8-C9
14	B	825	CLA	C11-C10-C8-C9
14	B	834	CLA	C8-C10-C11-C12
14	B	820	CLA	C16-C17-C18-C19
16	A	845	BCR	C7-C8-C9-C34
16	A	847	BCR	C7-C8-C9-C10
16	A	851	BCR	C11-C12-C13-C14
14	A	806	CLA	C1A-C2A-CAA-CBA
14	B	826	CLA	C1A-C2A-CAA-CBA
14	B	837	CLA	C1A-C2A-CAA-CBA
14	B	810	CLA	C16-C17-C18-C20
16	L	207	BCR	C15-C16-C17-C18
17	A	852	LHG	C17-C18-C19-C20
14	A	829	CLA	C4-C3-C5-C6
14	A	807	CLA	O1A-CGA-O2A-C1
14	B	839	CLA	O1A-CGA-O2A-C1
17	B	851	LHG	C4-O6-P-O4
17	I	102	LHG	C3-O3-P-O5
17	M	101	LHG	C3-O3-P-O5
14	B	828	CLA	C16-C17-C18-C19
14	B	831	CLA	C6-C7-C8-C10
14	B	832	CLA	O2A-C1-C2-C3
20	B	850	LMG	O6-C1-O1-C7
17	A	853	LHG	O6-C4-C5-C6
14	B	809	CLA	C15-C16-C17-C18
14	A	806	CLA	CAD-CBD-CGD-O1D
14	A	815	CLA	CAD-CBD-CGD-O1D
14	A	826	CLA	CAD-CBD-CGD-O1D
14	B	814	CLA	CAD-CBD-CGD-O1D
14	B	837	CLA	CAD-CBD-CGD-O1D
14	K	101	CLA	CAD-CBD-CGD-O1D
14	K	102	CLA	CAD-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
14	A	826	CLA	C13-C15-C16-C17
17	M	101	LHG	C11-C10-C9-C8
17	M	101	LHG	C33-C34-C35-C36
14	B	838	CLA	CBA-CGA-O2A-C1
14	A	825	CLA	C11-C10-C8-C7
14	A	827	CLA	C11-C10-C8-C7
14	A	827	CLA	C12-C13-C15-C16
14	A	831	CLA	C11-C10-C8-C7
14	A	834	CLA	C12-C13-C15-C16
14	A	854	CLA	C12-C13-C15-C16
14	B	801	CLA	C12-C13-C15-C16
14	B	805	CLA	C12-C13-C15-C16
14	B	825	CLA	C11-C10-C8-C7
14	L	205	CLA	C6-C7-C8-C10
17	B	851	LHG	O6-C4-C5-O7
14	L	204	CLA	C5-C6-C7-C8
20	B	850	LMG	C21-C22-C23-C24
17	A	852	LHG	C29-C30-C31-C32
14	L	201	CLA	C15-C16-C17-C18
14	B	827	CLA	C3-C5-C6-C7
14	A	804	CLA	C13-C15-C16-C17
14	F	204	CLA	O1D-CGD-O2D-CED
14	A	829	CLA	C10-C11-C12-C13
14	A	806	CLA	C11-C12-C13-C14
14	A	831	CLA	C11-C10-C8-C9
14	A	833	CLA	C6-C7-C8-C9
14	A	833	CLA	C11-C10-C8-C9
14	A	836	CLA	C11-C12-C13-C14
14	B	815	CLA	C6-C7-C8-C9
14	B	816	CLA	C11-C12-C13-C14
14	B	819	CLA	C14-C13-C15-C16
14	B	842	CLA	C11-C10-C8-C9
14	B	842	CLA	C14-C13-C15-C16
16	A	850	BCR	C22-C23-C24-C25
16	I	101	BCR	C22-C23-C24-C25
14	B	838	CLA	O1A-CGA-O2A-C1
14	A	825	CLA	C5-C6-C7-C8
14	B	839	CLA	C15-C16-C17-C18
14	B	833	CLA	C10-C11-C12-C13
14	B	832	CLA	C1-C2-C3-C4
14	A	803	CLA	C2A-CAA-CBA-CGA
14	A	819	CLA	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
14	B	809	CLA	C2A-CAA-CBA-CGA
14	A	802	CLA	C2-C1-O2A-CGA
14	A	835	CLA	C2-C1-O2A-CGA
14	A	854	CLA	C2-C1-O2A-CGA
14	B	830	CLA	C2-C1-O2A-CGA
14	B	831	CLA	C6-C7-C8-C9
14	A	810	CLA	C10-C11-C12-C13
17	I	102	LHG	C11-C12-C13-C14
14	A	808	CLA	C2A-CAA-CBA-CGA
14	A	842	CLA	C2A-CAA-CBA-CGA
16	B	846	BCR	C20-C21-C22-C23
16	B	853	BCR	C16-C17-C18-C19
14	B	817	CLA	C2C-C3C-CAC-CBC
17	A	852	LHG	O7-C5-C6-O8
14	B	833	CLA	C4C-C3C-CAC-CBC
17	B	851	LHG	C3-O3-P-O6
14	A	821	CLA	C4-C3-C5-C6
14	A	804	CLA	C12-C13-C15-C16
14	B	817	CLA	C12-C13-C15-C16
14	B	821	CLA	C6-C7-C8-C10
14	A	825	CLA	C11-C10-C8-C9
14	A	827	CLA	C14-C13-C15-C16
14	B	807	CLA	C11-C10-C8-C9
14	B	807	CLA	C14-C13-C15-C16
14	B	820	CLA	C11-C12-C13-C14
14	A	814	CLA	C15-C16-C17-C18
14	B	801	CLA	C15-C16-C17-C18
20	B	850	LMG	C34-C35-C36-C37
14	A	835	CLA	C2A-CAA-CBA-CGA
16	B	852	BCR	C36-C18-C19-C20
14	B	815	CLA	C16-C17-C18-C19
14	B	817	CLA	C4C-C3C-CAC-CBC
17	B	851	LHG	C7-C8-C9-C10
14	B	826	CLA	CBA-CGA-O2A-C1
14	B	826	CLA	O1A-CGA-O2A-C1
14	B	828	CLA	CAA-CBA-CGA-O2A
14	A	803	CLA	C15-C16-C17-C18
14	B	822	CLA	CAA-CBA-CGA-O1A
16	F	202	BCR	C18-C19-C20-C21
14	F	204	CLA	CAA-CBA-CGA-O2A
14	A	841	CLA	C3-C5-C6-C7
20	B	850	LMG	C32-C33-C34-C35

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Mol	Chain	Res	Type	Atoms
14	B	814	CLA	C2-C3-C5-C6
14	B	821	CLA	C8-C10-C11-C12
17	A	853	LHG	C10-C11-C12-C13
14	A	819	CLA	CAA-CBA-CGA-O2A
14	B	806	CLA	C2-C1-O2A-CGA
14	B	819	CLA	C2-C1-O2A-CGA
14	L	201	CLA	C2-C1-O2A-CGA
20	B	850	LMG	C23-C24-C25-C26
14	A	835	CLA	C5-C6-C7-C8
14	A	839	CLA	C13-C15-C16-C17
14	A	839	CLA	C2A-CAA-CBA-CGA
14	A	815	CLA	C13-C15-C16-C17
14	A	854	CLA	C3-C5-C6-C7
14	A	836	CLA	C3A-C2A-CAA-CBA
14	B	821	CLA	C3A-C2A-CAA-CBA
14	A	832	CLA	C11-C12-C13-C15
14	B	809	CLA	C4-C3-C5-C6
14	B	814	CLA	C4-C3-C5-C6
17	I	102	LHG	C14-C15-C16-C17
14	B	809	CLA	C2-C3-C5-C6
17	A	852	LHG	C31-C32-C33-C34
14	A	806	CLA	C6-C7-C8-C9
14	A	834	CLA	C11-C12-C13-C14
14	A	841	CLA	C6-C7-C8-C9
14	B	807	CLA	C6-C7-C8-C9
14	B	809	CLA	C11-C10-C8-C9
14	B	817	CLA	C11-C10-C8-C9
14	B	828	CLA	C14-C13-C15-C16
14	B	828	CLA	C8-C10-C11-C12
16	B	845	BCR	C35-C13-C14-C15
16	B	846	BCR	C20-C21-C22-C37
16	F	205	BCR	C35-C13-C14-C15
14	A	810	CLA	C2A-CAA-CBA-CGA
14	B	824	CLA	CAA-CBA-CGA-O2A
16	B	853	BCR	C36-C18-C19-C20
16	I	101	BCR	C14-C15-C16-C17
14	F	201	CLA	C3-C5-C6-C7
14	B	814	CLA	C1A-C2A-CAA-CBA
14	B	821	CLA	C1A-C2A-CAA-CBA
14	F	201	CLA	C1A-C2A-CAA-CBA
14	F	204	CLA	C1A-C2A-CAA-CBA
14	A	802	CLA	C6-C7-C8-C10

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Mol	Chain	Res	Type	Atoms
14	A	838	CLA	C11-C10-C8-C7
14	L	205	CLA	C11-C12-C13-C15
17	B	851	LHG	C15-C16-C17-C18
14	B	838	CLA	C8-C10-C11-C12
14	B	813	CLA	CAA-CBA-CGA-O1A
14	B	801	CLA	C13-C15-C16-C17
14	B	815	CLA	C10-C11-C12-C13
14	A	842	CLA	C16-C17-C18-C19
14	B	827	CLA	C16-C17-C18-C20
14	B	821	CLA	C5-C6-C7-C8
14	B	822	CLA	CAA-CBA-CGA-O2A
17	A	853	LHG	C9-C10-C11-C12
14	B	824	CLA	CAA-CBA-CGA-O1A
14	B	826	CLA	C16-C17-C18-C20
14	F	204	CLA	C2C-C3C-CAC-CBC
16	B	846	BCR	C11-C10-C9-C8
16	F	205	BCR	C12-C13-C14-C15
14	A	840	CLA	C13-C15-C16-C17
14	B	829	CLA	C5-C6-C7-C8
14	A	810	CLA	C4-C3-C5-C6
14	B	816	CLA	C4-C3-C5-C6
14	A	834	CLA	C2-C1-O2A-CGA
14	B	807	CLA	C2-C1-O2A-CGA
14	B	826	CLA	C2-C1-O2A-CGA
14	A	821	CLA	C2-C3-C5-C6
14	F	201	CLA	C6-C7-C8-C9
14	A	827	CLA	C10-C11-C12-C13
14	A	824	CLA	O1A-CGA-O2A-C1
14	A	823	CLA	CAA-CBA-CGA-O2A
14	A	819	CLA	O1D-CGD-O2D-CED
14	B	826	CLA	C13-C15-C16-C17
14	B	829	CLA	C2A-CAA-CBA-CGA
16	A	847	BCR	C1-C6-C7-C8
16	B	844	BCR	C1-C6-C7-C8
16	I	103	BCR	C1-C6-C7-C8
16	K	103	BCR	C1-C6-C7-C8
16	L	202	BCR	C23-C24-C25-C30
14	F	203	CLA	CAA-CBA-CGA-O2A
17	A	852	LHG	O1-C1-C2-C3
14	B	804	CLA	CAA-CBA-CGA-O1A
16	L	207	BCR	C7-C8-C9-C10
14	B	804	CLA	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
14	A	812	CLA	C2-C3-C5-C6
14	B	833	CLA	CAA-CBA-CGA-O2A
14	A	813	CLA	CAA-CBA-CGA-O2A
14	A	822	CLA	C15-C16-C17-C18
13	A	801	CL0	CAA-CBA-CGA-O1A
14	A	836	CLA	C15-C16-C17-C18
14	A	824	CLA	CBA-CGA-O2A-C1
14	A	832	CLA	CBA-CGA-O2A-C1
14	A	823	CLA	CAA-CBA-CGA-O1A
14	A	804	CLA	C16-C17-C18-C20
14	L	206	CLA	C16-C17-C18-C20
13	A	801	CL0	C11-C12-C13-C15
14	L	206	CLA	C2-C3-C5-C6
17	A	852	LHG	O1-C1-C2-O2
16	L	202	BCR	C13-C14-C15-C16
14	A	818	CLA	C16-C17-C18-C20
20	B	850	LMG	C24-C25-C26-C27
14	A	813	CLA	CAA-CBA-CGA-O1A
14	A	806	CLA	CAA-CBA-CGA-O2A
14	K	101	CLA	CAA-CBA-CGA-O2A
14	A	804	CLA	C2A-CAA-CBA-CGA
14	A	837	CLA	CAA-CBA-CGA-O2A
16	A	847	BCR	C20-C21-C22-C37
16	B	846	BCR	C11-C10-C9-C34
16	L	202	BCR	C16-C17-C18-C36
14	A	806	CLA	C4-C3-C5-C6
14	A	814	CLA	C4-C3-C5-C6
14	A	829	CLA	C2-C3-C5-C6
14	B	816	CLA	C2-C3-C5-C6
14	B	818	CLA	C16-C17-C18-C20
14	A	805	CLA	C6-C7-C8-C9
14	A	818	CLA	C11-C10-C8-C9
14	B	826	CLA	C11-C12-C13-C14
14	A	808	CLA	C3A-C2A-CAA-CBA
14	A	816	CLA	C3A-C2A-CAA-CBA
14	B	814	CLA	C3A-C2A-CAA-CBA
14	B	818	CLA	C3A-C2A-CAA-CBA
14	B	825	CLA	C3A-C2A-CAA-CBA
14	F	201	CLA	C3A-C2A-CAA-CBA
14	A	806	CLA	C15-C16-C17-C18
14	B	814	CLA	C5-C6-C7-C8
14	A	832	CLA	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
14	A	819	CLA	CBD-CGD-O2D-CED
14	A	829	CLA	CAD-CBD-CGD-O2D
14	A	833	CLA	CAD-CBD-CGD-O2D
14	B	810	CLA	CAD-CBD-CGD-O2D
14	B	816	CLA	CAD-CBD-CGD-O2D
14	B	819	CLA	CAD-CBD-CGD-O2D
14	B	823	CLA	CAD-CBD-CGD-O2D
14	B	830	CLA	CAD-CBD-CGD-O2D
14	B	833	CLA	CAD-CBD-CGD-O2D
16	F	202	BCR	C15-C16-C17-C18
14	A	814	CLA	CAA-CBA-CGA-O2A
20	B	850	LMG	C35-C36-C37-C38
14	B	835	CLA	C10-C11-C12-C13
14	B	842	CLA	C15-C16-C17-C18
14	B	823	CLA	C2C-C3C-CAC-CBC
14	B	813	CLA	CAA-CBA-CGA-O2A
14	F	203	CLA	CAA-CBA-CGA-O1A
14	F	204	CLA	C4C-C3C-CAC-CBC
16	F	205	BCR	C21-C22-C23-C24
16	J	104	BCR	C21-C22-C23-C24
14	A	837	CLA	CAA-CBA-CGA-O1A
17	I	102	LHG	O6-C4-C5-O7
14	A	834	CLA	C5-C6-C7-C8
14	A	802	CLA	CAA-CBA-CGA-O2A
17	A	852	LHG	C35-C36-C37-C38
17	B	851	LHG	C24-C25-C26-C27
14	A	802	CLA	O2A-C1-C2-C3
14	A	827	CLA	O2A-C1-C2-C3
14	K	101	CLA	C2A-CAA-CBA-CGA
17	B	851	LHG	O7-C7-C8-C9
14	B	808	CLA	C3-C5-C6-C7
14	A	830	CLA	C16-C17-C18-C20
14	A	832	CLA	C11-C12-C13-C14
14	B	827	CLA	C16-C17-C18-C19
14	B	813	CLA	O1D-CGD-O2D-CED
13	A	801	CL0	CHA-CBD-CGD-O2D
14	A	805	CLA	CHA-CBD-CGD-O1D
14	A	805	CLA	CHA-CBD-CGD-O2D
14	A	816	CLA	CHA-CBD-CGD-O2D
14	A	825	CLA	CHA-CBD-CGD-O1D
14	A	825	CLA	CHA-CBD-CGD-O2D
14	A	854	CLA	CHA-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
14	B	809	CLA	CHA-CBD-CGD-O2D
14	B	817	CLA	CHA-CBD-CGD-O1D
14	B	817	CLA	CHA-CBD-CGD-O2D
14	B	827	CLA	CHA-CBD-CGD-O2D
14	B	828	CLA	CHA-CBD-CGD-O1D
14	B	828	CLA	CHA-CBD-CGD-O2D
14	B	831	CLA	CHA-CBD-CGD-O1D
14	B	831	CLA	CHA-CBD-CGD-O2D
14	B	834	CLA	CHA-CBD-CGD-O1D
14	B	838	CLA	CHA-CBD-CGD-O1D
14	L	201	CLA	CHA-CBD-CGD-O1D
14	L	205	CLA	CHA-CBD-CGD-O1D
14	L	205	CLA	CHA-CBD-CGD-O2D
14	X	1701	CLA	CHA-CBD-CGD-O1D
14	X	1701	CLA	CHA-CBD-CGD-O2D
14	A	816	CLA	C4-C3-C5-C6
14	A	814	CLA	C2C-C3C-CAC-CBC
14	A	832	CLA	C3-C5-C6-C7
14	B	842	CLA	C3-C5-C6-C7
14	A	826	CLA	CAA-CBA-CGA-O2A
14	B	811	CLA	CAA-CBA-CGA-O2A
14	B	817	CLA	CAA-CBA-CGA-O2A
14	B	829	CLA	CAA-CBA-CGA-O2A
20	B	850	LMG	O7-C10-C11-C12
14	A	814	CLA	C4C-C3C-CAC-CBC
14	B	807	CLA	C16-C17-C18-C19
14	B	815	CLA	C16-C17-C18-C20
14	B	818	CLA	C16-C17-C18-C19
14	A	818	CLA	C6-C7-C8-C9
14	A	826	CLA	C6-C7-C8-C9
14	A	834	CLA	C14-C13-C15-C16
14	B	805	CLA	C14-C13-C15-C16
14	B	826	CLA	C11-C10-C8-C9
14	L	201	CLA	C11-C12-C13-C14
16	J	104	BCR	C13-C14-C15-C16
14	B	808	CLA	CAA-CBA-CGA-O2A
14	A	854	CLA	O1A-CGA-O2A-C1
14	A	803	CLA	C13-C15-C16-C17
14	B	813	CLA	CBD-CGD-O2D-CED
14	A	802	CLA	CAA-CBA-CGA-O1A
14	B	826	CLA	C16-C17-C18-C19
14	B	808	CLA	CAA-CBA-CGA-O1A

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Mol	Chain	Res	Type	Atoms
16	B	848	BCR	C17-C18-C19-C20
14	B	840	CLA	CBA-CGA-O2A-C1
14	A	808	CLA	C1A-C2A-CAA-CBA
14	A	815	CLA	C1A-C2A-CAA-CBA
14	A	830	CLA	C1A-C2A-CAA-CBA
14	A	836	CLA	C1A-C2A-CAA-CBA
14	A	838	CLA	C1A-C2A-CAA-CBA
14	B	818	CLA	C1A-C2A-CAA-CBA
14	B	824	CLA	C1A-C2A-CAA-CBA
14	B	825	CLA	C1A-C2A-CAA-CBA
14	B	830	CLA	C1A-C2A-CAA-CBA
14	B	835	CLA	C1A-C2A-CAA-CBA
14	X	1701	CLA	C1A-C2A-CAA-CBA
14	A	834	CLA	C15-C16-C17-C18
14	A	811	CLA	C2C-C3C-CAC-CBC
14	A	818	CLA	C2A-CAA-CBA-CGA
14	A	829	CLA	C2A-CAA-CBA-CGA
14	A	841	CLA	C2A-CAA-CBA-CGA
20	B	850	LMG	C17-C18-C19-C20
14	A	817	CLA	C16-C17-C18-C20
14	B	811	CLA	C16-C17-C18-C19
14	A	806	CLA	CAA-CBA-CGA-O1A
14	A	814	CLA	CAA-CBA-CGA-O1A
14	K	101	CLA	CAA-CBA-CGA-O1A
20	B	850	LMG	O9-C10-C11-C12
14	A	812	CLA	C4-C3-C5-C6
14	B	801	CLA	CAA-CBA-CGA-O2A
14	A	834	CLA	C8-C10-C11-C12
14	A	815	CLA	C5-C6-C7-C8
17	A	852	LHG	O10-C23-C24-C25
14	B	811	CLA	CAA-CBA-CGA-O1A
14	B	833	CLA	C13-C15-C16-C17
14	A	806	CLA	C2C-C3C-CAC-CBC
14	L	206	CLA	C4-C3-C5-C6
14	A	834	CLA	CAD-CBD-CGD-O1D
14	B	827	CLA	CAD-CBD-CGD-O1D
14	B	828	CLA	CAD-CBD-CGD-O1D
14	B	831	CLA	CAD-CBD-CGD-O1D
14	L	201	CLA	CAD-CBD-CGD-O1D
14	A	802	CLA	C14-C13-C15-C16
14	A	822	CLA	C6-C7-C8-C9
14	A	838	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
14	B	812	CLA	C6-C7-C8-C9
14	B	834	CLA	C11-C12-C13-C14
14	B	817	CLA	CAA-CBA-CGA-O1A
14	B	820	CLA	CAA-CBA-CGA-O2A
17	B	851	LHG	O9-C7-C8-C9
14	A	810	CLA	CAA-CBA-CGA-O2A
14	K	102	CLA	CAA-CBA-CGA-O2A
15	B	843	PQN	C13-C15-C16-C17
14	A	826	CLA	C10-C11-C12-C13
14	A	807	CLA	C11-C10-C8-C7
14	A	812	CLA	C6-C7-C8-C10
14	A	817	CLA	C6-C7-C8-C10
14	B	824	CLA	C3A-C2A-CAA-CBA
14	B	826	CLA	C6-C7-C8-C10
14	B	838	CLA	C11-C10-C8-C7
14	F	201	CLA	C6-C7-C8-C10
14	L	201	CLA	C11-C12-C13-C15
14	B	829	CLA	CAA-CBA-CGA-O1A
16	B	845	BCR	C11-C12-C13-C14
14	A	826	CLA	CAA-CBA-CGA-O1A
14	A	821	CLA	CAA-CBA-CGA-O2A
14	A	803	CLA	C10-C11-C12-C13
14	B	840	CLA	O1A-CGA-O2A-C1
14	B	801	CLA	CAA-CBA-CGA-O1A
14	A	854	CLA	CBA-CGA-O2A-C1
14	B	817	CLA	C13-C15-C16-C17
14	A	840	CLA	CAA-CBA-CGA-O2A
14	A	810	CLA	CAA-CBA-CGA-O1A
14	A	806	CLA	C10-C11-C12-C13
14	B	820	CLA	CAA-CBA-CGA-O1A
14	B	823	CLA	C4C-C3C-CAC-CBC
14	A	842	CLA	CAA-CBA-CGA-O2A
17	I	102	LHG	O7-C7-C8-C9

There are no ring outliers.

107 monomers are involved in 201 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
14	A	809	CLA	2	0
14	A	819	CLA	3	0
14	B	807	CLA	1	0
16	A	851	BCR	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
14	A	825	CLA	7	0
14	B	801	CLA	2	0
14	A	841	CLA	2	0
14	B	817	CLA	1	0
17	B	851	LHG	1	0
16	L	202	BCR	1	0
14	A	843	CLA	1	0
14	A	803	CLA	1	0
14	B	814	CLA	3	0
14	B	821	CLA	1	0
14	A	807	CLA	3	0
14	A	833	CLA	3	0
14	J	102	CLA	1	0
14	B	829	CLA	2	0
14	B	825	CLA	4	0
14	J	101	CLA	1	0
14	A	829	CLA	6	0
14	F	204	CLA	1	0
14	B	835	CLA	3	0
16	F	205	BCR	1	0
14	B	833	CLA	1	0
14	B	841	CLA	1	0
14	A	826	CLA	3	0
14	B	842	CLA	1	0
14	A	813	CLA	1	0
16	J	103	BCR	3	0
14	A	842	CLA	2	0
14	F	203	CLA	1	0
14	B	832	CLA	1	0
15	A	844	PQN	2	0
14	K	101	CLA	4	0
14	A	838	CLA	2	0
14	A	804	CLA	2	0
14	A	811	CLA	1	0
16	B	847	BCR	3	0
14	B	828	CLA	6	0
14	A	840	CLA	2	0
16	A	846	BCR	5	0
14	A	827	CLA	1	0
14	A	837	CLA	2	0
14	A	802	CLA	6	0
14	B	824	CLA	2	0

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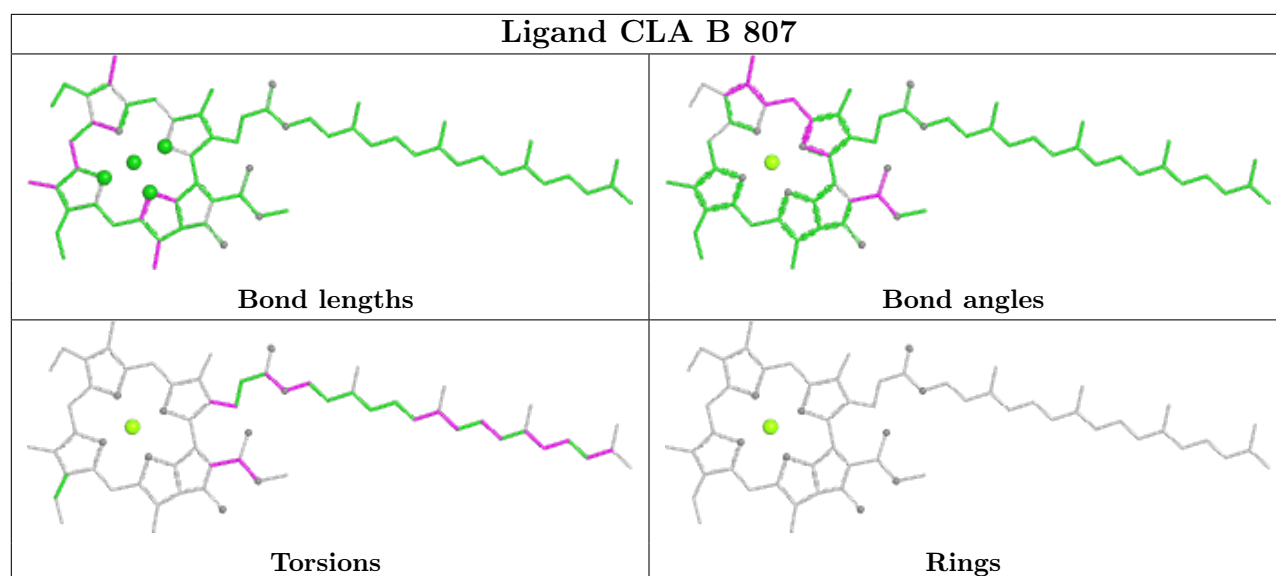
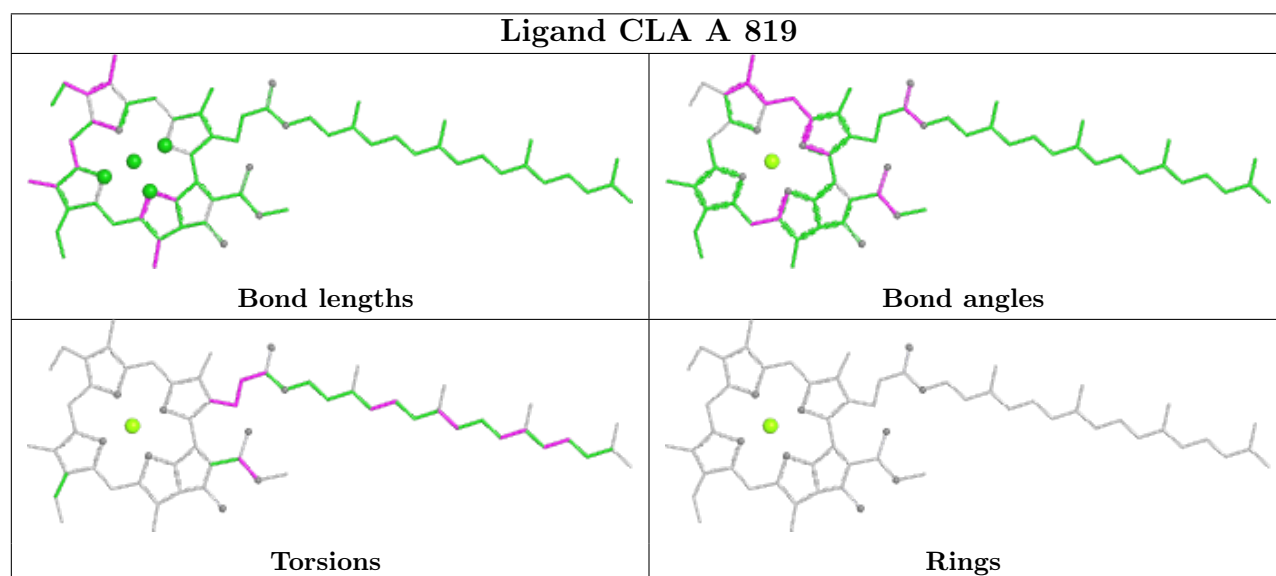
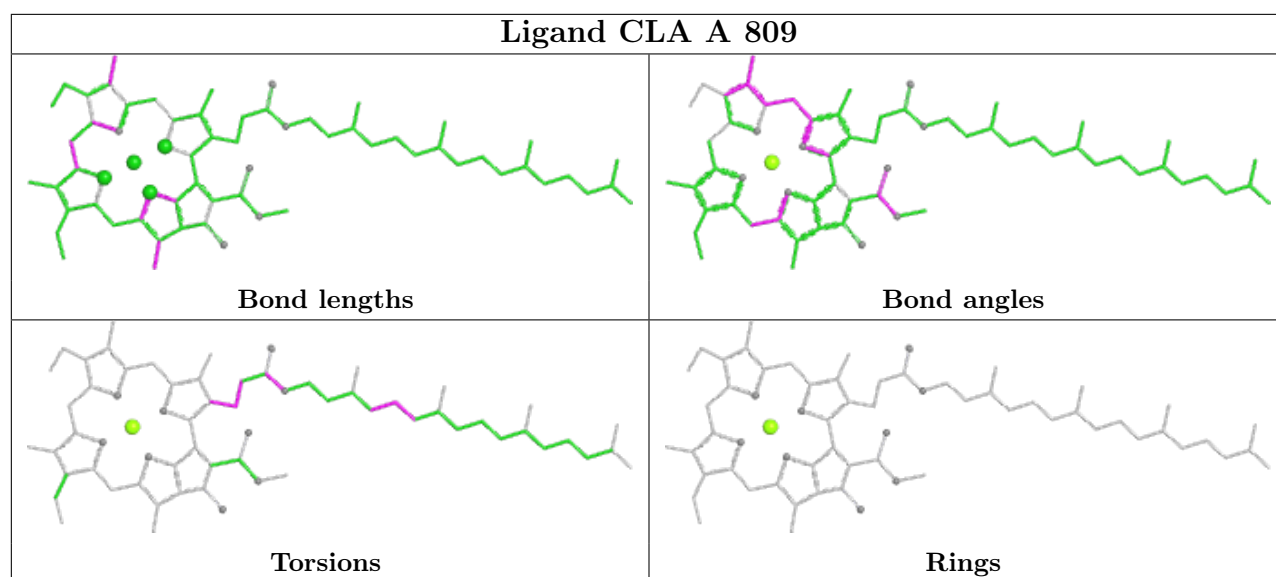
Mol	Chain	Res	Type	Clashes	Symm-Clashes
14	B	831	CLA	1	0
14	A	830	CLA	6	0
14	B	836	CLA	3	0
14	A	821	CLA	3	0
14	A	824	CLA	1	0
14	A	820	CLA	4	0
14	B	823	CLA	1	0
14	A	836	CLA	4	0
14	B	816	CLA	2	0
16	J	104	BCR	3	0
16	I	103	BCR	1	0
14	B	804	CLA	2	0
14	A	816	CLA	3	0
14	B	818	CLA	4	0
16	B	848	BCR	2	0
14	B	822	CLA	1	0
13	A	801	CL0	1	0
16	K	103	BCR	4	0
14	B	810	CLA	2	0
14	L	201	CLA	3	0
14	A	832	CLA	1	0
17	M	101	LHG	1	0
14	A	812	CLA	2	0
14	B	805	CLA	3	0
14	L	205	CLA	1	0
14	B	806	CLA	1	0
14	B	827	CLA	2	0
16	A	847	BCR	3	0
14	A	828	CLA	2	0
14	B	819	CLA	1	0
14	A	805	CLA	2	0
14	B	808	CLA	2	0
14	B	834	CLA	1	0
16	B	846	BCR	1	0
14	A	814	CLA	1	0
17	A	852	LHG	2	0
14	A	854	CLA	5	0
14	A	835	CLA	4	0
14	B	839	CLA	2	0
14	L	204	CLA	3	0
16	A	845	BCR	1	0
14	A	810	CLA	2	0

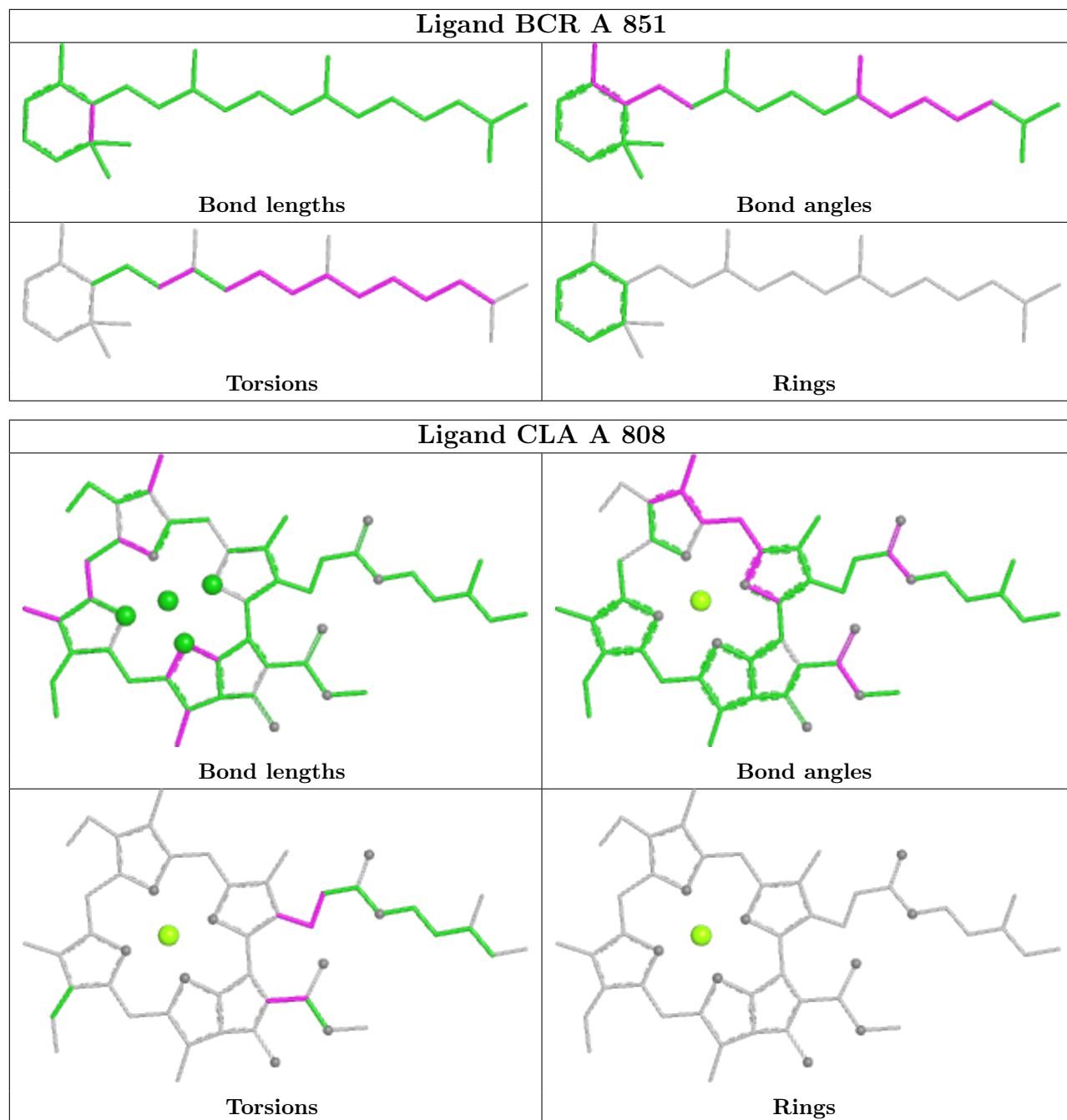
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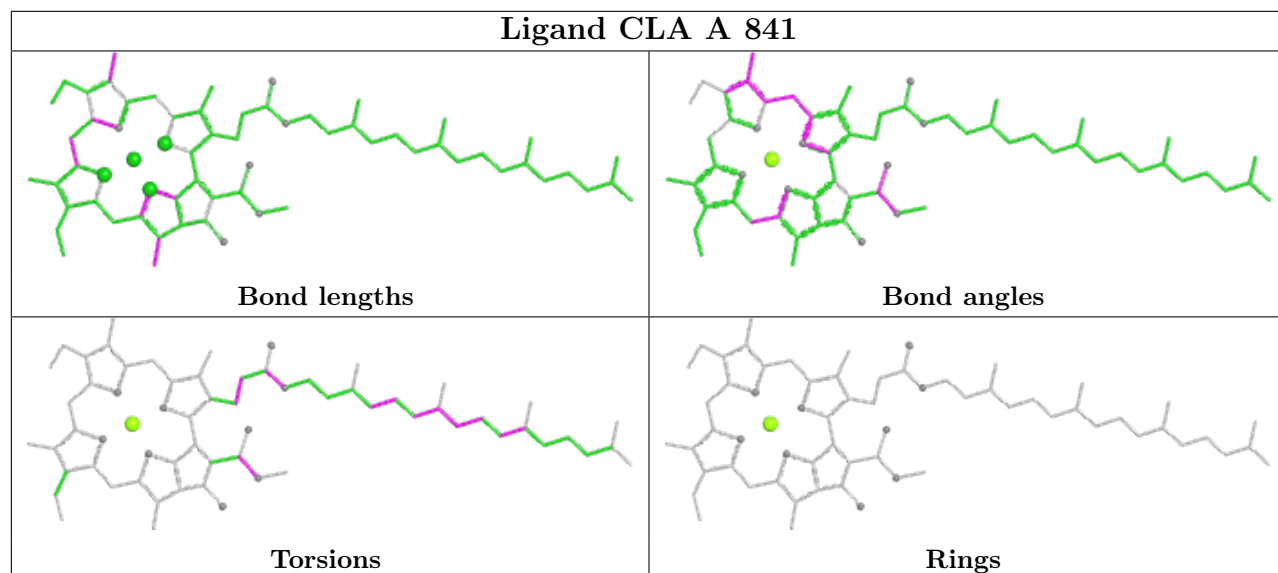
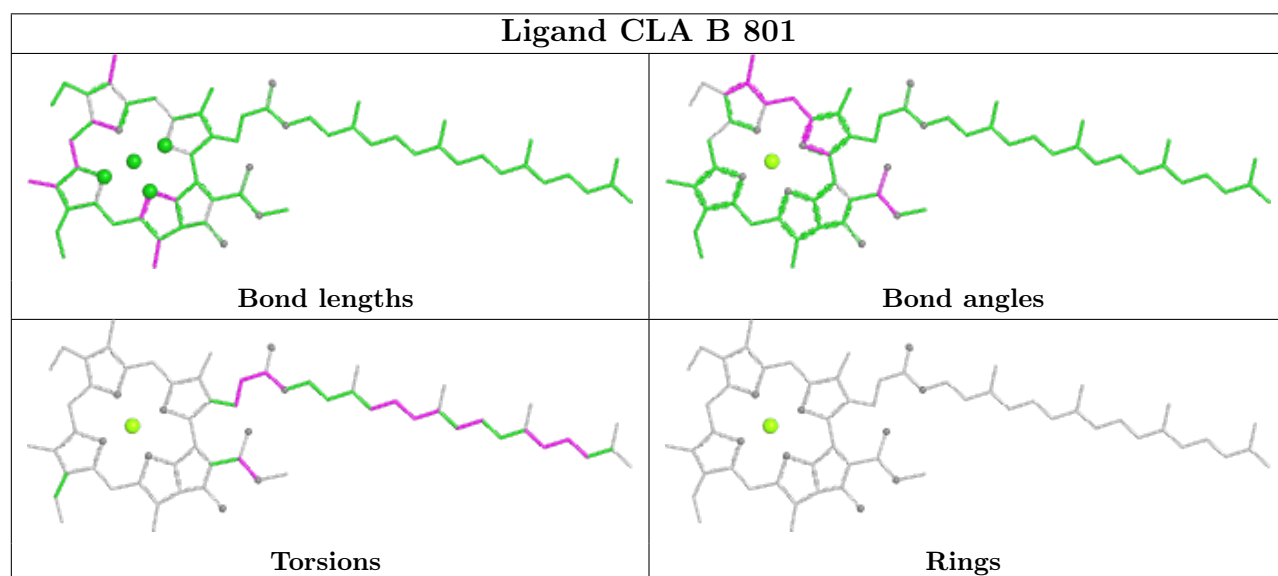
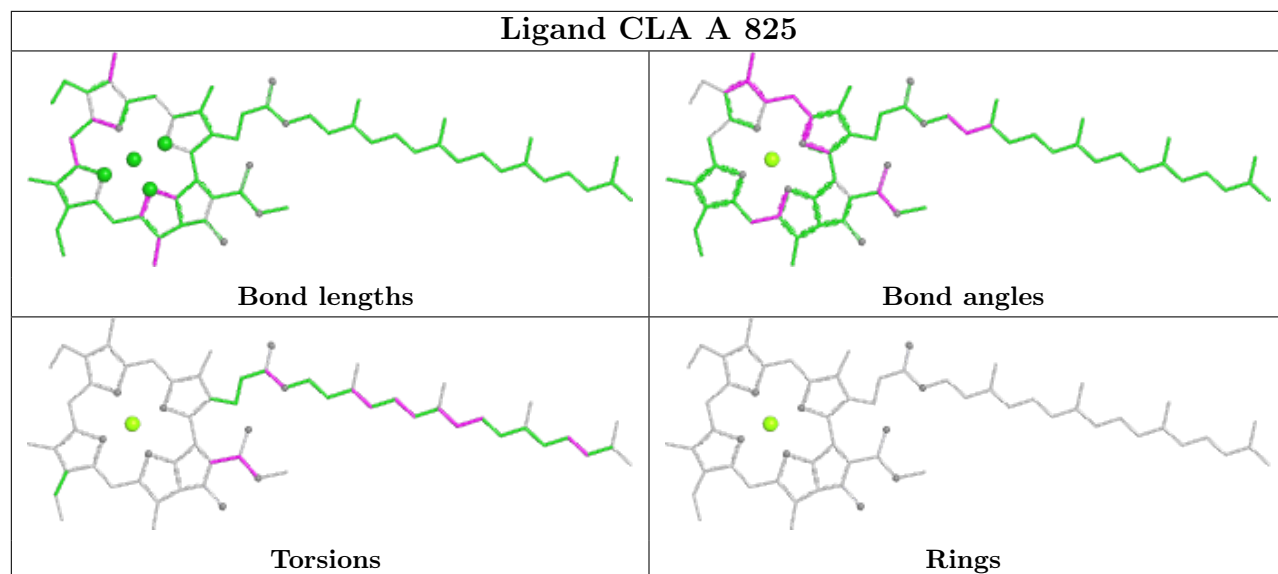
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Mol	Chain	Res	Type	Clashes	Symm-Clashes
16	B	853	BCR	3	0
14	B	830	CLA	2	0
16	B	852	BCR	2	0
16	A	850	BCR	6	0
16	A	848	BCR	2	0
16	I	101	BCR	2	0
14	B	838	CLA	1	0
14	B	826	CLA	4	0
20	B	850	LMG	3	0
14	F	201	CLA	2	0
16	B	849	BCR	1	0
16	B	844	BCR	1	0
17	I	102	LHG	2	0
17	A	853	LHG	2	0
14	A	822	CLA	5	0
14	B	809	CLA	1	0
14	B	815	CLA	2	0
16	A	849	BCR	2	0
14	X	1701	CLA	1	0

