Full wwPDB EM Validation Report

Oct 13, 2024 – 05:53 pm BST

PDB ID	:	6Z5R
EMDB ID	:	EMD-11080
Title	:	RC-LH1(16) complex from Rhodopseudomonas palustris
Authors	:	Swainsbury, D.J.K.; Qian, P.; Hitchcock, A.; Hunter, C.N.
Deposited on	:	2020-05-27
Resolution	:	2.80 Å(reported)

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

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

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

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

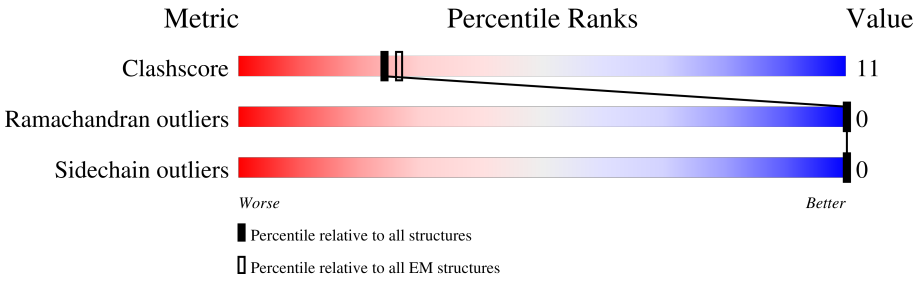
EMDB validation analysis	:	0.0.1.dev113
Mogul	:	1.8.4, CSD as541be (2020)
MolProbity	:	4.02b-467
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.39

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 2.80 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	1	48	83% 12%
1	3	48	75% 21%
1	5	48	69% 27%
1	7	48	81% 15%
1	9	48	8% 50% 46%
1	A	48	83% 12%
1	C	48	73% 23%
1	E	48	75% 21%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	G	48	73% 23%
1	J	48	81% 12% 6%
1	N	48	71% 25%
1	P	48	77% 19%
1	R	48	63% 33%
1	T	48	79% 21%
1	V	48	79% 17%
1	Y	48	71% 23% 6%
2	0	52	6% 75% 19% 6%
2	2	52	73% 19% 8%
2	4	52	8% 58% 35% 8%
2	6	52	67% 29%
2	8	52	17% 71% 23% 6%
2	B	52	75% 19% 6%
2	D	52	75% 19% 6%
2	F	52	79% 15% 6%
2	I	52	77% 13% 10%
2	K	52	75% 15% 10%
2	O	52	69% 23% 8%
2	Q	52	65% 27% 8%
2	S	52	79% 13% 8%
2	U	52	71% 19% 10%
2	X	52	67% 23% 10%
2	Z	52	67% 25% 8%
3	H	255	87% 10%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
4	L	277	92% 8%
5	M	307	89% 11%

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
11	BPH	L	302	X	-	-	-
11	BPH	M	405	X	-	-	-
14	QAK	M	407	X	-	-	-

2 Entry composition (i)

There are 16 unique types of molecules in this entry. The entry contains 25048 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 Light-harvesting complex 1 alpha chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	C	46	Total	C	N	O	S	0	0
			397	274	67	55	1		
1	E	46	Total	C	N	O	S	0	0
			397	274	67	55	1		
1	G	46	Total	C	N	O	S	0	0
			397	274	67	55	1		
1	J	45	Total	C	N	O	S	0	0
			392	271	66	54	1		
1	N	46	Total	C	N	O	S	0	0
			397	274	67	55	1		
1	R	46	Total	C	N	O	S	0	0
			397	274	67	55	1		
1	T	48	Total	C	N	O	S	0	0
			411	283	70	57	1		
1	V	46	Total	C	N	O	S	0	0
			397	274	67	55	1		
1	P	46	Total	C	N	O	S	0	0
			397	274	67	55	1		
1	Y	45	Total	C	N	O		0	0
			387	268	66	53			
1	A	46	Total	C	N	O	S	0	0
			397	274	67	55	1		
1	1	46	Total	C	N	O	S	0	0
			397	274	67	55	1		
1	3	46	Total	C	N	O	S	0	0
			397	274	67	55	1		
1	5	46	Total	C	N	O	S	0	0
			397	274	67	55	1		
1	7	46	Total	C	N	O	S	0	0
			397	274	67	55	1		
1	9	46	Total	C	N	O	S	0	0
			397	274	67	55	1		

- Molecule 2 is a protein called Light-harvesting complex 1 beta chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	D	49	Total	C	N	O	S	1	0
			403	276	62	64	1		
2	F	49	Total	C	N	O	S	1	0
			403	276	62	64	1		
2	I	47	Total	C	N	O	S	0	0
			382	262	59	60	1		
2	K	47	Total	C	N	O	S	1	0
			393	271	60	61	1		
2	O	48	Total	C	N	O	S	1	0
			399	274	61	63	1		
2	S	48	Total	C	N	O	S	1	0
			399	274	61	63	1		
2	U	47	Total	C	N	O	S	1	0
			393	271	60	61	1		
2	X	47	Total	C	N	O	S	0	0
			382	262	59	60	1		
2	Q	48	Total	C	N	O	S	1	0
			399	274	61	63	1		
2	Z	48	Total	C	N	O	S	1	0
			399	274	61	63	1		
2	B	49	Total	C	N	O	S	1	0
			403	276	62	64	1		
2	2	48	Total	C	N	O	S	1	0
			399	274	61	63	1		
2	4	48	Total	C	N	O	S	1	0
			399	274	61	63	1		
2	6	50	Total	C	N	O	S	1	0
			411	280	63	67	1		
2	8	49	Total	C	N	O	S	1	0
			403	276	62	64	1		
2	0	49	Total	C	N	O	S	1	0
			403	276	62	64	1		

- Molecule 3 is a protein called H subunit of photosynthetic reaction center complex.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	H	247	Total	C	N	O	S	0	0
			1862	1201	314	342	5		

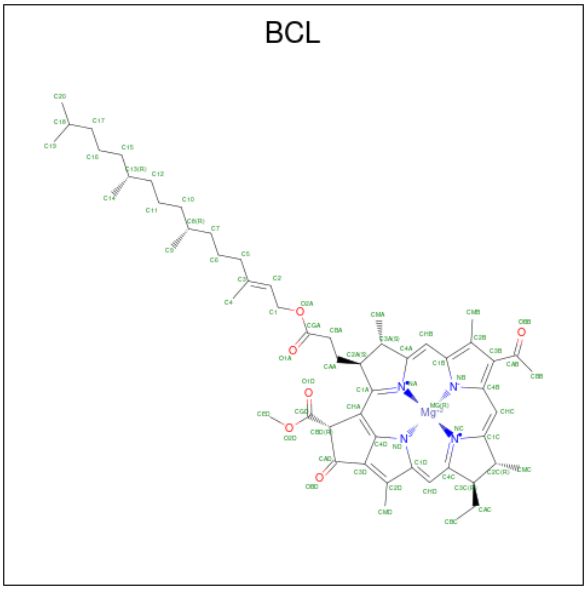
- Molecule 4 is a protein called Reaction center protein L chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	L	276	Total	C	N	O	S	0	0
			2185	1467	350	359	9		

- Molecule 5 is a protein called Reaction center protein M chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	M	306	Total	C	N	O	S	0	0
			2433	1615	400	406	12		

- Molecule 6 is BACTERIOCHLOROPHYLL A (three-letter code: BCL) (formula: $C_{55}H_{74}MgN_4O_6$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
6	C	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	C	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	E	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	F	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	G	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	G	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	J	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	J	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	N	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

Continued on next page...

Continued from previous page...

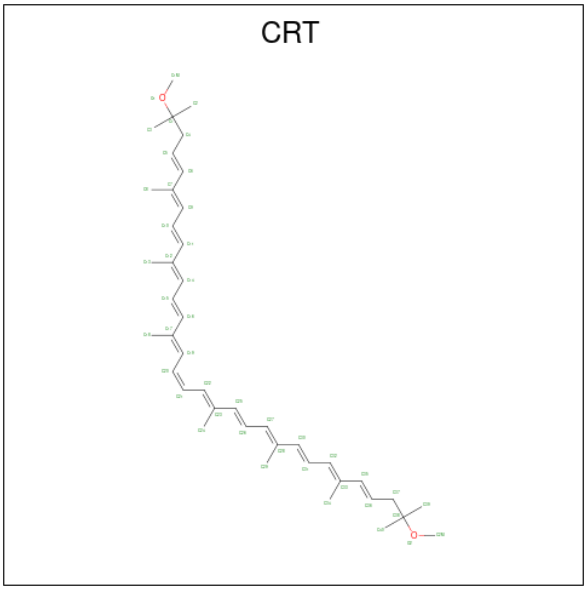
Mol	Chain	Residues	Atoms					AltConf
6	N	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	L	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	L	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	M	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	M	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	R	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	R	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	T	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	U	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	V	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	V	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	P	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	Q	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	Y	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	Y	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	A	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	B	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	3	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	4	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf
6	5	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	5	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	7	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	7	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	9	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
6	0	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

- Molecule 7 is SPIRILLOXANTHIN (three-letter code: CRT) (formula: $C_{42}H_{60}O_2$) (labeled as "Ligand of Interest" by depositor).



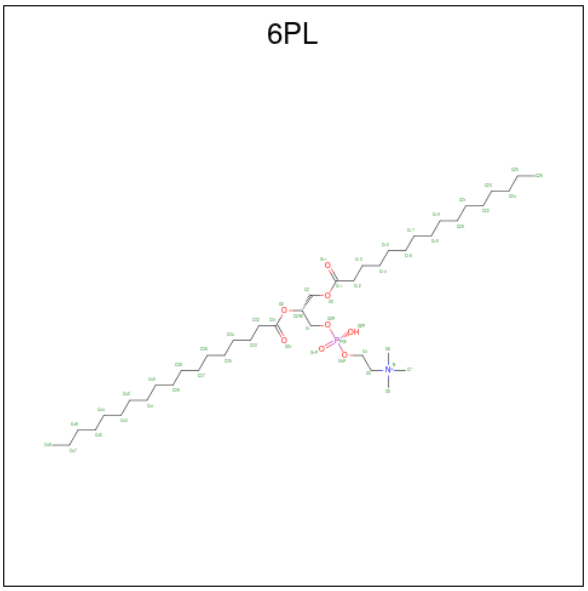
Mol	Chain	Residues	Atoms			AltConf
7	D	1	Total	C	O	0
			44	42	2	
7	G	1	Total	C	O	0
			44	42	2	
7	I	1	Total	C	O	0
			44	42	2	
7	K	1	Total	C	O	0
			44	42	2	
7	O	1	Total	C	O	0
			44	42	2	

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	AltConf
7	S	1	Total C O 44 42 2	0
7	U	1	Total C O 44 42 2	0
7	X	1	Total C O 44 42 2	0
7	Q	1	Total C O 44 42 2	0
7	Z	1	Total C O 44 42 2	0
7	B	1	Total C O 44 42 2	0
7	2	1	Total C O 44 42 2	0
7	4	1	Total C O 44 42 2	0
7	7	1	Total C O 44 42 2	0
7	8	1	Total C O 44 42 2	0
7	0	1	Total C O 44 42 2	0

- Molecule 8 is (4S,7R)-4-HYDROXY-N,N,N-TRIMETHYL-9-OXO-7-[(PALMITOYLOXY) METHYL]-3,5,8-TRIOXA-4-PHOSPHAHEXACOSAN-1-AMINIUM 4-OXIDE (three-letter code: 6PL) (formula: $C_{42}H_{85}NO_8P$) (labeled as "Ligand of Interest" by depositor).



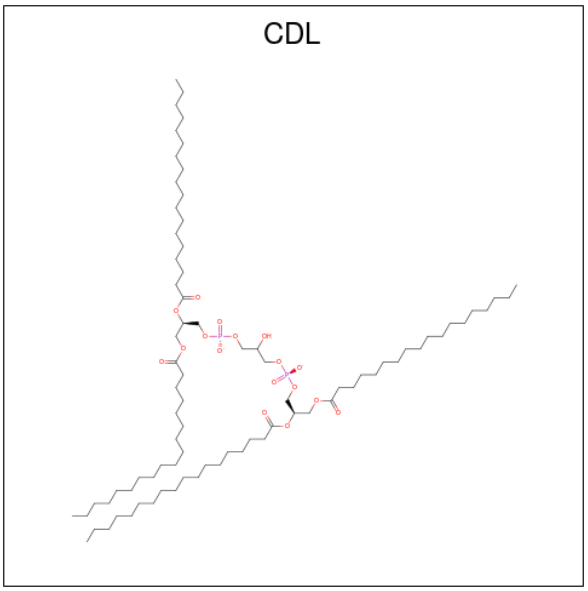
Mol	Chain	Residues	Atoms					AltConf
8	D	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	E	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	F	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	I	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	I	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	K	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	O	1	Total	C	N	O	P	0
			47	37	1	8	1	
8	H	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	L	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	L	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	M	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	S	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	U	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	X	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	P	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	Q	1	Total	C	N	O	P	0
			48	38	1	8	1	
8	Z	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	B	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	2	1	Total	C	N	O	P	0
			47	37	1	8	1	
8	4	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	5	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	6	1	Total	C	N	O	P	0
			52	42	1	8	1	

Continued on next page...

Continued from previous page...

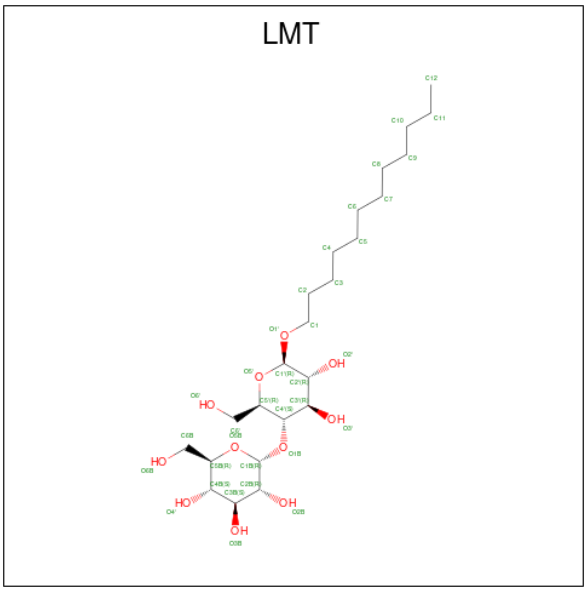
Mol	Chain	Residues	Atoms					AltConf
8	8	1	Total	C	N	O	P	0
			52	42	1	8	1	
8	0	1	Total	C	N	O	P	0
			52	42	1	8	1	

- Molecule 9 is CARDIOLIPIN (three-letter code: CDL) (formula: $C_{81}H_{156}O_{17}P_2$) (labeled as "Ligand of Interest" by depositor).



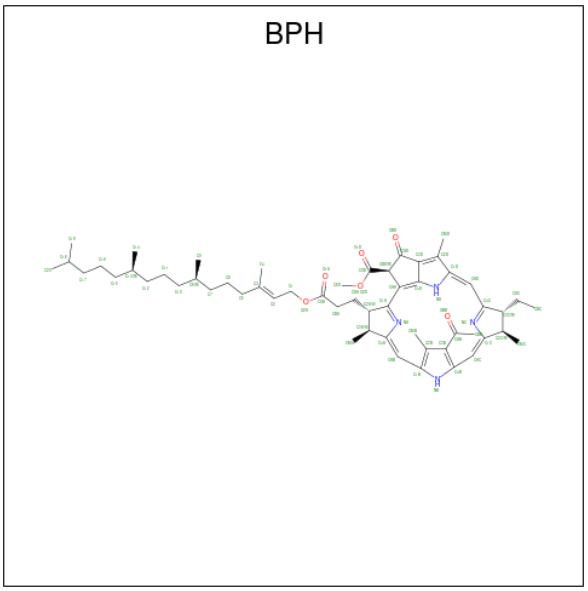
Mol	Chain	Residues	Atoms				AltConf
9	E	1	Total	C	O	P	0
			87	68	17	2	
9	G	1	Total	C	O	P	0
			100	81	17	2	
9	G	1	Total	C	O	P	0
			90	71	17	2	
9	L	1	Total	C	O	P	0
			100	81	17	2	
9	M	1	Total	C	O	P	0
			90	71	17	2	
9	M	1	Total	C	O	P	0
			84	65	17	2	

- Molecule 10 is DODECYL-BETA-D-MALTOSIDE (three-letter code: LMT) (formula: $C_{24}H_{46}O_{11}$) (labeled as "Ligand of Interest" by depositor).



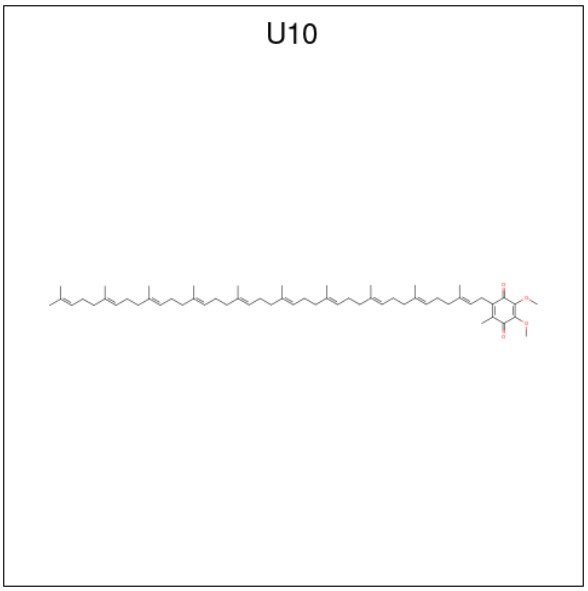
Mol	Chain	Residues	Atoms			AltConf
10	F	1	Total	C	O	0
			35	24	11	
10	J	1	Total	C	O	0
			35	24	11	
10	O	1	Total	C	O	0
			35	24	11	
10	H	1	Total	C	O	0
			35	24	11	
10	L	1	Total	C	O	0
			35	24	11	
10	R	1	Total	C	O	0
			35	24	11	
10	P	1	Total	C	O	0
			35	24	11	
10	Z	1	Total	C	O	0
			35	24	11	
10	B	1	Total	C	O	0
			35	24	11	
10	2	1	Total	C	O	0
			35	24	11	
10	4	1	Total	C	O	0
			35	24	11	
10	6	1	Total	C	O	0
			35	24	11	

- Molecule 11 is BACTERIOPHEOPHYTIN A (three-letter code: BPH) (formula: $C_{55}H_{76}N_4O_6$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf
11	L	1	Total	C	N	O	0
			65	55	4	6	
11	M	1	Total	C	N	O	0
			65	55	4	6	

- Molecule 12 is UBIQUINONE-10 (three-letter code: U10) (formula: $C_{59}H_{90}O_4$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms			AltConf
12	L	1	Total	C	O	0
			48	44	4	

Continued on next page...

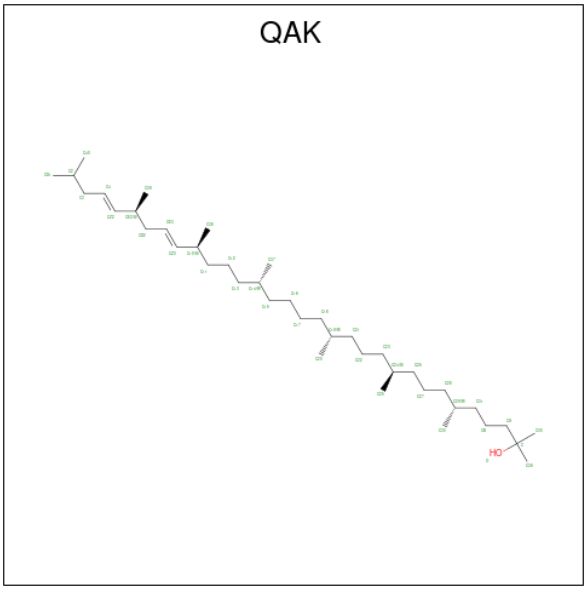
Continued from previous page...

Mol	Chain	Residues	Atoms	AltConf
12	L	1	Total C O 63 59 4	0
12	L	1	Total C O 63 59 4	0
12	M	1	Total C O 48 44 4	0
12	M	1	Total C O 63 59 4	0

- Molecule 13 is FE (III) ION (three-letter code: FE) (formula: Fe) (labeled as "Ligand of Interest" by depositor).

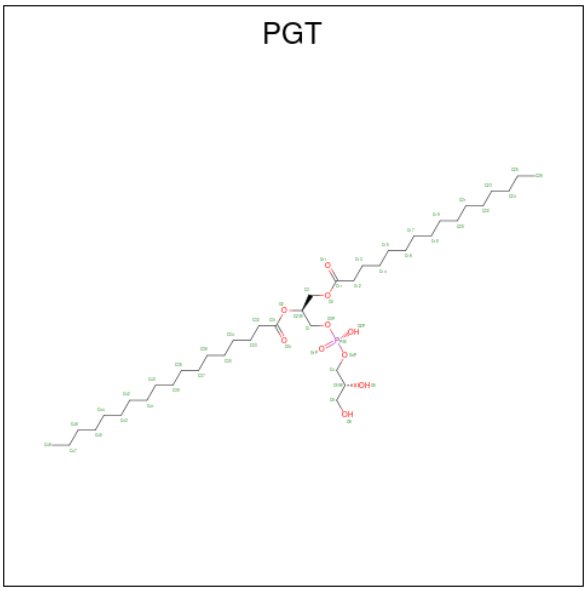
Mol	Chain	Residues	Atoms	AltConf
13	M	1	Total Fe 1 1	0

- Molecule 14 is (6 {R},10 {S},14 {R},19 {R},23 {S},24 {E},27 {S},28 {E})-2,6,10,14,19,23,27,31-octamethyldotriaconta-24,28-dien-2-ol (three-letter code: QAK) (formula: $C_{40}H_{78}O$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
14	M	1	Total C O 41 40 1	0

- Molecule 15 is (1S)-2-{[{[(2R)-2,3-DIHYDROXYPROPYL]OXY}(HYDROXY)PHOSPHORYL]OXY}-1-[(PALMITOYLOXY)METHYL]ETHYL STEARATE (three-letter code: PGT) (formula: $C_{40}H_{79}O_{10}P$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf
15	7	1	Total	C	O	P	0
			51	40	10	1	
15	9	1	Total	C	O	P	0
			51	40	10	1	

- Molecule 16 is water.

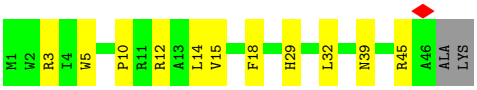
Mol	Chain	Residues	Atoms		AltConf
16	L	1	Total	O	0
			1	1	
16	M	2	Total	O	0
			2	2	

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.

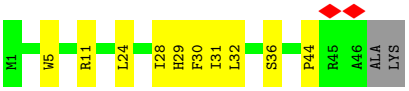
• Molecule 1: Light-harvesting complex 1 alpha chain

Chain C:



• Molecule 1: Light-harvesting complex 1 alpha chain

Chain E:

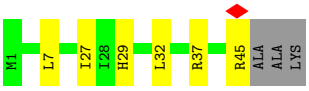


• Molecule 1: Light-harvesting complex 1 alpha chain

Chain G:

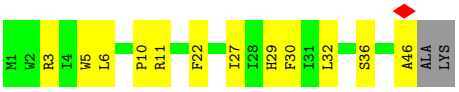
• Molecule 1: Light-harvesting complex 1 alpha chain

Chain J:



• Molecule 1: Light-harvesting complex 1 alpha chain

Chain N:

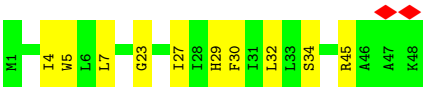


• Molecule 1: Light-harvesting complex 1 alpha chain

Chain R:

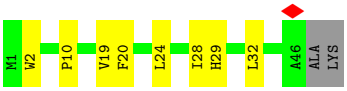
• Molecule 1: Light-harvesting complex 1 alpha chain

Chain T:



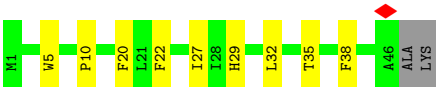
• Molecule 1: Light-harvesting complex 1 alpha chain

Chain V:



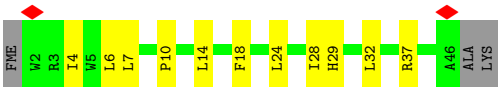
• Molecule 1: Light-harvesting complex 1 alpha chain

Chain P:



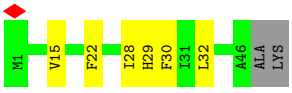
• Molecule 1: Light-harvesting complex 1 alpha chain

Chain Y:



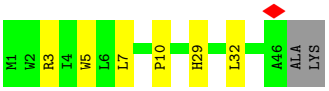
• Molecule 1: Light-harvesting complex 1 alpha chain

Chain A:



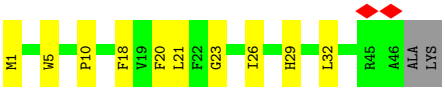
• Molecule 1: Light-harvesting complex 1 alpha chain

Chain 1:



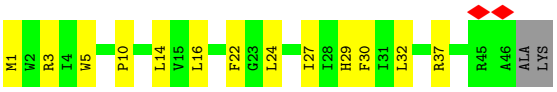
• Molecule 1: Light-harvesting complex 1 alpha chain

Chain 3:



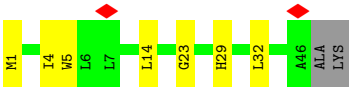
• Molecule 1: Light-harvesting complex 1 alpha chain

Chain 5:



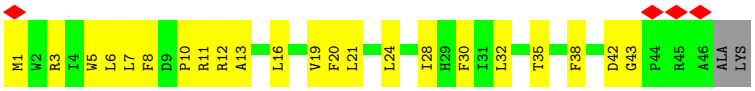
• Molecule 1: Light-harvesting complex 1 alpha chain

Chain 7:



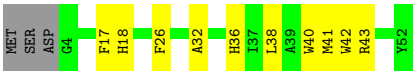
• Molecule 1: Light-harvesting complex 1 alpha chain

Chain 9:



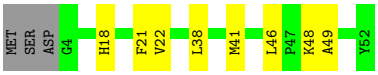
• Molecule 2: Light-harvesting complex 1 beta chain

Chain D:



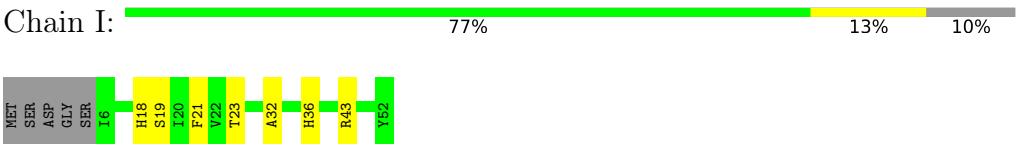
• Molecule 2: Light-harvesting complex 1 beta chain

Chain F:



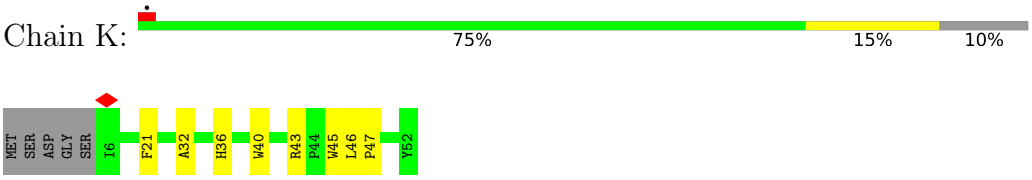
• Molecule 2: Light-harvesting complex 1 beta chain

Chain I:



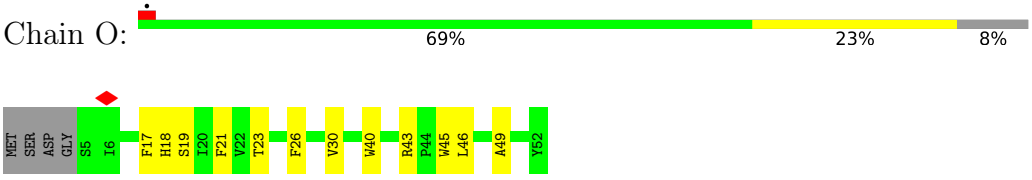
• Molecule 2: Light-harvesting complex 1 beta chain

Chain K:



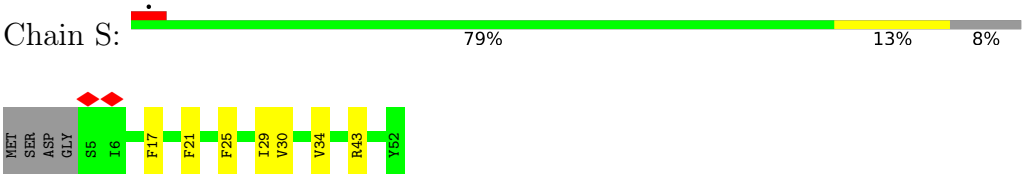
• Molecule 2: Light-harvesting complex 1 beta chain

Chain O:



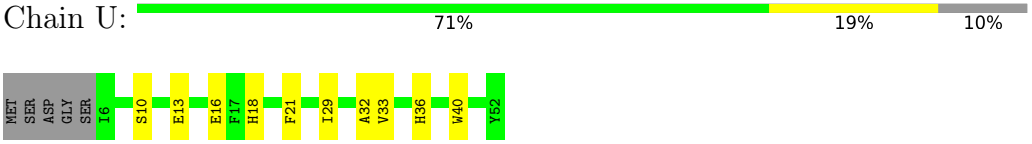
• Molecule 2: Light-harvesting complex 1 beta chain

Chain S:



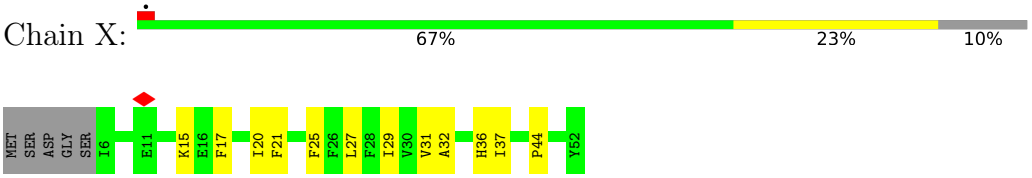
• Molecule 2: Light-harvesting complex 1 beta chain

Chain U:



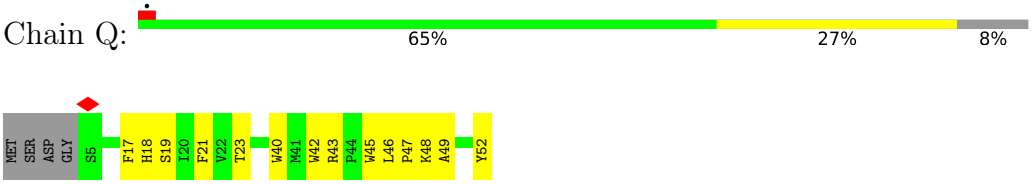
• Molecule 2: Light-harvesting complex 1 beta chain

Chain X:



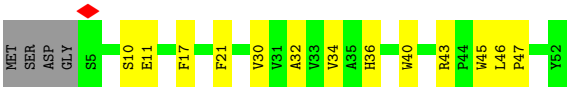
• Molecule 2: Light-harvesting complex 1 beta chain

Chain Q:



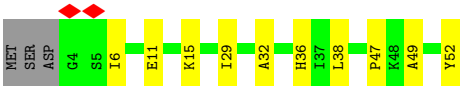
• Molecule 2: Light-harvesting complex 1 beta chain

Chain Z:



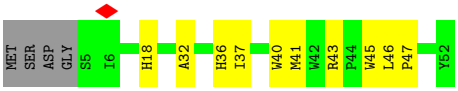
• Molecule 2: Light-harvesting complex 1 beta chain

Chain B:



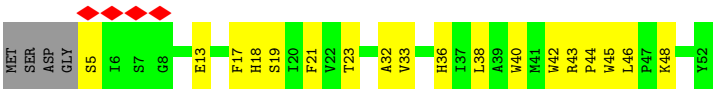
• Molecule 2: Light-harvesting complex 1 beta chain

Chain 2:



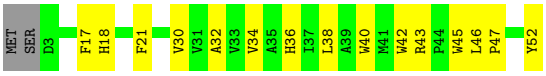
• Molecule 2: Light-harvesting complex 1 beta chain

Chain 4:



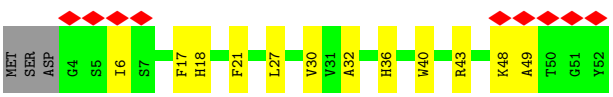
• Molecule 2: Light-harvesting complex 1 beta chain

Chain 6:



• Molecule 2: Light-harvesting complex 1 beta chain

Chain 8:

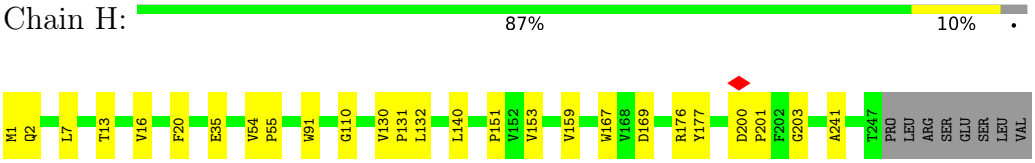


• Molecule 2: Light-harvesting complex 1 beta chain

Chain 0:

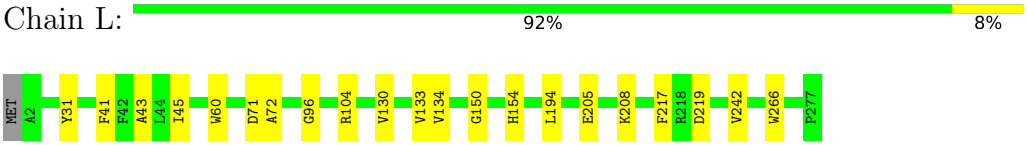
• Molecule 3: H subunit of photosynthetic reaction center complex

Chain H:



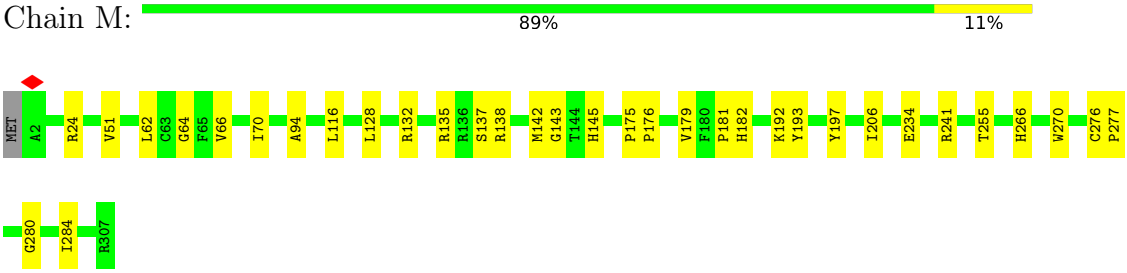
• Molecule 4: Reaction center protein L chain

Chain L:



• Molecule 5: Reaction center protein M chain

Chain M:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	260752	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	55.2	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.901	Depositor
Minimum map value	-0.248	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.017	Depositor
Recommended contour level	0.18	Depositor
Map size (Å)	426.00003, 426.00003, 426.00003	wwPDB
Map dimensions	400, 400, 400	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.065, 1.065, 1.065	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: 6PL, BCL, U10, BPH, CRT, PGT, FME, LMT, FE, CDL, QAK

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	1	0.26	0/401	0.37	0/546
1	3	0.26	0/401	0.37	0/546
1	5	0.26	0/401	0.40	0/546
1	7	0.26	0/401	0.35	0/546
1	9	0.26	0/401	0.38	0/546
1	A	0.28	0/401	0.39	0/546
1	C	0.27	0/401	0.37	0/546
1	E	0.28	0/401	0.40	0/546
1	G	0.28	0/401	0.37	0/546
1	J	0.27	0/396	0.39	0/539
1	N	0.27	0/401	0.36	0/546
1	P	0.26	0/401	0.36	0/546
1	R	0.27	0/401	0.40	0/546
1	T	0.28	0/415	0.38	0/564
1	V	0.27	0/401	0.38	0/546
1	Y	0.28	0/401	0.39	0/546
2	0	0.29	0/419	0.40	0/571
2	2	0.29	0/415	0.38	0/566
2	4	0.28	0/415	0.38	0/566
2	6	0.29	0/427	0.37	0/582
2	8	0.29	0/419	0.38	0/571
2	B	0.30	0/419	0.40	0/571
2	D	0.30	0/419	0.38	0/571
2	F	0.31	0/419	0.42	0/571
2	I	0.30	0/397	0.38	0/542
2	K	0.29	0/409	0.36	0/558
2	O	0.29	0/415	0.40	0/566
2	Q	0.29	0/415	0.38	0/566
2	S	0.30	0/415	0.38	0/566
2	U	0.30	0/409	0.41	0/558
2	X	0.28	0/397	0.41	0/542
2	Z	0.30	0/415	0.39	0/566

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
3	H	0.29	0/1913	0.47	0/2618
4	L	0.30	0/2271	0.42	0/3109
5	M	0.29	0/2524	0.41	0/3454
All	All	0.29	0/19757	0.40	0/26961

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	1	397	0	415	7	0
1	3	397	0	415	10	0
1	5	397	0	415	11	0
1	7	397	0	415	6	0
1	9	397	0	415	27	0
1	A	397	0	415	7	0
1	C	397	0	415	9	0
1	E	397	0	415	9	0
1	G	397	0	415	11	0
1	J	392	0	410	8	0
1	N	397	0	415	14	0
1	P	397	0	415	11	0
1	R	397	0	415	14	0
1	T	411	0	433	11	0
1	V	397	0	415	9	0
1	Y	387	0	404	13	0
2	0	403	0	396	11	0
2	2	399	0	393	7	0
2	4	399	0	393	21	0
2	6	411	0	400	14	0
2	8	403	0	396	16	0
2	B	403	0	396	7	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	D	403	0	396	11	0
2	F	403	0	396	9	0
2	I	382	0	380	9	0
2	K	393	0	388	7	0
2	O	399	0	393	11	0
2	Q	399	0	393	12	0
2	S	399	0	393	6	0
2	U	393	0	388	10	0
2	X	382	0	380	16	0
2	Z	399	0	393	12	0
3	H	1862	0	1873	20	0
4	L	2185	0	2130	16	0
5	M	2433	0	2379	29	0
6	0	66	0	74	4	0
6	1	132	0	148	12	0
6	3	66	0	74	2	0
6	4	66	0	74	6	0
6	5	132	0	148	11	0
6	7	132	0	148	7	0
6	9	66	0	74	2	0
6	A	66	0	74	9	0
6	B	66	0	74	6	0
6	C	132	0	148	8	0
6	E	66	0	74	1	0
6	F	66	0	74	5	0
6	G	132	0	148	9	0
6	J	132	0	148	8	0
6	L	132	0	148	5	0
6	M	132	0	148	7	0
6	N	132	0	148	6	0
6	P	66	0	74	4	0
6	Q	66	0	74	6	0
6	R	132	0	148	10	0
6	T	66	0	74	4	0
6	U	66	0	74	5	0
6	V	132	0	148	7	0
6	Y	132	0	148	14	0
7	0	44	0	60	6	0
7	2	44	0	60	5	0
7	4	44	0	60	10	0
7	7	44	0	60	3	0
7	8	44	0	60	5	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
7	B	44	0	60	5	0
7	D	44	0	60	5	0
7	G	44	0	60	4	0
7	I	44	0	60	3	0
7	K	44	0	60	3	0
7	O	44	0	60	4	0
7	Q	44	0	60	5	0
7	S	44	0	60	3	0
7	U	44	0	60	5	0
7	X	44	0	60	15	0
7	Z	44	0	60	8	0
8	0	52	0	84	3	0
8	2	47	0	71	7	0
8	4	52	0	84	5	0
8	5	52	0	84	2	0
8	6	52	0	84	4	0
8	8	52	0	84	4	0
8	B	52	0	84	4	0
8	D	52	0	84	5	0
8	E	52	0	84	6	0
8	F	52	0	84	3	0
8	H	52	0	84	0	0
8	I	104	0	168	10	0
8	K	52	0	84	3	0
8	L	104	0	168	10	0
8	M	52	0	84	5	0
8	O	47	0	71	4	0
8	P	52	0	84	4	0
8	Q	48	0	73	6	0
8	S	52	0	84	5	0
8	U	52	0	84	4	0
8	X	52	0	84	3	0
8	Z	52	0	84	4	0
9	E	87	0	127	7	0
9	G	190	0	289	21	0
9	L	100	0	156	8	0
9	M	174	0	251	10	0
10	2	35	0	45	3	0
10	4	35	0	45	3	0
10	6	35	0	46	4	0
10	B	35	0	45	2	0
10	F	35	0	45	4	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
10	H	35	0	45	5	0
10	J	35	0	45	7	0
10	L	35	0	45	0	0
10	O	35	0	45	1	0
10	P	35	0	44	2	0
10	R	35	0	45	3	0
10	Z	35	0	45	1	0
11	L	65	0	76	5	0
11	M	65	0	76	6	0
12	L	174	0	243	13	0
12	M	111	0	153	9	0
13	M	1	0	0	0	0
14	M	41	0	0	0	0
15	7	51	0	78	4	0
15	9	51	0	78	3	0
16	L	1	0	0	0	0
16	M	2	0	0	0	0
All	All	25048	0	26968	553	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 11.

All (553) 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)
1:1:32:LEU:HD11	6:1:102:BCL:HHD	1.61	0.82
7:4:103:CRT:H35	6:5:101:BCL:HMB2	1.64	0.78
1:5:3:ARG:HB3	7:8:101:CRT:H23	1.65	0.77
2:8:17:PHE:HA	7:8:101:CRT:H6	1.67	0.75
9:L:310:CDL:H781	1:9:16:LEU:HD22	1.68	0.75
4:L:96:GLY:HA2	9:L:310:CDL:H632	1.67	0.74
7:D:101:CRT:H35	6:E:101:BCL:HMB2	1.70	0.73
1:Y:37:ARG:O	2:Z:43:ARG:NH1	2.22	0.73
6:N:101:BCL:H201	9:M:408:CDL:H611	1.70	0.73
6:1:101:BCL:HMA3	10:2:101:LMT:H121	1.69	0.72
1:Y:32:LEU:HD11	6:Y:102:BCL:HHD	1.71	0.72
4:L:31:TYR:O	4:L:104:ARG:NH2	2.23	0.72
2:X:17:PHE:HD1	7:X:101:CRT:H6	1.54	0.72
6:4:102:BCL:HAA1	8:4:104:6PL:H262	1.72	0.72
7:S:101:CRT:H35	6:T:100:BCL:HMB2	1.72	0.72
7:U:101:CRT:H35	6:V:101:BCL:HMB2	1.70	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:9:3:ARG:HG3	1:9:6:LEU:HD12	1.73	0.71
7:O:102:CRT:H35	6:P:102:BCL:HMB2	1.73	0.71
9:G:105:CDL:H602	6:J:101:BCL:H202	1.73	0.71
6:1:102:BCL:H152	8:2:103:6PL:H132	1.73	0.70
8:O:103:6PL:H73	2:Q:42:TRP:HB2	1.74	0.70
1:T:32:LEU:HD11	6:U:100:BCL:HHD	1.72	0.70
7:G:102:CRT:H35	6:G:103:BCL:HMB2	1.72	0.70
2:4:32:ALA:O	2:4:36:HIS:ND1	2.23	0.68
1:5:37:ARG:O	2:6:43:ARG:NH1	2.25	0.68
3:H:54:VAL:HG13	3:H:55:PRO:HD3	1.75	0.67
7:2:102:CRT:H2M3	1:3:29:HIS:HB3	1.75	0.67
6:R:101:BCL:HMB2	7:Q:101:CRT:H35	1.76	0.67
7:2:102:CRT:H35	6:3:100:BCL:HMB2	1.75	0.67
3:H:16:VAL:HG13	9:M:408:CDL:H652	1.77	0.67
6:B:102:BCL:H152	8:B:104:6PL:H412	1.76	0.67
6:0:100:BCL:HAA1	8:0:102:6PL:H471	1.78	0.66
12:L:307:U10:H23	12:L:307:U10:H38	1.77	0.66
1:C:39:ASN:HD22	1:C:45:ARG:HH22	1.42	0.65
7:7:101:CRT:H35	6:7:102:BCL:HMB2	1.77	0.65
1:J:32:LEU:HD11	6:J:103:BCL:HHD	1.77	0.65
7:U:101:CRT:H2M3	1:V:29:HIS:HB3	1.77	0.65
9:G:105:CDL:H451	1:N:22:PHE:HZ	1.62	0.65
1:5:22:PHE:HB2	6:5:101:BCL:H72	1.78	0.65
1:T:4:ILE:HB	7:X:101:CRT:H82	1.79	0.65
2:8:49:ALA:O	2:0:43:ARG:NH2	2.29	0.65
1:5:32:LEU:HD11	6:5:103:BCL:HHD	1.79	0.65
7:I:102:CRT:H35	6:J:101:BCL:HMB2	1.79	0.65
2:K:32:ALA:O	2:K:36:HIS:ND1	2.21	0.65
2:0:32:ALA:O	2:0:36:HIS:ND1	2.23	0.64
6:4:102:BCL:H172	8:4:104:6PL:H171	1.78	0.64
11:L:302:BPH:HHC	11:L:302:BPH:HBB3	1.80	0.64
9:L:310:CDL:H782	1:A:15:VAL:HG13	1.80	0.64
2:8:32:ALA:O	2:8:36:HIS:ND1	2.30	0.64
10:J:102:LMT:H11	10:H:302:LMT:H21	1.80	0.63
2:D:43:ARG:HH12	2:B:49:ALA:HA	1.63	0.63
6:F:102:BCL:H171	8:I:101:6PL:H262	1.81	0.63
6:7:104:BCL:H152	8:8:102:6PL:H201	1.79	0.63
9:L:310:CDL:H711	1:9:12:ARG:HD3	1.80	0.63
8:L:304:6PL:H51	8:L:305:6PL:H61	1.78	0.63
6:0:100:BCL:H11	7:0:101:CRT:H25	1.80	0.62
2:2:40:TRP:CE2	8:2:103:6PL:H11	2.35	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:I:102:CRT:H2M3	1:J:29:HIS:HB3	1.80	0.62
2:8:48:LYS:HG3	2:8:49:ALA:H	1.62	0.62
2:K:47:PRO:O	2:O:43:ARG:NH2	2.33	0.62
3:H:13:THR:HG23	8:M:401:6PL:H442	1.82	0.62
2:4:17:PHE:HA	7:4:103:CRT:H6	1.82	0.62
6:R:103:BCL:H152	8:S:102:6PL:H422	1.80	0.61
9:L:310:CDL:H761	1:9:16:LEU:HD13	1.81	0.61
2:6:47:PRO:O	2:8:43:ARG:NH2	2.32	0.61
2:8:21:PHE:CD1	7:8:101:CRT:H14	2.35	0.61
6:Y:102:BCL:H152	8:Z:103:6PL:H201	1.82	0.61
2:6:32:ALA:O	2:6:36:HIS:ND1	2.19	0.61
9:G:105:CDL:H362	9:G:105:CDL:H131	1.84	0.60
12:L:303:U10:H162	6:L:308:BCL:H71	1.82	0.60
6:4:102:BCL:H8	8:4:104:6PL:H241	1.83	0.60
6:5:103:BCL:HAA1	8:6:102:6PL:H252	1.83	0.60
6:A:100:BCL:H203	6:A:100:BCL:H122	1.84	0.60
1:A:32:LEU:HD11	6:B:102:BCL:HHD	1.83	0.59
1:J:7:LEU:O	1:N:11:ARG:NH2	2.34	0.59
1:N:30:PHE:HB3	8:M:401:6PL:H162	1.84	0.59
5:M:66:VAL:HG22	12:M:410:U10:H71	1.85	0.59
11:M:405:BPH:HBB3	11:M:405:BPH:HHC	1.84	0.59
2:4:21:PHE:HD1	7:4:103:CRT:H14	1.67	0.59
1:R:45:ARG:HH21	10:R:102:LMT:H6'1	1.68	0.59
1:R:18:PHE:HB3	6:R:101:BCL:H92	1.85	0.59
1:R:22:PHE:HB2	6:R:101:BCL:H52	1.85	0.59
3:H:35:GLU:OE1	5:M:241:ARG:NH1	2.36	0.58
2:Q:40:TRP:HE1	8:Q:102:6PL:H52	1.68	0.58
1:R:3:ARG:NE	2:U:16:GLU:OE2	2.34	0.58
7:8:101:CRT:H35	6:9:102:BCL:HMB2	1.85	0.58
1:9:32:LEU:HD11	6:0:100:BCL:HHD	1.86	0.58
5:M:64:GLY:HA3	11:M:405:BPH:H5C1	1.85	0.58
5:M:137:SER:OG	5:M:143:GLY:O	2.21	0.58
1:E:11:ARG:HH22	8:E:102:6PL:H41	1.68	0.58
5:M:70:ILE:HG12	12:M:410:U10:H4M2	1.86	0.58
9:G:101:CDL:H421	8:L:305:6PL:H441	1.87	0.57
1:R:32:LEU:HD11	6:R:103:BCL:HHD	1.86	0.57
2:8:17:PHE:HB2	7:8:101:CRT:H32A	1.85	0.57
5:M:138:ARG:HG3	9:M:409:CDL:HB21	1.87	0.57
5:M:94:ALA:HB2	5:M:181:PRO:HG2	1.84	0.57
1:T:34:SER:O	1:T:45:ARG:NH2	2.36	0.57
2:X:17:PHE:HB2	7:X:101:CRT:H32A	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:32:ALA:O	2:X:36:HIS:ND1	2.30	0.57
1:9:42:ASP:OD1	1:9:43:GLY:N	2.38	0.57
4:L:43:ALA:HA	11:L:302:BPH:H9C3	1.86	0.57
11:M:405:BPH:HBC3	11:M:405:BPH:HHD	1.86	0.57
1:C:29:HIS:CE1	6:C:102:BCL:HMD1	2.40	0.57
8:E:102:6PL:H261	9:E:103:CDL:H801	1.87	0.57
9:E:103:CDL:H571	9:G:101:CDL:H621	1.87	0.57
4:L:104:ARG:NH1	5:M:255:THR:O	2.37	0.57
1:Y:7:LEU:HD21	1:1:10:PRO:HB2	1.87	0.57
1:Y:29:HIS:CE1	6:Y:102:BCL:HMD1	2.40	0.57
4:L:150:GLY:O	4:L:154:HIS:ND1	2.38	0.56
6:A:100:BCL:H102	6:A:100:BCL:H161	1.87	0.56
8:E:102:6PL:H42	8:E:102:6PL:H2	1.87	0.56
1:N:3:ARG:HA	1:N:6:LEU:HD13	1.88	0.56
9:M:409:CDL:H221	10:R:102:LMT:H112	1.87	0.56
2:S:43:ARG:NH2	2:Q:48:LYS:O	2.38	0.56
12:L:307:U10:H28	12:L:307:U10:H372	1.88	0.56
8:Q:102:6PL:H141	8:Q:102:6PL:H352	1.86	0.56
2:6:17:PHE:HB2	7:7:101:CRT:H32A	1.87	0.56
1:E:5:TRP:HE1	2:F:18:HIS:HD2	1.52	0.56
1:P:32:LEU:O	1:P:35:THR:HG22	2.05	0.56
1:C:18:PHE:HB3	6:C:101:BCL:H61	1.87	0.56
6:A:100:BCL:H172	1:9:20:PHE:HB3	1.86	0.56
2:U:32:ALA:O	2:U:36:HIS:ND1	2.27	0.56
8:B:104:6PL:H441	8:B:104:6PL:H252	1.88	0.56
1:G:22:PHE:HB2	6:G:103:BCL:H52	1.87	0.56
2:O:49:ALA:HA	2:Q:43:ARG:HH12	1.70	0.56
1:V:19:VAL:HG22	6:V:101:BCL:H122	1.88	0.56
6:A:100:BCL:HBB2	7:0:101:CRT:H403	1.88	0.56
9:G:105:CDL:HB22	9:G:105:CDL:HB32	1.86	0.56
4:L:266:TRP:HZ3	12:L:309:U10:H3M3	1.71	0.56
12:L:307:U10:H38	12:L:307:U10:H261	1.88	0.56
6:C:101:BCL:HBB2	7:B:103:CRT:H403	1.87	0.56
4:L:71:ASP:OD1	4:L:72:ALA:N	2.39	0.55
6:A:100:BCL:HMB2	7:0:101:CRT:H35	1.87	0.55
1:G:44:PRO:HG3	2:I:43:ARG:HH22	1.71	0.55
2:D:42:TRP:HB2	10:B:101:LMT:H11	1.88	0.55
1:G:5:TRP:HE1	2:I:18:HIS:HD2	1.55	0.55
5:M:70:ILE:HA	12:M:410:U10:H4M2	1.87	0.55
2:4:21:PHE:CE1	7:4:103:CRT:H16	2.42	0.55
7:Z:102:CRT:H403	6:1:101:BCL:HBB2	1.89	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:M:410:U10:H261	6:T:100:BCL:H192	1.88	0.55
8:I:103:6PL:H391	8:I:103:6PL:H191	1.87	0.55
7:K:101:CRT:H35	6:N:101:BCL:HMB2	1.89	0.55
2:X:17:PHE:CD1	7:X:101:CRT:H6	2.39	0.55
1:E:11:ARG:NH1	8:E:102:6PL:O1P	2.30	0.55
5:M:276:CYS:HB3	5:M:277:PRO:HD3	1.89	0.55
9:L:310:CDL:H771	1:9:8:PHE:HZ	1.71	0.54
1:9:1:FME:O	1:9:3:ARG:NH1	2.40	0.54
9:E:103:CDL:H811	9:G:101:CDL:H622	1.89	0.54
1:3:29:HIS:CE1	6:4:102:BCL:HMD1	2.43	0.54
1:9:24:LEU:O	1:9:28:ILE:HG13	2.08	0.54
1:Y:7:LEU:HB2	7:2:102:CRT:H21A	1.89	0.54
2:K:40:TRP:HE1	8:K:102:6PL:H2	1.72	0.54
4:L:205:GLU:OE2	5:M:24:ARG:NH1	2.41	0.54
1:P:32:LEU:HD11	6:Q:100:BCL:HHD	1.89	0.54
9:M:408:CDL:H861	8:P:103:6PL:H192	1.90	0.54
1:V:32:LEU:HD11	6:V:102:BCL:HHD	1.90	0.54
7:X:101:CRT:H372	1:Y:29:HIS:CG	2.43	0.54
8:S:102:6PL:H142	8:S:102:6PL:H322	1.89	0.54
1:T:29:HIS:CE1	6:U:100:BCL:HMD1	2.43	0.54
8:M:401:6PL:H152	8:P:103:6PL:H131	1.90	0.53
12:M:410:U10:H211	1:T:23:GLY:HA3	1.89	0.53
8:F:103:6PL:H171	8:I:101:6PL:H231	1.90	0.53
6:Y:102:BCL:H11	7:Z:102:CRT:H25	1.91	0.53
1:A:29:HIS:CG	7:0:101:CRT:H372	2.43	0.53
2:6:38:LEU:HB3	10:6:101:LMT:H52	1.89	0.53
10:J:102:LMT:O2'	8:L:305:6PL:O31	2.16	0.53
2:U:21:PHE:CD1	7:U:101:CRT:H14	2.43	0.53
1:Y:18:PHE:HB3	6:Y:101:BCL:H61	1.90	0.53
1:7:14:LEU:HD11	2:8:17:PHE:HZ	1.73	0.53
8:6:102:6PL:H201	8:6:102:6PL:H372	1.91	0.53
7:Z:102:CRT:H372	1:1:29:HIS:CG	2.44	0.53
1:9:1:FME:SD	1:9:3:ARG:NH1	2.82	0.53
1:E:32:LEU:HD11	6:F:102:BCL:HHD	1.90	0.53
7:X:101:CRT:H35	6:Y:101:BCL:HMB2	1.90	0.53
7:X:101:CRT:H403	6:Y:101:BCL:HBB2	1.90	0.53
6:A:100:BCL:H61	6:A:100:BCL:H13	1.91	0.53
1:P:22:PHE:HB2	6:P:102:BCL:H52	1.90	0.53
8:8:102:6PL:H381	8:8:102:6PL:H212	1.91	0.52
6:C:102:BCL:HMB1	10:F:101:LMT:H102	1.91	0.52
6:C:102:BCL:H11	7:D:101:CRT:H25	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:29:HIS:CE1	6:N:102:BCL:HMD1	2.44	0.52
6:L:308:BCL:H42	12:L:309:U10:H512	1.91	0.52
6:Y:102:BCL:HAA1	8:Z:103:6PL:H262	1.91	0.52
2:Z:17:PHE:HB2	7:Z:102:CRT:H32A	1.92	0.52
1:A:29:HIS:CE1	6:B:102:BCL:HMD1	2.45	0.52
8:2:103:6PL:H361	8:2:103:6PL:H131	1.90	0.52
1:5:27:ILE:HD11	8:5:102:6PL:H201	1.90	0.52
8:F:103:6PL:H431	8:F:103:6PL:H222	1.92	0.52
5:M:135:ARG:HH11	9:M:409:CDL:HA62	1.74	0.52
2:F:38:LEU:HB3	10:F:101:LMT:H12	1.91	0.52
1:G:30:PHE:HB3	8:L:305:6PL:H331	1.91	0.52
3:H:54:VAL:CG1	3:H:55:PRO:HD3	2.39	0.52
6:U:100:BCL:H151	8:U:102:6PL:H422	1.92	0.52
1:N:32:LEU:HD11	6:N:102:BCL:HHD	1.90	0.52
1:P:10:PRO:HB3	2:Q:17:PHE:CZ	2.45	0.52
8:6:102:6PL:H202	8:6:102:6PL:H391	1.90	0.52
1:9:28:ILE:HG12	7:0:101:CRT:H401	1.92	0.52
1:E:36:SER:OG	1:E:44:PRO:O	2.20	0.51
2:U:29:ILE:O	2:U:33:VAL:HG23	2.09	0.51
1:9:7:LEU:HA	2:0:6:ILE:HB	1.91	0.51
2:D:32:ALA:O	2:D:36:HIS:ND1	2.25	0.51
2:D:40:TRP:HZ2	8:D:102:6PL:H11	1.75	0.51
1:J:29:HIS:CE1	6:J:103:BCL:HMD1	2.45	0.51
2:8:6:ILE:H	2:8:6:ILE:HD12	1.75	0.51
2:D:40:TRP:CD1	8:D:102:6PL:H401	2.46	0.51
7:O:102:CRT:H403	6:P:102:BCL:HBB2	1.92	0.51
15:7:103:PGT:H471	15:9:101:PGT:H381	1.93	0.51
1:C:32:LEU:HD11	6:C:102:BCL:HHD	1.92	0.51
3:H:110:GLY:HA3	3:H:241:ALA:HB2	1.93	0.51
1:9:32:LEU:O	1:9:35:THR:HG22	2.10	0.51
1:Y:7:LEU:HD22	7:2:102:CRT:H31A	1.93	0.51
3:H:20:PHE:HA	9:M:408:CDL:H621	1.93	0.51
2:D:17:PHE:CD1	7:D:101:CRT:H6	2.46	0.51
1:G:29:HIS:CE1	6:G:104:BCL:HMD1	2.45	0.51
2:X:21:PHE:HD1	7:X:101:CRT:H14	1.76	0.51
1:N:5:TRP:HE1	2:O:18:HIS:HD2	1.59	0.51
2:X:21:PHE:CE1	7:X:101:CRT:H16	2.46	0.51
2:D:41:MET:HG2	8:D:102:6PL:H352	1.93	0.50
3:H:1:MET:HG2	3:H:7:LEU:HD23	1.94	0.50
5:M:280:GLY:HA2	6:M:404:BCL:HED2	1.92	0.50
1:R:29:HIS:CE1	6:R:103:BCL:HMD1	2.47	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:3:ARG:HB2	7:4:103:CRT:H5	1.93	0.50
2:4:19:SER:O	2:4:23:THR:HG23	2.10	0.50
1:5:29:HIS:CE1	6:5:103:BCL:HMD1	2.46	0.50
2:B:32:ALA:O	2:B:36:HIS:ND1	2.29	0.50
1:G:19:VAL:HG12	9:G:101:CDL:H802	1.93	0.50
2:Z:40:TRP:CZ2	8:Z:103:6PL:H141	2.47	0.50
8:D:102:6PL:H221	8:D:102:6PL:H442	1.94	0.49
10:J:102:LMT:H4'	10:H:302:LMT:H1'	1.94	0.49
2:Z:45:TRP:HD1	2:Z:46:LEU:HG	1.77	0.49
1:7:29:HIS:CE1	6:7:104:BCL:HMD1	2.47	0.49
1:9:7:LEU:HB2	2:0:6:ILE:HD12	1.93	0.49
2:U:10:SER:HB2	2:U:13:GLU:HG2	1.93	0.49
2:Z:47:PRO:O	2:2:43:ARG:NH2	2.45	0.49
1:C:29:HIS:CG	7:B:103:CRT:H372	2.47	0.49
6:G:104:BCL:H152	8:I:103:6PL:H422	1.93	0.49
2:S:21:PHE:CD2	7:S:101:CRT:H14	2.48	0.49
2:B:11:GLU:O	2:B:15:LYS:HG2	2.12	0.49
2:4:42:TRP:HB2	10:4:101:LMT:H31	1.94	0.49
2:6:21:PHE:CD1	7:7:101:CRT:H14	2.47	0.49
1:Y:24:LEU:O	1:Y:28:ILE:HG13	2.12	0.49
9:G:105:CDL:H621	9:G:105:CDL:H191	1.93	0.49
1:Y:10:PRO:O	1:Y:14:LEU:HB2	2.13	0.49
1:3:32:LEU:HD11	6:4:102:BCL:HHD	1.93	0.49
7:B:103:CRT:H22A	1:9:3:ARG:HB2	1.94	0.49
6:1:102:BCL:H8	8:2:103:6PL:H432	1.94	0.49
8:2:103:6PL:H152	8:2:103:6PL:H342	1.95	0.49
3:H:153:VAL:HG12	3:H:159:VAL:HG22	1.94	0.49
1:3:20:PHE:HD2	1:3:21:LEU:HD12	1.77	0.49
2:X:21:PHE:CD1	7:X:101:CRT:H14	2.47	0.49
9:E:103:CDL:H791	9:G:101:CDL:H632	1.95	0.49
4:L:133:VAL:HG23	4:L:134:VAL:HG23	1.94	0.49
1:V:2:TRP:CE2	2:X:15:LYS:HE3	2.47	0.49
2:6:42:TRP:HB2	10:6:101:LMT:H31	1.94	0.49
9:E:103:CDL:H542	12:M:406:U10:H23	1.94	0.48
6:R:101:BCL:H171	1:P:20:PHE:HD1	1.78	0.48
8:U:102:6PL:H431	8:U:102:6PL:H231	1.95	0.48
10:J:102:LMT:H2'	10:J:102:LMT:H12	1.68	0.48
1:1:29:HIS:CE1	6:1:102:BCL:HMD1	2.49	0.48
1:V:10:PRO:HB3	2:X:17:PHE:CZ	2.48	0.48
7:G:102:CRT:H291	6:G:103:BCL:H11	1.96	0.48
2:4:21:PHE:CD1	7:4:103:CRT:H14	2.48	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:K:102:6PL:H431	8:K:102:6PL:H242	1.96	0.48
2:4:38:LEU:HB3	10:4:101:LMT:H41	1.95	0.48
12:L:309:U10:H33	12:L:309:U10:H371	1.72	0.48
2:2:37:ILE:O	2:2:41:MET:HG3	2.13	0.48
2:4:21:PHE:CD1	7:4:103:CRT:H16	2.49	0.48
1:G:3:ARG:HB3	7:K:101:CRT:H23	1.96	0.48
3:H:131:PRO:HG3	3:H:167:TRP:CE2	2.49	0.48
10:R:102:LMT:H62	10:P:101:LMT:H62	1.96	0.48
9:G:105:CDL:H441	1:J:27:ILE:HD12	1.97	0.47
2:O:21:PHE:CD1	7:O:102:CRT:H14	2.49	0.47
3:H:167:TRP:HB2	3:H:177:TYR:HB2	1.96	0.47
10:H:302:LMT:O6'	10:H:302:LMT:O2B	2.29	0.47
4:L:130:VAL:HG11	9:L:310:CDL:H461	1.96	0.47
6:J:103:BCL:H8	8:K:102:6PL:H462	1.96	0.47
12:L:307:U10:H1M1	12:L:307:U10:H72	1.68	0.47
2:0:46:LEU:HD13	8:0:102:6PL:H182	1.95	0.47
4:L:208:LYS:HG3	5:M:142:MET:HG2	1.96	0.47
6:U:100:BCL:H141	6:U:100:BCL:H161	1.69	0.47
6:A:100:BCL:H41	6:A:100:BCL:H62	1.56	0.47
2:O:19:SER:O	2:O:23:THR:HG23	2.13	0.47
12:L:307:U10:H251	12:L:307:U10:H272	1.70	0.47
2:X:27:LEU:O	2:X:31:VAL:HG23	2.15	0.47
1:9:10:PRO:HB3	2:0:17:PHE:CZ	2.50	0.47
2:D:17:PHE:HD1	7:D:101:CRT:H6	1.80	0.47
2:F:46:LEU:HD13	8:I:101:6PL:H361	1.97	0.47
6:N:101:BCL:HMA3	10:O:101:LMT:H121	1.96	0.47
5:M:116:LEU:HD23	1:T:30:PHE:HZ	1.79	0.47
9:M:408:CDL:H151	9:M:408:CDL:H351	1.95	0.47
8:S:102:6PL:H31	8:S:102:6PL:P	2.55	0.47
8:B:104:6PL:H32	8:B:104:6PL:H121	1.41	0.47
2:B:38:LEU:HB3	8:0:102:6PL:H192	1.96	0.47
8:O:103:6PL:H321	8:O:103:6PL:H171	1.97	0.47
5:M:128:LEU:HD11	6:T:100:BCL:H191	1.96	0.47
1:P:29:HIS:CE1	6:Q:100:BCL:HMD1	2.50	0.47
1:N:5:TRP:HE1	2:O:18:HIS:CD2	2.33	0.47
6:5:101:BCL:H61	6:5:101:BCL:H102	1.49	0.47
2:6:30:VAL:O	2:6:34:VAL:HG23	2.14	0.47
9:E:103:CDL:H1	9:G:101:CDL:HB32	1.97	0.46
2:Q:47:PRO:HB3	2:Q:52:TYR:CE1	2.50	0.46
2:U:13:GLU:HB2	7:U:101:CRT:H1M1	1.98	0.46
1:P:5:TRP:HE1	2:Q:18:HIS:HD2	1.63	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:M:405:BPH:HMA1	11:M:405:BPH:H143	1.98	0.46
2:X:20:ILE:HD13	7:X:101:CRT:H83	1.98	0.46
15:7:103:PGT:H151	15:7:103:PGT:H441	1.96	0.46
1:9:35:THR:HG23	1:9:38:PHE:H	1.80	0.46
2:S:43:ARG:NH1	2:Q:49:ALA:HA	2.30	0.46
2:F:49:ALA:HA	2:I:43:ARG:HH12	1.80	0.46
1:V:24:LEU:O	1:V:28:ILE:HG13	2.14	0.46
6:Q:100:BCL:H111	8:Q:102:6PL:H202	1.98	0.46
6:C:101:BCL:HMB2	7:B:103:CRT:H35	1.97	0.46
1:Y:4:ILE:HG22	1:Y:6:LEU:HB2	1.98	0.46
2:F:49:ALA:HA	2:I:43:ARG:NH1	2.31	0.46
6:F:102:BCL:H142	6:F:102:BCL:H112	1.73	0.46
12:L:307:U10:H422	12:L:307:U10:H401	1.56	0.46
2:Q:45:TRP:CD1	2:Q:46:LEU:HG	2.51	0.46
2:Z:21:PHE:CE1	7:Z:102:CRT:H16	2.51	0.46
1:G:23:GLY:O	1:G:26:ILE:HG22	2.16	0.46
9:G:105:CDL:H381	9:G:105:CDL:H162	1.97	0.46
2:K:21:PHE:CD2	7:K:101:CRT:H14	2.51	0.46
1:N:10:PRO:HB3	2:O:17:PHE:CZ	2.51	0.46
2:S:30:VAL:O	2:S:34:VAL:HG23	2.16	0.46
1:P:27:ILE:HD11	8:P:103:6PL:H241	1.98	0.46
1:G:32:LEU:HD11	6:G:104:BCL:HHD	1.98	0.45
6:G:104:BCL:H52	6:G:104:BCL:H12	1.79	0.45
1:V:20:PHE:HB2	6:Y:101:BCL:H143	1.98	0.45
2:Q:19:SER:O	2:Q:23:THR:HG23	2.16	0.45
2:I:32:ALA:O	2:I:36:HIS:ND1	2.25	0.45
1:C:5:TRP:HE1	2:D:18:HIS:HD2	1.64	0.45
6:J:103:BCL:H52	6:J:103:BCL:H12	1.73	0.45
6:Q:100:BCL:H12	6:Q:100:BCL:H52	1.68	0.45
6:7:104:BCL:H52	6:7:104:BCL:H12	1.75	0.45
10:F:101:LMT:H42	10:F:101:LMT:H71	1.75	0.45
8:M:401:6PL:H371	8:P:103:6PL:H122	1.99	0.45
6:U:100:BCL:H52	6:U:100:BCL:H12	1.73	0.45
1:9:1:FME:HB2	2:0:15:LYS:HE3	1.99	0.45
1:E:29:HIS:CE1	6:F:102:BCL:HMD1	2.51	0.45
2:Z:45:TRP:CD1	2:Z:46:LEU:HG	2.52	0.45
6:5:101:BCL:HBB2	6:5:101:BCL:HMB1	1.99	0.45
1:C:12:ARG:HA	1:C:15:VAL:HG22	1.98	0.45
8:O:103:6PL:H321	8:O:103:6PL:H151	1.99	0.45
15:9:101:PGT:H261	6:9:102:BCL:H141	1.98	0.45
2:F:21:PHE:HE2	9:G:101:CDL:H211	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:G:101:CDL:H441	8:L:305:6PL:H451	1.99	0.45
8:I:103:6PL:H242	8:I:103:6PL:H202	1.98	0.45
1:T:5:TRP:HE1	2:U:18:HIS:HD2	1.64	0.45
2:X:21:PHE:CD1	7:X:101:CRT:H16	2.52	0.45
1:3:18:PHE:HB3	6:3:100:BCL:H72	1.98	0.45
2:4:13:GLU:HB3	7:4:103:CRT:H1M1	1.99	0.45
10:6:101:LMT:H1'	10:6:101:LMT:H22	1.74	0.45
8:E:102:6PL:H131	12:M:406:U10:H403	1.99	0.45
9:G:101:CDL:H592	9:G:101:CDL:H631	1.98	0.45
6:R:103:BCL:H52	6:R:103:BCL:H12	1.71	0.45
8:Q:102:6PL:H412	8:Q:102:6PL:H192	1.99	0.45
8:Z:103:6PL:H471	8:Z:103:6PL:H212	1.98	0.45
6:L:308:BCL:H51	6:L:308:BCL:H12	1.72	0.45
6:B:102:BCL:H122	8:B:104:6PL:H432	1.99	0.44
1:5:5:TRP:HE1	2:6:18:HIS:HD2	1.64	0.44
1:5:10:PRO:O	1:5:14:LEU:HB2	2.17	0.44
1:5:16:LEU:HD13	6:7:102:BCL:H143	1.99	0.44
10:6:101:LMT:H6'	10:6:101:LMT:H6B	1.66	0.44
6:1:102:BCL:H41	6:1:102:BCL:H62	1.69	0.44
5:M:197:TYR:CZ	6:M:404:BCL:HMC2	2.52	0.44
6:M:402:BCL:H13	6:M:402:BCL:H171	1.67	0.44
2:X:44:PRO:HD3	8:X:102:6PL:H41	1.99	0.44
1:5:24:LEU:HD23	6:5:103:BCL:HED3	1.99	0.44
1:G:44:PRO:HG3	2:I:43:ARG:NH2	2.30	0.44
1:7:4:ILE:HD12	1:7:4:ILE:H	1.83	0.44
3:H:200:ASP:HB3	3:H:201:PRO:HD3	1.99	0.44
12:M:406:U10:H272	12:M:406:U10:H251	1.70	0.44
4:L:41:PHE:O	4:L:45:ILE:HG12	2.18	0.44
5:M:62:LEU:O	5:M:66:VAL:HG23	2.18	0.44
2:Z:30:VAL:O	2:Z:34:VAL:HG23	2.17	0.44
7:O:102:CRT:H2M3	1:P:29:HIS:HB3	2.00	0.44
2:8:36:HIS:CE1	8:8:102:6PL:H251	2.53	0.44
6:C:102:BCL:H91	6:C:102:BCL:H111	1.70	0.43
10:J:102:LMT:H2'	10:H:302:LMT:O2'	2.18	0.43
8:L:304:6PL:H482	8:L:304:6PL:H412	2.00	0.43
12:L:307:U10:H322	1:9:20:PHE:CD2	2.53	0.43
2:4:5:SER:O	2:4:5:SER:OG	2.35	0.43
9:G:105:CDL:H271	1:J:27:ILE:HG12	2.00	0.43
8:S:102:6PL:H262	8:S:102:6PL:H222	2.00	0.43
2:X:37:ILE:HA	8:X:102:6PL:H391	2.00	0.43
2:4:40:TRP:CG	8:4:104:6PL:H431	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:25:PHE:O	2:X:29:ILE:HG12	2.18	0.43
1:3:10:PRO:HB3	2:4:17:PHE:CZ	2.53	0.43
2:0:11:GLU:O	2:0:15:LYS:HG3	2.19	0.43
1:J:45:ARG:HA	1:J:45:ARG:NH2	2.34	0.43
9:L:310:CDL:H822	1:9:13:ALA:HB1	2.00	0.43
8:Q:102:6PL:H162	8:Q:102:6PL:H391	1.99	0.43
2:Z:10:SER:OG	2:Z:11:GLU:N	2.51	0.43
2:Z:21:PHE:CD1	7:Z:102:CRT:H14	2.53	0.43
2:K:45:TRP:CD1	2:K:46:LEU:HG	2.53	0.43
1:N:27:ILE:HG12	8:M:401:6PL:H202	2.00	0.43
6:L:308:BCL:H152	6:L:308:BCL:H112	1.81	0.43
5:M:51:VAL:HG21	11:M:405:BPH:H202	1.99	0.43
6:Q:100:BCL:H152	8:Q:102:6PL:H372	2.01	0.43
2:B:6:ILE:HD12	2:B:6:ILE:H	1.83	0.43
1:1:5:TRP:HE1	2:2:18:HIS:HD2	1.66	0.43
2:8:48:LYS:HG3	2:8:49:ALA:N	2.32	0.43
11:L:302:BPH:HHC	11:L:302:BPH:CBB	2.48	0.43
5:M:284:ILE:HG12	6:M:404:BCL:HED3	2.00	0.43
1:R:42:ASP:OD2	1:P:35:THR:OG1	2.36	0.43
2:Q:21:PHE:CD1	7:Q:101:CRT:H14	2.54	0.43
2:6:47:PRO:HB3	2:6:52:TYR:CZ	2.54	0.43
2:8:27:LEU:HA	2:8:30:VAL:HG12	2.01	0.43
1:C:3:ARG:HD3	7:G:102:CRT:H41	2.00	0.43
7:S:101:CRT:H2M3	1:T:29:HIS:HB3	2.01	0.43
10:P:101:LMT:H112	10:P:101:LMT:H81	1.78	0.43
2:Z:32:ALA:O	2:Z:36:HIS:ND1	2.25	0.43
2:B:47:PRO:HB3	2:B:52:TYR:CZ	2.54	0.43
2:6:45:TRP:HD1	2:6:46:LEU:HG	1.83	0.43
2:F:48:LYS:O	2:I:43:ARG:NH2	2.52	0.43
9:G:101:CDL:H602	8:L:305:6PL:H251	2.01	0.43
8:I:103:6PL:H2	8:I:103:6PL:H321	1.70	0.43
6:Y:102:BCL:H142	6:Y:102:BCL:H112	1.78	0.43
6:5:103:BCL:H91	6:5:103:BCL:H111	1.76	0.43
1:J:37:ARG:O	2:K:43:ARG:NH1	2.52	0.43
3:H:140:LEU:HD23	3:H:140:LEU:HA	1.90	0.43
6:M:402:BCL:HMB1	6:M:402:BCL:HBB2	2.01	0.43
6:Y:102:BCL:HMB1	10:2:101:LMT:H91	2.01	0.43
2:F:22:VAL:HG22	9:G:101:CDL:H251	2.01	0.43
10:J:102:LMT:H6'2	10:H:302:LMT:H5'	2.00	0.43
6:T:100:BCL:H161	6:T:100:BCL:H141	1.74	0.43
2:U:36:HIS:CD2	8:U:102:6PL:H452	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:28:ILE:HG12	7:B:103:CRT:C40	2.48	0.43
2:4:17:PHE:CD1	7:4:103:CRT:H6	2.54	0.43
6:5:101:BCL:H162	6:5:101:BCL:H192	1.80	0.43
6:R:101:BCL:H192	6:R:101:BCL:H162	1.85	0.42
1:T:7:LEU:HG	7:X:101:CRT:H22A	2.01	0.42
2:X:17:PHE:CD1	7:X:101:CRT:H9	2.54	0.42
6:1:102:BCL:HAA1	8:2:103:6PL:H201	2.01	0.42
2:0:18:HIS:O	2:0:22:VAL:HG13	2.19	0.42
4:L:242:VAL:HG21	11:L:302:BPH:HBC3	2.01	0.42
1:R:24:LEU:O	1:R:28:ILE:HG13	2.19	0.42
6:V:102:BCL:H141	6:V:102:BCL:H161	1.76	0.42
2:6:45:TRP:CD1	2:6:46:LEU:HG	2.54	0.42
8:D:102:6PL:H221	8:D:102:6PL:H461	2.01	0.42
5:M:145:HIS:CD2	9:M:408:CDL:HA61	2.55	0.42
6:R:103:BCL:HAA1	8:S:102:6PL:H482	2.02	0.42
3:H:169:ASP:HB2	3:H:176:ARG:HG3	2.00	0.42
4:L:194:LEU:HD22	4:L:217:PHE:CE2	2.54	0.42
1:R:7:LEU:HD11	7:U:101:CRT:H31A	1.99	0.42
1:R:10:PRO:HB3	2:S:17:PHE:CE1	2.54	0.42
8:E:102:6PL:H73	3:H:91:TRP:CZ3	2.55	0.42
6:G:104:BCL:H18	8:I:103:6PL:H382	2.02	0.42
2:I:21:PHE:CD2	7:I:102:CRT:H14	2.54	0.42
5:M:179:VAL:O	5:M:182:HIS:ND1	2.51	0.42
6:Y:101:BCL:HMA3	10:Z:101:LMT:H122	2.00	0.42
6:1:102:BCL:HBB1	10:4:101:LMT:H62	2.02	0.42
1:3:5:TRP:HE1	2:4:18:HIS:CD2	2.37	0.42
2:D:26[A]:PHE:HD1	2:D:26[A]:PHE:HA	1.77	0.42
2:O:40:TRP:CD1	8:O:103:6PL:H172	2.54	0.42
7:4:103:CRT:H2M1	1:5:30:PHE:CE2	2.54	0.42
1:C:10:PRO:O	1:C:14:LEU:HB2	2.19	0.42
1:N:36:SER:HB2	1:N:46:ALA:HB3	2.01	0.42
1:A:22:PHE:CE1	6:A:100:BCL:H171	2.54	0.42
1:9:11:ARG:NH1	1:9:12:ARG:HH11	2.18	0.42
2:O:49:ALA:HA	2:Q:43:ARG:NH1	2.35	0.42
6:Y:102:BCL:H141	6:Y:102:BCL:H161	1.91	0.42
2:B:29:ILE:HD11	6:B:102:BCL:H2	2.01	0.42
1:G:24:LEU:HD23	6:G:104:BCL:HED3	2.02	0.42
2:O:45:TRP:CD1	2:O:46:LEU:HG	2.55	0.42
12:L:307:U10:H412	1:9:19:VAL:HG13	2.02	0.42
5:M:234:GLU:OE2	5:M:266:HIS:CE1	2.72	0.42
1:3:23:GLY:O	1:3:26:ILE:HG22	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:4:33:VAL:HG13	8:4:104:6PL:H481	2.02	0.42
8:5:102:6PL:H212	8:5:102:6PL:H172	2.02	0.42
2:8:40:TRP:CH2	8:8:102:6PL:H152	2.55	0.42
9:G:105:CDL:H451	1:N:22:PHE:CZ	2.48	0.42
2:K:45:TRP:HD1	2:K:46:LEU:HG	1.84	0.42
6:Y:102:BCL:H12	6:Y:102:BCL:H52	1.80	0.42
2:2:32:ALA:O	2:2:36:HIS:ND1	2.26	0.42
2:2:47:PRO:O	2:4:43:ARG:NH2	2.53	0.42
1:N:3:ARG:HD3	7:Q:101:CRT:H41	2.00	0.41
1:N:46:ALA:HB1	3:H:2:GLN:HB3	2.01	0.41
1:R:1:FME:HCN	1:R:3:ARG:HH21	1.84	0.41
1:1:7:LEU:HD21	1:3:10:PRO:HB2	2.01	0.41
6:1:101:BCL:H151	6:1:101:BCL:H18	1.97	0.41
9:E:103:CDL:H312	9:E:103:CDL:HA62	1.81	0.41
1:Y:10:PRO:HB3	2:Z:17:PHE:CZ	2.55	0.41
2:2:45:TRP:HD1	2:2:46:LEU:HG	1.86	0.41
1:7:23:GLY:HA2	15:7:103:PGT:H231	2.01	0.41
1:7:32:LEU:HD11	6:7:104:BCL:HHD	2.02	0.41
4:L:60:TRP:HZ3	8:L:304:6PL:H181	1.84	0.41
6:L:308:BCL:H43	11:M:405:BPH:HMA3	2.01	0.41
5:M:175:PRO:HA	5:M:176:PRO:HD3	1.94	0.41
1:P:35:THR:HG23	1:P:38:PHE:H	1.84	0.41
6:Q:100:BCL:H11	7:Q:101:CRT:H25	2.01	0.41
7:Z:102:CRT:H35	6:1:101:BCL:HMB2	2.02	0.41
2:4:45:TRP:CD1	2:4:46:LEU:HG	2.55	0.41
3:H:151:PRO:HD2	3:H:203:GLY:O	2.20	0.41
1:V:29:HIS:CE1	6:V:102:BCL:HMD1	2.54	0.41
1:7:5:TRP:HE1	2:8:18:HIS:HD2	1.69	0.41
6:7:104:BCL:HAA2	2:8:36:HIS:HE1	1.85	0.41
1:9:10:PRO:HB3	2:0:17:PHE:CE2	2.54	0.41
2:D:38:LEU:HB3	10:B:101:LMT:H42	2.02	0.41
1:E:24:LEU:O	1:E:28:ILE:HG13	2.21	0.41
6:F:102:BCL:H192	8:I:101:6PL:H241	2.02	0.41
3:H:130:VAL:HG12	3:H:131:PRO:O	2.20	0.41
12:L:309:U10:H502	12:L:309:U10:H261	2.03	0.41
12:M:410:U10:O2	1:T:27:ILE:HG21	2.21	0.41
1:9:30:PHE:HD1	15:9:101:PGT:H31	1.86	0.41
6:0:100:BCL:H52	6:0:100:BCL:H12	1.77	0.41
2:F:41:MET:HG2	8:F:103:6PL:H341	2.02	0.41
6:J:103:BCL:H161	6:J:103:BCL:H141	1.67	0.41
5:M:206:ILE:HD13	6:M:402:BCL:HMD1	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:M:270:TRP:CH2	9:M:408:CDL:H322	2.56	0.41
6:M:404:BCL:H192	6:M:404:BCL:H162	1.71	0.41
1:T:5:TRP:HE1	2:U:18:HIS:CD2	2.38	0.41
6:P:102:BCL:H161	6:P:102:BCL:H122	1.90	0.41
1:3:5:TRP:HE1	2:4:18:HIS:HD2	1.69	0.41
6:4:102:BCL:H12	6:4:102:BCL:H52	1.78	0.41
7:D:101:CRT:H2M1	1:E:30:PHE:CE2	2.56	0.41
1:R:23:GLY:O	1:R:26:ILE:HG22	2.20	0.41
1:R:32:LEU:HD23	1:R:32:LEU:HA	1.93	0.41
6:V:102:BCL:H172	8:X:102:6PL:H461	2.03	0.41
6:5:103:BCL:H52	6:5:103:BCL:H12	1.77	0.41
1:E:31:ILE:HG12	8:L:304:6PL:H341	2.03	0.41
10:F:101:LMT:H21	10:F:101:LMT:H1'	1.70	0.41
6:N:102:BCL:H52	6:N:102:BCL:H12	1.81	0.41
2:O:26[A]:PHE:O	2:O:30:VAL:HG13	2.21	0.41
3:H:132:LEU:HD23	3:H:132:LEU:HA	1.84	0.41
4:L:219:ASP:O	5:M:132:ARG:NH1	2.53	0.41
5:M:66:VAL:O	5:M:70:ILE:HG13	2.20	0.41
1:R:33:LEU:HD13	1:R:40:TRP:CH2	2.56	0.41
2:S:25:PHE:O	2:S:29:ILE:HG12	2.20	0.41
6:V:102:BCL:H91	6:V:102:BCL:H111	1.83	0.41
1:Y:28:ILE:HG12	7:Z:102:CRT:H401	2.03	0.41
1:A:30:PHE:CE1	7:0:101:CRT:H2M1	2.56	0.41
6:A:100:BCL:H191	1:9:21:LEU:HD12	2.02	0.41
9:G:101:CDL:H742	3:H:54:VAL:HG11	2.03	0.41
6:B:102:BCL:H203	6:B:102:BCL:H13	2.02	0.41
2:6:40:TRP:CG	8:6:102:6PL:H342	2.56	0.41
15:7:103:PGT:H392	15:7:103:PGT:H421	1.97	0.41
2:I:19:SER:O	2:I:23:THR:HG23	2.21	0.40
8:I:101:6PL:H2	8:I:101:6PL:O2P	2.21	0.40
11:L:302:BPH:H112	11:L:302:BPH:H7C2	1.88	0.40
2:8:48:LYS:CG	2:8:49:ALA:H	2.31	0.40
7:G:102:CRT:H20	7:G:102:CRT:H181	1.95	0.40
10:J:102:LMT:H71	8:L:305:6PL:H192	2.02	0.40
1:9:5:TRP:HE1	2:0:18:HIS:CD2	2.39	0.40
6:J:101:BCL:HMB1	6:J:101:BCL:HBB2	2.03	0.40
5:M:192:LYS:HE3	5:M:193:TYR:CZ	2.55	0.40
2:U:40:TRP:CG	8:U:102:6PL:H201	2.56	0.40
7:2:102:CRT:H26	7:2:102:CRT:H241	1.98	0.40
2:4:43:ARG:HA	2:4:44:PRO:HD3	1.94	0.40
2:4:48:LYS:O	2:6:43:ARG:NH2	2.54	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:V:28:ILE:HG12	7:X:101:CRT:H401	2.04	0.40
7:Q:101:CRT:H20	7:Q:101:CRT:H181	1.96	0.40
6:1:102:BCL:H102	8:2:103:6PL:H181	2.02	0.40
10:2:101:LMT:H82	10:2:101:LMT:H52	1.94	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	1	44/48 (92%)	44 (100%)	0	0	100	100
1	3	44/48 (92%)	43 (98%)	1 (2%)	0	100	100
1	5	44/48 (92%)	43 (98%)	1 (2%)	0	100	100
1	7	44/48 (92%)	42 (96%)	2 (4%)	0	100	100
1	9	44/48 (92%)	43 (98%)	1 (2%)	0	100	100
1	A	44/48 (92%)	44 (100%)	0	0	100	100
1	C	44/48 (92%)	44 (100%)	0	0	100	100
1	E	44/48 (92%)	42 (96%)	2 (4%)	0	100	100
1	G	44/48 (92%)	42 (96%)	2 (4%)	0	100	100
1	J	43/48 (90%)	42 (98%)	1 (2%)	0	100	100
1	N	44/48 (92%)	42 (96%)	2 (4%)	0	100	100
1	P	44/48 (92%)	43 (98%)	1 (2%)	0	100	100
1	R	44/48 (92%)	43 (98%)	1 (2%)	0	100	100
1	T	46/48 (96%)	45 (98%)	1 (2%)	0	100	100
1	V	44/48 (92%)	43 (98%)	1 (2%)	0	100	100
1	Y	43/48 (90%)	41 (95%)	2 (5%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	0	48/52 (92%)	45 (94%)	3 (6%)	0	100	100
2	2	47/52 (90%)	44 (94%)	3 (6%)	0	100	100
2	4	47/52 (90%)	45 (96%)	2 (4%)	0	100	100
2	6	49/52 (94%)	46 (94%)	3 (6%)	0	100	100
2	8	48/52 (92%)	44 (92%)	4 (8%)	0	100	100
2	B	48/52 (92%)	45 (94%)	3 (6%)	0	100	100
2	D	48/52 (92%)	45 (94%)	3 (6%)	0	100	100
2	F	48/52 (92%)	46 (96%)	2 (4%)	0	100	100
2	I	45/52 (86%)	42 (93%)	3 (7%)	0	100	100
2	K	46/52 (88%)	44 (96%)	2 (4%)	0	100	100
2	O	47/52 (90%)	44 (94%)	3 (6%)	0	100	100
2	Q	47/52 (90%)	45 (96%)	2 (4%)	0	100	100
2	S	47/52 (90%)	44 (94%)	3 (6%)	0	100	100
2	U	46/52 (88%)	43 (94%)	3 (6%)	0	100	100
2	X	45/52 (86%)	42 (93%)	3 (7%)	0	100	100
2	Z	47/52 (90%)	44 (94%)	3 (6%)	0	100	100
3	H	245/255 (96%)	235 (96%)	10 (4%)	0	100	100
4	L	274/277 (99%)	270 (98%)	4 (2%)	0	100	100
5	M	304/307 (99%)	298 (98%)	6 (2%)	0	100	100
All	All	2280/2439 (94%)	2197 (96%)	83 (4%)	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	1	40/41 (98%)	40 (100%)	0	100	100
1	3	40/41 (98%)	40 (100%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	5	40/41 (98%)	40 (100%)	0	100	100
1	7	40/41 (98%)	40 (100%)	0	100	100
1	9	40/41 (98%)	40 (100%)	0	100	100
1	A	40/41 (98%)	40 (100%)	0	100	100
1	C	40/41 (98%)	40 (100%)	0	100	100
1	E	40/41 (98%)	40 (100%)	0	100	100
1	G	40/41 (98%)	40 (100%)	0	100	100
1	J	40/41 (98%)	40 (100%)	0	100	100
1	N	40/41 (98%)	40 (100%)	0	100	100
1	P	40/41 (98%)	40 (100%)	0	100	100
1	R	40/41 (98%)	40 (100%)	0	100	100
1	T	41/41 (100%)	41 (100%)	0	100	100
1	V	40/41 (98%)	40 (100%)	0	100	100
1	Y	40/41 (98%)	40 (100%)	0	100	100
2	0	41/43 (95%)	41 (100%)	0	100	100
2	2	41/43 (95%)	41 (100%)	0	100	100
2	4	41/43 (95%)	41 (100%)	0	100	100
2	6	42/43 (98%)	42 (100%)	0	100	100
2	8	41/43 (95%)	41 (100%)	0	100	100
2	B	41/43 (95%)	41 (100%)	0	100	100
2	D	41/43 (95%)	41 (100%)	0	100	100
2	F	41/43 (95%)	41 (100%)	0	100	100
2	I	39/43 (91%)	39 (100%)	0	100	100
2	K	40/43 (93%)	40 (100%)	0	100	100
2	O	41/43 (95%)	41 (100%)	0	100	100
2	Q	41/43 (95%)	41 (100%)	0	100	100
2	S	41/43 (95%)	41 (100%)	0	100	100
2	U	40/43 (93%)	40 (100%)	0	100	100
2	X	39/43 (91%)	39 (100%)	0	100	100
2	Z	41/43 (95%)	41 (100%)	0	100	100
3	H	195/203 (96%)	195 (100%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
4	L	222/223 (100%)	222 (100%)	0	100	100
5	M	246/247 (100%)	246 (100%)	0	100	100
All	All	1955/2017 (97%)	1955 (100%)	0	100	100

