Full wwPDB X-ray Structure Validation Report ⓘ

Jun 15, 2020 – 10:15 am BST

PDB ID	:	5I8G
Title	:	CBP in complex with Cpd637 ((R)-4-methyl-6-(1-methyl-3-(1-methyl-1H-pyrazol-4-yl)-1H-indazol-5-yl)-1,3,4,5-tetrahydro-2H-benzo[b][1,4]diazepin-2-one)
Authors	:	Murray, J.M.
Deposited on	:	2016-02-18
Resolution	:	1.41 Å(reported)

This is a Full wwPDB X-ray Structure 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/XrayValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

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

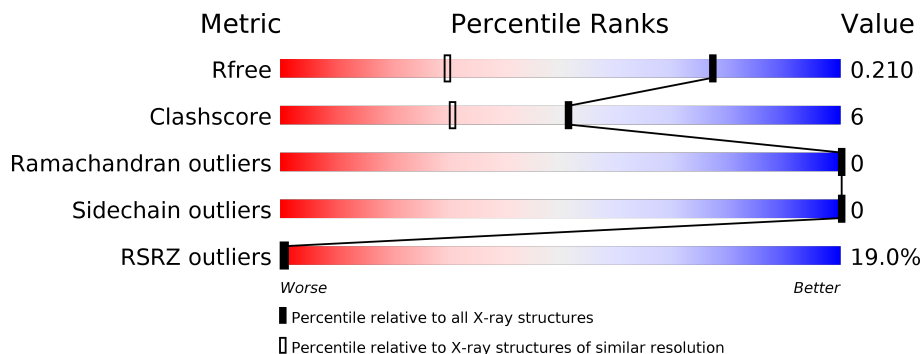|		
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.11
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.11

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 1.41 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		0.210
Clashscore		6
Ramachandran outliers		0
Sidechain outliers		0
RSRZ outliers		19.0%

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}	130704	2579 (1.44-1.40)
Clashscore	141614	2696 (1.44-1.40)
Ramachandran outliers	138981	2632 (1.44-1.40)
Sidechain outliers	138945	2631 (1.44-1.40)
RSRZ outliers	127900	2528 (1.44-1.40)

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 on 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	264	16% / 78% / 8% / 14%

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
7	PEG	A	1413	-	-	X	-

2 Entry composition (i)

There are 8 unique types of molecules in this entry. The entry contains 2221 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 CREB-binding protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	226	Total 1922	C 1228	N 322	O 354	S 18	0	7	0

There are 32 discrepancies between the modelled and reference sequences:

| Chain	Residue	Modelled	Actual	Comment	Reference
A	1049	MET	-	initiating methionine	UNP Q92793
A	1050	HIS	-	expression tag	UNP Q92793
A	1051	HIS	-	expression tag	UNP Q92793
A	1052	HIS	-	expression tag	UNP Q92793
A	1053	HIS	-	expression tag	UNP Q92793
A	1054	HIS	-	expression tag	UNP Q92793
A	1055	HIS	-	expression tag	UNP Q92793
A	1056	GLY	-	expression tag	UNP Q92793
A	1057	SER	-	expression tag	UNP Q92793
A	1058	LEU	-	expression tag	UNP Q92793
A	1059	VAL	-	expression tag	UNP Q92793
A	1060	PRO	-	expression tag	UNP Q92793
A	1061	ARG	-	expression tag	UNP Q92793
A	1062	GLY	-	expression tag	UNP Q92793
A	1063	SER	-	expression tag	UNP Q92793
A	1064	MET	-	expression tag	UNP Q92793
A	1065	ASP	-	expression tag	UNP Q92793
A	1066	TYR	-	expression tag	UNP Q92793
A	1067	LYS	-	expression tag	UNP Q92793
A	1068	ASP	-	expression tag	UNP Q92793
A	1069	ASP	-	expression tag	UNP Q92793
A	1070	ASP	-	expression tag	UNP Q92793
A	1071	ASP	-	expression tag	UNP Q92793
A	1072	LYS	-	expression tag	UNP Q92793
A	1073	GLU	-	expression tag	UNP Q92793
A	1074	ASN	-	expression tag	UNP Q92793
A	1075	LEU	-	expression tag	UNP Q92793

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Chain	Residue	Modelled	Actual	Comment	Reference
A	1076	TYR	-	expression tag	UNP Q92793
A	1077	PHE	-	expression tag	UNP Q92793
A	1078	GLN	-	expression tag	UNP Q92793
A	1079	GLY	-	expression tag	UNP Q92793
A	1080	SER	-	expression tag	UNP Q92793

