Full wwPDB EM Validation Report ⓘ

Apr 14, 2025 – 01:34 pm BST

PDB ID	:	9EYN / pdb_00009eyn
EMDB ID	:	EMD-50058
Title	:	The structure of solubilized octameric pore of actinoporin Fav prepared on DOPC, cholesterol, sphingomyelin membranes
Authors	:	Solinc, G.; Srnko, M.; Svigel, T.; Anderluh, G.; Podobnik, M.
Deposited on	:	2024-04-09
Resolution	:	3.06 Å(reported)
Based on initial model	:	.

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

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

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

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

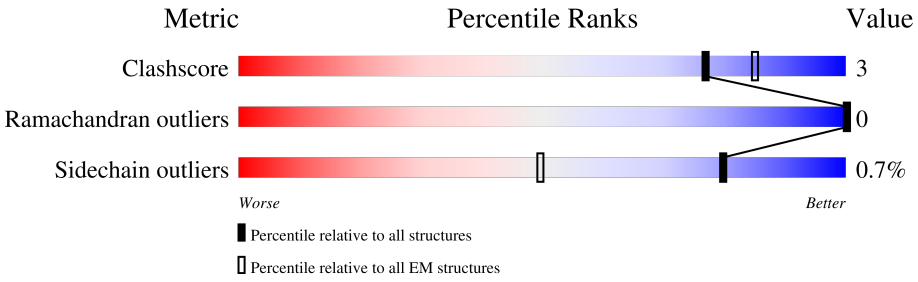
EMDB validation analysis	:	0.0.1.dev117
Mogul	:	1.8.4, CSD as541be (2020)
MolProbity	:	4.02b-467
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.42

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 3.06 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	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	262	66% · 31%
1	B	262	66% · 31%
1	C	262	66% · 31%
1	D	262	66% · 31%
1	E	262	66% · 31%
1	F	262	66% · 31%
1	G	262	66% · 31%
1	H	262	66% · 31%

2 Entry composition

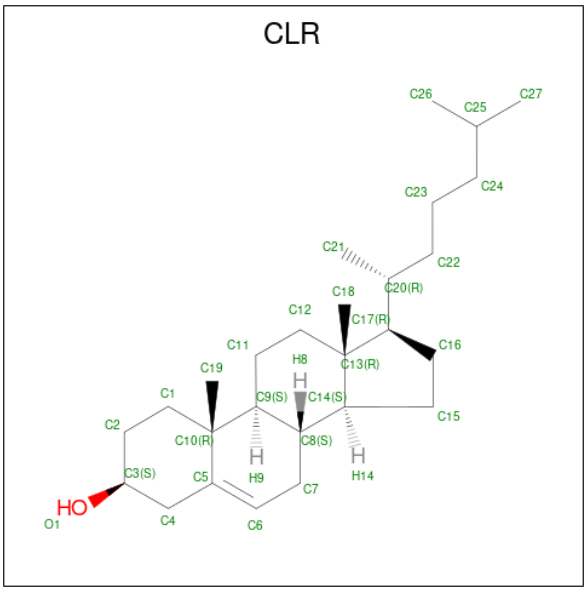
There are 3 unique types of molecules in this entry. The entry contains 14880 atoms, of which 0 are hydrogens and 0 are deuteriums.

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 Actinoporin.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	181	Total	C	N	O	S	0	0
			1400	895	228	271	6		
1	B	181	Total	C	N	O	S	0	0
			1400	895	228	271	6		
1	C	181	Total	C	N	O	S	0	0
			1400	895	228	271	6		
1	D	181	Total	C	N	O	S	0	0
			1400	895	228	271	6		
1	E	181	Total	C	N	O	S	0	0
			1400	895	228	271	6		
1	F	181	Total	C	N	O	S	0	0
			1400	895	228	271	6		
1	G	181	Total	C	N	O	S	0	0
			1400	895	228	271	6		
1	H	181	Total	C	N	O	S	0	0
			1400	895	228	271	6		

- Molecule 2 is CHOLESTEROL (CCD ID: CLR) (formula: $C_{27}H_{46}O$).



Mol	Chain	Residues	Atoms	AltConf
2	A	1	Total C O 28 27 1	0
2	A	1	Total C O 28 27 1	0
2	A	1	Total C O 28 27 1	0
2	A	1	Total C O 28 27 1	0
2	B	1	Total C O 28 27 1	0
2	B	1	Total C O 28 27 1	0
2	B	1	Total C O 28 27 1	0
2	B	1	Total C O 28 27 1	0
2	C	1	Total C O 28 27 1	0
2	C	1	Total C O 28 27 1	0
2	C	1	Total C O 28 27 1	0
2	C	1	Total C O 28 27 1	0
2	D	1	Total C O 28 27 1	0
2	D	1	Total C O 28 27 1	0
2	D	1	Total C O 28 27 1	0
2	D	1	Total C O 28 27 1	0
2	E	1	Total C O 28 27 1	0
2	E	1	Total C O 28 27 1	0
2	E	1	Total C O 28 27 1	0
2	E	1	Total C O 28 27 1	0
2	F	1	Total C O 28 27 1	0
2	F	1	Total C O 28 27 1	0

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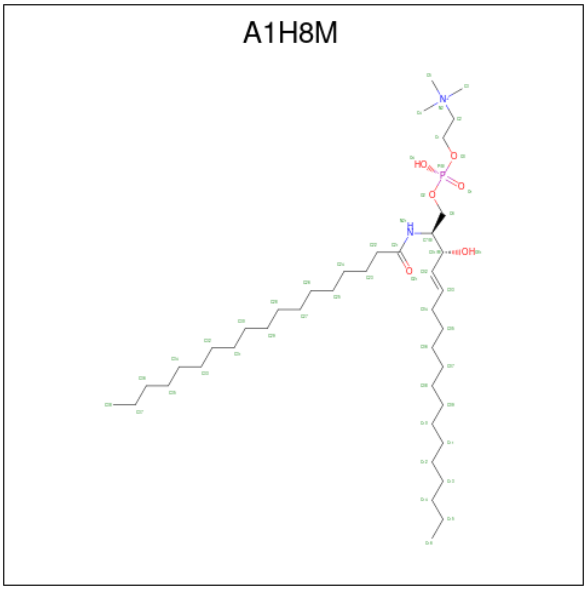
Mol	Chain	Residues	Atoms	AltConf
2	F	1	Total C O 28 27 1	0
2	F	1	Total C O 28 27 1	0
2	G	1	Total C O 28 27 1	0
2	G	1	Total C O 28 27 1	0
2	G	1	Total C O 28 27 1	0
2	G	1	Total C O 28 27 1	0
2	H	1	Total C O 28 27 1	0
2	H	1	Total C O 28 27 1	0
2	H	1	Total C O 28 27 1	0
2	H	1	Total C O 28 27 1	0

- Molecule 3 is Sphingomyelin C18 (CCD ID: A1H8M) (formula: $C_{41}H_{84}N_2O_6P$).



Mol	Chain	Residues	Atoms	AltConf
3	A	1	Total C N O P 48 39 2 6 1	0

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Mol	Chain	Residues	Atoms	AltConf
3	A	1	Total C N O P 44 35 2 6 1	0
3	A	1	Total C N O P 38 29 2 6 1	0
3	A	1	Total C N O P 45 36 2 6 1	0
3	A	1	Total C N O P 44 35 2 6 1	0
3	A	1	Total C N O 24 20 1 3	0
3	A	1	Total C N O P 41 32 2 6 1	0
3	A	1	Total C N O P 44 35 2 6 1	0
3	A	1	Total C N O 20 17 1 2	0
3	B	1	Total C N O P 48 39 2 6 1	0
3	B	1	Total C N O P 44 35 2 6 1	0
3	B	1	Total C N O P 38 29 2 6 1	0
3	B	1	Total C N O P 45 36 2 6 1	0
3	B	1	Total C N O P 44 35 2 6 1	0
3	B	1	Total C N O 24 20 1 3	0
3	B	1	Total C N O P 41 32 2 6 1	0
3	B	1	Total C N O P 44 35 2 6 1	0
3	B	1	Total C N O 20 17 1 2	0
3	C	1	Total C N O P 48 39 2 6 1	0
3	C	1	Total C N O P 44 35 2 6 1	0
3	C	1	Total C N O P 38 29 2 6 1	0
3	C	1	Total C N O P 45 36 2 6 1	0

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Mol	Chain	Residues	Atoms	AltConf
3	C	1	Total C N O P 44 35 2 6 1	0
3	C	1	Total C N O 24 20 1 3	0
3	C	1	Total C N O P 41 32 2 6 1	0
3	C	1	Total C N O P 44 35 2 6 1	0
3	C	1	Total C N O 20 17 1 2	0
3	D	1	Total C N O P 48 39 2 6 1	0
3	D	1	Total C N O P 44 35 2 6 1	0
3	D	1	Total C N O P 38 29 2 6 1	0
3	D	1	Total C N O P 45 36 2 6 1	0
3	D	1	Total C N O P 44 35 2 6 1	0
3	D	1	Total C N O 24 20 1 3	0
3	D	1	Total C N O P 41 32 2 6 1	0
3	D	1	Total C N O P 44 35 2 6 1	0
3	D	1	Total C N O 20 17 1 2	0
3	E	1	Total C N O P 48 39 2 6 1	0
3	E	1	Total C N O P 44 35 2 6 1	0
3	E	1	Total C N O P 38 29 2 6 1	0
3	E	1	Total C N O P 45 36 2 6 1	0
3	E	1	Total C N O P 44 35 2 6 1	0
3	E	1	Total C N O 24 20 1 3	0
3	E	1	Total C N O P 41 32 2 6 1	0

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Mol	Chain	Residues	Atoms	AltConf
3	E	1	Total C N O P 44 35 2 6 1	0
3	E	1	Total C N O 20 17 1 2	0
3	F	1	Total C N O P 48 39 2 6 1	0
3	F	1	Total C N O P 44 35 2 6 1	0
3	F	1	Total C N O P 38 29 2 6 1	0
3	F	1	Total C N O P 45 36 2 6 1	0
3	F	1	Total C N O P 44 35 2 6 1	0
3	F	1	Total C N O 24 20 1 3	0
3	F	1	Total C N O P 41 32 2 6 1	0
3	F	1	Total C N O P 44 35 2 6 1	0
3	F	1	Total C N O 20 17 1 2	0
3	G	1	Total C N O P 48 39 2 6 1	0
3	G	1	Total C N O P 44 35 2 6 1	0
3	G	1	Total C N O P 38 29 2 6 1	0
3	G	1	Total C N O P 45 36 2 6 1	0
3	G	1	Total C N O P 44 35 2 6 1	0
3	G	1	Total C N O 24 20 1 3	0
3	G	1	Total C N O P 41 32 2 6 1	0
3	G	1	Total C N O P 44 35 2 6 1	0
3	G	1	Total C N O 20 17 1 2	0
3	H	1	Total C N O P 48 39 2 6 1	0

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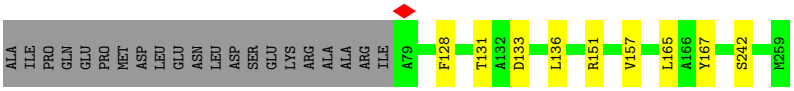
Mol	Chain	Residues	Atoms	AltConf
3	H	1	Total C N O P 44 35 2 6 1	0
3	H	1	Total C N O P 38 29 2 6 1	0
3	H	1	Total C N O P 45 36 2 6 1	0
3	H	1	Total C N O P 44 35 2 6 1	0
3	H	1	Total C N O 24 20 1 3	0
3	H	1	Total C N O P 41 32 2 6 1	0
3	H	1	Total C N O P 44 35 2 6 1	0
3	H	1	Total C N O 20 17 1 2	0

3 Residue-property plots (i)

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

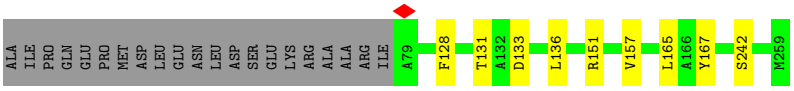
• Molecule 1: Actinoporin

Chain A:



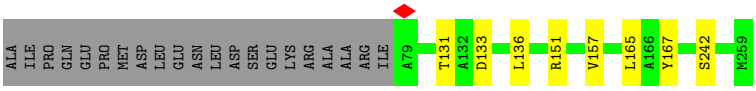
• Molecule 1: Actinoporin

Chain B:



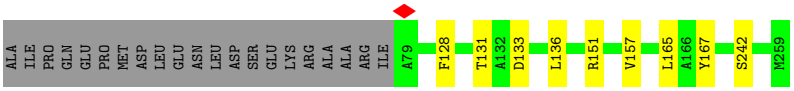
• Molecule 1: Actinoporin

Chain C:



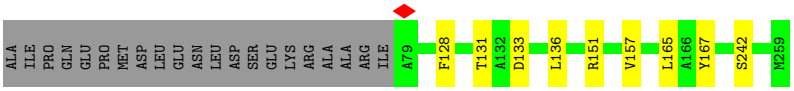
• Molecule 1: Actinoporin

Chain D:



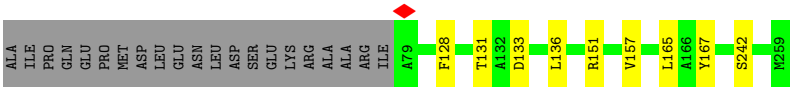
• Molecule 1: Actinoporin

Chain E:



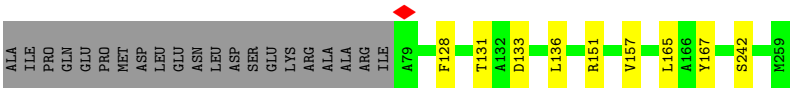
• Molecule 1: Actinoporin

Chain F:



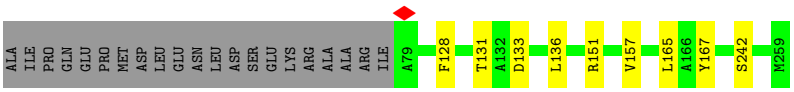
• Molecule 1: Actinoporin

Chain G:



• Molecule 1: Actinoporin

Chain H:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C8	Depositor
Number of particles used	223527	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	TFS GLACIOS	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/Å^2$)	40	Depositor
Minimum defocus (nm)	800	Depositor
Maximum defocus (nm)	3000	Depositor
Magnification	150000	Depositor
Image detector	FEI FALCON III (4k x 4k)	Depositor
Maximum map value	7.944	Depositor
Minimum map value	-5.868	Depositor
Average map value	-0.001	Depositor
Map value standard deviation	0.187	Depositor
Recommended contour level	0.805	Depositor
Map size (Å)	302.624, 302.624, 302.624	wwPDB
Map dimensions	320, 320, 320	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.9457, 0.9457, 0.9457	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: CLR, A1H8M

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	0.64	0/1438	0.95	1/1959 (0.1%)
1	B	0.64	0/1438	0.96	1/1959 (0.1%)
1	C	0.64	0/1438	0.95	1/1959 (0.1%)
1	D	0.64	0/1438	0.95	1/1959 (0.1%)
1	E	0.64	0/1438	0.95	1/1959 (0.1%)
1	F	0.64	0/1438	0.95	1/1959 (0.1%)
1	G	0.64	0/1438	0.95	1/1959 (0.1%)
1	H	0.64	0/1438	0.95	1/1959 (0.1%)
All	All	0.64	0/11504	0.95	8/15672 (0.1%)

There are no bond length outliers.

All (8) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	H	151	ARG	NE-CZ-NH2	5.33	122.97	120.30
1	A	151	ARG	NE-CZ-NH2	5.30	122.95	120.30
1	C	151	ARG	NE-CZ-NH2	5.30	122.95	120.30
1	E	151	ARG	NE-CZ-NH2	5.30	122.95	120.30
1	G	151	ARG	NE-CZ-NH2	5.30	122.95	120.30
1	B	151	ARG	NE-CZ-NH2	5.29	122.94	120.30
1	D	151	ARG	NE-CZ-NH2	5.29	122.94	120.30
1	F	151	ARG	NE-CZ-NH2	5.29	122.94	120.30

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	1400	0	1318	9	0
1	B	1400	0	1318	9	0
1	C	1400	0	1318	8	0
1	D	1400	0	1318	9	0
1	E	1400	0	1318	9	0
1	F	1400	0	1318	9	0
1	G	1400	0	1318	9	0
1	H	1400	0	1318	9	0
2	A	112	0	184	0	0
2	B	112	0	184	0	0
2	C	112	0	184	0	0
2	D	112	0	184	1	0
2	E	112	0	184	1	0
2	F	112	0	184	0	0
2	G	112	0	184	1	0
2	H	112	0	184	0	0
3	A	348	0	0	5	0
3	B	348	0	0	5	0
3	C	348	0	0	4	0
3	D	348	0	0	5	0
3	E	348	0	0	5	0
3	F	348	0	0	5	0
3	G	348	0	0	5	0
3	H	348	0	0	5	0
All	All	14880	0	12016	74	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 3.

All (74) 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:C:242:SER:HB2	1:D:133:ASP:OD1	2.01	0.61
1:F:242:SER:HB2	1:G:133:ASP:OD1	2.01	0.60
1:A:133:ASP:OD1	1:H:242:SER:HB2	2.01	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:242:SER:HB2	1:B:133:ASP:OD1	2.01	0.60
1:B:242:SER:HB2	1:C:133:ASP:OD1	2.01	0.60
1:G:242:SER:HB2	1:H:133:ASP:OD1	2.01	0.60
1:E:242:SER:HB2	1:F:133:ASP:OD1	2.01	0.59
1:D:242:SER:HB2	1:E:133:ASP:OD1	2.01	0.59
1:F:136:LEU:HD21	1:F:165:LEU:HG	1.86	0.57
1:H:136:LEU:HD21	1:H:165:LEU:HG	1.86	0.57
1:G:136:LEU:HD21	1:G:165:LEU:HG	1.86	0.57
1:A:136:LEU:HD21	1:A:165:LEU:HG	1.86	0.56
1:C:136:LEU:HD21	1:C:165:LEU:HG	1.86	0.56
1:D:136:LEU:HD21	1:D:165:LEU:HG	1.86	0.56
1:B:136:LEU:HD21	1:B:165:LEU:HG	1.86	0.56
1:E:136:LEU:HD21	1:E:165:LEU:HG	1.86	0.56
3:H:305:A1H8M:O21	3:H:305:A1H8M:C6	2.59	0.51
3:B:305:A1H8M:O21	3:B:305:A1H8M:C6	2.59	0.51
3:A:305:A1H8M:C6	3:A:305:A1H8M:O21	2.59	0.50
3:G:305:A1H8M:O21	3:G:305:A1H8M:C6	2.59	0.50
3:E:305:A1H8M:C6	3:E:305:A1H8M:O21	2.59	0.50
1:A:133:ASP:OD1	1:H:242:SER:CB	2.60	0.50
1:F:242:SER:CB	1:G:133:ASP:OD1	2.60	0.49
3:F:305:A1H8M:O21	3:F:305:A1H8M:C6	2.59	0.49
3:D:305:A1H8M:O21	3:D:305:A1H8M:C6	2.59	0.49
1:G:242:SER:CB	1:H:133:ASP:OD1	2.60	0.49
1:E:242:SER:CB	1:F:133:ASP:OD1	2.60	0.49
3:C:305:A1H8M:O21	3:C:305:A1H8M:C6	2.59	0.49
1:A:242:SER:CB	1:B:133:ASP:OD1	2.60	0.49
1:B:242:SER:CB	1:C:133:ASP:OD1	2.60	0.49
1:C:242:SER:CB	1:D:133:ASP:OD1	2.60	0.49
1:D:242:SER:CB	1:E:133:ASP:OD1	2.60	0.49
1:B:165:LEU:HD21	1:B:167:TYR:HE1	1.81	0.46
1:C:165:LEU:HD21	1:C:167:TYR:HE1	1.81	0.46
1:G:165:LEU:HD21	1:G:167:TYR:HE1	1.81	0.46
1:F:165:LEU:HD21	1:F:167:TYR:HE1	1.81	0.46
1:D:165:LEU:HD21	1:D:167:TYR:HE1	1.81	0.46
1:A:165:LEU:HD21	1:A:167:TYR:HE1	1.81	0.46
1:F:131:THR:HG21	3:F:305:A1H8M:C2	2.46	0.46
1:A:131:THR:HG21	3:A:305:A1H8M:C2	2.46	0.45
1:E:165:LEU:HD21	1:E:167:TYR:HE1	1.81	0.45
1:H:165:LEU:HD21	1:H:167:TYR:HE1	1.81	0.45
1:D:131:THR:HG21	3:D:305:A1H8M:C2	2.46	0.45
3:F:308:A1H8M:C22	3:F:308:A1H8M:C01	2.95	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:131:THR:HG21	3:G:305:A1H8M:C2	2.46	0.45
1:H:131:THR:HG21	3:H:305:A1H8M:C2	2.46	0.45
3:A:308:A1H8M:C22	3:A:308:A1H8M:C01	2.95	0.45
1:B:131:THR:HG21	3:B:305:A1H8M:C2	2.46	0.45
1:C:131:THR:HG21	3:C:305:A1H8M:C2	2.46	0.45
3:H:308:A1H8M:C22	3:H:308:A1H8M:C01	2.95	0.45
1:E:131:THR:HG21	3:E:305:A1H8M:C2	2.46	0.45
3:G:308:A1H8M:C22	3:G:308:A1H8M:C01	2.95	0.45
3:B:308:A1H8M:C22	3:B:308:A1H8M:C01	2.95	0.45
3:D:308:A1H8M:C22	3:D:308:A1H8M:C01	2.95	0.44
3:C:308:A1H8M:C22	3:C:308:A1H8M:C01	2.95	0.44
3:E:308:A1H8M:C22	3:E:308:A1H8M:C01	2.95	0.44
1:G:131:THR:CG2	3:G:305:A1H8M:C2	2.98	0.42
1:H:131:THR:CG2	3:H:305:A1H8M:C2	2.98	0.42
1:A:131:THR:CG2	3:A:305:A1H8M:C2	2.98	0.41
1:D:131:THR:CG2	3:D:305:A1H8M:C2	2.98	0.41
1:E:128:PHE:CE2	3:E:306:A1H8M:C4	3.04	0.41
1:F:131:THR:CG2	3:F:305:A1H8M:C2	2.98	0.41
1:F:128:PHE:CE2	3:F:306:A1H8M:C4	3.04	0.41
1:G:128:PHE:CE2	3:G:306:A1H8M:C4	3.04	0.41
1:H:128:PHE:CE2	3:H:306:A1H8M:C4	3.04	0.41
1:A:128:PHE:CE2	3:A:306:A1H8M:C4	3.04	0.41
1:B:131:THR:CG2	3:B:305:A1H8M:C2	2.98	0.41
1:D:128:PHE:CE2	3:D:306:A1H8M:C4	3.04	0.41
2:D:301:CLR:H121	2:D:301:CLR:H212	2.03	0.41
1:C:131:THR:CG2	3:C:305:A1H8M:C2	2.98	0.41
2:G:301:CLR:H212	2:G:301:CLR:H121	2.03	0.41
1:B:128:PHE:CE2	3:B:306:A1H8M:C4	3.04	0.40
2:E:301:CLR:H212	2:E:301:CLR:H121	2.03	0.40
1:E:131:THR:CG2	3:E:305:A1H8M:C2	2.98	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	179/262 (68%)	176 (98%)	3 (2%)	0	100	100
1	B	179/262 (68%)	176 (98%)	3 (2%)	0	100	100
1	C	179/262 (68%)	176 (98%)	3 (2%)	0	100	100
1	D	179/262 (68%)	176 (98%)	3 (2%)	0	100	100
1	E	179/262 (68%)	176 (98%)	3 (2%)	0	100	100
1	F	179/262 (68%)	176 (98%)	3 (2%)	0	100	100
1	G	179/262 (68%)	176 (98%)	3 (2%)	0	100	100
1	H	179/262 (68%)	176 (98%)	3 (2%)	0	100	100
All	All	1432/2096 (68%)	1408 (98%)	24 (2%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	146/212 (69%)	145 (99%)	1 (1%)	81	89
1	B	146/212 (69%)	145 (99%)	1 (1%)	81	89
1	C	146/212 (69%)	145 (99%)	1 (1%)	81	89
1	D	146/212 (69%)	145 (99%)	1 (1%)	81	89
1	E	146/212 (69%)	145 (99%)	1 (1%)	81	89
1	F	146/212 (69%)	145 (99%)	1 (1%)	81	89
1	G	146/212 (69%)	145 (99%)	1 (1%)	81	89
1	H	146/212 (69%)	145 (99%)	1 (1%)	81	89
All	All	1168/1696 (69%)	1160 (99%)	8 (1%)	80	89

All (8) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	157	VAL
1	B	157	VAL
1	C	157	VAL
1	D	157	VAL
1	E	157	VAL
1	F	157	VAL
1	G	157	VAL
1	H	157	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. There are no such sidechains identified.

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

104 ligands are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
3	A1H8M	B	313	-	18,19,49	1.24	2 (11%)	17,20,57	3.78	3 (17%)
2	CLR	H	302	-	31,31,31	1.37	5 (16%)	48,48,48	1.77	13 (27%)
3	A1H8M	C	311	-	39,40,49	1.56	5 (12%)	45,48,57	2.13	4 (8%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
3	A1H8M	E	308	-	43,44,49	1.53	5 (11%)	49,52,57	2.68	8 (16%)
3	A1H8M	D	307	-	36,37,49	1.83	7 (19%)	42,45,57	2.51	7 (16%)
3	A1H8M	G	312	-	42,43,49	1.56	6 (14%)	48,51,57	2.47	5 (10%)
3	A1H8M	A	308	-	43,44,49	1.53	5 (11%)	49,52,57	2.68	8 (16%)
2	CLR	G	304	-	31,31,31	1.05	2 (6%)	48,48,48	0.73	0
3	A1H8M	E	309	-	42,43,49	1.60	5 (11%)	48,51,57	2.26	2 (4%)
2	CLR	G	303	-	31,31,31	1.00	1 (3%)	48,48,48	0.70	0
3	A1H8M	G	305	-	46,47,49	1.46	6 (13%)	52,55,57	2.25	7 (13%)
3	A1H8M	F	309	-	42,43,49	1.60	4 (9%)	48,51,57	2.26	2 (4%)
2	CLR	E	302	-	31,31,31	1.37	4 (12%)	48,48,48	1.77	13 (27%)
2	CLR	F	301	-	31,31,31	0.96	0	48,48,48	0.43	0
2	CLR	D	302	-	31,31,31	1.37	5 (16%)	48,48,48	1.77	13 (27%)
3	A1H8M	B	310	-	22,23,49	1.60	4 (18%)	23,25,57	2.76	4 (17%)
3	A1H8M	C	310	-	22,23,49	1.60	4 (18%)	23,25,57	2.76	4 (17%)
3	A1H8M	E	312	-	42,43,49	1.56	6 (14%)	48,51,57	2.47	5 (10%)
2	CLR	C	303	-	31,31,31	1.00	1 (3%)	48,48,48	0.70	0
2	CLR	E	304	-	31,31,31	1.05	2 (6%)	48,48,48	0.73	0
3	A1H8M	D	309	-	42,43,49	1.60	5 (11%)	48,51,57	2.26	2 (4%)
2	CLR	C	301	-	31,31,31	0.96	0	48,48,48	0.43	0
3	A1H8M	F	313	-	18,19,49	1.24	2 (11%)	17,20,57	3.77	3 (17%)
2	CLR	A	303	-	31,31,31	1.00	1 (3%)	48,48,48	0.70	0
3	A1H8M	G	310	-	22,23,49	1.60	4 (18%)	23,25,57	2.76	4 (17%)
3	A1H8M	H	306	-	42,43,49	1.55	4 (9%)	48,51,57	2.24	2 (4%)
3	A1H8M	C	307	-	36,37,49	1.82	7 (19%)	42,45,57	2.51	7 (16%)
3	A1H8M	B	307	-	36,37,49	1.82	7 (19%)	42,45,57	2.51	7 (16%)
3	A1H8M	G	307	-	36,37,49	1.82	7 (19%)	42,45,57	2.51	7 (16%)
2	CLR	B	302	-	31,31,31	1.37	4 (12%)	48,48,48	1.77	13 (27%)
3	A1H8M	G	311	-	39,40,49	1.56	5 (12%)	45,48,57	2.13	4 (8%)
2	CLR	D	304	-	31,31,31	1.04	1 (3%)	48,48,48	0.73	0
3	A1H8M	E	306	-	42,43,49	1.56	5 (11%)	48,51,57	2.23	2 (4%)
2	CLR	A	302	-	31,31,31	1.37	4 (12%)	48,48,48	1.77	13 (27%)
3	A1H8M	D	306	-	42,43,49	1.56	4 (9%)	48,51,57	2.24	2 (4%)
3	A1H8M	F	311	-	39,40,49	1.56	5 (12%)	45,48,57	2.13	4 (8%)
2	CLR	F	304	-	31,31,31	1.04	1 (3%)	48,48,48	0.73	0
3	A1H8M	H	308	-	43,44,49	1.53	5 (11%)	49,52,57	2.69	8 (16%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
3	A1H8M	F	310	-	22,23,49	1.60	4 (18%)	23,25,57	2.76	4 (17%)
2	CLR	E	301	-	31,31,31	0.96	0	48,48,48	0.43	0
3	A1H8M	D	308	-	43,44,49	1.53	5 (11%)	49,52,57	2.69	8 (16%)
2	CLR	F	303	-	31,31,31	1.00	1 (3%)	48,48,48	0.70	0
2	CLR	H	301	-	31,31,31	0.96	0	48,48,48	0.43	0
3	A1H8M	H	312	-	42,43,49	1.56	6 (14%)	48,51,57	2.47	5 (10%)
3	A1H8M	D	312	-	42,43,49	1.56	6 (14%)	48,51,57	2.47	5 (10%)
3	A1H8M	A	312	-	42,43,49	1.56	6 (14%)	48,51,57	2.47	5 (10%)
2	CLR	D	301	-	31,31,31	0.97	0	48,48,48	0.43	0
3	A1H8M	C	305	-	46,47,49	1.46	6 (13%)	52,55,57	2.25	7 (13%)
3	A1H8M	B	306	-	42,43,49	1.56	5 (11%)	48,51,57	2.23	2 (4%)
2	CLR	H	304	-	31,31,31	1.05	2 (6%)	48,48,48	0.73	0
3	A1H8M	D	311	-	39,40,49	1.56	5 (12%)	45,48,57	2.13	3 (6%)
3	A1H8M	H	309	-	42,43,49	1.60	4 (9%)	48,51,57	2.26	2 (4%)
3	A1H8M	G	313	-	18,19,49	1.24	2 (11%)	17,20,57	3.77	3 (17%)
2	CLR	B	304	-	31,31,31	1.05	2 (6%)	48,48,48	0.72	0
3	A1H8M	A	309	-	42,43,49	1.60	5 (11%)	48,51,57	2.26	2 (4%)
3	A1H8M	A	310	-	22,23,49	1.60	4 (18%)	23,25,57	2.76	4 (17%)
3	A1H8M	B	308	-	43,44,49	1.54	5 (11%)	49,52,57	2.68	8 (16%)
3	A1H8M	E	305	-	46,47,49	1.46	6 (13%)	52,55,57	2.25	7 (13%)
2	CLR	E	303	-	31,31,31	1.00	1 (3%)	48,48,48	0.70	0
3	A1H8M	H	313	-	18,19,49	1.24	2 (11%)	17,20,57	3.77	3 (17%)
3	A1H8M	A	313	-	18,19,49	1.24	2 (11%)	17,20,57	3.77	3 (17%)
3	A1H8M	G	308	-	43,44,49	1.53	5 (11%)	49,52,57	2.68	8 (16%)
3	A1H8M	H	311	-	39,40,49	1.56	5 (12%)	45,48,57	2.14	3 (6%)
2	CLR	F	302	-	31,31,31	1.37	5 (16%)	48,48,48	1.77	13 (27%)
3	A1H8M	D	310	-	22,23,49	1.60	4 (18%)	23,25,57	2.76	4 (17%)
3	A1H8M	C	308	-	43,44,49	1.53	5 (11%)	49,52,57	2.68	8 (16%)
3	A1H8M	G	309	-	42,43,49	1.60	5 (11%)	48,51,57	2.26	2 (4%)
2	CLR	C	302	-	31,31,31	1.37	4 (12%)	48,48,48	1.77	13 (27%)
3	A1H8M	F	308	-	43,44,49	1.53	5 (11%)	49,52,57	2.68	8 (16%)
3	A1H8M	A	311	-	39,40,49	1.56	5 (12%)	45,48,57	2.13	4 (8%)
3	A1H8M	E	307	-	36,37,49	1.82	7 (19%)	42,45,57	2.51	7 (16%)
3	A1H8M	A	305	-	46,47,49	1.46	6 (13%)	52,55,57	2.25	7 (13%)
3	A1H8M	F	307	-	36,37,49	1.82	7 (19%)	42,45,57	2.51	7 (16%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
2	CLR	H	303	-	31,31,31	1.00	1 (3%)	48,48,48	0.70	0
3	A1H8M	B	309	-	42,43,49	1.60	5 (11%)	48,51,57	2.26	2 (4%)
2	CLR	G	302	-	31,31,31	1.37	4 (12%)	48,48,48	1.77	13 (27%)
3	A1H8M	F	312	-	42,43,49	1.56	6 (14%)	48,51,57	2.47	5 (10%)
3	A1H8M	A	307	-	36,37,49	1.82	7 (19%)	42,45,57	2.51	7 (16%)
3	A1H8M	B	305	-	46,47,49	1.46	6 (13%)	52,55,57	2.25	8 (15%)
2	CLR	B	303	-	31,31,31	1.00	1 (3%)	48,48,48	0.70	0
2	CLR	B	301	-	31,31,31	0.96	0	48,48,48	0.44	0
3	A1H8M	F	305	-	46,47,49	1.46	5 (10%)	52,55,57	2.25	7 (13%)
3	A1H8M	F	306	-	42,43,49	1.56	4 (9%)	48,51,57	2.23	2 (4%)
3	A1H8M	H	310	-	22,23,49	1.60	4 (18%)	23,25,57	2.76	4 (17%)
2	CLR	A	301	-	31,31,31	0.96	0	48,48,48	0.43	0
3	A1H8M	C	306	-	42,43,49	1.56	5 (11%)	48,51,57	2.23	2 (4%)
3	A1H8M	B	311	-	39,40,49	1.56	5 (12%)	45,48,57	2.13	4 (8%)
3	A1H8M	H	307	-	36,37,49	1.82	7 (19%)	42,45,57	2.51	7 (16%)
3	A1H8M	E	313	-	18,19,49	1.24	2 (11%)	17,20,57	3.77	3 (17%)
3	A1H8M	A	306	-	42,43,49	1.56	5 (11%)	48,51,57	2.23	2 (4%)
2	CLR	C	304	-	31,31,31	1.05	2 (6%)	48,48,48	0.73	0
3	A1H8M	D	305	-	46,47,49	1.46	5 (10%)	52,55,57	2.25	7 (13%)
2	CLR	D	303	-	31,31,31	1.00	1 (3%)	48,48,48	0.69	0
3	A1H8M	C	309	-	42,43,49	1.60	5 (11%)	48,51,57	2.26	2 (4%)
3	A1H8M	G	306	-	42,43,49	1.56	5 (11%)	48,51,57	2.23	2 (4%)
3	A1H8M	D	313	-	18,19,49	1.23	2 (11%)	17,20,57	3.78	3 (17%)
3	A1H8M	B	312	-	42,43,49	1.56	6 (14%)	48,51,57	2.47	5 (10%)
2	CLR	G	301	-	31,31,31	0.96	0	48,48,48	0.43	0
3	A1H8M	E	310	-	22,23,49	1.60	4 (18%)	23,25,57	2.76	4 (17%)
3	A1H8M	E	311	-	39,40,49	1.56	5 (12%)	45,48,57	2.13	4 (8%)
3	A1H8M	C	313	-	18,19,49	1.24	2 (11%)	17,20,57	3.77	3 (17%)
2	CLR	A	304	-	31,31,31	1.05	2 (6%)	48,48,48	0.73	0
3	A1H8M	C	312	-	42,43,49	1.56	6 (14%)	48,51,57	2.47	5 (10%)
3	A1H8M	H	305	-	46,47,49	1.46	6 (13%)	52,55,57	2.25	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
3	A1H8M	B	313	-	-	9/20/20/54	-
2	CLR	H	302	-	-	1/10/68/68	0/4/4/4
3	A1H8M	C	311	-	-	26/45/45/54	-
3	A1H8M	E	308	-	-	27/49/49/54	-
3	A1H8M	D	307	-	-	21/42/42/54	-
3	A1H8M	G	312	-	-	23/48/48/54	-
3	A1H8M	A	308	-	-	27/49/49/54	-
2	CLR	G	304	-	-	0/10/68/68	0/4/4/4
3	A1H8M	E	309	-	-	16/48/48/54	-
2	CLR	G	303	-	-	0/10/68/68	0/4/4/4
3	A1H8M	G	305	-	-	30/52/52/54	-
3	A1H8M	F	309	-	-	16/48/48/54	-
2	CLR	E	302	-	-	1/10/68/68	0/4/4/4
2	CLR	F	301	-	-	0/10/68/68	0/4/4/4
2	CLR	D	302	-	-	1/10/68/68	0/4/4/4
3	A1H8M	B	310	-	-	14/25/25/54	-
3	A1H8M	C	310	-	-	14/25/25/54	-
3	A1H8M	E	312	-	-	23/48/48/54	-
2	CLR	C	303	-	-	0/10/68/68	0/4/4/4
2	CLR	E	304	-	-	0/10/68/68	0/4/4/4
3	A1H8M	D	309	-	-	16/48/48/54	-
2	CLR	C	301	-	-	0/10/68/68	0/4/4/4
3	A1H8M	F	313	-	-	9/20/20/54	-
2	CLR	A	303	-	-	0/10/68/68	0/4/4/4
3	A1H8M	G	310	-	-	14/25/25/54	-
3	A1H8M	H	306	-	-	30/48/48/54	-
3	A1H8M	C	307	-	-	21/42/42/54	-
3	A1H8M	B	307	-	-	21/42/42/54	-
3	A1H8M	G	307	-	-	21/42/42/54	-
2	CLR	B	302	-	-	1/10/68/68	0/4/4/4
3	A1H8M	G	311	-	-	26/45/45/54	-
2	CLR	D	304	-	-	0/10/68/68	0/4/4/4
3	A1H8M	E	306	-	-	30/48/48/54	-
2	CLR	A	302	-	-	1/10/68/68	0/4/4/4
3	A1H8M	D	306	-	-	30/48/48/54	-
3	A1H8M	F	311	-	-	26/45/45/54	-
2	CLR	F	304	-	-	0/10/68/68	0/4/4/4
3	A1H8M	H	308	-	-	27/49/49/54	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	A1H8M	F	310	-	-	14/25/25/54	-
2	CLR	E	301	-	-	0/10/68/68	0/4/4/4
3	A1H8M	D	308	-	-	27/49/49/54	-
2	CLR	F	303	-	-	0/10/68/68	0/4/4/4
2	CLR	H	301	-	-	0/10/68/68	0/4/4/4
3	A1H8M	H	312	-	-	23/48/48/54	-
3	A1H8M	D	312	-	-	23/48/48/54	-
3	A1H8M	A	312	-	-	23/48/48/54	-
2	CLR	D	301	-	-	0/10/68/68	0/4/4/4
3	A1H8M	C	305	-	-	30/52/52/54	-
3	A1H8M	B	306	-	-	30/48/48/54	-
2	CLR	H	304	-	-	0/10/68/68	0/4/4/4
3	A1H8M	D	311	-	-	26/45/45/54	-
3	A1H8M	H	309	-	-	16/48/48/54	-
3	A1H8M	G	313	-	-	9/20/20/54	-
2	CLR	B	304	-	-	0/10/68/68	0/4/4/4
3	A1H8M	A	309	-	-	16/48/48/54	-
3	A1H8M	A	310	-	-	14/25/25/54	-
3	A1H8M	B	308	-	-	27/49/49/54	-
3	A1H8M	E	305	-	-	30/52/52/54	-
2	CLR	E	303	-	-	0/10/68/68	0/4/4/4
3	A1H8M	H	313	-	-	9/20/20/54	-
3	A1H8M	A	313	-	-	9/20/20/54	-
3	A1H8M	G	308	-	-	27/49/49/54	-
3	A1H8M	H	311	-	-	26/45/45/54	-
2	CLR	F	302	-	-	1/10/68/68	0/4/4/4
3	A1H8M	D	310	-	-	14/25/25/54	-
3	A1H8M	C	308	-	-	27/49/49/54	-
3	A1H8M	G	309	-	-	16/48/48/54	-
2	CLR	C	302	-	-	1/10/68/68	0/4/4/4
3	A1H8M	F	308	-	-	27/49/49/54	-
3	A1H8M	A	311	-	-	26/45/45/54	-
3	A1H8M	E	307	-	-	21/42/42/54	-
3	A1H8M	A	305	-	-	30/52/52/54	-
3	A1H8M	F	307	-	-	21/42/42/54	-
2	CLR	H	303	-	-	0/10/68/68	0/4/4/4

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	A1H8M	B	309	-	-	16/48/48/54	-
2	CLR	G	302	-	-	1/10/68/68	0/4/4/4
3	A1H8M	F	312	-	-	23/48/48/54	-
3	A1H8M	A	307	-	-	21/42/42/54	-
3	A1H8M	B	305	-	-	30/52/52/54	-
2	CLR	B	303	-	-	0/10/68/68	0/4/4/4
2	CLR	B	301	-	-	0/10/68/68	0/4/4/4
3	A1H8M	F	305	-	-	30/52/52/54	-
3	A1H8M	F	306	-	-	30/48/48/54	-
3	A1H8M	H	310	-	-	14/25/25/54	-
2	CLR	A	301	-	-	0/10/68/68	0/4/4/4
3	A1H8M	C	306	-	-	30/48/48/54	-
3	A1H8M	B	311	-	-	26/45/45/54	-
3	A1H8M	H	307	-	-	21/42/42/54	-
3	A1H8M	E	313	-	-	9/20/20/54	-
3	A1H8M	A	306	-	-	30/48/48/54	-
2	CLR	C	304	-	-	0/10/68/68	0/4/4/4
3	A1H8M	D	305	-	-	30/52/52/54	-
2	CLR	D	303	-	-	0/10/68/68	0/4/4/4
3	A1H8M	C	309	-	-	16/48/48/54	-
3	A1H8M	G	306	-	-	30/48/48/54	-
3	A1H8M	D	313	-	-	9/20/20/54	-
3	A1H8M	B	312	-	-	23/48/48/54	-
2	CLR	G	301	-	-	0/10/68/68	0/4/4/4
3	A1H8M	E	310	-	-	14/25/25/54	-
3	A1H8M	E	311	-	-	26/45/45/54	-
3	A1H8M	C	313	-	-	9/20/20/54	-
2	CLR	A	304	-	-	0/10/68/68	0/4/4/4
3	A1H8M	C	312	-	-	23/48/48/54	-
3	A1H8M	H	305	-	-	30/52/52/54	-

