Full wwPDB EM Validation Report ⓘ

Nov 29, 2022 – 12:55 PM JST

PDB ID	:	7WFR
EMDB ID	:	EMD-32475
Title	:	Human Nav1.8 with A-803467, class III
Authors	:	Yan, N.; Pan, X.J.; Huang, X.S.; Huang, G.X.
Deposited on	:	2021-12-27
Resolution	:	3.00 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:

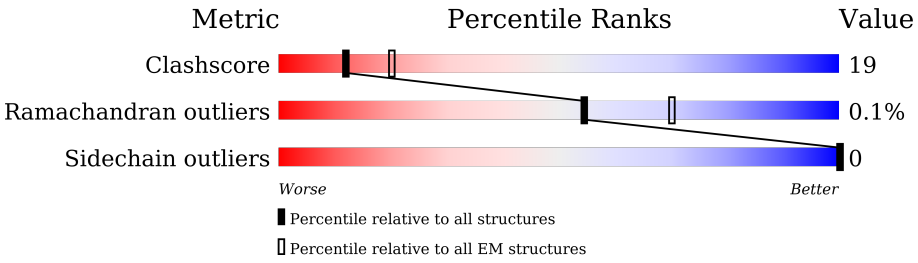
EMDB validation analysis	:	0.0.1.dev43
Mogul	:	1.8.5 (274361), CSD as541be (2020)
MolProbity	:	4.02b-467
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.31.3

1 Overall quality at a glance

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

The reported resolution of this entry is 3.00 Å.

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



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

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

Mol	Chain	Length	Quality of chain
1	A	1956	11%, 38%, 19%, 44%
2	B	2	100%
2	C	2	50%, 50%

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
4	95T	A	2004	-	-	X	-

2 Entry composition

There are 8 unique types of molecules in this entry. The entry contains 9748 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 Sodium channel protein type 10 subunit alpha.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	1100	Total	C	N	O	S	1	0
			8861	5886	1413	1500	62		

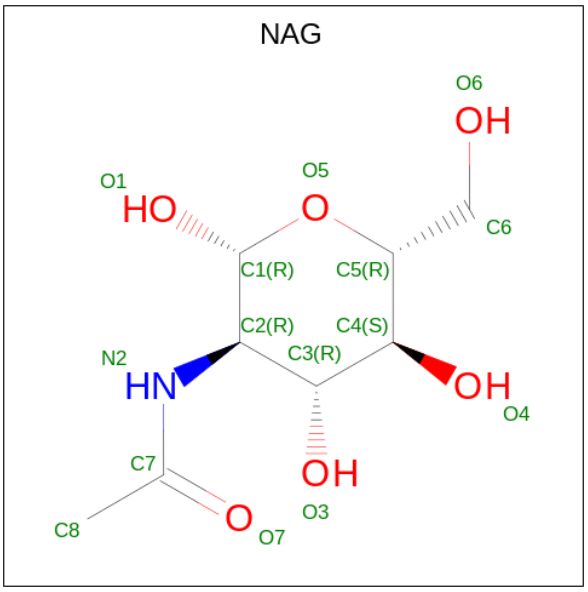
There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	894	PHE	SER	conflict	UNP Q9Y5Y9

- Molecule 2 is an oligosaccharide called 2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-2-acetamido-2-deoxy-beta-D-glucopyranose.

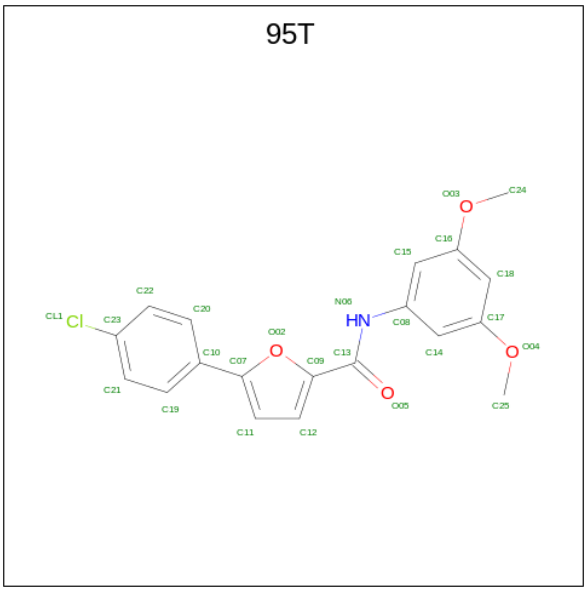
Mol	Chain	Residues	Atoms				AltConf	Trace
2	B	2	Total	C	N	O	0	0
			28	16	2	10		
2	C	2	Total	C	N	O	0	0
			28	16	2	10		

- Molecule 3 is 2-acetamido-2-deoxy-beta-D-glucopyranose (three-letter code: NAG) (formula: $C_8H_{15}NO_6$).



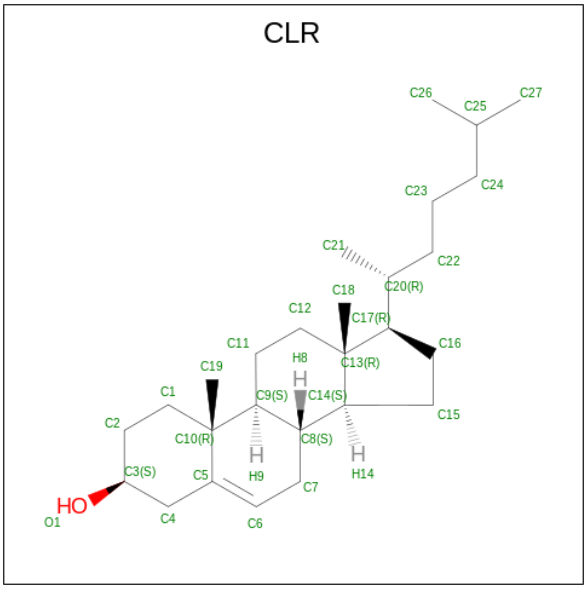
Mol	Chain	Residues	Atoms				AltConf
3	A	1	Total	C	N	O	0
			42	24	3	15	
3	A	1	Total	C	N	O	0
			42	24	3	15	
3	A	1	Total	C	N	O	0
			42	24	3	15	

- Molecule 4 is 5-(4-chlorophenyl)- {N}-(3,5-dimethoxyphenyl)furan-2-carboxamide (three-letter code: 95T) (formula: $C_{19}H_{16}ClNO_4$) (labeled as "Ligand of Interest" by depositor).



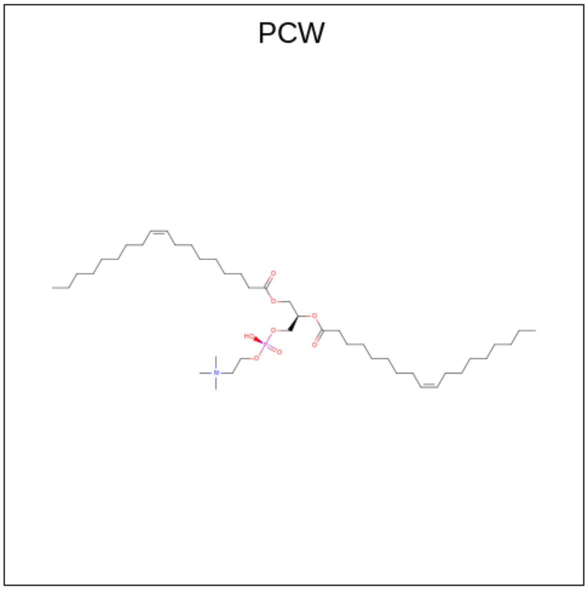
Mol	Chain	Residues	Atoms					AltConf
4	A	1	Total	C	Cl	N	O	0
			25	19	1	1	4	

- Molecule 5 is CHOLESTEROL (three-letter code: CLR) (formula: $C_{27}H_{46}O$).



Mol	Chain	Residues	Atoms			AltConf
5	A	1	Total	C	O	0
			140	135	5	
5	A	1	Total	C	O	0
			140	135	5	
5	A	1	Total	C	O	0
			140	135	5	
5	A	1	Total	C	O	0
			140	135	5	
5	A	1	Total	C	O	0
			140	135	5	

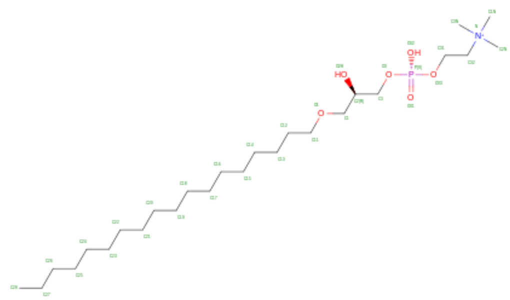
- Molecule 6 is 1,2-DIOLEOYL-SN-GLYCERO-3-PHOSPHOCHOLINE (three-letter code: PCW) (formula: $C_{44}H_{85}NO_8P$).



Mol	Chain	Residues	Atoms					AltConf
6	A	1	Total 296	C 228	N 5	O 56	P 7	0
6	A	1	Total 296	C 228	N 5	O 56	P 7	0
6	A	1	Total 296	C 228	N 5	O 56	P 7	0
6	A	1	Total 296	C 228	N 5	O 56	P 7	0
6	A	1	Total 296	C 228	N 5	O 56	P 7	0
6	A	1	Total 296	C 228	N 5	O 56	P 7	0
6	A	1	Total 296	C 228	N 5	O 56	P 7	0

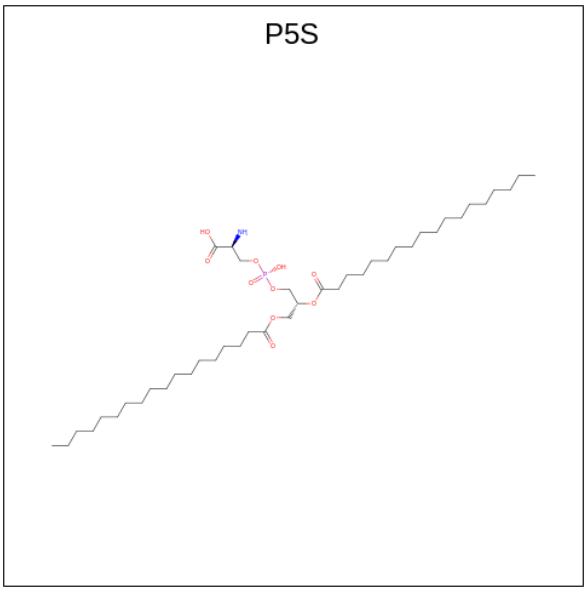
- Molecule 7 is 1-O-OCTADECYL-SN-GLYCERO-3-PHOSPHOCHOLINE (three-letter code: LPE) (formula: $C_{26}H_{57}NO_6P$).

LPE



Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	P	
7	A	1	283	188	11	72	12	0
7	A	1	283	188	11	72	12	0
7	A	1	283	188	11	72	12	0
7	A	1	283	188	11	72	12	0
7	A	1	283	188	11	72	12	0
7	A	1	283	188	11	72	12	0
7	A	1	283	188	11	72	12	0
7	A	1	283	188	11	72	12	0
7	A	1	283	188	11	72	12	0
7	A	1	283	188	11	72	12	0
7	A	1	283	188	11	72	12	0
7	A	1	283	188	11	72	12	0

- Molecule 8 is O-[(R)-{[(2R)-2,3-bis(octadecanoyloxy)propyl]oxy}(hydroxy)phosphoryl]-L-serine (three-letter code: P5S) (formula: $C_{42}H_{82}NO_{10}P$).

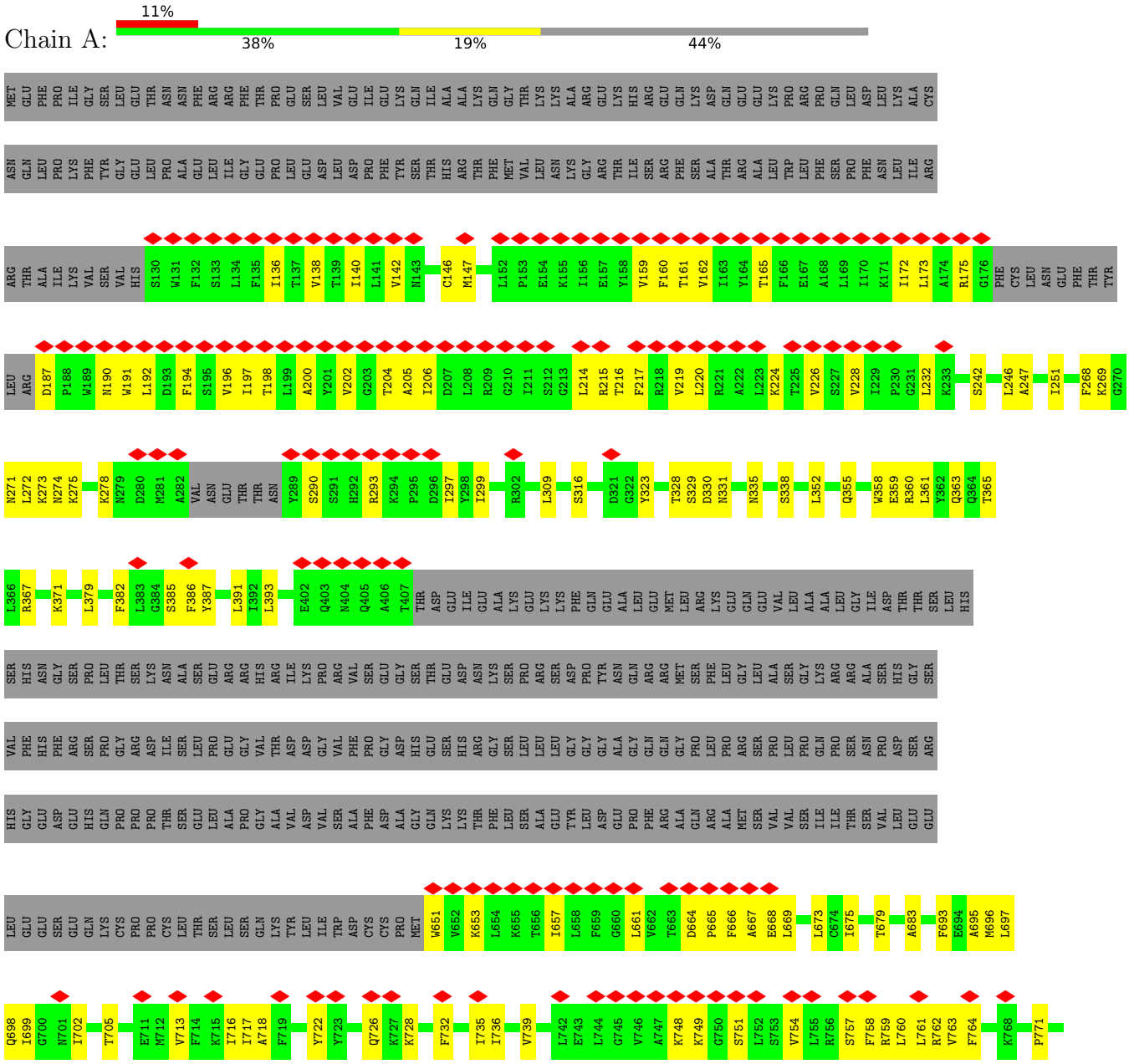


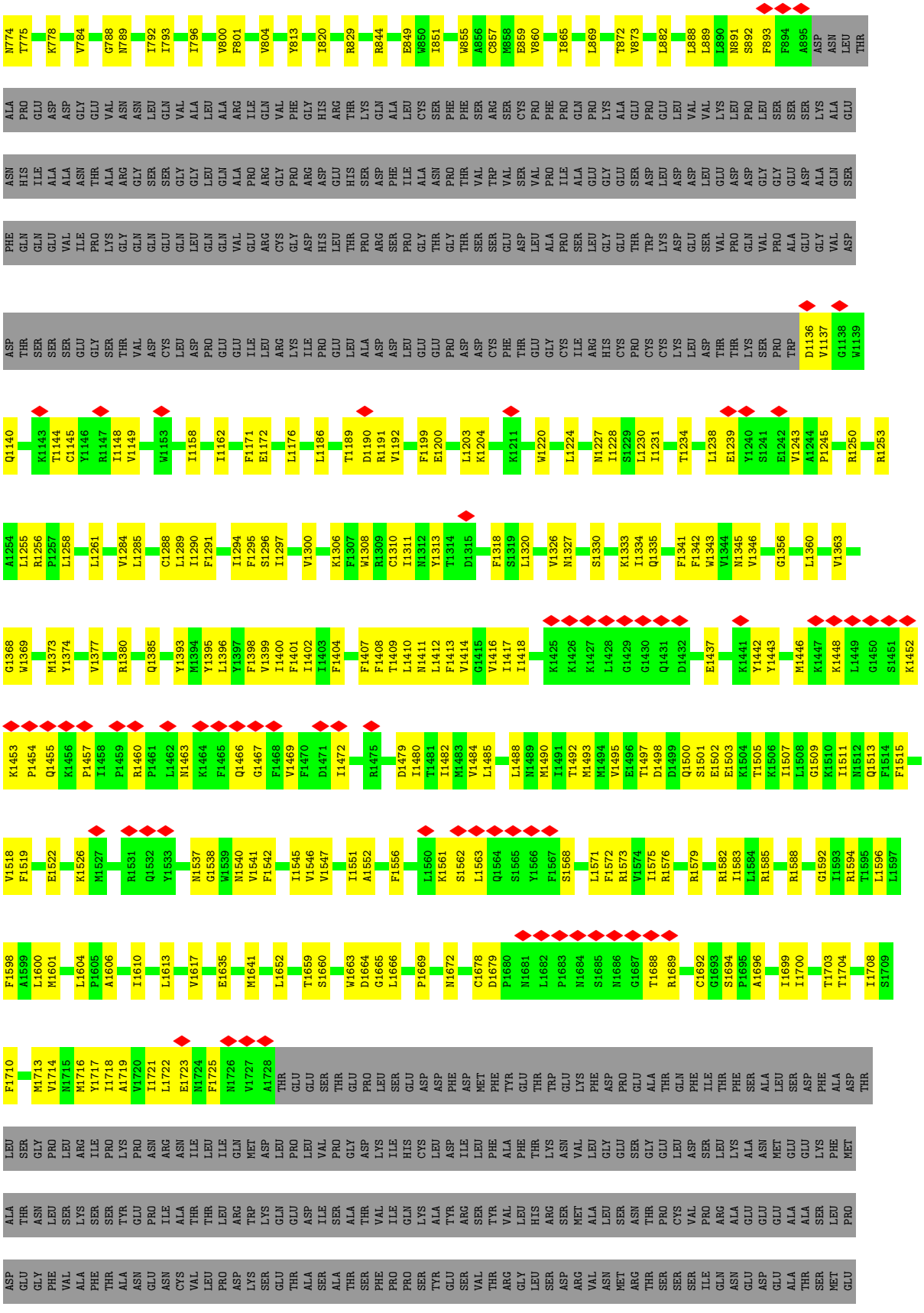
Mol	Chain	Residues	Atoms					AltConf
8	A	1	Total	C	N	O	P	0
			45	33	1	10	1	

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.

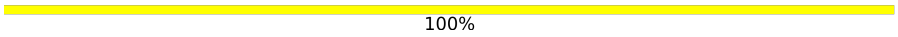
- Molecule 1: Sodium channel protein type 10 subunit alpha




N774 T775 K778 V784 G788 N789 I792 I793 I796 V800 F801 V804 Y813 I820 R829 R844 E849 W850 I851 W855 A856 C857 M858 E859 V860 I865 L869 T872 V873 L882 L888 L889 L890 N891 S892 F893 F894 A895 ASP ASN LEU THR
ALA PRO GLU ASP ASP GLY GLU VAL ASN ASN LEU GLN VAL ALA LEU ALA ARG ILE GLN VAL PHE GLY HIS ARG THR LYS GLN ALA LEU CYS SER PHE PHE SER ARG SER CYS PRO PHE PRO GLN PRO LYS ALA GLU PRO GLU LEU VAL VAL LYS LEU PRO LEU SER SER SER LYS ALA GLU
ASN HIS ILE ALA ALA ASN THR ALA ARG GLY SER SER GLY GLY LEU GLN ALA PRO ARG GLY PRO ARG ASP GLU HIS SER ASP PHE ILE ALA ASN PRO THR VAL TRP VAL SER VAL PRO ILE ALA GLU GLY GLU SER ASP PHE PRO LEU ASP ASP LEU GLU ASP GLY GLY GLU ASP ALA ALA GLN SER
PHE GLN GLN GLU VAL ILE PRO LYS GLY GLN GLN GLU GLN LEU GLN GLN VAL GLU ARG CYS GLY ASP HIS LEU THR PRO ARG SER PRO GLY THR GLY THR SER SER GLU ASP LEU ALA PRO SER LEU GLY GLU THR TRP LYS ASP GLU SER VAL PRO GLN VAL PRO ALA GLU GLY VAL ASP
ASP THR SER SER GLU GLY SER THR VAL ASP CYS LEU ASP PRO GLU GLU ILE LEU ARG LYS ILE PRO GLU LEU ALA ASP ASP LEU GLU GLU PRO ASP ASP CYS PHE THR GLU GLY CYS ILE ARG HIS CYS PRO CYS CYS LYS LEU ASP THR THR LYS SER PRO TRP D1136 V1137 G1138 W1139
Q1140 K1143 T1144 C1145 Y1146 R1147 I1148 V1149 W1153 I1158 I1162 F1171 E1172 L1176 L1186 T1189 D1190 R1191 V1192 F1199 E1200 L1203 K1204 K1211 W1220 L1224 N1227 I1228 S1229 L1230 L1231 T1234 L1238 E1239 Y1240 S1241 E1242 V1243 A1244 P1245 R1250 R1253
A1254 L1255 R1256 P1257 L1258 L1261 V1284 L1285 C1288 L1289 I1290 F1291 I1294 F1295 S1296 I1297 V1300 K1306 F1307 W1308 R1309 C1310 I1311 N1312 Y1313 T1314 D1315 F1318 S1319 L1320 V1326 N1327 S1330 K1333 I1334 Q1335 F1341 F1342 W1343 V1344 N1345 V1346 G1356 L1360 V1363
G1368 W1369 M1373 Y1374 V1377 R1380 Q1385 Y1393 M1394 Y1395 L1396 Y1397 F1398 V1399 I1400 F1401 I1402 I1403 F1404 F1407 F1408 T1409 L1410 N1411 L1412 F1413 V1414 G1415 V1416 I1417 I1418 K1425 K1426 K1427 L1428 G1429 G1430 Q1431 D1432 E1437 K1441 Y1442 Y1443 M1446 K1447 K1448 L1449 G1450 S1451 K1452
K1453 P1454 Q1455 K1456 P1457 I1458 P1459 R1460 P1461 L1462 N1463 K1464 F1465 Q1466 G1467 F1468 V1469 F1470 D1471 I1472 R1475 D1479 I1480 T1481 I1482 M1483 V1484 L1485 L1488 N1489 M1490 I1491 T1492 M1493 M1494 V1495 E1496 T1497 D1498 D1499 Q1500 S1501 E1502 E1503 K1504 T1505 K1506 I1507 L1508 G1509 K1510 I1511 N1512 Q1513 F1514 F1515
V1518 F1519 E1522 K1526 M1527 R1531 Q1532 Y1533 N1537 G1538 W1539 N1540 V1541 F1542 I1545 V1546 V1547 I1551 A1552 F1556 L1560 K1561 S1562 L1563 Q1564 S1565 Y1566 F1567 S1568 L1571 F1572 R1573 Y1574 I1575 R1576 R1579 R1582 I1583 L1584 R1585 R1588 G1592 I1593 R1594 T1595 L1596 L1597
F1598 A1599 L1600 M1601 L1604 P1605 A1606 I1610 L1613 V1617 E1635 M1641 L1652 T1659 S1660 W1663 D1664 G1665 L1666 P1669 N1672 C1678 D1679 P1680 N1681 L1682 P1683 N1684 S1685 N1686 G1687 T1688 R1689 C1692 G1693 S1694 P1695 A1696 I1699 I1700 T1703 T1704 I1708 S1709
F1710 M1713 V1714 N1715 M1716 Y1717 I1718 A1719 V1720 I1721 L1722 E1723 N1724 F1725 N1726 V1727 A1728 THR GLU GLU SER THR GLU PRO LEU SER GLU ASP ASP PHE ASP MET PHE TYR GLU THR TRP GLU LYS PHE ASP PRO GLU ALA THR GLN PHE ILE THR PHE SER ALA LEU SER ASP PHE ALA ASP THR
LEU SER GLY PRO LEU SER ARG ILE PRO ILE ASN ARG ASN ILE LEU ILE GLN MET ASP LEU PRO LEU VAL PRO GLY ASP LYS ILE HIS CYS LEU ASP ILE LEU PHE ALA PHE THR LYS ASN VAL LEU GLY GLU SER GLY GLU LEU ASP SER ILE LEU LYS ALA ASN MET GLU GLU LYS PHE MET
ALA THR ASN LEU SER LYS SER TYR GLU PRO ILE ALA THR THR LEU ARG TRP LYS GLN GLU ASP ILE SER ALA THR VAL ILE GLN LYS ALA TYR ARG SER VAL THR ARG GLY LEU SER ASP ARG VAL MET ALA LEU SER ASN THR PRO CYS VAL PRO ARG ALA ALA GLU GLU GLU ALA ALA SER LEU PRO
ASP GLU GLY PHE VAL ALA ASN GLU CYS VAL LEU PRO ASP LYS SER GLU ALA THR ALA SER PHE PRO SER TYR GLU SER VAL THR ARG GLY LEU SER ASP ARG VAL MET ALA LEU ASN GLU SER SER SER ILE GLN LYS ASN GLU GLU ASP GLU GLU ALA THR SER SER MET GLU

• Molecule 2: 2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-2-acetamido-2-deoxy-beta-D-glucopyranose

Chain B:



• Molecule 2: 2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-2-acetamido-2-deoxy-beta-D-glucopyranose

Chain C:

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	274882	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 ($e^-/Å^2$)	50	Depositor
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	1800	Depositor
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	0.088	Depositor
Minimum map value	-0.044	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.003	Depositor
Recommended contour level	0.0217	Depositor
Map size (Å)	259.8, 259.8, 259.8	wwPDB
Map dimensions	240, 240, 240	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.0825, 1.0825, 1.0825	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: P5S, NAG, CLR, 95T, PCW, LPE

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
1	A	0.30	0/9083	0.53	0/12318

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

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	8861	0	9051	313	0
2	B	28	0	25	4	0
2	C	28	0	25	1	0
3	A	42	0	39	5	0
4	A	25	0	0	11	0
5	A	140	0	230	39	0
6	A	296	0	396	63	0
7	A	283	0	391	36	0
8	A	45	0	56	5	0
All	All	9748	0	10213	388	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 19.