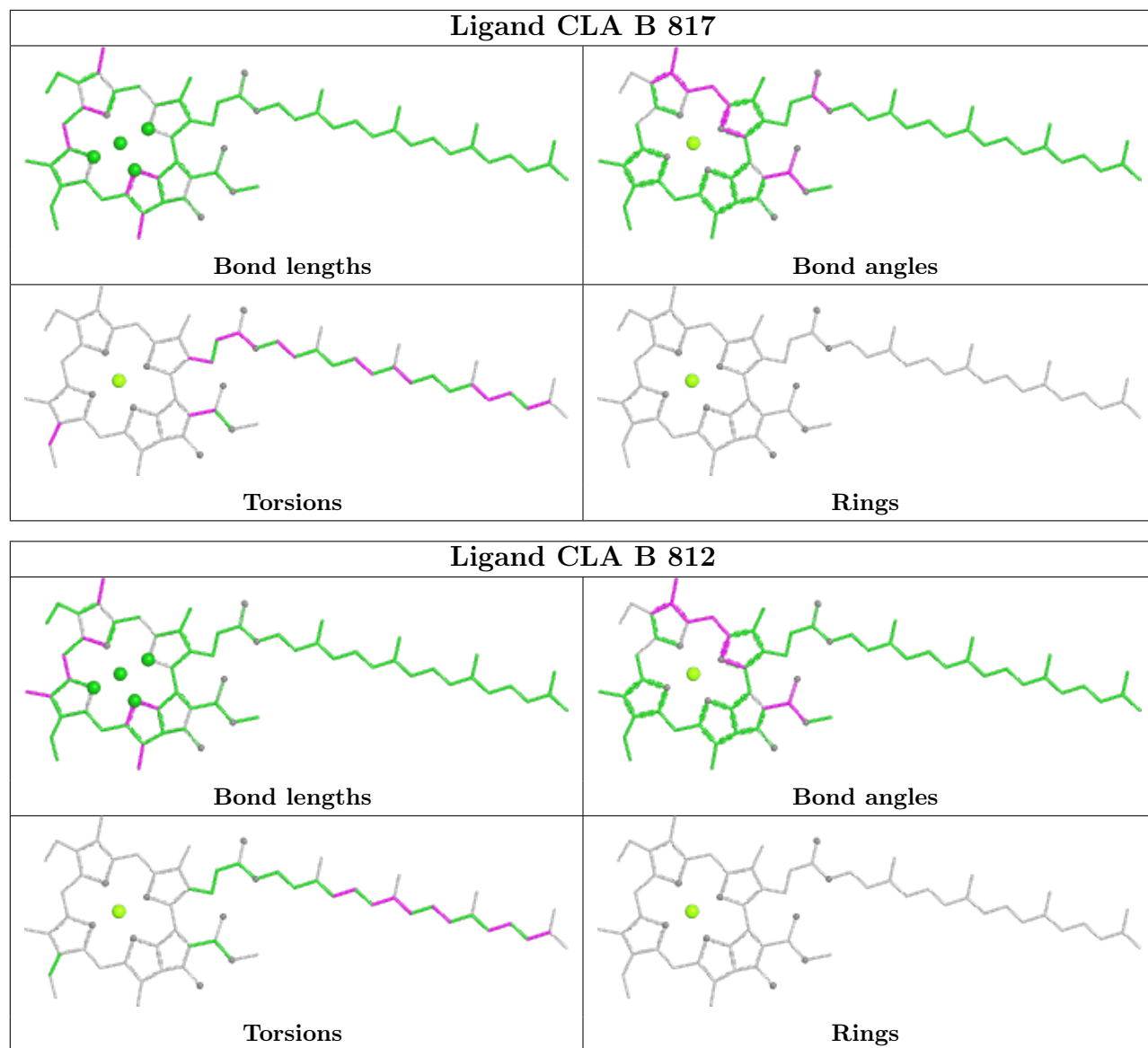
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

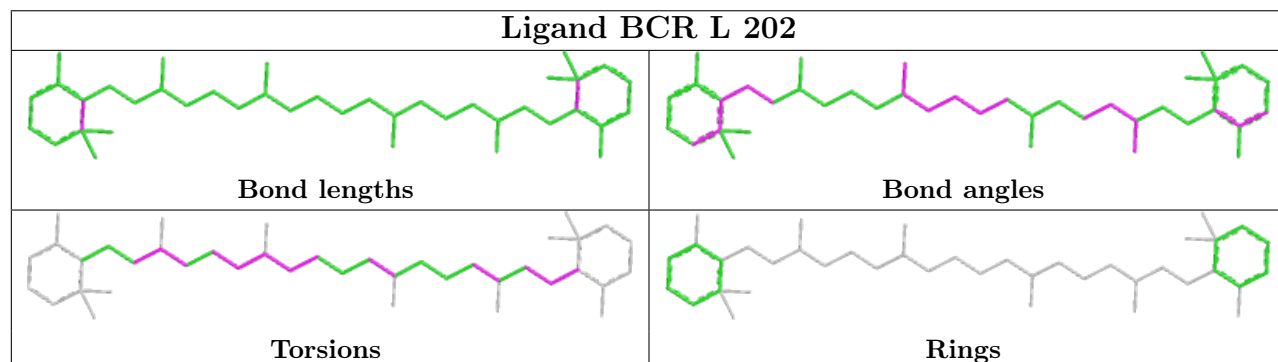
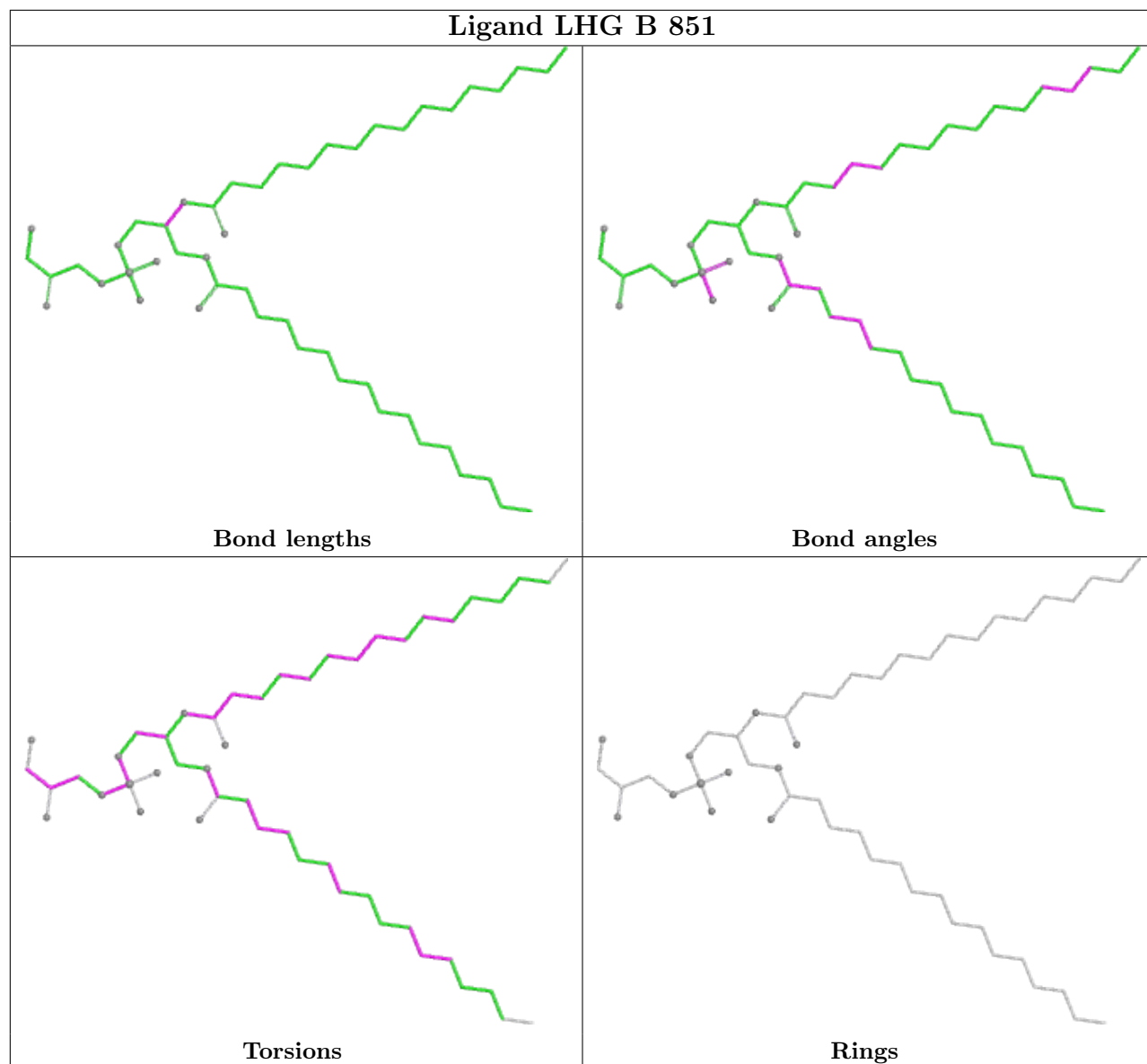


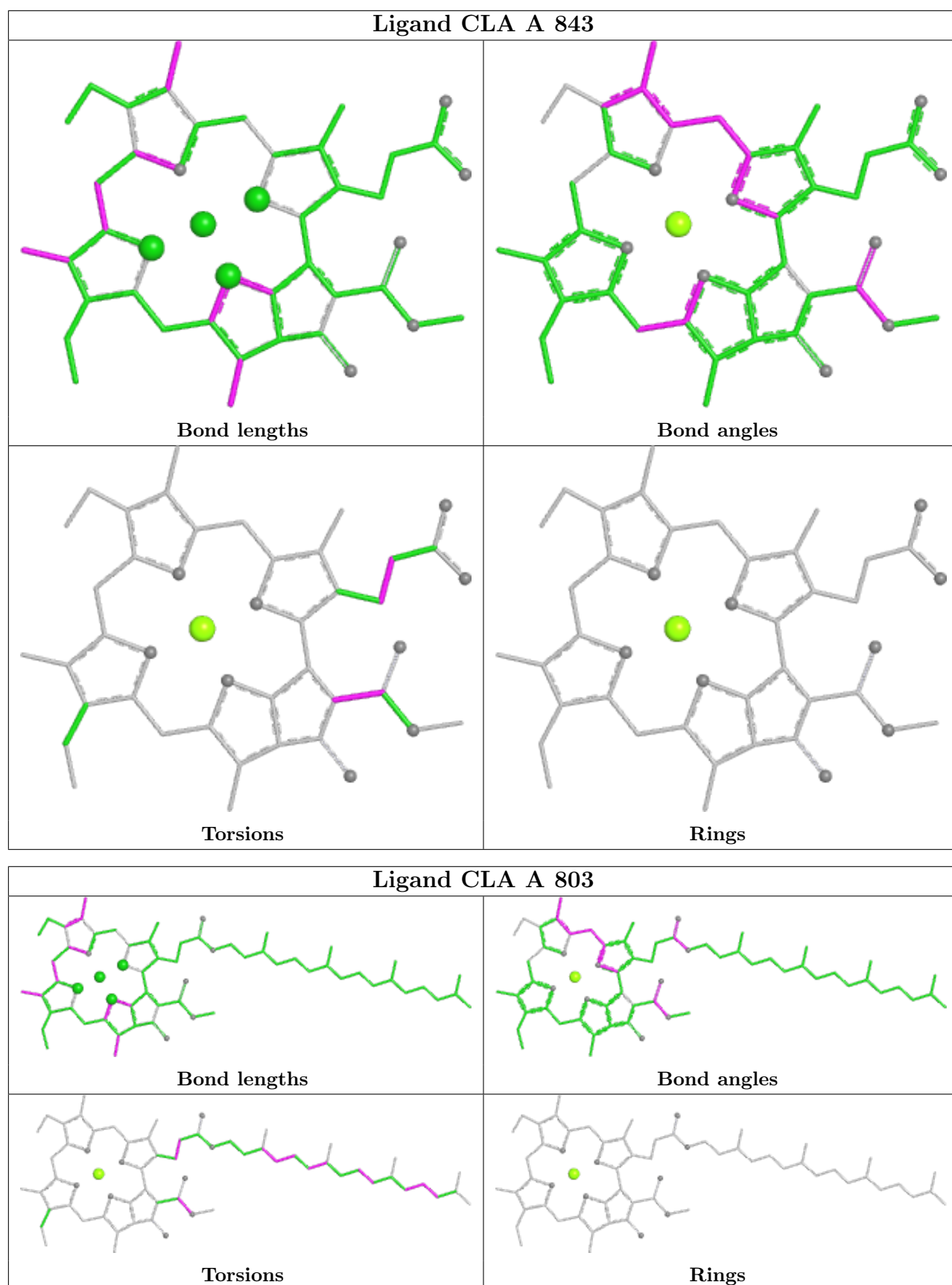


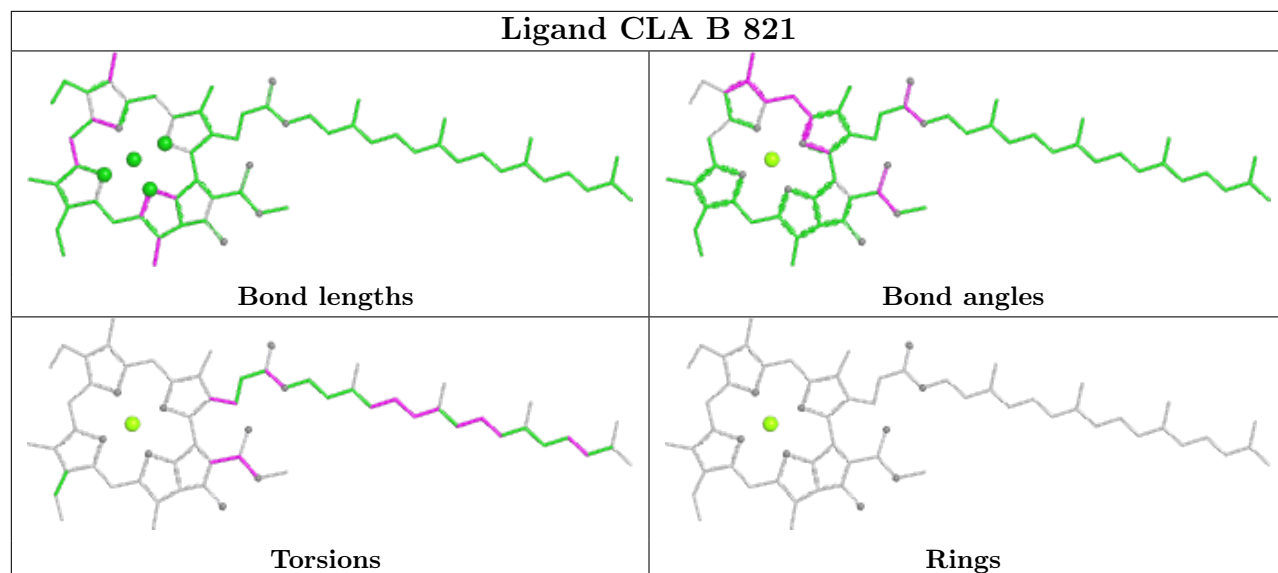
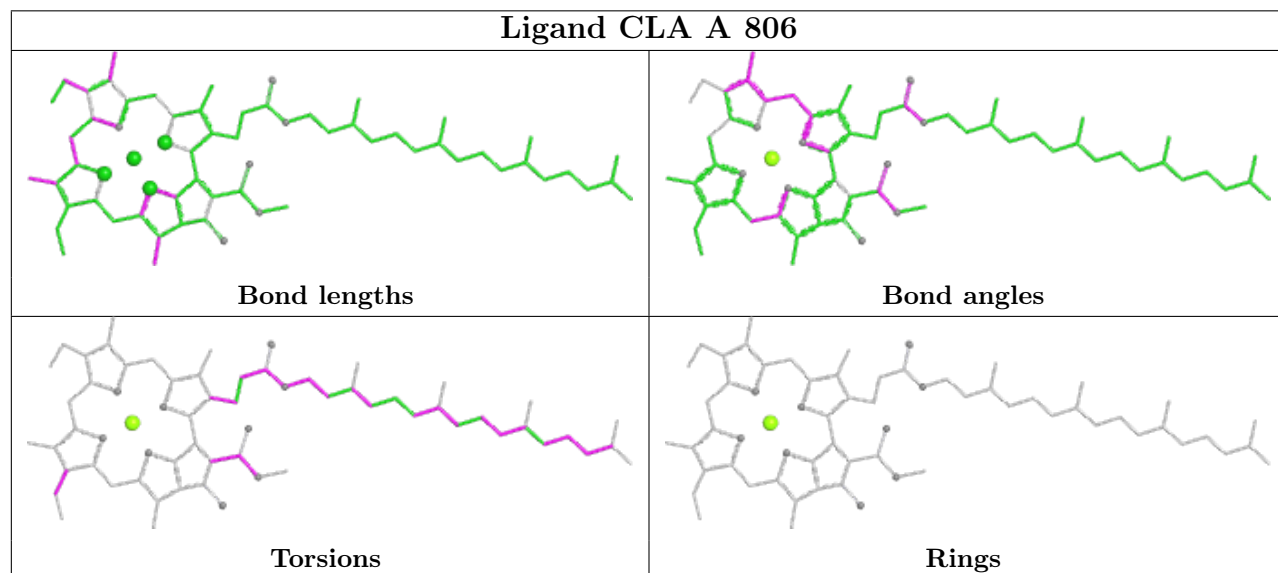
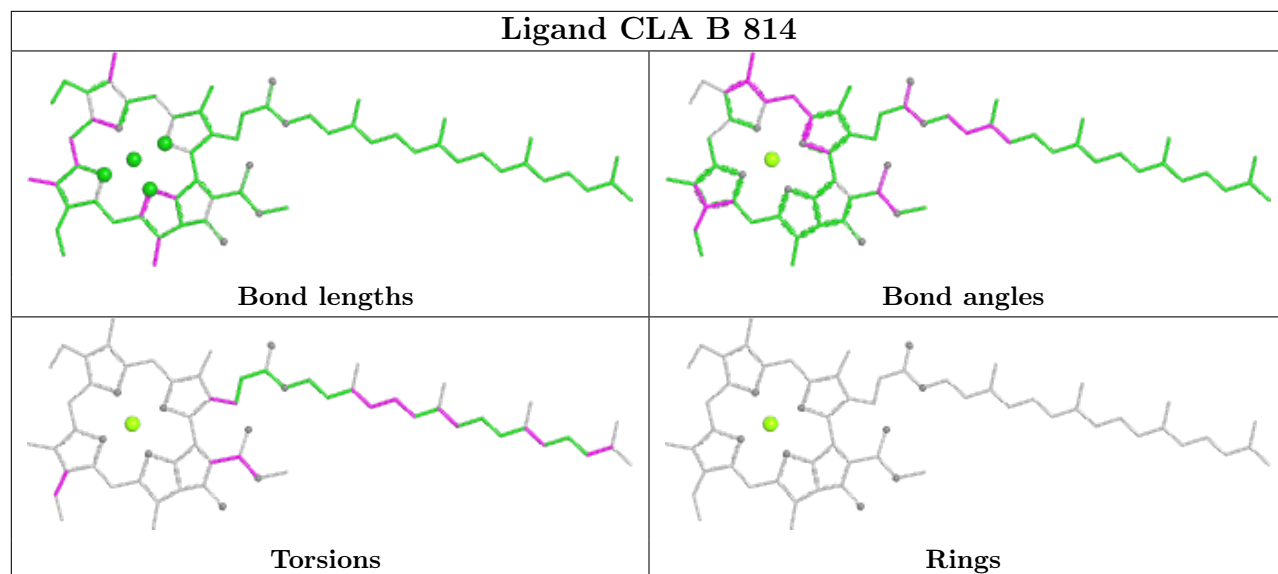


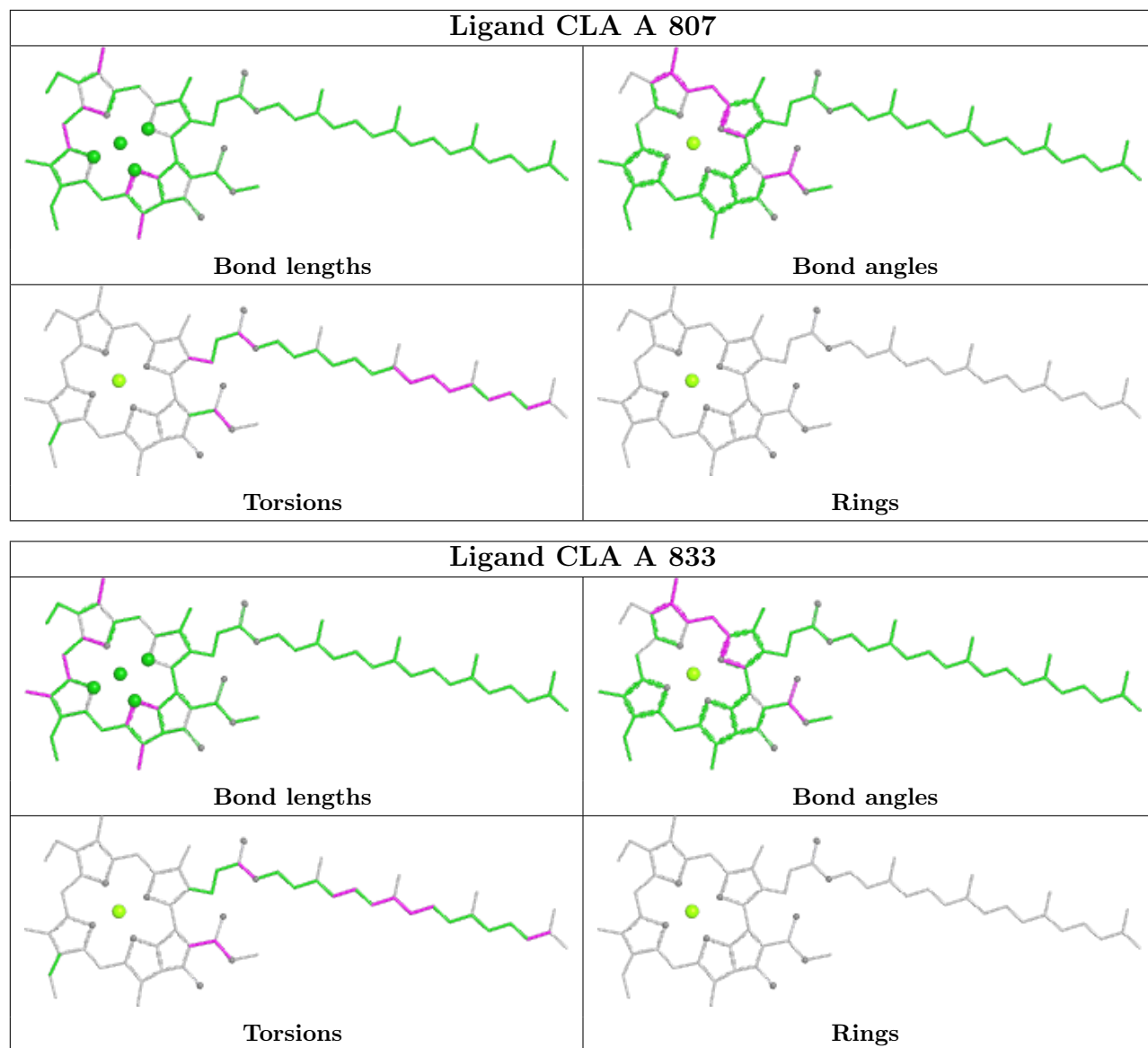


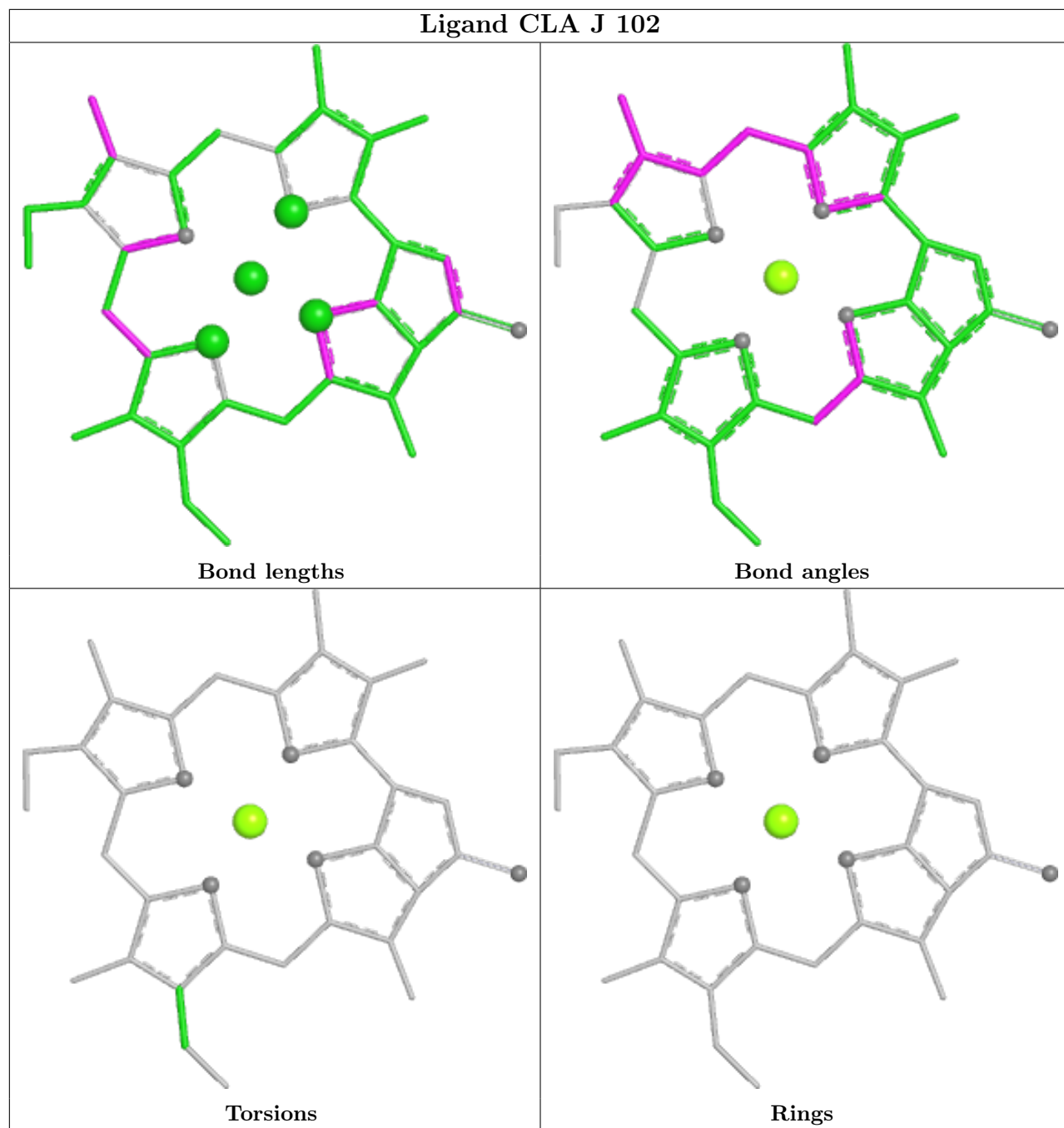


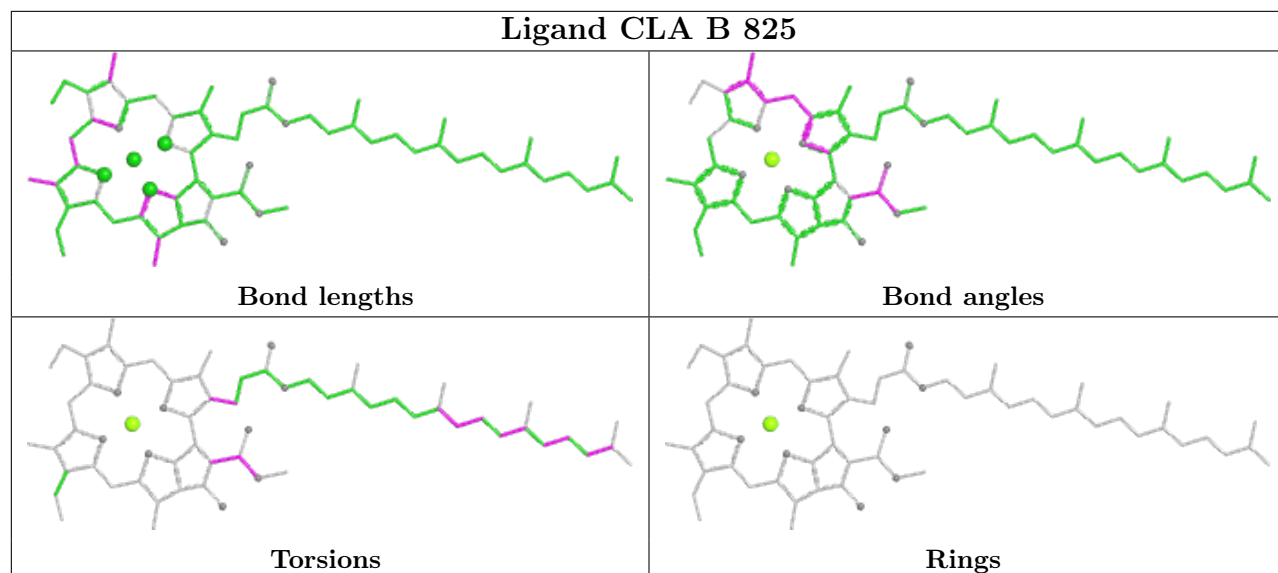
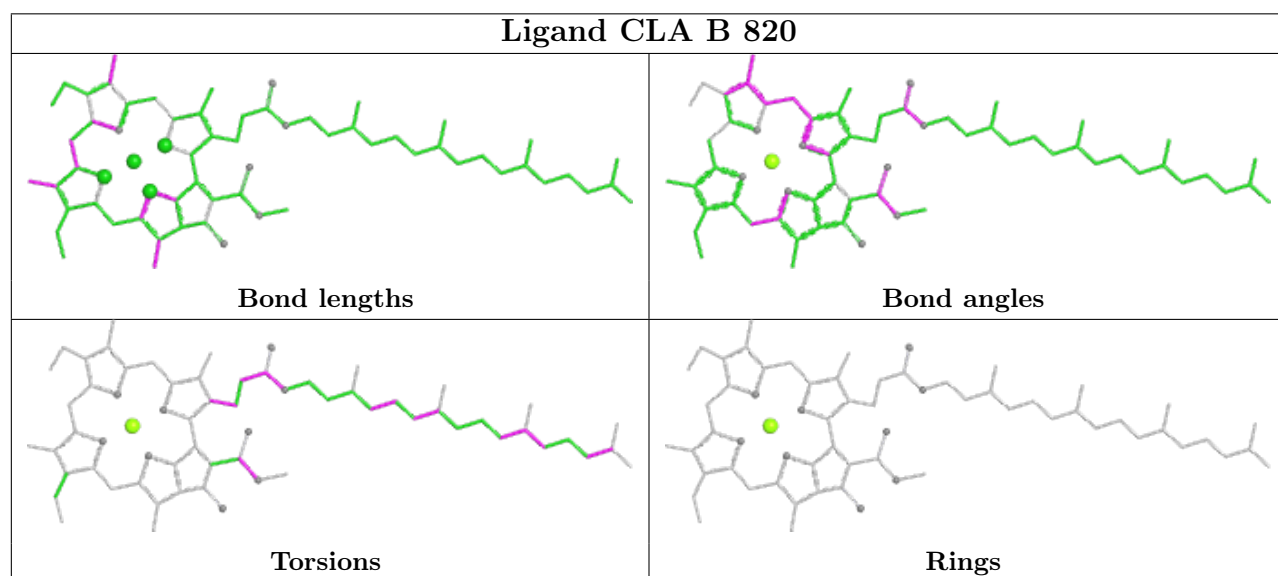
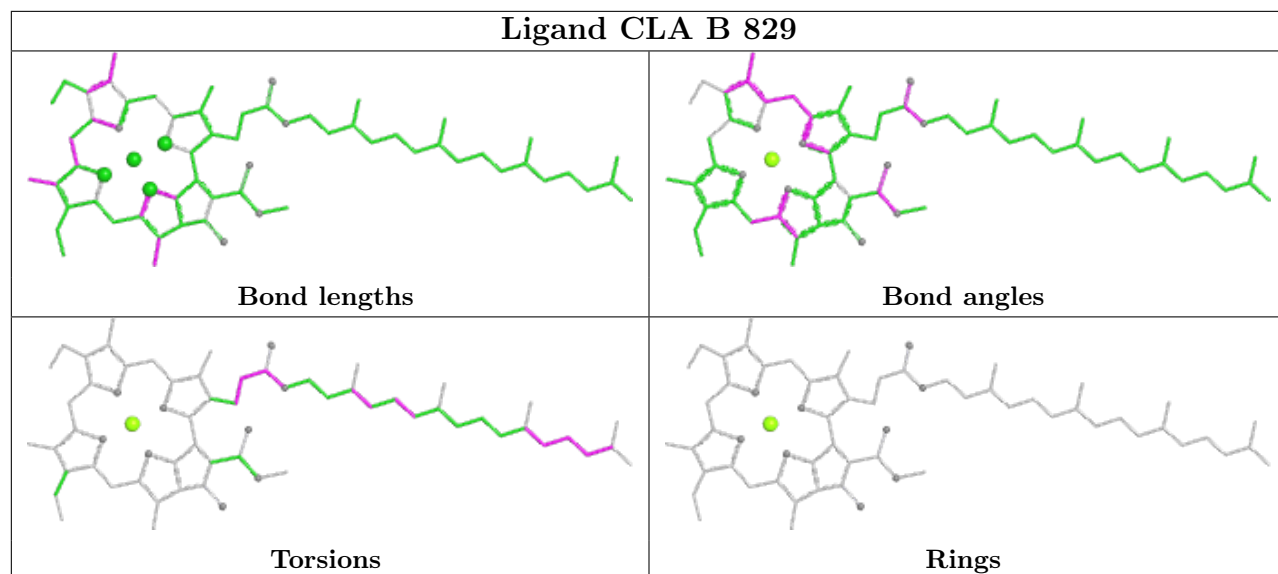