All (410) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	307	A1H8M	C21-N21	6.93	1.48	1.34
3	A	307	A1H8M	C21-N21	6.91	1.48	1.34
3	C	307	A1H8M	C21-N21	6.91	1.48	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	307	A1H8M	C21-N21	6.91	1.48	1.34
3	G	307	A1H8M	C21-N21	6.91	1.48	1.34
3	F	307	A1H8M	C21-N21	6.90	1.48	1.34
3	H	307	A1H8M	C21-N21	6.90	1.48	1.34
3	B	307	A1H8M	C21-N21	6.90	1.48	1.34
3	B	309	A1H8M	C21-N21	6.83	1.48	1.34
3	A	309	A1H8M	C21-N21	6.82	1.48	1.34
3	C	309	A1H8M	C21-N21	6.82	1.48	1.34
3	E	309	A1H8M	C21-N21	6.82	1.48	1.34
3	G	309	A1H8M	C21-N21	6.82	1.48	1.34
3	D	309	A1H8M	C21-N21	6.82	1.48	1.34
3	F	309	A1H8M	C21-N21	6.82	1.48	1.34
3	H	309	A1H8M	C21-N21	6.82	1.48	1.34
3	B	306	A1H8M	C21-N21	6.68	1.48	1.34
3	A	306	A1H8M	C21-N21	6.65	1.48	1.34
3	C	306	A1H8M	C21-N21	6.65	1.48	1.34
3	E	306	A1H8M	C21-N21	6.65	1.48	1.34
3	G	306	A1H8M	C21-N21	6.65	1.48	1.34
3	D	306	A1H8M	C21-N21	6.62	1.48	1.34
3	F	306	A1H8M	C21-N21	6.62	1.48	1.34
3	H	306	A1H8M	C21-N21	6.62	1.48	1.34
3	B	312	A1H8M	C21-N21	6.32	1.47	1.34
3	A	312	A1H8M	C21-N21	6.27	1.47	1.34
3	C	312	A1H8M	C21-N21	6.27	1.47	1.34
3	E	312	A1H8M	C21-N21	6.27	1.47	1.34
3	G	312	A1H8M	C21-N21	6.27	1.47	1.34
3	D	312	A1H8M	C21-N21	6.26	1.47	1.34
3	F	312	A1H8M	C21-N21	6.26	1.47	1.34
3	H	312	A1H8M	C21-N21	6.26	1.47	1.34
3	A	311	A1H8M	C21-N21	6.17	1.47	1.34
3	C	311	A1H8M	C21-N21	6.17	1.47	1.34
3	E	311	A1H8M	C21-N21	6.17	1.47	1.34
3	G	311	A1H8M	C21-N21	6.17	1.47	1.34
3	B	311	A1H8M	C21-N21	6.17	1.47	1.34
3	D	311	A1H8M	C21-N21	6.17	1.47	1.34
3	F	311	A1H8M	C21-N21	6.17	1.47	1.34
3	H	311	A1H8M	C21-N21	6.17	1.47	1.34
3	B	308	A1H8M	C21-N21	5.82	1.46	1.34
3	A	308	A1H8M	C21-N21	5.80	1.46	1.34
3	C	308	A1H8M	C21-N21	5.80	1.46	1.34
3	E	308	A1H8M	C21-N21	5.80	1.46	1.34
3	G	308	A1H8M	C21-N21	5.80	1.46	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	308	A1H8M	C21-N21	5.79	1.46	1.34
3	H	308	A1H8M	C21-N21	5.79	1.46	1.34
3	F	308	A1H8M	C21-N21	5.78	1.46	1.34
3	D	305	A1H8M	C21-N21	5.51	1.45	1.34
3	F	305	A1H8M	C21-N21	5.51	1.45	1.34
3	H	305	A1H8M	C21-N21	5.51	1.45	1.34
3	A	305	A1H8M	C21-N21	5.51	1.45	1.34
3	C	305	A1H8M	C21-N21	5.51	1.45	1.34
3	E	305	A1H8M	C21-N21	5.51	1.45	1.34
3	G	305	A1H8M	C21-N21	5.51	1.45	1.34
3	B	305	A1H8M	C21-N21	5.48	1.45	1.34
3	D	305	A1H8M	O01-C01	-3.78	1.36	1.43
3	H	305	A1H8M	O01-C01	-3.78	1.36	1.43
3	A	305	A1H8M	O01-C01	-3.76	1.36	1.43
3	C	305	A1H8M	O01-C01	-3.76	1.36	1.43
3	E	305	A1H8M	O01-C01	-3.76	1.36	1.43
3	G	305	A1H8M	O01-C01	-3.76	1.36	1.43
3	D	310	A1H8M	O01-C01	-3.75	1.36	1.43
3	H	310	A1H8M	O01-C01	-3.75	1.36	1.43
3	F	305	A1H8M	O01-C01	-3.75	1.36	1.43
3	A	310	A1H8M	O01-C01	-3.74	1.36	1.43
3	B	305	A1H8M	O01-C01	-3.74	1.36	1.43
3	C	310	A1H8M	O01-C01	-3.74	1.36	1.43
3	E	310	A1H8M	O01-C01	-3.74	1.36	1.43
3	G	310	A1H8M	O01-C01	-3.74	1.36	1.43
3	B	310	A1H8M	O01-C01	-3.73	1.36	1.43
3	F	310	A1H8M	O01-C01	-3.73	1.36	1.43
3	B	310	A1H8M	C21-N21	3.69	1.47	1.34
3	A	310	A1H8M	C21-N21	3.67	1.47	1.34
3	C	310	A1H8M	C21-N21	3.67	1.47	1.34
3	E	310	A1H8M	C21-N21	3.67	1.47	1.34
3	G	310	A1H8M	C21-N21	3.67	1.47	1.34
3	D	310	A1H8M	C21-N21	3.67	1.47	1.34
3	F	310	A1H8M	C21-N21	3.67	1.47	1.34
3	H	310	A1H8M	C21-N21	3.67	1.47	1.34
3	D	307	A1H8M	O01-C01	-3.39	1.37	1.43
3	H	307	A1H8M	O01-C01	-3.39	1.37	1.43
3	A	307	A1H8M	O01-C01	-3.39	1.37	1.43
3	C	307	A1H8M	O01-C01	-3.39	1.37	1.43
3	E	307	A1H8M	O01-C01	-3.39	1.37	1.43
3	G	307	A1H8M	O01-C01	-3.39	1.37	1.43
3	B	307	A1H8M	O01-C01	-3.37	1.37	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	F	307	A1H8M	O01-C01	-3.37	1.37	1.43
3	A	305	A1H8M	O21-C21	-3.29	1.16	1.23
3	C	305	A1H8M	O21-C21	-3.29	1.16	1.23
3	E	305	A1H8M	O21-C21	-3.29	1.16	1.23
3	G	305	A1H8M	O21-C21	-3.29	1.16	1.23
3	B	305	A1H8M	O21-C21	-3.29	1.16	1.23
3	D	305	A1H8M	O21-C21	-3.29	1.16	1.23
3	F	305	A1H8M	O21-C21	-3.29	1.16	1.23
3	H	305	A1H8M	O21-C21	-3.29	1.16	1.23
3	F	313	A1H8M	C01-C02	3.23	1.55	1.50
3	H	313	A1H8M	C01-C02	3.23	1.55	1.50
3	A	313	A1H8M	C01-C02	3.22	1.55	1.50
3	C	313	A1H8M	C01-C02	3.22	1.55	1.50
3	E	313	A1H8M	C01-C02	3.22	1.55	1.50
3	G	313	A1H8M	C01-C02	3.22	1.55	1.50
3	B	313	A1H8M	C01-C02	3.21	1.55	1.50
3	D	313	A1H8M	C01-C02	3.21	1.55	1.50
3	F	311	A1H8M	C01-C02	3.14	1.55	1.50
3	A	311	A1H8M	C01-C02	3.13	1.55	1.50
3	C	311	A1H8M	C01-C02	3.13	1.55	1.50
3	E	311	A1H8M	C01-C02	3.13	1.55	1.50
3	G	311	A1H8M	C01-C02	3.13	1.55	1.50
3	B	308	A1H8M	C6-C7	3.13	1.57	1.51
3	B	309	A1H8M	C01-C02	3.12	1.55	1.50
3	D	309	A1H8M	C01-C02	3.12	1.55	1.50
3	A	309	A1H8M	C01-C02	3.11	1.55	1.50
3	C	309	A1H8M	C01-C02	3.11	1.55	1.50
3	E	309	A1H8M	C01-C02	3.11	1.55	1.50
3	G	309	A1H8M	C01-C02	3.11	1.55	1.50
3	A	308	A1H8M	C6-C7	3.11	1.57	1.51
3	C	308	A1H8M	C6-C7	3.11	1.57	1.51
3	E	308	A1H8M	C6-C7	3.11	1.57	1.51
3	G	308	A1H8M	C6-C7	3.11	1.57	1.51
3	B	311	A1H8M	C01-C02	3.11	1.55	1.50
3	D	311	A1H8M	C01-C02	3.11	1.55	1.50
3	H	311	A1H8M	C01-C02	3.11	1.55	1.50
3	F	308	A1H8M	C6-C7	3.11	1.57	1.51
3	D	306	A1H8M	C01-C02	3.10	1.55	1.50
3	D	308	A1H8M	C6-C7	3.10	1.57	1.51
3	H	308	A1H8M	C6-C7	3.10	1.57	1.51
3	F	309	A1H8M	C01-C02	3.10	1.55	1.50
3	H	309	A1H8M	C01-C02	3.10	1.55	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	B	306	A1H8M	C01-C02	3.10	1.55	1.50
3	F	306	A1H8M	C01-C02	3.10	1.55	1.50
3	A	306	A1H8M	C01-C02	3.09	1.55	1.50
3	C	306	A1H8M	C01-C02	3.09	1.55	1.50
3	E	306	A1H8M	C01-C02	3.09	1.55	1.50
3	G	306	A1H8M	C01-C02	3.09	1.55	1.50
3	D	312	A1H8M	C01-C02	3.09	1.55	1.50
3	H	312	A1H8M	C01-C02	3.09	1.55	1.50
3	H	306	A1H8M	C01-C02	3.06	1.55	1.50
3	A	312	A1H8M	C01-C02	3.06	1.55	1.50
3	C	312	A1H8M	C01-C02	3.06	1.55	1.50
3	E	312	A1H8M	C01-C02	3.06	1.55	1.50
3	G	312	A1H8M	C01-C02	3.06	1.55	1.50
3	F	305	A1H8M	P-O4	-3.06	1.41	1.55
3	H	305	A1H8M	P-O4	-3.06	1.41	1.55
3	B	312	A1H8M	C01-C02	3.05	1.55	1.50
3	F	312	A1H8M	C01-C02	3.05	1.55	1.50
3	A	305	A1H8M	P-O4	-3.04	1.41	1.55
3	C	305	A1H8M	P-O4	-3.04	1.41	1.55
3	E	305	A1H8M	P-O4	-3.04	1.41	1.55
3	G	305	A1H8M	P-O4	-3.04	1.41	1.55
3	D	305	A1H8M	P-O4	-3.04	1.41	1.55
3	B	305	A1H8M	P-O4	-3.04	1.41	1.55
3	A	308	A1H8M	O21-C21	-2.97	1.17	1.23
3	C	308	A1H8M	O21-C21	-2.97	1.17	1.23
3	E	308	A1H8M	O21-C21	-2.97	1.17	1.23
3	G	308	A1H8M	O21-C21	-2.97	1.17	1.23
3	B	308	A1H8M	O21-C21	-2.96	1.17	1.23
3	D	308	A1H8M	O21-C21	-2.96	1.17	1.23
3	F	308	A1H8M	O21-C21	-2.96	1.17	1.23
3	H	308	A1H8M	O21-C21	-2.96	1.17	1.23
3	B	307	A1H8M	C3-N2	-2.84	1.41	1.50
3	D	307	A1H8M	C3-N2	-2.84	1.41	1.50
3	F	307	A1H8M	C3-N2	-2.84	1.41	1.50
3	H	307	A1H8M	C3-N2	-2.84	1.41	1.50
3	A	307	A1H8M	C3-N2	-2.84	1.41	1.50
3	C	307	A1H8M	C3-N2	-2.84	1.41	1.50
3	E	307	A1H8M	C3-N2	-2.84	1.41	1.50
3	G	307	A1H8M	C3-N2	-2.84	1.41	1.50
3	F	308	A1H8M	C01-C02	2.80	1.54	1.50
3	H	308	A1H8M	C01-C02	2.80	1.54	1.50
3	A	308	A1H8M	C01-C02	2.79	1.54	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	308	A1H8M	C01-C02	2.79	1.54	1.50
3	E	308	A1H8M	C01-C02	2.79	1.54	1.50
3	G	308	A1H8M	C01-C02	2.79	1.54	1.50
3	B	308	A1H8M	C01-C02	2.78	1.54	1.50
3	D	308	A1H8M	C01-C02	2.76	1.54	1.50
2	B	302	CLR	C4-C3	2.71	1.56	1.52
2	F	302	CLR	C4-C3	2.71	1.56	1.52
2	A	302	CLR	C4-C3	2.69	1.56	1.52
2	C	302	CLR	C4-C3	2.69	1.56	1.52
2	E	302	CLR	C4-C3	2.69	1.56	1.52
2	G	302	CLR	C4-C3	2.69	1.56	1.52
2	D	302	CLR	C12-C13	-2.69	1.49	1.54
2	H	302	CLR	C12-C13	-2.69	1.49	1.54
2	D	302	CLR	C4-C3	2.68	1.56	1.52
2	H	302	CLR	C4-C3	2.68	1.56	1.52
2	A	302	CLR	C12-C13	-2.66	1.49	1.54
2	C	302	CLR	C12-C13	-2.66	1.49	1.54
2	E	302	CLR	C12-C13	-2.66	1.49	1.54
2	G	302	CLR	C12-C13	-2.66	1.49	1.54
2	F	302	CLR	C12-C13	-2.65	1.49	1.54
2	B	302	CLR	C12-C13	-2.64	1.49	1.54
2	A	302	CLR	C13-C14	-2.64	1.50	1.55
2	C	302	CLR	C13-C14	-2.64	1.50	1.55
2	E	302	CLR	C13-C14	-2.64	1.50	1.55
2	G	302	CLR	C13-C14	-2.64	1.50	1.55
2	B	302	CLR	C13-C14	-2.64	1.50	1.55
2	D	302	CLR	C13-C14	-2.64	1.50	1.55
2	F	302	CLR	C13-C14	-2.64	1.50	1.55
2	H	302	CLR	C13-C14	-2.64	1.50	1.55
3	B	312	A1H8M	C6-C7	2.61	1.56	1.51
3	D	312	A1H8M	C6-C7	2.61	1.56	1.51
3	H	312	A1H8M	C6-C7	2.61	1.56	1.51
3	A	312	A1H8M	C6-C7	2.60	1.56	1.51
3	C	312	A1H8M	C6-C7	2.60	1.56	1.51
3	E	312	A1H8M	C6-C7	2.60	1.56	1.51
3	G	312	A1H8M	C6-C7	2.60	1.56	1.51
3	F	312	A1H8M	C6-C7	2.59	1.56	1.51
2	B	304	CLR	C11-C9	2.55	1.58	1.53
2	D	304	CLR	C11-C9	2.55	1.58	1.53
2	H	304	CLR	C11-C9	2.55	1.58	1.53
2	A	304	CLR	C11-C9	2.52	1.58	1.53
2	C	304	CLR	C11-C9	2.52	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	304	CLR	C11-C9	2.52	1.58	1.53
2	G	304	CLR	C11-C9	2.52	1.58	1.53
2	F	304	CLR	C11-C9	2.49	1.57	1.53
3	A	307	A1H8M	C2-N2	-2.46	1.43	1.51
3	C	307	A1H8M	C2-N2	-2.46	1.43	1.51
3	E	307	A1H8M	C2-N2	-2.46	1.43	1.51
3	G	307	A1H8M	C2-N2	-2.46	1.43	1.51
3	B	307	A1H8M	C2-N2	-2.46	1.43	1.51
3	F	307	A1H8M	C2-N2	-2.46	1.43	1.51
3	H	307	A1H8M	C2-N2	-2.46	1.43	1.51
3	B	309	A1H8M	C22-C21	2.46	1.56	1.51
3	D	307	A1H8M	C2-N2	-2.46	1.43	1.51
3	A	309	A1H8M	C22-C21	2.43	1.56	1.51
3	C	309	A1H8M	C22-C21	2.43	1.56	1.51
3	E	309	A1H8M	C22-C21	2.43	1.56	1.51
3	G	309	A1H8M	C22-C21	2.43	1.56	1.51
3	D	309	A1H8M	C22-C21	2.43	1.56	1.51
3	F	309	A1H8M	C22-C21	2.43	1.56	1.51
3	H	309	A1H8M	C22-C21	2.43	1.56	1.51
2	B	303	CLR	C11-C9	2.37	1.57	1.53
2	D	303	CLR	C11-C9	2.37	1.57	1.53
2	H	303	CLR	C11-C9	2.37	1.57	1.53
3	D	310	A1H8M	C01-C02	2.36	1.54	1.50
3	F	310	A1H8M	C01-C02	2.36	1.54	1.50
3	H	310	A1H8M	C01-C02	2.36	1.54	1.50
3	A	310	A1H8M	C01-C02	2.36	1.54	1.50
3	C	310	A1H8M	C01-C02	2.36	1.54	1.50
3	E	310	A1H8M	C01-C02	2.36	1.54	1.50
3	G	310	A1H8M	C01-C02	2.36	1.54	1.50
2	B	302	CLR	C10-C9	-2.35	1.52	1.56
2	D	302	CLR	C10-C9	-2.35	1.52	1.56
2	F	302	CLR	C10-C9	-2.35	1.52	1.56
2	H	302	CLR	C10-C9	-2.35	1.52	1.56
3	B	310	A1H8M	C01-C02	2.35	1.54	1.50
2	A	302	CLR	C10-C9	-2.35	1.52	1.56
2	C	302	CLR	C10-C9	-2.35	1.52	1.56
2	E	302	CLR	C10-C9	-2.35	1.52	1.56
2	G	302	CLR	C10-C9	-2.35	1.52	1.56
3	B	308	A1H8M	O01-C01	-2.34	1.39	1.43
3	D	308	A1H8M	O01-C01	-2.34	1.39	1.43
2	A	303	CLR	C11-C9	2.34	1.57	1.53
2	C	303	CLR	C11-C9	2.34	1.57	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	303	CLR	C11-C9	2.34	1.57	1.53
2	G	303	CLR	C11-C9	2.34	1.57	1.53
3	F	307	A1H8M	C5-N2	-2.33	1.43	1.50
3	A	308	A1H8M	O01-C01	-2.33	1.39	1.43
3	C	308	A1H8M	O01-C01	-2.33	1.39	1.43
3	E	308	A1H8M	O01-C01	-2.33	1.39	1.43
3	G	308	A1H8M	O01-C01	-2.33	1.39	1.43
3	F	308	A1H8M	O01-C01	-2.32	1.39	1.43
3	H	308	A1H8M	O01-C01	-2.32	1.39	1.43
3	A	307	A1H8M	C5-N2	-2.32	1.43	1.50
3	C	307	A1H8M	C5-N2	-2.32	1.43	1.50
3	E	307	A1H8M	C5-N2	-2.32	1.43	1.50
3	G	307	A1H8M	C5-N2	-2.32	1.43	1.50
2	F	303	CLR	C11-C9	2.31	1.57	1.53
3	D	307	A1H8M	C5-N2	-2.31	1.43	1.50
3	H	307	A1H8M	C5-N2	-2.31	1.43	1.50
3	B	307	A1H8M	C5-N2	-2.30	1.43	1.50
3	A	312	A1H8M	O21-C21	-2.29	1.18	1.23
3	B	312	A1H8M	O21-C21	-2.29	1.18	1.23
3	C	312	A1H8M	O21-C21	-2.29	1.18	1.23
3	D	312	A1H8M	O21-C21	-2.29	1.18	1.23
3	E	312	A1H8M	O21-C21	-2.29	1.18	1.23
3	F	312	A1H8M	O21-C21	-2.29	1.18	1.23
3	G	312	A1H8M	O21-C21	-2.29	1.18	1.23
3	H	312	A1H8M	O21-C21	-2.29	1.18	1.23
3	D	312	A1H8M	O01-C01	-2.25	1.39	1.43
3	B	310	A1H8M	C22-C21	2.23	1.55	1.50
3	D	310	A1H8M	C22-C21	2.23	1.55	1.50
3	H	310	A1H8M	C22-C21	2.23	1.55	1.50
3	A	310	A1H8M	C22-C21	2.22	1.55	1.50
3	C	310	A1H8M	C22-C21	2.22	1.55	1.50
3	E	310	A1H8M	C22-C21	2.22	1.55	1.50
3	G	310	A1H8M	C22-C21	2.22	1.55	1.50
3	F	306	A1H8M	C22-C21	2.22	1.55	1.51
3	F	310	A1H8M	C22-C21	2.20	1.55	1.50
3	A	312	A1H8M	O01-C01	-2.20	1.39	1.43
3	C	312	A1H8M	O01-C01	-2.20	1.39	1.43
3	E	312	A1H8M	O01-C01	-2.20	1.39	1.43
3	G	312	A1H8M	O01-C01	-2.20	1.39	1.43
3	F	312	A1H8M	O01-C01	-2.19	1.39	1.43
3	H	312	A1H8M	O01-C01	-2.19	1.39	1.43
3	B	305	A1H8M	C2-N2	-2.19	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	B	312	A1H8M	O01-C01	-2.19	1.39	1.43
3	B	311	A1H8M	O21-C21	-2.19	1.18	1.23
3	D	305	A1H8M	C2-N2	-2.18	1.44	1.51
3	F	305	A1H8M	C2-N2	-2.18	1.44	1.51
3	A	306	A1H8M	C22-C21	2.18	1.55	1.51
3	C	306	A1H8M	C22-C21	2.18	1.55	1.51
3	E	306	A1H8M	C22-C21	2.18	1.55	1.51
3	G	306	A1H8M	C22-C21	2.18	1.55	1.51
3	A	305	A1H8M	C2-N2	-2.18	1.44	1.51
3	C	305	A1H8M	C2-N2	-2.18	1.44	1.51
3	E	305	A1H8M	C2-N2	-2.18	1.44	1.51
3	G	305	A1H8M	C2-N2	-2.18	1.44	1.51
3	A	311	A1H8M	O21-C21	-2.18	1.18	1.23
3	C	311	A1H8M	O21-C21	-2.18	1.18	1.23
3	E	311	A1H8M	O21-C21	-2.18	1.18	1.23
3	G	311	A1H8M	O21-C21	-2.18	1.18	1.23
3	B	306	A1H8M	C22-C21	2.18	1.55	1.51
3	D	311	A1H8M	O21-C21	-2.17	1.18	1.23
3	F	311	A1H8M	O21-C21	-2.17	1.18	1.23
3	H	311	A1H8M	O21-C21	-2.17	1.18	1.23
3	F	312	A1H8M	C22-C21	2.16	1.55	1.51
3	D	306	A1H8M	C22-C21	2.16	1.55	1.51
3	H	306	A1H8M	C22-C21	2.16	1.55	1.51
3	H	305	A1H8M	C2-N2	-2.15	1.44	1.51
3	D	307	A1H8M	C4-N2	-2.13	1.43	1.50
3	A	312	A1H8M	C22-C21	2.12	1.55	1.51
3	C	312	A1H8M	C22-C21	2.12	1.55	1.51
3	E	312	A1H8M	C22-C21	2.12	1.55	1.51
3	G	312	A1H8M	C22-C21	2.12	1.55	1.51
3	B	311	A1H8M	C22-C21	2.12	1.55	1.51
3	F	311	A1H8M	C22-C21	2.12	1.55	1.51
3	A	307	A1H8M	C4-N2	-2.11	1.43	1.50
3	C	307	A1H8M	C4-N2	-2.11	1.43	1.50
3	E	307	A1H8M	C4-N2	-2.11	1.43	1.50
3	G	307	A1H8M	C4-N2	-2.11	1.43	1.50
3	B	312	A1H8M	C22-C21	2.11	1.55	1.51
3	B	307	A1H8M	C4-N2	-2.11	1.43	1.50
3	F	307	A1H8M	C4-N2	-2.11	1.43	1.50
3	H	307	A1H8M	C4-N2	-2.11	1.43	1.50
3	A	311	A1H8M	C22-C21	2.11	1.55	1.51
3	C	311	A1H8M	C22-C21	2.11	1.55	1.51
3	E	311	A1H8M	C22-C21	2.11	1.55	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	311	A1H8M	C22-C21	2.11	1.55	1.51
3	D	312	A1H8M	C22-C21	2.10	1.55	1.51
3	H	312	A1H8M	C22-C21	2.10	1.55	1.51
3	H	306	A1H8M	O01-C01	-2.10	1.39	1.43
3	D	311	A1H8M	C22-C21	2.09	1.55	1.51
3	H	311	A1H8M	C22-C21	2.09	1.55	1.51
3	A	306	A1H8M	O01-C01	-2.08	1.39	1.43
3	C	306	A1H8M	O01-C01	-2.08	1.39	1.43
3	E	306	A1H8M	O01-C01	-2.08	1.39	1.43
3	G	306	A1H8M	O01-C01	-2.08	1.39	1.43
3	B	306	A1H8M	O01-C01	-2.08	1.39	1.43
3	D	306	A1H8M	O01-C01	-2.08	1.39	1.43
3	F	306	A1H8M	O01-C01	-2.08	1.39	1.43
3	D	307	A1H8M	C22-C21	2.06	1.55	1.51
3	F	309	A1H8M	O01-C01	-2.06	1.39	1.43
3	B	309	A1H8M	O01-C01	-2.05	1.39	1.43
3	D	309	A1H8M	O01-C01	-2.05	1.39	1.43
3	H	309	A1H8M	O01-C01	-2.05	1.39	1.43
3	A	309	A1H8M	O01-C01	-2.05	1.39	1.43
3	C	309	A1H8M	O01-C01	-2.05	1.39	1.43
3	E	309	A1H8M	O01-C01	-2.05	1.39	1.43
3	G	309	A1H8M	O01-C01	-2.05	1.39	1.43
3	F	307	A1H8M	C22-C21	2.04	1.55	1.51
3	A	307	A1H8M	C22-C21	2.04	1.55	1.51
3	C	307	A1H8M	C22-C21	2.04	1.55	1.51
3	E	307	A1H8M	C22-C21	2.04	1.55	1.51
3	G	307	A1H8M	C22-C21	2.04	1.55	1.51
3	B	306	A1H8M	O21-C21	-2.04	1.19	1.23
3	B	305	A1H8M	C3-N2	-2.04	1.44	1.50
3	B	311	A1H8M	O01-C01	-2.03	1.39	1.43
3	D	311	A1H8M	O01-C01	-2.03	1.39	1.43
3	F	311	A1H8M	O01-C01	-2.03	1.39	1.43
3	H	311	A1H8M	O01-C01	-2.03	1.39	1.43
3	F	313	A1H8M	O01-C01	-2.03	1.39	1.43
3	H	313	A1H8M	O01-C01	-2.03	1.39	1.43
3	A	311	A1H8M	O01-C01	-2.03	1.39	1.43
3	C	311	A1H8M	O01-C01	-2.03	1.39	1.43
3	E	311	A1H8M	O01-C01	-2.03	1.39	1.43
3	G	311	A1H8M	O01-C01	-2.03	1.39	1.43
3	B	307	A1H8M	C22-C21	2.02	1.55	1.51
3	H	307	A1H8M	C22-C21	2.02	1.55	1.51
2	B	304	CLR	C20-C17	2.02	1.57	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	H	304	CLR	C20-C17	2.02	1.57	1.54
3	B	309	A1H8M	O21-C21	-2.02	1.19	1.23
3	D	309	A1H8M	O21-C21	-2.02	1.19	1.23
3	H	305	A1H8M	C3-N2	-2.02	1.44	1.50
3	A	305	A1H8M	C3-N2	-2.01	1.44	1.50
3	C	305	A1H8M	C3-N2	-2.01	1.44	1.50
3	E	305	A1H8M	C3-N2	-2.01	1.44	1.50
3	G	305	A1H8M	C3-N2	-2.01	1.44	1.50
2	A	304	CLR	C20-C17	2.01	1.57	1.54
2	C	304	CLR	C20-C17	2.01	1.57	1.54
2	E	304	CLR	C20-C17	2.01	1.57	1.54
2	G	304	CLR	C20-C17	2.01	1.57	1.54
3	A	306	A1H8M	O21-C21	-2.01	1.19	1.23
3	C	306	A1H8M	O21-C21	-2.01	1.19	1.23
3	E	306	A1H8M	O21-C21	-2.01	1.19	1.23
3	G	306	A1H8M	O21-C21	-2.01	1.19	1.23
3	A	309	A1H8M	O21-C21	-2.01	1.19	1.23
3	C	309	A1H8M	O21-C21	-2.01	1.19	1.23
3	E	309	A1H8M	O21-C21	-2.01	1.19	1.23
3	G	309	A1H8M	O21-C21	-2.01	1.19	1.23
3	A	313	A1H8M	O01-C01	-2.00	1.39	1.43
3	C	313	A1H8M	O01-C01	-2.00	1.39	1.43
3	E	313	A1H8M	O01-C01	-2.00	1.39	1.43
3	G	313	A1H8M	O01-C01	-2.00	1.39	1.43
2	D	302	CLR	C8-C9	-2.00	1.49	1.53
2	F	302	CLR	C8-C9	-2.00	1.49	1.53
2	H	302	CLR	C8-C9	-2.00	1.49	1.53
3	B	313	A1H8M	O01-C01	-2.00	1.39	1.43
3	D	313	A1H8M	O01-C01	-2.00	1.39	1.43

All (439) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	B	312	A1H8M	C01-C02-C03	14.23	156.52	124.79
3	F	312	A1H8M	C01-C02-C03	14.23	156.52	124.79
3	A	312	A1H8M	C01-C02-C03	14.23	156.51	124.79
3	C	312	A1H8M	C01-C02-C03	14.23	156.51	124.79
3	E	312	A1H8M	C01-C02-C03	14.23	156.51	124.79
3	G	312	A1H8M	C01-C02-C03	14.23	156.51	124.79
3	D	312	A1H8M	C01-C02-C03	14.22	156.50	124.79
3	H	312	A1H8M	C01-C02-C03	14.22	156.50	124.79
3	B	313	A1H8M	C01-C02-C03	13.89	155.75	124.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	D	313	A1H8M	C01-C02-C03	13.89	155.75	124.79
3	A	313	A1H8M	C01-C02-C03	13.88	155.73	124.79
3	C	313	A1H8M	C01-C02-C03	13.88	155.73	124.79
3	E	313	A1H8M	C01-C02-C03	13.88	155.73	124.79
3	G	313	A1H8M	C01-C02-C03	13.88	155.73	124.79
3	F	313	A1H8M	C01-C02-C03	13.86	155.70	124.79
3	H	313	A1H8M	C01-C02-C03	13.86	155.70	124.79
3	D	308	A1H8M	C01-C02-C03	13.54	154.99	124.79
3	B	308	A1H8M	C01-C02-C03	13.54	154.98	124.79
3	H	308	A1H8M	C01-C02-C03	13.54	154.98	124.79
3	A	308	A1H8M	C01-C02-C03	13.54	154.97	124.79
3	C	308	A1H8M	C01-C02-C03	13.54	154.97	124.79
3	E	308	A1H8M	C01-C02-C03	13.54	154.97	124.79
3	G	308	A1H8M	C01-C02-C03	13.54	154.97	124.79
3	F	308	A1H8M	C01-C02-C03	13.53	154.95	124.79
3	D	309	A1H8M	C01-C02-C03	13.43	154.74	124.79
3	H	309	A1H8M	C01-C02-C03	13.42	154.70	124.79
3	A	309	A1H8M	C01-C02-C03	13.41	154.69	124.79
3	B	309	A1H8M	C01-C02-C03	13.41	154.69	124.79
3	C	309	A1H8M	C01-C02-C03	13.41	154.69	124.79
3	E	309	A1H8M	C01-C02-C03	13.41	154.69	124.79
3	G	309	A1H8M	C01-C02-C03	13.41	154.69	124.79
3	F	309	A1H8M	C01-C02-C03	13.39	154.65	124.79
3	H	306	A1H8M	C01-C02-C03	13.33	154.51	124.79
3	D	306	A1H8M	C01-C02-C03	13.32	154.49	124.79
3	A	306	A1H8M	C01-C02-C03	13.31	154.46	124.79
3	C	306	A1H8M	C01-C02-C03	13.31	154.46	124.79
3	E	306	A1H8M	C01-C02-C03	13.31	154.46	124.79
3	G	306	A1H8M	C01-C02-C03	13.31	154.46	124.79
3	B	306	A1H8M	C01-C02-C03	13.30	154.45	124.79
3	F	306	A1H8M	C01-C02-C03	13.30	154.45	124.79
3	B	307	A1H8M	C01-C02-C03	12.51	152.68	124.79
3	D	307	A1H8M	C01-C02-C03	12.50	152.67	124.79
3	H	307	A1H8M	C01-C02-C03	12.50	152.67	124.79
3	F	307	A1H8M	C01-C02-C03	12.50	152.66	124.79
3	A	307	A1H8M	C01-C02-C03	12.50	152.65	124.79
3	C	307	A1H8M	C01-C02-C03	12.50	152.65	124.79
3	E	307	A1H8M	C01-C02-C03	12.50	152.65	124.79
3	G	307	A1H8M	C01-C02-C03	12.50	152.65	124.79
3	F	305	A1H8M	C01-C02-C03	11.47	150.37	124.79
3	A	305	A1H8M	C01-C02-C03	11.46	150.35	124.79
3	C	305	A1H8M	C01-C02-C03	11.46	150.35	124.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	E	305	A1H8M	C01-C02-C03	11.46	150.35	124.79
3	G	305	A1H8M	C01-C02-C03	11.46	150.35	124.79
3	B	305	A1H8M	C01-C02-C03	11.46	150.35	124.79
3	D	305	A1H8M	C01-C02-C03	11.45	150.33	124.79
3	H	305	A1H8M	C01-C02-C03	11.45	150.33	124.79
3	D	311	A1H8M	C01-C02-C03	11.43	150.27	124.79
3	H	311	A1H8M	C01-C02-C03	11.43	150.27	124.79
3	A	311	A1H8M	C01-C02-C03	11.40	150.22	124.79
3	C	311	A1H8M	C01-C02-C03	11.40	150.22	124.79
3	E	311	A1H8M	C01-C02-C03	11.40	150.22	124.79
3	G	311	A1H8M	C01-C02-C03	11.40	150.22	124.79
3	F	311	A1H8M	C01-C02-C03	11.40	150.21	124.79
3	B	311	A1H8M	C01-C02-C03	11.39	150.19	124.79
3	D	310	A1H8M	C01-C02-C03	10.53	148.26	124.79
3	H	310	A1H8M	C01-C02-C03	10.53	148.26	124.79
3	A	310	A1H8M	C01-C02-C03	10.51	148.24	124.79
3	C	310	A1H8M	C01-C02-C03	10.51	148.24	124.79
3	E	310	A1H8M	C01-C02-C03	10.51	148.24	124.79
3	G	310	A1H8M	C01-C02-C03	10.51	148.24	124.79
3	F	310	A1H8M	C01-C02-C03	10.51	148.23	124.79
3	B	310	A1H8M	C01-C02-C03	10.51	148.22	124.79
3	D	311	A1H8M	C04-C03-C02	7.21	157.65	125.39
3	H	311	A1H8M	C04-C03-C02	7.21	157.65	125.39
3	F	311	A1H8M	C04-C03-C02	7.20	157.61	125.39
3	A	311	A1H8M	C04-C03-C02	7.20	157.60	125.39
3	C	311	A1H8M	C04-C03-C02	7.20	157.60	125.39
3	E	311	A1H8M	C04-C03-C02	7.20	157.60	125.39
3	G	311	A1H8M	C04-C03-C02	7.20	157.60	125.39
3	B	311	A1H8M	C04-C03-C02	7.19	157.54	125.39
3	B	308	A1H8M	C7-N21-C21	7.04	135.34	123.48
3	D	308	A1H8M	C7-N21-C21	7.03	135.33	123.48
3	H	308	A1H8M	C7-N21-C21	7.03	135.33	123.48
3	A	308	A1H8M	C7-N21-C21	7.02	135.31	123.48
3	C	308	A1H8M	C7-N21-C21	7.02	135.31	123.48
3	E	308	A1H8M	C7-N21-C21	7.02	135.31	123.48
3	G	308	A1H8M	C7-N21-C21	7.02	135.31	123.48
3	F	308	A1H8M	C7-N21-C21	6.99	135.27	123.48
3	F	309	A1H8M	C04-C03-C02	6.67	155.22	125.39
3	B	309	A1H8M	C04-C03-C02	6.67	155.21	125.39
3	A	309	A1H8M	C04-C03-C02	6.67	155.20	125.39
3	C	309	A1H8M	C04-C03-C02	6.67	155.20	125.39
3	E	309	A1H8M	C04-C03-C02	6.67	155.20	125.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	G	309	A1H8M	C04-C03-C02	6.67	155.20	125.39
3	H	309	A1H8M	C04-C03-C02	6.66	155.18	125.39
3	D	309	A1H8M	C04-C03-C02	6.66	155.16	125.39
3	D	312	A1H8M	C04-C03-C02	6.64	155.11	125.39
3	H	312	A1H8M	C04-C03-C02	6.64	155.11	125.39
3	A	312	A1H8M	C04-C03-C02	6.64	155.10	125.39
3	C	312	A1H8M	C04-C03-C02	6.64	155.10	125.39
3	E	312	A1H8M	C04-C03-C02	6.64	155.10	125.39
3	G	312	A1H8M	C04-C03-C02	6.64	155.10	125.39
3	B	312	A1H8M	C04-C03-C02	6.64	155.10	125.39
3	F	312	A1H8M	C04-C03-C02	6.64	155.10	125.39
3	F	306	A1H8M	C04-C03-C02	6.51	154.51	125.39
3	H	306	A1H8M	C04-C03-C02	6.51	154.49	125.39
3	A	306	A1H8M	C04-C03-C02	6.50	154.49	125.39
3	C	306	A1H8M	C04-C03-C02	6.50	154.49	125.39
3	E	306	A1H8M	C04-C03-C02	6.50	154.49	125.39
3	G	306	A1H8M	C04-C03-C02	6.50	154.49	125.39
3	B	306	A1H8M	C04-C03-C02	6.50	154.48	125.39
3	D	306	A1H8M	C04-C03-C02	6.50	154.46	125.39
3	B	305	A1H8M	C04-C03-C02	6.42	154.11	125.39
3	D	305	A1H8M	C04-C03-C02	6.42	154.10	125.39
3	H	305	A1H8M	C04-C03-C02	6.42	154.10	125.39
3	A	305	A1H8M	C04-C03-C02	6.42	154.10	125.39
3	C	305	A1H8M	C04-C03-C02	6.42	154.10	125.39
3	E	305	A1H8M	C04-C03-C02	6.42	154.10	125.39
3	G	305	A1H8M	C04-C03-C02	6.42	154.10	125.39
3	F	305	A1H8M	C04-C03-C02	6.42	154.09	125.39
3	D	313	A1H8M	C04-C03-C02	6.17	153.01	125.39
3	F	313	A1H8M	C04-C03-C02	6.16	152.96	125.39
3	H	313	A1H8M	C04-C03-C02	6.16	152.96	125.39
3	B	313	A1H8M	C04-C03-C02	6.16	152.96	125.39
3	A	313	A1H8M	C04-C03-C02	6.16	152.95	125.39
3	C	313	A1H8M	C04-C03-C02	6.16	152.95	125.39
3	E	313	A1H8M	C04-C03-C02	6.16	152.95	125.39
3	G	313	A1H8M	C04-C03-C02	6.16	152.95	125.39
2	D	302	CLR	C2-C3-C4	5.97	118.49	110.31
2	H	302	CLR	C2-C3-C4	5.97	118.49	110.31
2	B	302	CLR	C2-C3-C4	5.97	118.49	110.31
2	A	302	CLR	C2-C3-C4	5.97	118.49	110.31
2	C	302	CLR	C2-C3-C4	5.97	118.49	110.31
2	E	302	CLR	C2-C3-C4	5.97	118.49	110.31
2	G	302	CLR	C2-C3-C4	5.97	118.49	110.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	F	302	CLR	C2-C3-C4	5.95	118.47	110.31
3	A	307	A1H8M	C04-C03-C02	5.85	151.56	125.39
3	C	307	A1H8M	C04-C03-C02	5.85	151.56	125.39
3	E	307	A1H8M	C04-C03-C02	5.85	151.56	125.39
3	G	307	A1H8M	C04-C03-C02	5.85	151.56	125.39
3	H	307	A1H8M	C04-C03-C02	5.84	151.53	125.39
3	B	307	A1H8M	C04-C03-C02	5.84	151.53	125.39
3	D	307	A1H8M	C04-C03-C02	5.84	151.53	125.39
3	F	307	A1H8M	C04-C03-C02	5.84	151.53	125.39
3	D	308	A1H8M	C04-C03-C02	5.84	151.51	125.39
3	H	308	A1H8M	C04-C03-C02	5.84	151.51	125.39
3	A	308	A1H8M	C04-C03-C02	5.83	151.47	125.39
3	C	308	A1H8M	C04-C03-C02	5.83	151.47	125.39
3	E	308	A1H8M	C04-C03-C02	5.83	151.47	125.39
3	G	308	A1H8M	C04-C03-C02	5.83	151.47	125.39
3	B	308	A1H8M	C04-C03-C02	5.82	151.44	125.39
3	F	308	A1H8M	C04-C03-C02	5.82	151.44	125.39
3	B	310	A1H8M	C04-C03-C02	5.76	151.16	125.39
3	F	310	A1H8M	C04-C03-C02	5.76	151.16	125.39
3	A	310	A1H8M	C04-C03-C02	5.76	151.15	125.39
3	C	310	A1H8M	C04-C03-C02	5.76	151.15	125.39
3	E	310	A1H8M	C04-C03-C02	5.76	151.15	125.39
3	G	310	A1H8M	C04-C03-C02	5.76	151.15	125.39
3	D	310	A1H8M	C04-C03-C02	5.75	151.13	125.39
3	H	310	A1H8M	C04-C03-C02	5.75	151.13	125.39
3	F	308	A1H8M	C22-C21-N21	5.59	125.52	115.83
3	D	308	A1H8M	C22-C21-N21	5.57	125.49	115.83
3	H	308	A1H8M	C22-C21-N21	5.57	125.49	115.83
3	A	308	A1H8M	C22-C21-N21	5.56	125.48	115.83
3	C	308	A1H8M	C22-C21-N21	5.56	125.48	115.83
3	E	308	A1H8M	C22-C21-N21	5.56	125.48	115.83
3	G	308	A1H8M	C22-C21-N21	5.56	125.48	115.83
3	B	308	A1H8M	C22-C21-N21	5.55	125.45	115.83
3	D	305	A1H8M	O4-P-O2	-5.12	83.98	107.75
3	B	305	A1H8M	O4-P-O2	-5.12	83.98	107.75
3	A	305	A1H8M	O4-P-O2	-5.12	83.98	107.75
3	C	305	A1H8M	O4-P-O2	-5.12	83.98	107.75
3	E	305	A1H8M	O4-P-O2	-5.12	83.98	107.75
3	G	305	A1H8M	O4-P-O2	-5.12	83.98	107.75
3	F	305	A1H8M	O4-P-O2	-5.11	84.00	107.75
3	H	305	A1H8M	O4-P-O2	-5.11	84.00	107.75
3	B	307	A1H8M	C1-C2-N2	-4.69	100.10	115.78

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	H	307	A1H8M	C1-C2-N2	-4.69	100.10	115.78
3	F	307	A1H8M	C1-C2-N2	-4.68	100.14	115.78
3	A	307	A1H8M	C1-C2-N2	-4.68	100.14	115.78
3	C	307	A1H8M	C1-C2-N2	-4.68	100.14	115.78
3	E	307	A1H8M	C1-C2-N2	-4.68	100.14	115.78
3	G	307	A1H8M	C1-C2-N2	-4.68	100.14	115.78
3	D	307	A1H8M	C1-C2-N2	-4.68	100.17	115.78
3	F	305	A1H8M	O01-C01-C02	-4.01	100.10	110.85
3	B	305	A1H8M	O01-C01-C02	-4.01	100.11	110.85
3	A	305	A1H8M	O01-C01-C02	-4.01	100.12	110.85
3	C	305	A1H8M	O01-C01-C02	-4.01	100.12	110.85
3	E	305	A1H8M	O01-C01-C02	-4.01	100.12	110.85
3	G	305	A1H8M	O01-C01-C02	-4.01	100.12	110.85
3	D	305	A1H8M	O01-C01-C02	-4.00	100.15	110.85
3	H	305	A1H8M	O01-C01-C02	-4.00	100.15	110.85
3	B	307	A1H8M	C22-C21-N21	3.83	122.48	115.83
3	H	307	A1H8M	C22-C21-N21	3.83	122.47	115.83
3	A	307	A1H8M	C22-C21-N21	3.81	122.45	115.83
3	C	307	A1H8M	C22-C21-N21	3.81	122.45	115.83
3	E	307	A1H8M	C22-C21-N21	3.81	122.45	115.83
3	G	307	A1H8M	C22-C21-N21	3.81	122.45	115.83
3	F	307	A1H8M	C22-C21-N21	3.81	122.43	115.83
3	F	308	A1H8M	O21-C21-N21	-3.79	116.55	122.95
3	D	307	A1H8M	C22-C21-N21	3.79	122.40	115.83
3	A	308	A1H8M	O21-C21-N21	-3.77	116.58	122.95
3	C	308	A1H8M	O21-C21-N21	-3.77	116.58	122.95
3	E	308	A1H8M	O21-C21-N21	-3.77	116.58	122.95
3	G	308	A1H8M	O21-C21-N21	-3.77	116.58	122.95
3	D	308	A1H8M	O21-C21-N21	-3.77	116.59	122.95
3	H	308	A1H8M	O21-C21-N21	-3.77	116.59	122.95
3	B	308	A1H8M	O21-C21-N21	-3.76	116.60	122.95
2	F	302	CLR	C4-C5-C10	3.67	121.29	116.42
2	D	302	CLR	C4-C5-C10	3.66	121.28	116.42
2	H	302	CLR	C4-C5-C10	3.66	121.28	116.42
2	A	302	CLR	C4-C5-C10	3.65	121.28	116.42
2	C	302	CLR	C4-C5-C10	3.65	121.28	116.42
2	E	302	CLR	C4-C5-C10	3.65	121.28	116.42
2	G	302	CLR	C4-C5-C10	3.65	121.28	116.42
2	B	302	CLR	C4-C5-C10	3.64	121.25	116.42
3	D	310	A1H8M	O01-C01-C02	-3.42	101.68	110.85
3	H	310	A1H8M	O01-C01-C02	-3.42	101.68	110.85
2	A	302	CLR	C19-C10-C5	-3.42	102.81	108.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	C	302	CLR	C19-C10-C5	-3.42	102.81	108.34
2	E	302	CLR	C19-C10-C5	-3.42	102.81	108.34
2	G	302	CLR	C19-C10-C5	-3.42	102.81	108.34
3	A	310	A1H8M	O01-C01-C02	-3.41	101.71	110.85
3	C	310	A1H8M	O01-C01-C02	-3.41	101.71	110.85
3	E	310	A1H8M	O01-C01-C02	-3.41	101.71	110.85
3	G	310	A1H8M	O01-C01-C02	-3.41	101.71	110.85
2	B	302	CLR	C19-C10-C5	-3.41	102.82	108.34
2	D	302	CLR	C19-C10-C5	-3.41	102.82	108.34
2	F	302	CLR	C19-C10-C5	-3.41	102.82	108.34
2	H	302	CLR	C19-C10-C5	-3.41	102.82	108.34
3	F	310	A1H8M	O01-C01-C02	-3.41	101.72	110.85
3	B	310	A1H8M	O01-C01-C02	-3.40	101.73	110.85
3	B	312	A1H8M	C7-N21-C21	-3.35	117.83	123.48
3	D	312	A1H8M	C7-N21-C21	-3.35	117.83	123.48
3	H	312	A1H8M	C7-N21-C21	-3.35	117.83	123.48
3	A	312	A1H8M	C7-N21-C21	-3.34	117.85	123.48
3	C	312	A1H8M	C7-N21-C21	-3.34	117.85	123.48
3	E	312	A1H8M	C7-N21-C21	-3.34	117.85	123.48
3	G	312	A1H8M	C7-N21-C21	-3.34	117.85	123.48
3	F	312	A1H8M	C7-N21-C21	-3.33	117.86	123.48
3	F	312	A1H8M	C22-C21-N21	3.20	121.38	115.83
3	A	312	A1H8M	C22-C21-N21	3.20	121.38	115.83
3	C	312	A1H8M	C22-C21-N21	3.20	121.38	115.83
3	E	312	A1H8M	C22-C21-N21	3.20	121.38	115.83
3	G	312	A1H8M	C22-C21-N21	3.20	121.38	115.83
3	D	312	A1H8M	C22-C21-N21	3.20	121.38	115.83
3	H	312	A1H8M	C22-C21-N21	3.20	121.38	115.83
3	B	312	A1H8M	C22-C21-N21	3.18	121.35	115.83
2	D	302	CLR	O1-C3-C4	3.07	116.26	109.68
2	H	302	CLR	O1-C3-C4	3.07	116.26	109.68
2	F	302	CLR	O1-C3-C4	3.07	116.25	109.68
2	A	302	CLR	O1-C3-C4	3.06	116.25	109.68
2	C	302	CLR	O1-C3-C4	3.06	116.25	109.68
2	E	302	CLR	O1-C3-C4	3.06	116.25	109.68
2	G	302	CLR	O1-C3-C4	3.06	116.25	109.68
2	B	302	CLR	O1-C3-C4	3.06	116.24	109.68
3	A	305	A1H8M	C23-C22-C21	-3.03	104.75	113.26
3	C	305	A1H8M	C23-C22-C21	-3.03	104.75	113.26
3	E	305	A1H8M	C23-C22-C21	-3.03	104.75	113.26
3	F	305	A1H8M	C23-C22-C21	-3.03	104.75	113.26
3	G	305	A1H8M	C23-C22-C21	-3.03	104.75	113.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	B	305	A1H8M	C23-C22-C21	-3.03	104.75	113.26
3	D	305	A1H8M	C23-C22-C21	-3.03	104.75	113.26
3	H	305	A1H8M	C23-C22-C21	-3.03	104.75	113.26
2	A	302	CLR	C10-C9-C8	-2.98	108.26	112.73
2	C	302	CLR	C10-C9-C8	-2.98	108.26	112.73
2	E	302	CLR	C10-C9-C8	-2.98	108.26	112.73
2	G	302	CLR	C10-C9-C8	-2.98	108.26	112.73
2	D	302	CLR	C10-C9-C8	-2.98	108.26	112.73
2	F	302	CLR	C10-C9-C8	-2.98	108.26	112.73
2	H	302	CLR	C10-C9-C8	-2.98	108.26	112.73
2	B	302	CLR	C10-C9-C8	-2.97	108.28	112.73
2	B	302	CLR	C15-C14-C8	-2.81	114.45	119.08
2	A	302	CLR	C15-C14-C8	-2.80	114.47	119.08
2	C	302	CLR	C15-C14-C8	-2.80	114.47	119.08
2	E	302	CLR	C15-C14-C8	-2.80	114.47	119.08
2	G	302	CLR	C15-C14-C8	-2.80	114.47	119.08
2	D	302	CLR	C15-C14-C8	-2.80	114.47	119.08
2	F	302	CLR	C15-C14-C8	-2.80	114.47	119.08
2	H	302	CLR	C15-C14-C8	-2.80	114.47	119.08
3	B	305	A1H8M	C1-C2-N2	-2.78	106.50	115.78
3	H	305	A1H8M	C1-C2-N2	-2.77	106.52	115.78
3	A	305	A1H8M	C1-C2-N2	-2.77	106.52	115.78
3	C	305	A1H8M	C1-C2-N2	-2.77	106.52	115.78
3	E	305	A1H8M	C1-C2-N2	-2.77	106.52	115.78
3	G	305	A1H8M	C1-C2-N2	-2.77	106.52	115.78
3	F	305	A1H8M	C1-C2-N2	-2.77	106.53	115.78
3	D	305	A1H8M	C1-C2-N2	-2.77	106.53	115.78
3	F	310	A1H8M	C01-C7-N21	-2.66	105.19	110.01
3	A	310	A1H8M	C01-C7-N21	-2.65	105.20	110.01
3	C	310	A1H8M	C01-C7-N21	-2.65	105.20	110.01
3	E	310	A1H8M	C01-C7-N21	-2.65	105.20	110.01
3	G	310	A1H8M	C01-C7-N21	-2.65	105.20	110.01
2	F	302	CLR	C4-C5-C6	-2.65	116.79	120.61
3	B	310	A1H8M	C01-C7-N21	-2.65	105.21	110.01
2	B	302	CLR	C4-C5-C6	-2.65	116.79	120.61
2	A	302	CLR	C4-C5-C6	-2.65	116.80	120.61
2	C	302	CLR	C4-C5-C6	-2.65	116.80	120.61
2	E	302	CLR	C4-C5-C6	-2.65	116.80	120.61
2	G	302	CLR	C4-C5-C6	-2.65	116.80	120.61
2	D	302	CLR	C4-C5-C6	-2.65	116.80	120.61
2	H	302	CLR	C4-C5-C6	-2.65	116.80	120.61
3	D	310	A1H8M	C01-C7-N21	-2.63	105.24	110.01

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	H	310	A1H8M	C01-C7-N21	-2.63	105.24	110.01
3	B	305	A1H8M	O2-P-O1	2.58	119.16	109.07
3	A	308	A1H8M	C1-C2-N2	-2.58	107.16	115.78
3	C	308	A1H8M	C1-C2-N2	-2.58	107.16	115.78
3	E	308	A1H8M	C1-C2-N2	-2.58	107.16	115.78
3	G	308	A1H8M	C1-C2-N2	-2.58	107.16	115.78
3	B	308	A1H8M	C1-C2-N2	-2.58	107.16	115.78
3	F	308	A1H8M	C1-C2-N2	-2.58	107.16	115.78
3	D	308	A1H8M	C1-C2-N2	-2.58	107.17	115.78
3	H	308	A1H8M	C1-C2-N2	-2.58	107.17	115.78
3	A	305	A1H8M	O2-P-O1	2.58	119.13	109.07
3	C	305	A1H8M	O2-P-O1	2.58	119.13	109.07
3	E	305	A1H8M	O2-P-O1	2.58	119.13	109.07
3	G	305	A1H8M	O2-P-O1	2.58	119.13	109.07
3	F	305	A1H8M	O2-P-O1	2.58	119.13	109.07
3	H	305	A1H8M	O2-P-O1	2.58	119.13	109.07
3	D	305	A1H8M	O2-P-O1	2.57	119.11	109.07
2	B	302	CLR	C12-C11-C9	2.41	117.29	113.11
2	D	302	CLR	C12-C11-C9	2.40	117.28	113.11
2	H	302	CLR	C12-C11-C9	2.40	117.28	113.11
2	A	302	CLR	C12-C11-C9	2.40	117.27	113.11
2	C	302	CLR	C12-C11-C9	2.40	117.27	113.11
2	E	302	CLR	C12-C11-C9	2.40	117.27	113.11
2	G	302	CLR	C12-C11-C9	2.40	117.27	113.11
2	F	302	CLR	C12-C11-C9	2.38	117.25	113.11
2	B	302	CLR	C21-C20-C17	-2.35	109.33	112.92
2	A	302	CLR	C21-C20-C17	-2.33	109.35	112.92
2	C	302	CLR	C21-C20-C17	-2.33	109.35	112.92
2	E	302	CLR	C21-C20-C17	-2.33	109.35	112.92
2	G	302	CLR	C21-C20-C17	-2.33	109.35	112.92
2	D	302	CLR	C21-C20-C17	-2.33	109.35	112.92
2	F	302	CLR	C21-C20-C17	-2.33	109.35	112.92
2	H	302	CLR	C21-C20-C17	-2.33	109.35	112.92
3	B	312	A1H8M	O21-C21-N21	-2.32	119.03	122.95
3	A	312	A1H8M	O21-C21-N21	-2.32	119.03	122.95
3	C	312	A1H8M	O21-C21-N21	-2.32	119.03	122.95
3	D	312	A1H8M	O21-C21-N21	-2.32	119.03	122.95
3	E	312	A1H8M	O21-C21-N21	-2.32	119.03	122.95
3	F	312	A1H8M	O21-C21-N21	-2.32	119.03	122.95
3	G	312	A1H8M	O21-C21-N21	-2.32	119.03	122.95
3	H	312	A1H8M	O21-C21-N21	-2.32	119.03	122.95
3	H	307	A1H8M	O21-C21-C22	-2.31	117.80	122.02

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	B	307	A1H8M	O21-C21-C22	-2.30	117.80	122.02
3	A	307	A1H8M	O21-C21-C22	-2.29	117.82	122.02
3	C	307	A1H8M	O21-C21-C22	-2.29	117.82	122.02
3	E	307	A1H8M	O21-C21-C22	-2.29	117.82	122.02
3	G	307	A1H8M	O21-C21-C22	-2.29	117.82	122.02
2	A	302	CLR	C17-C13-C14	2.29	102.78	100.07
2	C	302	CLR	C17-C13-C14	2.29	102.78	100.07
2	E	302	CLR	C17-C13-C14	2.29	102.78	100.07
2	G	302	CLR	C17-C13-C14	2.29	102.78	100.07
3	D	307	A1H8M	O21-C21-C22	-2.29	117.83	122.02
3	F	307	A1H8M	O21-C21-C22	-2.29	117.83	122.02
2	D	302	CLR	C17-C13-C14	2.28	102.77	100.07
2	F	302	CLR	C17-C13-C14	2.28	102.77	100.07
2	H	302	CLR	C17-C13-C14	2.28	102.77	100.07
2	B	302	CLR	C17-C13-C14	2.28	102.77	100.07
3	D	308	A1H8M	O21-C21-C22	-2.24	117.91	122.02
3	F	308	A1H8M	O21-C21-C22	-2.24	117.91	122.02
3	H	308	A1H8M	O21-C21-C22	-2.24	117.91	122.02
3	A	308	A1H8M	O21-C21-C22	-2.24	117.92	122.02
3	C	308	A1H8M	O21-C21-C22	-2.24	117.92	122.02
3	E	308	A1H8M	O21-C21-C22	-2.24	117.92	122.02
3	G	308	A1H8M	O21-C21-C22	-2.24	117.92	122.02
3	B	308	A1H8M	O21-C21-C22	-2.23	117.94	122.02
2	B	302	CLR	C16-C17-C20	-2.22	108.71	112.15
2	A	302	CLR	C16-C17-C20	-2.20	108.73	112.15
2	C	302	CLR	C16-C17-C20	-2.20	108.73	112.15
2	E	302	CLR	C16-C17-C20	-2.20	108.73	112.15
2	F	302	CLR	C16-C17-C20	-2.20	108.73	112.15
2	G	302	CLR	C16-C17-C20	-2.20	108.73	112.15
2	D	302	CLR	C16-C17-C20	-2.19	108.75	112.15
2	H	302	CLR	C16-C17-C20	-2.19	108.75	112.15
3	D	307	A1H8M	C7-N21-C21	2.17	127.15	123.48
3	H	307	A1H8M	C7-N21-C21	2.16	127.12	123.48
3	F	307	A1H8M	C7-N21-C21	2.16	127.12	123.48
3	A	307	A1H8M	C7-N21-C21	2.15	127.11	123.48
3	C	307	A1H8M	C7-N21-C21	2.15	127.11	123.48
3	E	307	A1H8M	C7-N21-C21	2.15	127.11	123.48
3	G	307	A1H8M	C7-N21-C21	2.15	127.11	123.48
3	B	307	A1H8M	C7-N21-C21	2.14	127.10	123.48
3	B	311	A1H8M	C01-C7-N21	-2.12	106.16	110.01
3	A	311	A1H8M	C01-C7-N21	-2.12	106.17	110.01
3	C	311	A1H8M	C01-C7-N21	-2.12	106.17	110.01

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	E	311	A1H8M	C01-C7-N21	-2.12	106.17	110.01
3	G	311	A1H8M	C01-C7-N21	-2.12	106.17	110.01
3	F	311	A1H8M	C01-C7-N21	-2.12	106.17	110.01
3	D	311	A1H8M	C01-C7-N21	-2.12	106.17	110.01
3	H	311	A1H8M	C01-C7-N21	-2.12	106.17	110.01
3	F	313	A1H8M	O01-C01-C7	2.10	110.65	107.31
3	H	313	A1H8M	O01-C01-C7	2.10	110.65	107.31
3	B	307	A1H8M	C24-C23-C22	-2.08	105.71	113.19
3	F	307	A1H8M	C24-C23-C22	-2.08	105.72	113.19
3	A	313	A1H8M	O01-C01-C7	2.08	110.61	107.31
3	C	313	A1H8M	O01-C01-C7	2.08	110.61	107.31
3	E	313	A1H8M	O01-C01-C7	2.08	110.61	107.31
3	G	313	A1H8M	O01-C01-C7	2.08	110.61	107.31
3	A	307	A1H8M	C24-C23-C22	-2.07	105.73	113.19
3	C	307	A1H8M	C24-C23-C22	-2.07	105.73	113.19
3	E	307	A1H8M	C24-C23-C22	-2.07	105.73	113.19
3	G	307	A1H8M	C24-C23-C22	-2.07	105.73	113.19
3	D	307	A1H8M	C24-C23-C22	-2.07	105.74	113.19
3	H	307	A1H8M	C24-C23-C22	-2.07	105.75	113.19
2	B	302	CLR	C19-C10-C1	2.07	112.69	109.43
3	F	308	A1H8M	C3-N2-C5	2.06	114.28	108.97
3	B	313	A1H8M	O01-C01-C7	2.06	110.59	107.31
3	D	313	A1H8M	O01-C01-C7	2.06	110.59	107.31
3	H	308	A1H8M	C3-N2-C5	2.06	114.27	108.97
2	A	302	CLR	C19-C10-C1	2.06	112.67	109.43
2	C	302	CLR	C19-C10-C1	2.06	112.67	109.43
2	E	302	CLR	C19-C10-C1	2.06	112.67	109.43
2	G	302	CLR	C19-C10-C1	2.06	112.67	109.43
3	A	308	A1H8M	C3-N2-C5	2.05	114.25	108.97
3	C	308	A1H8M	C3-N2-C5	2.05	114.25	108.97
3	E	308	A1H8M	C3-N2-C5	2.05	114.25	108.97
3	G	308	A1H8M	C3-N2-C5	2.05	114.25	108.97
3	B	308	A1H8M	C3-N2-C5	2.05	114.24	108.97
3	D	308	A1H8M	C3-N2-C5	2.05	114.24	108.97
2	D	302	CLR	C19-C10-C1	2.04	112.66	109.43
2	F	302	CLR	C19-C10-C1	2.04	112.66	109.43
2	H	302	CLR	C19-C10-C1	2.04	112.66	109.43
2	B	302	CLR	C12-C13-C14	-2.04	104.10	107.27
2	A	302	CLR	C12-C13-C14	-2.04	104.11	107.27
2	C	302	CLR	C12-C13-C14	-2.04	104.11	107.27
2	E	302	CLR	C12-C13-C14	-2.04	104.11	107.27
2	G	302	CLR	C12-C13-C14	-2.04	104.11	107.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	D	302	CLR	C12-C13-C14	-2.04	104.11	107.27
2	H	302	CLR	C12-C13-C14	-2.04	104.11	107.27
2	F	302	CLR	C12-C13-C14	-2.03	104.13	107.27
3	F	311	A1H8M	C6-C7-C01	-2.01	108.20	112.92
3	B	311	A1H8M	C6-C7-C01	-2.01	108.20	112.92
3	A	311	A1H8M	C6-C7-C01	-2.01	108.21	112.92
3	C	311	A1H8M	C6-C7-C01	-2.01	108.21	112.92
3	E	311	A1H8M	C6-C7-C01	-2.01	108.21	112.92
3	G	311	A1H8M	C6-C7-C01	-2.01	108.21	112.92
3	B	305	A1H8M	C7-N21-C21	2.01	126.86	123.48

There are no chirality outliers.