All (388) 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)
4:A:2004:95T:C11	6:A:2013:PCW:H141	1.80	1.11
1:A:382:PHE:HE2	6:A:2006:PCW:H221	1.03	1.11
7:A:2011:LPE:H151	7:A:2012:LPE:H131	1.30	1.10
6:A:2016:PCW:H331	6:A:2016:PCW:H2	1.37	1.06
1:A:1418:ILE:CD1	5:A:2028:CLR:H17	1.87	1.03
1:A:382:PHE:CE2	6:A:2006:PCW:H221	1.96	1.01
1:A:382:PHE:CD2	6:A:2006:PCW:H242	2.02	0.94
1:A:393:LEU:HD23	5:A:2028:CLR:H191	1.50	0.91
1:A:1410:LEU:HD21	6:A:2013:PCW:H20	1.54	0.89
1:A:1713:MET:HE3	4:A:2004:95T:C19	2.03	0.89
1:A:371:LYS:HE2	1:A:1641:MET:CG	2.03	0.88
1:A:1713:MET:HE1	4:A:2004:95T:O02	1.72	0.88
6:A:2016:PCW:H2	6:A:2016:PCW:C33	2.05	0.87
1:A:1418:ILE:HD11	5:A:2028:CLR:H17	1.57	0.86
1:A:371:LYS:HE2	1:A:1641:MET:HG3	1.56	0.84
3:A:2001:NAG:O7	3:A:2001:NAG:O3	1.95	0.84
1:A:1418:ILE:HD11	5:A:2028:CLR:H122	1.59	0.82
1:A:371:LYS:CE	1:A:1641:MET:HG3	2.10	0.81
1:A:200:ALA:O	1:A:204:THR:HG23	1.80	0.81
7:A:2009:LPE:O31	7:A:2009:LPE:H3N3	1.80	0.80
1:A:1716:MET:SD	4:A:2004:95T:C24	2.70	0.79
1:A:1306:LYS:HG2	1:A:1380:ARG:O	1.82	0.79
1:A:748:LYS:HB2	1:A:751:SER:HB3	1.65	0.78
1:A:1497:THR:HG21	5:A:2027:CLR:H12	1.65	0.78
1:A:1678:CYS:SG	1:A:1692:CYS:N	2.57	0.78
7:A:2011:LPE:H151	7:A:2012:LPE:C13	2.11	0.78
6:A:2019:PCW:O4P	6:A:2019:PCW:H32	1.82	0.78
6:A:2019:PCW:H19	6:A:2019:PCW:H40	1.67	0.77
1:A:1238:LEU:HD12	1:A:1239:GLU:H	1.50	0.77
1:A:1284:VAL:HG11	1:A:1416:VAL:HG21	1.67	0.77
1:A:1418:ILE:HD13	5:A:2028:CLR:H17	1.66	0.76
7:A:2023:LPE:H322	8:A:2029:P5S:C	2.18	0.74
1:A:1713:MET:CE	4:A:2004:95T:C19	2.65	0.74
1:A:1501:SER:HB3	6:A:2026:PCW:O1P	1.87	0.74
1:A:1410:LEU:HD11	6:A:2013:PCW:H221	1.69	0.73
7:A:2023:LPE:H322	8:A:2029:P5S:O	1.87	0.73
1:A:761:LEU:HD11	5:A:2017:CLR:H231	1.70	0.72
1:A:1700:ILE:O	1:A:1704:THR:HG23	1.89	0.72
7:A:2010:LPE:C3	7:A:2011:LPE:H321	2.19	0.71
4:A:2004:95T:C12	6:A:2013:PCW:H141	2.20	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1721:ILE:CD1	5:A:2028:CLR:H183	2.21	0.71
1:A:382:PHE:CE2	6:A:2006:PCW:H242	2.25	0.71
6:A:2016:PCW:C47	5:A:2017:CLR:H262	2.21	0.71
1:A:1413:PHE:O	1:A:1417:ILE:HG12	1.91	0.70
5:A:2017:CLR:O1	5:A:2017:CLR:H192	1.92	0.69
1:A:1678:CYS:SG	1:A:1679:ASP:N	2.65	0.69
7:A:2009:LPE:H3N3	7:A:2009:LPE:P	2.33	0.69
1:A:331:ASN:HB2	1:A:335:ASN:HA	1.75	0.68
1:A:1255:LEU:HG	1:A:1258:LEU:HD12	1.75	0.68
1:A:393:LEU:CD2	5:A:2028:CLR:H191	2.24	0.68
1:A:1594:ARG:HD2	6:A:2006:PCW:O2P	1.93	0.68
7:A:2010:LPE:H32	7:A:2011:LPE:H3N2	1.73	0.68
1:A:391:LEU:HD13	1:A:1596:LEU:HD13	1.76	0.68
7:A:2010:LPE:O32	7:A:2011:LPE:H3N2	1.94	0.68
1:A:1398:PHE:O	1:A:1402:ILE:HG13	1.94	0.67
1:A:857:CYS:HA	1:A:860:VAL:HG12	1.77	0.67
1:A:775:THR:HA	1:A:778:LYS:HD3	1.75	0.67
1:A:784:VAL:CG1	7:A:2014:LPE:H162	2.24	0.67
1:A:371:LYS:HE2	1:A:1641:MET:HG2	1.77	0.67
1:A:1243:VAL:HG22	1:A:1245:PRO:HD2	1.76	0.66
1:A:1721:ILE:HD12	5:A:2028:CLR:H183	1.77	0.66
1:A:382:PHE:HD2	6:A:2006:PCW:H242	1.58	0.66
1:A:1326:VAL:HG23	1:A:1327:ASN:H	1.61	0.66
1:A:1721:ILE:CD1	5:A:2028:CLR:C18	2.74	0.66
1:A:1503:GLU:OE2	1:A:1503:GLU:N	2.27	0.66
6:A:2019:PCW:C2	6:A:2019:PCW:H332	2.25	0.65
1:A:1571:LEU:O	1:A:1575:ILE:HG12	1.96	0.65
1:A:1158:ILE:O	1:A:1162:ILE:HG13	1.97	0.64
1:A:888:LEU:HB3	1:A:1411:ASN:HD21	1.62	0.64
1:A:1393:TYR:OH	6:A:2018:PCW:H73	1.98	0.64
1:A:352:LEU:HD23	1:A:358:TRP:HB2	1.79	0.64
1:A:749:LYS:HE3	1:A:749:LYS:HA	1.77	0.64
1:A:328:THR:HG22	1:A:329:SER:H	1.61	0.64
1:A:1696:ALA:HB3	6:A:2019:PCW:O3P	1.98	0.64
5:A:2017:CLR:H221	5:A:2017:CLR:H263	1.80	0.62
1:A:1601:MET:HB2	6:A:2006:PCW:H151	1.80	0.62
1:A:1488:LEU:O	1:A:1492:THR:HG23	2.00	0.62
1:A:1410:LEU:HD21	6:A:2013:PCW:C20	2.28	0.62
1:A:175:ARG:HD2	1:A:175:ARG:O	2.00	0.62
1:A:1507:ILE:O	1:A:1511:ILE:HG13	1.99	0.61
1:A:1137:VAL:HA	1:A:1140:GLN:HE21	1.64	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1230:LEU:O	1:A:1234:THR:HG23	2.01	0.61
6:A:2019:PCW:H19	6:A:2019:PCW:C40	2.30	0.61
1:A:679:THR:OG1	5:A:2005:CLR:H271	2.01	0.60
1:A:1664:ASP:OD2	1:A:1665:GLY:N	2.34	0.60
1:A:275:LYS:HE2	1:A:328:THR:HG21	1.84	0.60
1:A:1418:ILE:HD11	5:A:2028:CLR:C12	2.31	0.60
3:A:2001:NAG:HO3	3:A:2001:NAG:C7	2.08	0.60
6:A:2019:PCW:H332	6:A:2019:PCW:C3	2.31	0.60
1:A:1140:GLN:O	1:A:1144:THR:HG23	2.00	0.60
1:A:1310:CYS:H	1:A:1385:GLN:HE22	1.50	0.60
1:A:1572:PHE:O	1:A:1576:ARG:HG3	2.00	0.60
1:A:371:LYS:HD3	1:A:1652:LEU:HD11	1.84	0.59
1:A:865:ILE:HD12	1:A:865:ILE:H	1.67	0.59
1:A:1598:PHE:CD2	6:A:2006:PCW:H72	2.38	0.59
1:A:1541:VAL:O	1:A:1545:ILE:HG13	2.03	0.59
1:A:844:ARG:HG2	1:A:849:GLU:HB2	1.85	0.59
7:A:2010:LPE:O32	7:A:2011:LPE:C3N	2.50	0.59
1:A:1495:VAL:HA	5:A:2027:CLR:H122	1.84	0.58
1:A:1285:LEU:O	1:A:1289:LEU:HG	2.03	0.58
1:A:1227:ASN:O	1:A:1231:ILE:HG13	2.04	0.58
6:A:2013:PCW:O4P	7:A:2014:LPE:H1N1	2.04	0.58
6:A:2016:PCW:H411	5:A:2017:CLR:H212	1.85	0.58
6:A:2019:PCW:H332	6:A:2019:PCW:O3	2.03	0.58
1:A:1224:LEU:O	1:A:1228:ILE:HG13	2.04	0.58
7:A:2010:LPE:H32	7:A:2011:LPE:H321	1.85	0.58
1:A:1253:ARG:HH21	1:A:1256:ARG:HH12	1.51	0.57
1:A:1288:CYS:SG	1:A:1409:THR:HG23	2.44	0.57
1:A:1313:TYR:HD2	1:A:1318:PHE:HB3	1.69	0.57
1:A:675:ILE:O	1:A:679:THR:HG23	2.04	0.57
1:A:1699:ILE:O	1:A:1703:THR:HG23	2.03	0.57
1:A:1704:THR:O	1:A:1708:ILE:HG13	2.04	0.57
1:A:1547:VAL:O	1:A:1551:ILE:HG12	2.04	0.57
1:A:696:MET:HE1	7:A:2025:LPE:H31	1.87	0.56
1:A:1200:GLU:OE1	1:A:1204:LYS:HE3	2.05	0.56
1:A:159:VAL:O	1:A:162:VAL:HG22	2.06	0.56
1:A:161:THR:O	1:A:165:THR:HG23	2.05	0.56
1:A:1717:TYR:O	1:A:1721:ILE:HG13	2.06	0.56
1:A:1238:LEU:CD1	1:A:1239:GLU:H	2.18	0.56
1:A:187:ASP:HB3	1:A:190:ASN:HB2	1.87	0.56
1:A:735:ILE:CD1	5:A:2017:CLR:H151	2.36	0.56
1:A:361:LEU:O	1:A:365:THR:HG23	2.06	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:A:2011:LPE:H131	7:A:2012:LPE:H141	1.88	0.55
1:A:247:ALA:HB1	7:A:2011:LPE:H311	1.88	0.55
1:A:1700:ILE:HD13	6:A:2019:PCW:H371	1.88	0.55
1:A:1144:THR:O	1:A:1148:ILE:HG13	2.07	0.55
1:A:1363:VAL:HA	1:A:1369:TRP:HB3	1.89	0.54
1:A:1442:TYR:CE2	7:A:2009:LPE:H312	2.41	0.54
6:A:2016:PCW:H331	6:A:2016:PCW:C2	2.23	0.54
1:A:1330:SER:O	1:A:1334:ILE:HD12	2.06	0.54
1:A:1721:ILE:HD13	5:A:2028:CLR:C18	2.37	0.54
1:A:1696:ALA:CB	6:A:2019:PCW:O3P	2.56	0.54
1:A:328:THR:HG22	1:A:329:SER:N	2.23	0.54
1:A:393:LEU:HD12	1:A:882:LEU:HD11	1.90	0.54
1:A:771:PRO:O	1:A:775:THR:HG23	2.08	0.54
1:A:1296:SER:O	1:A:1300:VAL:HG23	2.08	0.54
1:A:1313:TYR:CD2	1:A:1318:PHE:HB3	2.43	0.54
5:A:2028:CLR:H121	5:A:2028:CLR:H212	1.89	0.54
1:A:224:LYS:O	1:A:228:VAL:HG23	2.07	0.54
6:A:2026:PCW:H371	6:A:2026:PCW:H141	1.90	0.53
1:A:665:PRO:O	1:A:668:GLU:HG2	2.08	0.53
8:A:2029:P5S:H44	8:A:2029:P5S:H22	1.91	0.53
1:A:813:TYR:HA	1:A:860:VAL:HG21	1.91	0.53
1:A:1190:ASP:OD2	1:A:1191:ARG:N	2.42	0.53
1:A:1443:TYR:HE2	1:A:1723:GLU:OE1	1.92	0.53
1:A:1538:GLY:HA3	6:A:2007:PCW:O31	2.08	0.53
1:A:1503:GLU:O	1:A:1507:ILE:HG13	2.09	0.53
1:A:219:VAL:HG21	1:A:804:VAL:HG22	1.91	0.52
1:A:1404:PHE:HA	1:A:1408:PHE:HD2	1.72	0.52
7:A:2010:LPE:H31	7:A:2011:LPE:H321	1.89	0.52
2:B:1:NAG:H5	2:B:2:NAG:O5	2.08	0.52
1:A:1594:ARG:HG2	6:A:2006:PCW:H12	1.92	0.52
1:A:226:VAL:HA	1:A:232:LEU:HD22	1.91	0.52
1:A:1500:GLN:O	6:A:2026:PCW:C6	2.57	0.52
1:A:1356:GLY:O	1:A:1360:LEU:HG	2.10	0.52
1:A:1395:TYR:O	1:A:1399:VAL:HG23	2.10	0.52
1:A:1261:LEU:HD12	1:A:1261:LEU:H	1.74	0.52
1:A:1291:PHE:HE1	1:A:1295:PHE:HE1	1.57	0.52
1:A:1721:ILE:HD13	5:A:2028:CLR:H183	1.92	0.52
1:A:869:LEU:O	1:A:873:VAL:HG23	2.09	0.51
1:A:891:ASN:OD1	1:A:892:SER:N	2.43	0.51
1:A:1418:ILE:HD11	5:A:2028:CLR:C17	2.36	0.51
1:A:216:THR:O	1:A:219:VAL:HG22	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:A:2019:PCW:H171	6:A:2019:PCW:H39	1.93	0.51
1:A:1360:LEU:HB3	1:A:1401:PHE:CZ	2.46	0.51
4:A:2004:95T:C12	6:A:2013:PCW:H122	2.41	0.51
1:A:1479:ASP:OD2	1:A:1588:ARG:NH2	2.43	0.51
5:A:2005:CLR:H121	5:A:2005:CLR:H212	1.93	0.51
1:A:1345:ASN:OD1	1:A:1346:VAL:N	2.43	0.51
1:A:1568:SER:OG	7:A:2015:LPE:H2N2	2.10	0.50
1:A:788:GLY:O	1:A:792:ILE:HG13	2.11	0.50
5:A:2017:CLR:H212	5:A:2017:CLR:H121	1.92	0.50
1:A:1369:TRP:O	1:A:1373:MET:HG3	2.12	0.50
1:A:214:LEU:HA	1:A:217:PHE:CE2	2.47	0.50
1:A:789:ASN:O	1:A:793:ILE:HG23	2.10	0.50
1:A:889:LEU:HD12	5:A:2028:CLR:H151	1.93	0.50
1:A:1171:PHE:CE1	7:A:2022:LPE:C2N	2.95	0.50
1:A:801:PHE:CZ	1:A:872:THR:HG22	2.48	0.49
1:A:1522:GLU:O	1:A:1526:LYS:HG2	2.13	0.49
1:A:367:ARG:NH1	1:A:1641:MET:HE3	2.26	0.49
1:A:1542:PHE:O	1:A:1546:VAL:HG23	2.12	0.49
1:A:1561:LYS:HG2	1:A:1563:LEU:HD12	1.93	0.49
1:A:683:ALA:HB2	1:A:1297:ILE:HD11	1.94	0.49
1:A:759:ARG:O	1:A:762:ARG:HG2	2.12	0.49
1:A:216:THR:HA	1:A:219:VAL:HG22	1.94	0.49
1:A:792:ILE:O	1:A:796:ILE:HG12	2.12	0.49
6:A:2016:PCW:H2	6:A:2016:PCW:C34	2.42	0.49
1:A:851:ILE:HG12	1:A:855:TRP:CE2	2.48	0.49
1:A:1238:LEU:HD12	1:A:1239:GLU:N	2.25	0.49
1:A:198:THR:O	1:A:202:VAL:HG23	2.12	0.49
1:A:1659:THR:O	1:A:1660:SER:OG	2.29	0.49
1:A:1710:PHE:O	1:A:1714:VAL:HG23	2.13	0.49
1:A:1710:PHE:HB2	4:A:2004:95T:C21	2.43	0.49
1:A:732:PHE:O	1:A:736:ILE:HG12	2.12	0.49
1:A:1606:ALA:O	1:A:1610:ILE:HG13	2.12	0.48
1:A:1288:CYS:SG	1:A:1409:THR:CG2	3.01	0.48
1:A:698:GLN:O	1:A:702:ILE:HG23	2.13	0.48
1:A:1594:ARG:HG2	6:A:2006:PCW:H31	1.94	0.48
1:A:215:ARG:O	1:A:219:VAL:HG13	2.13	0.48
1:A:754:VAL:HG21	6:A:2018:PCW:H141	1.94	0.48
1:A:1604:LEU:HD21	6:A:2006:PCW:H20	1.93	0.48
1:A:1253:ARG:HH21	1:A:1256:ARG:NH1	2.11	0.48
1:A:1330:SER:O	1:A:1333:LYS:HB3	2.14	0.48
1:A:328:THR:CG2	1:A:329:SER:H	2.27	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:800:VAL:O	1:A:804:VAL:HG23	2.13	0.48
1:A:735:ILE:HD12	5:A:2017:CLR:H151	1.94	0.48
1:A:1501:SER:O	1:A:1505:THR:HG23	2.14	0.48
6:A:2019:PCW:C2	6:A:2019:PCW:C33	2.89	0.47
1:A:273:LYS:NZ	1:A:1498:ASP:OD2	2.47	0.47
1:A:1310:CYS:SG	1:A:1343:TRP:HE3	2.36	0.47
1:A:1582:ARG:HA	1:A:1585:ARG:HG3	1.96	0.47
1:A:355:GLN:HE21	1:A:385:SER:HB3	1.78	0.47
1:A:382:PHE:O	1:A:386:PHE:HB3	2.14	0.47
1:A:829:ARG:HD3	1:A:1374:TYR:CZ	2.49	0.47
1:A:1199:PHE:O	1:A:1203:LEU:HD23	2.14	0.47
1:A:1598:PHE:CD2	6:A:2006:PCW:C7	2.98	0.47
1:A:695:ALA:O	1:A:699:ILE:HG12	2.15	0.47
1:A:713:VAL:HA	1:A:716:ILE:HG12	1.97	0.47
1:A:1713:MET:HE1	4:A:2004:95T:C19	2.45	0.47
7:A:2023:LPE:H322	8:A:2029:P5S:OXT	2.14	0.47
1:A:893:PHE:HZ	1:A:1412:LEU:HD12	1.79	0.47
1:A:1407:PHE:HD1	7:A:2014:LPE:H2N2	1.80	0.47
6:A:2019:PCW:C33	6:A:2019:PCW:H2	2.43	0.47
1:A:1480:ILE:O	1:A:1484:VAL:HG23	2.15	0.47
1:A:1469:VAL:HA	1:A:1472:ILE:HG22	1.96	0.47
1:A:278:LYS:HB2	1:A:297:ILE:HG13	1.96	0.47
1:A:761:LEU:HD22	1:A:764:PHE:HE1	1.80	0.47
1:A:1455:GLN:HE22	1:A:1457:PRO:HA	1.79	0.47
1:A:1635:GLU:OE1	1:A:1672:ASN:ND2	2.48	0.46
1:A:669:LEU:O	1:A:673:LEU:HD23	2.15	0.46
1:A:1561:LYS:HG3	1:A:1562:SER:H	1.80	0.46
1:A:147:MET:SD	1:A:219:VAL:HG12	2.56	0.46
1:A:1460:ARG:HH22	1:A:1467:GLY:CA	2.28	0.46
1:A:851:ILE:HG12	1:A:855:TRP:CZ2	2.51	0.46
1:A:1255:LEU:O	1:A:1258:LEU:HB2	2.16	0.46
7:A:2023:LPE:H151	7:A:2023:LPE:H122	1.71	0.46
1:A:722:TYR:O	1:A:726:GLN:HG3	2.15	0.46
6:A:2013:PCW:H222	6:A:2013:PCW:H252	1.69	0.46
7:A:2015:LPE:H2N3	7:A:2015:LPE:H312	1.76	0.46
1:A:1377:VAL:HG11	1:A:1395:TYR:CE1	2.51	0.46
1:A:693:PHE:O	1:A:697:LEU:HD23	2.16	0.46
1:A:774:ASN:O	1:A:778:LYS:HG3	2.16	0.46
1:A:309:LEU:HB2	1:A:367:ARG:HD3	1.98	0.46
1:A:1311:ILE:HB	1:A:1318:PHE:HB2	1.98	0.46
1:A:1368:GLY:N	1:A:1664:ASP:OD1	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1519:PHE:O	1:A:1522:GLU:HG2	2.16	0.46
6:A:2016:PCW:C33	6:A:2016:PCW:C2	2.86	0.46
1:A:1414:VAL:O	1:A:1418:ILE:HG13	2.16	0.46
1:A:330:ASP:OD1	1:A:330:ASP:N	2.46	0.45
1:A:829:ARG:HD3	1:A:1374:TYR:CE1	2.51	0.45
7:A:2011:LPE:C15	7:A:2012:LPE:H131	2.21	0.45
6:A:2006:PCW:H421	6:A:2007:PCW:C21	2.47	0.45
5:A:2021:CLR:H222	5:A:2021:CLR:H162	1.68	0.45
1:A:757:SER:HA	1:A:760:LEU:HD23	1.98	0.45
1:A:1576:ARG:HH21	1:A:1579:ARG:NH2	2.14	0.45
7:A:2008:LPE:H312	7:A:2008:LPE:H3N3	1.63	0.45
6:A:2016:PCW:H2	6:A:2016:PCW:H342	1.99	0.45
6:A:2016:PCW:C11	6:A:2016:PCW:C1	2.94	0.45
6:A:2016:PCW:H31	5:A:2017:CLR:O1	2.16	0.45
6:A:2019:PCW:H32	6:A:2019:PCW:P	2.57	0.45
1:A:269:LYS:HG3	1:A:1573:ARG:NH2	2.32	0.45
8:A:2029:P5S:H20	8:A:2029:P5S:H42	1.98	0.45
1:A:269:LYS:HG3	1:A:1573:ARG:HH21	1.80	0.45
1:A:1258:LEU:HD23	1:A:1261:LEU:HD11	1.97	0.45
1:A:1700:ILE:O	1:A:1704:THR:CG2	2.62	0.45
1:A:382:PHE:CD2	6:A:2006:PCW:H271	2.52	0.45
1:A:1500:GLN:O	6:A:2026:PCW:H63	2.17	0.45
1:A:1490:MET:HB2	1:A:1583:ILE:HD12	1.99	0.45
1:A:763:VAL:HB	1:A:1294:ILE:HD11	1.99	0.44
1:A:1291:PHE:HE1	1:A:1295:PHE:CE1	2.35	0.44
1:A:1453:LYS:HD3	1:A:1453:LYS:N	2.32	0.44
1:A:138:VAL:O	1:A:142:VAL:HG22	2.18	0.44
1:A:242:SER:O	1:A:246:LEU:HG	2.17	0.44
1:A:1460:ARG:HH22	1:A:1467:GLY:HA3	1.82	0.44
1:A:1495:VAL:HG21	6:A:2026:PCW:H142	1.99	0.44
1:A:192:LEU:O	1:A:196:VAL:HG23	2.18	0.44
1:A:290:SER:H	1:A:293:ARG:HH11	1.64	0.44
1:A:796:ILE:O	1:A:800:VAL:HG23	2.17	0.44
1:A:1253:ARG:NH2	1:A:1256:ARG:HH12	2.14	0.44
1:A:735:ILE:O	1:A:739:VAL:HG23	2.18	0.44
1:A:1452:LYS:HE3	1:A:1454:PRO:O	2.18	0.44
7:A:2011:LPE:H2N3	7:A:2011:LPE:H312	1.73	0.44
5:A:2027:CLR:H221	5:A:2027:CLR:H162	1.79	0.44
1:A:359:GLU:O	1:A:363:GLN:HG3	2.17	0.44
1:A:849:GLU:OE1	1:A:1369:TRP:NE1	2.46	0.44
1:A:1250:ARG:NH2	1:A:1250:ARG:HB3	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1463:ASN:HB3	1:A:1466:GLN:HB3	2.00	0.44
7:A:2010:LPE:H11	7:A:2011:LPE:H1N3	2.00	0.44
6:A:2006:PCW:H341	6:A:2006:PCW:H371	1.60	0.43
7:A:2010:LPE:H2N3	7:A:2010:LPE:H311	1.80	0.43
1:A:205:ALA:C	1:A:206:ILE:HD12	2.39	0.43
1:A:702:ILE:HA	1:A:705:THR:HG22	2.00	0.43
1:A:1255:LEU:HD21	7:A:2020:LPE:H222	2.00	0.43
1:A:1413:PHE:O	1:A:1416:VAL:HG22	2.19	0.43
1:A:1666:LEU:O	1:A:1669:PRO:HD2	2.17	0.43
1:A:1718:ILE:O	1:A:1722:LEU:HD23	2.18	0.43
1:A:316:SER:O	1:A:1641:MET:HE1	2.18	0.43
1:A:661:LEU:HA	1:A:718:ALA:HB1	2.01	0.43
1:A:1189:THR:O	1:A:1192:VAL:HG22	2.17	0.43
1:A:1341:PHE:HZ	3:A:2003:NAG:H82	1.83	0.43
1:A:1404:PHE:HA	1:A:1408:PHE:CD2	2.51	0.43
1:A:1613:LEU:O	1:A:1617:VAL:HG23	2.18	0.43
1:A:1220:TRP:CE2	5:A:2021:CLR:H122	2.53	0.43
1:A:1341:PHE:CZ	3:A:2003:NAG:H82	2.54	0.43
1:A:1482:ILE:HD12	1:A:1522:GLU:OE2	2.17	0.43
1:A:1688:THR:O	1:A:1688:THR:HG22	2.19	0.43
1:A:1688:THR:O	1:A:1689:ARG:HB2	2.19	0.43
1:A:191:TRP:HA	1:A:194:PHE:HD2	1.83	0.43
1:A:1500:GLN:O	6:A:2026:PCW:H62	2.17	0.43
1:A:1509:GLY:O	1:A:1513:GLN:HG3	2.18	0.43
1:A:1502:GLU:OE2	1:A:1502:GLU:HA	2.19	0.42
6:A:2018:PCW:H351	6:A:2018:PCW:H322	1.65	0.42
6:A:2006:PCW:H72	6:A:2006:PCW:H42	1.52	0.42
1:A:272:LEU:HD12	1:A:338:SER:HA	2.00	0.42
1:A:371:LYS:CE	1:A:1641:MET:CG	2.80	0.42
1:A:1290:ILE:HD11	5:A:2005:CLR:C23	2.49	0.42
2:B:1:NAG:O4	2:B:1:NAG:O6	2.37	0.42
1:A:1721:ILE:HG22	1:A:1725:PHE:HE2	1.84	0.42
1:A:1437:GLU:CD	1:A:1437:GLU:H	2.23	0.42
1:A:1446:MET:HE1	1:A:1601:MET:HG2	2.02	0.42
1:A:1721:ILE:CD1	5:A:2028:CLR:H182	2.48	0.42
1:A:651:TRP:CZ2	1:A:653:LYS:HE3	2.54	0.42
1:A:664:ASP:HB2	1:A:665:PRO:HD2	2.01	0.42
1:A:1660:SER:O	1:A:1663:TRP:HD1	2.02	0.42
1:A:1719:ALA:O	1:A:1723:GLU:HG2	2.20	0.42
1:A:664:ASP:OD1	1:A:667:ALA:HB2	2.20	0.42
1:A:758:PHE:CE2	5:A:2017:CLR:H25	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1342:PHE:CE1	2:C:1:NAG:H3	2.53	0.42
1:A:705:THR:HB	1:A:759:ARG:NH1	2.35	0.42
1:A:889:LEU:CD1	5:A:2028:CLR:H151	2.49	0.42
1:A:1186:LEU:HA	1:A:1189:THR:OG1	2.20	0.42
1:A:1308:TRP:CD2	1:A:1345:ASN:HB2	2.55	0.42
1:A:1448:LYS:HA	1:A:1448:LYS:HD3	1.80	0.42
1:A:1485:LEU:HD13	1:A:1518:VAL:HG11	2.02	0.42
6:A:2007:PCW:H63	6:A:2007:PCW:H41	1.63	0.42
1:A:1537:ASN:HB3	1:A:1540:ASN:OD1	2.19	0.41
5:A:2027:CLR:H183	5:A:2027:CLR:H20	1.79	0.41
1:A:268:PHE:HA	1:A:271:ASN:ND2	2.35	0.41
1:A:696:MET:CE	7:A:2025:LPE:H31	2.49	0.41
1:A:1326:VAL:HG23	1:A:1327:ASN:N	2.33	0.41
1:A:1493:MET:HE1	1:A:1583:ILE:HD11	2.02	0.41
1:A:1552:ALA:O	1:A:1556:PHE:HB2	2.21	0.41
7:A:2011:LPE:H142	7:A:2011:LPE:H112	1.67	0.41
1:A:355:GLN:NE2	4:A:2004:95T:O05	2.41	0.41
1:A:359:GLU:HG2	1:A:360:ARG:N	2.34	0.41
1:A:387:TYR:CD1	1:A:1600:LEU:HD13	2.55	0.41
1:A:1199:PHE:CZ	1:A:1203:LEU:HD21	2.56	0.41
1:A:1563:LEU:HD12	1:A:1563:LEU:H	1.85	0.41
1:A:146:CYS:HB2	1:A:160:PHE:CZ	2.55	0.41
1:A:299:ILE:HB	1:A:323:TYR:CE2	2.56	0.41
1:A:728:LYS:HE3	6:A:2016:PCW:C3	2.51	0.41
1:A:1330:SER:OG	2:B:1:NAG:H82	2.20	0.41
1:A:1600:LEU:HD23	6:A:2006:PCW:H161	2.01	0.41
1:A:136:ILE:O	1:A:140:ILE:HG23	2.21	0.41
1:A:172:ILE:HG23	1:A:173:LEU:HD23	2.03	0.41
1:A:219:VAL:HG23	1:A:220:LEU:HD22	2.03	0.41
1:A:859:GLU:O	3:A:2001:NAG:H82	2.21	0.41
6:A:2016:PCW:H411	5:A:2017:CLR:C21	2.51	0.41
5:A:2027:CLR:H193	5:A:2027:CLR:H111	1.83	0.41
5:A:2028:CLR:H183	5:A:2028:CLR:H212	2.02	0.41
1:A:194:PHE:O	1:A:197:ILE:HG22	2.21	0.41
1:A:1145:CYS:O	1:A:1149:VAL:HG13	2.21	0.41
1:A:1172:GLU:HA	1:A:1176:LEU:HD22	2.02	0.41
1:A:1308:TRP:CE3	1:A:1345:ASN:HB2	2.56	0.41
1:A:1713:MET:CE	4:A:2004:95T:O02	2.56	0.41
7:A:2011:LPE:H151	7:A:2012:LPE:C14	2.50	0.41
2:B:1:NAG:HO6	2:B:2:NAG:C1	2.34	0.41
1:A:1694:SER:OG	6:A:2019:PCW:H12	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:247:ALA:O	1:A:251:ILE:HG13	2.21	0.40
1:A:653:LYS:O	1:A:657:ILE:HG13	2.20	0.40
1:A:820:ILE:HD13	1:A:860:VAL:HB	2.02	0.40
7:A:2009:LPE:P	7:A:2009:LPE:C3N	3.08	0.40
7:A:2025:LPE:H311	7:A:2025:LPE:H3N3	1.81	0.40
1:A:271:ASN:O	1:A:274:ASN:ND2	2.55	0.40
1:A:379:LEU:HD23	1:A:379:LEU:HA	1.96	0.40
1:A:696:MET:HB2	1:A:696:MET:HE2	1.94	0.40
1:A:784:VAL:HG11	7:A:2014:LPE:H162	2.00	0.40
1:A:1320:LEU:HD12	1:A:1320:LEU:HA	1.87	0.40
1:A:1396:LEU:O	1:A:1400:ILE:HG12	2.22	0.40
1:A:1493:MET:CE	1:A:1583:ILE:HD11	2.51	0.40
1:A:1511:ILE:HG22	1:A:1515:PHE:CE2	2.57	0.40
1:A:216:THR:O	1:A:220:LEU:HD23	2.22	0.40
1:A:1136:ASP:OD1	1:A:1137:VAL:N	2.48	0.40
1:A:713:VAL:O	1:A:717:ILE:HG23	2.22	0.40
1:A:1335:GLN:N	1:A:1335:GLN:OE1	2.54	0.40
1:A:1500:GLN:HE21	1:A:1505:THR:HG22	1.86	0.40
1:A:1592:GLY:O	1:A:1596:LEU:HG	2.20	0.40
6:A:2019:PCW:H381	6:A:2019:PCW:H411	1.70	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	A	1091/1956 (56%)	1031 (94%)	59 (5%)	1 (0%)	51 85