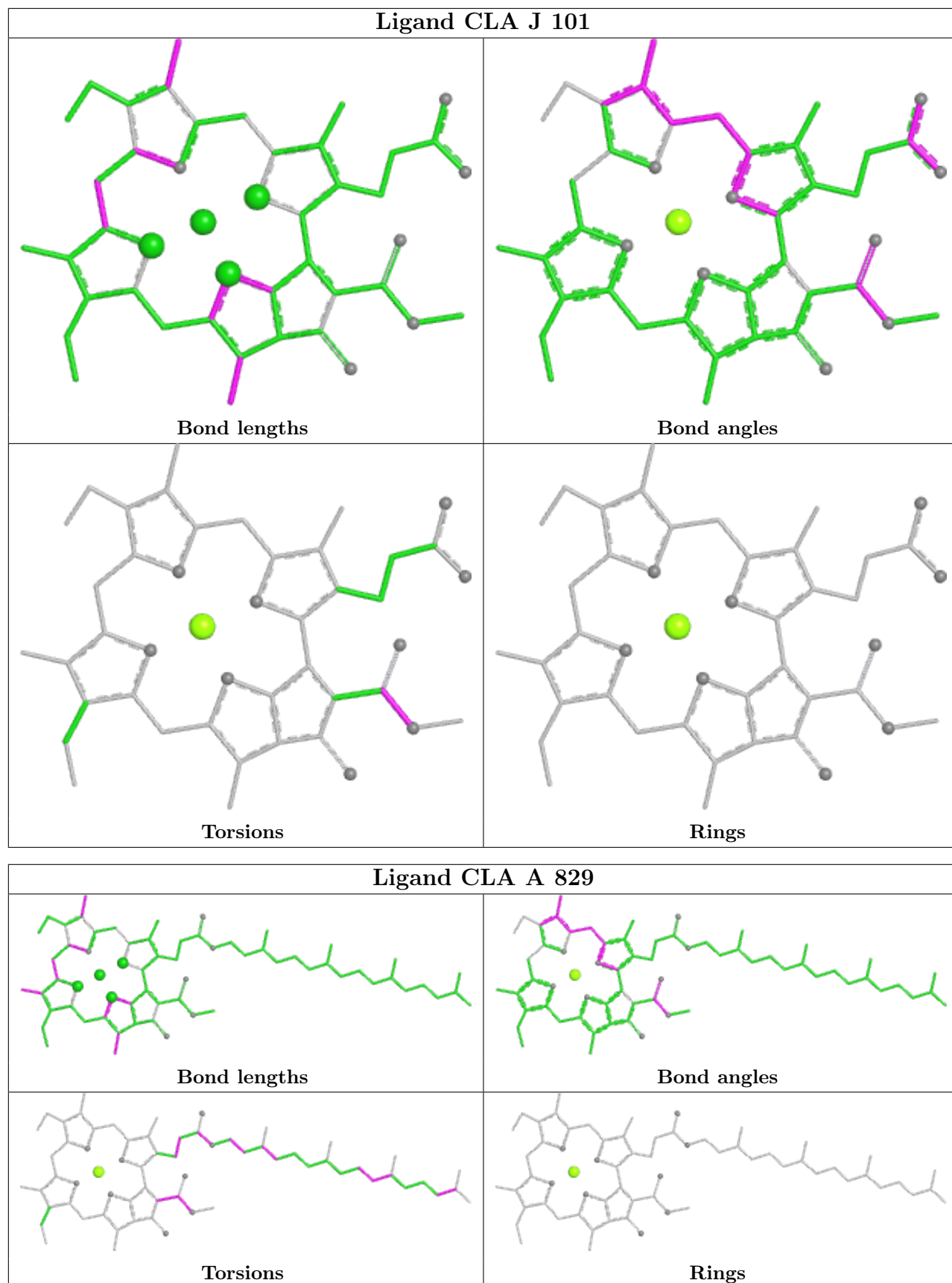




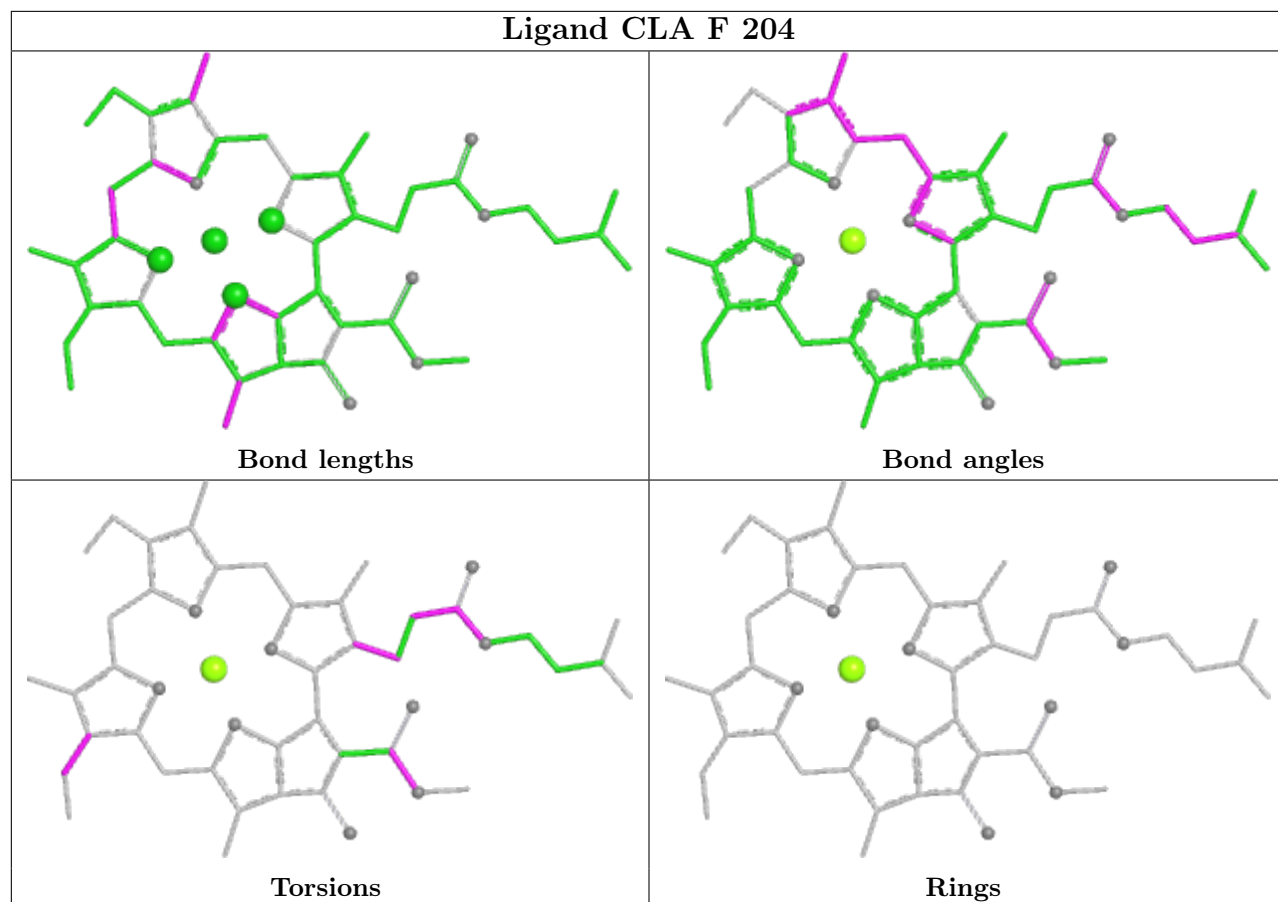


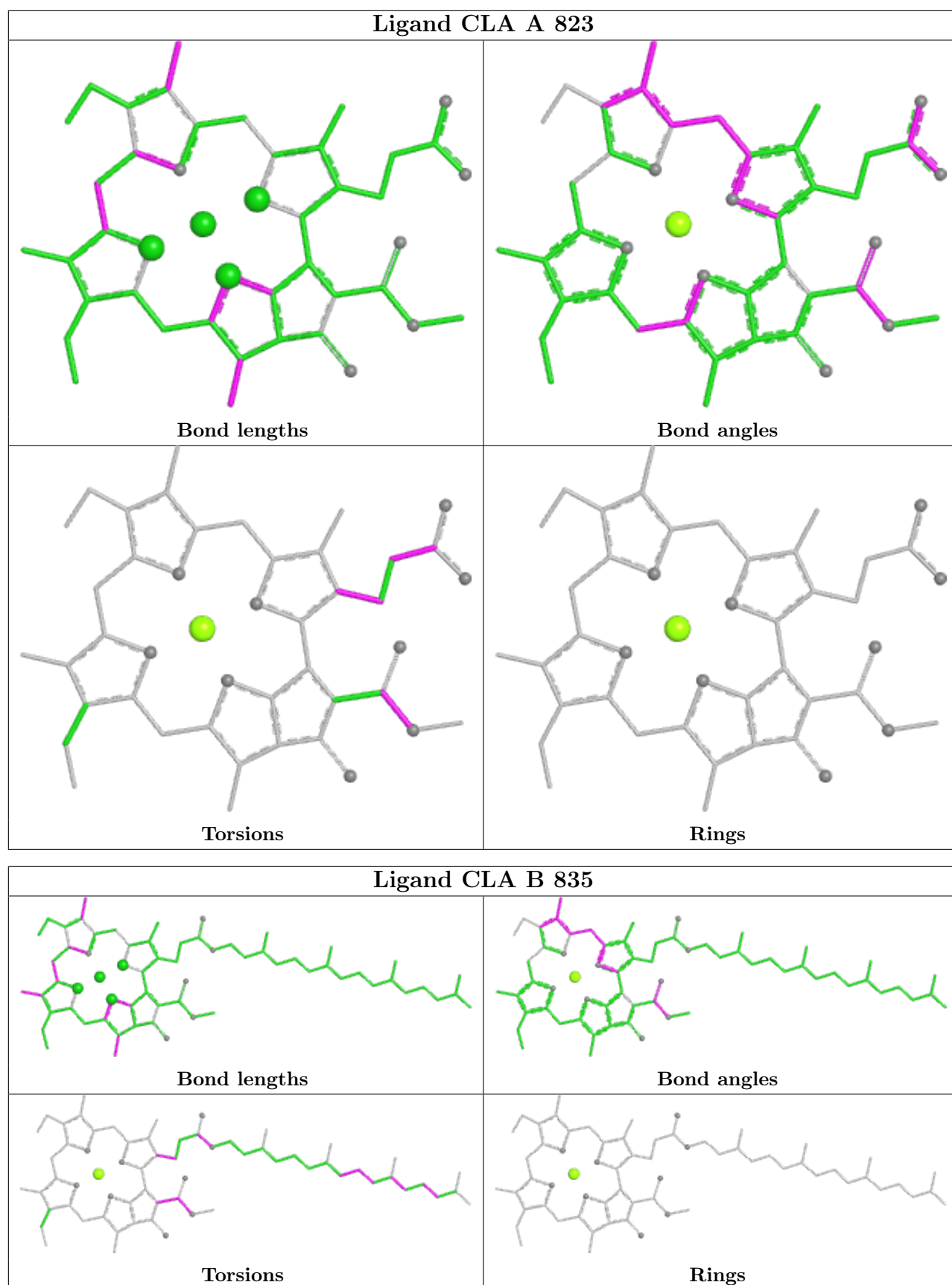


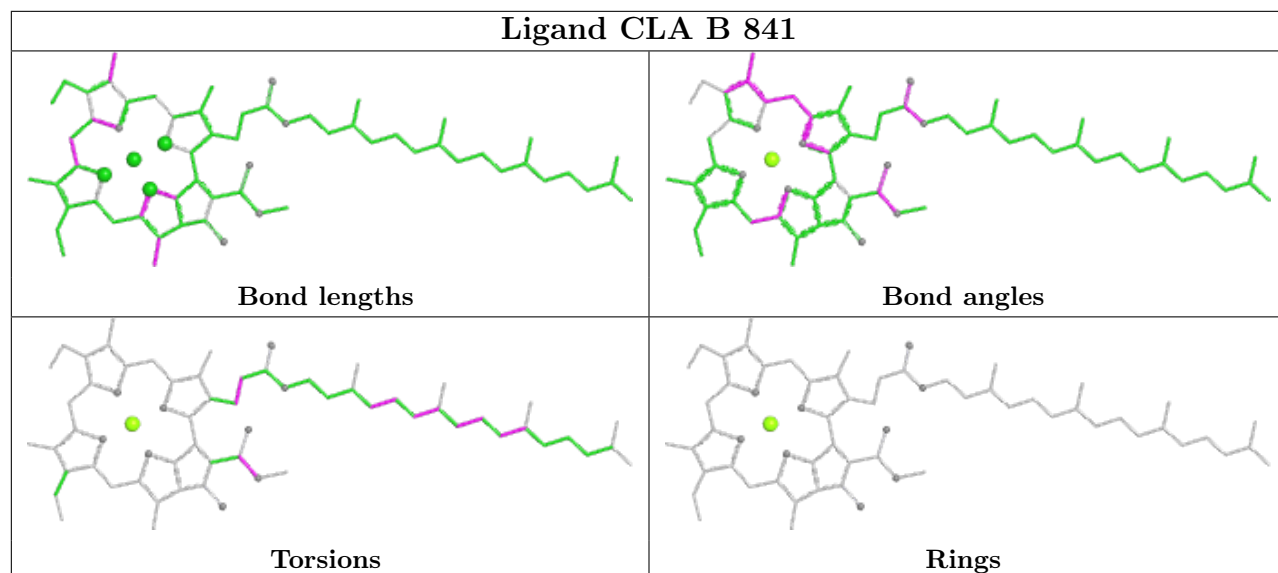
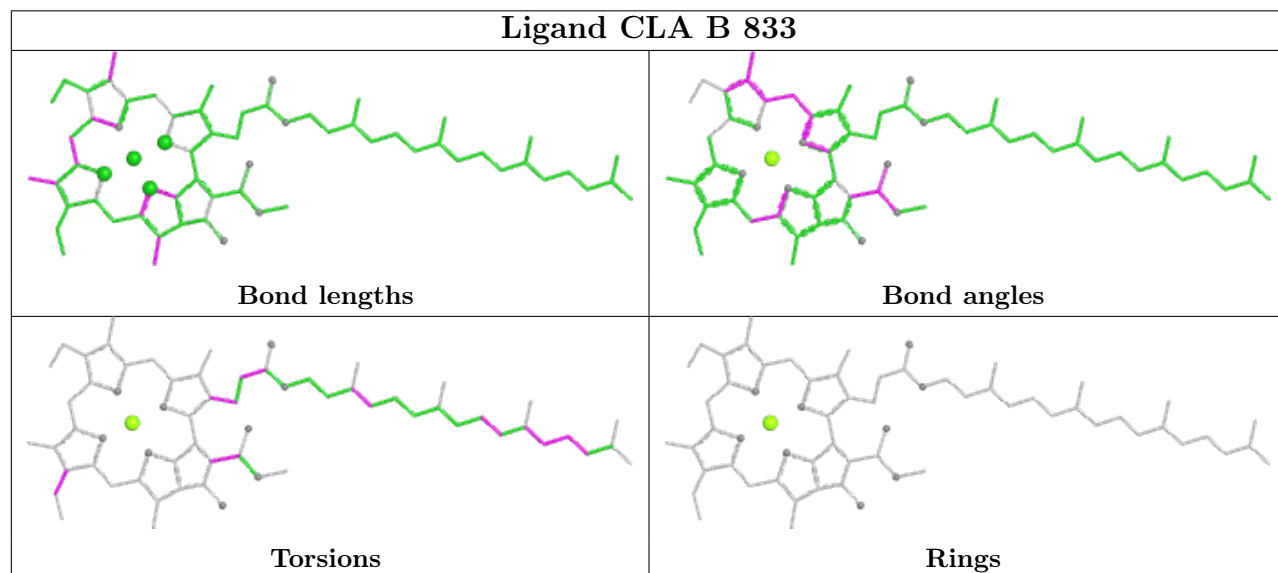
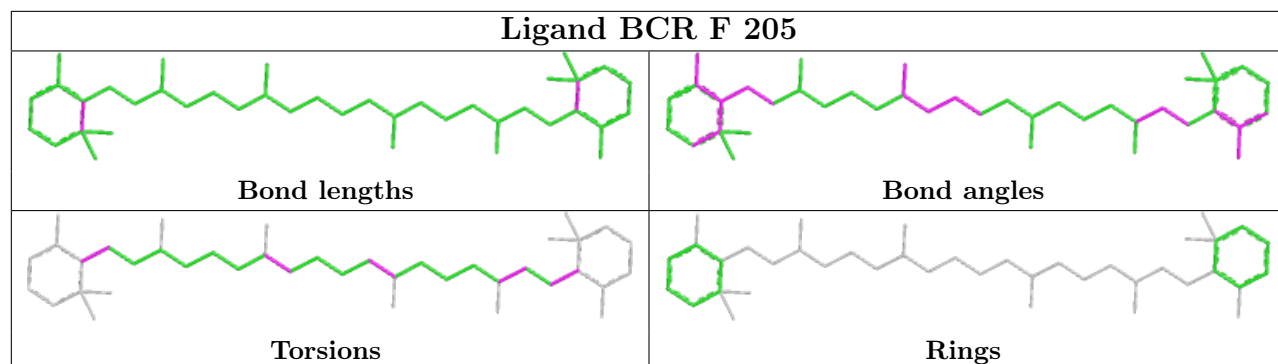


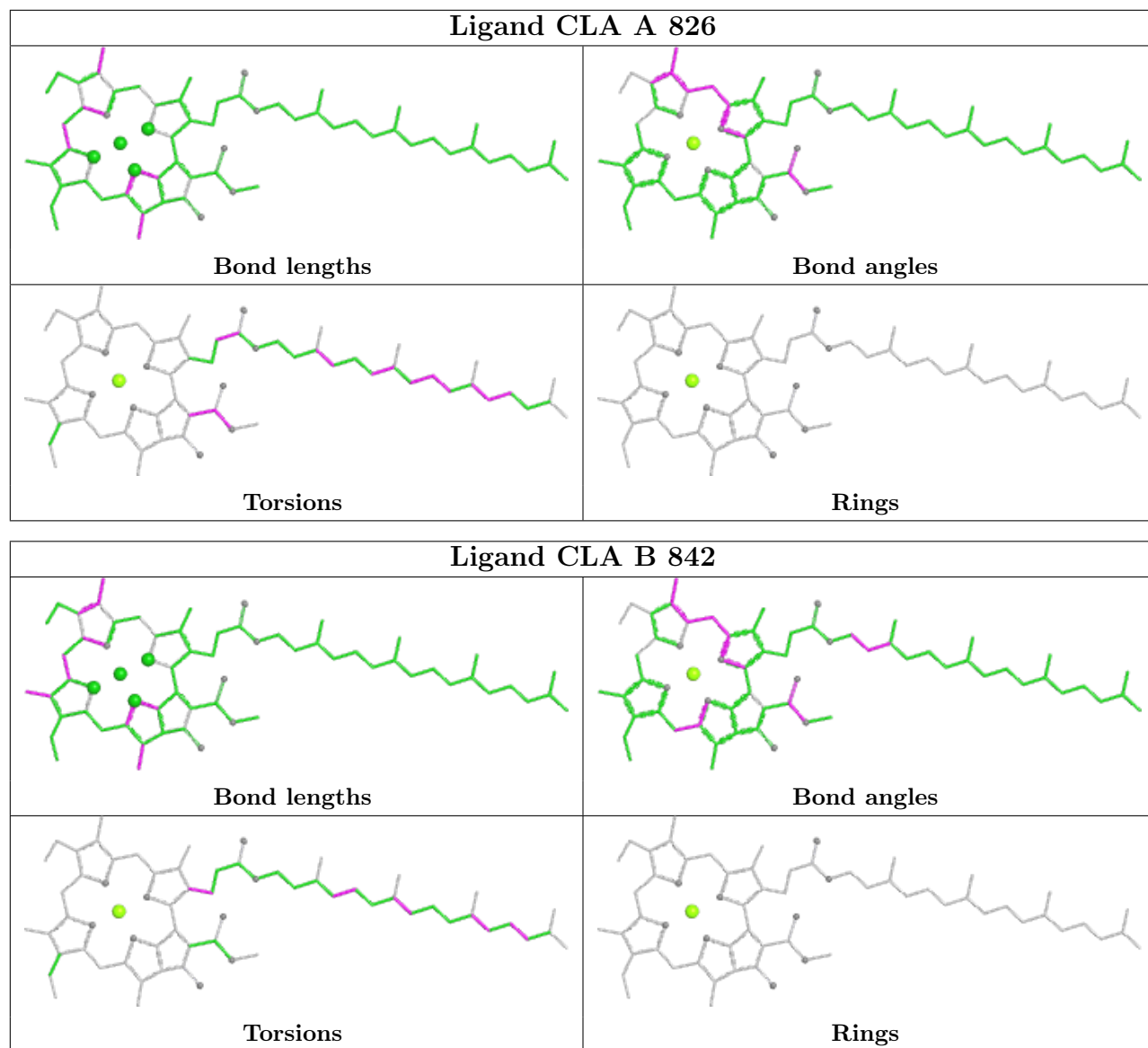


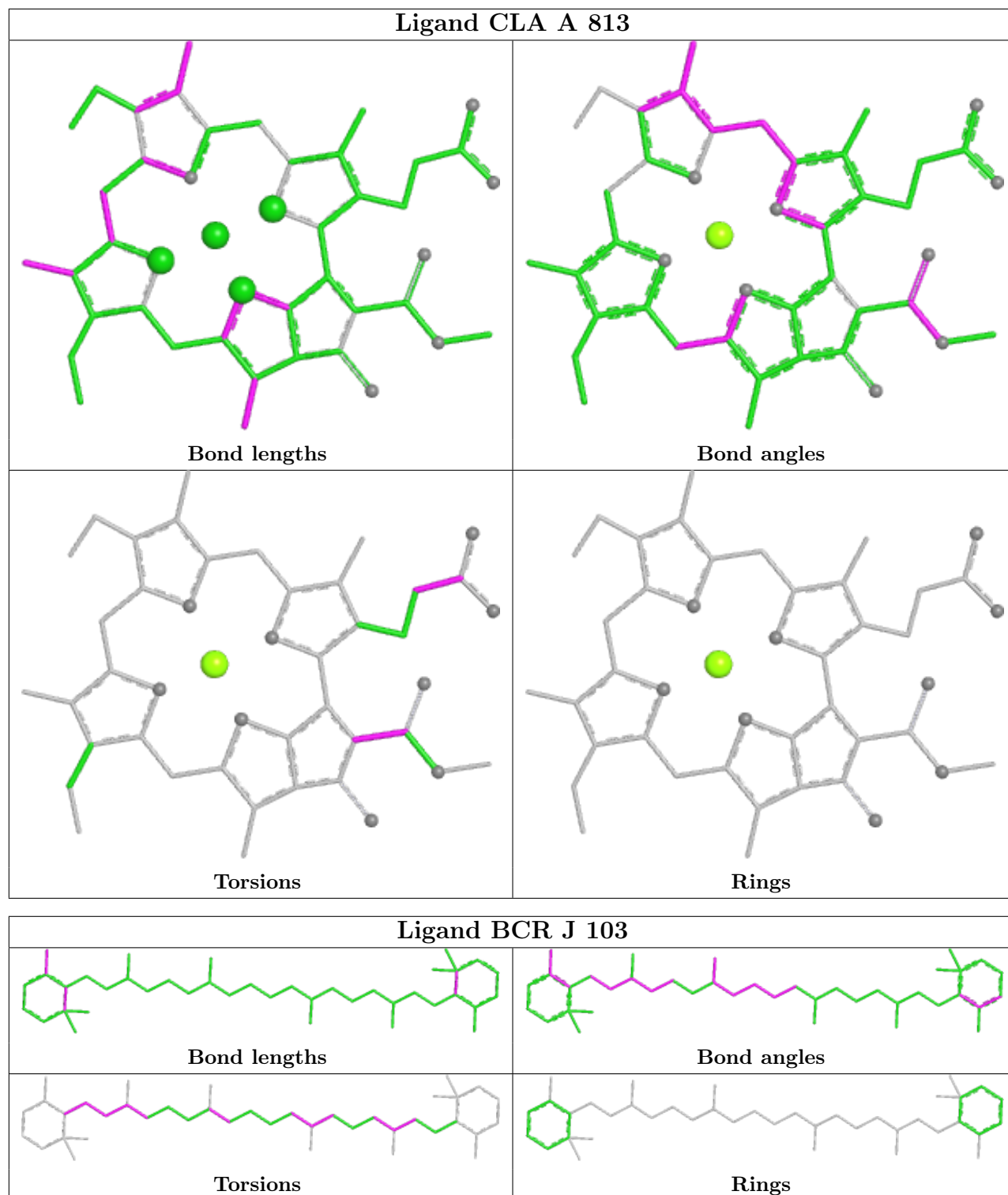


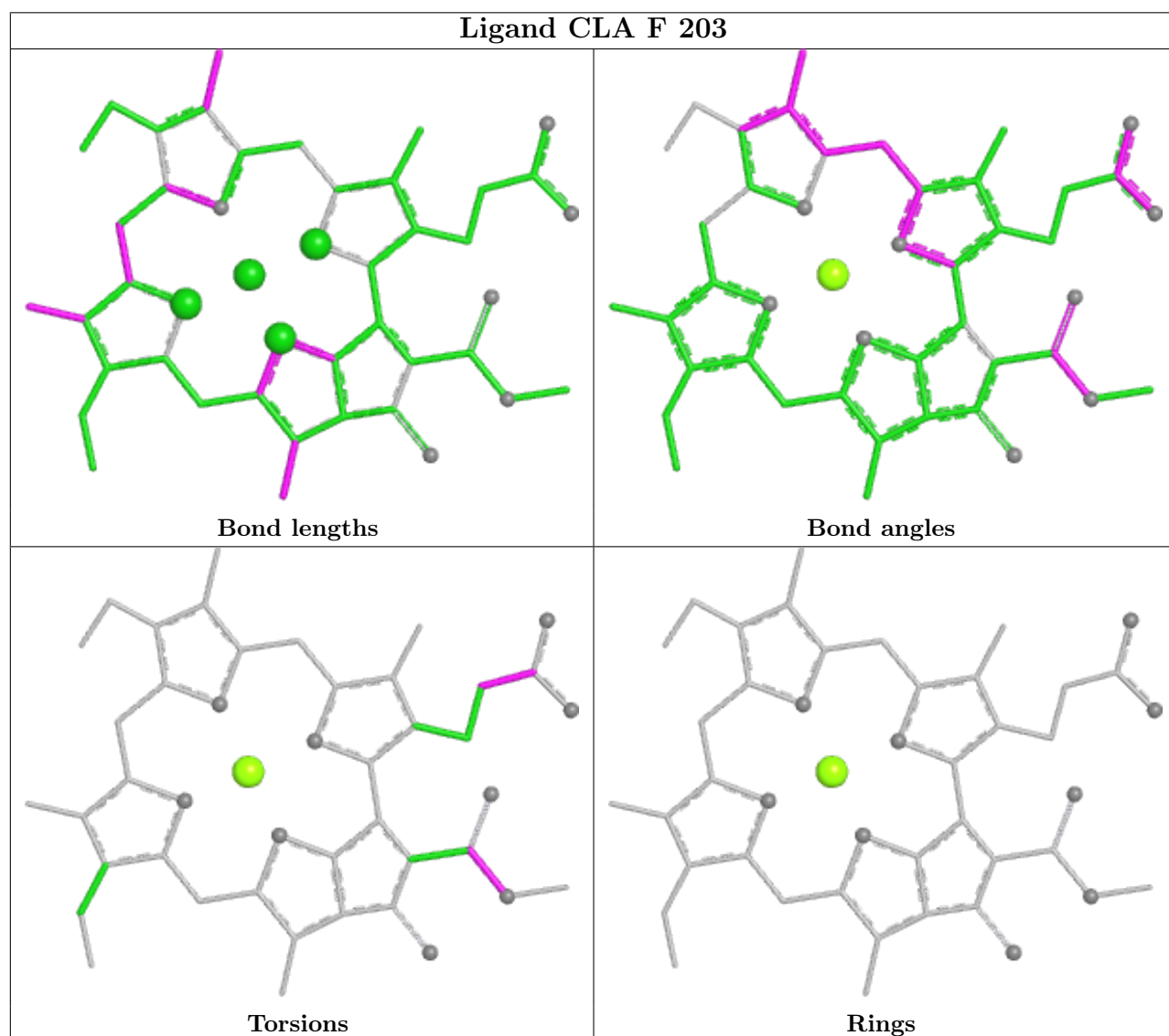
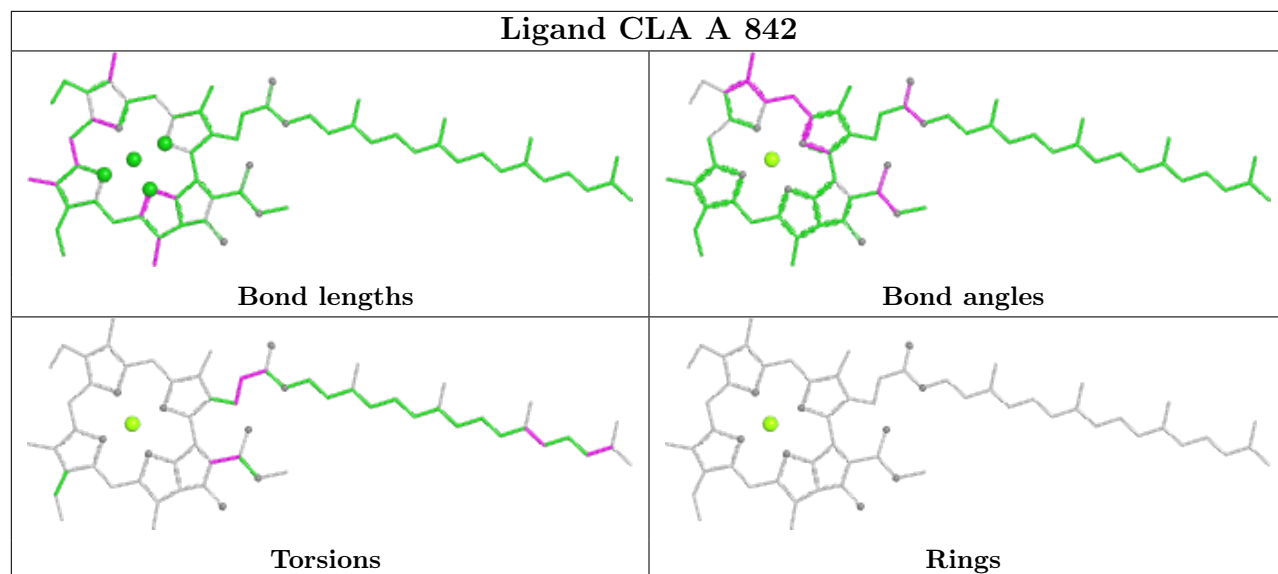


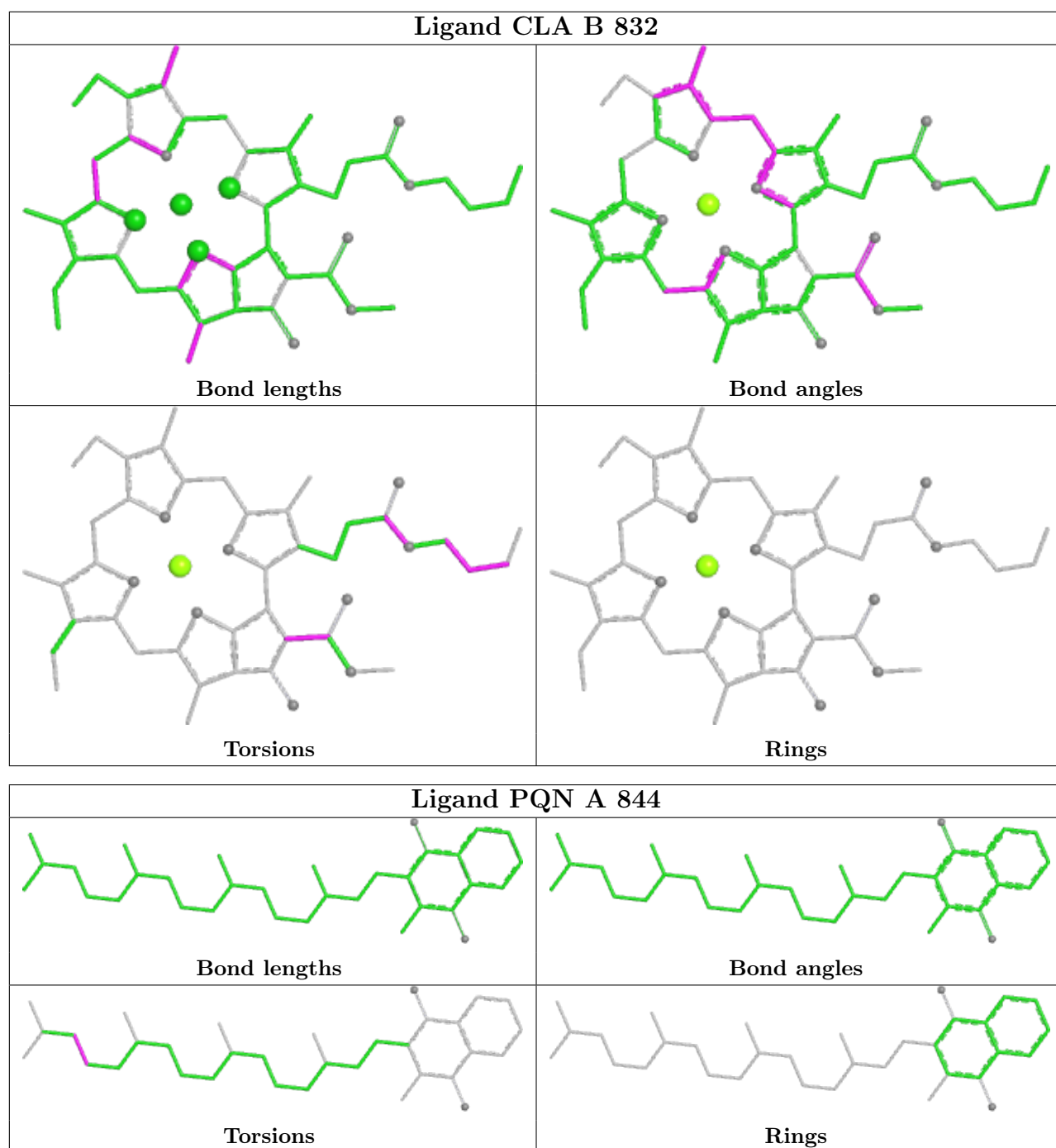


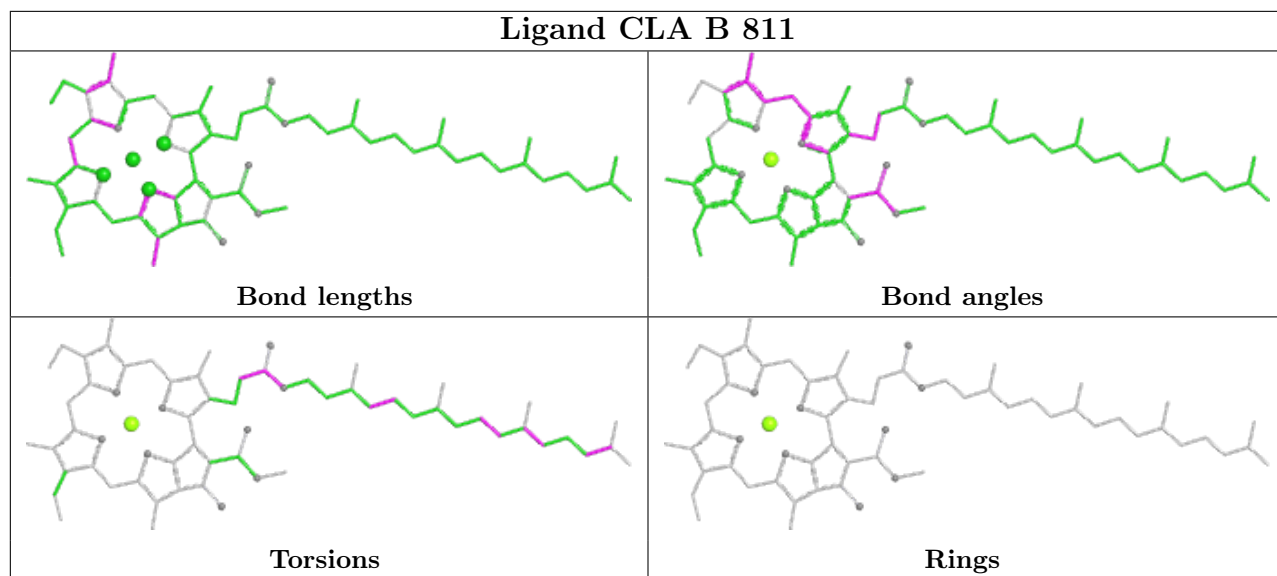




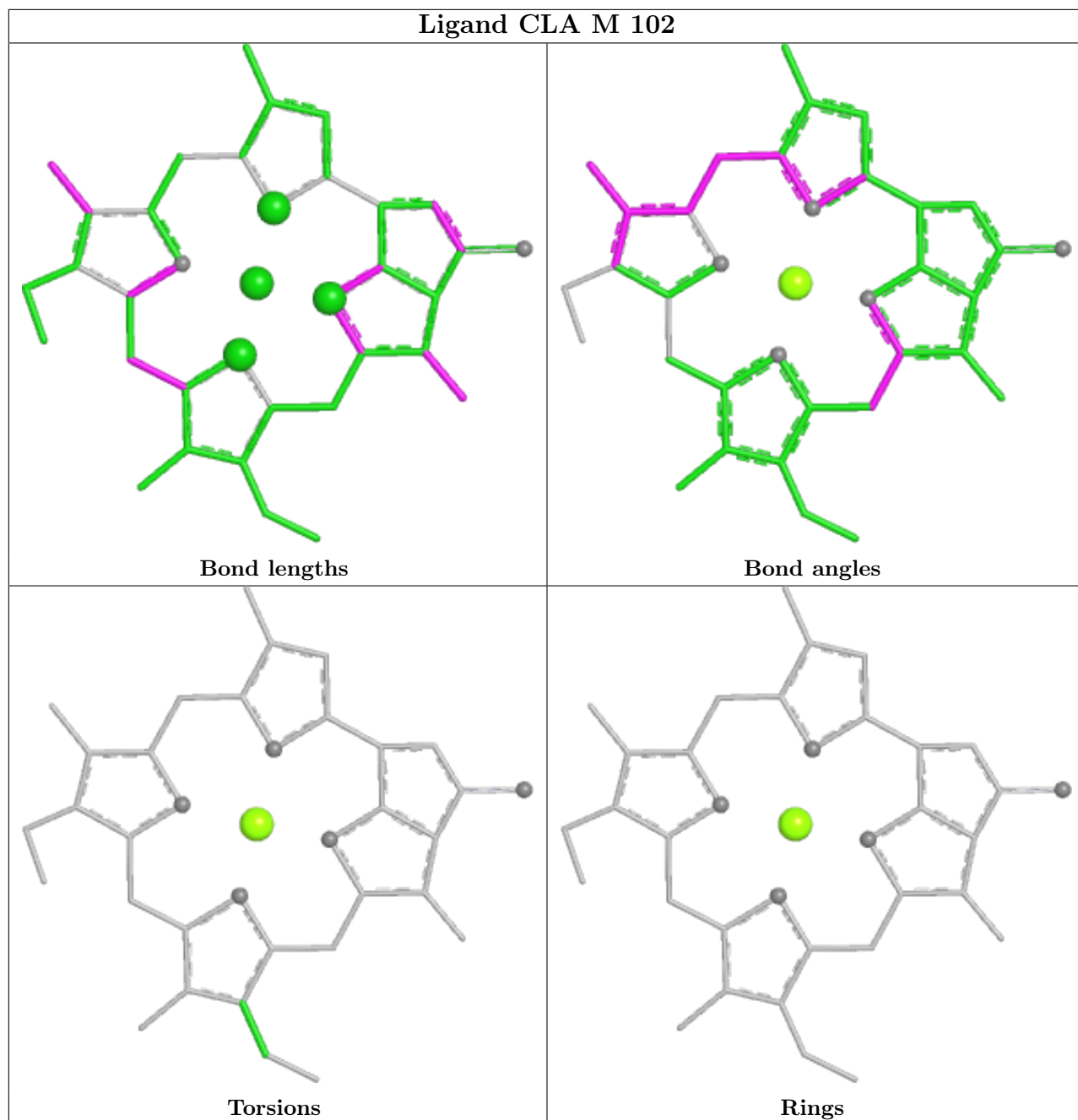


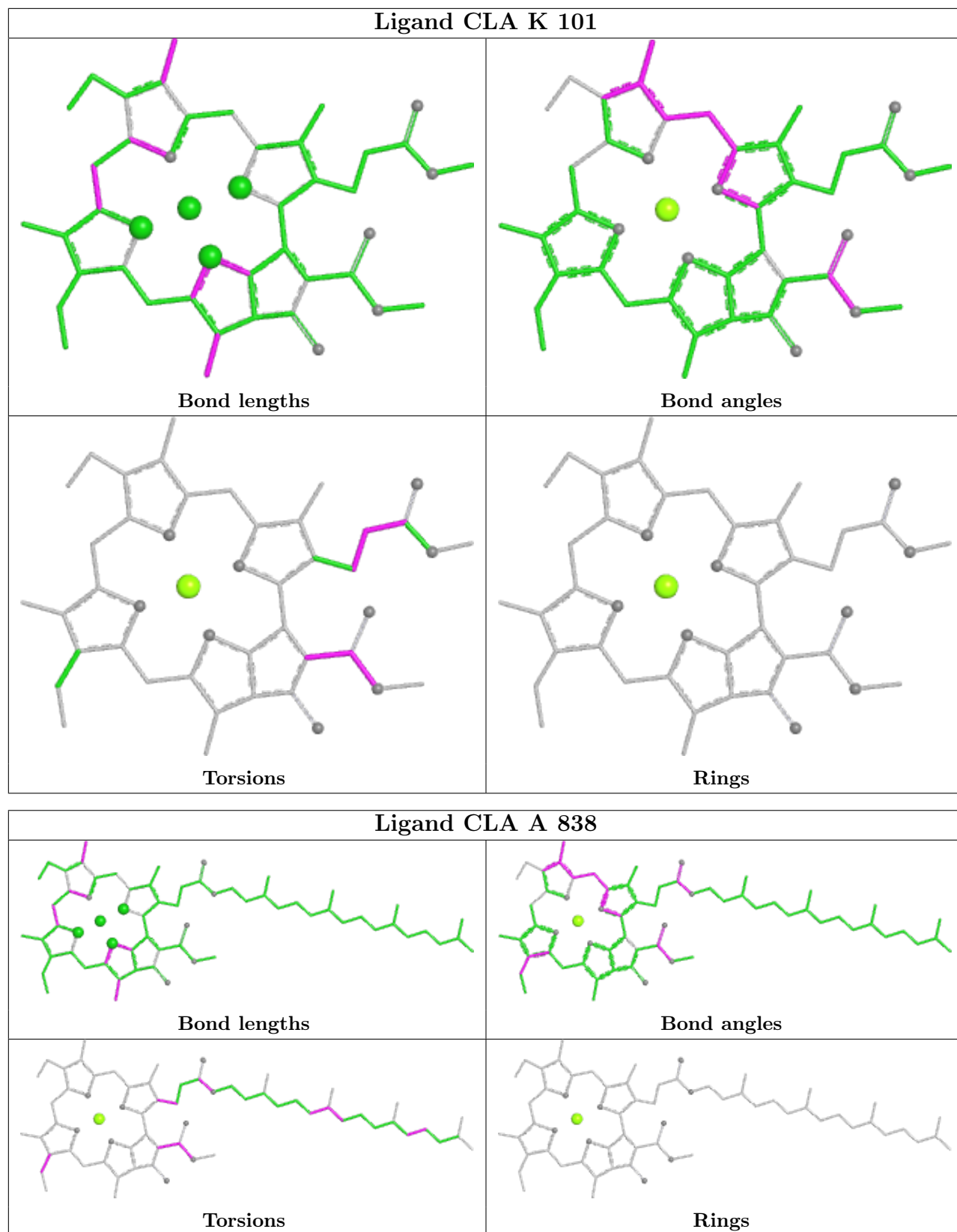


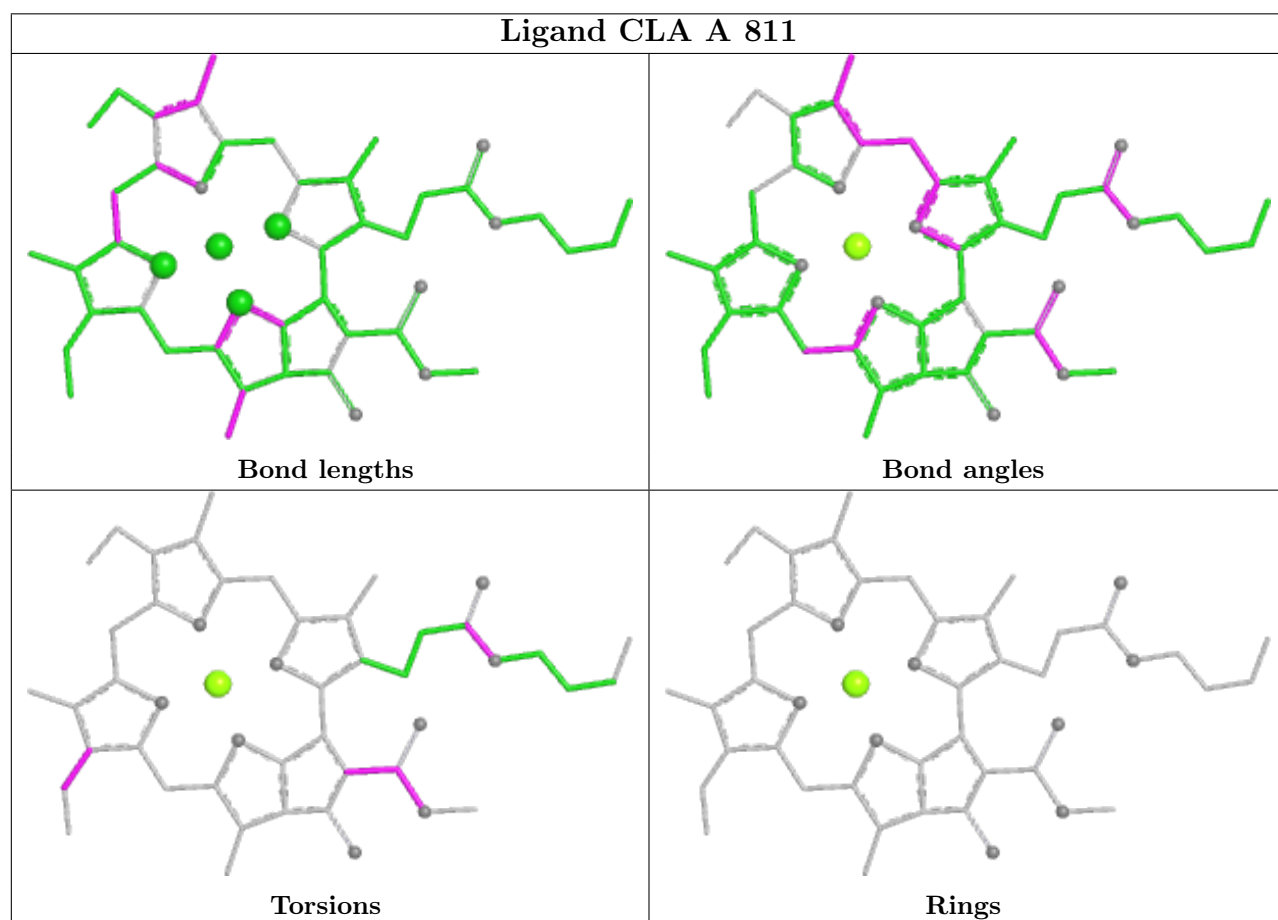
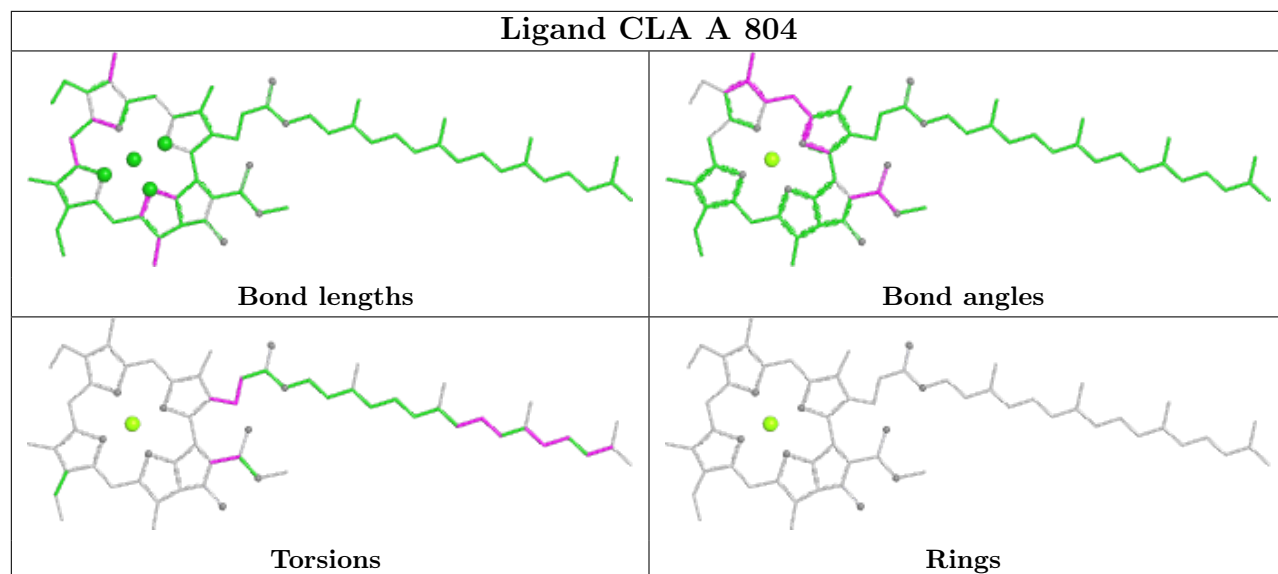