All (1576) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	A	305	A1H8M	O2-C6-C7-N21
3	A	305	A1H8M	C6-C7-N21-C21
3	A	305	A1H8M	O3-C1-C2-N2
3	A	305	A1H8M	C6-O2-P-O4
3	A	306	A1H8M	C02-C01-C7-C6
3	A	306	A1H8M	O01-C01-C7-C6
3	A	306	A1H8M	C02-C01-C7-N21
3	A	306	A1H8M	O01-C01-C7-N21
3	A	306	A1H8M	O2-C6-C7-C01
3	A	306	A1H8M	O2-C6-C7-N21
3	A	306	A1H8M	C01-C7-N21-C21
3	A	306	A1H8M	O3-C1-C2-N2
3	A	306	A1H8M	C1-O3-P-O1
3	A	306	A1H8M	C1-O3-P-O4
3	A	307	A1H8M	C02-C01-C7-C6
3	A	307	A1H8M	O01-C01-C7-C6
3	A	307	A1H8M	C02-C01-C7-N21
3	A	307	A1H8M	O01-C01-C7-N21
3	A	307	A1H8M	C01-C7-N21-C21
3	A	307	A1H8M	O3-C1-C2-N2
3	A	307	A1H8M	C1-O3-P-O1
3	A	308	A1H8M	C02-C01-C7-C6
3	A	308	A1H8M	O01-C01-C7-C6
3	A	308	A1H8M	O01-C01-C7-N21
3	A	308	A1H8M	C01-C7-N21-C21
3	A	308	A1H8M	C7-C01-C02-C03
3	A	308	A1H8M	O01-C01-C02-C03

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Mol	Chain	Res	Type	Atoms
3	A	308	A1H8M	C6-O2-P-O3
3	A	308	A1H8M	C1-O3-P-O2
3	A	308	A1H8M	C1-O3-P-O1
3	A	308	A1H8M	C1-O3-P-O4
3	A	309	A1H8M	C01-C7-N21-C21
3	A	309	A1H8M	C7-C01-C02-C03
3	A	309	A1H8M	O01-C01-C02-C03
3	A	309	A1H8M	C1-O3-P-O2
3	A	310	A1H8M	C02-C01-C7-C6
3	A	310	A1H8M	O01-C01-C7-C6
3	A	310	A1H8M	C02-C01-C7-N21
3	A	311	A1H8M	C6-O2-P-O1
3	A	311	A1H8M	C6-O2-P-O3
3	A	311	A1H8M	C6-O2-P-O4
3	A	311	A1H8M	C1-O3-P-O1
3	A	311	A1H8M	C1-O3-P-O4
3	A	312	A1H8M	O2-C6-C7-C01
3	A	312	A1H8M	O2-C6-C7-N21
3	A	312	A1H8M	C7-C01-C02-C03
3	A	312	A1H8M	O01-C01-C02-C03
3	A	312	A1H8M	O3-C1-C2-N2
3	A	312	A1H8M	C1-O3-P-O1
3	A	313	A1H8M	O01-C01-C7-C6
3	A	313	A1H8M	O2-C6-C7-C01
3	A	313	A1H8M	O2-C6-C7-N21
3	B	305	A1H8M	O2-C6-C7-N21
3	B	305	A1H8M	C6-C7-N21-C21
3	B	305	A1H8M	O3-C1-C2-N2
3	B	305	A1H8M	C6-O2-P-O4
3	B	306	A1H8M	C02-C01-C7-C6
3	B	306	A1H8M	O01-C01-C7-C6
3	B	306	A1H8M	C02-C01-C7-N21
3	B	306	A1H8M	O01-C01-C7-N21
3	B	306	A1H8M	O2-C6-C7-C01
3	B	306	A1H8M	O2-C6-C7-N21
3	B	306	A1H8M	C01-C7-N21-C21
3	B	306	A1H8M	O3-C1-C2-N2
3	B	306	A1H8M	C1-O3-P-O1
3	B	306	A1H8M	C1-O3-P-O4
3	B	307	A1H8M	C02-C01-C7-C6
3	B	307	A1H8M	O01-C01-C7-C6
3	B	307	A1H8M	C02-C01-C7-N21

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Mol	Chain	Res	Type	Atoms
3	B	307	A1H8M	O01-C01-C7-N21
3	B	307	A1H8M	C01-C7-N21-C21
3	B	307	A1H8M	O3-C1-C2-N2
3	B	307	A1H8M	C1-O3-P-O1
3	B	308	A1H8M	C02-C01-C7-C6
3	B	308	A1H8M	O01-C01-C7-C6
3	B	308	A1H8M	O01-C01-C7-N21
3	B	308	A1H8M	C01-C7-N21-C21
3	B	308	A1H8M	C7-C01-C02-C03
3	B	308	A1H8M	O01-C01-C02-C03
3	B	308	A1H8M	C6-O2-P-O3
3	B	308	A1H8M	C1-O3-P-O2
3	B	308	A1H8M	C1-O3-P-O1
3	B	308	A1H8M	C1-O3-P-O4
3	B	309	A1H8M	C01-C7-N21-C21
3	B	309	A1H8M	C7-C01-C02-C03
3	B	309	A1H8M	O01-C01-C02-C03
3	B	309	A1H8M	C1-O3-P-O2
3	B	310	A1H8M	C02-C01-C7-C6
3	B	310	A1H8M	O01-C01-C7-C6
3	B	310	A1H8M	C02-C01-C7-N21
3	B	311	A1H8M	C6-O2-P-O1
3	B	311	A1H8M	C6-O2-P-O3
3	B	311	A1H8M	C6-O2-P-O4
3	B	311	A1H8M	C1-O3-P-O1
3	B	311	A1H8M	C1-O3-P-O4
3	B	312	A1H8M	O2-C6-C7-C01
3	B	312	A1H8M	O2-C6-C7-N21
3	B	312	A1H8M	C7-C01-C02-C03
3	B	312	A1H8M	O01-C01-C02-C03
3	B	312	A1H8M	O3-C1-C2-N2
3	B	312	A1H8M	C1-O3-P-O1
3	B	313	A1H8M	O01-C01-C7-C6
3	B	313	A1H8M	O2-C6-C7-C01
3	B	313	A1H8M	O2-C6-C7-N21
3	C	305	A1H8M	O2-C6-C7-N21
3	C	305	A1H8M	C6-C7-N21-C21
3	C	305	A1H8M	O3-C1-C2-N2
3	C	305	A1H8M	C6-O2-P-O4
3	C	306	A1H8M	C02-C01-C7-C6
3	C	306	A1H8M	O01-C01-C7-C6
3	C	306	A1H8M	C02-C01-C7-N21

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Mol	Chain	Res	Type	Atoms
3	C	306	A1H8M	O01-C01-C7-N21
3	C	306	A1H8M	O2-C6-C7-C01
3	C	306	A1H8M	O2-C6-C7-N21
3	C	306	A1H8M	C01-C7-N21-C21
3	C	306	A1H8M	O3-C1-C2-N2
3	C	306	A1H8M	C1-O3-P-O1
3	C	306	A1H8M	C1-O3-P-O4
3	C	307	A1H8M	C02-C01-C7-C6
3	C	307	A1H8M	O01-C01-C7-C6
3	C	307	A1H8M	C02-C01-C7-N21
3	C	307	A1H8M	O01-C01-C7-N21
3	C	307	A1H8M	C01-C7-N21-C21
3	C	307	A1H8M	O3-C1-C2-N2
3	C	307	A1H8M	C1-O3-P-O1
3	C	308	A1H8M	C02-C01-C7-C6
3	C	308	A1H8M	O01-C01-C7-C6
3	C	308	A1H8M	O01-C01-C7-N21
3	C	308	A1H8M	C01-C7-N21-C21
3	C	308	A1H8M	C7-C01-C02-C03
3	C	308	A1H8M	O01-C01-C02-C03
3	C	308	A1H8M	C6-O2-P-O3
3	C	308	A1H8M	C1-O3-P-O2
3	C	308	A1H8M	C1-O3-P-O1
3	C	308	A1H8M	C1-O3-P-O4
3	C	309	A1H8M	C01-C7-N21-C21
3	C	309	A1H8M	C7-C01-C02-C03
3	C	309	A1H8M	O01-C01-C02-C03
3	C	309	A1H8M	C1-O3-P-O2
3	C	310	A1H8M	C02-C01-C7-C6
3	C	310	A1H8M	O01-C01-C7-C6
3	C	310	A1H8M	C02-C01-C7-N21
3	C	311	A1H8M	C6-O2-P-O1
3	C	311	A1H8M	C6-O2-P-O3
3	C	311	A1H8M	C6-O2-P-O4
3	C	311	A1H8M	C1-O3-P-O1
3	C	311	A1H8M	C1-O3-P-O4
3	C	312	A1H8M	O2-C6-C7-C01
3	C	312	A1H8M	O2-C6-C7-N21
3	C	312	A1H8M	C7-C01-C02-C03
3	C	312	A1H8M	O01-C01-C02-C03
3	C	312	A1H8M	O3-C1-C2-N2
3	C	312	A1H8M	C1-O3-P-O1

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Mol	Chain	Res	Type	Atoms
3	C	313	A1H8M	O01-C01-C7-C6
3	C	313	A1H8M	O2-C6-C7-C01
3	C	313	A1H8M	O2-C6-C7-N21
3	D	305	A1H8M	O2-C6-C7-N21
3	D	305	A1H8M	C6-C7-N21-C21
3	D	305	A1H8M	O3-C1-C2-N2
3	D	305	A1H8M	C6-O2-P-O4
3	D	306	A1H8M	C02-C01-C7-C6
3	D	306	A1H8M	O01-C01-C7-C6
3	D	306	A1H8M	C02-C01-C7-N21
3	D	306	A1H8M	O01-C01-C7-N21
3	D	306	A1H8M	O2-C6-C7-C01
3	D	306	A1H8M	O2-C6-C7-N21
3	D	306	A1H8M	C01-C7-N21-C21
3	D	306	A1H8M	O3-C1-C2-N2
3	D	306	A1H8M	C1-O3-P-O1
3	D	306	A1H8M	C1-O3-P-O4
3	D	307	A1H8M	C02-C01-C7-C6
3	D	307	A1H8M	O01-C01-C7-C6
3	D	307	A1H8M	C02-C01-C7-N21
3	D	307	A1H8M	O01-C01-C7-N21
3	D	307	A1H8M	C01-C7-N21-C21
3	D	307	A1H8M	O3-C1-C2-N2
3	D	307	A1H8M	C1-O3-P-O1
3	D	308	A1H8M	C02-C01-C7-C6
3	D	308	A1H8M	O01-C01-C7-C6
3	D	308	A1H8M	O01-C01-C7-N21
3	D	308	A1H8M	C01-C7-N21-C21
3	D	308	A1H8M	C7-C01-C02-C03
3	D	308	A1H8M	O01-C01-C02-C03
3	D	308	A1H8M	C6-O2-P-O3
3	D	308	A1H8M	C1-O3-P-O2
3	D	308	A1H8M	C1-O3-P-O1
3	D	308	A1H8M	C1-O3-P-O4
3	D	309	A1H8M	C01-C7-N21-C21
3	D	309	A1H8M	C7-C01-C02-C03
3	D	309	A1H8M	O01-C01-C02-C03
3	D	309	A1H8M	C1-O3-P-O2
3	D	310	A1H8M	C02-C01-C7-C6
3	D	310	A1H8M	O01-C01-C7-C6
3	D	310	A1H8M	C02-C01-C7-N21
3	D	311	A1H8M	C6-O2-P-O1

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Mol	Chain	Res	Type	Atoms
3	D	311	A1H8M	C6-O2-P-O3
3	D	311	A1H8M	C6-O2-P-O4
3	D	311	A1H8M	C1-O3-P-O1
3	D	311	A1H8M	C1-O3-P-O4
3	D	312	A1H8M	O2-C6-C7-C01
3	D	312	A1H8M	O2-C6-C7-N21
3	D	312	A1H8M	C7-C01-C02-C03
3	D	312	A1H8M	O01-C01-C02-C03
3	D	312	A1H8M	O3-C1-C2-N2
3	D	312	A1H8M	C1-O3-P-O1
3	D	313	A1H8M	O01-C01-C7-C6
3	D	313	A1H8M	O2-C6-C7-C01
3	D	313	A1H8M	O2-C6-C7-N21
3	E	305	A1H8M	O2-C6-C7-N21
3	E	305	A1H8M	C6-C7-N21-C21
3	E	305	A1H8M	O3-C1-C2-N2
3	E	305	A1H8M	C6-O2-P-O4
3	E	306	A1H8M	C02-C01-C7-C6
3	E	306	A1H8M	O01-C01-C7-C6
3	E	306	A1H8M	C02-C01-C7-N21
3	E	306	A1H8M	O01-C01-C7-N21
3	E	306	A1H8M	O2-C6-C7-C01
3	E	306	A1H8M	O2-C6-C7-N21
3	E	306	A1H8M	C01-C7-N21-C21
3	E	306	A1H8M	O3-C1-C2-N2
3	E	306	A1H8M	C1-O3-P-O1
3	E	306	A1H8M	C1-O3-P-O4
3	E	307	A1H8M	C02-C01-C7-C6
3	E	307	A1H8M	O01-C01-C7-C6
3	E	307	A1H8M	C02-C01-C7-N21
3	E	307	A1H8M	O01-C01-C7-N21
3	E	307	A1H8M	C01-C7-N21-C21
3	E	307	A1H8M	O3-C1-C2-N2
3	E	307	A1H8M	C1-O3-P-O1
3	E	308	A1H8M	C02-C01-C7-C6
3	E	308	A1H8M	O01-C01-C7-C6
3	E	308	A1H8M	O01-C01-C7-N21
3	E	308	A1H8M	C01-C7-N21-C21
3	E	308	A1H8M	C7-C01-C02-C03
3	E	308	A1H8M	O01-C01-C02-C03
3	E	308	A1H8M	C6-O2-P-O3
3	E	308	A1H8M	C1-O3-P-O2

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Mol	Chain	Res	Type	Atoms
3	E	308	A1H8M	C1-O3-P-O1
3	E	308	A1H8M	C1-O3-P-O4
3	E	309	A1H8M	C01-C7-N21-C21
3	E	309	A1H8M	C7-C01-C02-C03
3	E	309	A1H8M	O01-C01-C02-C03
3	E	309	A1H8M	C1-O3-P-O2
3	E	310	A1H8M	C02-C01-C7-C6
3	E	310	A1H8M	O01-C01-C7-C6
3	E	310	A1H8M	C02-C01-C7-N21
3	E	311	A1H8M	C6-O2-P-O1
3	E	311	A1H8M	C6-O2-P-O3
3	E	311	A1H8M	C6-O2-P-O4
3	E	311	A1H8M	C1-O3-P-O1
3	E	311	A1H8M	C1-O3-P-O4
3	E	312	A1H8M	O2-C6-C7-C01
3	E	312	A1H8M	O2-C6-C7-N21
3	E	312	A1H8M	C7-C01-C02-C03
3	E	312	A1H8M	O01-C01-C02-C03
3	E	312	A1H8M	O3-C1-C2-N2
3	E	312	A1H8M	C1-O3-P-O1
3	E	313	A1H8M	O01-C01-C7-C6
3	E	313	A1H8M	O2-C6-C7-C01
3	E	313	A1H8M	O2-C6-C7-N21
3	F	305	A1H8M	O2-C6-C7-N21
3	F	305	A1H8M	C6-C7-N21-C21
3	F	305	A1H8M	O3-C1-C2-N2
3	F	305	A1H8M	C6-O2-P-O4
3	F	306	A1H8M	C02-C01-C7-C6
3	F	306	A1H8M	O01-C01-C7-C6
3	F	306	A1H8M	C02-C01-C7-N21
3	F	306	A1H8M	O01-C01-C7-N21
3	F	306	A1H8M	O2-C6-C7-C01
3	F	306	A1H8M	O2-C6-C7-N21
3	F	306	A1H8M	C01-C7-N21-C21
3	F	306	A1H8M	O3-C1-C2-N2
3	F	306	A1H8M	C1-O3-P-O1
3	F	306	A1H8M	C1-O3-P-O4
3	F	307	A1H8M	C02-C01-C7-C6
3	F	307	A1H8M	O01-C01-C7-C6
3	F	307	A1H8M	C02-C01-C7-N21
3	F	307	A1H8M	O01-C01-C7-N21
3	F	307	A1H8M	C01-C7-N21-C21

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Mol	Chain	Res	Type	Atoms
3	F	307	A1H8M	O3-C1-C2-N2
3	F	307	A1H8M	C1-O3-P-O1
3	F	308	A1H8M	C02-C01-C7-C6
3	F	308	A1H8M	O01-C01-C7-C6
3	F	308	A1H8M	O01-C01-C7-N21
3	F	308	A1H8M	C01-C7-N21-C21
3	F	308	A1H8M	C7-C01-C02-C03
3	F	308	A1H8M	O01-C01-C02-C03
3	F	308	A1H8M	C6-O2-P-O3
3	F	308	A1H8M	C1-O3-P-O2
3	F	308	A1H8M	C1-O3-P-O1
3	F	308	A1H8M	C1-O3-P-O4
3	F	309	A1H8M	C01-C7-N21-C21
3	F	309	A1H8M	C7-C01-C02-C03
3	F	309	A1H8M	O01-C01-C02-C03
3	F	309	A1H8M	C1-O3-P-O2
3	F	310	A1H8M	C02-C01-C7-C6
3	F	310	A1H8M	O01-C01-C7-C6
3	F	310	A1H8M	C02-C01-C7-N21
3	F	311	A1H8M	C6-O2-P-O1
3	F	311	A1H8M	C6-O2-P-O3
3	F	311	A1H8M	C6-O2-P-O4
3	F	311	A1H8M	C1-O3-P-O1
3	F	311	A1H8M	C1-O3-P-O4
3	F	312	A1H8M	O2-C6-C7-C01
3	F	312	A1H8M	O2-C6-C7-N21
3	F	312	A1H8M	C7-C01-C02-C03
3	F	312	A1H8M	O01-C01-C02-C03
3	F	312	A1H8M	O3-C1-C2-N2
3	F	312	A1H8M	C1-O3-P-O1
3	F	313	A1H8M	O01-C01-C7-C6
3	F	313	A1H8M	O2-C6-C7-C01
3	F	313	A1H8M	O2-C6-C7-N21
3	G	305	A1H8M	O2-C6-C7-N21
3	G	305	A1H8M	C6-C7-N21-C21
3	G	305	A1H8M	O3-C1-C2-N2
3	G	305	A1H8M	C6-O2-P-O4
3	G	306	A1H8M	C02-C01-C7-C6
3	G	306	A1H8M	O01-C01-C7-C6
3	G	306	A1H8M	C02-C01-C7-N21
3	G	306	A1H8M	O01-C01-C7-N21
3	G	306	A1H8M	O2-C6-C7-C01

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Mol	Chain	Res	Type	Atoms
3	G	306	A1H8M	O2-C6-C7-N21
3	G	306	A1H8M	C01-C7-N21-C21
3	G	306	A1H8M	O3-C1-C2-N2
3	G	306	A1H8M	C1-O3-P-O1
3	G	306	A1H8M	C1-O3-P-O4
3	G	307	A1H8M	C02-C01-C7-C6
3	G	307	A1H8M	O01-C01-C7-C6
3	G	307	A1H8M	C02-C01-C7-N21
3	G	307	A1H8M	O01-C01-C7-N21
3	G	307	A1H8M	C01-C7-N21-C21
3	G	307	A1H8M	O3-C1-C2-N2
3	G	307	A1H8M	C1-O3-P-O1
3	G	308	A1H8M	C02-C01-C7-C6
3	G	308	A1H8M	O01-C01-C7-C6
3	G	308	A1H8M	O01-C01-C7-N21
3	G	308	A1H8M	C01-C7-N21-C21
3	G	308	A1H8M	C7-C01-C02-C03
3	G	308	A1H8M	O01-C01-C02-C03
3	G	308	A1H8M	C6-O2-P-O3
3	G	308	A1H8M	C1-O3-P-O2
3	G	308	A1H8M	C1-O3-P-O1
3	G	308	A1H8M	C1-O3-P-O4
3	G	309	A1H8M	C01-C7-N21-C21
3	G	309	A1H8M	C7-C01-C02-C03
3	G	309	A1H8M	O01-C01-C02-C03
3	G	309	A1H8M	C1-O3-P-O2
3	G	310	A1H8M	C02-C01-C7-C6
3	G	310	A1H8M	O01-C01-C7-C6
3	G	310	A1H8M	C02-C01-C7-N21
3	G	311	A1H8M	C6-O2-P-O1
3	G	311	A1H8M	C6-O2-P-O3
3	G	311	A1H8M	C6-O2-P-O4
3	G	311	A1H8M	C1-O3-P-O1
3	G	311	A1H8M	C1-O3-P-O4
3	G	312	A1H8M	O2-C6-C7-C01
3	G	312	A1H8M	O2-C6-C7-N21
3	G	312	A1H8M	C7-C01-C02-C03
3	G	312	A1H8M	O01-C01-C02-C03
3	G	312	A1H8M	O3-C1-C2-N2
3	G	312	A1H8M	C1-O3-P-O1
3	G	313	A1H8M	O01-C01-C7-C6
3	G	313	A1H8M	O2-C6-C7-C01

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Mol	Chain	Res	Type	Atoms
3	G	313	A1H8M	O2-C6-C7-N21
3	H	305	A1H8M	O2-C6-C7-N21
3	H	305	A1H8M	C6-C7-N21-C21
3	H	305	A1H8M	O3-C1-C2-N2
3	H	305	A1H8M	C6-O2-P-O4
3	H	306	A1H8M	C02-C01-C7-C6
3	H	306	A1H8M	O01-C01-C7-C6
3	H	306	A1H8M	C02-C01-C7-N21
3	H	306	A1H8M	O01-C01-C7-N21
3	H	306	A1H8M	O2-C6-C7-C01
3	H	306	A1H8M	O2-C6-C7-N21
3	H	306	A1H8M	C01-C7-N21-C21
3	H	306	A1H8M	O3-C1-C2-N2
3	H	306	A1H8M	C1-O3-P-O1
3	H	306	A1H8M	C1-O3-P-O4
3	H	307	A1H8M	C02-C01-C7-C6
3	H	307	A1H8M	O01-C01-C7-C6
3	H	307	A1H8M	C02-C01-C7-N21
3	H	307	A1H8M	O01-C01-C7-N21
3	H	307	A1H8M	C01-C7-N21-C21
3	H	307	A1H8M	O3-C1-C2-N2
3	H	307	A1H8M	C1-O3-P-O1
3	H	308	A1H8M	C02-C01-C7-C6
3	H	308	A1H8M	O01-C01-C7-C6
3	H	308	A1H8M	O01-C01-C7-N21
3	H	308	A1H8M	C01-C7-N21-C21
3	H	308	A1H8M	C7-C01-C02-C03
3	H	308	A1H8M	O01-C01-C02-C03
3	H	308	A1H8M	C6-O2-P-O3
3	H	308	A1H8M	C1-O3-P-O2
3	H	308	A1H8M	C1-O3-P-O1
3	H	308	A1H8M	C1-O3-P-O4
3	H	309	A1H8M	C01-C7-N21-C21
3	H	309	A1H8M	C7-C01-C02-C03
3	H	309	A1H8M	O01-C01-C02-C03
3	H	309	A1H8M	C1-O3-P-O2
3	H	310	A1H8M	C02-C01-C7-C6
3	H	310	A1H8M	O01-C01-C7-C6
3	H	310	A1H8M	C02-C01-C7-N21
3	H	311	A1H8M	C6-O2-P-O1
3	H	311	A1H8M	C6-O2-P-O3
3	H	311	A1H8M	C6-O2-P-O4

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Mol	Chain	Res	Type	Atoms
3	H	311	A1H8M	C1-O3-P-O1
3	H	311	A1H8M	C1-O3-P-O4
3	H	312	A1H8M	O2-C6-C7-C01
3	H	312	A1H8M	O2-C6-C7-N21
3	H	312	A1H8M	C7-C01-C02-C03
3	H	312	A1H8M	O01-C01-C02-C03
3	H	312	A1H8M	O3-C1-C2-N2
3	H	312	A1H8M	C1-O3-P-O1
3	H	313	A1H8M	O01-C01-C7-C6
3	H	313	A1H8M	O2-C6-C7-C01
3	H	313	A1H8M	O2-C6-C7-N21
3	A	307	A1H8M	C22-C21-N21-C7
3	A	308	A1H8M	C22-C21-N21-C7
3	B	307	A1H8M	C22-C21-N21-C7
3	B	308	A1H8M	C22-C21-N21-C7
3	C	307	A1H8M	C22-C21-N21-C7
3	C	308	A1H8M	C22-C21-N21-C7
3	D	307	A1H8M	C22-C21-N21-C7
3	D	308	A1H8M	C22-C21-N21-C7
3	E	307	A1H8M	C22-C21-N21-C7
3	E	308	A1H8M	C22-C21-N21-C7
3	F	307	A1H8M	C22-C21-N21-C7
3	F	308	A1H8M	C22-C21-N21-C7
3	G	307	A1H8M	C22-C21-N21-C7
3	G	308	A1H8M	C22-C21-N21-C7
3	H	307	A1H8M	C22-C21-N21-C7
3	H	308	A1H8M	C22-C21-N21-C7
3	A	310	A1H8M	C10-C11-C12-C13
3	B	310	A1H8M	C10-C11-C12-C13
3	C	310	A1H8M	C10-C11-C12-C13
3	D	310	A1H8M	C10-C11-C12-C13
3	E	310	A1H8M	C10-C11-C12-C13
3	F	310	A1H8M	C10-C11-C12-C13
3	G	310	A1H8M	C10-C11-C12-C13
3	H	310	A1H8M	C10-C11-C12-C13
3	A	307	A1H8M	O21-C21-N21-C7
3	A	308	A1H8M	O21-C21-N21-C7
3	B	307	A1H8M	O21-C21-N21-C7
3	B	308	A1H8M	O21-C21-N21-C7
3	C	307	A1H8M	O21-C21-N21-C7
3	C	308	A1H8M	O21-C21-N21-C7
3	D	307	A1H8M	O21-C21-N21-C7

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Mol	Chain	Res	Type	Atoms
3	D	308	A1H8M	O21-C21-N21-C7
3	E	307	A1H8M	O21-C21-N21-C7
3	E	308	A1H8M	O21-C21-N21-C7
3	F	307	A1H8M	O21-C21-N21-C7
3	F	308	A1H8M	O21-C21-N21-C7
3	G	307	A1H8M	O21-C21-N21-C7
3	G	308	A1H8M	O21-C21-N21-C7
3	H	307	A1H8M	O21-C21-N21-C7
3	H	308	A1H8M	O21-C21-N21-C7
3	A	311	A1H8M	C23-C24-C25-C26
3	B	311	A1H8M	C23-C24-C25-C26
3	C	311	A1H8M	C23-C24-C25-C26
3	D	311	A1H8M	C23-C24-C25-C26
3	E	311	A1H8M	C23-C24-C25-C26
3	F	311	A1H8M	C23-C24-C25-C26
3	G	311	A1H8M	C23-C24-C25-C26
3	H	311	A1H8M	C23-C24-C25-C26
3	A	311	A1H8M	C21-C22-C23-C24
3	B	311	A1H8M	C21-C22-C23-C24
3	C	311	A1H8M	C21-C22-C23-C24
3	D	311	A1H8M	C21-C22-C23-C24
3	E	311	A1H8M	C21-C22-C23-C24
3	F	311	A1H8M	C21-C22-C23-C24
3	G	311	A1H8M	C21-C22-C23-C24
3	H	311	A1H8M	C21-C22-C23-C24
3	A	310	A1H8M	C08-C09-C10-C11
3	B	310	A1H8M	C08-C09-C10-C11
3	C	310	A1H8M	C08-C09-C10-C11
3	D	310	A1H8M	C08-C09-C10-C11
3	E	310	A1H8M	C08-C09-C10-C11
3	F	310	A1H8M	C08-C09-C10-C11
3	G	310	A1H8M	C08-C09-C10-C11
3	H	310	A1H8M	C08-C09-C10-C11
2	A	302	CLR	C21-C20-C22-C23
2	B	302	CLR	C21-C20-C22-C23
2	C	302	CLR	C21-C20-C22-C23
2	D	302	CLR	C21-C20-C22-C23
2	E	302	CLR	C21-C20-C22-C23
2	F	302	CLR	C21-C20-C22-C23
2	G	302	CLR	C21-C20-C22-C23
2	H	302	CLR	C21-C20-C22-C23
3	A	311	A1H8M	C1-C2-N2-C3

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Mol	Chain	Res	Type	Atoms
3	B	311	A1H8M	C1-C2-N2-C3
3	C	311	A1H8M	C1-C2-N2-C3
3	D	311	A1H8M	C1-C2-N2-C3
3	E	311	A1H8M	C1-C2-N2-C3
3	F	311	A1H8M	C1-C2-N2-C3
3	G	311	A1H8M	C1-C2-N2-C3
3	H	311	A1H8M	C1-C2-N2-C3
3	A	308	A1H8M	C21-C22-C23-C24
3	B	308	A1H8M	C21-C22-C23-C24
3	C	308	A1H8M	C21-C22-C23-C24
3	D	308	A1H8M	C21-C22-C23-C24
3	E	308	A1H8M	C21-C22-C23-C24
3	F	308	A1H8M	C21-C22-C23-C24
3	G	308	A1H8M	C21-C22-C23-C24
3	H	308	A1H8M	C21-C22-C23-C24
3	A	305	A1H8M	C6-O2-P-O3
3	A	306	A1H8M	C1-O3-P-O2
3	A	311	A1H8M	C1-O3-P-O2
3	B	305	A1H8M	C6-O2-P-O3
3	B	306	A1H8M	C1-O3-P-O2
3	B	311	A1H8M	C1-O3-P-O2
3	C	305	A1H8M	C6-O2-P-O3
3	C	306	A1H8M	C1-O3-P-O2
3	C	311	A1H8M	C1-O3-P-O2
3	D	305	A1H8M	C6-O2-P-O3
3	D	306	A1H8M	C1-O3-P-O2
3	D	311	A1H8M	C1-O3-P-O2
3	E	305	A1H8M	C6-O2-P-O3
3	E	306	A1H8M	C1-O3-P-O2
3	E	311	A1H8M	C1-O3-P-O2
3	F	305	A1H8M	C6-O2-P-O3
3	F	306	A1H8M	C1-O3-P-O2
3	F	311	A1H8M	C1-O3-P-O2
3	G	305	A1H8M	C6-O2-P-O3
3	G	306	A1H8M	C1-O3-P-O2
3	G	311	A1H8M	C1-O3-P-O2
3	H	305	A1H8M	C6-O2-P-O3
3	H	306	A1H8M	C1-O3-P-O2
3	H	311	A1H8M	C1-O3-P-O2
3	F	305	A1H8M	C05-C06-C07-C08
3	A	305	A1H8M	C05-C06-C07-C08
3	B	305	A1H8M	C05-C06-C07-C08

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Mol	Chain	Res	Type	Atoms
3	C	305	A1H8M	C05-C06-C07-C08
3	D	305	A1H8M	C05-C06-C07-C08
3	E	305	A1H8M	C05-C06-C07-C08
3	G	305	A1H8M	C05-C06-C07-C08
3	H	305	A1H8M	C05-C06-C07-C08
3	B	311	A1H8M	C04-C05-C06-C07
3	D	306	A1H8M	C09-C10-C11-C12
3	D	311	A1H8M	C04-C05-C06-C07
3	A	306	A1H8M	O21-C21-C22-C23
3	B	306	A1H8M	O21-C21-C22-C23
3	C	306	A1H8M	O21-C21-C22-C23
3	D	306	A1H8M	O21-C21-C22-C23
3	E	306	A1H8M	O21-C21-C22-C23
3	F	306	A1H8M	O21-C21-C22-C23
3	G	306	A1H8M	O21-C21-C22-C23
3	H	306	A1H8M	O21-C21-C22-C23
3	A	305	A1H8M	C22-C23-C24-C25
3	A	306	A1H8M	C09-C10-C11-C12
3	A	311	A1H8M	C04-C05-C06-C07
3	A	313	A1H8M	C11-C12-C13-C14
3	B	305	A1H8M	C22-C23-C24-C25
3	B	306	A1H8M	C09-C10-C11-C12
3	B	306	A1H8M	C27-C28-C29-C30
3	C	305	A1H8M	C22-C23-C24-C25
3	C	306	A1H8M	C09-C10-C11-C12
3	C	311	A1H8M	C04-C05-C06-C07
3	C	313	A1H8M	C11-C12-C13-C14
3	D	305	A1H8M	C22-C23-C24-C25
3	D	313	A1H8M	C11-C12-C13-C14
3	E	305	A1H8M	C22-C23-C24-C25
3	E	306	A1H8M	C09-C10-C11-C12
3	E	311	A1H8M	C04-C05-C06-C07
3	E	313	A1H8M	C11-C12-C13-C14
3	F	305	A1H8M	C22-C23-C24-C25
3	F	306	A1H8M	C09-C10-C11-C12
3	F	311	A1H8M	C04-C05-C06-C07
3	F	313	A1H8M	C11-C12-C13-C14
3	G	305	A1H8M	C22-C23-C24-C25
3	G	306	A1H8M	C09-C10-C11-C12
3	G	311	A1H8M	C04-C05-C06-C07
3	G	313	A1H8M	C11-C12-C13-C14
3	H	305	A1H8M	C22-C23-C24-C25

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Mol	Chain	Res	Type	Atoms
3	H	305	A1H8M	C28-C29-C30-C31
3	H	306	A1H8M	C09-C10-C11-C12
3	H	311	A1H8M	C04-C05-C06-C07
3	H	313	A1H8M	C11-C12-C13-C14
3	A	305	A1H8M	C28-C29-C30-C31
3	A	306	A1H8M	C27-C28-C29-C30
3	A	307	A1H8M	C22-C23-C24-C25
3	B	305	A1H8M	C28-C29-C30-C31
3	B	307	A1H8M	C22-C23-C24-C25
3	B	313	A1H8M	C11-C12-C13-C14
3	C	305	A1H8M	C28-C29-C30-C31
3	C	306	A1H8M	C27-C28-C29-C30
3	C	307	A1H8M	C22-C23-C24-C25
3	D	305	A1H8M	C24-C25-C26-C27
3	D	305	A1H8M	C28-C29-C30-C31
3	D	306	A1H8M	C27-C28-C29-C30
3	D	307	A1H8M	C22-C23-C24-C25
3	E	305	A1H8M	C28-C29-C30-C31
3	E	306	A1H8M	C27-C28-C29-C30
3	E	307	A1H8M	C22-C23-C24-C25
3	F	305	A1H8M	C24-C25-C26-C27
3	F	305	A1H8M	C28-C29-C30-C31
3	F	306	A1H8M	C27-C28-C29-C30
3	F	307	A1H8M	C22-C23-C24-C25
3	G	305	A1H8M	C28-C29-C30-C31
3	G	306	A1H8M	C27-C28-C29-C30
3	G	307	A1H8M	C22-C23-C24-C25
3	H	305	A1H8M	C24-C25-C26-C27
3	H	306	A1H8M	C27-C28-C29-C30
3	H	307	A1H8M	C22-C23-C24-C25
3	A	305	A1H8M	C24-C25-C26-C27
3	B	305	A1H8M	C24-C25-C26-C27
3	C	305	A1H8M	C24-C25-C26-C27
3	E	305	A1H8M	C24-C25-C26-C27
3	G	305	A1H8M	C24-C25-C26-C27
3	A	306	A1H8M	C07-C08-C09-C10
3	A	306	A1H8M	C08-C09-C10-C11
3	B	306	A1H8M	C07-C08-C09-C10
3	B	306	A1H8M	C08-C09-C10-C11
3	C	306	A1H8M	C07-C08-C09-C10
3	C	306	A1H8M	C08-C09-C10-C11
3	D	306	A1H8M	C07-C08-C09-C10

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Mol	Chain	Res	Type	Atoms
3	D	306	A1H8M	C08-C09-C10-C11
3	E	306	A1H8M	C07-C08-C09-C10
3	E	306	A1H8M	C08-C09-C10-C11
3	F	306	A1H8M	C07-C08-C09-C10
3	F	306	A1H8M	C08-C09-C10-C11
3	G	306	A1H8M	C07-C08-C09-C10
3	G	306	A1H8M	C08-C09-C10-C11
3	H	306	A1H8M	C07-C08-C09-C10
3	H	306	A1H8M	C08-C09-C10-C11
3	A	305	A1H8M	N21-C21-C22-C23
3	B	305	A1H8M	N21-C21-C22-C23
3	C	305	A1H8M	N21-C21-C22-C23
3	D	305	A1H8M	N21-C21-C22-C23
3	E	305	A1H8M	N21-C21-C22-C23
3	F	305	A1H8M	N21-C21-C22-C23
3	G	305	A1H8M	N21-C21-C22-C23
3	H	305	A1H8M	N21-C21-C22-C23
3	A	305	A1H8M	C31-C32-C33-C34
3	B	305	A1H8M	C31-C32-C33-C34
3	C	305	A1H8M	C31-C32-C33-C34
3	D	305	A1H8M	C31-C32-C33-C34
3	E	305	A1H8M	C31-C32-C33-C34
3	F	305	A1H8M	C31-C32-C33-C34
3	G	305	A1H8M	C31-C32-C33-C34
3	H	305	A1H8M	C31-C32-C33-C34
3	A	312	A1H8M	C07-C08-C09-C10
3	B	312	A1H8M	C07-C08-C09-C10
3	B	313	A1H8M	C06-C07-C08-C09
3	C	312	A1H8M	C07-C08-C09-C10
3	D	312	A1H8M	C07-C08-C09-C10
3	E	312	A1H8M	C07-C08-C09-C10
3	F	312	A1H8M	C07-C08-C09-C10
3	G	312	A1H8M	C07-C08-C09-C10
3	H	312	A1H8M	C07-C08-C09-C10
3	A	313	A1H8M	C06-C07-C08-C09
3	C	313	A1H8M	C06-C07-C08-C09
3	D	313	A1H8M	C06-C07-C08-C09
3	E	313	A1H8M	C06-C07-C08-C09
3	F	313	A1H8M	C06-C07-C08-C09
3	G	313	A1H8M	C06-C07-C08-C09
3	H	313	A1H8M	C06-C07-C08-C09
3	A	306	A1H8M	N21-C21-C22-C23

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Mol	Chain	Res	Type	Atoms
3	B	306	A1H8M	N21-C21-C22-C23
3	C	306	A1H8M	N21-C21-C22-C23
3	D	306	A1H8M	N21-C21-C22-C23
3	E	306	A1H8M	N21-C21-C22-C23
3	F	306	A1H8M	N21-C21-C22-C23
3	G	306	A1H8M	N21-C21-C22-C23
3	H	306	A1H8M	N21-C21-C22-C23
3	A	306	A1H8M	C21-C22-C23-C24
3	B	306	A1H8M	C21-C22-C23-C24
3	C	306	A1H8M	C21-C22-C23-C24
3	D	306	A1H8M	C21-C22-C23-C24
3	E	306	A1H8M	C21-C22-C23-C24
3	F	306	A1H8M	C21-C22-C23-C24
3	G	306	A1H8M	C21-C22-C23-C24
3	H	306	A1H8M	C21-C22-C23-C24
3	A	305	A1H8M	O21-C21-C22-C23
3	B	305	A1H8M	O21-C21-C22-C23
3	C	305	A1H8M	O21-C21-C22-C23
3	D	305	A1H8M	O21-C21-C22-C23
3	E	305	A1H8M	O21-C21-C22-C23
3	F	305	A1H8M	O21-C21-C22-C23
3	G	305	A1H8M	O21-C21-C22-C23
3	H	305	A1H8M	O21-C21-C22-C23
3	A	308	A1H8M	C26-C27-C28-C29
3	A	312	A1H8M	C24-C25-C26-C27
3	A	312	A1H8M	C27-C28-C29-C30
3	B	308	A1H8M	C26-C27-C28-C29
3	B	312	A1H8M	C24-C25-C26-C27
3	B	312	A1H8M	C27-C28-C29-C30
3	C	308	A1H8M	C26-C27-C28-C29
3	C	312	A1H8M	C24-C25-C26-C27
3	C	312	A1H8M	C27-C28-C29-C30
3	D	308	A1H8M	C26-C27-C28-C29
3	D	312	A1H8M	C24-C25-C26-C27
3	D	312	A1H8M	C27-C28-C29-C30
3	E	308	A1H8M	C26-C27-C28-C29
3	E	312	A1H8M	C24-C25-C26-C27
3	E	312	A1H8M	C27-C28-C29-C30
3	F	308	A1H8M	C26-C27-C28-C29
3	F	312	A1H8M	C24-C25-C26-C27
3	F	312	A1H8M	C27-C28-C29-C30
3	G	308	A1H8M	C26-C27-C28-C29

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Mol	Chain	Res	Type	Atoms
3	G	312	A1H8M	C24-C25-C26-C27
3	G	312	A1H8M	C27-C28-C29-C30
3	H	308	A1H8M	C26-C27-C28-C29
3	H	312	A1H8M	C24-C25-C26-C27
3	H	312	A1H8M	C27-C28-C29-C30
3	A	305	A1H8M	C03-C04-C05-C06
3	B	305	A1H8M	C03-C04-C05-C06
3	C	305	A1H8M	C03-C04-C05-C06
3	D	305	A1H8M	C03-C04-C05-C06
3	E	305	A1H8M	C03-C04-C05-C06
3	F	305	A1H8M	C03-C04-C05-C06
3	G	305	A1H8M	C03-C04-C05-C06
3	H	305	A1H8M	C03-C04-C05-C06
3	A	309	A1H8M	C05-C06-C07-C08
3	A	312	A1H8M	C08-C09-C10-C11
3	B	309	A1H8M	C05-C06-C07-C08
3	B	312	A1H8M	C08-C09-C10-C11
3	B	312	A1H8M	C30-C31-C32-C33
3	C	309	A1H8M	C05-C06-C07-C08
3	C	312	A1H8M	C08-C09-C10-C11
3	D	312	A1H8M	C08-C09-C10-C11
3	D	312	A1H8M	C30-C31-C32-C33
3	E	309	A1H8M	C05-C06-C07-C08
3	E	312	A1H8M	C08-C09-C10-C11
3	F	309	A1H8M	C05-C06-C07-C08
3	F	312	A1H8M	C08-C09-C10-C11
3	F	312	A1H8M	C30-C31-C32-C33
3	G	309	A1H8M	C05-C06-C07-C08
3	G	312	A1H8M	C08-C09-C10-C11
3	H	309	A1H8M	C05-C06-C07-C08
3	H	312	A1H8M	C08-C09-C10-C11
3	H	312	A1H8M	C30-C31-C32-C33
3	A	312	A1H8M	C30-C31-C32-C33
3	C	312	A1H8M	C30-C31-C32-C33
3	D	309	A1H8M	C05-C06-C07-C08
3	E	312	A1H8M	C30-C31-C32-C33
3	G	312	A1H8M	C30-C31-C32-C33
3	A	312	A1H8M	C05-C06-C07-C08
3	B	312	A1H8M	C05-C06-C07-C08
3	C	312	A1H8M	C05-C06-C07-C08
3	D	312	A1H8M	C05-C06-C07-C08
3	E	312	A1H8M	C05-C06-C07-C08

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Mol	Chain	Res	Type	Atoms
3	F	312	A1H8M	C05-C06-C07-C08
3	G	312	A1H8M	C05-C06-C07-C08
3	H	312	A1H8M	C05-C06-C07-C08
3	A	308	A1H8M	C30-C31-C32-C33
3	B	308	A1H8M	C30-C31-C32-C33
3	C	308	A1H8M	C30-C31-C32-C33
3	D	308	A1H8M	C30-C31-C32-C33
3	E	308	A1H8M	C30-C31-C32-C33
3	F	308	A1H8M	C30-C31-C32-C33
3	G	308	A1H8M	C30-C31-C32-C33
3	H	308	A1H8M	C30-C31-C32-C33
3	A	306	A1H8M	C05-C06-C07-C08
3	B	306	A1H8M	C05-C06-C07-C08
3	C	306	A1H8M	C05-C06-C07-C08
3	D	306	A1H8M	C05-C06-C07-C08
3	E	306	A1H8M	C05-C06-C07-C08
3	F	306	A1H8M	C05-C06-C07-C08
3	G	306	A1H8M	C05-C06-C07-C08
3	H	306	A1H8M	C05-C06-C07-C08
3	A	305	A1H8M	C26-C27-C28-C29
3	A	308	A1H8M	C05-C06-C07-C08
3	B	305	A1H8M	C26-C27-C28-C29
3	B	308	A1H8M	C05-C06-C07-C08
3	C	305	A1H8M	C26-C27-C28-C29
3	C	308	A1H8M	C05-C06-C07-C08
3	D	305	A1H8M	C26-C27-C28-C29
3	E	305	A1H8M	C26-C27-C28-C29
3	E	308	A1H8M	C05-C06-C07-C08
3	F	305	A1H8M	C26-C27-C28-C29
3	F	308	A1H8M	C05-C06-C07-C08
3	G	305	A1H8M	C26-C27-C28-C29
3	G	308	A1H8M	C05-C06-C07-C08
3	H	305	A1H8M	C26-C27-C28-C29
3	H	308	A1H8M	C05-C06-C07-C08
3	A	311	A1H8M	C1-C2-N2-C4
3	B	311	A1H8M	C1-C2-N2-C4
3	C	311	A1H8M	C1-C2-N2-C4
3	D	311	A1H8M	C1-C2-N2-C4
3	E	311	A1H8M	C1-C2-N2-C4
3	F	311	A1H8M	C1-C2-N2-C4
3	G	311	A1H8M	C1-C2-N2-C4
3	H	311	A1H8M	C1-C2-N2-C4

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Mol	Chain	Res	Type	Atoms
3	A	306	A1H8M	C6-C7-N21-C21
3	A	307	A1H8M	C6-C7-N21-C21
3	B	306	A1H8M	C6-C7-N21-C21
3	B	307	A1H8M	C6-C7-N21-C21
3	C	306	A1H8M	C6-C7-N21-C21
3	C	307	A1H8M	C6-C7-N21-C21
3	D	306	A1H8M	C6-C7-N21-C21
3	D	307	A1H8M	C6-C7-N21-C21
3	E	306	A1H8M	C6-C7-N21-C21
3	E	307	A1H8M	C6-C7-N21-C21
3	F	306	A1H8M	C6-C7-N21-C21
3	F	307	A1H8M	C6-C7-N21-C21
3	G	306	A1H8M	C6-C7-N21-C21
3	G	307	A1H8M	C6-C7-N21-C21
3	H	306	A1H8M	C6-C7-N21-C21
3	H	307	A1H8M	C6-C7-N21-C21
3	D	308	A1H8M	C05-C06-C07-C08
3	H	306	A1H8M	C24-C25-C26-C27
3	A	306	A1H8M	C24-C25-C26-C27
3	A	308	A1H8M	C23-C24-C25-C26
3	A	311	A1H8M	C24-C25-C26-C27
3	A	311	A1H8M	C27-C28-C29-C30
3	B	306	A1H8M	C24-C25-C26-C27
3	B	308	A1H8M	C23-C24-C25-C26
3	B	311	A1H8M	C24-C25-C26-C27
3	B	311	A1H8M	C27-C28-C29-C30
3	C	306	A1H8M	C24-C25-C26-C27
3	C	308	A1H8M	C23-C24-C25-C26
3	C	311	A1H8M	C24-C25-C26-C27
3	C	311	A1H8M	C27-C28-C29-C30
3	D	306	A1H8M	C24-C25-C26-C27
3	D	308	A1H8M	C23-C24-C25-C26
3	D	311	A1H8M	C24-C25-C26-C27
3	D	311	A1H8M	C27-C28-C29-C30
3	E	306	A1H8M	C24-C25-C26-C27
3	E	308	A1H8M	C23-C24-C25-C26
3	E	311	A1H8M	C24-C25-C26-C27
3	E	311	A1H8M	C27-C28-C29-C30
3	F	306	A1H8M	C24-C25-C26-C27
3	F	311	A1H8M	C24-C25-C26-C27
3	F	311	A1H8M	C27-C28-C29-C30
3	G	306	A1H8M	C24-C25-C26-C27

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Mol	Chain	Res	Type	Atoms
3	G	308	A1H8M	C23-C24-C25-C26
3	G	311	A1H8M	C24-C25-C26-C27
3	G	311	A1H8M	C27-C28-C29-C30
3	H	308	A1H8M	C23-C24-C25-C26
3	H	311	A1H8M	C24-C25-C26-C27
3	H	311	A1H8M	C27-C28-C29-C30
3	F	308	A1H8M	C23-C24-C25-C26
3	A	309	A1H8M	C21-C22-C23-C24
3	B	309	A1H8M	C21-C22-C23-C24
3	C	309	A1H8M	C21-C22-C23-C24
3	D	309	A1H8M	C21-C22-C23-C24
3	E	309	A1H8M	C21-C22-C23-C24
3	F	309	A1H8M	C21-C22-C23-C24
3	G	309	A1H8M	C21-C22-C23-C24
3	H	309	A1H8M	C21-C22-C23-C24
3	A	310	A1H8M	C03-C04-C05-C06
3	B	310	A1H8M	C03-C04-C05-C06
3	C	310	A1H8M	C03-C04-C05-C06
3	D	310	A1H8M	C03-C04-C05-C06
3	E	310	A1H8M	C03-C04-C05-C06
3	F	310	A1H8M	C03-C04-C05-C06
3	G	310	A1H8M	C03-C04-C05-C06
3	H	310	A1H8M	C03-C04-C05-C06
3	A	311	A1H8M	C05-C06-C07-C08
3	B	311	A1H8M	C05-C06-C07-C08
3	C	311	A1H8M	C05-C06-C07-C08
3	D	311	A1H8M	C05-C06-C07-C08
3	E	311	A1H8M	C05-C06-C07-C08
3	F	311	A1H8M	C05-C06-C07-C08
3	G	311	A1H8M	C05-C06-C07-C08
3	H	311	A1H8M	C05-C06-C07-C08
3	A	311	A1H8M	O21-C21-C22-C23
3	B	311	A1H8M	O21-C21-C22-C23
3	C	311	A1H8M	O21-C21-C22-C23
3	D	311	A1H8M	O21-C21-C22-C23
3	E	311	A1H8M	O21-C21-C22-C23
3	F	311	A1H8M	O21-C21-C22-C23
3	G	311	A1H8M	O21-C21-C22-C23
3	H	311	A1H8M	O21-C21-C22-C23
3	A	308	A1H8M	C28-C29-C30-C31
3	B	308	A1H8M	C28-C29-C30-C31
3	C	308	A1H8M	C28-C29-C30-C31

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Mol	Chain	Res	Type	Atoms
3	D	308	A1H8M	C28-C29-C30-C31
3	E	308	A1H8M	C28-C29-C30-C31
3	F	308	A1H8M	C28-C29-C30-C31
3	G	308	A1H8M	C28-C29-C30-C31
3	H	308	A1H8M	C28-C29-C30-C31
3	A	311	A1H8M	C26-C27-C28-C29
3	B	311	A1H8M	C26-C27-C28-C29
3	C	311	A1H8M	C26-C27-C28-C29
3	D	311	A1H8M	C26-C27-C28-C29
3	E	311	A1H8M	C26-C27-C28-C29
3	F	311	A1H8M	C26-C27-C28-C29
3	G	311	A1H8M	C26-C27-C28-C29
3	H	311	A1H8M	C26-C27-C28-C29
3	A	310	A1H8M	O2-C6-C7-N21
3	B	310	A1H8M	O2-C6-C7-N21
3	C	310	A1H8M	O2-C6-C7-N21
3	D	310	A1H8M	O2-C6-C7-N21
3	E	310	A1H8M	O2-C6-C7-N21
3	F	310	A1H8M	O2-C6-C7-N21
3	G	310	A1H8M	O2-C6-C7-N21
3	H	310	A1H8M	O2-C6-C7-N21
3	A	311	A1H8M	C1-C2-N2-C5
3	B	311	A1H8M	C1-C2-N2-C5
3	C	311	A1H8M	C1-C2-N2-C5
3	D	311	A1H8M	C1-C2-N2-C5
3	E	311	A1H8M	C1-C2-N2-C5
3	F	311	A1H8M	C1-C2-N2-C5
3	G	311	A1H8M	C1-C2-N2-C5
3	H	311	A1H8M	C1-C2-N2-C5
3	A	311	A1H8M	N21-C21-C22-C23
3	B	311	A1H8M	N21-C21-C22-C23
3	C	311	A1H8M	N21-C21-C22-C23
3	D	311	A1H8M	N21-C21-C22-C23
3	E	311	A1H8M	N21-C21-C22-C23
3	F	311	A1H8M	N21-C21-C22-C23
3	G	311	A1H8M	N21-C21-C22-C23
3	H	311	A1H8M	N21-C21-C22-C23
3	A	311	A1H8M	C25-C26-C27-C28
3	B	311	A1H8M	C25-C26-C27-C28
3	C	311	A1H8M	C25-C26-C27-C28
3	D	311	A1H8M	C25-C26-C27-C28
3	E	311	A1H8M	C25-C26-C27-C28