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	666	PHE

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	971/1727 (56%)	971 (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 (6) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	271	ASN
1	A	1140	GLN
1	A	1327	ASN
1	A	1423	GLN
1	A	1424	GLN
1	A	1455	GLN

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

4 monosaccharides 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	$\#\|Z\|>2$
2	NAG	B	1	1,2	14,14,15	0.32	0	17,19,21	0.62	0
2	NAG	B	2	2	14,14,15	0.29	0	17,19,21	0.61	0
2	NAG	C	1	1,2	14,14,15	0.29	0	17,19,21	0.62	0
2	NAG	C	2	2	14,14,15	0.29	0	17,19,21	0.62	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
2	NAG	B	1	1,2	-	2/6/23/26	0/1/1/1
2	NAG	B	2	2	-	4/6/23/26	0/1/1/1
2	NAG	C	1	1,2	-	2/6/23/26	0/1/1/1
2	NAG	C	2	2	-	0/6/23/26	0/1/1/1

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (8) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	B	2	NAG	C8-C7-N2-C2
2	B	2	NAG	O7-C7-N2-C2
2	B	2	NAG	O5-C5-C6-O6
2	C	1	NAG	O5-C5-C6-O6
2	B	1	NAG	O5-C5-C6-O6
2	B	2	NAG	C4-C5-C6-O6
2	C	1	NAG	C4-C5-C6-O6
2	B	1	NAG	C4-C5-C6-O6

There are no ring outliers.

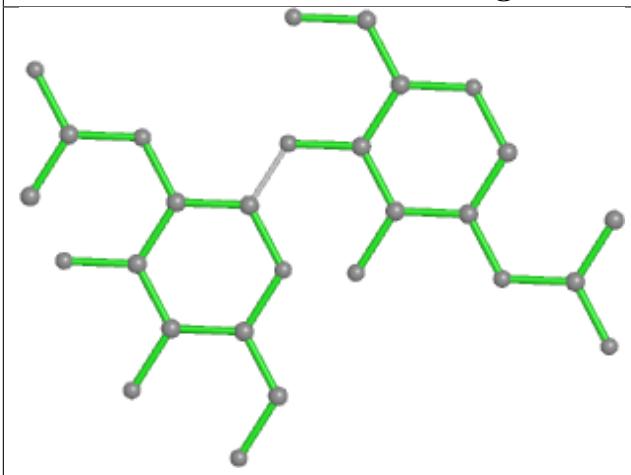
3 monomers are involved in 5 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	B	1	NAG	4	0
2	C	1	NAG	1	0
2	B	2	NAG	2	0

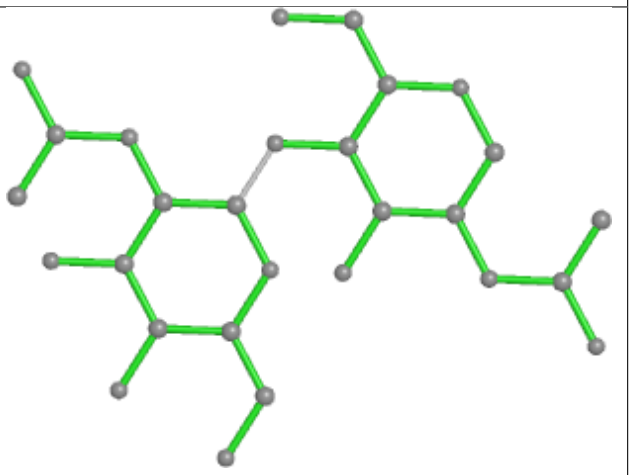
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths,

bond angles, torsion angles, and ring geometry for oligosaccharide.

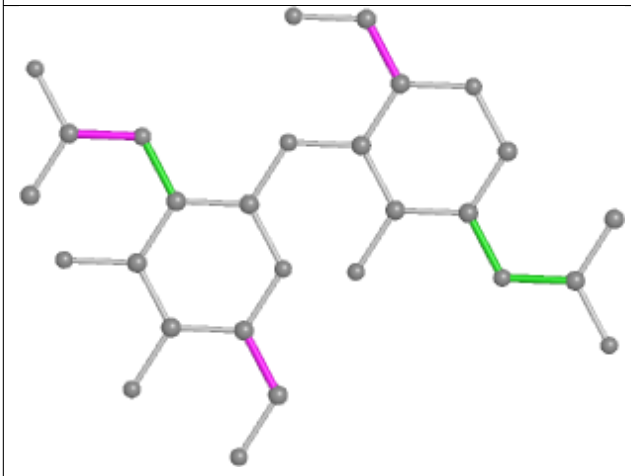
Oligosaccharide Chain B



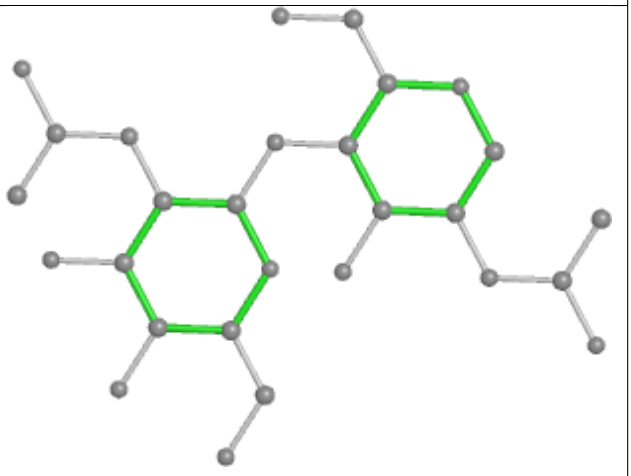
Bond lengths



Bond angles

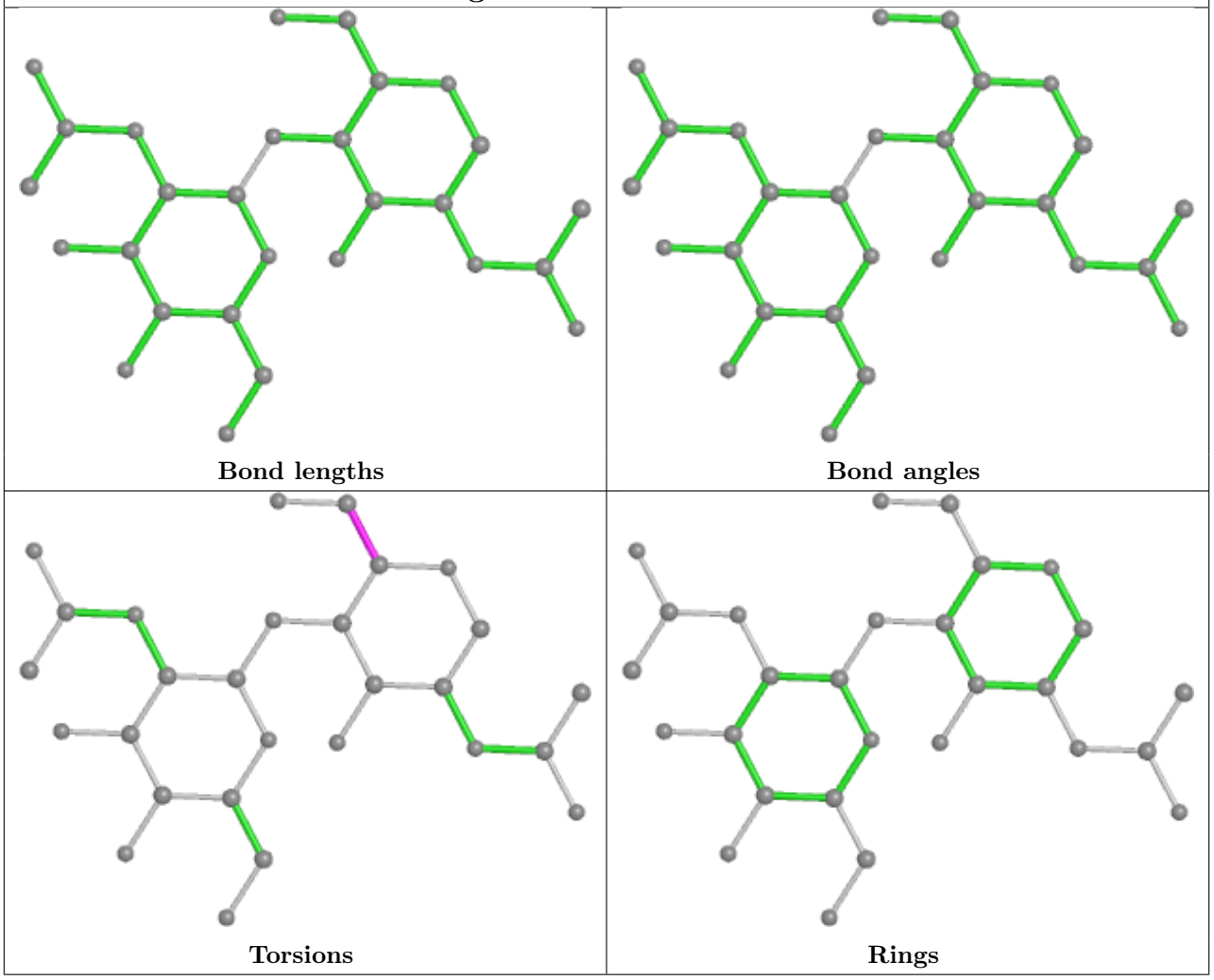


Torsions



Rings

Oligosaccharide Chain C



5.6 Ligand geometry (i)

29 ligands are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
5	CLR	A	2027	-	31,31,31	0.69	0	48,48,48	1.30	7 (14%)
6	PCW	A	2018	-	38,38,53	1.08	2 (5%)	43,46,61	1.08	3 (6%)
7	LPE	A	2011	-	21,21,33	0.62	0	25,27,39	0.71	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
7	LPE	A	2015	-	22,22,33	0.61	0	26,28,39	0.70	0
5	CLR	A	2028	-	31,31,31	0.71	0	48,48,48	1.26	6 (12%)
3	NAG	A	2002	1	14,14,15	0.29	0	17,19,21	0.62	0
7	LPE	A	2024	-	20,20,33	0.58	0	24,26,39	0.60	0
6	PCW	A	2019	-	39,39,53	1.08	2 (5%)	44,47,61	2.47	9 (20%)
7	LPE	A	2020	-	33,33,33	0.46	0	37,39,39	0.72	0
3	NAG	A	2001	1	14,14,15	0.31	0	17,19,21	0.85	1 (5%)
7	LPE	A	2025	-	33,33,33	0.48	0	37,39,39	0.61	0
7	LPE	A	2008	-	21,21,33	0.57	0	25,27,39	0.53	0
5	CLR	A	2005	-	31,31,31	0.72	0	48,48,48	1.18	5 (10%)
7	LPE	A	2012	-	15,15,33	0.58	0	17,18,39	0.85	1 (5%)
8	P5S	A	2029	-	43,44,53	0.94	3 (6%)	47,51,60	1.48	8 (17%)
5	CLR	A	2017	-	31,31,31	0.71	0	48,48,48	1.37	9 (18%)
5	CLR	A	2021	-	31,31,31	0.83	1 (3%)	48,48,48	1.41	9 (18%)
6	PCW	A	2013	-	36,36,53	1.11	2 (5%)	40,41,61	1.14	3 (7%)
4	95T	A	2004	-	23,27,27	0.39	0	29,37,37	0.96	1 (3%)
6	PCW	A	2016	-	40,40,53	1.06	2 (5%)	43,45,61	1.19	4 (9%)
7	LPE	A	2023	-	21,21,33	0.57	0	25,27,39	0.70	0
6	PCW	A	2026	-	37,37,53	1.11	2 (5%)	42,45,61	1.11	2 (4%)
7	LPE	A	2014	-	22,22,33	0.59	0	26,28,39	0.58	0
7	LPE	A	2009	-	21,21,33	0.57	0	25,27,39	0.58	0
6	PCW	A	2006	-	53,53,53	0.92	2 (3%)	59,61,61	1.10	4 (6%)
3	NAG	A	2003	1	14,14,15	0.28	0	17,19,21	0.62	0
7	LPE	A	2010	-	21,21,33	0.57	0	25,27,39	0.57	0
7	LPE	A	2022	-	21,21,33	0.66	0	25,27,39	0.78	1 (4%)
6	PCW	A	2007	-	46,46,53	1.02	2 (4%)	52,54,61	1.17	3 (5%)

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
5	CLR	A	2027	-	-	7/10/68/68	0/4/4/4
6	PCW	A	2018	-	-	14/42/42/57	-
7	LPE	A	2011	-	-	8/22/22/34	-
7	LPE	A	2015	-	-	8/23/23/34	-
5	CLR	A	2028	-	-	2/10/68/68	0/4/4/4

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	NAG	A	2002	1	-	2/6/23/26	0/1/1/1
7	LPE	A	2024	-	-	6/21/21/34	-
6	PCW	A	2019	-	-	25/43/43/57	-
7	LPE	A	2020	-	-	3/34/34/34	-
3	NAG	A	2001	1	-	2/6/23/26	0/1/1/1
7	LPE	A	2025	-	-	18/34/34/34	-
7	LPE	A	2008	-	-	13/22/22/34	-
5	CLR	A	2005	-	-	3/10/68/68	0/4/4/4
7	LPE	A	2012	-	-	7/14/14/34	-
8	P5S	A	2029	-	-	13/50/50/59	-
5	CLR	A	2017	-	-	5/10/68/68	0/4/4/4
5	CLR	A	2021	-	-	4/10/68/68	0/4/4/4
6	PCW	A	2013	-	-	26/38/38/57	-
4	95T	A	2004	-	-	9/11/16/16	0/3/3/3
6	PCW	A	2016	-	-	22/42/42/57	-
7	LPE	A	2023	-	-	4/22/22/34	-
6	PCW	A	2026	-	-	18/41/41/57	-
7	LPE	A	2014	-	-	10/23/23/34	-
7	LPE	A	2009	-	-	9/22/22/34	-
6	PCW	A	2006	-	-	24/57/57/57	-
3	NAG	A	2003	1	-	2/6/23/26	0/1/1/1
7	LPE	A	2010	-	-	13/22/22/34	-
7	LPE	A	2022	-	-	10/22/22/34	-
6	PCW	A	2007	-	-	16/50/50/57	-

All (18) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	A	2007	PCW	O3-C11	4.44	1.46	1.33
6	A	2019	PCW	O3-C11	4.27	1.45	1.33
6	A	2013	PCW	O3-C11	4.26	1.45	1.33
6	A	2016	PCW	O3-C11	4.26	1.45	1.33
6	A	2007	PCW	O2-C31	4.21	1.46	1.34
6	A	2026	PCW	O2-C31	4.18	1.46	1.34
6	A	2013	PCW	O2-C31	4.16	1.46	1.34
6	A	2006	PCW	O2-C31	4.15	1.46	1.34
6	A	2018	PCW	O3-C11	4.14	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	A	2018	PCW	O2-C31	4.13	1.46	1.34
6	A	2016	PCW	O2-C31	4.13	1.46	1.34
6	A	2026	PCW	O3-C11	4.12	1.45	1.33
6	A	2019	PCW	O2-C31	4.09	1.45	1.34
6	A	2006	PCW	O3-C11	3.84	1.44	1.33
8	A	2029	P5S	O19-C17	3.74	1.44	1.33
8	A	2029	P5S	O37-C38	3.64	1.44	1.34
5	A	2021	CLR	C10-C9	-2.30	1.52	1.56
8	A	2029	P5S	O37-C2	-2.03	1.41	1.46

All (76) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	A	2019	PCW	C8-N-C6	-8.75	86.48	108.97
6	A	2019	PCW	C8-N-C7	-8.74	86.51	108.97
6	A	2019	PCW	C8-N-C5	-5.72	86.50	109.92
8	A	2029	P5S	OG-CB-CA	5.06	112.47	108.06
6	A	2007	PCW	O2-C31-C32	4.87	121.99	111.50
4	A	2004	95T	C11-C07-C10	4.52	133.00	128.77
6	A	2026	PCW	O2-C31-C32	4.37	120.91	111.50
6	A	2019	PCW	C7-N-C6	4.13	119.60	108.97
6	A	2016	PCW	O2-C31-C32	4.12	120.38	111.50
6	A	2019	PCW	O2-C31-C32	4.02	120.17	111.50
5	A	2027	CLR	C13-C17-C20	-3.98	113.25	119.49
8	A	2029	P5S	O37-C38-C39	3.96	120.05	111.50
6	A	2013	PCW	O2-C31-C32	3.81	119.72	111.50
5	A	2017	CLR	C1-C2-C3	3.81	115.36	110.47
6	A	2006	PCW	O2-C31-C32	3.69	119.45	111.50
5	A	2005	CLR	C13-C17-C20	-3.49	114.02	119.49
5	A	2021	CLR	C7-C6-C5	-3.45	118.70	125.06
6	A	2018	PCW	O2-C31-C32	3.41	118.86	111.50
5	A	2028	CLR	C4-C5-C10	3.34	120.86	116.42
5	A	2017	CLR	C13-C17-C20	-3.31	114.31	119.49
6	A	2007	PCW	O3-C11-C12	3.24	122.08	111.91
8	A	2029	P5S	O19-C17-C20	3.19	121.92	111.91
6	A	2006	PCW	O3-C11-C12	3.17	121.87	111.91
5	A	2028	CLR	C13-C17-C20	-3.16	114.54	119.49
5	A	2021	CLR	C1-C10-C9	3.07	113.01	108.73
5	A	2017	CLR	C4-C5-C10	2.85	120.20	116.42
6	A	2013	PCW	O3-C11-C12	2.67	120.28	111.91
6	A	2018	PCW	O3-C11-C12	2.64	120.18	111.91
6	A	2019	PCW	O3-C11-C12	2.63	120.17	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	A	2028	CLR	C8-C7-C6	-2.63	108.95	112.73
5	A	2021	CLR	C8-C7-C6	-2.61	108.98	112.73
8	A	2029	P5S	OXT-C-O	-2.60	118.19	124.09
3	A	2001	NAG	C1-O5-C5	2.58	115.68	112.19
5	A	2027	CLR	C13-C14-C8	-2.56	110.59	114.38
6	A	2016	PCW	O3-C11-C12	2.54	119.88	111.91
6	A	2026	PCW	O3-C11-C12	2.53	119.85	111.91
5	A	2017	CLR	C13-C14-C8	-2.51	110.66	114.38
5	A	2017	CLR	C11-C12-C13	-2.51	108.48	112.78
6	A	2007	PCW	O3-C3-C2	2.50	115.70	108.43
6	A	2006	PCW	C3-C2-C1	-2.49	105.91	111.79
5	A	2028	CLR	C13-C14-C8	-2.47	110.72	114.38
5	A	2005	CLR	C11-C12-C13	-2.47	108.55	112.78
5	A	2021	CLR	C1-C2-C3	2.47	113.63	110.47
5	A	2027	CLR	C11-C12-C13	-2.46	108.57	112.78
6	A	2018	PCW	C3-C2-C1	-2.44	106.01	111.79
6	A	2019	PCW	C2-O2-C31	-2.44	111.79	117.79
5	A	2005	CLR	C13-C14-C8	-2.43	110.78	114.38
5	A	2027	CLR	C16-C17-C20	2.42	115.89	112.15
6	A	2019	PCW	C6-N-C5	2.39	119.69	109.92
6	A	2016	PCW	O1P-P-O2P	2.38	120.01	110.68
5	A	2005	CLR	C4-C5-C10	2.38	119.58	116.42
7	A	2012	LPE	O32-P-O31	2.37	119.94	110.68
6	A	2019	PCW	C7-N-C5	2.37	119.59	109.92
6	A	2006	PCW	O3-C11-O11	-2.36	117.65	123.59
6	A	2013	PCW	O1P-P-O2P	2.35	119.87	110.68
5	A	2027	CLR	C17-C13-C14	2.34	102.85	100.07
7	A	2022	LPE	C3-C2-C1	-2.33	105.92	112.79
5	A	2021	CLR	C7-C8-C9	2.31	112.51	109.71
5	A	2027	CLR	C22-C20-C17	2.29	115.02	110.28
8	A	2029	P5S	OXT-C-CA	2.29	121.19	113.38
5	A	2027	CLR	C4-C5-C10	2.25	119.41	116.42
8	A	2029	P5S	O37-C38-O47	-2.24	118.28	123.70
5	A	2028	CLR	C4-C5-C6	-2.24	117.38	120.61
5	A	2017	CLR	C8-C7-C6	-2.23	109.52	112.73
5	A	2028	CLR	C11-C12-C13	-2.22	108.97	112.78
6	A	2016	PCW	C2-O2-C31	-2.19	112.41	117.79
5	A	2021	CLR	C13-C14-C8	-2.18	111.16	114.38
8	A	2029	P5S	C2-O37-C38	-2.17	112.44	117.79
5	A	2005	CLR	C17-C13-C14	2.17	102.65	100.07
5	A	2017	CLR	C3-C4-C5	-2.17	108.35	112.03
5	A	2021	CLR	C4-C5-C10	2.16	119.29	116.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	A	2017	CLR	C17-C13-C14	2.16	102.63	100.07
5	A	2017	CLR	C7-C6-C5	-2.09	121.21	125.06
8	A	2029	P5S	O19-C17-O18	-2.07	118.37	123.59
5	A	2021	CLR	C10-C9-C8	-2.07	109.64	112.73
5	A	2021	CLR	C19-C10-C9	-2.01	109.28	111.68

There are no chirality outliers.

