WORLDWIDE PDB
PROTEIN DATA BANK

Full wwPDB X-ray Structure Validation Report (i)

Apr 29, 2025 – 06:56 AM EDT

PDB ID : 4I5P / pdb_00004i5p
Title : Selective & Brain-Permeable Polo-like Kinase-2 (Plk-2) Inhibitors that Reduce -Synuclein Phosphorylation in Rat Brain
Authors : Aubele, D.L.; Hom, R.K.; Adler, M.; Galemmo Jr., R.A.; Bowers, S.; Truong, A.P.; Pan, H.; Beroza, P.
Deposited on : 2012-11-28
Resolution : 1.74 Å(reported)

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

|		
MolProbity	:	4-5-2 with Phenix2.0rc1
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0rc1
EDS	:	3.0
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.006 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.43.1
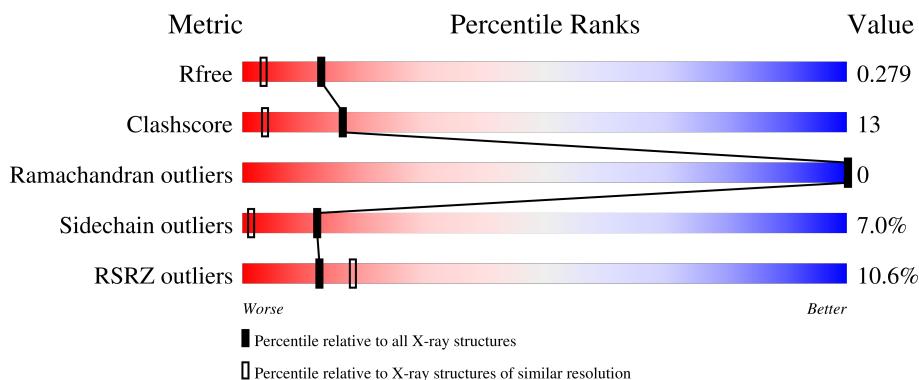
1 Overall quality at a glance ⓘ

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION
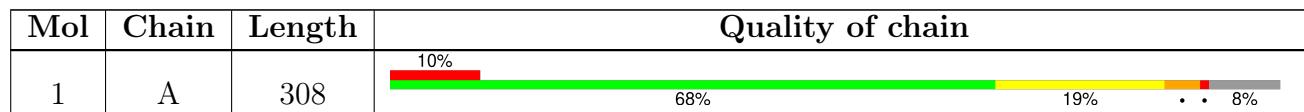
The reported resolution of this entry is 1.74 Å.

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	Percentile Ranks	Value
Rfree		0.279
Clashscore		13
Ramachandran outliers		0
Sidechain outliers		7.0%
RSRZ outliers		10.6%

Worse ———— *Better*

▮ Percentile relative to all X-ray structures

▯ Percentile relative to X-ray structures of similar resolution

Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	1043 (1.74-1.74)
Clashscore	180529	1119 (1.74-1.74)
Ramachandran outliers	177936	1112 (1.74-1.74)
Sidechain outliers	177891	1112 (1.74-1.74)
RSRZ outliers	164620	1043 (1.74-1.74)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower 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 electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	308	10% / 68% / 19% / · · / 8%

2 Entry composition ⓘ

There are 3 unique types of molecules in this entry. The entry contains 2761 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, 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.
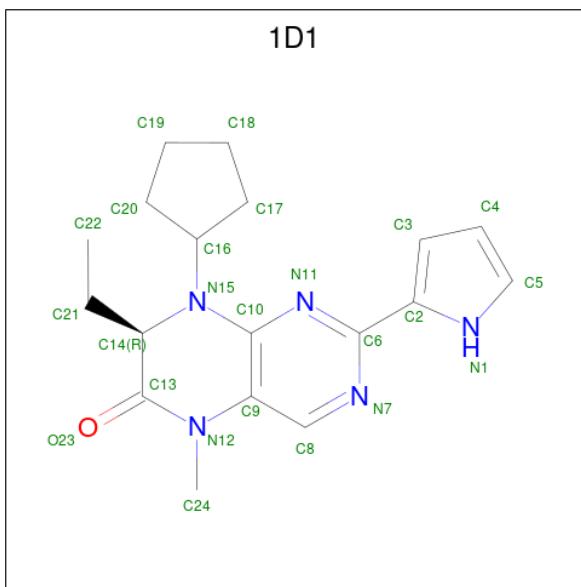
- Molecule 1 is a protein called Serine/threonine-protein kinase PLK2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	284	2330	1481	421	415	13	0	1	0