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Mol	Chain	Res	Type	Atoms
3	F	311	A1H8M	C25-C26-C27-C28
3	G	311	A1H8M	C25-C26-C27-C28
3	H	311	A1H8M	C25-C26-C27-C28
3	A	312	A1H8M	C03-C04-C05-C06
3	B	312	A1H8M	C03-C04-C05-C06
3	C	312	A1H8M	C03-C04-C05-C06
3	D	312	A1H8M	C03-C04-C05-C06
3	E	312	A1H8M	C03-C04-C05-C06
3	F	312	A1H8M	C03-C04-C05-C06
3	G	312	A1H8M	C03-C04-C05-C06
3	H	312	A1H8M	C03-C04-C05-C06
3	A	310	A1H8M	C02-C03-C04-C05
3	B	310	A1H8M	C02-C03-C04-C05
3	C	310	A1H8M	C02-C03-C04-C05
3	D	310	A1H8M	C02-C03-C04-C05
3	E	310	A1H8M	C02-C03-C04-C05
3	F	310	A1H8M	C02-C03-C04-C05
3	G	310	A1H8M	C02-C03-C04-C05
3	H	310	A1H8M	C02-C03-C04-C05
3	A	313	A1H8M	C08-C09-C10-C11
3	B	313	A1H8M	C08-C09-C10-C11
3	C	313	A1H8M	C08-C09-C10-C11
3	D	313	A1H8M	C08-C09-C10-C11
3	E	313	A1H8M	C08-C09-C10-C11
3	G	313	A1H8M	C08-C09-C10-C11
3	H	313	A1H8M	C08-C09-C10-C11
3	A	306	A1H8M	C23-C24-C25-C26
3	C	306	A1H8M	C23-C24-C25-C26
3	E	306	A1H8M	C23-C24-C25-C26
3	F	306	A1H8M	C23-C24-C25-C26
3	F	313	A1H8M	C08-C09-C10-C11
3	G	306	A1H8M	C23-C24-C25-C26
3	H	306	A1H8M	C23-C24-C25-C26
3	B	306	A1H8M	C23-C24-C25-C26
3	D	306	A1H8M	C23-C24-C25-C26
3	A	305	A1H8M	C07-C08-C09-C10
3	C	305	A1H8M	C07-C08-C09-C10
3	E	305	A1H8M	C07-C08-C09-C10
3	F	305	A1H8M	C07-C08-C09-C10
3	G	305	A1H8M	C07-C08-C09-C10
3	B	305	A1H8M	C07-C08-C09-C10
3	D	305	A1H8M	C07-C08-C09-C10

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Mol	Chain	Res	Type	Atoms
3	H	305	A1H8M	C07-C08-C09-C10
3	A	306	A1H8M	C29-C30-C31-C32
3	A	307	A1H8M	C12-C13-C14-C15
3	A	310	A1H8M	C06-C07-C08-C09
3	A	312	A1H8M	C28-C29-C30-C31
3	B	307	A1H8M	C12-C13-C14-C15
3	B	310	A1H8M	C06-C07-C08-C09
3	B	312	A1H8M	C28-C29-C30-C31
3	C	306	A1H8M	C29-C30-C31-C32
3	C	307	A1H8M	C12-C13-C14-C15
3	C	310	A1H8M	C06-C07-C08-C09
3	C	312	A1H8M	C28-C29-C30-C31
3	D	306	A1H8M	C29-C30-C31-C32
3	D	307	A1H8M	C12-C13-C14-C15
3	D	310	A1H8M	C06-C07-C08-C09
3	D	312	A1H8M	C28-C29-C30-C31
3	E	306	A1H8M	C29-C30-C31-C32
3	E	307	A1H8M	C12-C13-C14-C15
3	E	310	A1H8M	C06-C07-C08-C09
3	E	312	A1H8M	C28-C29-C30-C31
3	F	306	A1H8M	C29-C30-C31-C32
3	F	307	A1H8M	C12-C13-C14-C15
3	F	310	A1H8M	C06-C07-C08-C09
3	F	312	A1H8M	C28-C29-C30-C31
3	G	306	A1H8M	C29-C30-C31-C32
3	G	307	A1H8M	C12-C13-C14-C15
3	G	310	A1H8M	C06-C07-C08-C09
3	G	312	A1H8M	C28-C29-C30-C31
3	H	306	A1H8M	C29-C30-C31-C32
3	H	307	A1H8M	C12-C13-C14-C15
3	H	310	A1H8M	C06-C07-C08-C09
3	H	312	A1H8M	C28-C29-C30-C31
3	B	306	A1H8M	C29-C30-C31-C32
3	A	307	A1H8M	C03-C04-C05-C06
3	A	309	A1H8M	C03-C04-C05-C06
3	B	307	A1H8M	C03-C04-C05-C06
3	B	309	A1H8M	C03-C04-C05-C06
3	C	307	A1H8M	C03-C04-C05-C06
3	C	309	A1H8M	C03-C04-C05-C06
3	D	307	A1H8M	C03-C04-C05-C06
3	D	309	A1H8M	C03-C04-C05-C06
3	E	307	A1H8M	C03-C04-C05-C06

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Mol	Chain	Res	Type	Atoms
3	E	309	A1H8M	C03-C04-C05-C06
3	F	307	A1H8M	C03-C04-C05-C06
3	F	309	A1H8M	C03-C04-C05-C06
3	G	307	A1H8M	C03-C04-C05-C06
3	G	309	A1H8M	C03-C04-C05-C06
3	H	307	A1H8M	C03-C04-C05-C06
3	H	309	A1H8M	C03-C04-C05-C06
3	F	309	A1H8M	C07-C08-C09-C10
3	A	309	A1H8M	C07-C08-C09-C10
3	B	309	A1H8M	C07-C08-C09-C10
3	C	309	A1H8M	C07-C08-C09-C10
3	D	309	A1H8M	C07-C08-C09-C10
3	E	309	A1H8M	C07-C08-C09-C10
3	G	309	A1H8M	C07-C08-C09-C10
3	H	309	A1H8M	C07-C08-C09-C10
3	A	306	A1H8M	C7-C01-C02-C03
3	B	306	A1H8M	C7-C01-C02-C03
3	C	306	A1H8M	C7-C01-C02-C03
3	D	306	A1H8M	C7-C01-C02-C03
3	E	306	A1H8M	C7-C01-C02-C03
3	F	306	A1H8M	C7-C01-C02-C03
3	G	306	A1H8M	C7-C01-C02-C03
3	H	306	A1H8M	C7-C01-C02-C03
3	A	306	A1H8M	O01-C01-C02-C03
3	B	306	A1H8M	O01-C01-C02-C03
3	C	306	A1H8M	O01-C01-C02-C03
3	D	306	A1H8M	O01-C01-C02-C03
3	E	306	A1H8M	O01-C01-C02-C03
3	F	306	A1H8M	O01-C01-C02-C03
3	G	306	A1H8M	O01-C01-C02-C03
3	H	306	A1H8M	O01-C01-C02-C03
3	B	309	A1H8M	C27-C28-C29-C30
3	A	309	A1H8M	C27-C28-C29-C30
3	C	309	A1H8M	C27-C28-C29-C30
3	D	309	A1H8M	C27-C28-C29-C30
3	E	309	A1H8M	C27-C28-C29-C30
3	F	309	A1H8M	C27-C28-C29-C30
3	G	309	A1H8M	C27-C28-C29-C30
3	H	309	A1H8M	C27-C28-C29-C30
3	A	307	A1H8M	C08-C09-C10-C11
3	C	307	A1H8M	C08-C09-C10-C11
3	D	307	A1H8M	C08-C09-C10-C11

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Mol	Chain	Res	Type	Atoms
3	E	307	A1H8M	C08-C09-C10-C11
3	F	307	A1H8M	C08-C09-C10-C11
3	G	307	A1H8M	C08-C09-C10-C11
3	H	307	A1H8M	C08-C09-C10-C11
3	B	307	A1H8M	C08-C09-C10-C11
3	A	309	A1H8M	C22-C23-C24-C25
3	B	309	A1H8M	C22-C23-C24-C25
3	C	309	A1H8M	C22-C23-C24-C25
3	D	309	A1H8M	C22-C23-C24-C25
3	E	309	A1H8M	C22-C23-C24-C25
3	F	309	A1H8M	C22-C23-C24-C25
3	G	309	A1H8M	C22-C23-C24-C25
3	H	309	A1H8M	C22-C23-C24-C25
3	A	313	A1H8M	C12-C13-C14-C15
3	B	313	A1H8M	C12-C13-C14-C15
3	C	313	A1H8M	C12-C13-C14-C15
3	D	313	A1H8M	C12-C13-C14-C15
3	E	313	A1H8M	C12-C13-C14-C15
3	F	313	A1H8M	C12-C13-C14-C15
3	G	313	A1H8M	C12-C13-C14-C15
3	H	313	A1H8M	C12-C13-C14-C15
3	A	312	A1H8M	C10-C11-C12-C13
3	B	312	A1H8M	C10-C11-C12-C13
3	C	312	A1H8M	C10-C11-C12-C13
3	D	312	A1H8M	C10-C11-C12-C13
3	E	312	A1H8M	C10-C11-C12-C13
3	F	312	A1H8M	C10-C11-C12-C13
3	G	312	A1H8M	C10-C11-C12-C13
3	H	312	A1H8M	C10-C11-C12-C13
3	A	312	A1H8M	C25-C26-C27-C28
3	B	312	A1H8M	C06-C07-C08-C09
3	B	312	A1H8M	C25-C26-C27-C28
3	C	312	A1H8M	C25-C26-C27-C28
3	D	312	A1H8M	C06-C07-C08-C09
3	D	312	A1H8M	C25-C26-C27-C28
3	E	312	A1H8M	C25-C26-C27-C28
3	F	312	A1H8M	C06-C07-C08-C09
3	G	312	A1H8M	C25-C26-C27-C28
3	H	312	A1H8M	C06-C07-C08-C09
3	H	312	A1H8M	C25-C26-C27-C28
3	A	312	A1H8M	C06-C07-C08-C09
3	C	312	A1H8M	C06-C07-C08-C09

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Mol	Chain	Res	Type	Atoms
3	E	312	A1H8M	C06-C07-C08-C09
3	F	312	A1H8M	C25-C26-C27-C28
3	G	312	A1H8M	C06-C07-C08-C09
3	A	305	A1H8M	O2-C6-C7-C01
3	B	305	A1H8M	O2-C6-C7-C01
3	C	305	A1H8M	O2-C6-C7-C01
3	D	305	A1H8M	O2-C6-C7-C01
3	E	305	A1H8M	O2-C6-C7-C01
3	F	305	A1H8M	O2-C6-C7-C01
3	G	305	A1H8M	O2-C6-C7-C01
3	H	305	A1H8M	O2-C6-C7-C01
3	A	312	A1H8M	C04-C05-C06-C07
3	C	312	A1H8M	C04-C05-C06-C07
3	E	312	A1H8M	C04-C05-C06-C07
3	G	312	A1H8M	C04-C05-C06-C07
3	B	312	A1H8M	C04-C05-C06-C07
3	D	312	A1H8M	C04-C05-C06-C07
3	F	312	A1H8M	C04-C05-C06-C07
3	H	312	A1H8M	C04-C05-C06-C07
3	A	310	A1H8M	C13-C14-C15-C16
3	B	310	A1H8M	C13-C14-C15-C16
3	C	310	A1H8M	C13-C14-C15-C16
3	D	310	A1H8M	C13-C14-C15-C16
3	E	310	A1H8M	C13-C14-C15-C16
3	F	310	A1H8M	C13-C14-C15-C16
3	G	310	A1H8M	C13-C14-C15-C16
3	H	310	A1H8M	C13-C14-C15-C16
3	A	305	A1H8M	C1-C2-N2-C3
3	B	305	A1H8M	C1-C2-N2-C3
3	C	305	A1H8M	C1-C2-N2-C3
3	D	305	A1H8M	C1-C2-N2-C3
3	E	305	A1H8M	C1-C2-N2-C3
3	F	305	A1H8M	C1-C2-N2-C3
3	G	305	A1H8M	C1-C2-N2-C3
3	H	305	A1H8M	C1-C2-N2-C3
3	A	310	A1H8M	O2-C6-C7-C01
3	B	310	A1H8M	O2-C6-C7-C01
3	C	310	A1H8M	O2-C6-C7-C01
3	D	310	A1H8M	O2-C6-C7-C01
3	E	310	A1H8M	O2-C6-C7-C01
3	F	310	A1H8M	O2-C6-C7-C01
3	G	310	A1H8M	O2-C6-C7-C01

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Mol	Chain	Res	Type	Atoms
3	H	310	A1H8M	O2-C6-C7-C01
3	A	313	A1H8M	C02-C03-C04-C05
3	B	313	A1H8M	C02-C03-C04-C05
3	C	313	A1H8M	C02-C03-C04-C05
3	D	313	A1H8M	C02-C03-C04-C05
3	E	313	A1H8M	C02-C03-C04-C05
3	F	313	A1H8M	C02-C03-C04-C05
3	G	313	A1H8M	C02-C03-C04-C05
3	H	313	A1H8M	C02-C03-C04-C05
3	H	311	A1H8M	C03-C04-C05-C06
3	F	310	A1H8M	C05-C06-C07-C08
3	A	310	A1H8M	C05-C06-C07-C08
3	C	310	A1H8M	C05-C06-C07-C08
3	D	310	A1H8M	C05-C06-C07-C08
3	E	310	A1H8M	C05-C06-C07-C08
3	G	310	A1H8M	C05-C06-C07-C08
3	H	310	A1H8M	C05-C06-C07-C08
3	B	310	A1H8M	C05-C06-C07-C08
3	A	307	A1H8M	C13-C14-C15-C16
3	B	307	A1H8M	C13-C14-C15-C16
3	C	307	A1H8M	C13-C14-C15-C16
3	D	307	A1H8M	C13-C14-C15-C16
3	E	307	A1H8M	C13-C14-C15-C16
3	F	307	A1H8M	C13-C14-C15-C16
3	G	307	A1H8M	C13-C14-C15-C16
3	H	307	A1H8M	C13-C14-C15-C16
3	A	311	A1H8M	C03-C04-C05-C06
3	B	311	A1H8M	C03-C04-C05-C06
3	C	311	A1H8M	C03-C04-C05-C06
3	D	311	A1H8M	C03-C04-C05-C06
3	E	311	A1H8M	C03-C04-C05-C06
3	F	311	A1H8M	C03-C04-C05-C06
3	G	311	A1H8M	C03-C04-C05-C06
3	A	312	A1H8M	C26-C27-C28-C29
3	B	312	A1H8M	C26-C27-C28-C29
3	C	312	A1H8M	C26-C27-C28-C29
3	E	312	A1H8M	C26-C27-C28-C29
3	F	312	A1H8M	C26-C27-C28-C29
3	G	312	A1H8M	C26-C27-C28-C29
3	A	305	A1H8M	C30-C31-C32-C33
3	B	305	A1H8M	C30-C31-C32-C33
3	C	305	A1H8M	C30-C31-C32-C33

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Mol	Chain	Res	Type	Atoms
3	D	305	A1H8M	C30-C31-C32-C33
3	D	312	A1H8M	C26-C27-C28-C29
3	E	305	A1H8M	C30-C31-C32-C33
3	F	305	A1H8M	C30-C31-C32-C33
3	G	305	A1H8M	C30-C31-C32-C33
3	H	305	A1H8M	C30-C31-C32-C33
3	H	312	A1H8M	C26-C27-C28-C29
3	A	305	A1H8M	O01-C01-C7-N21
3	A	310	A1H8M	O01-C01-C7-N21
3	A	311	A1H8M	O01-C01-C7-N21
3	B	305	A1H8M	O01-C01-C7-N21
3	B	310	A1H8M	O01-C01-C7-N21
3	B	311	A1H8M	O01-C01-C7-N21
3	C	305	A1H8M	O01-C01-C7-N21
3	C	310	A1H8M	O01-C01-C7-N21
3	C	311	A1H8M	O01-C01-C7-N21
3	D	305	A1H8M	O01-C01-C7-N21
3	D	310	A1H8M	O01-C01-C7-N21
3	D	311	A1H8M	O01-C01-C7-N21
3	E	305	A1H8M	O01-C01-C7-N21
3	E	310	A1H8M	O01-C01-C7-N21
3	E	311	A1H8M	O01-C01-C7-N21
3	F	305	A1H8M	O01-C01-C7-N21
3	F	310	A1H8M	O01-C01-C7-N21
3	F	311	A1H8M	O01-C01-C7-N21
3	G	305	A1H8M	O01-C01-C7-N21
3	G	310	A1H8M	O01-C01-C7-N21
3	G	311	A1H8M	O01-C01-C7-N21
3	H	305	A1H8M	O01-C01-C7-N21
3	H	310	A1H8M	O01-C01-C7-N21
3	H	311	A1H8M	O01-C01-C7-N21
3	A	306	A1H8M	C10-C11-C12-C13
3	B	306	A1H8M	C10-C11-C12-C13
3	C	306	A1H8M	C10-C11-C12-C13
3	D	306	A1H8M	C10-C11-C12-C13
3	E	306	A1H8M	C10-C11-C12-C13
3	F	306	A1H8M	C10-C11-C12-C13
3	G	306	A1H8M	C10-C11-C12-C13
3	H	306	A1H8M	C10-C11-C12-C13
3	D	310	A1H8M	C04-C05-C06-C07
3	F	310	A1H8M	C04-C05-C06-C07
3	H	310	A1H8M	C04-C05-C06-C07

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Mol	Chain	Res	Type	Atoms
3	A	310	A1H8M	C04-C05-C06-C07
3	B	310	A1H8M	C04-C05-C06-C07
3	C	310	A1H8M	C04-C05-C06-C07
3	E	310	A1H8M	C04-C05-C06-C07
3	G	310	A1H8M	C04-C05-C06-C07
3	A	311	A1H8M	C7-C6-O2-P
3	B	311	A1H8M	C7-C6-O2-P
3	C	311	A1H8M	C7-C6-O2-P
3	D	311	A1H8M	C7-C6-O2-P
3	E	311	A1H8M	C7-C6-O2-P
3	F	311	A1H8M	C7-C6-O2-P
3	G	311	A1H8M	C7-C6-O2-P
3	H	311	A1H8M	C7-C6-O2-P
3	A	305	A1H8M	C6-O2-P-O1
3	A	308	A1H8M	C6-O2-P-O1
3	A	308	A1H8M	C6-O2-P-O4
3	B	305	A1H8M	C6-O2-P-O1
3	B	308	A1H8M	C6-O2-P-O1
3	B	308	A1H8M	C6-O2-P-O4
3	C	305	A1H8M	C6-O2-P-O1
3	C	308	A1H8M	C6-O2-P-O1
3	C	308	A1H8M	C6-O2-P-O4
3	D	305	A1H8M	C6-O2-P-O1
3	D	308	A1H8M	C6-O2-P-O1
3	D	308	A1H8M	C6-O2-P-O4
3	E	305	A1H8M	C6-O2-P-O1
3	E	308	A1H8M	C6-O2-P-O1
3	E	308	A1H8M	C6-O2-P-O4
3	F	305	A1H8M	C6-O2-P-O1
3	F	308	A1H8M	C6-O2-P-O1
3	F	308	A1H8M	C6-O2-P-O4
3	G	305	A1H8M	C6-O2-P-O1
3	G	308	A1H8M	C6-O2-P-O1
3	G	308	A1H8M	C6-O2-P-O4
3	H	305	A1H8M	C6-O2-P-O1
3	H	308	A1H8M	C6-O2-P-O1
3	H	308	A1H8M	C6-O2-P-O4
3	A	313	A1H8M	C05-C06-C07-C08
3	B	313	A1H8M	C05-C06-C07-C08
3	C	313	A1H8M	C05-C06-C07-C08
3	D	313	A1H8M	C05-C06-C07-C08
3	E	313	A1H8M	C05-C06-C07-C08

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Mol	Chain	Res	Type	Atoms
3	F	313	A1H8M	C05-C06-C07-C08
3	G	313	A1H8M	C05-C06-C07-C08
3	H	313	A1H8M	C05-C06-C07-C08
3	A	305	A1H8M	O01-C01-C7-C6
3	A	308	A1H8M	O3-C1-C2-N2
3	A	311	A1H8M	C02-C01-C7-C6
3	A	312	A1H8M	O01-C01-C7-C6
3	B	305	A1H8M	O01-C01-C7-C6
3	B	308	A1H8M	O3-C1-C2-N2
3	B	311	A1H8M	C02-C01-C7-C6
3	B	312	A1H8M	O01-C01-C7-C6
3	C	305	A1H8M	O01-C01-C7-C6
3	C	308	A1H8M	O3-C1-C2-N2
3	C	311	A1H8M	C02-C01-C7-C6
3	C	312	A1H8M	O01-C01-C7-C6
3	D	305	A1H8M	O01-C01-C7-C6
3	D	308	A1H8M	O3-C1-C2-N2
3	D	311	A1H8M	C02-C01-C7-C6
3	D	312	A1H8M	O01-C01-C7-C6
3	E	305	A1H8M	O01-C01-C7-C6
3	E	308	A1H8M	O3-C1-C2-N2
3	E	311	A1H8M	C02-C01-C7-C6
3	E	312	A1H8M	O01-C01-C7-C6
3	F	305	A1H8M	O01-C01-C7-C6
3	F	308	A1H8M	O3-C1-C2-N2
3	F	311	A1H8M	C02-C01-C7-C6
3	F	312	A1H8M	O01-C01-C7-C6
3	G	305	A1H8M	O01-C01-C7-C6
3	G	308	A1H8M	O3-C1-C2-N2
3	G	311	A1H8M	C02-C01-C7-C6
3	G	312	A1H8M	O01-C01-C7-C6
3	H	305	A1H8M	O01-C01-C7-C6
3	H	308	A1H8M	O3-C1-C2-N2
3	H	311	A1H8M	C02-C01-C7-C6
3	H	312	A1H8M	O01-C01-C7-C6
3	D	309	A1H8M	C29-C30-C31-C32
3	A	309	A1H8M	C29-C30-C31-C32
3	B	309	A1H8M	C29-C30-C31-C32
3	C	309	A1H8M	C29-C30-C31-C32
3	E	309	A1H8M	C29-C30-C31-C32
3	G	309	A1H8M	C29-C30-C31-C32
3	H	309	A1H8M	C29-C30-C31-C32

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Mol	Chain	Res	Type	Atoms
3	F	309	A1H8M	C29-C30-C31-C32
3	A	306	A1H8M	C22-C23-C24-C25
3	B	306	A1H8M	C22-C23-C24-C25
3	C	306	A1H8M	C22-C23-C24-C25
3	D	306	A1H8M	C22-C23-C24-C25
3	E	306	A1H8M	C22-C23-C24-C25
3	G	306	A1H8M	C22-C23-C24-C25
3	H	306	A1H8M	C22-C23-C24-C25
3	F	306	A1H8M	C22-C23-C24-C25
3	A	305	A1H8M	C1-C2-N2-C4
3	B	305	A1H8M	C1-C2-N2-C4
3	C	305	A1H8M	C1-C2-N2-C4
3	D	305	A1H8M	C1-C2-N2-C4
3	E	305	A1H8M	C1-C2-N2-C4
3	F	305	A1H8M	C1-C2-N2-C4
3	G	305	A1H8M	C1-C2-N2-C4
3	H	305	A1H8M	C1-C2-N2-C4
3	A	305	A1H8M	C13-C14-C15-C16
3	B	305	A1H8M	C13-C14-C15-C16
3	C	305	A1H8M	C13-C14-C15-C16
3	D	305	A1H8M	C13-C14-C15-C16
3	E	305	A1H8M	C13-C14-C15-C16
3	F	305	A1H8M	C13-C14-C15-C16
3	G	305	A1H8M	C13-C14-C15-C16
3	H	305	A1H8M	C13-C14-C15-C16
3	A	307	A1H8M	C7-C01-C02-C03
3	B	307	A1H8M	C7-C01-C02-C03
3	C	307	A1H8M	C7-C01-C02-C03
3	D	307	A1H8M	C7-C01-C02-C03
3	E	307	A1H8M	C7-C01-C02-C03
3	F	307	A1H8M	C7-C01-C02-C03
3	G	307	A1H8M	C7-C01-C02-C03
3	H	307	A1H8M	C7-C01-C02-C03
3	A	307	A1H8M	O01-C01-C02-C03
3	B	307	A1H8M	O01-C01-C02-C03
3	C	307	A1H8M	O01-C01-C02-C03
3	D	307	A1H8M	O01-C01-C02-C03
3	E	307	A1H8M	O01-C01-C02-C03
3	F	307	A1H8M	O01-C01-C02-C03
3	G	307	A1H8M	O01-C01-C02-C03
3	H	307	A1H8M	O01-C01-C02-C03
3	B	307	A1H8M	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
3	A	307	A1H8M	C10-C11-C12-C13
3	C	307	A1H8M	C10-C11-C12-C13
3	D	307	A1H8M	C10-C11-C12-C13
3	E	307	A1H8M	C10-C11-C12-C13
3	F	307	A1H8M	C10-C11-C12-C13
3	G	307	A1H8M	C10-C11-C12-C13
3	H	307	A1H8M	C10-C11-C12-C13
3	A	308	A1H8M	C32-C33-C34-C35
3	B	308	A1H8M	C32-C33-C34-C35
3	C	308	A1H8M	C32-C33-C34-C35
3	D	308	A1H8M	C32-C33-C34-C35
3	E	308	A1H8M	C32-C33-C34-C35
3	F	308	A1H8M	C32-C33-C34-C35
3	G	308	A1H8M	C32-C33-C34-C35
3	H	308	A1H8M	C32-C33-C34-C35
3	A	305	A1H8M	C12-C13-C14-C15
3	B	305	A1H8M	C12-C13-C14-C15
3	C	305	A1H8M	C12-C13-C14-C15
3	E	305	A1H8M	C12-C13-C14-C15
3	G	305	A1H8M	C12-C13-C14-C15
3	H	305	A1H8M	C12-C13-C14-C15
3	D	305	A1H8M	C12-C13-C14-C15
3	F	305	A1H8M	C12-C13-C14-C15
3	A	306	A1H8M	C6-O2-P-O3
3	A	307	A1H8M	C1-O3-P-O2
3	A	309	A1H8M	C6-O2-P-O3
3	B	306	A1H8M	C6-O2-P-O3
3	B	307	A1H8M	C1-O3-P-O2
3	B	309	A1H8M	C6-O2-P-O3
3	C	306	A1H8M	C6-O2-P-O3
3	C	307	A1H8M	C1-O3-P-O2
3	C	309	A1H8M	C6-O2-P-O3
3	D	306	A1H8M	C6-O2-P-O3
3	D	307	A1H8M	C1-O3-P-O2
3	D	309	A1H8M	C6-O2-P-O3
3	E	306	A1H8M	C6-O2-P-O3
3	E	307	A1H8M	C1-O3-P-O2
3	E	309	A1H8M	C6-O2-P-O3
3	F	306	A1H8M	C6-O2-P-O3
3	F	307	A1H8M	C1-O3-P-O2
3	F	309	A1H8M	C6-O2-P-O3
3	G	306	A1H8M	C6-O2-P-O3

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Mol	Chain	Res	Type	Atoms
3	G	307	A1H8M	C1-O3-P-O2
3	G	309	A1H8M	C6-O2-P-O3
3	H	306	A1H8M	C6-O2-P-O3
3	H	307	A1H8M	C1-O3-P-O2
3	H	309	A1H8M	C6-O2-P-O3
3	B	312	A1H8M	C23-C24-C25-C26
3	D	312	A1H8M	C23-C24-C25-C26
3	H	312	A1H8M	C23-C24-C25-C26
3	A	312	A1H8M	C23-C24-C25-C26
3	C	312	A1H8M	C23-C24-C25-C26
3	E	312	A1H8M	C23-C24-C25-C26
3	F	312	A1H8M	C23-C24-C25-C26
3	G	312	A1H8M	C23-C24-C25-C26
3	A	306	A1H8M	C12-C13-C14-C15
3	B	306	A1H8M	C12-C13-C14-C15
3	C	306	A1H8M	C12-C13-C14-C15
3	D	306	A1H8M	C12-C13-C14-C15
3	E	306	A1H8M	C12-C13-C14-C15
3	F	306	A1H8M	C12-C13-C14-C15
3	G	306	A1H8M	C12-C13-C14-C15
3	H	306	A1H8M	C12-C13-C14-C15
3	B	305	A1H8M	C1-C2-N2-C5
3	D	305	A1H8M	C10-C11-C12-C13
3	H	305	A1H8M	C10-C11-C12-C13
3	B	305	A1H8M	C21-C22-C23-C24
3	D	305	A1H8M	C21-C22-C23-C24
3	H	305	A1H8M	C21-C22-C23-C24
3	A	305	A1H8M	C10-C11-C12-C13
3	B	305	A1H8M	C10-C11-C12-C13
3	C	305	A1H8M	C10-C11-C12-C13
3	E	305	A1H8M	C10-C11-C12-C13
3	F	305	A1H8M	C10-C11-C12-C13
3	G	305	A1H8M	C10-C11-C12-C13
3	A	305	A1H8M	C21-C22-C23-C24
3	C	305	A1H8M	C21-C22-C23-C24
3	E	305	A1H8M	C21-C22-C23-C24
3	F	305	A1H8M	C21-C22-C23-C24
3	G	305	A1H8M	C21-C22-C23-C24
3	A	305	A1H8M	C1-C2-N2-C5
3	C	305	A1H8M	C1-C2-N2-C5
3	D	305	A1H8M	C1-C2-N2-C5
3	E	305	A1H8M	C1-C2-N2-C5

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Mol	Chain	Res	Type	Atoms
3	F	305	A1H8M	C1-C2-N2-C5
3	G	305	A1H8M	C1-C2-N2-C5
3	H	305	A1H8M	C1-C2-N2-C5
3	F	311	A1H8M	C06-C07-C08-C09
3	A	311	A1H8M	C06-C07-C08-C09
3	B	311	A1H8M	C06-C07-C08-C09
3	C	311	A1H8M	C06-C07-C08-C09
3	E	311	A1H8M	C06-C07-C08-C09
3	G	311	A1H8M	C06-C07-C08-C09
3	H	311	A1H8M	C06-C07-C08-C09
3	D	311	A1H8M	C06-C07-C08-C09
3	F	312	A1H8M	C22-C23-C24-C25
3	H	312	A1H8M	C22-C23-C24-C25
3	A	312	A1H8M	C22-C23-C24-C25
3	B	312	A1H8M	C22-C23-C24-C25
3	C	312	A1H8M	C22-C23-C24-C25
3	D	312	A1H8M	C22-C23-C24-C25
3	E	312	A1H8M	C22-C23-C24-C25
3	G	312	A1H8M	C22-C23-C24-C25
3	F	308	A1H8M	C11-C12-C13-C14
3	A	308	A1H8M	C11-C12-C13-C14
3	B	308	A1H8M	C11-C12-C13-C14
3	C	308	A1H8M	C11-C12-C13-C14
3	D	308	A1H8M	C11-C12-C13-C14
3	E	308	A1H8M	C11-C12-C13-C14
3	G	308	A1H8M	C11-C12-C13-C14
3	H	308	A1H8M	C11-C12-C13-C14
3	D	307	A1H8M	C11-C12-C13-C14
3	H	307	A1H8M	C11-C12-C13-C14
3	A	307	A1H8M	C11-C12-C13-C14
3	C	307	A1H8M	C11-C12-C13-C14
3	E	307	A1H8M	C11-C12-C13-C14
3	G	307	A1H8M	C11-C12-C13-C14
3	B	307	A1H8M	C11-C12-C13-C14
3	F	307	A1H8M	C11-C12-C13-C14
3	F	305	A1H8M	C29-C30-C31-C32
3	H	305	A1H8M	C29-C30-C31-C32
3	A	305	A1H8M	C29-C30-C31-C32
3	B	305	A1H8M	C29-C30-C31-C32
3	C	305	A1H8M	C29-C30-C31-C32
3	D	305	A1H8M	C29-C30-C31-C32
3	E	305	A1H8M	C29-C30-C31-C32

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Mol	Chain	Res	Type	Atoms
3	G	305	A1H8M	C29-C30-C31-C32
3	A	305	A1H8M	C02-C03-C04-C05
3	B	305	A1H8M	C02-C03-C04-C05
3	C	305	A1H8M	C02-C03-C04-C05
3	D	305	A1H8M	C02-C03-C04-C05
3	E	305	A1H8M	C02-C03-C04-C05
3	F	305	A1H8M	C02-C03-C04-C05
3	G	305	A1H8M	C02-C03-C04-C05
3	H	305	A1H8M	C02-C03-C04-C05
3	A	305	A1H8M	C08-C09-C10-C11
3	B	305	A1H8M	C08-C09-C10-C11
3	C	305	A1H8M	C08-C09-C10-C11
3	D	305	A1H8M	C08-C09-C10-C11
3	E	305	A1H8M	C08-C09-C10-C11
3	F	305	A1H8M	C08-C09-C10-C11
3	F	309	A1H8M	C31-C32-C33-C34
3	G	305	A1H8M	C08-C09-C10-C11
3	H	305	A1H8M	C08-C09-C10-C11
3	A	309	A1H8M	C31-C32-C33-C34
3	C	309	A1H8M	C31-C32-C33-C34
3	E	309	A1H8M	C31-C32-C33-C34
3	G	309	A1H8M	C31-C32-C33-C34
3	H	309	A1H8M	C31-C32-C33-C34
3	B	309	A1H8M	C31-C32-C33-C34
3	D	309	A1H8M	C31-C32-C33-C34
3	A	308	A1H8M	C02-C03-C04-C05
3	B	308	A1H8M	C02-C03-C04-C05
3	C	308	A1H8M	C02-C03-C04-C05
3	D	308	A1H8M	C02-C03-C04-C05
3	E	308	A1H8M	C02-C03-C04-C05
3	F	308	A1H8M	C02-C03-C04-C05
3	G	308	A1H8M	C02-C03-C04-C05
3	H	308	A1H8M	C02-C03-C04-C05
3	A	311	A1H8M	O01-C01-C02-C03
3	B	311	A1H8M	O01-C01-C02-C03
3	C	311	A1H8M	O01-C01-C02-C03
3	D	311	A1H8M	O01-C01-C02-C03
3	E	311	A1H8M	O01-C01-C02-C03
3	F	311	A1H8M	O01-C01-C02-C03
3	G	311	A1H8M	O01-C01-C02-C03
3	H	311	A1H8M	O01-C01-C02-C03
3	A	311	A1H8M	C02-C03-C04-C05

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Mol	Chain	Res	Type	Atoms
3	B	311	A1H8M	C02-C03-C04-C05
3	C	311	A1H8M	C02-C03-C04-C05
3	D	311	A1H8M	C02-C03-C04-C05
3	E	311	A1H8M	C02-C03-C04-C05
3	F	311	A1H8M	C02-C03-C04-C05
3	G	311	A1H8M	C02-C03-C04-C05
3	H	311	A1H8M	C02-C03-C04-C05
3	A	308	A1H8M	C02-C01-C7-N21
3	B	308	A1H8M	C02-C01-C7-N21
3	C	308	A1H8M	C02-C01-C7-N21
3	D	308	A1H8M	C02-C01-C7-N21
3	E	308	A1H8M	C02-C01-C7-N21
3	F	308	A1H8M	C02-C01-C7-N21
3	G	308	A1H8M	C02-C01-C7-N21
3	H	308	A1H8M	C02-C01-C7-N21
3	A	309	A1H8M	C30-C31-C32-C33
3	B	309	A1H8M	C30-C31-C32-C33
3	C	309	A1H8M	C30-C31-C32-C33
3	D	309	A1H8M	C30-C31-C32-C33
3	E	309	A1H8M	C30-C31-C32-C33
3	F	309	A1H8M	C30-C31-C32-C33
3	G	309	A1H8M	C30-C31-C32-C33
3	H	309	A1H8M	C30-C31-C32-C33
3	B	308	A1H8M	C27-C28-C29-C30
3	D	308	A1H8M	C27-C28-C29-C30
3	A	308	A1H8M	C27-C28-C29-C30
3	C	308	A1H8M	C27-C28-C29-C30
3	E	308	A1H8M	C27-C28-C29-C30
3	G	308	A1H8M	C27-C28-C29-C30
3	H	308	A1H8M	C27-C28-C29-C30
3	F	308	A1H8M	C27-C28-C29-C30
3	A	312	A1H8M	C32-C33-C34-C35
3	B	312	A1H8M	C32-C33-C34-C35
3	C	312	A1H8M	C32-C33-C34-C35
3	E	312	A1H8M	C32-C33-C34-C35
3	F	312	A1H8M	C32-C33-C34-C35
3	G	312	A1H8M	C32-C33-C34-C35
3	D	312	A1H8M	C32-C33-C34-C35
3	H	312	A1H8M	C32-C33-C34-C35
3	A	309	A1H8M	C02-C03-C04-C05
3	B	309	A1H8M	C02-C03-C04-C05
3	C	309	A1H8M	C02-C03-C04-C05

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Mol	Chain	Res	Type	Atoms
3	E	309	A1H8M	C02-C03-C04-C05
3	G	309	A1H8M	C02-C03-C04-C05
3	H	309	A1H8M	C02-C03-C04-C05
3	D	309	A1H8M	C02-C03-C04-C05
3	F	309	A1H8M	C02-C03-C04-C05
3	A	309	A1H8M	C1-O3-P-O4
3	B	309	A1H8M	C1-O3-P-O4
3	C	309	A1H8M	C1-O3-P-O4
3	D	309	A1H8M	C1-O3-P-O4
3	E	309	A1H8M	C1-O3-P-O4
3	F	309	A1H8M	C1-O3-P-O4
3	G	309	A1H8M	C1-O3-P-O4
3	H	309	A1H8M	C1-O3-P-O4
3	H	307	A1H8M	C04-C05-C06-C07
3	A	307	A1H8M	C04-C05-C06-C07
3	B	307	A1H8M	C04-C05-C06-C07
3	C	307	A1H8M	C04-C05-C06-C07
3	E	307	A1H8M	C04-C05-C06-C07
3	F	307	A1H8M	C04-C05-C06-C07
3	G	307	A1H8M	C04-C05-C06-C07
3	D	307	A1H8M	C04-C05-C06-C07
3	A	306	A1H8M	C2-C1-O3-P
3	A	308	A1H8M	C2-C1-O3-P
3	B	306	A1H8M	C2-C1-O3-P
3	B	308	A1H8M	C2-C1-O3-P
3	C	306	A1H8M	C2-C1-O3-P
3	C	308	A1H8M	C2-C1-O3-P
3	D	306	A1H8M	C2-C1-O3-P
3	D	308	A1H8M	C2-C1-O3-P
3	E	306	A1H8M	C2-C1-O3-P
3	E	308	A1H8M	C2-C1-O3-P
3	F	306	A1H8M	C2-C1-O3-P
3	F	308	A1H8M	C2-C1-O3-P
3	G	306	A1H8M	C2-C1-O3-P
3	G	308	A1H8M	C2-C1-O3-P
3	H	306	A1H8M	C2-C1-O3-P
3	H	308	A1H8M	C2-C1-O3-P

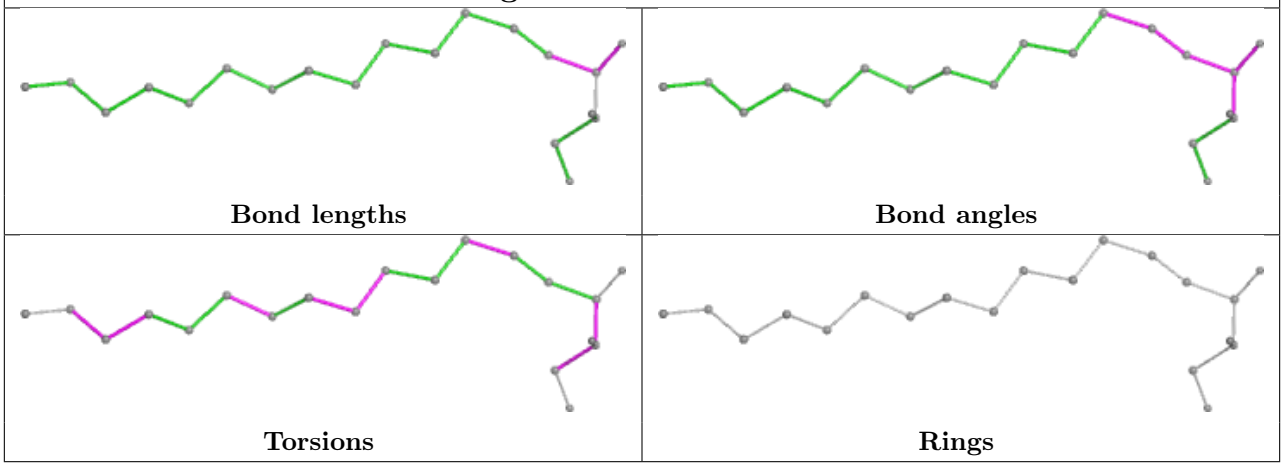
There are no ring outliers.

26 monomers are involved in 42 short contacts:

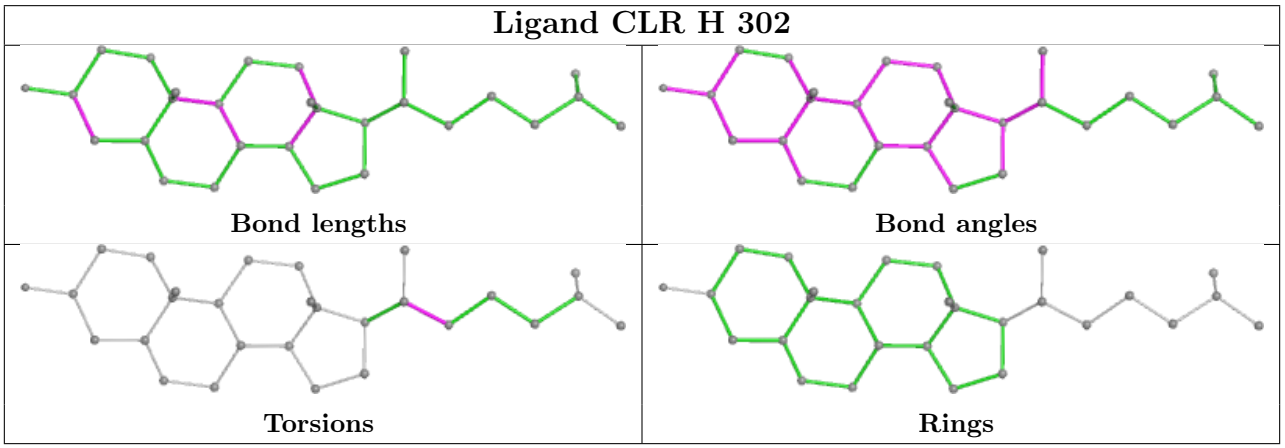
Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	E	308	A1H8M	1	0
3	A	308	A1H8M	1	0
3	G	305	A1H8M	3	0
3	H	306	A1H8M	1	0
3	E	306	A1H8M	1	0
3	D	306	A1H8M	1	0
3	H	308	A1H8M	1	0
2	E	301	CLR	1	0
3	D	308	A1H8M	1	0
2	D	301	CLR	1	0
3	C	305	A1H8M	3	0
3	B	306	A1H8M	1	0
3	B	308	A1H8M	1	0
3	E	305	A1H8M	3	0
3	G	308	A1H8M	1	0
3	C	308	A1H8M	1	0
3	F	308	A1H8M	1	0
3	A	305	A1H8M	3	0
3	B	305	A1H8M	3	0
3	F	305	A1H8M	3	0
3	F	306	A1H8M	1	0
3	A	306	A1H8M	1	0
3	D	305	A1H8M	3	0
3	G	306	A1H8M	1	0
2	G	301	CLR	1	0
3	H	305	A1H8M	3	0

