Full wwPDB X-ray Structure Validation Report ⓘ

Apr 14, 2025 – 11:35 am BST

PDB ID	:	8QS3 / pdb_00008qs3
Title	:	Ternary structure of 14-3-3s, C-RAF phosphopeptide (pS259) and compound 23 (1083848)
Authors	:	Konstantinidou, M.; Vickery, H.; Pennings, M.A.M.; Virta, J.; Visser, E.J.; Oetelaar, M.C.M.; Overmans, M.; Neitz, J.; Ottmann, C.; Brunsveld, L.; Arkin, M.R.
Deposited on	:	2023-10-10
Resolution	:	1.60 Å(reported)

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

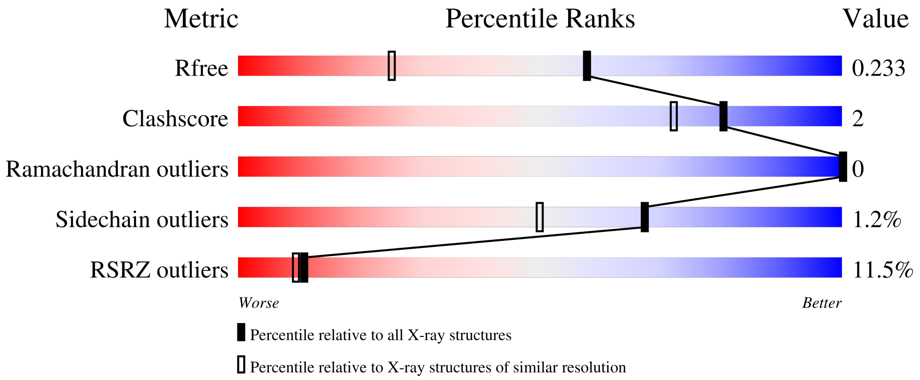
MolProbity	:	4.02b-467
Mogul	:	1.8.4, CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	3.0
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.003 (Gargrove)
Density-Fitness	:	1.0.11
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.42

1 Overall quality at a glance ⓘ

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

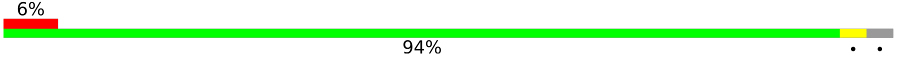
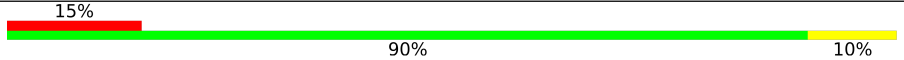
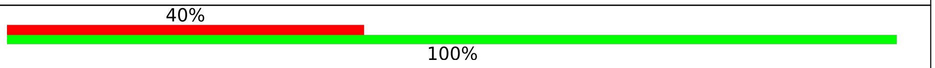
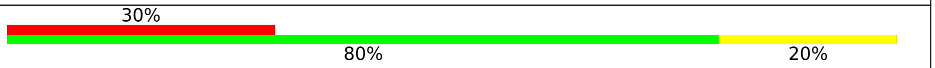
The reported resolution of this entry is 1.60 Å.

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)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	4274 (1.60-1.60)
Clashscore	180529	4682 (1.60-1.60)
Ramachandran outliers	177936	4583 (1.60-1.60)
Sidechain outliers	177891	4582 (1.60-1.60)
RSRZ outliers	164620	4272 (1.60-1.60)

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	235	
1	M	235	
2	K	10	
2	Y	10	

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
3	CL	M	302	-	-	-	X

2 Entry composition (i)

There are 6 unique types of molecules in this entry. The entry contains 4314 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 14-3-3 protein sigma.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
1	A	227	Total C N O S 1793 1120 304 358 11	0	0	0
1	M	235	Total C N O S 1853 1154 313 375 11	0	0	0

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-3	ALA	-	expression tag	UNP P31947
A	-2	MET	-	expression tag	UNP P31947
A	-1	GLY	-	expression tag	UNP P31947
A	0	SER	-	expression tag	UNP P31947
M	-3	ALA	-	expression tag	UNP P31947
M	-2	MET	-	expression tag	UNP P31947
M	-1	GLY	-	expression tag	UNP P31947
M	0	SER	-	expression tag	UNP P31947