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

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (18) such sidechains are listed below:

Mol	Chain	Res	Type
2	D	18	HIS
2	F	18	HIS
2	I	18	HIS
2	K	18	HIS
2	O	18	HIS
3	H	11	GLN
4	L	160	ASN
4	L	267	ASN
4	L	271	ASN
5	M	12	GLN
2	S	18	HIS
2	U	18	HIS
2	Q	18	HIS
2	B	18	HIS
2	2	18	HIS
2	4	18	HIS
2	6	18	HIS
2	0	18	HIS

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

15 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond

length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
1	FME	1	1	1	8,9,10	0.93	0	7,9,11	0.91	0
1	FME	E	1	1	8,9,10	0.93	0	7,9,11	0.80	0
1	FME	J	1	1	8,9,10	0.95	0	7,9,11	0.94	0
1	FME	A	1	1	8,9,10	0.94	0	7,9,11	0.85	0
1	FME	P	1	1	8,9,10	0.97	0	7,9,11	0.65	0
1	FME	C	1	1	8,9,10	0.94	0	7,9,11	0.88	0
1	FME	3	1	1	8,9,10	0.92	0	7,9,11	0.99	1 (14%)
1	FME	N	1	1	8,9,10	0.96	0	7,9,11	0.93	0
1	FME	V	1	1	8,9,10	0.95	0	7,9,11	0.92	0
1	FME	T	1	1	8,9,10	0.92	0	7,9,11	0.87	0
1	FME	9	1	1	8,9,10	0.92	0	7,9,11	0.93	0
1	FME	7	1	1	8,9,10	0.89	0	7,9,11	1.37	1 (14%)
1	FME	G	1	1	8,9,10	0.93	0	7,9,11	0.85	0
1	FME	R	1	1	8,9,10	0.94	0	7,9,11	0.88	0
1	FME	5	1	1	8,9,10	0.91	0	7,9,11	1.19	1 (14%)

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
1	FME	1	1	1	-	6/7/9/11	-
1	FME	E	1	1	-	3/7/9/11	-
1	FME	J	1	1	-	2/7/9/11	-
1	FME	A	1	1	-	3/7/9/11	-
1	FME	P	1	1	-	0/7/9/11	-
1	FME	C	1	1	-	3/7/9/11	-
1	FME	3	1	1	-	1/7/9/11	-
1	FME	N	1	1	-	2/7/9/11	-
1	FME	V	1	1	-	1/7/9/11	-
1	FME	T	1	1	-	1/7/9/11	-
1	FME	9	1	1	-	3/7/9/11	-
1	FME	7	1	1	-	3/7/9/11	-
1	FME	G	1	1	-	1/7/9/11	-
1	FME	R	1	1	-	6/7/9/11	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	FME	5	1	1	-	3/7/9/11	-

There are no bond length outliers.

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	7	1	FME	C-CA-N	2.76	114.71	109.73
1	5	1	FME	C-CA-N	2.30	113.88	109.73
1	3	1	FME	C-CA-N	2.04	113.42	109.73

There are no chirality outliers.

All (38) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	E	1	FME	CB-CA-N-CN
1	N	1	FME	N-CA-CB-CG
1	N	1	FME	C-CA-CB-CG
1	R	1	FME	CB-CA-N-CN
1	R	1	FME	C-CA-CB-CG
1	R	1	FME	O-C-CA-CB
1	A	1	FME	N-CA-CB-CG
1	1	1	FME	CB-CA-N-CN
1	1	1	FME	N-CA-CB-CG
1	1	1	FME	C-CA-CB-CG
1	1	1	FME	O-C-CA-CB
1	5	1	FME	O-C-CA-CB
1	9	1	FME	CA-CB-CG-SD
1	1	1	FME	CA-CB-CG-SD
1	7	1	FME	CA-CB-CG-SD
1	1	1	FME	CB-CG-SD-CE
1	9	1	FME	CB-CG-SD-CE
1	C	1	FME	N-CA-CB-CG
1	E	1	FME	N-CA-CB-CG
1	J	1	FME	N-CA-CB-CG
1	R	1	FME	N-CA-CB-CG
1	T	1	FME	N-CA-CB-CG
1	V	1	FME	N-CA-CB-CG
1	7	1	FME	N-CA-CB-CG
1	9	1	FME	N-CA-CB-CG
1	A	1	FME	CA-CB-CG-SD
1	C	1	FME	CB-CG-SD-CE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
1	E	1	FME	CB-CG-SD-CE
1	J	1	FME	CB-CG-SD-CE
1	R	1	FME	CB-CG-SD-CE
1	G	1	FME	N-CA-CB-CG
1	A	1	FME	C-CA-CB-CG
1	5	1	FME	N-CA-CB-CG
1	7	1	FME	C-CA-CB-CG
1	5	1	FME	CB-CG-SD-CE
1	R	1	FME	CA-CB-CG-SD
1	3	1	FME	N-CA-CB-CG
1	C	1	FME	CB-CA-N-CN

There are no ring outliers.

2 monomers are involved in 4 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
1	9	1	FME	3	0
1	R	1	FME	1	0

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 105 ligands modelled in this entry, 1 is monoatomic - leaving 104 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
8	6PL	H	301	-	51,51,51	0.27	0	57,59,59	0.41	0
9	CDL	G	101	-	99,99,99	0.27	0	105,111,111	0.35	0
11	BPH	L	302	-	51,70,70	0.53	0	52,101,101	0.69	1 (1%)
6	BCL	J	103	-	64,74,74	1.71	13 (20%)	78,115,115	2.28	19 (24%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
6	BCL	R	101	-	64,74,74	1.69	13 (20%)	78,115,115	2.33	20 (25%)
6	BCL	B	102	-	64,74,74	1.71	14 (21%)	78,115,115	2.22	20 (25%)
8	6PL	F	103	-	51,51,51	0.26	0	57,59,59	0.41	0
12	U10	L	309	-	63,63,63	2.71	17 (26%)	76,79,79	1.75	22 (28%)
11	BPH	M	405	-	51,70,70	0.53	1 (1%)	52,101,101	0.68	1 (1%)
10	LMT	Z	101	-	36,36,36	1.17	5 (13%)	47,47,47	1.03	2 (4%)
10	LMT	6	101	-	36,36,36	1.20	5 (13%)	47,47,47	1.04	1 (2%)
8	6PL	0	102	-	51,51,51	0.27	0	57,59,59	0.40	0
8	6PL	X	102	-	51,51,51	0.28	0	57,59,59	0.34	0
12	U10	M	410	-	63,63,63	2.66	17 (26%)	76,79,79	1.77	22 (28%)
10	LMT	J	102	-	36,36,36	1.15	5 (13%)	47,47,47	1.11	2 (4%)
14	QAK	M	407	-	40,40,40	1.38	2 (5%)	45,49,49	0.87	2 (4%)
12	U10	L	303	-	48,48,63	2.69	14 (29%)	58,61,79	1.71	14 (24%)
8	6PL	I	103	-	51,51,51	0.27	0	57,59,59	0.36	0
9	CDL	M	408	-	89,89,99	0.29	0	95,101,111	0.36	0
10	LMT	H	302	-	36,36,36	1.15	5 (13%)	47,47,47	1.06	3 (6%)
7	CRT	0	101	-	41,43,43	1.96	12 (29%)	50,54,54	1.68	14 (28%)
6	BCL	4	102	-	64,74,74	1.73	14 (21%)	78,115,115	2.22	21 (26%)
8	6PL	Q	102	-	47,47,51	0.28	0	53,55,59	0.31	0
6	BCL	A	100	-	64,74,74	1.69	13 (20%)	78,115,115	2.40	20 (25%)
8	6PL	D	102	-	51,51,51	0.27	0	57,59,59	0.30	0
8	6PL	U	102	-	51,51,51	0.26	0	57,59,59	0.31	0
7	CRT	O	102	-	41,43,43	1.93	12 (29%)	50,54,54	1.67	13 (26%)
7	CRT	S	101	-	41,43,43	1.95	12 (29%)	50,54,54	1.68	14 (28%)
12	U10	L	307	-	63,63,63	2.69	17 (26%)	76,79,79	1.74	19 (25%)
6	BCL	G	103	-	64,74,74	1.68	13 (20%)	78,115,115	2.39	20 (25%)
8	6PL	2	103	-	46,46,51	0.29	0	52,54,59	0.31	0
6	BCL	G	104	-	64,74,74	1.71	14 (21%)	78,115,115	2.22	19 (24%)
6	BCL	F	102	-	64,74,74	1.71	14 (21%)	78,115,115	2.26	21 (26%)
6	BCL	5	103	-	64,74,74	1.71	14 (21%)	78,115,115	2.26	19 (24%)
8	6PL	5	102	-	51,51,51	0.26	0	57,59,59	0.31	0
6	BCL	E	101	-	64,74,74	1.69	12 (18%)	78,115,115	2.32	18 (23%)
6	BCL	V	102	-	64,74,74	1.71	14 (21%)	78,115,115	2.22	20 (25%)
6	BCL	M	404	-	64,74,74	1.73	14 (21%)	78,115,115	2.36	21 (26%)
6	BCL	1	102	-	64,74,74	1.72	14 (21%)	78,115,115	2.24	21 (26%)
6	BCL	7	104	-	64,74,74	1.71	13 (20%)	78,115,115	2.28	19 (24%)
8	6PL	8	102	-	51,51,51	0.27	0	57,59,59	0.31	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
6	BCL	L	301	-	64,74,74	1.69	14 (21%)	78,115,115	2.30	20 (25%)
10	LMT	B	101	-	36,36,36	1.17	5 (13%)	47,47,47	0.98	1 (2%)
10	LMT	P	101	-	36,36,36	1.18	5 (13%)	47,47,47	0.97	2 (4%)
6	BCL	C	102	-	64,74,74	1.70	14 (21%)	78,115,115	2.20	20 (25%)
8	6PL	4	104	-	51,51,51	0.27	0	57,59,59	0.35	0
7	CRT	Q	101	-	41,43,43	1.95	12 (29%)	50,54,54	1.67	15 (30%)
6	BCL	R	103	-	64,74,74	1.70	13 (20%)	78,115,115	2.23	19 (24%)
6	BCL	V	101	-	64,74,74	1.69	13 (20%)	78,115,115	2.31	19 (24%)
12	U10	M	406	-	48,48,63	2.69	14 (29%)	58,61,79	1.61	13 (22%)
6	BCL	1	101	-	64,74,74	1.70	13 (20%)	78,115,115	2.38	20 (25%)
8	6PL	M	401	-	51,51,51	0.27	0	57,59,59	0.33	0
8	6PL	6	102	-	51,51,51	0.27	0	57,59,59	0.34	0
9	CDL	E	103	-	86,86,99	0.29	0	92,98,111	0.37	0
10	LMT	L	306	-	36,36,36	1.15	5 (13%)	47,47,47	1.01	2 (4%)
8	6PL	S	102	-	51,51,51	0.28	0	57,59,59	0.39	0
6	BCL	J	101	-	64,74,74	1.70	13 (20%)	78,115,115	2.36	20 (25%)
7	CRT	I	102	-	41,43,43	1.95	12 (29%)	50,54,54	1.70	14 (28%)
10	LMT	R	102	-	36,36,36	1.18	6 (16%)	47,47,47	1.11	3 (6%)
6	BCL	L	308	-	64,74,74	1.75	14 (21%)	78,115,115	2.29	20 (25%)
8	6PL	Z	103	-	51,51,51	0.28	0	57,59,59	0.30	0
8	6PL	B	104	-	51,51,51	0.28	0	57,59,59	0.37	0
9	CDL	L	310	-	99,99,99	0.26	0	105,111,111	0.31	0
6	BCL	C	101	-	64,74,74	1.69	13 (20%)	78,115,115	2.33	19 (24%)
6	BCL	P	102	-	64,74,74	1.69	13 (20%)	78,115,115	2.33	19 (24%)
7	CRT	U	101	-	41,43,43	1.97	12 (29%)	50,54,54	1.70	15 (30%)
8	6PL	O	103	-	46,46,51	0.29	0	52,54,59	0.33	0
6	BCL	7	102	-	64,74,74	1.70	14 (21%)	78,115,115	2.33	20 (25%)
6	BCL	Y	102	-	64,74,74	1.71	14 (21%)	78,115,115	2.19	18 (23%)
7	CRT	7	101	-	41,43,43	1.96	12 (29%)	50,54,54	1.68	15 (30%)
10	LMT	O	101	-	36,36,36	1.21	6 (16%)	47,47,47	1.07	2 (4%)
10	LMT	F	101	-	36,36,36	1.21	5 (13%)	47,47,47	1.01	1 (2%)
6	BCL	3	100	-	64,74,74	1.70	14 (21%)	78,115,115	2.30	20 (25%)
7	CRT	4	103	-	41,43,43	1.99	12 (29%)	50,54,54	1.74	14 (28%)
7	CRT	Z	102	-	41,43,43	1.96	12 (29%)	50,54,54	1.64	14 (28%)
6	BCL	N	101	-	64,74,74	1.69	14 (21%)	78,115,115	2.32	21 (26%)
15	PGT	7	103	-	50,50,50	0.25	0	53,56,56	0.33	0
6	BCL	0	100	-	64,74,74	1.71	13 (20%)	78,115,115	2.29	21 (26%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
7	CRT	D	101	-	41,43,43	1.97	12 (29%)	50,54,54	1.69	16 (32%)
6	BCL	M	402	-	64,74,74	1.69	13 (20%)	78,115,115	2.29	22 (28%)
6	BCL	Y	101	-	64,74,74	1.68	14 (21%)	78,115,115	2.39	20 (25%)
6	BCL	Q	100	-	64,74,74	1.71	14 (21%)	78,115,115	2.25	20 (25%)
6	BCL	9	102	-	64,74,74	1.69	13 (20%)	78,115,115	2.41	20 (25%)
15	PGT	9	101	-	50,50,50	0.26	0	53,56,56	0.35	0
10	LMT	4	101	-	36,36,36	1.17	6 (16%)	47,47,47	1.16	5 (10%)
7	CRT	8	101	-	41,43,43	2.07	12 (29%)	50,54,54	1.89	15 (30%)
9	CDL	G	105	-	89,89,99	0.29	0	95,101,111	0.44	0
8	6PL	L	304	-	51,51,51	0.27	0	57,59,59	0.36	0
8	6PL	I	101	-	51,51,51	0.27	0	57,59,59	0.37	0
7	CRT	B	103	-	41,43,43	1.94	12 (29%)	50,54,54	1.63	14 (28%)
7	CRT	2	102	-	41,43,43	2.03	12 (29%)	50,54,54	1.80	16 (32%)
8	6PL	K	102	-	51,51,51	0.26	0	57,59,59	0.33	0
8	6PL	P	103	-	51,51,51	0.28	0	57,59,59	0.37	0
6	BCL	T	100	-	64,74,74	1.69	13 (20%)	78,115,115	2.37	21 (26%)
7	CRT	G	102	-	41,43,43	1.97	12 (29%)	50,54,54	1.69	16 (32%)
7	CRT	K	101	-	41,43,43	1.95	12 (29%)	50,54,54	1.68	13 (26%)
7	CRT	X	101	-	41,43,43	2.01	12 (29%)	50,54,54	1.76	14 (28%)
10	LMT	2	101	-	36,36,36	1.18	4 (11%)	47,47,47	1.04	2 (4%)
6	BCL	U	100	-	64,74,74	1.71	14 (21%)	78,115,115	2.25	20 (25%)
6	BCL	N	102	-	64,74,74	1.72	14 (21%)	78,115,115	2.26	19 (24%)
8	6PL	L	305	-	51,51,51	0.30	0	57,59,59	0.33	0
9	CDL	M	409	-	83,83,99	0.28	0	89,95,111	0.37	0
6	BCL	5	101	-	64,74,74	1.70	14 (21%)	78,115,115	2.29	22 (28%)
8	6PL	E	102	-	51,51,51	0.28	0	57,59,59	0.28	0

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
8	6PL	H	301	-	-	6/55/55/55	-
9	CDL	G	101	-	-	12/110/110/110	-
11	BPH	L	302	-	2/2/18/22	8/37/105/105	0/5/6/6
6	BCL	J	103	-	-	11/37/137/137	-
6	BCL	R	101	-	-	16/37/137/137	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
6	BCL	B	102	-	-	16/37/137/137	-
8	6PL	F	103	-	-	8/55/55/55	-
12	U10	L	309	-	-	23/63/87/87	0/1/1/1
11	BPH	M	405	-	2/2/18/22	7/37/105/105	0/5/6/6
10	LMT	Z	101	-	-	11/21/61/61	0/2/2/2
10	LMT	6	101	-	-	7/21/61/61	0/2/2/2
8	6PL	0	102	-	-	9/55/55/55	-
8	6PL	X	102	-	-	6/55/55/55	-
12	U10	M	410	-	-	22/63/87/87	0/1/1/1
14	QAK	M	407	-	3/3/8/12	22/44/44/44	-
10	LMT	J	102	-	-	6/21/61/61	0/2/2/2
12	U10	L	303	-	-	18/45/69/87	0/1/1/1
8	6PL	I	103	-	-	7/55/55/55	-
9	CDL	M	408	-	-	8/100/100/110	-
10	LMT	H	302	-	-	10/21/61/61	0/2/2/2
7	CRT	0	101	-	-	0/51/51/51	-
6	BCL	4	102	-	-	9/37/137/137	-
8	6PL	Q	102	-	-	8/51/51/55	-
6	BCL	A	100	-	-	20/37/137/137	-
8	6PL	D	102	-	-	6/55/55/55	-
8	6PL	U	102	-	-	6/55/55/55	-
7	CRT	O	102	-	-	1/51/51/51	-
7	CRT	S	101	-	-	0/51/51/51	-
12	U10	L	307	-	-	27/63/87/87	0/1/1/1
6	BCL	G	103	-	-	15/37/137/137	-
8	6PL	2	103	-	-	12/50/50/55	-
6	BCL	G	104	-	-	12/37/137/137	-
6	BCL	F	102	-	-	17/37/137/137	-
6	BCL	5	103	-	-	8/37/137/137	-
8	6PL	5	102	-	-	12/55/55/55	-
6	BCL	E	101	-	-	21/37/137/137	-
6	BCL	V	102	-	-	12/37/137/137	-
6	BCL	M	404	-	-	12/37/137/137	-
6	BCL	1	102	-	-	10/37/137/137	-
6	BCL	7	104	-	-	15/37/137/137	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
8	6PL	8	102	-	-	8/55/55/55	-
6	BCL	L	301	-	-	14/37/137/137	-
10	LMT	B	101	-	-	9/21/61/61	0/2/2/2
10	LMT	P	101	-	-	6/21/61/61	0/2/2/2
6	BCL	C	102	-	-	12/37/137/137	-
8	6PL	4	104	-	-	9/55/55/55	-
7	CRT	Q	101	-	-	1/51/51/51	-
6	BCL	R	103	-	-	9/37/137/137	-
6	BCL	V	101	-	-	22/37/137/137	-
12	U10	M	406	-	-	10/45/69/87	0/1/1/1
6	BCL	1	101	-	-	15/37/137/137	-
8	6PL	M	401	-	-	9/55/55/55	-
8	6PL	6	102	-	-	6/55/55/55	-
9	CDL	E	103	-	-	10/97/97/110	-
10	LMT	L	306	-	-	12/21/61/61	0/2/2/2
8	6PL	S	102	-	-	8/55/55/55	-
6	BCL	J	101	-	-	14/37/137/137	-
7	CRT	I	102	-	-	0/51/51/51	-
10	LMT	R	102	-	-	15/21/61/61	0/2/2/2
6	BCL	L	308	-	-	14/37/137/137	-
8	6PL	Z	103	-	-	11/55/55/55	-
8	6PL	B	104	-	-	8/55/55/55	-
9	CDL	L	310	-	-	20/110/110/110	-
6	BCL	C	101	-	-	15/37/137/137	-
6	BCL	P	102	-	-	16/37/137/137	-
7	CRT	U	101	-	-	0/51/51/51	-
8	6PL	O	103	-	-	13/50/50/55	-
6	BCL	7	102	-	-	22/37/137/137	-
6	BCL	Y	102	-	-	16/37/137/137	-
7	CRT	7	101	-	-	1/51/51/51	-
10	LMT	O	101	-	-	9/21/61/61	0/2/2/2
10	LMT	F	101	-	-	10/21/61/61	0/2/2/2
6	BCL	3	100	-	-	19/37/137/137	-
7	CRT	4	103	-	-	0/51/51/51	-
7	CRT	Z	102	-	-	0/51/51/51	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
6	BCL	N	101	-	-	16/37/137/137	-
15	PGT	7	103	-	-	7/55/55/55	-
6	BCL	0	100	-	-	13/37/137/137	-
7	CRT	D	101	-	-	0/51/51/51	-
6	BCL	M	402	-	-	11/37/137/137	-
6	BCL	Y	101	-	-	11/37/137/137	-
6	BCL	Q	100	-	-	10/37/137/137	-
6	BCL	9	102	-	-	12/37/137/137	-
15	PGT	9	101	-	-	7/55/55/55	-
10	LMT	4	101	-	-	10/21/61/61	0/2/2/2
7	CRT	8	101	-	-	1/51/51/51	-
9	CDL	G	105	-	-	16/100/100/110	-
8	6PL	L	304	-	-	8/55/55/55	-
8	6PL	I	101	-	-	11/55/55/55	-
7	CRT	B	103	-	-	0/51/51/51	-
7	CRT	2	102	-	-	2/51/51/51	-
8	6PL	K	102	-	-	11/55/55/55	-
8	6PL	P	103	-	-	12/55/55/55	-
6	BCL	T	100	-	-	18/37/137/137	-
7	CRT	G	102	-	-	0/51/51/51	-
7	CRT	K	101	-	-	0/51/51/51	-
7	CRT	X	101	-	-	1/51/51/51	-
10	LMT	2	101	-	-	13/21/61/61	0/2/2/2
6	BCL	U	100	-	-	16/37/137/137	-
6	BCL	N	102	-	-	8/37/137/137	-
8	6PL	L	305	-	-	10/55/55/55	-
9	CDL	M	409	-	-	7/94/94/110	-
6	BCL	5	101	-	-	18/37/137/137	-
8	6PL	E	102	-	-	11/55/55/55	-

All (823) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	M	410	U10	C38-C39	6.12	1.47	1.33
12	L	303	U10	C23-C24	6.12	1.47	1.33
12	L	309	U10	C38-C39	6.10	1.47	1.33
12	L	307	U10	C23-C24	6.09	1.47	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	M	410	U10	C43-C44	6.08	1.47	1.33
12	L	303	U10	C28-C29	6.08	1.47	1.33
12	L	307	U10	C33-C34	6.08	1.47	1.33
12	L	303	U10	C18-C19	6.06	1.47	1.33
12	L	309	U10	C13-C14	6.04	1.47	1.33
12	L	309	U10	C23-C24	6.03	1.47	1.33
12	L	309	U10	C18-C19	6.03	1.47	1.33
12	L	307	U10	C28-C29	6.03	1.47	1.33
12	M	406	U10	C8-C9	6.02	1.47	1.33
12	L	307	U10	C38-C39	6.01	1.47	1.33
12	L	309	U10	C43-C44	6.01	1.47	1.33
12	L	303	U10	C33-C34	5.99	1.47	1.33
12	L	307	U10	C48-C49	5.99	1.47	1.33
12	M	410	U10	C18-C19	5.98	1.47	1.33
12	L	307	U10	C18-C19	5.98	1.47	1.33
12	M	406	U10	C33-C34	5.98	1.47	1.33
12	L	309	U10	C48-C49	5.98	1.47	1.33
12	L	309	U10	C8-C9	5.97	1.47	1.33
12	L	309	U10	C33-C34	5.97	1.47	1.33
12	L	309	U10	C28-C29	5.96	1.47	1.33
12	M	406	U10	C28-C29	5.95	1.47	1.33
12	L	303	U10	C8-C9	5.95	1.47	1.33
12	M	410	U10	C13-C14	5.95	1.47	1.33
12	M	410	U10	C48-C49	5.94	1.47	1.33
12	M	406	U10	C23-C24	5.92	1.47	1.33
12	M	410	U10	C8-C9	5.92	1.47	1.33
12	L	307	U10	C13-C14	5.91	1.47	1.33
12	L	303	U10	C13-C14	5.91	1.47	1.33
12	L	307	U10	C43-C44	5.90	1.47	1.33
12	M	406	U10	C18-C19	5.89	1.47	1.33
12	M	406	U10	C13-C14	5.87	1.47	1.33
12	L	307	U10	C8-C9	5.86	1.47	1.33
12	M	410	U10	C23-C24	5.76	1.46	1.33
12	M	410	U10	C33-C34	5.76	1.46	1.33
12	M	410	U10	C28-C29	5.75	1.46	1.33
12	L	309	U10	O4-C4	-5.61	1.23	1.36
14	M	407	QAK	CZ2-C4	5.56	1.55	1.31
12	L	307	U10	O3-C3	-5.55	1.23	1.36
12	L	309	U10	O3-C3	-5.48	1.23	1.36
12	M	406	U10	O3-C3	-5.47	1.23	1.36
12	L	307	U10	O4-C4	-5.46	1.23	1.36
12	L	303	U10	O4-C4	-5.45	1.23	1.36

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	M	406	U10	O4-C4	-5.42	1.23	1.36
12	M	410	U10	O4-C4	-5.42	1.23	1.36
12	M	410	U10	O3-C3	-5.42	1.23	1.36
12	L	303	U10	O3-C3	-5.36	1.23	1.36
12	M	406	U10	C38-C39	5.29	1.47	1.32
12	L	309	U10	C53-C54	5.28	1.47	1.32
12	L	307	U10	C53-C54	5.26	1.47	1.32
14	M	407	QAK	CZ3-CE3	5.22	1.54	1.31
12	L	303	U10	C38-C39	5.20	1.47	1.32
6	L	308	BCL	C3B-C2B	5.17	1.48	1.39
6	M	404	BCL	O2D-CGD	5.17	1.45	1.33
6	V	102	BCL	O2D-CGD	5.11	1.45	1.33
12	M	410	U10	C53-C54	5.11	1.47	1.32
6	1	102	BCL	O2D-CGD	5.09	1.45	1.33
6	L	301	BCL	O2D-CGD	5.08	1.45	1.33
6	4	102	BCL	O2D-CGD	5.08	1.45	1.33
6	M	404	BCL	C3B-C2B	5.07	1.48	1.39
6	Q	100	BCL	O2D-CGD	5.06	1.45	1.33
6	P	102	BCL	O2D-CGD	5.05	1.45	1.33
6	0	100	BCL	O2D-CGD	5.05	1.45	1.33
6	R	103	BCL	O2D-CGD	5.05	1.45	1.33
6	5	103	BCL	O2D-CGD	5.03	1.45	1.33
6	A	100	BCL	O2D-CGD	5.03	1.45	1.33
6	Y	102	BCL	O2D-CGD	5.02	1.45	1.33
6	J	103	BCL	O2D-CGD	5.02	1.45	1.33
6	Y	101	BCL	O2D-CGD	5.02	1.45	1.33
6	U	100	BCL	O2D-CGD	5.02	1.45	1.33
6	7	104	BCL	O2D-CGD	5.01	1.45	1.33
6	3	100	BCL	O2D-CGD	5.01	1.45	1.33
6	J	101	BCL	O2D-CGD	5.00	1.45	1.33
6	C	102	BCL	O2D-CGD	5.00	1.45	1.33
6	N	102	BCL	O2D-CGD	4.99	1.45	1.33
6	G	103	BCL	O2D-CGD	4.99	1.45	1.33
6	G	104	BCL	O2D-CGD	4.99	1.45	1.33
6	F	102	BCL	O2D-CGD	4.99	1.45	1.33
6	5	101	BCL	O2D-CGD	4.99	1.45	1.33
6	R	101	BCL	O2D-CGD	4.98	1.45	1.33
6	T	100	BCL	O2D-CGD	4.98	1.45	1.33
6	N	101	BCL	O2D-CGD	4.97	1.45	1.33
6	B	102	BCL	O2D-CGD	4.97	1.45	1.33
6	V	101	BCL	O2D-CGD	4.97	1.45	1.33
6	C	101	BCL	O2D-CGD	4.97	1.45	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	E	101	BCL	O2D-CGD	4.95	1.45	1.33
6	1	101	BCL	C3B-C2B	4.94	1.48	1.39
6	1	101	BCL	O2D-CGD	4.94	1.45	1.33
6	L	308	BCL	O2D-CGD	4.94	1.45	1.33
6	7	102	BCL	C3B-C2B	4.93	1.48	1.39
6	M	402	BCL	O2D-CGD	4.92	1.45	1.33
6	9	102	BCL	O2D-CGD	4.92	1.45	1.33
6	7	102	BCL	O2D-CGD	4.91	1.45	1.33
6	N	102	BCL	C3B-C2B	4.89	1.48	1.39
6	U	100	BCL	C3B-C2B	4.88	1.48	1.39
6	4	102	BCL	C3B-C2B	4.88	1.48	1.39
6	E	101	BCL	C3B-C2B	4.86	1.48	1.39
6	5	103	BCL	C3B-C2B	4.85	1.48	1.39
6	Q	100	BCL	C3B-C2B	4.84	1.48	1.39
6	7	104	BCL	C3B-C2B	4.84	1.48	1.39
6	F	102	BCL	C3B-C2B	4.84	1.48	1.39
6	R	103	BCL	C3B-C2B	4.84	1.48	1.39
6	B	102	BCL	C3B-C2B	4.84	1.48	1.39
6	3	100	BCL	C3B-C2B	4.84	1.48	1.39
6	N	101	BCL	C3B-C2B	4.83	1.48	1.39
6	V	102	BCL	C3B-C2B	4.82	1.48	1.39
6	Y	102	BCL	C3B-C2B	4.82	1.48	1.39
6	1	102	BCL	C3B-C2B	4.81	1.48	1.39
6	0	100	BCL	C3B-C2B	4.81	1.48	1.39
6	L	301	BCL	C3B-C2B	4.80	1.48	1.39
6	T	100	BCL	C3B-C2B	4.80	1.48	1.39
6	G	104	BCL	C3B-C2B	4.80	1.48	1.39
6	J	103	BCL	C3B-C2B	4.80	1.48	1.39
6	P	102	BCL	C3B-C2B	4.80	1.48	1.39
6	G	103	BCL	C3B-C2B	4.79	1.48	1.39
6	C	102	BCL	C3B-C2B	4.78	1.48	1.39
6	9	102	BCL	C3B-C2B	4.78	1.48	1.39
6	Y	101	BCL	C3B-C2B	4.78	1.48	1.39
6	5	101	BCL	C3B-C2B	4.75	1.47	1.39
6	L	308	BCL	C3D-C4D	-4.75	1.33	1.44
6	C	101	BCL	C3B-C2B	4.74	1.47	1.39
6	J	101	BCL	C3B-C2B	4.74	1.47	1.39
6	A	100	BCL	C3B-C2B	4.73	1.47	1.39
6	V	102	BCL	C3D-C4D	-4.72	1.33	1.44
6	V	101	BCL	C3B-C2B	4.70	1.47	1.39
6	R	101	BCL	C3B-C2B	4.69	1.47	1.39
6	M	404	BCL	C3D-C4D	-4.69	1.33	1.44

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	V	101	BCL	C3D-C4D	-4.68	1.33	1.44
6	1	102	BCL	C3D-C4D	-4.68	1.33	1.44
6	5	101	BCL	C3D-C4D	-4.68	1.33	1.44
6	7	102	BCL	C3D-C4D	-4.67	1.33	1.44
6	0	100	BCL	C3D-C4D	-4.67	1.33	1.44
6	Y	101	BCL	C3D-C4D	-4.66	1.33	1.44
6	N	102	BCL	C3D-C4D	-4.66	1.33	1.44
6	C	101	BCL	C3D-C4D	-4.66	1.33	1.44
6	Q	100	BCL	C3D-C4D	-4.65	1.33	1.44
6	9	102	BCL	C3D-C4D	-4.65	1.33	1.44
6	G	104	BCL	C3D-C4D	-4.65	1.33	1.44
6	M	402	BCL	C3D-C4D	-4.65	1.33	1.44
6	U	100	BCL	C3D-C4D	-4.65	1.33	1.44
6	3	100	BCL	C3D-C4D	-4.64	1.33	1.44
6	F	102	BCL	C3D-C4D	-4.64	1.33	1.44
6	7	104	BCL	C3D-C4D	-4.64	1.33	1.44
6	1	101	BCL	C3D-C4D	-4.63	1.33	1.44
6	J	101	BCL	C3D-C4D	-4.63	1.33	1.44
6	C	102	BCL	C3D-C4D	-4.63	1.33	1.44
6	4	102	BCL	C3D-C4D	-4.62	1.33	1.44
6	E	101	BCL	C3D-C4D	-4.62	1.33	1.44
6	Y	102	BCL	C3D-C4D	-4.62	1.33	1.44
6	R	101	BCL	C3D-C4D	-4.62	1.33	1.44
6	L	301	BCL	C3D-C4D	-4.62	1.33	1.44
6	B	102	BCL	C3D-C4D	-4.62	1.33	1.44
6	N	101	BCL	C3D-C4D	-4.61	1.33	1.44
6	G	103	BCL	C3D-C4D	-4.61	1.33	1.44
6	A	100	BCL	C3D-C4D	-4.61	1.33	1.44
6	T	100	BCL	C3D-C4D	-4.60	1.33	1.44
6	5	103	BCL	C3D-C4D	-4.58	1.33	1.44
6	P	102	BCL	C3D-C4D	-4.58	1.33	1.44
6	J	103	BCL	C3D-C4D	-4.58	1.33	1.44
6	M	402	BCL	C3B-C2B	4.57	1.47	1.39
6	R	103	BCL	C3D-C4D	-4.57	1.33	1.44
7	8	101	CRT	C22-C23	4.56	1.41	1.35
7	8	101	CRT	C19-C17	4.52	1.41	1.35
7	8	101	CRT	C14-C12	4.40	1.41	1.35
7	8	101	CRT	C9-C7	4.34	1.41	1.35
6	N	102	BCL	O2A-CGA	4.30	1.45	1.33
6	G	104	BCL	O2A-CGA	4.30	1.45	1.33
6	4	102	BCL	O2A-CGA	4.28	1.45	1.33
7	2	102	CRT	C19-C17	4.28	1.41	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	J	103	BCL	O2A-CGA	4.28	1.45	1.33
6	V	102	BCL	O2A-CGA	4.27	1.45	1.33
6	L	301	BCL	O2A-CGA	4.27	1.45	1.33
6	N	101	BCL	O2A-CGA	4.25	1.45	1.33
7	2	102	CRT	C9-C7	4.25	1.41	1.35
6	5	103	BCL	O2A-CGA	4.25	1.45	1.33
6	M	402	BCL	O2A-CGA	4.24	1.45	1.33
6	M	404	BCL	O2A-CGA	4.24	1.45	1.33
7	8	101	CRT	C27-C28	4.24	1.41	1.35
7	2	102	CRT	C22-C23	4.24	1.41	1.35
6	P	102	BCL	O2A-CGA	4.23	1.45	1.33
6	R	101	BCL	O2A-CGA	4.23	1.45	1.33
7	X	101	CRT	C22-C23	4.23	1.41	1.35
6	1	101	BCL	O2A-CGA	4.22	1.45	1.33
6	C	101	BCL	O2A-CGA	4.22	1.45	1.33
6	7	104	BCL	O2A-CGA	4.21	1.45	1.33
6	R	103	BCL	O2A-CGA	4.21	1.45	1.33
7	2	102	CRT	C27-C28	4.20	1.41	1.35
6	J	101	BCL	O2A-CGA	4.20	1.45	1.33
7	X	101	CRT	C9-C7	4.20	1.41	1.35
6	B	102	BCL	O2A-CGA	4.20	1.45	1.33
6	Y	102	BCL	O2A-CGA	4.20	1.45	1.33
6	Y	101	BCL	O2A-CGA	4.19	1.45	1.33
7	2	102	CRT	C14-C12	4.19	1.41	1.35
6	9	102	BCL	O2A-CGA	4.19	1.45	1.33
6	C	102	BCL	O2A-CGA	4.19	1.45	1.33
6	T	100	BCL	O2A-CGA	4.18	1.45	1.33
6	E	101	BCL	O2A-CGA	4.17	1.45	1.33
6	1	102	BCL	O2A-CGA	4.17	1.45	1.33
6	7	102	BCL	O2A-CGA	4.17	1.45	1.33
6	F	102	BCL	O2A-CGA	4.17	1.45	1.33
6	3	100	BCL	O2A-CGA	4.17	1.45	1.33
6	U	100	BCL	O2A-CGA	4.16	1.45	1.33
6	Q	100	BCL	O2A-CGA	4.16	1.45	1.33
7	4	103	CRT	C9-C7	4.16	1.41	1.35
6	5	101	BCL	O2A-CGA	4.16	1.45	1.33
6	A	100	BCL	O2A-CGA	4.15	1.45	1.33
6	L	308	BCL	O2A-CGA	4.14	1.45	1.33
6	0	100	BCL	O2A-CGA	4.14	1.45	1.33
6	V	101	BCL	O2A-CGA	4.13	1.45	1.33
7	4	103	CRT	C22-C23	4.11	1.41	1.35
6	G	103	BCL	O2A-CGA	4.09	1.45	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	X	101	CRT	C19-C17	4.06	1.41	1.35
7	X	101	CRT	C14-C12	4.03	1.41	1.35
7	4	103	CRT	C19-C17	4.02	1.41	1.35
7	0	101	CRT	C9-C7	4.02	1.41	1.35
7	D	101	CRT	C22-C23	4.01	1.41	1.35
7	X	101	CRT	C27-C28	3.99	1.41	1.35
7	K	101	CRT	C19-C17	3.98	1.41	1.35
7	8	101	CRT	C32-C33	3.97	1.41	1.35
7	0	101	CRT	C22-C23	3.96	1.41	1.35
7	U	101	CRT	C19-C17	3.96	1.41	1.35
7	0	101	CRT	C14-C12	3.95	1.41	1.35
7	2	102	CRT	C32-C33	3.94	1.41	1.35
6	L	308	BCL	CHD-C1D	3.94	1.46	1.38
7	S	101	CRT	C9-C7	3.94	1.41	1.35
7	K	101	CRT	C22-C23	3.93	1.41	1.35
7	Z	102	CRT	C22-C23	3.92	1.41	1.35
7	4	103	CRT	C14-C12	3.91	1.41	1.35
7	G	102	CRT	C19-C17	3.90	1.41	1.35
7	I	102	CRT	C27-C28	3.90	1.41	1.35
7	G	102	CRT	C22-C23	3.90	1.41	1.35
7	D	101	CRT	C14-C12	3.90	1.40	1.35
7	S	101	CRT	C22-C23	3.90	1.40	1.35
7	Z	102	CRT	C9-C7	3.90	1.40	1.35
7	U	101	CRT	C27-C28	3.89	1.40	1.35
7	D	101	CRT	C9-C7	3.89	1.40	1.35
7	7	101	CRT	C22-C23	3.89	1.40	1.35
7	U	101	CRT	C9-C7	3.89	1.40	1.35
6	5	101	BCL	CHD-C1D	3.89	1.45	1.38
7	U	101	CRT	C22-C23	3.88	1.40	1.35
7	K	101	CRT	C14-C12	3.87	1.40	1.35
7	4	103	CRT	C27-C28	3.87	1.40	1.35
7	G	102	CRT	C14-C12	3.86	1.40	1.35
7	0	101	CRT	C19-C17	3.86	1.40	1.35
7	I	102	CRT	C22-C23	3.86	1.40	1.35
7	7	101	CRT	C19-C17	3.86	1.40	1.35
7	7	101	CRT	C9-C7	3.86	1.40	1.35
7	Q	101	CRT	C22-C23	3.86	1.40	1.35
7	Z	102	CRT	C19-C17	3.85	1.40	1.35
7	D	101	CRT	C27-C28	3.84	1.40	1.35
7	X	101	CRT	C32-C33	3.84	1.40	1.35
7	0	101	CRT	C27-C28	3.83	1.40	1.35
7	S	101	CRT	C19-C17	3.83	1.40	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	O	102	CRT	C19-C17	3.83	1.40	1.35
7	Q	101	CRT	C14-C12	3.82	1.40	1.35
7	B	103	CRT	C22-C23	3.81	1.40	1.35
7	B	103	CRT	C27-C28	3.81	1.40	1.35
7	K	101	CRT	C9-C7	3.80	1.40	1.35
7	4	103	CRT	C32-C33	3.80	1.40	1.35
7	7	101	CRT	C27-C28	3.80	1.40	1.35
7	K	101	CRT	C27-C28	3.80	1.40	1.35
7	G	102	CRT	C9-C7	3.80	1.40	1.35
6	7	102	BCL	CHD-C1D	3.79	1.45	1.38
7	D	101	CRT	C19-C17	3.79	1.40	1.35
7	Q	101	CRT	C19-C17	3.78	1.40	1.35
7	O	102	CRT	C22-C23	3.78	1.40	1.35
6	P	102	BCL	CHD-C1D	3.78	1.45	1.38
7	G	102	CRT	C32-C33	3.78	1.40	1.35
7	U	101	CRT	C14-C12	3.78	1.40	1.35
7	Q	101	CRT	C9-C7	3.78	1.40	1.35
7	I	102	CRT	C19-C17	3.76	1.40	1.35
7	I	102	CRT	C14-C12	3.76	1.40	1.35
7	7	101	CRT	C14-C12	3.75	1.40	1.35
6	3	100	BCL	CHD-C1D	3.75	1.45	1.38
6	R	101	BCL	CHD-C1D	3.74	1.45	1.38
6	U	100	BCL	CHD-C1D	3.74	1.45	1.38
7	Z	102	CRT	C14-C12	3.74	1.40	1.35
6	J	101	BCL	CHD-C1D	3.74	1.45	1.38
7	G	102	CRT	C27-C28	3.73	1.40	1.35
7	O	102	CRT	C9-C7	3.73	1.40	1.35
7	D	101	CRT	C32-C33	3.73	1.40	1.35
7	S	101	CRT	C14-C12	3.73	1.40	1.35
7	O	102	CRT	C14-C12	3.72	1.40	1.35
6	5	103	BCL	CHD-C1D	3.72	1.45	1.38
6	4	102	BCL	CHD-C1D	3.72	1.45	1.38
6	Q	100	BCL	CHD-C1D	3.71	1.45	1.38
7	Z	102	CRT	C27-C28	3.71	1.40	1.35
7	Q	101	CRT	C32-C33	3.71	1.40	1.35
6	V	101	BCL	CHD-C1D	3.70	1.45	1.38
6	E	101	BCL	CHD-C1D	3.70	1.45	1.38
6	F	102	BCL	CHD-C1D	3.70	1.45	1.38
7	U	101	CRT	C32-C33	3.70	1.40	1.35
7	B	103	CRT	C19-C17	3.70	1.40	1.35
7	K	101	CRT	C32-C33	3.69	1.40	1.35
6	0	100	BCL	CHD-C1D	3.69	1.45	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	Q	101	CRT	C27-C28	3.68	1.40	1.35
7	I	102	CRT	C32-C33	3.68	1.40	1.35
6	M	402	BCL	CHD-C1D	3.68	1.45	1.38
6	1	102	BCL	CHD-C1D	3.66	1.45	1.38
7	B	103	CRT	C32-C33	3.66	1.40	1.35
7	Z	102	CRT	C32-C33	3.66	1.40	1.35
6	4	102	BCL	OBD-CAD	3.65	1.28	1.22
7	7	101	CRT	C32-C33	3.65	1.40	1.35
7	S	101	CRT	C27-C28	3.64	1.40	1.35
6	V	102	BCL	CHD-C1D	3.64	1.45	1.38
6	Y	102	BCL	OBD-CAD	3.64	1.28	1.22
6	N	101	BCL	CHD-C1D	3.63	1.45	1.38
6	Y	102	BCL	CHD-C1D	3.63	1.45	1.38
6	M	404	BCL	CHD-C1D	3.63	1.45	1.38
6	G	104	BCL	OBD-CAD	3.63	1.28	1.22
6	7	104	BCL	CHD-C1D	3.63	1.45	1.38
6	J	103	BCL	CHD-C1D	3.62	1.45	1.38
7	B	103	CRT	C14-C12	3.62	1.40	1.35
6	G	104	BCL	CHD-C1D	3.62	1.45	1.38
6	B	102	BCL	CHD-C1D	3.62	1.45	1.38
6	N	102	BCL	CHD-C1D	3.61	1.45	1.38
6	5	103	BCL	OBD-CAD	3.61	1.28	1.22
6	N	102	BCL	OBD-CAD	3.60	1.28	1.22
6	E	101	BCL	OBD-CAD	3.60	1.28	1.22
6	M	402	BCL	OBD-CAD	3.60	1.28	1.22
6	C	101	BCL	CHD-C1D	3.60	1.45	1.38
6	Y	101	BCL	CHD-C1D	3.60	1.45	1.38
6	F	102	BCL	OBD-CAD	3.59	1.28	1.22
6	G	103	BCL	CHD-C1D	3.59	1.45	1.38
6	L	301	BCL	OBD-CAD	3.59	1.28	1.22
6	9	102	BCL	CHD-C1D	3.59	1.45	1.38
6	0	100	BCL	OBD-CAD	3.59	1.28	1.22
6	T	100	BCL	CHD-C1D	3.59	1.45	1.38
6	5	101	BCL	OBD-CAD	3.58	1.28	1.22
6	L	301	BCL	CHD-C1D	3.58	1.45	1.38
6	C	102	BCL	CHD-C1D	3.58	1.45	1.38
6	L	308	BCL	OBD-CAD	3.57	1.28	1.22
6	Q	100	BCL	OBD-CAD	3.57	1.28	1.22
6	3	100	BCL	OBD-CAD	3.57	1.28	1.22
6	C	102	BCL	OBD-CAD	3.57	1.28	1.22
7	I	102	CRT	C9-C7	3.57	1.40	1.35
6	9	102	BCL	OBD-CAD	3.57	1.28	1.22

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	R	103	BCL	OBD-CAD	3.56	1.28	1.22
6	J	103	BCL	OBD-CAD	3.56	1.28	1.22
6	R	103	BCL	CHD-C1D	3.56	1.45	1.38
6	7	104	BCL	OBD-CAD	3.55	1.28	1.22
6	V	102	BCL	OBD-CAD	3.55	1.28	1.22
6	N	101	BCL	OBD-CAD	3.55	1.28	1.22
7	B	103	CRT	C9-C7	3.54	1.40	1.35
6	7	102	BCL	OBD-CAD	3.54	1.28	1.22
6	1	102	BCL	OBD-CAD	3.53	1.28	1.22
7	0	101	CRT	C32-C33	3.52	1.40	1.35
6	A	100	BCL	CHD-C1D	3.52	1.45	1.38
6	C	101	BCL	OBD-CAD	3.51	1.28	1.22
6	U	100	BCL	OBD-CAD	3.50	1.28	1.22
6	G	103	BCL	OBD-CAD	3.50	1.28	1.22
6	B	102	BCL	OBD-CAD	3.50	1.28	1.22
7	O	102	CRT	C27-C28	3.49	1.40	1.35
6	1	101	BCL	CHD-C1D	3.49	1.45	1.38
7	O	102	CRT	C32-C33	3.49	1.40	1.35
6	1	101	BCL	OBD-CAD	3.49	1.28	1.22
6	P	102	BCL	OBD-CAD	3.48	1.28	1.22
6	T	100	BCL	OBD-CAD	3.48	1.28	1.22
7	S	101	CRT	C32-C33	3.48	1.40	1.35
6	J	101	BCL	OBD-CAD	3.47	1.28	1.22
6	M	404	BCL	OBD-CAD	3.46	1.28	1.22
6	V	101	BCL	OBD-CAD	3.44	1.28	1.22
6	A	100	BCL	OBD-CAD	3.42	1.28	1.22
6	R	101	BCL	OBD-CAD	3.38	1.28	1.22
6	Y	101	BCL	OBD-CAD	3.38	1.28	1.22
12	L	307	U10	C4-C5	-3.38	1.39	1.48
12	L	303	U10	C4-C5	-3.37	1.39	1.48
12	L	309	U10	C4-C5	-3.37	1.39	1.48
12	M	410	U10	C4-C5	-3.34	1.39	1.48
12	M	406	U10	C3-C2	-3.30	1.39	1.48
12	M	406	U10	C4-C5	-3.28	1.39	1.48
12	M	410	U10	C3-C2	-3.26	1.39	1.48
12	L	307	U10	C3-C2	-3.26	1.39	1.48
12	L	309	U10	C3-C2	-3.26	1.39	1.48
12	L	303	U10	C3-C2	-3.12	1.39	1.48
6	Y	102	BCL	C3D-C2D	3.04	1.47	1.39
6	M	402	BCL	C3D-C2D	3.02	1.47	1.39
6	L	308	BCL	C3D-C2D	3.01	1.47	1.39
6	C	102	BCL	C3D-C2D	3.01	1.47	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	5	103	BCL	C3D-C2D	3.00	1.47	1.39
6	Y	102	BCL	C1D-ND	-3.00	1.34	1.37
6	F	102	BCL	C3D-C2D	2.99	1.47	1.39
6	U	100	BCL	C3D-C2D	2.98	1.47	1.39
6	1	102	BCL	C1D-ND	-2.98	1.34	1.37
6	4	102	BCL	C3D-C2D	2.98	1.47	1.39
6	C	102	BCL	C1D-ND	-2.98	1.34	1.37
6	J	103	BCL	C1D-ND	-2.97	1.34	1.37
6	J	103	BCL	C3D-C2D	2.97	1.47	1.39
6	1	102	BCL	C3D-C2D	2.97	1.47	1.39
6	N	102	BCL	C3D-C2D	2.96	1.47	1.39
6	L	308	BCL	CHD-C4C	2.96	1.47	1.39
6	4	102	BCL	C1D-ND	-2.95	1.34	1.37
6	G	104	BCL	C3D-C2D	2.95	1.47	1.39
6	N	102	BCL	C1D-ND	-2.94	1.34	1.37
6	R	103	BCL	C3D-C2D	2.94	1.47	1.39
6	U	100	BCL	C1D-ND	-2.93	1.34	1.37
6	7	104	BCL	C3D-C2D	2.93	1.47	1.39
6	V	102	BCL	C1D-ND	-2.92	1.34	1.37
6	V	102	BCL	C3D-C2D	2.91	1.47	1.39
6	P	102	BCL	C3D-C2D	2.91	1.47	1.39
6	E	101	BCL	C3D-C2D	2.91	1.47	1.39
6	B	102	BCL	C3D-C2D	2.91	1.47	1.39
6	R	103	BCL	C1D-ND	-2.91	1.34	1.37
6	C	101	BCL	C3D-C2D	2.90	1.47	1.39
6	7	102	BCL	C3D-C2D	2.90	1.47	1.39
6	3	100	BCL	C3D-C2D	2.89	1.47	1.39
6	0	100	BCL	C3D-C2D	2.89	1.47	1.39
6	L	301	BCL	C3D-C2D	2.88	1.47	1.39
6	N	101	BCL	C3D-C2D	2.88	1.47	1.39
6	V	101	BCL	C3D-C2D	2.87	1.47	1.39
6	R	101	BCL	C1D-C2D	2.87	1.51	1.45
6	Q	100	BCL	C3D-C2D	2.87	1.46	1.39
6	R	101	BCL	C3D-C2D	2.86	1.46	1.39
6	J	101	BCL	C3D-C2D	2.86	1.46	1.39
6	M	404	BCL	C3D-C2D	2.86	1.46	1.39
6	B	102	BCL	C1D-ND	-2.86	1.34	1.37
6	5	101	BCL	C3D-C2D	2.85	1.46	1.39
6	L	308	BCL	C1D-C2D	2.84	1.50	1.45
6	T	100	BCL	C3D-C2D	2.84	1.46	1.39
6	A	100	BCL	C3D-C2D	2.83	1.46	1.39
6	7	104	BCL	C1D-ND	-2.83	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	104	BCL	C1D-ND	-2.82	1.34	1.37
6	1	101	BCL	C3D-C2D	2.82	1.46	1.39
6	9	102	BCL	C1D-C2D	2.81	1.50	1.45
6	P	102	BCL	C1D-C2D	2.80	1.50	1.45
6	E	101	BCL	CHD-C4C	2.80	1.47	1.39
6	G	103	BCL	C3D-C2D	2.80	1.46	1.39
6	7	102	BCL	C1D-C2D	2.80	1.50	1.45
6	5	101	BCL	CHD-C4C	2.80	1.47	1.39
6	Q	100	BCL	C1D-ND	-2.79	1.34	1.37
6	Y	101	BCL	C3D-C2D	2.79	1.46	1.39
6	9	102	BCL	C3D-C2D	2.79	1.46	1.39
6	3	100	BCL	C1D-C2D	2.79	1.50	1.45
6	7	102	BCL	CHD-C4C	2.79	1.47	1.39
6	5	103	BCL	C1D-ND	-2.79	1.34	1.37
6	J	101	BCL	C1D-C2D	2.79	1.50	1.45
6	3	100	BCL	CHD-C4C	2.78	1.47	1.39
6	J	101	BCL	CHD-C4C	2.78	1.47	1.39
6	V	101	BCL	C1D-C2D	2.78	1.50	1.45
6	F	102	BCL	C1D-ND	-2.78	1.34	1.37
6	M	402	BCL	CHD-C4C	2.77	1.47	1.39
6	5	101	BCL	C1D-C2D	2.77	1.50	1.45
6	T	100	BCL	C1D-C2D	2.77	1.50	1.45
6	R	101	BCL	CHD-C4C	2.77	1.47	1.39
6	T	100	BCL	CHD-C4C	2.75	1.47	1.39
6	0	100	BCL	C1D-ND	-2.75	1.34	1.37
6	M	404	BCL	C1D-ND	-2.74	1.34	1.37
6	V	101	BCL	CHD-C4C	2.74	1.47	1.39
12	L	307	U10	C6-C5	-2.74	1.39	1.46
6	P	102	BCL	CHD-C4C	2.74	1.47	1.39
10	R	102	LMT	O3'-C3'	-2.73	1.36	1.43
6	F	102	BCL	CHD-C4C	2.73	1.46	1.39
12	M	410	U10	C6-C5	-2.73	1.39	1.46
6	Q	100	BCL	C1D-C2D	2.73	1.50	1.45
10	P	101	LMT	O3'-C3'	-2.73	1.36	1.43
12	L	303	U10	C6-C5	-2.72	1.39	1.46
6	C	101	BCL	C1D-C2D	2.72	1.50	1.45
6	7	104	BCL	C1D-C2D	2.72	1.50	1.45
10	2	101	LMT	O3'-C3'	-2.72	1.36	1.43
6	G	103	BCL	C1D-C2D	2.72	1.50	1.45
6	E	101	BCL	C1D-C2D	2.71	1.50	1.45
6	U	100	BCL	CHD-C4C	2.71	1.46	1.39
6	Q	100	BCL	CHD-C4C	2.71	1.46	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	M	404	BCL	C1D-C2D	2.71	1.50	1.45
6	0	100	BCL	CHD-C4C	2.71	1.46	1.39
6	7	104	BCL	CHD-C4C	2.71	1.46	1.39
10	B	101	LMT	O3'-C3'	-2.70	1.36	1.43
6	Y	101	BCL	CHD-C4C	2.70	1.46	1.39
6	9	102	BCL	CHD-C4C	2.70	1.46	1.39
10	L	306	LMT	O3'-C3'	-2.70	1.36	1.43
6	5	103	BCL	CHD-C4C	2.69	1.46	1.39
6	N	101	BCL	CHD-C4C	2.69	1.46	1.39
6	F	102	BCL	C1D-C2D	2.69	1.50	1.45
6	4	102	BCL	CHD-C4C	2.69	1.46	1.39
6	L	308	BCL	C1D-ND	-2.69	1.34	1.37
6	C	101	BCL	CHD-C4C	2.69	1.46	1.39
6	M	402	BCL	C1D-C2D	2.68	1.50	1.45
10	P	101	LMT	O2'-C2'	-2.68	1.36	1.43
12	M	406	U10	C6-C5	-2.68	1.39	1.46
6	B	102	BCL	CHD-C4C	2.68	1.46	1.39
12	L	309	U10	C6-C5	-2.67	1.39	1.46
6	M	404	BCL	CHD-C4C	2.67	1.46	1.39
6	G	104	BCL	CHD-C4C	2.67	1.46	1.39
6	1	101	BCL	C1D-C2D	2.67	1.50	1.45
6	1	101	BCL	CHD-C4C	2.67	1.46	1.39
10	J	102	LMT	O3'-C3'	-2.67	1.36	1.43
6	Y	101	BCL	C1D-C2D	2.66	1.50	1.45
6	G	103	BCL	CHD-C4C	2.66	1.46	1.39
6	N	101	BCL	C1D-C2D	2.65	1.50	1.45
6	L	301	BCL	CHD-C4C	2.65	1.46	1.39
6	A	100	BCL	CHD-C4C	2.65	1.46	1.39
6	N	102	BCL	CHD-C4C	2.65	1.46	1.39
6	1	101	BCL	C1D-ND	-2.65	1.34	1.37
6	0	100	BCL	C1D-C2D	2.65	1.50	1.45
6	J	103	BCL	CHD-C4C	2.65	1.46	1.39
10	O	101	LMT	O3'-C3'	-2.64	1.36	1.43
6	A	100	BCL	C1D-C2D	2.64	1.50	1.45
6	Y	102	BCL	CHD-C4C	2.64	1.46	1.39
10	H	302	LMT	O3'-C3'	-2.64	1.36	1.43
7	B	103	CRT	C16-C17	-2.64	1.40	1.45
6	1	102	BCL	CHD-C4C	2.63	1.46	1.39
6	L	308	BCL	MG-NA	-2.63	2.00	2.06
10	4	101	LMT	O3'-C3'	-2.63	1.36	1.43
10	Z	101	LMT	O3'-C3'	-2.63	1.36	1.43
6	U	100	BCL	C1D-C2D	2.63	1.50	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	F	101	LMT	O3'-C3'	-2.62	1.36	1.43
7	O	102	CRT	C25-C23	-2.62	1.40	1.45
6	A	100	BCL	C1D-ND	-2.62	1.34	1.37
6	V	102	BCL	CHD-C4C	2.61	1.46	1.39
6	9	102	BCL	C1D-ND	-2.61	1.34	1.37
6	L	301	BCL	C1D-C2D	2.61	1.50	1.45
6	R	101	BCL	C1D-ND	-2.61	1.34	1.37
6	N	102	BCL	C1D-C2D	2.61	1.50	1.45
6	C	102	BCL	CHD-C4C	2.60	1.46	1.39
6	M	402	BCL	C1D-ND	-2.60	1.34	1.37
6	1	102	BCL	C1D-C2D	2.60	1.50	1.45
6	5	103	BCL	C1D-C2D	2.60	1.50	1.45
6	L	301	BCL	C1D-ND	-2.58	1.34	1.37
6	R	103	BCL	CHD-C4C	2.58	1.46	1.39
10	6	101	LMT	O3'-C3'	-2.57	1.36	1.43
7	Z	102	CRT	C30-C28	-2.57	1.40	1.45
10	H	302	LMT	O2'-C2'	-2.56	1.36	1.43
10	J	102	LMT	O2B-C2B	-2.56	1.36	1.43
6	J	103	BCL	C1D-C2D	2.55	1.50	1.45
6	E	101	BCL	C1D-ND	-2.55	1.34	1.37
6	N	101	BCL	C1D-ND	-2.55	1.34	1.37
6	V	101	BCL	C1D-ND	-2.55	1.34	1.37
6	T	100	BCL	C1D-ND	-2.55	1.34	1.37
7	U	101	CRT	C16-C17	-2.54	1.40	1.45
7	O	102	CRT	C30-C28	-2.54	1.40	1.45
6	7	102	BCL	C1D-ND	-2.54	1.34	1.37
6	G	103	BCL	C1D-ND	-2.53	1.34	1.37
7	I	102	CRT	C16-C17	-2.53	1.40	1.45
6	P	102	BCL	C1D-ND	-2.52	1.34	1.37
7	0	101	CRT	C30-C28	-2.52	1.40	1.45
7	G	102	CRT	C30-C28	-2.51	1.40	1.45
6	4	102	BCL	C1D-C2D	2.51	1.50	1.45
6	L	308	BCL	MG-NC	-2.51	2.00	2.06
7	Z	102	CRT	C16-C17	-2.51	1.40	1.45
6	R	103	BCL	C1D-C2D	2.51	1.50	1.45
7	B	103	CRT	C11-C12	-2.50	1.40	1.45
6	B	102	BCL	C1D-C2D	2.50	1.50	1.45
10	F	101	LMT	O2'-C2'	-2.50	1.37	1.43
6	J	101	BCL	C1D-ND	-2.50	1.34	1.37
6	C	101	BCL	C1D-ND	-2.49	1.34	1.37
10	L	306	LMT	O2'-C2'	-2.49	1.37	1.43
6	C	102	BCL	C1D-C2D	2.49	1.50	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	3	100	BCL	C1D-ND	-2.49	1.34	1.37
10	J	102	LMT	O2'-C2'	-2.49	1.37	1.43
6	M	404	BCL	MG-NA	-2.48	2.00	2.06
7	O	102	CRT	C16-C17	-2.48	1.40	1.45
7	S	101	CRT	C30-C28	-2.48	1.40	1.45
7	I	102	CRT	C11-C12	-2.48	1.40	1.45
10	R	102	LMT	O2'-C2'	-2.48	1.37	1.43
6	B	102	BCL	MG-NC	-2.47	2.00	2.06
6	5	101	BCL	C1D-ND	-2.47	1.34	1.37
7	7	101	CRT	C16-C17	-2.47	1.40	1.45
6	1	102	BCL	MG-NC	-2.47	2.00	2.06
7	Q	101	CRT	C30-C28	-2.47	1.40	1.45
7	S	101	CRT	C25-C23	-2.46	1.40	1.45
7	G	102	CRT	C25-C23	-2.46	1.40	1.45
7	B	103	CRT	C25-C23	-2.46	1.40	1.45
7	B	103	CRT	C30-C28	-2.46	1.40	1.45
7	D	101	CRT	C16-C17	-2.45	1.40	1.45
7	Q	101	CRT	C16-C17	-2.45	1.40	1.45
7	7	101	CRT	C25-C23	-2.44	1.40	1.45
7	I	102	CRT	C25-C23	-2.44	1.40	1.45
7	Z	102	CRT	C25-C23	-2.44	1.40	1.45
6	Y	102	BCL	C1D-C2D	2.44	1.50	1.45
6	Y	101	BCL	C1D-ND	-2.44	1.34	1.37
6	5	103	BCL	MG-NC	-2.44	2.00	2.06
7	7	101	CRT	C30-C28	-2.44	1.40	1.45
7	Z	102	CRT	C35-C33	-2.44	1.40	1.45
6	0	100	BCL	MG-NC	-2.43	2.00	2.06
7	G	102	CRT	C35-C33	-2.43	1.40	1.45
7	D	101	CRT	C25-C23	-2.43	1.40	1.45
7	G	102	CRT	C16-C17	-2.43	1.40	1.45
7	7	101	CRT	C35-C33	-2.43	1.40	1.45
6	G	104	BCL	C1D-C2D	2.43	1.50	1.45
7	O	102	CRT	C35-C33	-2.42	1.40	1.45
7	Q	101	CRT	C35-C33	-2.42	1.40	1.45
6	V	102	BCL	C1D-C2D	2.42	1.50	1.45
7	G	102	CRT	C11-C12	-2.42	1.40	1.45
7	Q	101	CRT	C25-C23	-2.42	1.40	1.45
10	H	302	LMT	O2B-C2B	-2.42	1.37	1.43
7	0	101	CRT	C35-C33	-2.41	1.40	1.45
7	U	101	CRT	C30-C28	-2.41	1.40	1.45
7	Q	101	CRT	C11-C12	-2.41	1.40	1.45
7	K	101	CRT	C16-C17	-2.41	1.40	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	S	101	CRT	C35-C33	-2.41	1.40	1.45
6	F	102	BCL	MG-NC	-2.40	2.00	2.06
7	U	101	CRT	C35-C33	-2.40	1.40	1.45
6	T	100	BCL	MG-NC	-2.40	2.00	2.06
6	4	102	BCL	MG-NC	-2.40	2.00	2.06
6	U	100	BCL	MG-NC	-2.40	2.00	2.06
7	S	101	CRT	C16-C17	-2.39	1.40	1.45
6	N	102	BCL	MG-NA	-2.39	2.00	2.06
10	R	102	LMT	O3B-C3B	-2.39	1.37	1.43
12	M	406	U10	C6-C1	2.39	1.39	1.35
7	B	103	CRT	C35-C33	-2.38	1.40	1.45
10	R	102	LMT	O2B-C2B	-2.38	1.37	1.43
7	4	103	CRT	C30-C28	-2.38	1.40	1.45
10	J	102	LMT	O3B-C3B	-2.38	1.37	1.43
7	I	102	CRT	C30-C28	-2.38	1.40	1.45
7	X	101	CRT	C35-C33	-2.38	1.40	1.45
7	D	101	CRT	C30-C28	-2.38	1.40	1.45
7	X	101	CRT	C30-C28	-2.38	1.40	1.45
6	M	402	BCL	MG-NA	-2.38	2.00	2.06
7	0	101	CRT	C11-C12	-2.38	1.40	1.45
7	B	103	CRT	C6-C7	-2.37	1.40	1.45
10	H	302	LMT	O3B-C3B	-2.37	1.37	1.43
10	P	101	LMT	O3B-C3B	-2.37	1.37	1.43
12	L	309	U10	C1-C2	-2.36	1.38	1.47
7	U	101	CRT	C25-C23	-2.36	1.40	1.45
7	K	101	CRT	C30-C28	-2.36	1.40	1.45
10	O	101	LMT	O2'-C2'	-2.36	1.37	1.43
7	O	102	CRT	C11-C12	-2.36	1.40	1.45
6	J	103	BCL	MG-NC	-2.36	2.00	2.06
10	4	101	LMT	O3B-C3B	-2.36	1.37	1.43
7	U	101	CRT	C11-C12	-2.36	1.40	1.45
6	Y	102	BCL	MG-NC	-2.35	2.00	2.06
10	F	101	LMT	O2B-C2B	-2.35	1.37	1.43
10	B	101	LMT	O2B-C2B	-2.35	1.37	1.43
6	Y	101	BCL	MG-NC	-2.35	2.00	2.06
7	7	101	CRT	C11-C12	-2.35	1.40	1.45
10	4	101	LMT	O2B-C2B	-2.35	1.37	1.43
7	I	102	CRT	C6-C7	-2.35	1.40	1.45
6	A	100	BCL	MG-NC	-2.35	2.00	2.06
7	D	101	CRT	C11-C12	-2.35	1.40	1.45
6	7	102	BCL	MG-NC	-2.35	2.00	2.06
12	M	406	U10	C1-C2	-2.35	1.38	1.47

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	1	102	BCL	MG-NA	-2.34	2.00	2.06
6	J	103	BCL	MG-NA	-2.34	2.00	2.06
10	6	101	LMT	O2'-C2'	-2.34	1.37	1.43
10	P	101	LMT	O2B-C2B	-2.34	1.37	1.43
6	C	102	BCL	MG-NC	-2.34	2.00	2.06
7	2	102	CRT	C30-C28	-2.33	1.40	1.45
7	K	101	CRT	C6-C7	-2.33	1.40	1.45
10	O	101	LMT	O2B-C2B	-2.33	1.37	1.43
6	R	103	BCL	MG-NA	-2.33	2.00	2.06
6	5	101	BCL	MG-NC	-2.33	2.00	2.06
6	M	404	BCL	MG-NC	-2.33	2.00	2.06
7	I	102	CRT	C35-C33	-2.33	1.40	1.45
6	R	103	BCL	MG-NC	-2.33	2.00	2.06
6	9	102	BCL	MG-NA	-2.33	2.00	2.06
7	0	101	CRT	C25-C23	-2.32	1.41	1.45
7	S	101	CRT	C11-C12	-2.32	1.41	1.45
10	B	101	LMT	O3B-C3B	-2.32	1.37	1.43
7	4	103	CRT	C25-C23	-2.31	1.41	1.45
10	O	101	LMT	O3B-C3B	-2.31	1.37	1.43
7	0	101	CRT	C16-C17	-2.31	1.41	1.45
6	Q	100	BCL	MG-NC	-2.31	2.00	2.06
6	B	102	BCL	MG-NA	-2.30	2.00	2.06
7	X	101	CRT	C25-C23	-2.30	1.41	1.45
6	7	104	BCL	MG-NA	-2.30	2.00	2.06
12	L	307	U10	C1-C2	-2.30	1.39	1.47
7	Z	102	CRT	C11-C12	-2.30	1.41	1.45
10	4	101	LMT	O2'-C2'	-2.30	1.37	1.43
10	F	101	LMT	O3B-C3B	-2.30	1.37	1.43
10	Z	101	LMT	O3B-C3B	-2.30	1.37	1.43
6	N	101	BCL	MG-NC	-2.30	2.00	2.06
7	4	103	CRT	C16-C17	-2.29	1.41	1.45
7	8	101	CRT	C35-C33	-2.29	1.41	1.45
6	L	308	BCL	C1B-CHB	2.29	1.47	1.41
7	K	101	CRT	C35-C33	-2.29	1.41	1.45
10	L	306	LMT	O2B-C2B	-2.29	1.37	1.43
6	4	102	BCL	MG-NA	-2.29	2.00	2.06
7	K	101	CRT	C11-C12	-2.29	1.41	1.45
7	8	101	CRT	C30-C28	-2.28	1.41	1.45
6	5	103	BCL	MG-NA	-2.28	2.00	2.06
7	O	102	CRT	C6-C7	-2.28	1.41	1.45
7	Z	102	CRT	C6-C7	-2.28	1.41	1.45
7	2	102	CRT	C35-C33	-2.28	1.41	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	2	101	LMT	O3B-C3B	-2.28	1.37	1.43
6	A	100	BCL	MG-NA	-2.28	2.00	2.06
7	D	101	CRT	C35-C33	-2.28	1.41	1.45
6	T	100	BCL	MG-NA	-2.28	2.00	2.06
6	J	101	BCL	MG-NC	-2.28	2.00	2.06
10	L	306	LMT	O3B-C3B	-2.28	1.37	1.43
7	K	101	CRT	C25-C23	-2.27	1.41	1.45
6	0	100	BCL	MG-NA	-2.27	2.00	2.06
6	V	102	BCL	MG-NC	-2.27	2.00	2.06
7	4	103	CRT	C35-C33	-2.27	1.41	1.45
12	M	410	U10	C1-C2	-2.27	1.39	1.47
7	X	101	CRT	C16-C17	-2.27	1.41	1.45
7	G	102	CRT	C6-C7	-2.27	1.41	1.45
7	S	101	CRT	C6-C7	-2.26	1.41	1.45
6	1	101	BCL	MG-NC	-2.26	2.00	2.06
7	D	101	CRT	C6-C7	-2.26	1.41	1.45
7	Q	101	CRT	C6-C7	-2.26	1.41	1.45
7	7	101	CRT	C6-C7	-2.25	1.41	1.45
6	C	101	BCL	MG-NC	-2.25	2.00	2.06
6	E	101	BCL	MG-NC	-2.25	2.00	2.06
10	6	101	LMT	O3B-C3B	-2.25	1.37	1.43
6	G	104	BCL	MG-NC	-2.25	2.00	2.06
10	Z	101	LMT	O2B-C2B	-2.25	1.37	1.43
6	V	102	BCL	MG-NA	-2.25	2.00	2.06
6	7	104	BCL	MG-NC	-2.25	2.00	2.06
6	M	402	BCL	MG-NC	-2.25	2.00	2.06
6	F	102	BCL	MG-NA	-2.25	2.00	2.06
6	Q	100	BCL	MG-NA	-2.24	2.00	2.06
12	L	303	U10	C1-C2	-2.24	1.39	1.47
6	J	101	BCL	MG-NA	-2.24	2.01	2.06
6	L	301	BCL	MG-NC	-2.24	2.01	2.06
10	2	101	LMT	O2'-C2'	-2.23	1.37	1.43
6	G	103	BCL	MG-NC	-2.23	2.01	2.06
6	3	100	BCL	MG-NC	-2.23	2.01	2.06
7	U	101	CRT	C6-C7	-2.23	1.41	1.45
6	U	100	BCL	MG-NA	-2.23	2.01	2.06
6	7	102	BCL	MG-NA	-2.23	2.01	2.06
6	9	102	BCL	C1B-CHB	2.22	1.47	1.41
6	Y	102	BCL	MG-NA	-2.22	2.01	2.06
6	L	301	BCL	MG-NA	-2.22	2.01	2.06
6	G	104	BCL	MG-NA	-2.21	2.01	2.06
6	5	101	BCL	MG-NA	-2.21	2.01	2.06