All (303) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	A	2004	95T	C09-C13-N06-C08
4	A	2004	95T	C12-C09-C13-O05
5	A	2027	CLR	C13-C17-C20-C21
5	A	2027	CLR	C16-C17-C20-C22
6	A	2006	PCW	O4P-C4-C5-N
6	A	2006	PCW	C4-O4P-P-O2P
6	A	2007	PCW	C1-O3P-P-O1P
6	A	2013	PCW	C1-O3P-P-O1P
6	A	2013	PCW	C1-O3P-P-O4P
6	A	2016	PCW	C2-C3-O3-C11
6	A	2016	PCW	C19-C20-C21-C22
6	A	2016	PCW	C32-C31-O2-C2
6	A	2016	PCW	O31-C31-O2-C2
6	A	2018	PCW	C1-O3P-P-O1P
6	A	2018	PCW	C1-O3P-P-O2P
6	A	2019	PCW	C32-C31-O2-C2
6	A	2019	PCW	O31-C31-O2-C2
6	A	2026	PCW	C39-C40-C41-C42
6	A	2026	PCW	C1-O3P-P-O2P
6	A	2026	PCW	C4-O4P-P-O2P
7	A	2008	LPE	C3-O3-P-O32
7	A	2008	LPE	C31-O33-P-O3
7	A	2008	LPE	C31-O33-P-O31
7	A	2008	LPE	C31-O33-P-O32
7	A	2009	LPE	O1-C1-C2-O2H
7	A	2009	LPE	O1-C1-C2-C3
7	A	2009	LPE	C3-O3-P-O31
7	A	2009	LPE	C31-O33-P-O3
7	A	2009	LPE	C31-O33-P-O31
7	A	2009	LPE	C31-O33-P-O32
7	A	2010	LPE	C1-C2-C3-O3
7	A	2010	LPE	C3-O3-P-O31

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Mol	Chain	Res	Type	Atoms
7	A	2010	LPE	C3-O3-P-O32
7	A	2010	LPE	C3-O3-P-O33
7	A	2010	LPE	C31-O33-P-O3
7	A	2010	LPE	C31-O33-P-O32
7	A	2010	LPE	O33-C31-C32-N
7	A	2011	LPE	C2-C3-O3-P
7	A	2011	LPE	C3-O3-P-O32
7	A	2011	LPE	C31-O33-P-O31
7	A	2014	LPE	C31-O33-P-O31
7	A	2014	LPE	C31-O33-P-O32
7	A	2015	LPE	O2H-C2-C3-O3
7	A	2015	LPE	C3-O3-P-O32
7	A	2015	LPE	C31-O33-P-O32
7	A	2022	LPE	C3-O3-P-O32
7	A	2022	LPE	C31-O33-P-O32
7	A	2023	LPE	O33-C31-C32-N
7	A	2025	LPE	O1-C1-C2-O2H
7	A	2025	LPE	O1-C1-C2-C3
7	A	2025	LPE	C3-O3-P-O31
7	A	2025	LPE	C3-O3-P-O33
7	A	2025	LPE	C32-C31-O33-P
7	A	2025	LPE	O33-C31-C32-N
8	A	2029	P5S	O-C-CA-N
8	A	2029	P5S	O47-C38-O37-C2
5	A	2027	CLR	C16-C17-C20-C21
5	A	2027	CLR	C13-C17-C20-C22
4	A	2004	95T	C15-C16-O03-C24
4	A	2004	95T	C18-C16-O03-C24
6	A	2007	PCW	O31-C31-O2-C2
8	A	2029	P5S	C39-C38-O37-C2
3	A	2002	NAG	O5-C5-C6-O6
6	A	2006	PCW	C12-C11-O3-C3
6	A	2026	PCW	O11-C11-O3-C3
4	A	2004	95T	O05-C13-N06-C08
7	A	2010	LPE	O2H-C2-C3-O3
6	A	2026	PCW	C12-C11-O3-C3
6	A	2007	PCW	C32-C31-O2-C2
3	A	2002	NAG	C4-C5-C6-O6
5	A	2017	CLR	C17-C20-C22-C23
6	A	2006	PCW	O11-C11-O3-C3
8	A	2029	P5S	OXT-C-CA-N
7	A	2015	LPE	C1-C2-C3-O3

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Mol	Chain	Res	Type	Atoms
6	A	2016	PCW	C12-C11-O3-C3
5	A	2017	CLR	C21-C20-C22-C23
6	A	2016	PCW	O11-C11-O3-C3
3	A	2003	NAG	O5-C5-C6-O6
5	A	2017	CLR	C20-C22-C23-C24
6	A	2006	PCW	C4-C5-N-C7
6	A	2026	PCW	C4-C5-N-C8
3	A	2003	NAG	C4-C5-C6-O6
4	A	2004	95T	C14-C17-O04-C25
7	A	2012	LPE	O2H-C2-C3-O3
3	A	2001	NAG	C1-C2-N2-C7
4	A	2004	95T	C18-C17-O04-C25
5	A	2005	CLR	C20-C22-C23-C24
5	A	2005	CLR	C22-C23-C24-C25
6	A	2007	PCW	C1-O3P-P-O4P
6	A	2018	PCW	C1-O3P-P-O4P
6	A	2019	PCW	C4-O4P-P-O3P
6	A	2026	PCW	C1-O3P-P-O4P
7	A	2008	LPE	C3-O3-P-O33
7	A	2011	LPE	C3-O3-P-O33
7	A	2014	LPE	C31-O33-P-O3
7	A	2015	LPE	C3-O3-P-O33
7	A	2015	LPE	C31-O33-P-O3
7	A	2022	LPE	C3-O3-P-O33
7	A	2022	LPE	C31-O33-P-O3
7	A	2023	LPE	C31-O33-P-O3
7	A	2024	LPE	C31-O33-P-O3
7	A	2025	LPE	C31-O33-P-O3
6	A	2019	PCW	C31-C32-C33-C34
7	A	2012	LPE	C1-C2-C3-O3
5	A	2027	CLR	C22-C23-C24-C25
7	A	2025	LPE	O1-C11-C12-C13
7	A	2014	LPE	C31-C32-N-C1N
6	A	2026	PCW	C32-C31-O2-C2
6	A	2026	PCW	O31-C31-O2-C2
7	A	2022	LPE	C2-C3-O3-P
6	A	2006	PCW	C35-C36-C37-C38
6	A	2013	PCW	C13-C14-C15-C16
6	A	2019	PCW	C12-C13-C14-C15
6	A	2016	PCW	C15-C16-C17-C18
6	A	2019	PCW	C13-C14-C15-C16
6	A	2013	PCW	C20-C21-C22-C23

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Mol	Chain	Res	Type	Atoms
6	A	2013	PCW	C15-C16-C17-C18
6	A	2019	PCW	C4-C5-N-C8
6	A	2026	PCW	C4-C5-N-C6
7	A	2014	LPE	C31-C32-N-C2N
7	A	2014	LPE	C31-C32-N-C3N
6	A	2007	PCW	C12-C13-C14-C15
6	A	2016	PCW	C31-C32-C33-C34
6	A	2006	PCW	C22-C23-C24-C25
6	A	2013	PCW	C32-C33-C34-C35
6	A	2016	PCW	C33-C34-C35-C36
7	A	2009	LPE	C12-C13-C14-C15
7	A	2012	LPE	O1-C11-C12-C13
6	A	2006	PCW	C4-C5-N-C6
6	A	2006	PCW	C4-C5-N-C8
6	A	2019	PCW	C4-C5-N-C7
6	A	2026	PCW	C31-C32-C33-C34
6	A	2013	PCW	C14-C15-C16-C17
6	A	2006	PCW	C15-C16-C17-C18
6	A	2013	PCW	C16-C17-C18-C19
6	A	2019	PCW	C16-C17-C18-C19
6	A	2013	PCW	C12-C11-O3-C3
5	A	2028	CLR	C23-C24-C25-C27
6	A	2016	PCW	O3P-C1-C2-O2
7	A	2025	LPE	C12-C13-C14-C15
6	A	2006	PCW	C34-C35-C36-C37
6	A	2026	PCW	C4-C5-N-C7
7	A	2025	LPE	C24-C25-C26-C27
6	A	2016	PCW	C34-C35-C36-C37
6	A	2016	PCW	C12-C13-C14-C15
6	A	2019	PCW	C14-C15-C16-C17
5	A	2028	CLR	C23-C24-C25-C26
7	A	2012	LPE	C2-C1-O1-C11
6	A	2026	PCW	C4-O4P-P-O3P
6	A	2016	PCW	C35-C36-C37-C38
6	A	2013	PCW	O11-C11-O3-C3
7	A	2025	LPE	C13-C14-C15-C16
7	A	2025	LPE	C22-C23-C24-C25
6	A	2019	PCW	C33-C34-C35-C36
6	A	2013	PCW	C1-C2-C3-O3
6	A	2016	PCW	C41-C42-C43-C44
6	A	2016	PCW	C44-C45-C46-C47
5	A	2021	CLR	C13-C17-C20-C22

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Mol	Chain	Res	Type	Atoms
6	A	2006	PCW	C40-C41-C42-C43
7	A	2008	LPE	C2-C1-O1-C11
7	A	2014	LPE	C2-C1-O1-C11
7	A	2010	LPE	C13-C14-C15-C16
5	A	2021	CLR	C16-C17-C20-C21
5	A	2021	CLR	C13-C17-C20-C21
7	A	2010	LPE	C12-C13-C14-C15
6	A	2013	PCW	C21-C22-C23-C24
6	A	2013	PCW	C23-C24-C25-C26
6	A	2019	PCW	C35-C36-C37-C38
3	A	2001	NAG	C3-C2-N2-C7
5	A	2017	CLR	C23-C24-C25-C27
6	A	2018	PCW	C33-C34-C35-C36
6	A	2016	PCW	O3P-C1-C2-C3
5	A	2027	CLR	C17-C20-C22-C23
7	A	2025	LPE	C21-C22-C23-C24
6	A	2019	PCW	C1-C2-C3-O3
6	A	2013	PCW	C22-C23-C24-C25
6	A	2013	PCW	C36-C37-C38-C39
6	A	2026	PCW	C35-C36-C37-C38
7	A	2025	LPE	C2-C1-O1-C11
6	A	2018	PCW	C4-O4P-P-O3P
7	A	2009	LPE	C3-O3-P-O33
8	A	2029	P5S	O37-C2-C3-O16
5	A	2021	CLR	C16-C17-C20-C22
6	A	2013	PCW	O2-C2-C3-O3
6	A	2019	PCW	O2-C2-C3-O3
8	A	2029	P5S	C28-C29-C30-C31
6	A	2018	PCW	C39-C40-C41-C42
8	A	2029	P5S	C1-C2-C3-O16
6	A	2016	PCW	C1-O3P-P-O1P
6	A	2016	PCW	C32-C33-C34-C35
5	A	2017	CLR	C23-C24-C25-C26
7	A	2014	LPE	C12-C11-O1-C1
6	A	2019	PCW	C32-C33-C34-C35
6	A	2007	PCW	C3-C2-O2-C31
4	A	2004	95T	C15-C08-N06-C13
7	A	2012	LPE	C12-C13-C14-C15
6	A	2006	PCW	O3P-C1-C2-O2
7	A	2025	LPE	C11-C12-C13-C14
7	A	2025	LPE	C16-C17-C18-C19
7	A	2009	LPE	O1-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
6	A	2006	PCW	C16-C17-C18-C19
8	A	2029	P5S	N-CA-CB-OG
7	A	2010	LPE	C2-C1-O1-C11
6	A	2006	PCW	C4-O4P-P-O3P
7	A	2011	LPE	C31-O33-P-O3
6	A	2018	PCW	C2-C1-O3P-P
6	A	2006	PCW	C4-O4P-P-O1P
6	A	2019	PCW	C4-O4P-P-O2P
6	A	2026	PCW	C1-O3P-P-O1P
6	A	2026	PCW	C4-O4P-P-O1P
7	A	2010	LPE	C31-O33-P-O31
7	A	2023	LPE	C31-O33-P-O31
7	A	2024	LPE	C31-O33-P-O31
7	A	2025	LPE	C31-O33-P-O31
7	A	2008	LPE	O1-C1-C2-C3
6	A	2019	PCW	C5-C4-O4P-P
7	A	2024	LPE	C32-C31-O33-P
6	A	2006	PCW	C32-C33-C34-C35
7	A	2008	LPE	C1-C2-C3-O3
7	A	2023	LPE	C2-C1-O1-C11
4	A	2004	95T	C14-C08-N06-C13
6	A	2026	PCW	C33-C34-C35-C36
6	A	2018	PCW	O4P-C4-C5-N
6	A	2019	PCW	O4P-C4-C5-N
7	A	2015	LPE	O33-C31-C32-N
7	A	2020	LPE	O33-C31-C32-N
7	A	2022	LPE	O33-C31-C32-N
7	A	2024	LPE	O33-C31-C32-N
7	A	2020	LPE	C12-C11-O1-C1
6	A	2006	PCW	C21-C22-C23-C24
6	A	2013	PCW	C33-C34-C35-C36
7	A	2011	LPE	C12-C11-O1-C1
7	A	2022	LPE	O1-C1-C2-C3
6	A	2013	PCW	O31-C31-O2-C2
7	A	2008	LPE	O2H-C2-C3-O3
6	A	2013	PCW	C32-C31-O2-C2
7	A	2011	LPE	C11-C12-C13-C14
6	A	2006	PCW	O2-C2-C3-O3
6	A	2007	PCW	C4-O4P-P-O3P
7	A	2014	LPE	C3-O3-P-O33
7	A	2024	LPE	C3-O3-P-O33
6	A	2018	PCW	C31-C32-C33-C34

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Mol	Chain	Res	Type	Atoms
6	A	2006	PCW	C19-C20-C21-C22
6	A	2019	PCW	C36-C37-C38-C39
6	A	2019	PCW	C2-C1-O3P-P
6	A	2016	PCW	C40-C41-C42-C43
8	A	2029	P5S	C45-C46-C48-C49
7	A	2025	LPE	C25-C26-C27-C28
7	A	2012	LPE	C12-C11-O1-C1
7	A	2022	LPE	C11-C12-C13-C14
7	A	2010	LPE	C11-C12-C13-C14
6	A	2007	PCW	C31-C32-C33-C34
6	A	2007	PCW	C39-C40-C41-C42
6	A	2006	PCW	O3P-C1-C2-C3
7	A	2011	LPE	O1-C1-C2-O2H
6	A	2006	PCW	C24-C25-C26-C27
6	A	2007	PCW	C4-C5-N-C6
6	A	2019	PCW	C17-C18-C19-C20
7	A	2022	LPE	C12-C13-C14-C15
6	A	2006	PCW	C39-C40-C41-C42
7	A	2008	LPE	C31-C32-N-C3N
6	A	2007	PCW	O2-C2-C3-O3
7	A	2008	LPE	O1-C1-C2-O2H
5	A	2005	CLR	C13-C17-C20-C21
6	A	2013	PCW	C17-C18-C19-C20
6	A	2013	PCW	C19-C20-C21-C22
7	A	2012	LPE	C2-C3-O3-P
6	A	2018	PCW	O3P-C1-C2-O2
8	A	2029	P5S	O37-C38-C39-C40
6	A	2007	PCW	C4-C5-N-C8
6	A	2006	PCW	C17-C18-C19-C20
6	A	2016	PCW	O3-C11-C12-C13
7	A	2015	LPE	C31-C32-N-C2N
6	A	2016	PCW	C17-C18-C19-C20
6	A	2013	PCW	O3-C11-C12-C13
6	A	2007	PCW	O3-C11-C12-C13
6	A	2019	PCW	C34-C35-C36-C37
6	A	2018	PCW	C37-C38-C39-C40
6	A	2016	PCW	O11-C11-C12-C13
8	A	2029	P5S	C39-C40-C41-C42
5	A	2027	CLR	C23-C24-C25-C27
6	A	2013	PCW	O2-C31-C32-C33
6	A	2018	PCW	O2-C31-C32-C33
6	A	2013	PCW	C31-C32-C33-C34

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Mol	Chain	Res	Type	Atoms
6	A	2007	PCW	C4-O4P-P-O2P
6	A	2018	PCW	C4-O4P-P-O1P
7	A	2008	LPE	C31-C32-N-C1N
7	A	2020	LPE	C31-O33-P-O31
7	A	2022	LPE	C31-C32-N-C2N
7	A	2024	LPE	C3-O3-P-O31
8	A	2029	P5S	CB-OG-P12-O13
6	A	2007	PCW	O11-C11-C12-C13
8	A	2029	P5S	O47-C38-C39-C40
7	A	2014	LPE	C12-C13-C14-C15
6	A	2026	PCW	C5-C4-O4P-P
6	A	2007	PCW	C4-C5-N-C7
7	A	2008	LPE	C31-C32-N-C2N
6	A	2019	PCW	O3-C11-C12-C13
6	A	2019	PCW	O2-C31-C32-C33
6	A	2013	PCW	O11-C11-C12-C13
6	A	2013	PCW	O31-C31-C32-C33
6	A	2018	PCW	O31-C31-C32-C33
6	A	2019	PCW	O11-C11-C12-C13

There are no ring outliers.

27 monomers are involved in 148 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
5	A	2027	CLR	5	0
6	A	2018	PCW	3	0
7	A	2011	LPE	15	0
7	A	2015	LPE	2	0
5	A	2028	CLR	18	0
6	A	2019	PCW	15	0
7	A	2020	LPE	1	0
3	A	2001	NAG	3	0
7	A	2025	LPE	3	0
7	A	2008	LPE	1	0
5	A	2005	CLR	3	0
7	A	2012	LPE	5	0
8	A	2029	P5S	5	0
5	A	2017	CLR	11	0
5	A	2021	CLR	2	0
6	A	2013	PCW	8	0
4	A	2004	95T	11	0
6	A	2016	PCW	12	0

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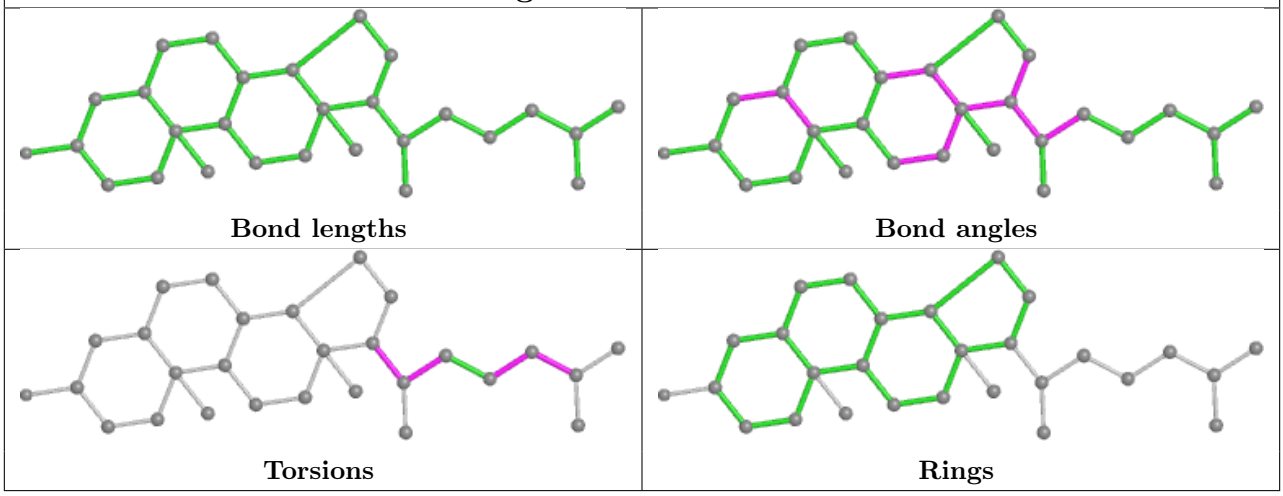
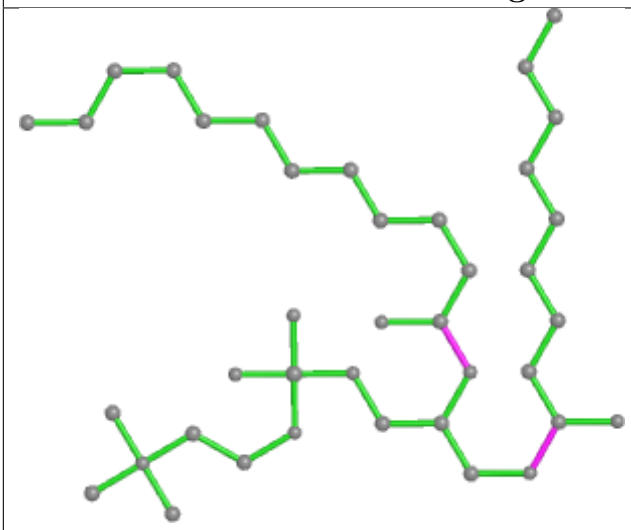
Mol	Chain	Res	Type	Clashes	Symm-Clashes
7	A	2023	LPE	4	0
6	A	2026	PCW	6	0
7	A	2014	LPE	4	0
7	A	2009	LPE	4	0
6	A	2006	PCW	17	0
3	A	2003	NAG	2	0
7	A	2010	LPE	8	0
7	A	2022	LPE	1	0
6	A	2007	PCW	3	0