- Molecule 2 is a protein called C-RAF peptide pS259.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
2	K	10	Total C N O P 83 45 17 20 1	0	0	0
2	Y	10	Total C N O P 83 45 17 20 1	0	0	0

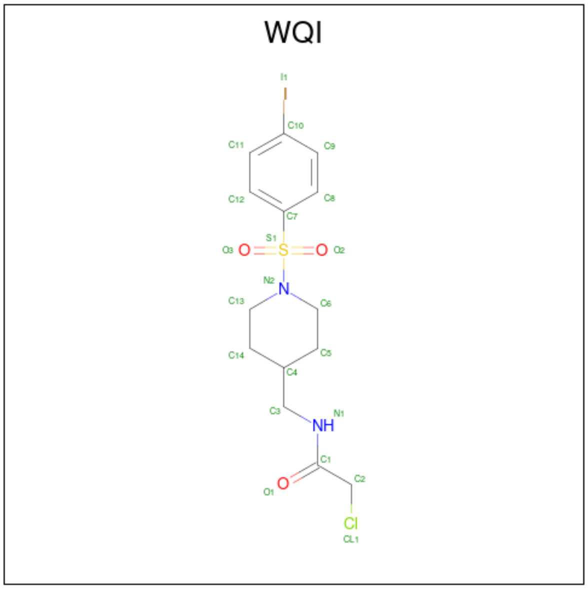
- Molecule 3 is CHLORIDE ION (CCD ID: CL) (formula: Cl).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	2	Total Cl 2 2	0	0
3	M	2	Total Cl 2 2	0	0

- Molecule 4 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	6	Total Mg 6 6	0	0
4	M	4	Total Mg 4 4	0	0

- Molecule 5 is 2-chloranyl- {N}-[[1-(4-iodophenyl)sulfonylpiperidin-4-yl]methyl]ethanamide (CCD ID: WQI) (formula: $C_{14}H_{18}ClIN_2O_3S$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
			Total	C	I	N	O	S		
5	A	1	21	14	1	2	3	1	0	0
			Total	C	I	N	O	S		
5	M	1	21	14	1	2	3	1	0	0

- Molecule 6 is water.

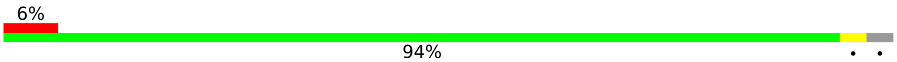
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
6	A	250	Total O 250 250	0	0
6	K	12	Total O 12 12	0	0
6	M	174	Total O 174 174	0	0
6	Y	10	Total O 10 10	0	0

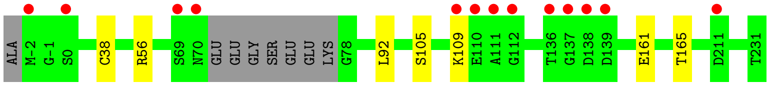
3 Residue-property plots

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: 14-3-3 protein sigma

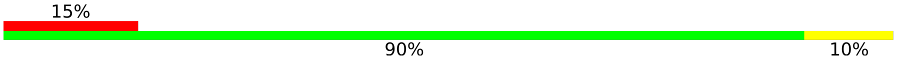
Chain A:

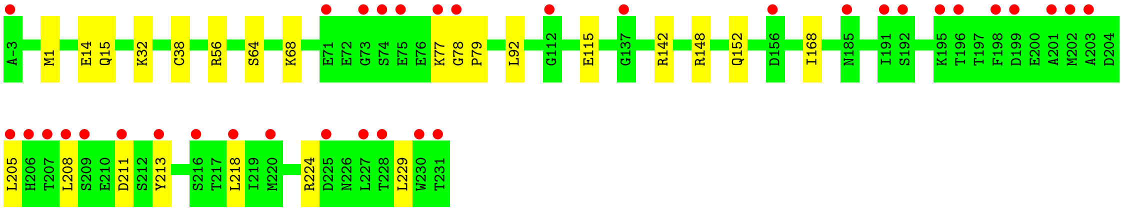




- Molecule 1: 14-3-3 protein sigma

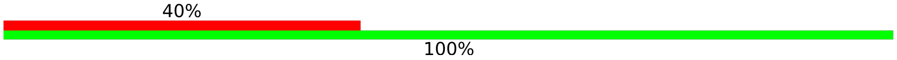
Chain M:

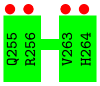




- Molecule 2: C-RAF peptide pS259

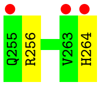
Chain K:





- Molecule 2: C-RAF peptide pS259

Chain Y:



4 Data and refinement statistics

Property	**Value**	**Source**
Space group	P 2 21 21	Depositor
Cell constants a, b, c, α, β, γ	60.69Å 89.26Å 116.97Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	70.96 – 1.60 70.96 – 1.60	Depositor EDS
% Data completeness (in resolution range)	98.2 (70.96-1.60) 98.2 (70.96-1.60)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	2.00 (at 1.60Å)	Xtriage
Refinement program	PDB-REDO	Depositor
R, R_{free}	0.184 , 0.199 0.222 , 0.233	Depositor DCC
R_{free} test set	4252 reflections (5.05%)	wwPDB-VP
Wilson B-factor (Å^2)	26.8	Xtriage
Anisotropy	0.202	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.38 , 41.3	EDS
L-test for twinning[2]	$< \|L\| >$ = 0.51, $< L^2 >$ = 0.34	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.95	EDS
Total number of atoms	4314	wwPDB-VP
Average B, all atoms (Å^2)	24.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 4.46% 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 ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: CL, SEP, MG, WQI

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	0/1818	0.53	0/2443
1	M	0.34	0/1879	0.54	0/2525
2	K	0.43	0/73	0.70	0/96
2	Y	0.28	0/73	0.62	0/96
All	All	0.34	0/3843	0.54	0/5160

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
1	M	0	3
2	Y	0	1
All	All	0	5

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (5) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	56	ARG	Sidechain
1	M	142	ARG	Sidechain
1	M	224	ARG	Sidechain
1	M	56	ARG	Sidechain
2	Y	256	ARG	Sidechain

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	1793	0	1777	4	0
1	M	1853	0	1828	15	0
2	K	83	0	71	0	0
2	Y	83	0	71	1	0
3	A	2	0	0	0	0
3	M	2	0	0	0	0
4	A	6	0	0	0	0
4	M	4	0	0	0	0
5	A	21	0	0	2	0
5	M	21	0	0	2	0
6	A	250	0	0	0	1
6	K	12	0	0	0	0
6	M	174	0	0	1	1
6	Y	10	0	0	0	0
All	All	4314	0	3747	19	1

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 2.

All (19) 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:M:38:CYS:SG	5:M:307:WQI:C2	2.15	1.33
1:A:38:CYS:SG	5:A:306:WQI:C2	2.16	1.32
1:A:38:CYS:SG	5:A:306:WQI:C1	2.83	0.66
1:M:38:CYS:SG	5:M:307:WQI:C1	2.84	0.65
1:M:218:LEU:HD23	1:M:218:LEU:C	2.24	0.57
1:A:105:SER:O	1:A:109:LYS:HE2	2.07	0.55
1:M:229:LEU:O	1:M:229:LEU:HD13	2.07	0.54
1:M:14:GLU:OE2	2:Y:264:HIS:HE1	1.98	0.47
1:M:229:LEU:HD13	1:M:229:LEU:C	2.35	0.46
1:M:218:LEU:HD23	1:M:218:LEU:O	2.16	0.46
1:M:1:MET:O	1:M:32:LYS:CE	2.64	0.45
1:M:115:GLU:CG	1:M:168:ILE:HD12	2.48	0.44
1:M:148:ARG:O	1:M:152:GLN:HG3	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:78:GLY:N	1:M:79:PRO:CD	2.80	0.44
1:M:15:GLN:NE2	6:M:403:HOH:O	2.50	0.44
1:M:205:LEU:HD21	1:M:213:TYR:HE1	1.84	0.43
1:M:64:SER:O	1:M:68:LYS:HD3	2.19	0.42
1:A:92:LEU:HD23	1:A:92:LEU:C	2.40	0.42
1:M:92:LEU:HD23	1:M:92:LEU:C	2.41	0.41

All (1) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:A:468:HOH:O	6:M:451:HOH:O[3_455]	2.14	0.06