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	3	100	BCL	MG-NA	-2.21	2.01	2.06
6	L	308	BCL	C4B-CHC	2.21	1.47	1.41
7	4	103	CRT	C6-C7	-2.20	1.41	1.45
6	1	101	BCL	MG-NA	-2.20	2.01	2.06
6	C	101	BCL	MG-NA	-2.20	2.01	2.06
6	N	102	BCL	MG-NC	-2.20	2.01	2.06
7	0	101	CRT	C6-C7	-2.20	1.41	1.45
6	E	101	BCL	MG-NA	-2.20	2.01	2.06
11	M	405	BPH	C3A-C2A	-2.20	1.52	1.54
10	6	101	LMT	O2B-C2B	-2.19	1.37	1.43
10	Z	101	LMT	O2'-C2'	-2.19	1.37	1.43
6	V	101	BCL	MG-NC	-2.19	2.01	2.06
6	Y	101	BCL	MG-NA	-2.19	2.01	2.06
6	L	301	BCL	C1B-CHB	2.19	1.47	1.41
6	R	103	BCL	C1B-CHB	2.18	1.47	1.41
7	2	102	CRT	C25-C23	-2.18	1.41	1.45
6	C	101	BCL	C1B-CHB	2.18	1.47	1.41
6	M	404	BCL	C1B-CHB	2.18	1.47	1.41
6	R	101	BCL	MG-NC	-2.18	2.01	2.06
6	N	102	BCL	C1B-CHB	2.17	1.47	1.41
6	V	101	BCL	MG-NA	-2.17	2.01	2.06
7	4	103	CRT	C11-C12	-2.16	1.41	1.45
6	M	402	BCL	C1B-CHB	2.16	1.47	1.41
6	P	102	BCL	MG-NC	-2.15	2.01	2.06
6	J	101	BCL	C1B-CHB	2.15	1.47	1.41
6	5	103	BCL	C1B-CHB	2.15	1.47	1.41
6	G	103	BCL	MG-NA	-2.14	2.01	2.06
6	P	102	BCL	MG-NA	-2.14	2.01	2.06
6	C	102	BCL	MG-NA	-2.14	2.01	2.06
6	N	101	BCL	MG-NA	-2.14	2.01	2.06
6	4	102	BCL	C1B-CHB	2.14	1.46	1.41
10	L	306	LMT	O4'-C4B	-2.14	1.37	1.43
6	5	101	BCL	C1B-CHB	2.14	1.46	1.41
12	L	303	U10	C6-C1	2.13	1.39	1.35
6	0	100	BCL	C1B-CHB	2.13	1.46	1.41
7	X	101	CRT	C11-C12	-2.13	1.41	1.45
6	7	104	BCL	C1B-CHB	2.13	1.46	1.41
6	1	101	BCL	C1B-CHB	2.12	1.46	1.41
6	1	102	BCL	C4B-CHC	2.12	1.46	1.41
10	H	302	LMT	O4'-C4B	-2.12	1.38	1.43
6	R	101	BCL	MG-NA	-2.12	2.01	2.06
10	O	101	LMT	O4'-C4B	-2.12	1.38	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	104	BCL	C1B-CHB	2.11	1.46	1.41
10	F	101	LMT	O4'-C4B	-2.10	1.38	1.43
6	V	102	BCL	C1B-CHB	2.10	1.46	1.41
6	9	102	BCL	MG-NC	-2.10	2.01	2.06
7	2	102	CRT	C16-C17	-2.10	1.41	1.45
10	J	102	LMT	O4'-C4B	-2.10	1.38	1.43
10	4	101	LMT	O4'-C4B	-2.09	1.38	1.43
7	X	101	CRT	C6-C7	-2.09	1.41	1.45
12	L	309	U10	C6-C1	2.09	1.39	1.35
10	B	101	LMT	O4'-C4B	-2.09	1.38	1.43
6	N	101	BCL	C1B-CHB	2.09	1.46	1.41
7	2	102	CRT	C11-C12	-2.09	1.41	1.45
6	G	104	BCL	C4B-CHC	2.08	1.46	1.41
6	4	102	BCL	C4B-CHC	2.08	1.46	1.41
7	8	101	CRT	C25-C23	-2.08	1.41	1.45
6	B	102	BCL	C4B-CHC	2.08	1.46	1.41
6	R	101	BCL	C1B-CHB	2.08	1.46	1.41
6	L	301	BCL	C4B-CHC	2.08	1.46	1.41
7	2	102	CRT	C6-C7	-2.07	1.41	1.45
12	M	410	U10	C6-C1	2.07	1.39	1.35
6	1	102	BCL	C1B-CHB	2.07	1.46	1.41
10	O	101	LMT	O1'-C1'	-2.07	1.36	1.40
6	P	102	BCL	C1B-CHB	2.07	1.46	1.41
6	Y	102	BCL	C4B-CHC	2.07	1.46	1.41
12	L	307	U10	C6-C1	2.07	1.38	1.35
10	P	101	LMT	O4'-C4B	-2.06	1.38	1.43
7	8	101	CRT	C16-C17	-2.06	1.41	1.45
6	7	102	BCL	C1B-CHB	2.06	1.46	1.41
6	C	102	BCL	C1B-CHB	2.06	1.46	1.41
6	V	101	BCL	C1B-CHB	2.06	1.46	1.41
6	3	100	BCL	C1B-CHB	2.06	1.46	1.41
6	F	102	BCL	C1B-CHB	2.06	1.46	1.41
6	Q	100	BCL	C1B-CHB	2.05	1.46	1.41
6	F	102	BCL	C4B-CHC	2.05	1.46	1.41
6	M	404	BCL	C4B-CHC	2.05	1.46	1.41
6	A	100	BCL	C1B-CHB	2.05	1.46	1.41
6	Y	102	BCL	C1B-CHB	2.05	1.46	1.41
6	U	100	BCL	C4B-CHC	2.05	1.46	1.41
6	5	101	BCL	C4B-CHC	2.04	1.46	1.41
10	2	101	LMT	O4'-C4B	-2.04	1.38	1.43
10	R	102	LMT	O1'-C1'	-2.04	1.36	1.40
6	7	102	BCL	C4B-CHC	2.03	1.46	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	B	101	LMT	O2'-C2'	-2.03	1.38	1.43
10	R	102	LMT	O4'-C4B	-2.03	1.38	1.43
6	N	101	BCL	C4B-CHC	2.03	1.46	1.41
6	5	103	BCL	C4B-CHC	2.03	1.46	1.41
6	Y	101	BCL	C1B-CHB	2.03	1.46	1.41
6	C	102	BCL	C4B-CHC	2.02	1.46	1.41
7	8	101	CRT	C6-C7	-2.02	1.41	1.45
6	V	102	BCL	C4B-CHC	2.02	1.46	1.41
6	Y	101	BCL	C4B-CHC	2.02	1.46	1.41
6	G	103	BCL	C1B-CHB	2.02	1.46	1.41
10	6	101	LMT	O4'-C4B	-2.02	1.38	1.43
6	Q	100	BCL	C4B-CHC	2.02	1.46	1.41
7	8	101	CRT	C11-C12	-2.02	1.41	1.45
6	N	102	BCL	C4B-CHC	2.01	1.46	1.41
6	3	100	BCL	C4B-CHC	2.01	1.46	1.41
6	T	100	BCL	C1B-CHB	2.01	1.46	1.41
10	4	101	LMT	O1'-C1'	-2.01	1.36	1.40
6	J	103	BCL	C1B-CHB	2.01	1.46	1.41
6	B	102	BCL	C1B-CHB	2.01	1.46	1.41
10	Z	101	LMT	O4'-C4B	-2.00	1.38	1.43
6	U	100	BCL	C1B-CHB	2.00	1.46	1.41

All (1070) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	M	404	BCL	CHD-C1D-ND	-9.07	116.12	124.45
6	L	308	BCL	CHD-C1D-ND	-8.86	116.31	124.45
6	J	101	BCL	CHD-C1D-ND	-8.84	116.33	124.45
6	9	102	BCL	CHD-C1D-ND	-8.80	116.36	124.45
6	A	100	BCL	CHD-C1D-ND	-8.76	116.41	124.45
6	7	102	BCL	CHD-C1D-ND	-8.75	116.41	124.45
6	Y	101	BCL	CHD-C1D-ND	-8.70	116.46	124.45
6	T	100	BCL	CHD-C1D-ND	-8.67	116.49	124.45
6	P	102	BCL	CHD-C1D-ND	-8.60	116.55	124.45
6	R	101	BCL	CHD-C1D-ND	-8.59	116.56	124.45
6	C	101	BCL	CHD-C1D-ND	-8.57	116.58	124.45
6	M	402	BCL	CHD-C1D-ND	-8.55	116.60	124.45
6	L	301	BCL	CHD-C1D-ND	-8.54	116.61	124.45
6	F	102	BCL	CHD-C1D-ND	-8.53	116.62	124.45
6	E	101	BCL	CHD-C1D-ND	-8.51	116.63	124.45
6	V	101	BCL	CHD-C1D-ND	-8.51	116.63	124.45
6	J	103	BCL	CHD-C1D-ND	-8.51	116.63	124.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	G	103	BCL	CHD-C1D-ND	-8.47	116.67	124.45
6	5	103	BCL	CHD-C1D-ND	-8.47	116.67	124.45
6	Q	100	BCL	CHD-C1D-ND	-8.44	116.69	124.45
6	0	100	BCL	CHD-C1D-ND	-8.44	116.69	124.45
6	5	101	BCL	CHD-C1D-ND	-8.42	116.72	124.45
6	7	104	BCL	CHD-C1D-ND	-8.40	116.73	124.45
6	U	100	BCL	CHD-C1D-ND	-8.40	116.73	124.45
6	1	101	BCL	CHD-C1D-ND	-8.38	116.75	124.45
6	9	102	BCL	CMD-C2D-C1D	8.36	139.45	124.71
6	N	101	BCL	CHD-C1D-ND	-8.36	116.77	124.45
6	5	101	BCL	CMD-C2D-C1D	8.35	139.43	124.71
6	T	100	BCL	CMD-C2D-C1D	8.34	139.42	124.71
6	3	100	BCL	CHD-C1D-ND	-8.34	116.79	124.45
6	N	102	BCL	CHD-C1D-ND	-8.33	116.80	124.45
6	G	103	BCL	CMD-C2D-C1D	8.32	139.37	124.71
6	1	102	BCL	CHD-C1D-ND	-8.32	116.81	124.45
6	Y	101	BCL	CMD-C2D-C1D	8.31	139.35	124.71
6	R	101	BCL	CMD-C2D-C1D	8.29	139.32	124.71
6	7	102	BCL	CMD-C2D-C1D	8.29	139.32	124.71
6	M	404	BCL	CMD-C2D-C1D	8.29	139.32	124.71
6	J	101	BCL	CMD-C2D-C1D	8.28	139.30	124.71
6	3	100	BCL	CMD-C2D-C1D	8.25	139.25	124.71
6	R	103	BCL	CHD-C1D-ND	-8.22	116.90	124.45
6	P	102	BCL	CMD-C2D-C1D	8.22	139.20	124.71
6	1	101	BCL	CMD-C2D-C1D	8.21	139.18	124.71
6	A	100	BCL	CMD-C2D-C1D	8.19	139.14	124.71
6	L	308	BCL	CMD-C2D-C1D	8.18	139.13	124.71
6	V	101	BCL	CMD-C2D-C1D	8.17	139.11	124.71
6	E	101	BCL	CMD-C2D-C1D	8.16	139.10	124.71
6	B	102	BCL	CHD-C1D-ND	-8.14	116.98	124.45
6	4	102	BCL	CHD-C1D-ND	-8.13	116.98	124.45
6	C	101	BCL	CMD-C2D-C1D	8.10	138.98	124.71
6	N	101	BCL	CMD-C2D-C1D	8.08	138.95	124.71
6	G	104	BCL	CHD-C1D-ND	-8.07	117.04	124.45
6	V	102	BCL	CHD-C1D-ND	-8.06	117.04	124.45
6	L	301	BCL	CMD-C2D-C1D	8.03	138.87	124.71
6	Y	102	BCL	CHD-C1D-ND	-8.01	117.10	124.45
6	0	100	BCL	CMD-C2D-C1D	7.96	138.75	124.71
6	C	102	BCL	CHD-C1D-ND	-7.87	117.22	124.45
6	Q	100	BCL	CMD-C2D-C1D	7.86	138.56	124.71
6	7	104	BCL	CMD-C2D-C1D	7.80	138.46	124.71
6	F	102	BCL	CMD-C2D-C1D	7.79	138.44	124.71

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	M	402	BCL	CMD-C2D-C1D	7.67	138.23	124.71
6	5	103	BCL	CMD-C2D-C1D	7.66	138.22	124.71
6	R	103	BCL	CMD-C2D-C1D	7.65	138.19	124.71
6	J	103	BCL	CMD-C2D-C1D	7.64	138.18	124.71
6	1	102	BCL	CMD-C2D-C1D	7.62	138.14	124.71
6	N	102	BCL	CMD-C2D-C1D	7.59	138.08	124.71
6	4	102	BCL	CMD-C2D-C1D	7.47	137.88	124.71
6	B	102	BCL	CMD-C2D-C1D	7.47	137.87	124.71
6	U	100	BCL	CMD-C2D-C1D	7.46	137.86	124.71
6	V	102	BCL	CMD-C2D-C1D	7.43	137.81	124.71
6	G	104	BCL	CMD-C2D-C1D	7.35	137.67	124.71
6	C	102	BCL	CMD-C2D-C1D	7.18	137.37	124.71
6	Y	102	BCL	CMD-C2D-C1D	7.12	137.27	124.71
6	L	308	BCL	O2D-CGD-CBD	5.83	121.63	111.27
6	A	100	BCL	C2D-C1D-ND	5.71	114.31	110.10
6	M	402	BCL	O2D-CGD-CBD	5.62	121.25	111.27
6	1	101	BCL	C2D-C1D-ND	5.53	114.18	110.10
6	9	102	BCL	O2D-CGD-CBD	5.38	120.83	111.27
6	Y	101	BCL	C2D-C1D-ND	5.34	114.04	110.10
6	G	103	BCL	C2D-C1D-ND	5.28	113.99	110.10
6	L	301	BCL	C2D-C1D-ND	5.24	113.97	110.10
6	A	100	BCL	C3D-C2D-C1D	-5.23	98.69	105.83
6	9	102	BCL	C2D-C1D-ND	5.23	113.95	110.10
6	R	103	BCL	C2D-C1D-ND	5.21	113.94	110.10
6	C	101	BCL	C2D-C1D-ND	5.19	113.93	110.10
6	N	101	BCL	C2D-C1D-ND	5.16	113.91	110.10
6	1	101	BCL	C3D-C2D-C1D	-5.15	98.80	105.83
6	J	103	BCL	C2D-C1D-ND	5.15	113.90	110.10
6	T	100	BCL	C2D-C1D-ND	5.14	113.89	110.10
6	M	404	BCL	C2D-C1D-ND	5.11	113.87	110.10
6	P	102	BCL	C2D-C1D-ND	5.11	113.87	110.10
6	E	101	BCL	C2D-C1D-ND	5.10	113.87	110.10
6	Y	101	BCL	C3D-C2D-C1D	-5.10	98.87	105.83
6	1	101	BCL	O2D-CGD-CBD	5.08	120.30	111.27
6	0	100	BCL	C2D-C1D-ND	5.05	113.82	110.10
6	L	301	BCL	C3D-C2D-C1D	-5.04	98.95	105.83
6	J	101	BCL	C2D-C1D-ND	5.03	113.81	110.10
6	R	101	BCL	C2D-C1D-ND	5.03	113.81	110.10
6	G	104	BCL	C2D-C1D-ND	5.02	113.81	110.10
6	3	100	BCL	C3D-C2D-C1D	-5.02	98.98	105.83
6	C	101	BCL	C3D-C2D-C1D	-5.02	98.98	105.83
6	G	103	BCL	C3D-C2D-C1D	-5.02	98.99	105.83

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	9	102	BCL	C3D-C2D-C1D	-5.01	98.99	105.83
6	Y	102	BCL	C2D-C1D-ND	5.01	113.79	110.10
6	G	103	BCL	O2D-CGD-CBD	5.01	120.16	111.27
6	R	101	BCL	C3D-C2D-C1D	-5.00	99.01	105.83
6	T	100	BCL	C3D-C2D-C1D	-5.00	99.01	105.83
6	5	103	BCL	C2D-C1D-ND	4.99	113.78	110.10
6	E	101	BCL	C3D-C2D-C1D	-4.99	99.02	105.83
6	M	404	BCL	C3D-C2D-C1D	-4.98	99.03	105.83
6	3	100	BCL	C2D-C1D-ND	4.98	113.77	110.10
6	N	101	BCL	C3D-C2D-C1D	-4.97	99.05	105.83
6	P	102	BCL	C3D-C2D-C1D	-4.97	99.05	105.83
6	N	102	BCL	C2D-C1D-ND	4.96	113.76	110.10
6	J	101	BCL	C3D-C2D-C1D	-4.96	99.07	105.83
6	V	101	BCL	C3D-C2D-C1D	-4.96	99.07	105.83
6	7	102	BCL	C2D-C1D-ND	4.95	113.75	110.10
6	7	102	BCL	C3D-C2D-C1D	-4.95	99.08	105.83
6	M	402	BCL	C2D-C1D-ND	4.94	113.75	110.10
6	V	102	BCL	C2D-C1D-ND	4.94	113.75	110.10
6	V	101	BCL	O2D-CGD-CBD	4.92	120.02	111.27
6	3	100	BCL	O2D-CGD-CBD	4.92	120.01	111.27
6	V	101	BCL	C2D-C1D-ND	4.91	113.72	110.10
6	Y	101	BCL	O2D-CGD-CBD	4.90	119.98	111.27
6	C	102	BCL	C2D-C1D-ND	4.89	113.71	110.10
6	C	101	BCL	O2D-CGD-CBD	4.88	119.95	111.27
6	J	101	BCL	O2D-CGD-CBD	4.88	119.94	111.27
6	1	102	BCL	C2D-C1D-ND	4.87	113.70	110.10
6	4	102	BCL	C2D-C1D-ND	4.87	113.70	110.10
6	0	100	BCL	C3D-C2D-C1D	-4.87	99.19	105.83
6	7	104	BCL	C2D-C1D-ND	4.86	113.69	110.10
6	M	404	BCL	CHD-C4C-NC	4.86	130.47	125.08
6	R	103	BCL	C3D-C2D-C1D	-4.85	99.21	105.83
6	U	100	BCL	C2D-C1D-ND	4.85	113.68	110.10
6	N	101	BCL	O2D-CGD-CBD	4.84	119.88	111.27
6	R	101	BCL	O2D-CGD-CBD	4.84	119.87	111.27
6	J	103	BCL	C3D-C2D-C1D	-4.84	99.23	105.83
6	A	100	BCL	CHD-C4C-NC	4.84	130.45	125.08
6	E	101	BCL	O2D-CGD-CBD	4.84	119.86	111.27
6	5	101	BCL	C3D-C2D-C1D	-4.83	99.23	105.83
6	F	102	BCL	C2D-C1D-ND	4.83	113.67	110.10
6	B	102	BCL	C2D-C1D-ND	4.81	113.65	110.10
6	7	104	BCL	O2D-CGD-CBD	4.80	119.79	111.27
6	7	102	BCL	O2D-CGD-CBD	4.79	119.78	111.27

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	M	402	BCL	C3D-C2D-C1D	-4.78	99.31	105.83
6	F	102	BCL	O2D-CGD-CBD	4.77	119.75	111.27
7	8	101	CRT	C20-C21-C22	4.77	133.25	123.47
6	T	100	BCL	O2D-CGD-CBD	4.74	119.70	111.27
6	A	100	BCL	O2D-CGD-CBD	4.74	119.70	111.27
6	5	103	BCL	O2D-CGD-CBD	4.74	119.70	111.27
6	7	104	BCL	C3D-C2D-C1D	-4.74	99.36	105.83
6	F	102	BCL	C3D-C2D-C1D	-4.74	99.36	105.83
6	Y	101	BCL	CHD-C4C-NC	4.74	130.34	125.08
6	1	102	BCL	C3D-C2D-C1D	-4.73	99.37	105.83
6	N	102	BCL	C3D-C2D-C1D	-4.73	99.37	105.83
6	P	102	BCL	O2D-CGD-CBD	4.73	119.67	111.27
6	Q	100	BCL	C2D-C1D-ND	4.73	113.59	110.10
6	9	102	BCL	CHD-C4C-NC	4.72	130.32	125.08
6	5	103	BCL	C3D-C2D-C1D	-4.72	99.39	105.83
6	V	102	BCL	C3D-C2D-C1D	-4.72	99.39	105.83
6	5	101	BCL	C2D-C1D-ND	4.71	113.57	110.10
6	A	100	BCL	C1D-ND-C4D	-4.71	102.99	106.33
6	L	308	BCL	C3D-C2D-C1D	-4.70	99.41	105.83
6	U	100	BCL	C3D-C2D-C1D	-4.70	99.42	105.83
6	5	101	BCL	O2D-CGD-CBD	4.70	119.61	111.27
6	Y	102	BCL	C3D-C2D-C1D	-4.70	99.42	105.83
6	G	104	BCL	C3D-C2D-C1D	-4.68	99.45	105.83
6	Q	100	BCL	C3D-C2D-C1D	-4.68	99.45	105.83
6	C	102	BCL	C3D-C2D-C1D	-4.67	99.46	105.83
6	U	100	BCL	O2D-CGD-CBD	4.67	119.56	111.27
6	E	101	BCL	CMB-C2B-C3B	4.67	133.41	124.68
6	Y	101	BCL	CMB-C2B-C3B	4.66	133.39	124.68
6	J	103	BCL	O2D-CGD-CBD	4.65	119.53	111.27
6	4	102	BCL	C3D-C2D-C1D	-4.65	99.49	105.83
6	N	102	BCL	O2D-CGD-CBD	4.65	119.52	111.27
6	C	102	BCL	CMB-C2B-C3B	4.63	133.35	124.68
6	G	104	BCL	O2D-CGD-CBD	4.63	119.49	111.27
6	T	100	BCL	CMB-C2B-C3B	4.62	133.33	124.68
6	1	101	BCL	CHD-C4C-NC	4.62	130.21	125.08
6	1	101	BCL	C1D-ND-C4D	-4.62	103.05	106.33
6	4	102	BCL	O2D-CGD-CBD	4.62	119.47	111.27
6	U	100	BCL	CMB-C2B-C3B	4.61	133.30	124.68
6	B	102	BCL	C3D-C2D-C1D	-4.61	99.54	105.83
6	0	100	BCL	O2D-CGD-CBD	4.61	119.45	111.27
6	G	103	BCL	CHD-C4C-NC	4.60	130.18	125.08
6	B	102	BCL	O2D-CGD-CBD	4.60	119.44	111.27

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	N	102	BCL	CHD-C4C-NC	4.59	130.17	125.08
6	G	104	BCL	CHD-C4C-NC	4.58	130.17	125.08
6	T	100	BCL	CHD-C4C-NC	4.58	130.16	125.08
6	Y	101	BCL	C1D-ND-C4D	-4.57	103.09	106.33
6	J	103	BCL	CMB-C2B-C3B	4.57	133.23	124.68
7	X	101	CRT	C20-C21-C22	4.56	132.81	123.47
6	L	301	BCL	CHD-C4C-NC	4.56	130.14	125.08
6	Y	102	BCL	O2D-CGD-CBD	4.56	119.37	111.27
6	F	102	BCL	CMB-C2B-C3B	4.55	133.19	124.68
6	9	102	BCL	C1D-ND-C4D	-4.55	103.11	106.33
6	C	102	BCL	O2D-CGD-CBD	4.54	119.33	111.27
6	V	102	BCL	O2D-CGD-CBD	4.54	119.33	111.27
6	J	103	BCL	CHD-C4C-NC	4.53	130.11	125.08
6	Q	100	BCL	O2D-CGD-CBD	4.52	119.29	111.27
6	7	104	BCL	CHD-C4C-NC	4.51	130.09	125.08
6	G	103	BCL	C1D-ND-C4D	-4.51	103.13	106.33
6	B	102	BCL	CHD-C4C-NC	4.50	130.08	125.08
12	L	303	U10	C7-C8-C9	-4.49	119.33	126.79
6	N	102	BCL	CMB-C2B-C3B	4.48	133.06	124.68
6	1	101	BCL	CMB-C2B-C3B	4.47	133.04	124.68
6	5	103	BCL	CMB-C2B-C3B	4.47	133.04	124.68
7	I	102	CRT	C20-C21-C22	4.46	132.61	123.47
6	C	101	BCL	C1D-ND-C4D	-4.44	103.18	106.33
6	N	101	BCL	CMB-C2B-C3B	4.44	132.98	124.68
6	A	100	BCL	CMB-C2B-C3B	4.43	132.97	124.68
6	N	101	BCL	CHD-C4C-NC	4.42	129.98	125.08
6	M	404	BCL	C3C-C4C-CHD	-4.41	113.96	123.39
6	R	103	BCL	O2D-CGD-CBD	4.41	119.11	111.27
6	Q	100	BCL	CMB-C2B-C3B	4.41	132.93	124.68
6	P	102	BCL	CMB-C2B-C3B	4.41	132.93	124.68
6	B	102	BCL	CMB-C2B-C3B	4.41	132.92	124.68
6	1	102	BCL	CHD-C4C-NC	4.41	129.97	125.08
6	A	100	BCL	C3C-C4C-CHD	-4.41	113.98	123.39
6	M	402	BCL	CHD-C4C-NC	4.40	129.97	125.08
6	1	101	BCL	C3C-C4C-CHD	-4.40	114.00	123.39
6	M	404	BCL	CMB-C2B-C3B	4.39	132.89	124.68
6	Y	102	BCL	CMB-C2B-C3B	4.39	132.89	124.68
6	7	102	BCL	CMB-C2B-C3B	4.38	132.88	124.68
6	G	104	BCL	CMB-C2B-C3B	4.38	132.88	124.68
6	R	101	BCL	CMB-C2B-C3B	4.38	132.88	124.68
6	Y	101	BCL	C3C-C4C-CHD	-4.38	114.03	123.39
6	V	101	BCL	CHD-C4C-NC	4.38	129.94	125.08

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	G	103	BCL	CMB-C2B-C3B	4.37	132.85	124.68
6	9	102	BCL	C3C-C4C-CHD	-4.37	114.06	123.39
6	0	100	BCL	CHD-C4C-NC	4.37	129.93	125.08
6	P	102	BCL	C1D-ND-C4D	-4.36	103.24	106.33
6	4	102	BCL	CHD-C4C-NC	4.36	129.92	125.08
6	T	100	BCL	C1D-ND-C4D	-4.36	103.24	106.33
6	J	101	BCL	C1D-ND-C4D	-4.36	103.24	106.33
6	C	101	BCL	CHD-C4C-NC	4.35	129.91	125.08
12	L	309	U10	C7-C8-C9	-4.35	119.55	126.79
6	M	404	BCL	O2D-CGD-CBD	4.35	119.00	111.27
6	V	102	BCL	CHD-C4C-NC	4.35	129.91	125.08
6	L	301	BCL	C3C-C4C-CHD	-4.35	114.10	123.39
6	3	100	BCL	CMB-C2B-C3B	4.35	132.82	124.68
6	L	301	BCL	CMB-C2B-C3B	4.35	132.82	124.68
6	1	102	BCL	CMB-C2B-C3B	4.35	132.81	124.68
6	1	102	BCL	O2D-CGD-CBD	4.34	118.98	111.27
7	2	102	CRT	C20-C21-C22	4.34	132.36	123.47
6	G	104	BCL	C3C-C4C-CHD	-4.33	114.15	123.39
6	R	101	BCL	CHD-C4C-NC	4.33	129.88	125.08
6	R	103	BCL	CHD-C4C-NC	4.32	129.88	125.08
6	M	402	BCL	C1D-ND-C4D	-4.32	103.27	106.33
6	G	103	BCL	C3C-C4C-CHD	-4.31	114.18	123.39
6	V	101	BCL	CMB-C2B-C3B	4.31	132.75	124.68
6	0	100	BCL	CMB-C2B-C3B	4.30	132.72	124.68
6	N	101	BCL	C1D-ND-C4D	-4.29	103.28	106.33
6	0	100	BCL	C1D-ND-C4D	-4.29	103.29	106.33
6	M	404	BCL	C1D-ND-C4D	-4.29	103.29	106.33
6	G	104	BCL	C1D-ND-C4D	-4.28	103.30	106.33
6	4	102	BCL	CMB-C2B-C3B	4.28	132.68	124.68
6	7	104	BCL	CMB-C2B-C3B	4.26	132.66	124.68
6	3	100	BCL	CHD-C4C-NC	4.26	129.81	125.08
6	7	102	BCL	C1D-ND-C4D	-4.26	103.31	106.33
6	R	101	BCL	C1D-ND-C4D	-4.26	103.31	106.33
6	F	102	BCL	CHD-C4C-NC	4.25	129.80	125.08
6	N	102	BCL	C3C-C4C-CHD	-4.25	114.32	123.39
6	5	101	BCL	CHD-C4C-NC	4.24	129.78	125.08
6	E	101	BCL	C1D-ND-C4D	-4.24	103.33	106.33
6	V	102	BCL	CMB-C2B-C3B	4.23	132.60	124.68
6	U	100	BCL	CHD-C4C-NC	4.23	129.77	125.08
6	J	101	BCL	CHD-C4C-NC	4.22	129.77	125.08
6	Q	100	BCL	CHD-C4C-NC	4.22	129.77	125.08
6	L	308	BCL	CMB-C2B-C3B	4.21	132.56	124.68

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	L	301	BCL	C1D-ND-C4D	-4.21	103.35	106.33
6	7	102	BCL	CHD-C4C-NC	4.21	129.75	125.08
6	7	104	BCL	C3C-C4C-CHD	-4.20	114.42	123.39
6	9	102	BCL	CMB-C2B-C3B	4.20	132.53	124.68
6	Q	100	BCL	C1D-ND-C4D	-4.17	103.37	106.33
6	V	102	BCL	C3C-C4C-CHD	-4.17	114.48	123.39
6	R	103	BCL	C3C-C4C-CHD	-4.17	114.48	123.39
6	R	103	BCL	C1D-ND-C4D	-4.17	103.38	106.33
6	5	103	BCL	C1D-ND-C4D	-4.17	103.38	106.33
6	L	308	BCL	C2D-C1D-ND	4.16	113.17	110.10
6	V	101	BCL	C1D-ND-C4D	-4.16	103.38	106.33
6	B	102	BCL	C3C-C4C-CHD	-4.16	114.50	123.39
6	P	102	BCL	CHD-C4C-NC	4.16	129.70	125.08
6	J	103	BCL	C3C-C4C-CHD	-4.16	114.51	123.39
6	R	103	BCL	CMB-C2B-C3B	4.16	132.45	124.68
6	Y	102	BCL	CHD-C4C-NC	4.16	129.69	125.08
6	T	100	BCL	C3C-C4C-CHD	-4.15	114.52	123.39
6	E	101	BCL	CHD-C4C-NC	4.15	129.69	125.08
6	C	102	BCL	CHD-C4C-NC	4.15	129.69	125.08
7	Z	102	CRT	C20-C21-C22	4.14	131.96	123.47
6	N	102	BCL	C1D-ND-C4D	-4.14	103.39	106.33
6	7	104	BCL	C1D-ND-C4D	-4.14	103.39	106.33
6	B	102	BCL	C1D-ND-C4D	-4.12	103.41	106.33
6	N	101	BCL	C3C-C4C-CHD	-4.11	114.61	123.39
6	J	103	BCL	C1D-ND-C4D	-4.11	103.42	106.33
6	1	102	BCL	C3C-C4C-CHD	-4.10	114.63	123.39
6	4	102	BCL	C3C-C4C-CHD	-4.10	114.63	123.39
6	3	100	BCL	C1D-ND-C4D	-4.09	103.43	106.33
6	5	103	BCL	CHD-C4C-NC	4.09	129.62	125.08
6	V	102	BCL	C1D-ND-C4D	-4.08	103.44	106.33
6	5	101	BCL	C1D-ND-C4D	-4.08	103.44	106.33
6	C	101	BCL	CMB-C2B-C3B	4.07	132.30	124.68
6	F	102	BCL	C1D-ND-C4D	-4.07	103.45	106.33
6	U	100	BCL	C1D-ND-C4D	-4.07	103.45	106.33
7	U	101	CRT	C20-C21-C22	4.06	131.80	123.47
6	J	101	BCL	CMB-C2B-C3B	4.05	132.26	124.68
7	4	103	CRT	C20-C21-C22	4.05	131.77	123.47
6	C	102	BCL	C3C-C4C-CHD	-4.05	114.74	123.39
6	Y	102	BCL	C1D-ND-C4D	-4.04	103.46	106.33
6	C	101	BCL	C3C-C4C-CHD	-4.04	114.77	123.39
6	1	102	BCL	C1D-ND-C4D	-4.01	103.48	106.33
6	4	102	BCL	C1D-ND-C4D	-4.01	103.48	106.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	O	102	CRT	C20-C21-C22	4.00	131.68	123.47
7	K	101	CRT	C20-C21-C22	3.98	131.63	123.47
6	R	101	BCL	C3C-C4C-CHD	-3.98	114.88	123.39
6	V	101	BCL	C3C-C4C-CHD	-3.98	114.90	123.39
6	0	100	BCL	C3C-C4C-CHD	-3.98	114.90	123.39
7	D	101	CRT	C20-C21-C22	3.97	131.61	123.47
6	M	402	BCL	C3C-C4C-CHD	-3.96	114.92	123.39
6	Y	102	BCL	C3C-C4C-CHD	-3.96	114.93	123.39
6	3	100	BCL	C3C-C4C-CHD	-3.95	114.96	123.39
7	0	101	CRT	C20-C21-C22	3.94	131.55	123.47
6	F	102	BCL	C3C-C4C-CHD	-3.93	114.99	123.39
6	U	100	BCL	C3C-C4C-CHD	-3.92	115.01	123.39
6	Q	100	BCL	C3C-C4C-CHD	-3.92	115.02	123.39
6	C	102	BCL	C1D-ND-C4D	-3.91	103.56	106.33
6	J	101	BCL	C3C-C4C-CHD	-3.89	115.08	123.39
6	L	301	BCL	O2D-CGD-CBD	3.88	118.17	111.27
6	L	308	BCL	CHD-C4C-NC	3.87	129.38	125.08
6	P	102	BCL	C3C-C4C-CHD	-3.86	115.16	123.39
6	E	101	BCL	C3C-C4C-CHD	-3.85	115.16	123.39
6	G	103	BCL	C1-C2-C3	-3.85	119.39	126.04
6	5	103	BCL	C3C-C4C-CHD	-3.83	115.21	123.39
6	J	101	BCL	C1-C2-C3	-3.83	119.42	126.04
7	S	101	CRT	C20-C21-C22	3.82	131.29	123.47
6	5	101	BCL	C3C-C4C-CHD	-3.79	115.29	123.39
6	M	402	BCL	CMB-C2B-C3B	3.79	131.77	124.68
6	7	102	BCL	C3C-C4C-CHD	-3.78	115.31	123.39
6	5	101	BCL	CMB-C2B-C3B	3.76	131.72	124.68
7	7	101	CRT	C20-C21-C22	3.71	131.08	123.47
6	9	102	BCL	C1-C2-C3	-3.70	119.65	126.04
12	L	307	U10	C7-C8-C9	-3.66	120.70	126.79
6	M	402	BCL	C3D-C4D-ND	3.62	116.09	110.24
12	M	410	U10	C7-C8-C9	-3.61	120.79	126.79
7	G	102	CRT	C20-C21-C22	3.57	130.79	123.47
7	Q	101	CRT	C20-C21-C22	3.56	130.78	123.47
6	J	101	BCL	C3D-C4D-ND	3.51	115.92	110.24
6	7	102	BCL	C3D-C4D-ND	3.51	115.91	110.24
6	U	100	BCL	C3D-C4D-ND	3.51	115.91	110.24
6	Q	100	BCL	C3D-C4D-ND	3.51	115.91	110.24
6	G	104	BCL	C3D-C4D-ND	3.50	115.90	110.24
6	B	102	BCL	C3D-C4D-ND	3.50	115.89	110.24
7	2	102	CRT	C36-C35-C33	3.49	131.17	125.89
6	P	102	BCL	C3D-C4D-ND	3.49	115.89	110.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	M	407	QAK	CD2-CE2-CZ2	3.49	114.70	110.75
6	5	103	BCL	C3D-C4D-ND	3.49	115.88	110.24
6	C	101	BCL	C3D-C4D-ND	3.48	115.87	110.24
6	9	102	BCL	C3D-C4D-ND	3.48	115.86	110.24
6	0	100	BCL	C3D-C4D-ND	3.47	115.85	110.24
6	Y	102	BCL	C3D-C4D-ND	3.47	115.85	110.24
6	4	102	BCL	C3D-C4D-ND	3.47	115.84	110.24
6	7	104	BCL	C3D-C4D-ND	3.47	115.84	110.24
6	1	101	BCL	C3D-C4D-ND	3.45	115.82	110.24
12	M	410	U10	C35-C34-C36	3.45	121.07	115.27
6	1	102	BCL	C3D-C4D-ND	3.45	115.82	110.24
6	N	102	BCL	C3D-C4D-ND	3.45	115.81	110.24
6	L	308	BCL	C4B-CHC-C1C	-3.44	123.30	130.12
6	F	102	BCL	C3D-C4D-ND	3.44	115.81	110.24
6	T	100	BCL	C3D-C4D-ND	3.44	115.80	110.24
6	V	101	BCL	C3D-C4D-ND	3.43	115.79	110.24
6	Y	101	BCL	C3D-C4D-ND	3.43	115.79	110.24
7	B	103	CRT	C20-C21-C22	3.43	130.50	123.47
6	A	100	BCL	C3D-C4D-ND	3.43	115.78	110.24
6	M	404	BCL	C3D-C4D-ND	3.43	115.78	110.24
6	G	103	BCL	C3D-C4D-ND	3.43	115.78	110.24
6	R	101	BCL	C3D-C4D-ND	3.42	115.77	110.24
6	L	308	BCL	C1D-ND-C4D	-3.42	103.90	106.33
6	5	101	BCL	C3D-C4D-ND	3.42	115.77	110.24
12	M	406	U10	C27-C28-C29	-3.42	119.43	127.66
7	8	101	CRT	C36-C35-C33	3.41	131.05	125.89
7	X	101	CRT	C8-C7-C9	-3.41	118.14	122.92
12	L	307	U10	C15-C14-C16	3.40	121.00	115.27
6	N	101	BCL	C3D-C4D-ND	3.40	115.74	110.24
6	V	102	BCL	C3D-C4D-ND	3.39	115.72	110.24
6	E	101	BCL	C3D-C4D-ND	3.39	115.72	110.24
6	7	102	BCL	C1-C2-C3	-3.39	120.19	126.04
12	M	410	U10	C22-C23-C24	-3.38	119.51	127.66
6	G	103	BCL	C4-C3-C5	3.38	120.95	115.27
6	J	103	BCL	C3D-C4D-ND	3.37	115.70	110.24
6	V	101	BCL	C1-C2-C3	-3.37	120.21	126.04
6	P	102	BCL	C1-C2-C3	-3.37	120.21	126.04
6	C	102	BCL	C3D-C4D-ND	3.37	115.69	110.24
6	L	308	BCL	C3D-C4D-ND	3.36	115.68	110.24
6	R	103	BCL	C3D-C4D-ND	3.36	115.67	110.24
12	L	309	U10	C27-C28-C29	-3.35	119.59	127.66
7	2	102	CRT	C24-C23-C22	-3.34	118.25	122.92

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	M	410	U10	C27-C28-C29	-3.34	119.63	127.66
7	X	101	CRT	C24-C23-C22	-3.32	118.27	122.92
7	8	101	CRT	C24-C23-C22	-3.32	118.27	122.92
6	3	100	BCL	C3D-C4D-ND	3.32	115.61	110.24
7	8	101	CRT	C8-C7-C9	-3.32	118.27	122.92
6	C	101	BCL	C1-C2-C3	-3.29	120.35	126.04
6	L	301	BCL	C3D-C4D-ND	3.29	115.55	110.24
7	7	101	CRT	C8-C7-C9	-3.27	118.34	122.92
7	0	101	CRT	C24-C23-C22	-3.27	118.35	122.92
12	M	410	U10	C42-C43-C44	-3.26	119.81	127.66
6	Q	100	BCL	C1-C2-C3	-3.26	120.41	126.04
10	6	101	LMT	C1'-O5'-C5'	-3.26	107.29	113.69
6	C	102	BCL	C1-C2-C3	-3.25	120.42	126.04
6	U	100	BCL	C1-C2-C3	-3.25	120.42	126.04
6	5	101	BCL	C1-C2-C3	-3.25	120.42	126.04
12	M	406	U10	C25-C24-C26	3.25	120.74	115.27
12	L	307	U10	C32-C33-C34	-3.25	119.84	127.66
7	I	102	CRT	C24-C23-C22	-3.25	118.37	122.92
7	U	101	CRT	C24-C23-C22	-3.25	118.37	122.92
6	A	100	BCL	C1-C2-C3	-3.25	120.43	126.04
12	L	303	U10	C27-C28-C29	-3.24	119.85	127.66
12	L	307	U10	C22-C23-C24	-3.23	119.89	127.66
6	L	301	BCL	O2A-CGA-CBA	3.22	122.02	111.91
12	L	307	U10	C42-C43-C44	-3.22	119.90	127.66
6	C	101	BCL	C4-C3-C5	3.22	120.69	115.27
7	4	103	CRT	C24-C23-C22	-3.21	118.42	122.92
6	E	101	BCL	C1-C2-C3	-3.21	120.49	126.04
12	L	307	U10	C25-C24-C26	3.20	120.65	115.27
7	K	101	CRT	C8-C7-C9	-3.20	118.45	122.92
7	O	102	CRT	C8-C7-C9	-3.20	118.45	122.92
6	3	100	BCL	C4-C3-C5	3.19	120.64	115.27
7	S	101	CRT	C24-C23-C22	-3.19	118.45	122.92
7	K	101	CRT	C24-C23-C22	-3.19	118.45	122.92
12	L	309	U10	C32-C33-C34	-3.19	119.98	127.66
6	L	308	BCL	C3C-C4C-CHD	-3.19	116.58	123.39
7	I	102	CRT	C8-C7-C9	-3.19	118.46	122.92
6	Y	101	BCL	C1-C2-C3	-3.18	120.54	126.04
12	M	410	U10	C12-C13-C14	-3.18	120.01	127.66
6	A	100	BCL	C4-C3-C5	3.18	120.61	115.27
12	M	410	U10	C32-C33-C34	-3.17	120.02	127.66
7	B	103	CRT	C8-C7-C9	-3.17	118.48	122.92
7	X	101	CRT	C6-C7-C9	3.17	123.80	118.94

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	L	303	U10	C12-C13-C14	-3.17	120.03	127.66
6	1	102	BCL	C1-C2-C3	-3.16	120.57	126.04
12	L	307	U10	C20-C19-C21	3.16	120.59	115.27
6	E	101	BCL	C4-C3-C5	3.16	120.58	115.27
7	Q	101	CRT	C8-C7-C9	-3.16	118.50	122.92
6	3	100	BCL	C1-C2-C3	-3.15	120.59	126.04
7	D	101	CRT	C24-C23-C22	-3.15	118.51	122.92
6	Y	101	BCL	C4-C3-C5	3.15	120.57	115.27
7	0	101	CRT	C8-C7-C9	-3.15	118.51	122.92
7	Z	102	CRT	C24-C23-C22	-3.14	118.53	122.92
12	M	406	U10	C12-C13-C14	-3.13	120.11	127.66
7	7	101	CRT	C24-C23-C22	-3.13	118.54	122.92
12	M	406	U10	C35-C34-C36	3.12	120.53	115.27
6	V	101	BCL	C4-C3-C5	3.12	120.52	115.27
6	0	100	BCL	C1-C2-C3	-3.12	120.65	126.04
10	J	102	LMT	C1'-O5'-C5'	-3.11	107.57	113.69
6	R	101	BCL	C1-C2-C3	-3.11	120.66	126.04
7	G	102	CRT	C24-C23-C22	-3.10	118.58	122.92
10	O	101	LMT	C1'-O5'-C5'	-3.10	107.60	113.69
7	0	101	CRT	C18-C17-C19	-3.10	118.58	122.92
6	R	101	BCL	O2A-CGA-CBA	3.10	121.64	111.91
6	9	102	BCL	C4-C3-C5	3.09	120.46	115.27
7	8	101	CRT	C15-C14-C12	3.08	131.70	127.31
7	O	102	CRT	C24-C23-C22	-3.07	118.62	122.92
12	M	410	U10	C25-C24-C26	3.07	120.44	115.27
7	U	101	CRT	C8-C7-C9	-3.07	118.62	122.92
7	Q	101	CRT	C24-C23-C22	-3.07	118.62	122.92
6	V	102	BCL	C1-C2-C3	-3.07	120.74	126.04
7	B	103	CRT	C24-C23-C22	-3.06	118.64	122.92
10	2	101	LMT	C3'-C4'-C5'	-3.05	103.92	110.93
12	L	309	U10	C42-C43-C44	-3.05	120.31	127.66
6	5	101	BCL	O2A-CGA-CBA	3.05	121.47	111.91
7	8	101	CRT	C6-C7-C9	3.05	123.61	118.94
6	P	102	BCL	C4-C3-C5	3.05	120.39	115.27
6	Y	101	BCL	O2A-CGA-CBA	3.05	121.46	111.91
6	M	402	BCL	C4-C3-C5	3.03	120.37	115.27
6	N	101	BCL	O2A-CGA-CBA	3.03	121.42	111.91
6	7	104	BCL	C1-C2-C3	-3.03	120.81	126.04
7	S	101	CRT	C8-C7-C9	-3.03	118.68	122.92
6	T	100	BCL	C1-C2-C3	-3.03	120.81	126.04
12	L	307	U10	C50-C49-C51	3.02	120.36	115.27
12	M	406	U10	C15-C14-C16	3.02	120.35	115.27

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	G	102	CRT	C8-C7-C9	-3.01	118.70	122.92
7	2	102	CRT	C8-C7-C9	-3.01	118.70	122.92
6	1	102	BCL	C4-C3-C5	3.01	120.33	115.27
12	L	309	U10	C12-C13-C14	-3.00	120.43	127.66
12	L	309	U10	C50-C49-C51	3.00	120.32	115.27
7	8	101	CRT	C25-C23-C22	3.00	123.54	118.94
6	L	301	BCL	C4-C3-C5	3.00	120.32	115.27
7	X	101	CRT	C29-C28-C27	-3.00	118.72	122.92
7	2	102	CRT	C18-C17-C19	-3.00	118.73	122.92
7	X	101	CRT	C25-C23-C22	2.99	123.53	118.94
6	R	101	BCL	CHC-C1C-NC	2.99	128.64	124.51
12	L	309	U10	C40-C39-C41	2.98	120.29	115.27
12	M	410	U10	C30-C29-C31	2.97	120.27	115.27
7	2	102	CRT	C29-C28-C27	-2.97	118.76	122.92
6	L	308	BCL	C4-C3-C5	2.97	120.26	115.27
6	T	100	BCL	C4-C3-C5	2.97	120.26	115.27
6	R	103	BCL	C1-C2-C3	-2.97	120.91	126.04
7	G	102	CRT	C18-C17-C19	-2.97	118.77	122.92
12	L	307	U10	C45-C44-C46	2.97	120.26	115.27
12	L	303	U10	C35-C34-C36	2.96	120.26	115.27
6	J	103	BCL	CHB-C4A-NA	2.96	128.61	124.51
12	L	309	U10	C20-C19-C21	2.96	120.25	115.27
7	8	101	CRT	C31-C32-C33	2.96	131.53	127.31
6	T	100	BCL	CHC-C1C-NC	2.96	128.60	124.51
6	J	101	BCL	CHC-C1C-NC	2.95	128.60	124.51
6	U	100	BCL	O2A-CGA-CBA	2.95	121.17	111.91
6	1	101	BCL	C4-C3-C5	2.95	120.24	115.27
7	4	103	CRT	C8-C7-C9	-2.95	118.79	122.92
7	2	102	CRT	C25-C23-C22	2.95	123.46	118.94
6	V	101	BCL	CHC-C1C-NC	2.94	128.58	124.51
7	8	101	CRT	C21-C20-C19	2.94	129.50	123.47
7	2	102	CRT	C13-C12-C14	-2.94	118.80	122.92
6	T	100	BCL	O2A-CGA-CBA	2.94	121.12	111.91
6	L	301	BCL	C1-C2-C3	-2.94	120.97	126.04
6	G	104	BCL	C1-C2-C3	-2.93	120.97	126.04
12	M	406	U10	C20-C19-C21	2.93	120.20	115.27
6	G	104	BCL	O2A-CGA-CBA	2.93	121.11	111.91
6	N	101	BCL	C4-C3-C5	2.93	120.20	115.27
12	M	406	U10	C17-C18-C19	-2.93	120.61	127.66
12	L	303	U10	C22-C23-C24	-2.93	120.61	127.66
10	4	101	LMT	C3'-C4'-C5'	-2.93	104.22	110.93
6	P	102	BCL	O2A-CGA-CBA	2.93	121.09	111.91

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	M	410	U10	C50-C49-C51	2.93	120.19	115.27
6	F	102	BCL	C1-C2-C3	-2.92	120.99	126.04
12	L	307	U10	C47-C48-C49	-2.92	120.64	127.66
7	0	101	CRT	C13-C12-C14	-2.91	118.84	122.92
10	O	101	LMT	C3'-C4'-C5'	-2.91	104.26	110.93
7	D	101	CRT	C18-C17-C19	-2.91	118.85	122.92
6	G	103	BCL	CHC-C1C-NC	2.91	128.53	124.51
6	7	102	BCL	C4-C3-C5	2.91	120.16	115.27
7	Q	101	CRT	C18-C17-C19	-2.91	118.85	122.92
6	M	402	BCL	C1-C2-C3	-2.91	121.02	126.04
7	B	103	CRT	C34-C33-C32	-2.90	118.86	122.92
6	R	101	BCL	C4-C3-C5	2.90	120.15	115.27
12	L	307	U10	C40-C39-C41	2.90	120.15	115.27
6	9	102	BCL	CHC-C1C-NC	2.90	128.52	124.51
7	8	101	CRT	C18-C17-C19	-2.90	118.87	122.92
6	5	101	BCL	C4-C3-C5	2.89	120.14	115.27
7	G	102	CRT	C21-C20-C19	2.89	129.40	123.47
6	P	102	BCL	CHC-C1C-NC	2.89	128.51	124.51
7	D	101	CRT	C8-C7-C9	-2.89	118.88	122.92
6	1	101	BCL	C1-C2-C3	-2.89	121.05	126.04
12	L	309	U10	C35-C34-C36	2.89	120.13	115.27
12	L	307	U10	C17-C18-C19	-2.88	120.71	127.66
7	S	101	CRT	C18-C17-C19	-2.88	118.88	122.92
7	B	103	CRT	C18-C17-C19	-2.88	118.89	122.92
6	J	103	BCL	C1-C2-C3	-2.88	121.06	126.04
7	Z	102	CRT	C29-C28-C27	-2.88	118.89	122.92
7	Z	102	CRT	C8-C7-C9	-2.88	118.89	122.92
6	4	102	BCL	O2A-CGA-CBA	2.87	120.92	111.91
12	L	307	U10	C10-C9-C11	2.87	120.09	115.27
7	U	101	CRT	C13-C12-C14	-2.87	118.91	122.92
6	J	101	BCL	C4-C3-C5	2.87	120.09	115.27
10	J	102	LMT	O1'-C1'-C2'	2.86	112.77	108.30
6	R	103	BCL	CHB-C4A-NA	2.86	128.47	124.51
6	C	102	BCL	O2A-CGA-CBA	2.86	120.89	111.91
6	E	101	BCL	CHC-C1C-NC	2.86	128.47	124.51
6	7	102	BCL	O2A-CGA-CBA	2.86	120.88	111.91
6	G	104	BCL	CHB-C4A-NA	2.86	128.46	124.51
6	U	100	BCL	C4-C3-C5	2.85	120.07	115.27
12	L	309	U10	C47-C48-C49	-2.85	120.79	127.66
12	M	410	U10	C10-C9-C11	2.85	120.07	115.27
6	L	308	BCL	O2D-CGD-O1D	-2.85	118.27	123.84
7	0	101	CRT	C29-C28-C27	-2.85	118.93	122.92

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	X	101	CRT	C34-C33-C32	-2.85	118.93	122.92
7	S	101	CRT	C34-C33-C32	-2.85	118.94	122.92
6	4	102	BCL	C1-C2-C3	-2.85	121.12	126.04
12	L	303	U10	C30-C29-C31	2.85	120.06	115.27
6	A	100	BCL	CHC-C1C-NC	2.84	128.44	124.51
7	U	101	CRT	C18-C17-C19	-2.84	118.94	122.92
6	7	104	BCL	CHB-C4A-NA	2.84	128.44	124.51
7	0	101	CRT	C21-C20-C19	2.84	129.29	123.47
12	M	410	U10	C15-C14-C16	2.84	120.05	115.27
6	Y	102	BCL	C1-C2-C3	-2.84	121.14	126.04
7	Z	102	CRT	C34-C33-C32	-2.84	118.95	122.92
6	3	100	BCL	O2A-CGA-CBA	2.83	120.80	111.91
6	Y	102	BCL	O2A-CGA-CBA	2.83	120.80	111.91
12	L	309	U10	C15-C14-C16	2.83	120.03	115.27
6	5	103	BCL	O2A-CGA-CBA	2.83	120.78	111.91
6	1	101	BCL	O2A-CGA-CBA	2.83	120.78	111.91
6	M	404	BCL	O2A-CGA-CBA	2.83	120.78	111.91
7	4	103	CRT	C29-C28-C27	-2.82	118.97	122.92
7	0	101	CRT	C25-C23-C22	2.82	123.27	118.94
12	L	307	U10	C35-C34-C36	2.82	120.02	115.27
6	L	301	BCL	CHC-C1C-NC	2.82	128.41	124.51
7	Q	101	CRT	C21-C20-C19	2.82	129.24	123.47
7	B	103	CRT	C13-C12-C14	-2.82	118.98	122.92
7	7	101	CRT	C18-C17-C19	-2.82	118.98	122.92
6	L	308	BCL	O2A-CGA-CBA	2.81	120.74	111.91
6	Q	100	BCL	C4-C3-C5	2.81	120.00	115.27
12	L	307	U10	C30-C29-C31	2.81	120.00	115.27
6	V	102	BCL	CHB-C4A-NA	2.81	128.40	124.51
7	O	102	CRT	C18-C17-C19	-2.81	118.99	122.92
7	I	102	CRT	C36-C35-C33	2.81	130.14	125.89
7	4	103	CRT	C15-C14-C12	2.81	131.32	127.31
6	J	103	BCL	CHC-C1C-NC	2.81	128.39	124.51
10	Z	101	LMT	C3'-C4'-C5'	-2.80	104.50	110.93
6	N	102	BCL	O2A-CGA-CBA	2.80	120.70	111.91
7	4	103	CRT	C34-C33-C32	-2.80	119.00	122.92
12	M	410	U10	C20-C19-C21	2.80	119.98	115.27
7	K	101	CRT	C34-C33-C32	-2.80	119.00	122.92
12	L	309	U10	C22-C23-C24	-2.80	120.93	127.66
6	V	101	BCL	O2A-CGA-CBA	2.80	120.68	111.91
7	X	101	CRT	C13-C12-C14	-2.80	119.01	122.92
6	C	101	BCL	O2A-CGA-CBA	2.79	120.67	111.91
6	1	102	BCL	O2A-CGA-CBA	2.79	120.67	111.91

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	B	102	BCL	CHB-C4A-NA	2.79	128.37	124.51
7	K	101	CRT	C29-C28-C27	-2.79	119.02	122.92
6	3	100	BCL	CHC-C1C-NC	2.78	128.36	124.51
6	U	100	BCL	CHC-C1C-NC	2.78	128.36	124.51
7	7	101	CRT	C6-C7-C9	2.78	123.21	118.94
6	V	102	BCL	O2A-CGA-CBA	2.78	120.64	111.91
6	9	102	BCL	O2D-CGD-O1D	-2.77	118.41	123.84
6	9	102	BCL	O2A-CGA-CBA	2.77	120.61	111.91
6	M	402	BCL	O2D-CGD-O1D	-2.77	118.41	123.84
6	Q	100	BCL	CHC-C1C-NC	2.77	128.35	124.51
6	1	101	BCL	CHC-C1C-NC	2.77	128.35	124.51
6	0	100	BCL	O2A-CGA-CBA	2.77	120.61	111.91
7	D	101	CRT	C34-C33-C32	-2.77	119.04	122.92
7	I	102	CRT	C18-C17-C19	-2.77	119.04	122.92
7	X	101	CRT	C18-C17-C19	-2.77	119.04	122.92
7	K	101	CRT	C6-C7-C9	2.77	123.19	118.94
6	G	103	BCL	O2A-CGA-CBA	2.77	120.59	111.91
7	B	103	CRT	C21-C20-C19	2.76	129.13	123.47
7	I	102	CRT	C13-C12-C14	-2.76	119.05	122.92
10	F	101	LMT	C1'-O5'-C5'	-2.76	108.27	113.69
7	K	101	CRT	C18-C17-C19	-2.76	119.05	122.92
6	J	101	BCL	O2A-CGA-CBA	2.76	120.57	111.91
6	E	101	BCL	O2A-CGA-CBA	2.76	120.57	111.91
7	U	101	CRT	C34-C33-C32	-2.76	119.06	122.92
6	V	102	BCL	C4-C3-C5	2.76	119.91	115.27
6	A	100	BCL	O2A-CGA-CBA	2.76	120.56	111.91
6	U	100	BCL	CHB-C4A-NA	2.76	128.32	124.51
6	7	104	BCL	CHC-C1C-NC	2.75	128.32	124.51
10	4	101	LMT	O5B-C5B-C4B	2.75	114.69	109.69
6	N	102	BCL	CHB-C4A-NA	2.75	128.32	124.51
6	R	103	BCL	O2A-CGA-CBA	2.75	120.54	111.91
12	L	303	U10	C1M-C1-C6	-2.75	119.91	124.40
12	L	303	U10	C32-C33-C34	-2.75	121.04	127.66
6	5	103	BCL	CHB-C4A-NA	2.75	128.31	124.51
12	M	410	U10	C17-C18-C19	-2.75	121.05	127.66
6	U	100	BCL	O2D-CGD-O1D	-2.74	118.47	123.84
12	L	309	U10	C25-C24-C26	2.74	119.89	115.27
7	4	103	CRT	C36-C35-C33	2.74	130.03	125.89
6	Y	102	BCL	CHB-C4A-NA	2.74	128.30	124.51
7	0	101	CRT	C34-C33-C32	-2.74	119.09	122.92
6	J	103	BCL	O2A-CGA-CBA	2.73	120.49	111.91
7	K	101	CRT	C13-C12-C14	-2.73	119.09	122.92

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	Z	102	CRT	C18-C17-C19	-2.73	119.09	122.92
6	B	102	BCL	O2D-CGD-O1D	-2.73	118.49	123.84
7	G	102	CRT	C29-C28-C27	-2.73	119.10	122.92
7	S	101	CRT	C13-C12-C14	-2.73	119.10	122.92
6	5	101	BCL	CMD-C2D-C3D	-2.73	121.33	127.61
10	P	101	LMT	C1'-O5'-C5'	-2.73	108.33	113.69
7	4	103	CRT	C18-C17-C19	-2.73	119.10	122.92
7	Q	101	CRT	C29-C28-C27	-2.72	119.11	122.92
6	F	102	BCL	O2A-CGA-CBA	2.72	120.46	111.91
6	R	103	BCL	CHC-C1C-NC	2.72	128.28	124.51
6	Y	101	BCL	CHC-C1C-NC	2.72	128.27	124.51
6	C	102	BCL	CHB-C4A-NA	2.71	128.27	124.51
6	F	102	BCL	CHB-C4A-NA	2.71	128.26	124.51
7	Q	101	CRT	C13-C12-C14	-2.71	119.12	122.92
6	0	100	BCL	CHB-C4A-NA	2.71	128.26	124.51
6	5	103	BCL	C1-C2-C3	-2.71	121.36	126.04
7	U	101	CRT	C25-C23-C22	2.70	123.09	118.94
10	Z	101	LMT	C1'-O5'-C5'	-2.70	108.38	113.69
7	S	101	CRT	C29-C28-C27	-2.70	119.14	122.92
7	S	101	CRT	C21-C20-C19	2.70	129.01	123.47
6	Q	100	BCL	CHB-C4A-NA	2.70	128.25	124.51
7	D	101	CRT	C13-C12-C14	-2.70	119.14	122.92
12	L	309	U10	C30-C29-C31	2.70	119.81	115.27
7	4	103	CRT	C25-C23-C22	2.70	123.08	118.94
7	2	102	CRT	C21-C20-C19	2.70	129.00	123.47
7	D	101	CRT	C29-C28-C27	-2.70	119.14	122.92
6	G	104	BCL	CHC-C1C-NC	2.70	128.24	124.51
7	I	102	CRT	C25-C23-C22	2.69	123.08	118.94
7	7	101	CRT	C29-C28-C27	-2.69	119.16	122.92
6	N	102	BCL	C1-C2-C3	-2.69	121.39	126.04
12	M	406	U10	C10-C9-C11	2.69	119.79	115.27
12	M	406	U10	C22-C23-C24	-2.68	121.20	127.66
7	O	102	CRT	C13-C12-C14	-2.68	119.17	122.92
6	N	101	BCL	CHC-C1C-NC	2.68	128.22	124.51
7	S	101	CRT	C25-C23-C22	2.68	123.05	118.94
6	C	102	BCL	C4-C3-C5	2.68	119.78	115.27
6	0	100	BCL	CHC-C1C-NC	2.68	128.22	124.51
7	8	101	CRT	C29-C28-C27	-2.68	119.17	122.92
6	L	308	BCL	CMD-C2D-C3D	-2.68	121.46	127.61
7	7	101	CRT	C13-C12-C14	-2.68	119.17	122.92
7	I	102	CRT	C34-C33-C32	-2.67	119.18	122.92
7	G	102	CRT	C13-C12-C14	-2.67	119.18	122.92

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	O	102	CRT	C29-C28-C27	-2.67	119.18	122.92
7	B	103	CRT	C29-C28-C27	-2.67	119.18	122.92
6	7	102	BCL	CHC-C1C-NC	2.67	128.20	124.51
6	Y	102	BCL	C4-C3-C5	2.67	119.76	115.27
6	M	404	BCL	CHC-C1C-NC	2.66	128.20	124.51
6	5	103	BCL	CHC-C1C-NC	2.66	128.20	124.51
6	Q	100	BCL	O2A-CGA-CBA	2.66	120.27	111.91
7	O	102	CRT	C6-C7-C9	2.66	123.03	118.94
6	N	102	BCL	CHC-C1C-NC	2.66	128.19	124.51
12	M	410	U10	C47-C48-C49	-2.66	121.25	127.66
6	N	102	BCL	O2D-CGD-O1D	-2.66	118.64	123.84
7	Q	101	CRT	C34-C33-C32	-2.66	119.20	122.92
7	7	101	CRT	C34-C33-C32	-2.66	119.20	122.92
6	7	104	BCL	C4-C3-C5	2.66	119.74	115.27
7	X	101	CRT	C15-C14-C12	2.65	131.10	127.31
12	L	309	U10	C10-C9-C11	2.65	119.74	115.27
10	4	101	LMT	C1'-O5'-C5'	-2.65	108.48	113.69
10	R	102	LMT	C1'-O5'-C5'	-2.65	108.49	113.69
6	R	103	BCL	C4-C3-C5	2.65	119.72	115.27
6	C	101	BCL	O2D-CGD-O1D	-2.65	118.66	123.84
12	L	307	U10	C12-C13-C14	-2.65	121.29	127.66
7	I	102	CRT	C29-C28-C27	-2.65	119.22	122.92
6	F	102	BCL	C4-C3-C5	2.64	119.72	115.27
6	C	101	BCL	CHC-C1C-NC	2.64	128.16	124.51
7	D	101	CRT	C21-C20-C19	2.64	128.88	123.47
12	M	406	U10	C32-C33-C34	-2.64	121.30	127.66
7	8	101	CRT	C13-C12-C14	-2.64	119.23	122.92
10	H	302	LMT	C3'-C4'-C5'	-2.63	104.89	110.93
6	9	102	BCL	CMD-C2D-C3D	-2.63	121.56	127.61
7	K	101	CRT	C25-C23-C22	2.63	122.97	118.94
6	9	102	BCL	CHB-C4A-NA	2.63	128.15	124.51
6	T	100	BCL	CMD-C2D-C3D	-2.63	121.57	127.61
12	L	303	U10	C20-C19-C21	2.62	119.69	115.27
6	J	103	BCL	C4-C3-C5	2.62	119.69	115.27
7	2	102	CRT	C31-C32-C33	2.62	131.04	127.31
6	7	102	BCL	CMD-C2D-C3D	-2.61	121.60	127.61
10	H	302	LMT	C1'-O5'-C5'	-2.61	108.56	113.69
7	I	102	CRT	C6-C7-C9	2.61	122.95	118.94
6	7	104	BCL	O2A-CGA-CBA	2.61	120.10	111.91
12	L	303	U10	C25-C24-C26	2.61	119.65	115.27
6	5	101	BCL	CHC-C1C-NC	2.60	128.11	124.51
10	B	101	LMT	C1'-O5'-C5'	-2.60	108.58	113.69

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	J	101	BCL	CMD-C2D-C3D	-2.60	121.63	127.61
12	L	303	U10	C17-C18-C19	-2.60	121.40	127.66
7	U	101	CRT	C21-C20-C19	2.60	128.80	123.47
7	G	102	CRT	C34-C33-C32	-2.60	119.28	122.92
12	L	309	U10	C1M-C1-C6	-2.60	120.16	124.40
6	G	103	BCL	CMD-C2D-C3D	-2.60	121.64	127.61
6	M	402	BCL	CHC-C1C-NC	2.60	128.10	124.51
6	7	104	BCL	O2D-CGD-O1D	-2.60	118.76	123.84
6	Y	102	BCL	O2D-CGD-O1D	-2.60	118.76	123.84
7	2	102	CRT	C34-C33-C32	-2.59	119.29	122.92
6	M	404	BCL	CMD-C2D-C3D	-2.59	121.65	127.61
6	1	102	BCL	CHB-C4A-NA	2.59	128.10	124.51
7	7	101	CRT	C21-C20-C19	2.59	128.78	123.47
6	B	102	BCL	O2A-CGA-CBA	2.59	120.03	111.91
6	1	102	BCL	CHC-C1C-NC	2.59	128.09	124.51
7	O	102	CRT	C34-C33-C32	-2.59	119.30	122.92
6	V	102	BCL	CHC-C1C-NC	2.59	128.09	124.51
6	G	103	BCL	O2D-CGD-O1D	-2.58	118.79	123.84
7	U	101	CRT	C29-C28-C27	-2.58	119.31	122.92
6	R	101	BCL	CMD-C2D-C3D	-2.58	121.68	127.61
6	E	101	BCL	O2D-CGD-O1D	-2.58	118.80	123.84
6	C	102	BCL	O2D-CGD-O1D	-2.58	118.80	123.84
10	4	101	LMT	O5B-C5B-C6B	2.58	112.84	106.44
6	F	102	BCL	CHC-C1C-NC	2.57	128.07	124.51
7	Z	102	CRT	C13-C12-C14	-2.57	119.32	122.92
7	4	103	CRT	C13-C12-C14	-2.57	119.32	122.92
7	O	102	CRT	C31-C32-C33	2.57	130.98	127.31
6	0	100	BCL	O2D-CGD-O1D	-2.57	118.82	123.84
12	M	410	U10	C1M-C1-C6	-2.57	120.21	124.40
7	Q	101	CRT	C6-C7-C9	2.56	122.87	118.94
6	B	102	BCL	C1-C2-C3	-2.56	121.61	126.04
6	Q	100	BCL	C2A-C1A-CHA	-2.56	119.38	123.86
6	5	103	BCL	O2D-CGD-O1D	-2.56	118.83	123.84
12	M	406	U10	C30-C29-C31	2.56	119.58	115.27
7	Z	102	CRT	C25-C23-C22	2.56	122.87	118.94
6	C	102	BCL	CHC-C1C-NC	2.56	128.05	124.51
6	R	101	BCL	O2D-CGD-O1D	-2.56	118.84	123.84
6	1	101	BCL	CHB-C4A-NA	2.55	128.04	124.51
6	G	103	BCL	CHB-C4A-NA	2.55	128.04	124.51
6	B	102	BCL	CHC-C1C-NC	2.55	128.04	124.51
12	M	410	U10	C56-C54-C55	2.55	120.24	114.60
6	P	102	BCL	CMD-C2D-C3D	-2.55	121.75	127.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	4	102	BCL	C4-C3-C5	2.55	119.56	115.27
6	4	102	BCL	CHB-C4A-NA	2.54	128.03	124.51
7	0	101	CRT	C6-C7-C9	2.54	122.84	118.94
6	Y	101	BCL	CMD-C2D-C3D	-2.54	121.77	127.61
7	8	101	CRT	C34-C33-C32	-2.54	119.37	122.92
10	L	306	LMT	C1'-O5'-C5'	-2.54	108.70	113.69
6	V	101	BCL	O2D-CGD-O1D	-2.54	118.87	123.84
6	3	100	BCL	CMD-C2D-C3D	-2.54	121.78	127.61
7	O	102	CRT	C25-C23-C22	2.54	122.83	118.94
6	C	101	BCL	CHB-C4A-NA	2.53	128.02	124.51
6	F	102	BCL	O2D-CGD-O1D	-2.53	118.89	123.84
6	N	101	BCL	C1-C2-C3	-2.53	121.67	126.04
6	L	308	BCL	C1B-CHB-C4A	-2.53	125.11	130.12
12	M	410	U10	C40-C39-C41	2.53	119.53	115.27
6	N	101	BCL	O2D-CGD-O1D	-2.53	118.89	123.84
7	G	102	CRT	C36-C35-C33	2.53	129.71	125.89
7	7	101	CRT	C25-C23-C22	2.53	122.82	118.94
6	Y	102	BCL	CHC-C1C-NC	2.52	128.00	124.51
6	5	103	BCL	C4-C3-C5	2.52	119.51	115.27
12	L	309	U10	C17-C18-C19	-2.52	121.59	127.66
7	2	102	CRT	C6-C7-C9	2.52	122.81	118.94
6	5	101	BCL	C1B-CHB-C4A	-2.52	125.13	130.12
6	N	102	BCL	C4-C3-C5	2.52	119.51	115.27
6	V	101	BCL	CMD-C2D-C3D	-2.52	121.82	127.61
6	1	101	BCL	C2A-C1A-CHA	-2.51	119.47	123.86
6	G	104	BCL	C4-C3-C5	2.51	119.49	115.27
7	4	103	CRT	C21-C20-C19	2.50	128.60	123.47
6	Y	101	BCL	C2A-C1A-CHA	-2.50	119.49	123.86
7	D	101	CRT	C25-C23-C22	2.50	122.77	118.94
12	M	410	U10	C45-C44-C46	2.50	119.47	115.27
6	T	100	BCL	O2D-CGD-O1D	-2.49	118.96	123.84
7	0	101	CRT	C16-C17-C19	2.49	122.77	118.94
7	G	102	CRT	C31-C32-C33	2.49	130.87	127.31
7	7	101	CRT	C15-C14-C12	2.49	130.87	127.31
6	E	101	BCL	CMD-C2D-C3D	-2.49	121.88	127.61
6	1	101	BCL	O2D-CGD-O1D	-2.49	118.97	123.84
6	J	103	BCL	O2D-CGD-O1D	-2.49	118.97	123.84
6	M	402	BCL	O2A-CGA-CBA	2.49	119.72	111.91
10	2	101	LMT	C1'-O5'-C5'	-2.49	108.81	113.69
6	P	102	BCL	O2D-CGD-O1D	-2.48	118.98	123.84
7	G	102	CRT	C15-C14-C12	2.47	130.84	127.31
7	Q	101	CRT	C25-C23-C22	2.47	122.73	118.94

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	U	101	CRT	C31-C32-C33	2.47	130.83	127.31
7	G	102	CRT	C25-C23-C22	2.46	122.72	118.94
6	B	102	BCL	C4-C3-C5	2.46	119.41	115.27
12	L	307	U10	C1M-C1-C6	-2.46	120.39	124.40
7	I	102	CRT	C31-C32-C33	2.46	130.81	127.31
7	4	103	CRT	C6-C7-C9	2.45	122.70	118.94
7	O	102	CRT	C36-C35-C33	2.45	129.60	125.89
7	B	103	CRT	C25-C23-C22	2.45	122.70	118.94
6	Q	100	BCL	CMD-C2D-C3D	-2.44	121.99	127.61
7	Q	101	CRT	C31-C32-C33	2.44	130.80	127.31
6	N	101	BCL	CMD-C2D-C3D	-2.44	122.00	127.61
6	M	402	BCL	C2A-C1A-CHA	-2.44	119.59	123.86
6	0	100	BCL	C2A-C1A-CHA	-2.43	119.60	123.86
6	1	101	BCL	CMD-C2D-C3D	-2.43	122.02	127.61
7	B	103	CRT	C6-C7-C9	2.43	122.67	118.94
6	R	101	BCL	CHB-C4A-NA	2.43	127.88	124.51
6	M	404	BCL	CED-O2D-CGD	2.43	121.43	115.94
6	G	104	BCL	O2D-CGD-O1D	-2.43	119.09	123.84
6	R	103	BCL	O2D-CGD-O1D	-2.43	119.09	123.84
6	C	101	BCL	CMD-C2D-C3D	-2.43	122.03	127.61
6	7	104	BCL	C2A-C1A-CHA	-2.43	119.62	123.86
6	L	301	BCL	CED-O2D-CGD	2.42	121.42	115.94
6	7	102	BCL	C1B-CHB-C4A	-2.42	125.32	130.12
6	0	100	BCL	C4-C3-C5	2.42	119.35	115.27
6	M	404	BCL	C4A-NA-C1A	2.42	107.79	106.71
6	0	100	BCL	CMD-C2D-C3D	-2.41	122.06	127.61
6	E	101	BCL	CHB-C4A-NA	2.41	127.85	124.51
6	A	100	BCL	CHB-C4A-NA	2.41	127.85	124.51
6	M	404	BCL	C1-C2-C3	-2.41	121.88	126.04
7	U	101	CRT	C6-C7-C9	2.41	122.64	118.94
12	L	309	U10	C45-C44-C46	2.41	119.32	115.27
7	K	101	CRT	C21-C20-C19	2.41	128.40	123.47
10	R	102	LMT	C3'-C4'-C5'	-2.40	105.42	110.93
6	Y	101	BCL	CHB-C4A-NA	2.40	127.83	124.51
6	9	102	BCL	C2A-C1A-CHA	-2.40	119.66	123.86
7	O	102	CRT	C21-C20-C19	2.40	128.38	123.47
6	L	308	BCL	CHD-C1D-C2D	2.39	130.50	125.48
6	4	102	BCL	O2D-CGD-O1D	-2.39	119.17	123.84
6	P	102	BCL	CHB-C4A-NA	2.39	127.81	124.51
12	L	303	U10	C41-C39-C40	2.38	119.87	114.60
7	S	101	CRT	C6-C7-C9	2.38	122.60	118.94
6	T	100	BCL	CHB-C4A-NA	2.38	127.80	124.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	3	100	BCL	O2D-CGD-O1D	-2.38	119.19	123.84
6	5	103	BCL	C2A-C1A-CHA	-2.38	119.71	123.86
7	G	102	CRT	C6-C7-C9	2.37	122.58	118.94
6	Y	101	BCL	O2D-CGD-O1D	-2.37	119.20	123.84
7	Z	102	CRT	C15-C14-C12	2.37	130.69	127.31
6	V	101	BCL	CHB-C4A-NA	2.37	127.79	124.51
6	A	100	BCL	CMD-C2D-C3D	-2.37	122.17	127.61
12	L	303	U10	C10-C9-C11	2.37	119.25	115.27
6	V	102	BCL	C2A-C1A-CHA	-2.37	119.72	123.86
6	5	101	BCL	O2D-CGD-O1D	-2.37	119.21	123.84
6	J	101	BCL	C2A-C1A-CHA	-2.36	119.73	123.86
6	7	104	BCL	CMD-C2D-C3D	-2.36	122.18	127.61
6	J	101	BCL	CHB-C4A-NA	2.36	127.78	124.51
6	L	301	BCL	CMD-C2D-C3D	-2.36	122.18	127.61
6	M	404	BCL	C4-C3-C5	2.36	119.25	115.27
6	C	101	BCL	C2A-C1A-CHA	-2.36	119.73	123.86
6	J	101	BCL	O2D-CGD-O1D	-2.36	119.23	123.84
7	O	102	CRT	C15-C14-C12	2.35	130.67	127.31
6	F	102	BCL	CMD-C2D-C3D	-2.35	122.20	127.61
7	7	101	CRT	C31-C32-C33	2.35	130.66	127.31
6	Q	100	BCL	O2D-CGD-O1D	-2.35	119.24	123.84
6	9	102	BCL	C1C-NC-C4C	-2.34	105.65	106.71
6	A	100	BCL	O2D-CGD-O1D	-2.34	119.25	123.84
6	7	102	BCL	O2D-CGD-O1D	-2.34	119.26	123.84
12	L	309	U10	C56-C54-C55	2.34	119.78	114.60
6	R	103	BCL	C2A-C1A-CHA	-2.34	119.76	123.86
7	4	103	CRT	C31-C32-C33	2.34	130.65	127.31
6	4	102	BCL	CHC-C1C-NC	2.34	127.75	124.51
6	N	101	BCL	CHB-C4A-NA	2.34	127.75	124.51
7	2	102	CRT	C30-C28-C27	2.34	122.53	118.94
7	U	101	CRT	C36-C35-C33	2.33	129.41	125.89
7	8	101	CRT	C26-C27-C28	2.33	130.63	127.31
6	G	103	BCL	C1D-CHD-C4C	-2.33	121.00	126.62
7	Q	101	CRT	C15-C14-C12	2.33	130.63	127.31
10	R	102	LMT	O1B-C4'-C3'	2.33	113.47	107.28
6	P	102	BCL	C2A-C1A-CHA	-2.33	119.79	123.86
6	M	402	BCL	CHB-C4A-NA	2.33	127.73	124.51
6	Y	102	BCL	C2A-C1A-CHA	-2.33	119.79	123.86
6	1	101	BCL	CAC-C3C-C4C	-2.33	107.42	112.58
12	L	307	U10	C56-C54-C55	2.33	119.74	114.60
7	X	101	CRT	C21-C20-C19	2.32	128.24	123.47
6	R	101	BCL	C2A-C1A-CHA	-2.32	119.80	123.86

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	L	307	U10	C37-C38-C39	-2.32	122.08	127.66
7	D	101	CRT	C31-C32-C33	2.32	130.62	127.31
6	V	102	BCL	O2D-CGD-O1D	-2.32	119.31	123.84
7	K	101	CRT	C15-C14-C12	2.32	130.61	127.31
6	1	102	BCL	O2D-CGD-O1D	-2.31	119.32	123.84
6	L	308	BCL	C1-C2-C3	-2.30	122.06	126.04
7	B	103	CRT	C31-C32-C33	2.30	130.59	127.31
7	U	101	CRT	C26-C27-C28	2.30	130.59	127.31
6	A	100	BCL	C2A-C1A-CHA	-2.30	119.85	123.86
12	L	303	U10	C15-C14-C16	2.29	119.13	115.27
6	M	402	BCL	C4B-CHC-C1C	-2.29	125.58	130.12
6	M	404	BCL	C1D-CHD-C4C	-2.28	121.11	126.62
6	U	100	BCL	C2A-C1A-CHA	-2.28	119.88	123.86
7	D	101	CRT	C15-C14-C12	2.28	130.56	127.31
7	K	101	CRT	C31-C32-C33	2.27	130.56	127.31
7	0	101	CRT	C11-C12-C14	2.27	122.43	118.94
7	X	101	CRT	C30-C28-C27	2.27	122.42	118.94
11	M	405	BPH	CMA-C3A-C4A	-2.27	109.41	114.38
6	5	103	BCL	CMD-C2D-C3D	-2.27	122.39	127.61
6	G	103	BCL	C2A-C1A-CHA	-2.27	119.89	123.86
6	N	101	BCL	C2A-C1A-CHA	-2.27	119.90	123.86
6	M	402	BCL	C11-C10-C8	-2.26	108.60	115.92
6	G	104	BCL	C2A-C1A-CHA	-2.26	119.90	123.86
6	B	102	BCL	C2A-C1A-CHA	-2.26	119.91	123.86
7	D	101	CRT	C16-C17-C19	2.26	122.40	118.94
6	N	101	BCL	CAC-C3C-C4C	-2.25	107.60	112.58
7	2	102	CRT	C16-C17-C19	2.25	122.39	118.94
6	L	301	BCL	O2A-CGA-O1A	-2.24	117.94	123.59
10	P	101	LMT	C3'-C4'-C5'	-2.24	105.79	110.93
6	M	402	BCL	CMD-C2D-C3D	-2.24	122.47	127.61
7	Q	101	CRT	C36-C35-C33	2.23	129.27	125.89
6	N	102	BCL	C2A-C1A-CHA	-2.23	119.95	123.86
6	J	103	BCL	C2A-C1A-CHA	-2.23	119.96	123.86
7	2	102	CRT	C11-C12-C14	2.23	122.36	118.94
7	4	103	CRT	C10-C9-C7	2.23	130.49	127.31
6	1	102	BCL	CMD-C2D-C3D	-2.23	122.49	127.61
6	1	102	BCL	C2A-C1A-CHA	-2.22	119.97	123.86
6	M	404	BCL	O2D-CGD-O1D	-2.22	119.50	123.84
12	L	309	U10	C37-C38-C39	-2.22	122.31	127.66
6	C	102	BCL	C2A-C1A-CHA	-2.22	119.98	123.86
7	G	102	CRT	C16-C17-C19	2.22	122.34	118.94
7	B	103	CRT	C16-C17-C19	2.21	122.33	118.94