There are 11 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	53	MET	-	expression tag	UNP Q9NYY3
A	54	MET	-	expression tag	UNP Q9NYY3
A	55	HIS	-	expression tag	UNP Q9NYY3
A	56	HIS	-	expression tag	UNP Q9NYY3
A	83	SER	CYS	engineered mutation	UNP Q9NYY3
A	87	THR	VAL	engineered mutation	UNP Q9NYY3
A	119	SER	ALA	engineered mutation	UNP Q9NYY3
A	216	SER	ALA	engineered mutation	UNP Q9NYY3
A	259	ALA	CYS	engineered mutation	UNP Q9NYY3
A	291	SER	CYS	engineered mutation	UNP Q9NYY3
A	335	THR	LEU	engineered mutation	UNP Q9NYY3

- Molecule 2 is (7R)-8-cyclopentyl-7-ethyl-5-methyl-2-(1H-pyrrol-2-yl)-7,8-dihydropteridin-6(5H)-one (CCD ID: 1D1) (formula: $C_{18}H_{23}N_5O$).

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
2	A	1	Total 24	C 18	N 5	O 1	0	0
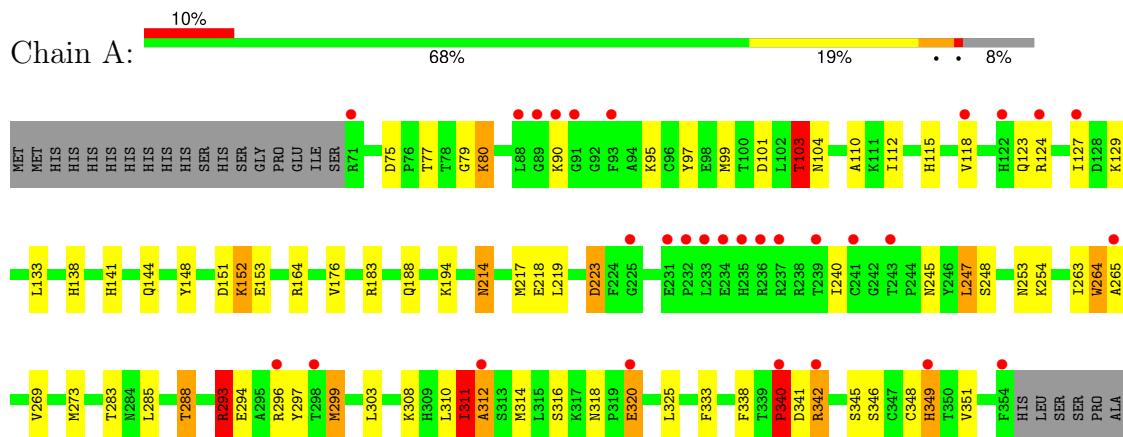
- Molecule 3 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	A	407	Total 407	O 407	0	0

3 Residue-property plots ⓘ

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron 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 dot above a residue indicates a poor fit to the electron density (RSRZ > 2). 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: Serine/threonine-protein kinase PLK2