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	223/235 (95%)	220 (99%)	3 (1%)	0	100	100
1	M	233/235 (99%)	231 (99%)	2 (1%)	0	100	100
2	K	7/10 (70%)	7 (100%)	0	0	100	100
2	Y	7/10 (70%)	7 (100%)	0	0	100	100
All	All	470/490 (96%)	465 (99%)	5 (1%)	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	192/198 (97%)	190 (99%)	2 (1%)	73	57
1	M	198/198 (100%)	195 (98%)	3 (2%)	60	39
2	K	9/9 (100%)	9 (100%)	0	100	100
2	Y	9/9 (100%)	9 (100%)	0	100	100
All	All	408/414 (99%)	403 (99%)	5 (1%)	67	50

All (5) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	161	GLU
1	A	165	THR
1	M	77	LYS
1	M	208	LEU
1	M	211	ASP

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	42	ASN
1	A	70	ASN
1	M	42	ASN
1	M	106	HIS
1	M	206	HIS
2	Y	264	HIS

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
2	SEP	Y	259	2	8,9,10	0.56	0	8,12,14	0.54	0
2	SEP	K	259	2	8,9,10	0.63	0	8,12,14	0.85	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	SEP	Y	259	2	-	0/5/8/10	-
2	SEP	K	259	2	-	0/5/8/10	-

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.6 Ligand geometry ⓘ

Of 16 ligands modelled in this entry, 14 are monoatomic - leaving 2 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	$\#\|Z\| > 2$
5	WQI	A	306	-	22,22,23	0.36	0	31,31,32	0.86	2 (6%)
5	WQI	M	307	-	22,22,23	0.42	0	31,31,32	0.48	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
5	WQI	A	306	-	-	0/17/27/29	0/2/2/2
5	WQI	M	307	-	-	0/17/27/29	0/2/2/2

There are no bond length outliers.

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	A	306	WQI	O3-S1-C7	2.48	111.18	108.05
5	A	306	WQI	C7-S1-N2	-2.34	104.51	107.30

There are no chirality outliers.

There are no torsion outliers.

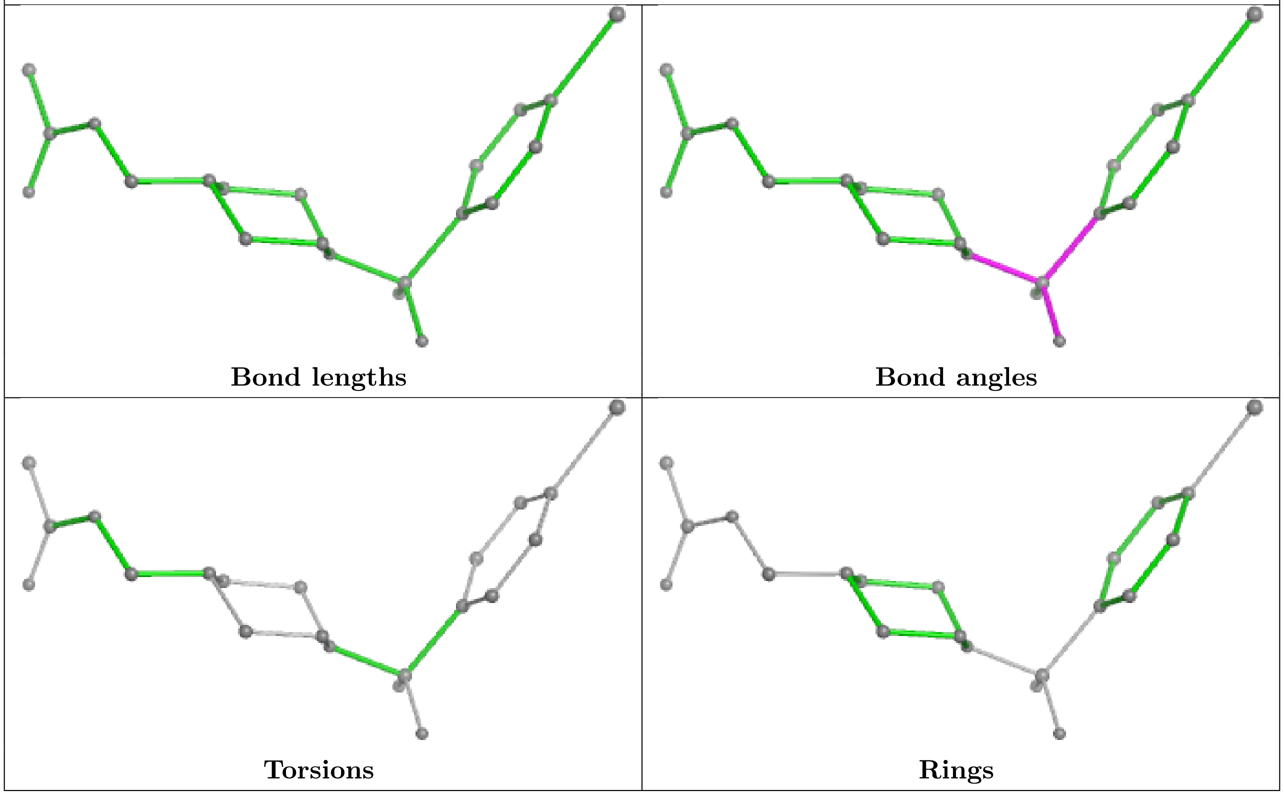
There are no ring outliers.