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	M	406	U10	C7-C8-C9	-2.21	123.11	126.79
6	N	102	BCL	C1D-CHD-C4C	-2.21	121.30	126.62
6	G	104	BCL	C1D-CHD-C4C	-2.21	121.30	126.62
6	N	102	BCL	CMD-C2D-C3D	-2.20	122.54	127.61
6	9	102	BCL	C1D-CHD-C4C	-2.20	121.31	126.62
6	M	402	BCL	C1D-CHD-C4C	-2.20	121.31	126.62
6	4	102	BCL	C2A-C1A-CHA	-2.20	120.01	123.86
6	1	101	BCL	C1D-CHD-C4C	-2.20	121.31	126.62
6	R	103	BCL	C1D-CHD-C4C	-2.20	121.32	126.62
6	5	103	BCL	C1D-CHD-C4C	-2.20	121.33	126.62
6	Q	100	BCL	C1D-CHD-C4C	-2.19	121.33	126.62
6	F	102	BCL	C2A-C1A-CHA	-2.19	120.03	123.86
7	S	101	CRT	C31-C32-C33	2.19	130.43	127.31
6	B	102	BCL	CMD-C2D-C3D	-2.19	122.58	127.61
6	J	103	BCL	CMD-C2D-C3D	-2.19	122.59	127.61
7	Z	102	CRT	C6-C7-C9	2.18	122.29	118.94
6	J	101	BCL	C1D-CHD-C4C	-2.18	121.35	126.62
6	L	301	BCL	CHB-C4A-NA	2.18	127.53	124.51
6	R	103	BCL	CMD-C2D-C3D	-2.18	122.59	127.61
6	V	101	BCL	C2A-C1A-CHA	-2.18	120.05	123.86
6	T	100	BCL	CAC-C3C-C4C	-2.18	107.75	112.58
10	L	306	LMT	C3B-C4B-C5B	-2.18	106.35	110.24
6	B	102	BCL	C1D-CHD-C4C	-2.18	121.36	126.62
7	Z	102	CRT	C10-C9-C7	2.18	130.42	127.31
7	8	101	CRT	C16-C17-C19	2.18	122.28	118.94
6	L	301	BCL	C1D-CHD-C4C	-2.18	121.37	126.62
7	0	101	CRT	C31-C32-C33	2.18	130.42	127.31
6	A	100	BCL	CAC-C3C-C4C	-2.17	107.77	112.58
7	U	101	CRT	C16-C17-C19	2.17	122.27	118.94
7	S	101	CRT	C15-C14-C12	2.17	130.41	127.31
6	C	102	BCL	C4D-CHA-C1A	-2.17	118.61	121.25
7	I	102	CRT	C15-C14-C12	2.17	130.41	127.31
7	Z	102	CRT	C30-C28-C27	2.16	122.26	118.94
6	4	102	BCL	CMD-C2D-C3D	-2.16	122.64	127.61
12	M	410	U10	C52-C53-C54	-2.16	120.38	127.75
6	V	101	BCL	C1D-CHD-C4C	-2.16	121.42	126.62
6	T	100	BCL	C2A-C1A-CHA	-2.16	120.09	123.86
6	3	100	BCL	C1B-CHB-C4A	-2.16	125.85	130.12
7	D	101	CRT	C10-C9-C7	2.15	130.38	127.31
11	L	302	BPH	CMA-C3A-C4A	-2.15	109.66	114.38
7	7	101	CRT	C36-C35-C33	2.15	129.14	125.89
6	5	101	BCL	C2A-C3A-C4A	-2.15	98.40	101.87

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	5	101	BCL	CAA-CBA-CGA	-2.15	106.97	113.25
12	L	309	U10	C52-C53-C54	-2.15	120.41	127.75
6	M	404	BCL	CHD-C1D-C2D	2.15	129.98	125.48
12	M	410	U10	C37-C38-C39	-2.14	122.50	127.66
6	L	308	BCL	O1D-CGD-CBD	-2.14	120.10	124.48
7	X	101	CRT	C35-C33-C32	2.14	122.23	118.94
10	4	101	LMT	C1B-O5B-C5B	2.14	117.89	113.69
6	R	101	BCL	O2A-CGA-O1A	-2.14	118.19	123.59
6	A	100	BCL	C1D-CHD-C4C	-2.14	121.47	126.62
6	B	102	BCL	C4D-CHA-C1A	-2.13	118.65	121.25
7	Q	101	CRT	C16-C17-C19	2.13	122.21	118.94
6	Y	101	BCL	C1D-CHD-C4C	-2.13	121.48	126.62
6	L	308	BCL	C1D-CHD-C4C	-2.13	121.48	126.62
6	U	100	BCL	CMD-C2D-C3D	-2.13	122.72	127.61
7	D	101	CRT	C6-C7-C9	2.13	122.20	118.94
7	I	102	CRT	C26-C27-C28	2.12	130.34	127.31
6	V	102	BCL	C4D-CHA-C1A	-2.12	118.67	121.25
6	E	101	BCL	C2A-C1A-CHA	-2.12	120.15	123.86
6	V	102	BCL	C1D-CHD-C4C	-2.12	121.50	126.62
7	D	101	CRT	C26-C27-C28	2.12	130.34	127.31
7	D	101	CRT	C36-C35-C33	2.12	129.09	125.89
7	B	103	CRT	C35-C33-C32	2.11	122.18	118.94
6	N	101	BCL	C1D-CHD-C4C	-2.11	121.52	126.62
6	F	102	BCL	C4D-CHA-C1A	-2.11	118.68	121.25
6	0	100	BCL	C1D-CHD-C4C	-2.11	121.53	126.62
6	0	100	BCL	C4D-CHA-C1A	-2.11	118.68	121.25
7	G	102	CRT	C26-C27-C28	2.11	130.32	127.31
6	7	104	BCL	C1D-CHD-C4C	-2.10	121.55	126.62
7	S	101	CRT	C16-C17-C19	2.10	122.16	118.94
7	0	101	CRT	C30-C28-C27	2.10	122.16	118.94
6	4	102	BCL	C4B-CHC-C1C	-2.10	125.96	130.12
6	4	102	BCL	C1D-CHD-C4C	-2.10	121.56	126.62
6	Y	102	BCL	C1D-CHD-C4C	-2.09	121.57	126.62
6	V	102	BCL	CMD-C2D-C3D	-2.09	122.80	127.61
7	7	101	CRT	C16-C17-C19	2.09	122.15	118.94
6	3	100	BCL	C1D-CHD-C4C	-2.09	121.58	126.62
6	J	101	BCL	CHD-C1D-C2D	2.09	129.86	125.48
6	J	103	BCL	C1D-CHD-C4C	-2.08	121.60	126.62
6	1	102	BCL	CED-O2D-CGD	2.08	120.64	115.94
12	M	406	U10	C41-C39-C40	2.08	119.19	114.60
6	R	101	BCL	C1D-CHD-C4C	-2.07	121.62	126.62
7	Z	102	CRT	C21-C20-C19	2.07	127.72	123.47

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	7	102	BCL	CHD-C1D-C2D	2.07	129.83	125.48
12	L	309	U10	C6-C1-C2	2.07	120.82	119.18
7	2	102	CRT	C15-C14-C12	2.07	130.26	127.31
6	4	102	BCL	C4D-CHA-C1A	-2.06	118.74	121.25
6	3	100	BCL	CHB-C4A-NA	2.06	127.36	124.51
7	Z	102	CRT	C35-C33-C32	2.06	122.10	118.94
7	B	103	CRT	C26-C27-C28	2.06	130.25	127.31
6	T	100	BCL	C1D-CHD-C4C	-2.06	121.65	126.62
10	H	302	LMT	O1'-C1'-C2'	2.06	111.52	108.30
6	1	102	BCL	C4D-CHA-C1A	-2.06	118.75	121.25
6	G	104	BCL	CMD-C2D-C3D	-2.06	122.88	127.61
6	L	301	BCL	C2A-C1A-CHA	-2.06	120.27	123.86
6	7	102	BCL	C1D-CHD-C4C	-2.06	121.66	126.62
6	3	100	BCL	C2A-C1A-CHA	-2.05	120.27	123.86
6	G	103	BCL	CAC-C3C-C4C	-2.05	108.03	112.58
6	0	100	BCL	C6-C5-C3	-2.05	108.08	113.45
6	U	100	BCL	O2A-CGA-O1A	-2.05	118.42	123.59
6	7	102	BCL	C2A-C1A-CHA	-2.05	120.28	123.86
6	M	404	BCL	CHB-C4A-NA	2.05	127.34	124.51
7	X	101	CRT	C31-C32-C33	2.04	130.23	127.31
7	U	101	CRT	C11-C12-C14	2.04	122.07	118.94
7	K	101	CRT	C35-C33-C32	2.04	122.07	118.94
7	I	102	CRT	C21-C20-C19	2.04	127.65	123.47
12	M	410	U10	O5-C5-C6	-2.03	117.98	121.55
6	C	102	BCL	C1D-CHD-C4C	-2.03	121.73	126.62
6	C	101	BCL	C1D-CHD-C4C	-2.03	121.73	126.62
6	M	402	BCL	O1D-CGD-CBD	-2.03	120.34	124.48
6	F	102	BCL	C1D-CHD-C4C	-2.02	121.74	126.62
6	1	102	BCL	C1D-CHD-C4C	-2.02	121.75	126.62
6	C	102	BCL	O2A-CGA-O1A	-2.02	118.50	123.59
7	Q	101	CRT	C26-C27-C28	2.02	130.19	127.31
7	G	102	CRT	C10-C9-C7	2.02	130.19	127.31
6	P	102	BCL	C1D-CHD-C4C	-2.02	121.76	126.62
14	M	407	QAK	C3-C4-CZ2	-2.02	115.66	125.81
6	5	101	BCL	CHD-C1D-C2D	2.01	129.70	125.48
6	T	100	BCL	O2A-CGA-O1A	-2.01	118.52	123.59
6	N	101	BCL	O2A-CGA-O1A	-2.01	118.52	123.59
6	U	100	BCL	C1D-CHD-C4C	-2.01	121.78	126.62
6	5	101	BCL	C1D-CHD-C4C	-2.01	121.78	126.62
6	F	102	BCL	CHD-C1D-C2D	2.01	129.69	125.48
7	7	101	CRT	C26-C27-C28	2.01	130.18	127.31
7	S	101	CRT	C36-C35-C33	2.01	128.92	125.89

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	Q	100	BCL	CHD-C1D-C2D	2.01	129.69	125.48
6	5	101	BCL	C4D-CHA-C1A	-2.00	118.81	121.25
6	Y	101	BCL	CAA-CBA-CGA	-2.00	107.40	113.25

All (7) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
11	L	302	BPH	C8
11	L	302	BPH	C13
11	M	405	BPH	C8
11	M	405	BPH	C13
14	M	407	QAK	C24
14	M	407	QAK	C19
14	M	407	QAK	C14

All (1079) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
6	C	101	BCL	C2C-C3C-CAC-CBC
6	C	101	BCL	C4C-C3C-CAC-CBC
6	C	101	BCL	C2-C3-C5-C6
6	C	101	BCL	C4-C3-C5-C6
6	C	102	BCL	C1A-C2A-CAA-CBA
6	C	102	BCL	C3A-C2A-CAA-CBA
6	C	102	BCL	C2C-C3C-CAC-CBC
6	C	102	BCL	C4C-C3C-CAC-CBC
6	E	101	BCL	C4C-C3C-CAC-CBC
6	E	101	BCL	C2-C3-C5-C6
6	E	101	BCL	C4-C3-C5-C6
6	F	102	BCL	C1A-C2A-CAA-CBA
6	F	102	BCL	C3A-C2A-CAA-CBA
6	F	102	BCL	C4C-C3C-CAC-CBC
6	G	103	BCL	C4C-C3C-CAC-CBC
6	G	103	BCL	C2-C3-C5-C6
6	G	103	BCL	C4-C3-C5-C6
6	G	104	BCL	C1A-C2A-CAA-CBA
6	G	104	BCL	C3A-C2A-CAA-CBA
6	G	104	BCL	C11-C10-C8-C9
6	J	101	BCL	C4C-C3C-CAC-CBC
6	N	101	BCL	C1A-C2A-CAA-CBA
6	N	101	BCL	C3A-C2A-CAA-CBA
6	N	101	BCL	C2-C3-C5-C6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
6	N	101	BCL	C4-C3-C5-C6
6	N	102	BCL	C1A-C2A-CAA-CBA
6	N	102	BCL	C3A-C2A-CAA-CBA
6	R	101	BCL	C1A-C2A-CAA-CBA
6	R	101	BCL	C3A-C2A-CAA-CBA
6	R	101	BCL	C4C-C3C-CAC-CBC
6	R	101	BCL	C2-C3-C5-C6
6	R	101	BCL	C4-C3-C5-C6
6	R	103	BCL	C1A-C2A-CAA-CBA
6	T	100	BCL	C2-C3-C5-C6
6	T	100	BCL	C4-C3-C5-C6
6	U	100	BCL	C1A-C2A-CAA-CBA
6	U	100	BCL	C3A-C2A-CAA-CBA
6	U	100	BCL	C2C-C3C-CAC-CBC
6	U	100	BCL	C4C-C3C-CAC-CBC
6	V	101	BCL	C1A-C2A-CAA-CBA
6	V	101	BCL	C4C-C3C-CAC-CBC
6	V	101	BCL	C2-C3-C5-C6
6	V	101	BCL	C4-C3-C5-C6
6	V	102	BCL	C1A-C2A-CAA-CBA
6	V	102	BCL	C3A-C2A-CAA-CBA
6	P	102	BCL	C2C-C3C-CAC-CBC
6	P	102	BCL	C4C-C3C-CAC-CBC
6	P	102	BCL	C4-C3-C5-C6
6	Q	100	BCL	C1A-C2A-CAA-CBA
6	Q	100	BCL	C3A-C2A-CAA-CBA
6	Q	100	BCL	C2C-C3C-CAC-CBC
6	Q	100	BCL	C4C-C3C-CAC-CBC
6	Y	101	BCL	C2-C3-C5-C6
6	Y	101	BCL	C4-C3-C5-C6
6	Y	102	BCL	C1A-C2A-CAA-CBA
6	Y	102	BCL	C3A-C2A-CAA-CBA
6	Y	102	BCL	C2C-C3C-CAC-CBC
6	Y	102	BCL	C4C-C3C-CAC-CBC
6	A	100	BCL	C2-C3-C5-C6
6	A	100	BCL	C4-C3-C5-C6
6	B	102	BCL	C1A-C2A-CAA-CBA
6	B	102	BCL	C3A-C2A-CAA-CBA
6	B	102	BCL	C4C-C3C-CAC-CBC
6	1	102	BCL	C1A-C2A-CAA-CBA
6	1	102	BCL	C3A-C2A-CAA-CBA
6	3	100	BCL	C4C-C3C-CAC-CBC

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
6	4	102	BCL	C1A-C2A-CAA-CBA
6	4	102	BCL	C3A-C2A-CAA-CBA
6	4	102	BCL	C2C-C3C-CAC-CBC
6	4	102	BCL	C4C-C3C-CAC-CBC
6	5	101	BCL	C4C-C3C-CAC-CBC
6	5	103	BCL	C1A-C2A-CAA-CBA
6	5	103	BCL	C2C-C3C-CAC-CBC
6	5	103	BCL	C4C-C3C-CAC-CBC
6	7	102	BCL	C2C-C3C-CAC-CBC
6	7	102	BCL	C4C-C3C-CAC-CBC
6	7	104	BCL	C1A-C2A-CAA-CBA
6	7	104	BCL	C3A-C2A-CAA-CBA
6	7	104	BCL	C11-C10-C8-C9
6	9	102	BCL	C2-C3-C5-C6
6	9	102	BCL	C4-C3-C5-C6
6	0	100	BCL	C2C-C3C-CAC-CBC
6	0	100	BCL	C4C-C3C-CAC-CBC
7	X	101	CRT	C1-C4-C5-C6
7	2	102	CRT	C36-C37-C38-C40
7	7	101	CRT	C35-C36-C37-C38
7	8	101	CRT	C35-C36-C37-C38
8	D	102	6PL	C2-C1-O3P-P
8	E	102	6PL	C12-C11-O3-C3
8	E	102	6PL	O11-C11-O3-C3
8	F	103	6PL	C5-C4-O4P-P
8	F	103	6PL	O31-C31-O2-C2
8	F	103	6PL	C32-C31-O2-C2
8	I	101	6PL	C2-C1-O3P-P
8	I	103	6PL	O31-C31-O2-C2
8	I	103	6PL	C32-C31-O2-C2
8	K	102	6PL	C12-C11-O3-C3
8	K	102	6PL	O11-C11-O3-C3
8	K	102	6PL	C4-O4P-P-O3P
8	K	102	6PL	C4-O4P-P-O1P
8	K	102	6PL	C4-O4P-P-O2P
8	L	304	6PL	C4-O4P-P-O3P
8	L	304	6PL	C5-C4-O4P-P
8	L	305	6PL	C4-O4P-P-O1P
8	L	305	6PL	C5-C4-O4P-P
8	S	102	6PL	C1-O3P-P-O2P
8	S	102	6PL	O31-C31-O2-C2
8	S	102	6PL	C32-C31-O2-C2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
8	U	102	6PL	C4-O4P-P-O1P
8	X	102	6PL	C1-O3P-P-O2P
8	P	103	6PL	C2-C1-O3P-P
8	P	103	6PL	C4-O4P-P-O3P
8	P	103	6PL	C5-C4-O4P-P
8	Z	103	6PL	C12-C11-O3-C3
8	Z	103	6PL	O11-C11-O3-C3
8	Z	103	6PL	C4-O4P-P-O1P
8	B	104	6PL	C12-C11-O3-C3
8	B	104	6PL	O31-C31-O2-C2
8	B	104	6PL	C32-C31-O2-C2
8	5	102	6PL	C32-C31-O2-C2
8	6	102	6PL	C4-O4P-P-O1P
8	8	102	6PL	C12-C11-O3-C3
8	8	102	6PL	O11-C11-O3-C3
9	E	103	CDL	OA9-CA7-OA8-CA6
9	E	103	CDL	C31-CA7-OA8-CA6
9	E	103	CDL	CB4-CB3-OB5-PB2
9	G	101	CDL	OB9-CB7-OB8-CB6
9	G	101	CDL	C71-CB7-OB8-CB6
9	G	105	CDL	CA3-OA5-PA1-OA4
9	L	310	CDL	CA2-OA2-PA1-OA3
9	L	310	CDL	C1-CB2-OB2-PB2
9	L	310	CDL	CB2-OB2-PB2-OB5
9	L	310	CDL	OB9-CB7-OB8-CB6
9	L	310	CDL	C71-CB7-OB8-CB6
10	F	101	LMT	C2'-C1'-O1'-C1
10	F	101	LMT	O5'-C1'-O1'-C1
10	H	302	LMT	O5B-C1B-O1B-C4'
10	P	101	LMT	C2-C1-O1'-C1'
10	B	101	LMT	C2'-C1'-O1'-C1
10	B	101	LMT	O5'-C1'-O1'-C1
10	2	101	LMT	C2-C1-O1'-C1'
12	L	303	U10	C28-C29-C31-C32
12	L	303	U10	C30-C29-C31-C32
12	L	303	U10	C37-C38-C39-C40
12	L	307	U10	C22-C23-C24-C25
12	L	307	U10	C22-C23-C24-C26
12	L	307	U10	C23-C24-C26-C27
12	L	307	U10	C25-C24-C26-C27
12	L	307	U10	C24-C26-C27-C28
12	L	307	U10	C40-C39-C41-C42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
12	L	309	U10	C7-C8-C9-C10
12	L	309	U10	C7-C8-C9-C11
12	L	309	U10	C27-C28-C29-C30
12	L	309	U10	C27-C28-C29-C31
12	L	309	U10	C34-C36-C37-C38
12	M	406	U10	C33-C34-C36-C37
12	M	406	U10	C35-C34-C36-C37
12	M	410	U10	C7-C8-C9-C10
12	M	410	U10	C7-C8-C9-C11
12	M	410	U10	C29-C31-C32-C33
12	M	410	U10	C37-C38-C39-C40
12	M	410	U10	C37-C38-C39-C41
14	M	407	QAK	C39-CE2-CZ2-C4
14	M	407	QAK	CZ3-C10-C11-C12
15	7	103	PGT	C1-O3P-P-O4P
15	9	101	PGT	C5-C4-O4P-P
8	B	104	6PL	O11-C11-O3-C3
10	4	101	LMT	O5B-C1B-O1B-C4'
10	L	306	LMT	C4'-C5'-C6'-O6'
10	R	102	LMT	C3'-C4'-O1B-C1B
6	M	404	BCL	CBD-CGD-O2D-CED
10	Z	101	LMT	O5B-C5B-C6B-O6B
8	5	102	6PL	O31-C31-O2-C2
6	C	102	BCL	C3-C5-C6-C7
6	N	101	BCL	C3-C5-C6-C7
6	3	100	BCL	C3-C5-C6-C7
12	M	410	U10	C52-C53-C54-C55
6	L	301	BCL	C4-C3-C5-C6
6	7	102	BCL	C4-C3-C5-C6
12	M	406	U10	C25-C24-C26-C27
12	M	410	U10	C35-C34-C36-C37
6	L	301	BCL	C2-C3-C5-C6
6	P	102	BCL	C2-C3-C5-C6
12	L	307	U10	C38-C39-C41-C42
6	P	102	BCL	C2A-CAA-CBA-CGA
6	J	103	BCL	C3-C5-C6-C7
10	O	101	LMT	C4B-C5B-C6B-O6B
10	R	102	LMT	C4B-C5B-C6B-O6B
6	F	102	BCL	C3-C5-C6-C7
6	L	308	BCL	C3-C5-C6-C7
6	M	404	BCL	C3-C5-C6-C7
6	V	102	BCL	C3-C5-C6-C7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
6	7	104	BCL	C3-C5-C6-C7
10	R	102	LMT	O5B-C5B-C6B-O6B
6	L	301	BCL	CBD-CGD-O2D-CED
10	6	101	LMT	O5'-C5'-C6'-O6'
10	Z	101	LMT	C4B-C5B-C6B-O6B
10	L	306	LMT	O5'-C5'-C6'-O6'
10	H	302	LMT	C4'-C5'-C6'-O6'
10	R	102	LMT	O5'-C5'-C6'-O6'
10	6	101	LMT	C4B-C5B-C6B-O6B
8	Q	102	6PL	C2-C1-O3P-P
12	L	303	U10	C37-C38-C39-C41
10	O	101	LMT	O5B-C5B-C6B-O6B
10	O	101	LMT	O5'-C5'-C6'-O6'
10	H	302	LMT	O5B-C5B-C6B-O6B
6	1	102	BCL	C4-C3-C5-C6
12	L	309	U10	C40-C39-C41-C42
6	1	102	BCL	C2-C3-C5-C6
12	L	309	U10	C38-C39-C41-C42
6	G	103	BCL	C2A-CAA-CBA-CGA
10	J	102	LMT	O5B-C5B-C6B-O6B
10	4	101	LMT	O5'-C5'-C6'-O6'
10	H	302	LMT	O5'-C1'-O1'-C1
10	L	306	LMT	O5'-C1'-O1'-C1
10	Z	101	LMT	O5'-C1'-O1'-C1
12	L	303	U10	C14-C16-C17-C18
12	L	303	U10	C24-C26-C27-C28
12	L	307	U10	C34-C36-C37-C38
12	L	307	U10	C44-C46-C47-C48
12	L	309	U10	C19-C21-C22-C23
12	L	309	U10	C29-C31-C32-C33
12	L	309	U10	C49-C51-C52-C53
12	M	410	U10	C52-C53-C54-C56
6	M	404	BCL	O1D-CGD-O2D-CED
6	R	101	BCL	CBD-CGD-O2D-CED
6	L	308	BCL	CBA-CGA-O2A-C1
6	B	102	BCL	CBD-CGD-O2D-CED
10	J	102	LMT	C4B-C5B-C6B-O6B
10	4	101	LMT	C4'-C5'-C6'-O6'
10	R	102	LMT	C4'-C5'-C6'-O6'
10	H	302	LMT	C4B-C5B-C6B-O6B
6	F	102	BCL	C10-C11-C12-C13
6	T	100	BCL	C10-C11-C12-C13

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
6	A	100	BCL	C8-C10-C11-C12
6	5	101	BCL	C10-C11-C12-C13
6	9	102	BCL	C8-C10-C11-C12
10	J	102	LMT	C2'-C1'-O1'-C1
10	H	302	LMT	C2'-C1'-O1'-C1
10	L	306	LMT	C2'-C1'-O1'-C1
10	H	302	LMT	O5'-C5'-C6'-O6'
12	M	406	U10	C23-C24-C26-C27
12	M	410	U10	C33-C34-C36-C37
6	C	101	BCL	C11-C10-C8-C9
6	C	102	BCL	C11-C10-C8-C9
6	G	103	BCL	C11-C10-C8-C9
6	J	103	BCL	C11-C10-C8-C9
6	J	103	BCL	C14-C13-C15-C16
6	N	102	BCL	C11-C10-C8-C9
6	L	308	BCL	C11-C10-C8-C9
6	U	100	BCL	C11-C10-C8-C9
6	Y	101	BCL	C11-C10-C8-C9
6	3	100	BCL	C6-C7-C8-C9
6	4	102	BCL	C11-C10-C8-C9
6	5	103	BCL	C11-C10-C8-C9
6	0	100	BCL	C11-C10-C8-C9
14	M	407	QAK	C22-C23-C24-C25
14	M	407	QAK	C30-C29-C31-CB
6	Y	101	BCL	C2A-CAA-CBA-CGA
10	Z	101	LMT	O5'-C5'-C6'-O6'
10	4	101	LMT	O5B-C5B-C6B-O6B
10	O	101	LMT	C4'-C5'-C6'-O6'
6	7	102	BCL	C8-C10-C11-C12
10	6	101	LMT	O5B-C5B-C6B-O6B
6	E	101	BCL	CBA-CGA-O2A-C1
6	T	100	BCL	C5-C6-C7-C8
6	5	101	BCL	C15-C16-C17-C18
6	9	102	BCL	C13-C15-C16-C17
11	M	405	BPH	C5-C6-C7-C8
10	2	101	LMT	O5'-C5'-C6'-O6'
6	E	101	BCL	C15-C16-C17-C18
6	0	100	BCL	C15-C16-C17-C18
10	4	101	LMT	C4B-C5B-C6B-O6B
6	1	102	BCL	C15-C16-C17-C18
6	E	101	BCL	C3-C5-C6-C7
10	H	302	LMT	O1'-C1-C2-C3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
6	A	100	BCL	C13-C15-C16-C17
9	G	105	CDL	CB4-CB3-OB5-PB2
6	3	100	BCL	C10-C11-C12-C13
6	M	402	BCL	C6-C7-C8-C10
6	5	101	BCL	C6-C7-C8-C10
6	L	308	BCL	O1A-CGA-O2A-C1
6	J	101	BCL	C2A-CAA-CBA-CGA
6	R	103	BCL	C15-C16-C17-C18
6	Y	102	BCL	C10-C11-C12-C13
14	M	407	QAK	C11-C12-C13-C14
10	R	102	LMT	O5'-C1'-O1'-C1
12	L	303	U10	C29-C31-C32-C33
12	M	410	U10	C14-C16-C17-C18
12	M	410	U10	C34-C36-C37-C38
12	M	406	U10	C37-C38-C39-C40
6	C	102	BCL	C8-C10-C11-C12
6	C	102	BCL	C15-C16-C17-C18
6	N	101	BCL	CBA-CGA-O2A-C1
10	6	101	LMT	C4'-C5'-C6'-O6'
6	E	101	BCL	C10-C11-C12-C13
6	J	101	BCL	C15-C16-C17-C18
6	N	102	BCL	C5-C6-C7-C8
6	R	101	BCL	C5-C6-C7-C8
6	P	102	BCL	C10-C11-C12-C13
6	B	102	BCL	C13-C15-C16-C17
6	7	102	BCL	C15-C16-C17-C18
6	E	101	BCL	O1A-CGA-O2A-C1
15	9	101	PGT	C32-C31-O2-C2
6	R	103	BCL	C5-C6-C7-C8
6	U	100	BCL	C13-C15-C16-C17
6	Q	100	BCL	C5-C6-C7-C8
6	B	102	BCL	C15-C16-C17-C18
8	D	102	6PL	C1-O3P-P-O4P
8	S	102	6PL	C1-O3P-P-O4P
6	0	100	BCL	C3-C5-C6-C7
6	C	101	BCL	C5-C6-C7-C8
6	3	100	BCL	C15-C16-C17-C18
15	9	101	PGT	O31-C31-O2-C2
6	T	100	BCL	C3-C5-C6-C7
10	O	101	LMT	C6-C7-C8-C9
8	O	103	6PL	C11-C12-C13-C14
8	Q	102	6PL	C35-C36-C37-C38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
10	H	302	LMT	C2-C3-C4-C5
10	P	101	LMT	C2B-C1B-O1B-C4'
10	B	101	LMT	C7-C8-C9-C10
8	S	102	6PL	C2-C1-O3P-P
9	G	105	CDL	C1-CB2-OB2-PB2
10	B	101	LMT	C4B-C5B-C6B-O6B
9	G	105	CDL	C72-C73-C74-C75
10	R	102	LMT	C2'-C1'-O1'-C1
6	3	100	BCL	CBA-CGA-O2A-C1
6	J	103	BCL	C13-C15-C16-C17
6	7	102	BCL	C16-C17-C18-C19
8	U	102	6PL	C13-C14-C15-C16
10	F	101	LMT	C3-C4-C5-C6
10	R	102	LMT	C2-C3-C4-C5
6	V	102	BCL	C11-C10-C8-C9
6	P	102	BCL	C11-C10-C8-C9
6	B	102	BCL	C11-C10-C8-C9
10	6	101	LMT	C2-C3-C4-C5
6	C	101	BCL	C2A-CAA-CBA-CGA
6	R	101	BCL	C2A-CAA-CBA-CGA
6	Y	102	BCL	C3-C5-C6-C7
10	O	101	LMT	C2-C3-C4-C5
10	P	101	LMT	C3-C4-C5-C6
14	M	407	QAK	C15-C16-C17-C18
6	0	100	BCL	C16-C17-C18-C19
6	Y	102	BCL	C8-C10-C11-C12
6	3	100	BCL	C13-C15-C16-C17
10	R	102	LMT	C5-C6-C7-C8
8	L	305	6PL	C38-C39-C40-C41
6	E	101	BCL	C8-C10-C11-C12
6	U	100	BCL	C15-C16-C17-C18
6	C	101	BCL	C3A-C2A-CAA-CBA
6	E	101	BCL	C3A-C2A-CAA-CBA
6	G	103	BCL	C3A-C2A-CAA-CBA
6	J	101	BCL	C3A-C2A-CAA-CBA
6	J	103	BCL	C3A-C2A-CAA-CBA
6	R	103	BCL	C3A-C2A-CAA-CBA
6	T	100	BCL	C3A-C2A-CAA-CBA
6	V	101	BCL	C3A-C2A-CAA-CBA
6	P	102	BCL	C3A-C2A-CAA-CBA
6	Y	101	BCL	C3A-C2A-CAA-CBA
6	A	100	BCL	C3A-C2A-CAA-CBA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
6	1	101	BCL	C3A-C2A-CAA-CBA
6	3	100	BCL	C3A-C2A-CAA-CBA
6	5	101	BCL	C3A-C2A-CAA-CBA
6	5	103	BCL	C3A-C2A-CAA-CBA
6	9	102	BCL	C3A-C2A-CAA-CBA
6	0	100	BCL	C3A-C2A-CAA-CBA
6	N	101	BCL	C8-C10-C11-C12
10	F	101	LMT	C2-C1-O1'-C1'
10	J	102	LMT	C2-C1-O1'-C1'
8	B	104	6PL	C20-C21-C22-C23
10	P	101	LMT	O5B-C1B-O1B-C4'
6	N	101	BCL	O1A-CGA-O2A-C1
6	0	100	BCL	C16-C17-C18-C20
10	P	101	LMT	C1-C2-C3-C4
6	A	100	BCL	C3-C5-C6-C7
12	L	307	U10	C45-C44-C46-C47
8	E	102	6PL	C32-C31-O2-C2
10	L	306	LMT	C3-C4-C5-C6
6	7	102	BCL	C16-C17-C18-C20
10	L	306	LMT	C4-C5-C6-C7
6	V	101	BCL	CBA-CGA-O2A-C1
8	Z	103	6PL	C36-C37-C38-C39
10	Z	101	LMT	C1-C2-C3-C4
12	L	307	U10	C52-C53-C54-C55
6	V	101	BCL	C13-C15-C16-C17
6	1	101	BCL	C8-C10-C11-C12
6	3	100	BCL	O1A-CGA-O2A-C1
6	P	102	BCL	C3-C5-C6-C7
6	L	308	BCL	C13-C15-C16-C17
6	Y	101	BCL	C15-C16-C17-C18
6	A	100	BCL	C15-C16-C17-C18
8	0	102	6PL	C37-C38-C39-C40
10	Z	101	LMT	C2-C3-C4-C5
9	L	310	CDL	C41-C42-C43-C44
6	C	101	BCL	C10-C11-C12-C13
10	Z	101	LMT	C3-C4-C5-C6
12	L	303	U10	C12-C11-C9-C10
12	M	410	U10	C25-C24-C26-C27
6	L	301	BCL	O1D-CGD-O2D-CED
6	L	301	BCL	C11-C10-C8-C7
6	P	102	BCL	C11-C10-C8-C7
11	L	302	BPH	C11-C12-C13-C15

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
12	L	303	U10	C12-C11-C9-C8
12	L	307	U10	C43-C44-C46-C47
12	M	410	U10	C23-C24-C26-C27
8	E	102	6PL	O31-C31-O2-C2
6	7	102	BCL	CBA-CGA-O2A-C1
6	C	101	BCL	C8-C10-C11-C12
6	G	104	BCL	C15-C16-C17-C18
6	Y	101	BCL	C5-C6-C7-C8
6	B	102	BCL	C5-C6-C7-C8
10	B	101	LMT	O5B-C5B-C6B-O6B
6	Q	100	BCL	C15-C16-C17-C18
6	7	102	BCL	C10-C11-C12-C13
12	L	307	U10	C32-C33-C34-C35
6	R	101	BCL	O1D-CGD-O2D-CED
8	8	102	6PL	C32-C31-O2-C2
10	R	102	LMT	C3-C4-C5-C6
6	G	103	BCL	C5-C6-C7-C8
6	L	308	BCL	CBD-CGD-O2D-CED
6	V	101	BCL	O1A-CGA-O2A-C1
12	M	406	U10	C37-C38-C39-C41
6	U	100	BCL	C3-C5-C6-C7
6	7	102	BCL	C3-C5-C6-C7
8	2	103	6PL	O2-C2-C3-O3
12	L	307	U10	C15-C14-C16-C17
6	7	102	BCL	C2-C3-C5-C6
6	F	102	BCL	C11-C12-C13-C14
6	M	402	BCL	C6-C7-C8-C9
6	T	100	BCL	C11-C10-C8-C9
6	5	101	BCL	C11-C10-C8-C9
6	5	101	BCL	C11-C12-C13-C14
6	9	102	BCL	C11-C10-C8-C9
11	L	302	BPH	C11-C12-C13-C14
14	M	407	QAK	C20-C19-C21-C22
6	1	101	BCL	C2A-CAA-CBA-CGA
8	H	301	6PL	C31-C32-C33-C34
6	Y	102	BCL	C15-C16-C17-C18
6	C	101	BCL	C1A-C2A-CAA-CBA
6	G	103	BCL	C1A-C2A-CAA-CBA
6	J	101	BCL	C1A-C2A-CAA-CBA
6	J	103	BCL	C1A-C2A-CAA-CBA
6	M	402	BCL	C1A-C2A-CAA-CBA
6	T	100	BCL	C1A-C2A-CAA-CBA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
6	P	102	BCL	C1A-C2A-CAA-CBA
6	Y	101	BCL	C1A-C2A-CAA-CBA
6	A	100	BCL	C1A-C2A-CAA-CBA
6	1	101	BCL	C1A-C2A-CAA-CBA
6	5	101	BCL	C1A-C2A-CAA-CBA
6	9	102	BCL	C1A-C2A-CAA-CBA
6	0	100	BCL	C1A-C2A-CAA-CBA
8	Z	103	6PL	C4-O4P-P-O3P
9	E	103	CDL	CA7-C31-C32-C33
6	B	102	BCL	C3-C5-C6-C7
9	G	105	CDL	CA4-CA3-OA5-PA1
10	4	101	LMT	C1-C2-C3-C4
10	2	101	LMT	C2B-C1B-O1B-C4'
9	M	409	CDL	OA5-CA3-CA4-CA6
10	B	101	LMT	C3-C4-C5-C6
10	B	101	LMT	C6-C7-C8-C9
10	L	306	LMT	C4B-C5B-C6B-O6B
8	4	104	6PL	C37-C38-C39-C40
8	L	305	6PL	C19-C20-C21-C22
12	L	303	U10	C15-C14-C16-C17
6	E	101	BCL	C2C-C3C-CAC-CBC
6	F	102	BCL	C2C-C3C-CAC-CBC
6	G	103	BCL	C2C-C3C-CAC-CBC
6	J	101	BCL	C2C-C3C-CAC-CBC
6	R	101	BCL	C2C-C3C-CAC-CBC
6	R	103	BCL	C2C-C3C-CAC-CBC
6	V	101	BCL	C2C-C3C-CAC-CBC
6	B	102	BCL	C2C-C3C-CAC-CBC
6	3	100	BCL	C2C-C3C-CAC-CBC
6	5	101	BCL	C2C-C3C-CAC-CBC
6	7	102	BCL	O1A-CGA-O2A-C1
6	E	101	BCL	C16-C17-C18-C19
6	7	104	BCL	C16-C17-C18-C19
8	5	102	6PL	C1-C2-C3-O3
8	I	101	6PL	C42-C43-C44-C45
8	2	103	6PL	O2-C31-C32-C33
8	H	301	6PL	C32-C33-C34-C35
10	R	102	LMT	C9-C10-C11-C12
12	L	307	U10	C12-C11-C9-C10
12	L	307	U10	C35-C34-C36-C37
12	L	307	U10	C12-C11-C9-C8
6	A	100	BCL	C16-C17-C18-C19

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
6	T	100	BCL	CBA-CGA-O2A-C1
10	2	101	LMT	O5B-C5B-C6B-O6B
8	L	305	6PL	C41-C42-C43-C44
8	8	102	6PL	O31-C31-O2-C2
6	V	102	BCL	C8-C10-C11-C12
6	J	103	BCL	C2-C1-O2A-CGA
10	4	101	LMT	C3-C4-C5-C6
6	B	102	BCL	O1D-CGD-O2D-CED
10	2	101	LMT	C3-C4-C5-C6
6	5	101	BCL	CBA-CGA-O2A-C1
8	0	102	6PL	O3P-C1-C2-O2
9	M	408	CDL	O1-C1-CA2-OA2
14	M	407	QAK	C11-C10-CZ3-CE3
7	2	102	CRT	C36-C37-C38-C39
11	L	302	BPH	CHA-CBD-CGD-O1D
11	L	302	BPH	C4-C3-C5-C6
12	L	307	U10	C17-C18-C19-C20
12	L	307	U10	C20-C19-C21-C22
6	G	103	BCL	C6-C7-C8-C10
6	J	101	BCL	C12-C13-C15-C16
6	J	103	BCL	C6-C7-C8-C10
6	N	101	BCL	C11-C10-C8-C7
6	N	102	BCL	C6-C7-C8-C10
6	L	308	BCL	C11-C10-C8-C7
6	R	101	BCL	C11-C10-C8-C7
6	R	103	BCL	C11-C10-C8-C7
6	T	100	BCL	C11-C10-C8-C7
6	V	102	BCL	C6-C7-C8-C10
6	Y	101	BCL	C6-C7-C8-C10
6	A	100	BCL	C6-C7-C8-C10
6	3	100	BCL	C6-C7-C8-C10
6	3	100	BCL	C11-C10-C8-C7
6	5	101	BCL	C11-C10-C8-C7
6	5	101	BCL	C12-C13-C15-C16
6	7	102	BCL	C6-C7-C8-C10
6	7	104	BCL	C6-C7-C8-C10
11	M	405	BPH	C11-C10-C8-C7
8	Q	102	6PL	O2-C31-C32-C33
6	C	101	BCL	C6-C7-C8-C9
6	F	102	BCL	C6-C7-C8-C9
6	G	103	BCL	C6-C7-C8-C9
6	N	101	BCL	C11-C10-C8-C9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
6	L	301	BCL	C11-C10-C8-C9
6	M	402	BCL	C14-C13-C15-C16
6	R	101	BCL	C11-C10-C8-C9
6	R	103	BCL	C11-C10-C8-C9
6	V	101	BCL	C11-C10-C8-C9
6	A	100	BCL	C6-C7-C8-C9
6	3	100	BCL	C11-C10-C8-C9
6	5	101	BCL	C6-C7-C8-C9
6	5	101	BCL	C14-C13-C15-C16
11	M	405	BPH	C11-C10-C8-C9
8	O	103	6PL	C33-C34-C35-C36
6	G	104	BCL	CBA-CGA-O2A-C1
12	L	307	U10	C52-C53-C54-C56
12	L	309	U10	C52-C53-C54-C55
6	7	104	BCL	C16-C17-C18-C20
6	N	101	BCL	C10-C11-C12-C13
8	O	103	6PL	C32-C31-O2-C2
6	3	100	BCL	C8-C10-C11-C12
10	F	101	LMT	C4'-C5'-C6'-O6'
8	O	103	6PL	O3-C11-C12-C13
6	E	101	BCL	C16-C17-C18-C20
9	M	409	CDL	OB5-CB3-CB4-CB6
12	L	309	U10	C24-C26-C27-C28
6	U	100	BCL	C8-C10-C11-C12
11	L	302	BPH	C2-C3-C5-C6
12	L	307	U10	C18-C19-C21-C22
9	G	105	CDL	C57-C58-C59-C60
9	G	101	CDL	C74-C75-C76-C77
9	G	101	CDL	C11-CA5-OA6-CA4
15	9	101	PGT	C14-C15-C16-C17
8	O	103	6PL	C2-C1-O3P-P
8	2	103	6PL	C2-C1-O3P-P
6	L	308	BCL	C3A-C2A-CAA-CBA
10	B	101	LMT	C2-C1-O1'-C1'
10	6	101	LMT	C2-C1-O1'-C1'
10	R	102	LMT	C11-C10-C9-C8
8	2	103	6PL	C1-C2-C3-O3
8	5	102	6PL	C21-C22-C23-C24
6	T	100	BCL	O1A-CGA-O2A-C1
8	F	103	6PL	C40-C41-C42-C43
10	F	101	LMT	C6-C7-C8-C9
8	I	103	6PL	C21-C22-C23-C24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
12	L	309	U10	C30-C29-C31-C32
12	L	307	U10	C13-C14-C16-C17
12	L	307	U10	C33-C34-C36-C37
10	4	101	LMT	O1'-C1-C2-C3
10	2	101	LMT	O1'-C1-C2-C3
8	X	102	6PL	C1-O3P-P-O4P
8	4	104	6PL	C1-O3P-P-O4P
9	G	105	CDL	CA3-OA5-PA1-OA2
6	M	404	BCL	C15-C16-C17-C18
15	7	103	PGT	O3P-C1-C2-O2
6	A	100	BCL	C16-C17-C18-C20
8	P	103	6PL	O2-C31-C32-C33
6	G	104	BCL	O1A-CGA-O2A-C1
6	5	101	BCL	O1A-CGA-O2A-C1
9	E	103	CDL	C37-C38-C39-C40
12	L	303	U10	C5-C4-O4-C4M
8	P	103	6PL	O2-C2-C3-O3
9	E	103	CDL	OA6-CA4-CA6-OA8
6	J	101	BCL	C13-C15-C16-C17
10	2	101	LMT	O5'-C1'-O1'-C1
6	L	308	BCL	C5-C6-C7-C8
9	M	408	CDL	CB2-C1-CA2-OA2
12	L	307	U10	C19-C21-C22-C23
12	L	307	U10	C39-C41-C42-C43
6	E	101	BCL	C2-C1-O2A-CGA
6	F	102	BCL	C2-C1-O2A-CGA
6	L	301	BCL	C2-C1-O2A-CGA
6	4	102	BCL	C2-C1-O2A-CGA
6	5	101	BCL	C2-C1-O2A-CGA
6	7	102	BCL	C2-C1-O2A-CGA
8	0	102	6PL	C42-C43-C44-C45
14	M	407	QAK	C29-C31-CB-CA
9	G	105	CDL	C32-C31-CA7-OA8
6	M	404	BCL	C11-C10-C8-C9
6	T	100	BCL	C6-C7-C8-C9
6	V	102	BCL	C14-C13-C15-C16
6	Q	100	BCL	C11-C10-C8-C9
6	A	100	BCL	C11-C10-C8-C9
6	7	104	BCL	C6-C7-C8-C9
8	Z	103	6PL	C32-C33-C34-C35
6	C	102	BCL	C10-C11-C12-C13
6	P	102	BCL	C5-C6-C7-C8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
14	M	407	QAK	C19-C21-C22-C23
6	M	402	BCL	C4C-C3C-CAC-CBC
6	R	103	BCL	C4C-C3C-CAC-CBC
6	G	104	BCL	C5-C6-C7-C8
10	Z	101	LMT	C4-C5-C6-C7
6	7	104	BCL	C13-C15-C16-C17
6	N	102	BCL	C10-C11-C12-C13
6	R	101	BCL	C10-C11-C12-C13
8	I	101	6PL	C17-C18-C19-C20
9	G	105	CDL	OA5-CA3-CA4-CA6
6	C	101	BCL	C6-C7-C8-C10
6	C	101	BCL	C11-C10-C8-C7
6	E	101	BCL	C6-C7-C8-C10
6	F	102	BCL	C6-C7-C8-C10
6	G	104	BCL	C11-C10-C8-C7
6	M	404	BCL	C11-C10-C8-C7
6	T	100	BCL	C6-C7-C8-C10
6	V	101	BCL	C11-C10-C8-C7
6	P	102	BCL	C6-C7-C8-C10
6	Q	100	BCL	C11-C10-C8-C7
6	A	100	BCL	C11-C10-C8-C7
6	4	102	BCL	C11-C10-C8-C7
6	7	102	BCL	C11-C12-C13-C15
6	7	104	BCL	C11-C10-C8-C7
6	0	100	BCL	C11-C10-C8-C7
12	L	303	U10	C13-C14-C16-C17
14	M	407	QAK	C23-C24-C26-C27
14	M	407	QAK	C28-C29-C31-CB
6	V	101	BCL	C3-C5-C6-C7
6	T	100	BCL	C16-C17-C18-C19
10	Z	101	LMT	O1'-C1-C2-C3
10	Z	101	LMT	C7-C8-C9-C10
6	F	102	BCL	C16-C17-C18-C19
6	R	101	BCL	CBA-CGA-O2A-C1
8	U	102	6PL	O3-C11-C12-C13
6	M	404	BCL	CAD-CBD-CGD-O2D
10	J	102	LMT	O5'-C5'-C6'-O6'
6	V	101	BCL	C15-C16-C17-C18
6	7	104	BCL	C5-C6-C7-C8
12	L	307	U10	C5-C4-O4-C4M
12	L	309	U10	C5-C4-O4-C4M
8	P	103	6PL	C1-C2-C3-O3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
10	2	101	LMT	O5B-C1B-O1B-C4'
9	M	409	CDL	OA5-CA3-CA4-OA6
8	P	103	6PL	C33-C34-C35-C36
10	O	101	LMT	C7-C8-C9-C10
10	2	101	LMT	C2-C3-C4-C5
6	E	101	BCL	C11-C10-C8-C9
6	J	101	BCL	C6-C7-C8-C9
6	L	301	BCL	C14-C13-C15-C16
6	V	101	BCL	C11-C12-C13-C14
6	B	102	BCL	C6-C7-C8-C9
6	7	102	BCL	C11-C10-C8-C9
6	R	101	BCL	O1A-CGA-O2A-C1
6	V	102	BCL	C13-C15-C16-C17
8	P	103	6PL	C35-C36-C37-C38
6	E	101	BCL	C1A-C2A-CAA-CBA
6	L	308	BCL	C1A-C2A-CAA-CBA
6	3	100	BCL	C1A-C2A-CAA-CBA
14	M	407	QAK	C40-C2-C3-C4
14	M	407	QAK	C38-C10-C11-C12
10	L	306	LMT	C2-C3-C4-C5
8	H	301	6PL	C1-O3P-P-O4P
8	L	305	6PL	C4-O4P-P-O3P
8	6	102	6PL	C4-O4P-P-O3P
15	9	101	PGT	C1-O3P-P-O4P
6	L	308	BCL	O1D-CGD-O2D-CED
10	2	101	LMT	C7-C8-C9-C10
8	X	102	6PL	C2-C1-O3P-P
8	L	304	6PL	C4-O4P-P-O2P
8	X	102	6PL	C1-O3P-P-O1P
8	P	103	6PL	C4-O4P-P-O2P
8	Z	103	6PL	C4-O4P-P-O2P
8	4	104	6PL	C1-O3P-P-O1P
9	G	105	CDL	CA3-OA5-PA1-OA3
9	L	310	CDL	CB2-OB2-PB2-OB4
15	7	103	PGT	C1-O3P-P-O2P
9	M	409	CDL	C12-C11-CA5-OA6
6	G	104	BCL	C3-C5-C6-C7
6	R	103	BCL	C3-C5-C6-C7
6	4	102	BCL	C3-C5-C6-C7
6	9	102	BCL	C3-C5-C6-C7
10	6	101	LMT	C1-C2-C3-C4
8	I	101	6PL	C5-C4-O4P-P

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
8	I	103	6PL	C5-C4-O4P-P
8	K	102	6PL	C5-C4-O4P-P
8	M	401	6PL	C5-C4-O4P-P
8	B	104	6PL	C5-C4-O4P-P
8	4	104	6PL	C5-C4-O4P-P
8	5	102	6PL	C5-C4-O4P-P
8	E	102	6PL	C13-C14-C15-C16
8	E	102	6PL	C38-C39-C40-C41
12	L	309	U10	C52-C53-C54-C56
12	L	303	U10	C20-C19-C21-C22
6	C	102	BCL	C6-C7-C8-C10
6	J	101	BCL	C6-C7-C8-C10
6	N	101	BCL	C6-C7-C8-C10
6	N	101	BCL	C11-C12-C13-C15
6	U	100	BCL	C6-C7-C8-C10
6	U	100	BCL	C11-C10-C8-C7
6	V	101	BCL	C11-C12-C13-C15
6	Y	101	BCL	C11-C10-C8-C7
6	Y	102	BCL	C6-C7-C8-C10
6	A	100	BCL	C11-C12-C13-C15
6	B	102	BCL	C6-C7-C8-C10
6	1	101	BCL	C6-C7-C8-C10
6	3	100	BCL	C12-C13-C15-C16
6	5	103	BCL	C11-C10-C8-C7
6	7	102	BCL	C11-C10-C8-C7
6	7	104	BCL	C11-C12-C13-C15
14	M	407	QAK	C22-C23-C24-C26
8	I	103	6PL	C38-C39-C40-C41
10	L	306	LMT	C11-C10-C9-C8
8	E	102	6PL	O4P-C4-C5-N
8	F	103	6PL	O4P-C4-C5-N
8	I	101	6PL	O4P-C4-C5-N
8	I	103	6PL	O4P-C4-C5-N
8	K	102	6PL	O4P-C4-C5-N
8	H	301	6PL	O4P-C4-C5-N
8	L	304	6PL	O4P-C4-C5-N
8	U	102	6PL	O4P-C4-C5-N
8	Q	102	6PL	O4P-C4-C5-N
8	Z	103	6PL	O4P-C4-C5-N
8	B	104	6PL	O4P-C4-C5-N
8	2	103	6PL	O4P-C4-C5-N
8	5	102	6PL	O4P-C4-C5-N

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
8	6	102	6PL	O4P-C4-C5-N
8	8	102	6PL	O4P-C4-C5-N
9	E	103	CDL	CA3-CA4-CA6-OA8
8	I	101	6PL	O2-C2-C3-O3
8	5	102	6PL	O2-C2-C3-O3
9	G	101	CDL	OB6-CB4-CB6-OB8
6	R	101	BCL	C15-C16-C17-C18
12	L	303	U10	C35-C34-C36-C37
12	L	309	U10	C35-C34-C36-C37
12	L	309	U10	C50-C49-C51-C52
8	M	401	6PL	C13-C14-C15-C16
6	E	101	BCL	C6-C7-C8-C9
6	J	103	BCL	C6-C7-C8-C9
6	P	102	BCL	C6-C7-C8-C9
6	1	102	BCL	C11-C10-C8-C9
6	7	102	BCL	C6-C7-C8-C9
6	7	102	BCL	C11-C12-C13-C14
14	M	407	QAK	C25-C24-C26-C27
10	J	102	LMT	C4'-C5'-C6'-O6'
6	J	101	BCL	C3-C5-C6-C7
6	5	103	BCL	C3-C5-C6-C7
6	T	100	BCL	C16-C17-C18-C20
9	L	310	CDL	C61-C62-C63-C64
12	M	410	U10	C9-C11-C12-C13
12	M	410	U10	C19-C21-C22-C23
10	4	101	LMT	C5-C6-C7-C8
6	0	100	BCL	C13-C15-C16-C17
9	M	408	CDL	C31-C32-C33-C34
6	F	102	BCL	C13-C15-C16-C17
9	M	408	CDL	C55-C56-C57-C58
12	M	406	U10	C30-C29-C31-C32
9	G	101	CDL	C81-C82-C83-C84
10	4	101	LMT	C6-C7-C8-C9
6	M	402	BCL	C13-C15-C16-C17
6	L	301	BCL	C2A-CAA-CBA-CGA
6	9	102	BCL	C2A-CAA-CBA-CGA
8	O	103	6PL	O31-C31-O2-C2
9	G	101	CDL	OA7-CA5-OA6-CA4
6	N	102	BCL	C2-C1-O2A-CGA
6	T	100	BCL	C2-C1-O2A-CGA
6	V	101	BCL	C2-C1-O2A-CGA
6	3	100	BCL	C2-C1-O2A-CGA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
6	0	100	BCL	C2-C1-O2A-CGA
6	F	102	BCL	C16-C17-C18-C20
6	7	102	BCL	C5-C6-C7-C8
8	H	301	6PL	C2-C3-O3-C11
8	M	401	6PL	C12-C11-O3-C3
8	M	401	6PL	O11-C11-O3-C3
8	Z	103	6PL	O3P-C1-C2-O2
9	G	105	CDL	OA5-CA3-CA4-OA6
8	4	104	6PL	C16-C17-C18-C19
8	L	305	6PL	C37-C38-C39-C40
6	Y	102	BCL	C16-C17-C18-C19
6	B	102	BCL	C16-C17-C18-C19
14	M	407	QAK	CD2-CE2-CZ2-C4
10	F	101	LMT	C1-C2-C3-C4
9	G	101	CDL	C51-C52-C53-C54
8	D	102	6PL	C4-O4P-P-O3P
8	O	103	6PL	C4-O4P-P-O3P
8	M	401	6PL	C1-O3P-P-O4P
8	S	102	6PL	C4-O4P-P-O3P
8	U	102	6PL	C4-O4P-P-O3P
8	X	102	6PL	C4-O4P-P-O3P
8	P	103	6PL	C1-O3P-P-O4P
8	B	104	6PL	C1-O3P-P-O4P
8	2	103	6PL	C4-O4P-P-O3P
8	4	104	6PL	C4-O4P-P-O3P
8	8	102	6PL	C1-O3P-P-O4P
8	8	102	6PL	C4-O4P-P-O3P
8	0	102	6PL	C1-O3P-P-O4P
8	0	102	6PL	C4-O4P-P-O3P
9	L	310	CDL	CA2-OA2-PA1-OA5
9	L	310	CDL	CA3-OA5-PA1-OA2
9	M	408	CDL	CB3-OB5-PB2-OB2
9	M	409	CDL	CA2-OA2-PA1-OA5
15	7	103	PGT	C4-O4P-P-O3P
15	9	101	PGT	C4-O4P-P-O3P
11	L	302	BPH	CHA-CBD-CGD-O2D
8	I	101	6PL	C40-C41-C42-C43
6	E	101	BCL	C11-C10-C8-C7
6	L	301	BCL	C12-C13-C15-C16
11	M	405	BPH	C6-C7-C8-C10
12	L	309	U10	C48-C49-C51-C52
8	2	103	6PL	C33-C34-C35-C36

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
6	J	101	BCL	C14-C13-C15-C16
6	N	101	BCL	C6-C7-C8-C9
6	N	102	BCL	C6-C7-C8-C9
6	V	102	BCL	C6-C7-C8-C9
6	Y	101	BCL	C6-C7-C8-C9
6	A	100	BCL	C11-C12-C13-C14
6	E	101	BCL	C5-C6-C7-C8
12	L	303	U10	C3-C4-O4-C4M
8	2	103	6PL	C31-C32-C33-C34
9	M	408	CDL	C59-C60-C61-C62
6	V	101	BCL	C5-C6-C7-C8
12	M	410	U10	C5-C4-O4-C4M
10	H	302	LMT	C5'-C4'-O1B-C1B
6	L	301	BCL	C3-C5-C6-C7
9	M	409	CDL	CA4-CA3-OA5-PA1
12	L	309	U10	C28-C29-C31-C32
12	L	309	U10	C33-C34-C36-C37
10	Z	101	LMT	C4'-C5'-C6'-O6'
8	E	102	6PL	C12-C13-C14-C15
12	L	309	U10	C44-C46-C47-C48
12	M	406	U10	C24-C26-C27-C28
10	R	102	LMT	O5B-C1B-O1B-C4'
8	5	102	6PL	C18-C19-C20-C21
6	V	102	BCL	C16-C17-C18-C19
6	P	102	BCL	C16-C17-C18-C20
10	L	306	LMT	C5'-C4'-O1B-C1B
12	M	410	U10	C45-C44-C46-C47
8	0	102	6PL	C32-C33-C34-C35
10	2	101	LMT	C4-C5-C6-C7
6	C	102	BCL	C2-C1-O2A-CGA
6	N	101	BCL	C2-C1-O2A-CGA
6	Q	100	BCL	C2-C1-O2A-CGA
6	Y	102	BCL	C2-C1-O2A-CGA
6	1	102	BCL	C2-C1-O2A-CGA
10	O	101	LMT	C4-C5-C6-C7
6	V	101	BCL	O1D-CGD-O2D-CED
6	Y	102	BCL	C2A-CAA-CBA-CGA
6	A	100	BCL	C2A-CAA-CBA-CGA
8	Q	102	6PL	O2-C2-C3-O3
8	E	102	6PL	C37-C38-C39-C40
12	M	406	U10	C5-C4-O4-C4M
9	G	101	CDL	C60-C61-C62-C63

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
12	L	303	U10	C33-C34-C36-C37
6	E	101	BCL	C14-C13-C15-C16
6	F	102	BCL	C11-C10-C8-C9
6	M	402	BCL	C11-C12-C13-C14
6	U	100	BCL	C14-C13-C15-C16
6	Y	102	BCL	C11-C10-C8-C9
6	1	101	BCL	C6-C7-C8-C9
6	7	104	BCL	C11-C12-C13-C14
11	M	405	BPH	C6-C7-C8-C9
9	M	409	CDL	CA4-CA6-OA8-CA7
9	L	310	CDL	C78-C79-C80-C81
10	2	101	LMT	C4'-C5'-C6'-O6'
14	M	407	QAK	CE2-CD2-CE3-CZ3
11	M	405	BPH	C2C-C3C-CAC-CBC
12	L	309	U10	C14-C16-C17-C18
6	G	103	BCL	C10-C11-C12-C13
9	G	101	CDL	CA3-CA4-OA6-CA5
6	G	104	BCL	C6-C7-C8-C10
6	M	402	BCL	C12-C13-C15-C16
6	V	101	BCL	C6-C7-C8-C10
6	1	101	BCL	C11-C10-C8-C7
6	1	102	BCL	C6-C7-C8-C10
6	T	100	BCL	C13-C15-C16-C17
6	1	101	BCL	C16-C17-C18-C19
8	E	102	6PL	C2-C1-O3P-P
6	Q	100	BCL	C13-C15-C16-C17
8	L	305	6PL	C33-C34-C35-C36
12	L	307	U10	C47-C48-C49-C50
12	M	410	U10	C42-C43-C44-C45
6	M	404	BCL	C5-C6-C7-C8
6	M	402	BCL	C4-C3-C5-C6
10	L	306	LMT	C5-C6-C7-C8
14	M	407	QAK	C-CA-CB-C31
14	M	407	QAK	C14-C15-C16-C17
10	F	101	LMT	O5'-C5'-C6'-O6'
8	0	102	6PL	O2-C2-C3-O3
15	9	101	PGT	O2-C2-C3-O3
8	I	103	6PL	O3-C11-C12-C13
8	Z	103	6PL	C40-C41-C42-C43
6	M	404	BCL	C16-C17-C18-C19
10	B	101	LMT	C4'-C5'-C6'-O6'
6	A	100	BCL	O1D-CGD-O2D-CED

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
6	G	104	BCL	C2-C1-O2A-CGA
6	U	100	BCL	C2-C1-O2A-CGA
6	5	103	BCL	C2-C1-O2A-CGA
6	7	104	BCL	C2-C1-O2A-CGA
6	9	102	BCL	C2-C1-O2A-CGA
12	M	406	U10	C28-C29-C31-C32
12	M	410	U10	C43-C44-C46-C47
6	L	301	BCL	C15-C16-C17-C18
10	2	101	LMT	C11-C10-C9-C8
6	B	102	BCL	C16-C17-C18-C20
10	R	102	LMT	C4-C5-C6-C7
8	M	401	6PL	C41-C42-C43-C44
8	O	103	6PL	O11-C11-C12-C13
12	L	309	U10	C45-C44-C46-C47
12	M	410	U10	C18-C19-C21-C22
8	L	304	6PL	C18-C19-C20-C21
10	P	101	LMT	C6-C7-C8-C9
6	V	101	BCL	CBD-CGD-O2D-CED
8	F	103	6PL	O3P-C1-C2-O2
10	F	101	LMT	C4-C5-C6-C7
6	V	101	BCL	C10-C11-C12-C13
9	L	310	CDL	C32-C33-C34-C35
8	I	101	6PL	C11-C12-C13-C14
14	M	407	QAK	C38-C10-CZ3-CE3
8	2	103	6PL	O31-C31-C32-C33
8	O	103	6PL	O2-C31-C32-C33
8	O	103	6PL	C32-C33-C34-C35
6	J	101	BCL	C16-C17-C18-C19
6	Y	102	BCL	C16-C17-C18-C20
6	9	102	BCL	C16-C17-C18-C19
8	L	304	6PL	C19-C20-C21-C22
8	2	103	6PL	C14-C15-C16-C17
10	L	306	LMT	O5B-C1B-O1B-C4'
12	L	303	U10	C25-C24-C26-C27
12	M	410	U10	C12-C11-C9-C10
11	L	302	BPH	C10-C11-C12-C13
6	M	402	BCL	C2-C3-C5-C6
6	L	308	BCL	CAA-CBA-CGA-O2A
6	C	102	BCL	C6-C7-C8-C9
6	N	101	BCL	C11-C12-C13-C14
6	U	100	BCL	C6-C7-C8-C9
6	V	101	BCL	C6-C7-C8-C9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
6	Y	102	BCL	C6-C7-C8-C9
6	1	101	BCL	C11-C10-C8-C9
6	1	102	BCL	C6-C7-C8-C9
6	3	100	BCL	C14-C13-C15-C16
6	M	404	BCL	C3A-C2A-CAA-CBA
10	O	101	LMT	C3-C4-C5-C6
6	L	301	BCL	CAD-CBD-CGD-O2D
6	M	402	BCL	CAD-CBD-CGD-O2D
8	I	101	6PL	C3-C2-O2-C31
8	5	102	6PL	C3-C2-O2-C31
9	E	103	CDL	CB6-CB4-OB6-CB5
6	P	102	BCL	C16-C17-C18-C19
6	F	102	BCL	C2A-CAA-CBA-CGA
6	7	104	BCL	C8-C10-C11-C12
10	R	102	LMT	C2B-C1B-O1B-C4'
9	L	310	CDL	C32-C31-CA7-OA8
8	D	102	6PL	C39-C40-C41-C42
8	K	102	6PL	O3-C11-C12-C13
9	L	310	CDL	C12-C11-CA5-OA6
11	L	302	BPH	O2A-C1-C2-C3
6	C	101	BCL	C16-C17-C18-C19
8	M	401	6PL	C2-C3-O3-C11
6	F	102	BCL	CHA-CBD-CGD-O1D
6	F	102	BCL	CHA-CBD-CGD-O2D
6	L	308	BCL	CHA-CBD-CGD-O2D
6	M	404	BCL	CHA-CBD-CGD-O2D
6	1	101	BCL	CHA-CBD-CGD-O1D
6	1	101	BCL	CHA-CBD-CGD-O2D
15	7	103	PGT	O3P-C1-C2-C3
6	G	103	BCL	CAA-CBA-CGA-O2A
8	6	102	6PL	O3-C11-C12-C13
8	I	101	6PL	C34-C35-C36-C37
11	M	405	BPH	CHA-CBD-CGD-O1D
8	Q	102	6PL	O31-C31-C32-C33
8	5	102	6PL	O2-C31-C32-C33
9	L	310	CDL	C32-C31-CA7-OA9
6	0	100	BCL	C6-C7-C8-C10
9	L	310	CDL	C38-C39-C40-C41
9	L	310	CDL	C40-C41-C42-C43
8	Q	102	6PL	C18-C19-C20-C21
8	U	102	6PL	O11-C11-C12-C13
6	V	102	BCL	C16-C17-C18-C20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
9	G	101	CDL	C15-C16-C17-C18
8	K	102	6PL	C32-C31-O2-C2
6	T	100	BCL	C2A-CAA-CBA-CGA
6	4	102	BCL	C2A-CAA-CBA-CGA
8	2	103	6PL	C40-C41-C42-C43
6	1	101	BCL	C16-C17-C18-C20
6	1	101	BCL	C4-C3-C5-C6
12	M	410	U10	C20-C19-C21-C22
12	L	303	U10	C18-C19-C21-C22
6	M	404	BCL	C1A-C2A-CAA-CBA
6	7	102	BCL	C1A-C2A-CAA-CBA
14	M	407	QAK	CD1-C2-C3-C4
6	L	308	BCL	CAA-CBA-CGA-O1A
15	7	103	PGT	C32-C33-C34-C35
6	B	102	BCL	C2-C1-O2A-CGA
8	5	102	6PL	O31-C31-C32-C33
9	M	408	CDL	C75-C76-C77-C78
9	G	101	CDL	CB3-CB4-CB6-OB8
6	3	100	BCL	C16-C17-C18-C19
8	K	102	6PL	O11-C11-C12-C13
9	G	105	CDL	CB4-CB6-OB8-CB7
10	F	101	LMT	C5-C6-C7-C8
8	D	102	6PL	C1-O3P-P-O1P
8	O	103	6PL	C1-O3P-P-O1P
8	O	103	6PL	C4-O4P-P-O1P
8	L	305	6PL	C1-O3P-P-O1P
8	M	401	6PL	C1-O3P-P-O1P
8	P	103	6PL	C1-O3P-P-O1P
8	Z	103	6PL	C1-O3P-P-O1P
8	2	103	6PL	C4-O4P-P-O1P
8	4	104	6PL	C4-O4P-P-O1P
8	5	102	6PL	C1-O3P-P-O1P
8	8	102	6PL	C4-O4P-P-O1P
8	0	102	6PL	C1-O3P-P-O1P
9	G	105	CDL	CA2-OA2-PA1-OA3
9	L	310	CDL	CA3-OA5-PA1-OA3
9	M	408	CDL	CB3-OB5-PB2-OB3
15	7	103	PGT	C4-O4P-P-O1P
6	G	103	BCL	CAA-CBA-CGA-O1A
9	L	310	CDL	C12-C11-CA5-OA7
8	6	102	6PL	O11-C11-C12-C13
6	J	101	BCL	C5-C6-C7-C8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
6	U	100	BCL	CBA-CGA-O2A-C1
8	O	103	6PL	O31-C31-C32-C33
6	1	101	BCL	C10-C11-C12-C13
8	K	102	6PL	C20-C21-C22-C23
8	P	103	6PL	O31-C31-C32-C33
6	5	101	BCL	C4-C3-C5-C6
8	E	102	6PL	C21-C22-C23-C24
8	M	401	6PL	C21-C22-C23-C24
6	V	102	BCL	CAD-CBD-CGD-O1D
6	1	101	BCL	CAD-CBD-CGD-O1D
8	H	301	6PL	C5-C4-O4P-P
9	E	103	CDL	CA3-CA4-OA6-CA5
9	E	103	CDL	CA6-CA4-OA6-CA5
6	U	100	BCL	O1A-CGA-O2A-C1
9	G	105	CDL	C32-C31-CA7-OA9
8	0	102	6PL	O3-C11-C12-C13
6	Y	102	BCL	C13-C15-C16-C17
6	G	104	BCL	C6-C7-C8-C9
9	G	105	CDL	C55-C56-C57-C58
8	X	102	6PL	C43-C44-C45-C46
8	F	103	6PL	O3-C11-C12-C13
7	O	102	CRT	C35-C36-C37-C38
7	Q	101	CRT	C35-C36-C37-C38
8	I	101	6PL	C43-C44-C45-C46
8	Q	102	6PL	C34-C35-C36-C37
6	A	100	BCL	CAA-CBA-CGA-O2A
9	G	105	CDL	C12-C11-CA5-OA6
6	A	100	BCL	C10-C11-C12-C13
9	L	310	CDL	C56-C57-C58-C59
6	G	103	BCL	C11-C10-C8-C7
6	J	103	BCL	C2C-C3C-CAC-CBC
6	J	103	BCL	C12-C13-C15-C16
6	L	301	BCL	C6-C7-C8-C10
6	7	102	BCL	C3A-C2A-CAA-CBA
8	L	304	6PL	O3-C11-C12-C13
8	S	102	6PL	O2-C31-C32-C33
8	F	103	6PL	O11-C11-C12-C13
8	L	305	6PL	O3-C11-C12-C13
6	1	102	BCL	O1D-CGD-O2D-CED
6	5	101	BCL	C5-C6-C7-C8
8	L	304	6PL	O11-C11-C12-C13
8	S	102	6PL	O31-C31-C32-C33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
8	4	104	6PL	O3-C11-C12-C13
8	D	102	6PL	C37-C38-C39-C40
8	4	104	6PL	O11-C11-C12-C13
8	6	102	6PL	C34-C35-C36-C37
6	9	102	BCL	CAA-CBA-CGA-O2A

There are no ring outliers.

100 monomers are involved in 382 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
9	G	101	CDL	12	0
11	L	302	BPH	5	0
6	J	103	BCL	5	0
6	R	101	BCL	5	0
6	B	102	BCL	6	0
8	F	103	6PL	3	0
12	L	309	U10	4	0
11	M	405	BPH	6	0
10	Z	101	LMT	1	0
10	6	101	LMT	4	0
8	0	102	6PL	3	0
8	X	102	6PL	3	0
12	M	410	U10	6	0
10	J	102	LMT	7	0
12	L	303	U10	1	0
8	I	103	6PL	5	0
9	M	408	CDL	7	0
10	H	302	LMT	5	0
7	0	101	CRT	6	0
6	4	102	BCL	6	0
8	Q	102	6PL	6	0
6	A	100	BCL	9	0
8	D	102	6PL	5	0
8	U	102	6PL	4	0
7	O	102	CRT	4	0
7	S	101	CRT	3	0
12	L	307	U10	8	0
6	G	103	BCL	3	0
8	2	103	6PL	7	0
6	G	104	BCL	6	0
6	F	102	BCL	5	0
6	5	103	BCL	6	0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Clashes	Symm-Clashes
8	5	102	6PL	2	0
6	E	101	BCL	1	0
6	V	102	BCL	5	0
6	M	404	BCL	4	0
6	1	102	BCL	8	0
6	7	104	BCL	5	0
8	8	102	6PL	4	0
10	B	101	LMT	2	0
10	P	101	LMT	2	0
6	C	102	BCL	5	0
8	4	104	6PL	5	0
7	Q	101	CRT	5	0
6	R	103	BCL	5	0
6	V	101	BCL	2	0
12	M	406	U10	3	0
6	1	101	BCL	4	0
8	M	401	6PL	5	0
8	6	102	6PL	4	0
9	E	103	CDL	7	0
8	S	102	6PL	5	0
6	J	101	BCL	3	0
7	I	102	CRT	3	0
10	R	102	LMT	3	0
6	L	308	BCL	5	0
8	Z	103	6PL	4	0
8	B	104	6PL	4	0
9	L	310	CDL	8	0
6	C	101	BCL	3	0
6	P	102	BCL	4	0
7	U	101	CRT	5	0
8	O	103	6PL	4	0
6	7	102	BCL	2	0
6	Y	102	BCL	9	0
7	7	101	CRT	3	0
10	O	101	LMT	1	0
10	F	101	LMT	4	0
6	3	100	BCL	2	0
7	4	103	CRT	10	0
7	Z	102	CRT	8	0
6	N	101	BCL	3	0
15	7	103	PGT	4	0
6	0	100	BCL	4	0

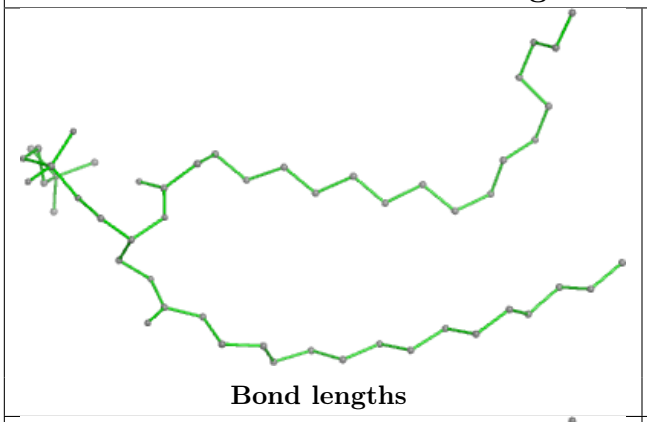
Continued on next page...

Continued from previous page...

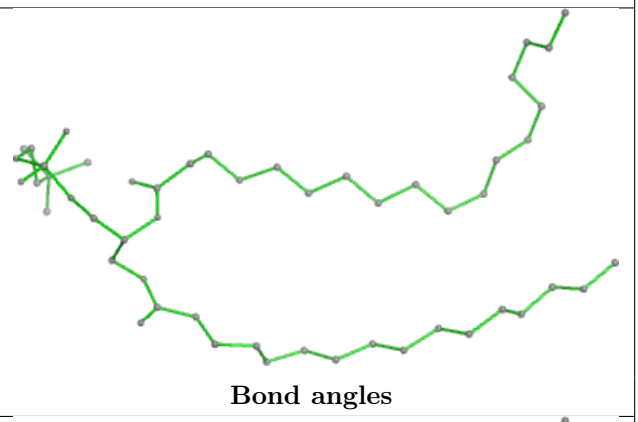
Mol	Chain	Res	Type	Clashes	Symm-Clashes
7	D	101	CRT	5	0
6	M	402	BCL	3	0
6	Y	101	BCL	5	0
6	Q	100	BCL	6	0
6	9	102	BCL	2	0
15	9	101	PGT	3	0
10	4	101	LMT	3	0
7	8	101	CRT	5	0
9	G	105	CDL	9	0
8	L	304	6PL	4	0
8	I	101	6PL	5	0
7	B	103	CRT	5	0
7	2	102	CRT	5	0
8	K	102	6PL	3	0
8	P	103	6PL	4	0
6	T	100	BCL	4	0
7	G	102	CRT	4	0
7	K	101	CRT	3	0
7	X	101	CRT	15	0
10	2	101	LMT	3	0
6	U	100	BCL	5	0
6	N	102	BCL	3	0
8	L	305	6PL	7	0
9	M	409	CDL	3	0
6	5	101	BCL	5	0
8	E	102	6PL	6	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.