- Molecule 2 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Zn		
2	A	3	3	3	0	0

- Molecule 3 is (4R)-4-methyl-6-[1-methyl-3-(1-methyl-1H-pyrazol-4-yl)-1H-indazol-5-yl]-1,3,4 ,5-tetrahydro-2H-1,5-benzodiazepin-2-one (three-letter code: 69E) (formula: $C_{22}H_{22}N_6O$).
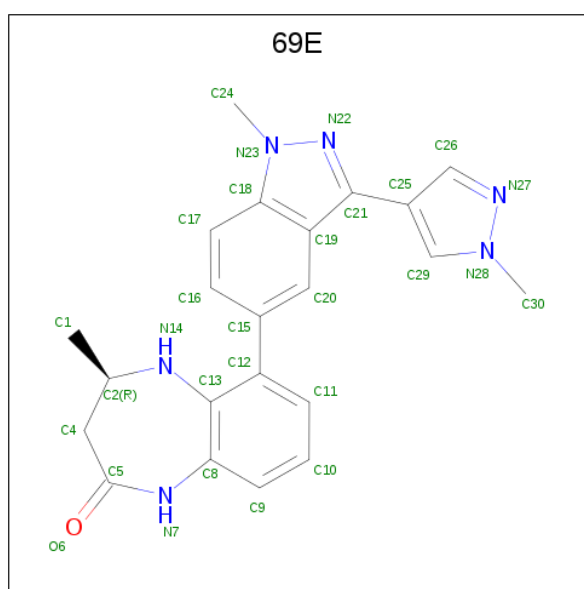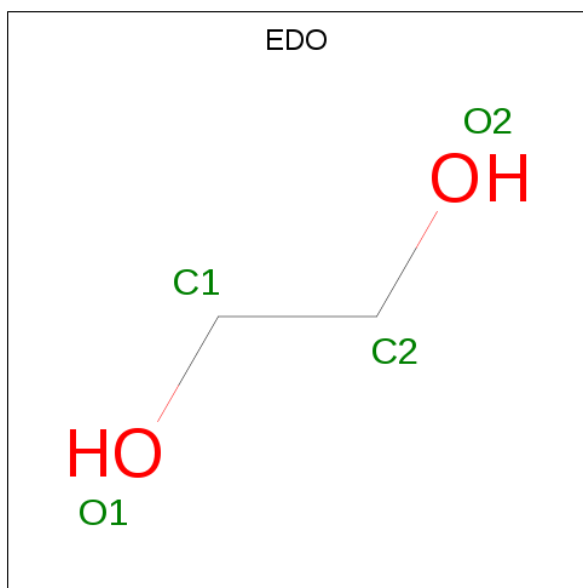

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	N	O		
3	A	1	29	22	6	1	0	0

- Molecule 4 is 2-[3-(2-HYDROXY-1,1-DIHYDROXYMETHYL-ETHYLAMINO)-PROPYL AMINO]-2-HYDROXYMETHYL-PROPANE-1,3-DIOL (three-letter code: B3P) (formula: $C_{11}H_{26}N_2O_6$).

B3P
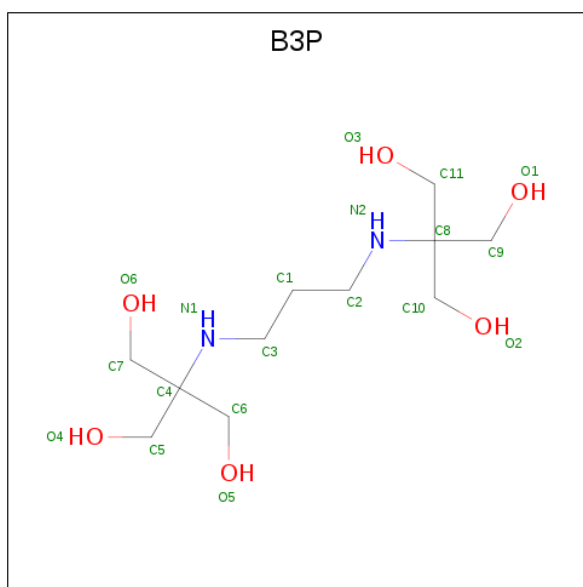
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
4	A	1	Total	C	N	O	0	0
			19	11	2	6		

- Molecule 5 is 1,2-ETHANEDIOL (three-letter code: EDO) (formula: $C_2H_6O_2$).