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

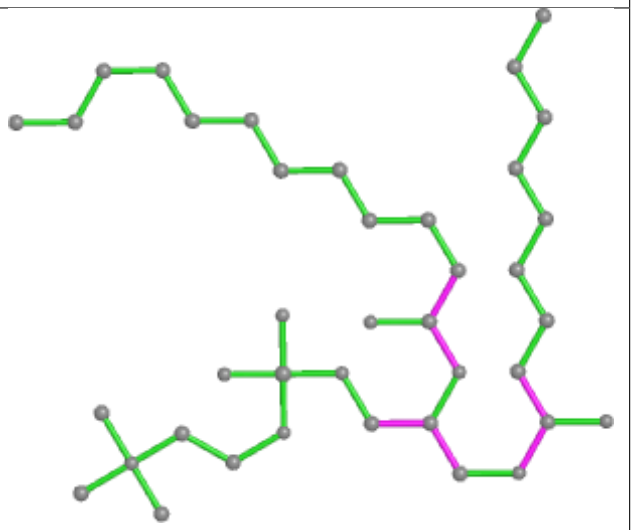
Ligand CLR A 2027



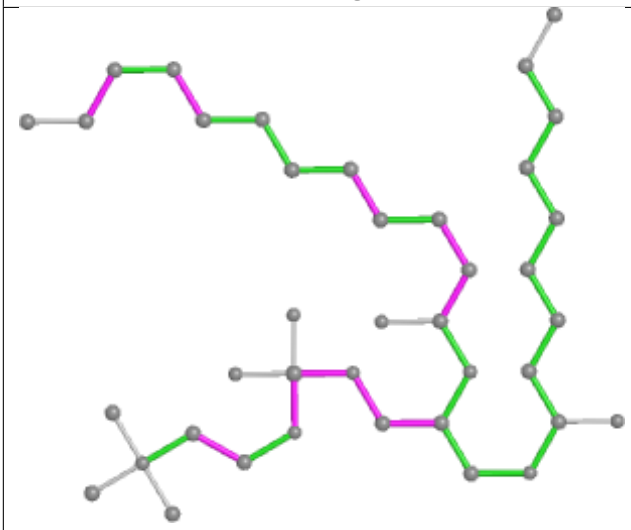
Ligand PCW A 2018



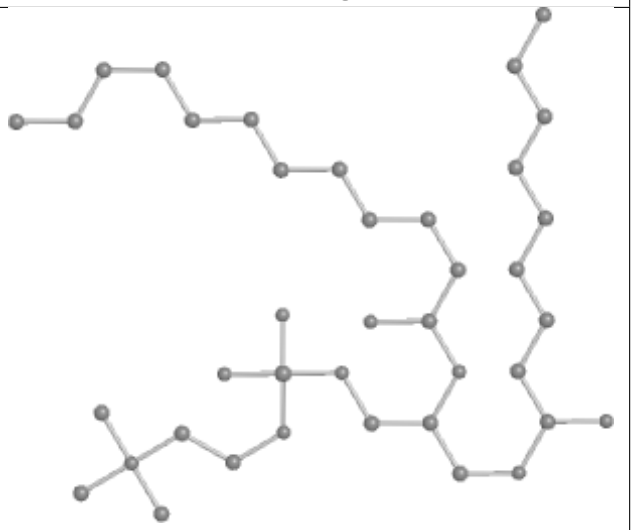
Bond lengths



Bond angles

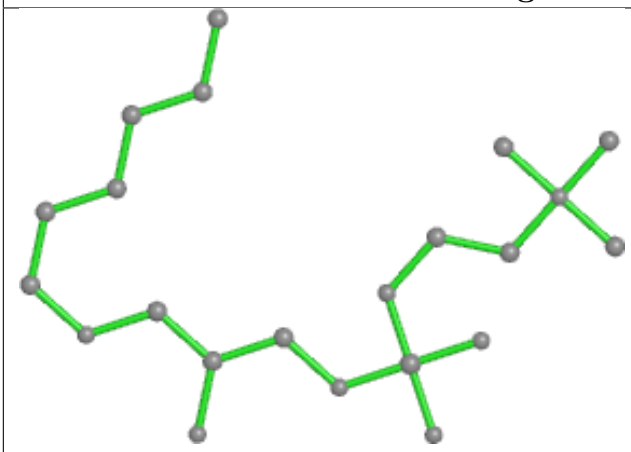


Torsions

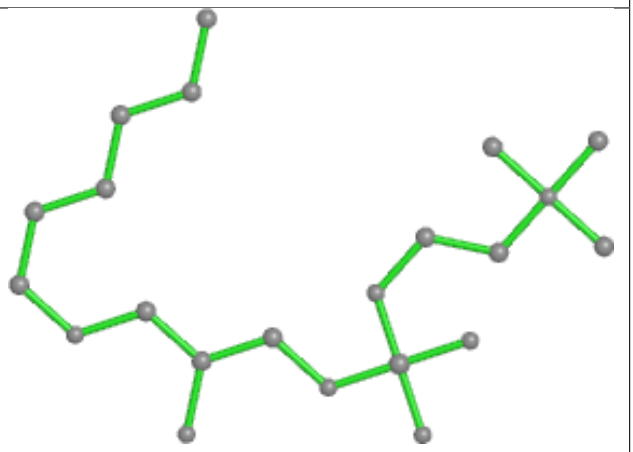


Rings

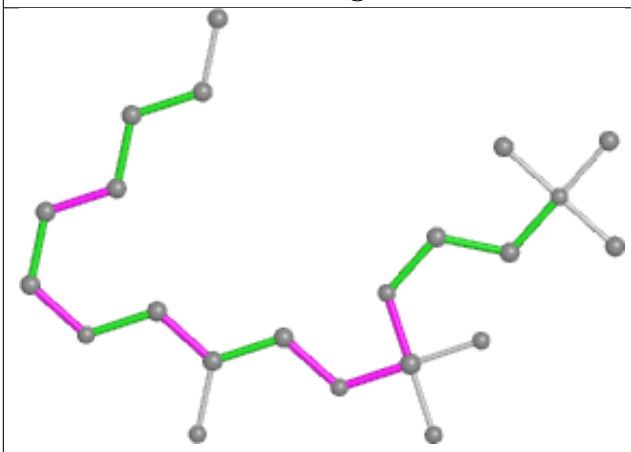
Ligand LPE A 2011



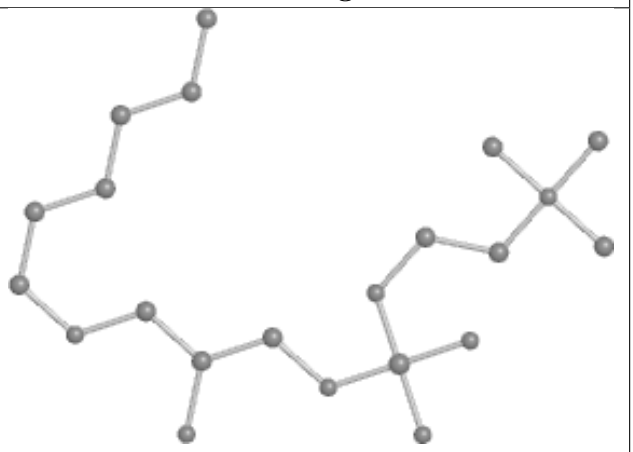
Bond lengths



Bond angles

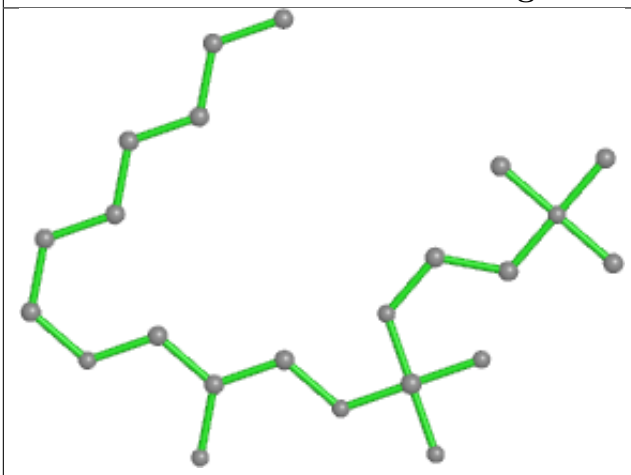


Torsions

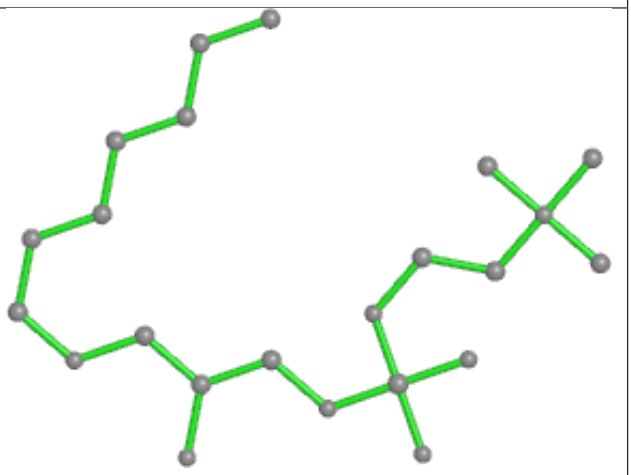


Rings

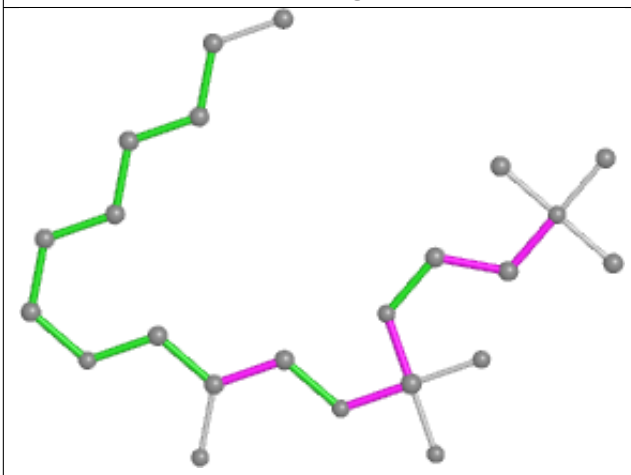
Ligand LPE A 2015



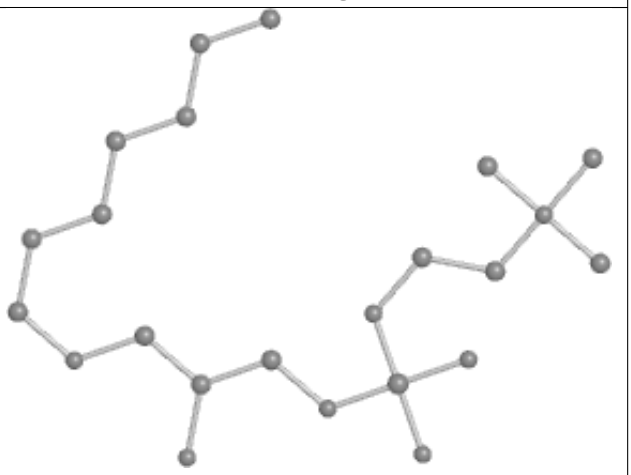
Bond lengths



Bond angles

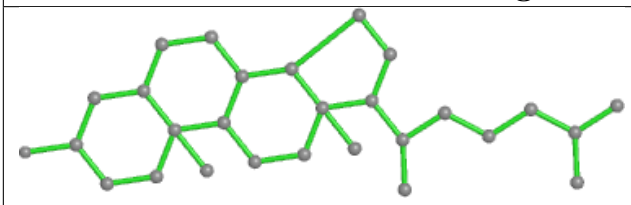


Torsions

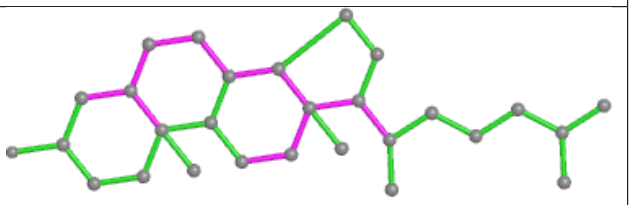


Rings

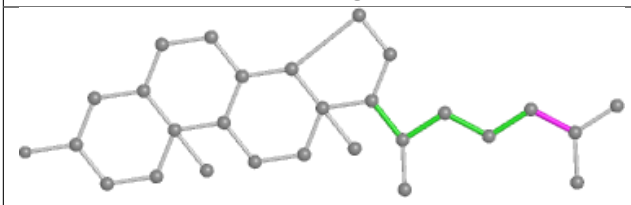
Ligand CLR A 2028



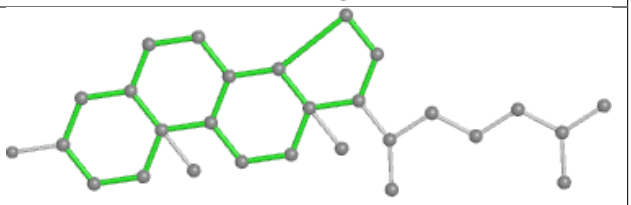
Bond lengths



Bond angles

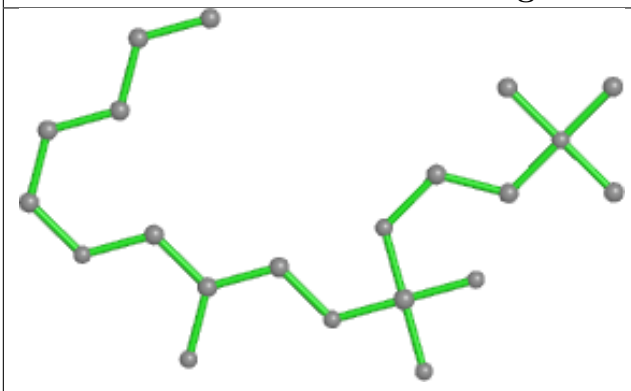


Torsions

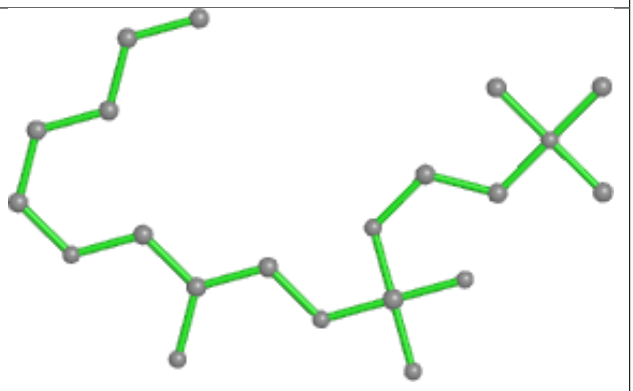


Rings

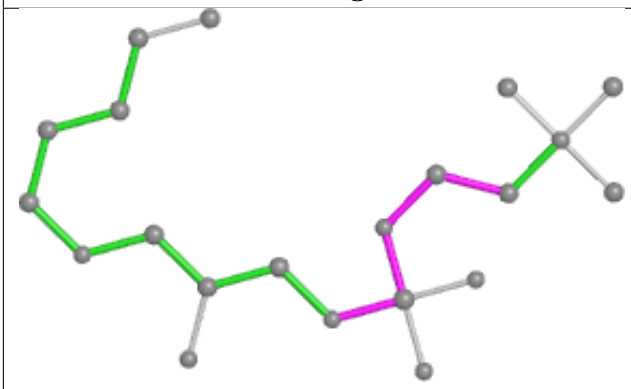
Ligand LPE A 2024



Bond lengths



Bond angles



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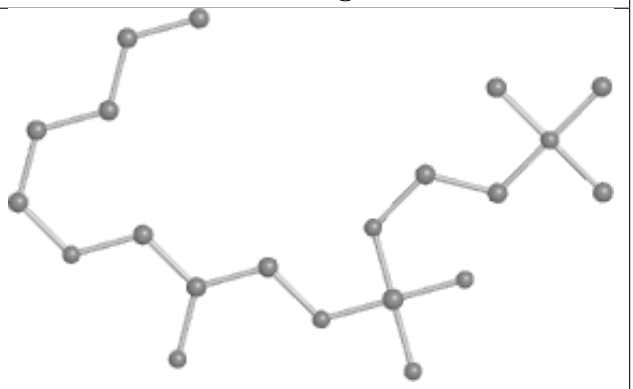
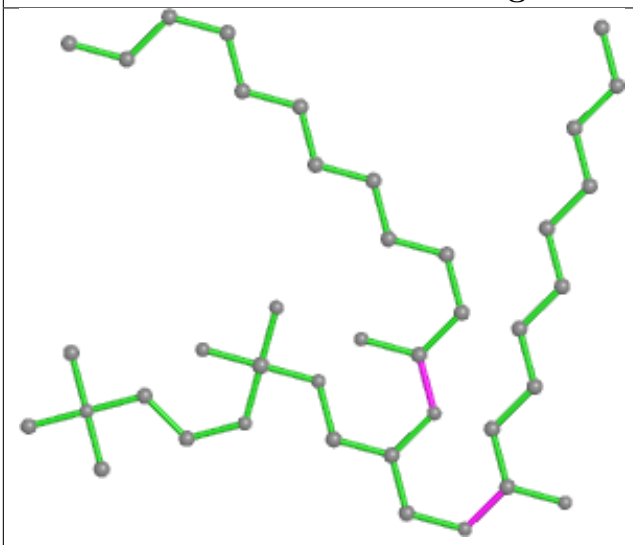
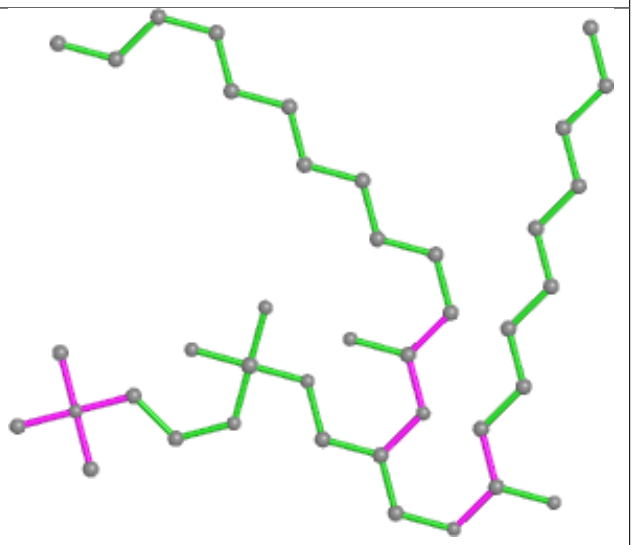


Rings

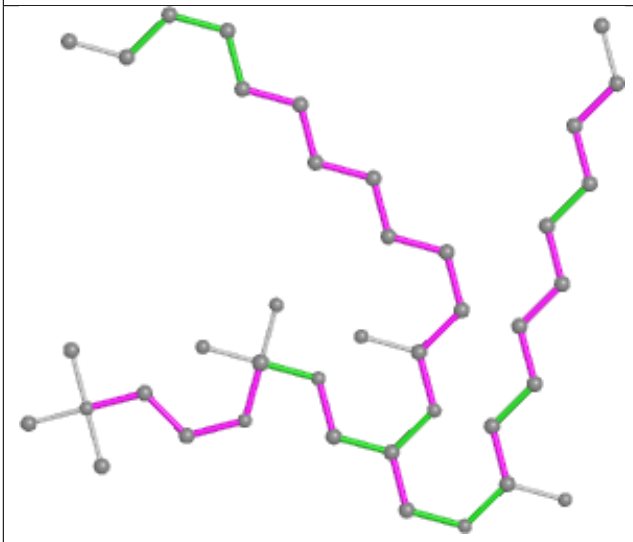
Ligand PCW A 2019



Bond lengths



Bond angles



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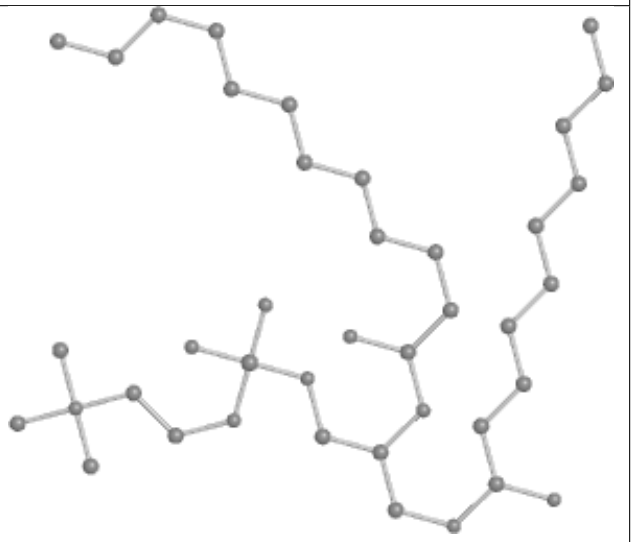
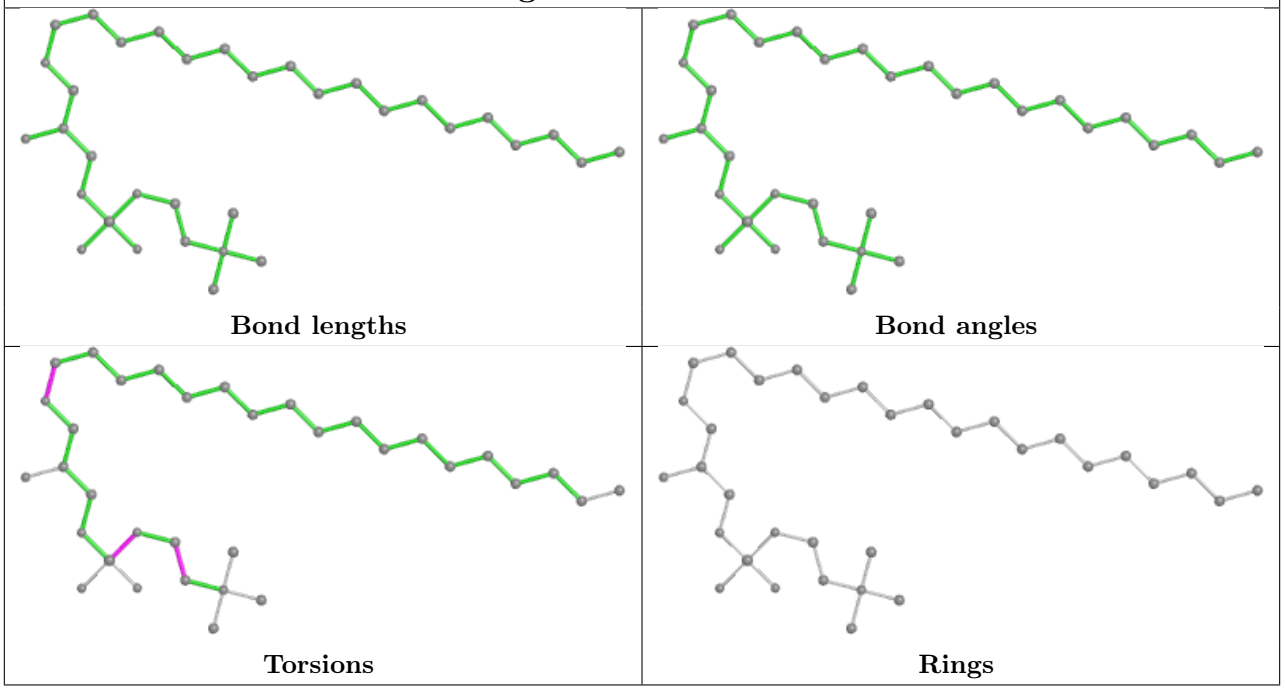
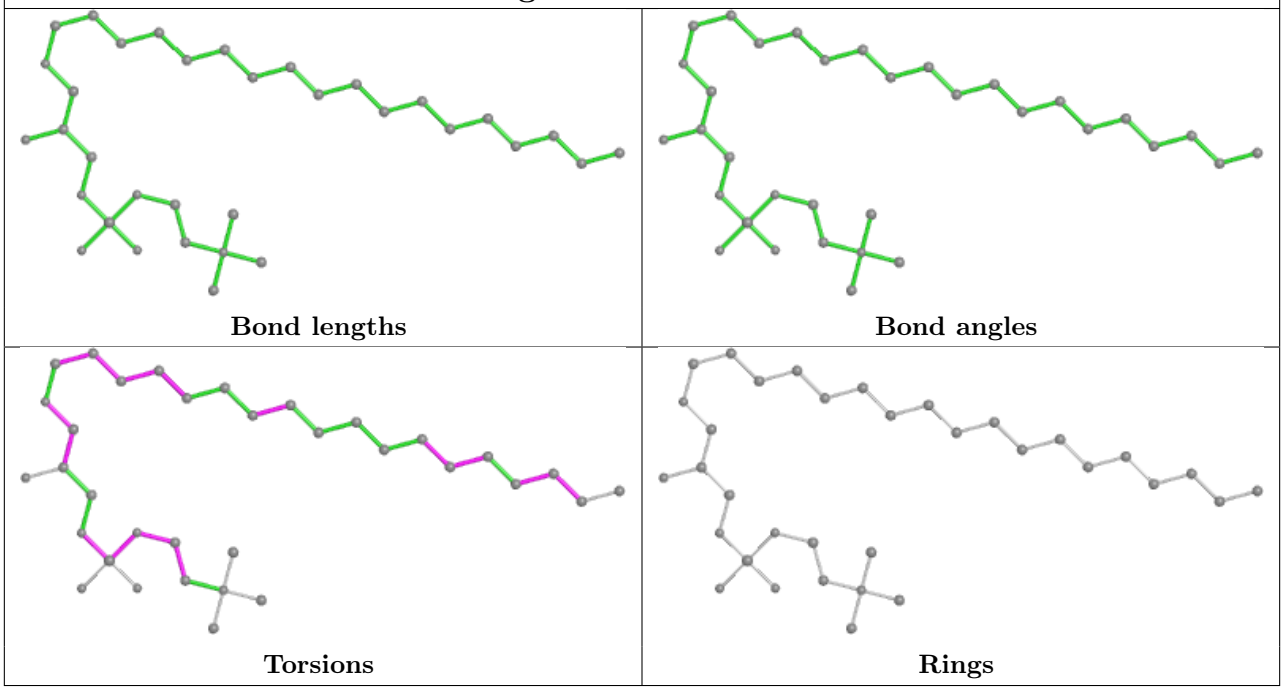


Rings

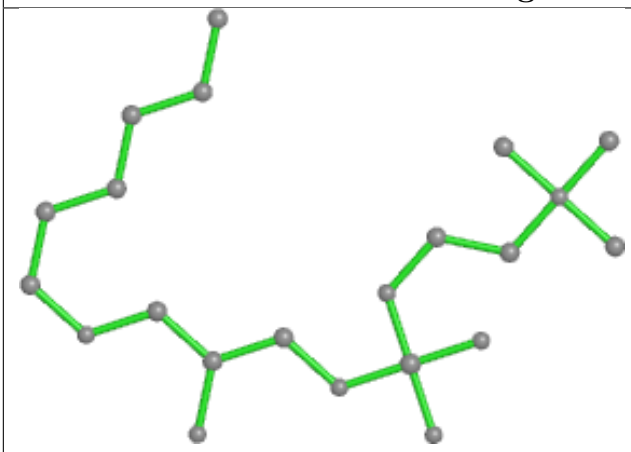
Ligand LPE A 2020



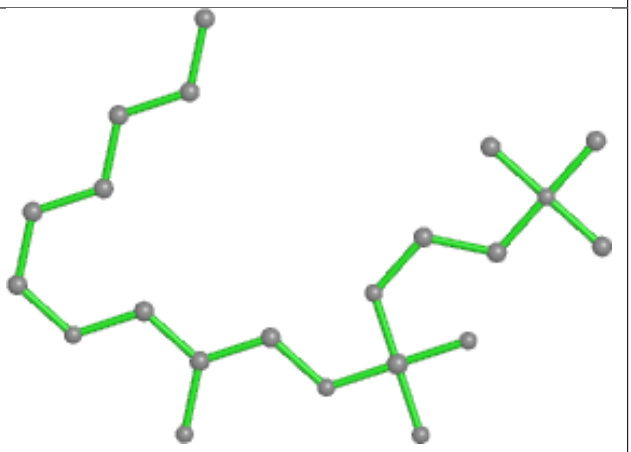
Ligand LPE A 2025



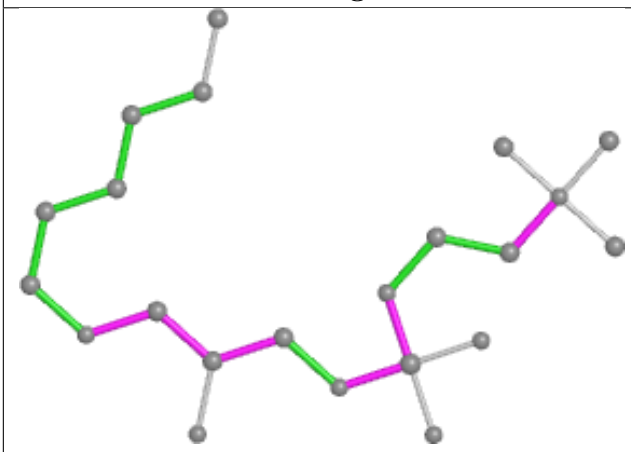
Ligand LPE A 2008



Bond lengths



Bond angles



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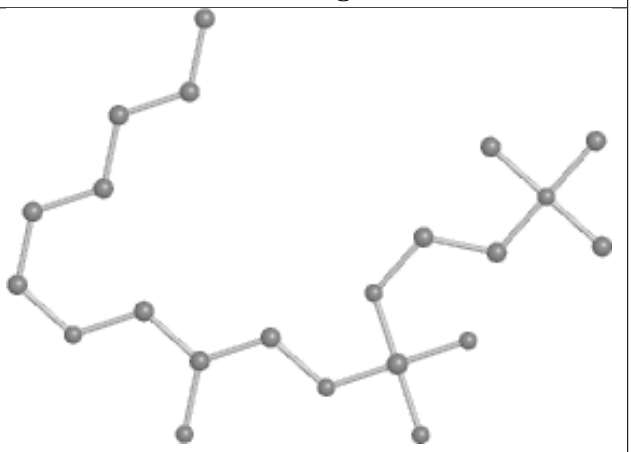
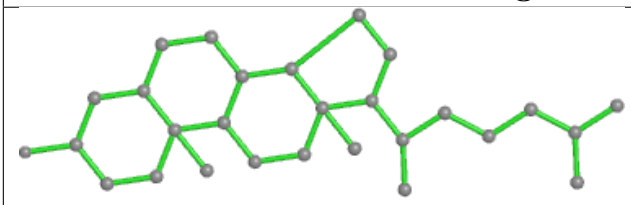
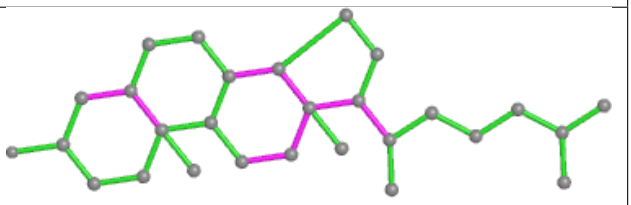