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

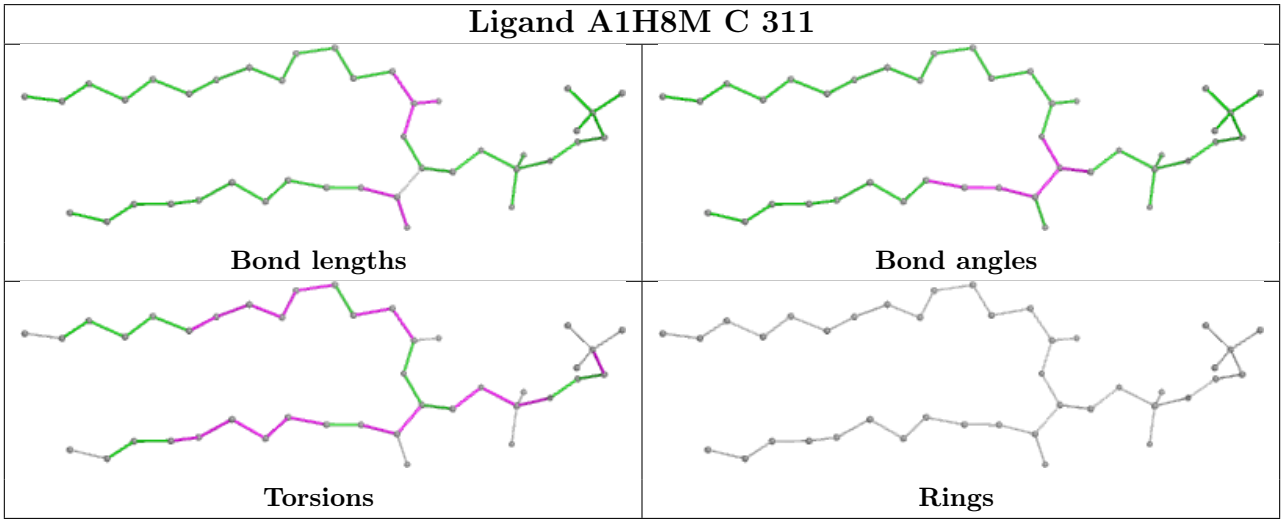
Ligand A1H8M B 313



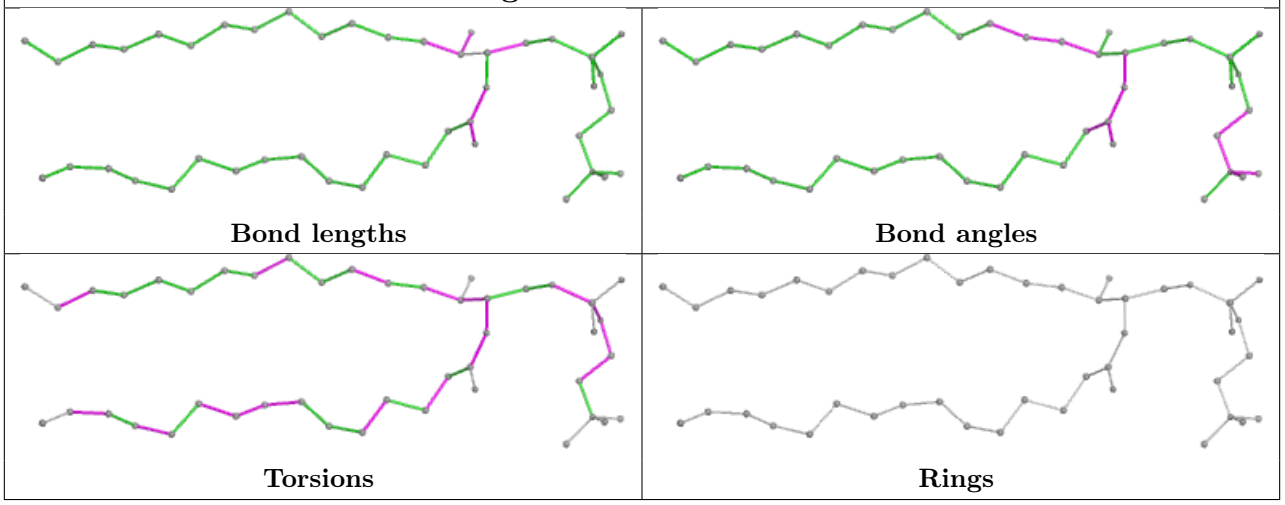
Ligand CLR H 302



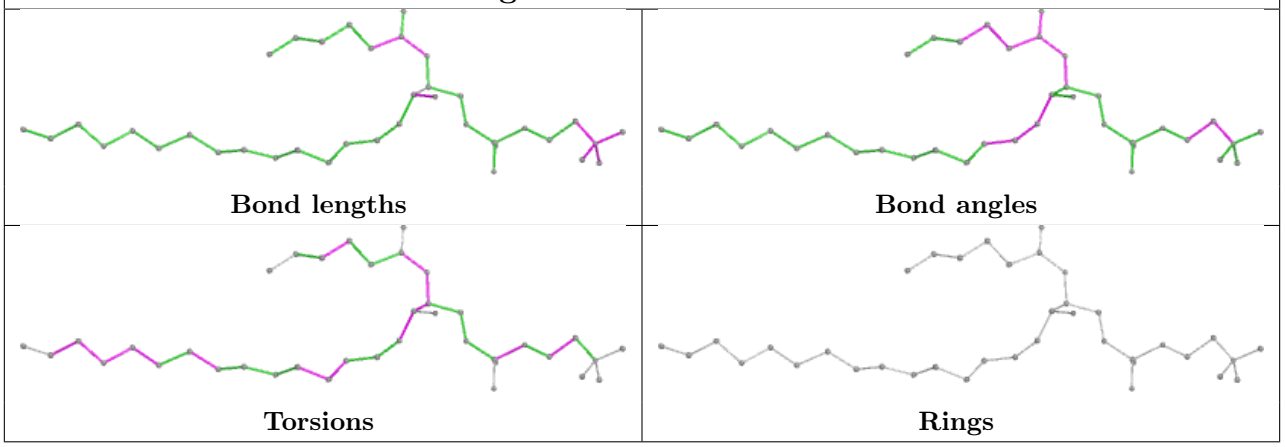
Ligand A1H8M C 311



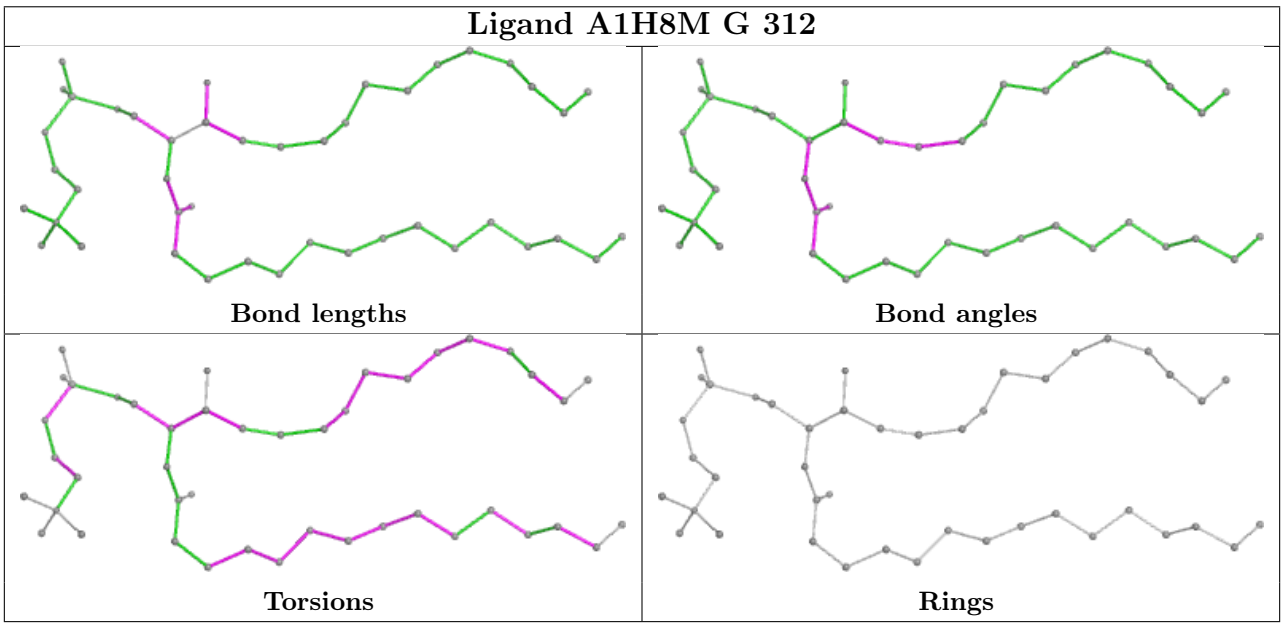
Ligand A1H8M E 308



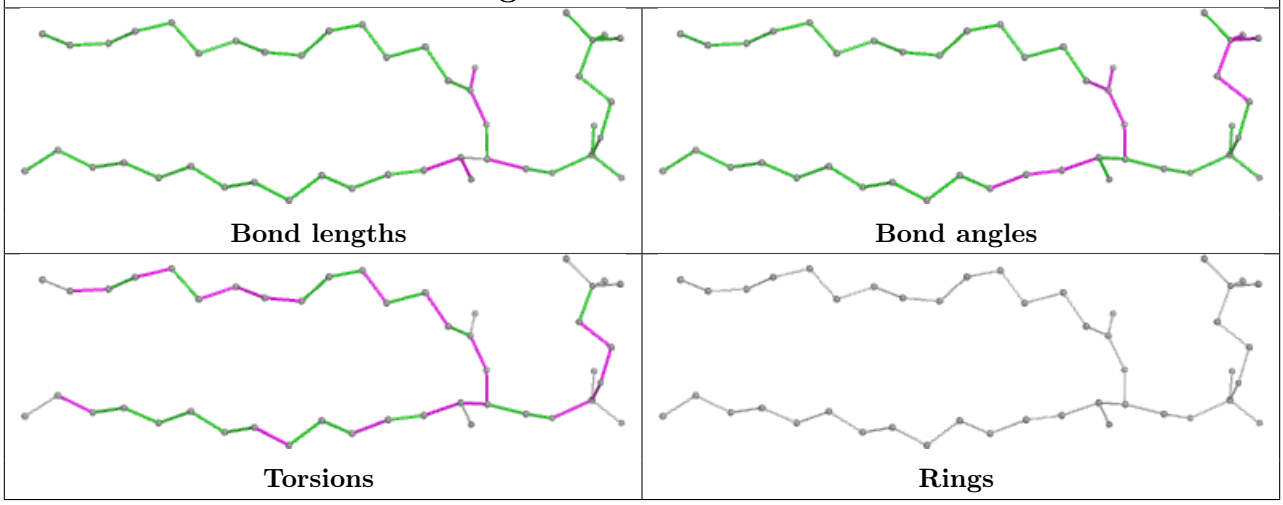
Ligand A1H8M D 307



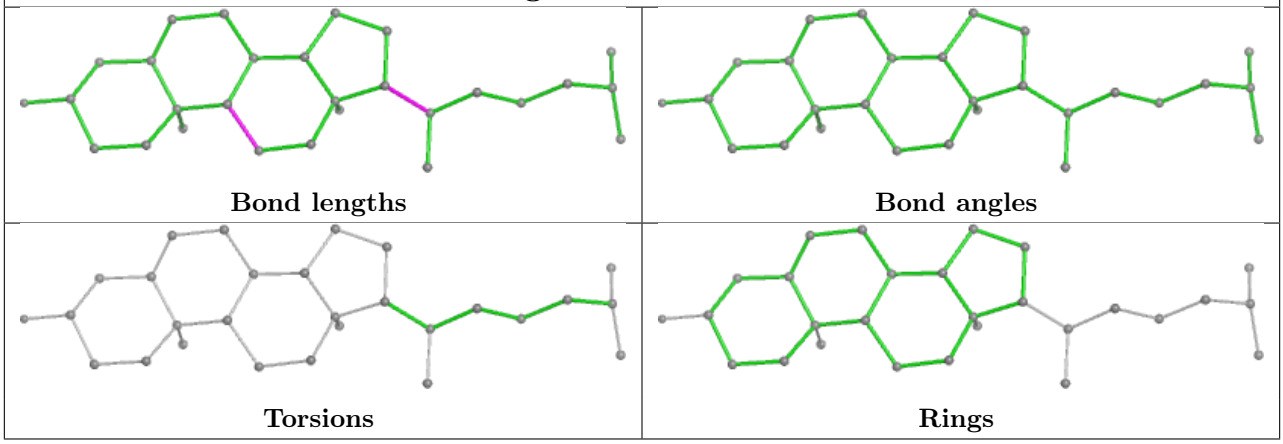
Ligand A1H8M G 312



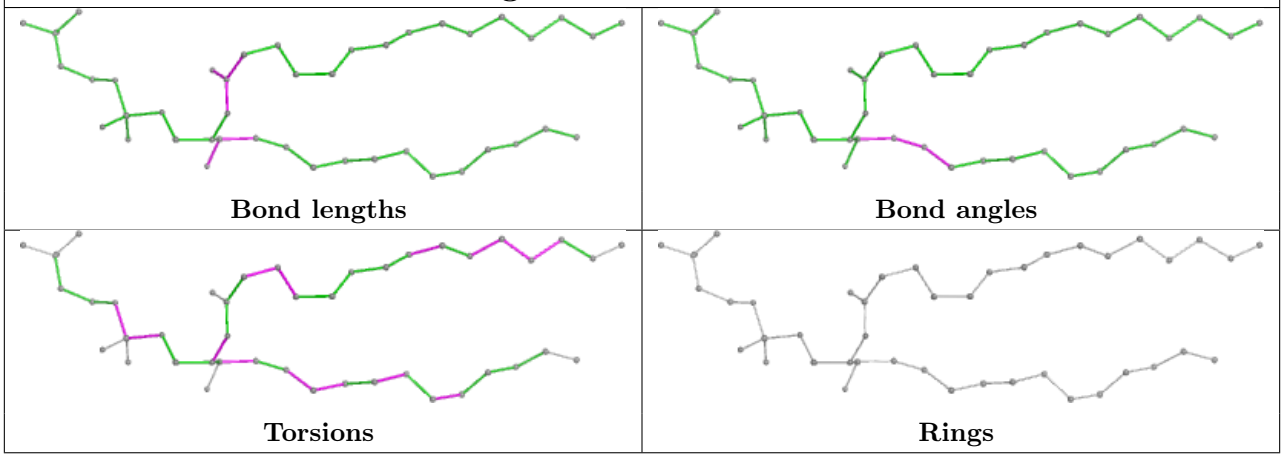
Ligand A1H8M A 308



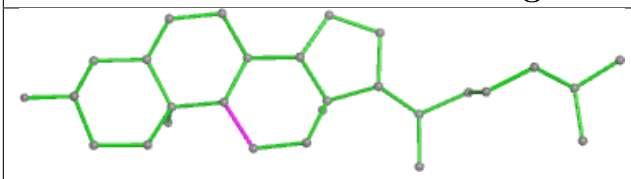
Ligand CLR G 304



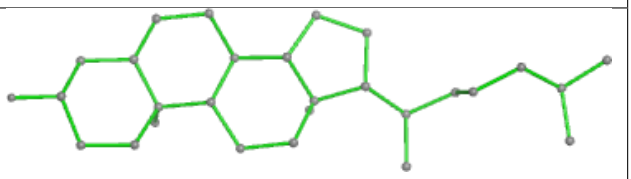
Ligand A1H8M E 309



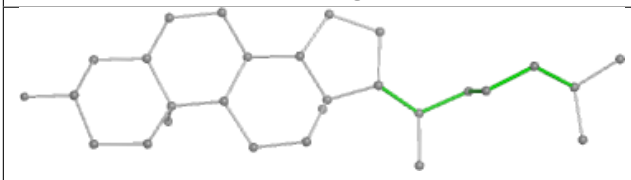
Ligand CLR G 303



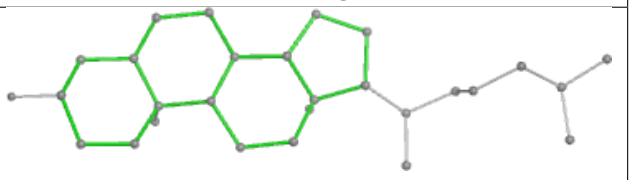
Bond lengths



Bond angles

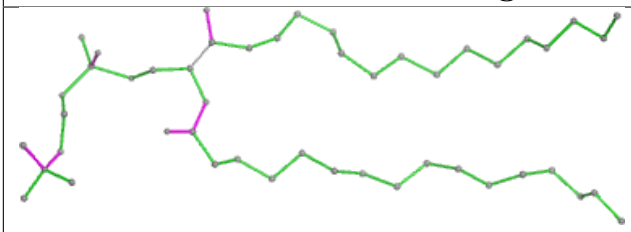


Torsions

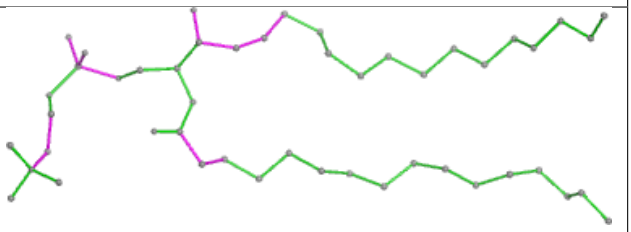


Rings

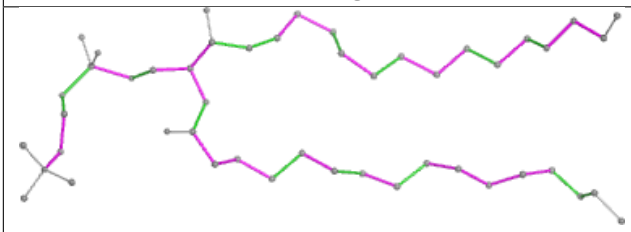
Ligand A1H8M G 305



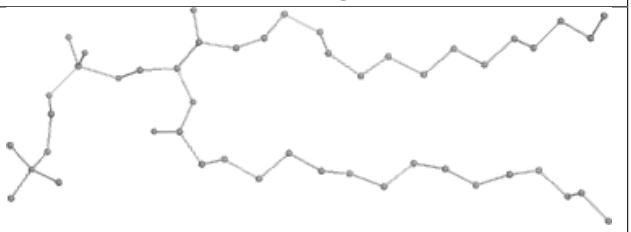
Bond lengths



Bond angles

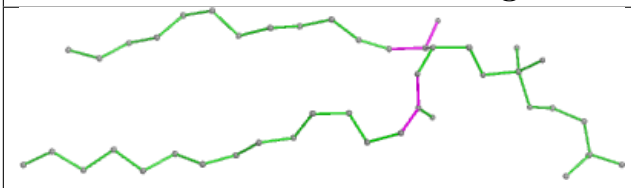


Torsions

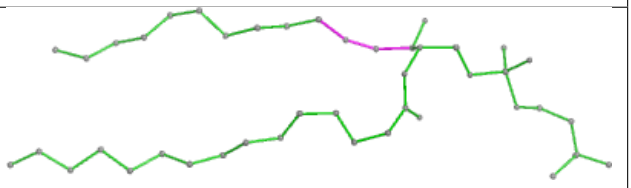


Rings

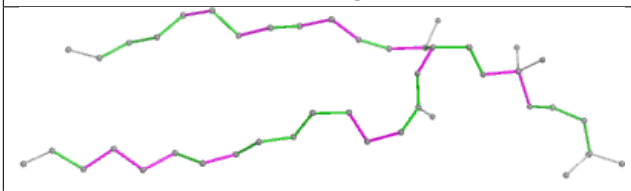
Ligand A1H8M F 309



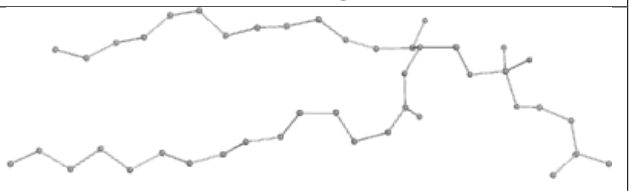
Bond lengths



Bond angles

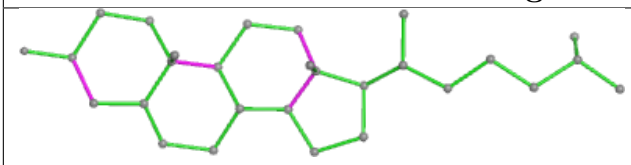


Torsions

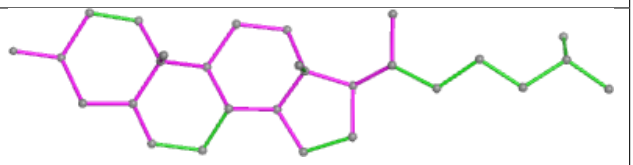


Rings

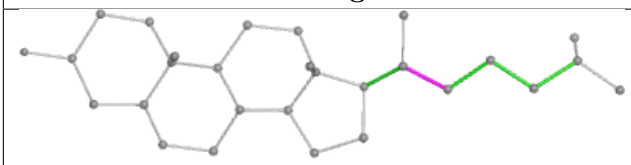
Ligand CLR E 302



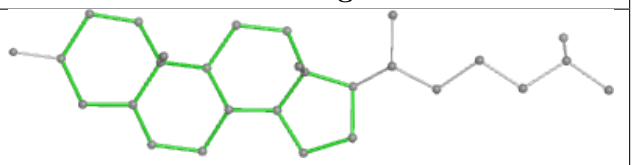
Bond lengths



Bond angles

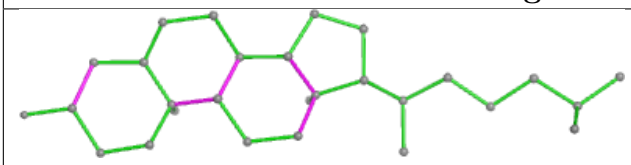


Torsions

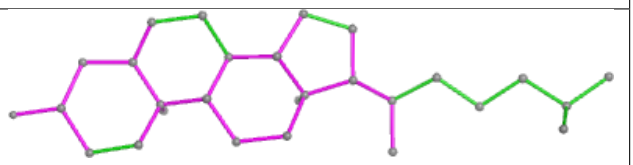


Rings

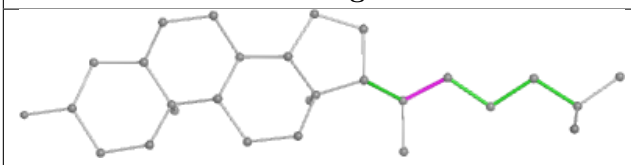
Ligand CLR D 302



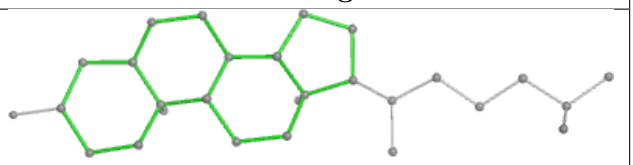
Bond lengths



Bond angles

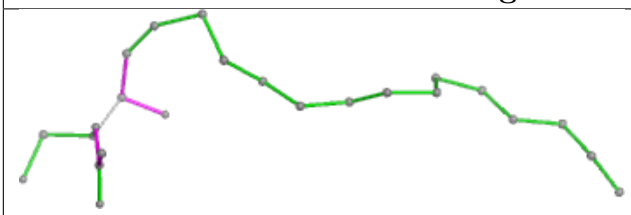


Torsions

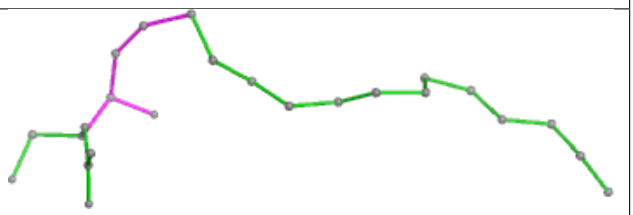


Rings

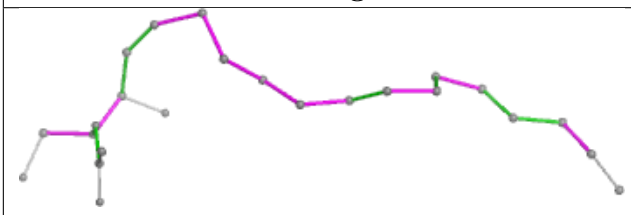
Ligand A1H8M B 310



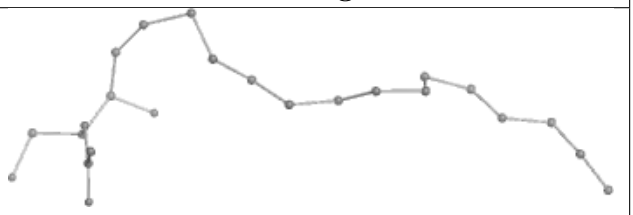
Bond lengths



Bond angles

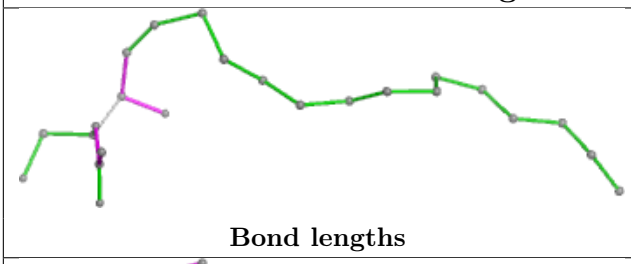


Torsions

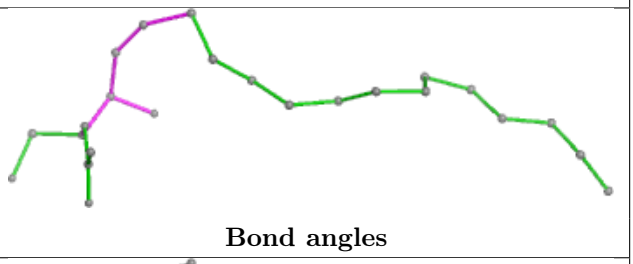


Rings

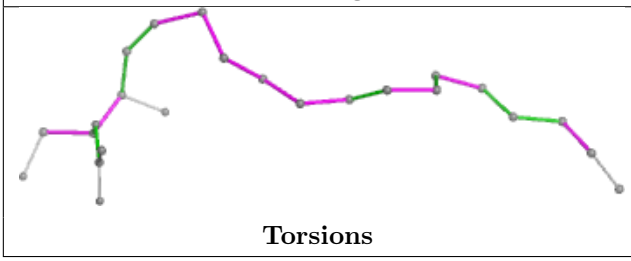
Ligand A1H8M C 310



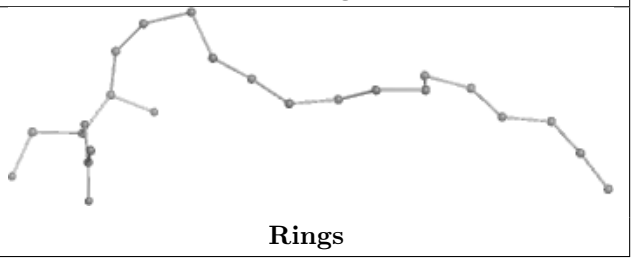
Bond lengths



Bond angles

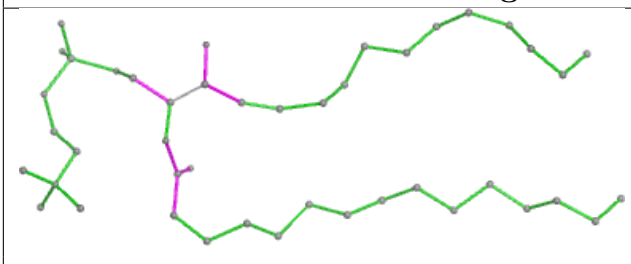


Torsions

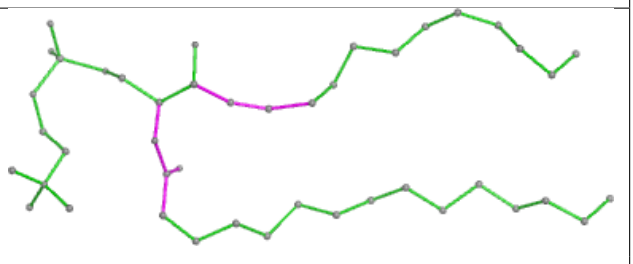


Rings

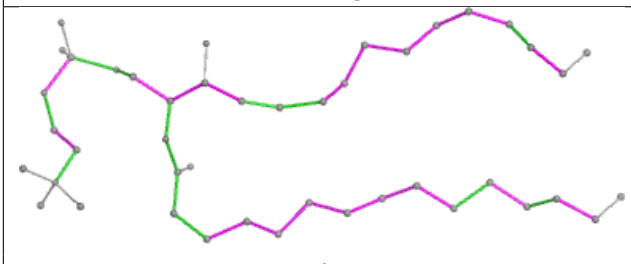
Ligand A1H8M E 312



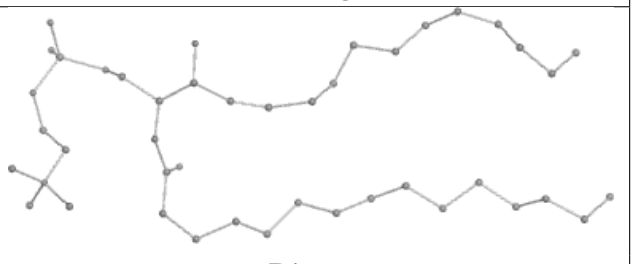
Bond lengths



Bond angles

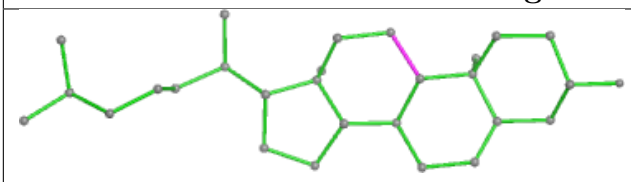


Torsions

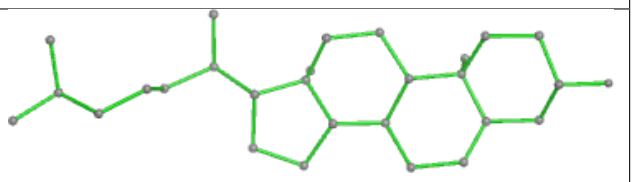


Rings

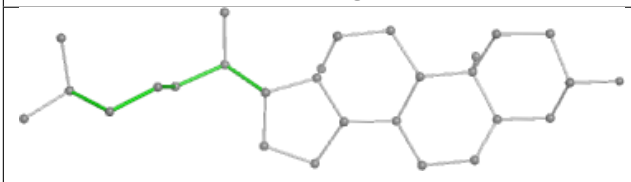
Ligand CLR C 303



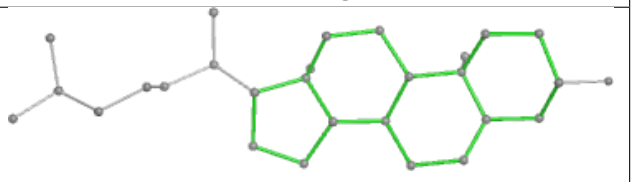
Bond lengths



Bond angles

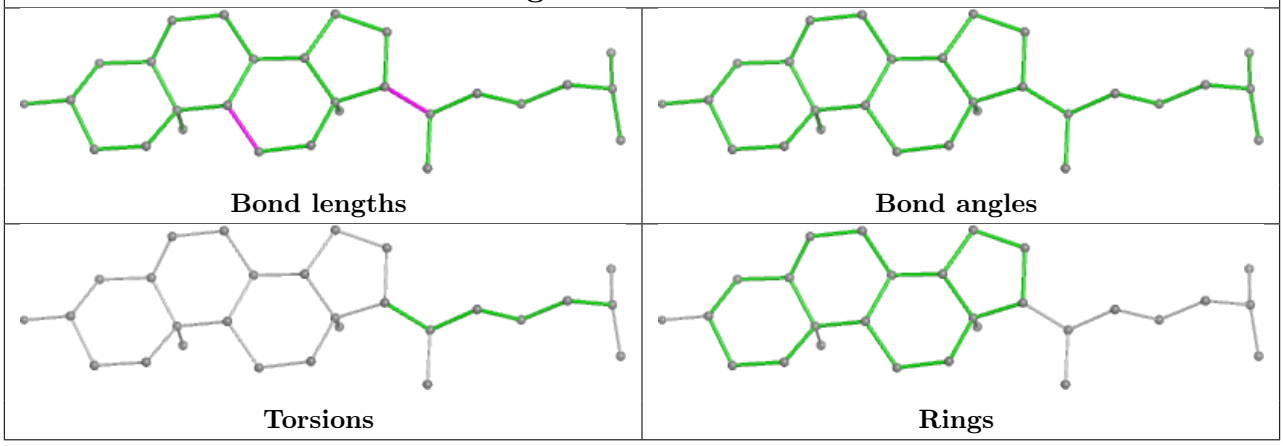


Torsions

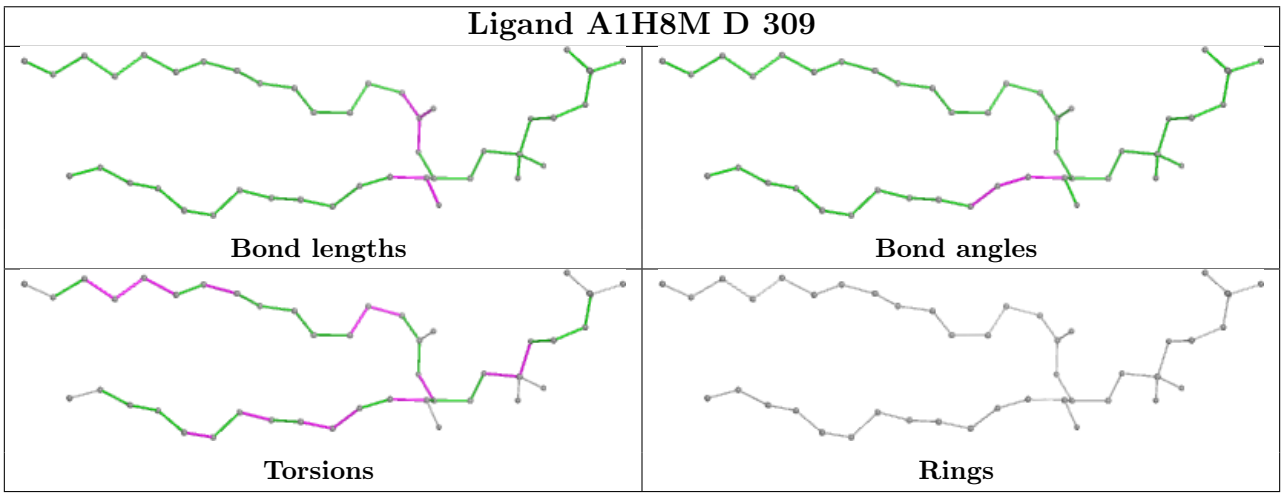


Rings

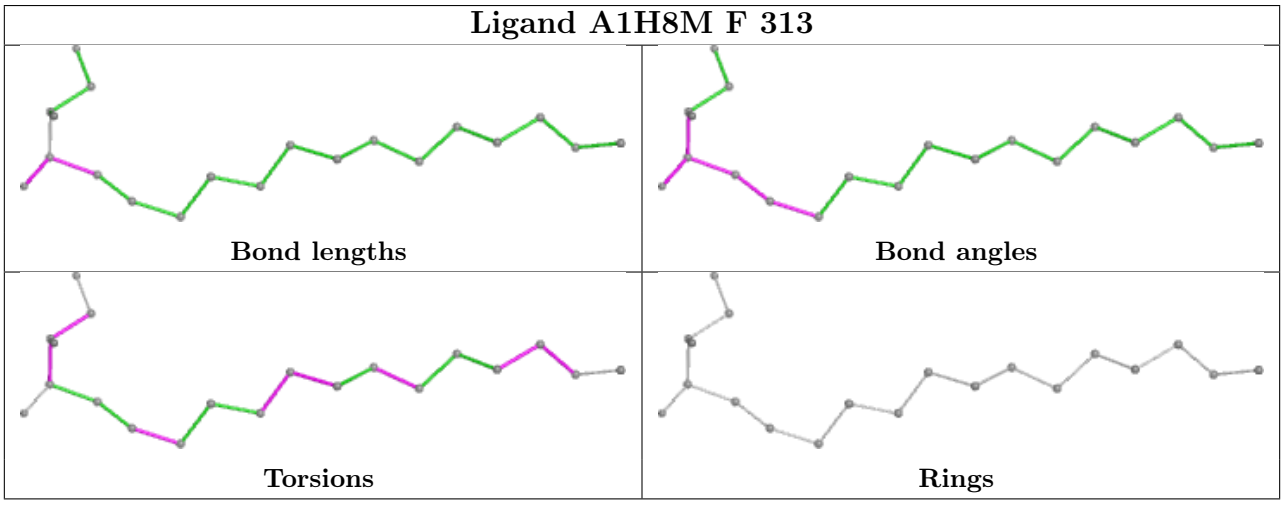
Ligand CLR E 304



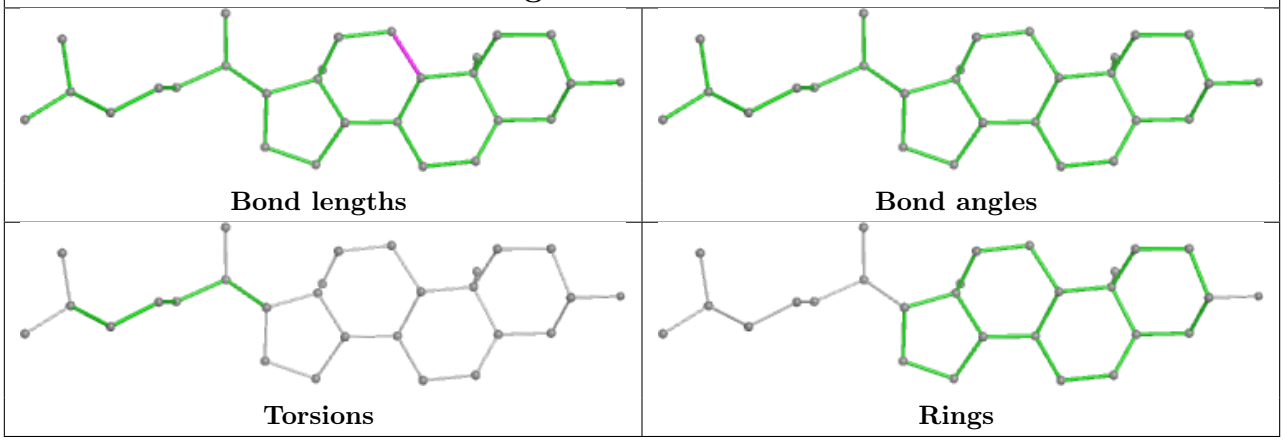
Ligand A1H8M D 309



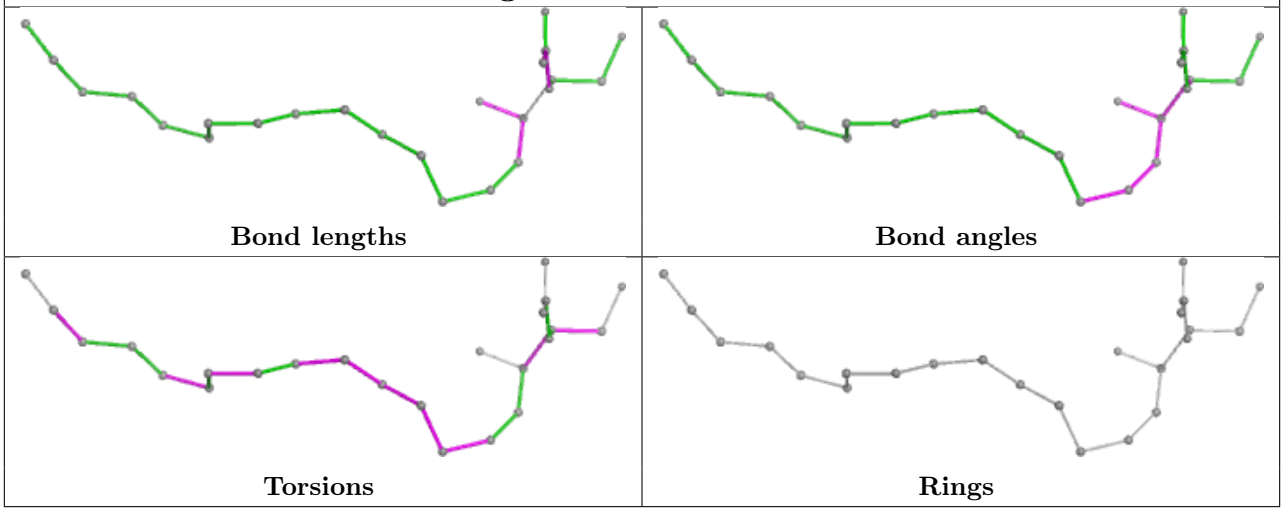
Ligand A1H8M F 313



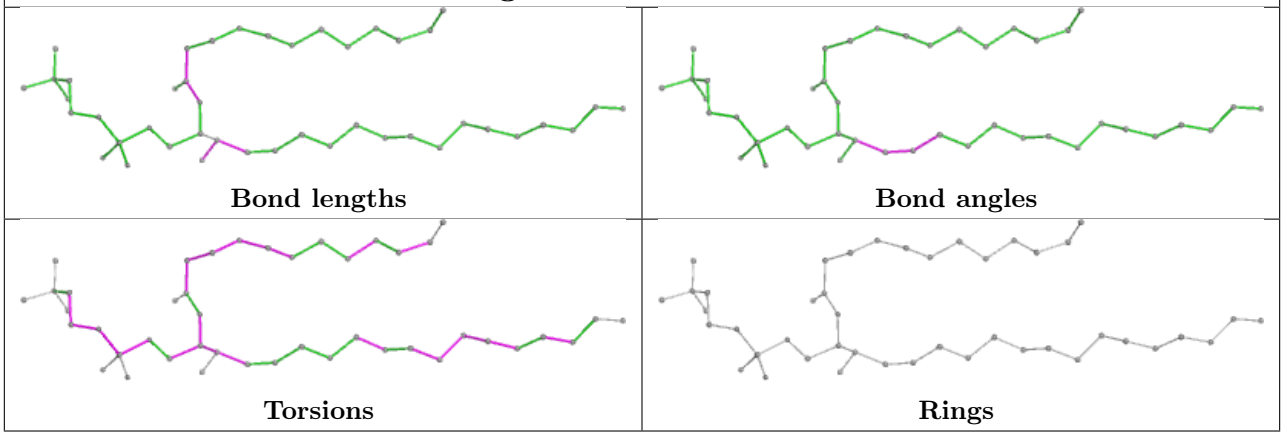
Ligand CLR A 303



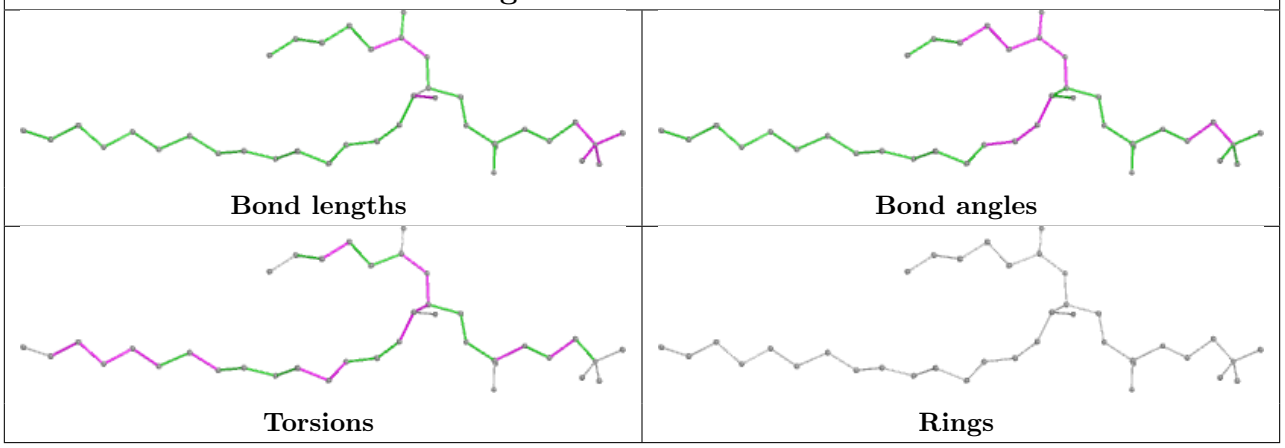
Ligand A1H8M G 310



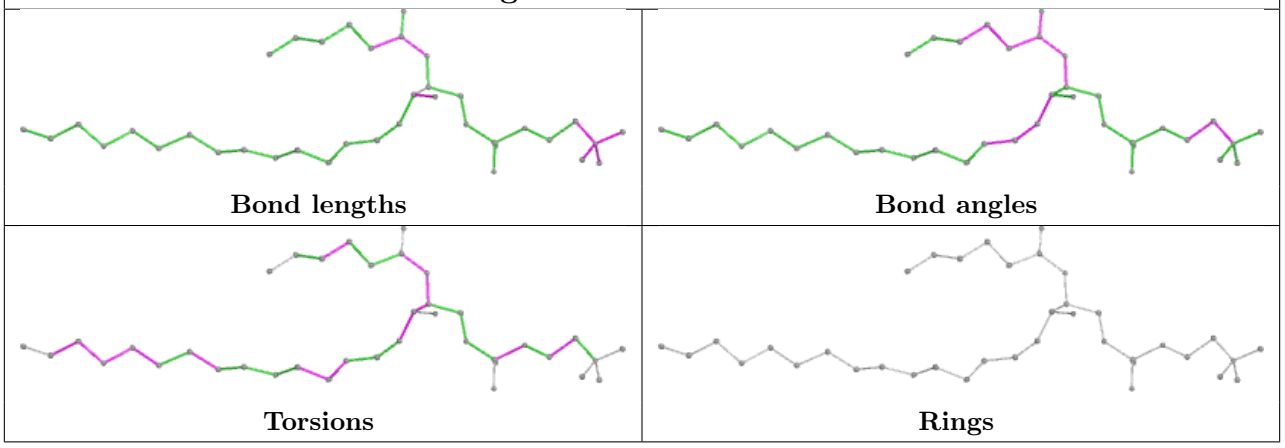
Ligand A1H8M H 306



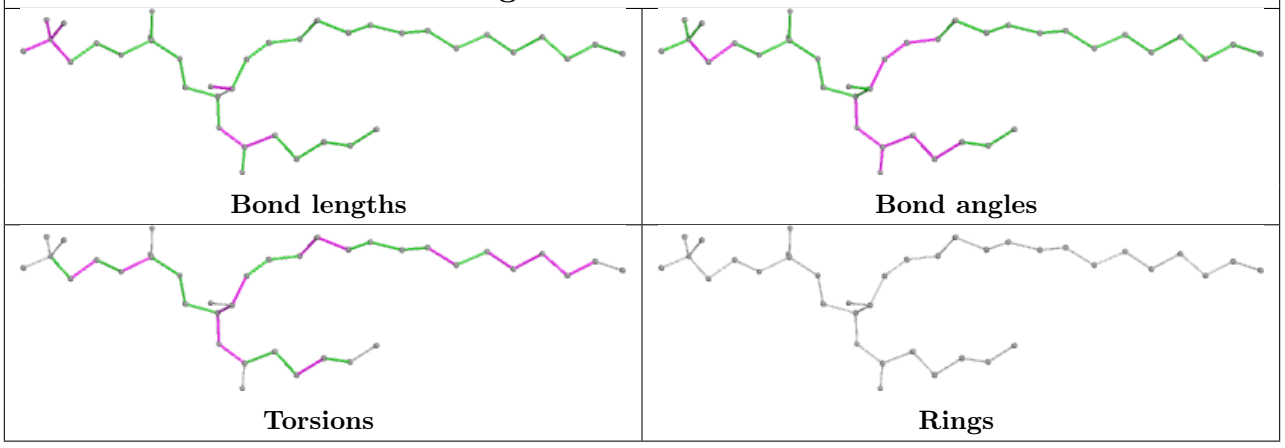
Ligand A1H8M C 307



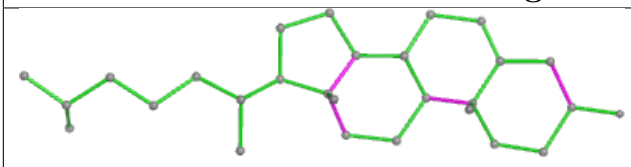
Ligand A1H8M B 307



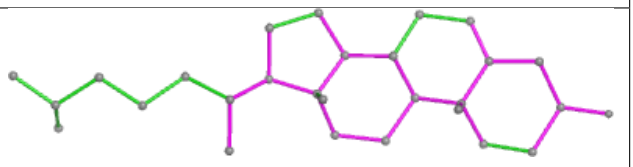
Ligand A1H8M G 307



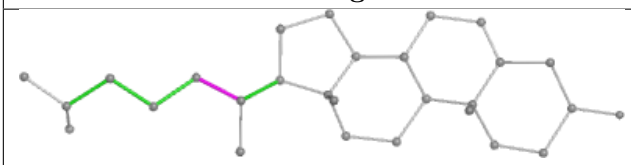
Ligand CLR B 302



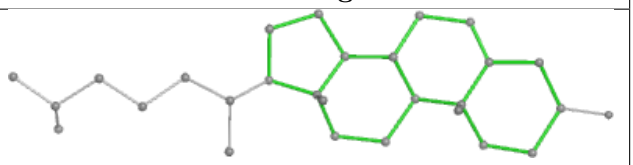
Bond lengths



Bond angles

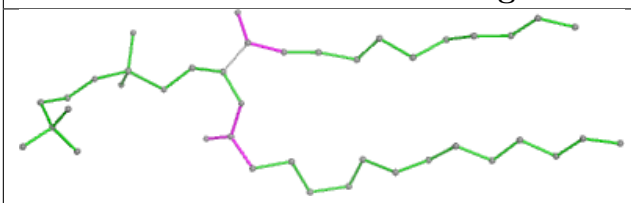


Torsions

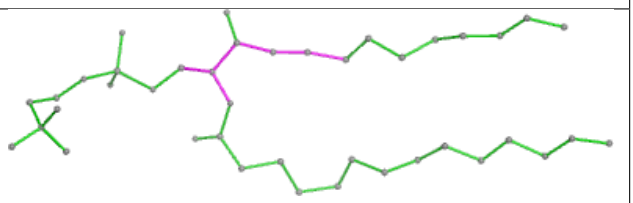


Rings

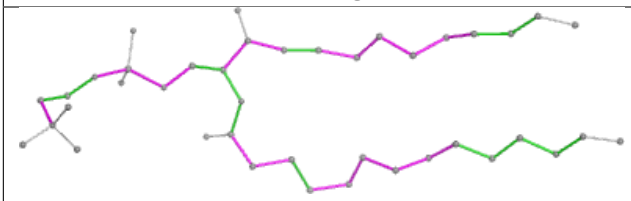
Ligand A1H8M G 311



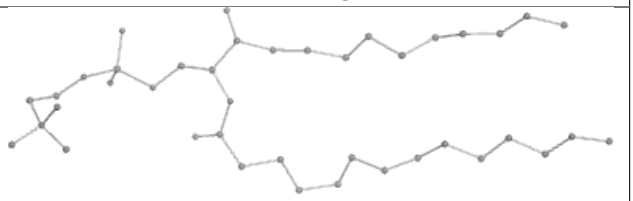
Bond lengths



Bond angles

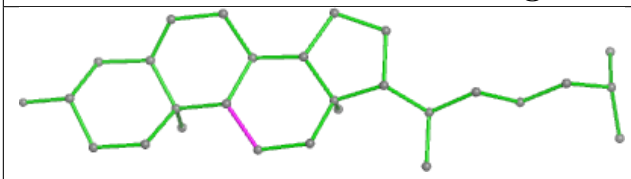


Torsions

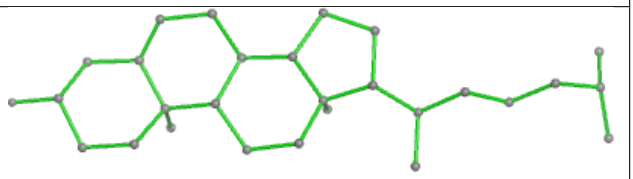


Rings

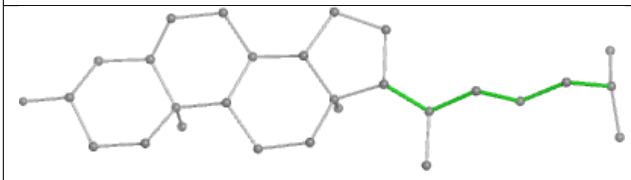
Ligand CLR D 304



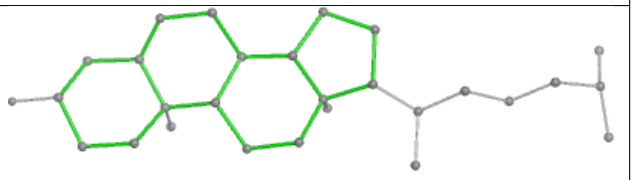
Bond lengths