2 monomers are involved in 4 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
5	A	306	WQI	2	0
5	M	307	WQI	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 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 WQI A 306



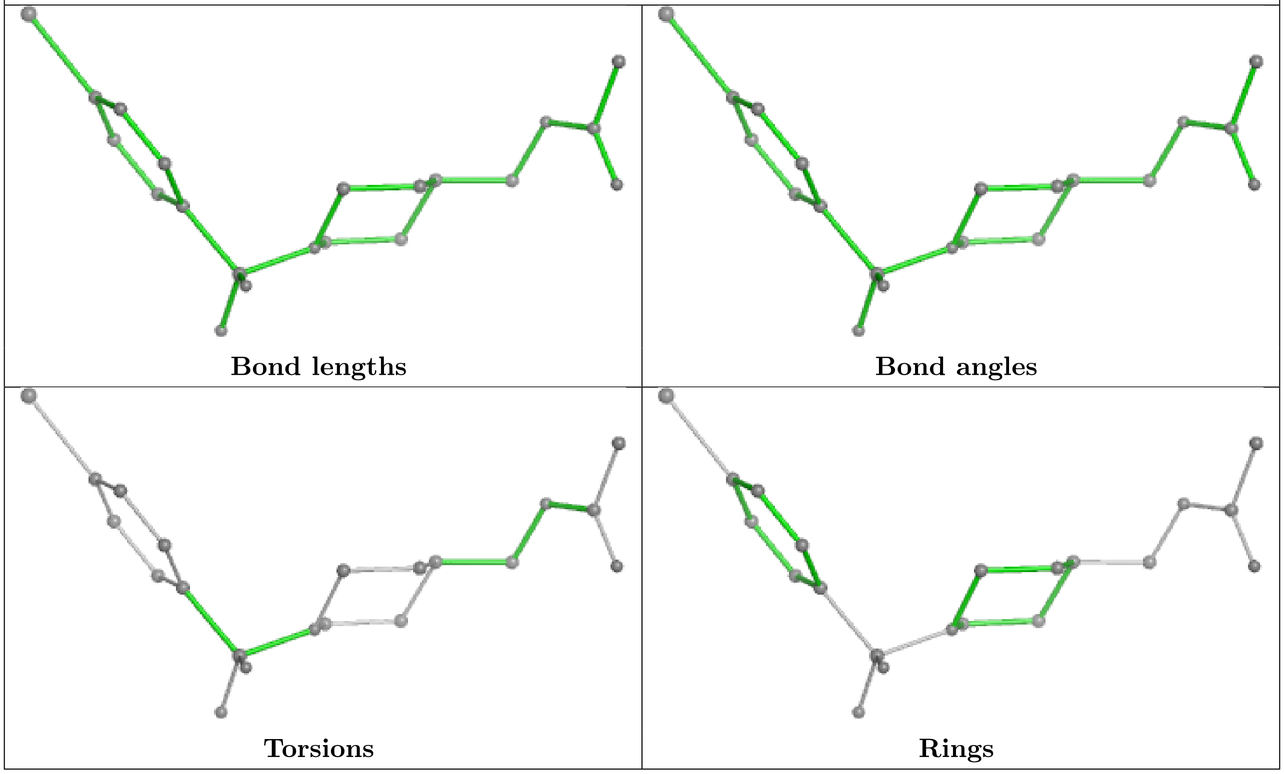
Bond lengths

Bond angles

Torsions

Rings

Ligand WQI M 307



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 (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	227/235 (96%)	0.20	13 (5%)	30	30	12, 17, 42, 69	0
1	M	235/235 (100%)	0.66	35 (14%)	7	5	12, 19, 40, 63	0
2	K	9/10 (90%)	1.89	4 (44%)	1	1	25, 29, 64, 66	0
2	Y	9/10 (90%)	1.67	3 (33%)	1	1	30, 38, 65, 80	0
All	All	480/490 (97%)	0.49	55 (11%)	11	9	12, 18, 47, 80	0

All (55) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	111	ALA	5.5
1	M	-3	ALA	5.3
1	M	203	ALA	5.3
1	A	136	THR	4.8
1	M	208	LEU	4.6
1	M	205	LEU	4.5
1	A	70	ASN	4.0
1	A	109	LYS	3.9
1	M	77	LYS	3.9
1	M	74	SER	3.8
1	A	110	GLU	3.8
1	A	69	SER	3.6
1	A	138	ASP	3.5
1	M	78	GLY	3.4
2	K	263	VAL	3.2
1	M	231	THR	3.1
2	Y	255	GLN	3.0
1	M	137	GLY	3.0
2	K	255	GLN	3.0
2	Y	264	HIS	3.0
1	M	213	TYR	3.0