Rings

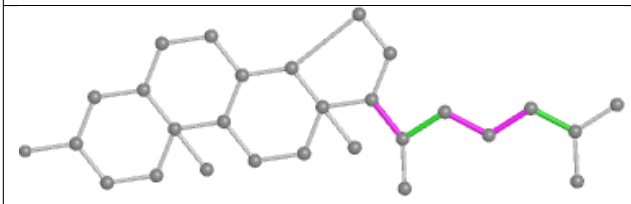
Ligand CLR A 2005



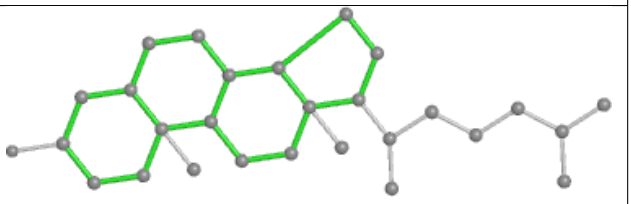
Bond lengths



Bond angles

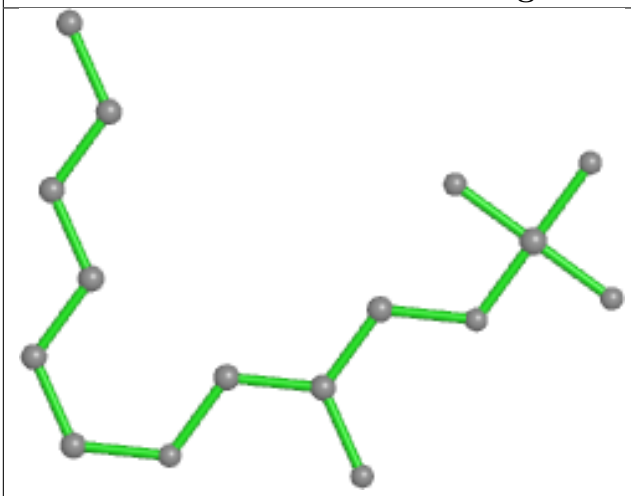


Torsions

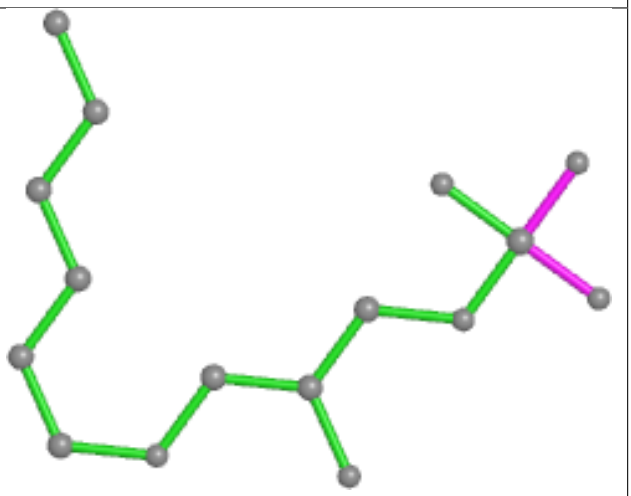


Rings

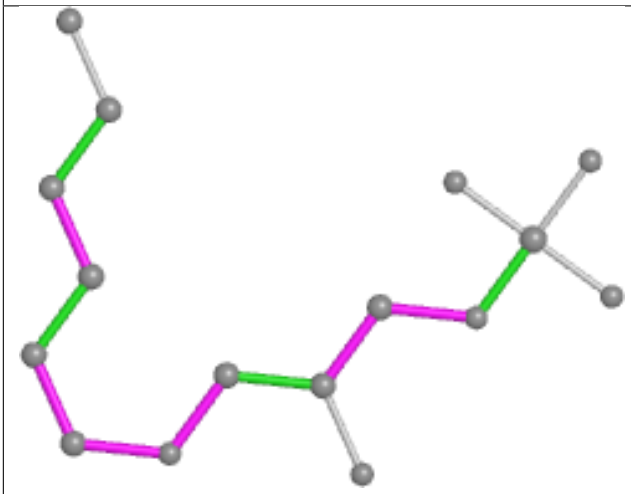
Ligand LPE A 2012



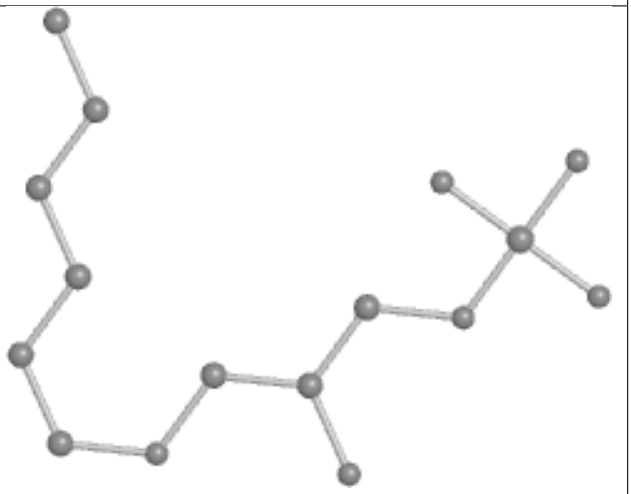
Bond lengths



Bond angles

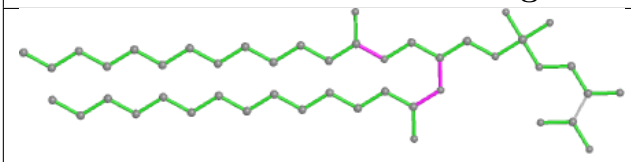


Torsions

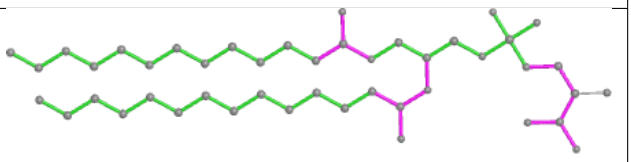


Rings

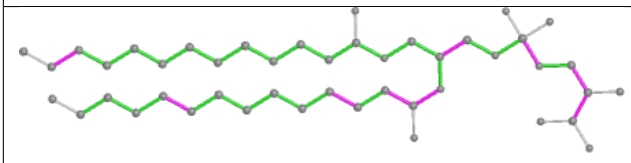
Ligand P5S A 2029



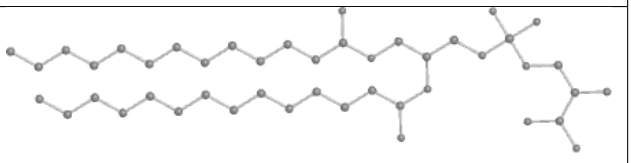
Bond lengths



Bond angles

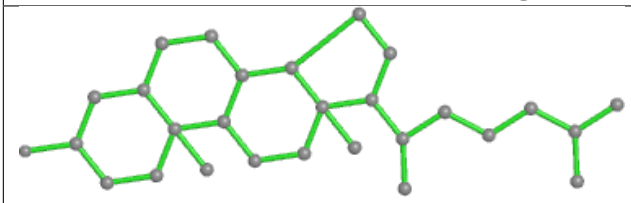


Torsions

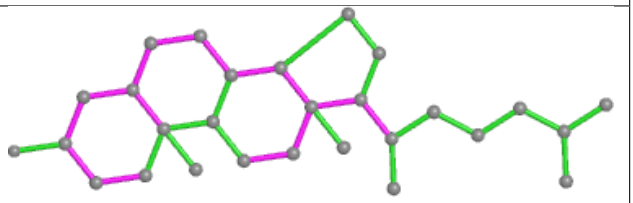


Rings

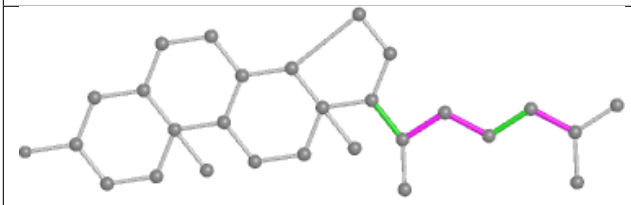
Ligand CLR A 2017



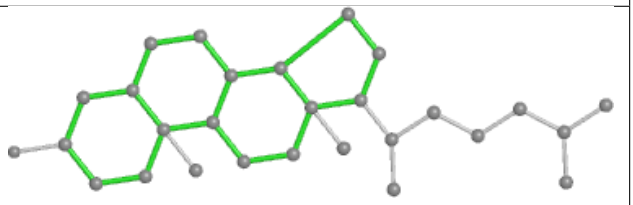
Bond lengths



Bond angles

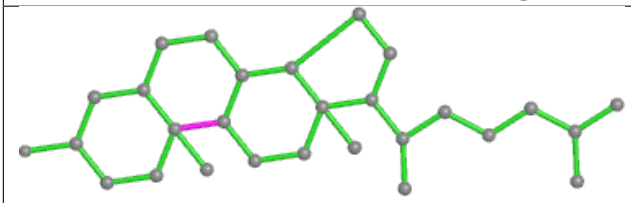


Torsions

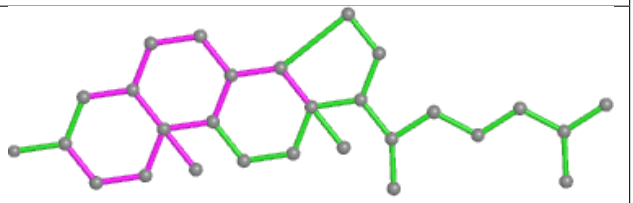


Rings

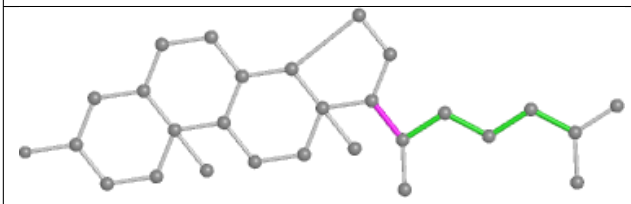
Ligand CLR A 2021



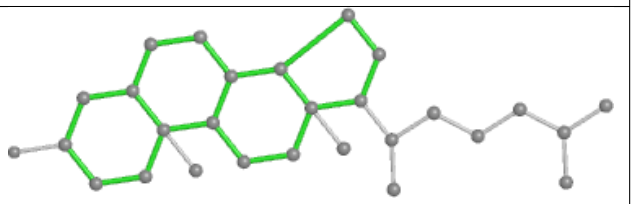
Bond lengths



Bond angles

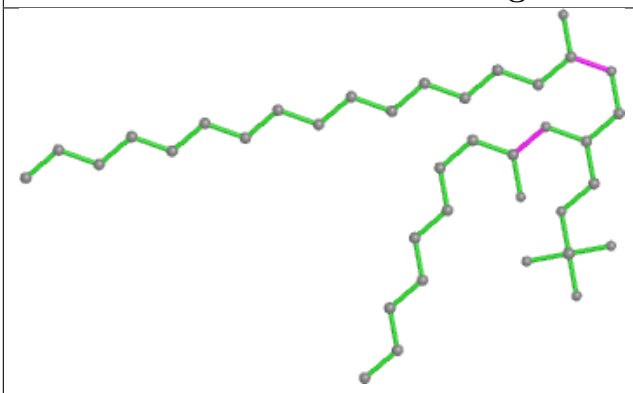


Torsions

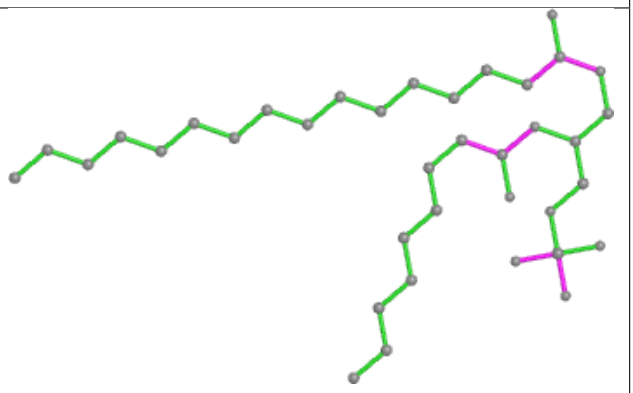


Rings

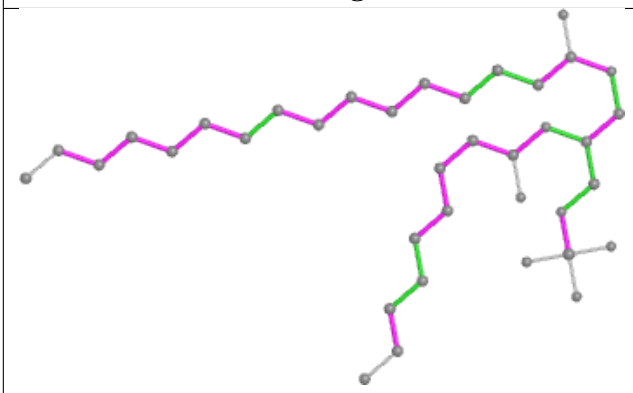
Ligand PCW A 2013



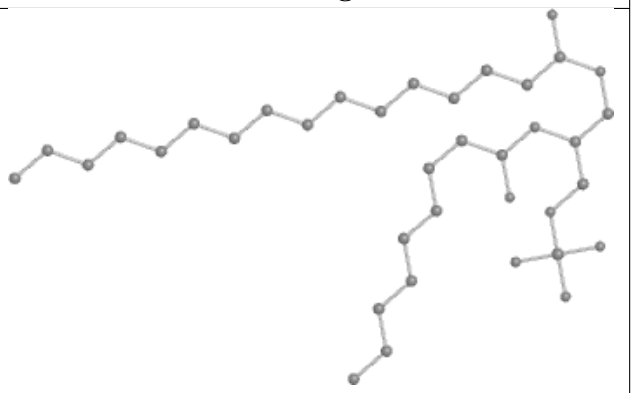
Bond lengths



Bond angles

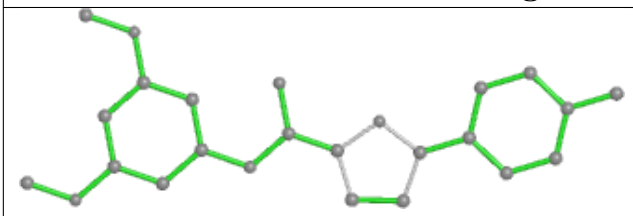


Torsions

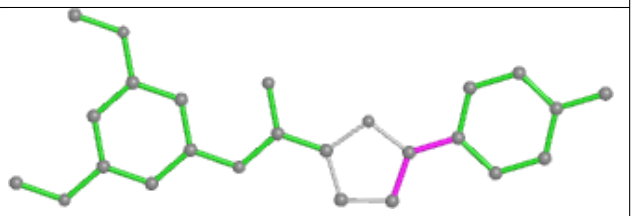


Rings

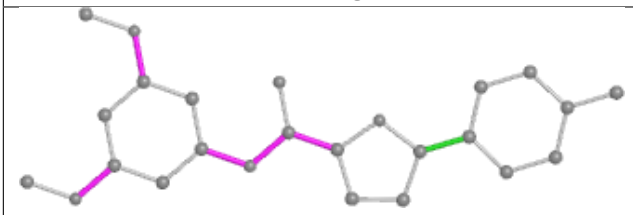
Ligand 95T A 2004



Bond lengths



Bond angles



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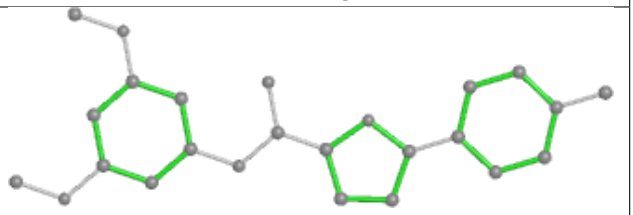
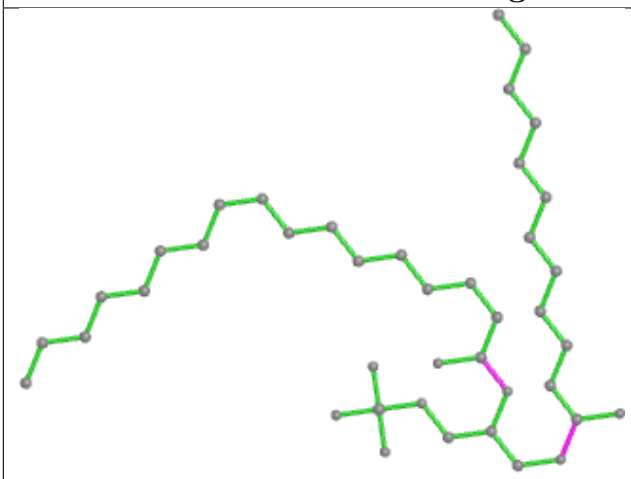
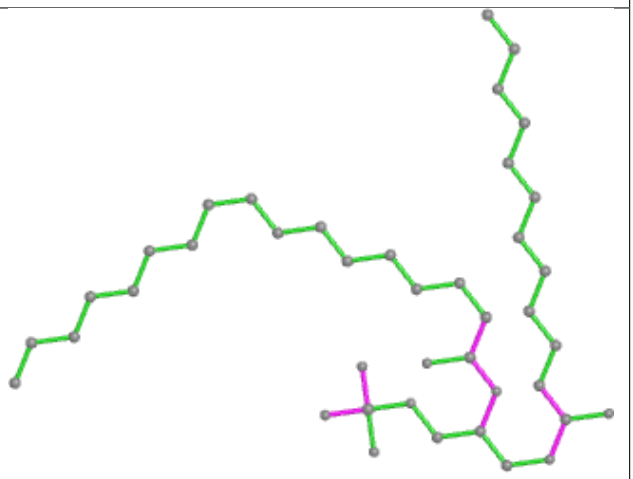


Rings

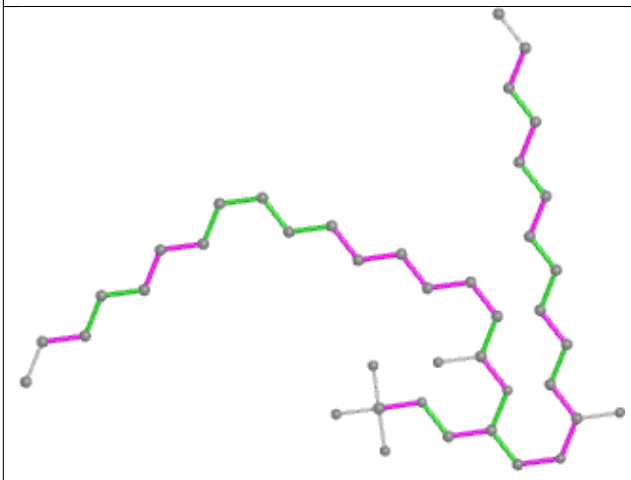
Ligand PCW A 2016



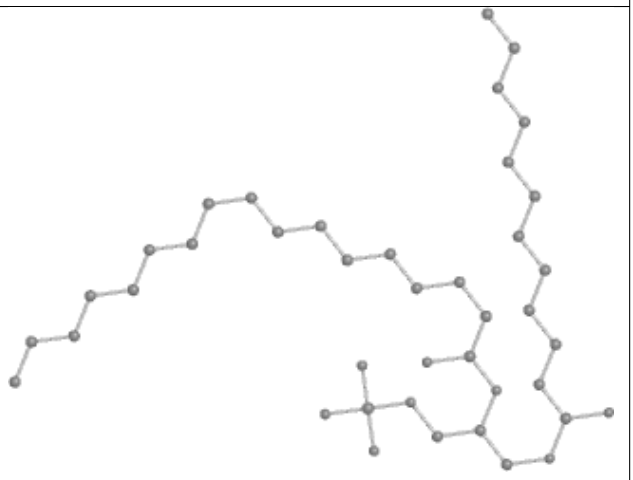
Bond lengths



Bond angles

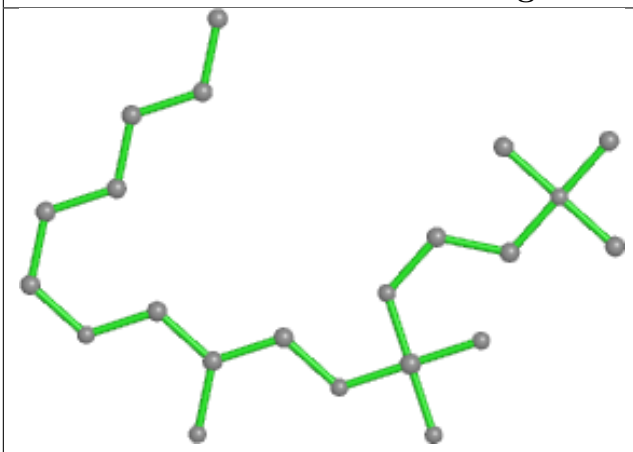


Torsions

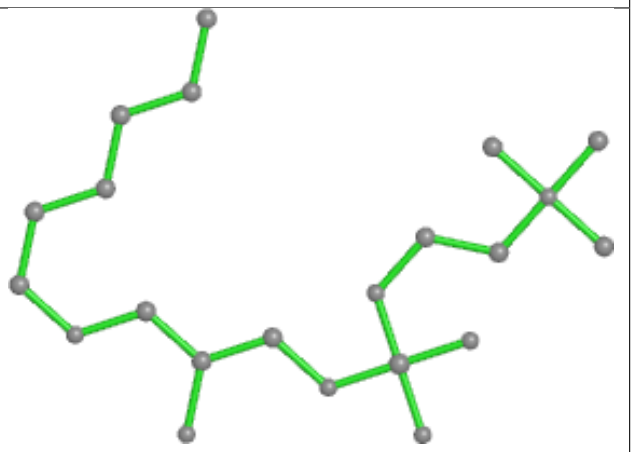


Rings

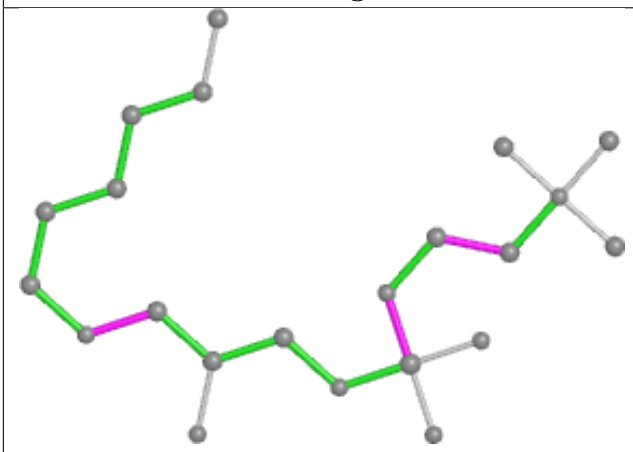
Ligand LPE A 2023



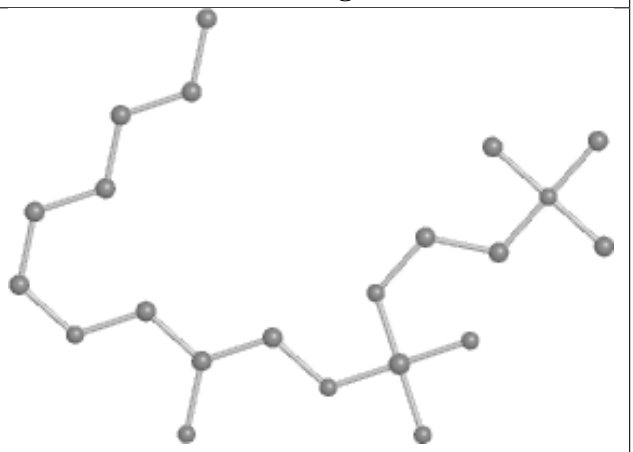
Bond lengths



Bond angles

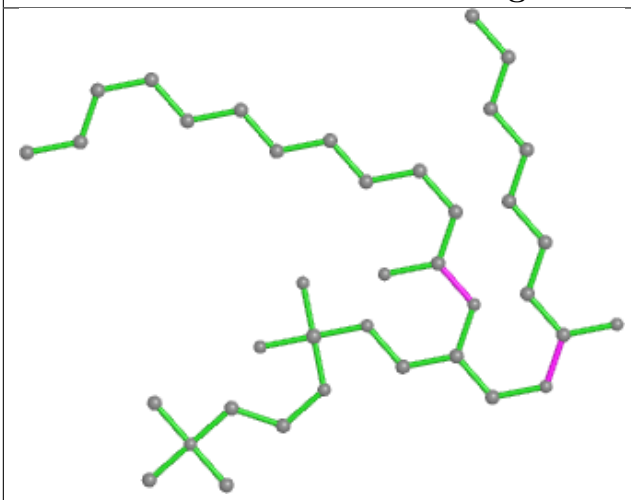


Torsions



Rings

Ligand PCW A 2026



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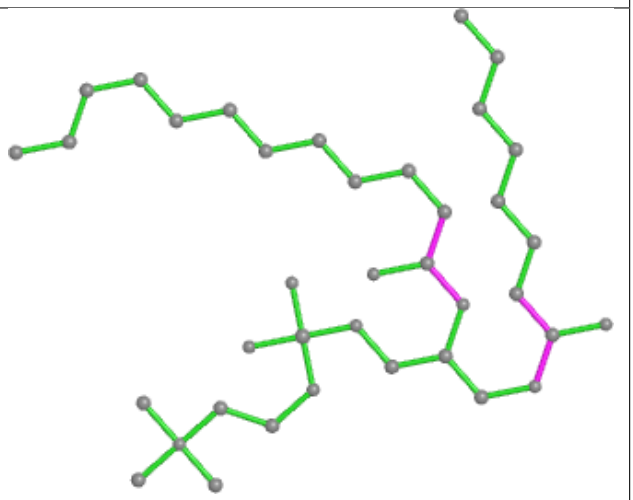
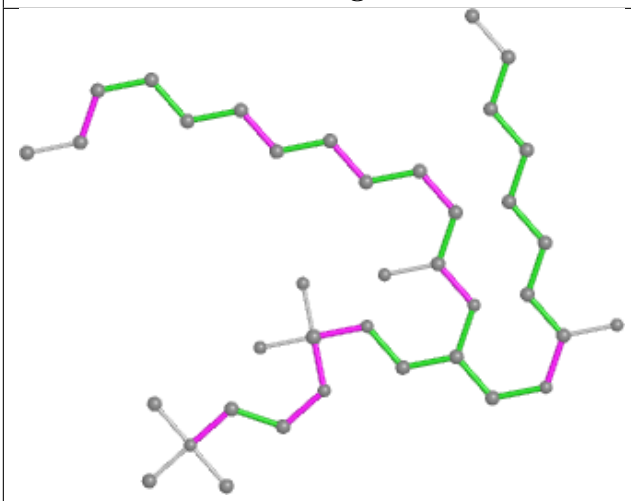
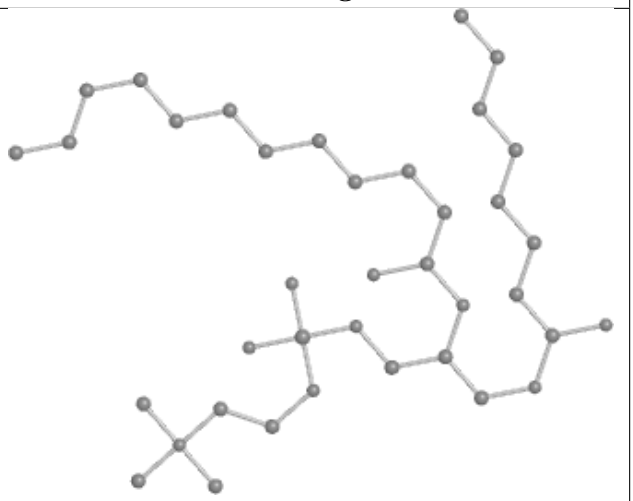