Bond angles

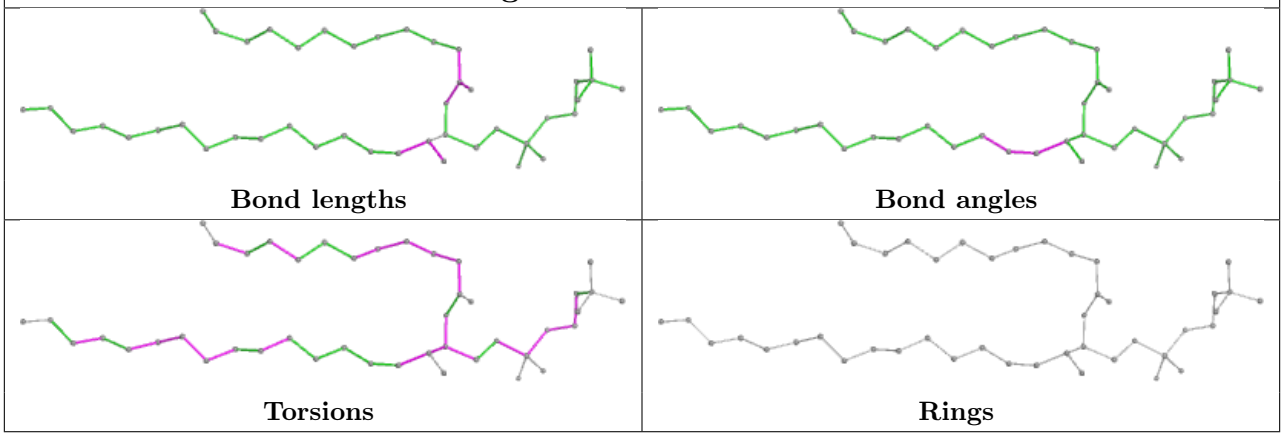


Torsions



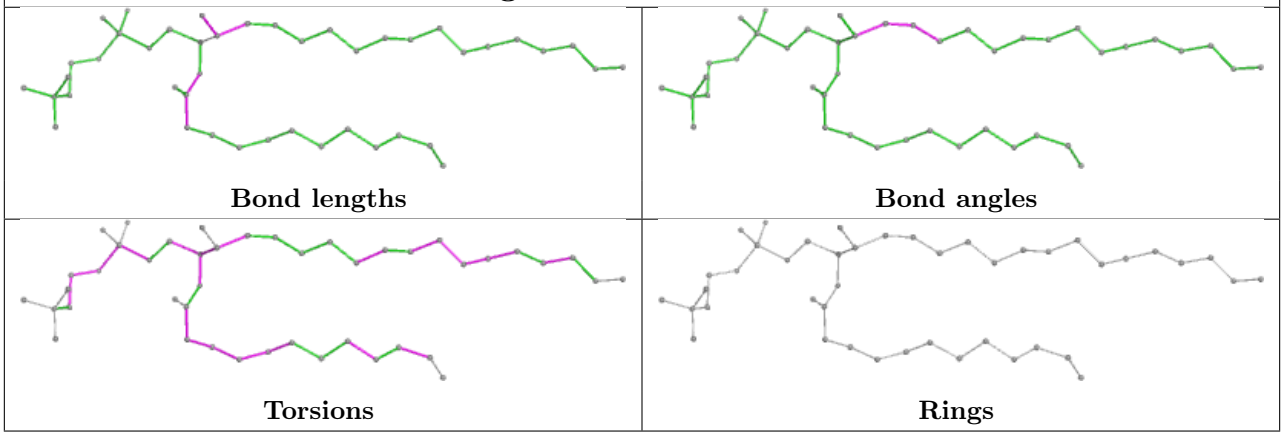
Rings

Ligand A1H8M E 306

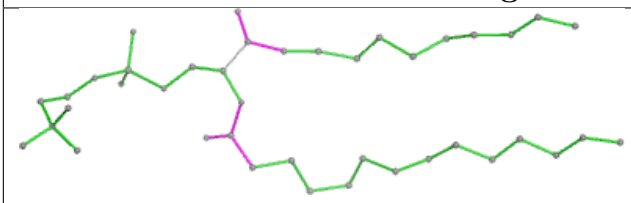


Ligand CLR A 302

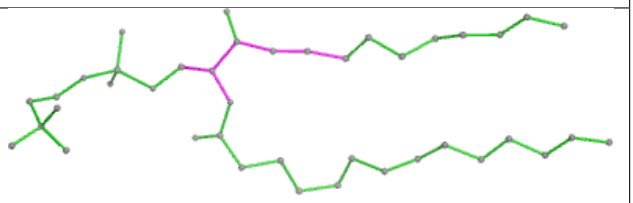
Ligand A1H8M D 306



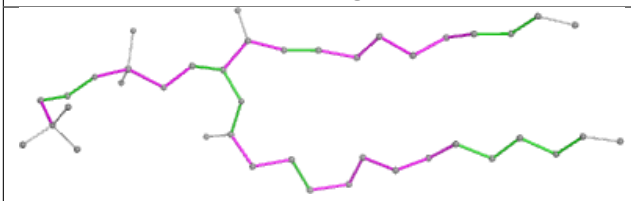
Ligand A1H8M F 311



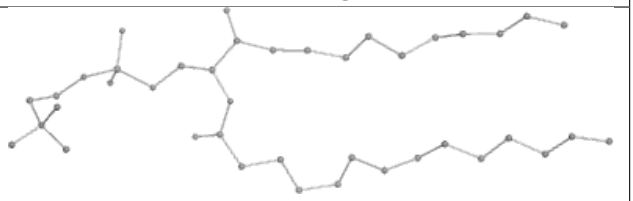
Bond lengths



Bond angles

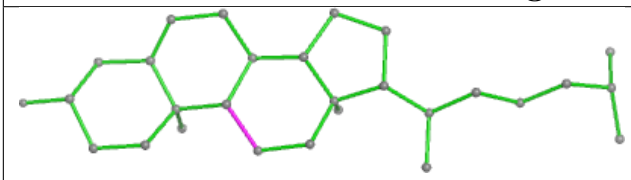


Torsions

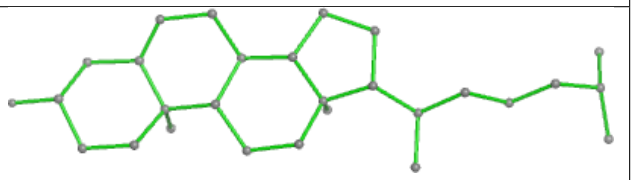


Rings

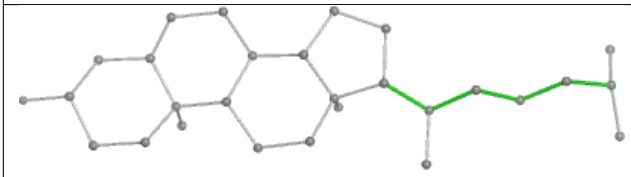
Ligand CLR F 304



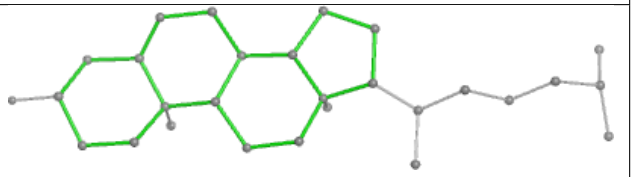
Bond lengths



Bond angles

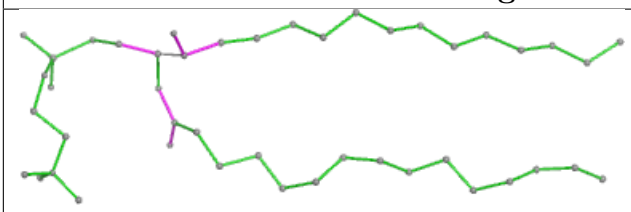


Torsions

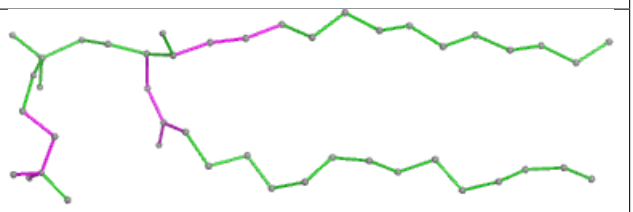


Rings

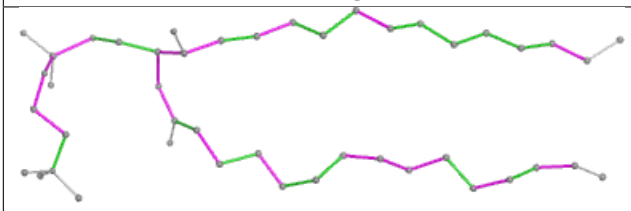
Ligand A1H8M H 308



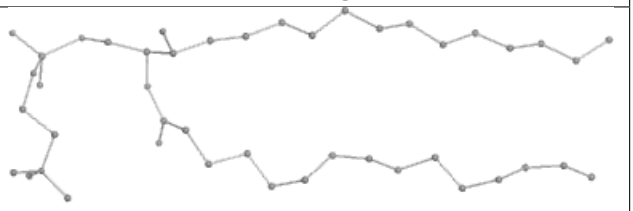
Bond lengths



Bond angles

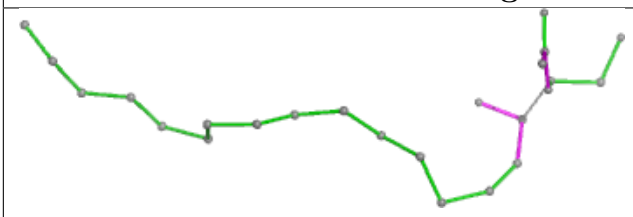


Torsions

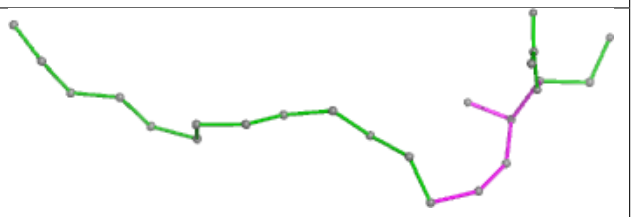


Rings

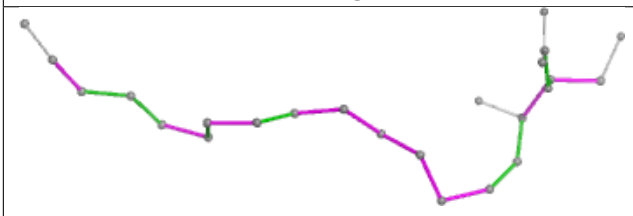
Ligand A1H8M F 310



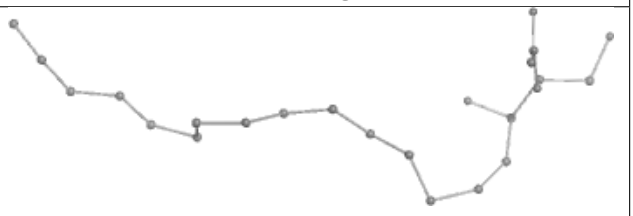
Bond lengths



Bond angles

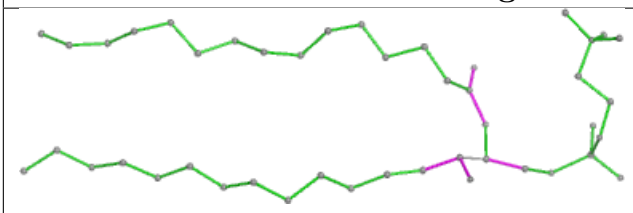


Torsions

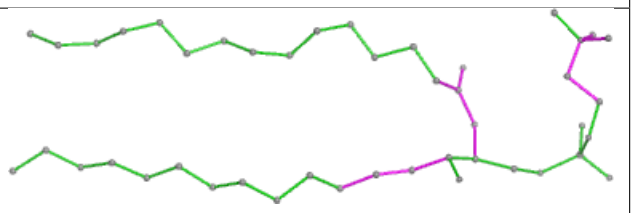


Rings

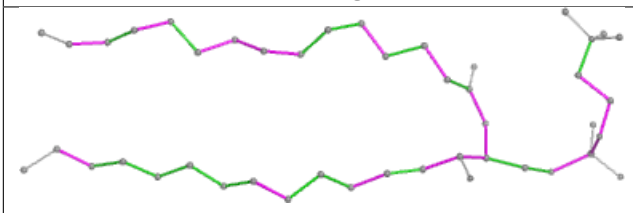
Ligand A1H8M D 308



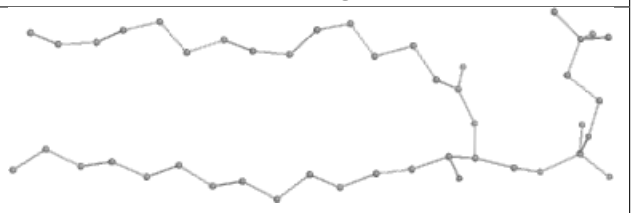
Bond lengths



Bond angles

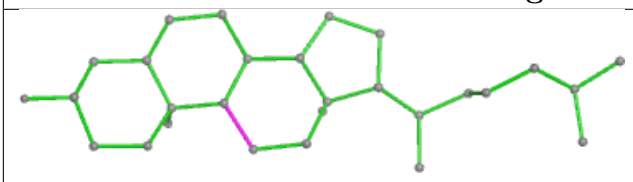


Torsions

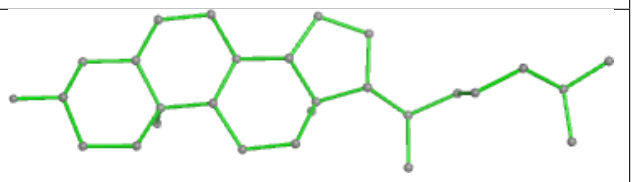


Rings

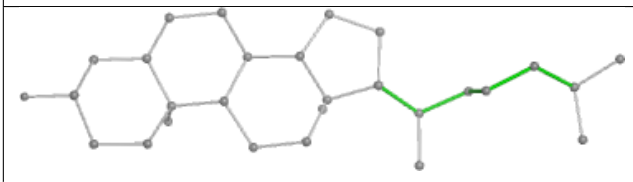
Ligand CLR F 303



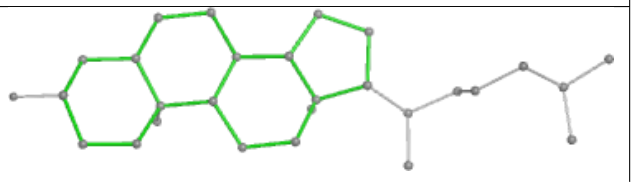
Bond lengths



Bond angles

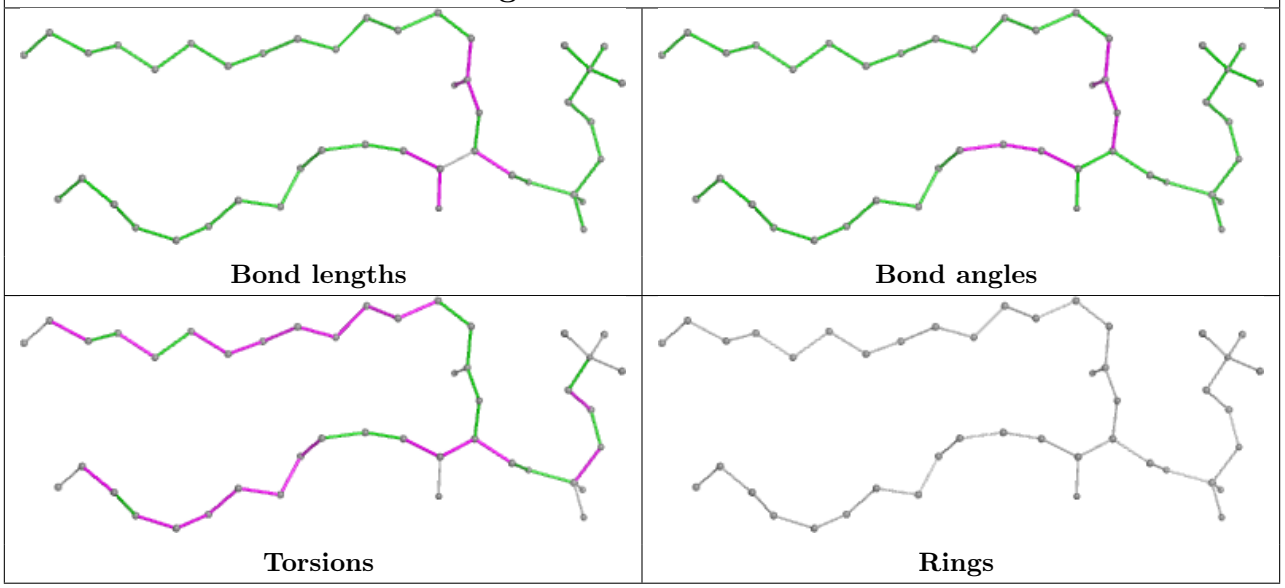


Torsions

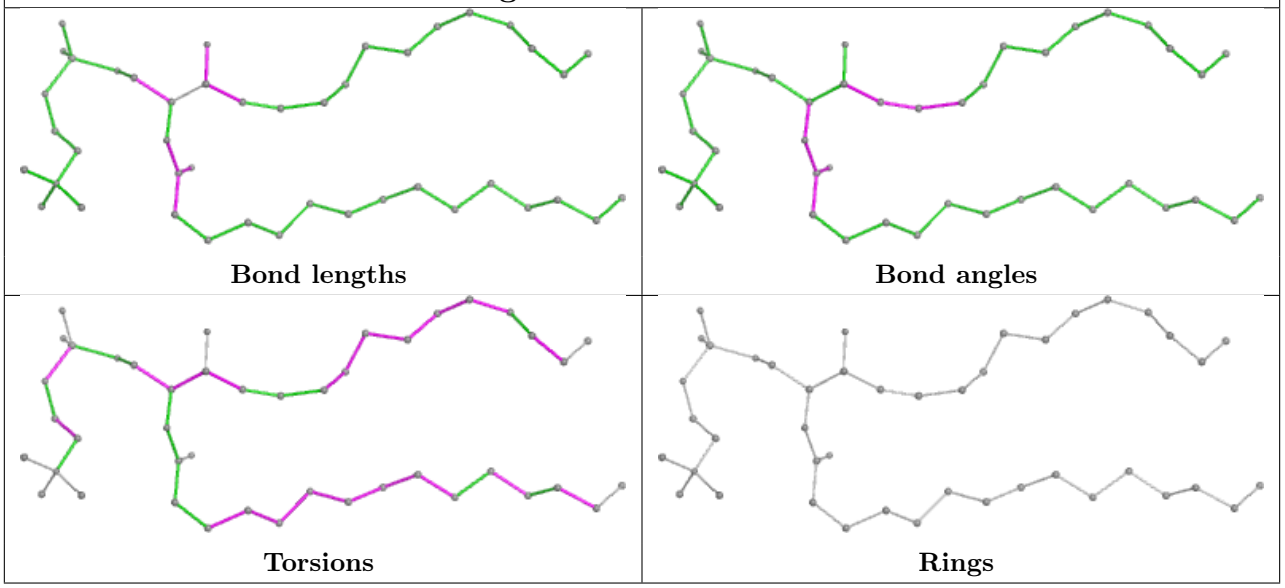


Rings

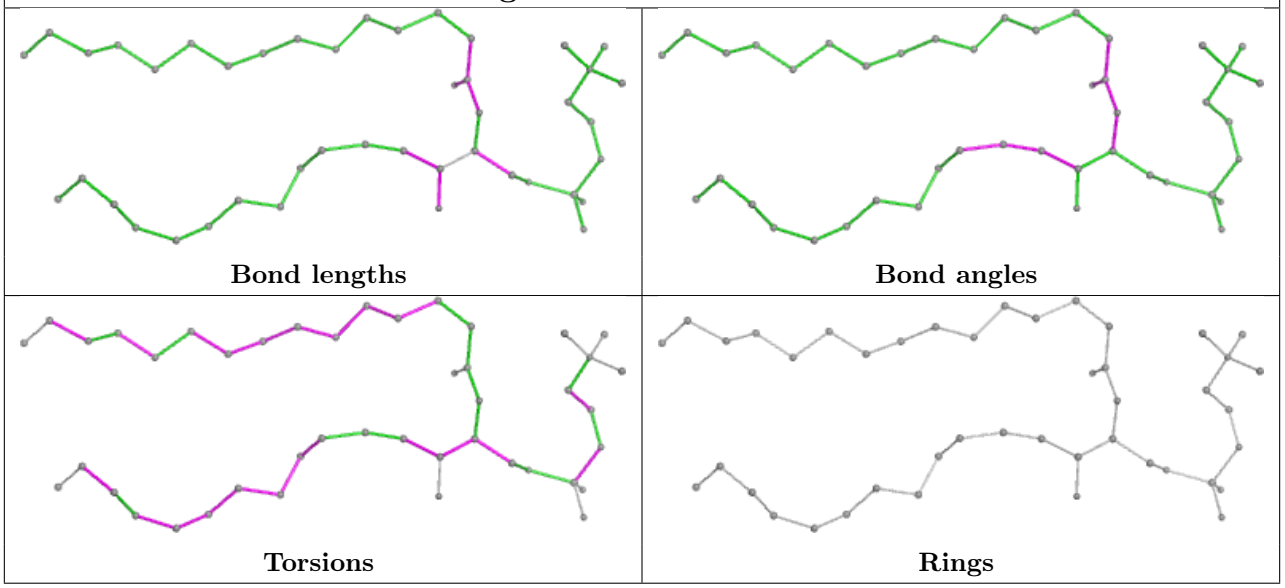
Ligand A1H8M H 312



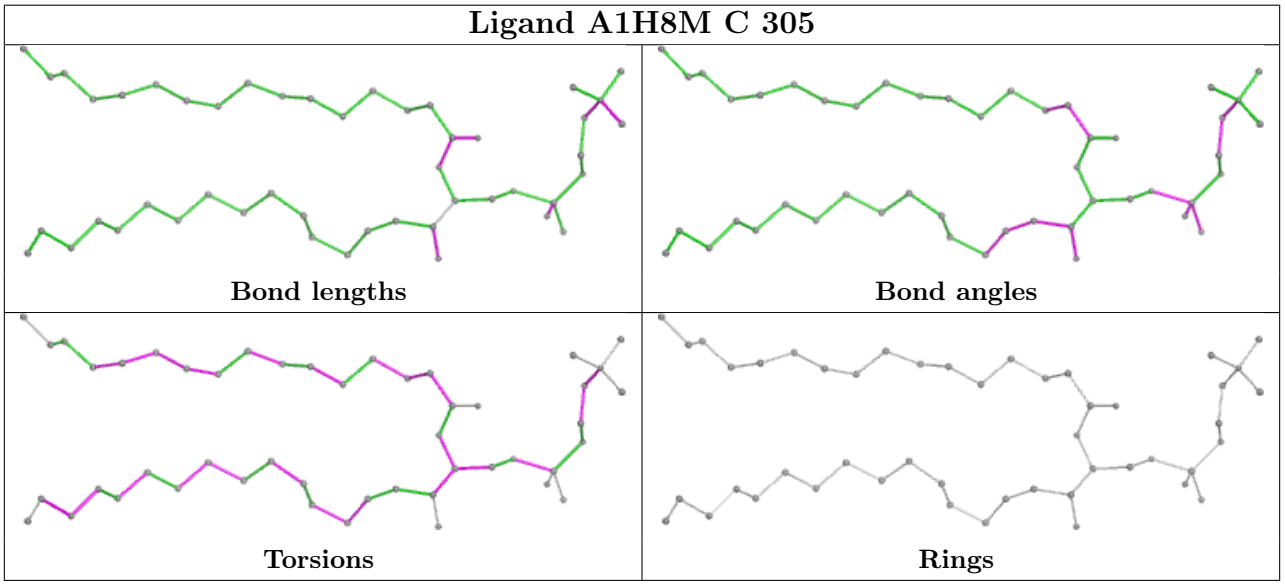
Ligand A1H8M D 312



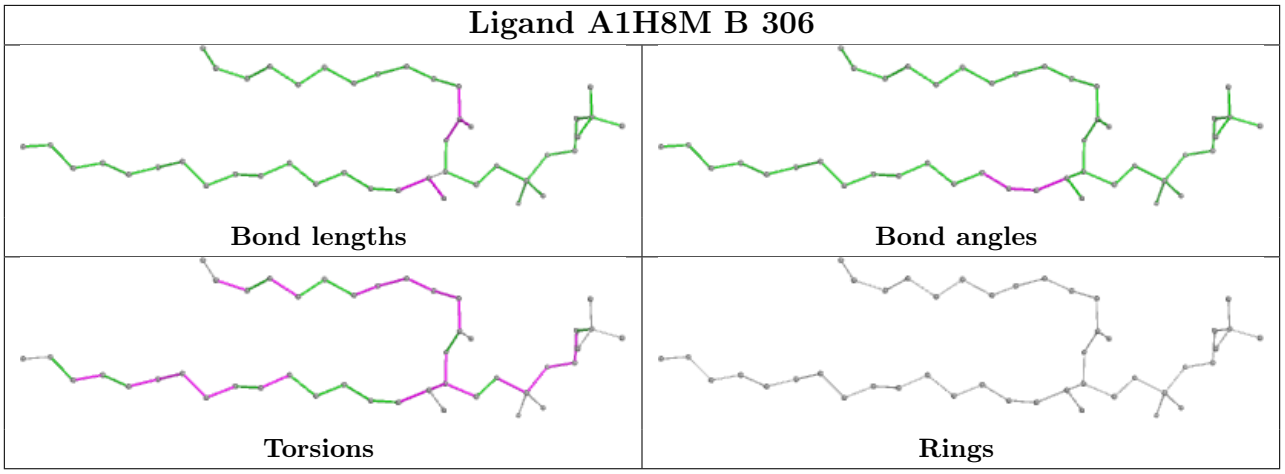
Ligand A1H8M A 312



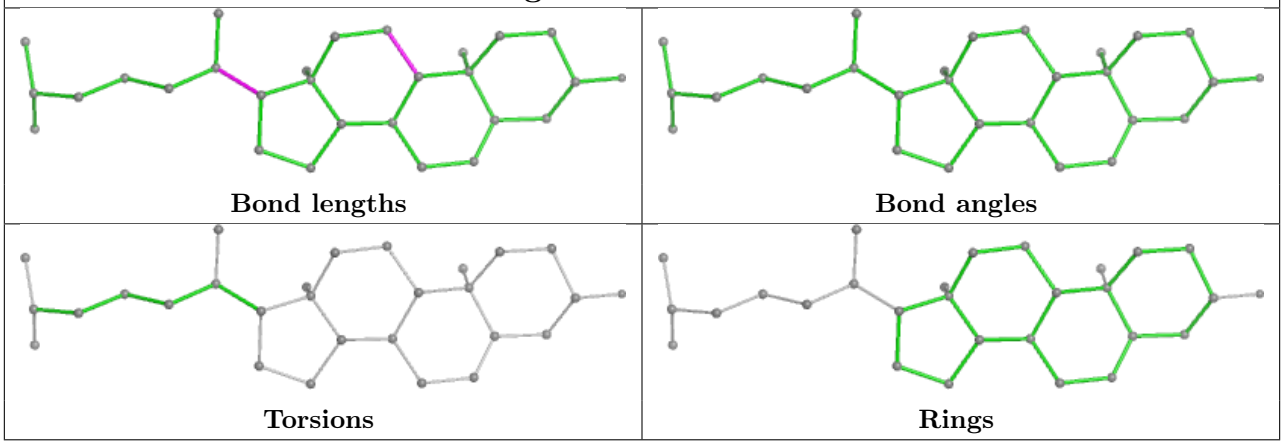
Ligand A1H8M C 305



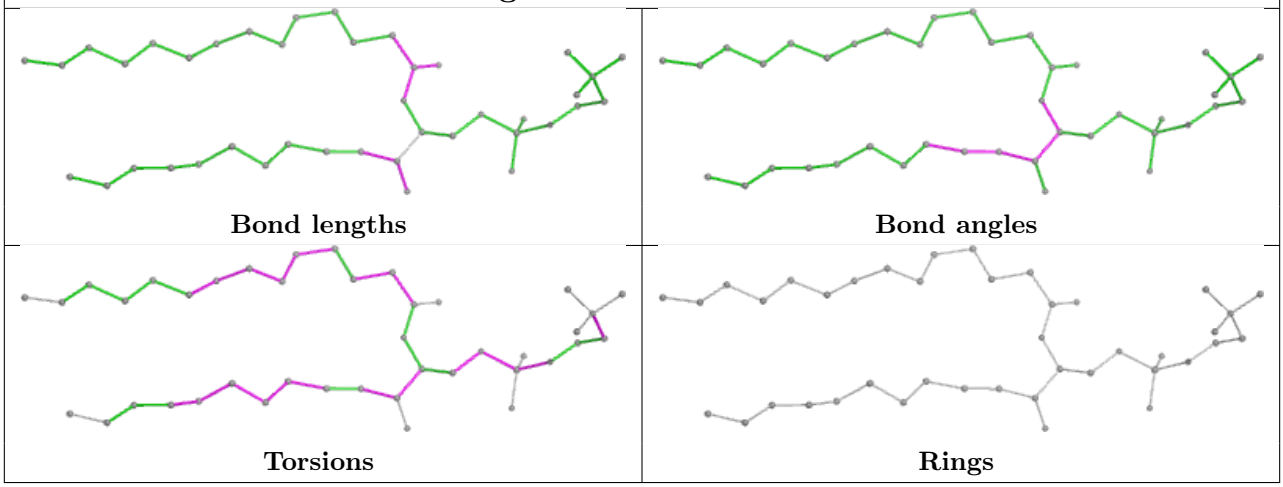
Ligand A1H8M B 306



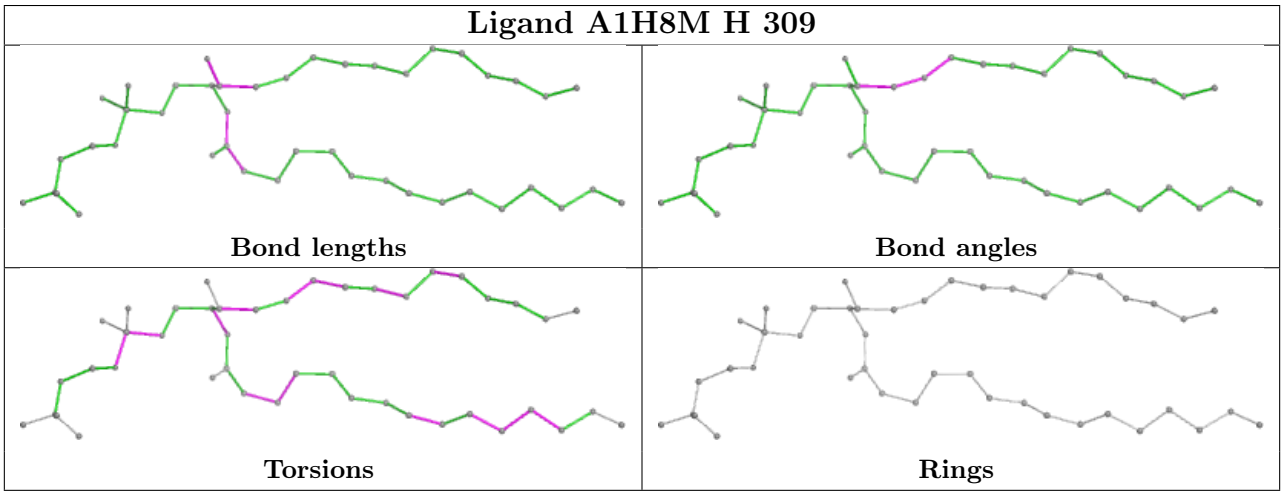
Ligand CLR H 304



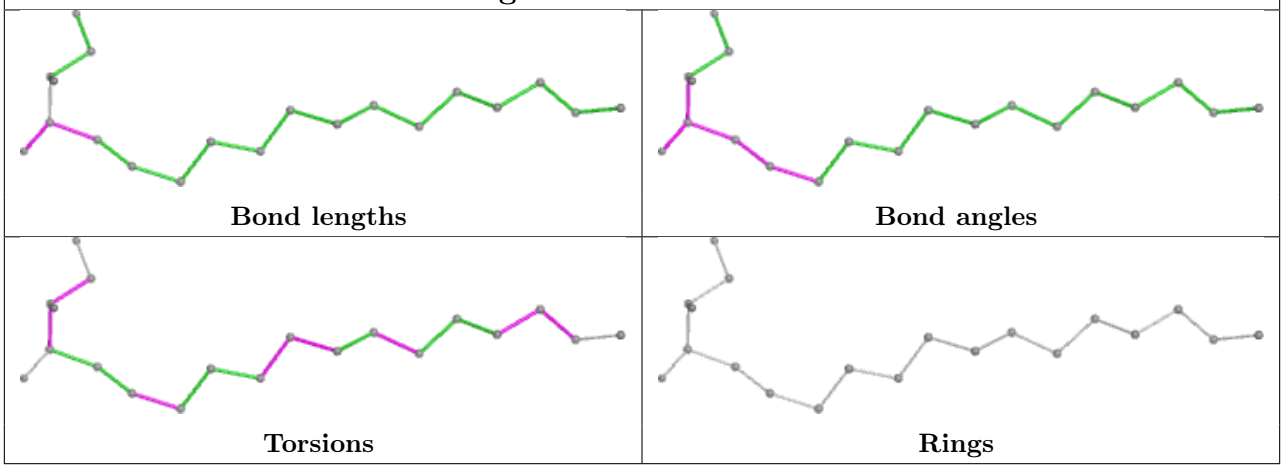
Ligand A1H8M D 311



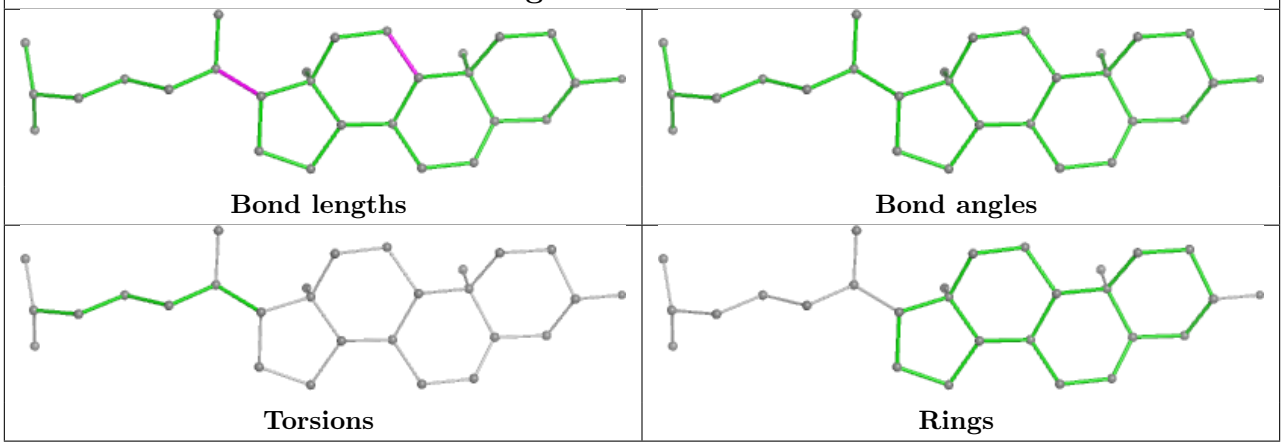
Ligand A1H8M H 309



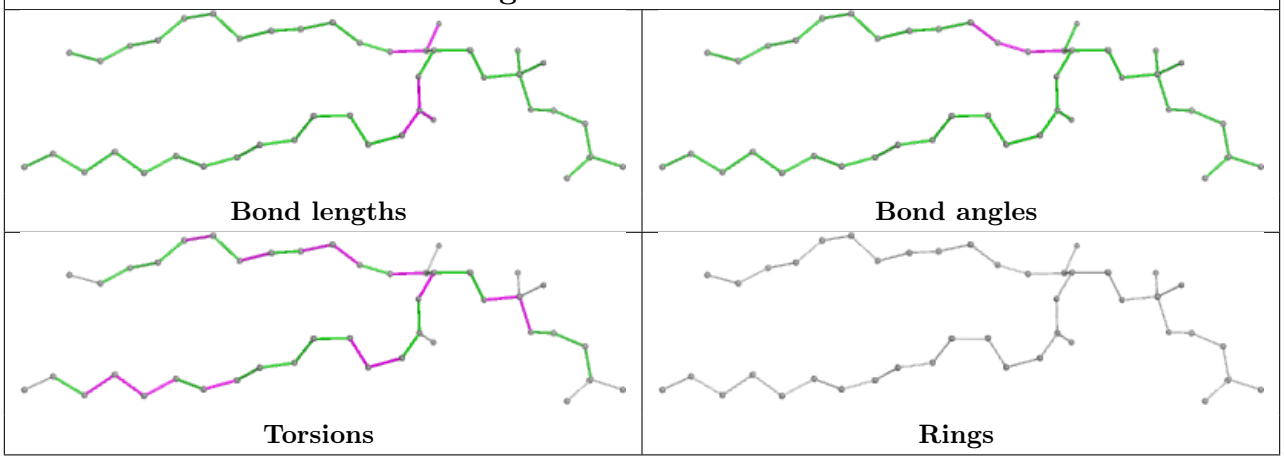
Ligand A1H8M G 313



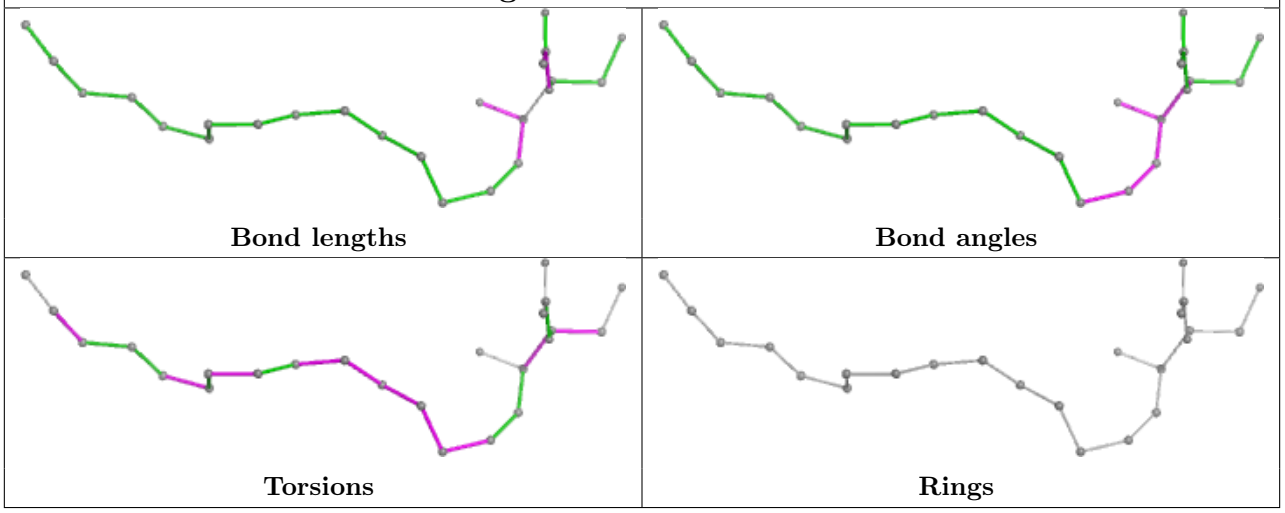
Ligand CLR B 304



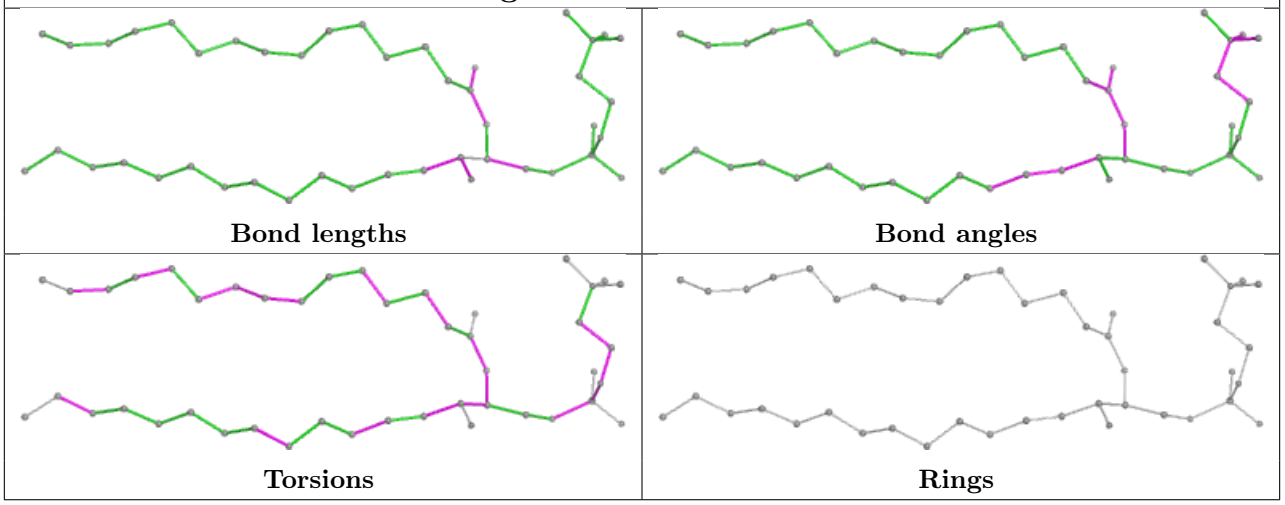
Ligand A1H8M A 309



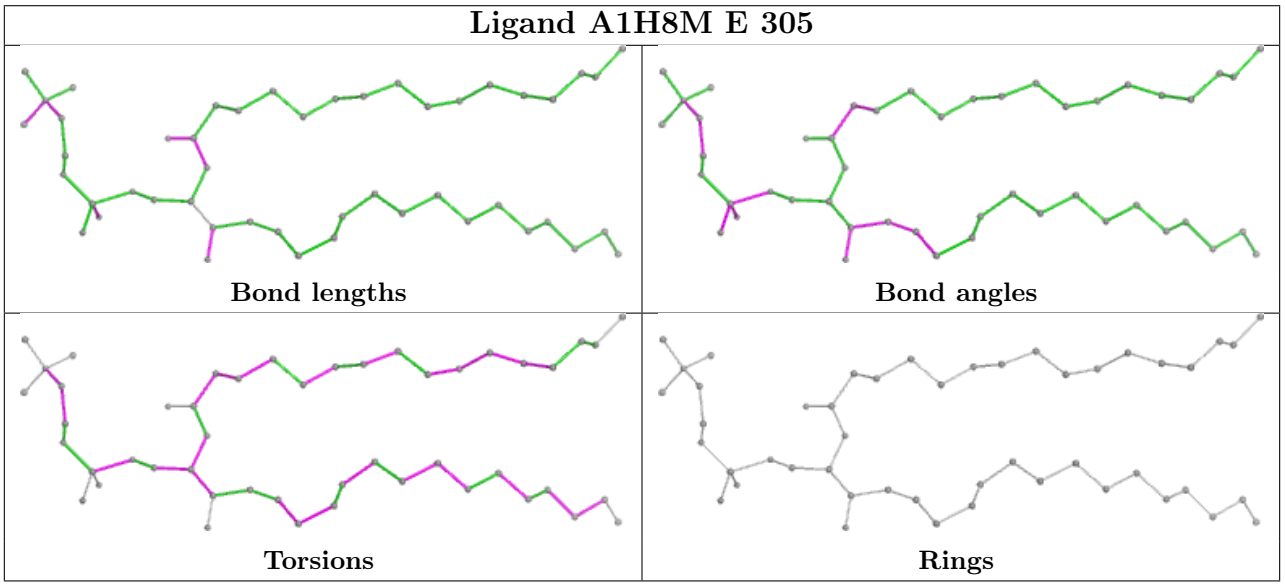
Ligand A1H8M A 310



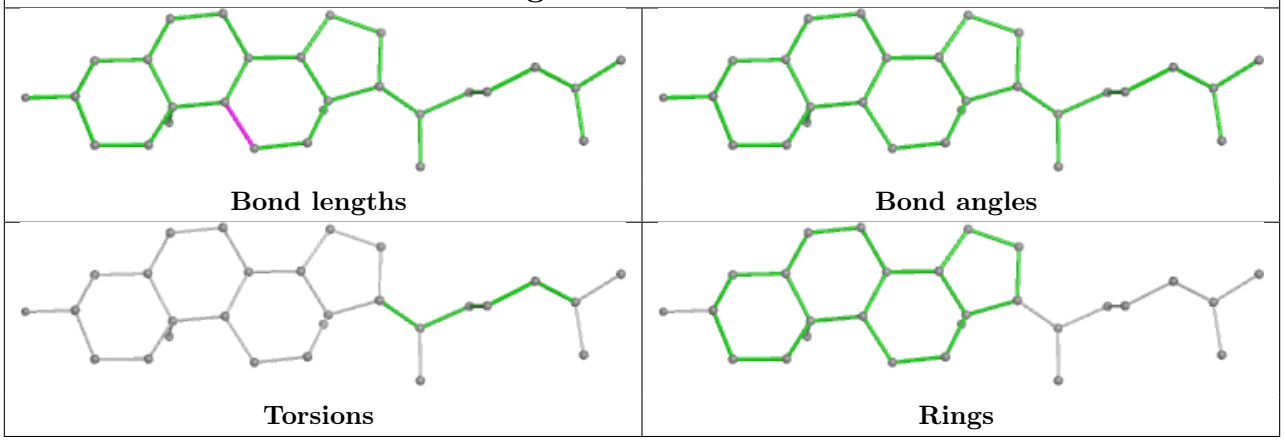
Ligand A1H8M B 308



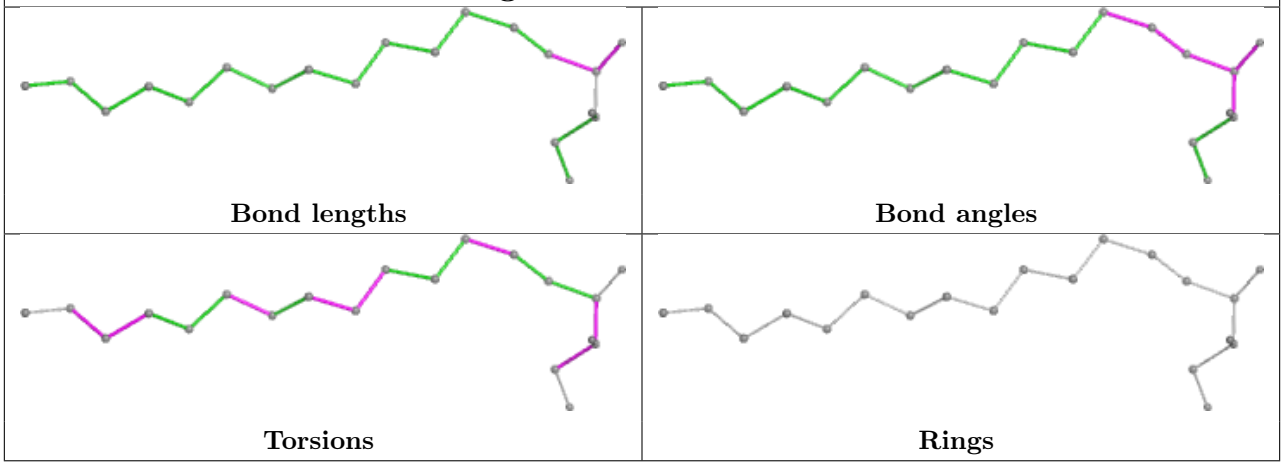
Ligand A1H8M E 305



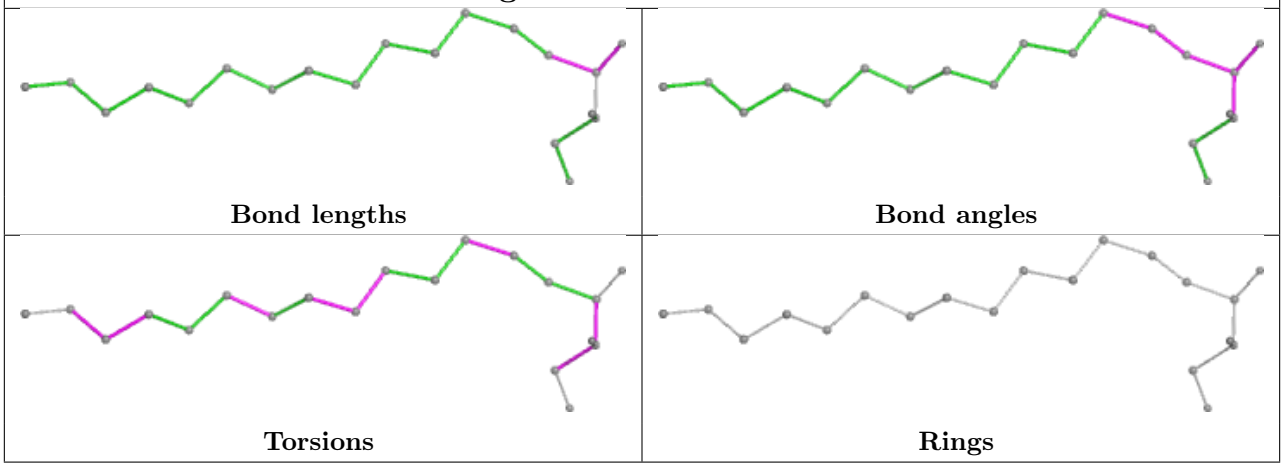
Ligand CLR E 303



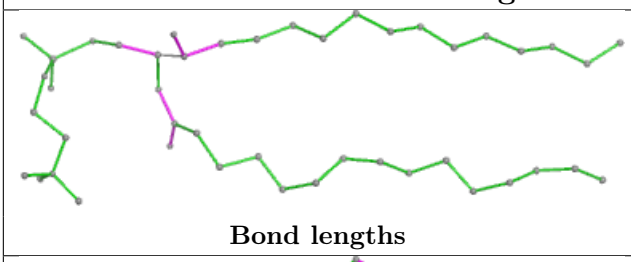
Ligand A1H8M H 313

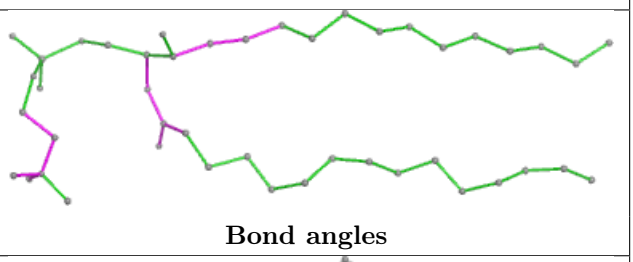


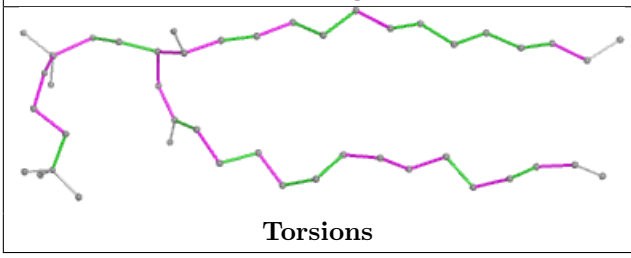
Ligand A1H8M A 313

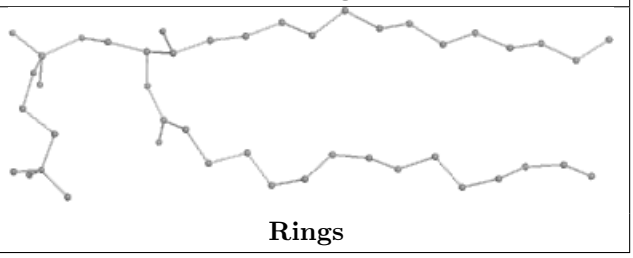


Ligand A1H8M G 308

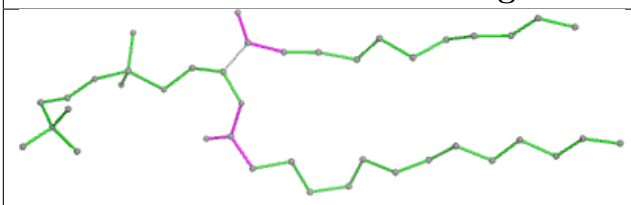

Bond lengths

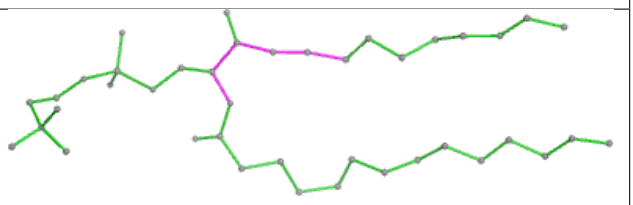

Bond angles

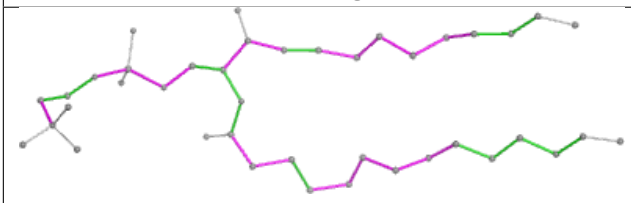

Torsions

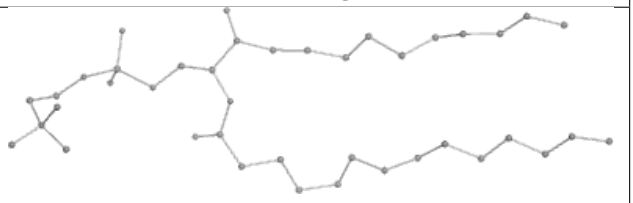

Rings

Ligand A1H8M H 311

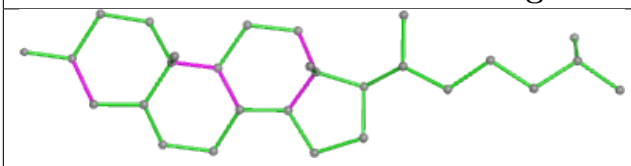

Bond lengths

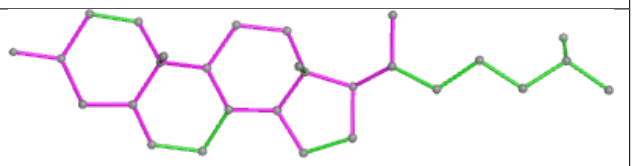

Bond angles

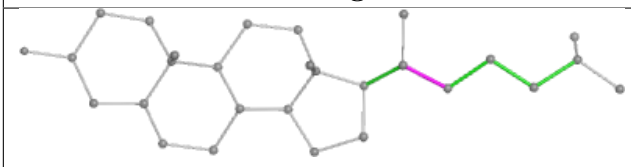

Torsions

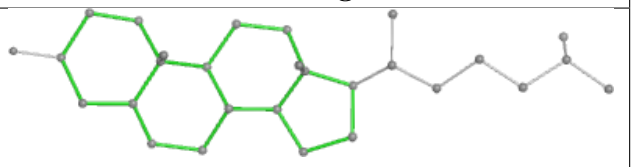

Rings

Ligand CLR F 302

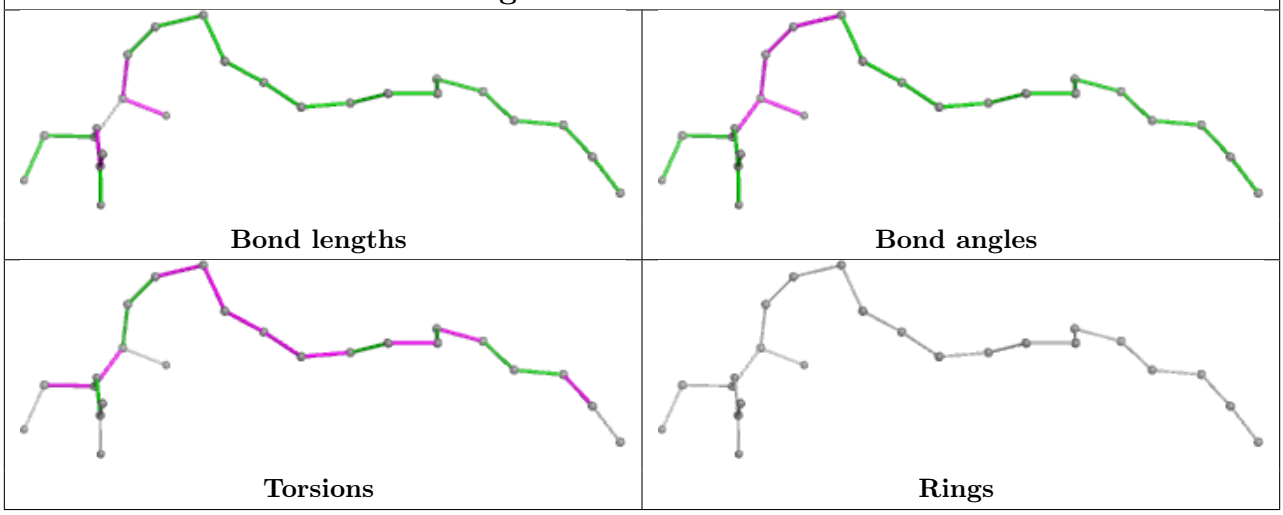

Bond lengths


Bond angles

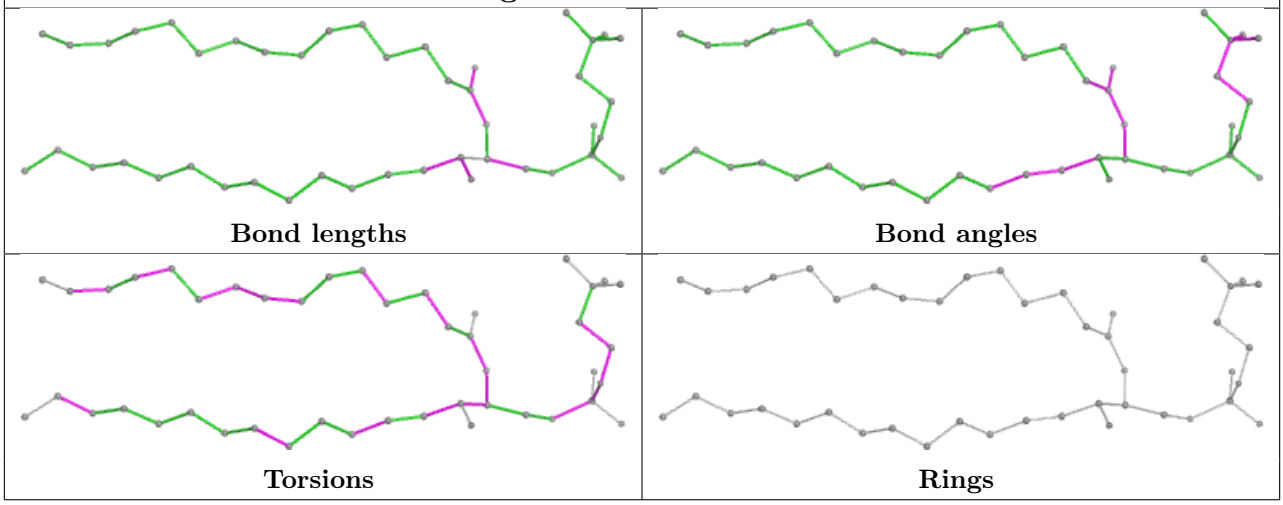

Torsions


Rings

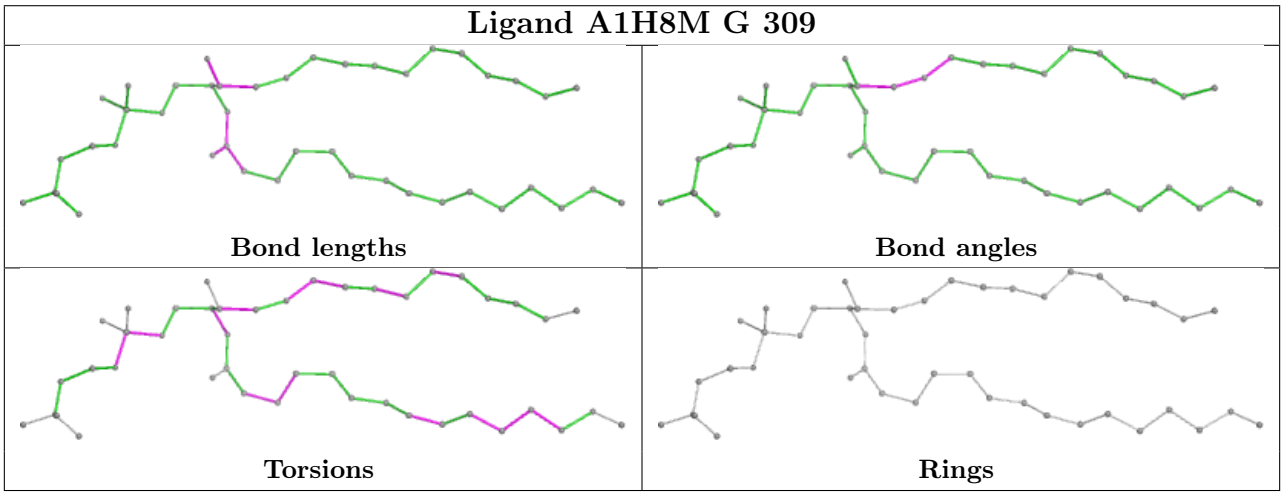
Ligand A1H8M D 310



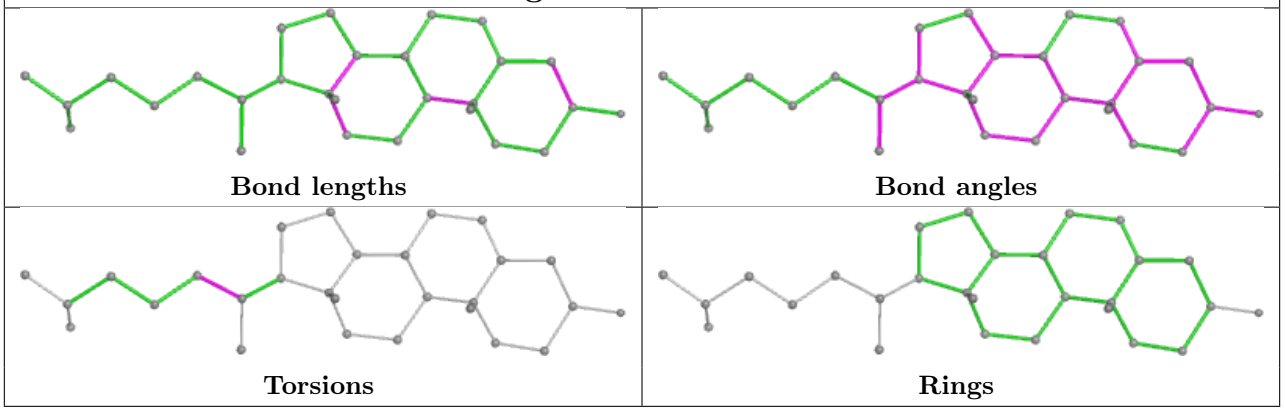
Ligand A1H8M C 308



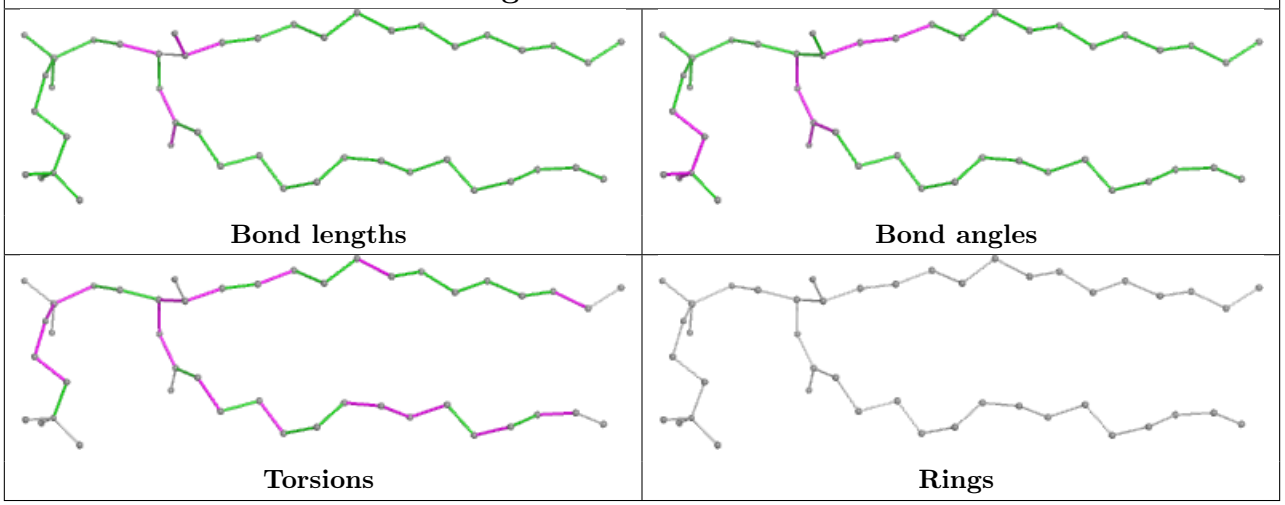
Ligand A1H8M G 309



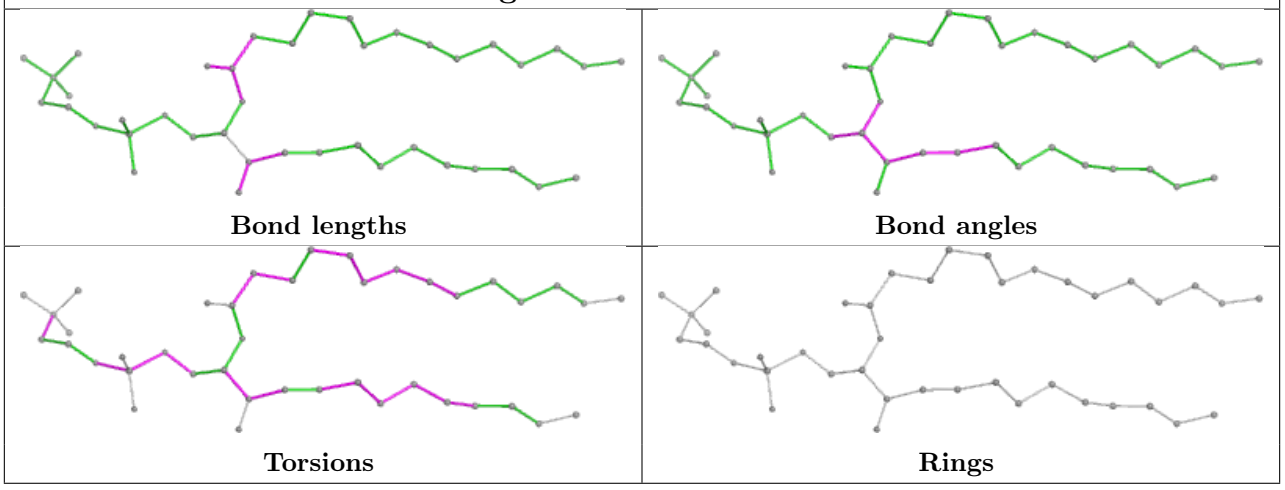
Ligand CLR C 302



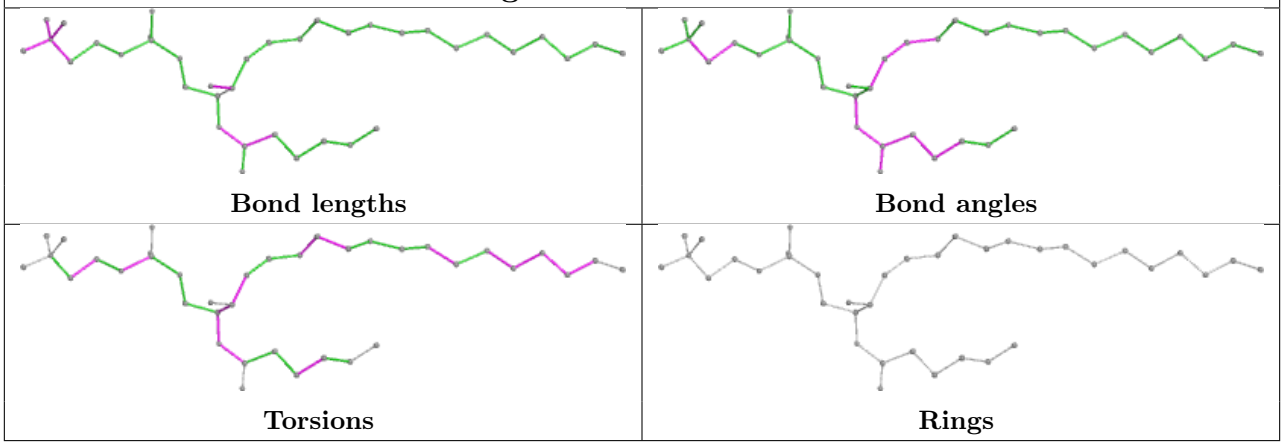
Ligand A1H8M F 308



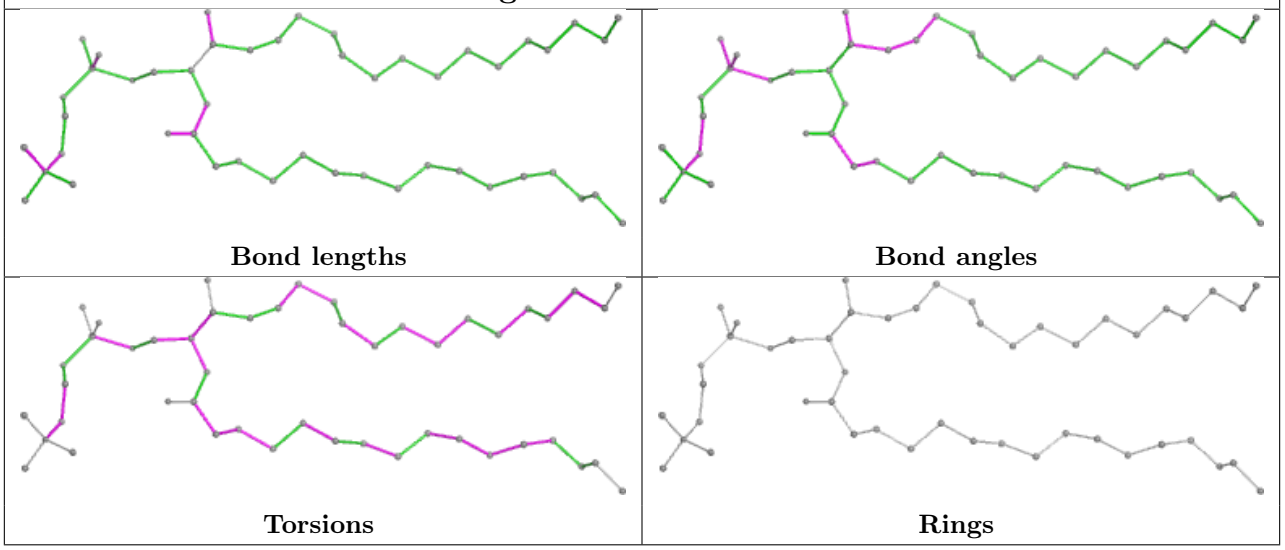
Ligand A1H8M A 311



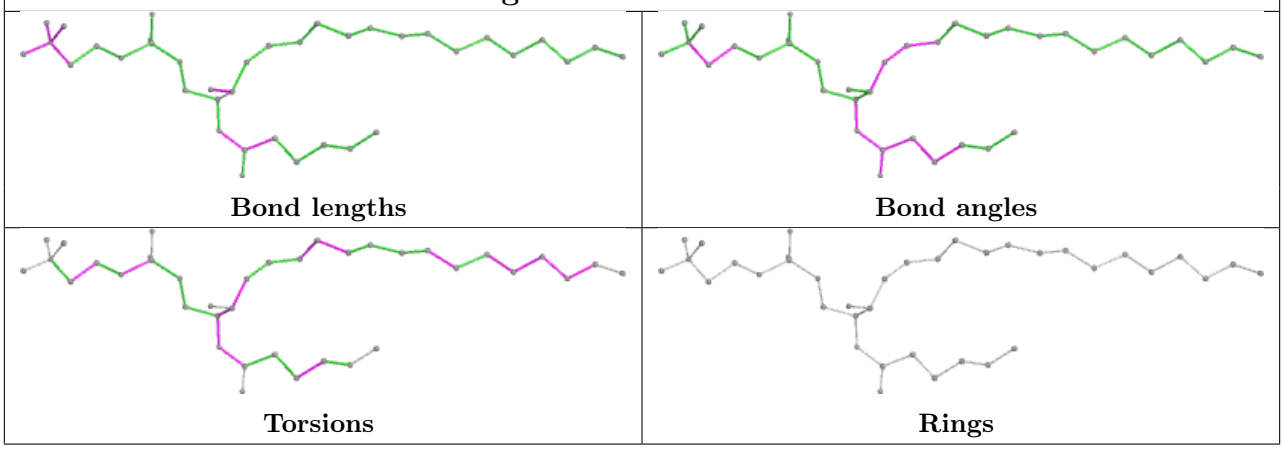
Ligand A1H8M E 307