EDO

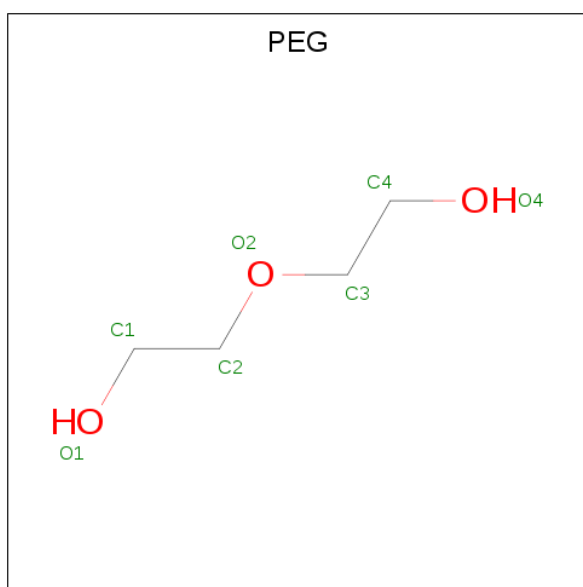| Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
5	A	1	Total	C	O	0	0
			4	2	2		
5	A	1	Total	C	O	0	0
			4	2	2		
5	A	1	Total	C	O	0	0
			4	2	2		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
5	A	1	Total 4	C 2	O 2		0	0
5	A	1	Total 4	C 2	O 2		0	0

- Molecule 6 is SODIUM ION (three-letter code: NA) (formula: Na).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
6	A	1	Total 1	Na 1	0	0

- Molecule 7 is DI(HYDROXYETHYL)ETHER (three-letter code: PEG) (formula: $C_4H_{10}O_3$).

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
7	A	1	Total 7	C 4	O 3	0	0
7	A	1	Total 7	C 4	O 3	0	0

- Molecule 8 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
8	A	213	Total 213	O 213	0	0

3 Residue-property plots (i)

These plots are drawn for all protein, RNA and DNA 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: CREB-binding protein
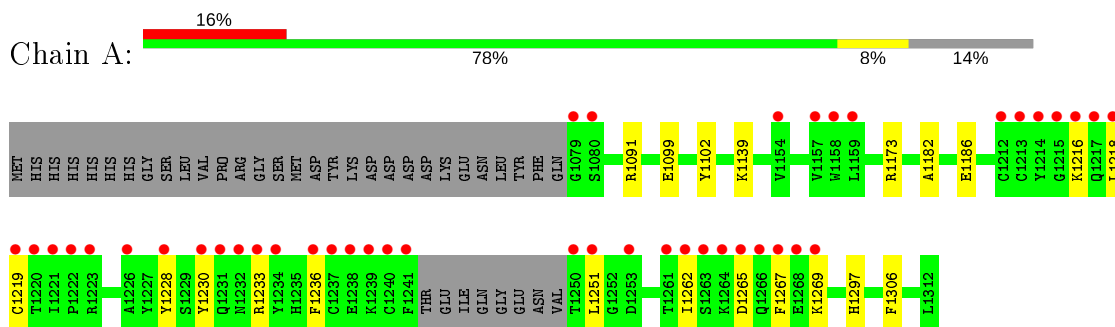
4 Data and refinement statistics (i)

Property	Value	Source
Space group	C 1 2 1	Depositor
Cell constants a, b, c, α, β, γ	92.11Å　　60.06Å　　54.12Å 90.00°　　102.71°　　90.00°	Depositor
Resolution (Å)	31.01　–　1.41 31.01　–　1.41	Depositor EDS
% Data completeness (in resolution range)	95.9 (31.01-1.41) 95.9 (31.01-1.41)	Depositor EDS
R_{merge}	0.03	Depositor
R_{sym}	(Not available)	Depositor
$<I/\sigma(I)>$ [1]	1.96 (at 1.41Å)	Xtriage
Refinement program	PHENIX	Depositor
R, R_{free}	0.189　,　0.210 0.189　,　0.210	Depositor DCC
R_{free} test set	2614 reflections (4.91%)	wwPDB-VP
Wilson B-factor (Å^2)	22.4	Xtriage
Anisotropy	0.221	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.33 , 39.7	EDS
L-test for twinning[2]	$<|L|> = 0.49$, $<L^2> = 0.32$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.97	EDS
Total number of atoms	2221	wwPDB-VP
Average B, all atoms (Å^2)	34.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 7.18% 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.

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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: ZN, NA, B3P, EDO, 69E, PEG

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	0.34	0/1986	0.58	1/2684 (0.0%)

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	0	1

There are no bond length outliers.