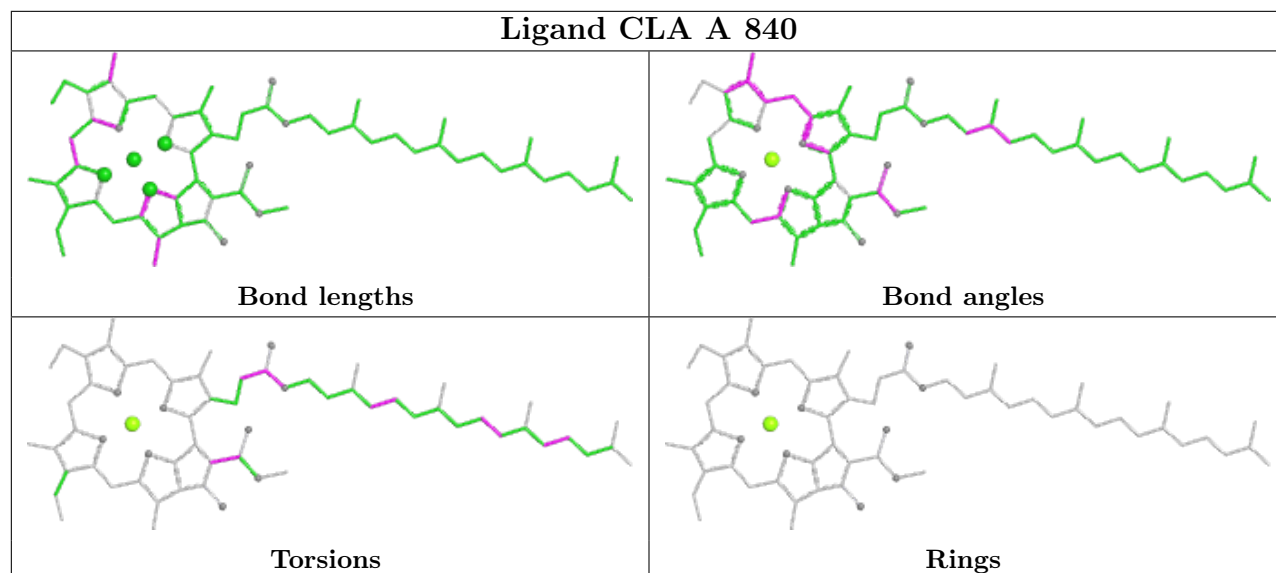
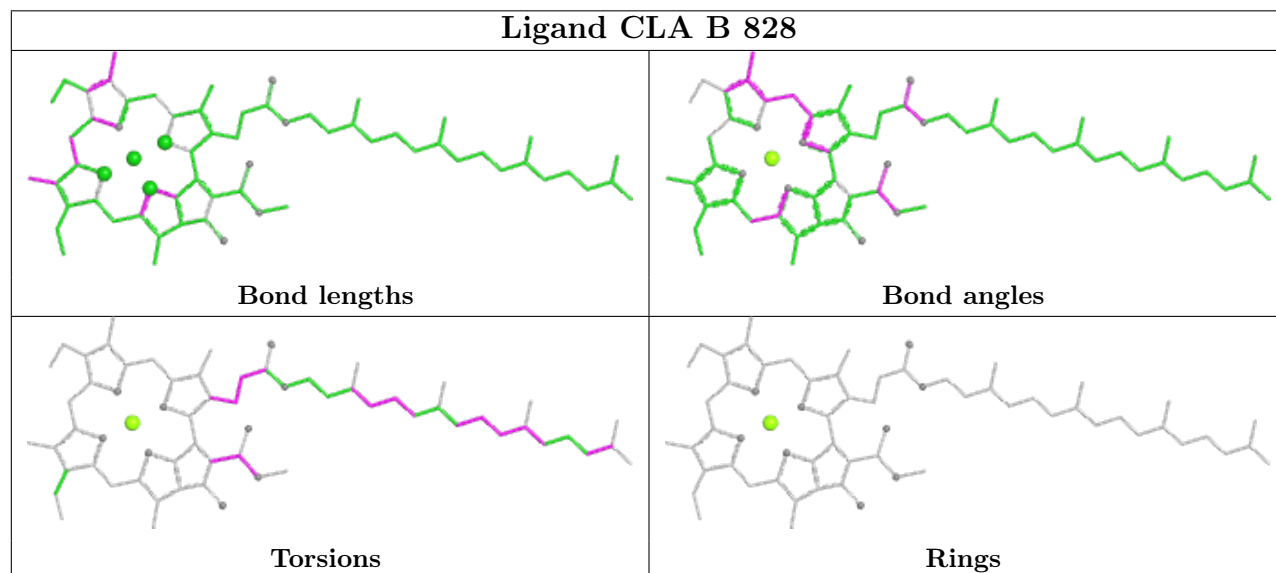
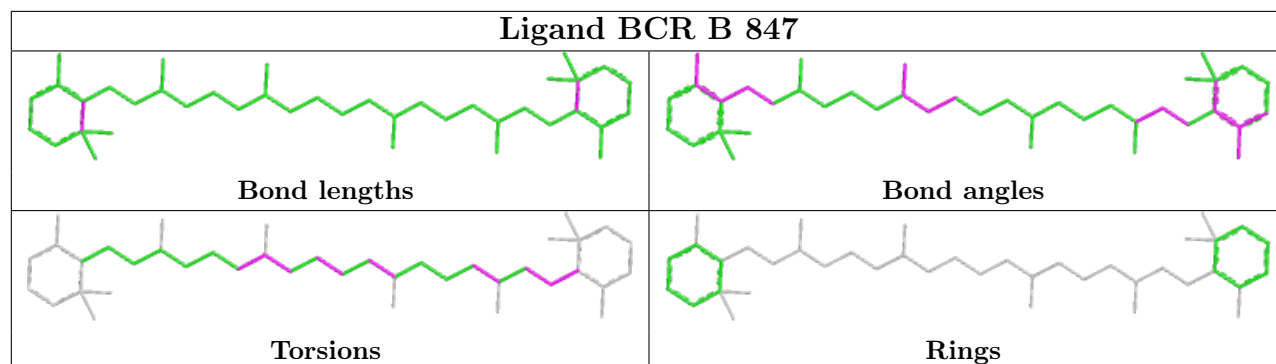


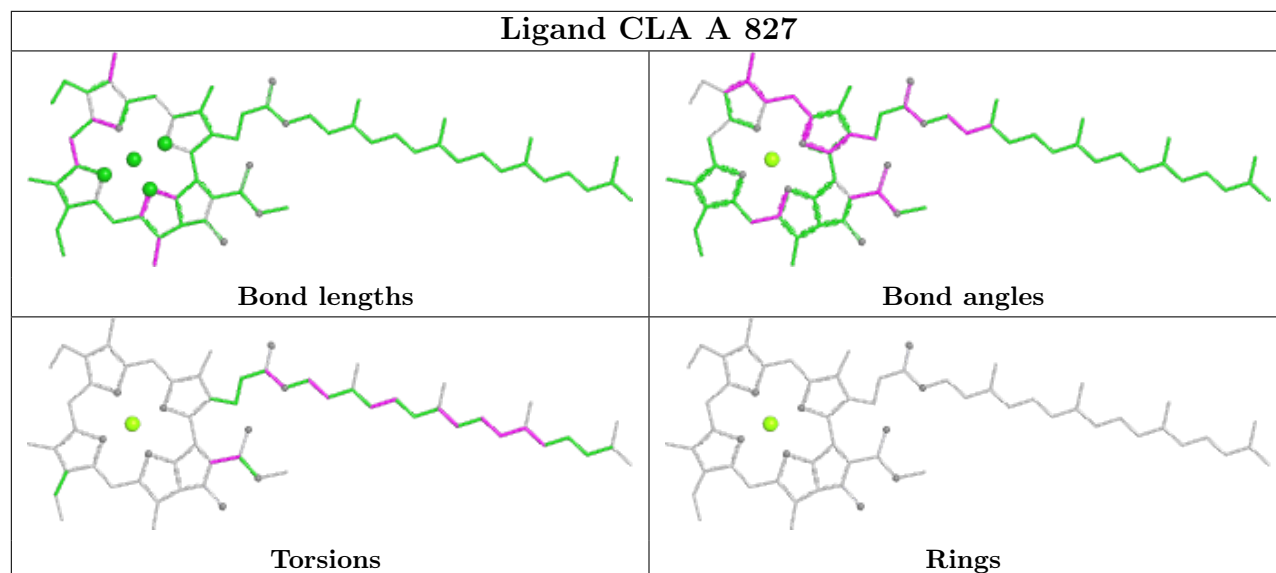
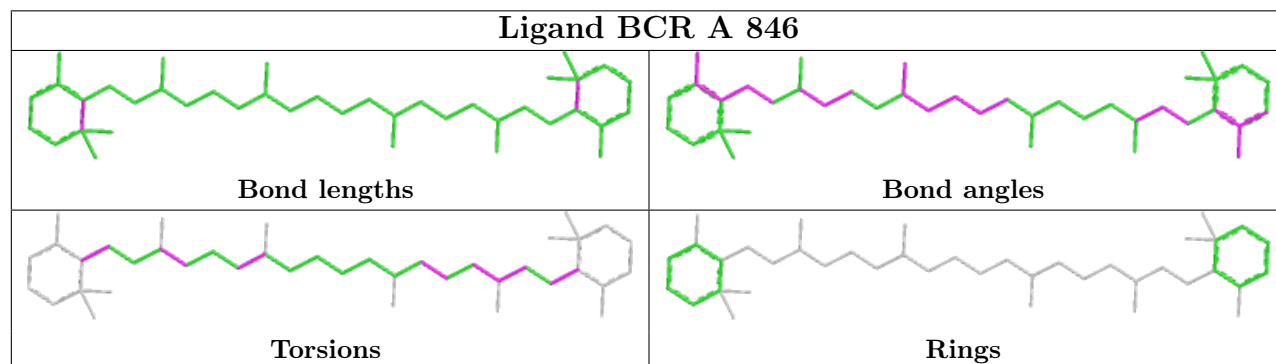
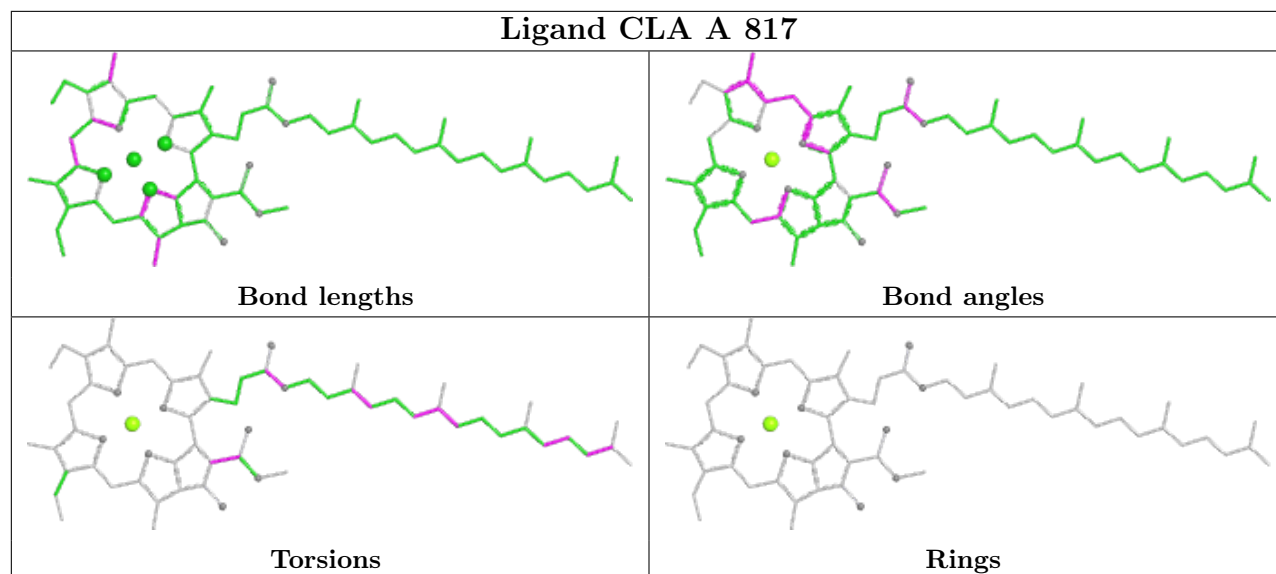


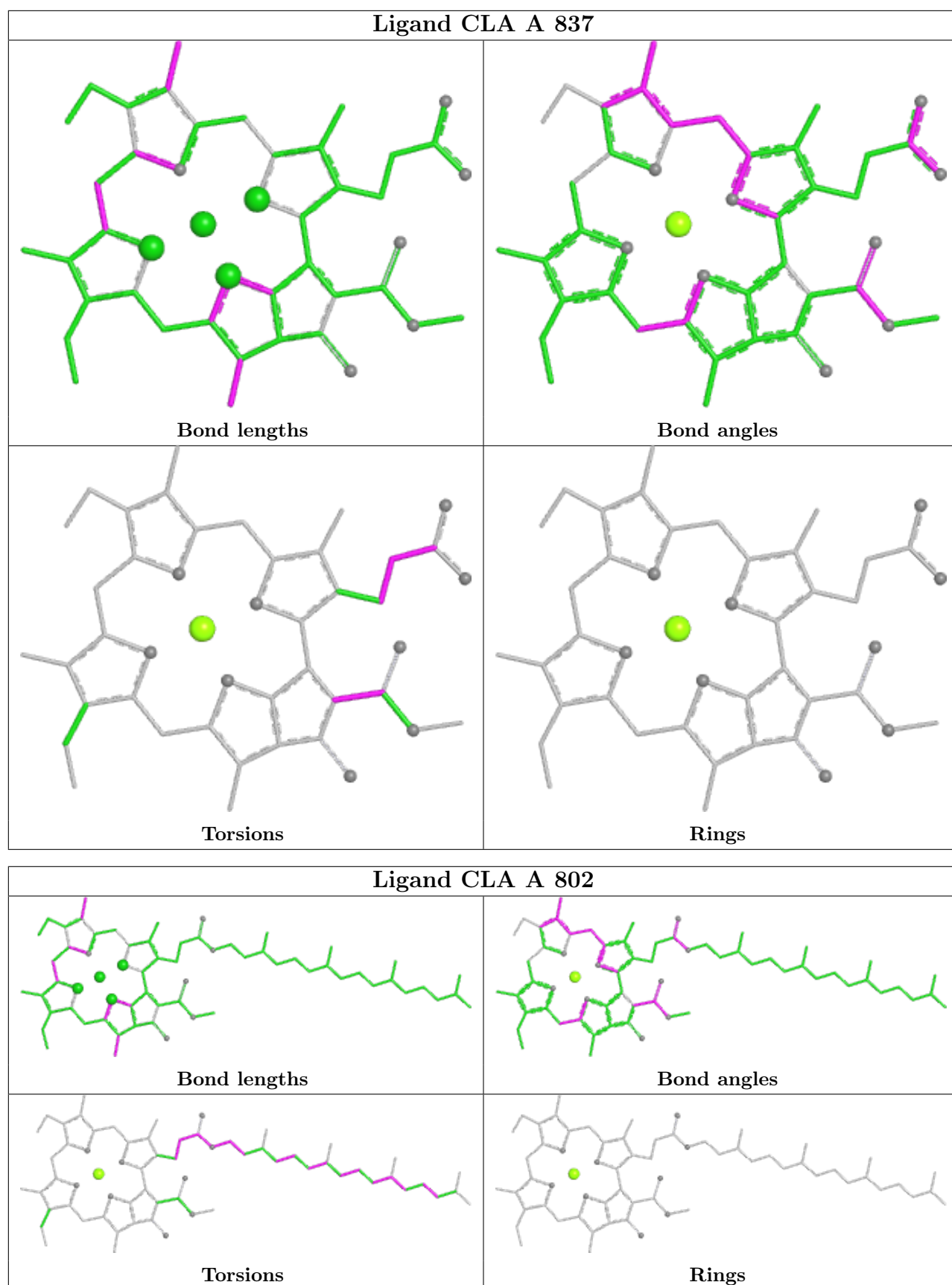


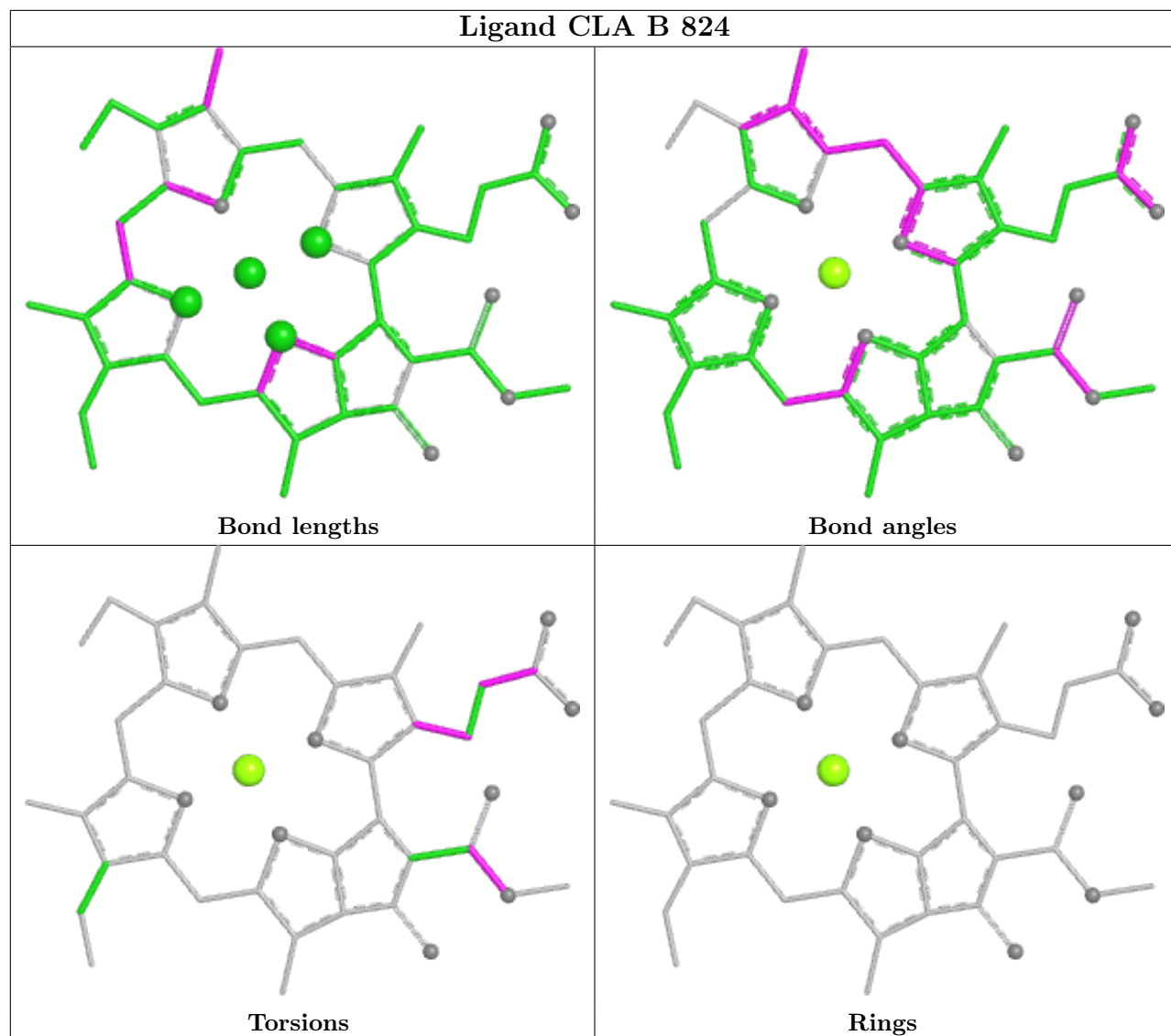


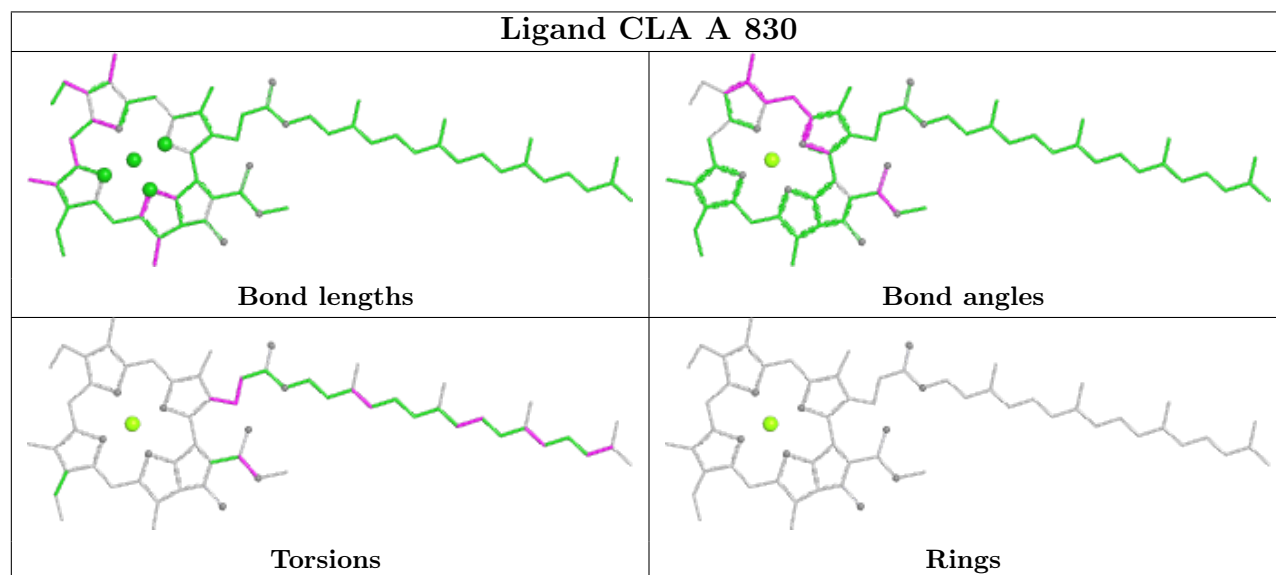
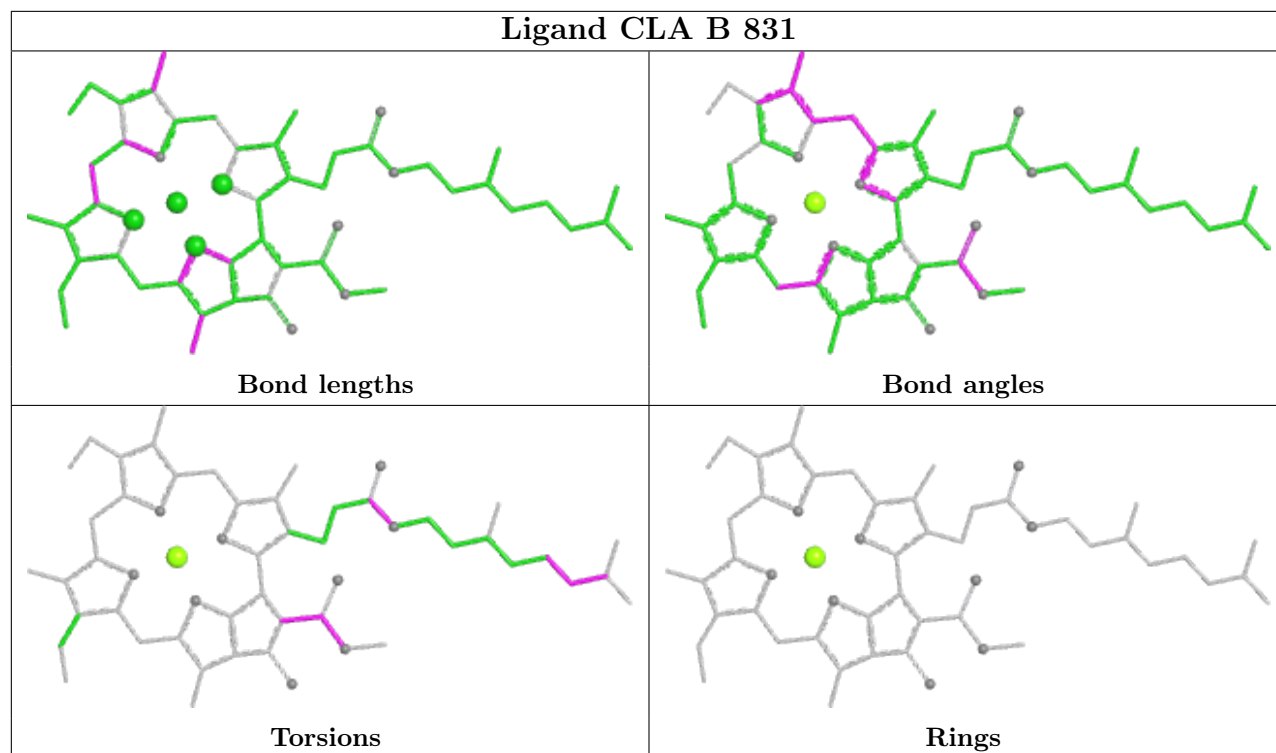




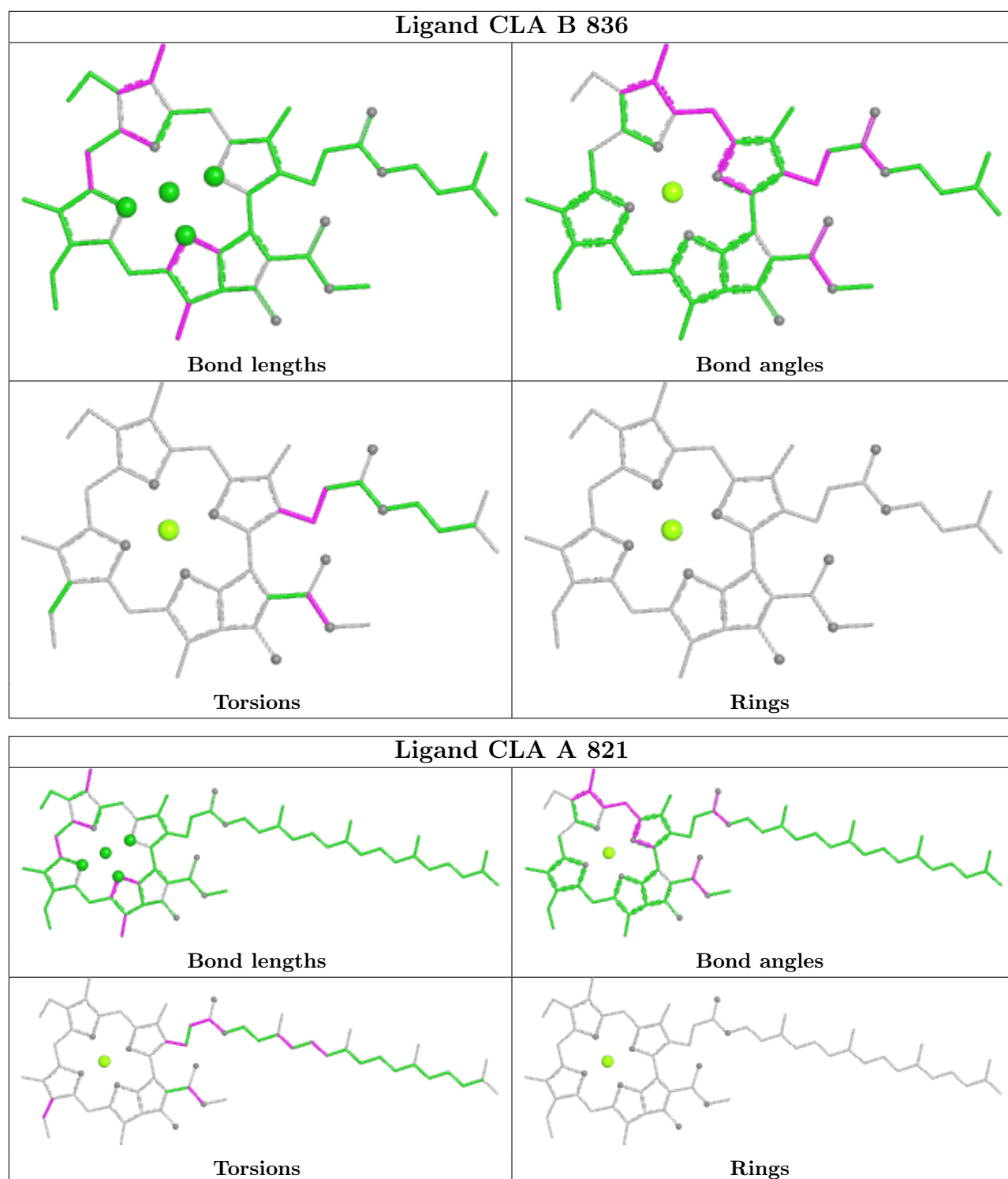


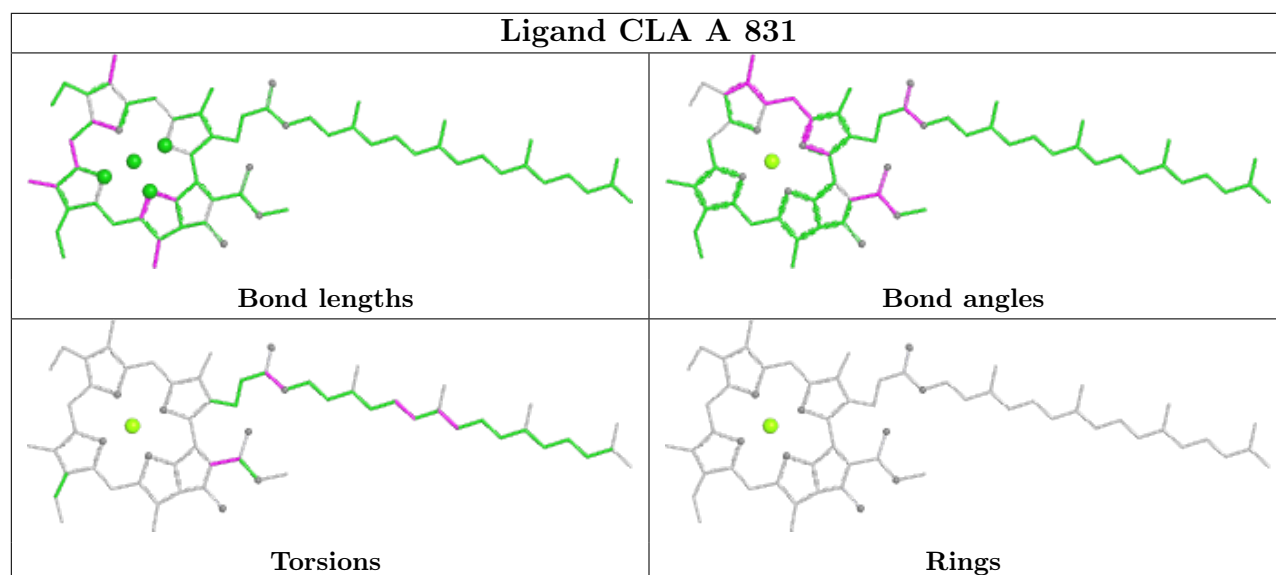
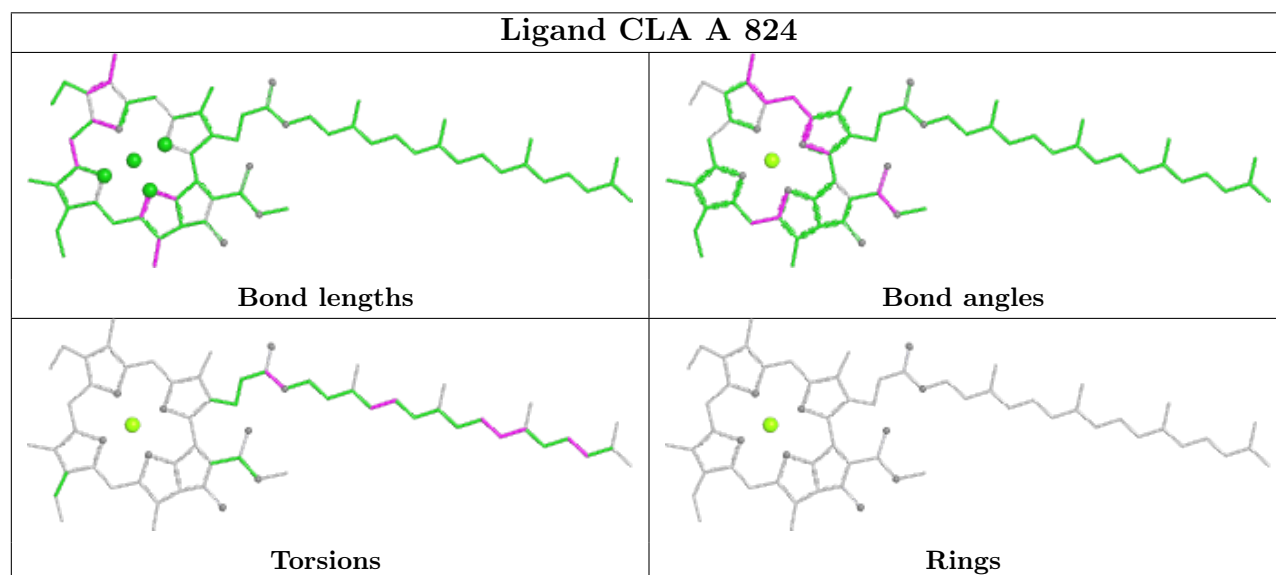
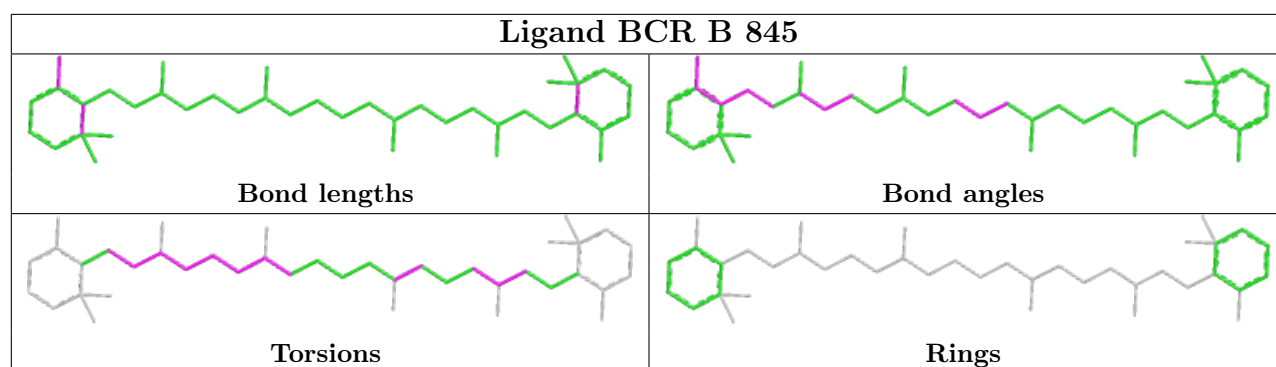