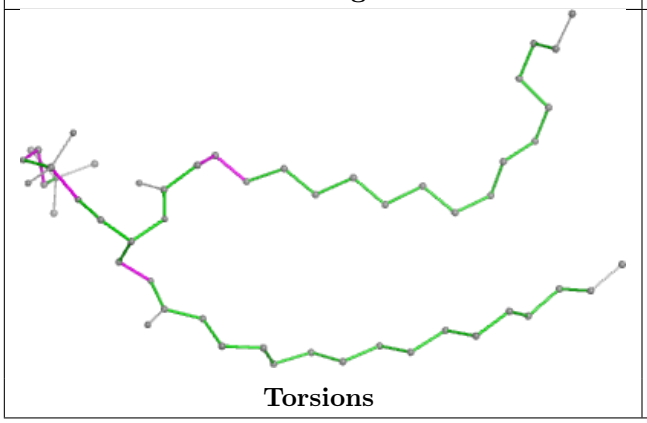
Ligand 6PL H 301



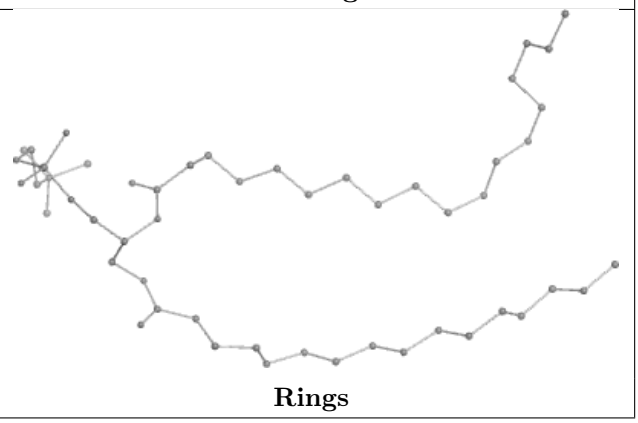
Bond lengths



Bond angles

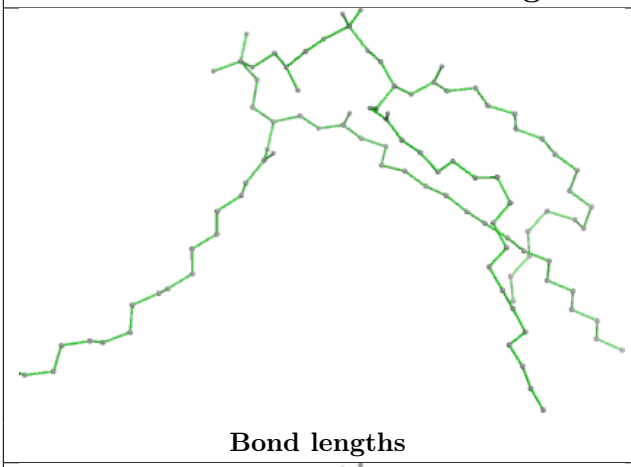


Torsions

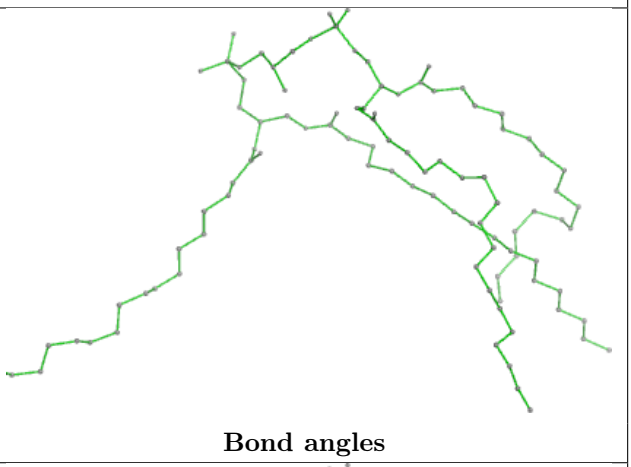


Rings

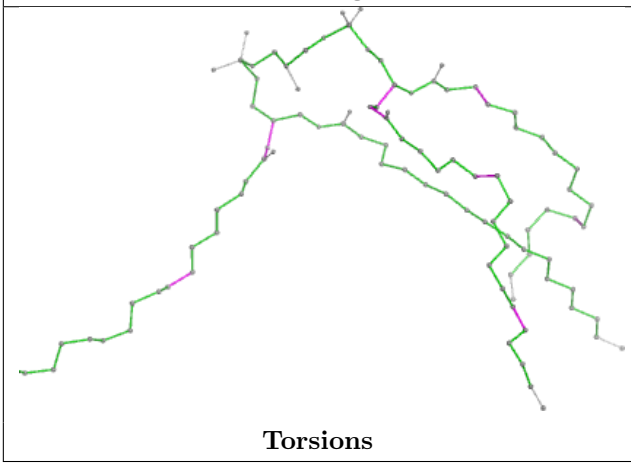
Ligand CDL G 101



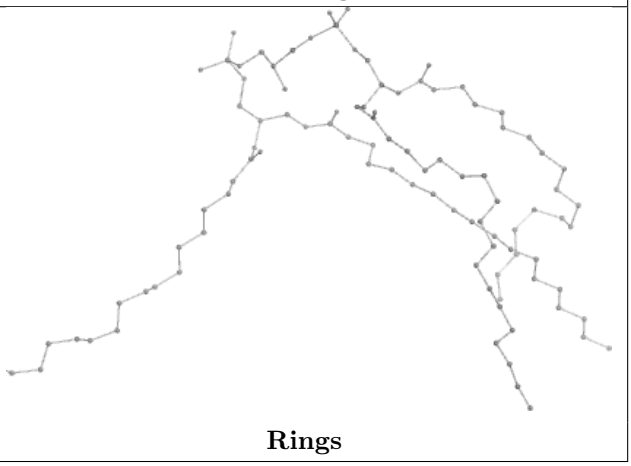
Bond lengths



Bond angles

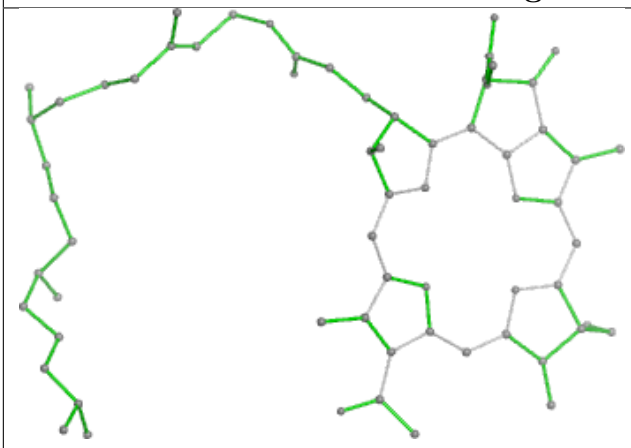


Torsions

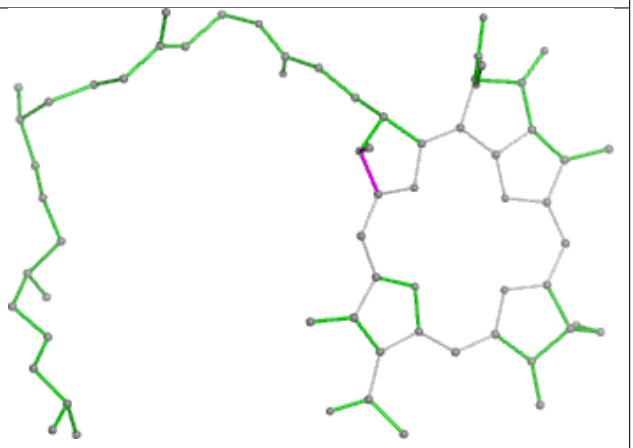


Rings

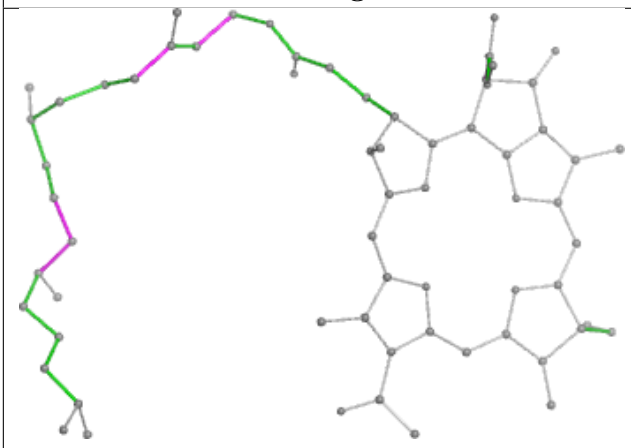
Ligand BPH L 302



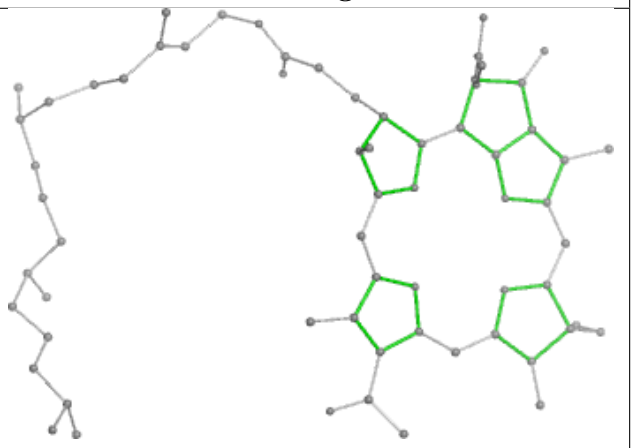
Bond lengths



Bond angles

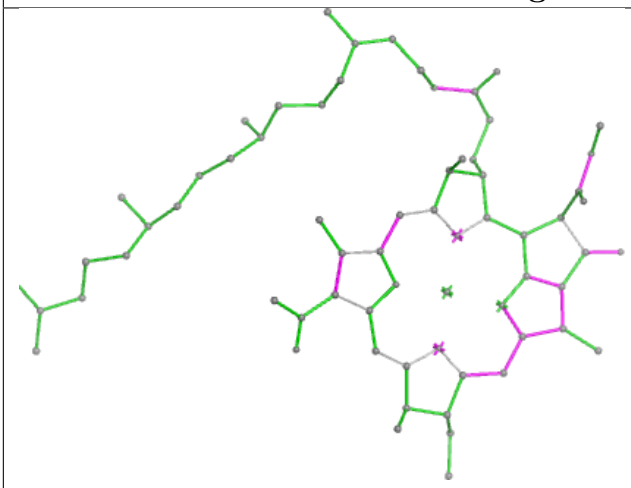


Torsions

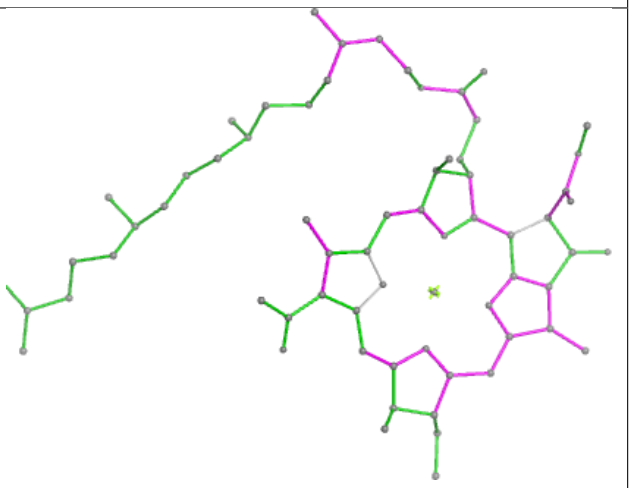


Rings

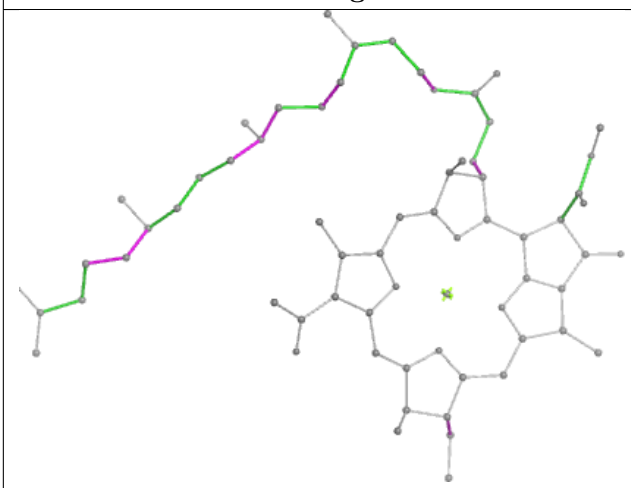
Ligand BCL J 103



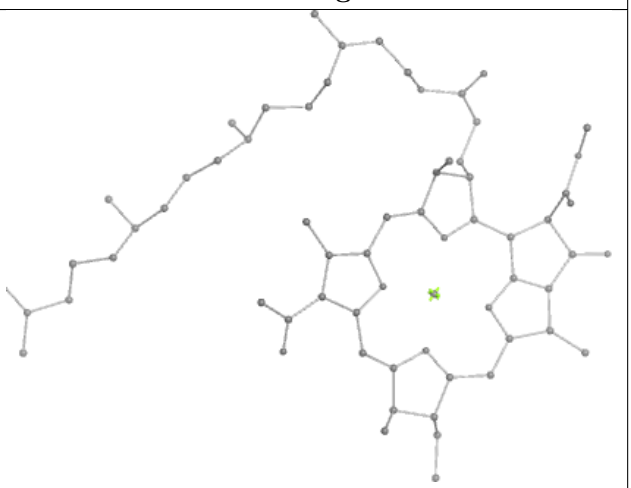
Bond lengths



Bond angles

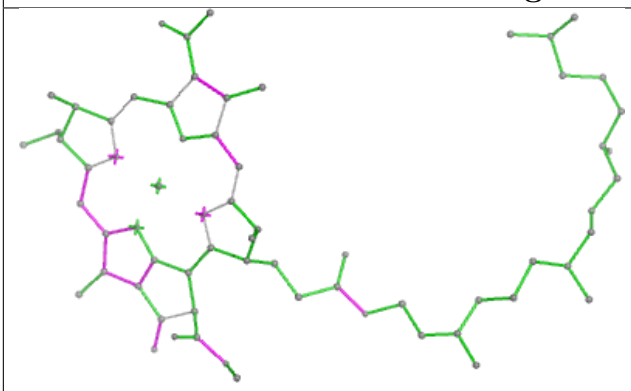


Torsions

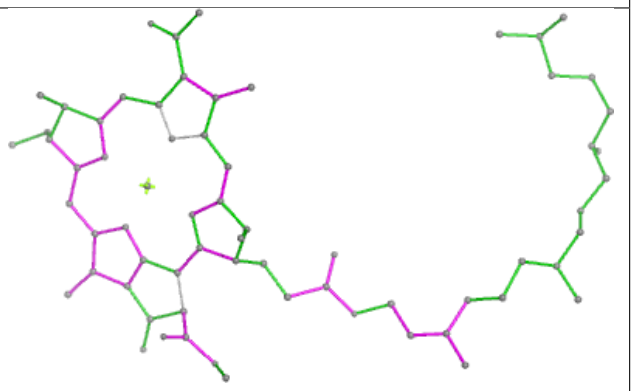


Rings

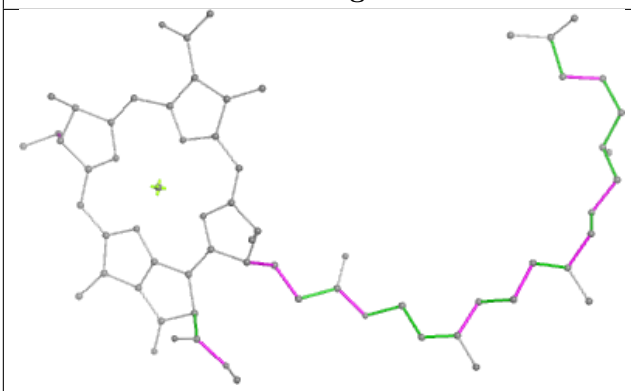
Ligand BCL R 101



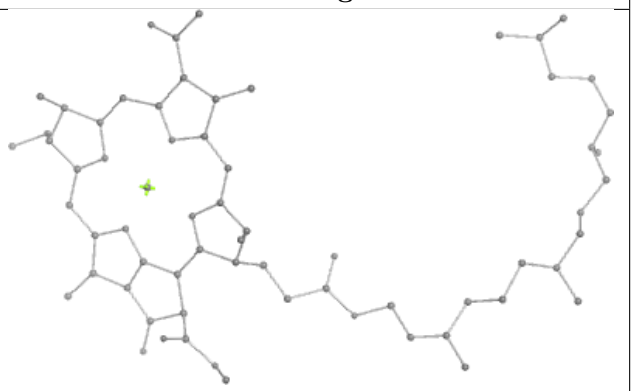
Bond lengths



Bond angles

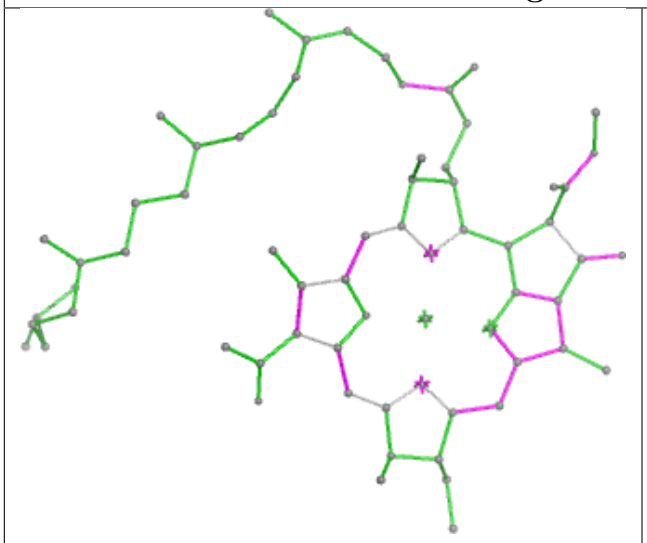


Torsions

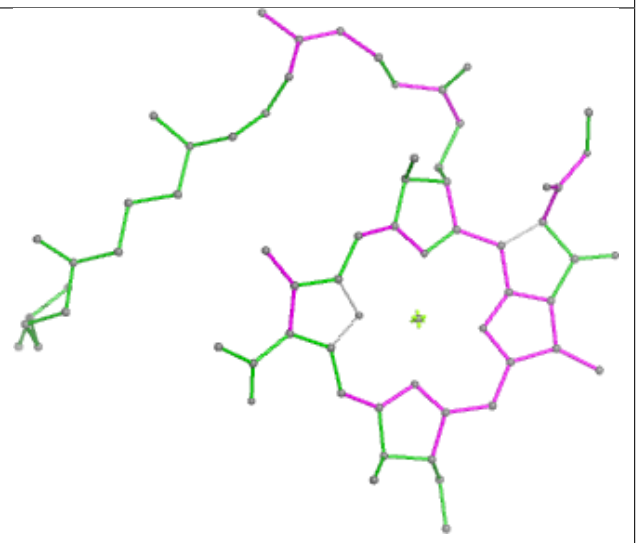


Rings

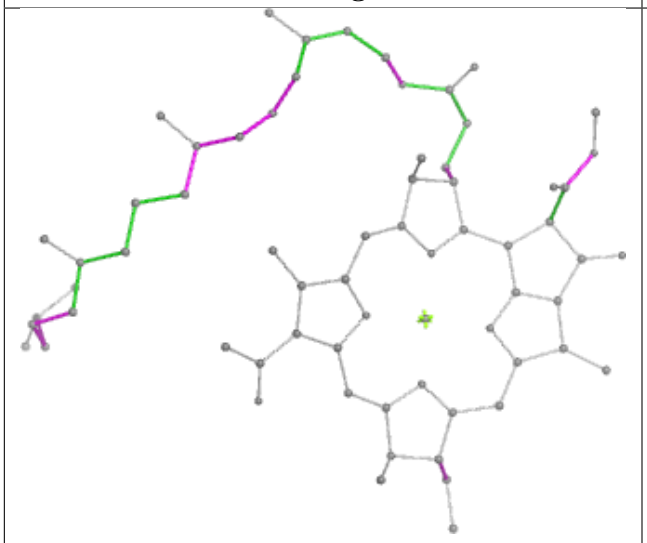
Ligand BCL B 102



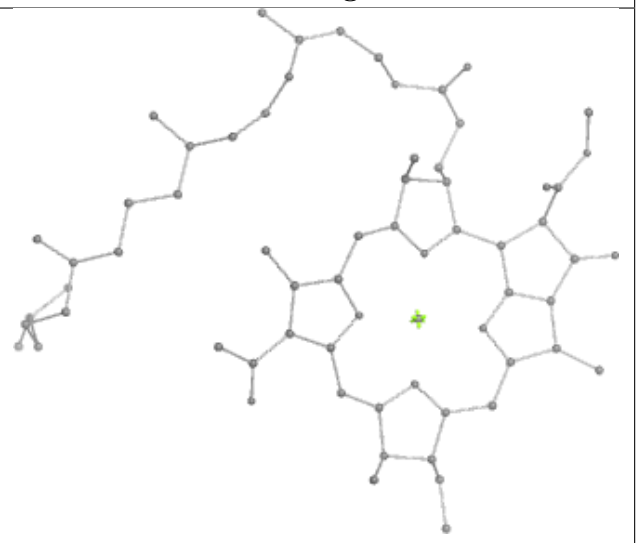
Bond lengths



Bond angles

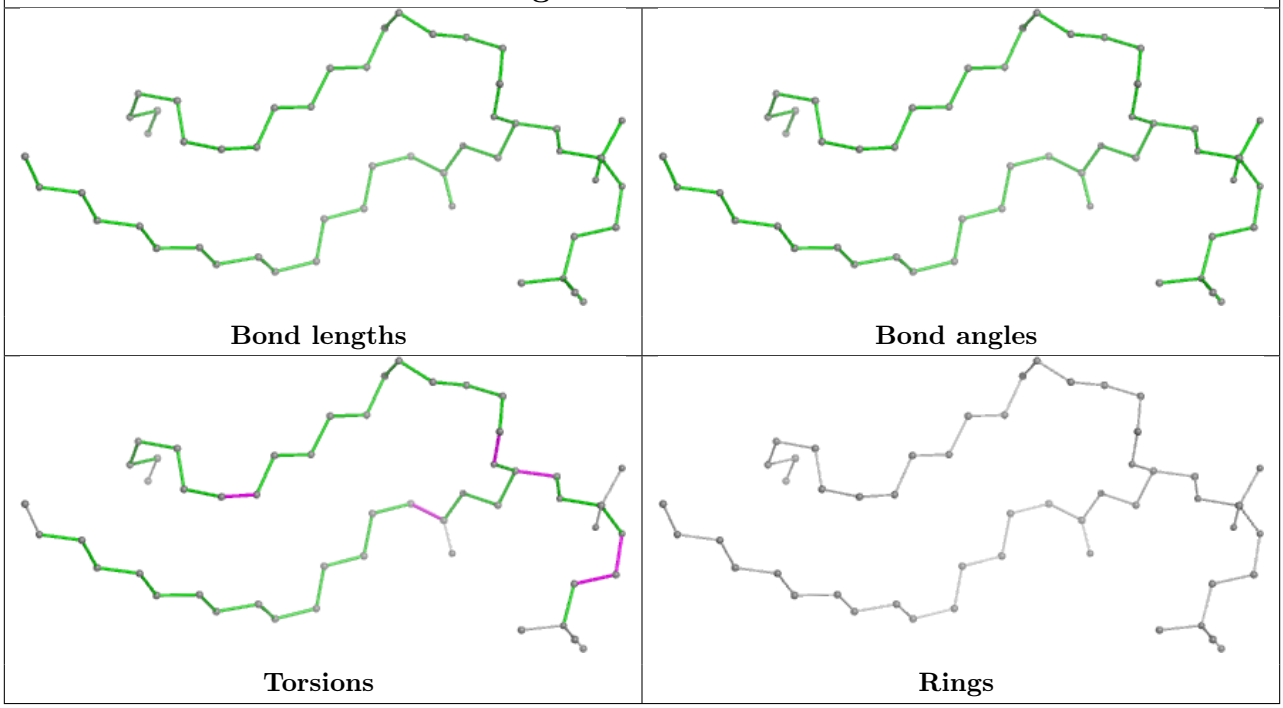


Torsions

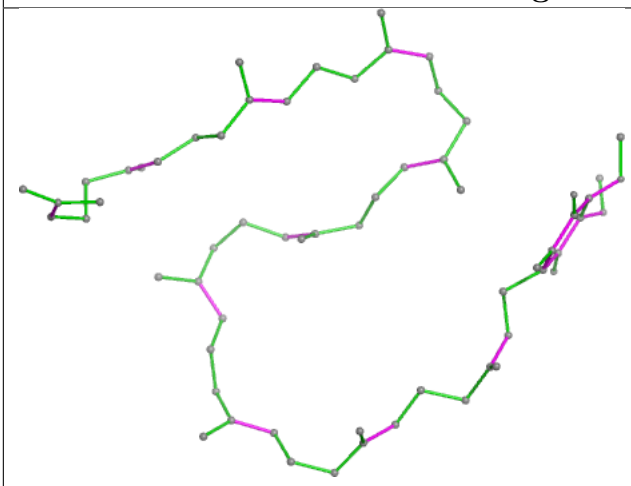


Rings

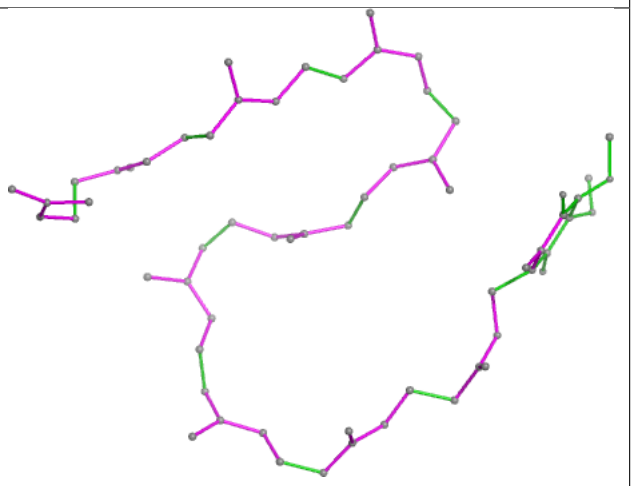
Ligand 6PL F 103



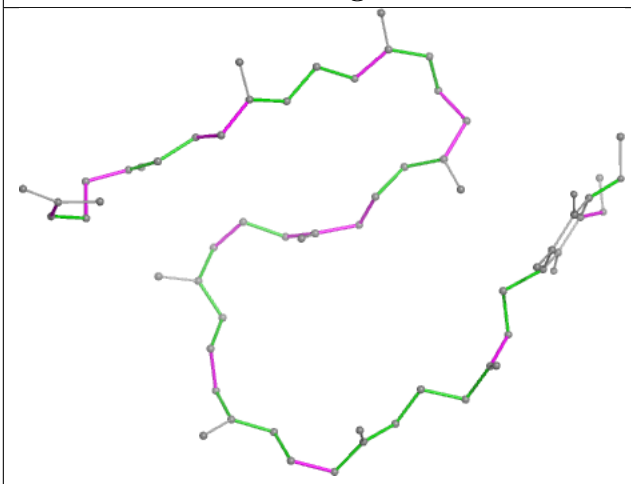
Ligand U10 L 309



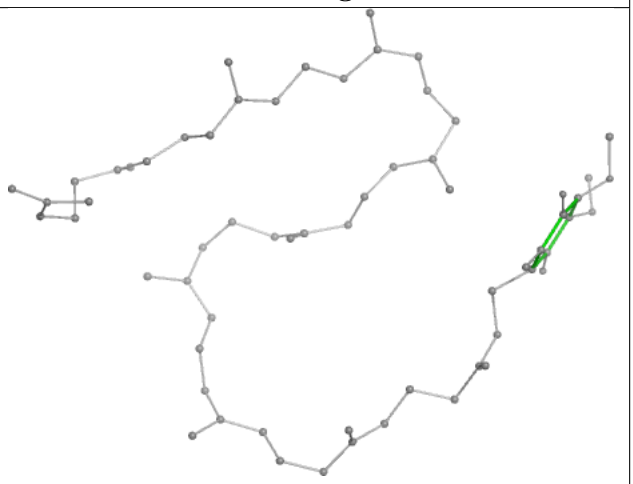
Bond lengths



Bond angles

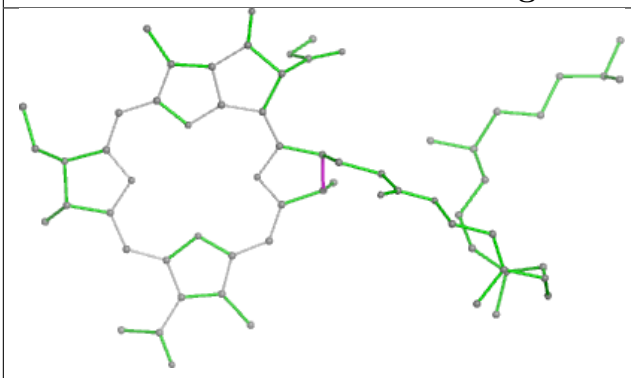


Torsions

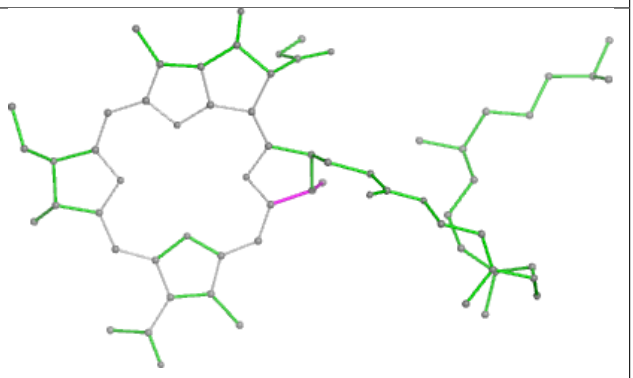


Rings

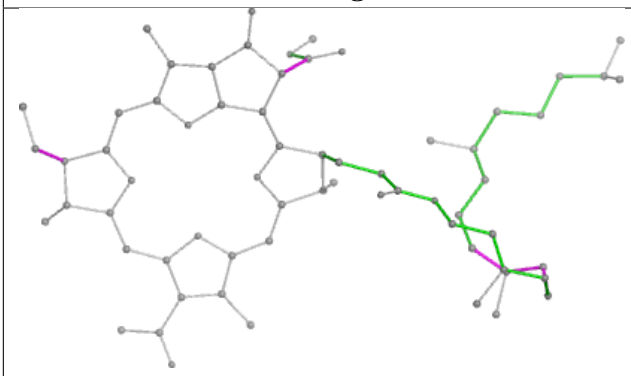
Ligand BPH M 405



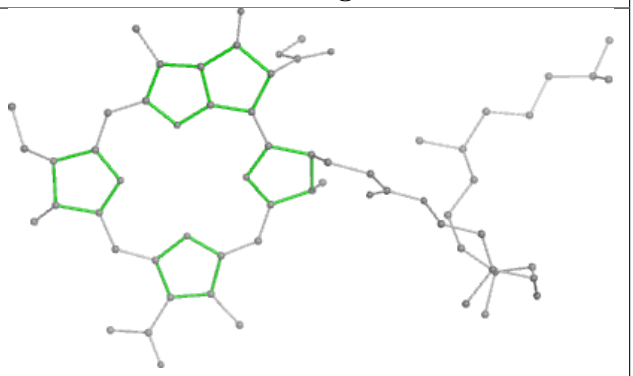
Bond lengths



Bond angles

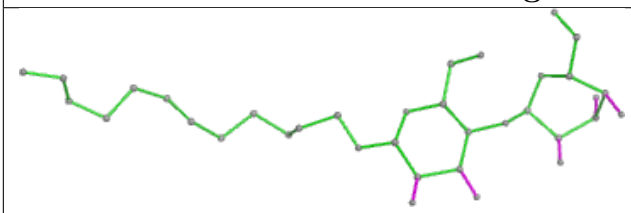


Torsions

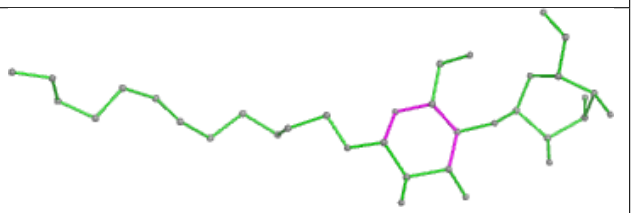


Rings

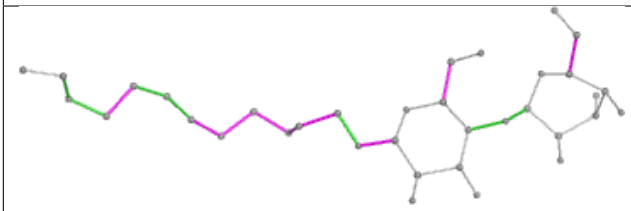
Ligand LMT Z 101



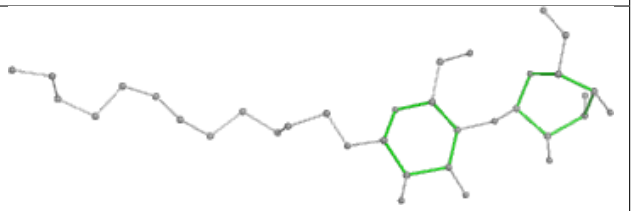
Bond lengths



Bond angles

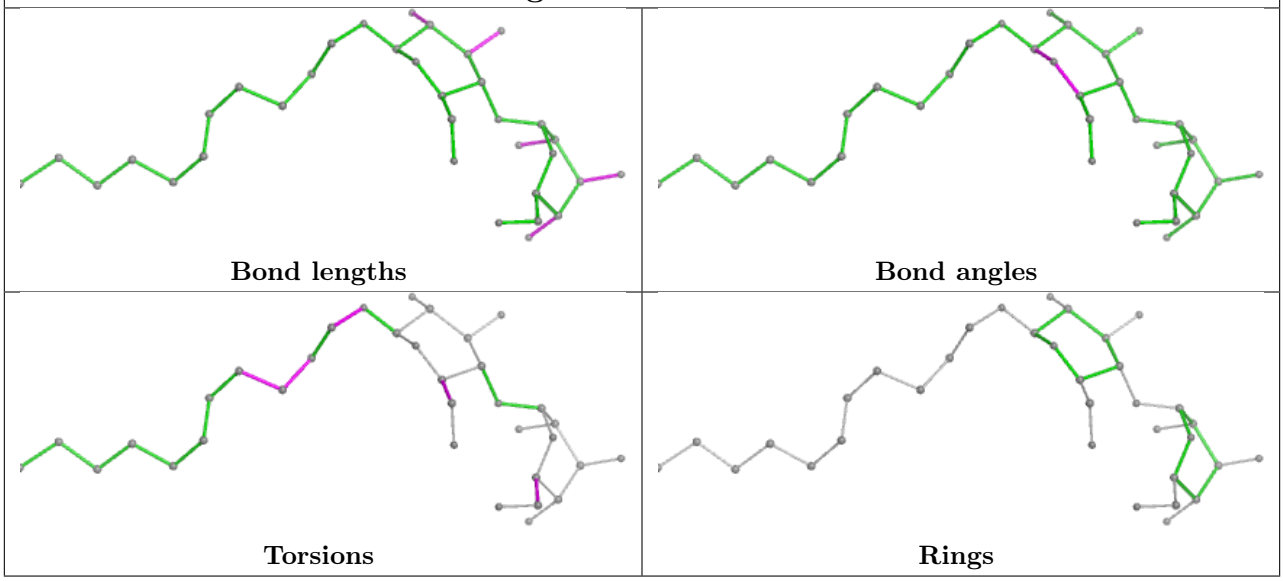


Torsions

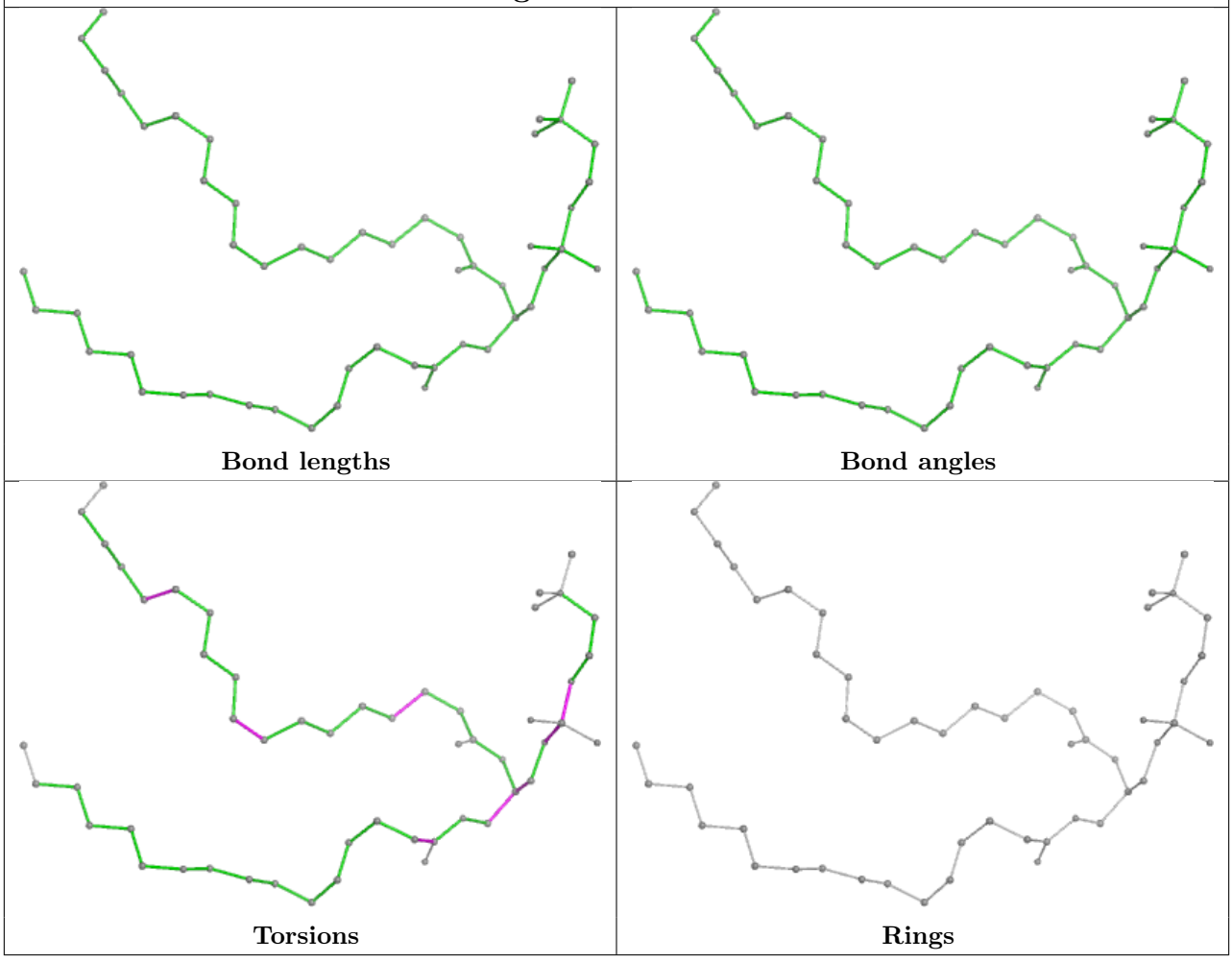


Rings

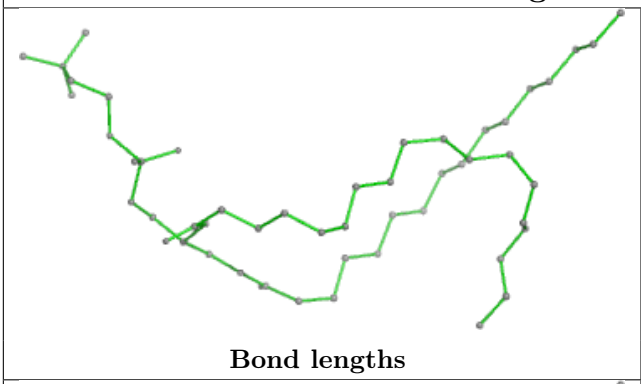
Ligand LMT 6 101



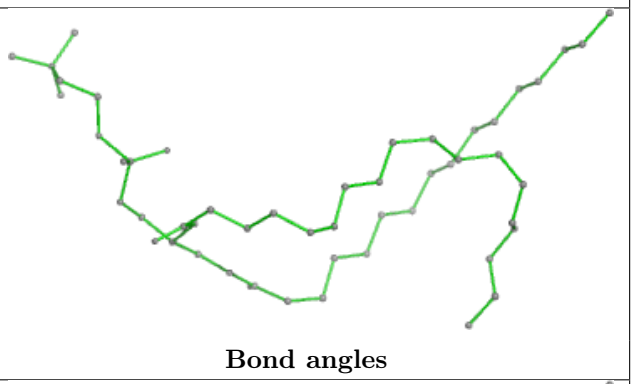
Ligand 6PL 0 102



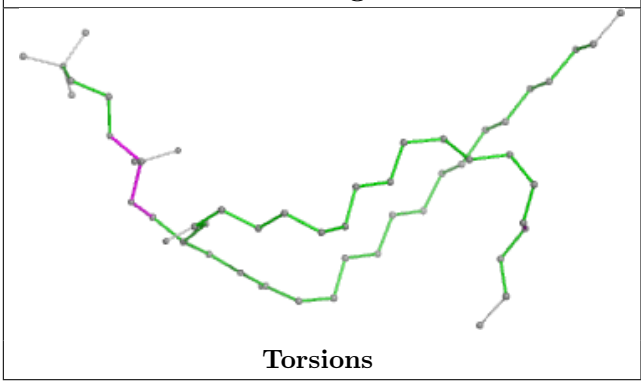
Ligand 6PL X 102



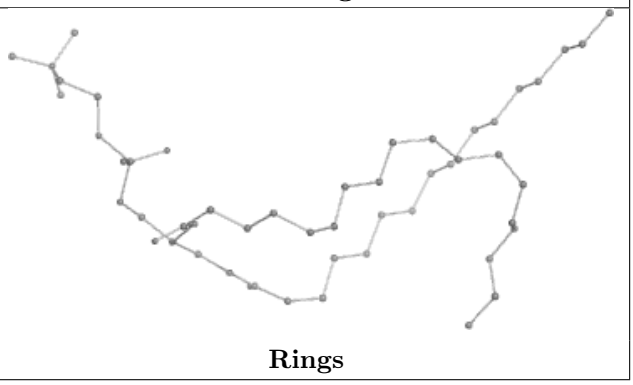
Bond lengths



Bond angles

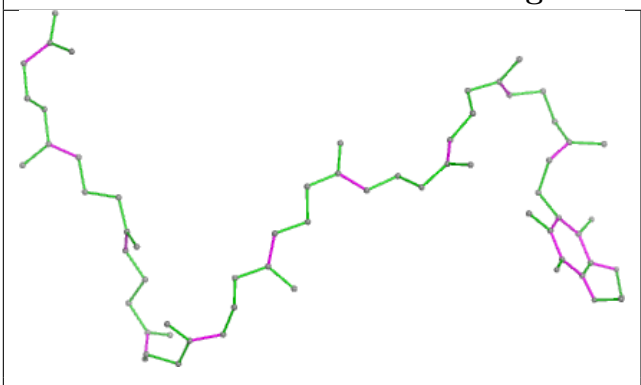


Torsions

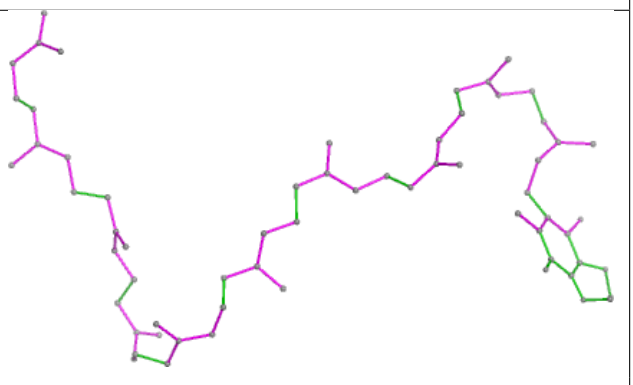


Rings

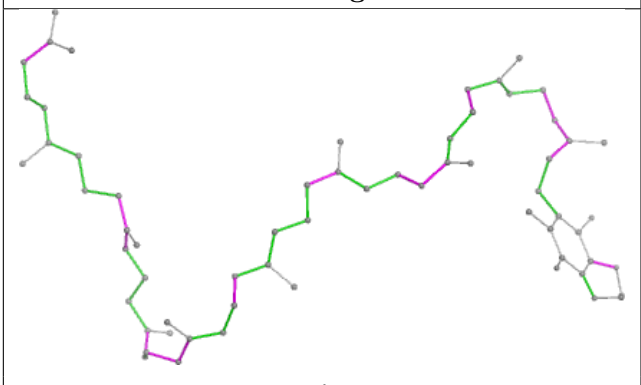
Ligand U10 M 410



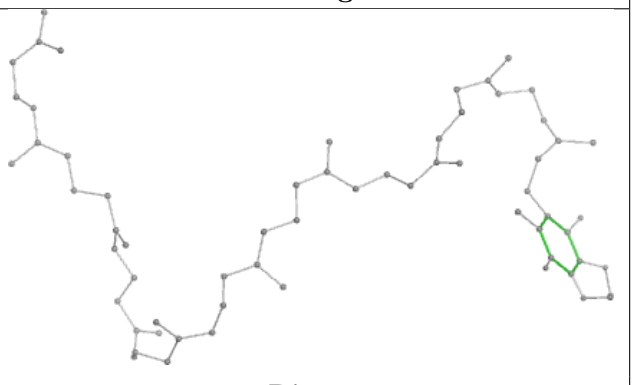
Bond lengths



Bond angles

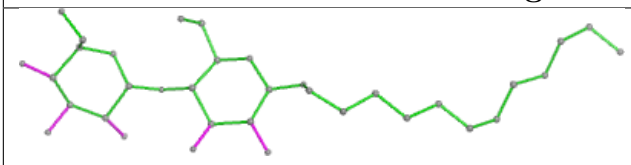


Torsions

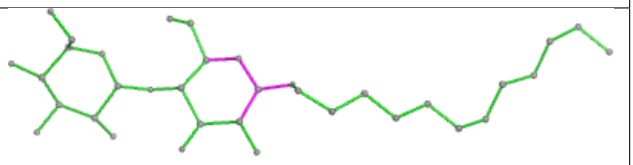


Rings

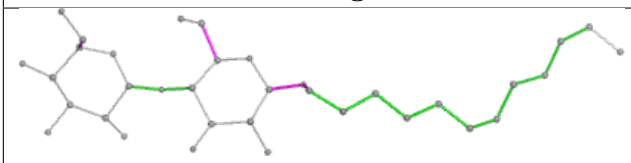
Ligand LMT J 102



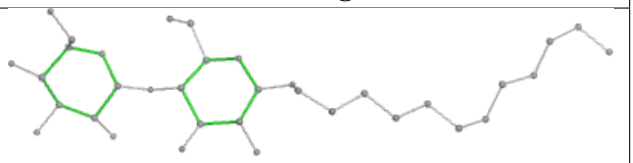
Bond lengths



Bond angles

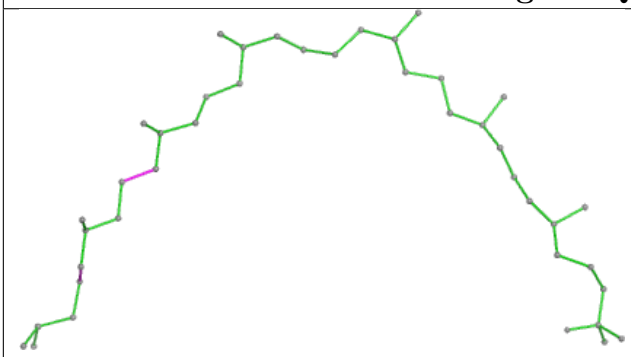


Torsions

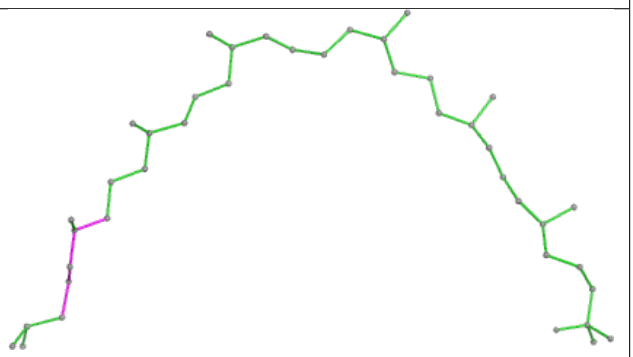


Rings

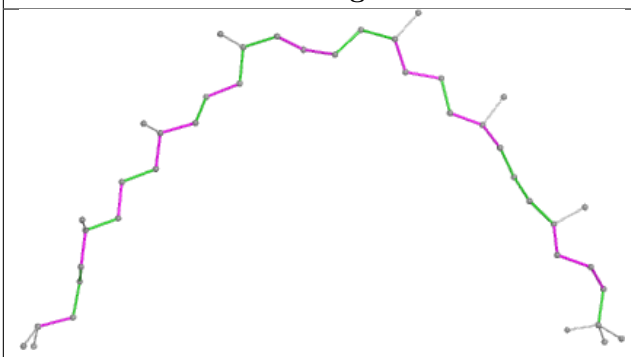
Ligand QAK M 407



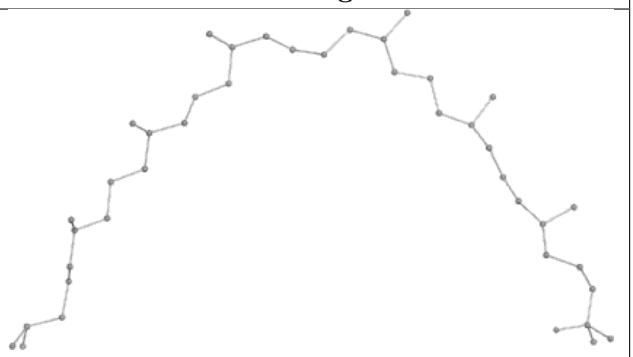
Bond lengths



Bond angles

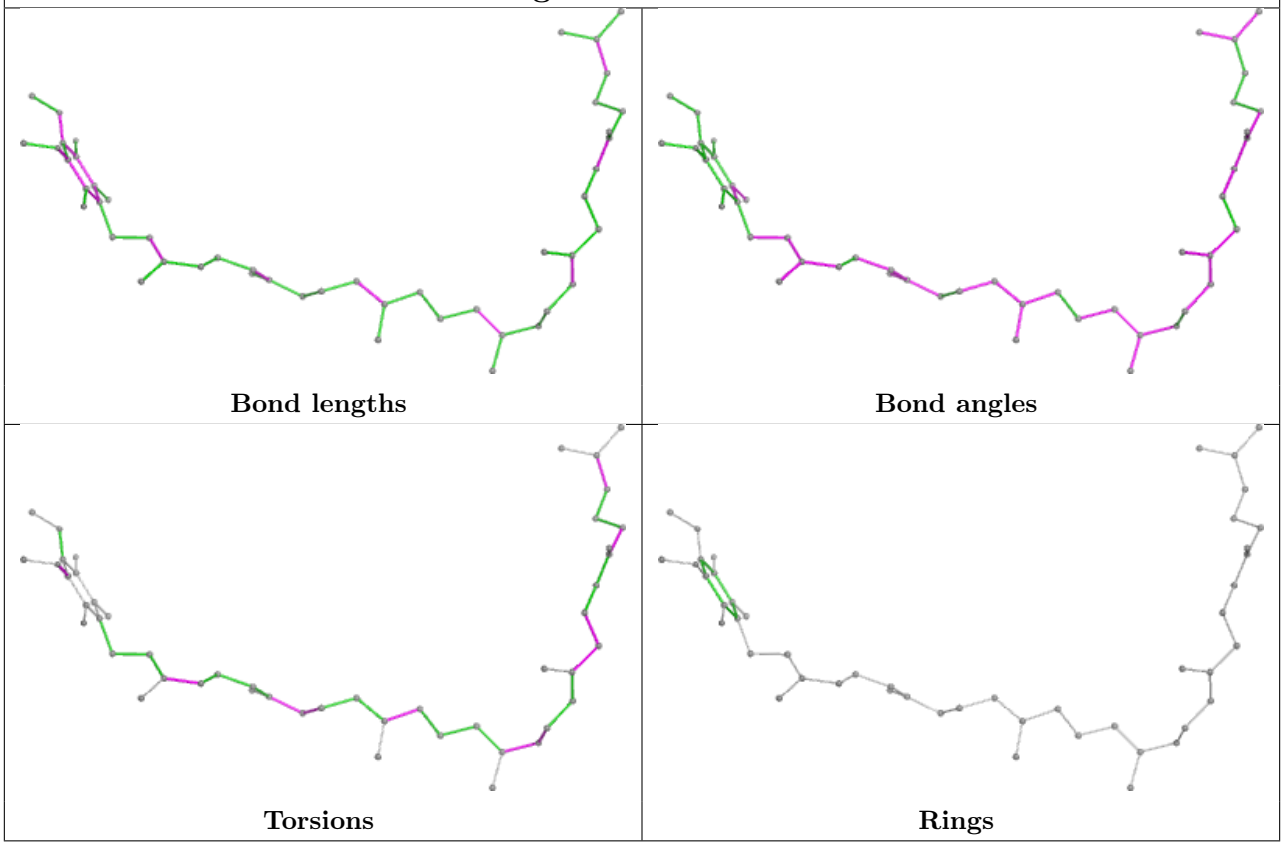


Torsions

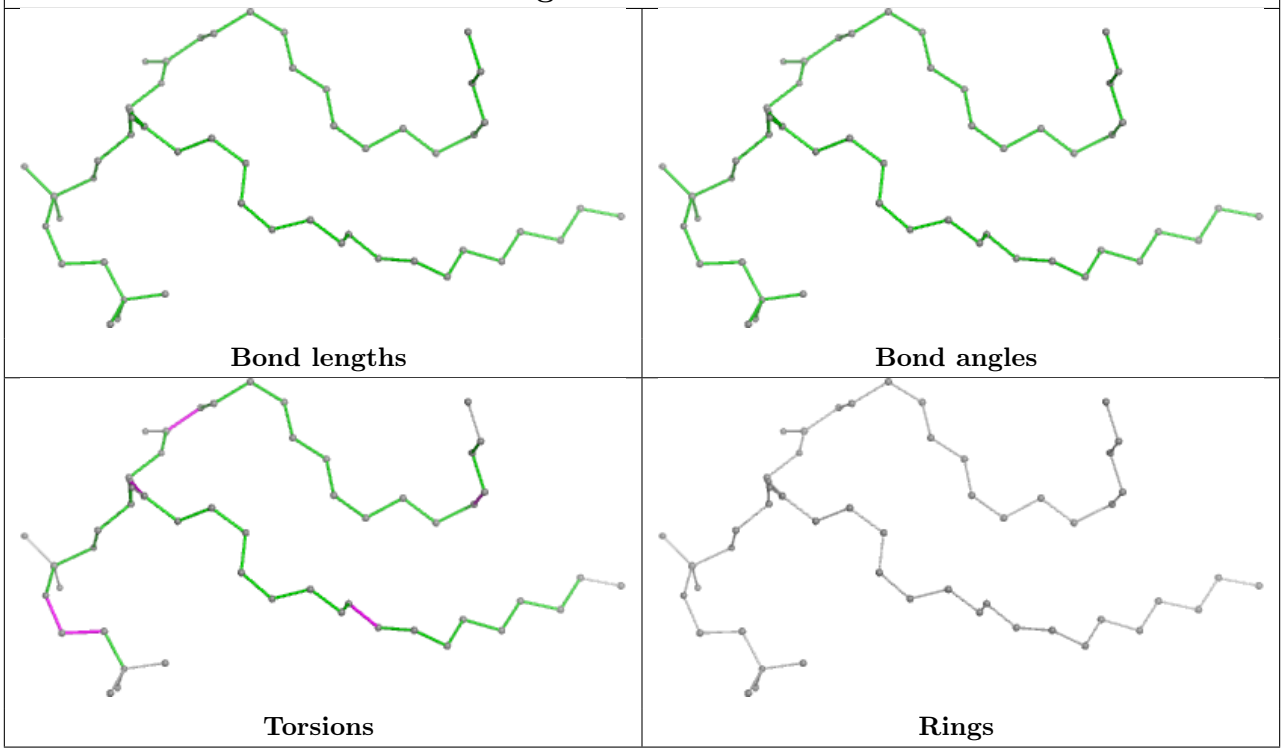


Rings

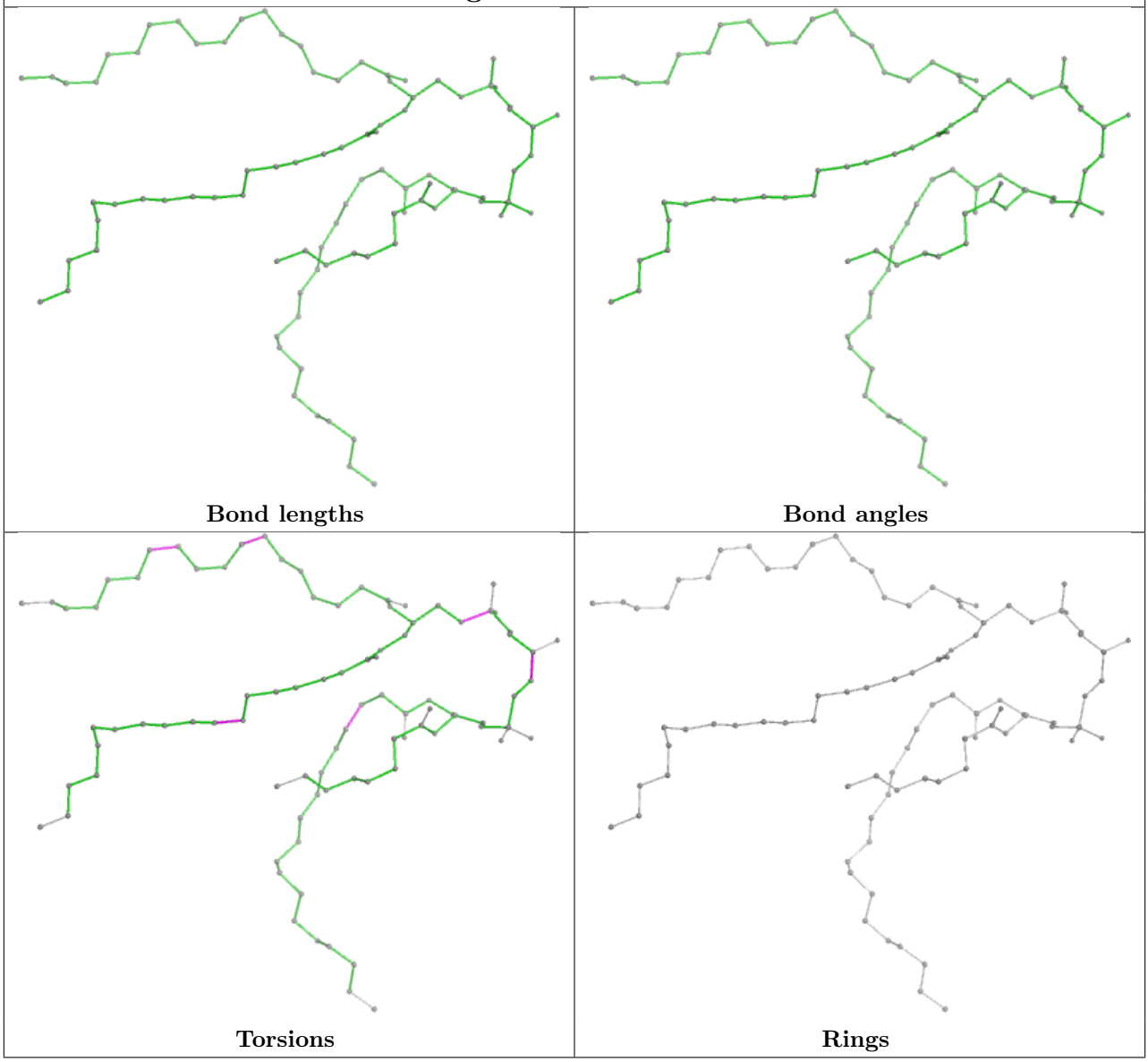
Ligand U10 L 303



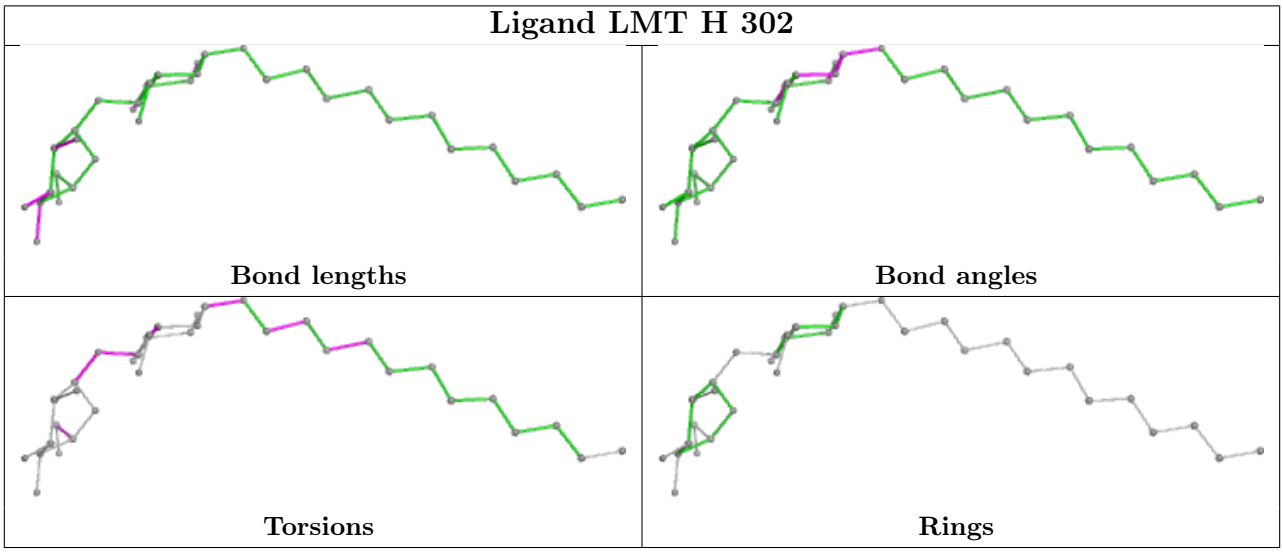
Ligand 6PL I 103



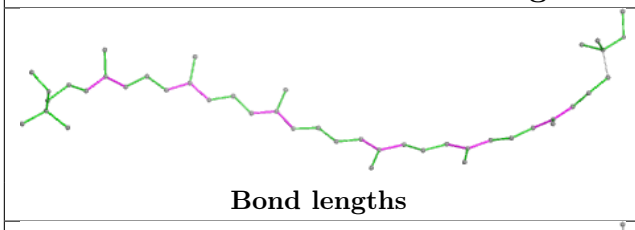
Ligand CDL M 408



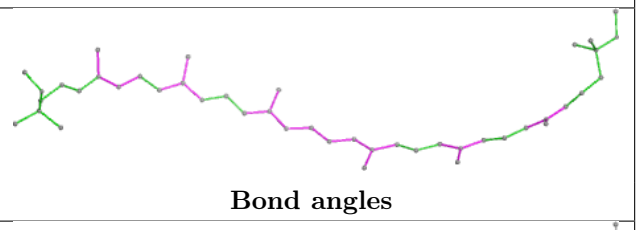
Ligand LMT H 302



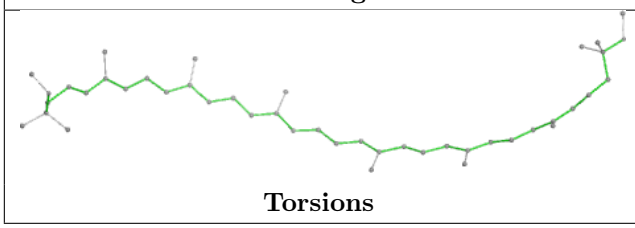
Ligand CRT 0 101



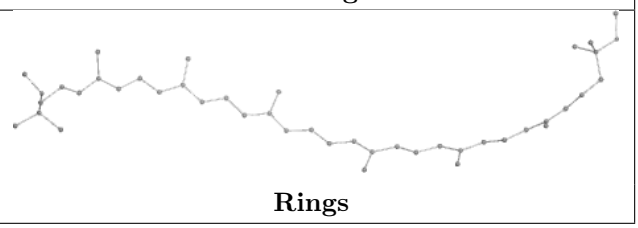
Bond lengths



Bond angles

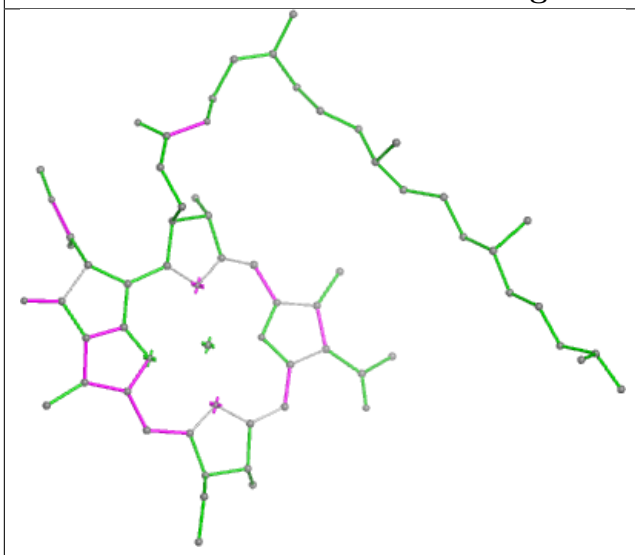


Torsions

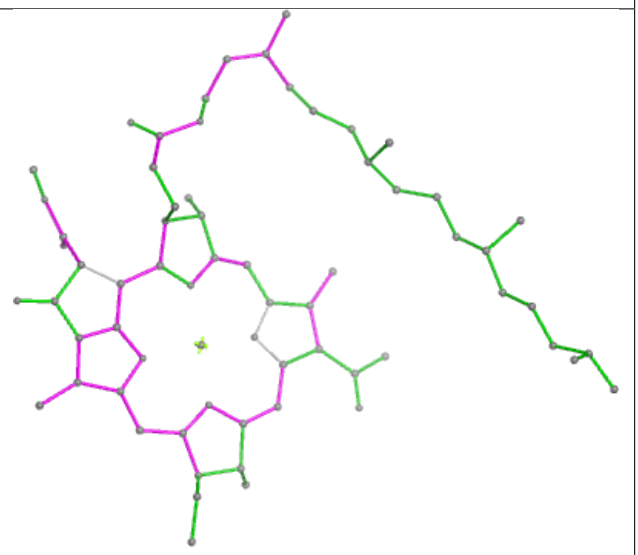


Rings

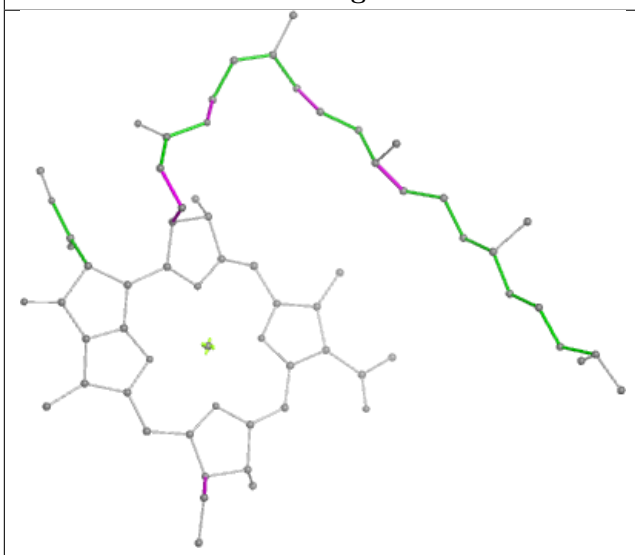
Ligand BCL 4 102



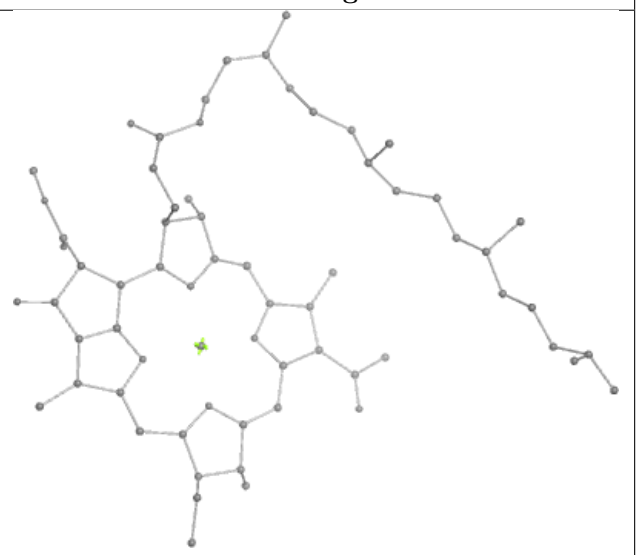
Bond lengths



Bond angles

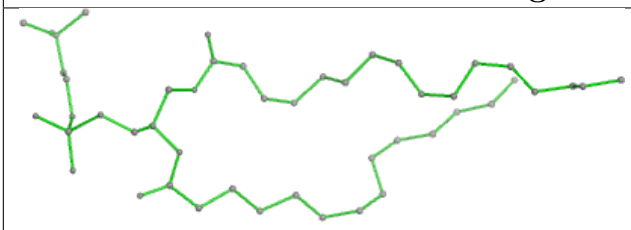


Torsions

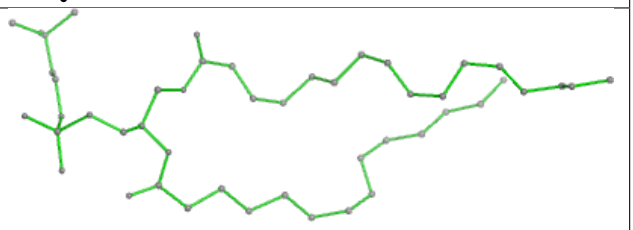


Rings

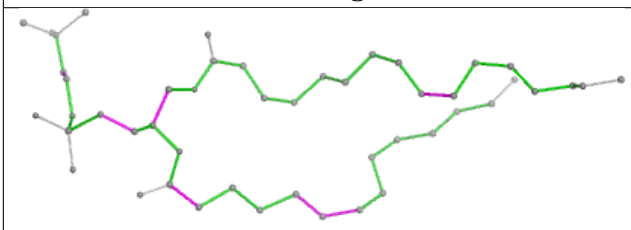
Ligand 6PL Q 102



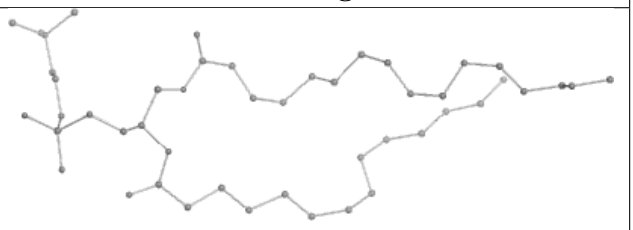
Bond lengths



Bond angles

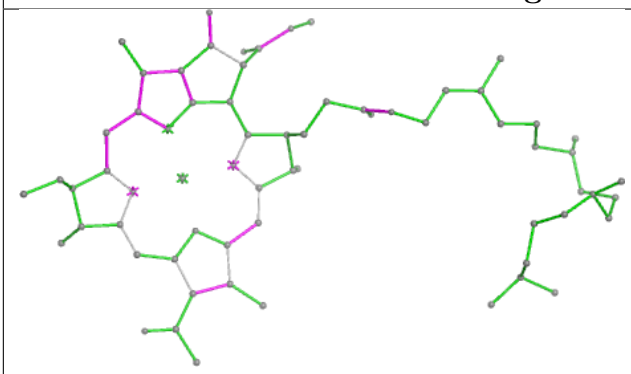


Torsions

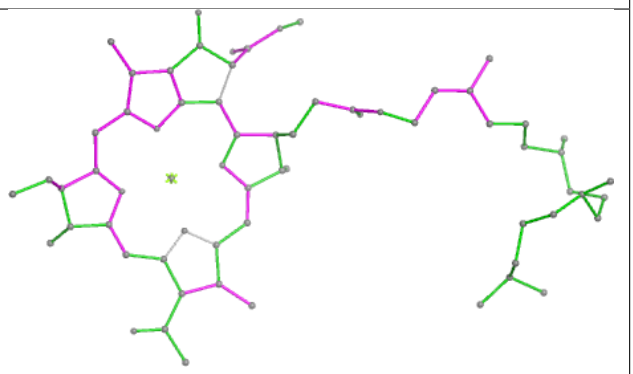


Rings

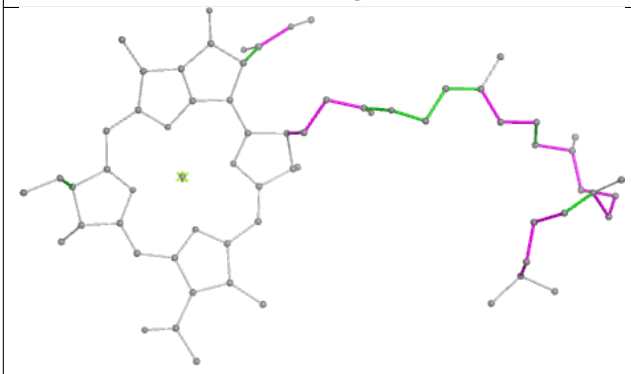
Ligand BCL A 100



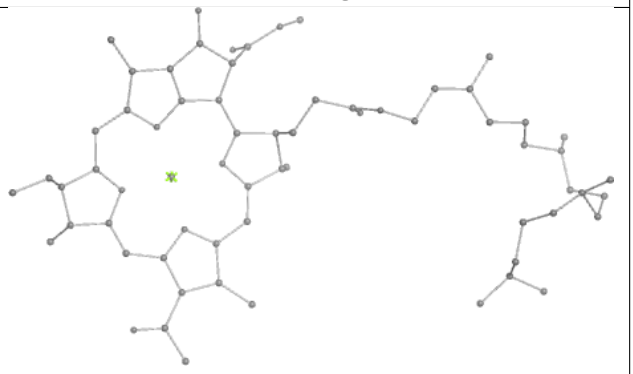
Bond lengths



Bond angles

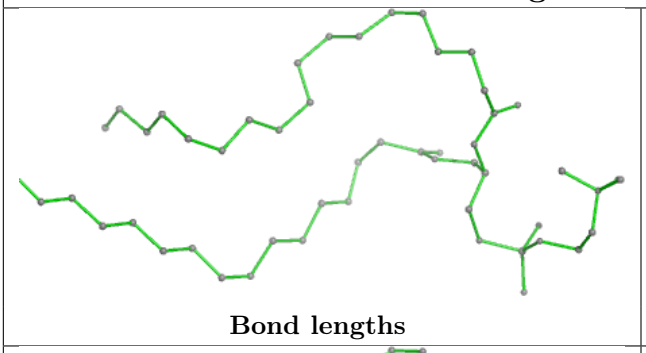


Torsions

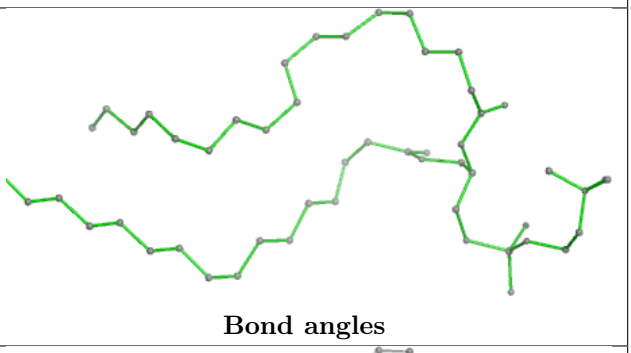


Rings

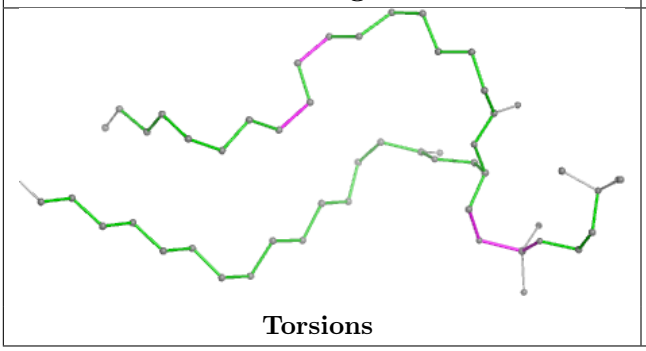
Ligand 6PL D 102



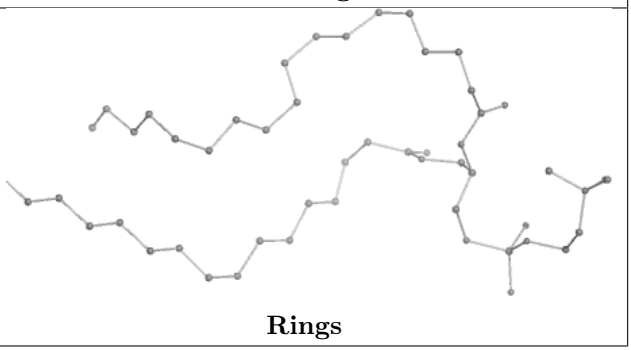
Bond lengths



Bond angles

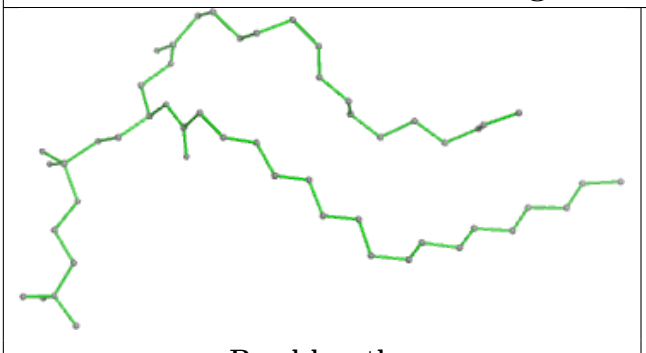


Torsions

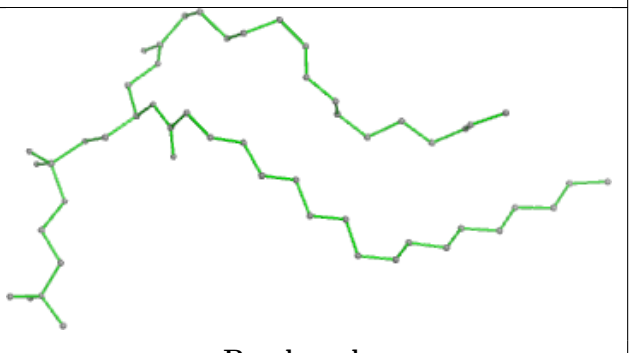


Rings

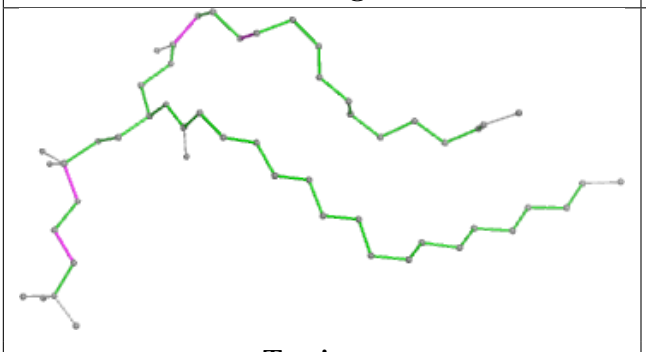
Ligand 6PL U 102



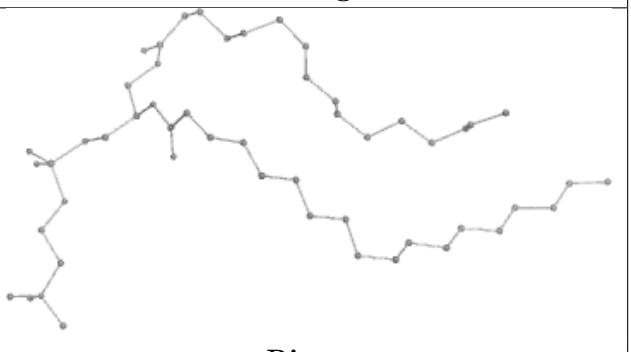
Bond lengths



Bond angles

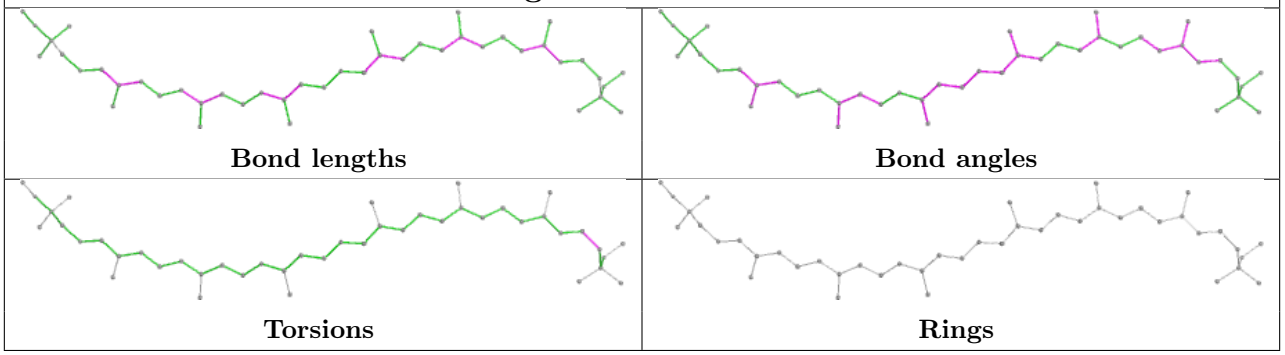


Torsions

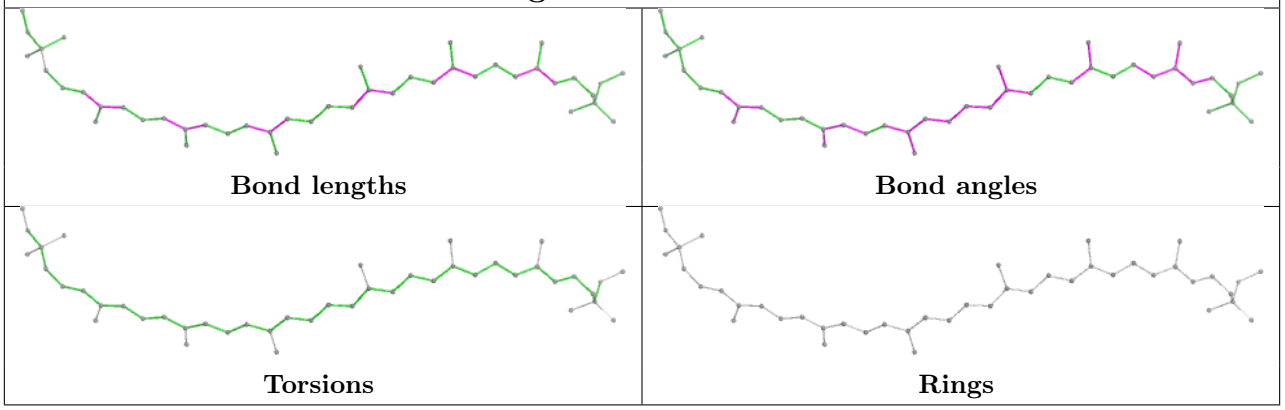


Rings

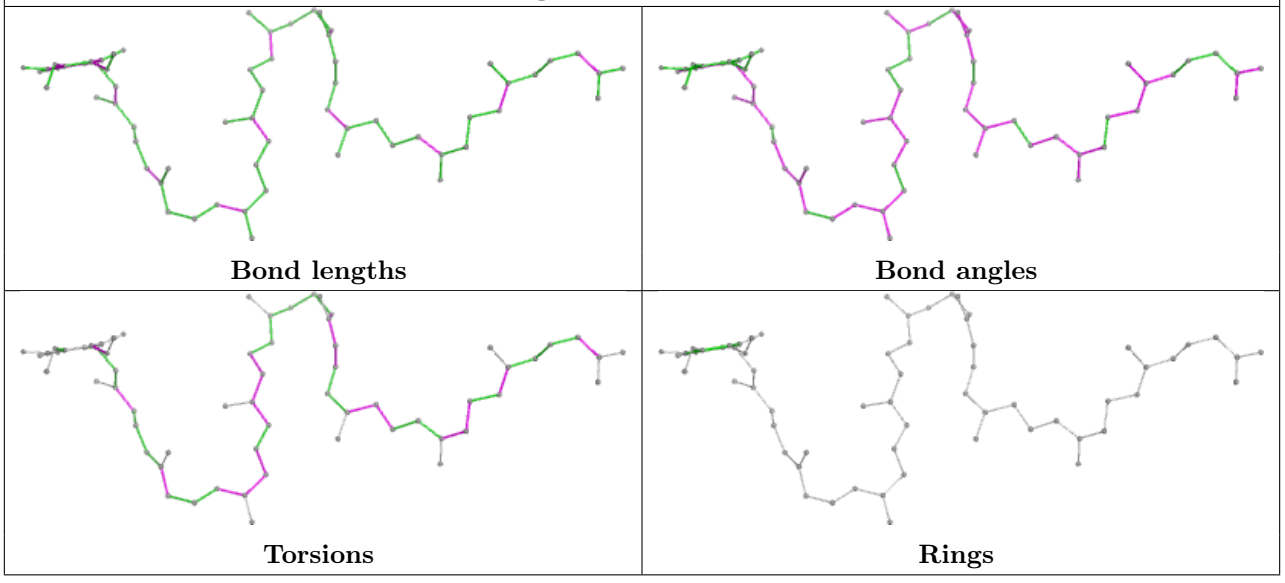
Ligand CRT O 102



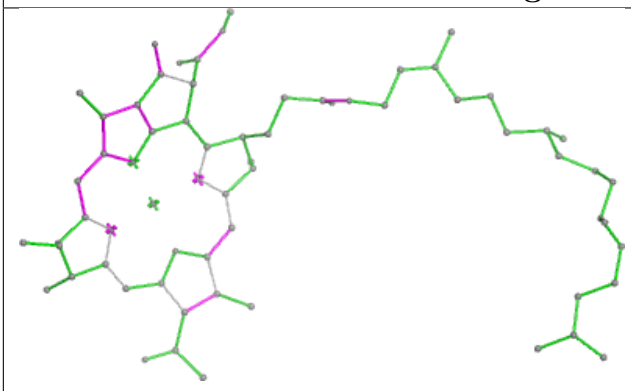
Ligand CRT S 101



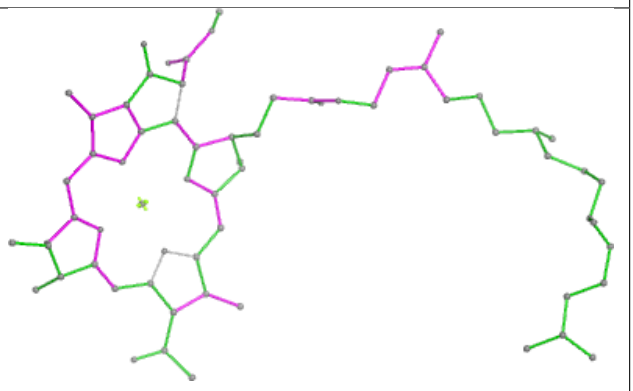
Ligand U10 L 307



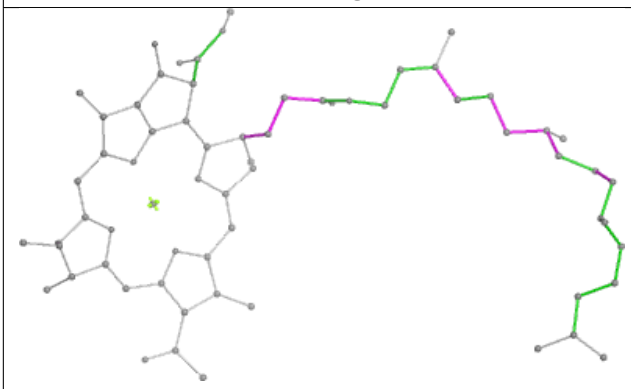
Ligand BCL G 103



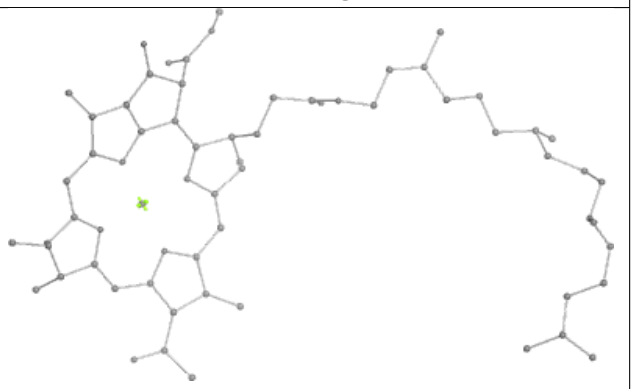
Bond lengths



Bond angles

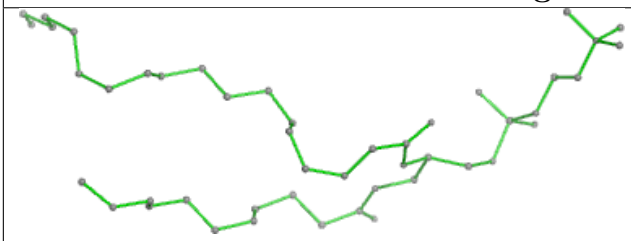


Torsions

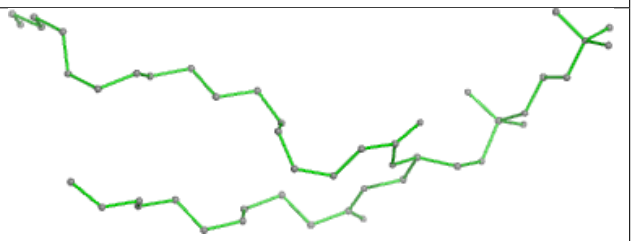


Rings

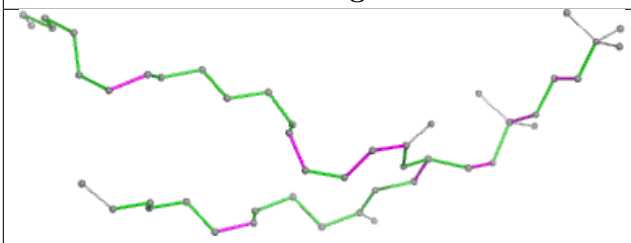
Ligand 6PL 2 103



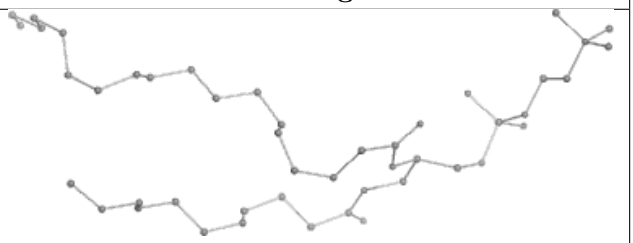
Bond lengths



Bond angles

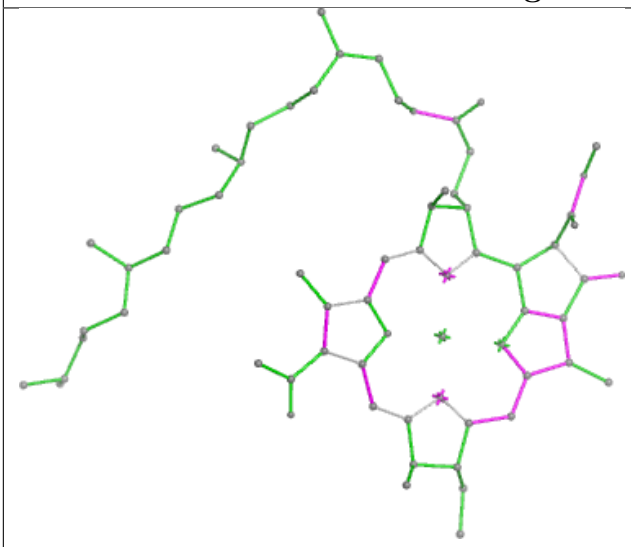


Torsions

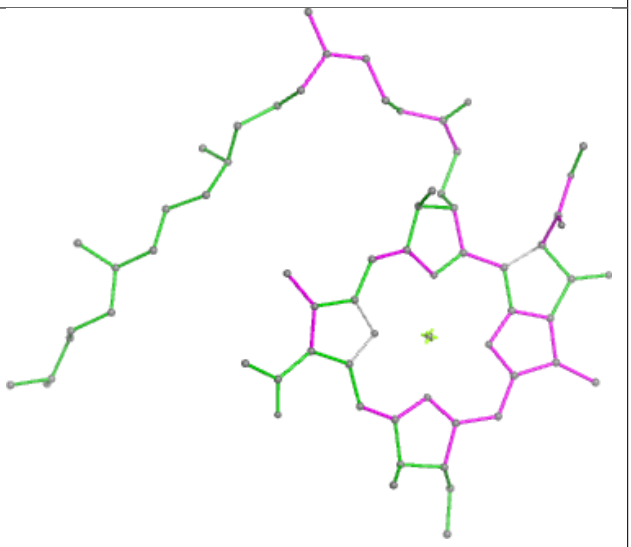


Rings