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1218	LEU	CA-CB-CG	5.12	127.07	115.30

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1265	ASP	Peptide

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	1922	0	1864	20	0
2	A	3	0	0	0	0
3	A	29	0	0	1	0
4	A	19	0	26	1	0
5	A	20	0	30	4	0
6	A	1	0	0	0	0
7	A	14	0	20	5	0
8	A	213	0	0	2	0
All	All	2221	0	1940	22	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 6.

All (22) 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:1236:PHE:HE2	1:A:1267:PHE:CE1	2.02	0.78
1:A:1297:HIS:HB3	5:A:1410:EDO:H21	1.74	0.69
1:A:1230:TYR:CE2	1:A:1262:ILE:HD12	2.33	0.64
1:A:1230:TYR:CD2	1:A:1262:ILE:HD12	2.37	0.60
1:A:1139:LYS:HD2	7:A:1413:PEG:H32	1.85	0.58
5:A:1410:EDO:O2	8:A:1501:HOH:O	2.18	0.56
1:A:1228:TYR:CZ	1:A:1269:LYS:HD2	2.41	0.55
1:A:1216:LYS:HB2	1:A:1219:CYS:HB2	1.92	0.52
1:A:1139:LYS:HD2	7:A:1413:PEG:H12	1.92	0.52
1:A:1102:TYR:CD2	7:A:1413:PEG:H21	2.46	0.51
1:A:1233:ARG:HG3	1:A:1233:ARG:HH11	1.75	0.50
1:A:1236:PHE:CE2	1:A:1267:PHE:CE1	2.93	0.50
1:A:1306:PHE:HB2	5:A:1408:EDO:H22	1.93	0.50
1:A:1139:LYS:HB2	7:A:1413:PEG:H12	1.98	0.45
1:A:1091:ARG:HD3	5:A:1409:EDO:H21	1.98	0.45
1:A:1182:ALA:O	1:A:1186:GLU:HG3	2.18	0.42
1:A:1173[B]:ARG:HE	3:A:1404:69E:C30	2.32	0.42
1:A:1099:GLU:HG2	7:A:1413:PEG:H42	2.01	0.42
1:A:1233:ARG:CZ	1:A:1233:ARG:HB3	2.50	0.42
4:A:1405:B3P:H22	4:A:1405:B3P:H102	1.85	0.42
1:A:1173[A]:ARG:NH1	8:A:1511:HOH:O	2.52	0.41
1:A:1251:LEU:HD22	1:A:1262:ILE:HG21	2.03	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 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	229/264 (87%)	226 (99%)	3 (1%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all 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	218/246 (89%)	218 (100%)	0	100	100

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

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (1) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	1232	ASN

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

There are no carbohydrates in this entry.

5.6 Ligand geometry (i)

Of 13 ligands modelled in this entry, 4 are monoatomic - leaving 9 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	#$|Z| > 2$	Counts	RMSZ	#$|Z| > 2$
4	B3P	A	1405	-	18,18,18	0.53	0	21,23,23	1.20	2 (9%)
5	EDO	A	1409	-	3,3,3	0.35	0	2,2,2	0.44	0
7	PEG	A	1413	-	6,6,6	0.41	0	5,5,5	0.44	0
5	EDO	A	1407	-	3,3,3	0.46	0	2,2,2	0.46	0
5	EDO	A	1408	-	3,3,3	0.41	0	2,2,2	0.37	0
5	EDO	A	1410	-	3,3,3	0.43	0	2,2,2	0.26	0
5	EDO	A	1406	-	3,3,3	0.47	0	2,2,2	0.34	0
3	69E	A	1404	-	26,33,33	1.36	2 (7%)	31,49,49	1.70	5 (16%)
7	PEG	A	1412	-	6,6,6	0.46	0	5,5,5	0.31	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
4	B3P	A	1405	-	-	0/28/28/28	-
5	EDO	A	1409	-	-	1/1/1/1	-
7	PEG	A	1413	-	-	2/4/4/4	-
5	EDO	A	1407	-	-	0/1/1/1	-
5	EDO	A	1408	-	-	1/1/1/1	-
5	EDO	A	1410	-	-	0/1/1/1	-
5	EDO	A	1406	-	-	0/1/1/1	-
3	69E	A	1404	-	-	0/4/20/20	0/5/5/5
7	PEG	A	1412	-	-	3/4/4/4	-

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	1404	69E	C21-N22	-5.42	1.30	1.35
3	A	1404	69E	C5-N7	-2.35	1.33	1.35

All (7) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	1404	69E	C30-N28-N27	4.87	126.22	120.50
3	A	1404	69E	C9-C8-C13	3.99	121.52	117.43
3	A	1404	69E	C26-N27-N28	3.76	108.14	104.23
4	A	1405	B3P	C3-N1-C4	-3.30	111.39	116.08
3	A	1404	69E	C29-N28-N27	-2.52	109.37	111.56
4	A	1405	B3P	C2-N2-C8	-2.41	112.67	116.08
3	A	1404	69E	C19-C18-N23	-2.01	106.39	109.17

There are no chirality outliers.