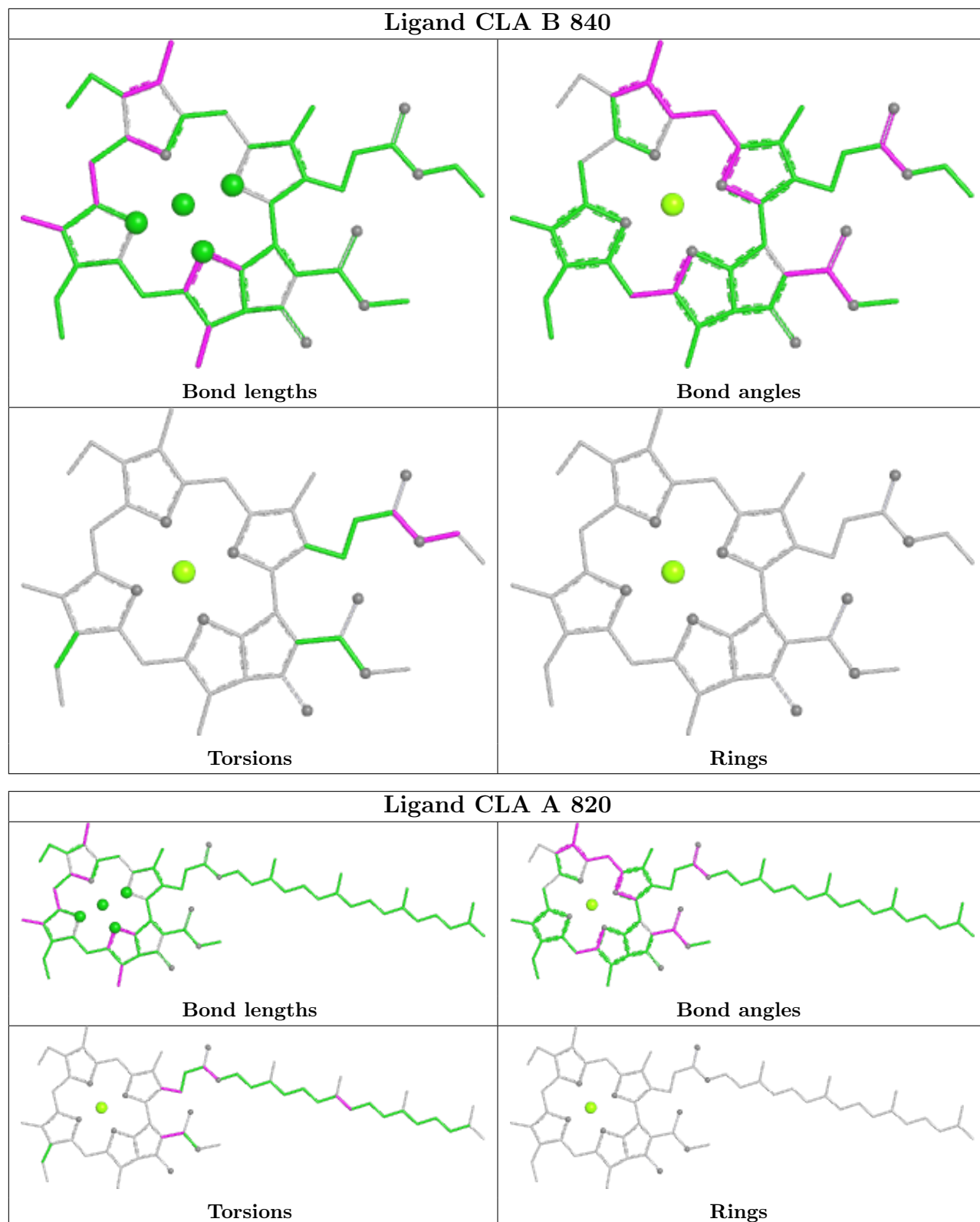


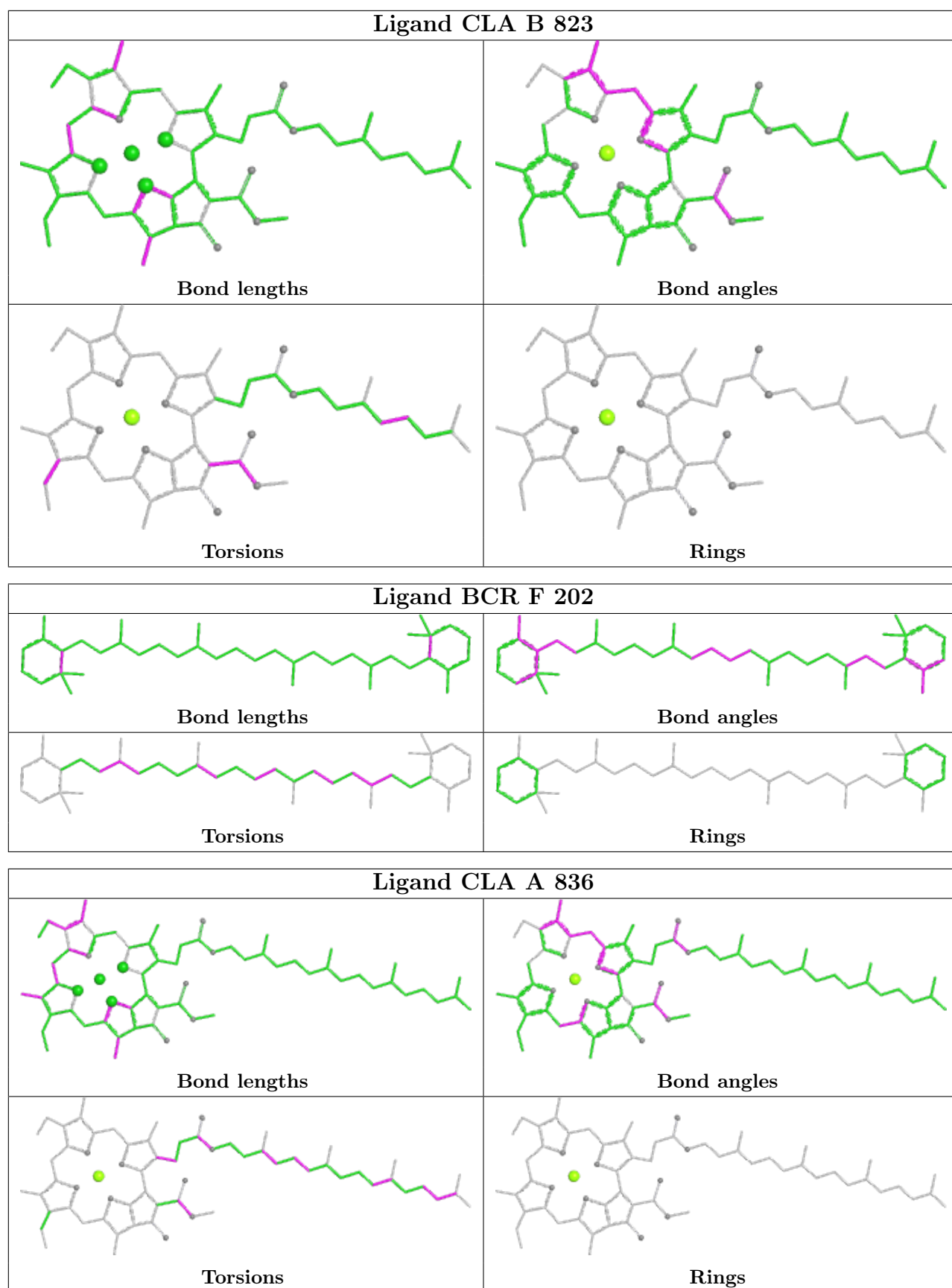


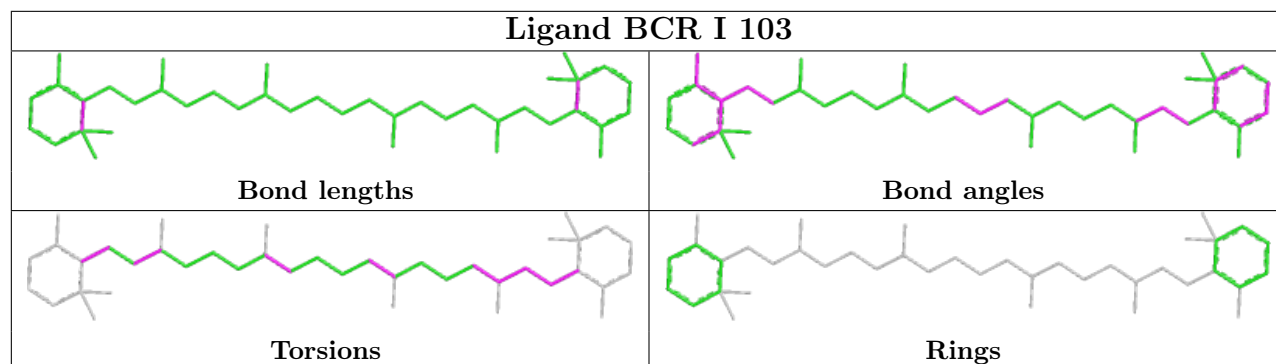
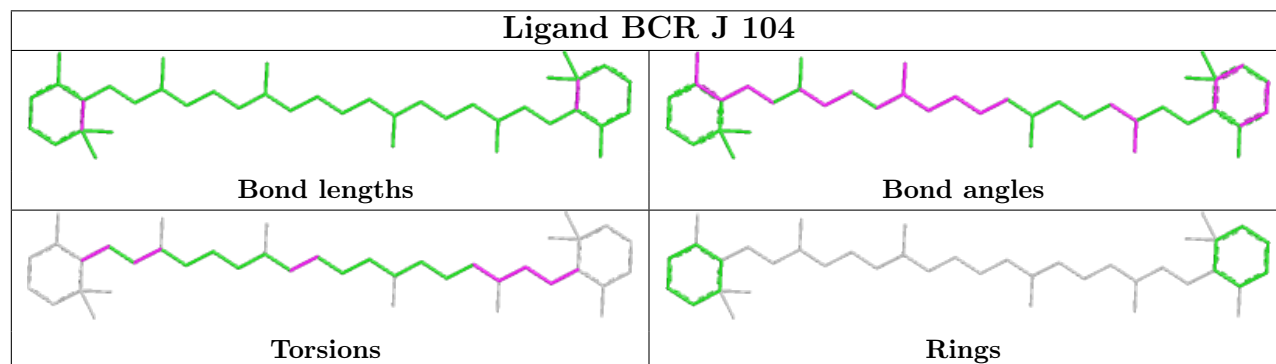
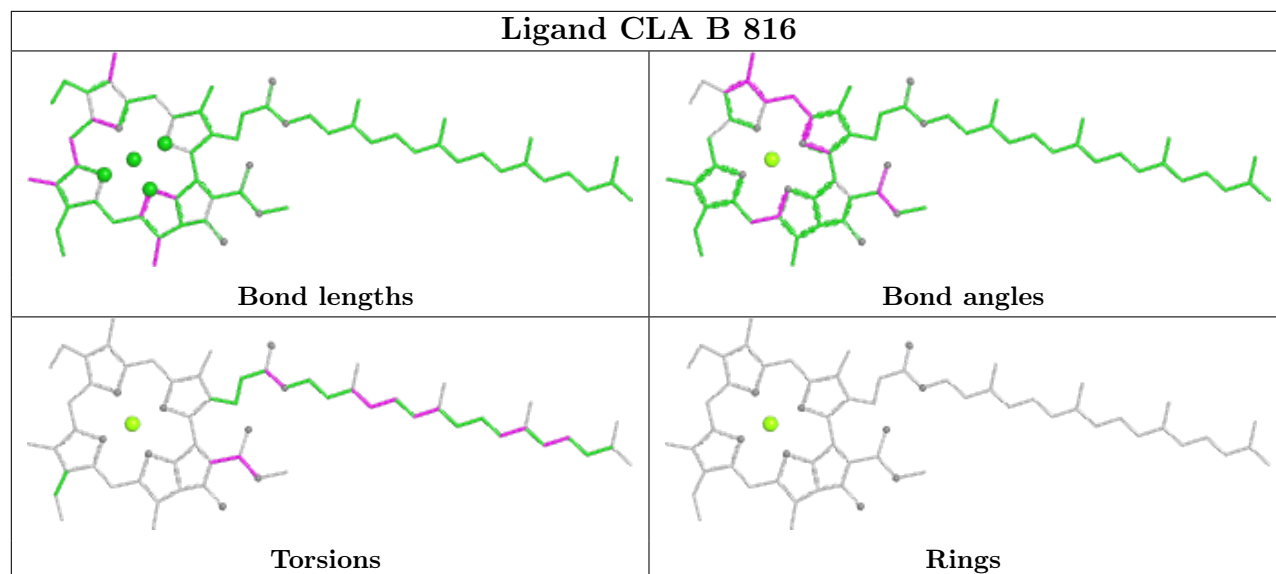


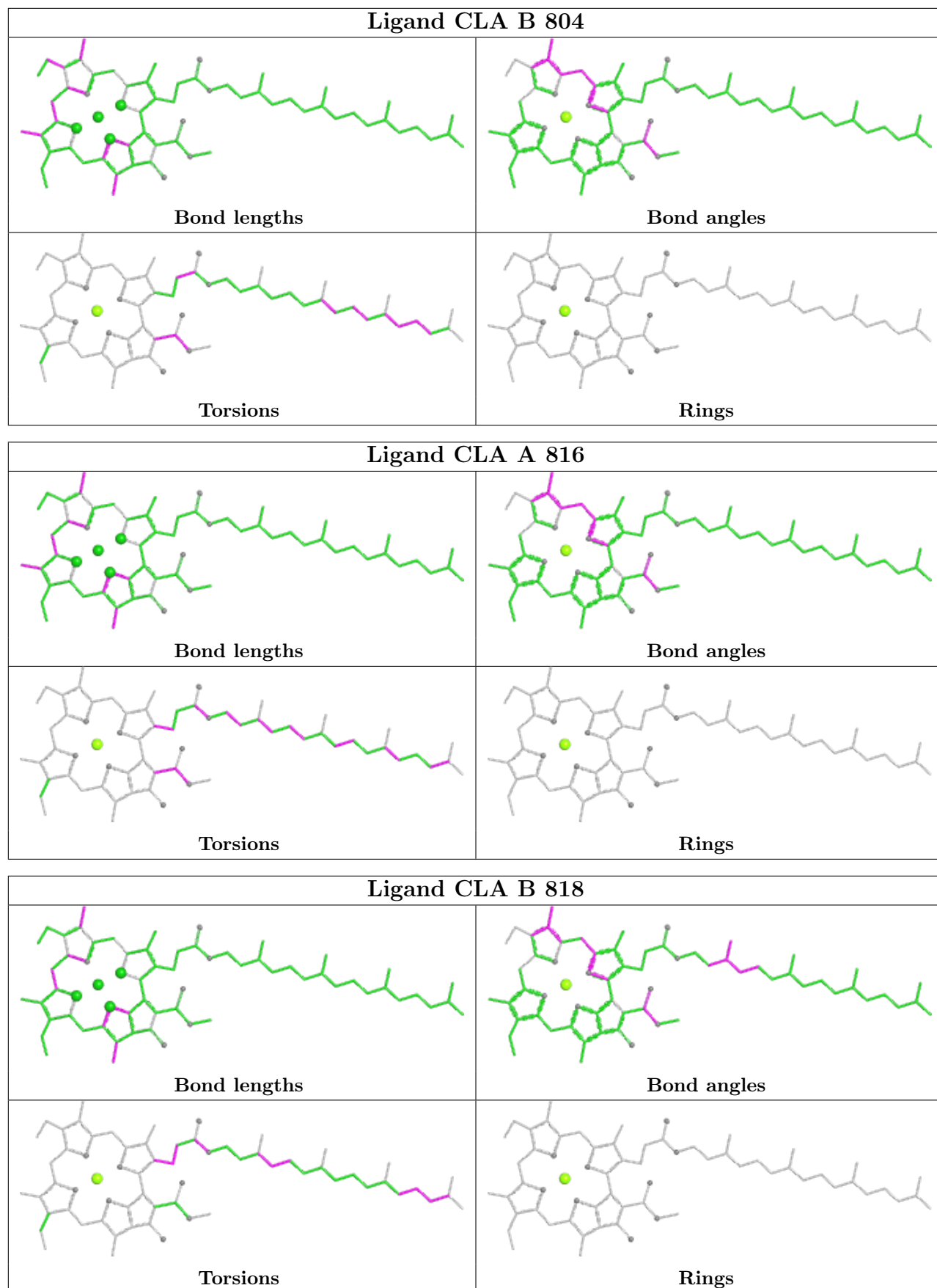


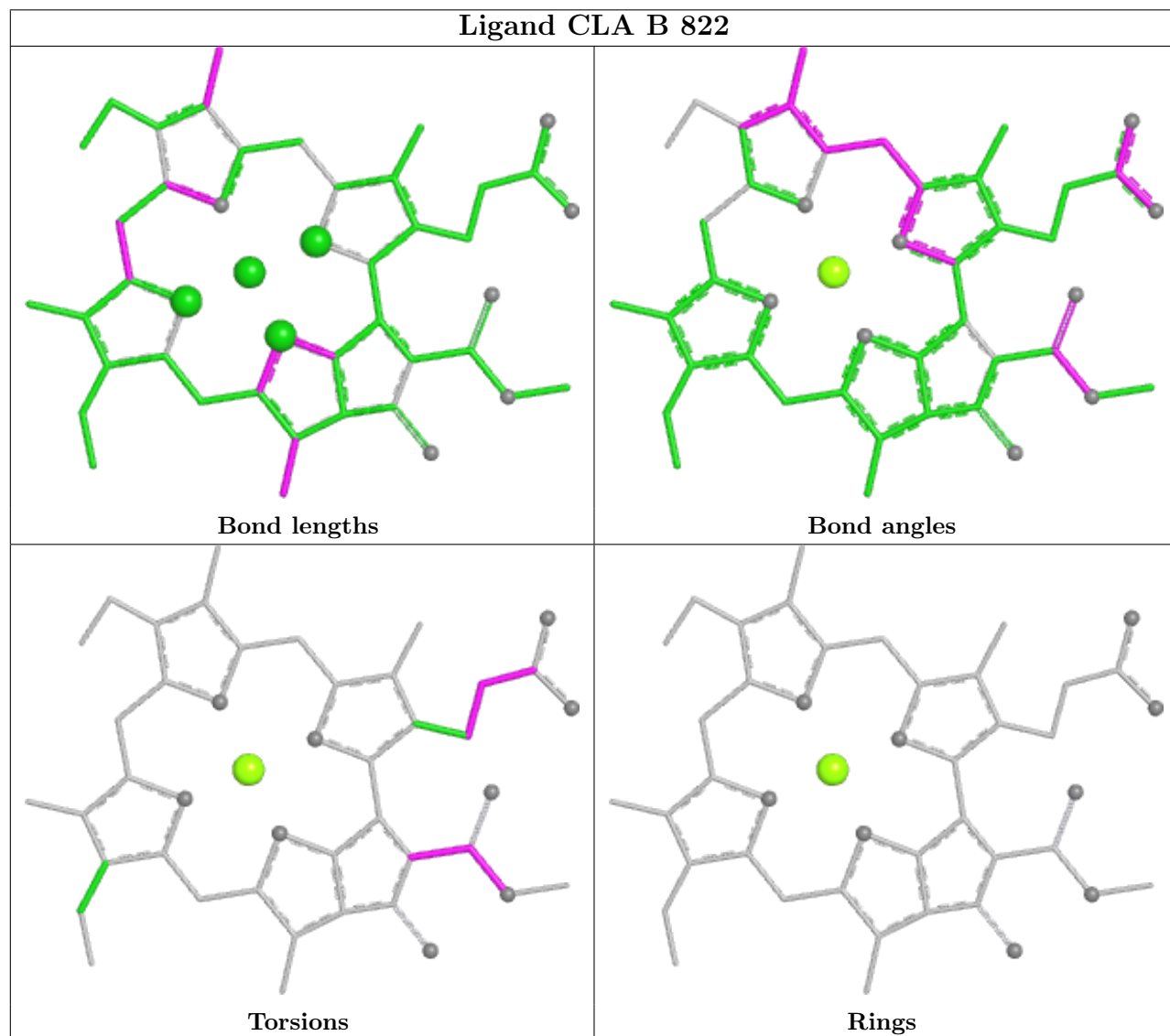
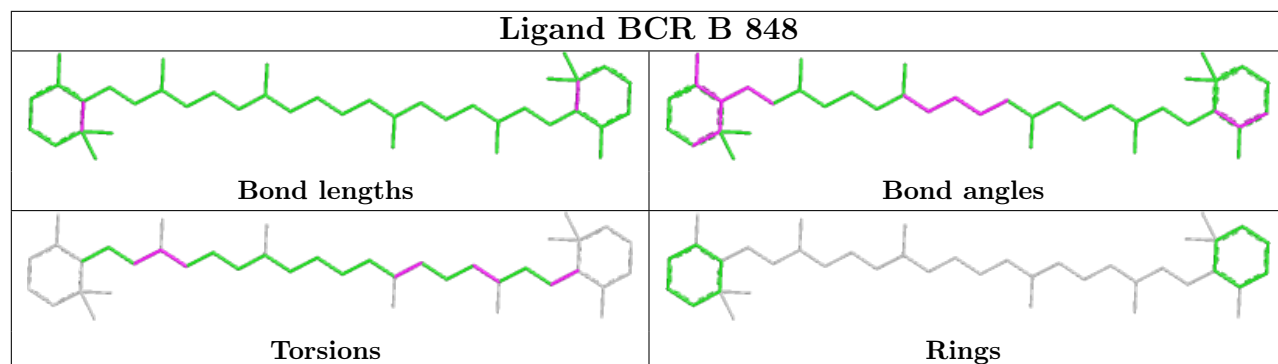


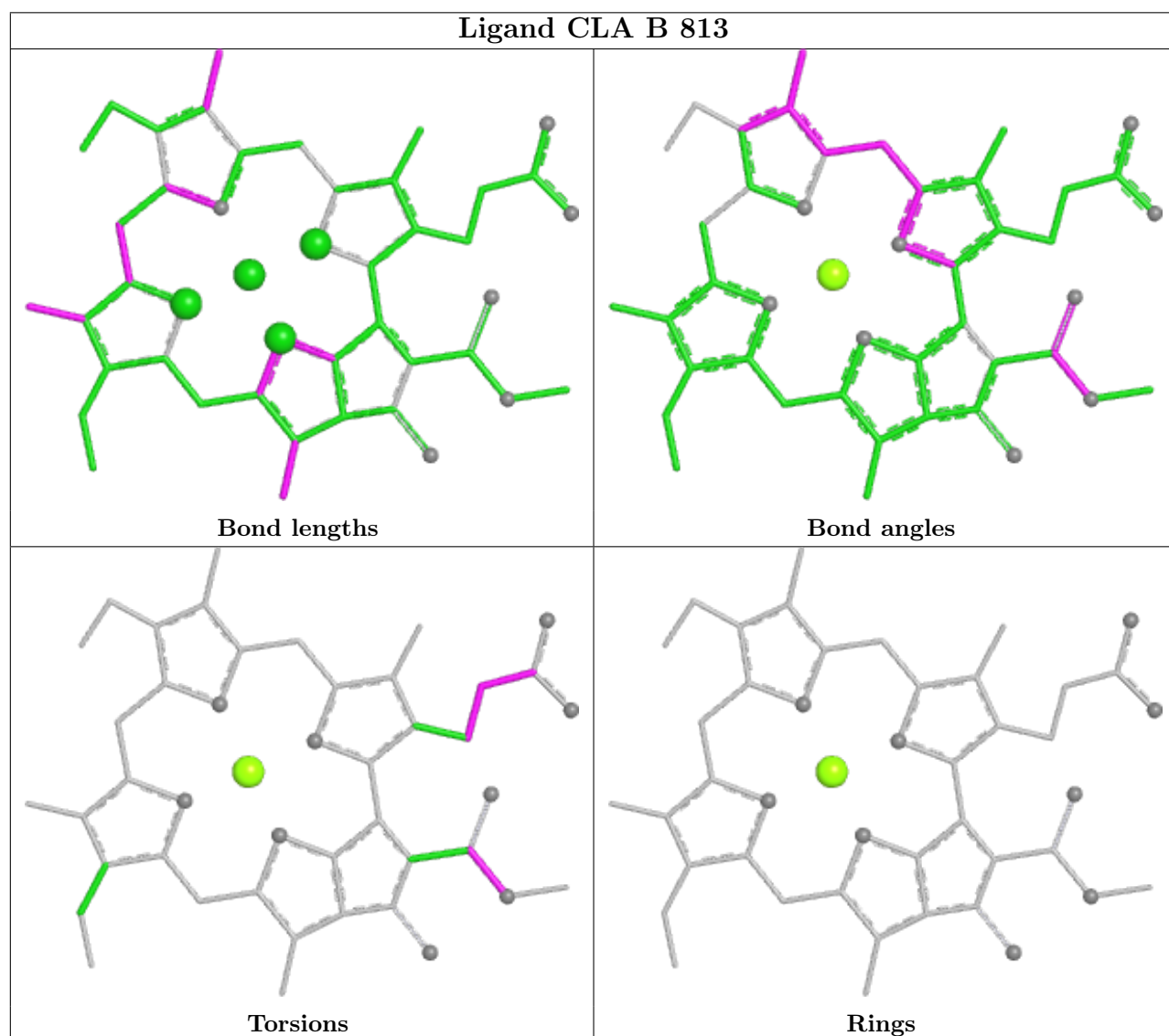
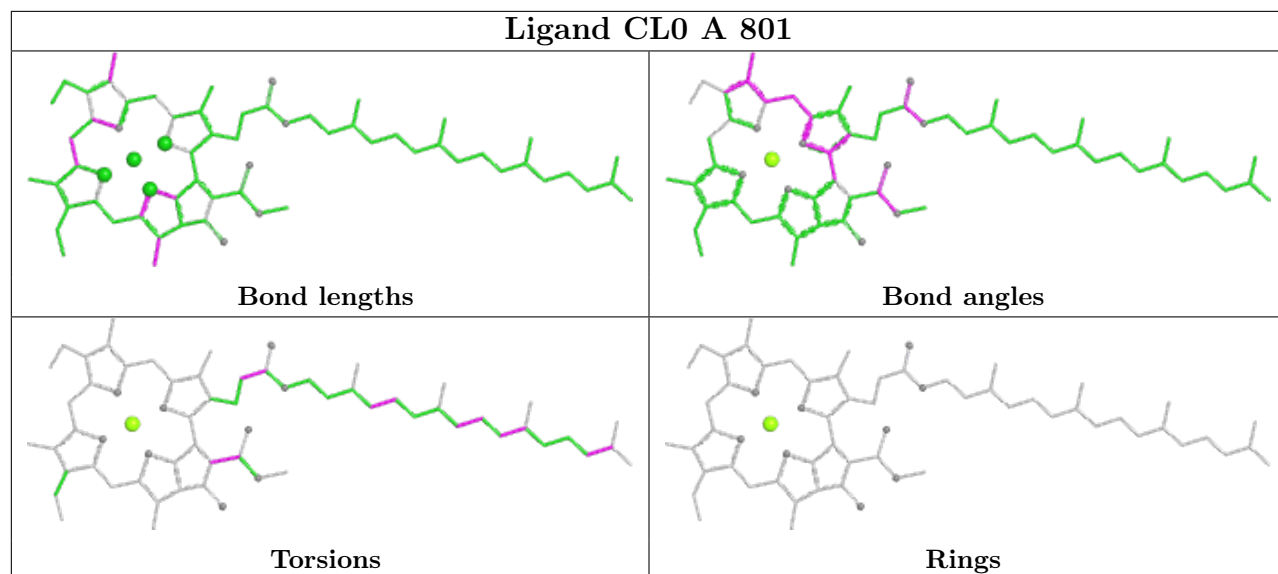




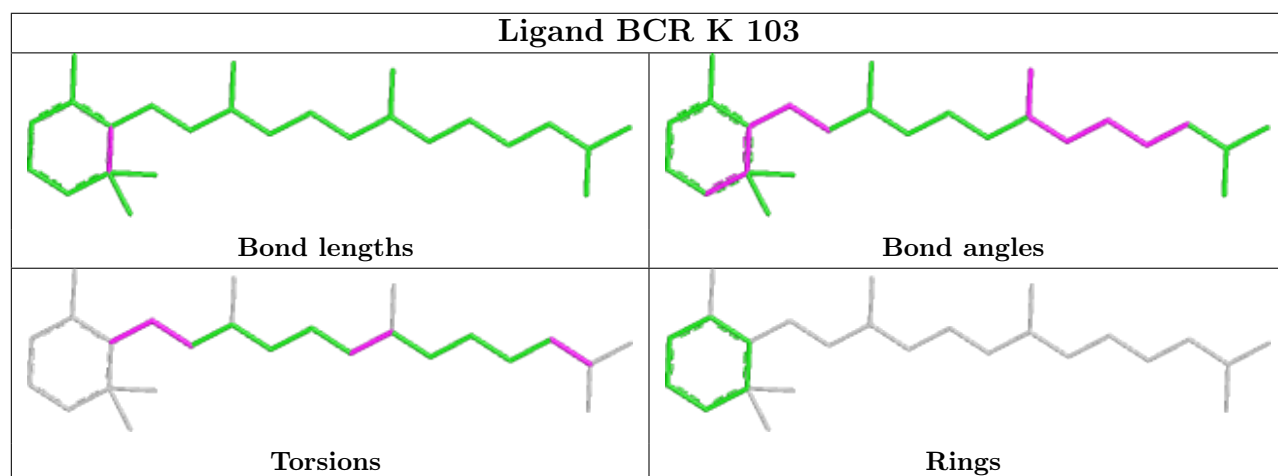
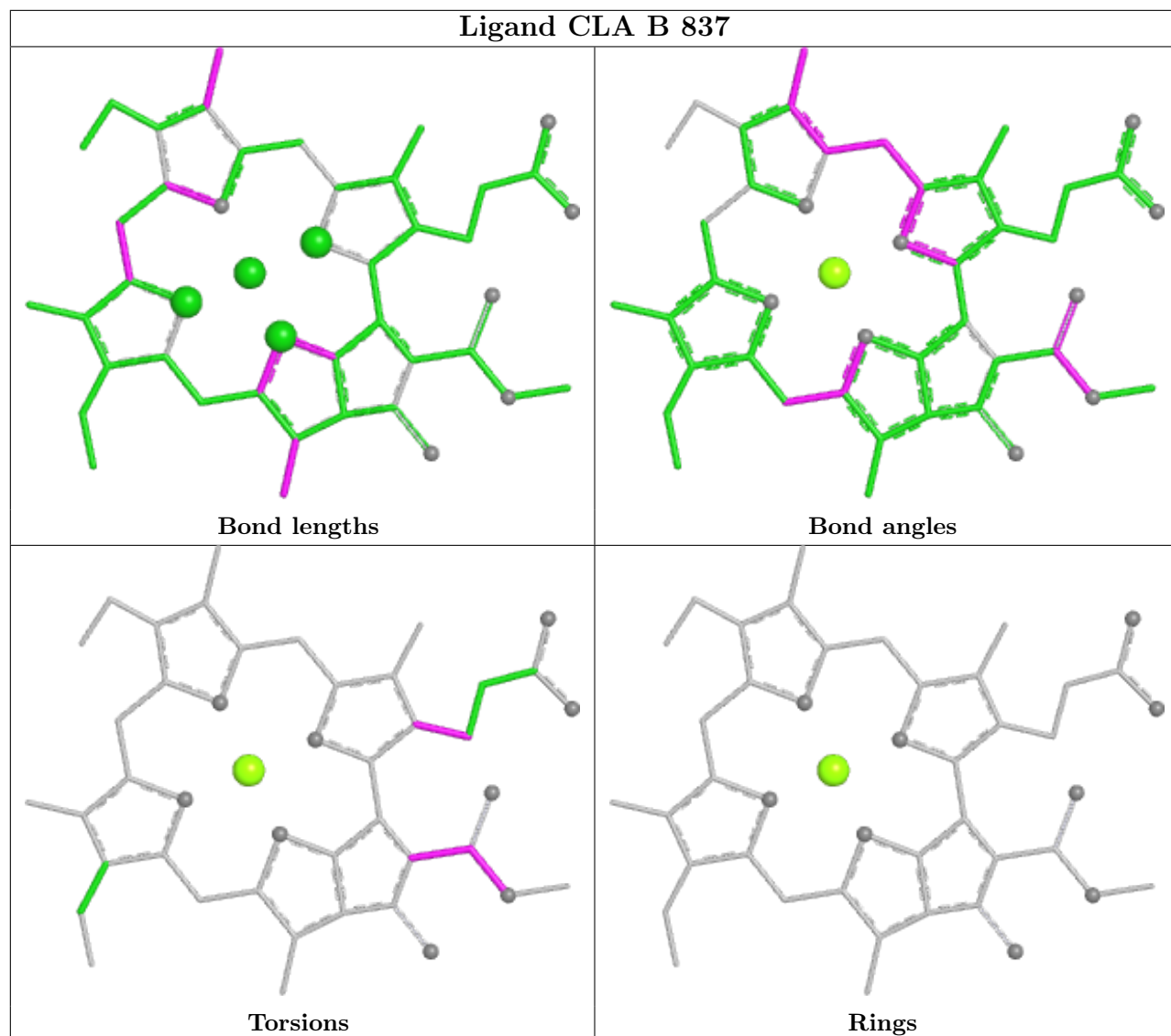


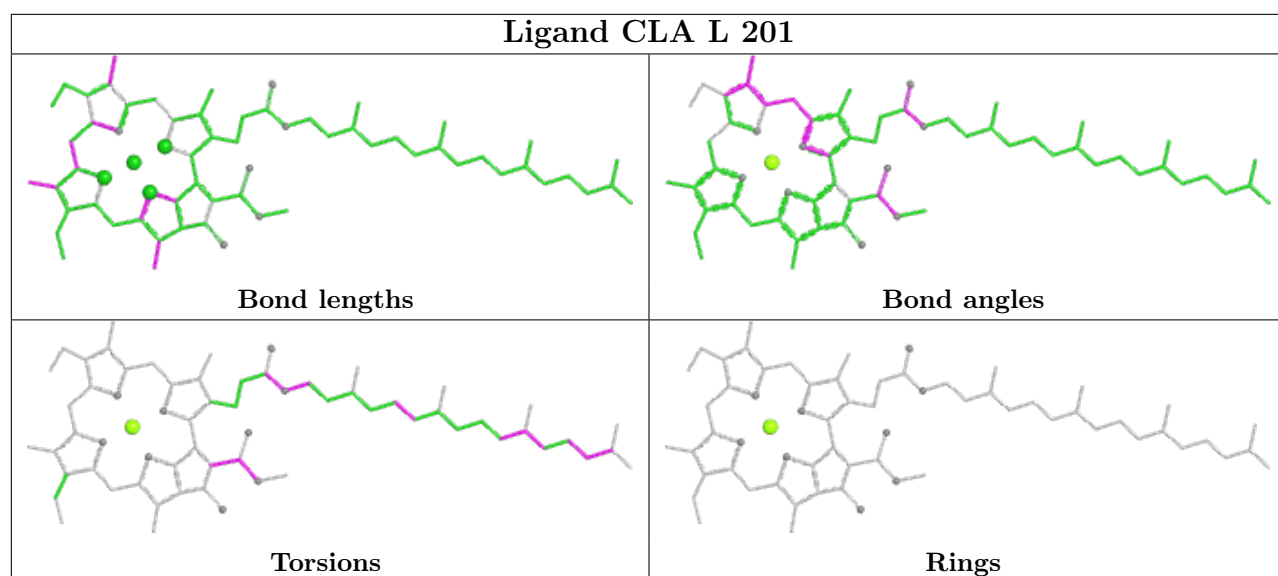
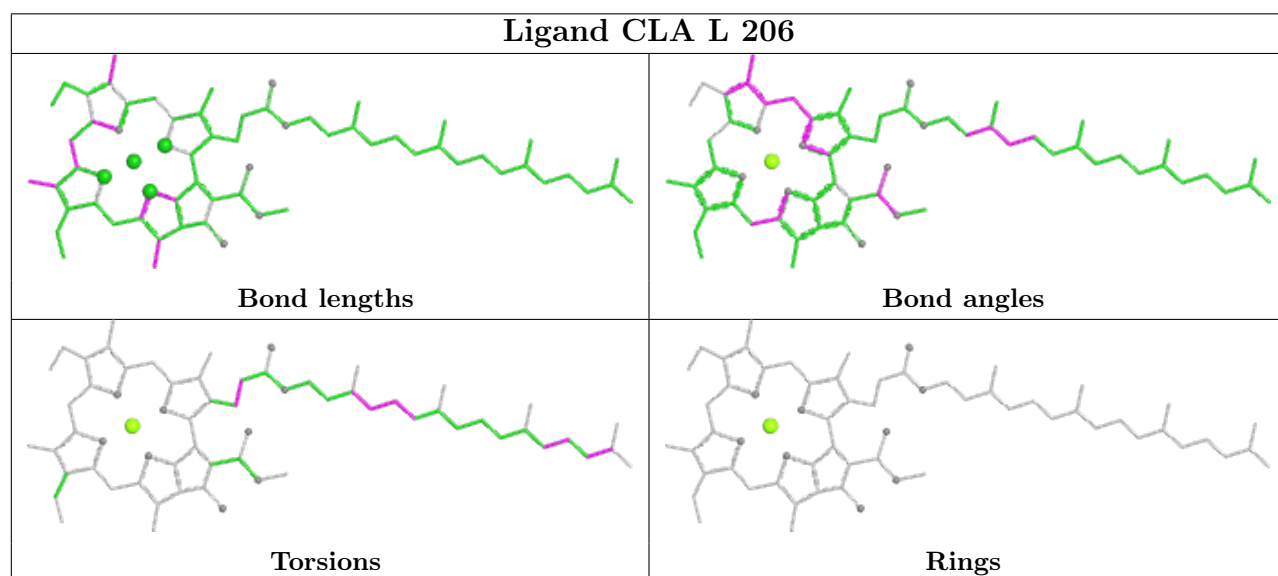
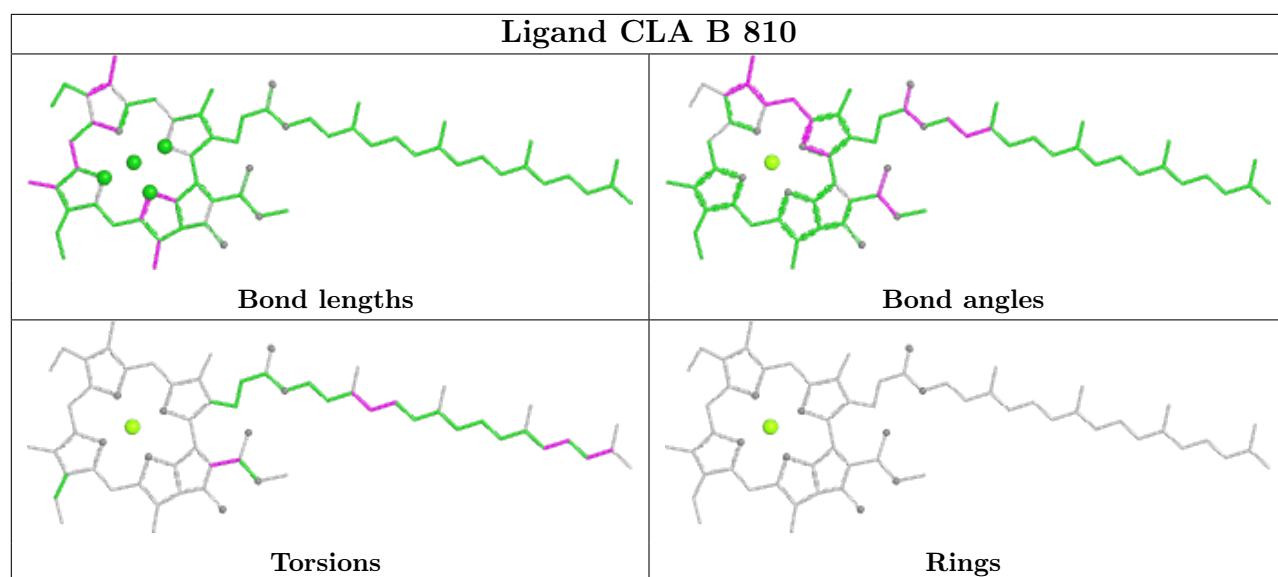