4 Data and refinement statistics ⓘ

Property	Value	Source
Space group	C 1 2 1	Depositor
Cell constants a, b, c, α, β, γ	103.87Å 60.11Å 52.95Å 90.00° 106.77° 90.00°	Depositor
Resolution (Å)	39.16 – 1.74 39.16 – 1.74	Depositor EDS
% Data completeness (in resolution range)	76.9 (39.16-1.74) 77.0 (39.16-1.74)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.41 (at 1.74Å)	Xtriage
Refinement program	REFMAC 5.2.0019	Depositor
R, R_{free}	0.221 , 0.273 0.218 , 0.279	Depositor DCC
R_{free} test set	1632 reflections (5.06%)	wwPDB-VP
Wilson B-factor (Å^2)	19.7	Xtriage
Anisotropy	0.183	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.33 , 38.3	EDS
L-test for twinning[2]	$< |L| > = 0.51, < L^2 > = 0.35$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.93	EDS
Total number of atoms	2761	wwPDB-VP
Average B, all atoms (Å^2)	20.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 7.74% of the height of the origin peak. No significant pseudotranslation is detected.*

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[1]Intensities estimated from amplitudes.

[2]Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

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: 1D1

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	0.84	12/2390 (0.5%)	1.22	12/3223 (0.4%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	3	7

All (12) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	247	LEU	C-N	9.61	1.46	1.33
1	A	316	SER	C-O	-8.15	1.13	1.23
1	A	104	ASN	N-CA	7.51	1.55	1.46
1	A	288	THR	CB-OG1	7.36	1.55	1.43
1	A	340	PRO	CA-C	7.11	1.62	1.52
1	A	341	ASP	C-O	-7.04	1.14	1.24
1	A	248	SER	N-CA	6.55	1.54	1.45
1	A	240	ILE	C-O	-6.26	1.16	1.24
1	A	223	ASP	C-O	-6.04	1.16	1.24
1	A	293	ARG	C-N	5.81	1.41	1.33
1	A	79	GLY	C-O	-5.11	1.16	1.24
1	A	247	LEU	CA-C	5.08	1.59	1.52

All (12) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	265	ALA	N-CA-C	-25.83	80.88	113.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	312	ALA	N-CA-C	-24.00	83.30	113.55
1	A	104	ASN	N-CA-C	17.31	134.63	113.16
1	A	248	SER	N-CA-C	13.96	129.25	109.84
1	A	341	ASP	N-CA-C	-11.64	98.79	113.23
1	A	248	SER	CA-C-N	6.75	126.25	119.24
1	A	248	SER	C-N-CA	6.75	126.25	119.24
1	A	294	GLU	N-CA-C	6.61	124.88	110.80
1	A	311	ILE	CB-CA-C	6.00	121.13	111.29
1	A	103	THR	CA-CB-OG1	5.60	118.01	109.60
1	A	223	ASP	N-CA-C	5.18	121.83	110.80
1	A	293	ARG	N-CA-C	5.07	117.93	111.69

All (3) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	A	103	THR	CB
1	A	288	THR	CB
1	A	298	THR	CB

All (7) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	103	THR	Peptide
1	A	247	LEU	Peptide
1	A	264	TRP	Peptide
1	A	293	ARG	Peptide
1	A	311	ILE	Peptide
1	A	340	PRO	Peptide,Mainchain

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	2330	0	2342	60	0
2	A	24	0	23	0	0
3	A	407	0	0	6	0
All	All	2761	0	2365	60	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 13.