All (7) torsion outliers are listed below:

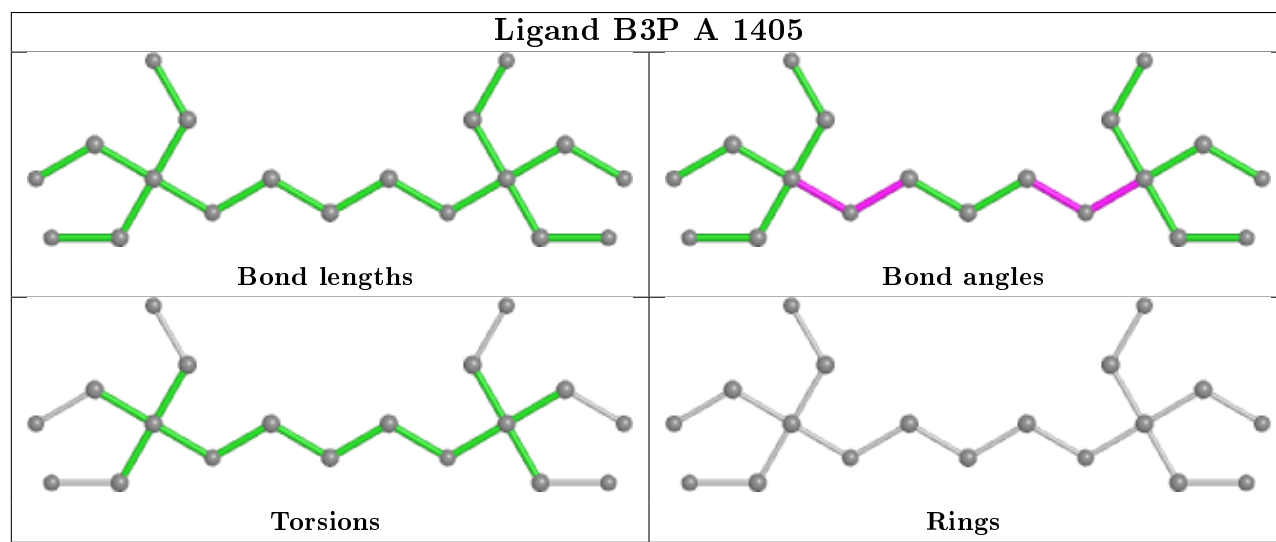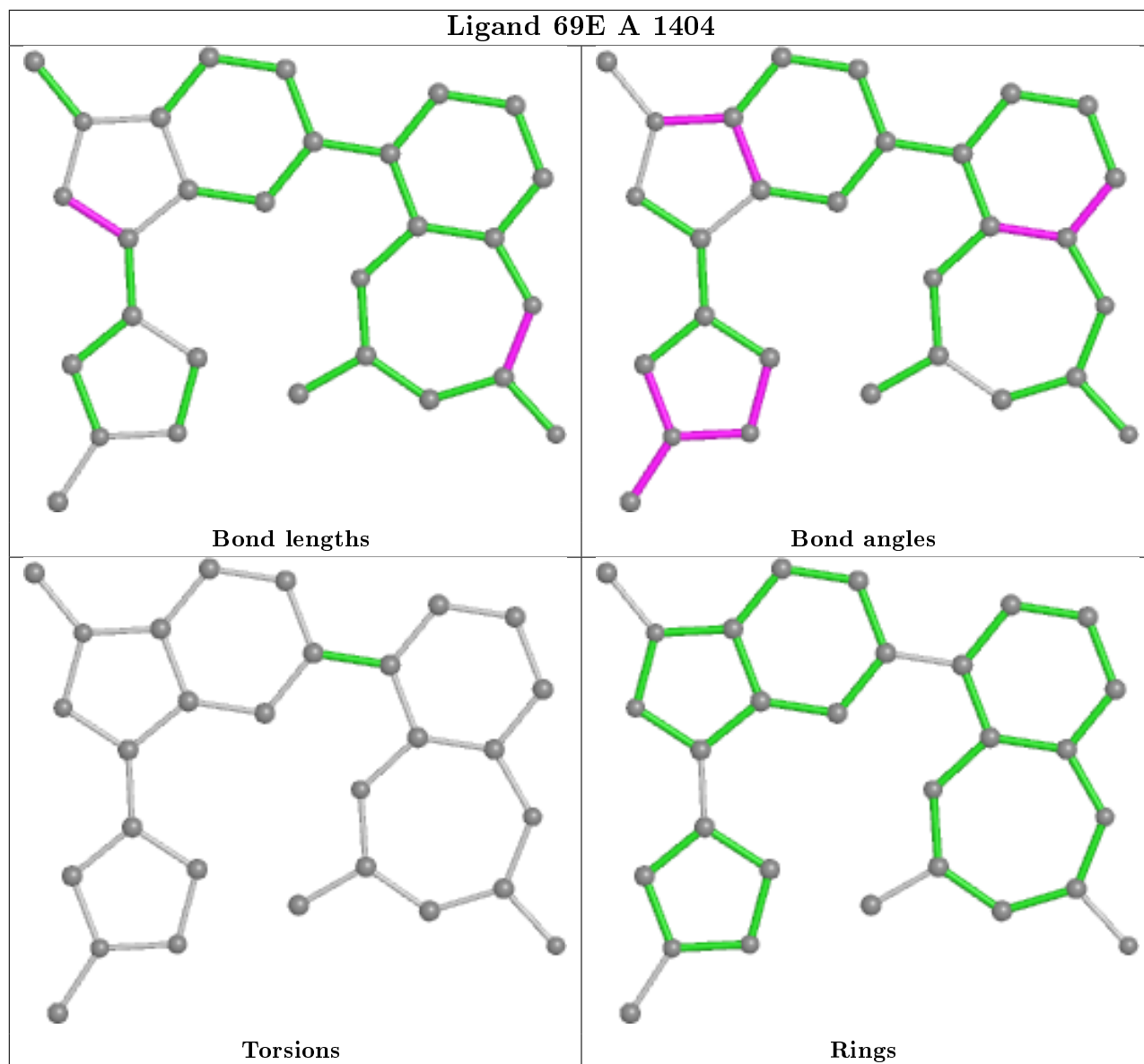| Mol	Chain	Res	Type	Atoms
7	A	1412	PEG	O1-C1-C2-O2
7	A	1413	PEG	O2-C3-C4-O4
7	A	1413	PEG	O1-C1-C2-O2
5	A	1409	EDO	O1-C1-C2-O2
7	A	1412	PEG	O2-C3-C4-O4
5	A	1408	EDO	O1-C1-C2-O2
7	A	1412	PEG	C4-C3-O2-C2