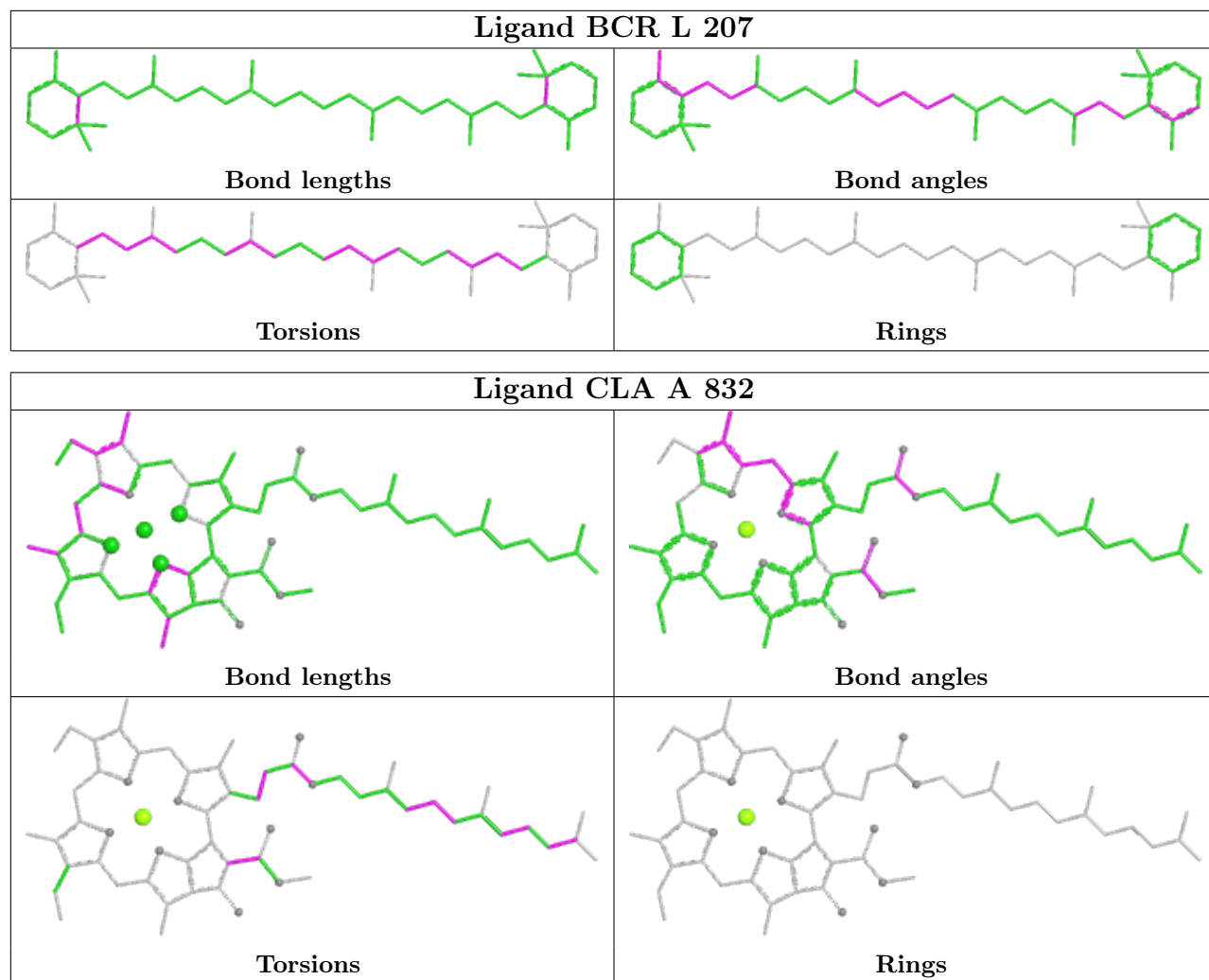


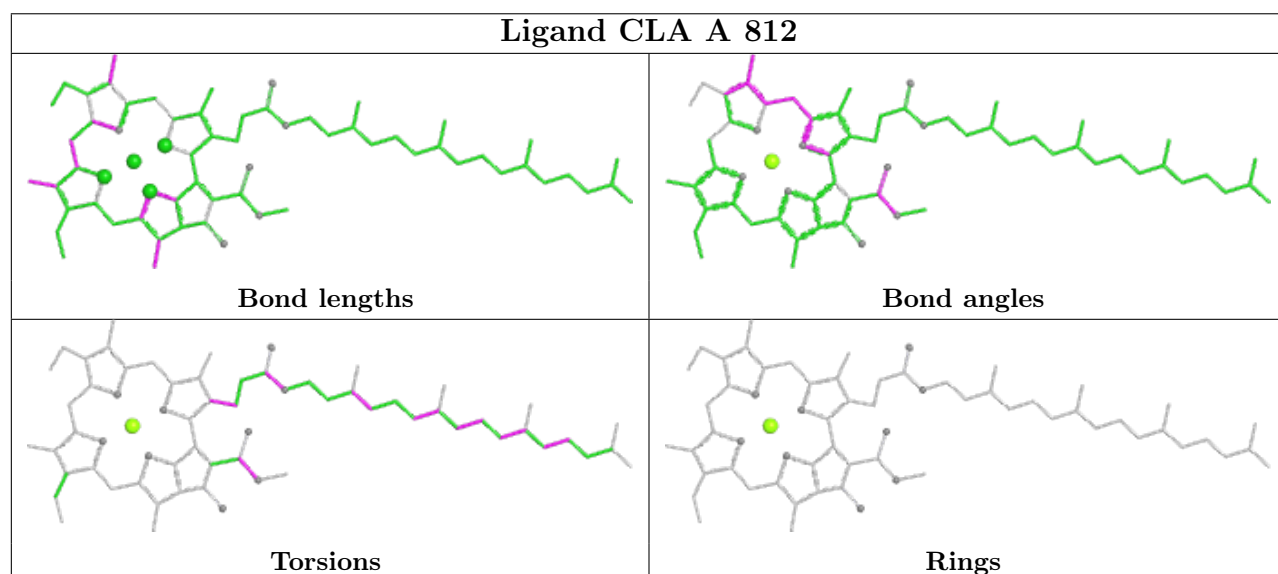
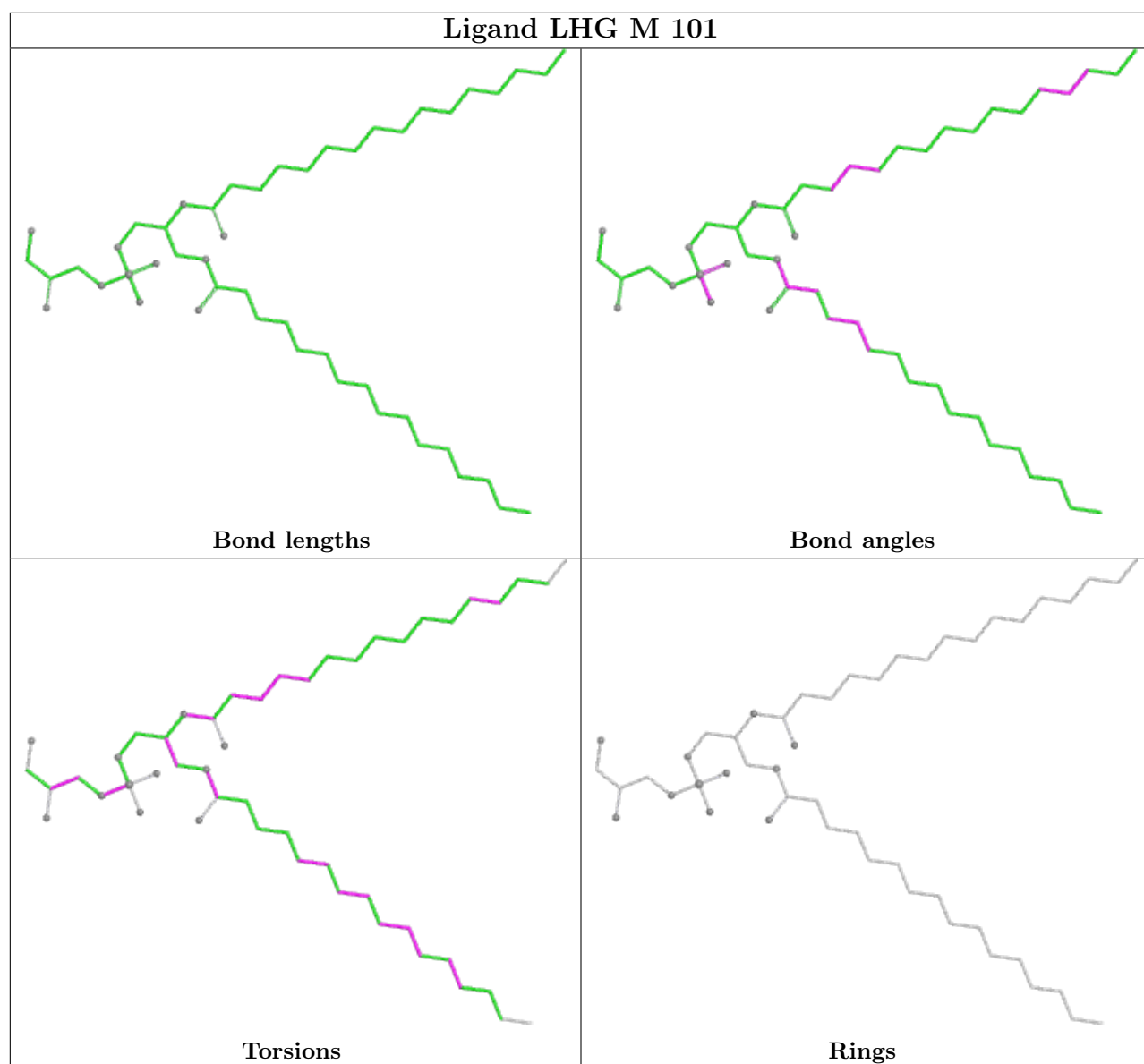


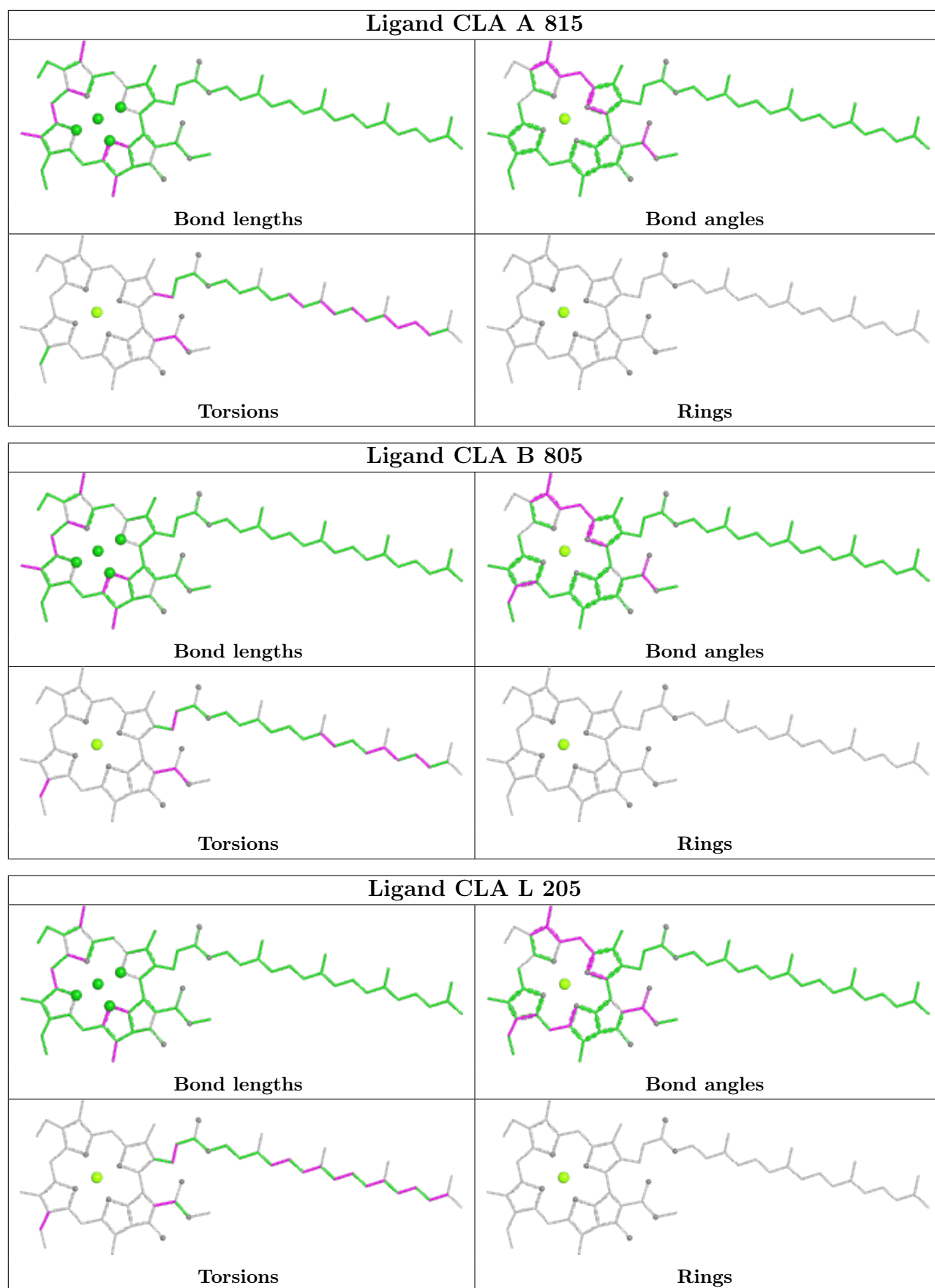


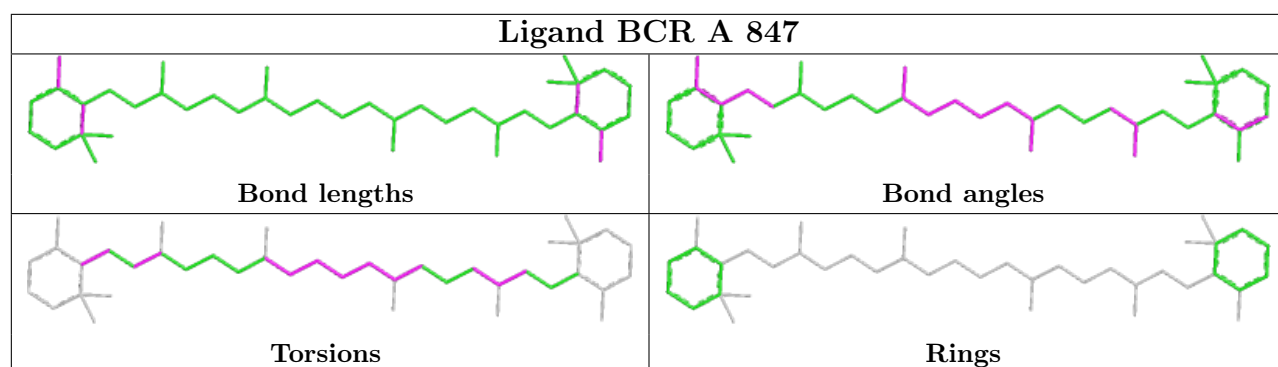
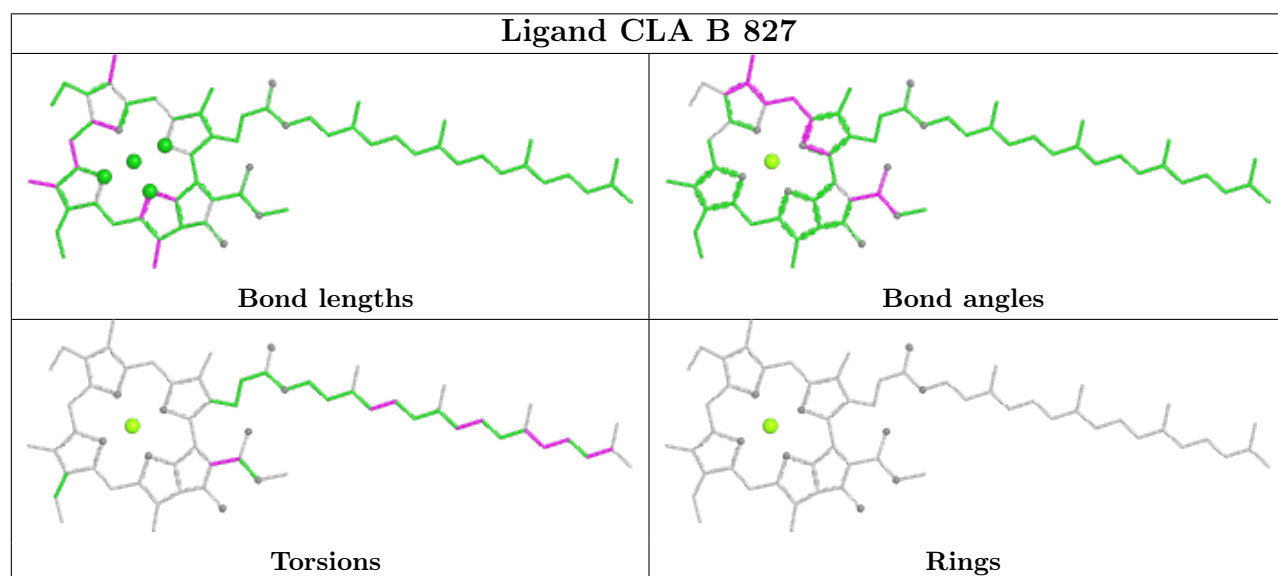
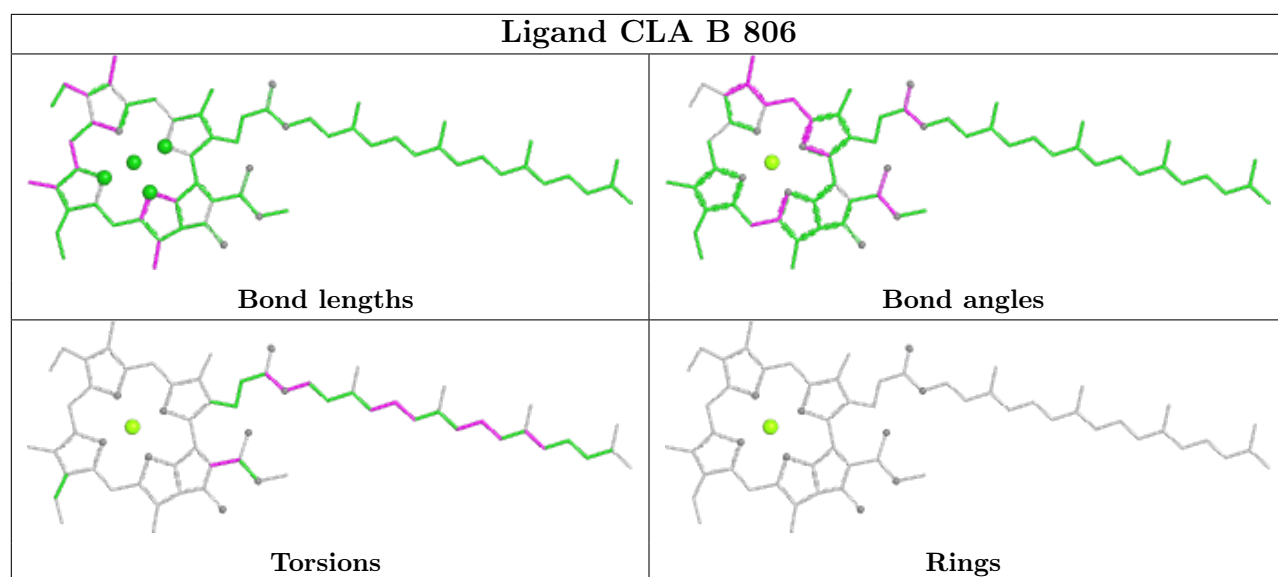


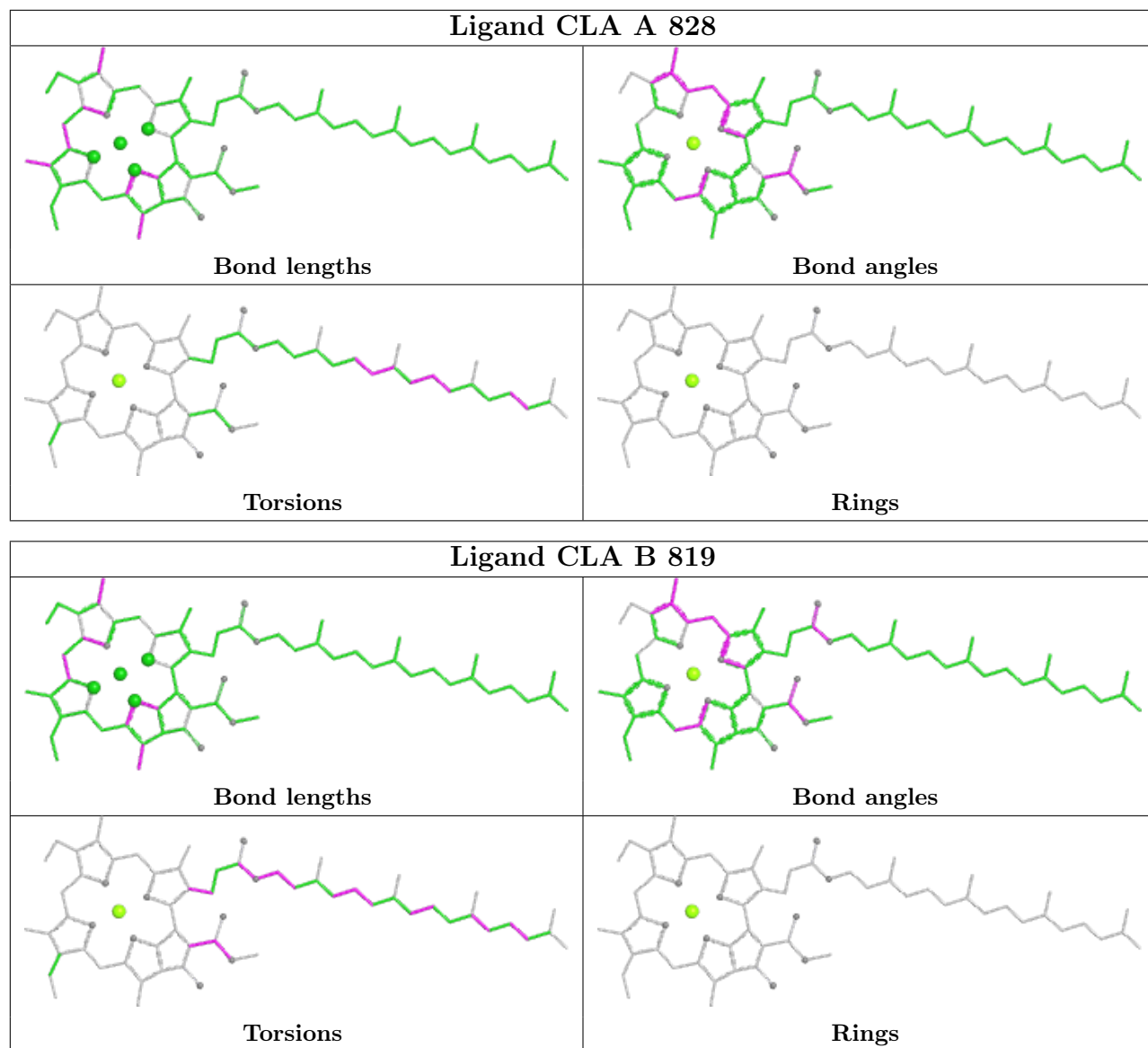


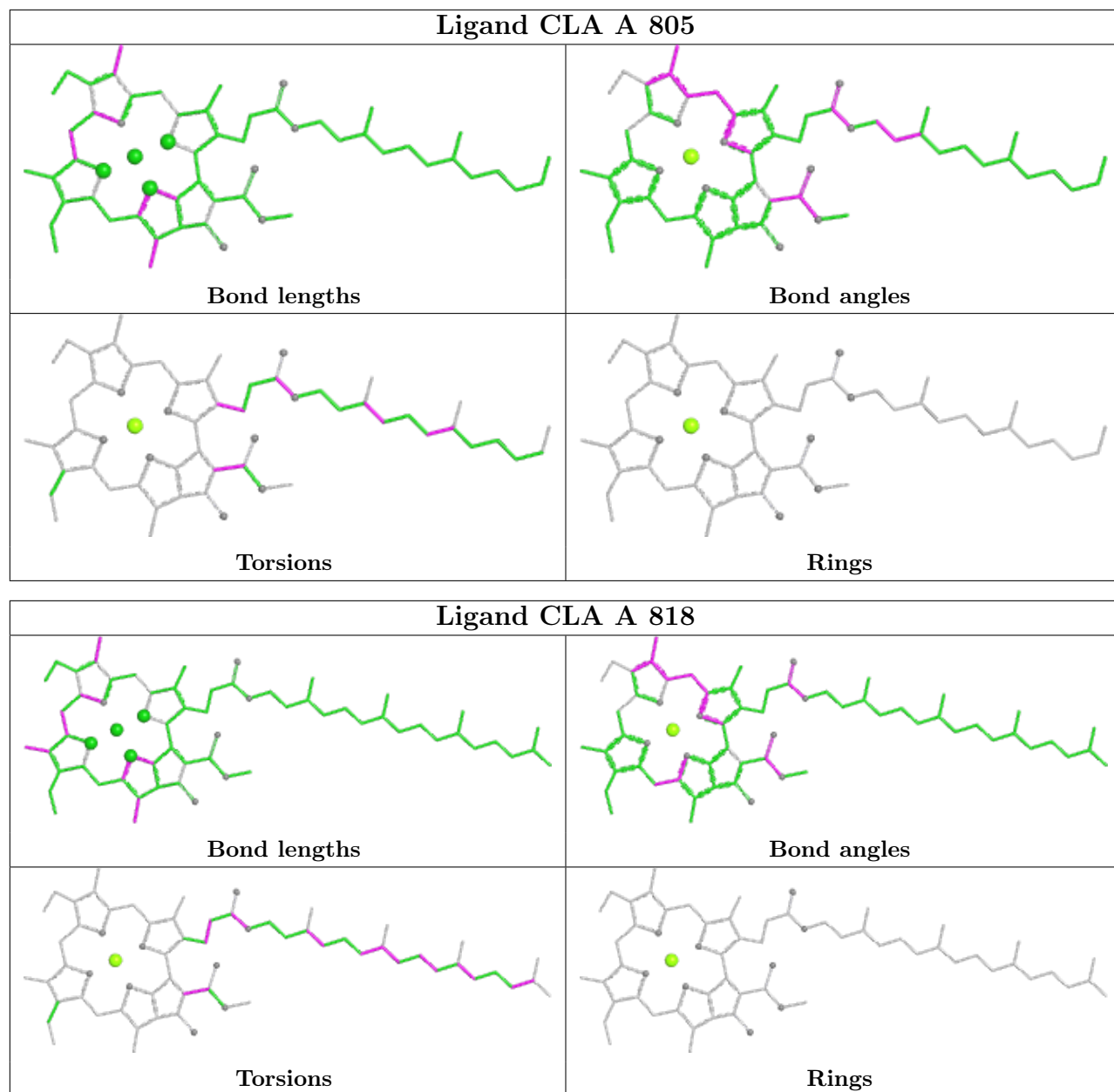




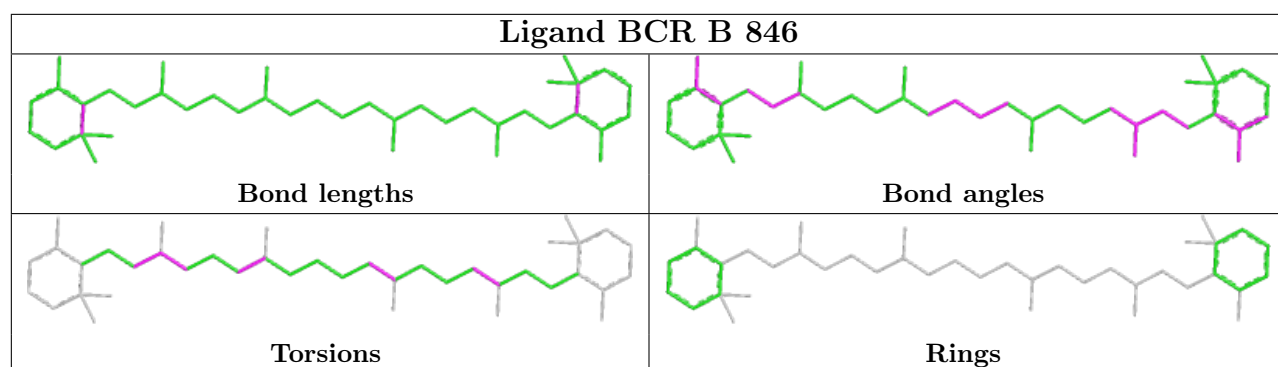
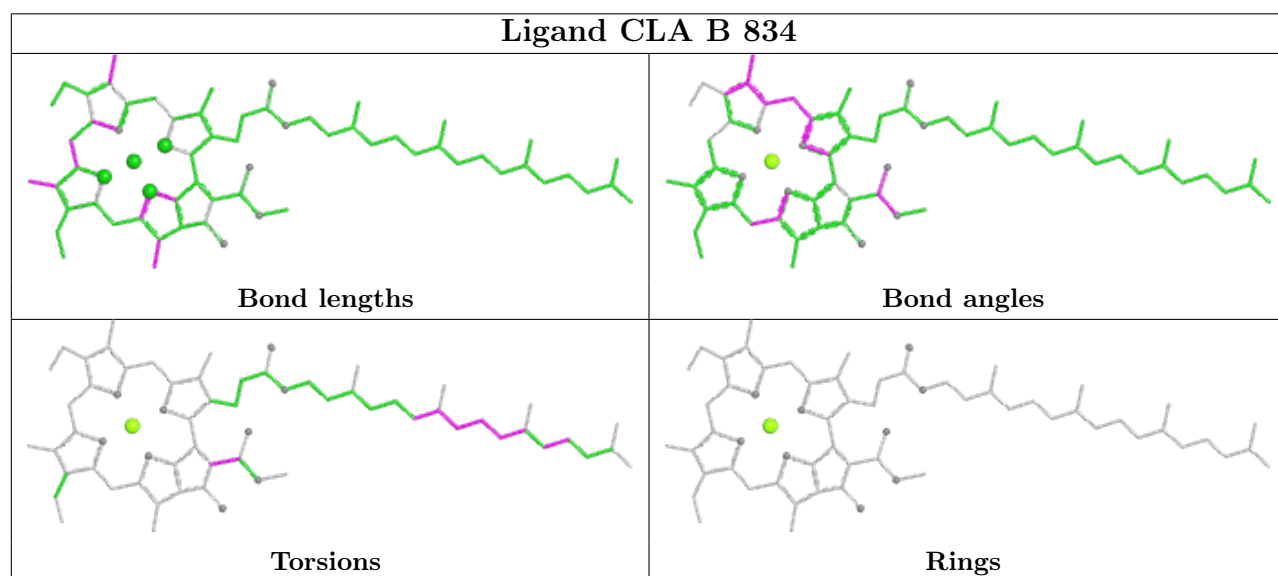
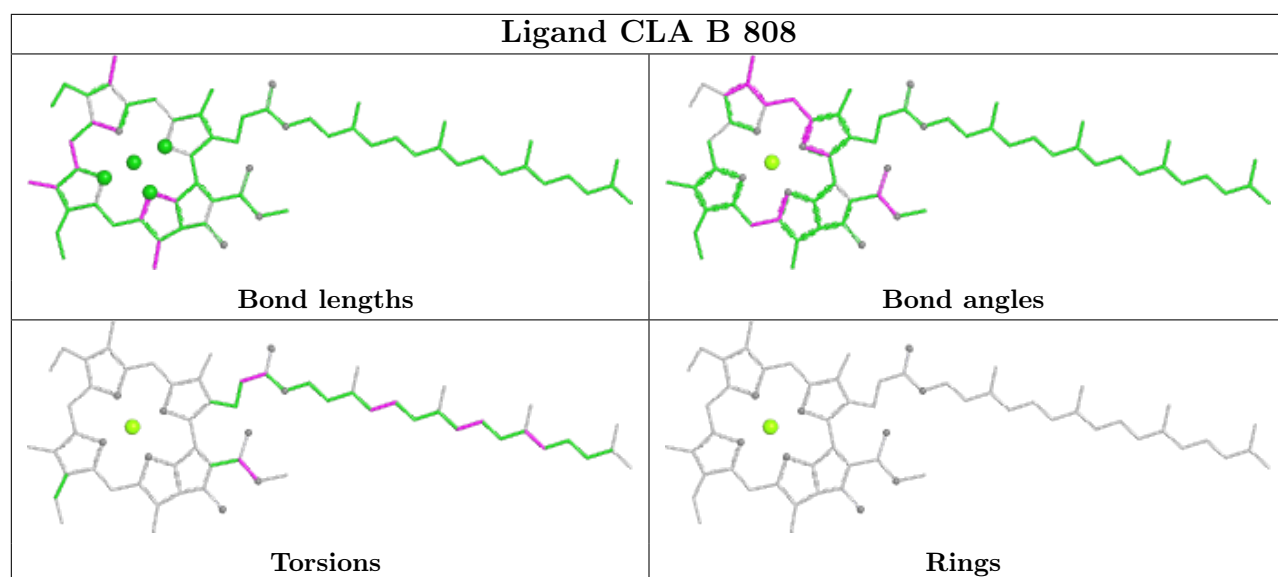


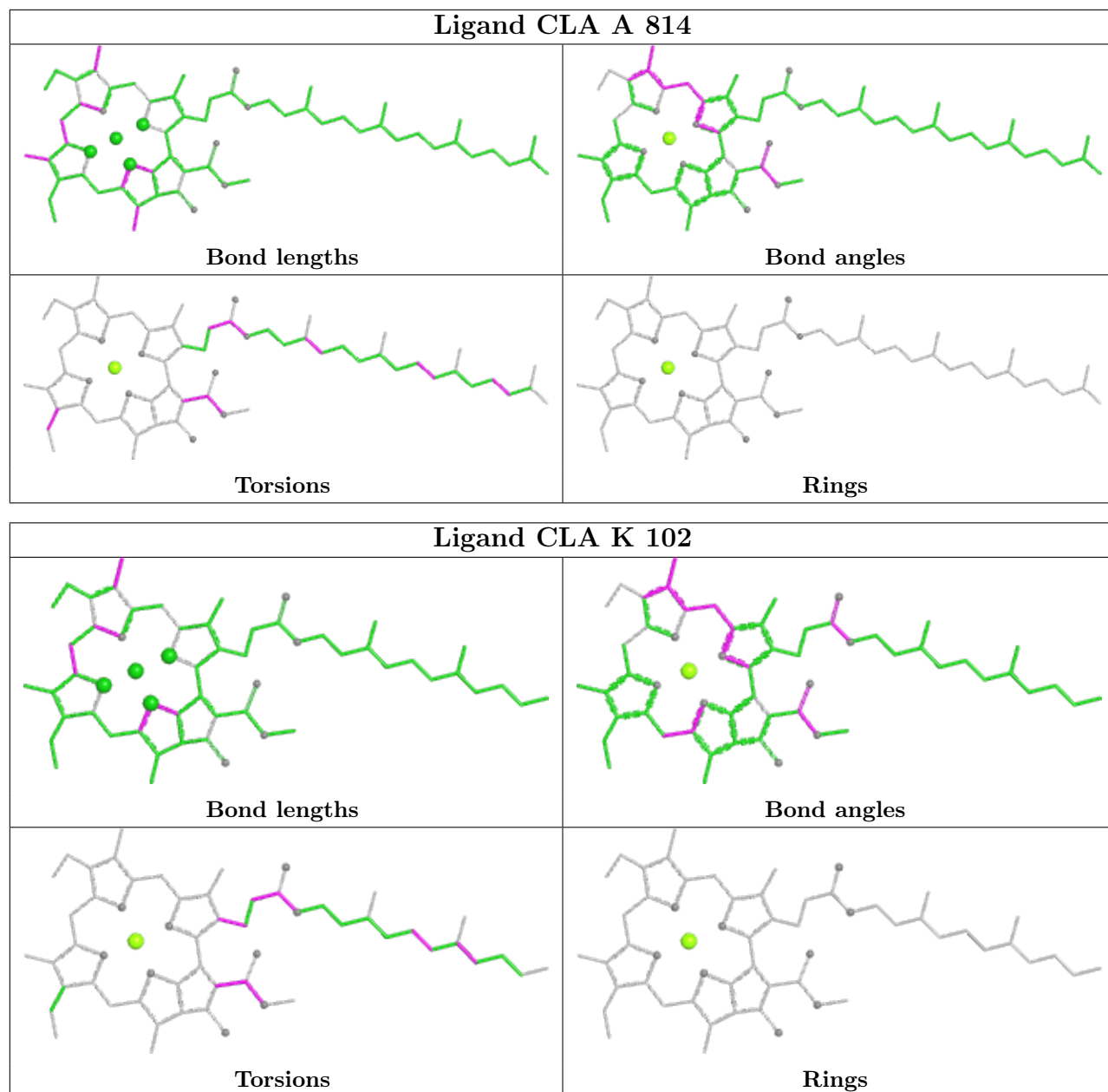


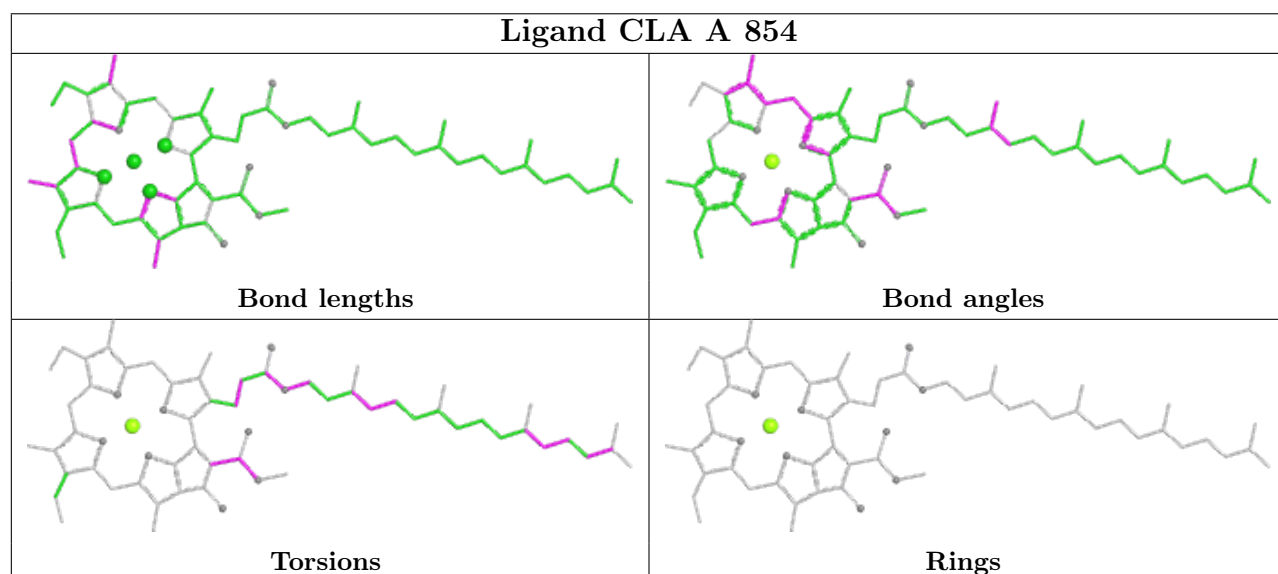
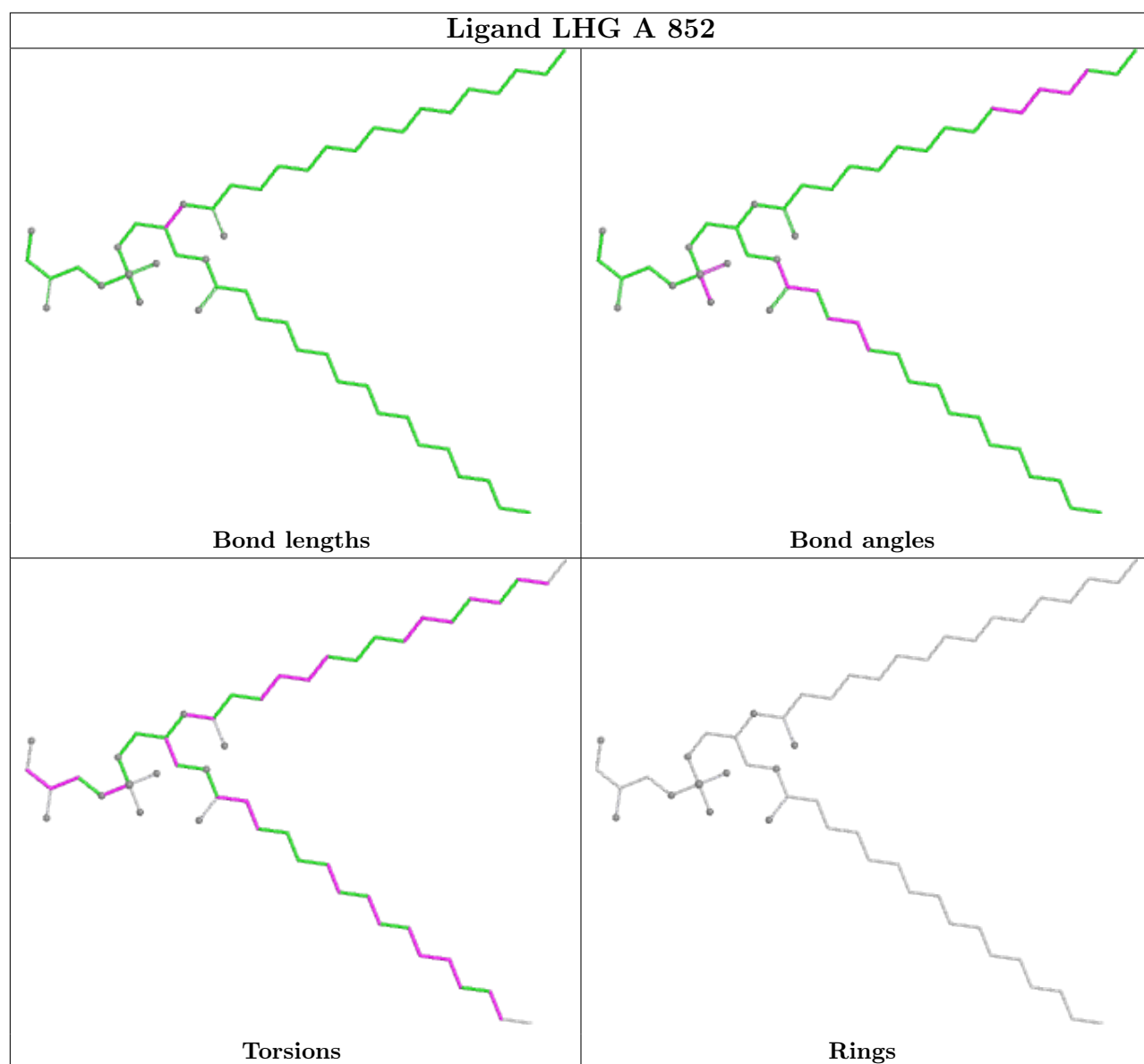