Bond angles

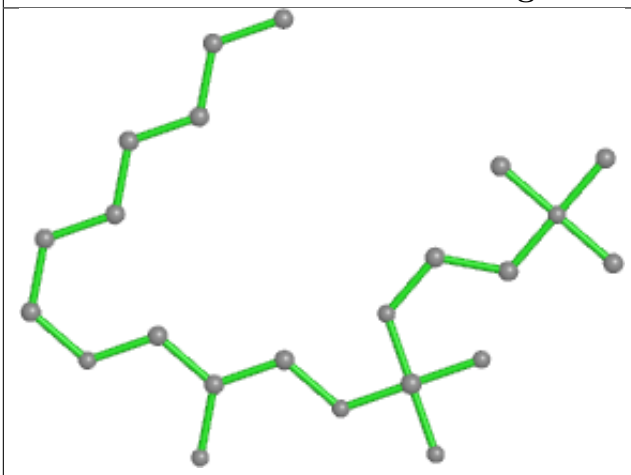


Torsions

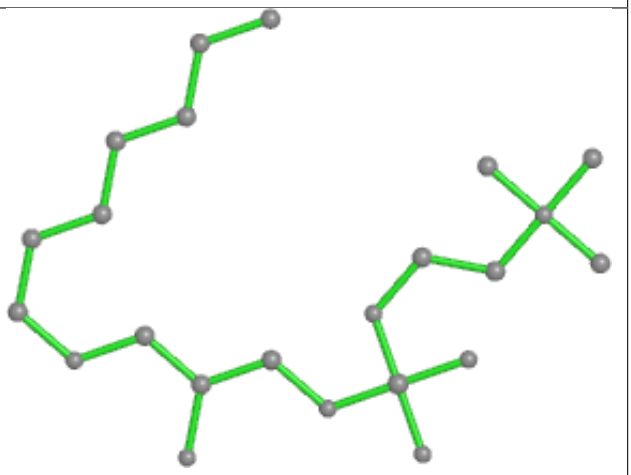


Rings

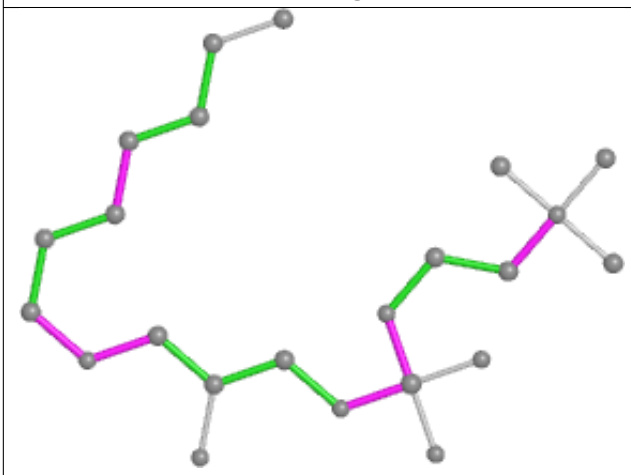
Ligand LPE A 2014



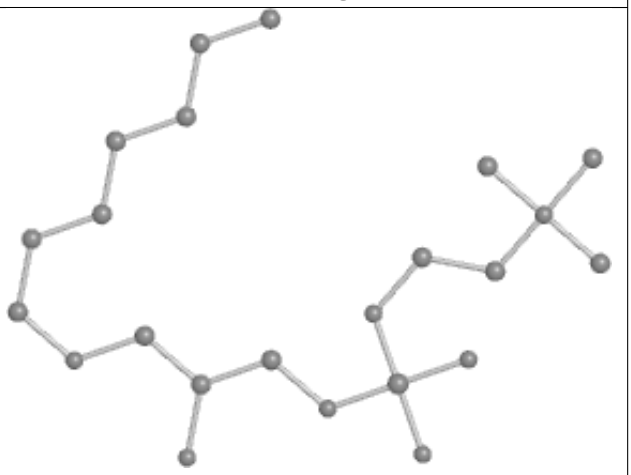
Bond lengths



Bond angles

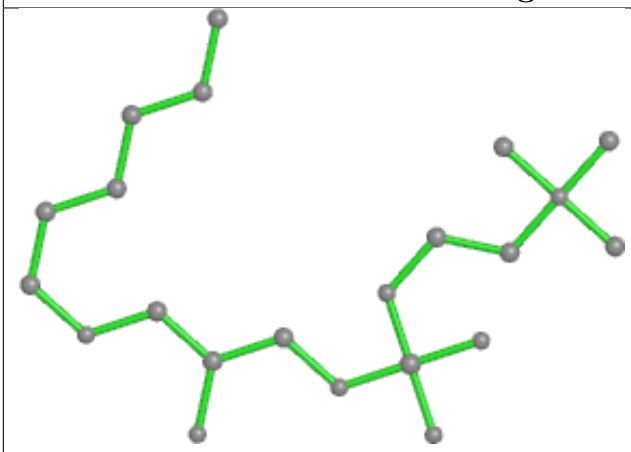


Torsions

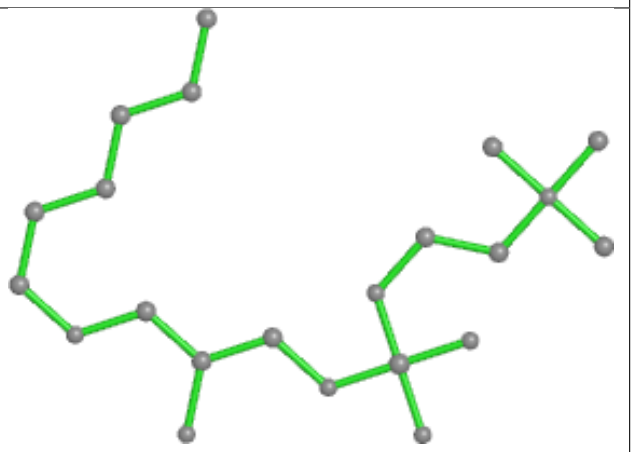


Rings

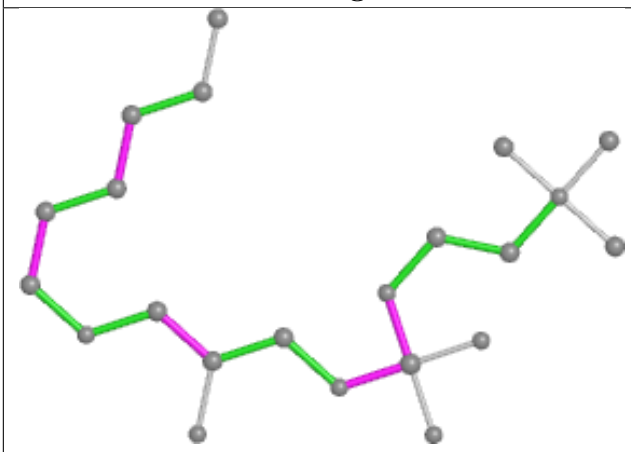
Ligand LPE A 2009



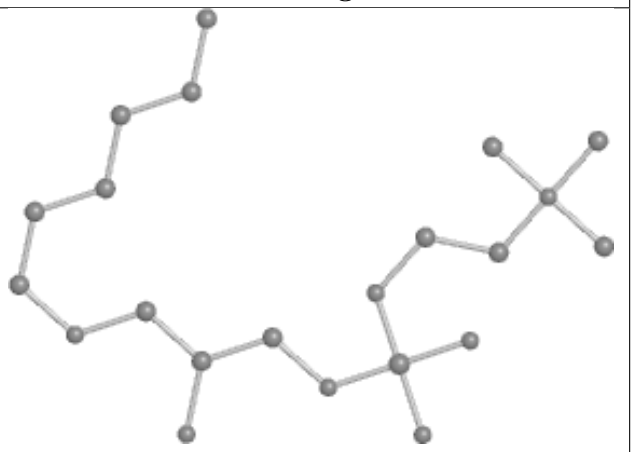
Bond lengths



Bond angles

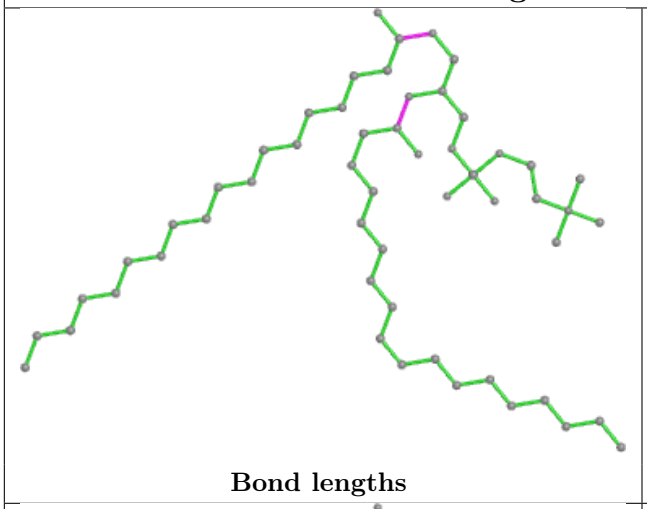


Torsions

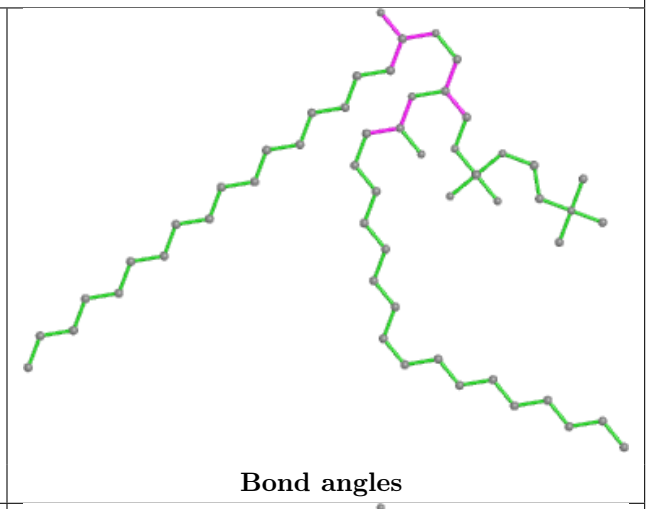


Rings

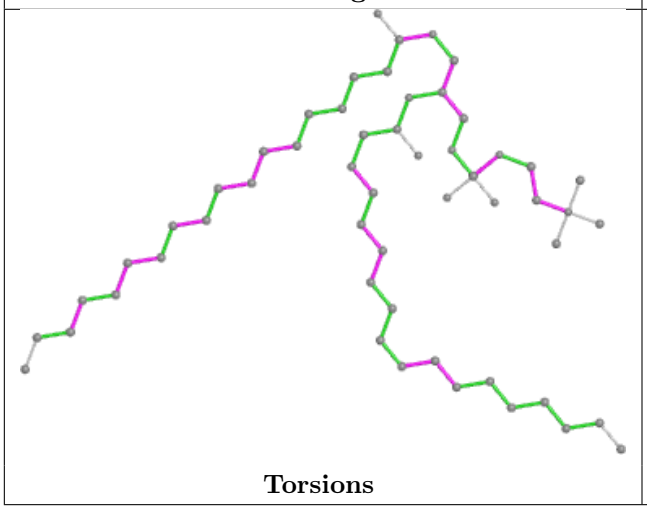
Ligand PCW A 2006



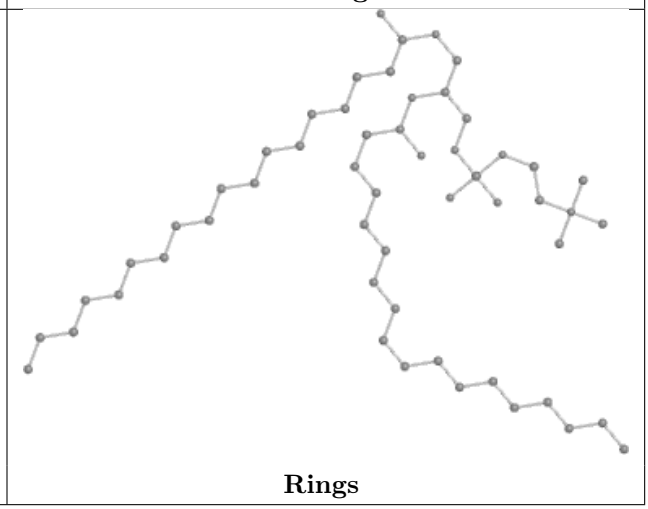
Bond lengths



Bond angles

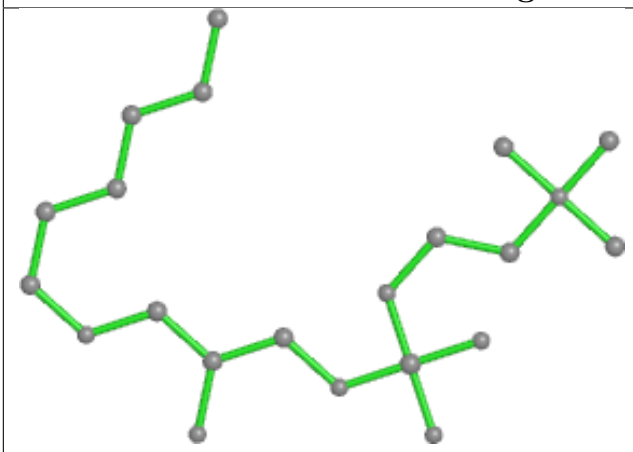


Torsions

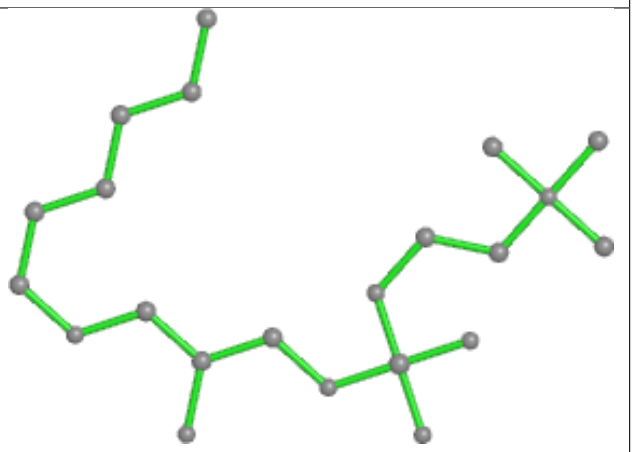


Rings

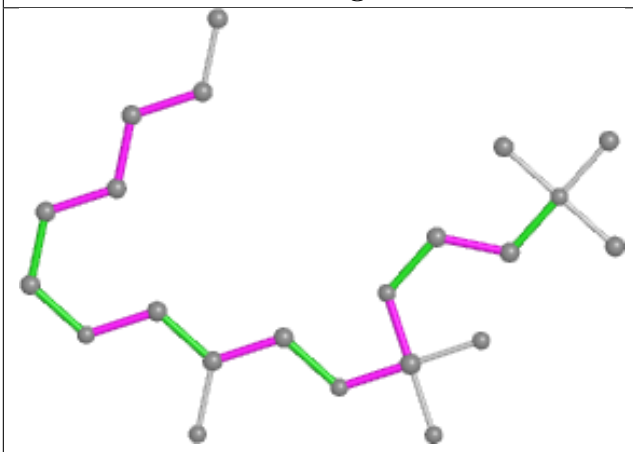
Ligand LPE A 2010



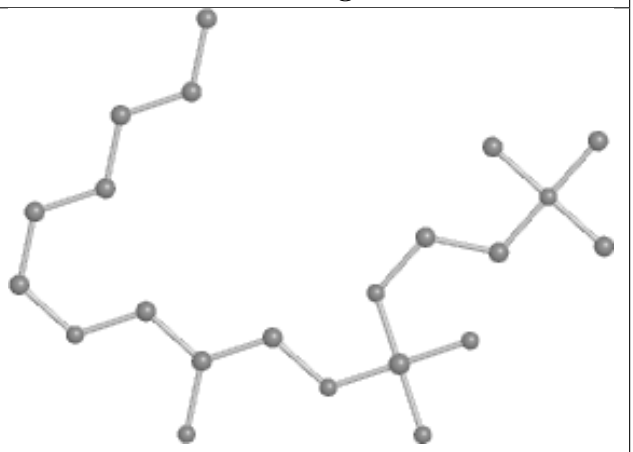
Bond lengths



Bond angles

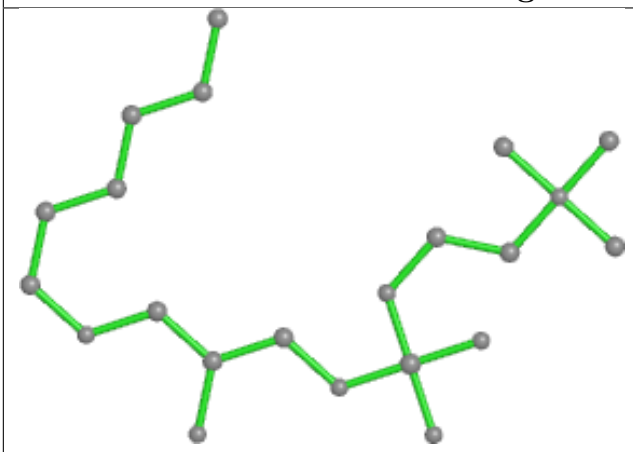


Torsions

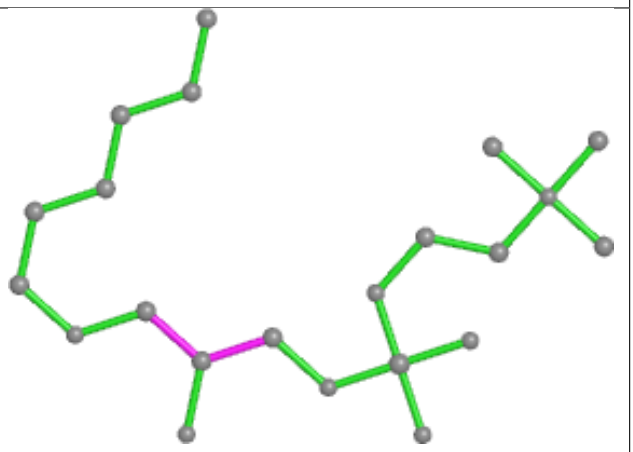


Rings

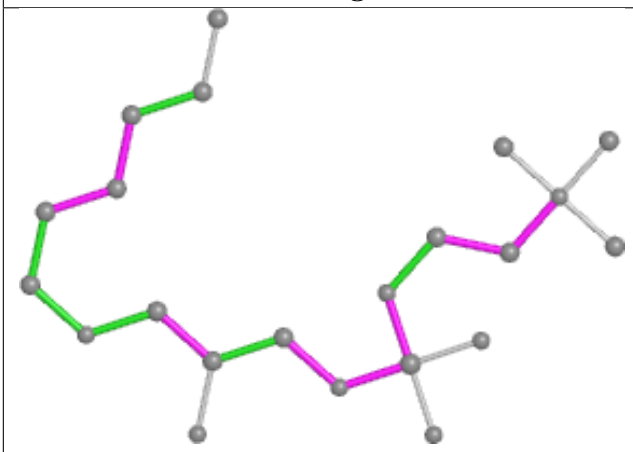
Ligand LPE A 2022



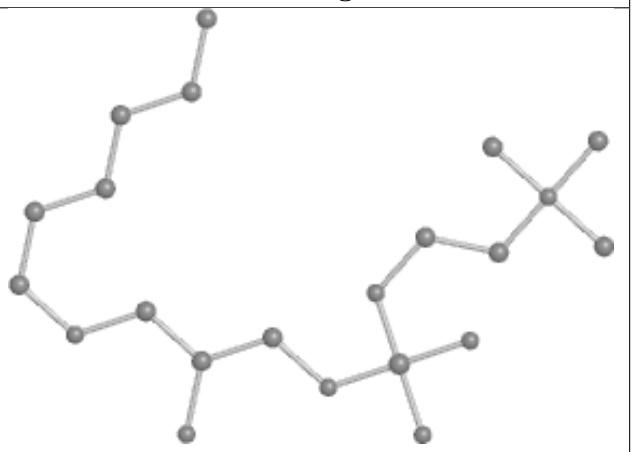
Bond lengths



Bond angles

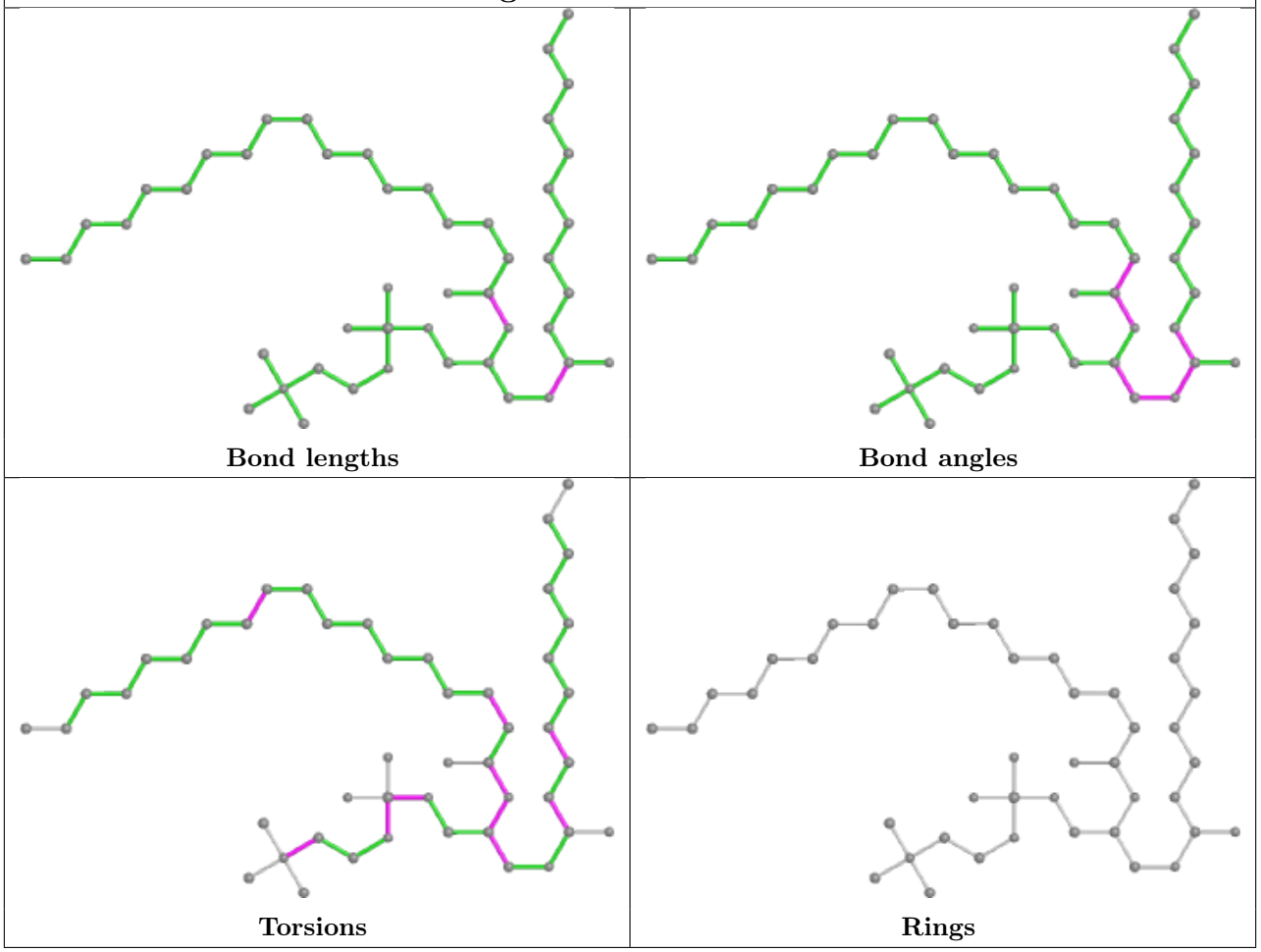


Torsions



Rings

Ligand PCW A 2007



5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

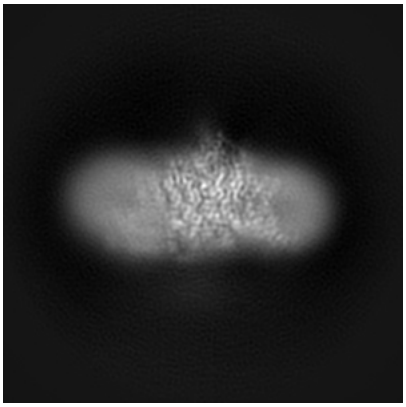
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-32475. These allow visual inspection of the internal detail of the map and identification of artifacts.