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Mol	Chain	Res	Type	RSRZ
1	M	195	LYS	2.9
2	Y	263	VAL	2.8
1	A	0	SER	2.7
1	A	139	ASP	2.7
1	A	112	GLY	2.7
1	A	137	GLY	2.7
1	M	112	GLY	2.7
1	M	207	THR	2.6
1	M	211	ASP	2.6
1	M	185	ASN	2.6
1	M	192	SER	2.6
1	M	230	TRP	2.5
1	M	199	ASP	2.5
1	M	73	GLY	2.5
1	M	227	LEU	2.5
1	M	206	HIS	2.5
1	M	196	THR	2.5
1	M	198	PHE	2.4
2	K	256	ARG	2.4
1	M	202	MET	2.4
1	M	156	ASP	2.4
1	M	220	MET	2.3
1	M	209	SER	2.3
2	K	264	HIS	2.3
1	M	75	GLU	2.3
1	M	225	ASP	2.2
1	M	191	ILE	2.2
1	M	201	ALA	2.2
1	A	-2	MET	2.2
1	M	71	GLU	2.1
1	M	218	LEU	2.1
1	M	228	THR	2.1
1	M	216	SER	2.1
1	A	211	ASP	2.1

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

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, 95^{th} 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	SEP	Y	259	10/11	0.97	0.08	27,28,29,31	0
2	SEP	K	259	10/11	0.98	0.09	21,22,22,23	0

6.3 Carbohydrates ⓘ

There are no monosaccharides in this entry.

6.4 Ligands ⓘ

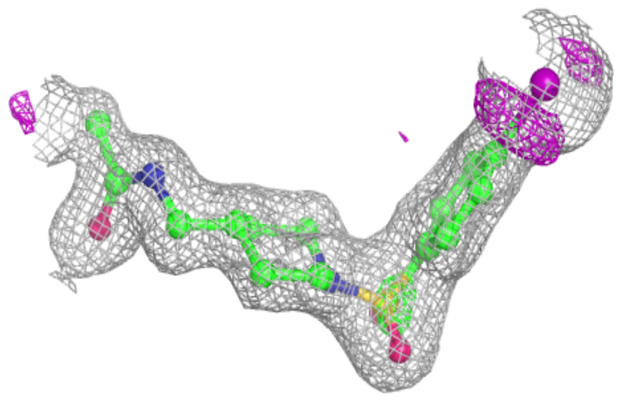
In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9'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