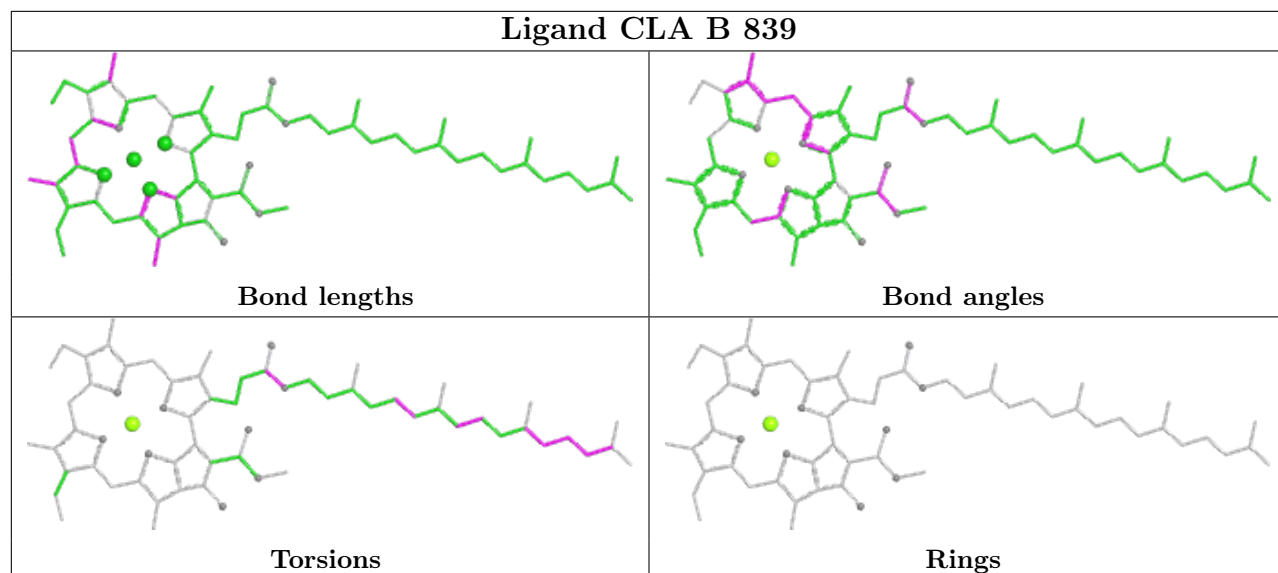
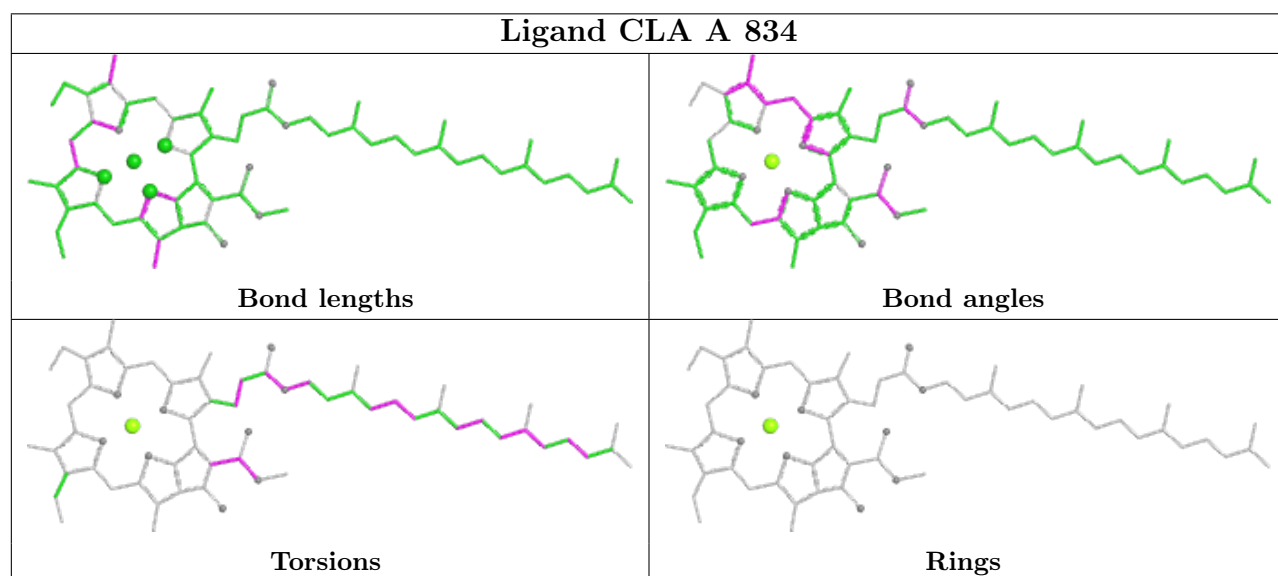
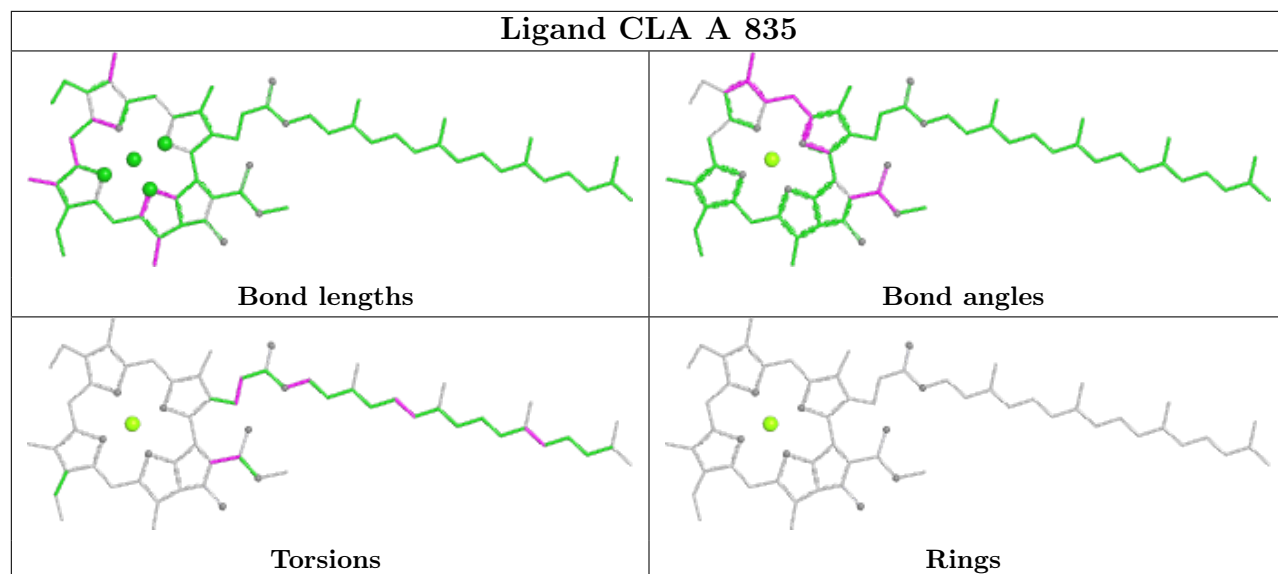


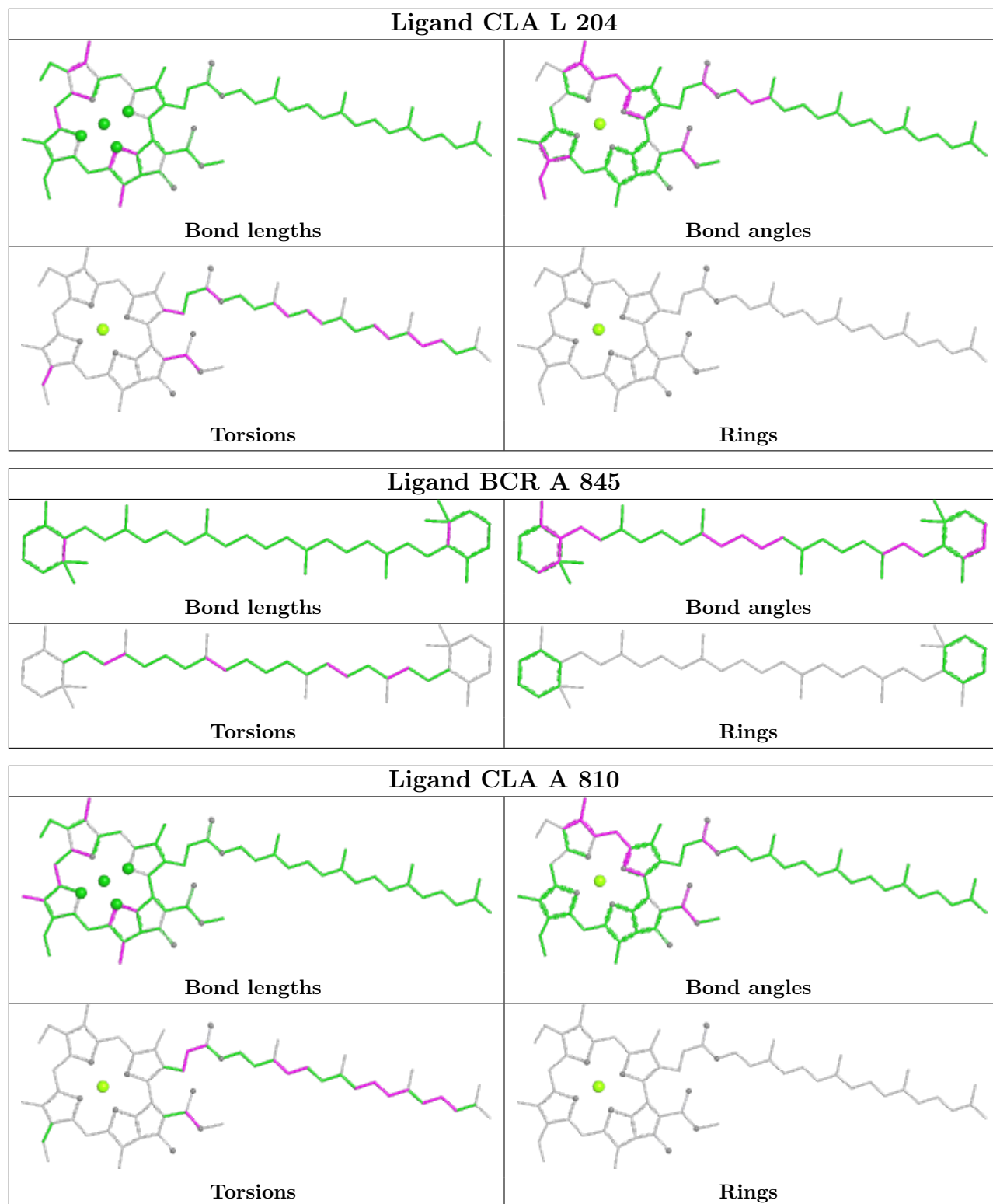


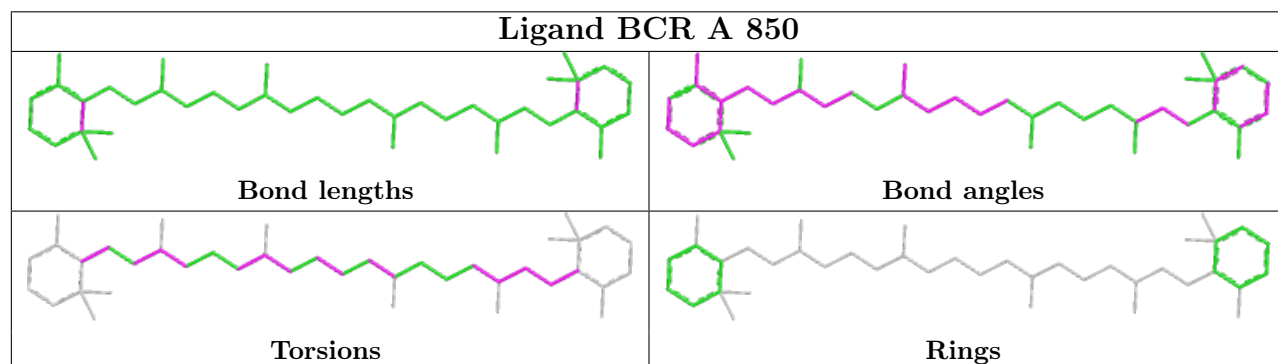
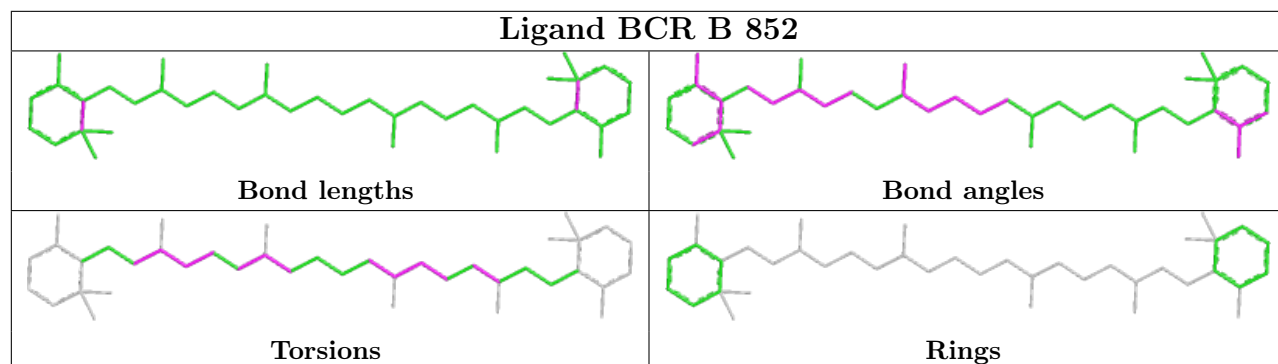
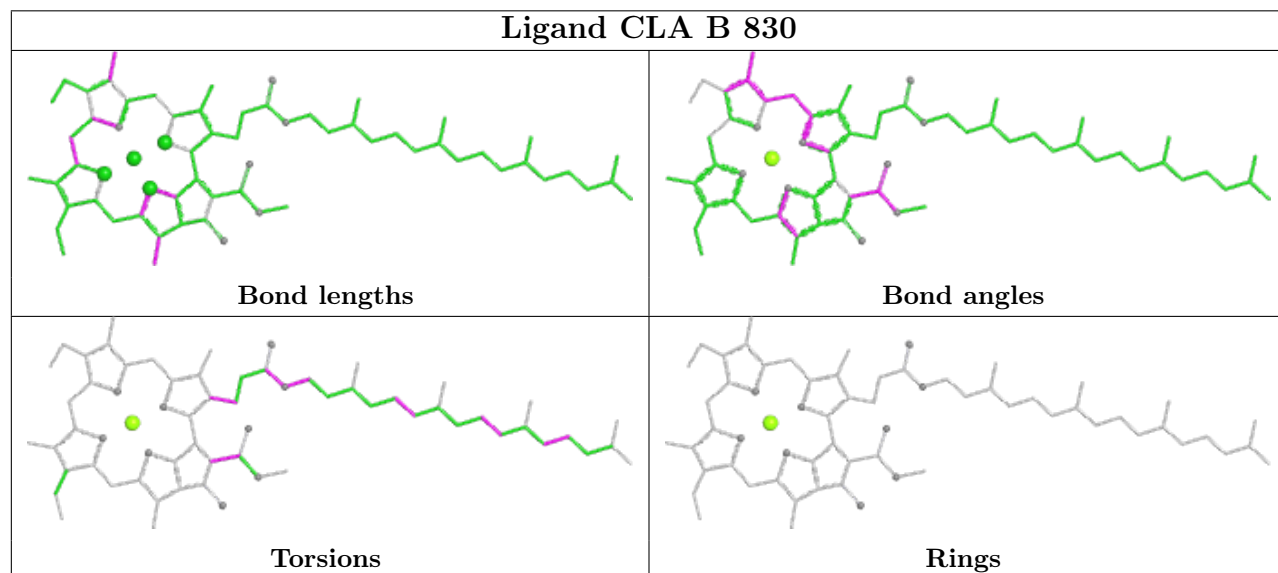
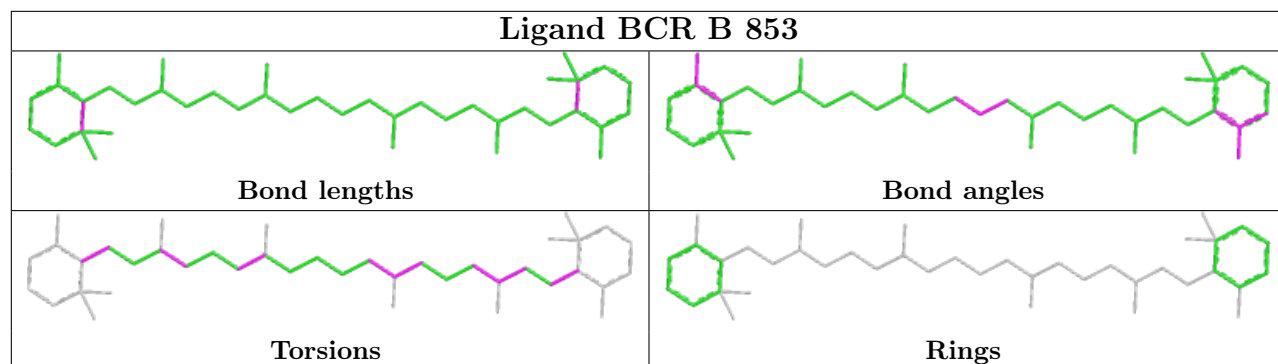


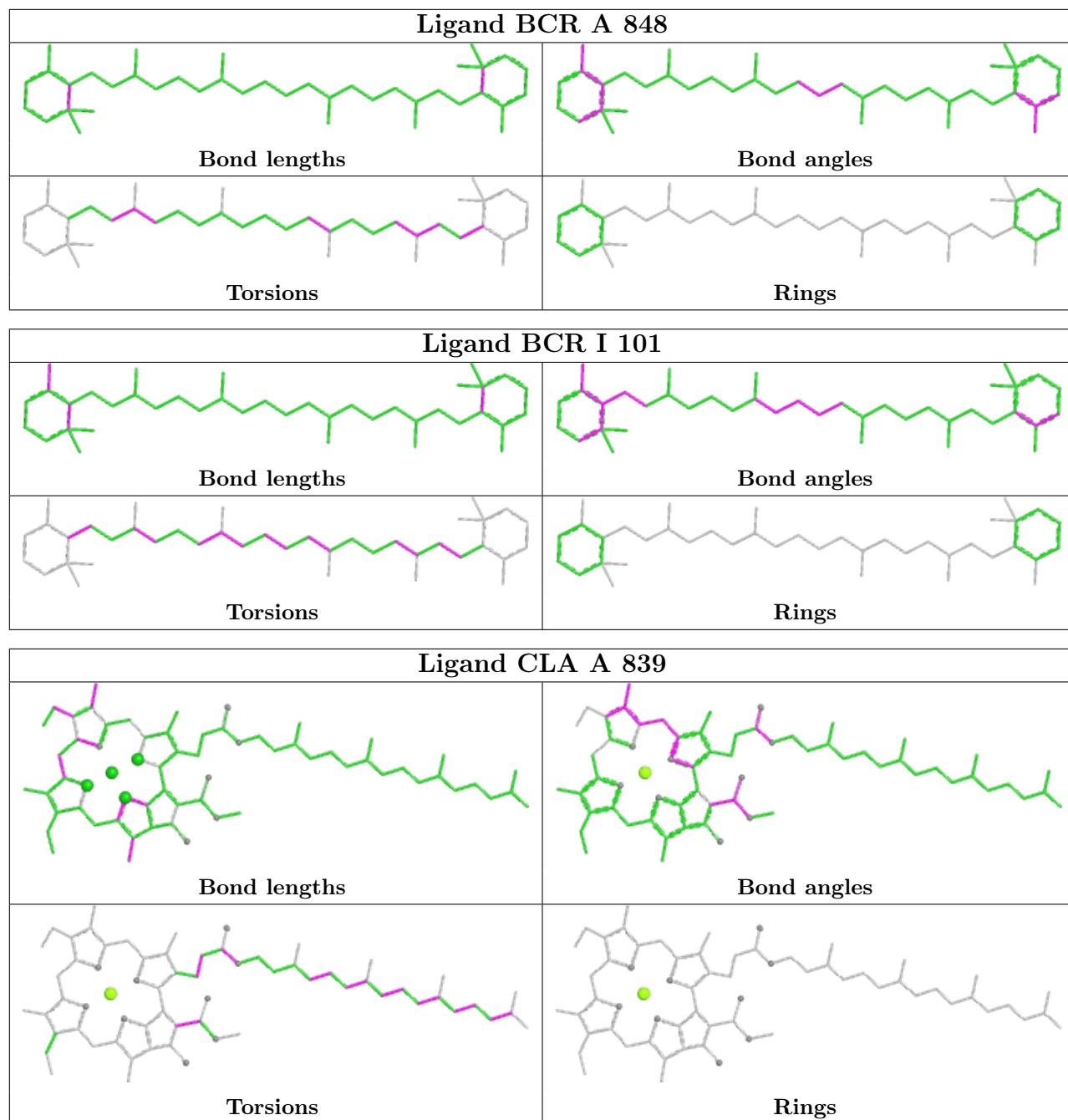


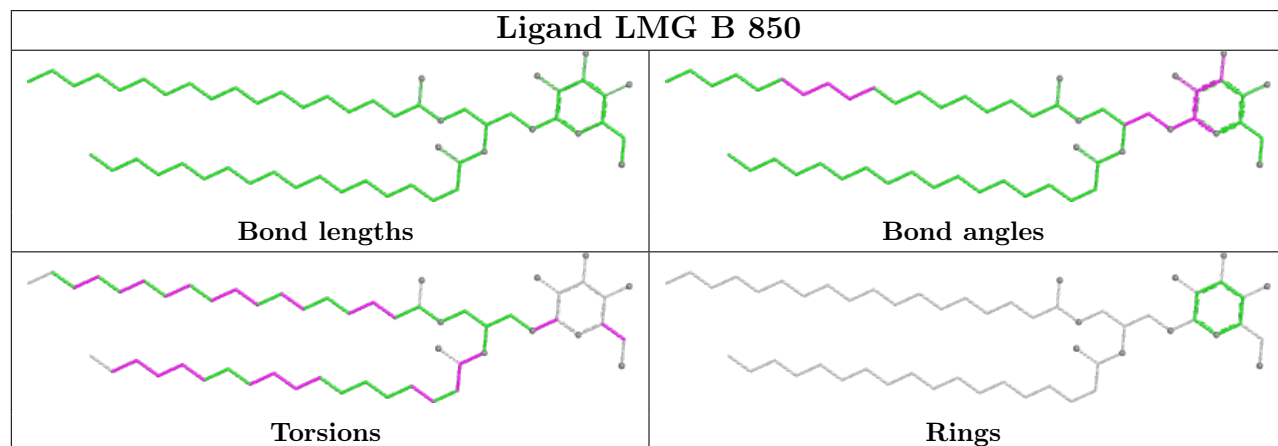
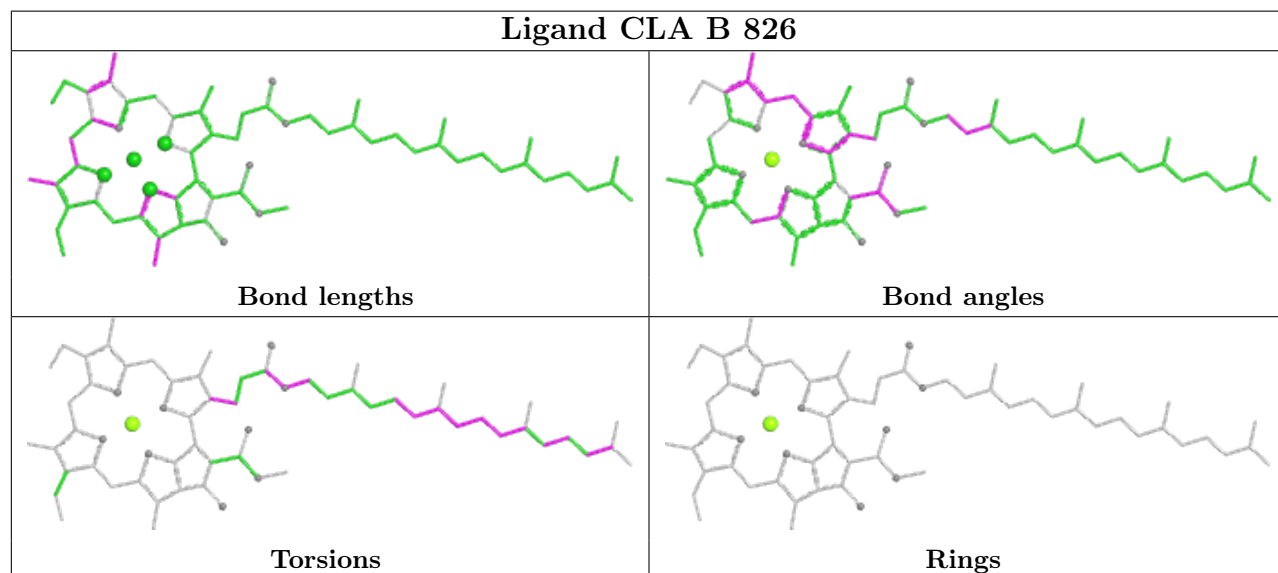
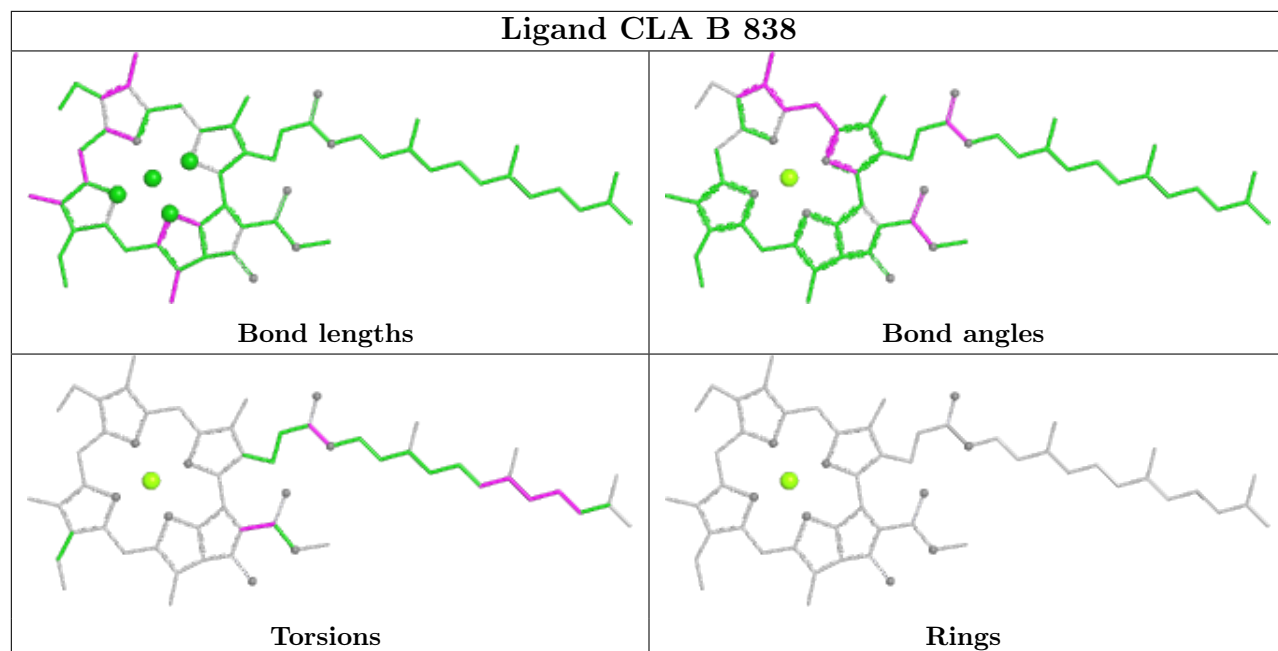




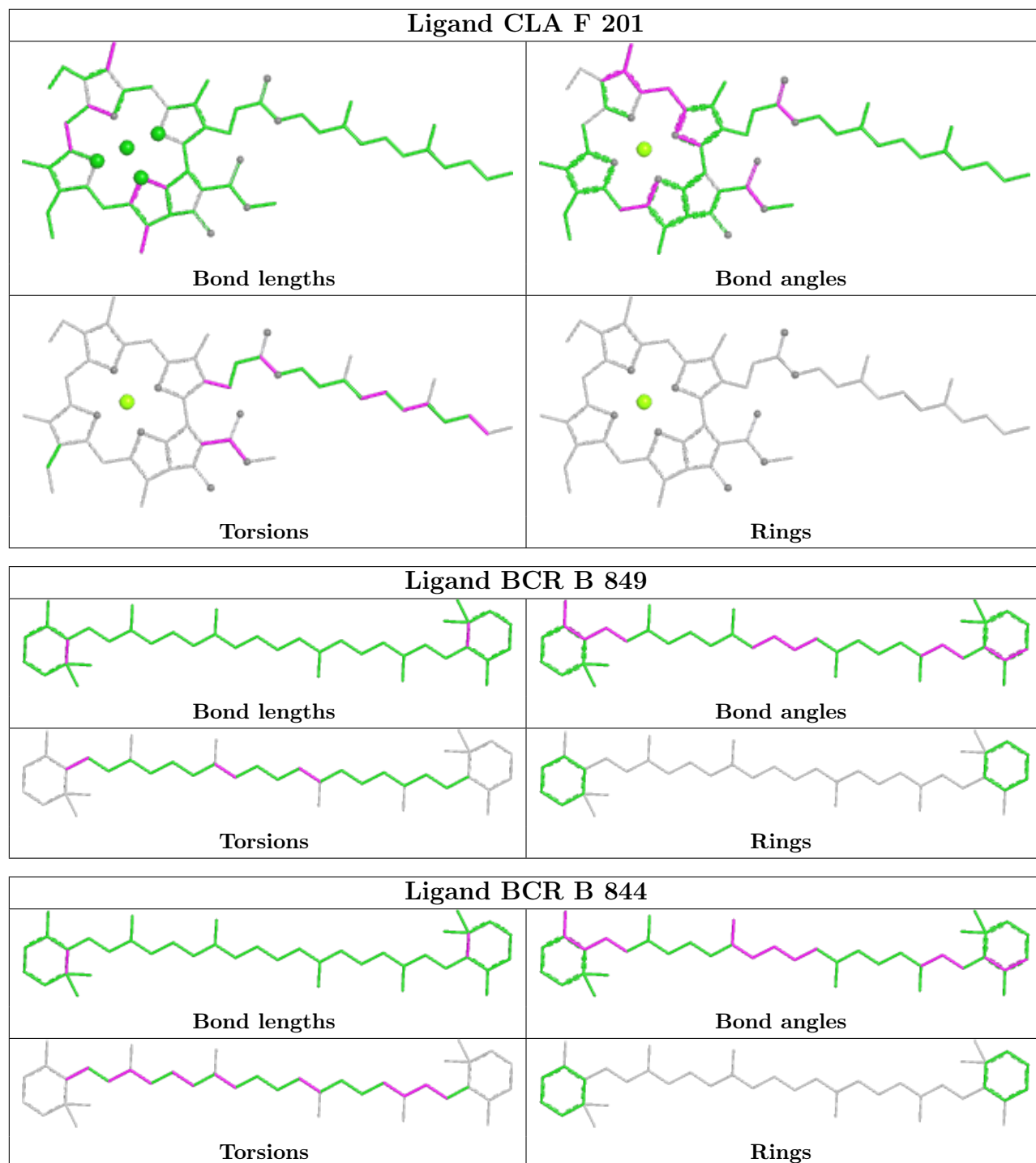


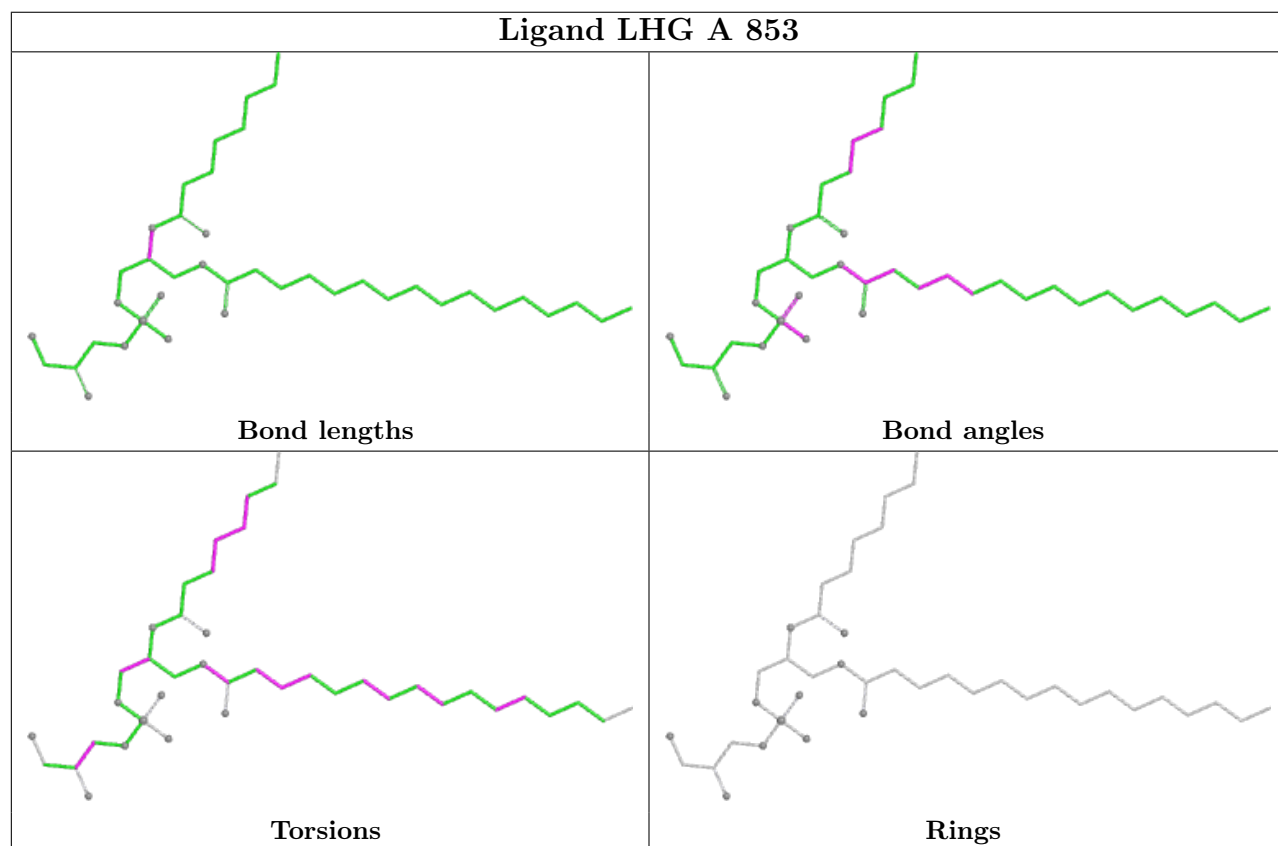
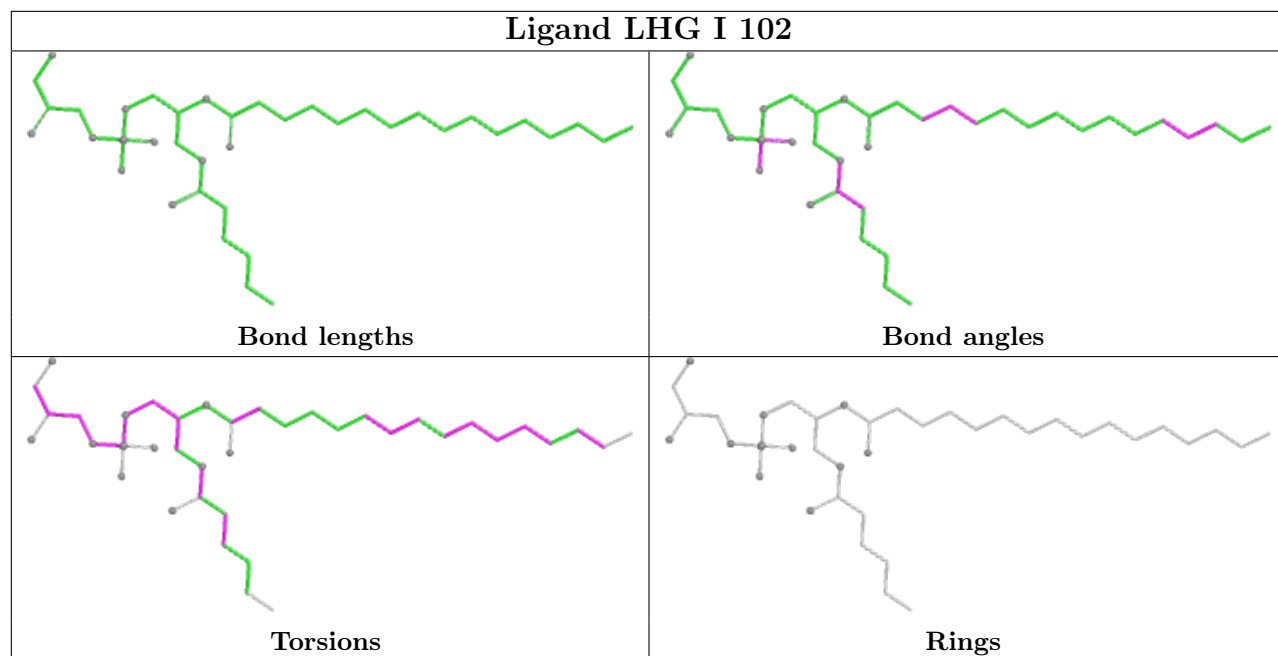