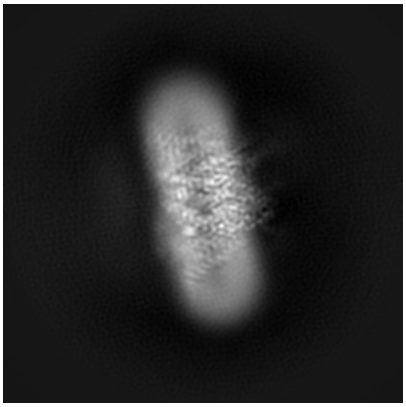
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

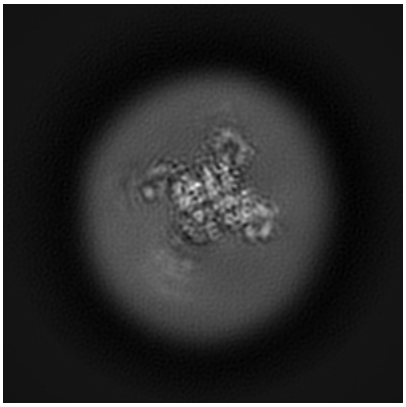
6.1.1 Primary map



X



Y

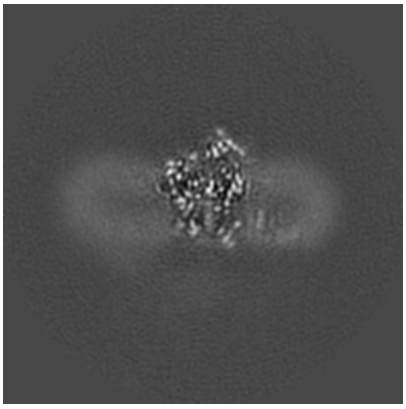


Z

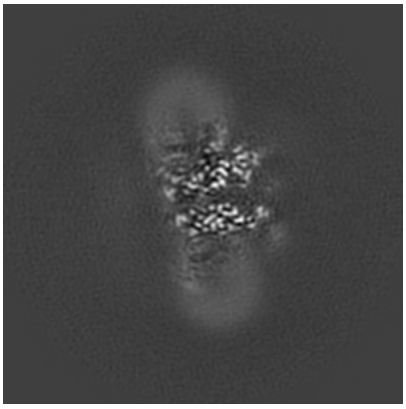
The images above show the map projected in three orthogonal directions.

6.2 Central slices

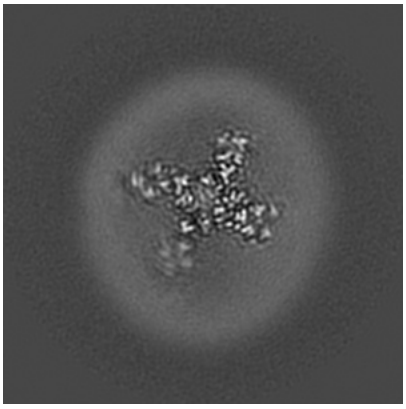
6.2.1 Primary map



X Index: 120



Y Index: 120

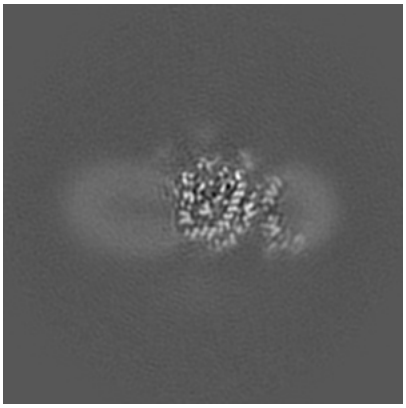


Z Index: 120

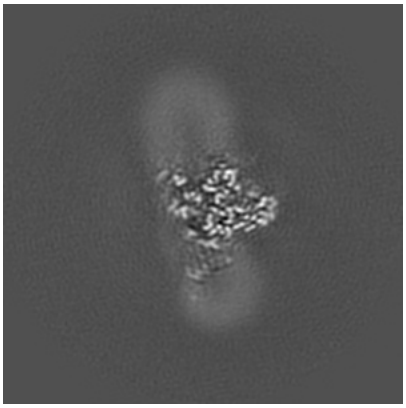
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

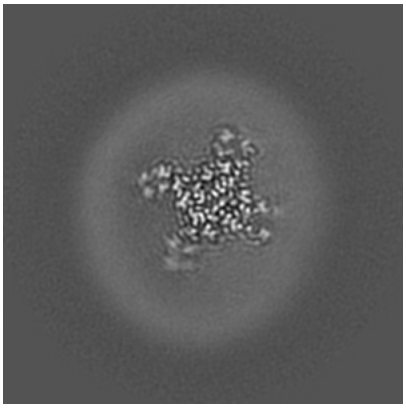
6.3.1 Primary map



X Index: 134



Y Index: 130



Z Index: 126

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

6.4 Orthogonal surface views (i)

6.4.1 Primary map

X

Y

Z

The images above show the 3D surface view of the map at the recommended contour level 0.0217. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

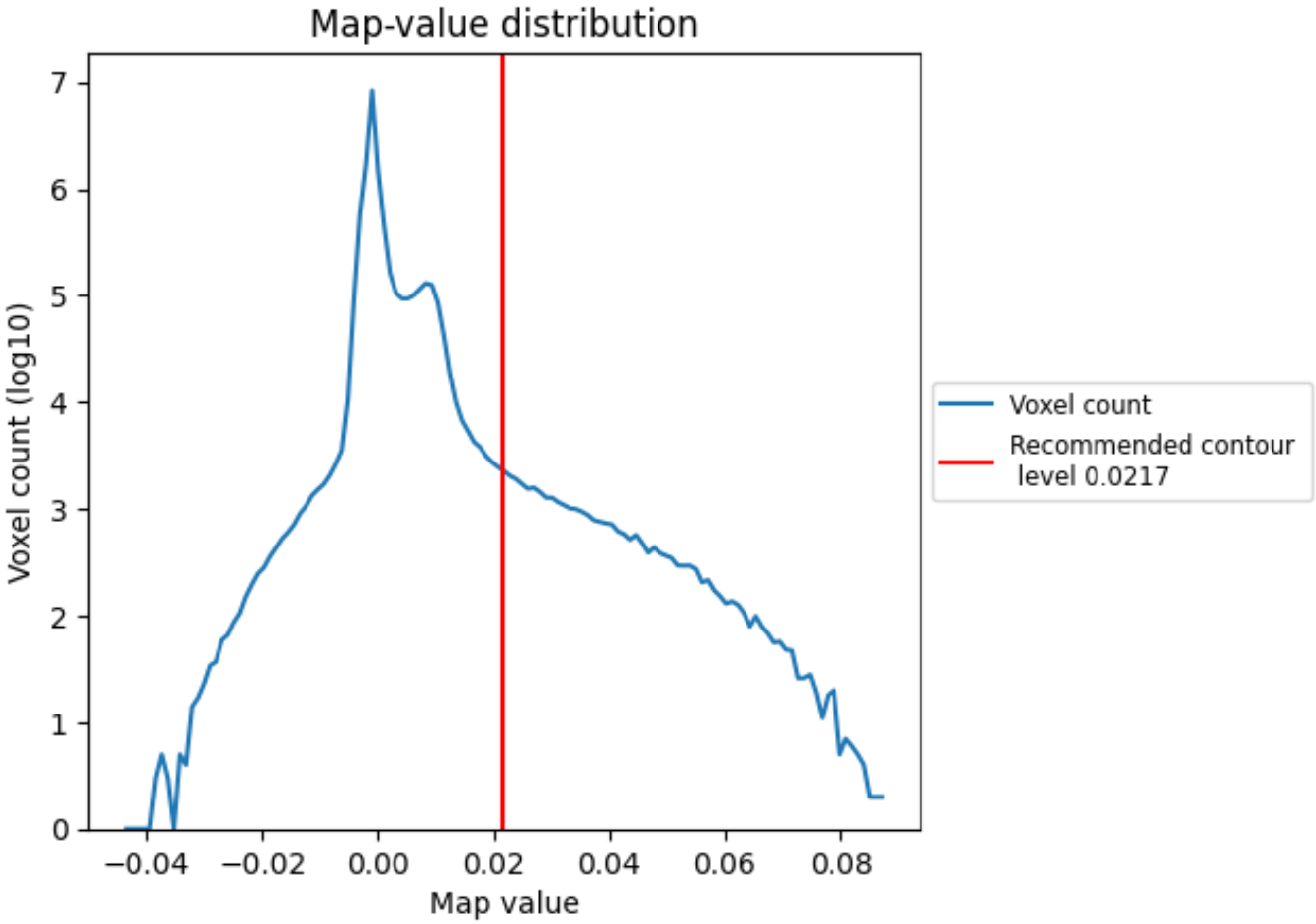
6.5 Mask visualisation (i)

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

7 Map analysis

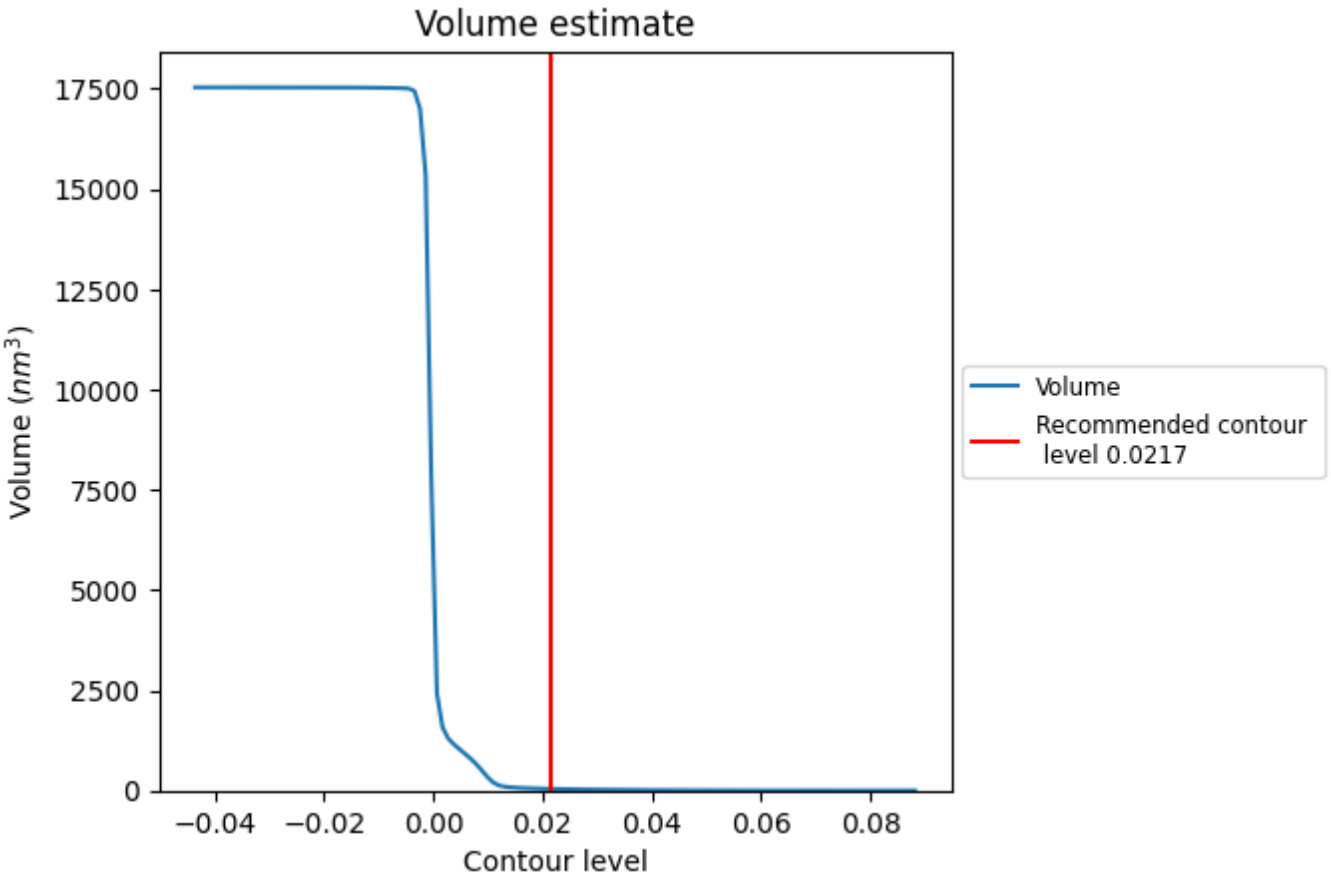
This section contains the results of statistical analysis of the map.

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.

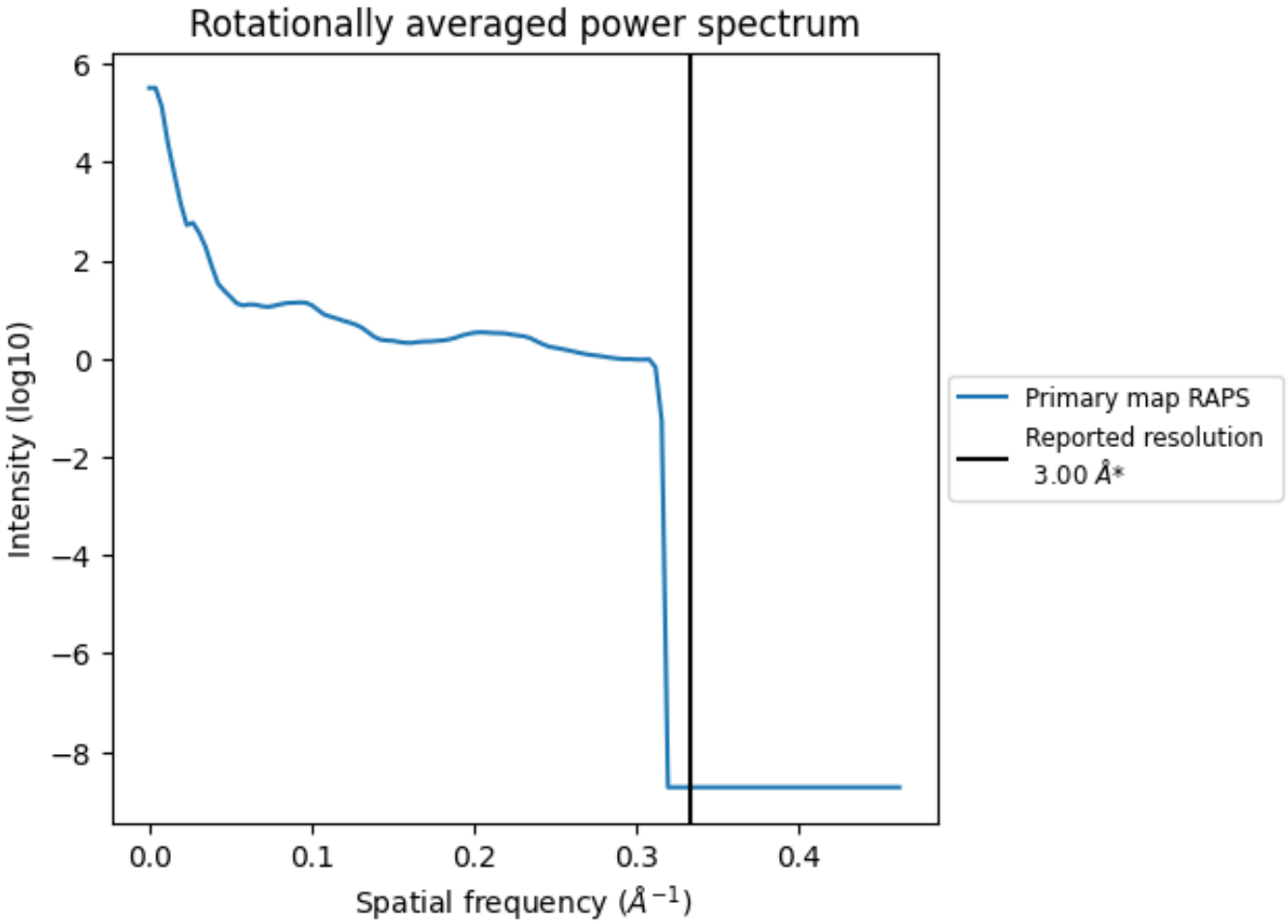
7.2 Volume estimate



The volume at the recommended contour level is 41 nm^3; this corresponds to an approximate mass of 37 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 0.333 Å^{-1}

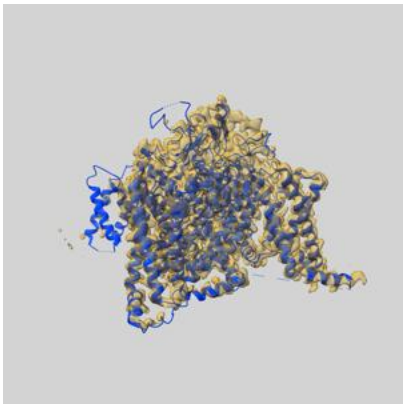
8 Fourier-Shell correlation (i)

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

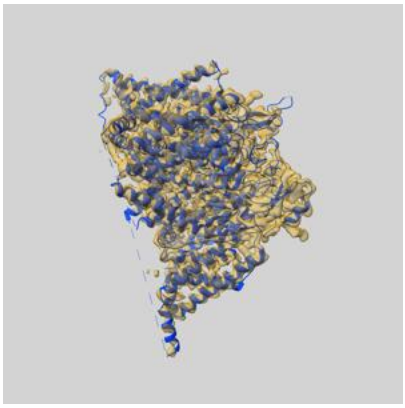
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-32475 and PDB model 7WFR. Per-residue inclusion information can be found in section 3 on page 9.

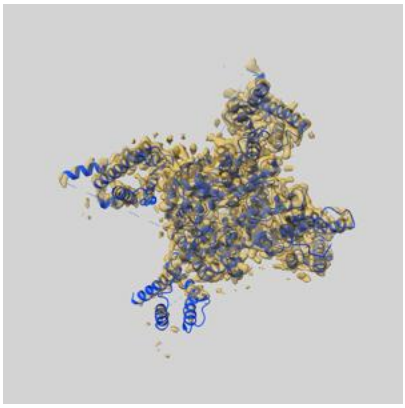
9.1 Map-model overlay



X



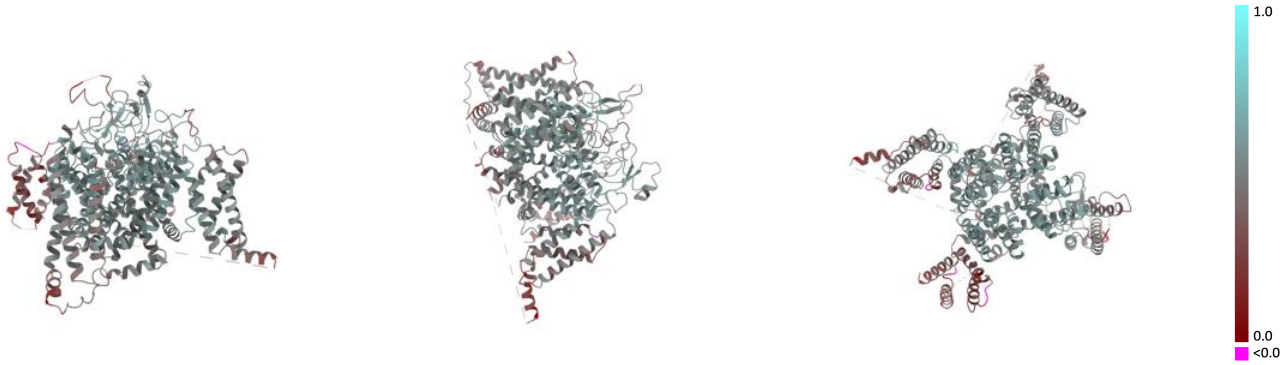
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.0217 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.

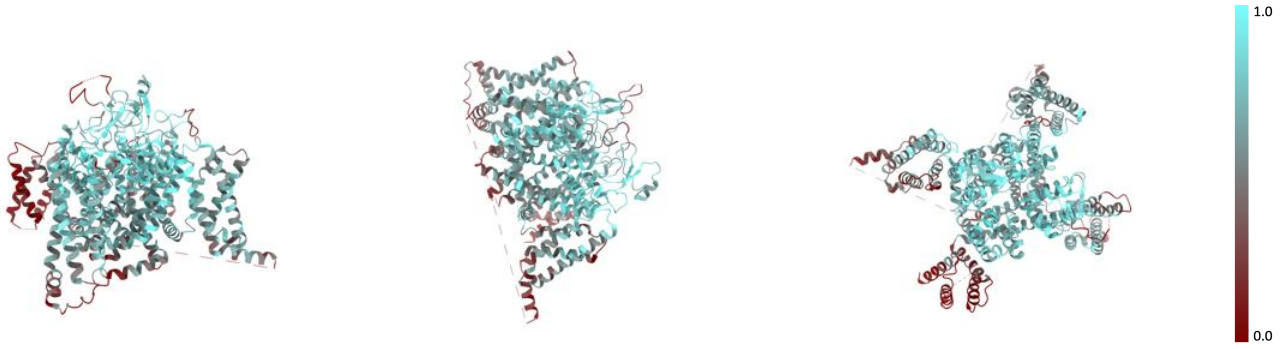
9.2 Q-score mapped to coordinate model (i)



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.

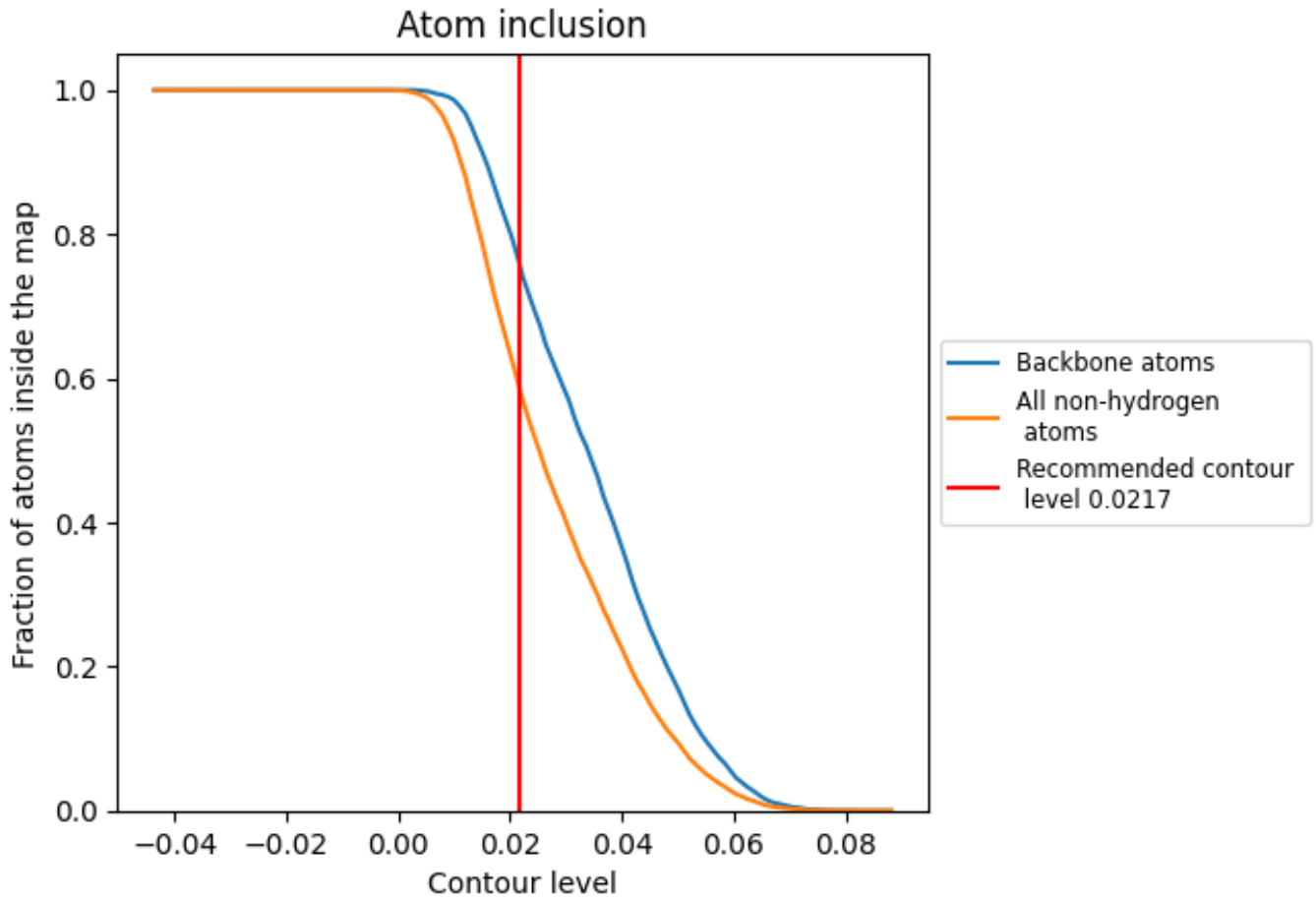
9.3 Atom inclusion mapped to coordinate model (i)



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 (0.0217).

9.4 Atom inclusion (i)



At the recommended contour level, 76% of all backbone atoms, 59% 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 (0.0217) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.5876	0.4830
A	0.5872	0.4830
B	0.5714	0.4310
C	0.7500	0.5480