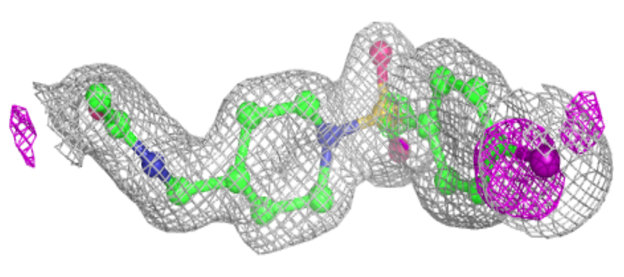
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($Å^2$)	Q<0.9
3	CL	M	302	1/1	0.16	0.42	124,124,124,124	0
4	MG	A	305	1/1	0.36	0.29	75,75,75,75	0
4	MG	A	302	1/1	0.59	0.36	77,77,77,77	0
4	MG	M	303	1/1	0.59	0.27	68,68,68,68	0
4	MG	M	306	1/1	0.74	0.31	64,64,64,64	0
3	CL	A	301	1/1	0.79	0.29	81,81,81,81	0
4	MG	M	305	1/1	0.81	0.19	30,30,30,30	0
4	MG	A	304	1/1	0.92	0.08	39,39,39,39	0
4	MG	M	304	1/1	0.92	0.14	42,42,42,42	0
5	WQI	M	307	21/22	0.96	0.10	25,30,34,54	0
4	MG	A	308	1/1	0.97	0.13	25,25,25,25	0
5	WQI	A	306	21/22	0.98	0.10	25,27,31,34	0
4	MG	A	303	1/1	0.98	0.15	31,31,31,31	0
3	CL	A	307	1/1	0.99	0.08	28,28,28,28	0
3	CL	M	301	1/1	0.99	0.08	30,30,30,30	0
4	MG	A	309	1/1	0.99	0.04	30,30,30,30	0

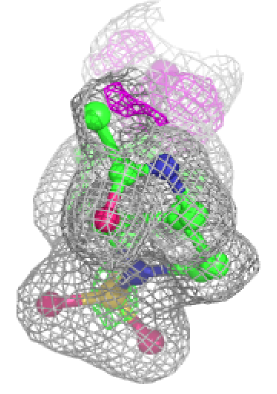
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around WQI M 307:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

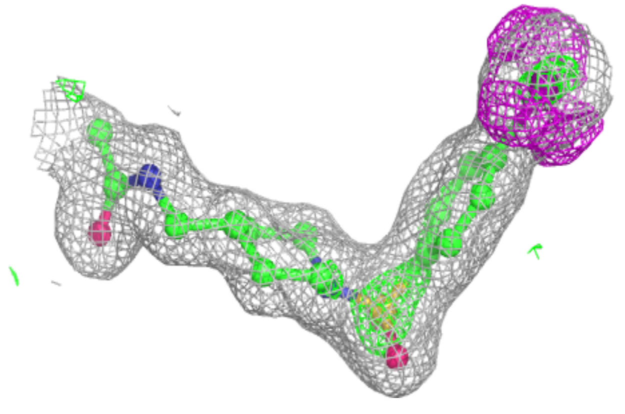


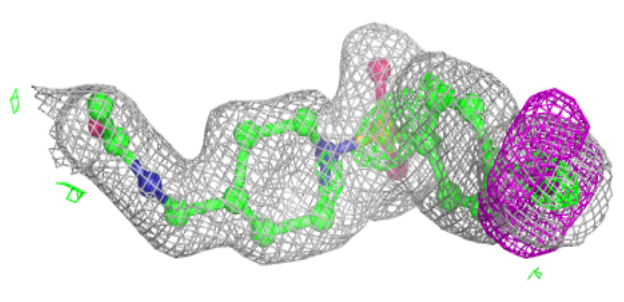


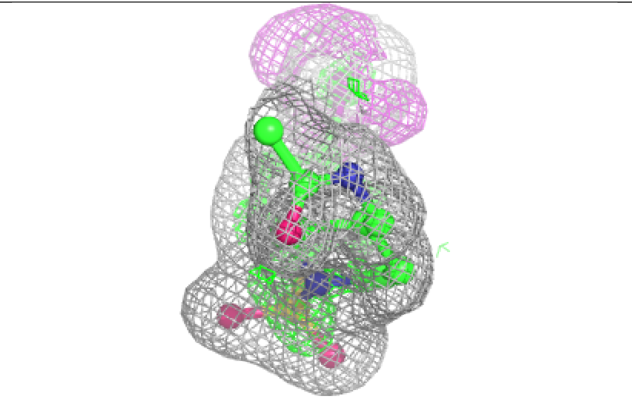


Electron density around WQI A 306:

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.