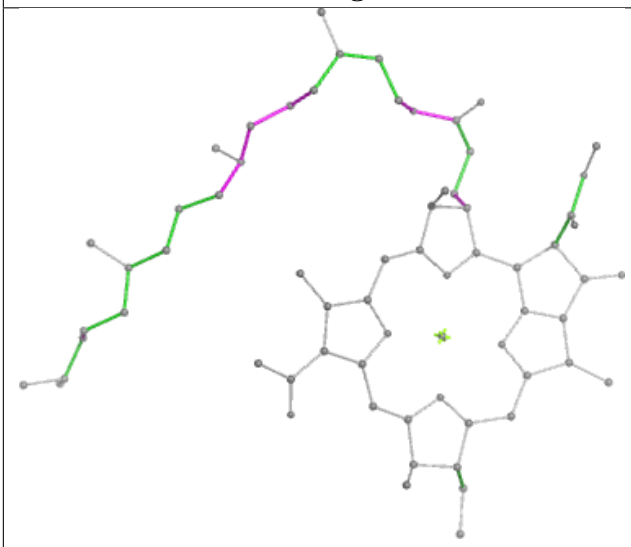
Ligand BCL G 104



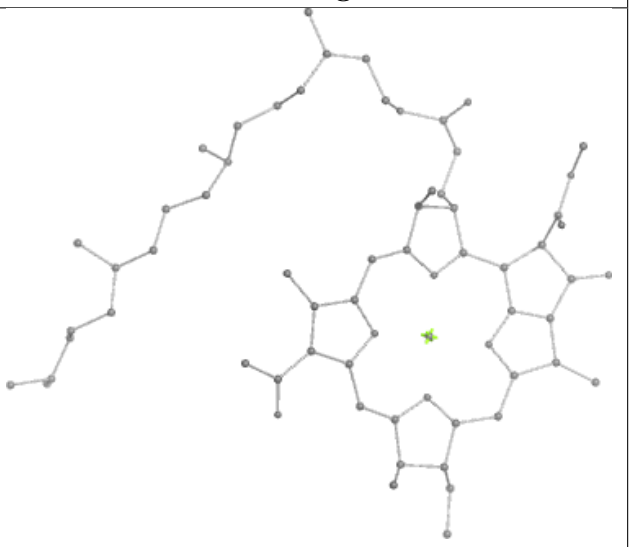
Bond lengths



Bond angles

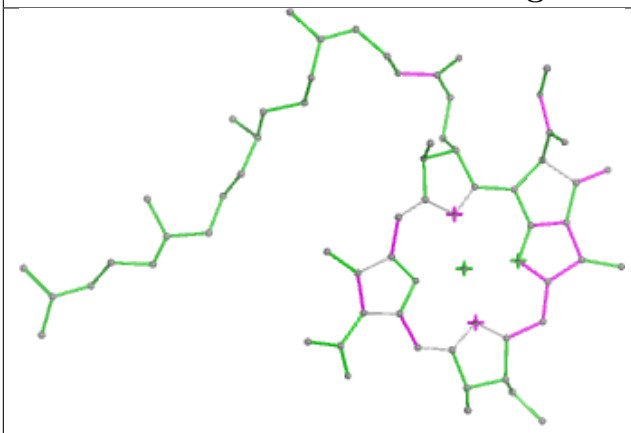


Torsions

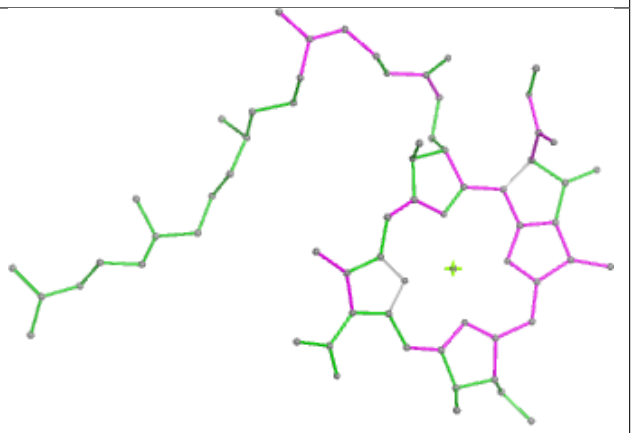


Rings

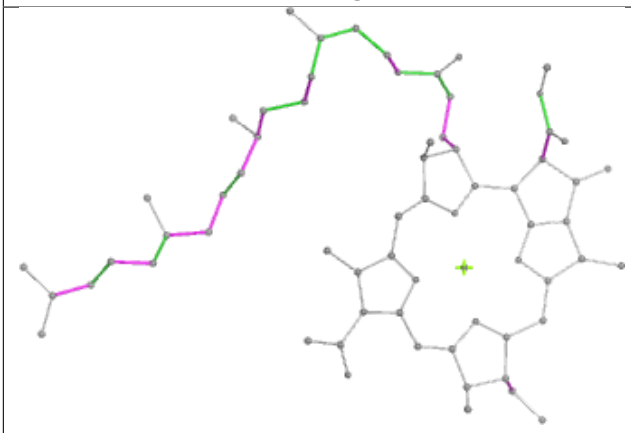
Ligand BCL F 102



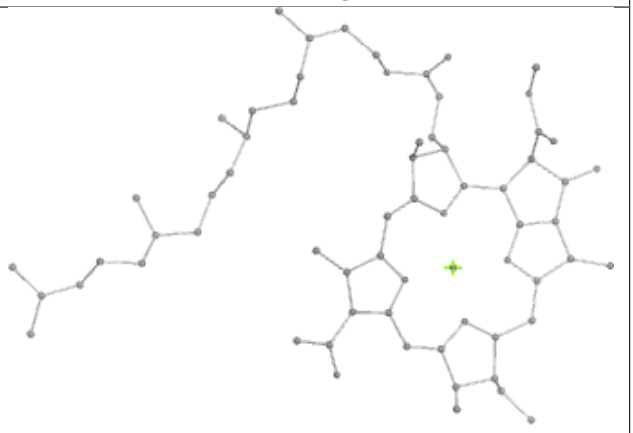
Bond lengths



Bond angles

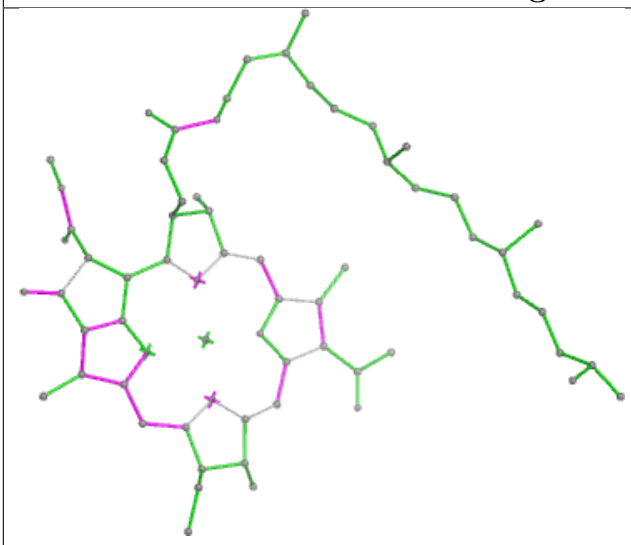


Torsions

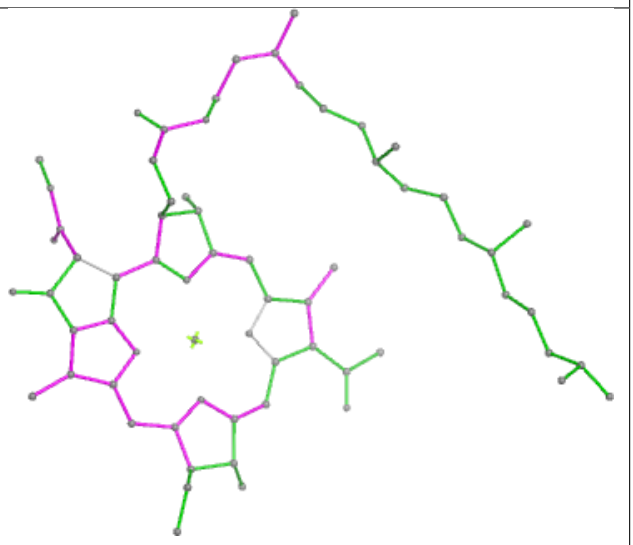


Rings

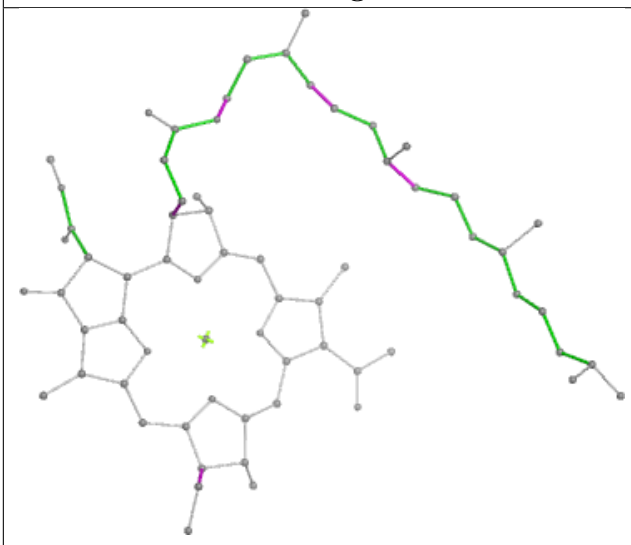
Ligand BCL 5 103



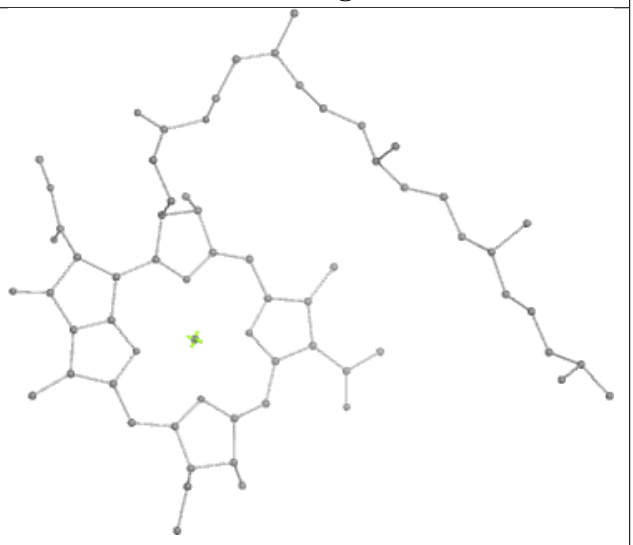
Bond lengths



Bond angles

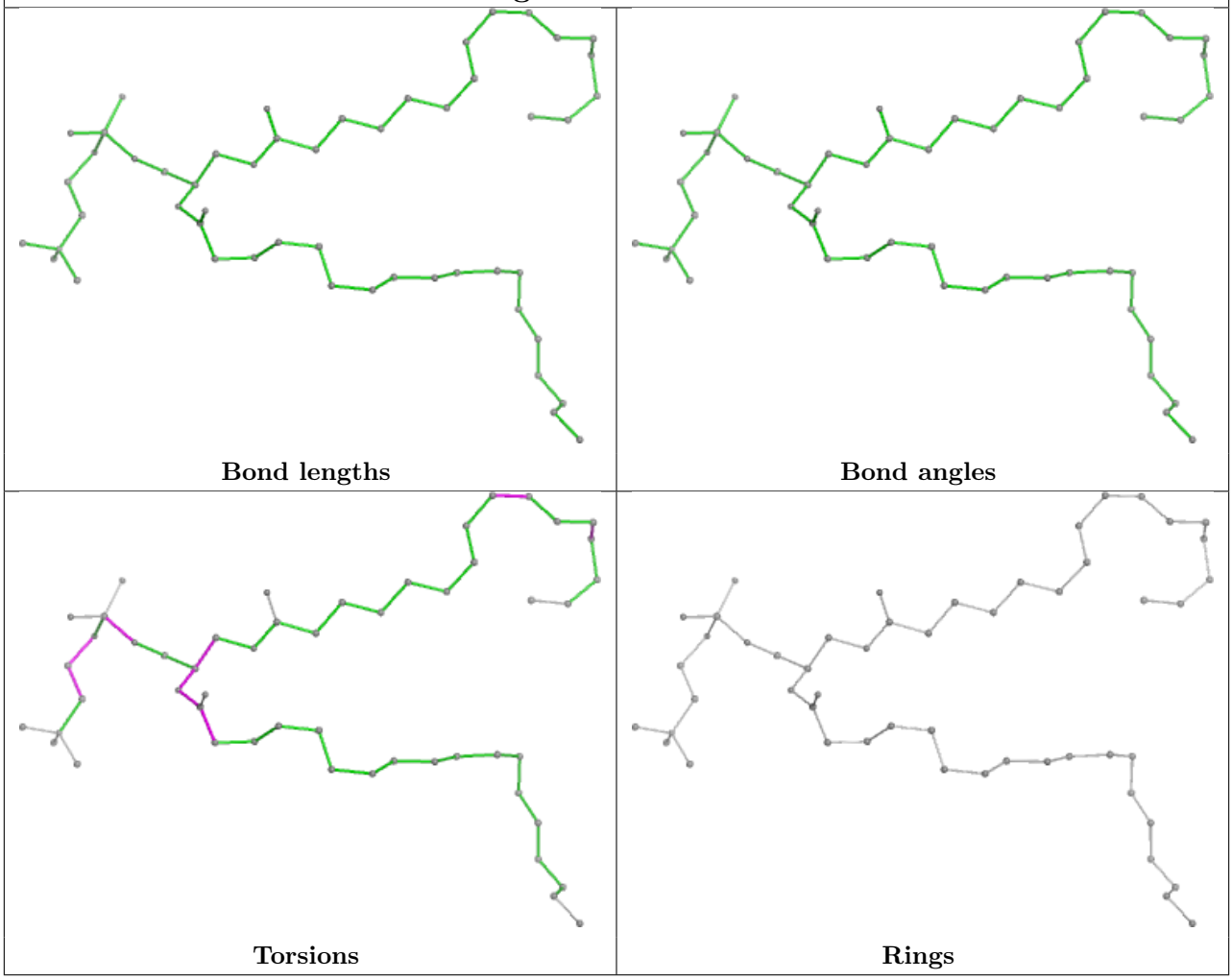


Torsions

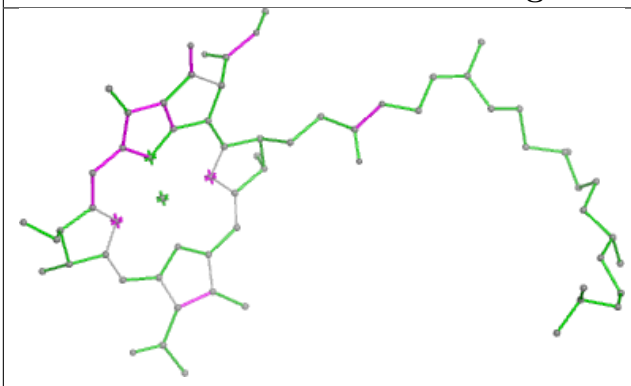


Rings

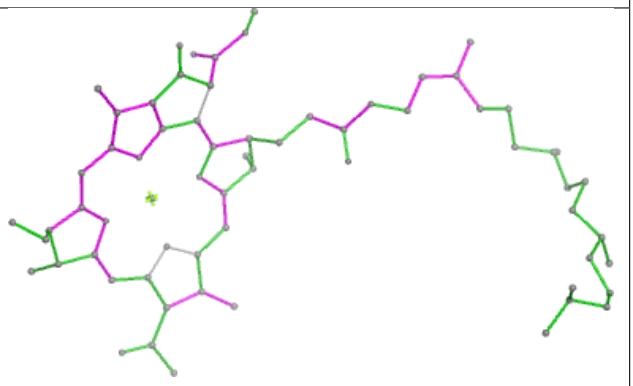
Ligand 6PL 5 102



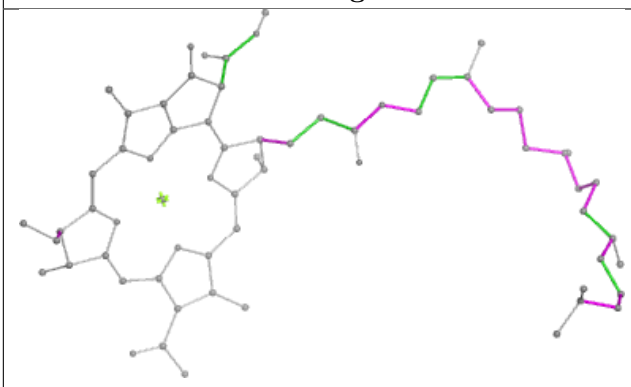
Ligand BCL E 101



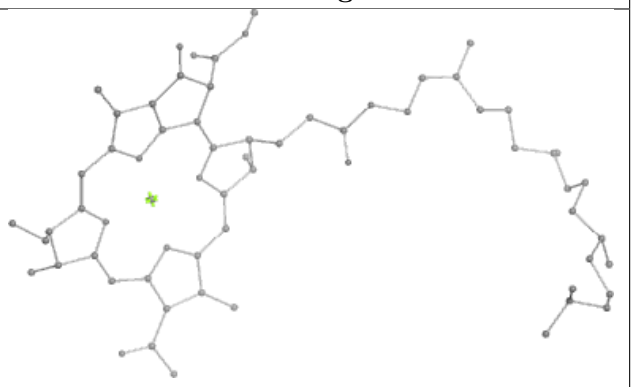
Bond lengths



Bond angles

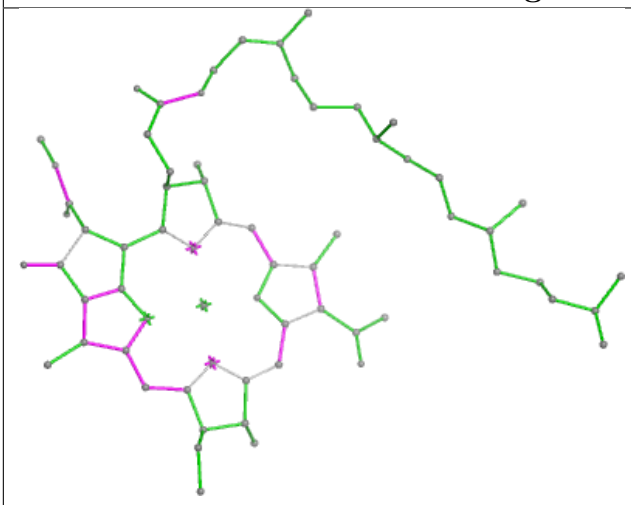


Torsions

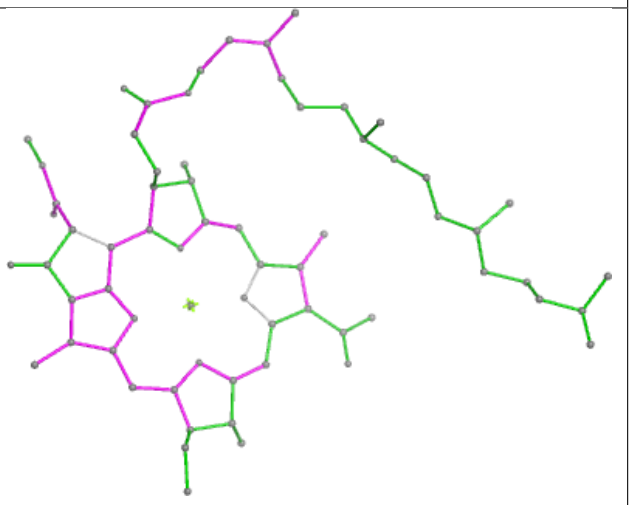


Rings

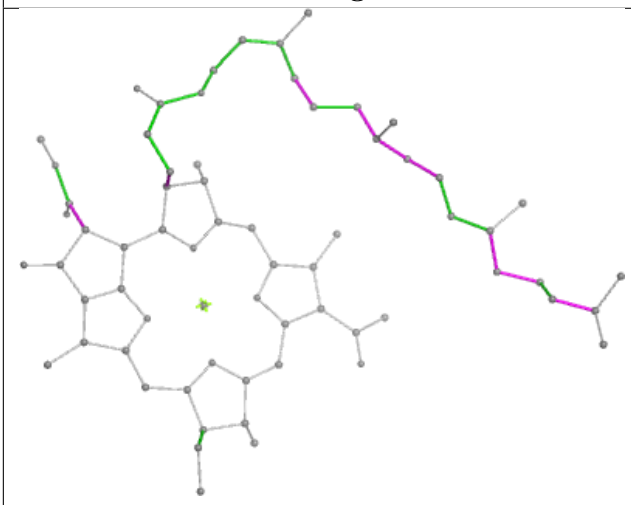
Ligand BCL V 102



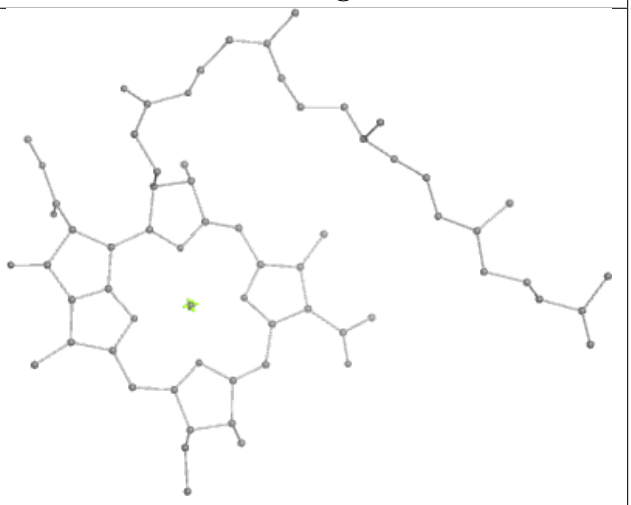
Bond lengths



Bond angles

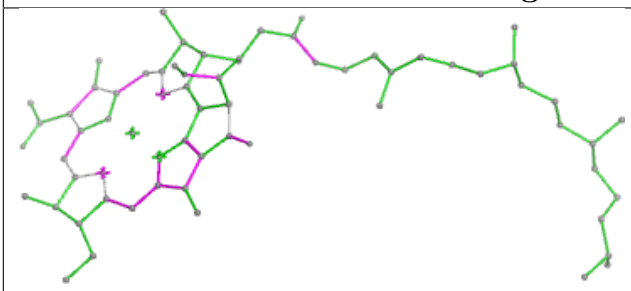


Torsions

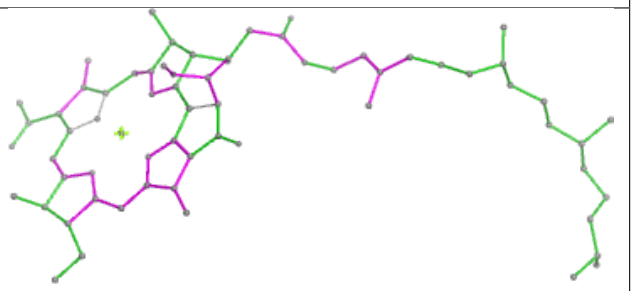


Rings

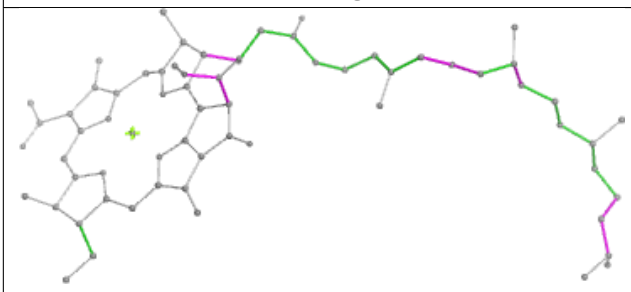
Ligand BCL M 404



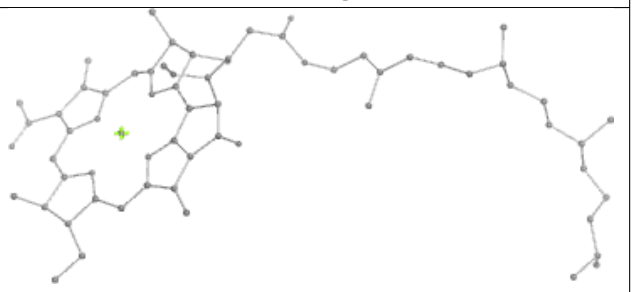
Bond lengths



Bond angles

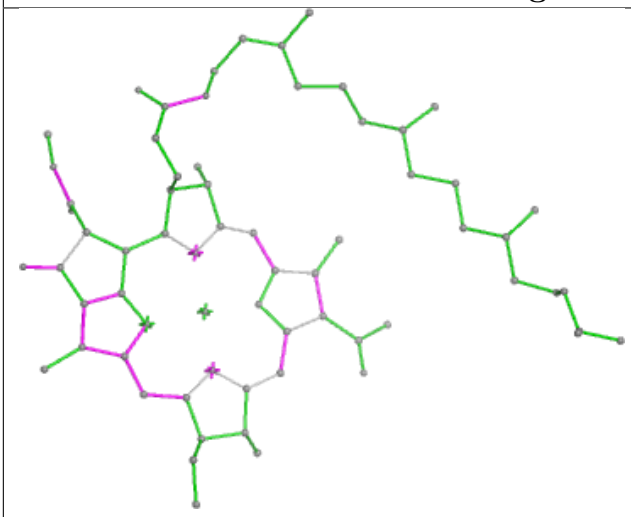


Torsions

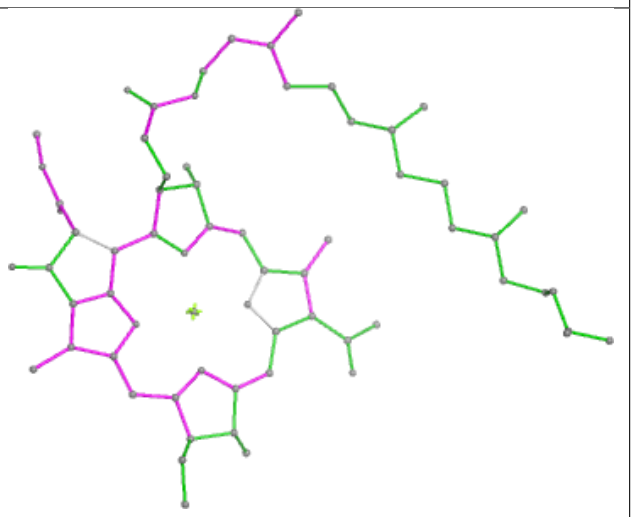


Rings

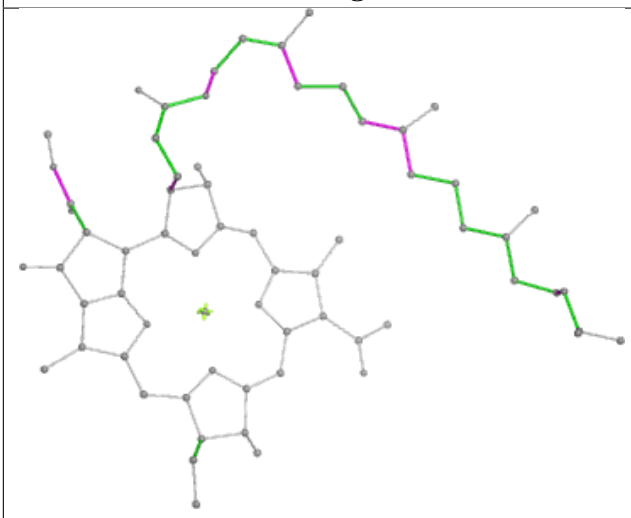
Ligand BCL 1 102



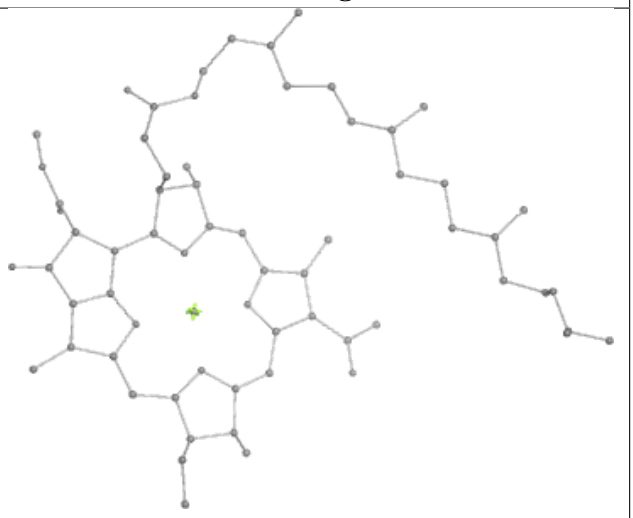
Bond lengths



Bond angles

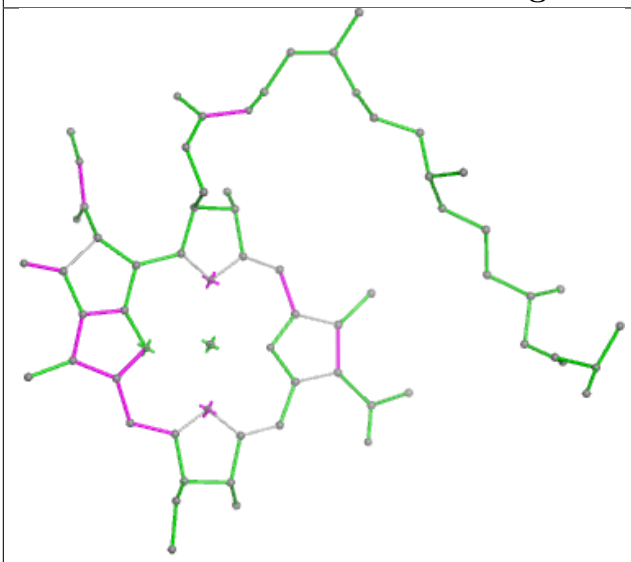


Torsions

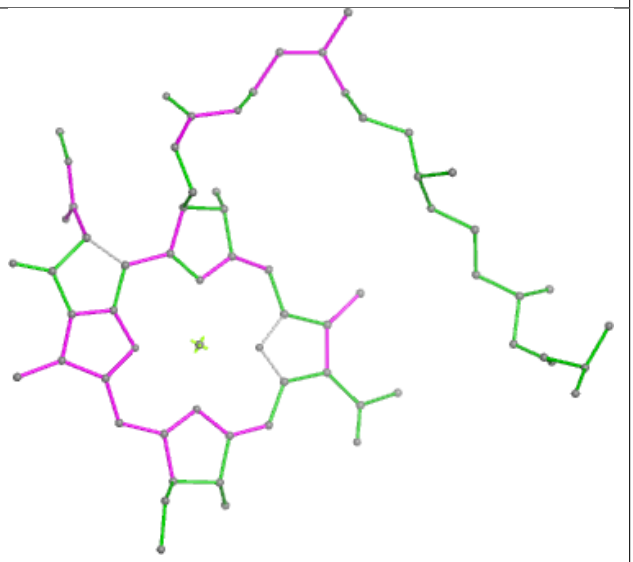


Rings

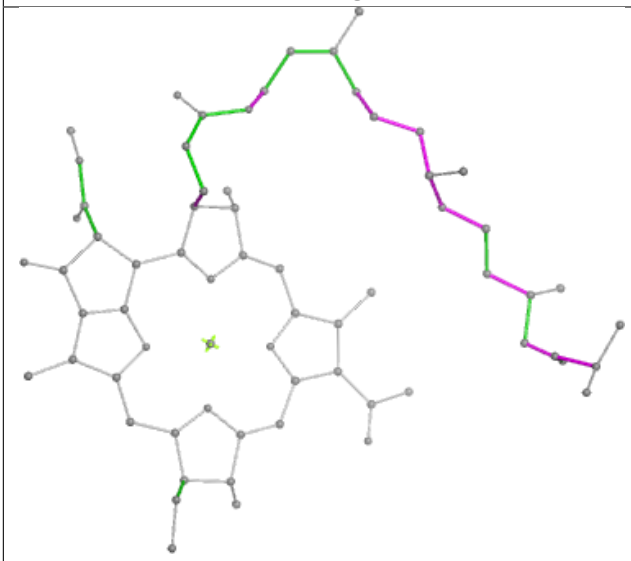
Ligand BCL 7 104



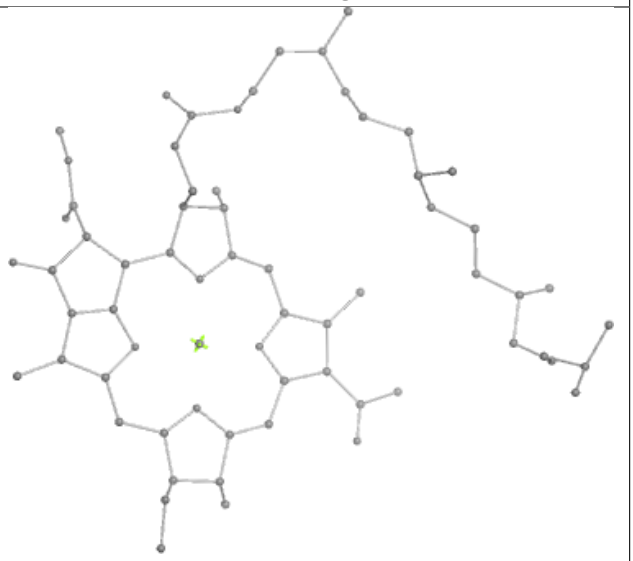
Bond lengths



Bond angles

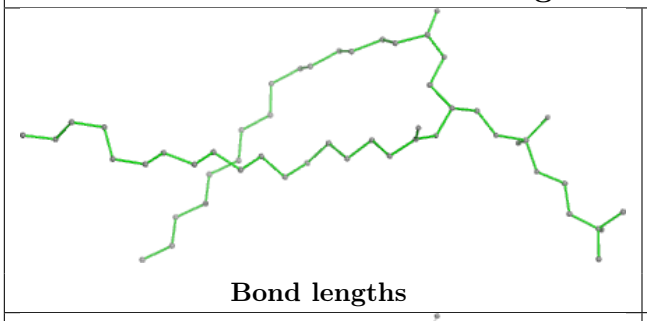


Torsions

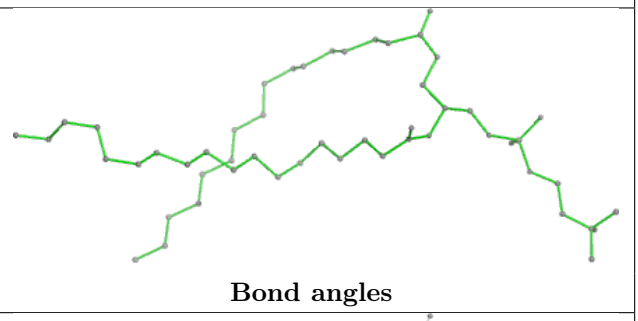


Rings

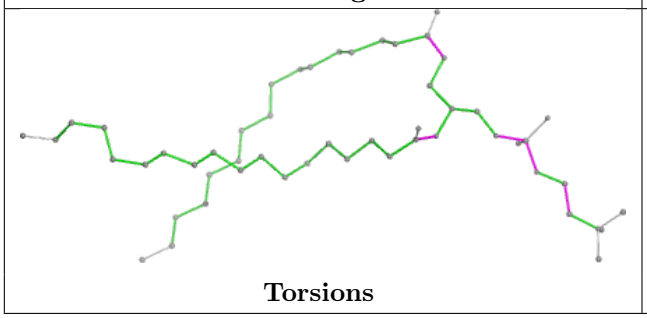
Ligand 6PL 8 102



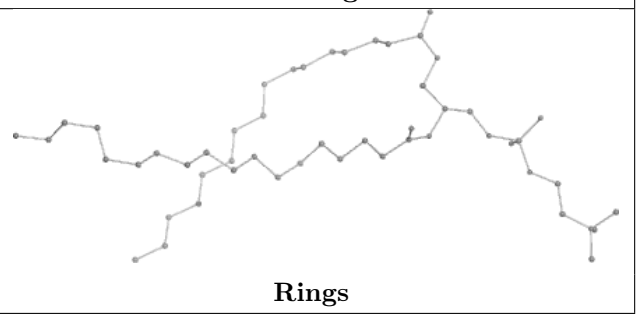
Bond lengths



Bond angles

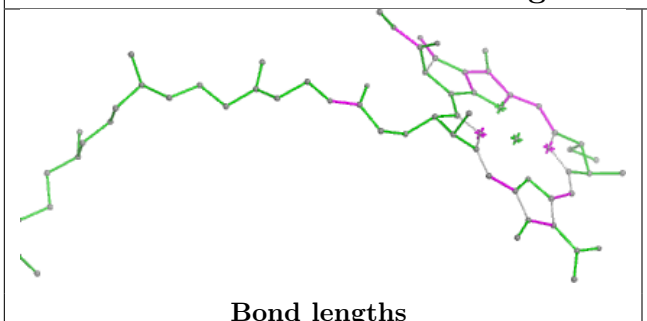


Torsions

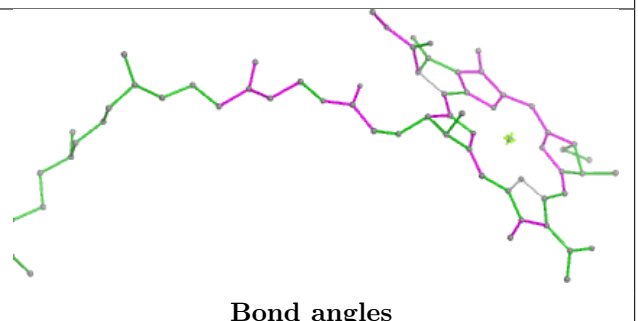


Rings

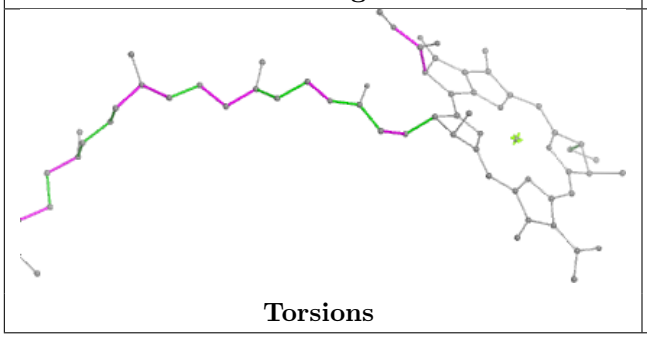
Ligand BCL L 301



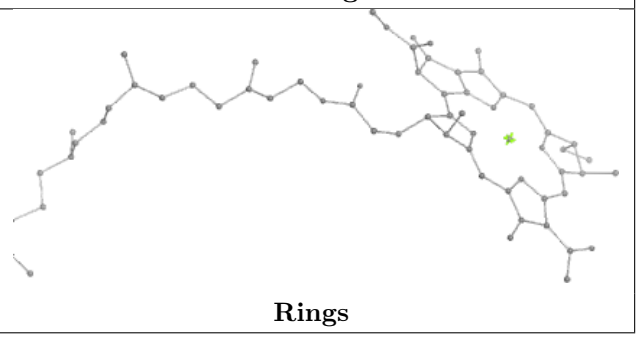
Bond lengths



Bond angles

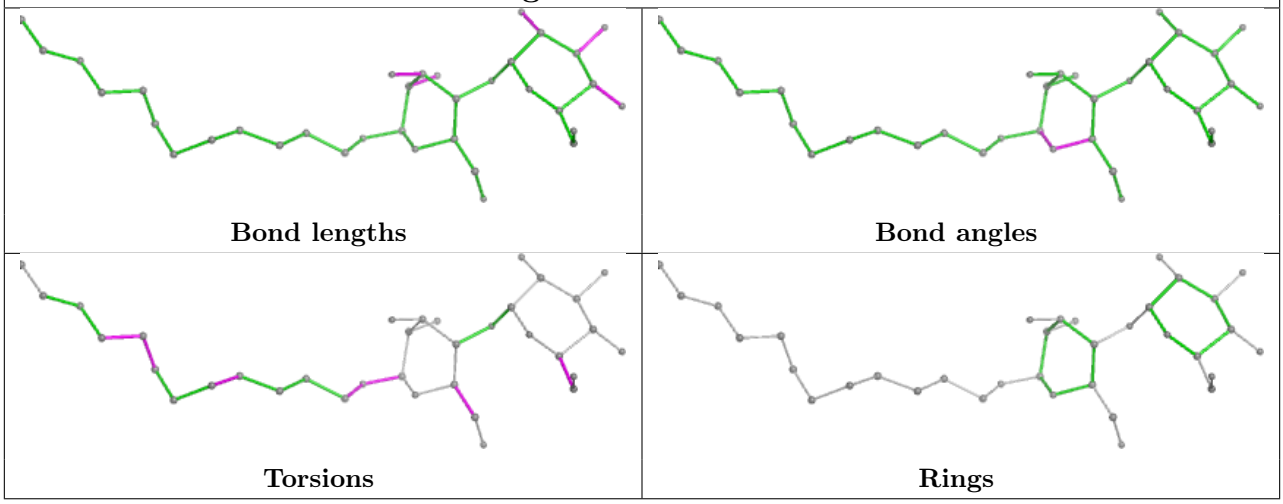


Torsions

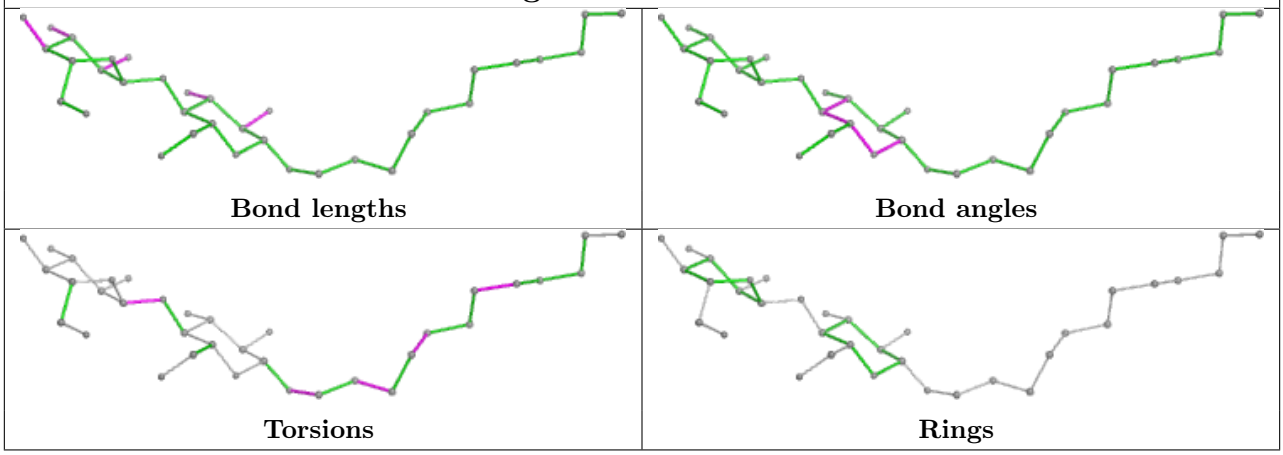


Rings

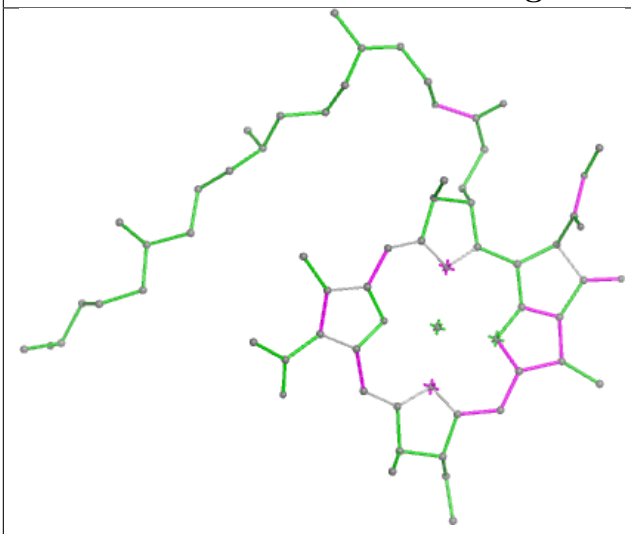
Ligand LMT B 101



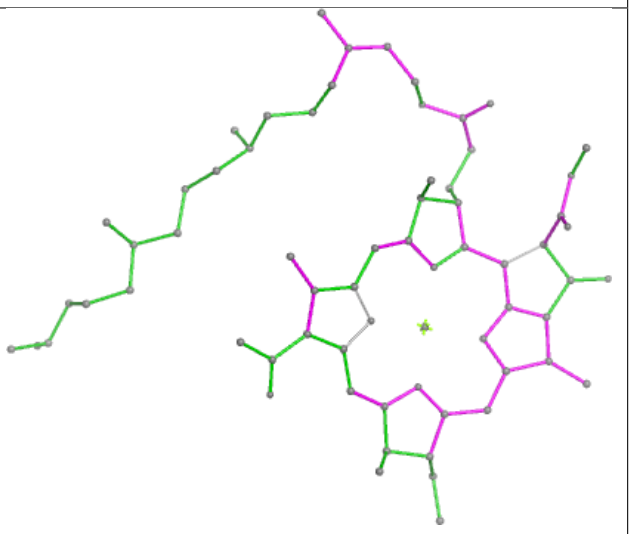
Ligand LMT P 101



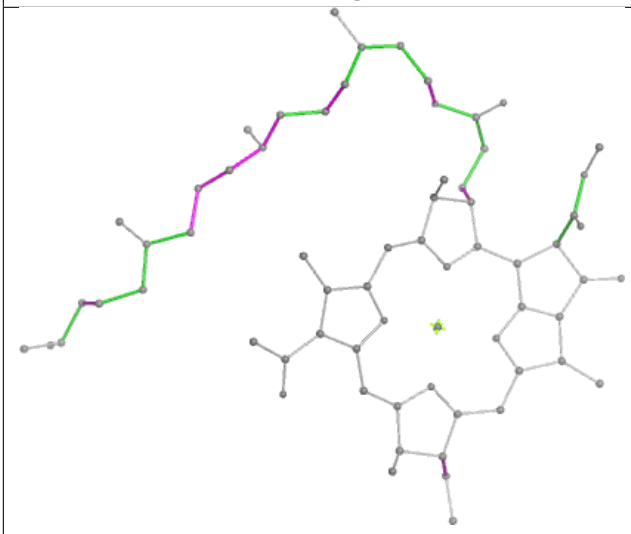
Ligand BCL C 102



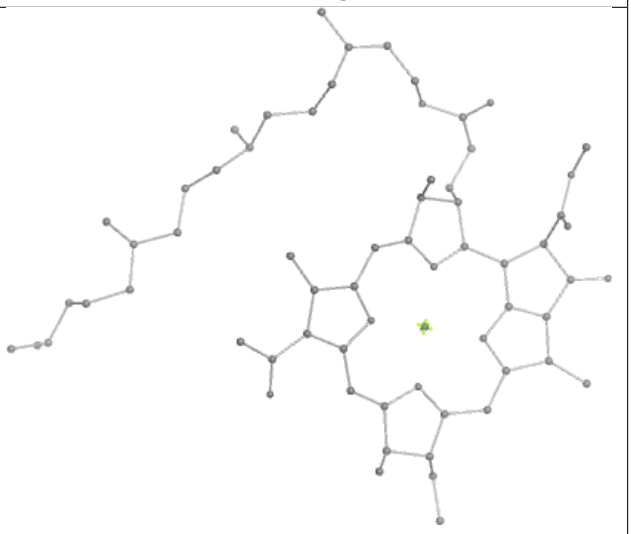
Bond lengths



Bond angles

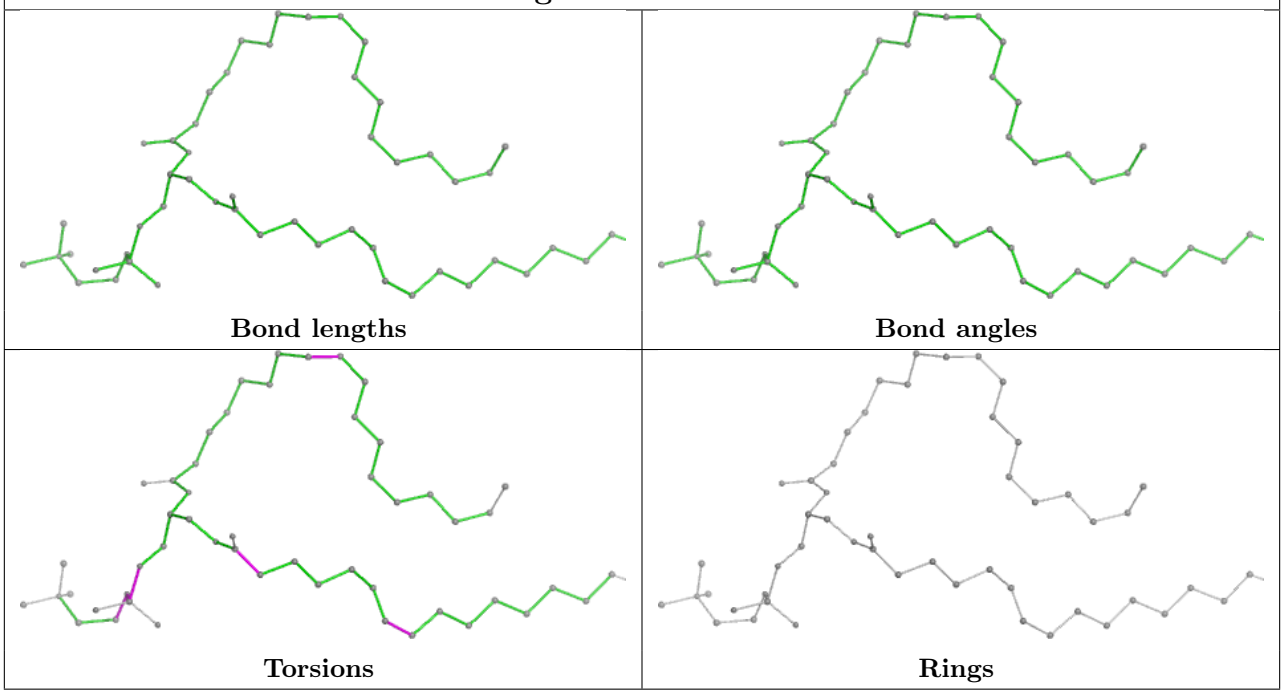


Torsions

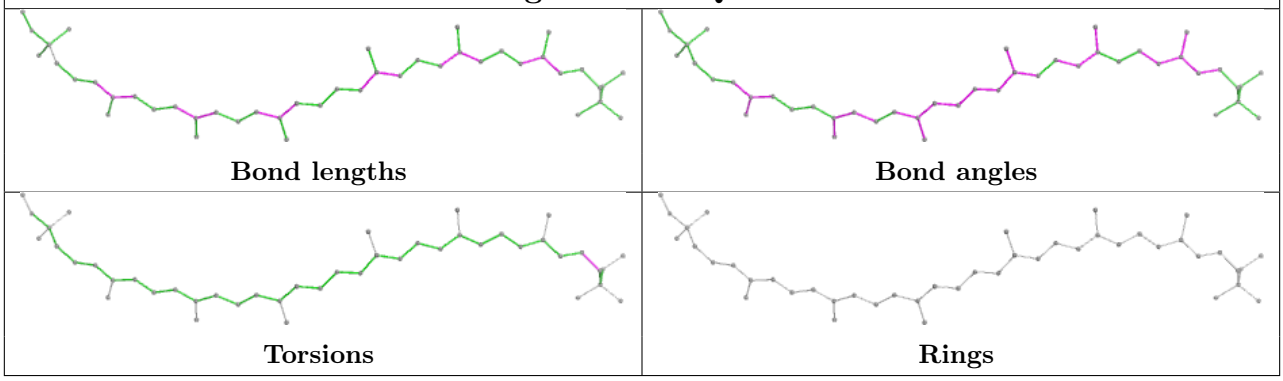


Rings

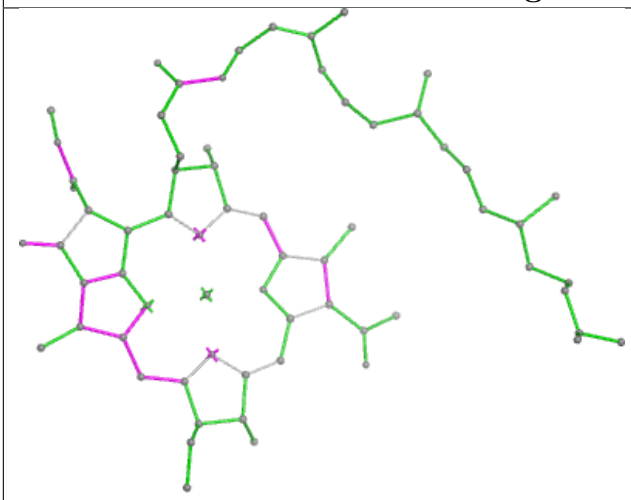
Ligand 6PL 4 104



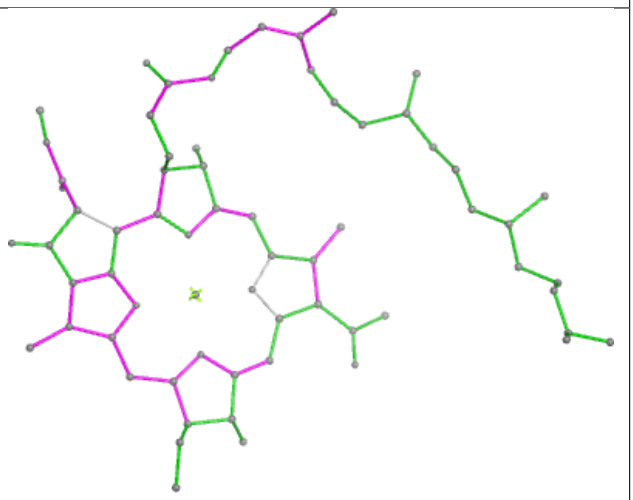
Ligand CRT Q 101



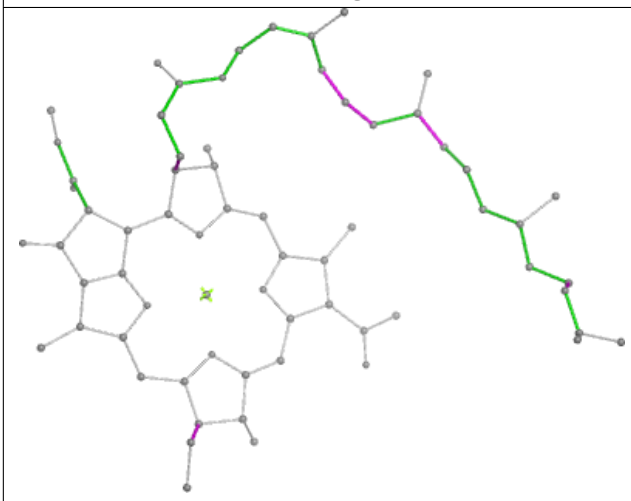
Ligand BCL R 103



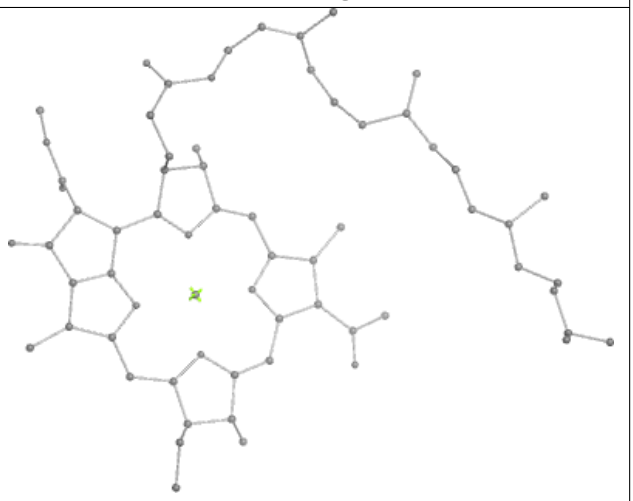
Bond lengths



Bond angles

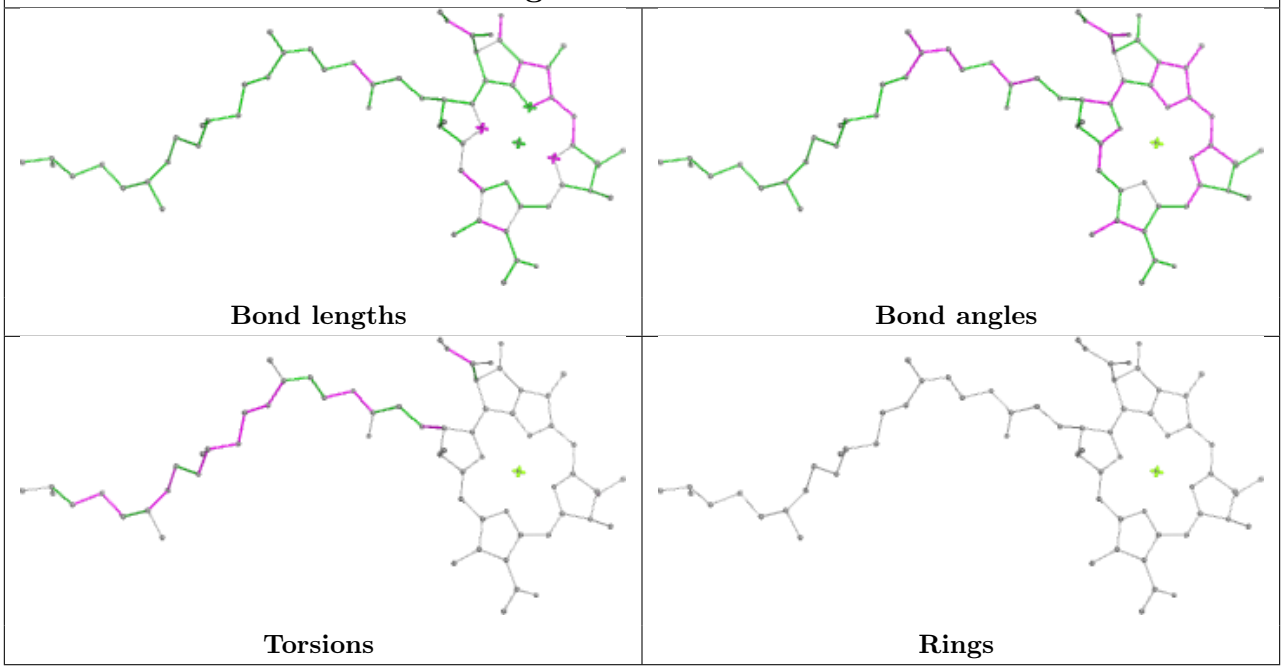


Torsions

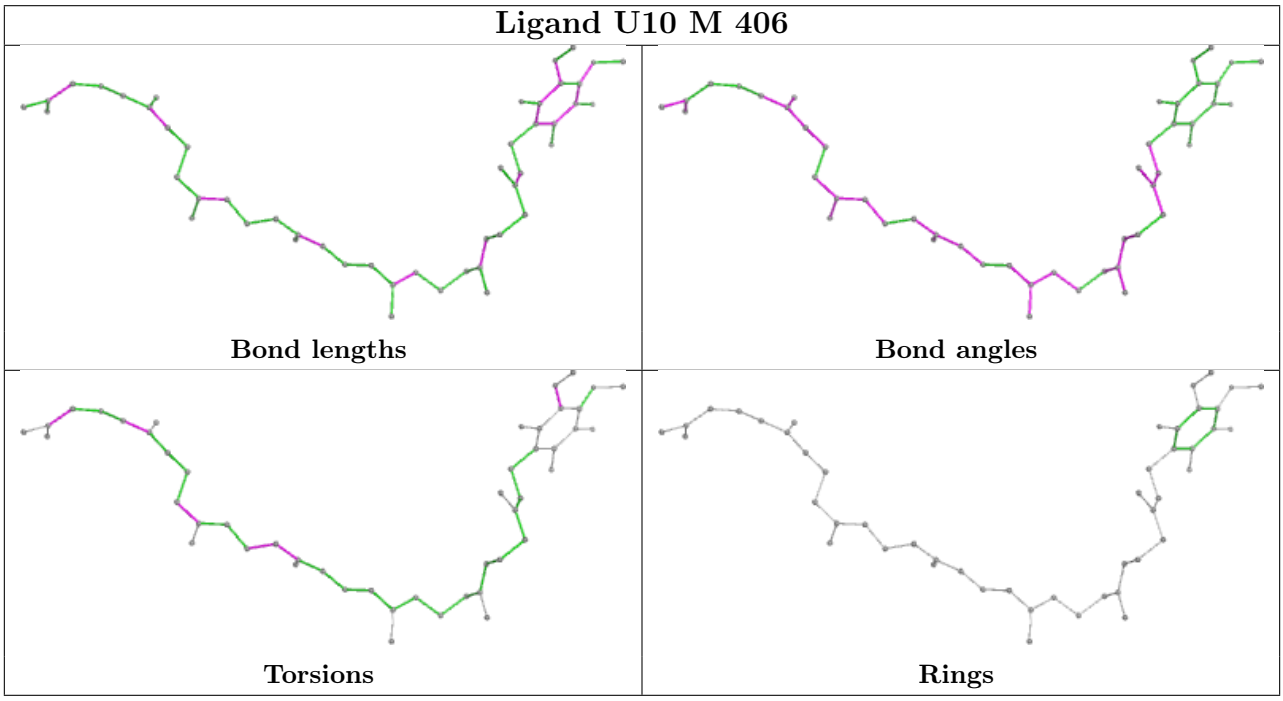


Rings

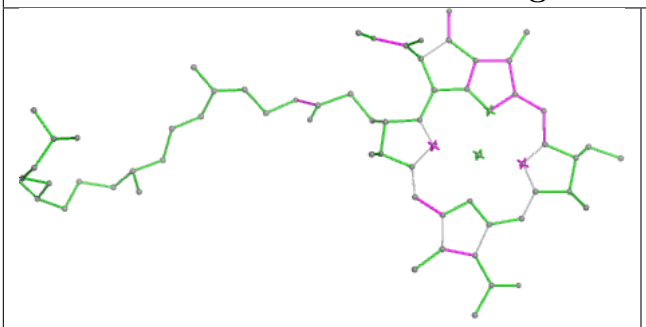
Ligand BCL V 101



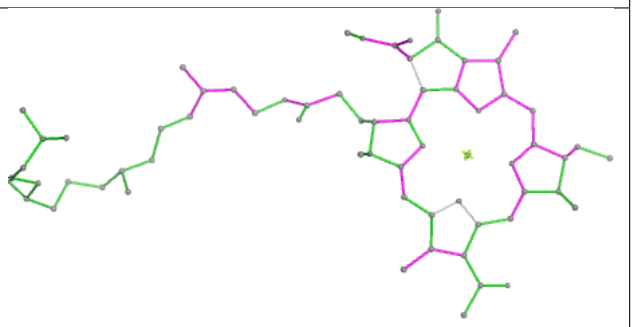
Ligand U10 M 406



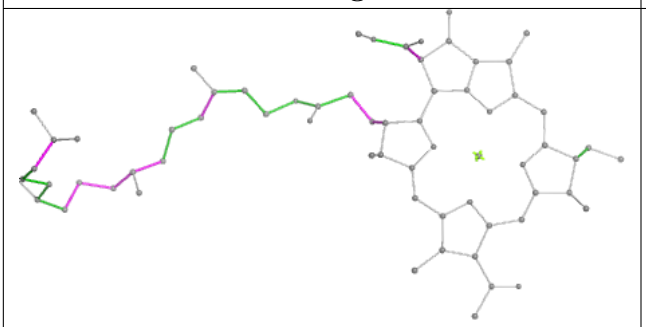
Ligand BCL 1 101



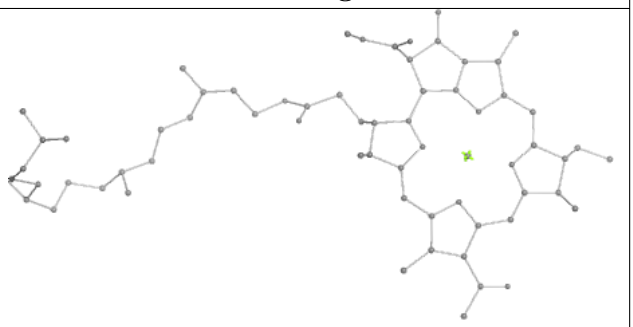
Bond lengths



Bond angles

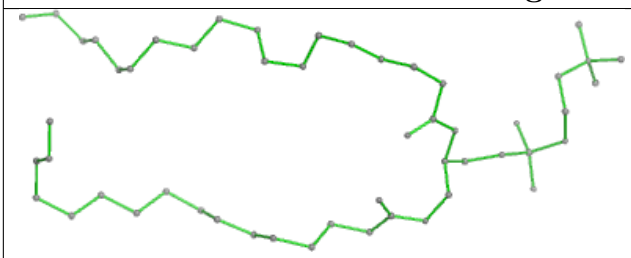


Torsions

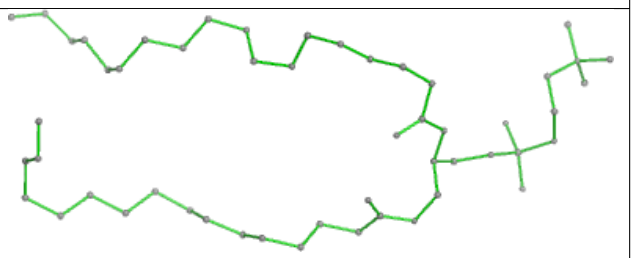


Rings

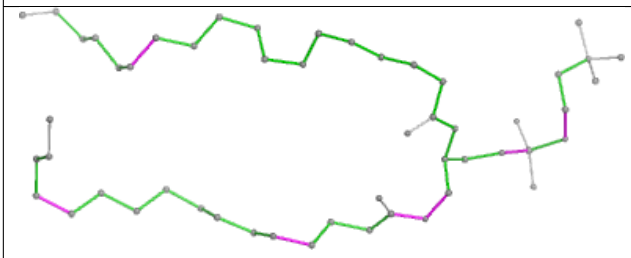
Ligand 6PL M 401



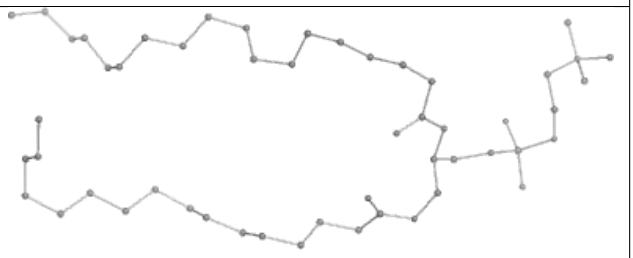
Bond lengths



Bond angles

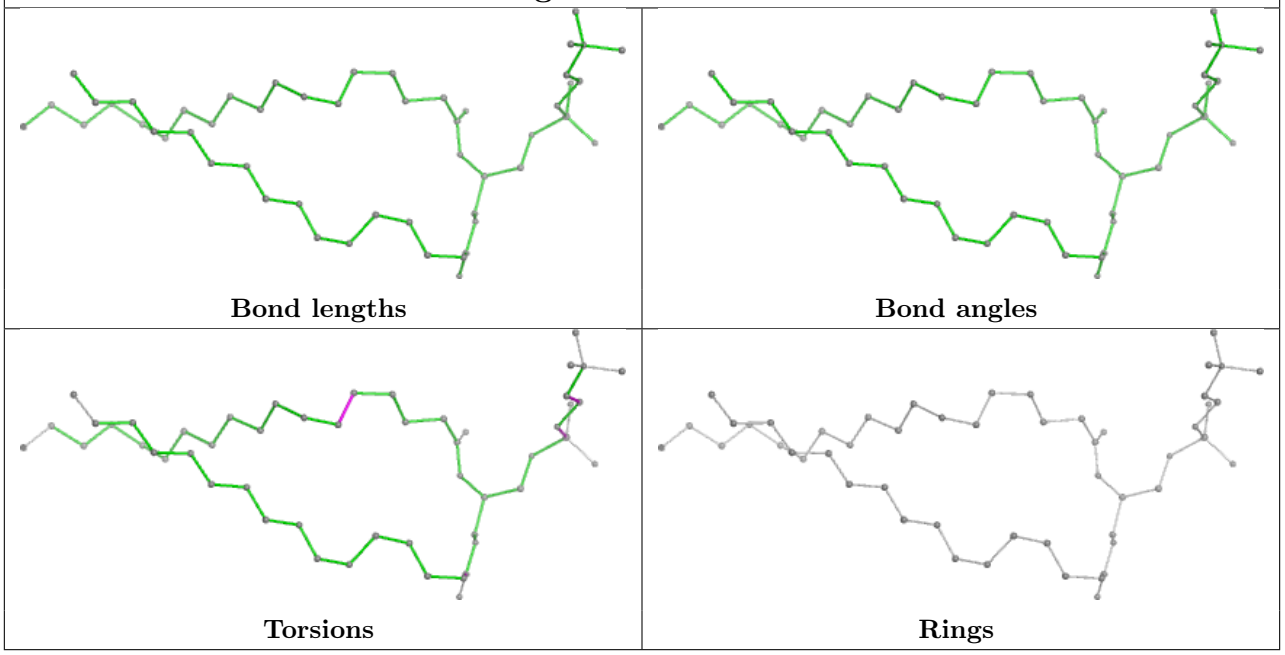


Torsions

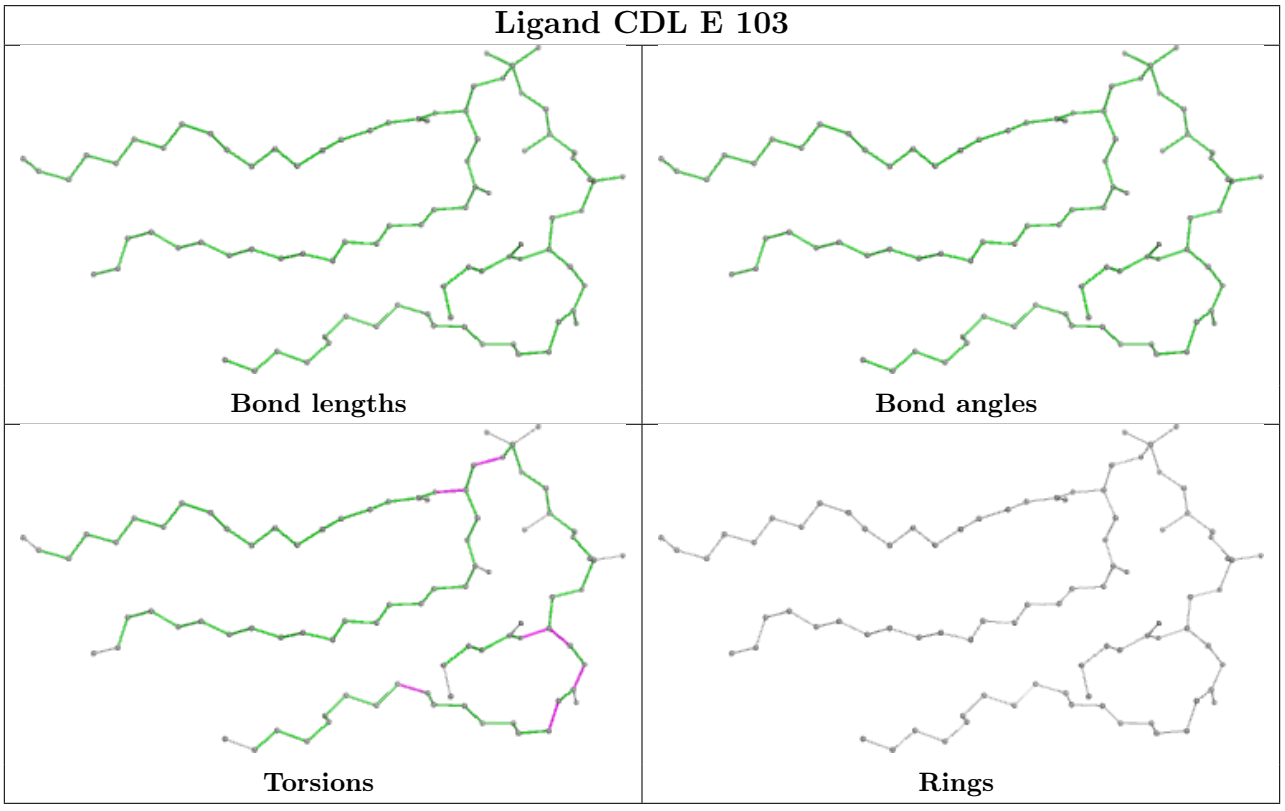


Rings

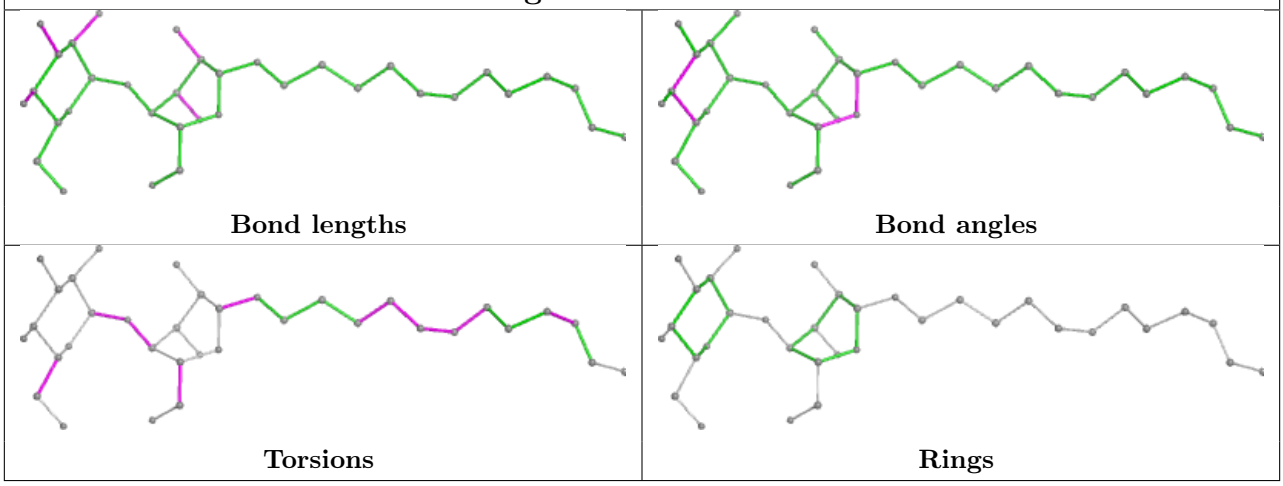
Ligand 6PL 6 102



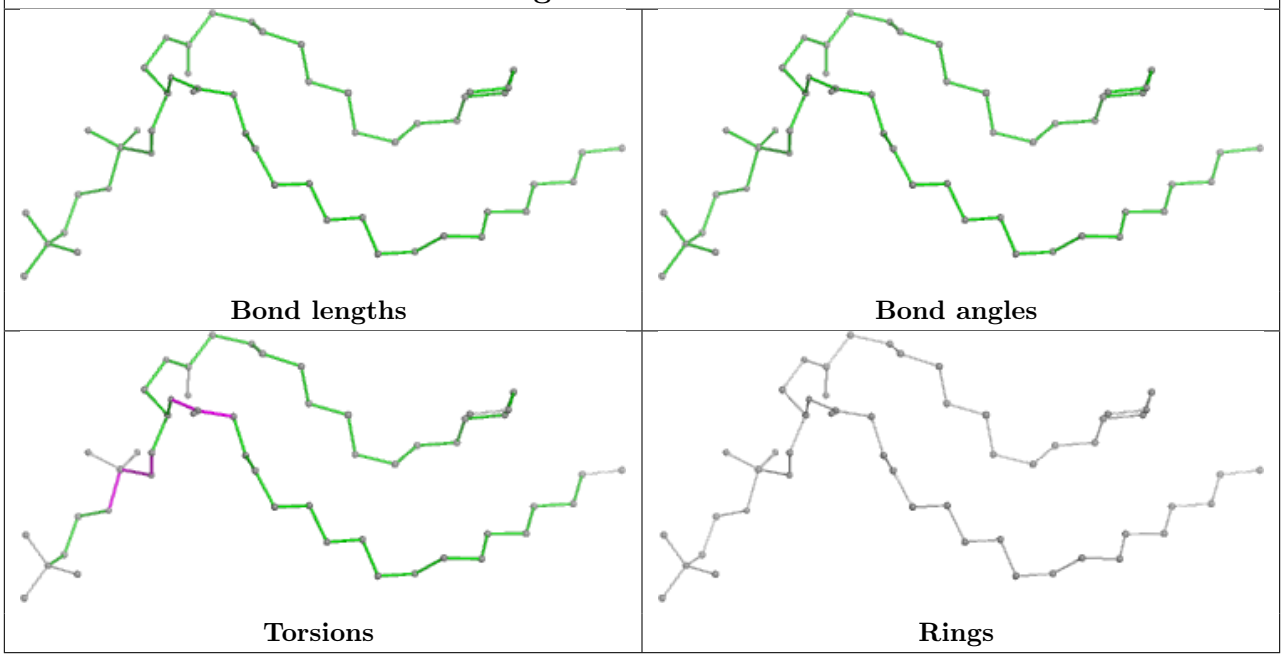
Ligand CDL E 103



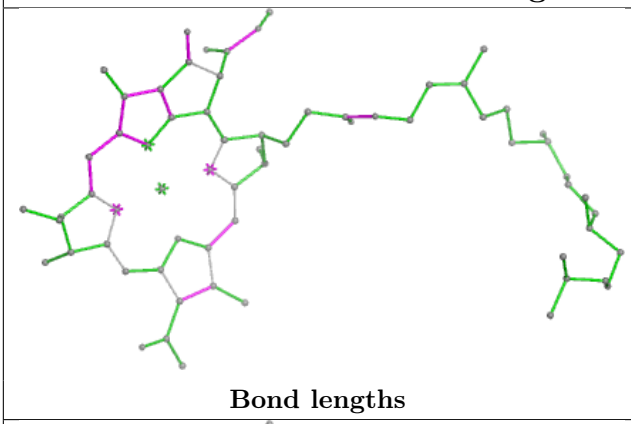
Ligand LMT L 306



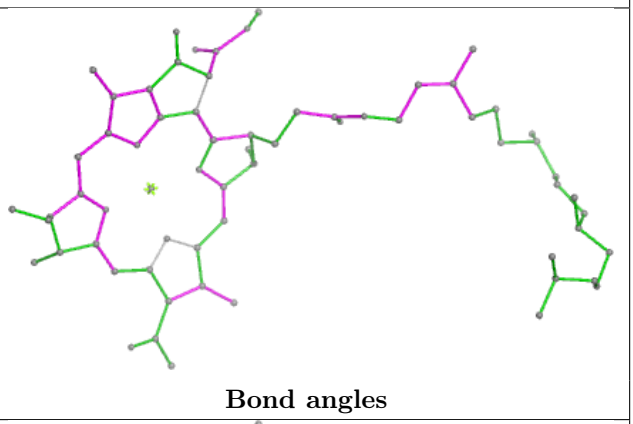
Ligand 6PL S 102



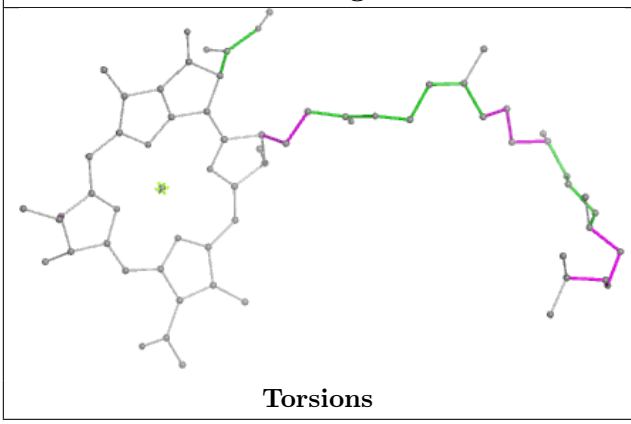
Ligand BCL J 101



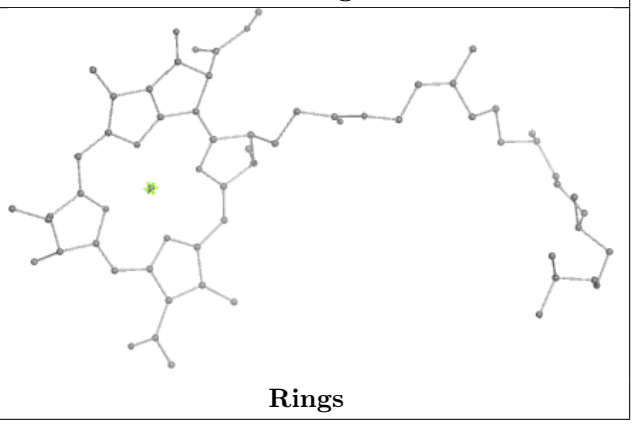
Bond lengths



Bond angles

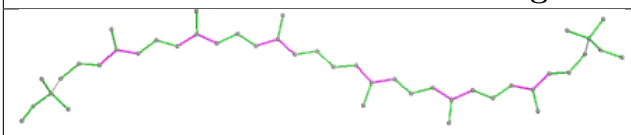


Torsions

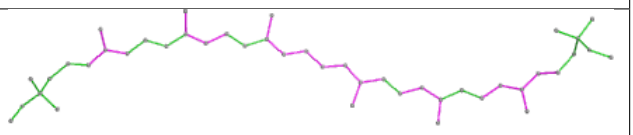


Rings

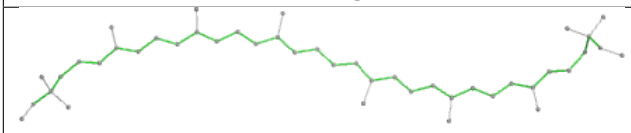
Ligand CRT I 102



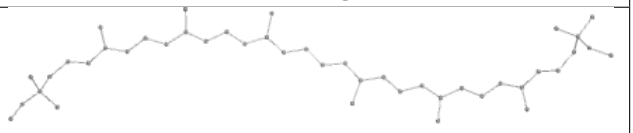
Bond lengths



Bond angles

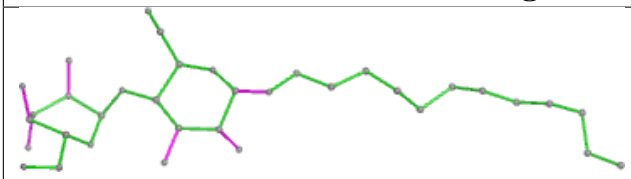


Torsions

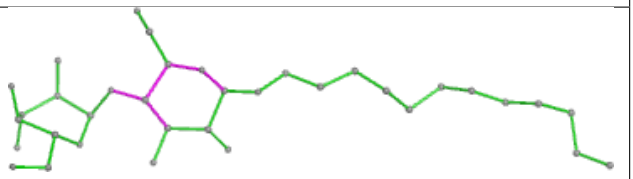


Rings

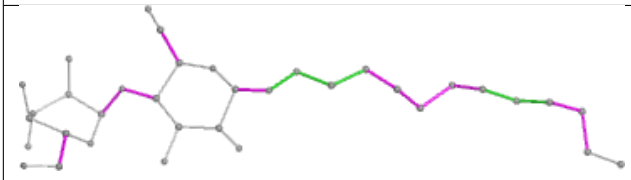
Ligand LMT R 102



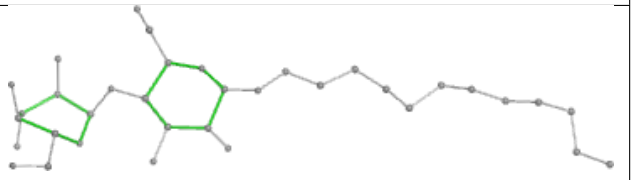
Bond lengths



Bond angles

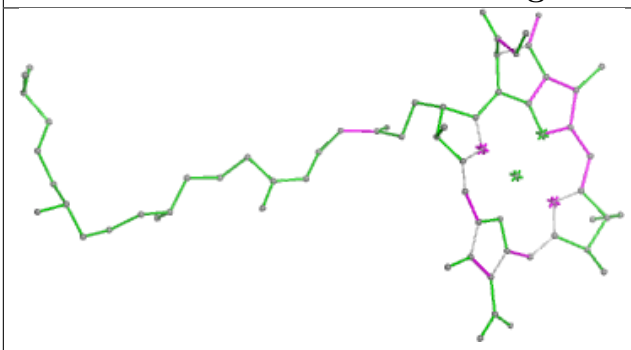


Torsions

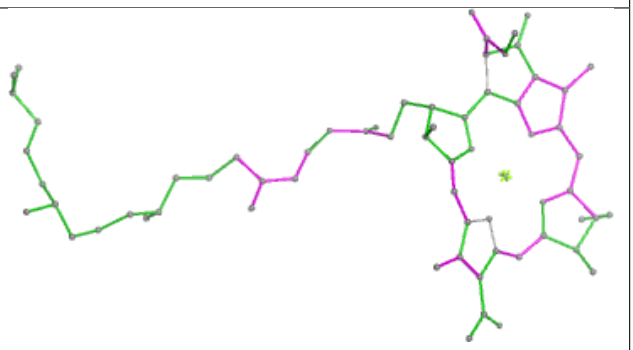


Rings

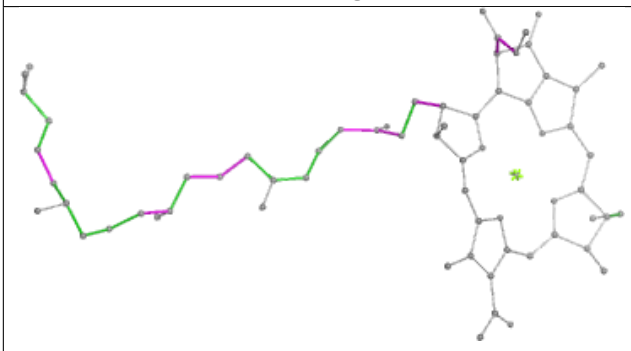
Ligand BCL L 308



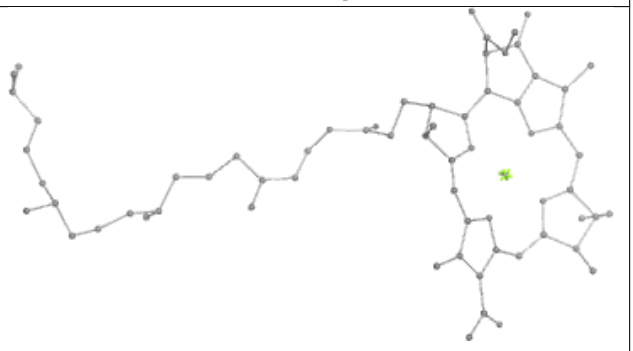
Bond lengths



Bond angles

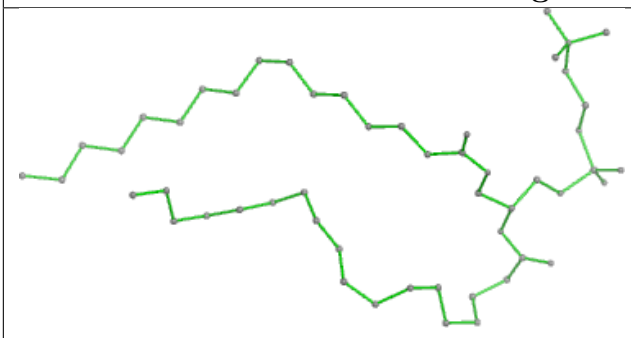


Torsions

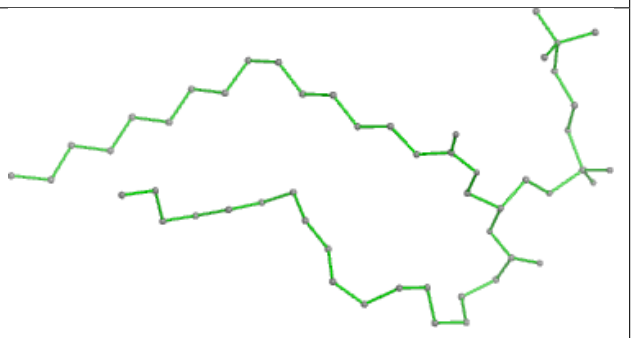


Rings

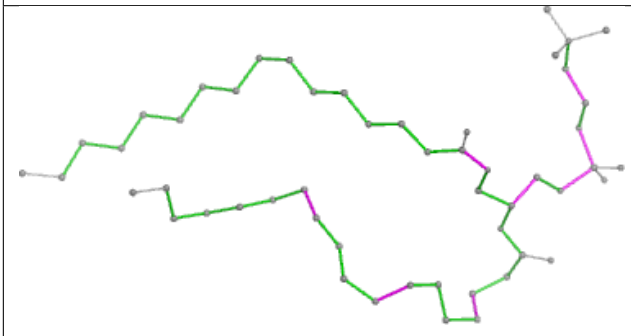
Ligand 6PL Z 103



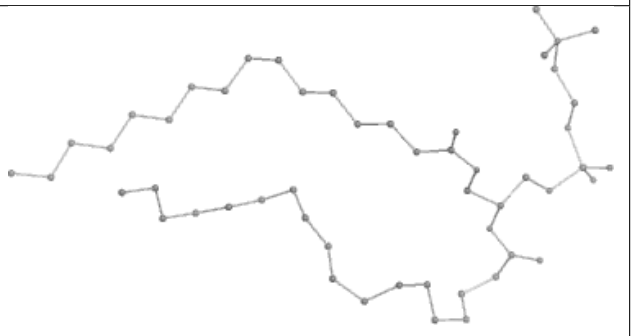
Bond lengths



Bond angles

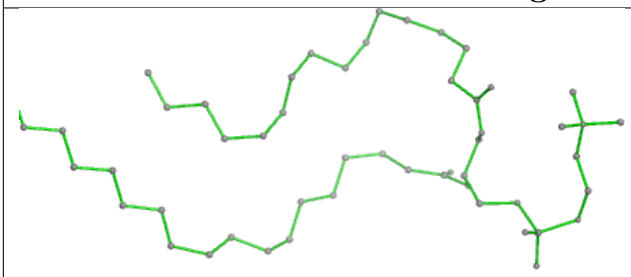


Torsions

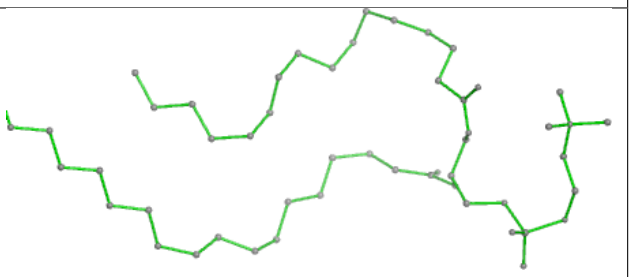


Rings

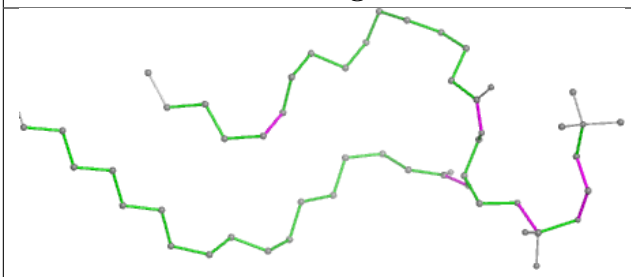
Ligand 6PL B 104



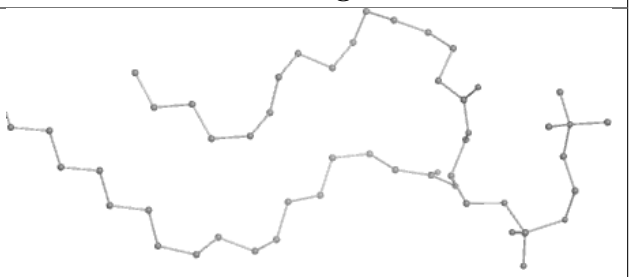
Bond lengths



Bond angles

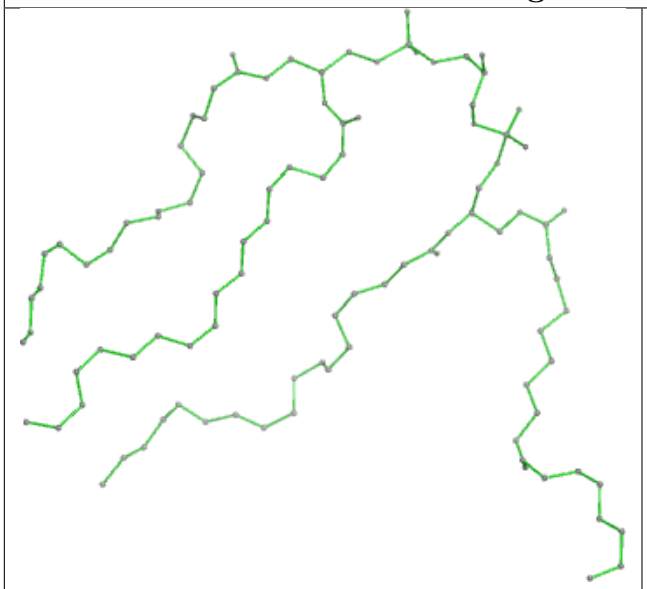


Torsions

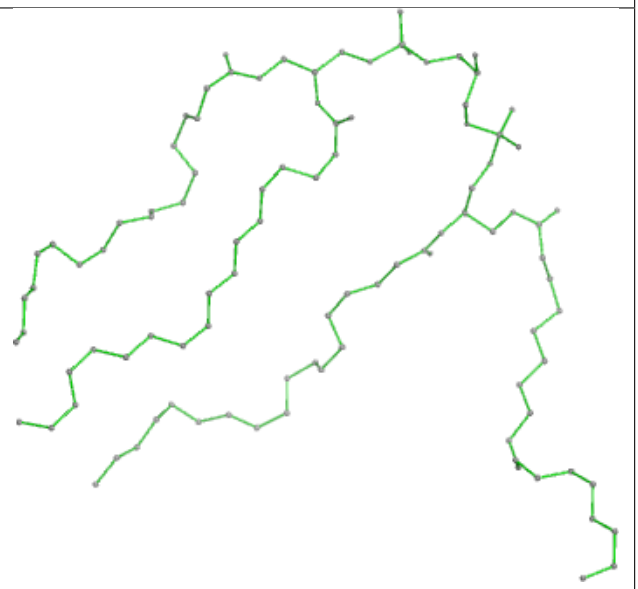


Rings

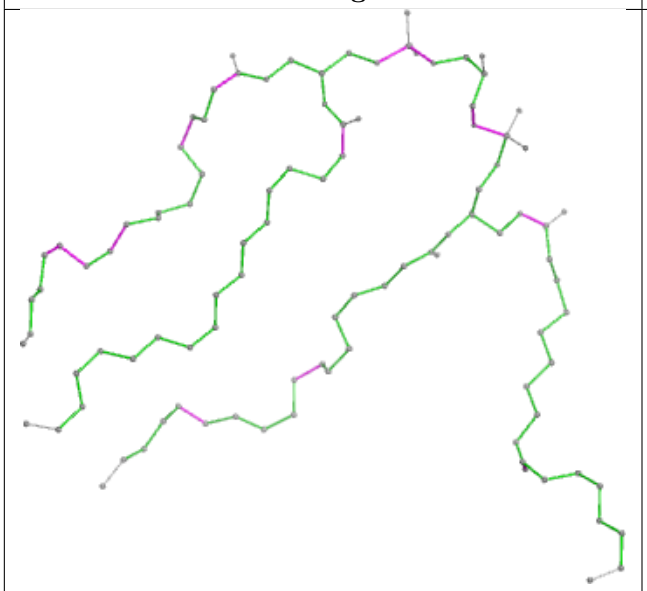
Ligand CDL L 310



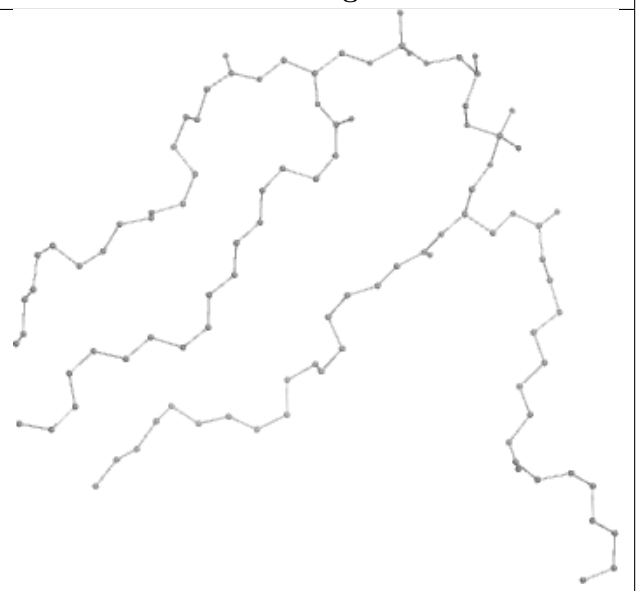
Bond lengths



Bond angles

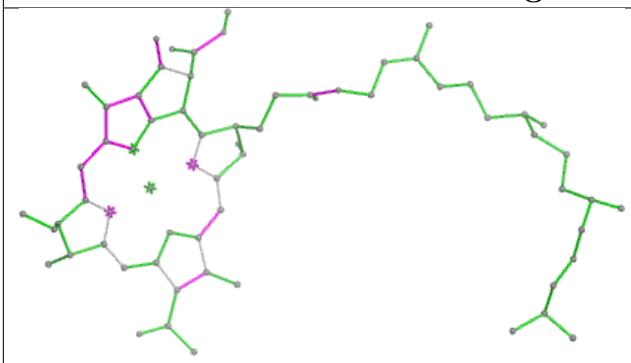


Torsions