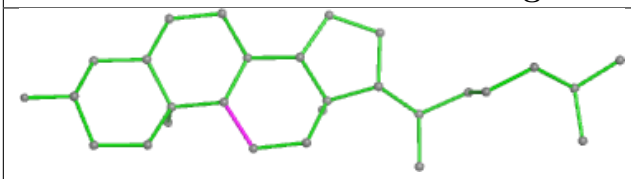
Ligand A1H8M A 305

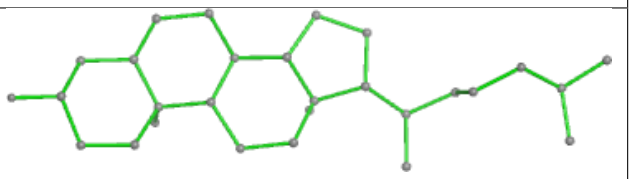


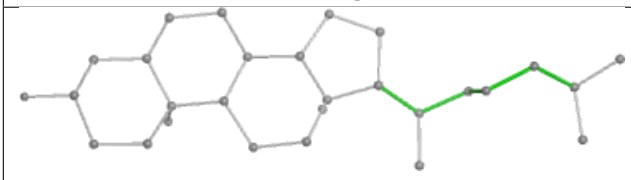
Ligand A1H8M F 307

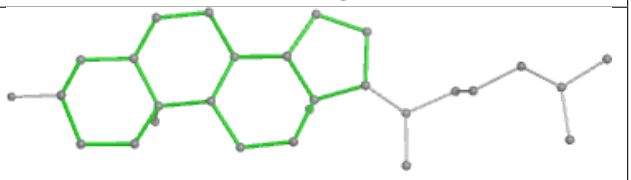


Ligand CLR H 303

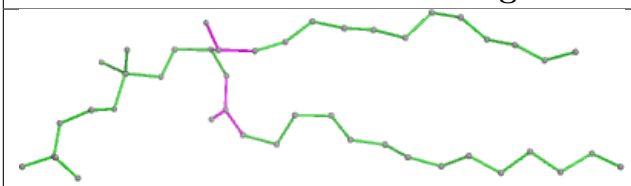

Bond lengths

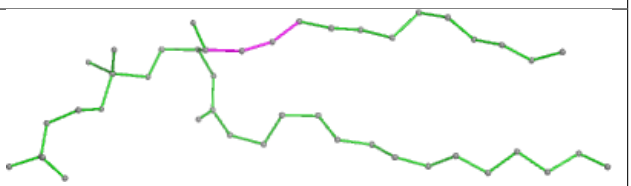

Bond angles

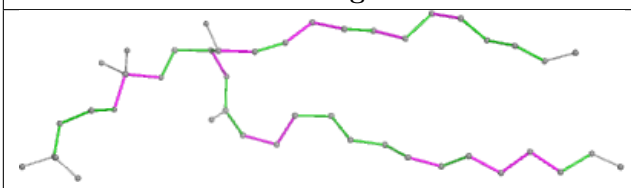

Torsions

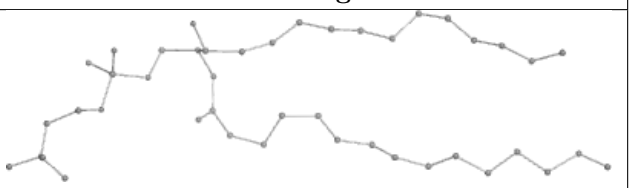

Rings

Ligand A1H8M B 309

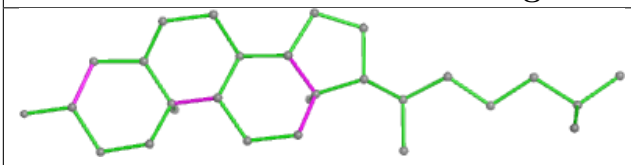

Bond lengths

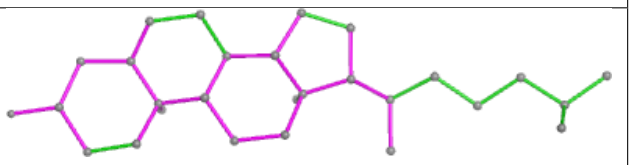

Bond angles

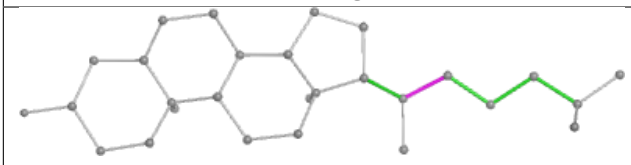

Torsions

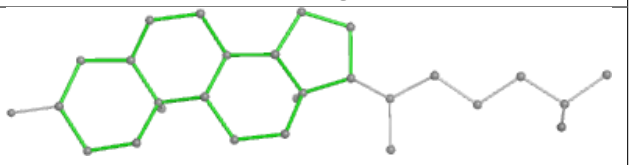

Rings

Ligand CLR G 302

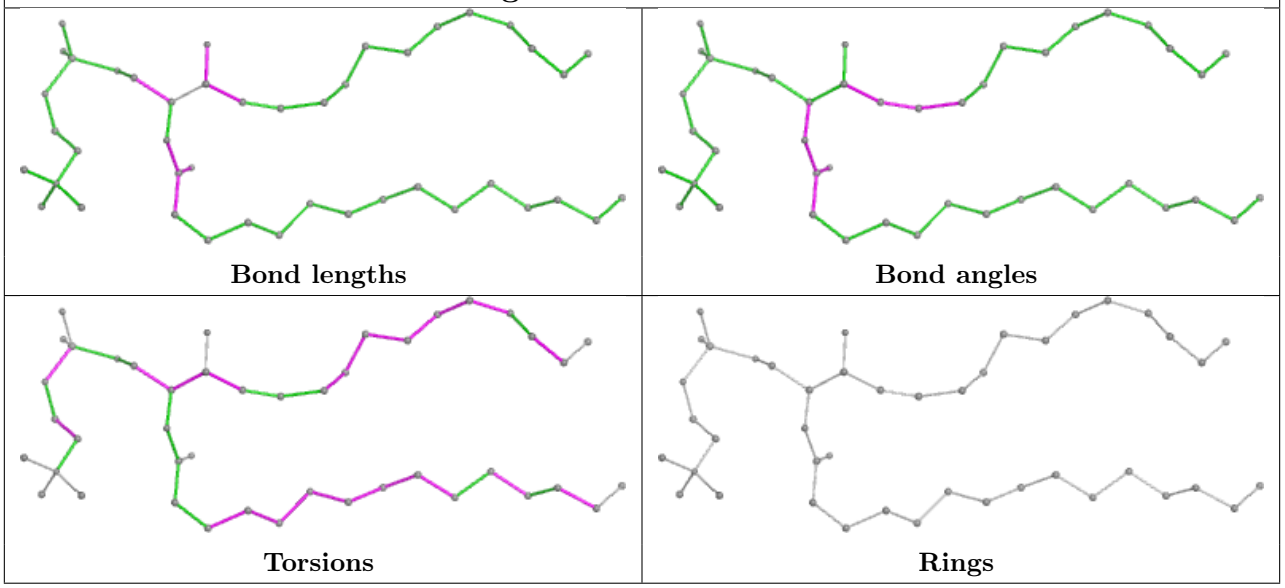

Bond lengths


Bond angles

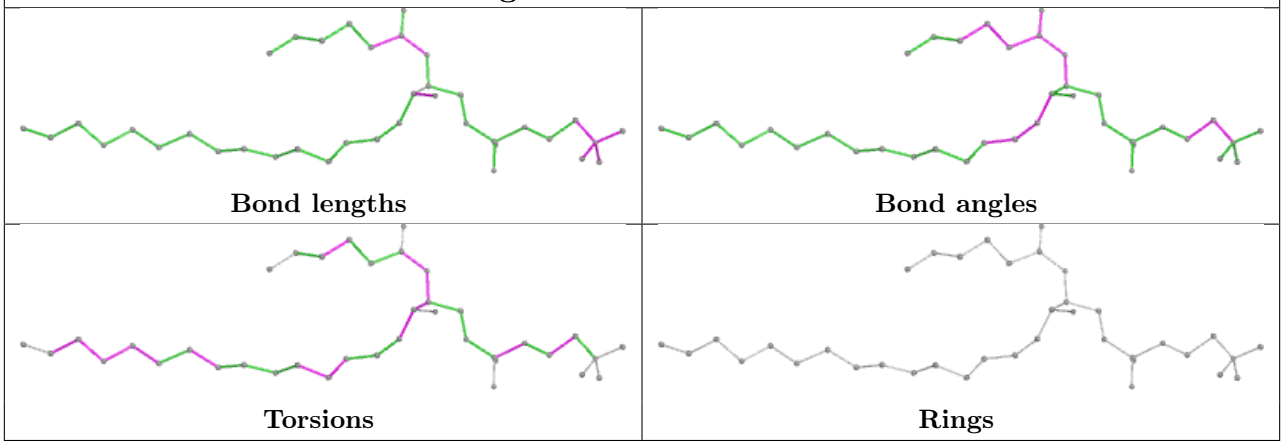

Torsions


Rings

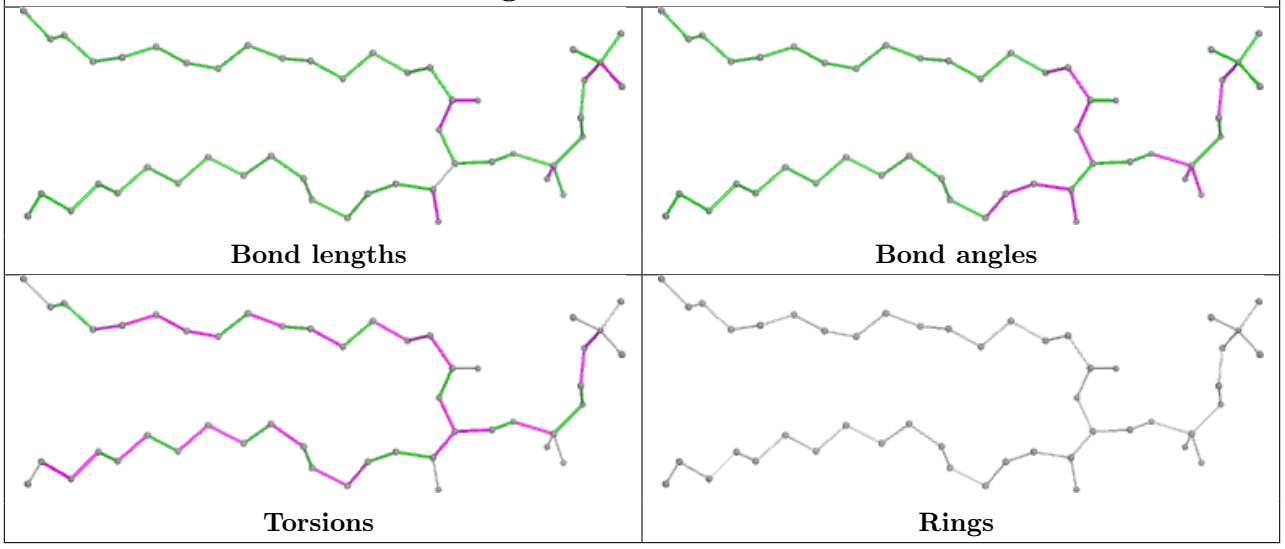
Ligand A1H8M F 312



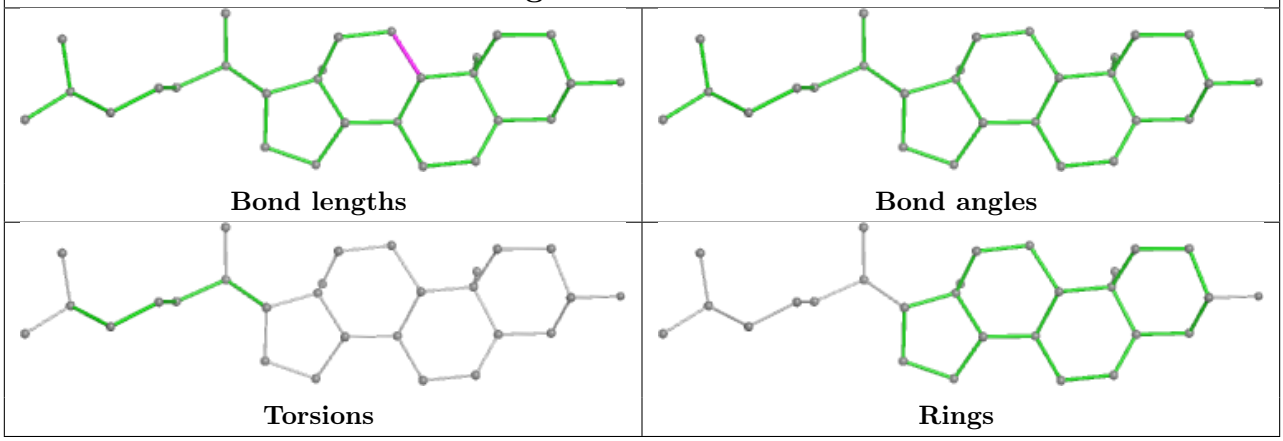
Ligand A1H8M A 307



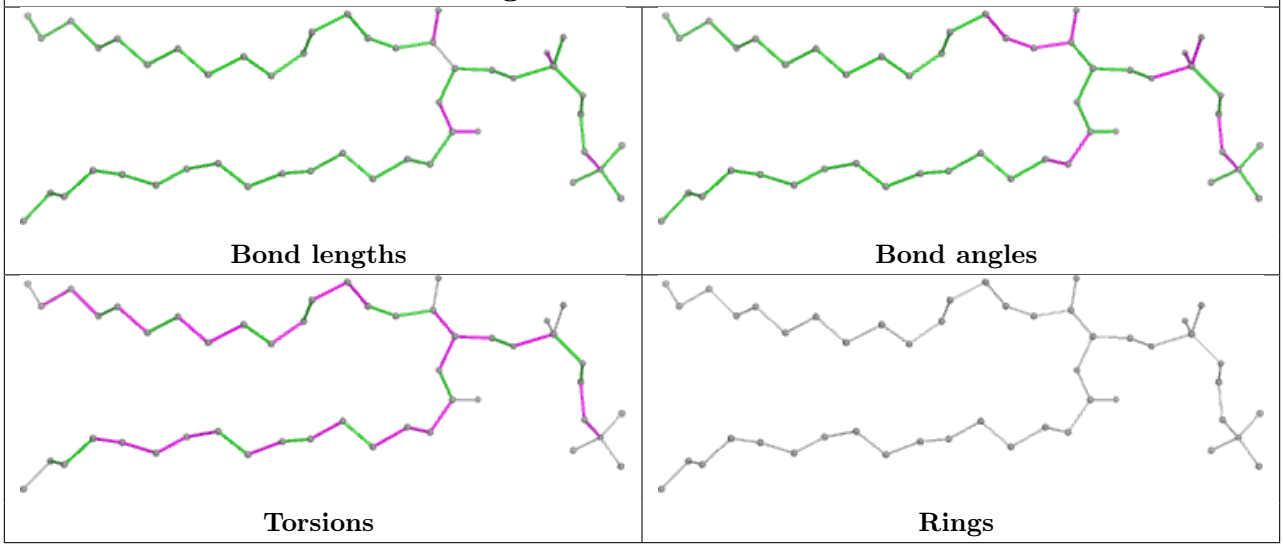
Ligand A1H8M B 305



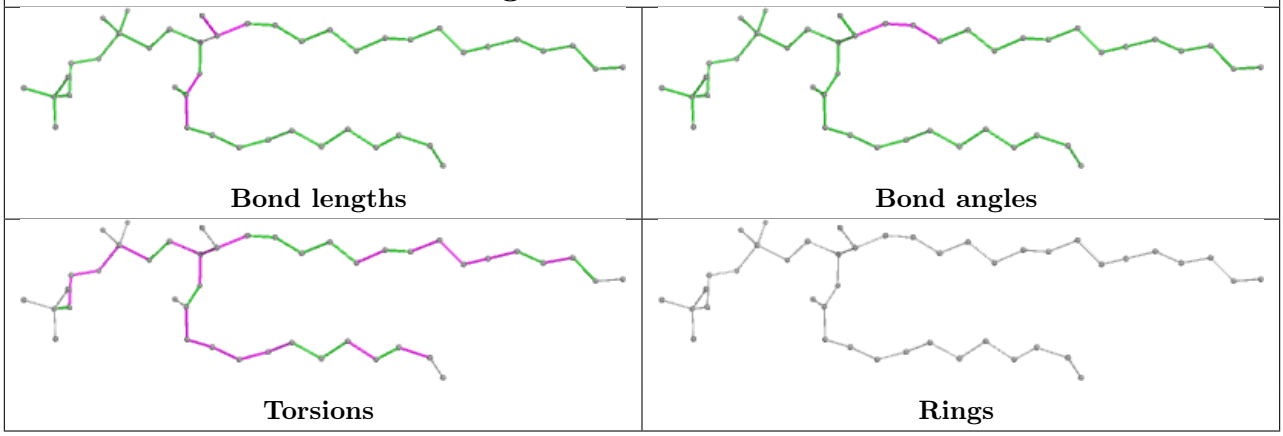
Ligand CLR B 303



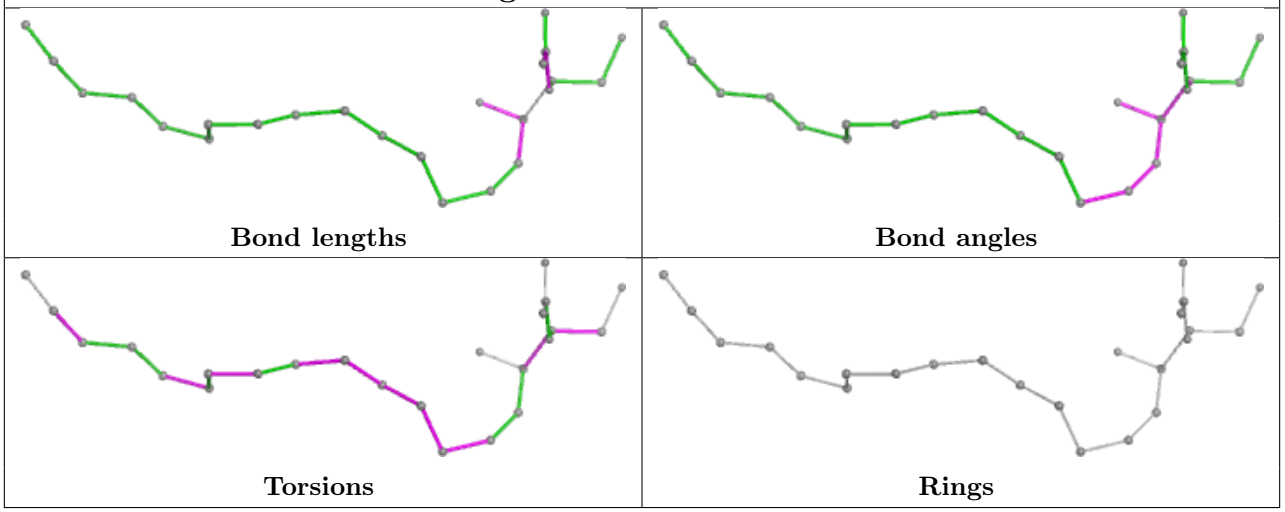
Ligand A1H8M F 305



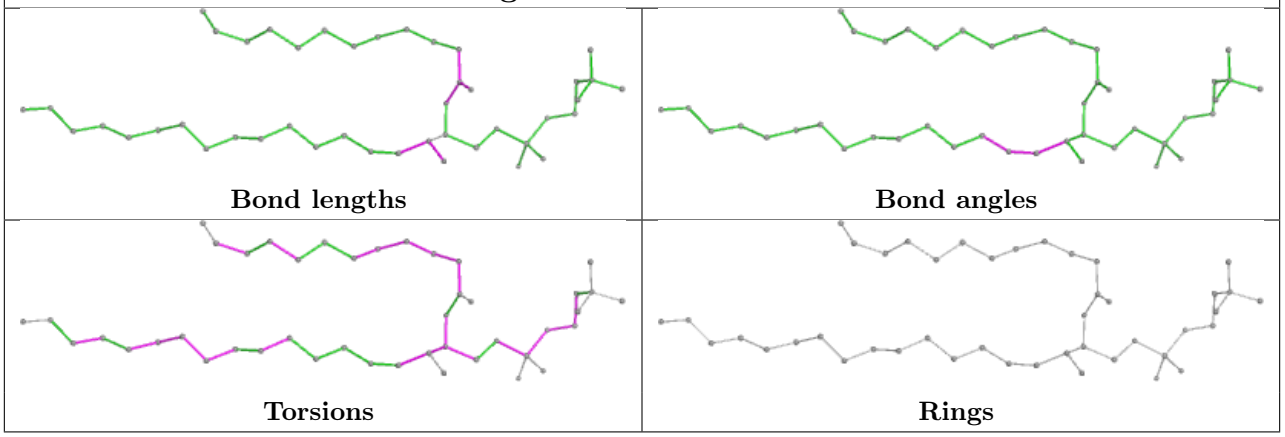
Ligand A1H8M F 306



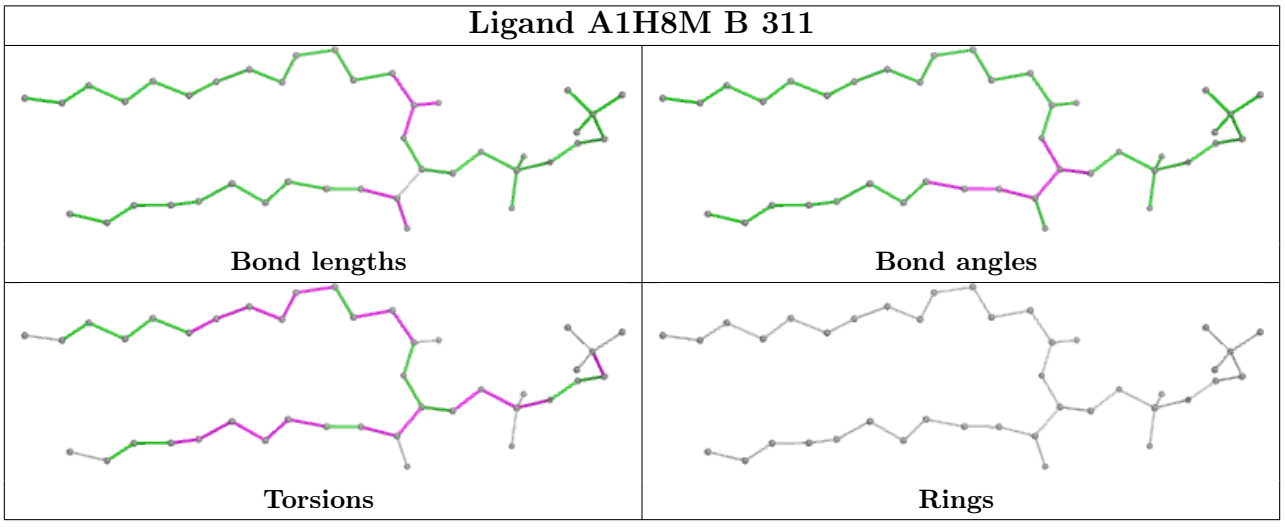
Ligand A1H8M H 310



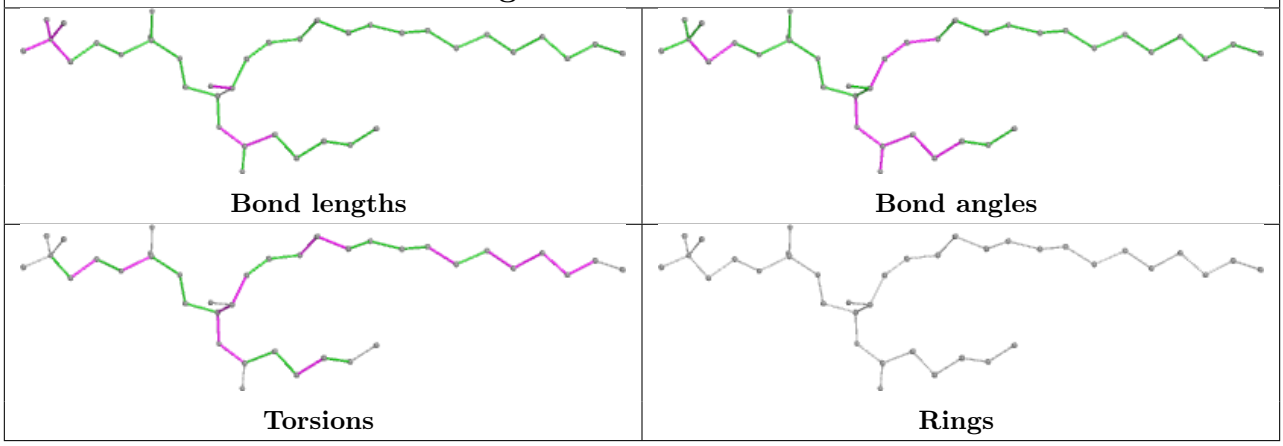
Ligand A1H8M C 306



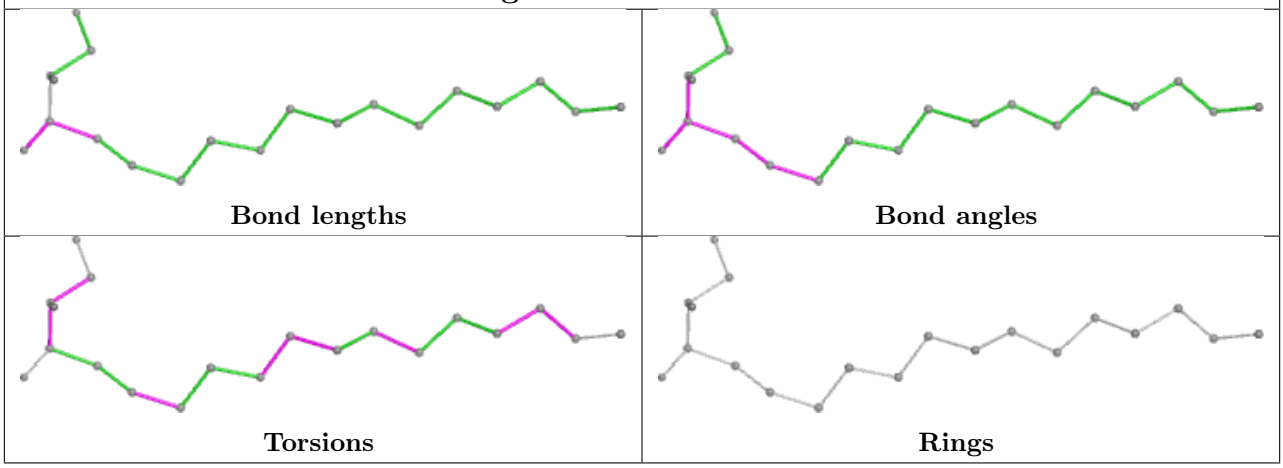
Ligand A1H8M B 311



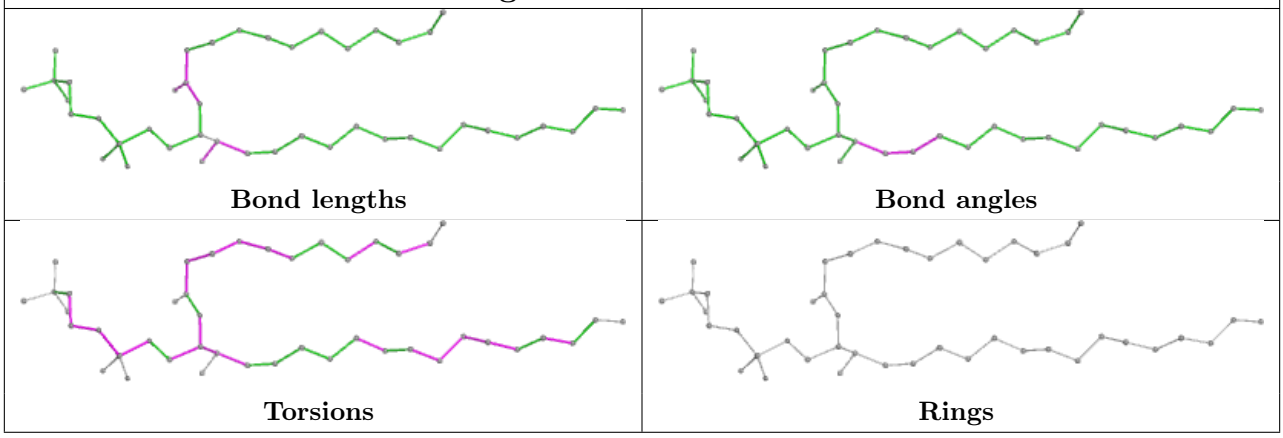
Ligand A1H8M H 307



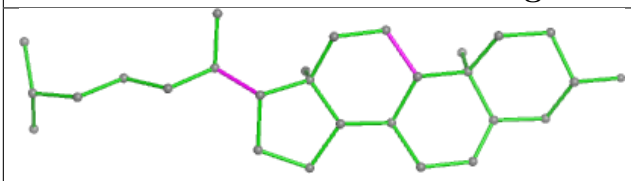
Ligand A1H8M E 313

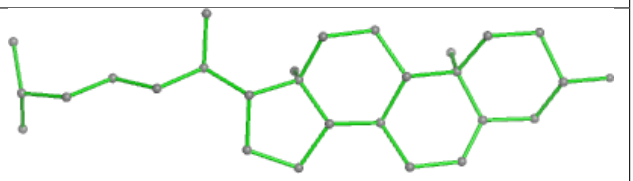


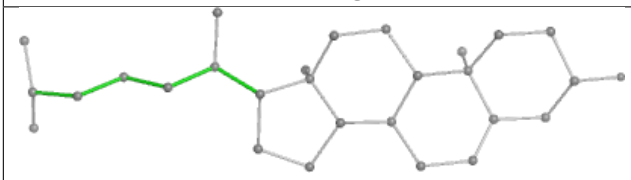
Ligand A1H8M A 306

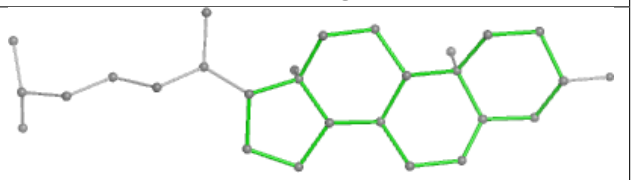


Ligand CLR C 304

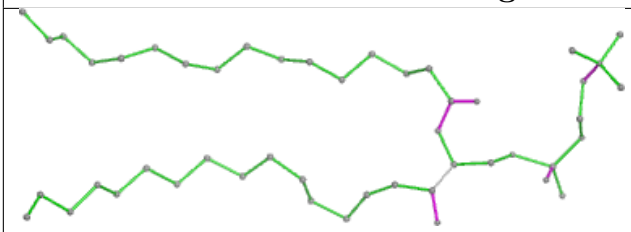

Bond lengths

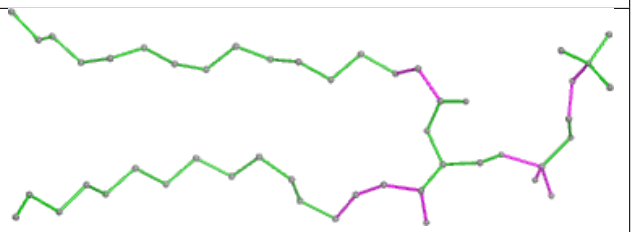

Bond angles

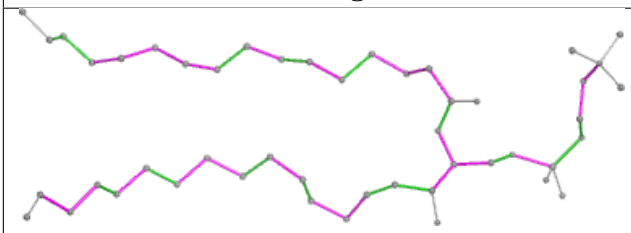

Torsions

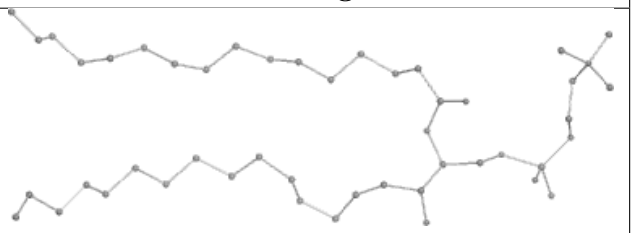

Rings

Ligand A1H8M D 305

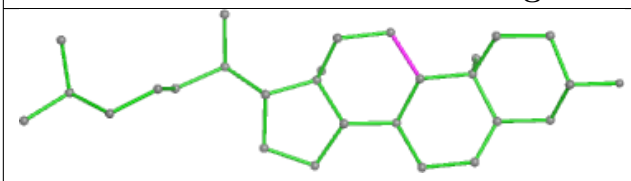

Bond lengths

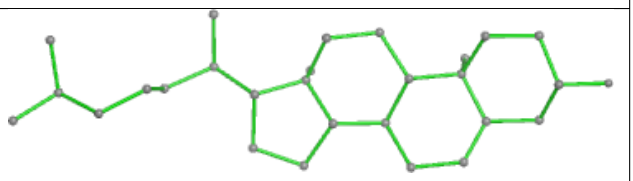

Bond angles

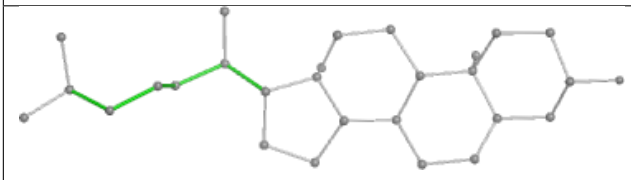

Torsions

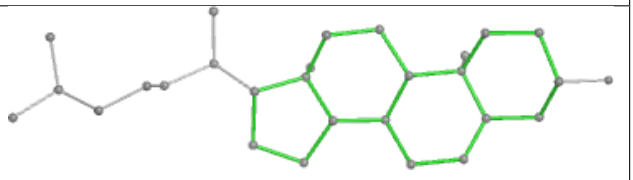

Rings

Ligand CLR D 303

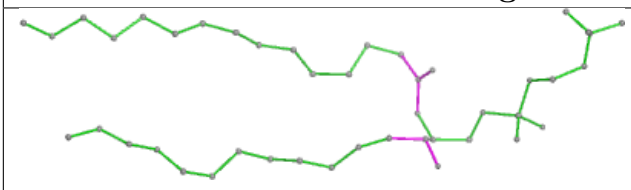

Bond lengths


Bond angles

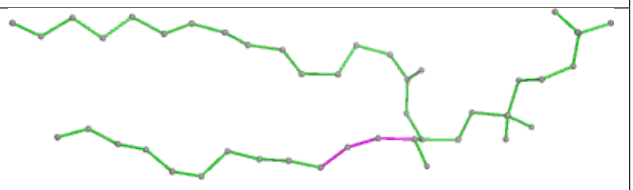

Torsions


Rings

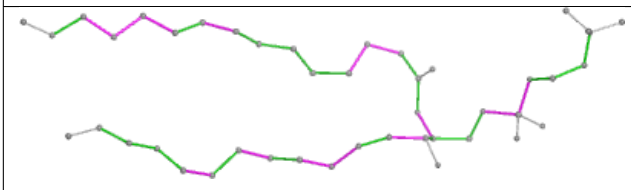
Ligand A1H8M C 309



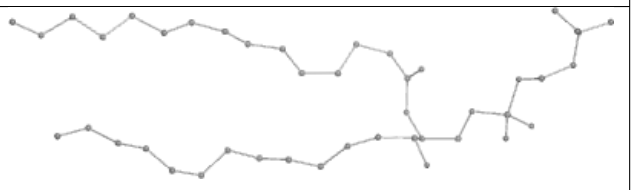
Bond lengths



Bond angles

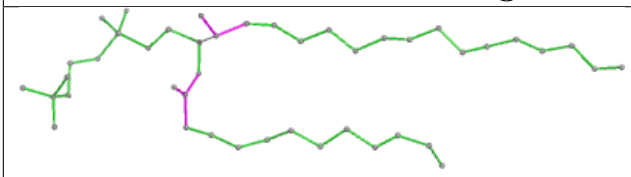


Torsions

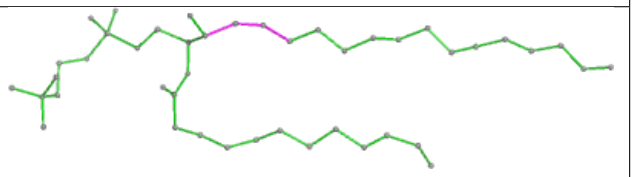


Rings

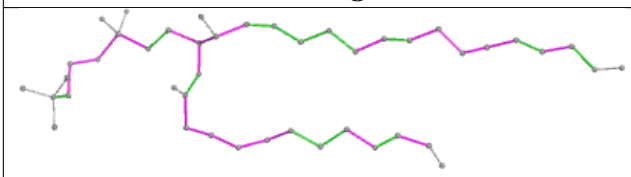
Ligand A1H8M G 306



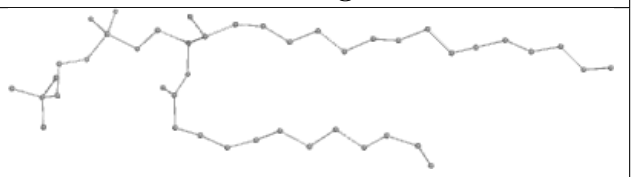
Bond lengths



Bond angles

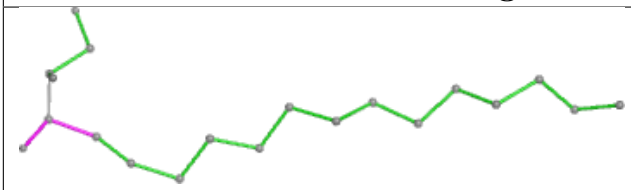


Torsions

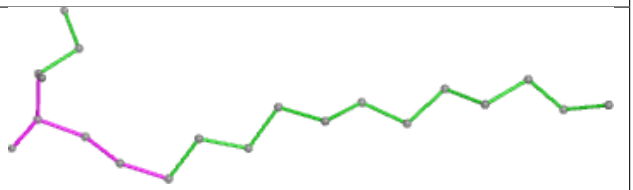


Rings

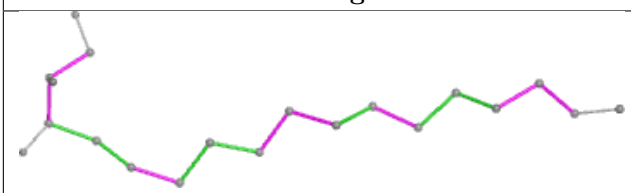
Ligand A1H8M D 313



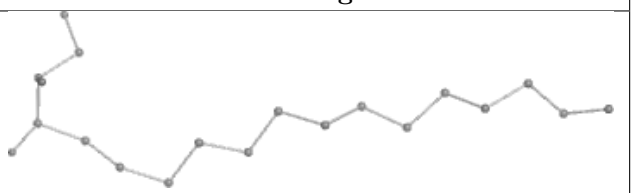
Bond lengths



Bond angles

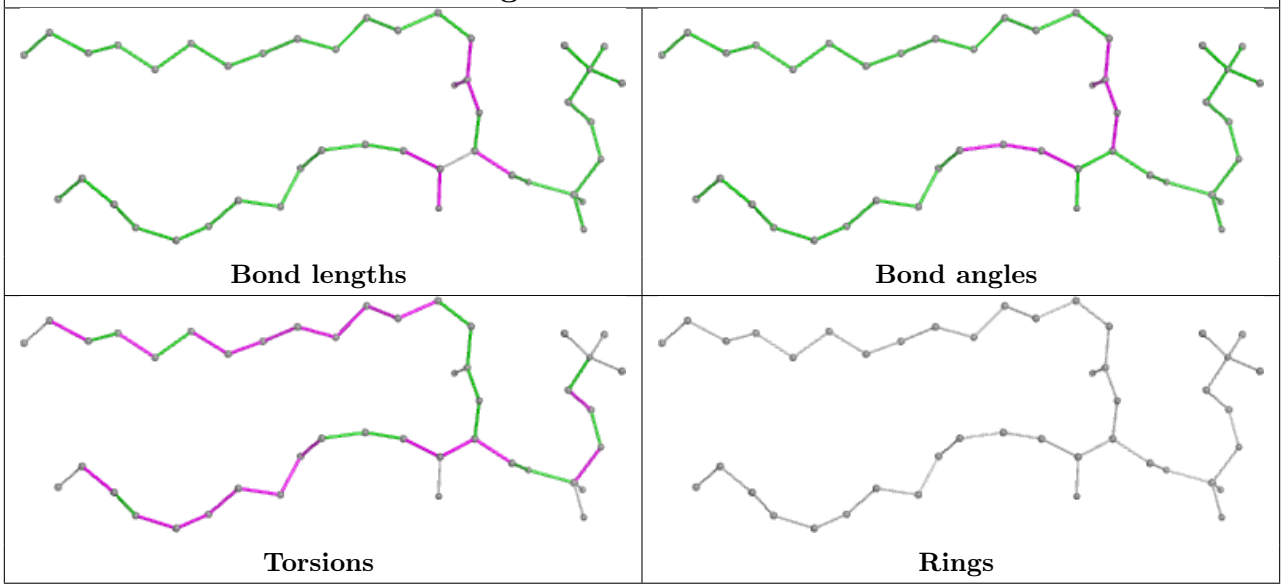


Torsions

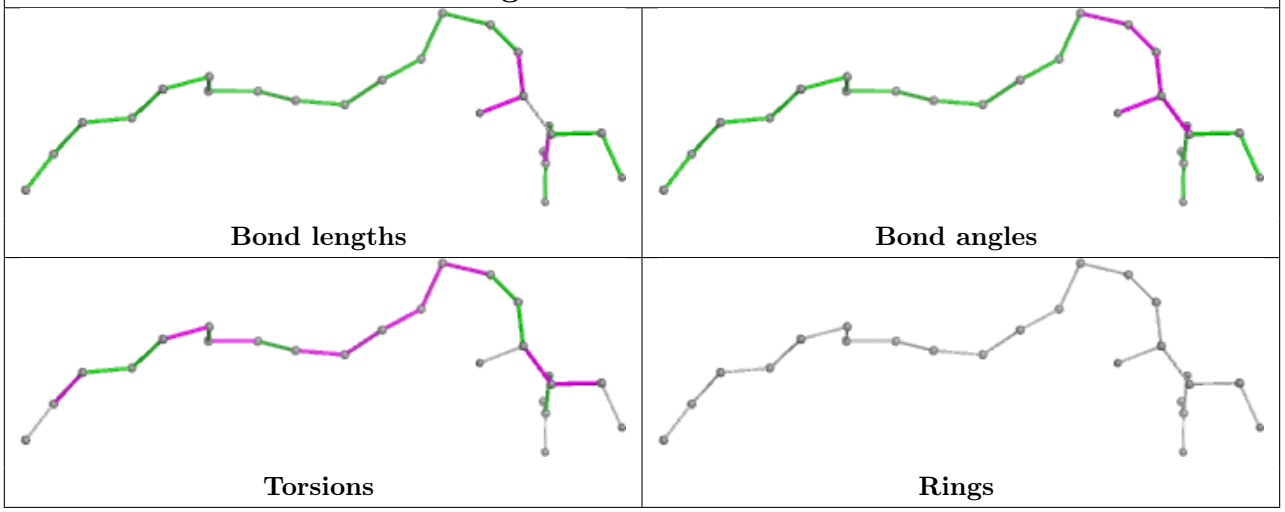


Rings

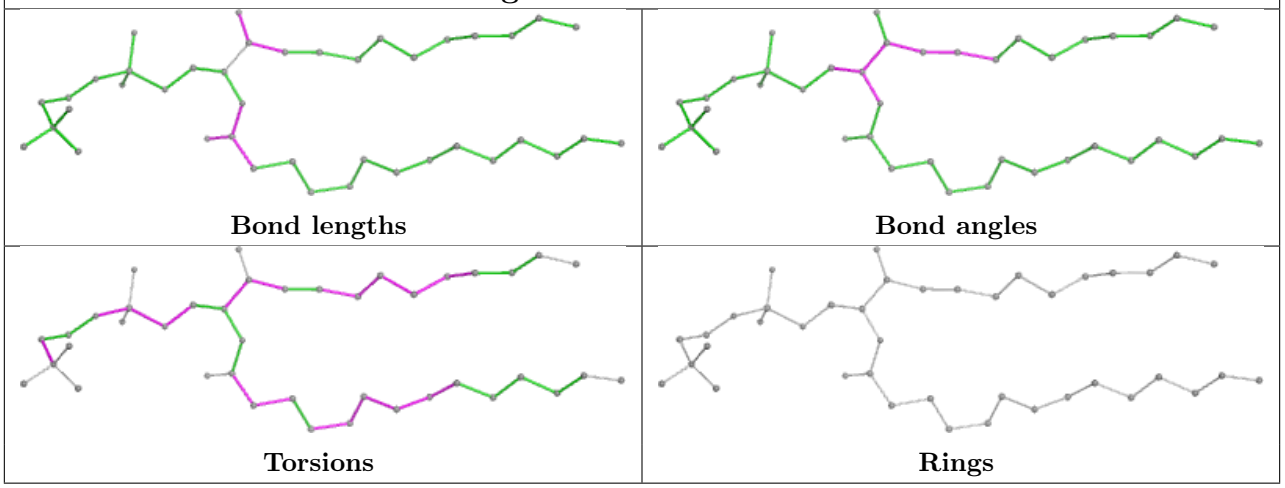
Ligand A1H8M B 312



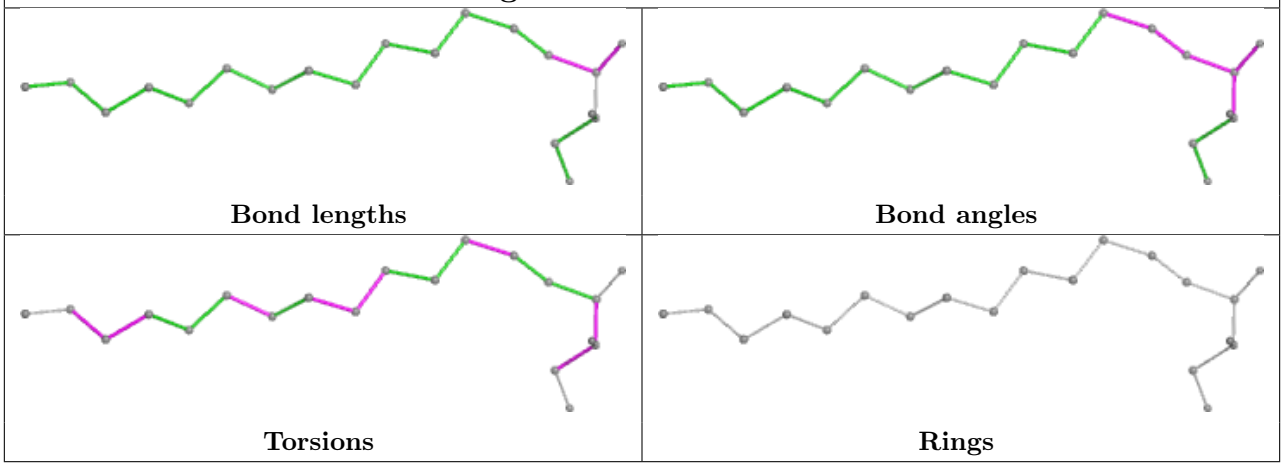
Ligand A1H8M E 310



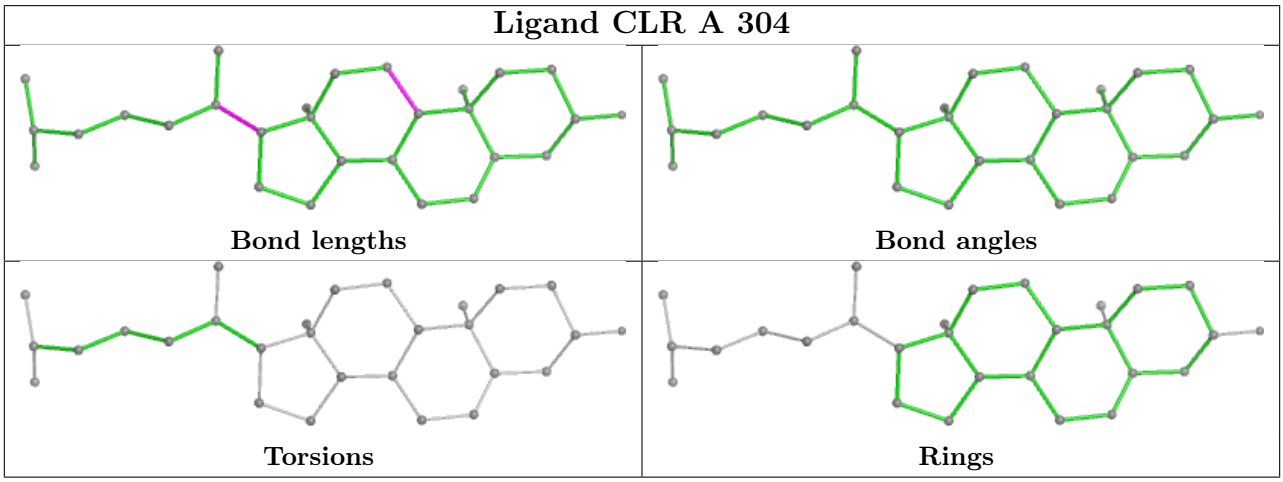
Ligand A1H8M E 311



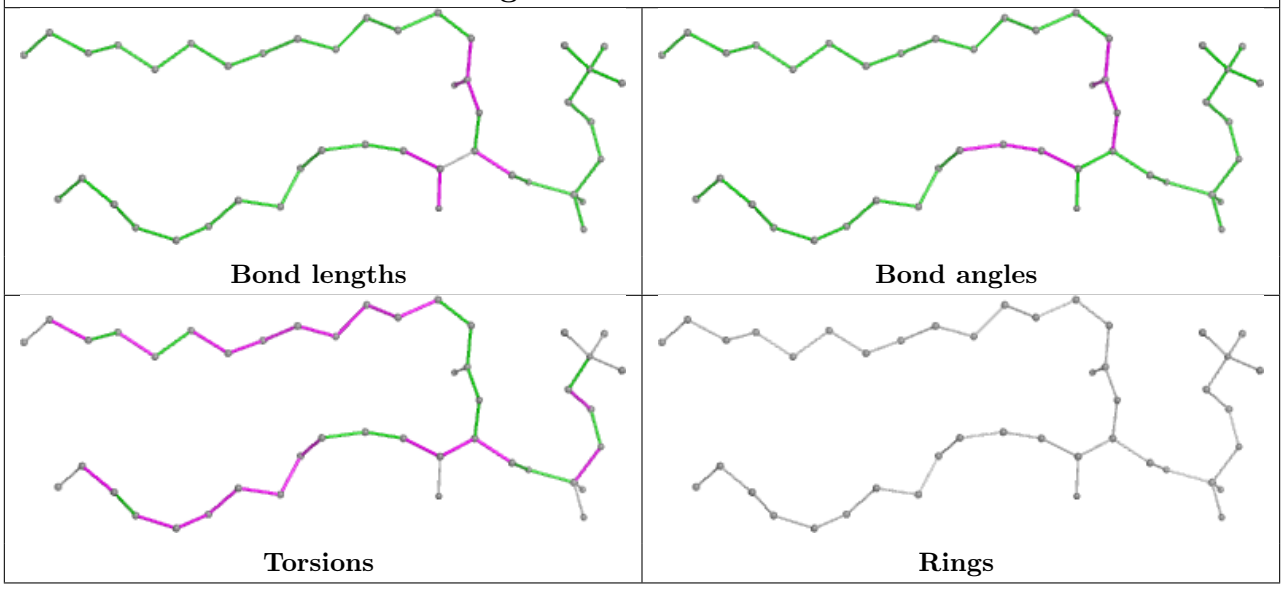
Ligand A1H8M C 313



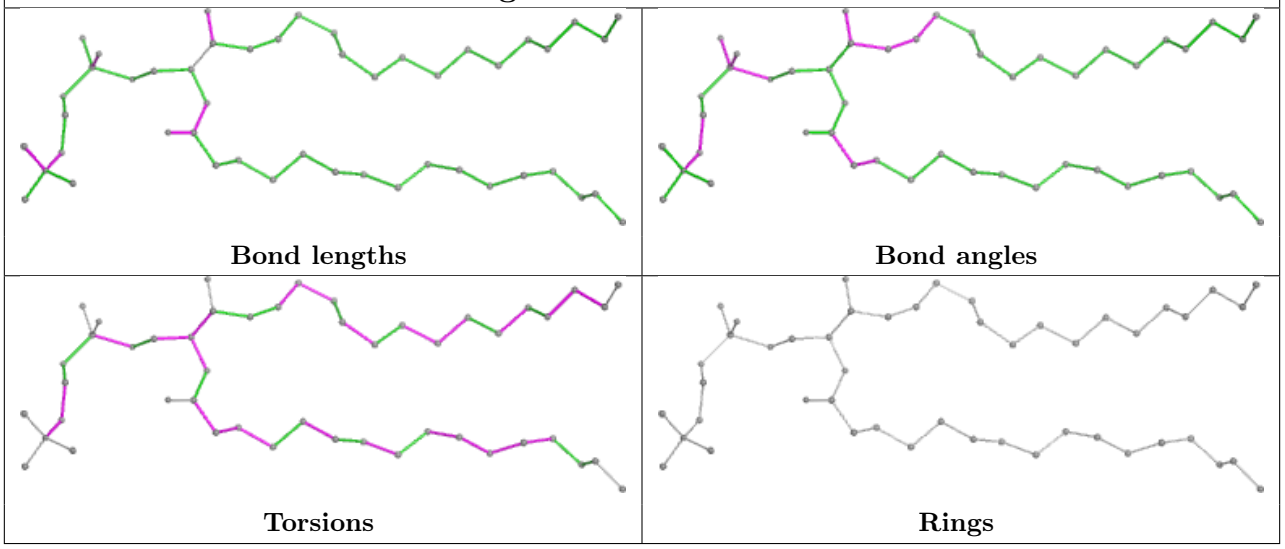
Ligand CLR A 304



Ligand A1H8M C 312



Ligand A1H8M H 305



5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

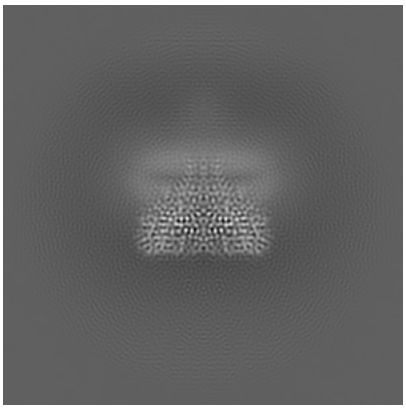
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-50058. These allow visual inspection of the internal detail of the map and identification of artifacts.

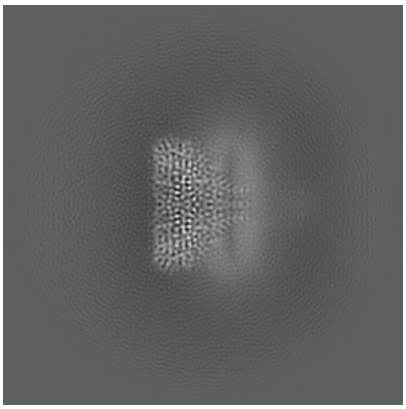
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

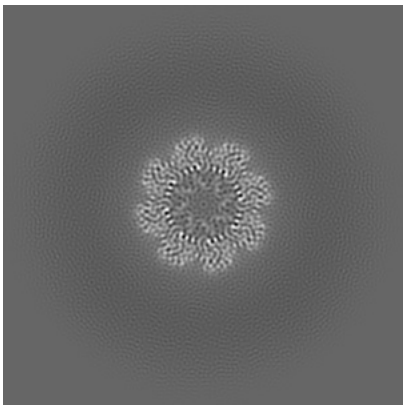
6.1.1 Primary map



X

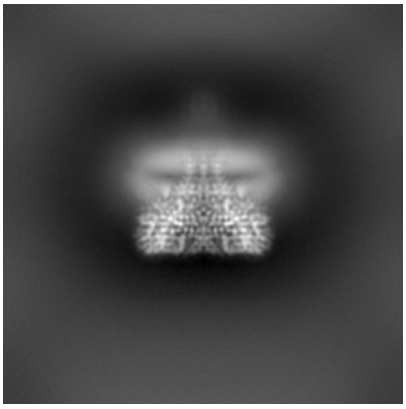


Y

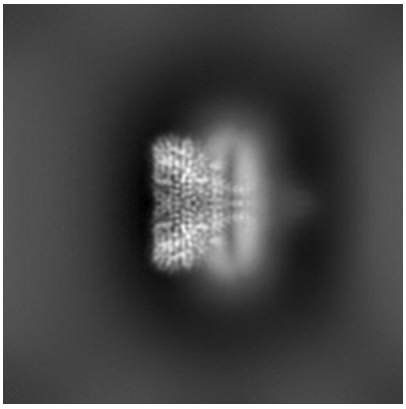


Z

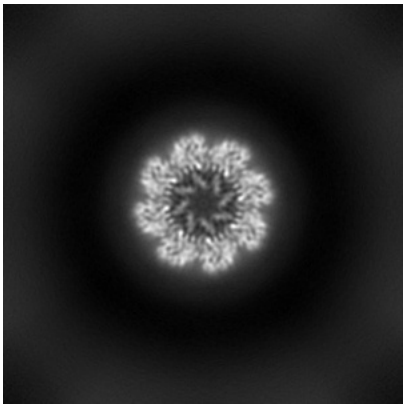
6.1.2 Raw map