All (60) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:217:MET:HE3	1:A:345:SER:CA	1.78	1.13
1:A:217:MET:CE	1:A:345:SER:HA	1.93	0.97
1:A:217:MET:HE3	1:A:345:SER:HA	0.97	0.96
1:A:285:LEU:O	1:A:288:THR:HG22	1.68	0.93
1:A:217:MET:HE1	1:A:348:CYS:SG	2.11	0.90
1:A:164:ARG:CD	1:A:217:MET:HE2	2.03	0.88
1:A:346:SER:O	1:A:349:HIS:HB2	1.88	0.73
1:A:164:ARG:HD3	1:A:217:MET:HE2	1.70	0.72
1:A:217:MET:SD	3:A:700:HOH:O	2.49	0.70
1:A:342:ARG:HH21	1:A:342:ARG:HG3	1.57	0.69
1:A:99:MET:HE3	1:A:110:ALA:HB3	1.75	0.67
1:A:214:ASN:ND2	1:A:218:GLU:H	1.94	0.66
1:A:299:MET:SD	3:A:825:HOH:O	2.54	0.66
1:A:164:ARG:HD3	1:A:217:MET:CE	2.25	0.66
1:A:296:ARG:HB3	3:A:896:HOH:O	1.96	0.66
1:A:75:ASP:OD2	1:A:77:THR:HG22	1.99	0.63
1:A:164:ARG:CD	1:A:217:MET:CE	2.76	0.62
1:A:217:MET:HE3	1:A:345:SER:CB	2.30	0.62
1:A:346:SER:O	1:A:349:HIS:CB	2.47	0.61
1:A:188:GLN:NE2	1:A:219:LEU:H	1.99	0.59
1:A:338:PHE:CZ	1:A:340:PRO:HB3	2.37	0.59
1:A:141:HIS:CE1	1:A:188:GLN:HE21	2.22	0.58
1:A:99:MET:CE	1:A:112:ILE:HD11	2.33	0.58
1:A:214:ASN:C	1:A:214:ASN:HD22	2.12	0.58
1:A:118:VAL:HA	1:A:123:GLN:HG3	1.86	0.57
1:A:308:LYS:O	1:A:312:ALA:HB2	2.04	0.57
1:A:188:GLN:HE22	1:A:219:LEU:H	1.53	0.56
1:A:138[B]:HIS:HA	1:A:144:GLN:HE22	1.71	0.54
1:A:138[A]:HIS:HA	1:A:144:GLN:HE22	1.72	0.54
1:A:99:MET:HE2	1:A:112:ILE:HD11	1.91	0.53
1:A:349:HIS:CD2	3:A:771:HOH:O	2.63	0.52
1:A:285:LEU:O	1:A:288:THR:CG2	2.51	0.51
1:A:217:MET:CE	1:A:345:SER:CB	2.89	0.51
1:A:164:ARG:HD2	1:A:217:MET:HE2	1.91	0.50
1:A:297:TYR:HE2	1:A:299:MET:HE3	1.77	0.50
1:A:342:ARG:HH21	1:A:342:ARG:CG	2.25	0.49
1:A:214:ASN:HD21	1:A:218:GLU:H	1.59	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:99:MET:HE3	1:A:110:ALA:CB	2.43	0.48
1:A:115:HIS:HE1	1:A:151:ASP:O	1.96	0.48
1:A:217:MET:CE	1:A:345:SER:HB2	2.43	0.48
1:A:310:LEU:HG	1:A:314:MET:HE2	1.96	0.47
1:A:283:THR:HB	1:A:285:LEU:HD13	1.97	0.47
1:A:90:LYS:HB2	3:A:726:HOH:O	2.14	0.46
1:A:152:LYS:HD2	1:A:153:GLU:HG2	1.96	0.46
1:A:263:ILE:O	1:A:264:TRP:C	2.58	0.46
1:A:97:TYR:CD1	1:A:112:ILE:HD12	2.51	0.45
1:A:183:ARG:HD3	1:A:333:PHE:O	2.17	0.45
1:A:310:LEU:O	1:A:311:ILE:C	2.60	0.45
1:A:194:LYS:HG2	1:A:325:LEU:HD13	2.00	0.44
1:A:318:ASN:HD22	1:A:318:ASN:C	2.24	0.44
1:A:223:ASP:C	1:A:223:ASP:OD2	2.60	0.43
1:A:101:ASP:OD1	1:A:103:THR:HG22	2.18	0.43
1:A:320:GLU:O	1:A:320:GLU:HG3	2.18	0.43
1:A:214:ASN:ND2	1:A:214:ASN:C	2.77	0.42
1:A:164:ARG:NE	1:A:217:MET:HE2	2.35	0.42
1:A:80:LYS:HE2	1:A:103:THR:CG2	2.50	0.42
1:A:253:ASN:OD1	1:A:293:ARG:CD	2.68	0.42
1:A:299:MET:SD	1:A:308:LYS:HG3	2.60	0.42
1:A:288:THR:HG21	3:A:607:HOH:O	2.21	0.41
1:A:269:VAL:CG1	1:A:273:MET:HE3	2.51	0.41