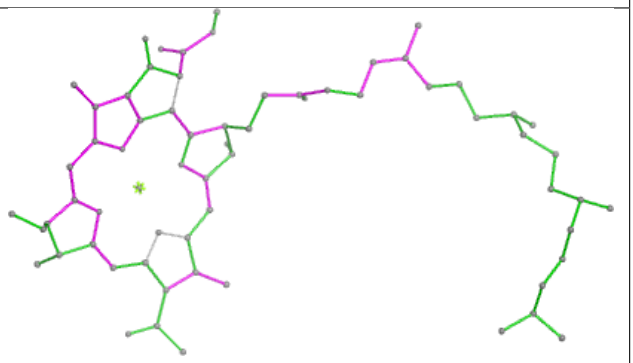


Rings

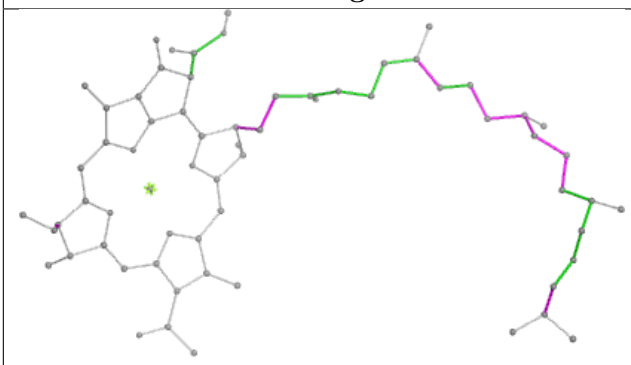
Ligand BCL C 101



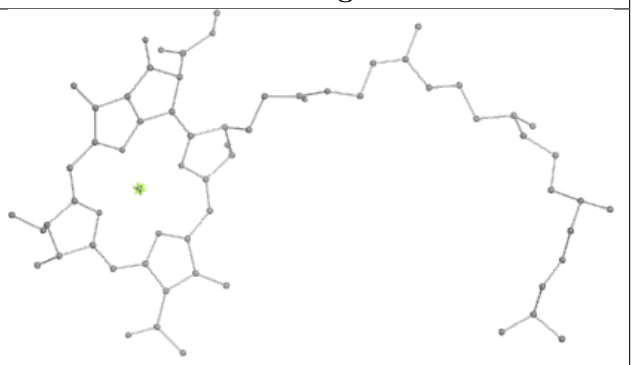
Bond lengths



Bond angles

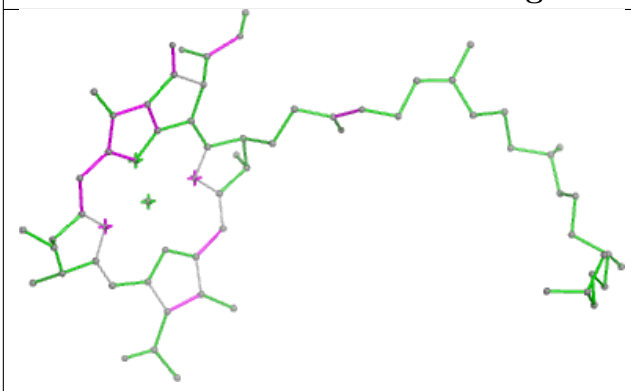


Torsions

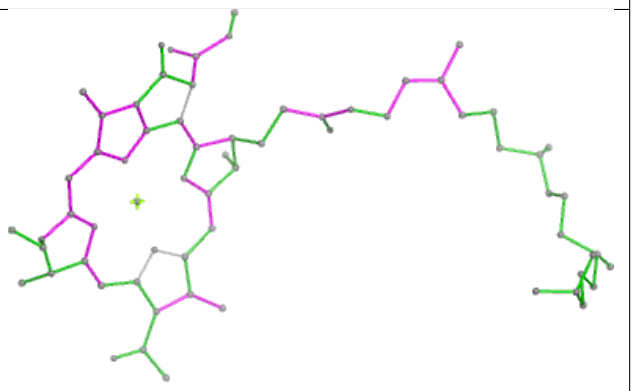


Rings

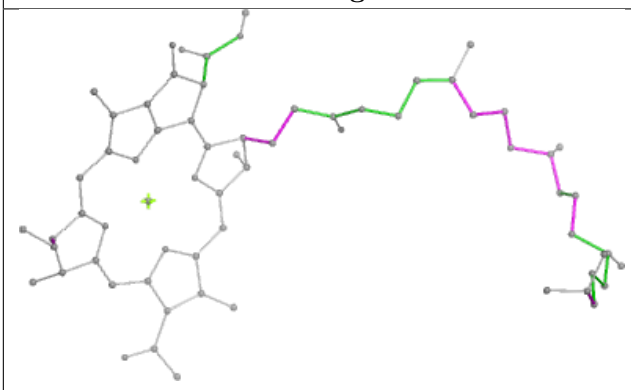
Ligand BCL P 102



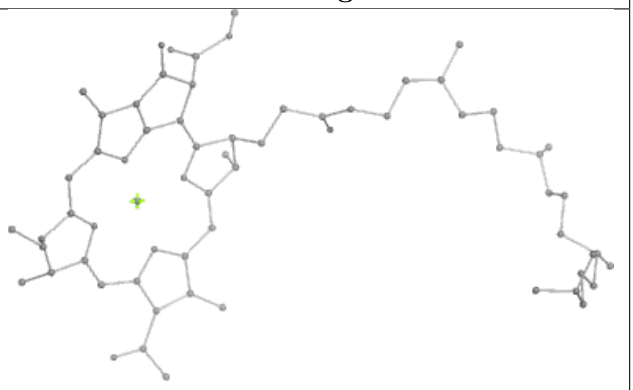
Bond lengths



Bond angles

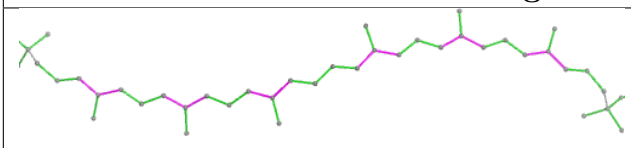


Torsions

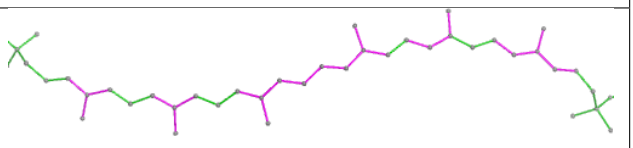


Rings

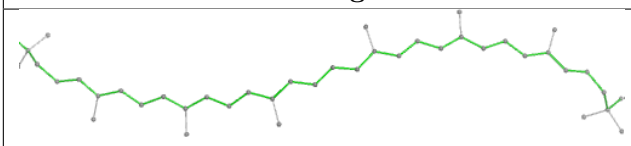
Ligand CRT U 101



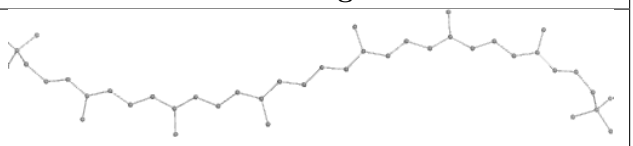
Bond lengths



Bond angles

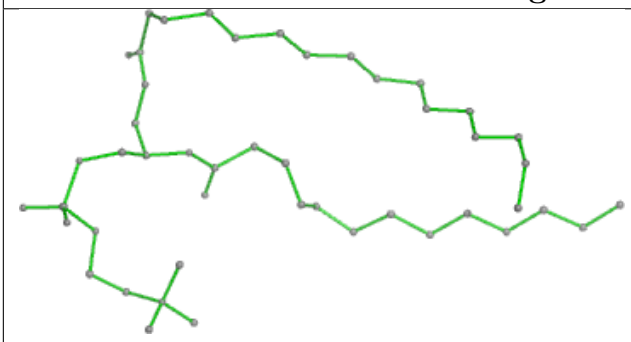


Torsions

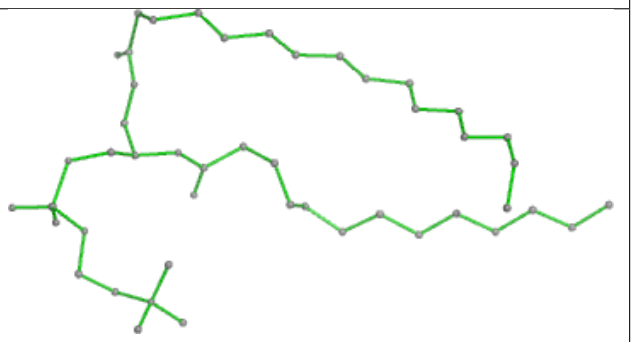


Rings

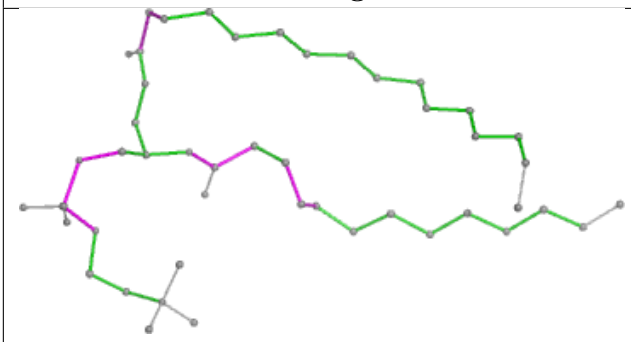
Ligand 6PL O 103



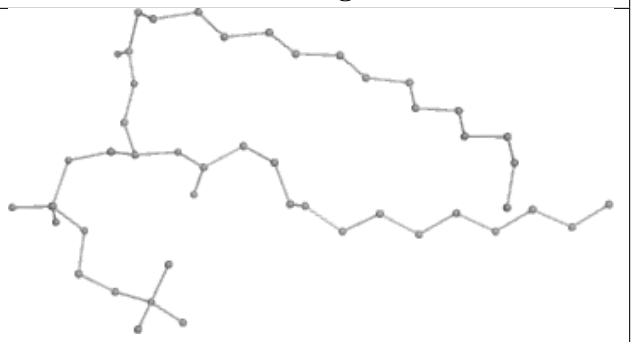
Bond lengths



Bond angles

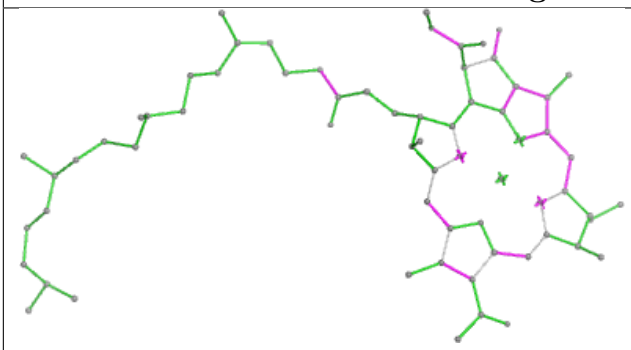


Torsions

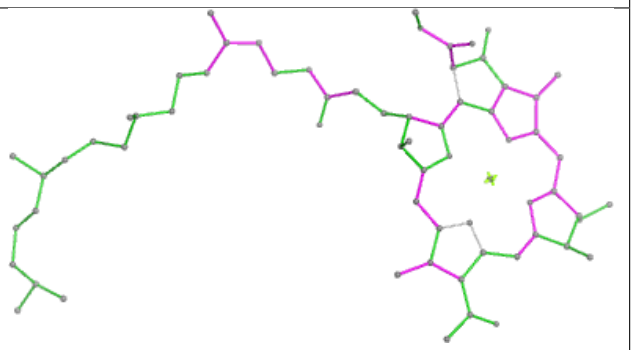


Rings

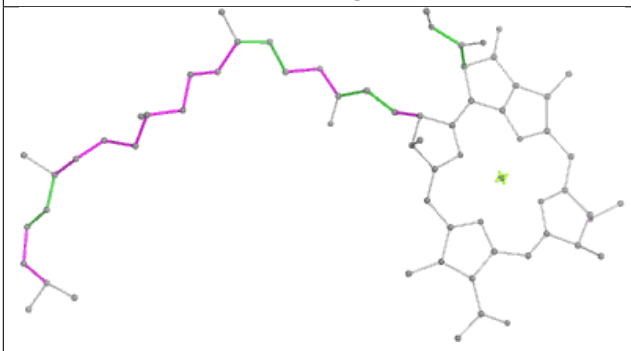
Ligand BCL 7 102



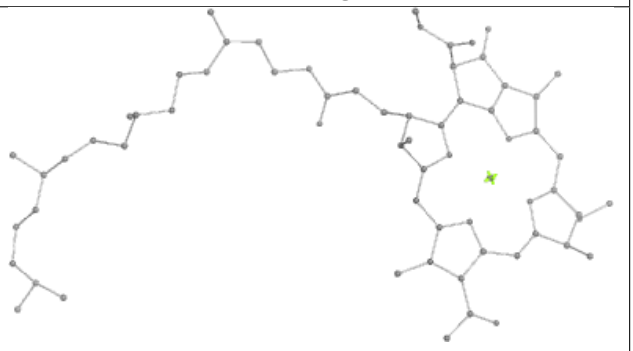
Bond lengths



Bond angles

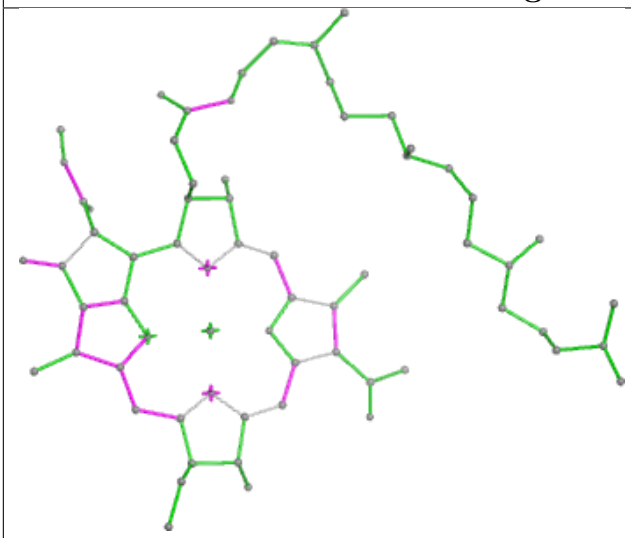


Torsions

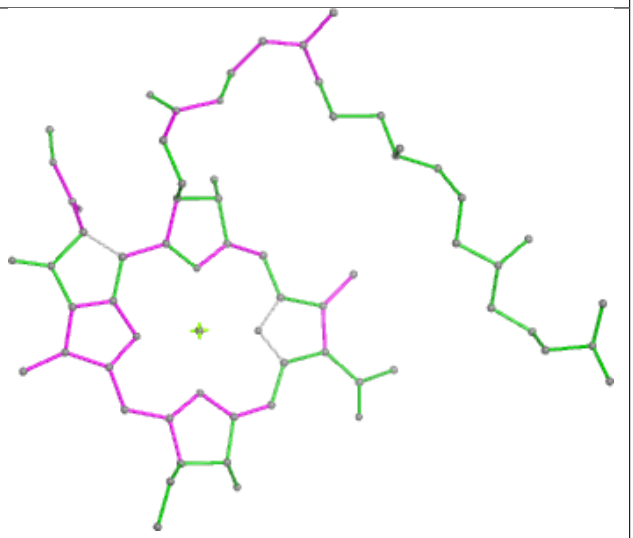


Rings

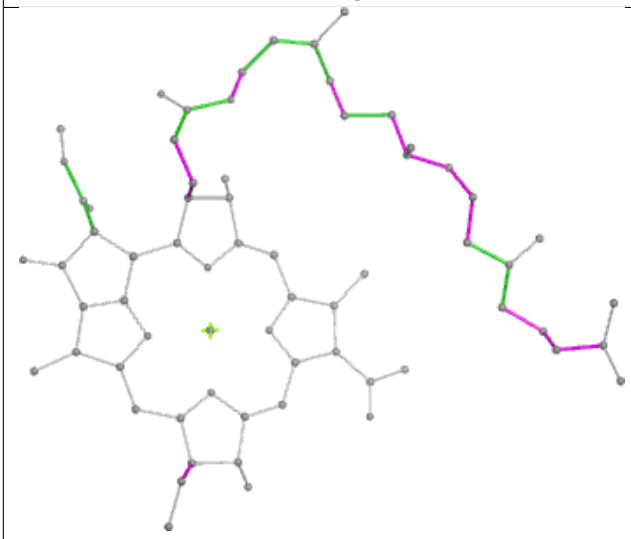
Ligand BCL Y 102



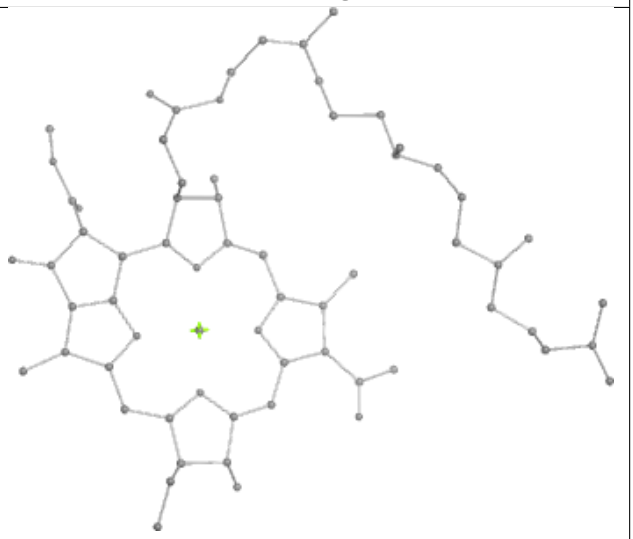
Bond lengths



Bond angles

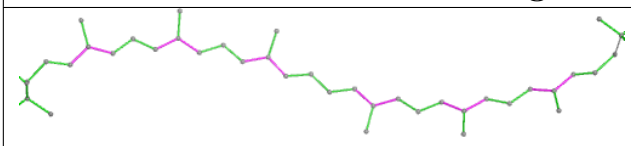


Torsions

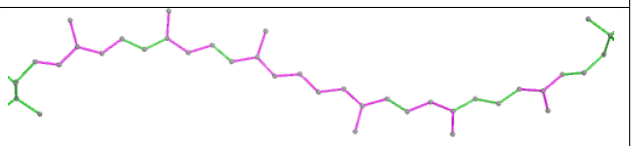


Rings

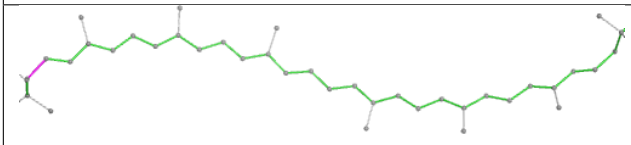
Ligand CRT 7 101



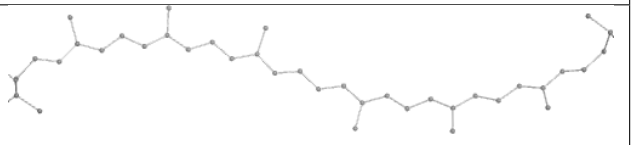
Bond lengths



Bond angles

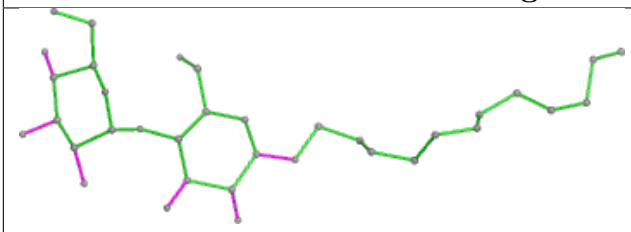


Torsions

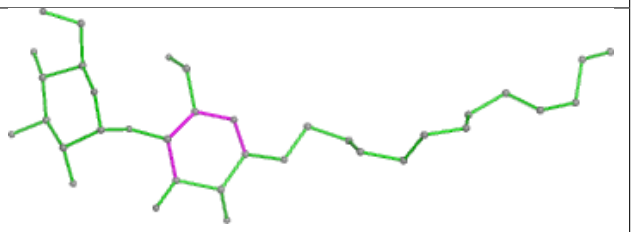


Rings

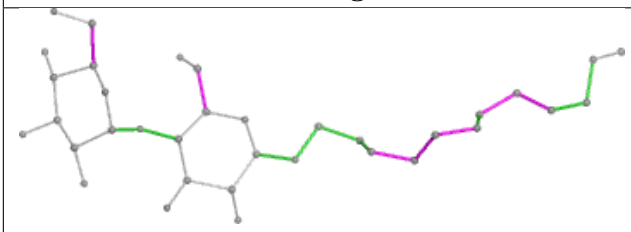
Ligand LMT O 101



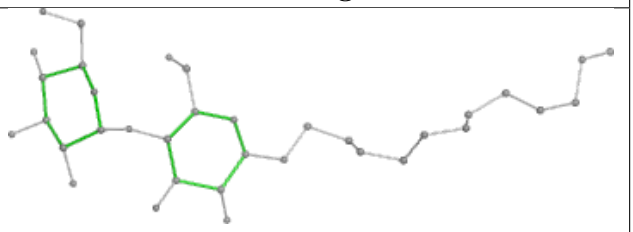
Bond lengths



Bond angles

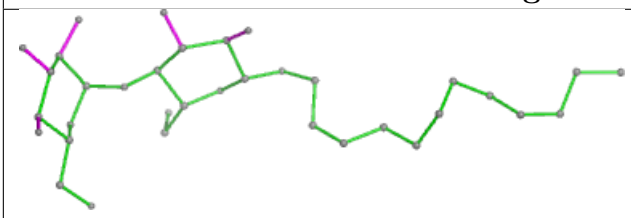


Torsions

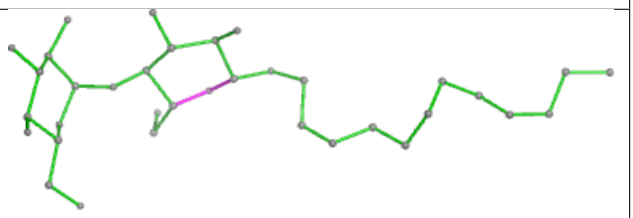


Rings

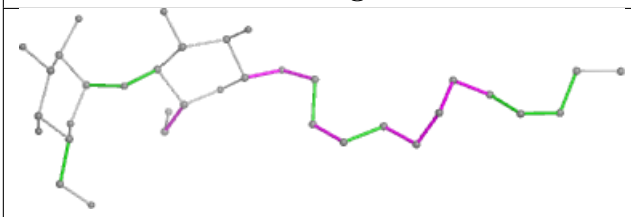
Ligand LMT F 101



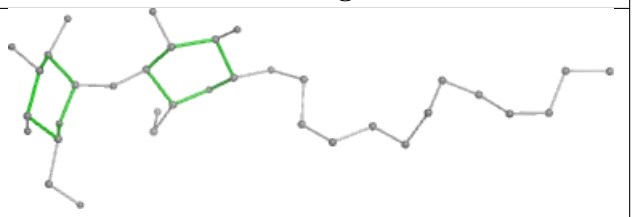
Bond lengths



Bond angles

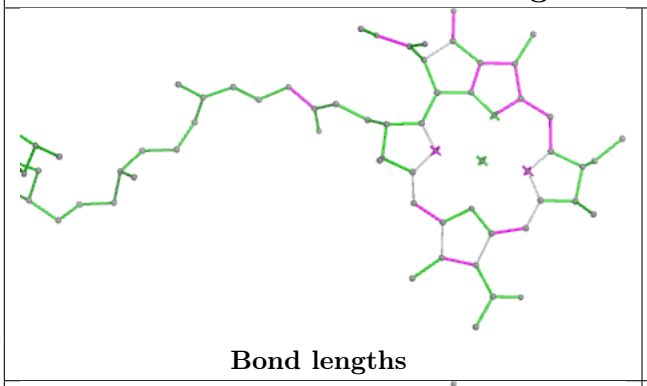


Torsions

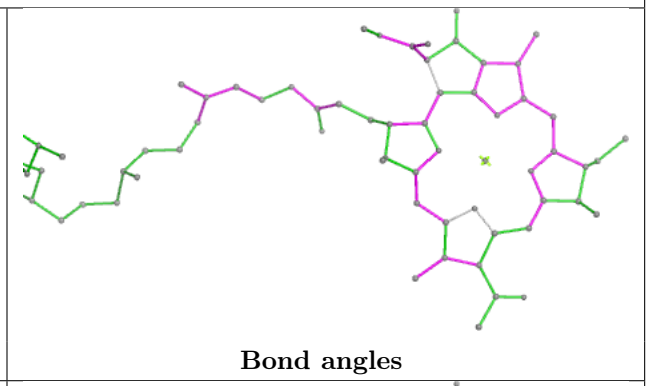


Rings

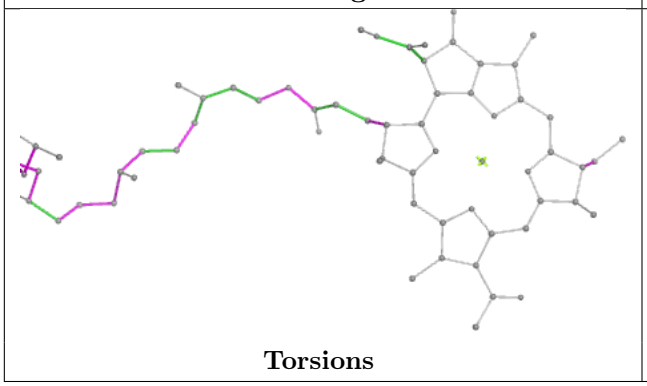
Ligand BCL 3 100



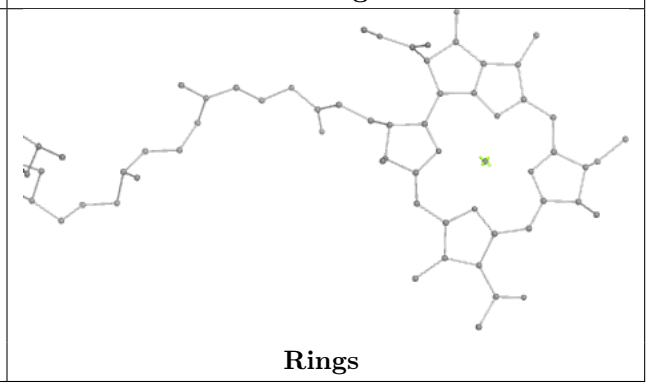
Bond lengths



Bond angles

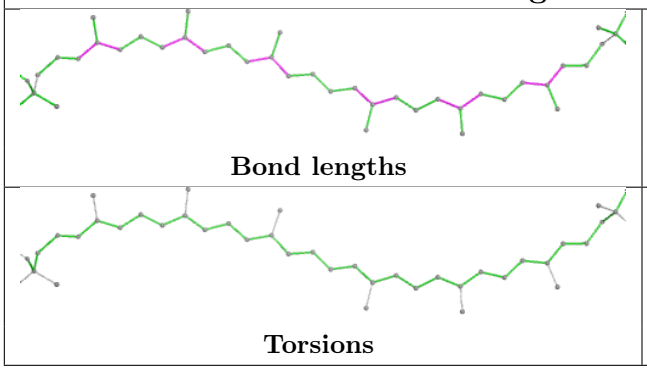


Torsions

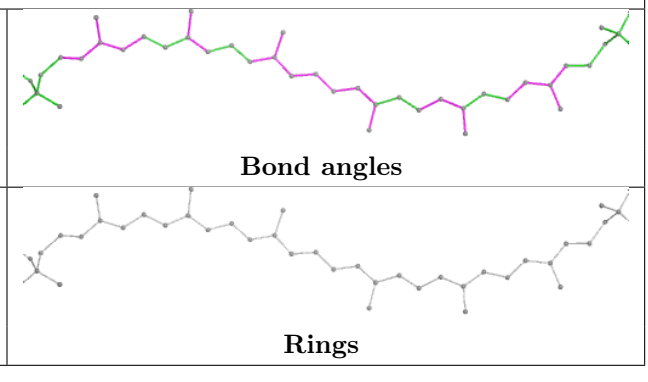


Rings

Ligand CRT 4 103



Bond lengths

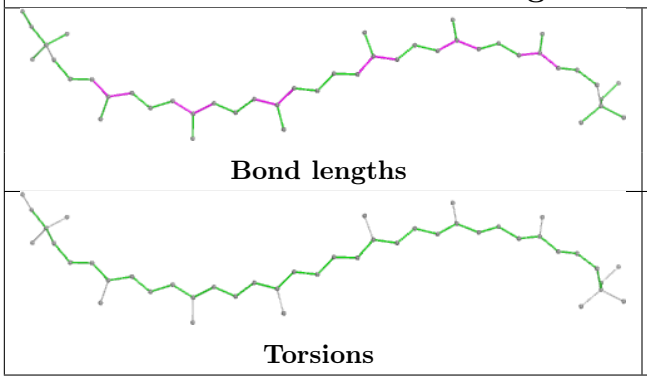


Bond angles

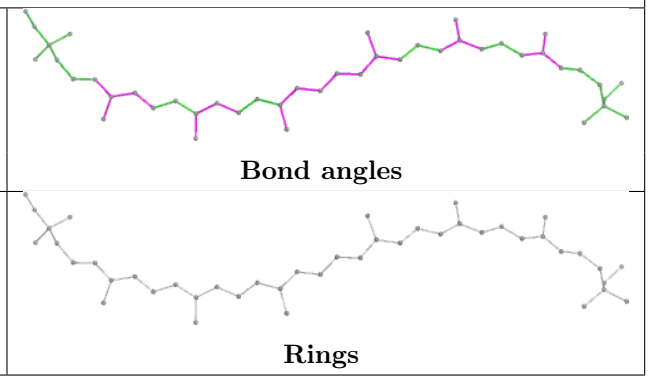
Torsions

Rings

Ligand CRT Z 102



Bond lengths

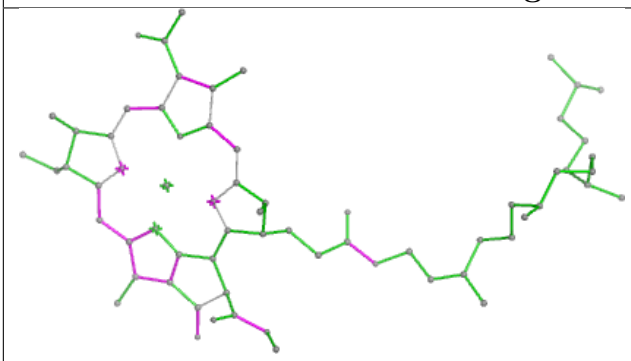


Bond angles

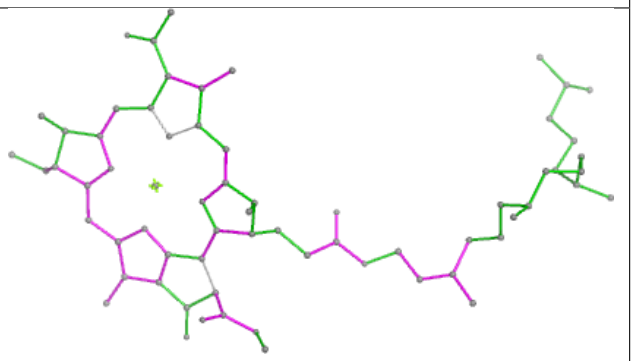
Torsions

Rings

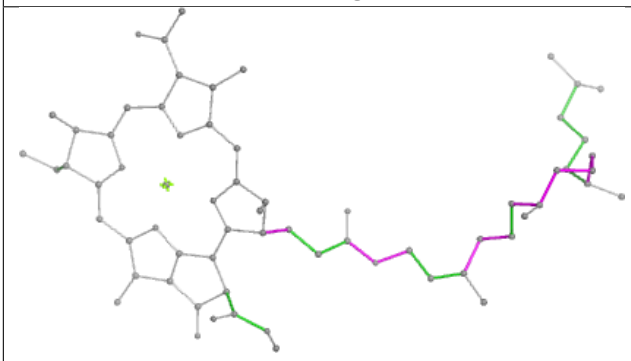
Ligand BCL N 101



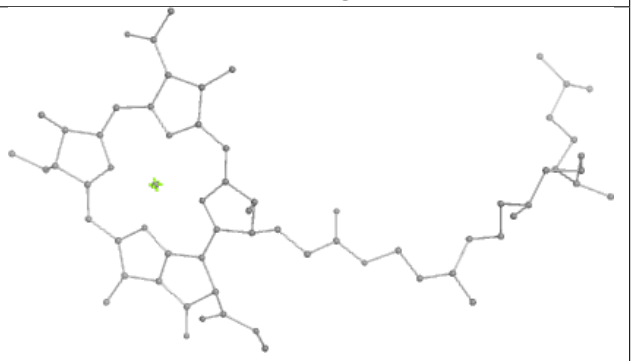
Bond lengths



Bond angles

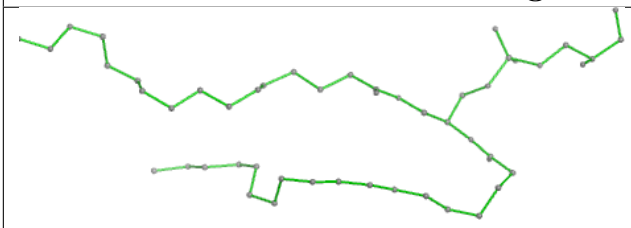


Torsions

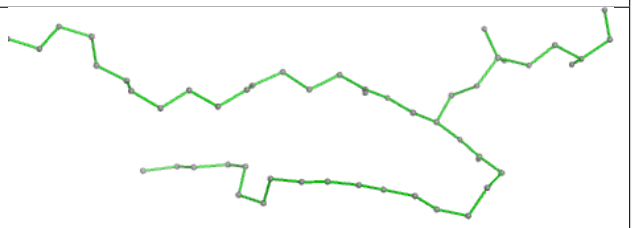


Rings

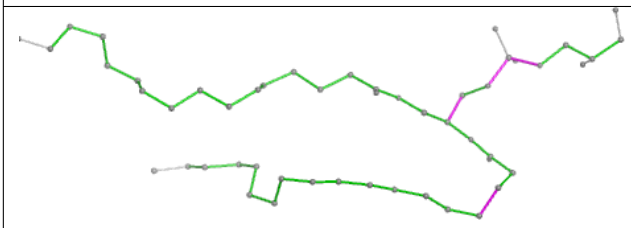
Ligand PGT 7 103



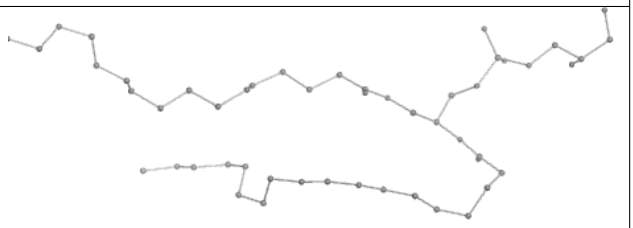
Bond lengths



Bond angles

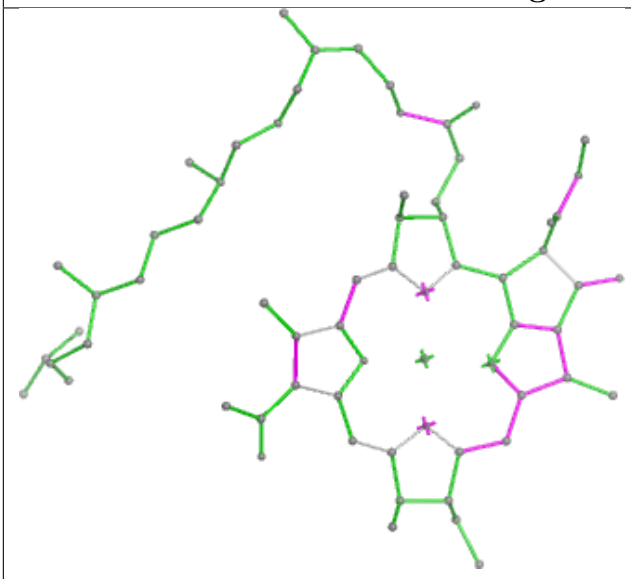


Torsions

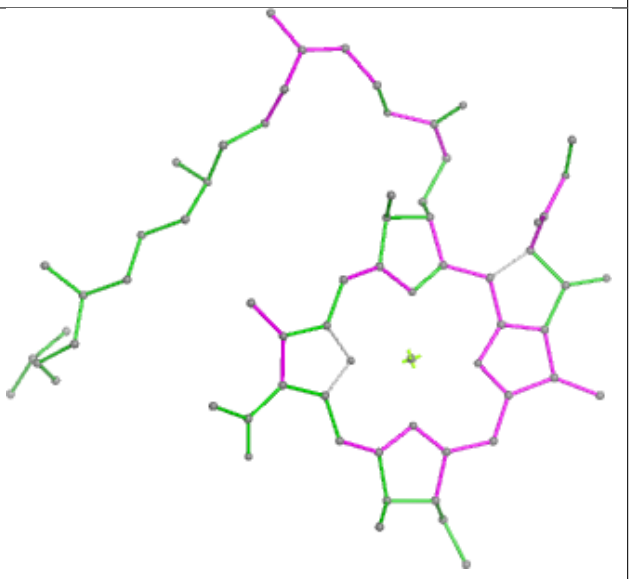


Rings

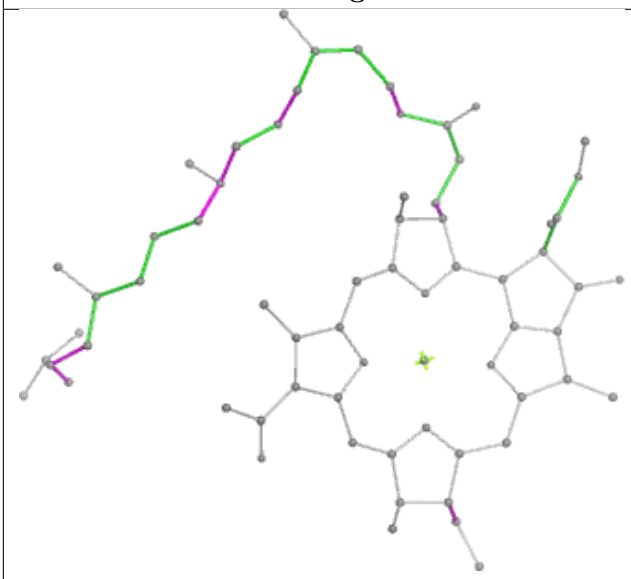
Ligand BCL 0 100



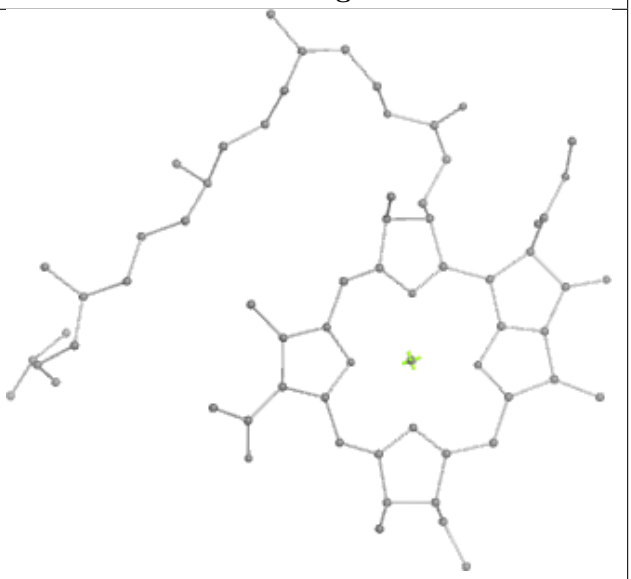
Bond lengths



Bond angles

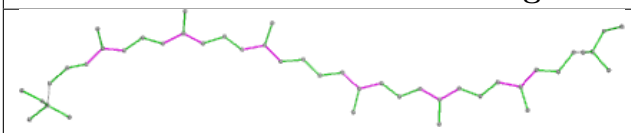


Torsions

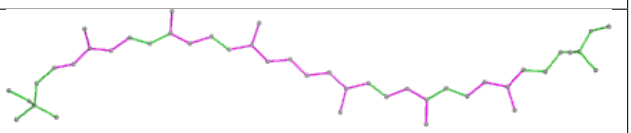


Rings

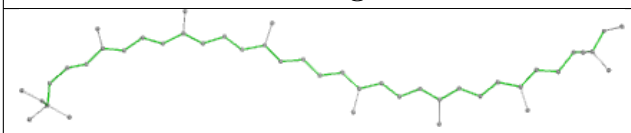
Ligand CRT D 101



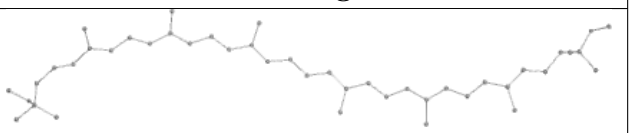
Bond lengths



Bond angles

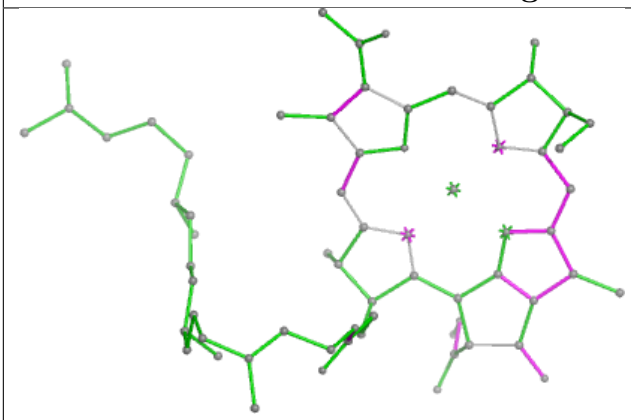


Torsions

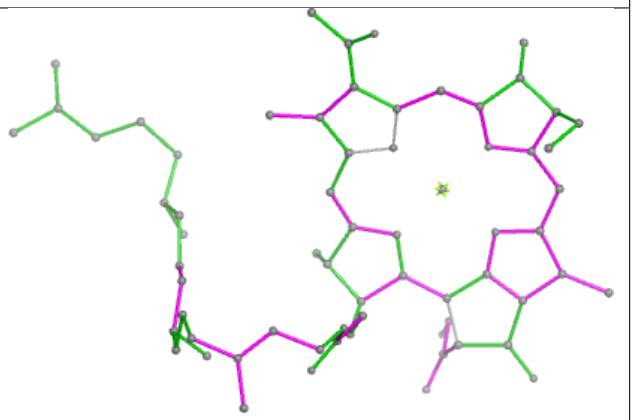


Rings

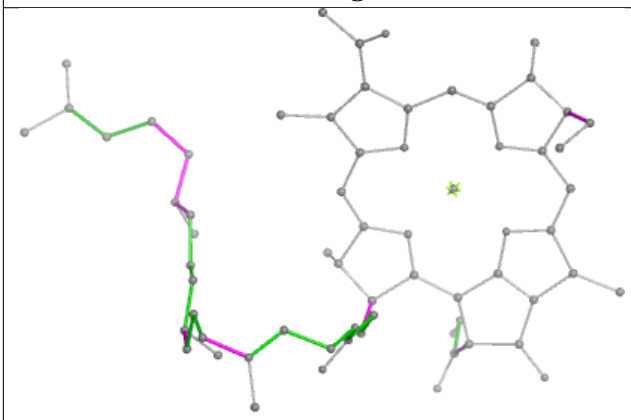
Ligand BCL M 402



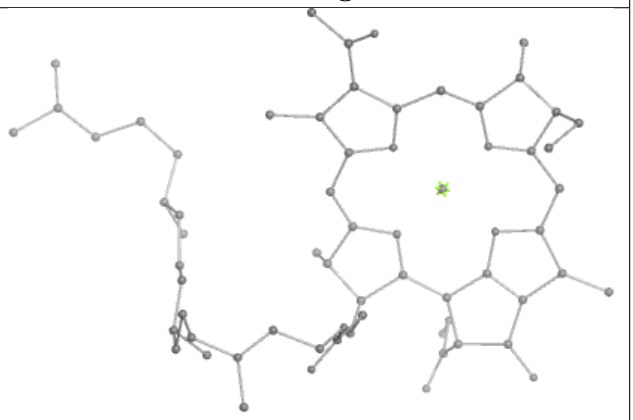
Bond lengths



Bond angles

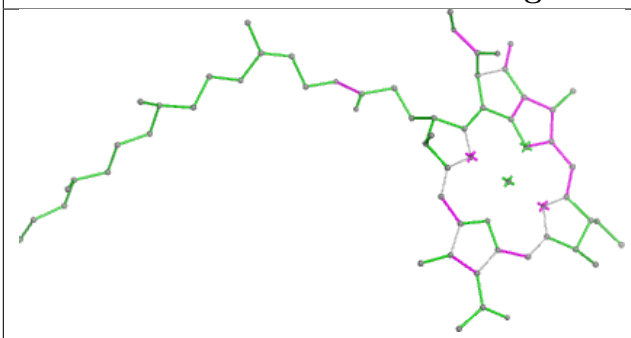


Torsions

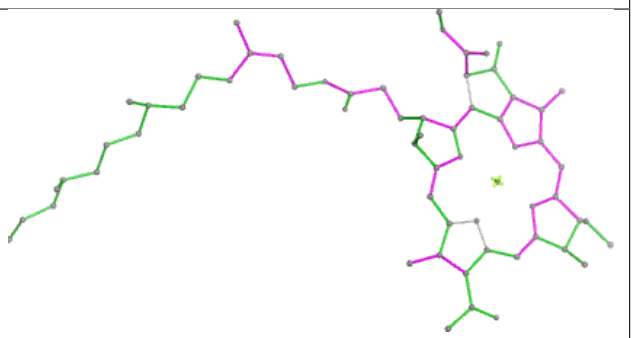


Rings

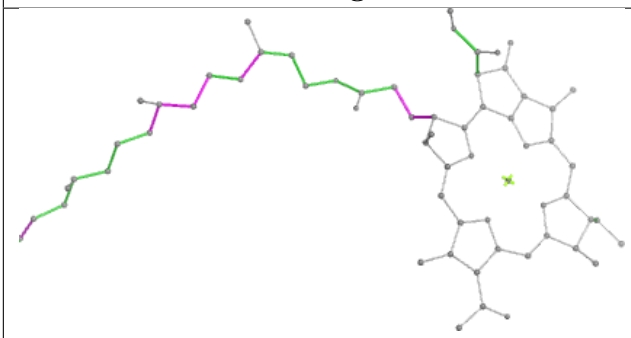
Ligand BCL Y 101



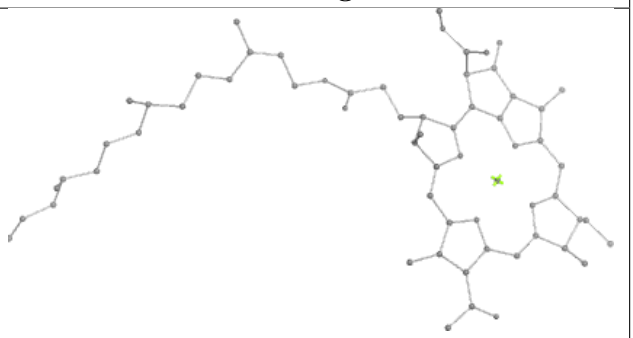
Bond lengths



Bond angles

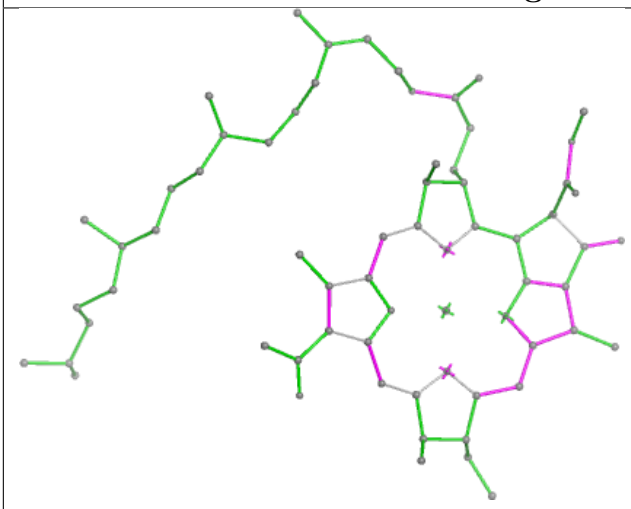


Torsions

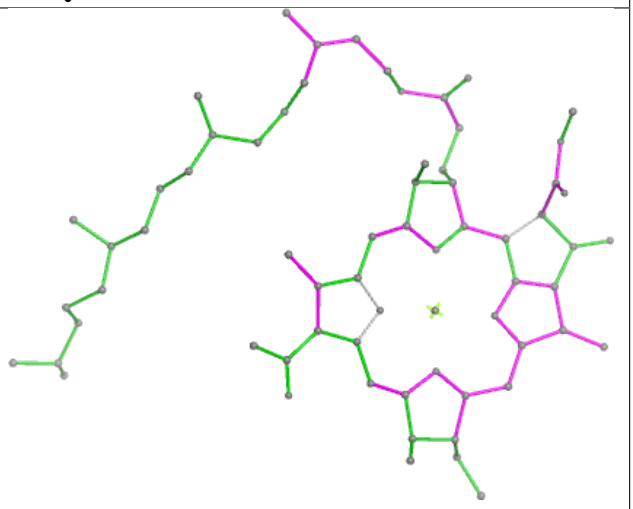


Rings

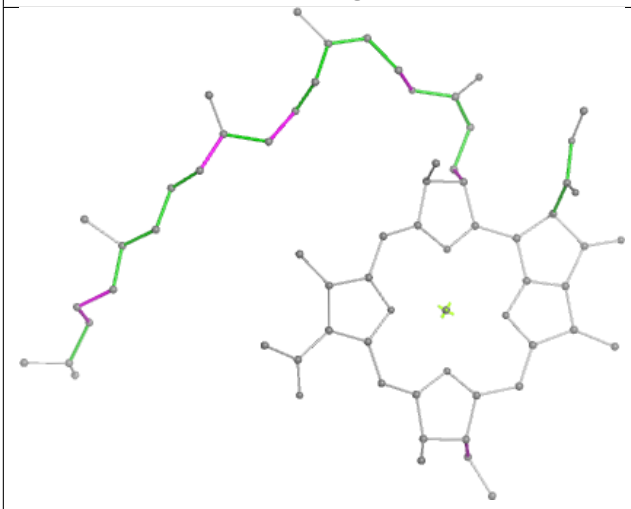
Ligand BCL Q 100



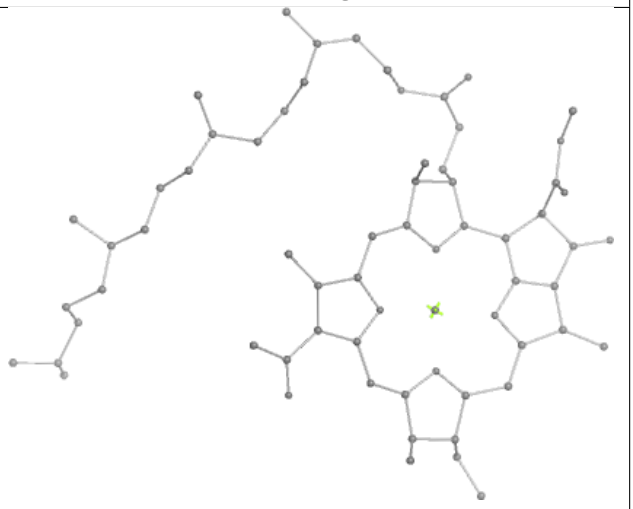
Bond lengths



Bond angles

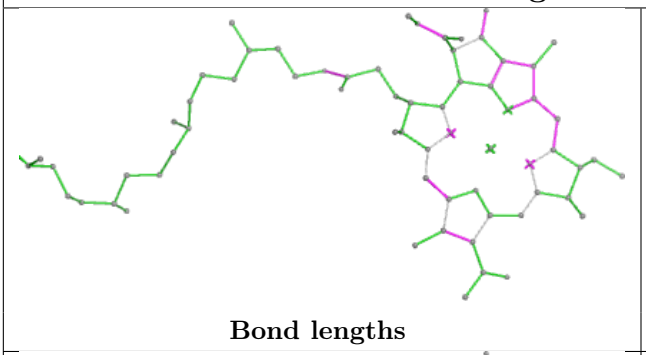


Torsions

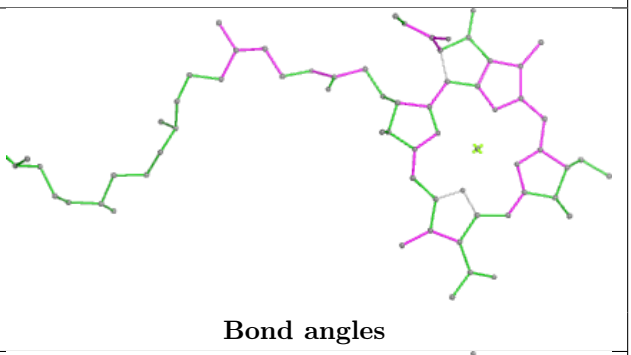


Rings

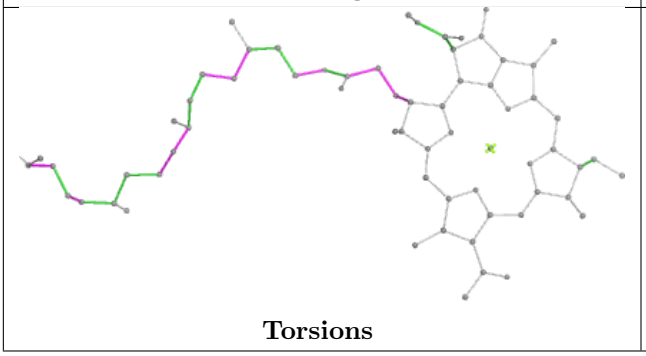
Ligand BCL 9 102



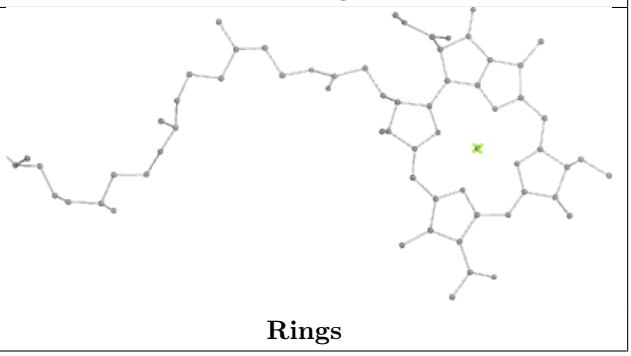
Bond lengths



Bond angles

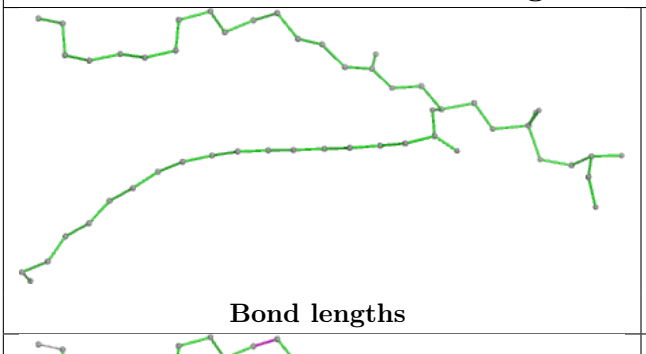


Torsions

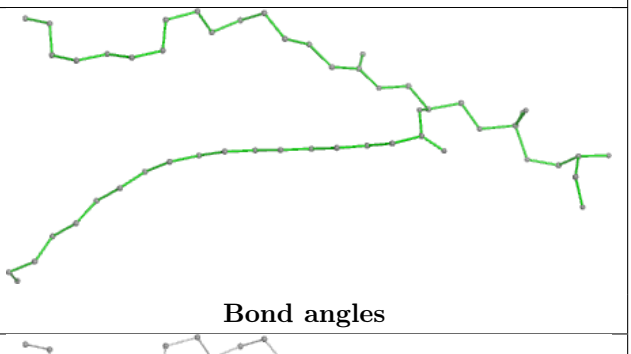


Rings

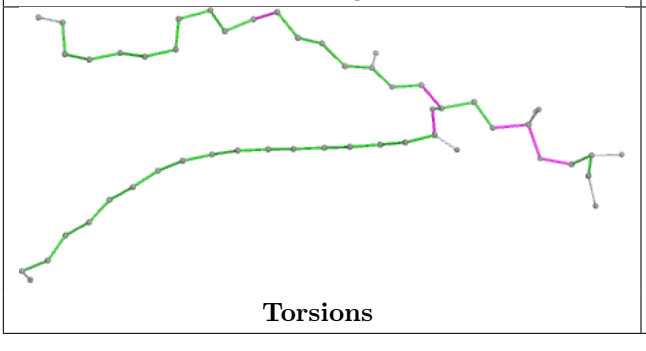
Ligand PGT 9 101



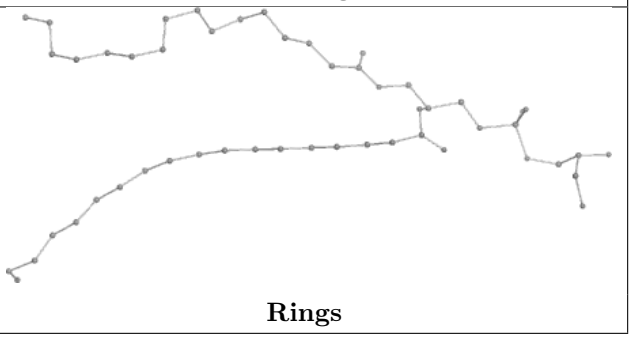
Bond lengths



Bond angles

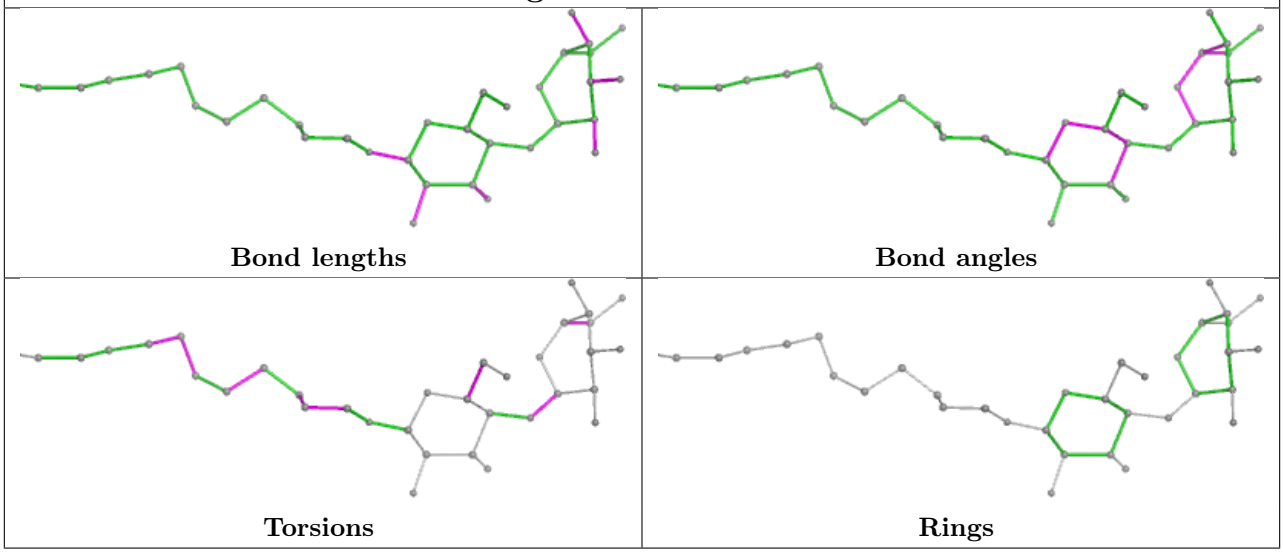


Torsions

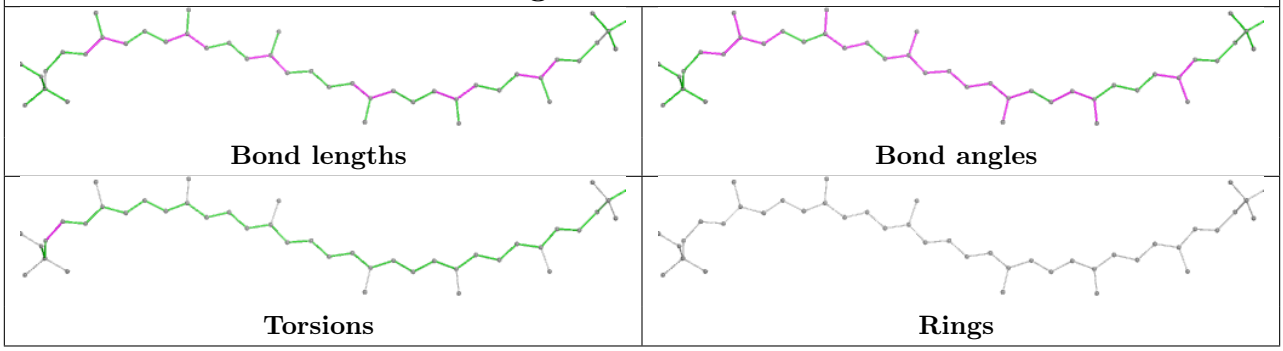


Rings

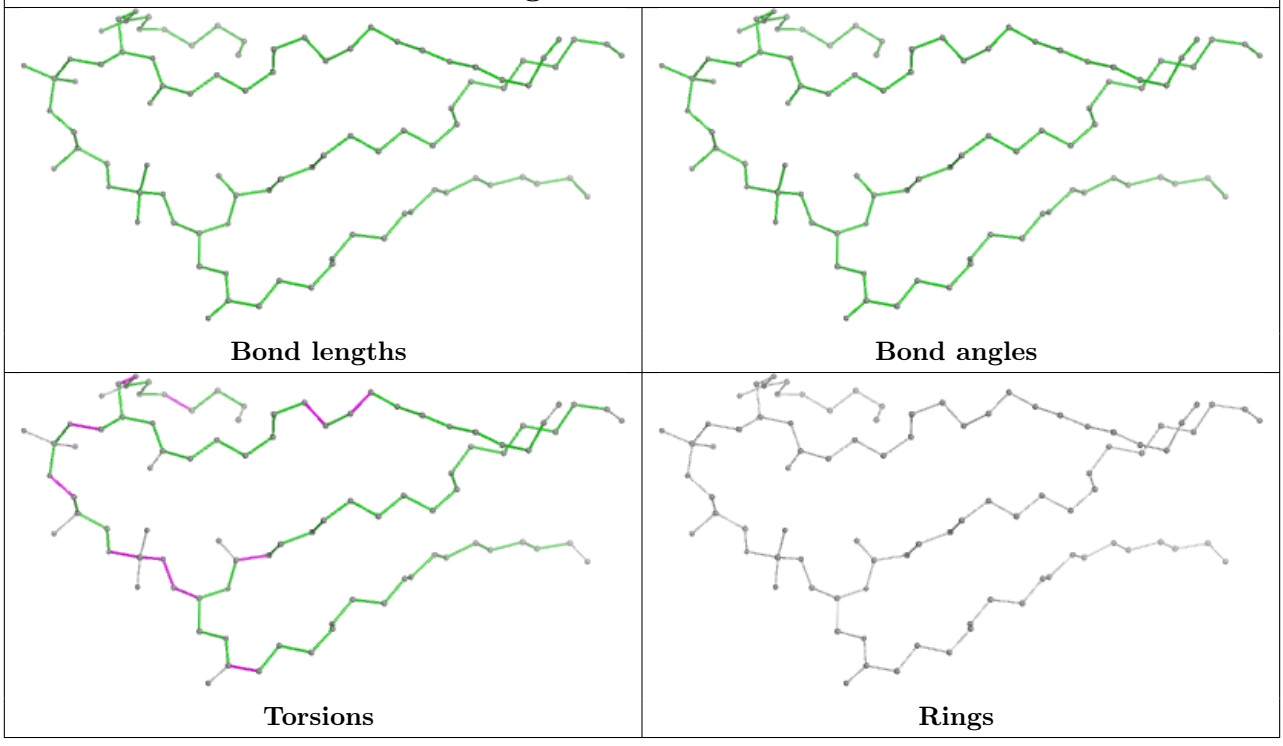
Ligand LMT 4 101



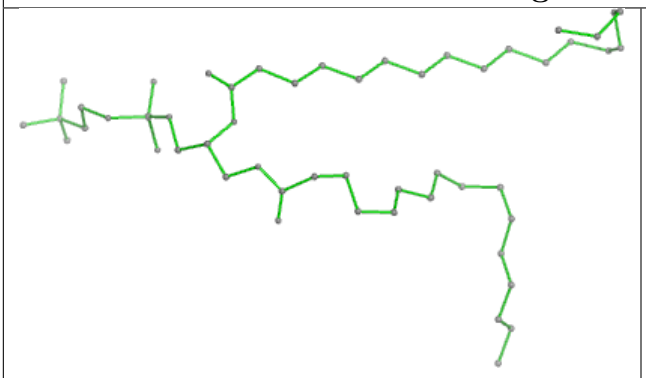
Ligand CRT 8 101



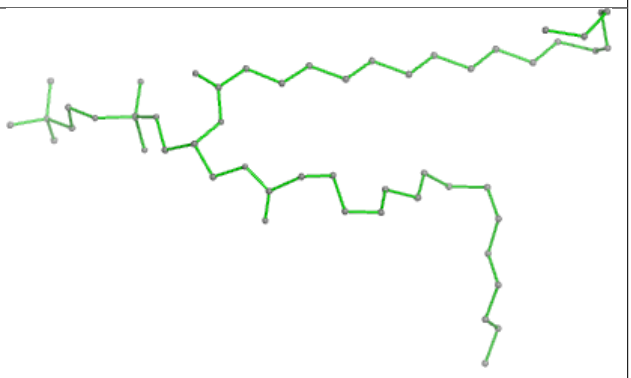
Ligand CDL G 105



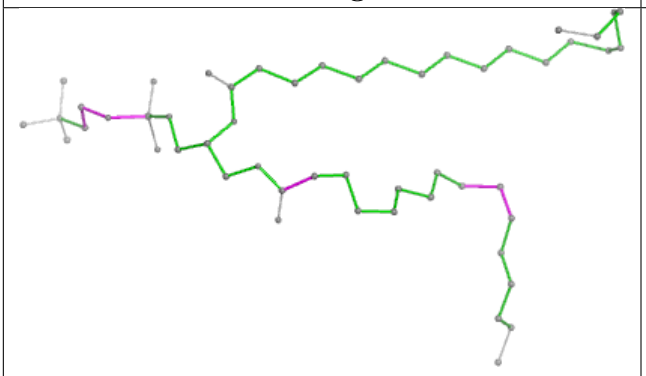
Ligand 6PL L 304



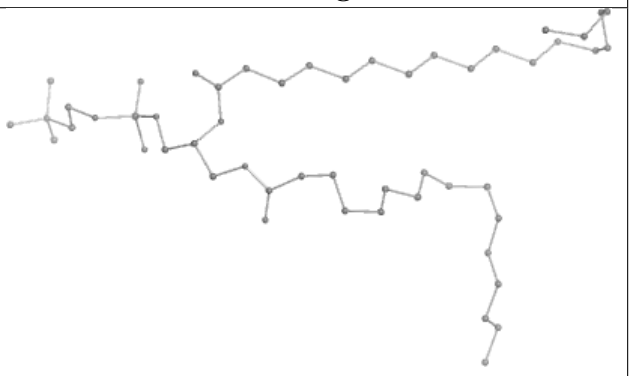
Bond lengths



Bond angles

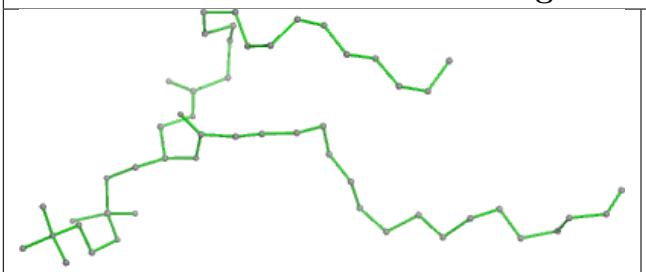


Torsions

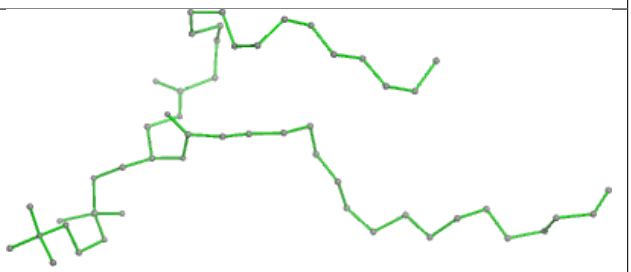


Rings

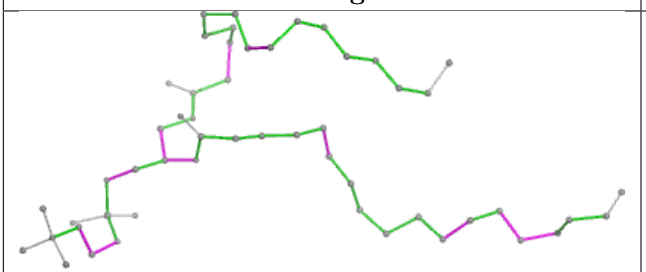
Ligand 6PL I 101



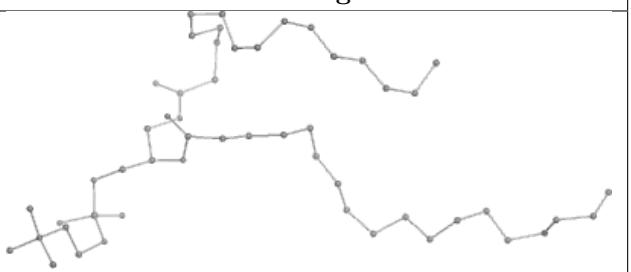
Bond lengths



Bond angles

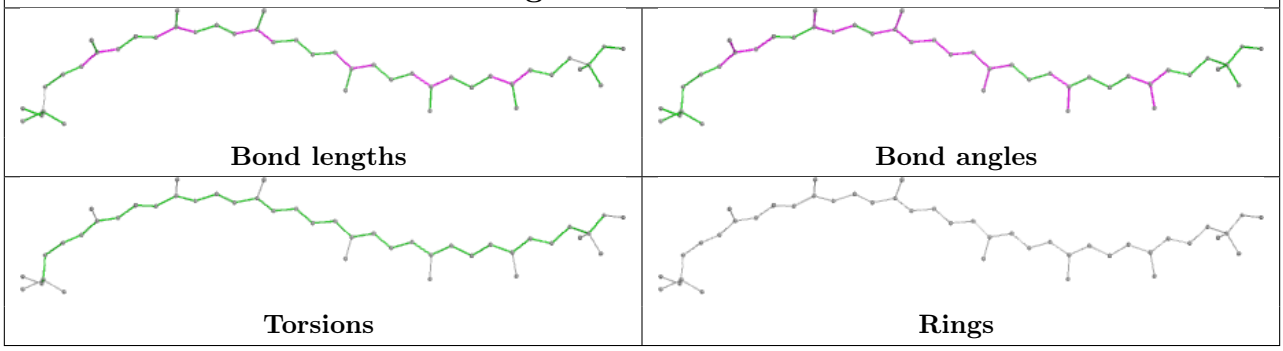


Torsions

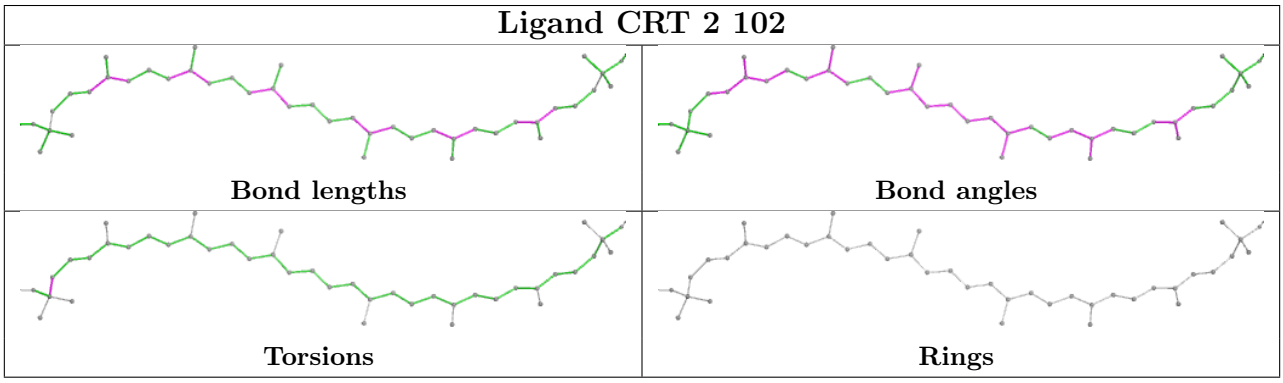


Rings

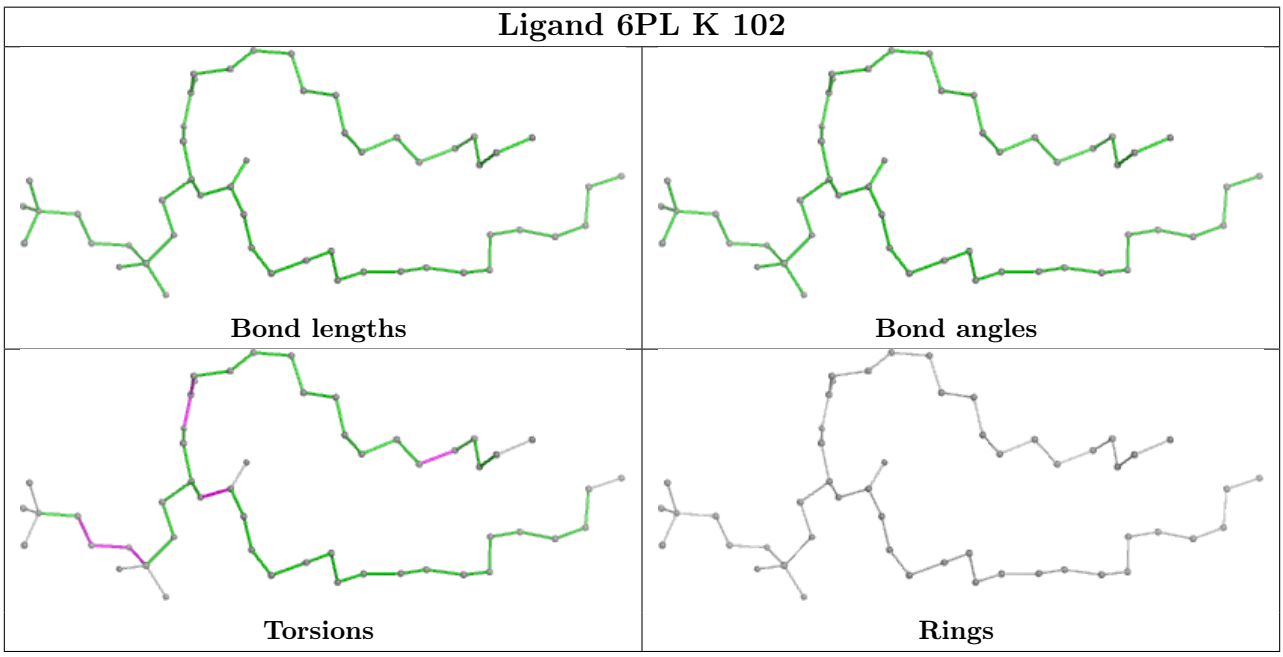
Ligand CRT B 103

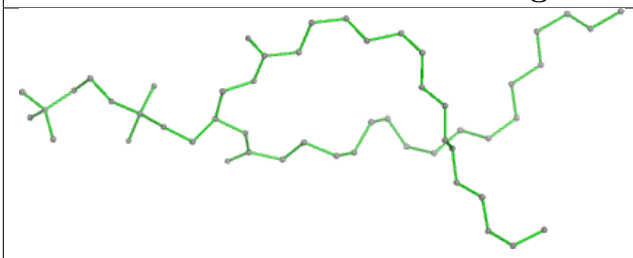