There are no ring outliers.

6 monomers are involved in 11 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
4	A	1405	B3P	1	0
5	A	1409	EDO	1	0
7	A	1413	PEG	5	0
5	A	1408	EDO	1	0
5	A	1410	EDO	2	0
3	A	1404	69E	1	0

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

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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 B3P A 1405

Bond lengths

Bond angles

Torsions

Rings

Ligand 69E A 1404

Bond lengths

Bond angles

Torsions

Rings

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 Fit of model and data (i)

6.1 Protein, DNA and RNA chains (i)

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	226/264 (85%)	1.03	43 (19%)	1	0	16, 25, 80, 88	0

All (43) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	1267	PHE	10.6
1	A	1218	LEU	9.1
1	A	1236	PHE	8.8
1	A	1262	ILE	8.7
1	A	1251	LEU	7.7
1	A	1230	TYR	7.4
1	A	1232	ASN	7.3
1	A	1239	LYS	7.0
1	A	1220	THR	6.9
1	A	1263	SER	6.5
1	A	1219	CYS	6.2
1	A	1217	GLN	6.1
1	A	1214	TYR	5.6
1	A	1221	ILE	5.6
1	A	1250	THR	5.4
1	A	1216	LYS	5.2
1	A	1240	CYS	4.7
1	A	1228	TYR	4.6
1	A	1215	GLY	4.5
1	A	1238	GLU	4.4
1	A	1265	ASP	4.3
1	A	1212	CYS	4.3
1	A	1261	THR	4.2
1	A	1079	GLY	4.2
1	A	1266	GLN	3.9
1	A	1268	GLU	3.8
1	A	1234	TYR	3.8

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Mol	Chain	Res	Type	RSRZ
1	A	1237	CYS	3.6
1	A	1226	ALA	3.5
1	A	1157	VAL	3.4
1	A	1080	SER	3.4
1	A	1233	ARG	3.3
1	A	1231	GLN	3.3
1	A	1241	PHE	3.1
1	A	1154	VAL	2.9
1	A	1253	ASP	2.9
1	A	1222	PRO	2.8
1	A	1158	TRP	2.7
1	A	1264	LYS	2.6
1	A	1159	LEU	2.5
1	A	1213	CYS	2.4
1	A	1269	LYS	2.2
1	A	1223	ARG	2.2

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

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

6.3 Carbohydrates (i)

There are no carbohydrates in this entry.