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

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	283/308 (92%)	265 (94%)	18 (6%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

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	257/278 (92%)	239 (93%)	18 (7%)	12	1

All (18) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	80	LYS
1	A	95	LYS
1	A	124	ARG
1	A	127	ILE
1	A	129	LYS
1	A	133	LEU
1	A	148	TYR
1	A	152	LYS
1	A	176	VAL
1	A	214	ASN
1	A	245	ASN
1	A	254	LYS
1	A	299	MET
1	A	303	LEU
1	A	320	GLU
1	A	342	ARG
1	A	349	HIS
1	A	351	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (13) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	115	HIS
1	A	144	GLN
1	A	147	HIS
1	A	169	HIS
1	A	188	GLN
1	A	210	ASN
1	A	214	ASN

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Mol	Chain	Res	Type
1	A	235	HIS
1	A	245	ASN
1	A	257	HIS
1	A	309	HIS
1	A	318	ASN
1	A	336	GLN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.6 Ligand geometry ⓘ

1 ligand is 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	1D1	A	401	-	25,27,27	1.68	2 (8%)	26,39,39	2.06	8 (30%)

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	1D1	A	401	-	-	0/6/37/37	0/4/4/4

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	A	401	1D1	C9-C10	6.80	1.49	1.41
2	A	401	1D1	C13-N12	3.05	1.42	1.36

All (8) bond angle outliers are listed below:

| Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	A	401	1D1	C14-C13-N12	4.12	122.89	116.28
2	A	401	1D1	C8-N7-C6	4.11	122.05	116.31
2	A	401	1D1	N7-C6-N11	-3.65	121.65	125.23
2	A	401	1D1	C21-C14-C13	-3.45	103.02	111.20
2	A	401	1D1	C9-C10-N11	-3.10	118.40	123.32
2	A	401	1D1	O23-C13-N12	-2.70	119.72	122.35
2	A	401	1D1	C4-C3-C2	-2.51	104.95	107.02
2	A	401	1D1	C9-N12-C13	-2.30	120.03	122.58
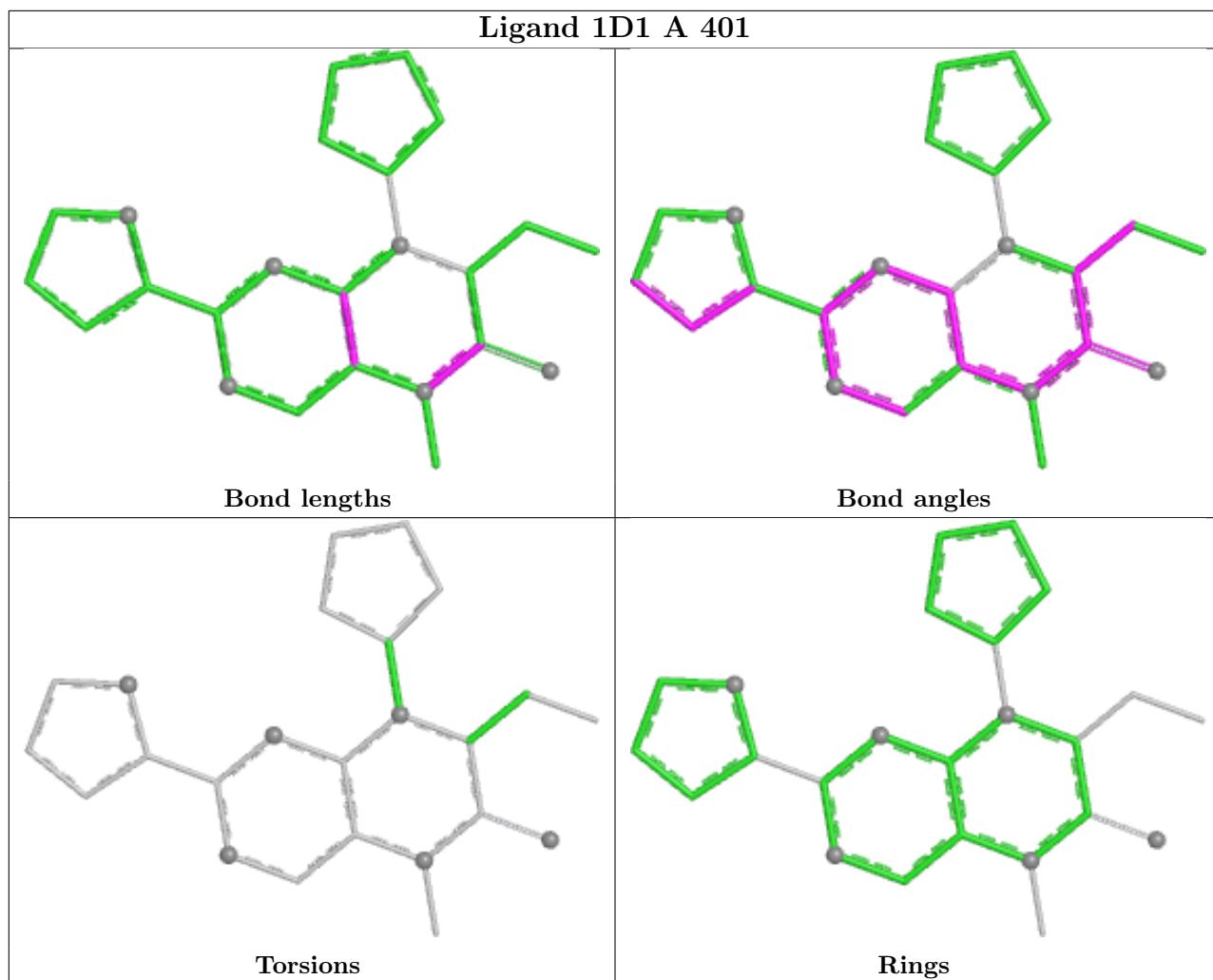
There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

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 1D1 A 401

Bond lengths

Bond angles

Torsions

Rings

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q< 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
1	A	284/308 (92%)	0.55	30 (10%)	13	18	9, 17, 34, 45	1 (0%)

All (30) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	93	PHE	5.8
1	A	349	HIS	5.8
1	A	235	HIS	4.7
1	A	233	LEU	4.1
1	A	225	GLY	4.0
1	A	232	PRO	3.7
1	A	236	ARG	3.2
1	A	122	HIS	3.1
1	A	241	CYS	3.1
1	A	298	THR	3.0
1	A	243	THR	3.0
1	A	118	VAL	2.9
1	A	312	ALA	2.8
1	A	239	THR	2.8
1	A	320	GLU	2.7
1	A	127	ILE	2.6
1	A	342	ARG	2.6
1	A	296	ARG	2.5
1	A	88	LEU	2.4
1	A	71	ARG	2.4
1	A	340	PRO	2.3
1	A	234	GLU	2.3
1	A	265	ALA	2.3
1	A	90	LYS	2.3
1	A	91	GLY	2.3
1	A	354	PHE	2.2
1	A	124	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
1	A	231	GLU	2.2
1	A	237	ARG	2.0
1	A	89	GLY	2.0