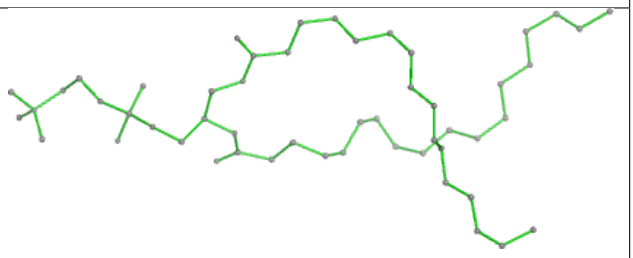
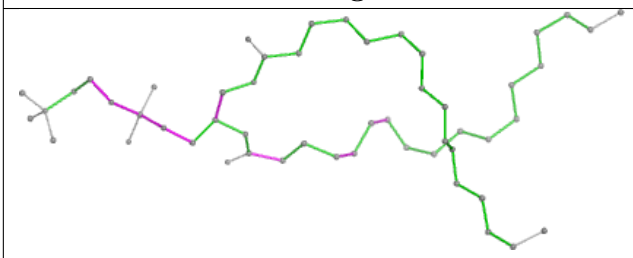
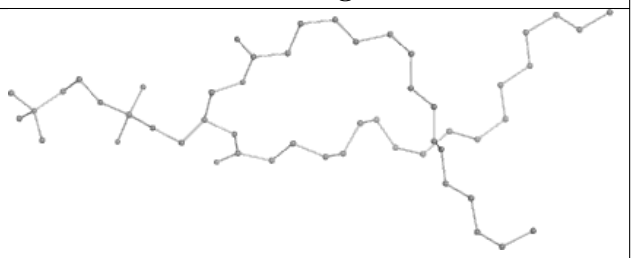


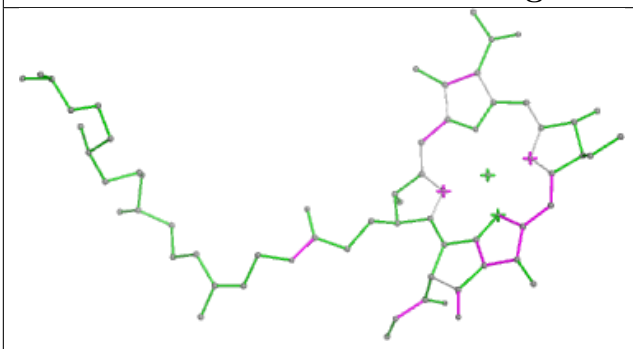
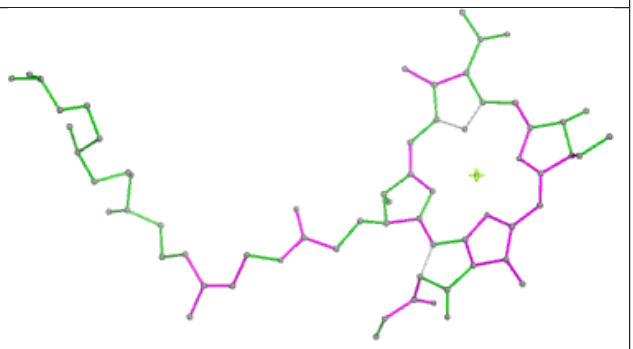
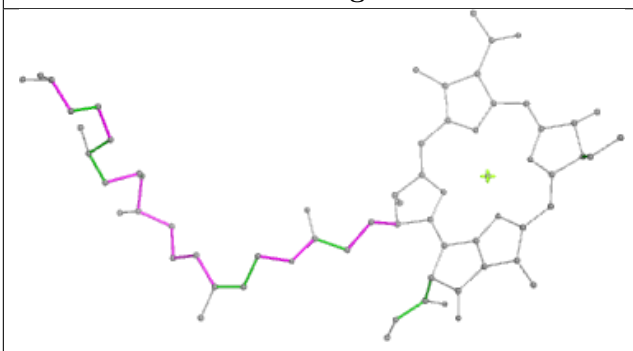
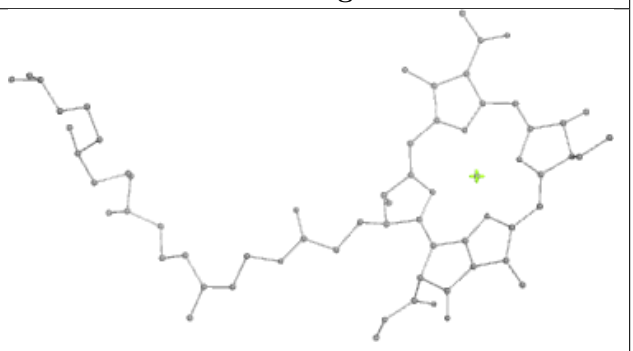
Ligand CRT 2 102



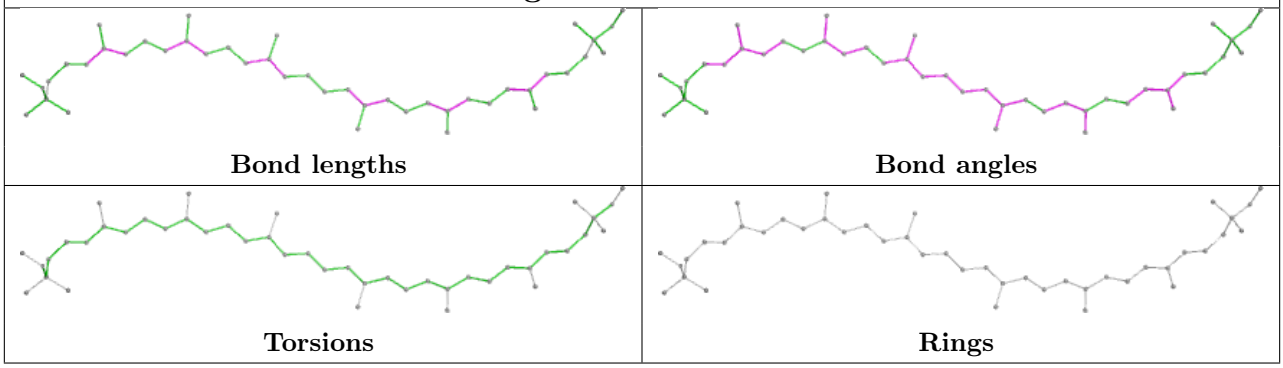
Ligand 6PL K 102



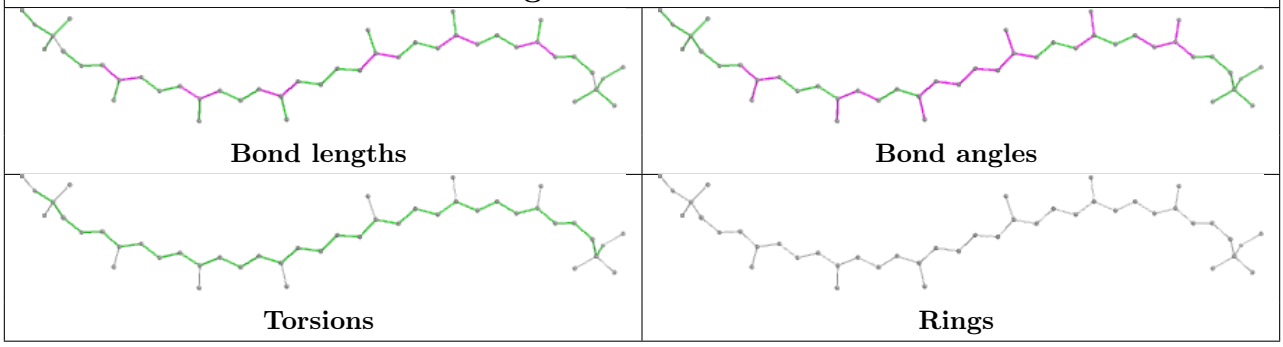
Ligand 6PL P 103	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL T 100	
 Bond lengths	 Bond angles
 Torsions	 Rings

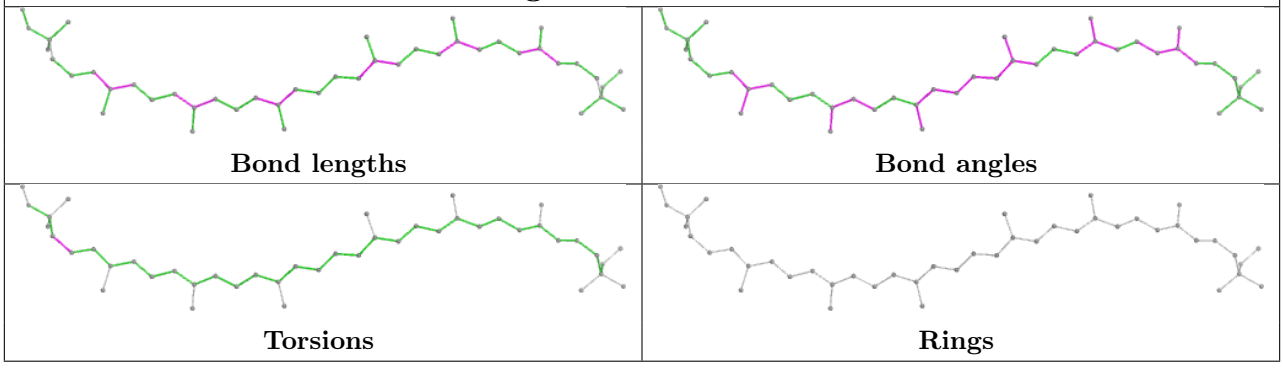
Ligand CRT G 102



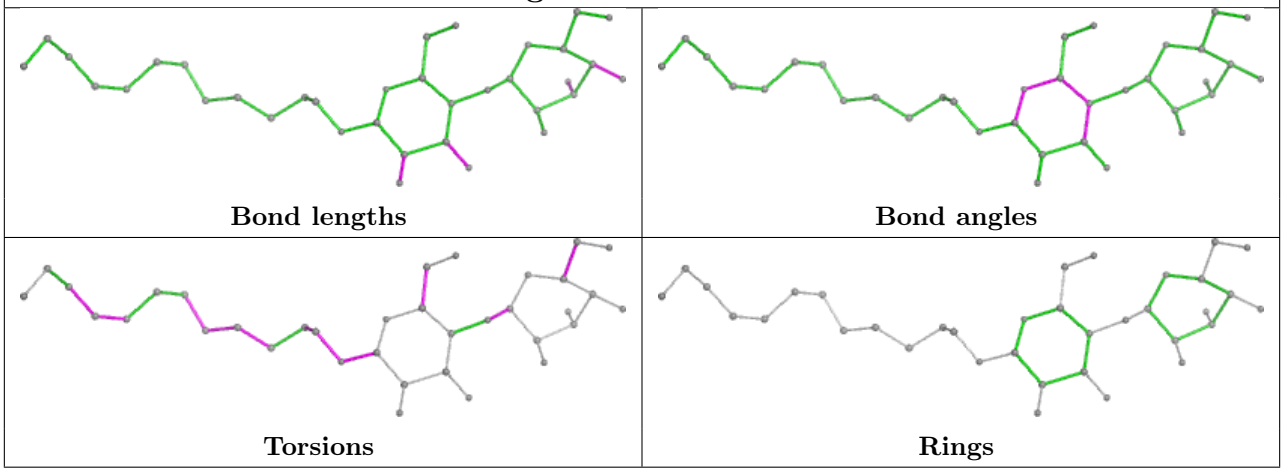
Ligand CRT K 101



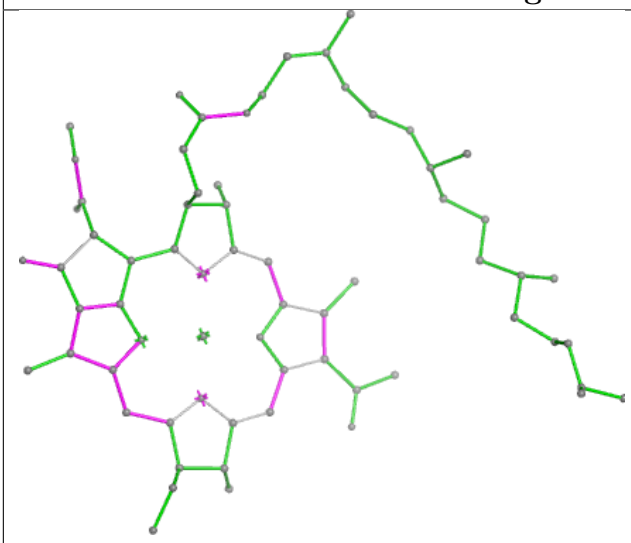
Ligand CRT X 101



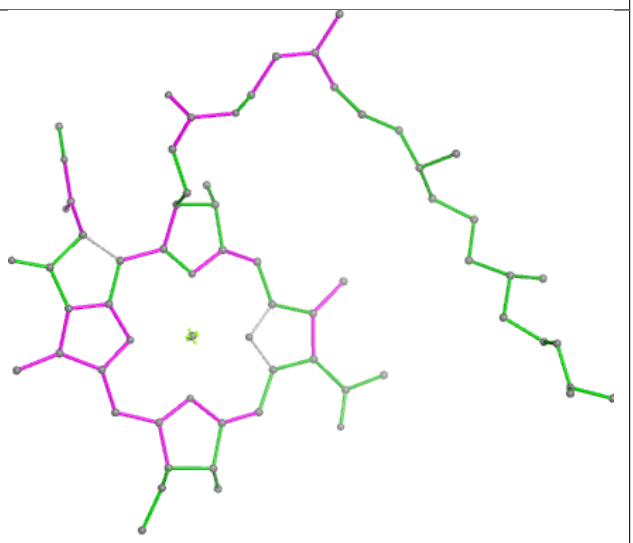
Ligand LMT 2 101



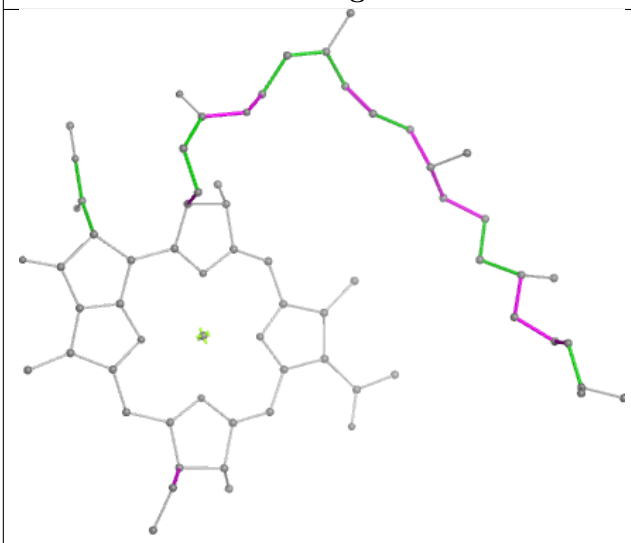
Ligand BCL U 100



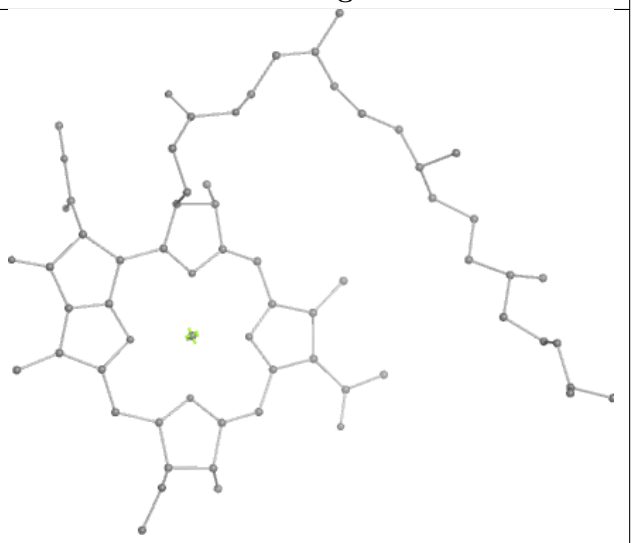
Bond lengths



Bond angles

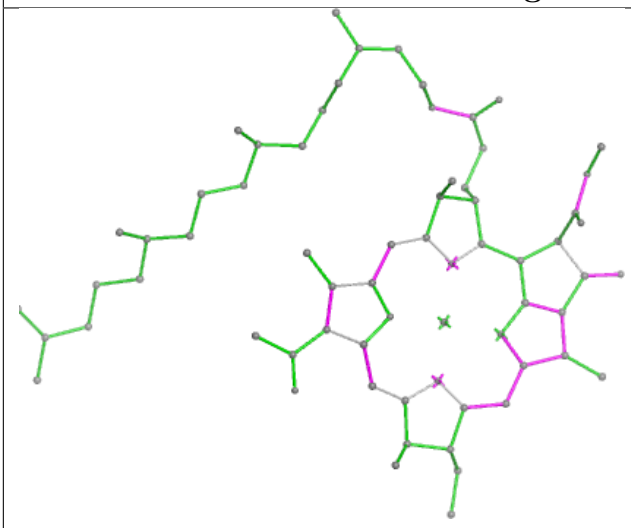


Torsions

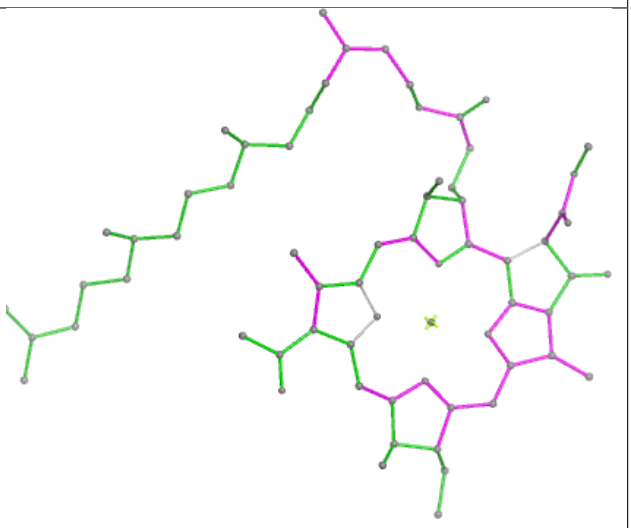


Rings

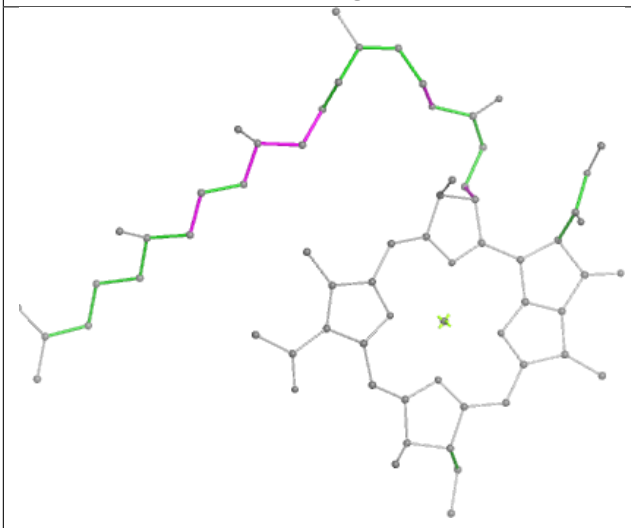
Ligand BCL N 102



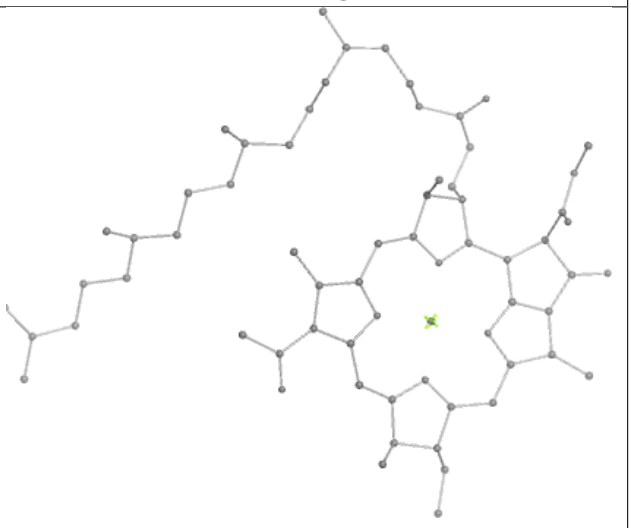
Bond lengths



Bond angles

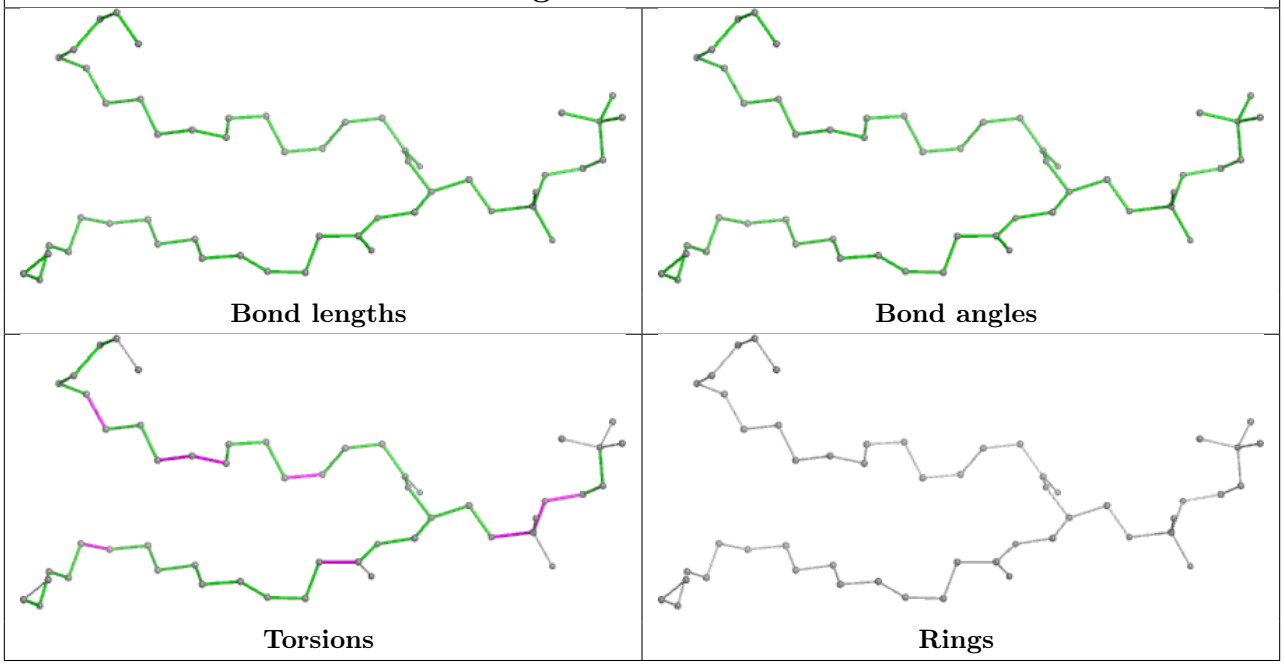


Torsions

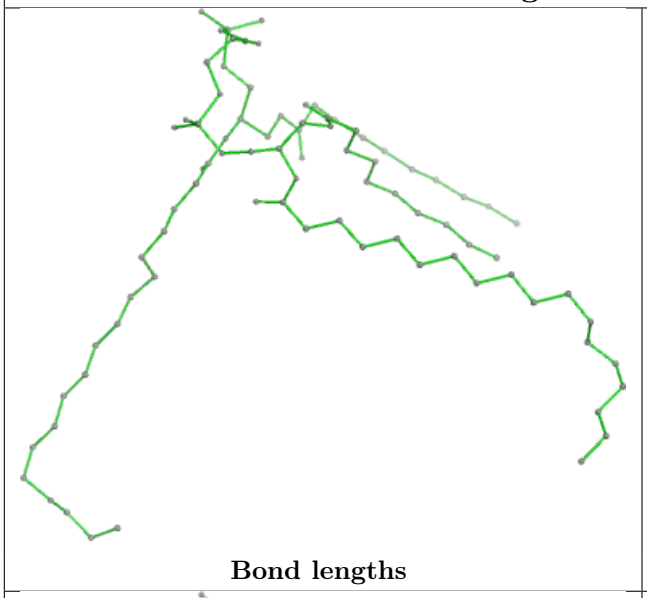


Rings

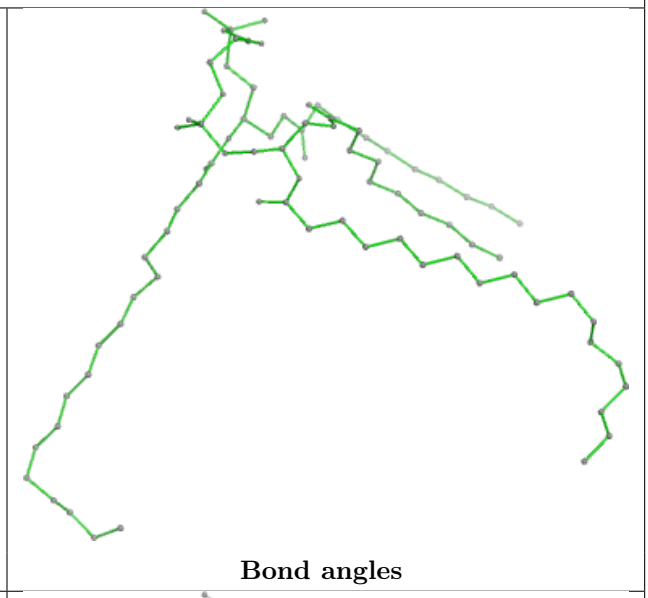
Ligand 6PL L 305



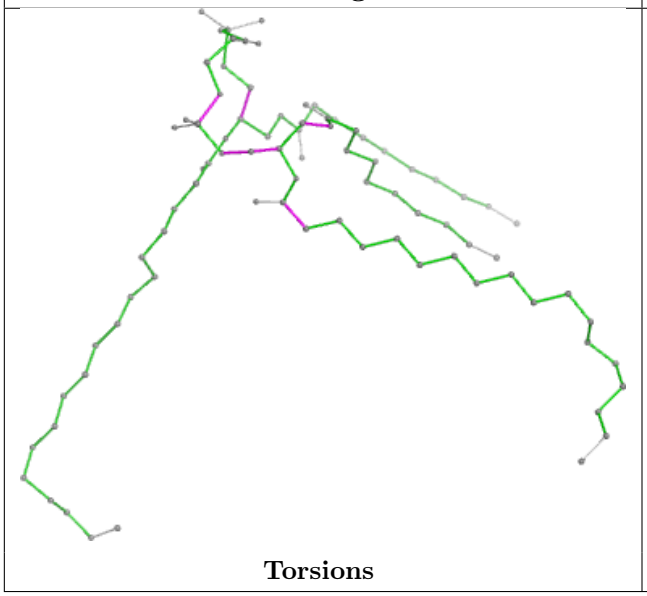
Ligand CDL M 409



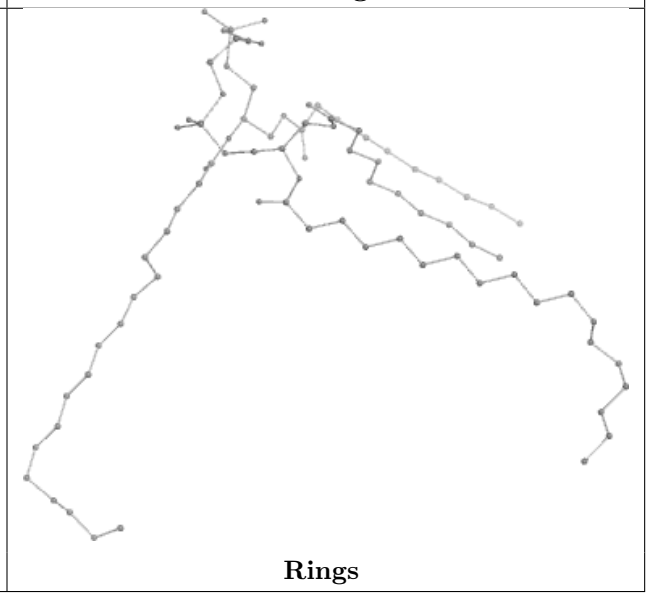
Bond lengths



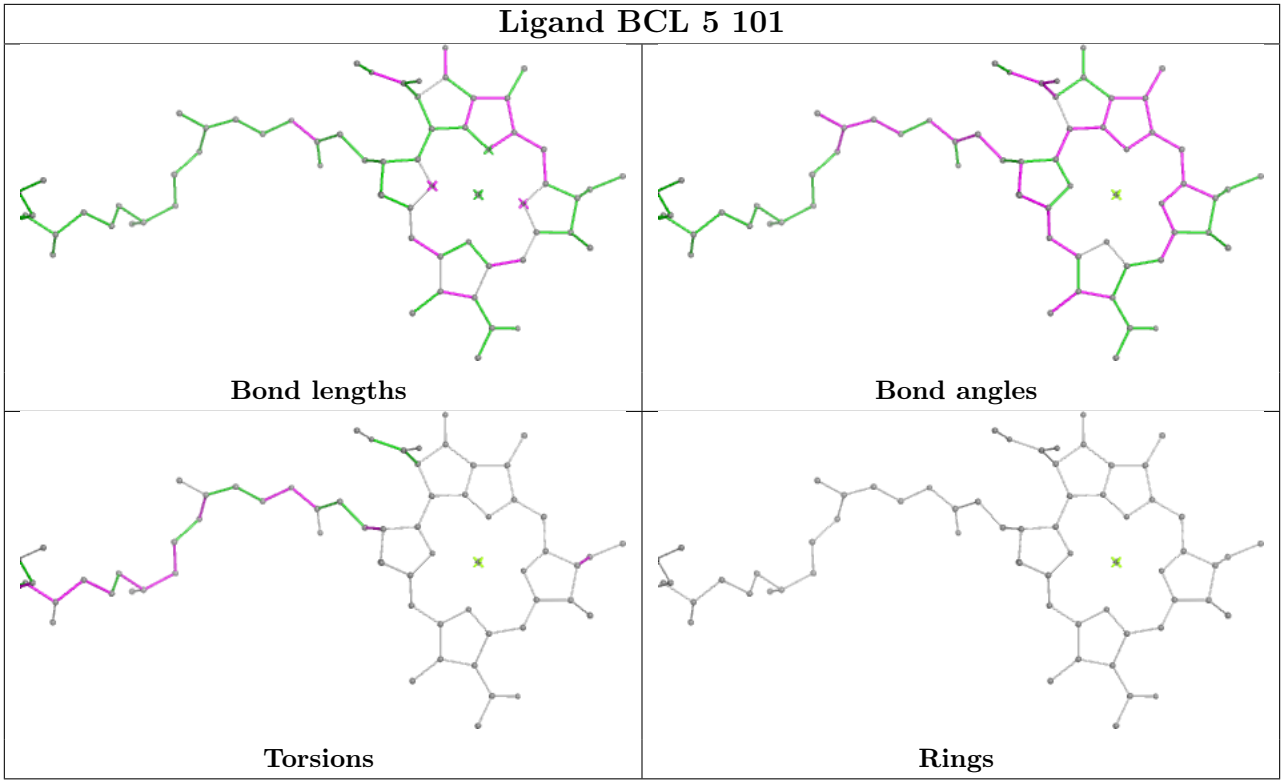
Bond angles

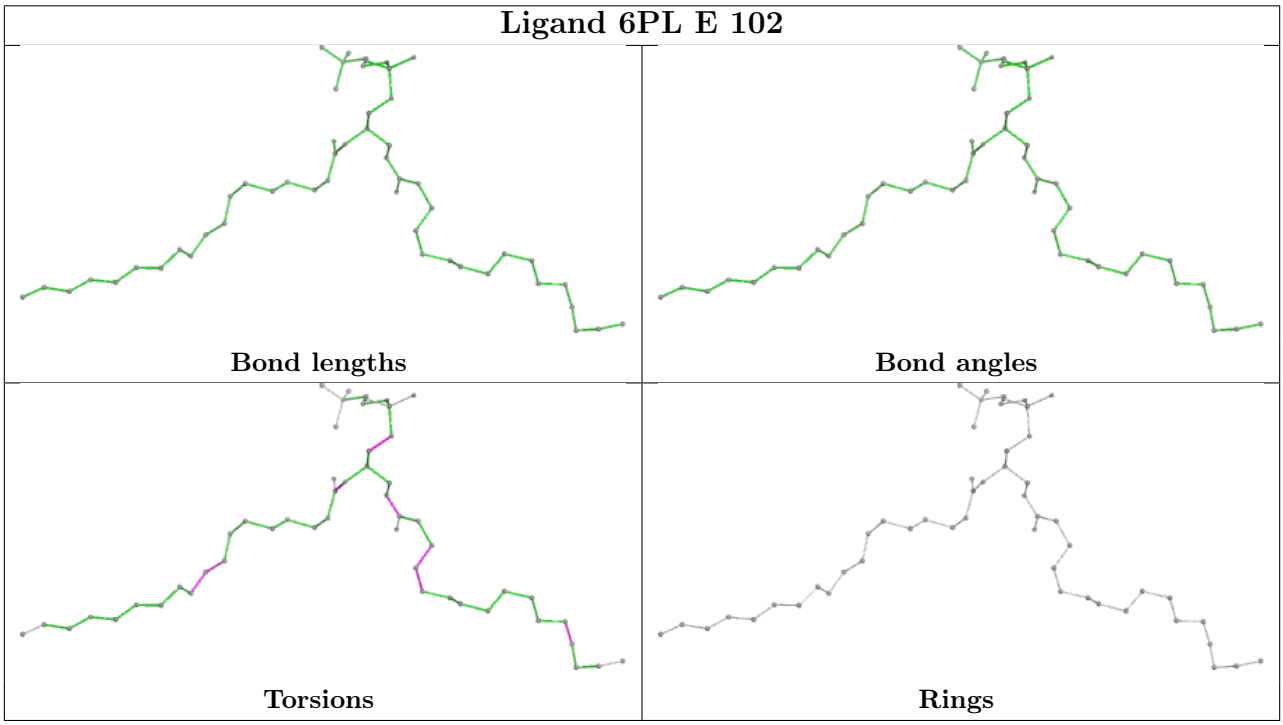


Torsions



Rings





5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

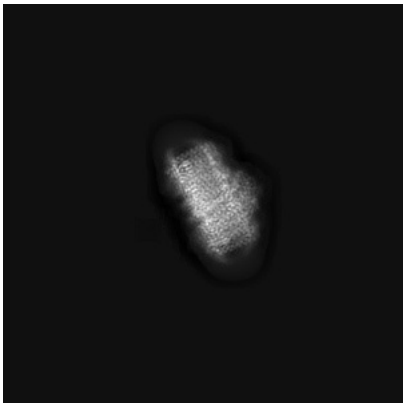
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-11080. These allow visual inspection of the internal detail of the map and identification of artifacts.

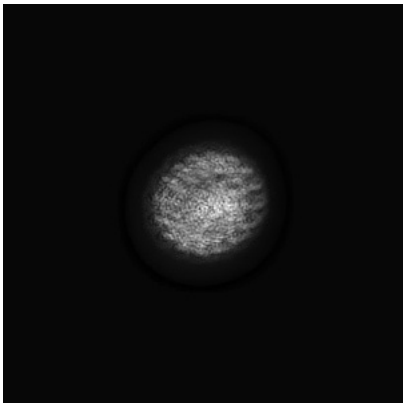
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

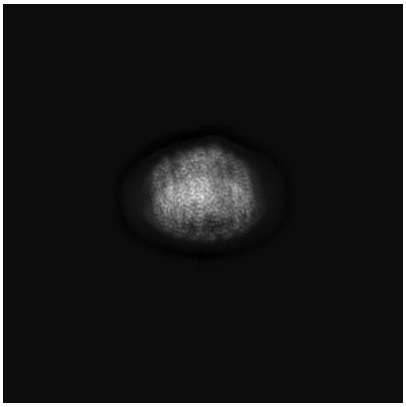
6.1.1 Primary map



X



Y

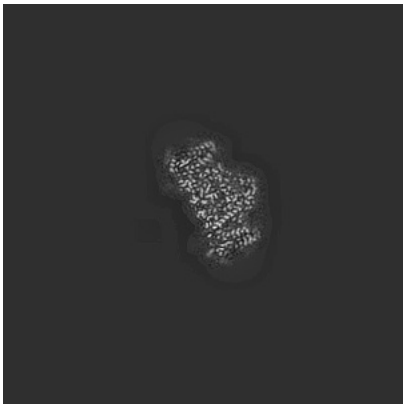


Z

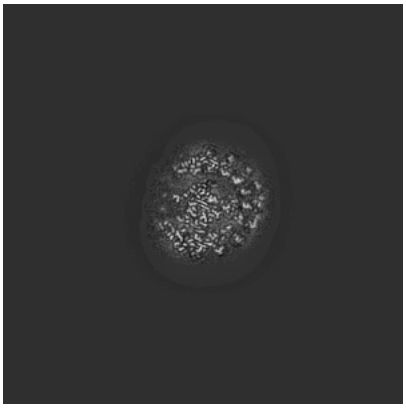
The images above show the map projected in three orthogonal directions.

6.2 Central slices

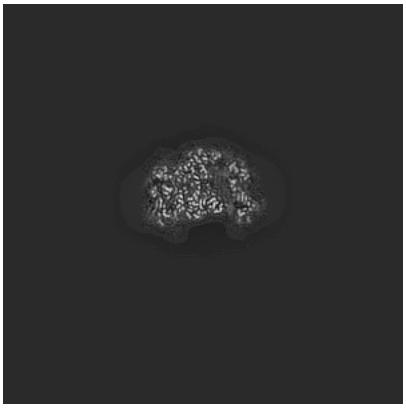
6.2.1 Primary map



X Index: 200



Y Index: 200

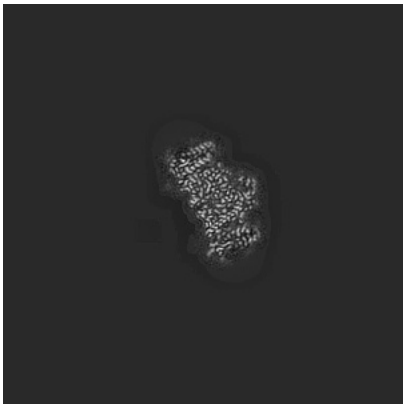


Z Index: 200

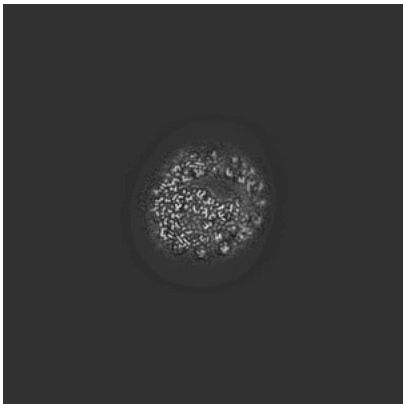
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

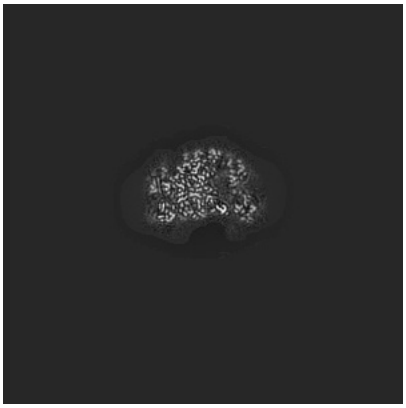
6.3.1 Primary map



X Index: 199



Y Index: 209

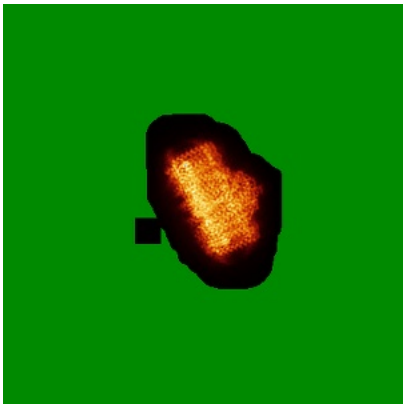


Z Index: 203

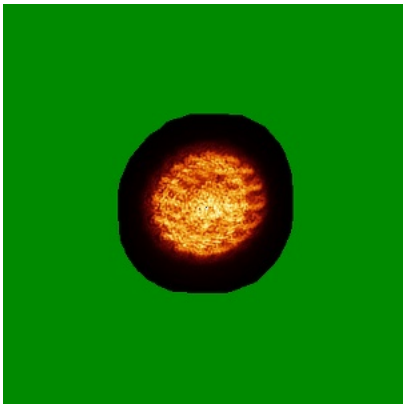
The images above show the largest variance slices of the map in three orthogonal directions.

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

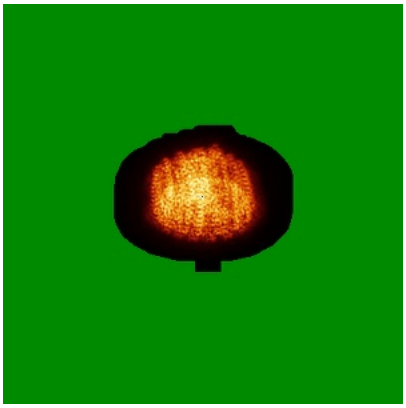
6.4.1 Primary map



X



Y

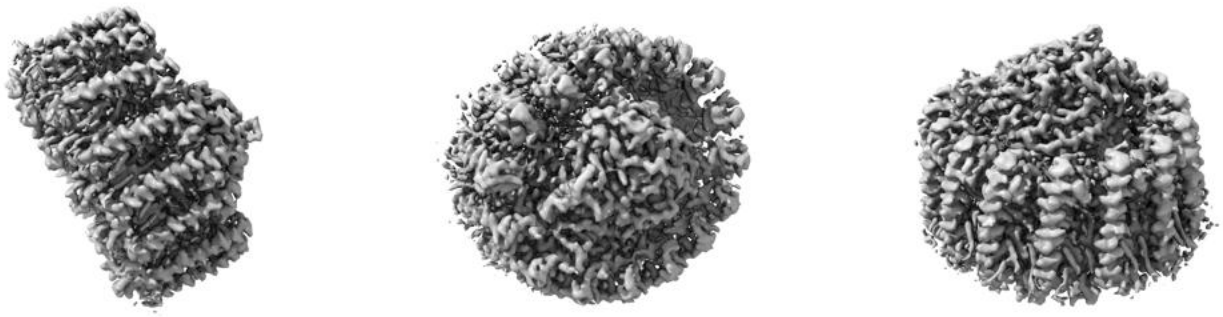


Z

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

6.5 Orthogonal surface views (i)

6.5.1 Primary map



X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.18. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

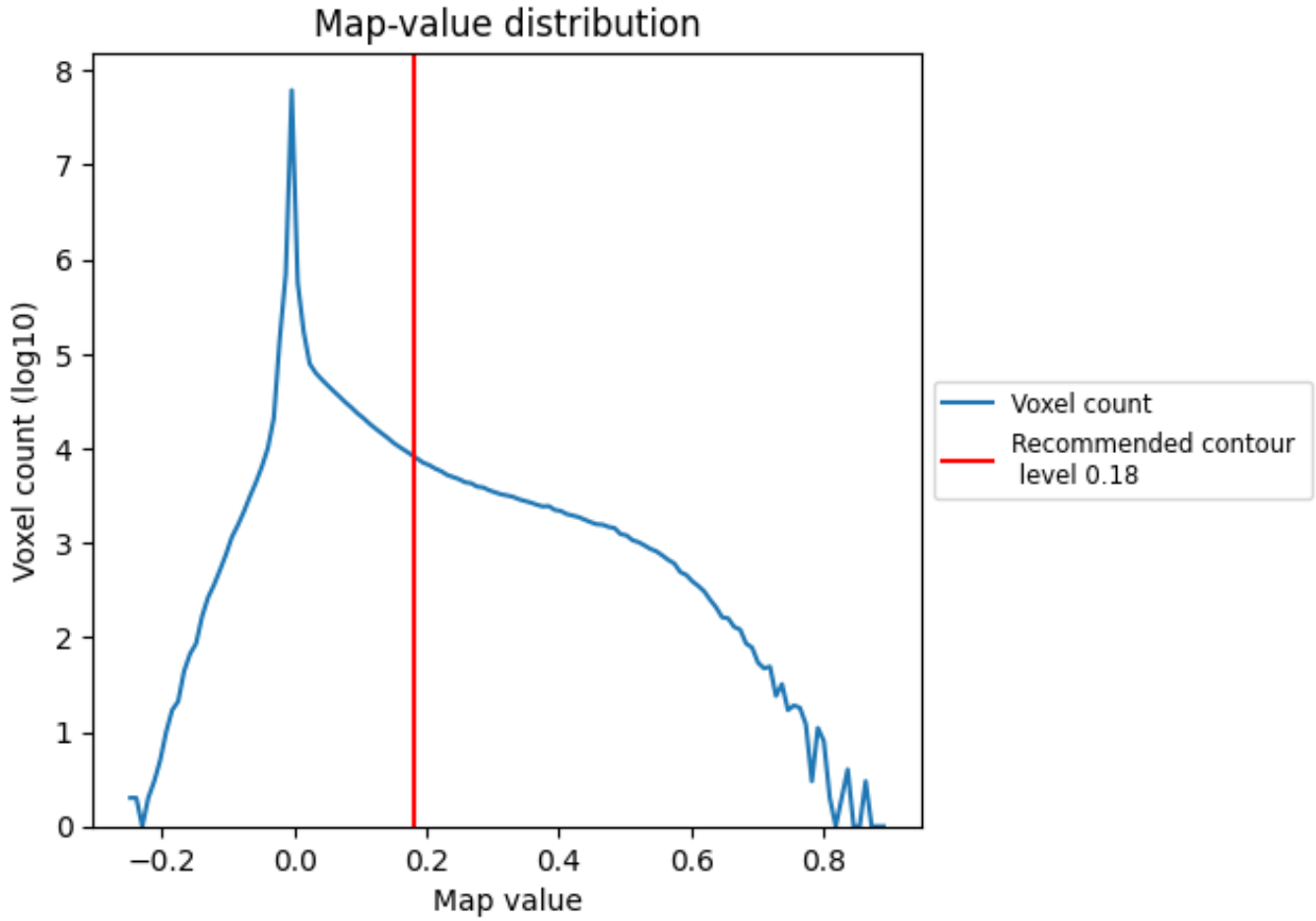
6.6 Mask visualisation (i)

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

7 Map analysis

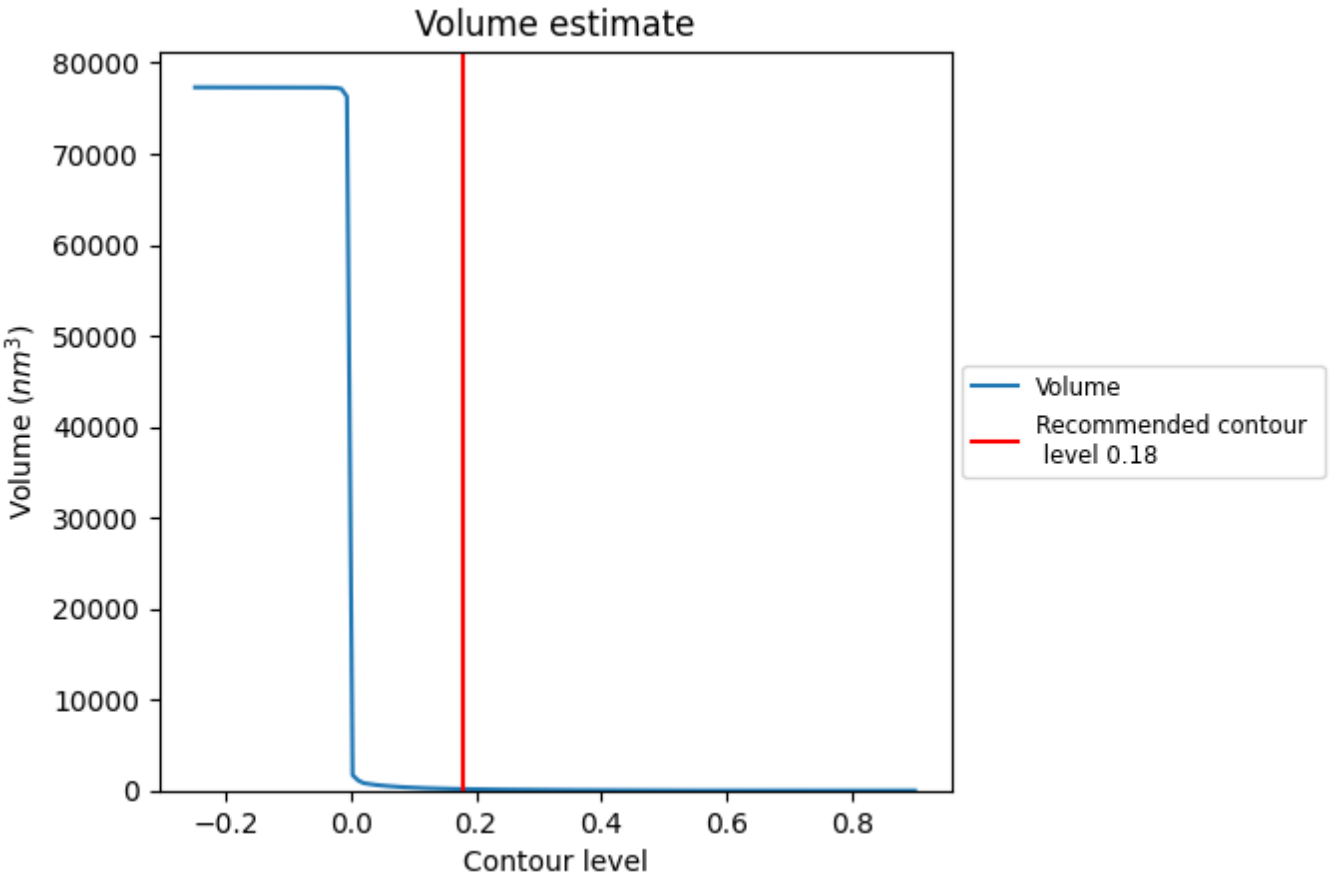
This section contains the results of statistical analysis of the map.

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.

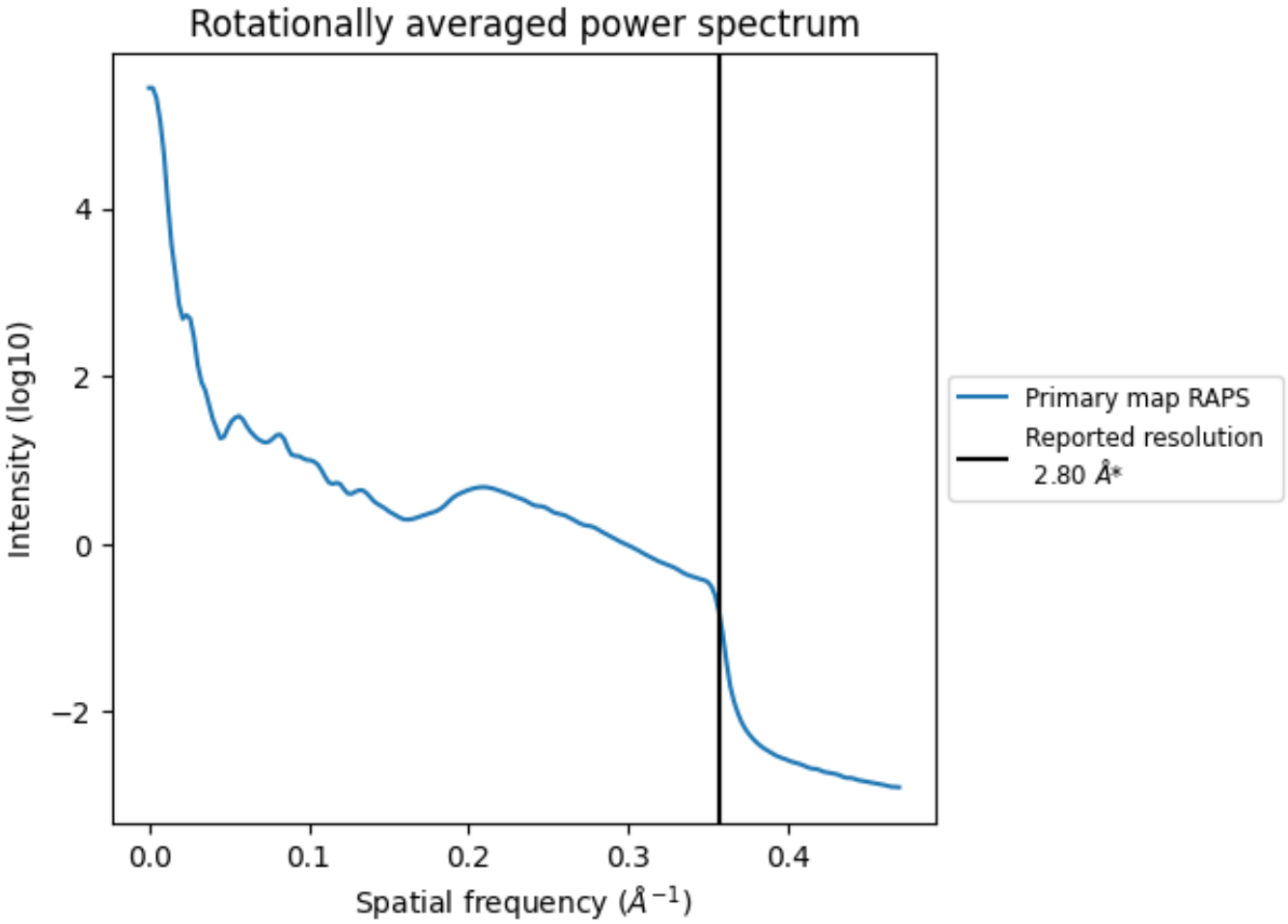
7.2 Volume estimate



The volume at the recommended contour level is 163 nm^3; this corresponds to an approximate mass of 147 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)

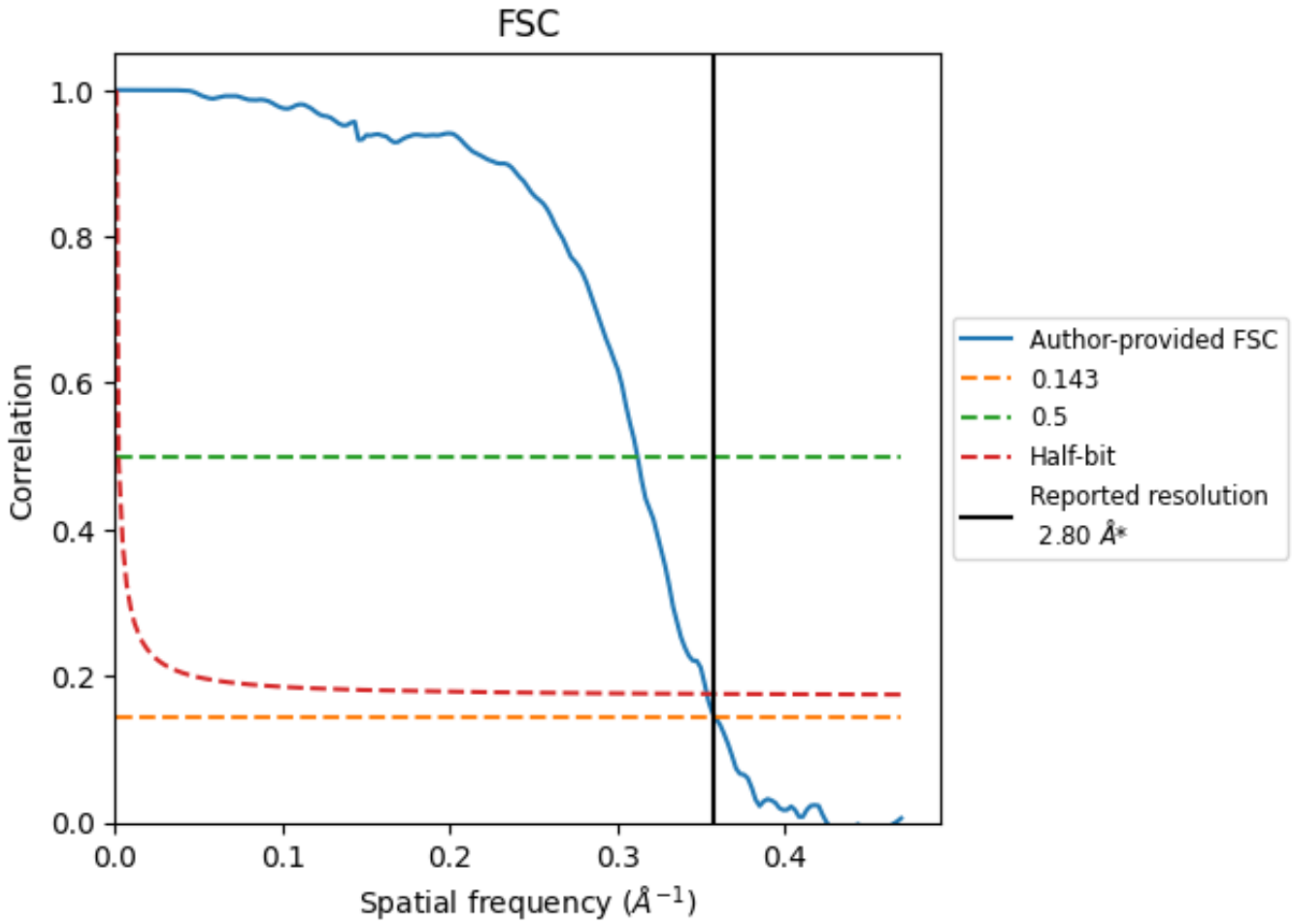


*Reported resolution corresponds to spatial frequency of 0.357 $Å^{-1}$

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 0.357 Å^{-1}

8.2 Resolution estimates (i)

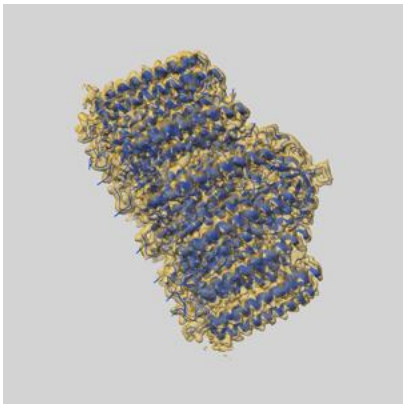
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	2.80	-	-
Author-provided FSC curve	2.79	3.21	2.83
Unmasked-calculated*	-	-	-

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

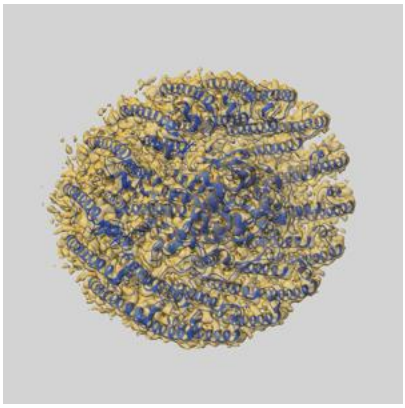
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-11080 and PDB model 6Z5R. Per-residue inclusion information can be found in section 3 on page 17.

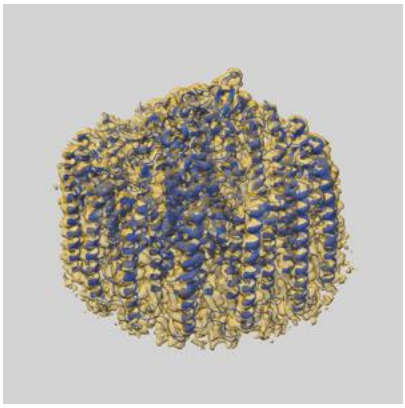
9.1 Map-model overlay



X



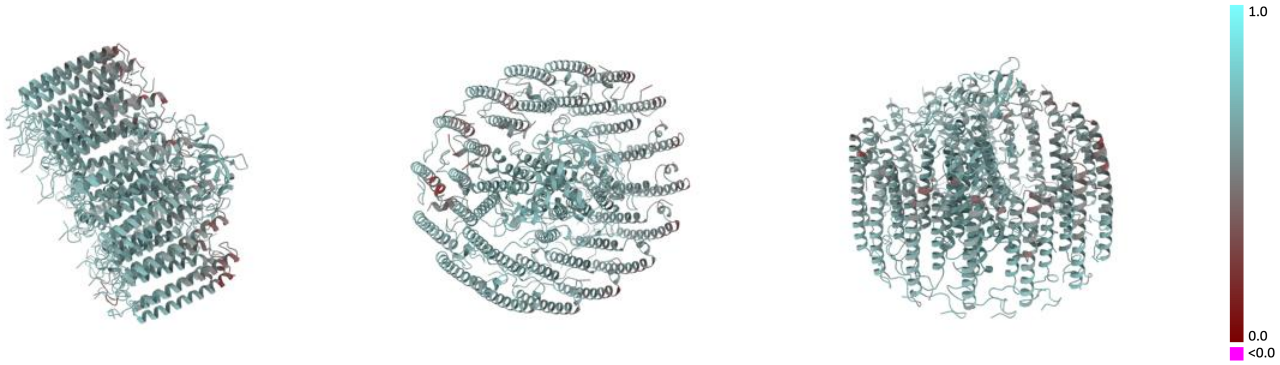
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.18 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.

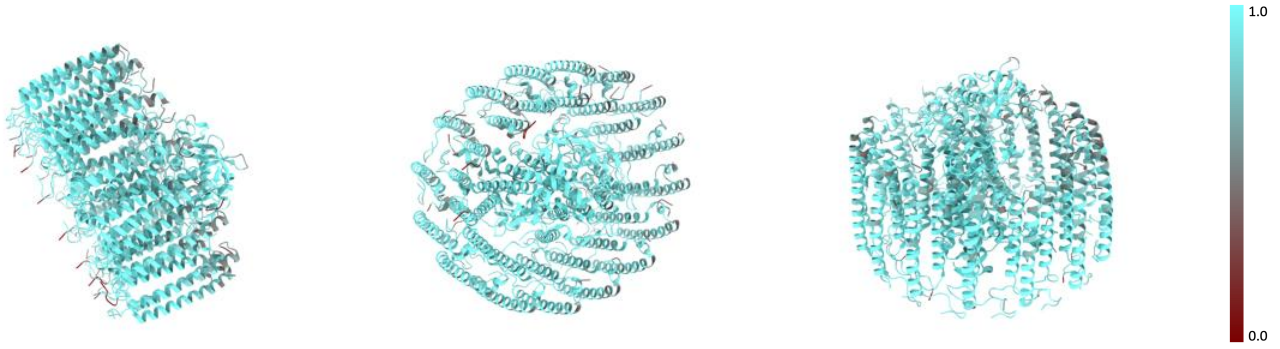
9.2 Q-score mapped to coordinate model (i)



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.

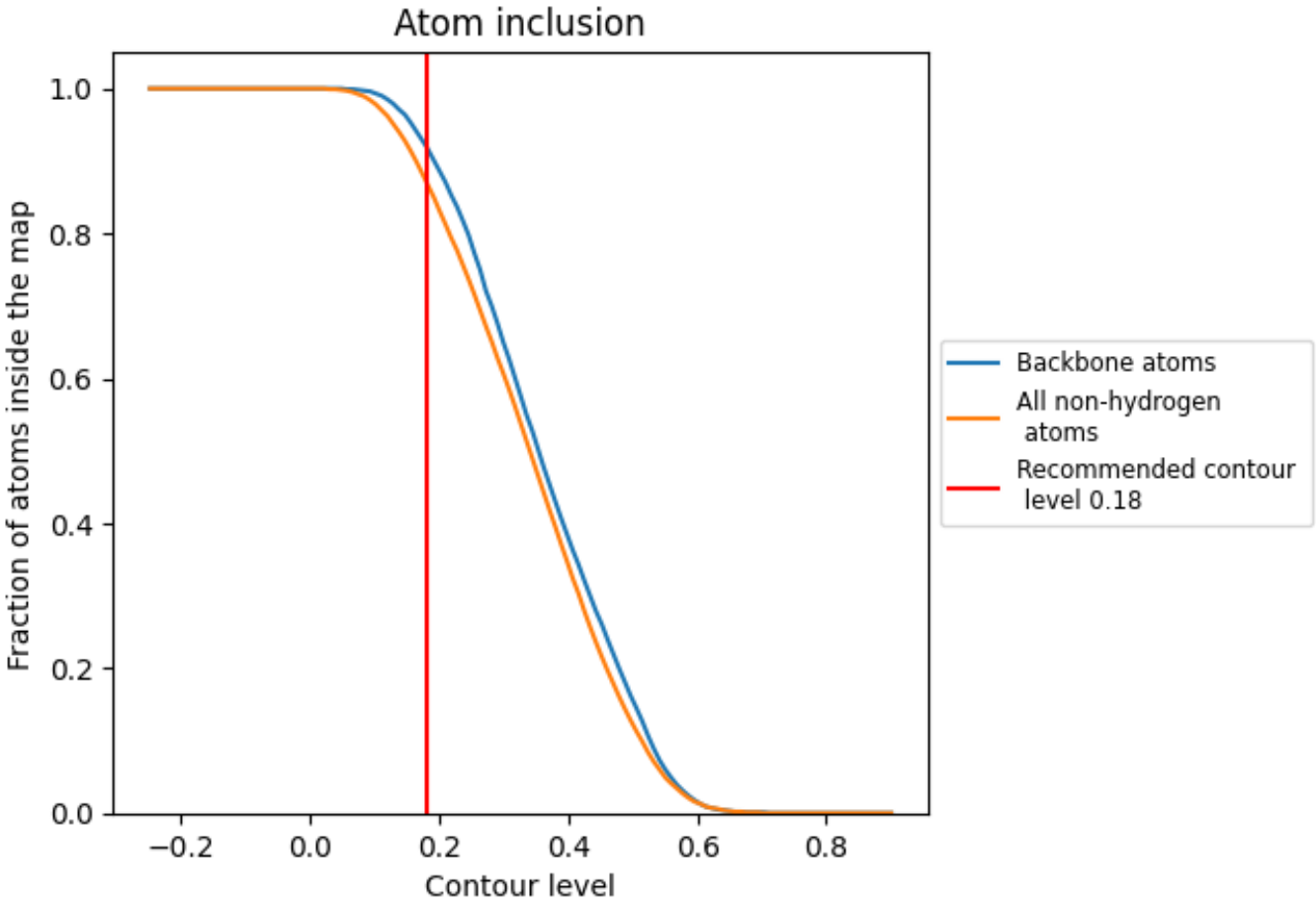
9.3 Atom inclusion mapped to coordinate model (i)



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 (0.18).

9.4 Atom inclusion (i)



At the recommended contour level, 92% of all backbone atoms, 87% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.18) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.8710	0.6030
0	0.7590	0.5480
1	0.8500	0.5920
2	0.7500	0.5560
3	0.8860	0.6020
4	0.7170	0.5620
5	0.8180	0.5910
6	0.7630	0.5700
7	0.8160	0.5870
8	0.6350	0.5160
9	0.8190	0.5520
A	0.9150	0.5990
B	0.7910	0.5660
C	0.9450	0.6400
D	0.8750	0.6140
E	0.9540	0.6230
F	0.8340	0.6030
G	0.9180	0.6210
H	0.9390	0.6210
I	0.8170	0.5910
J	0.9240	0.6190
K	0.8500	0.6010
L	0.9500	0.6380
M	0.9620	0.6410
N	0.9130	0.6170
O	0.8070	0.5720
P	0.9170	0.5970
Q	0.8210	0.5870
R	0.8780	0.6000
S	0.8160	0.5680
T	0.8980	0.5950
U	0.8240	0.5860
V	0.8840	0.6030
X	0.8090	0.5590
Y	0.8470	0.5920
Z	0.7540	0.5670