6.4 Ligands (i)

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.
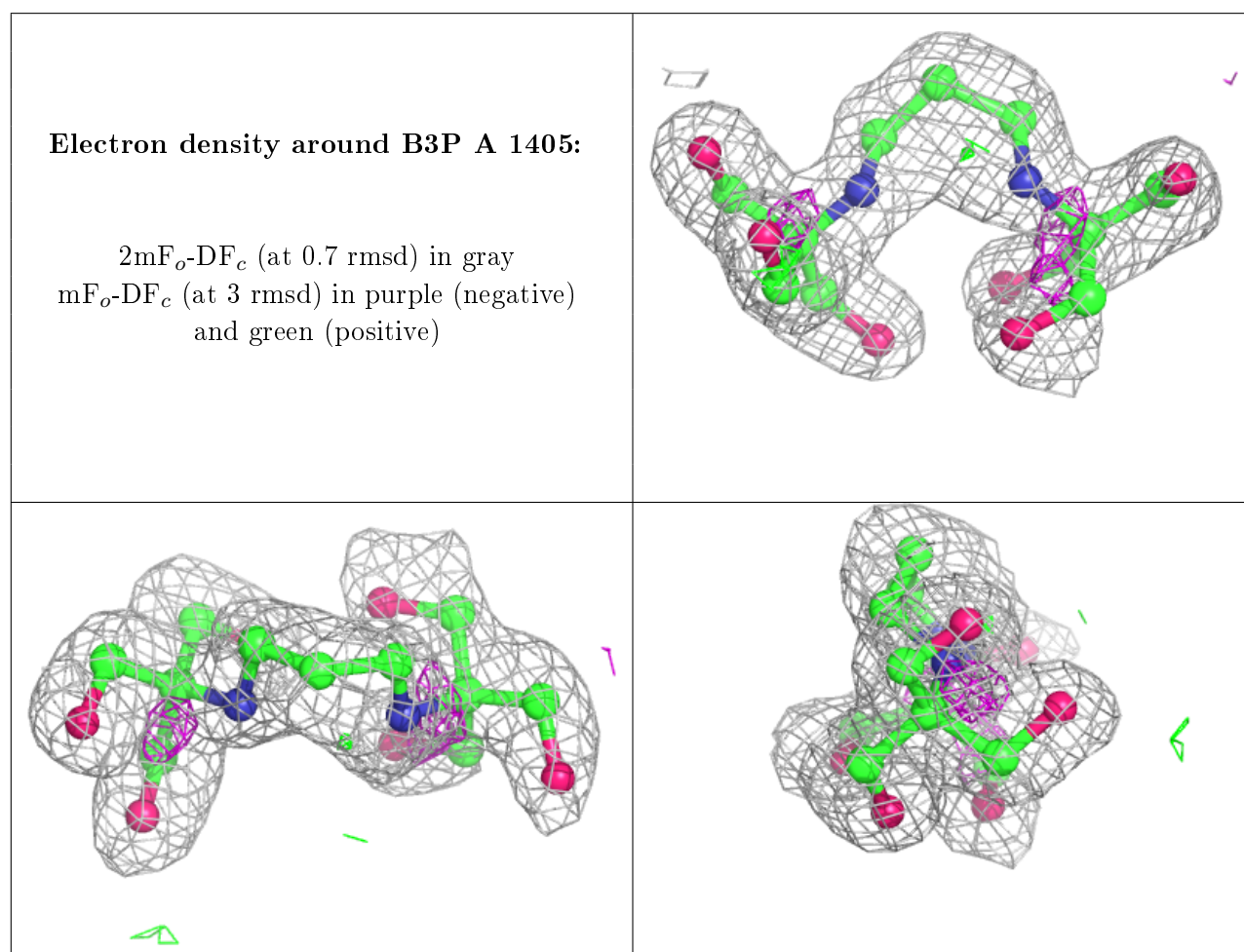
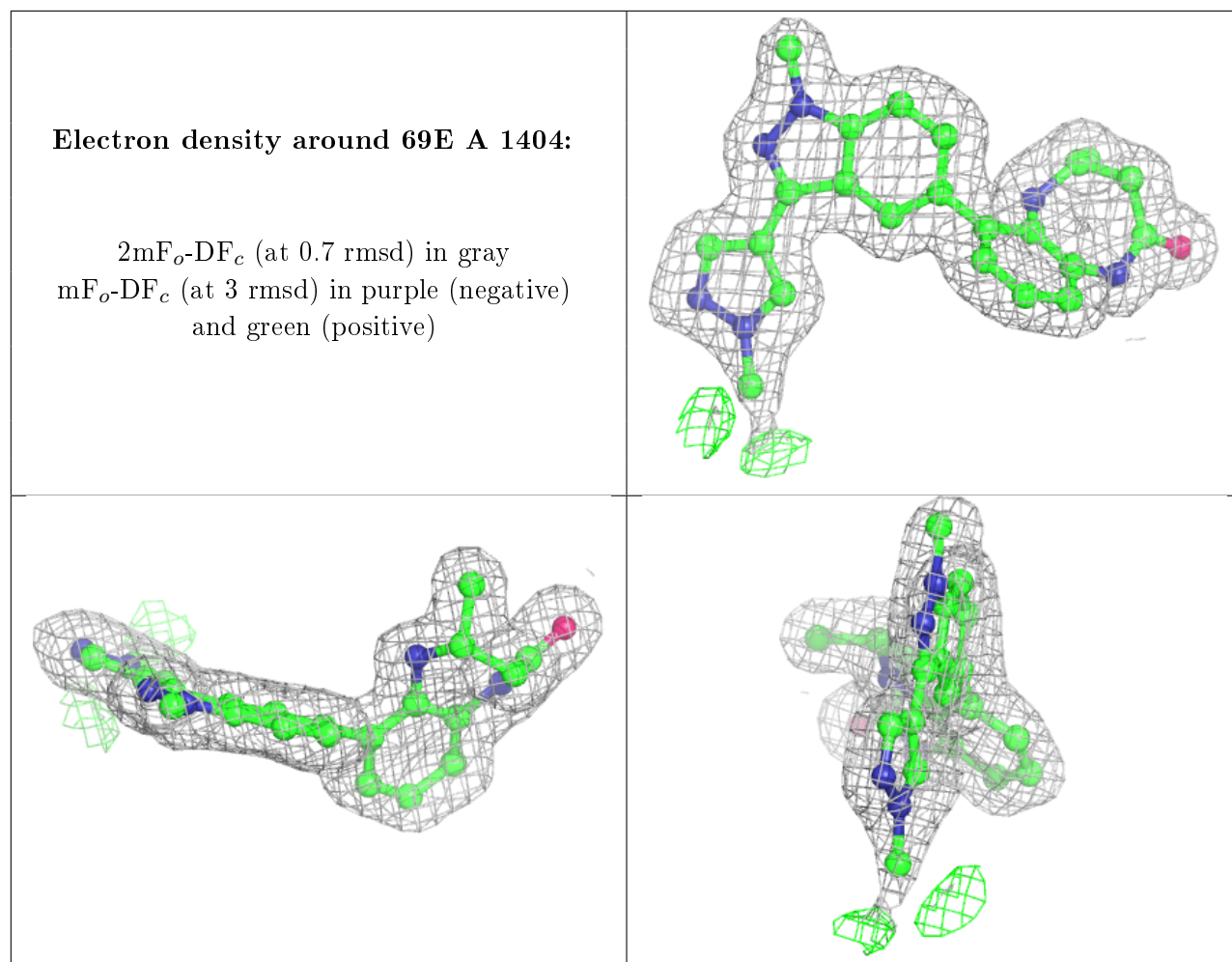| Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
7	PEG	A	1412	7/7	0.68	0.20	49,52,54,56	0
7	PEG	A	1413	7/7	0.78	0.21	30,32,41,45	0
4	B3P	A	1405	19/19	0.78	0.13	30,35,48,50	0
2	ZN	A	1403	1/1	0.83	0.06	66,66,66,66	1
5	EDO	A	1407	4/4	0.84	0.12	45,45,45,48	0
5	EDO	A	1410	4/4	0.86	0.34	33,40,40,42	0
5	EDO	A	1409	4/4	0.92	0.19	36,42,42,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($Å^2$)	Q<0.9
5	EDO	A	1406	4/4	0.94	0.12	33,34,38,46	0
5	EDO	A	1408	4/4	0.94	0.23	35,38,40,41	0
3	69E	A	1404	29/29	0.95	0.08	18,22,28,37	0
6	NA	A	1411	1/1	0.98	0.09	31,31,31,31	0
2	ZN	A	1402	1/1	0.99	0.07	21,21,21,21	0
2	ZN	A	1401	1/1	1.00	0.08	18,18,18,18	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 B3P A 1405:

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

Electron density around 69E A 1404:

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 (i)

There are no such residues in this entry.