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

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

6.3 Carbohydrates ⓘ
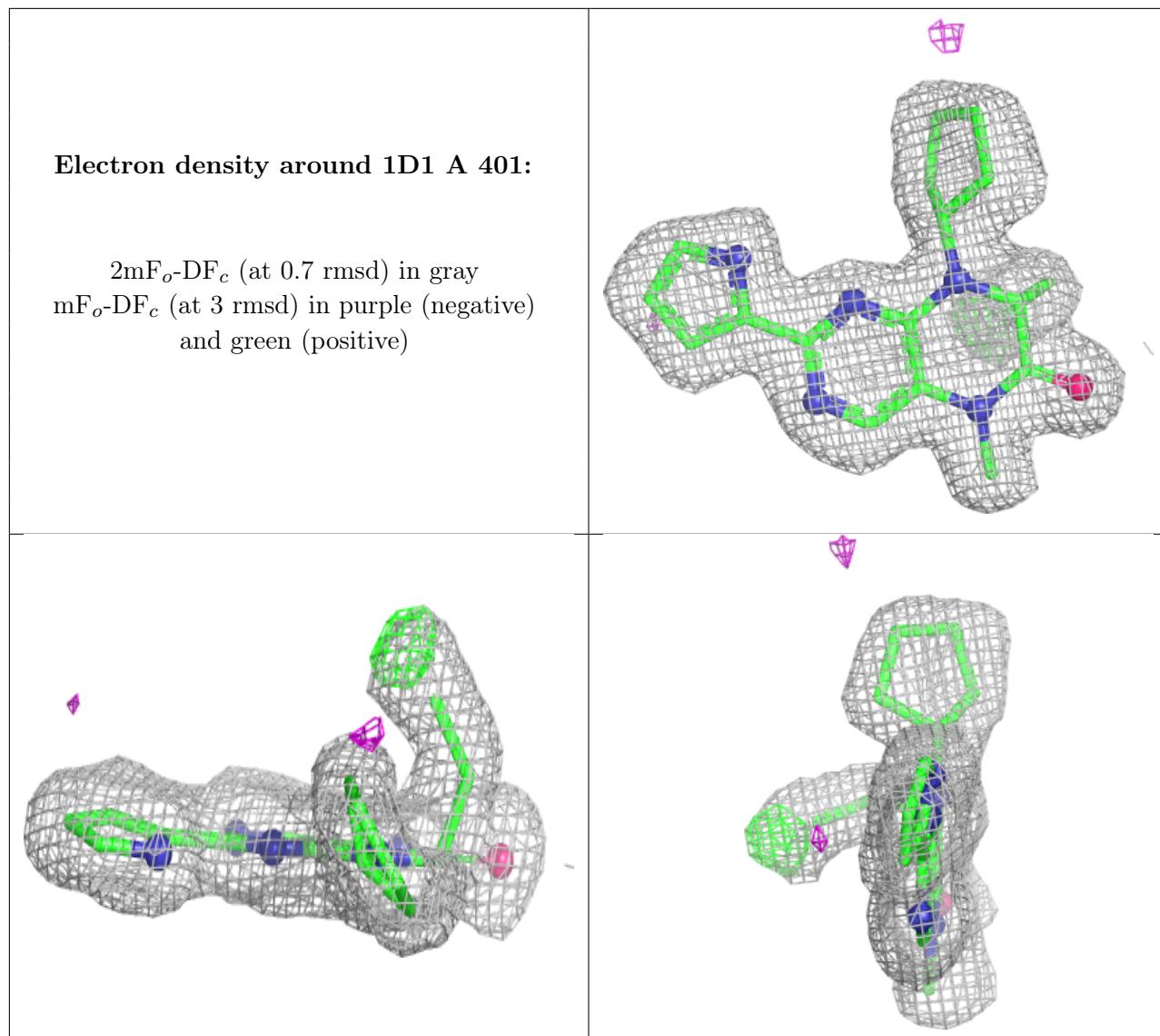
There are no monosaccharides in this entry.

6.4 Ligands ⓘ

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
2	1D1	A	401	24/24	0.93	0.07	13,14,15,16	0

The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

Electron density around 1D1 A 401:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

6.5 Other polymers ⓘ

There are no such residues in this entry.