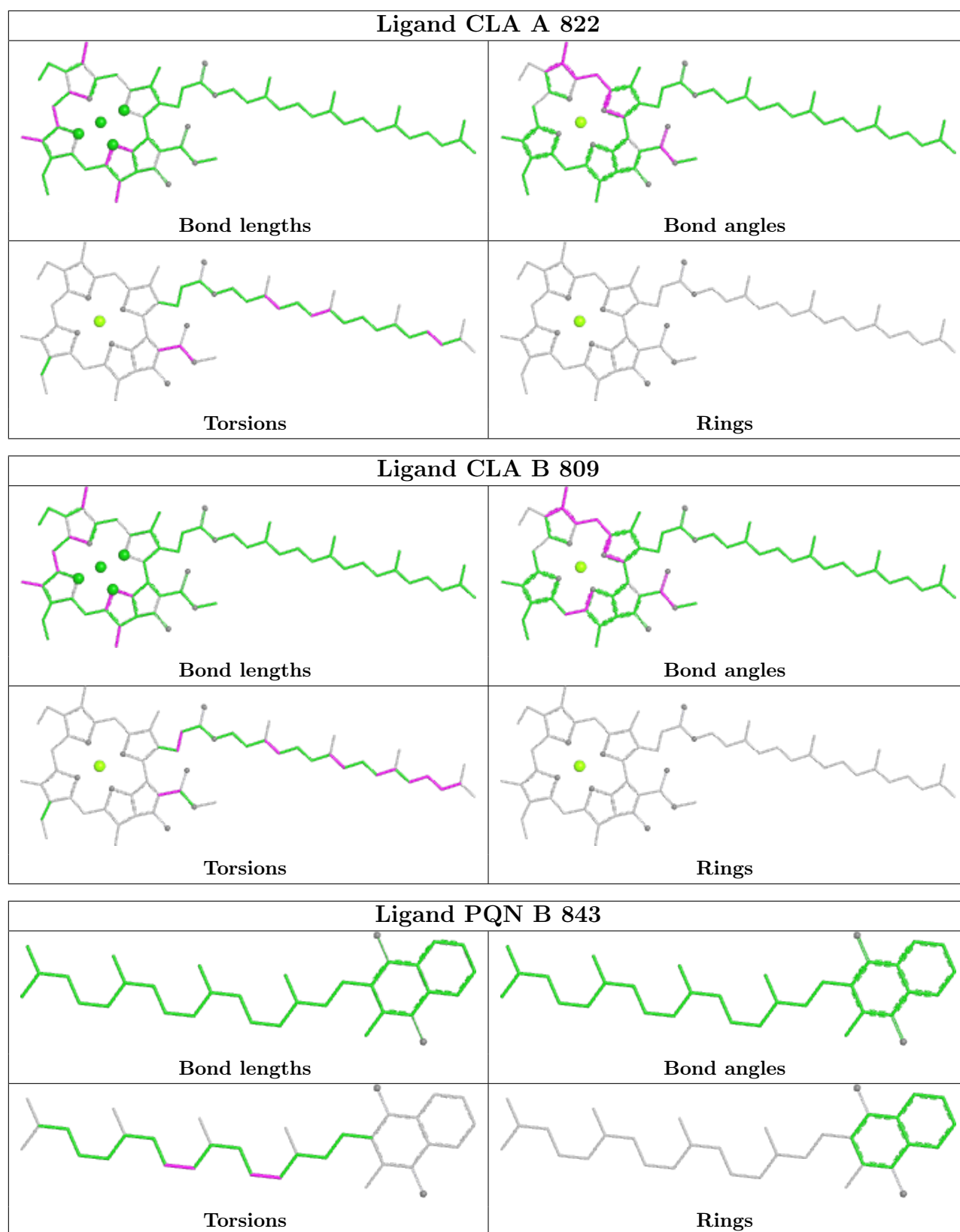


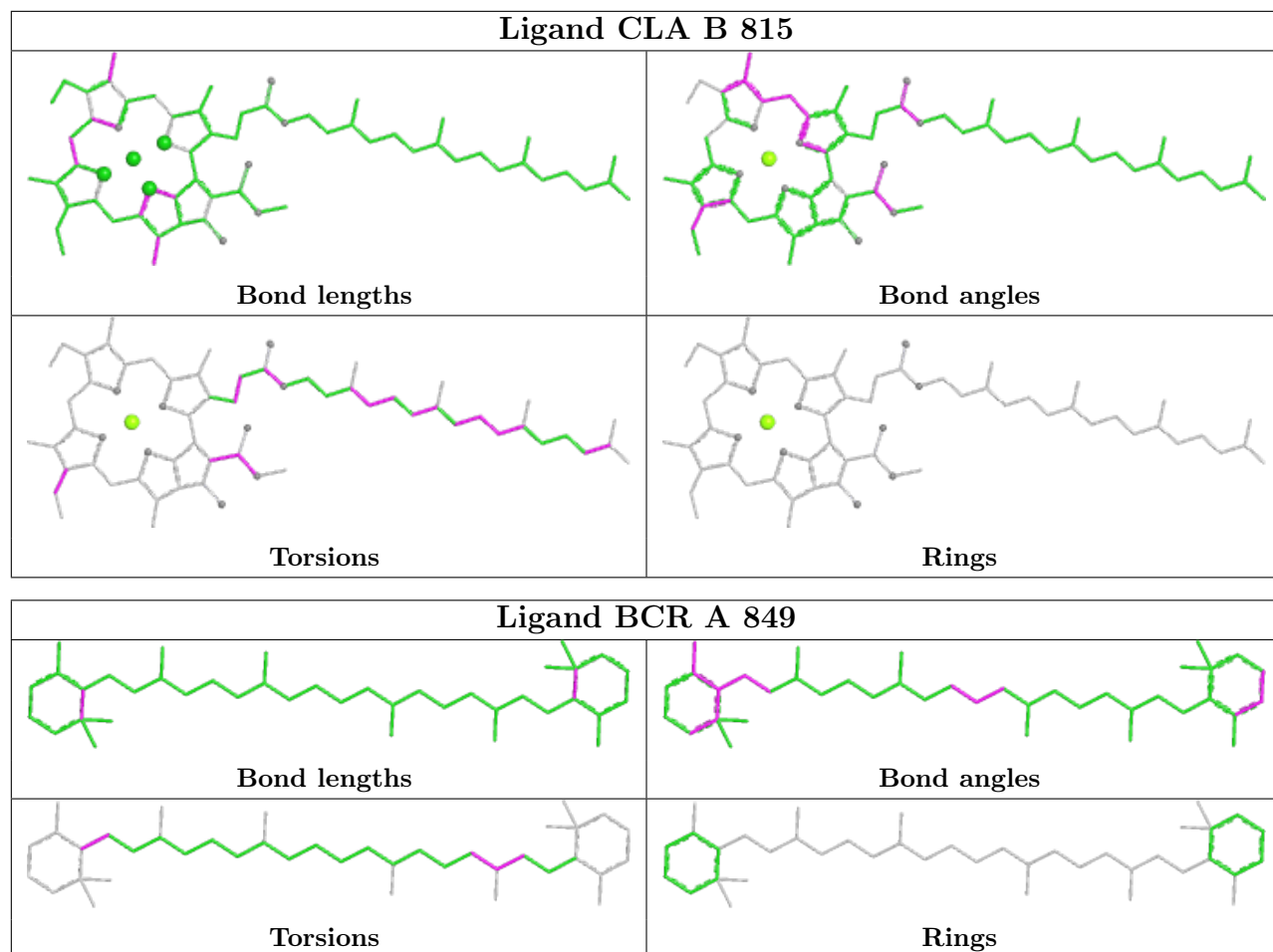


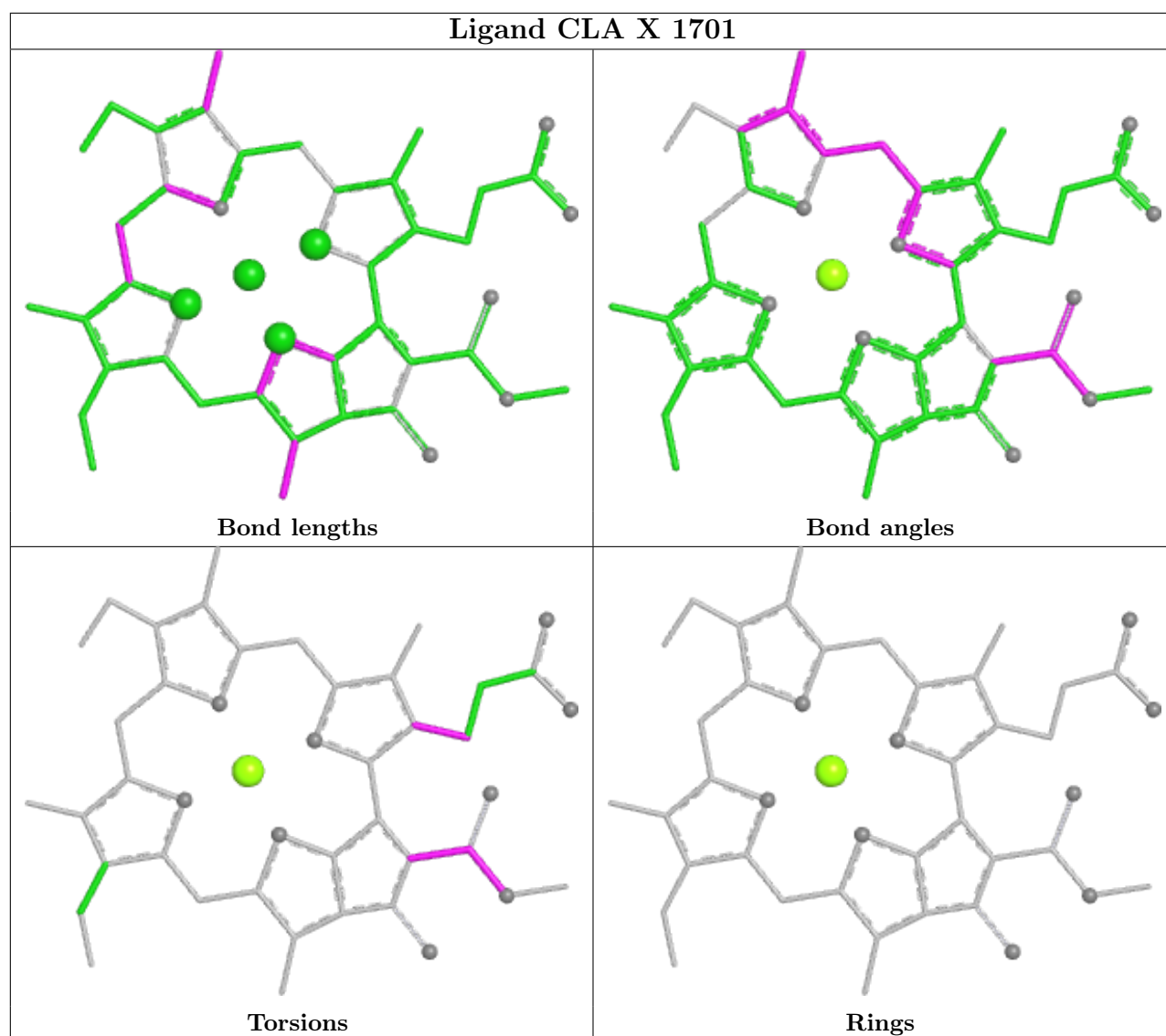












## 5.7 Other polymers [\(i\)](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [\(i\)](#)

There are no chain breaks in this entry.

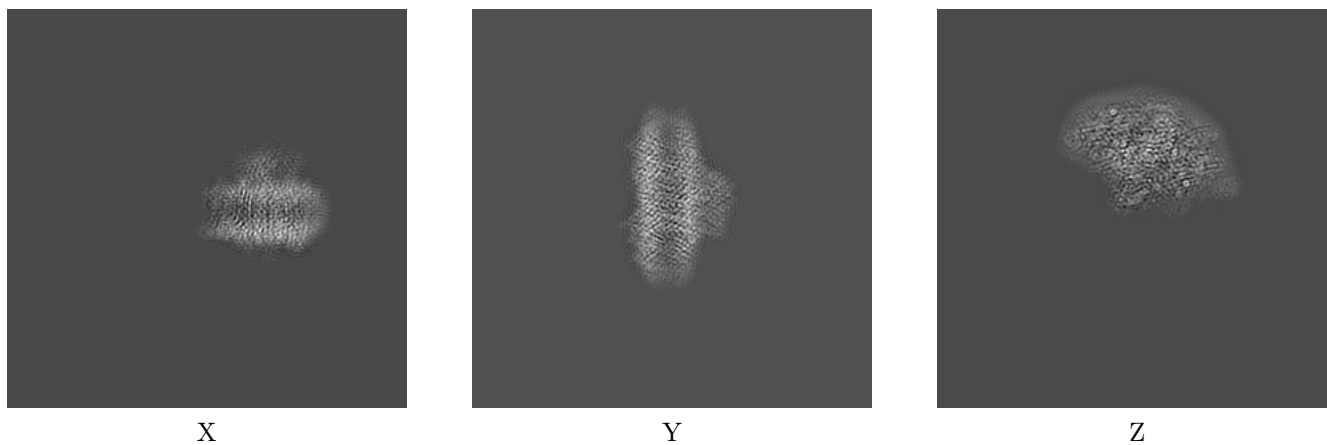
## 6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-10557. 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](#)

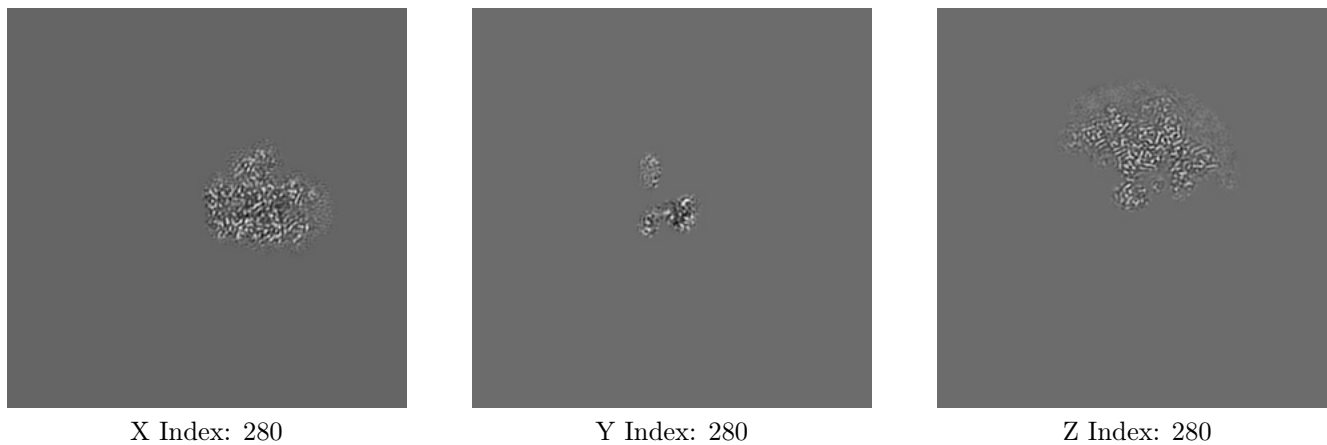
#### 6.1.1 Primary map



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

### 6.2 Central slices [i](#)

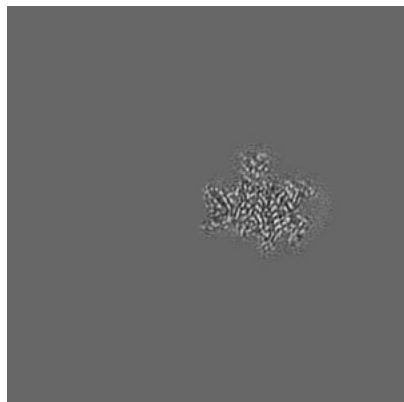
#### 6.2.1 Primary map



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

## 6.3 Largest variance slices [i](#)

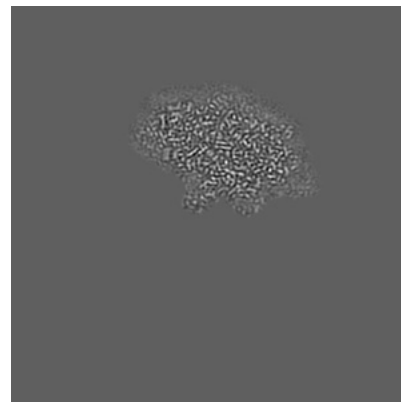
### 6.3.1 Primary map



X Index: 265



Y Index: 354

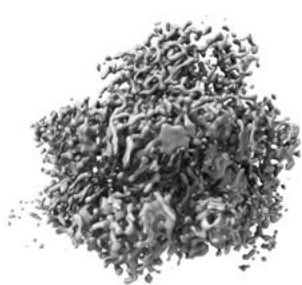


Z Index: 251

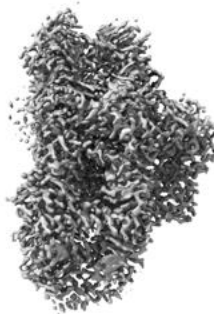
The images above show the largest variance slices of the map in three orthogonal directions.

## 6.4 Orthogonal surface views [i](#)

### 6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.017. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

## 6.5 Mask visualisation

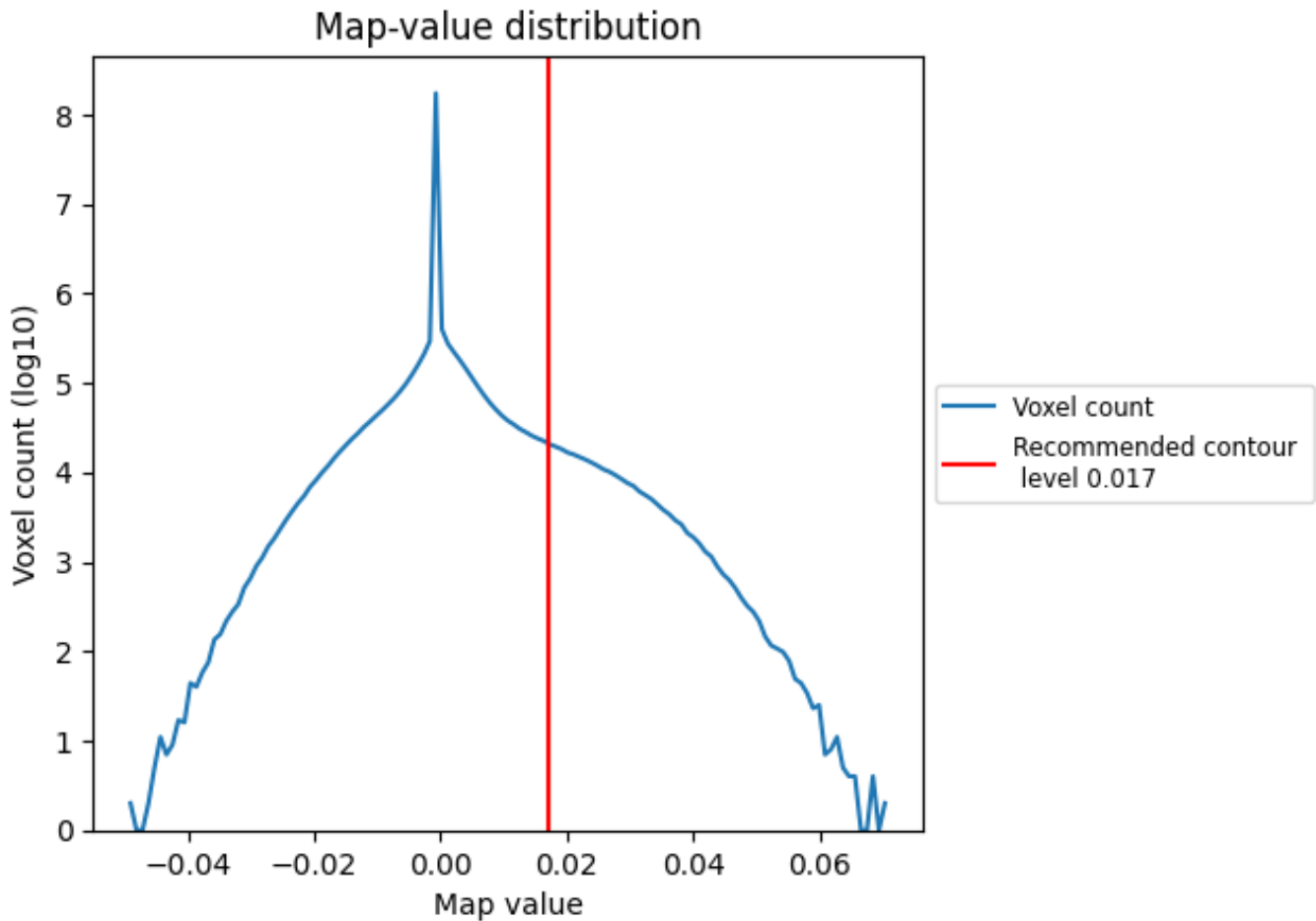
This section was not generated. No masks/segmentation were deposited.



## 7 Map analysis [i](#)

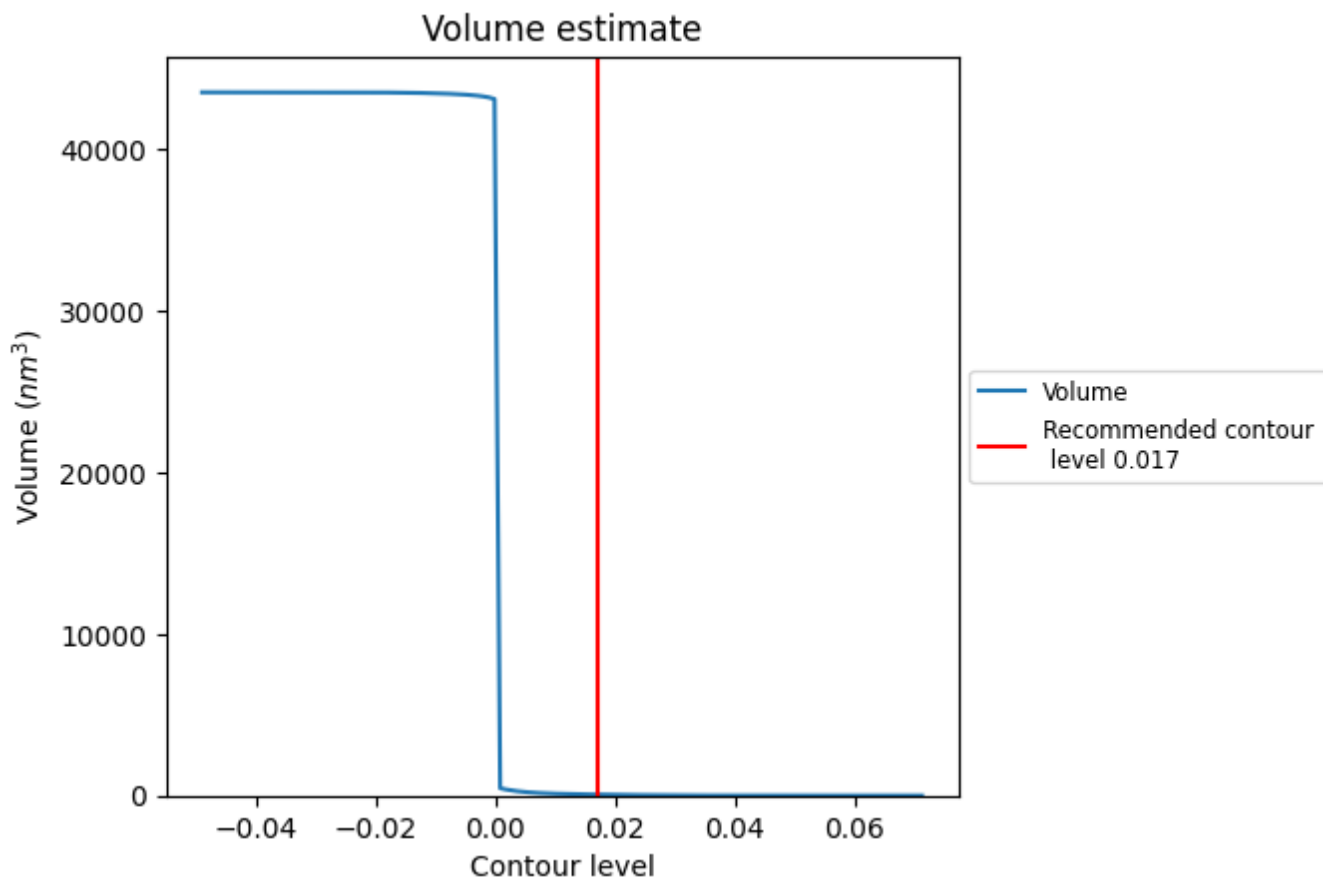
This section contains the results of statistical analysis of the map.

### 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.

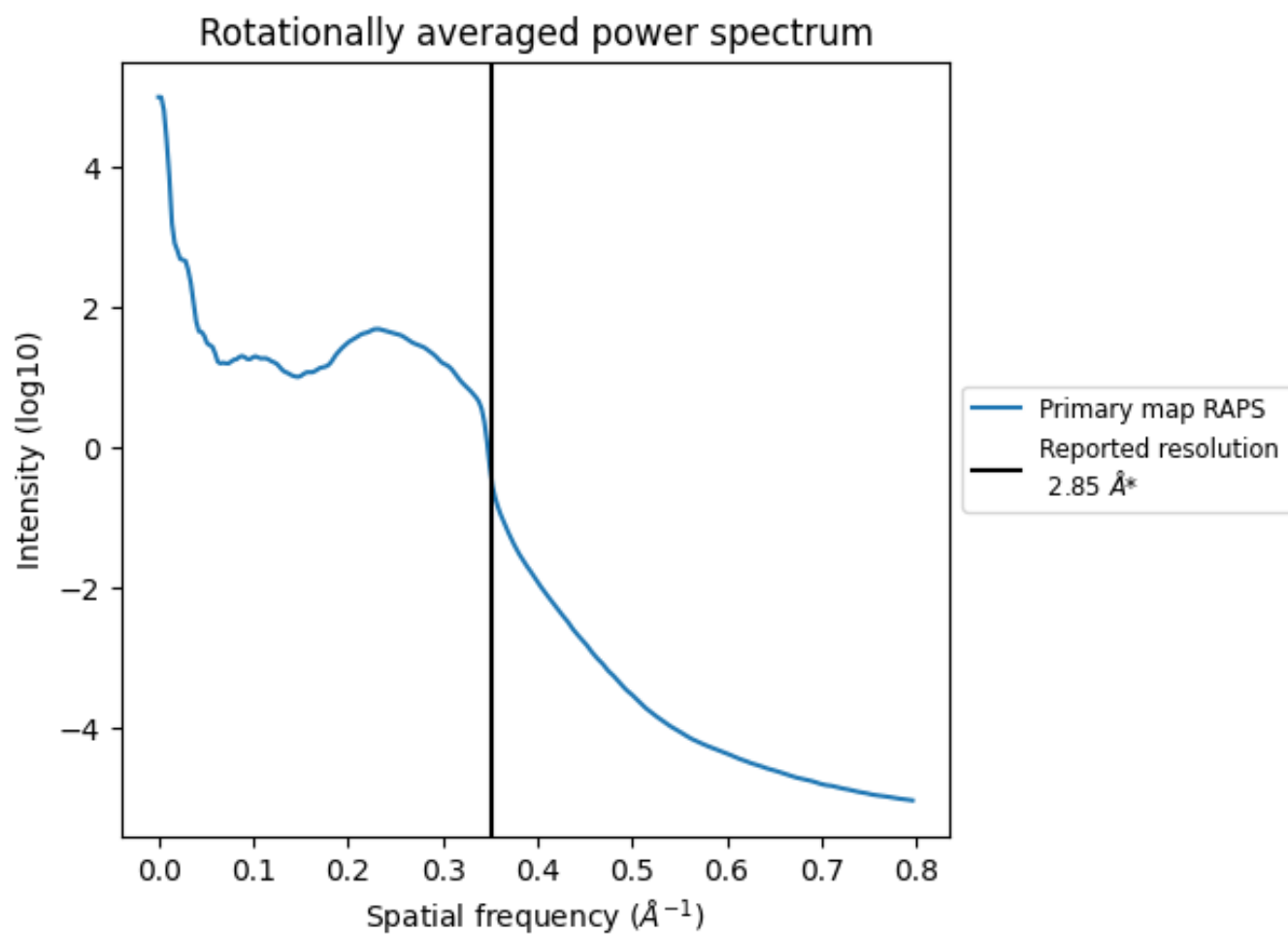
## 7.2 Volume estimate [i](#)



The volume at the recommended contour level is 62 nm<sup>3</sup>; this corresponds to an approximate mass of 56 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

### 7.3 Rotationally averaged power spectrum [i](#)

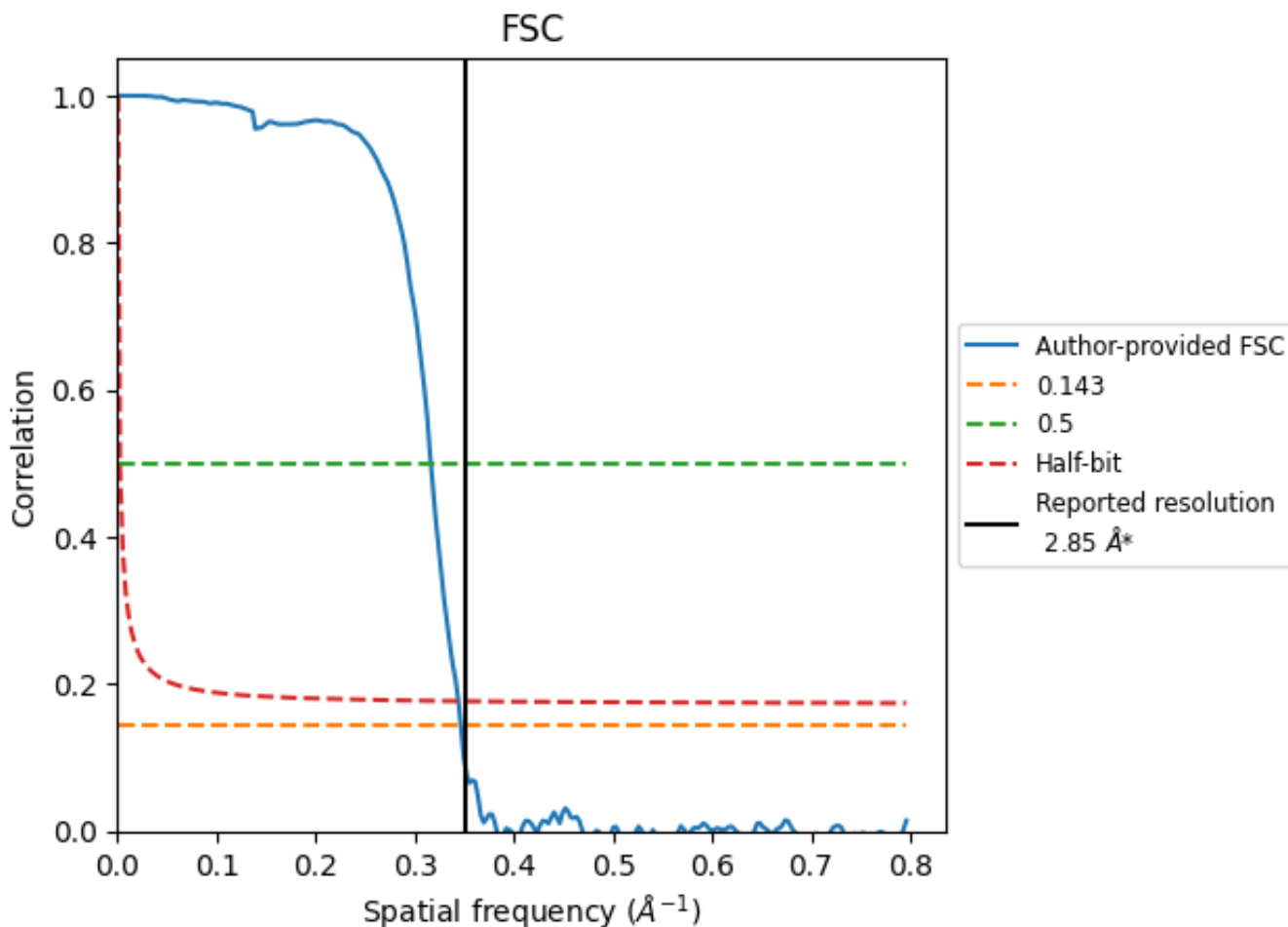


\*Reported resolution corresponds to spatial frequency of 0.351 Å<sup>-1</sup>

## 8 Fourier-Shell correlation [i](#)

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

### 8.1 FSC [i](#)



\*Reported resolution corresponds to spatial frequency of 0.351 Å<sup>-1</sup>

## 8.2 Resolution estimates [i](#)

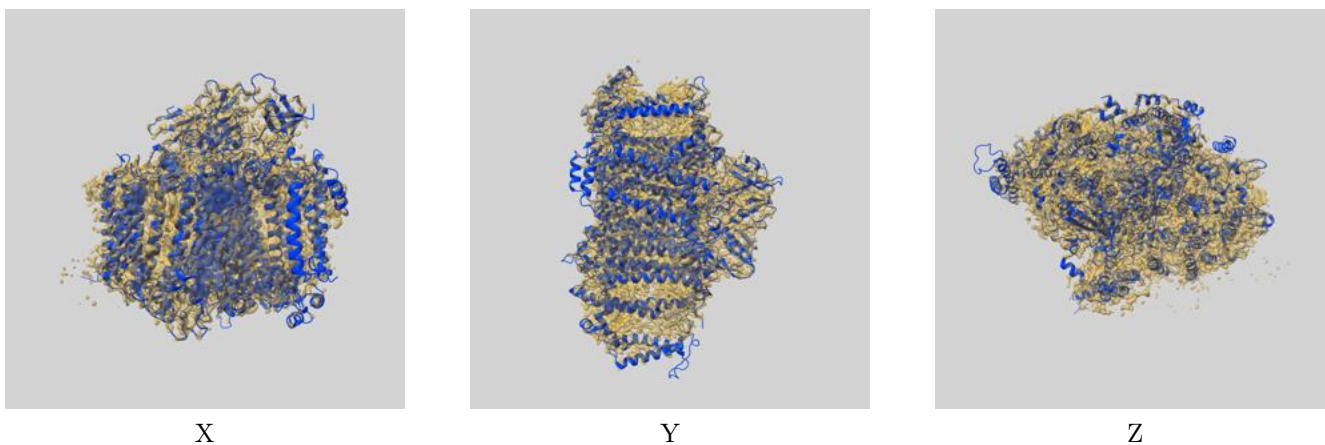
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	2.85	-	-
Author-provided FSC curve	2.89	3.16	2.91
Unmasked-calculated*	-	-	-

\*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

## 9 Map-model fit [i](#)

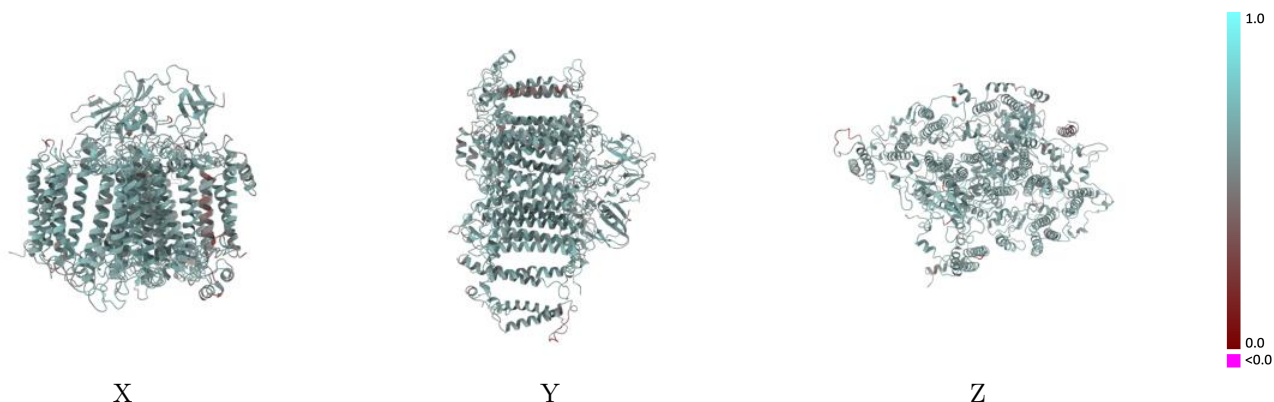
This section contains information regarding the fit between EMDB map EMD-10557 and PDB model 6TRA. Per-residue inclusion information can be found in section 3 on page 19.

### 9.1 Map-model overlay [i](#)



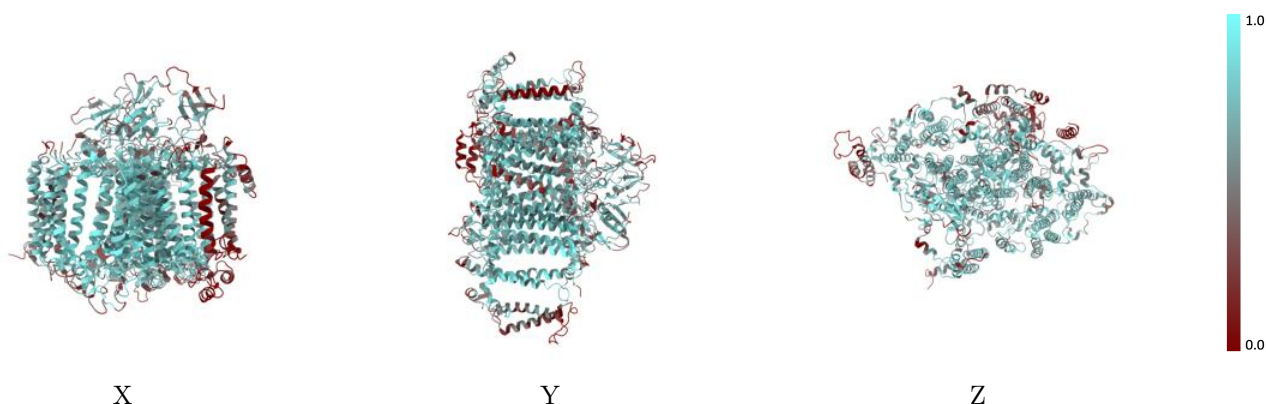
The images above show the 3D surface view of the map at the recommended contour level 0.017 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



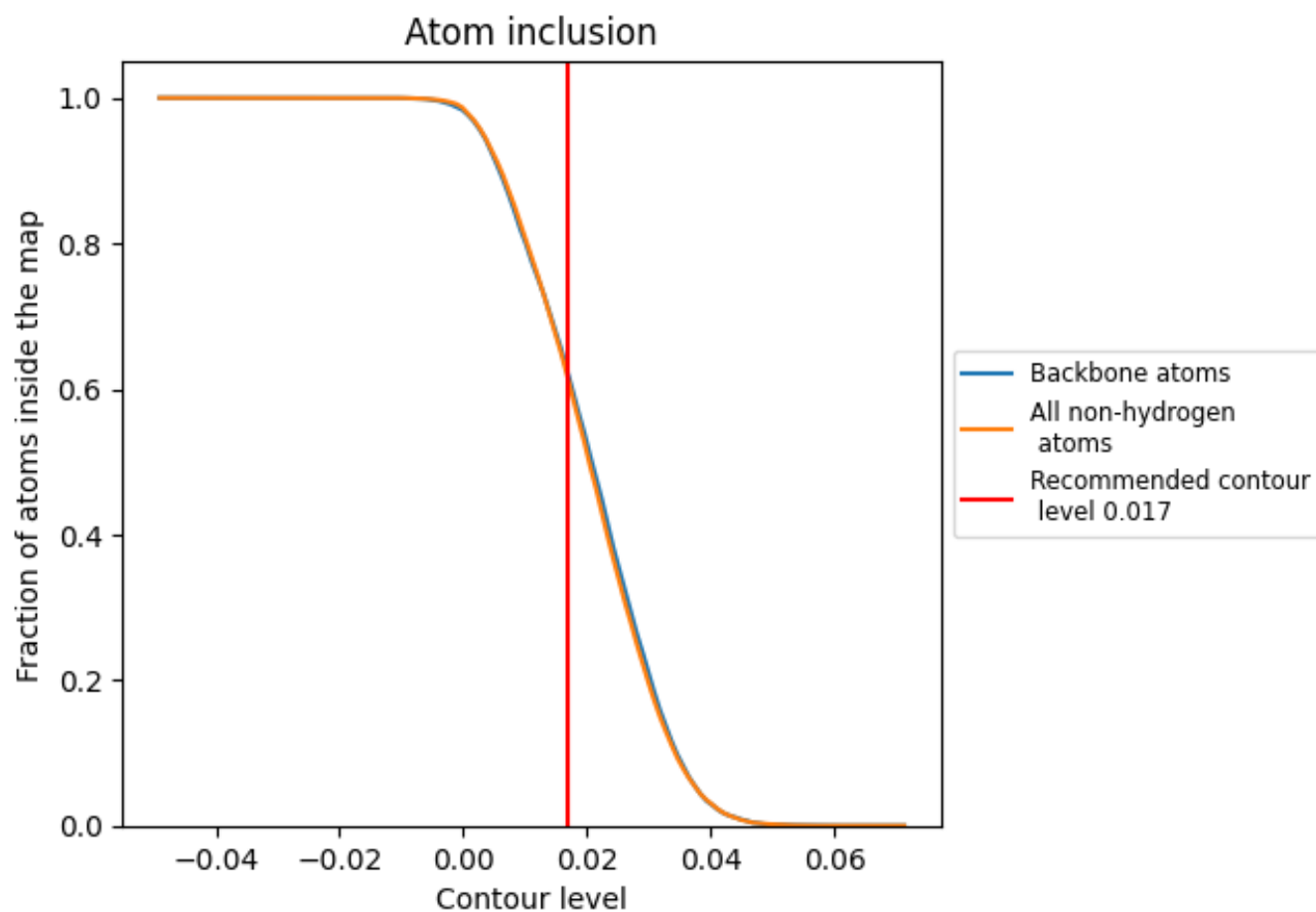
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.017).

## 9.4 Atom inclusion [i](#)





























At the recommended contour level, 62% of all backbone atoms, 61% 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 (0.017) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.6118	 0.5890
A	 0.6903	 0.6030
B	 0.6632	 0.5960
C	 0.6800	 0.5910
D	 0.5617	 0.5780
E	 0.5094	 0.5760
F	 0.3117	 0.5470
I	 0.5885	 0.5890
J	 0.2924	 0.5530
K	 0.2628	 0.5270
L	 0.5880	 0.5790
M	 0.4874	 0.5700
X	 0.0152	 0.4450