X



Y

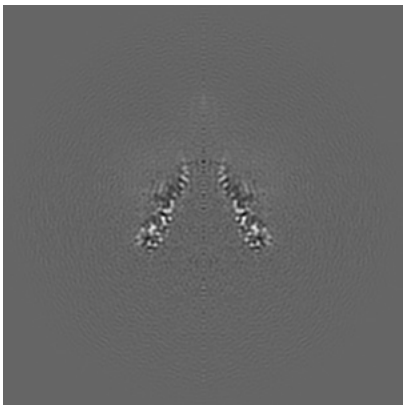


Z

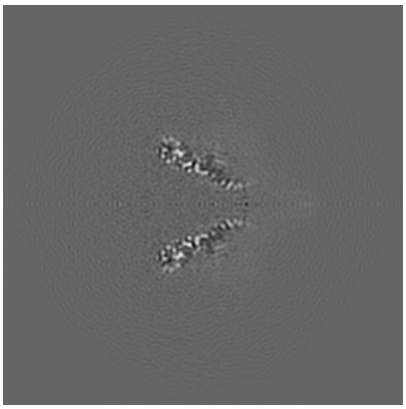
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

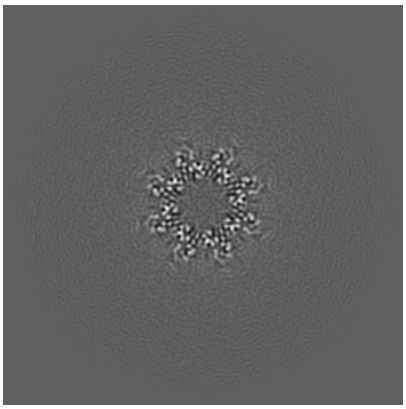
6.2.1 Primary map



X Index: 160

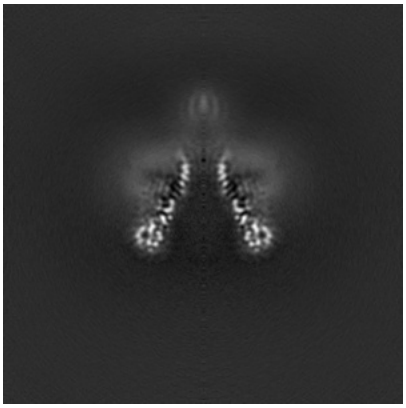


Y Index: 160

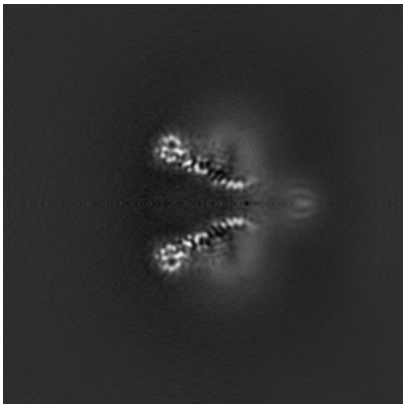


Z Index: 160

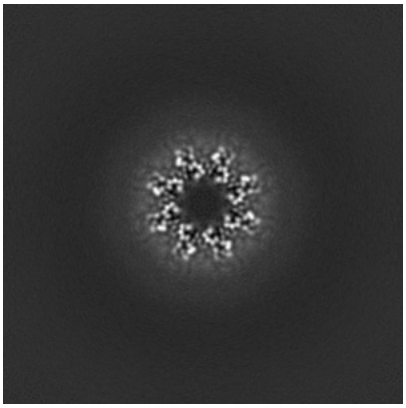
6.2.2 Raw map



X Index: 160



Y Index: 160

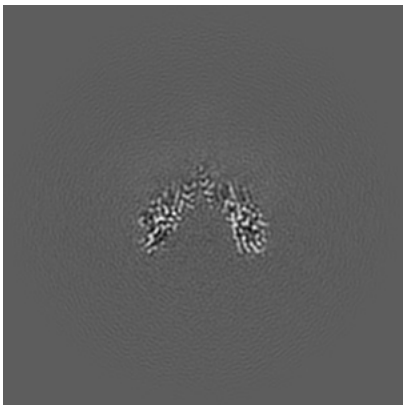


Z Index: 160

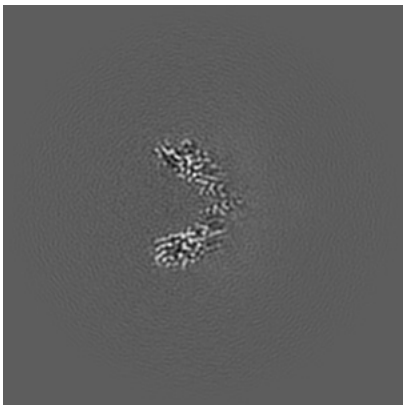
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

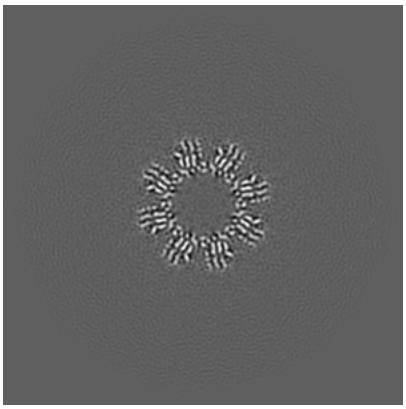
6.3.1 Primary map



X Index: 178

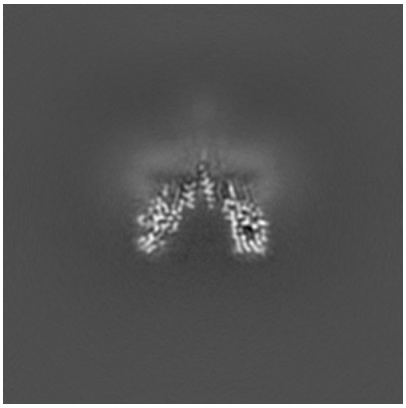


Y Index: 178

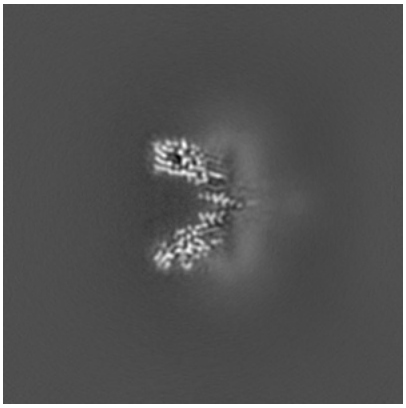


Z Index: 149

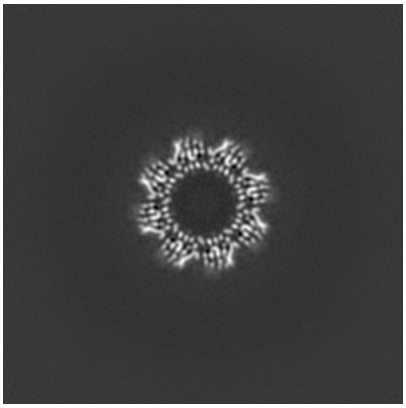
6.3.2 Raw map



X Index: 178



Y Index: 142

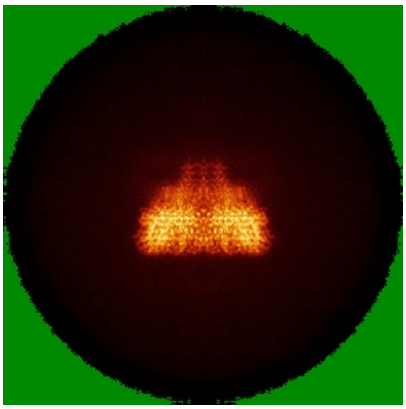


Z Index: 144

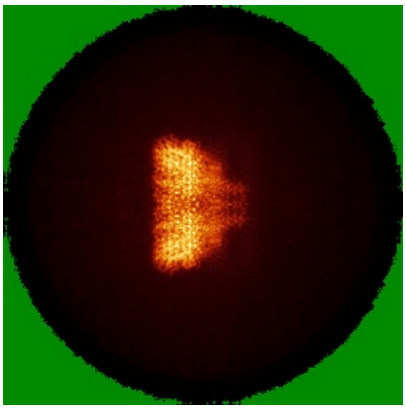
The images above show the largest variance slices of the map in three orthogonal directions.

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

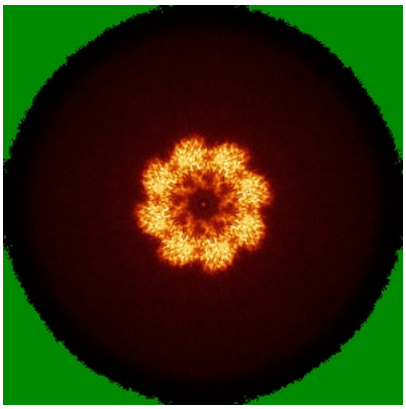
6.4.1 Primary map



X

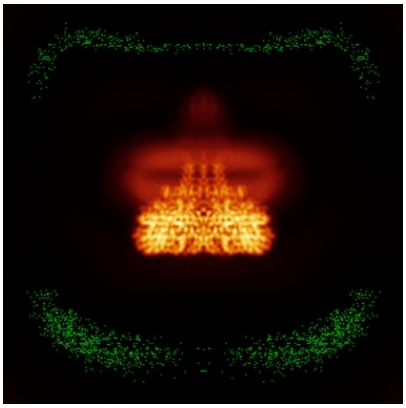


Y

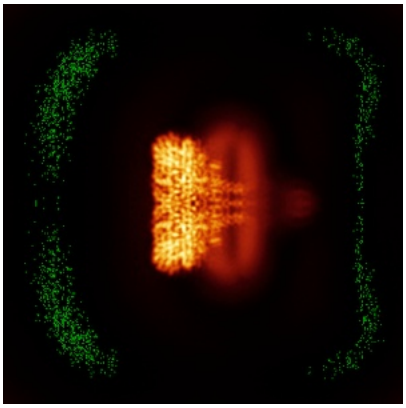


Z

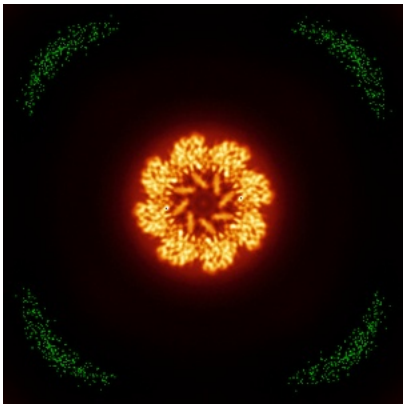
6.4.2 Raw map



X



Y



Z

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

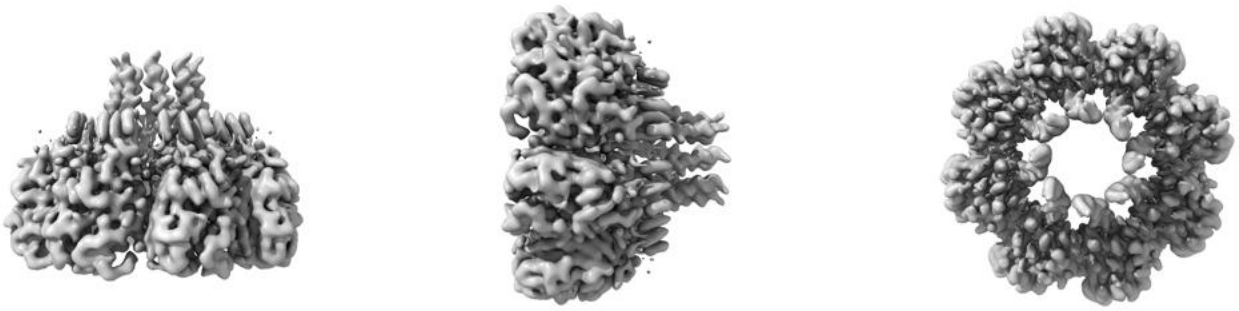
6.5 Orthogonal surface views (i)

6.5.1 Primary map

X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.805. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



X Y Z

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

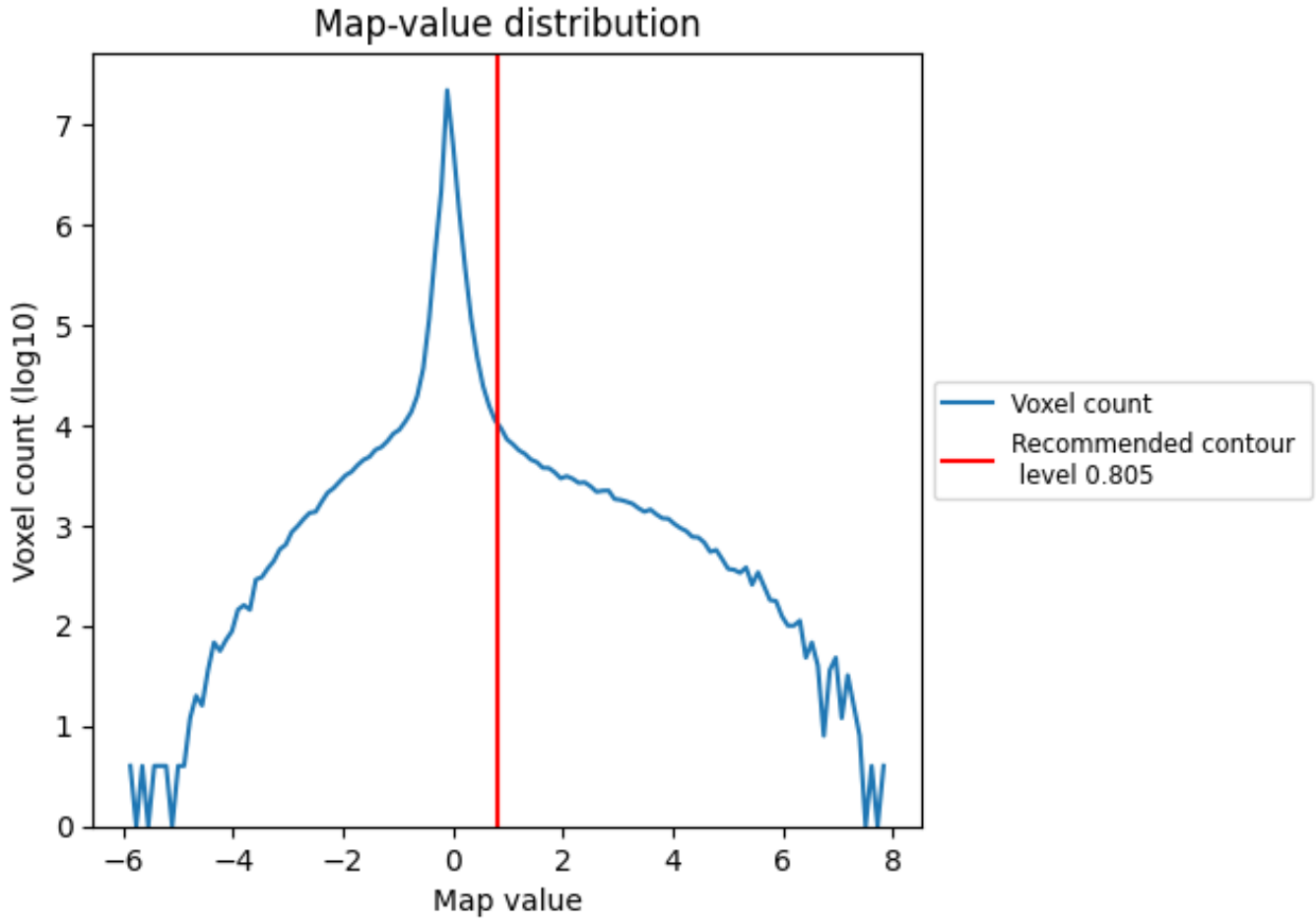
6.6 Mask visualisation (i)

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

7 Map analysis

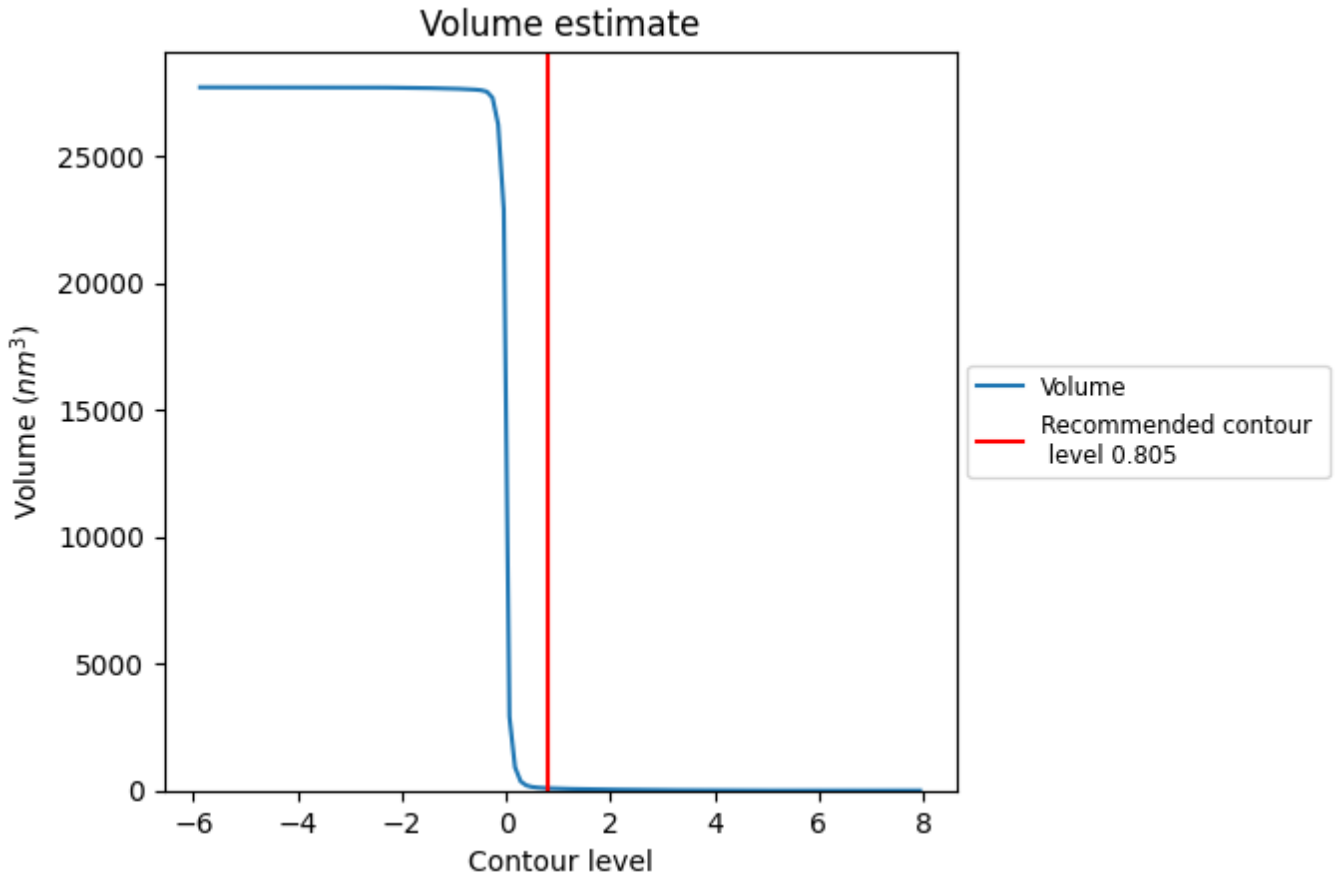
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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

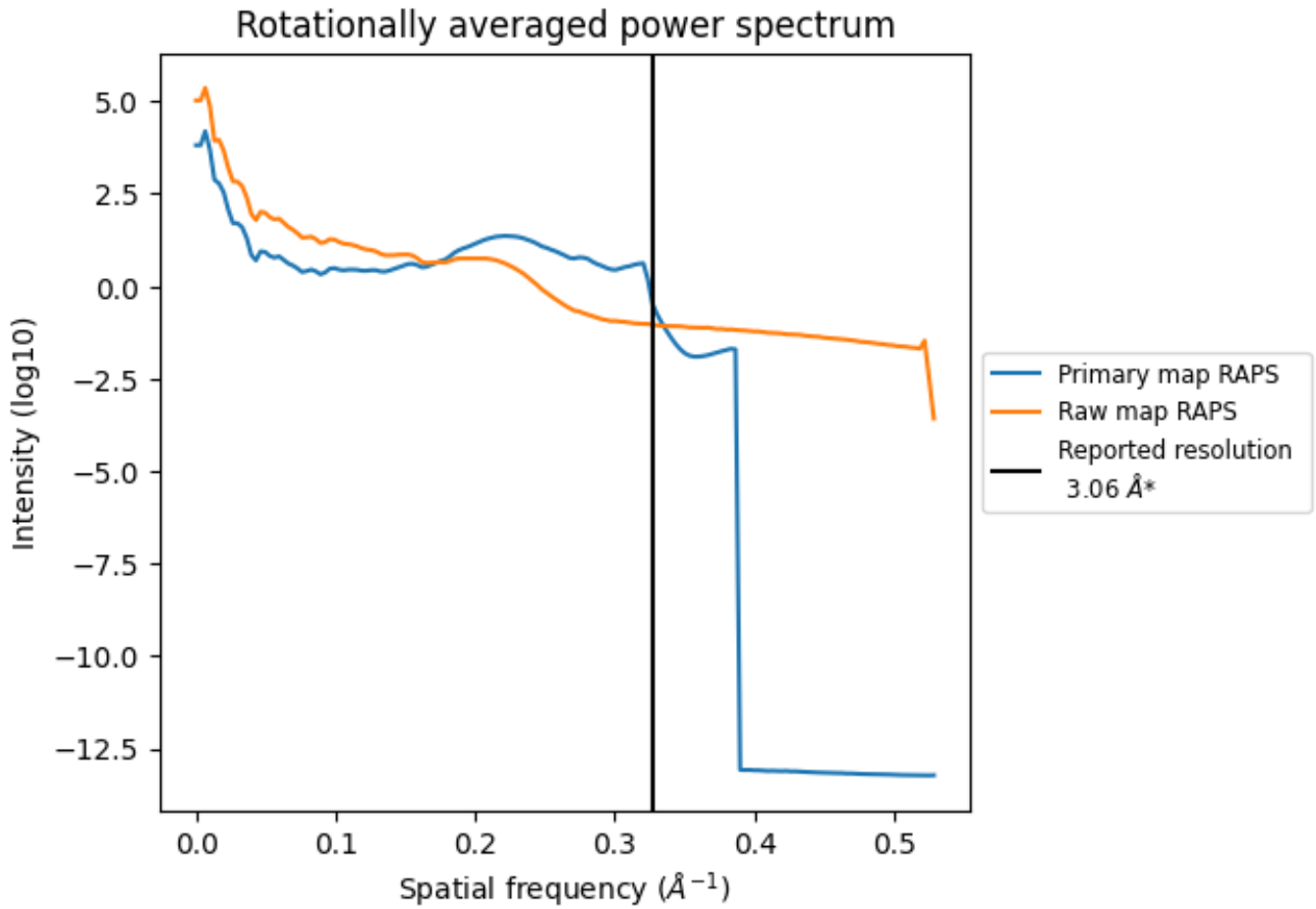
7.2 Volume estimate



The volume at the recommended contour level is 92 nm^3; this corresponds to an approximate mass of 83 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)

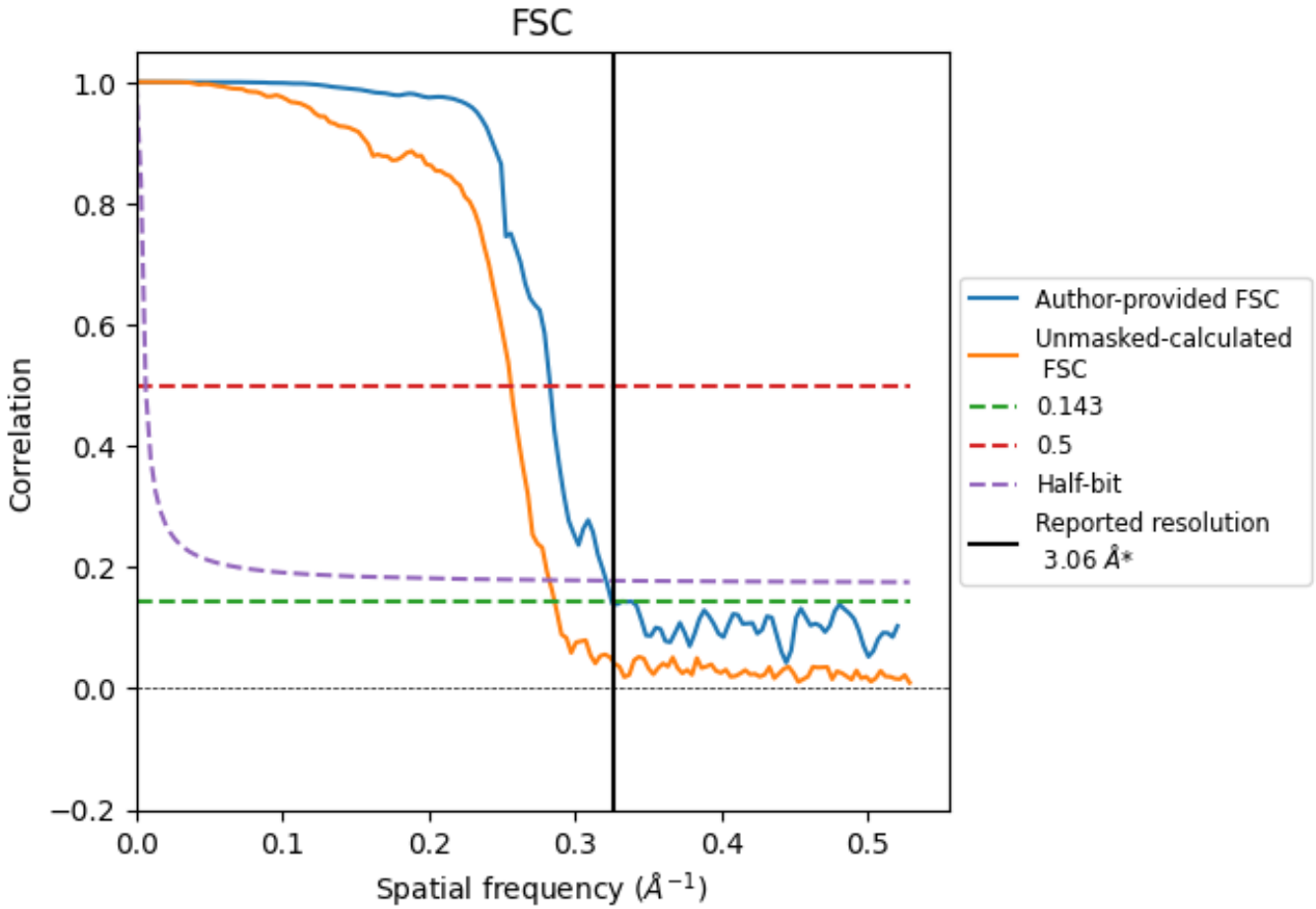


*Reported resolution corresponds to spatial frequency of 0.327 $Å^{-1}$

8 Fourier-Shell correlation

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

8.1 FSC



*Reported resolution corresponds to spatial frequency of 0.327 Å^{-1}

8.2 Resolution estimates (i)

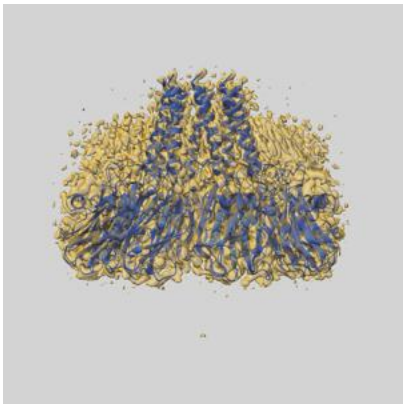
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.06	-	-
Author-provided FSC curve	3.08	3.53	3.11
Unmasked-calculated*	3.50	3.90	3.54

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 3.50 differs from the reported value 3.06 by more than 10 %

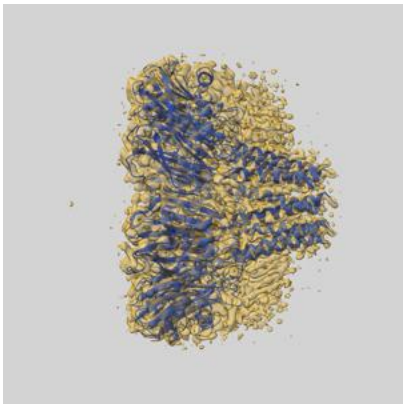
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-50058 and PDB model 9EYN. Per-residue inclusion information can be found in section 3 on page 10.

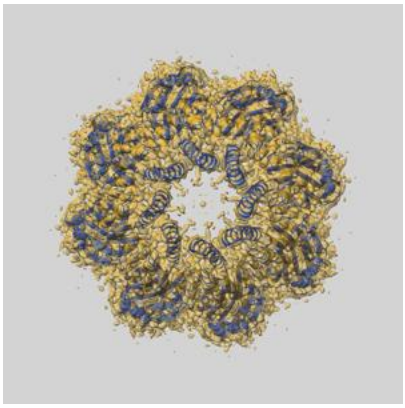
9.1 Map-model overlay



X



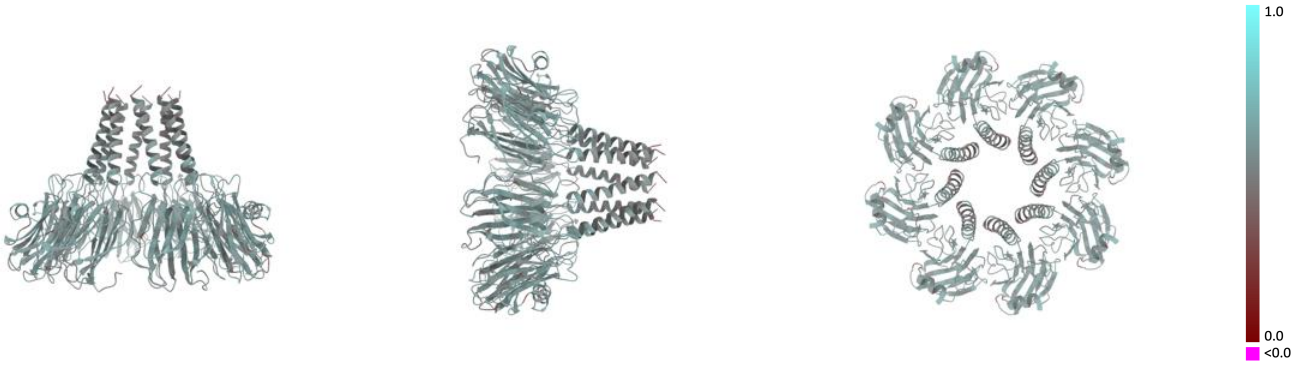
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.805 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

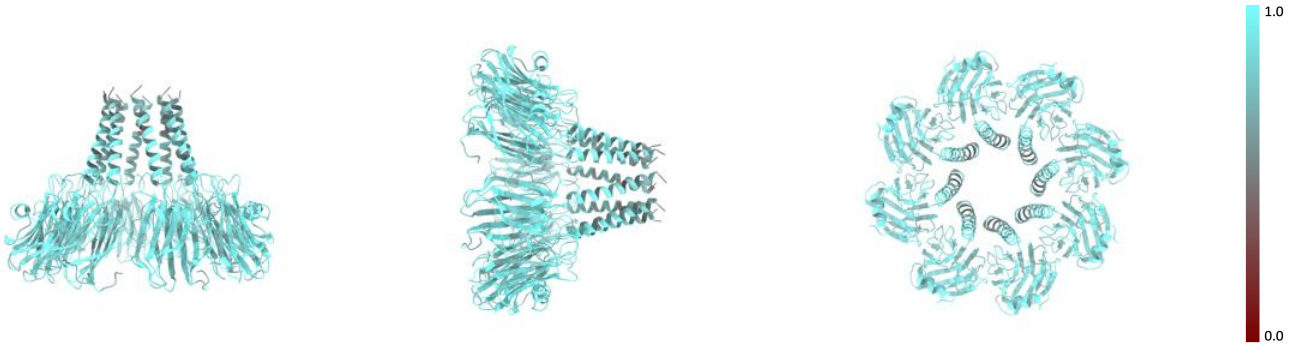
9.2 Q-score mapped to coordinate model (i)



X Y Z

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

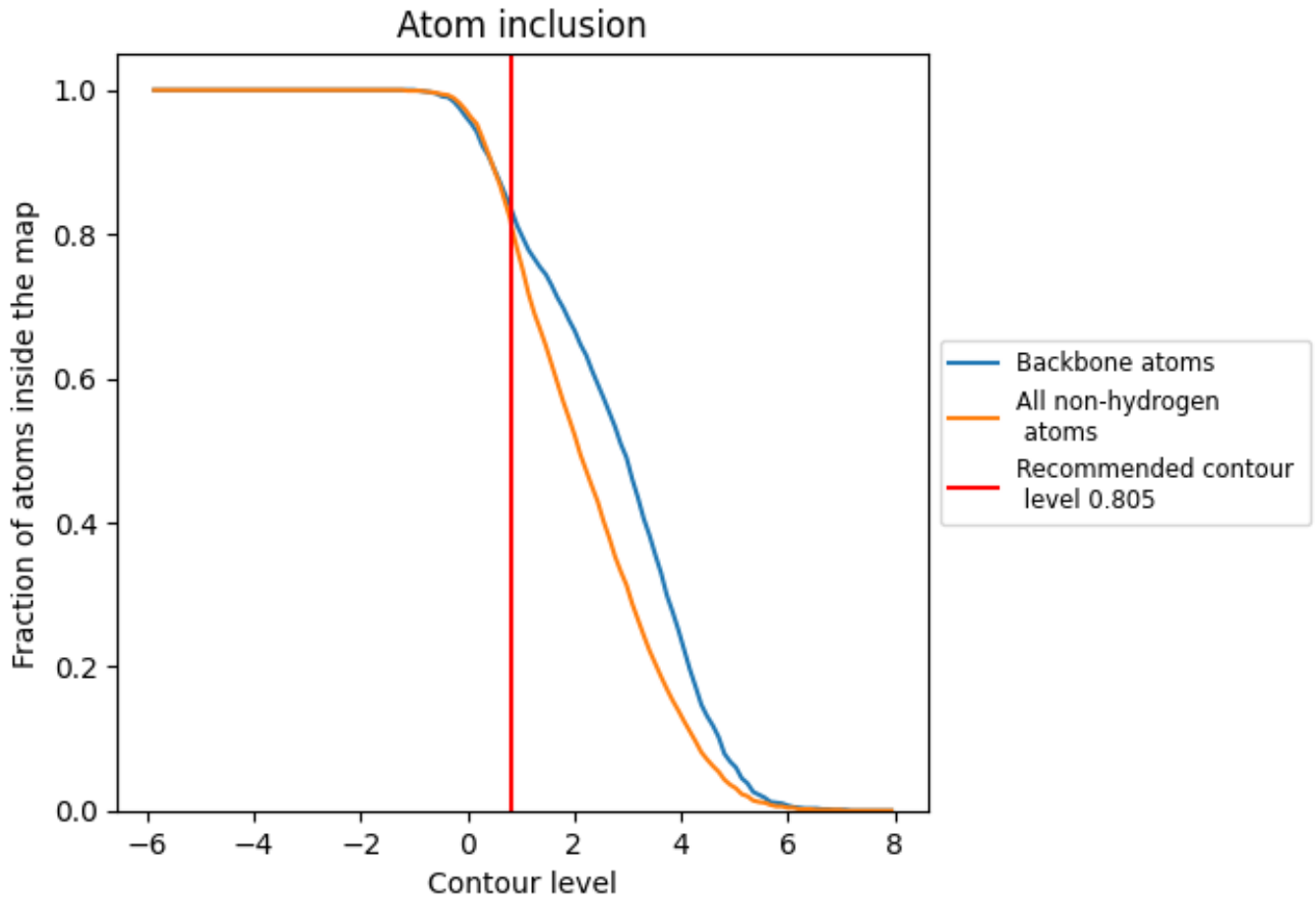
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.805).

9.4 Atom inclusion (i)



At the recommended contour level, 84% of all backbone atoms, 82% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary (i)

The table lists the average atom inclusion at the recommended contour level (0.805) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.8200	0.5450
A	0.8210	0.5470
B	0.8190	0.5450
C	0.8210	0.5470
D	0.8180	0.5440
E	0.8210	0.5450
F	0.8180	0.5430
G	0.8210	0.5450
H	0.8180	0.5440