WORLDWIDE wwPDB PROTEIN DATA BANK

Full wwPDB X-ray Structure Validation Report ⓘ

Jan 31, 2024 – 08:04 PM EST

PDB ID	:	8UDU
Title	:	The X-RAY co-crystal structure of human FGFR3 and Compound 17
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Deposited on	:	2023-09-29
Resolution	:	1.74 Å(reported)

The following versions of software and data (see references ①) 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	:	2.36
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)	:	2.36

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.
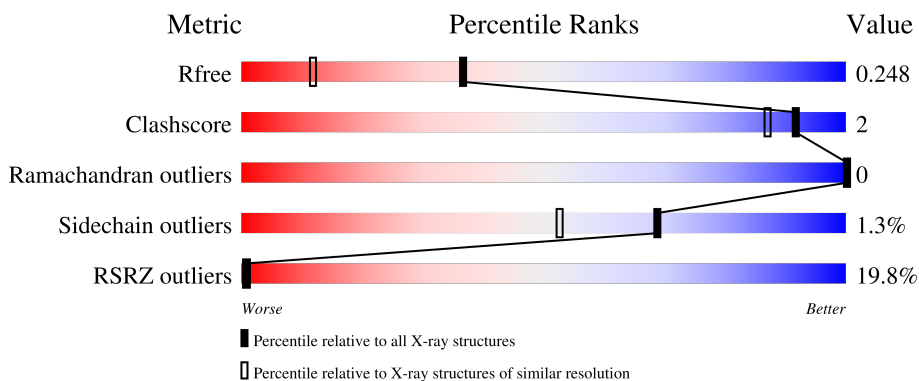
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	3764 (1.76-1.72)
Clashscore	141614	3923 (1.76-1.72)
Ramachandran outliers	138981	3878 (1.76-1.72)
Sidechain outliers	138945	3878 (1.76-1.72)
RSRZ outliers	127900	3705 (1.76-1.72)

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	297	18% / 89% / 5% / 6%
1	B	297	19% / 90% / · / 7%

2 Entry composition ⓘ

There are 4 unique types of molecules in this entry. The entry contains 9374 atoms, of which 4507 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 Fibroblast growth factor receptor 3.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
1	A	280	Total 4547	C 1438	H 2284	N 400	O 406	S 19	2284	10	0
1	B	276	Total 4425	C 1405	H 2223	N 379	O 400	S 18	2223	4	0

There are 42 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	454	MET	-	initiating methionine	UNP P22607
A	?	-	PRO	deletion	UNP P22607
A	?	-	PRO	deletion	UNP P22607
A	?	-	GLY	deletion	UNP P22607
A	?	-	LEU	deletion	UNP P22607
A	?	-	ASP	deletion	UNP P22607
A	?	-	TYR	deletion	UNP P22607
A	?	-	SER	deletion	UNP P22607
A	?	-	PHE	deletion	UNP P22607
A	?	-	ASP	deletion	UNP P22607
A	?	-	THR	deletion	UNP P22607
A	?	-	CYS	deletion	UNP P22607
A	?	-	LYS	deletion	UNP P22607
A	572	SER	PRO	engineered mutation	UNP P22607
A	573	GLY	PRO	engineered mutation	UNP P22607
A	757	HIS	-	expression tag	UNP P22607
A	758	HIS	-	expression tag	UNP P22607
A	759	HIS	-	expression tag	UNP P22607
A	760	HIS	-	expression tag	UNP P22607
A	761	HIS	-	expression tag	UNP P22607
A	762	HIS	-	expression tag	UNP P22607
B	454	MET	-	initiating methionine	UNP P22607
B	?	-	PRO	deletion	UNP P22607
B	?	-	PRO	deletion	UNP P22607
B	?	-	GLY	deletion	UNP P22607

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Chain	Residue	Modelled	Actual	Comment	Reference
B	?	-	LEU	deletion	UNP P22607
B	?	-	ASP	deletion	UNP P22607
B	?	-	TYR	deletion	UNP P22607
B	?	-	SER	deletion	UNP P22607
B	?	-	PHE	deletion	UNP P22607
B	?	-	ASP	deletion	UNP P22607
B	?	-	THR	deletion	UNP P22607
B	?	-	CYS	deletion	UNP P22607
B	?	-	LYS	deletion	UNP P22607
B	572	SER	PRO	engineered mutation	UNP P22607
B	573	GLY	PRO	engineered mutation	UNP P22607
B	757	HIS	-	expression tag	UNP P22607
B	758	HIS	-	expression tag	UNP P22607
B	759	HIS	-	expression tag	UNP P22607
B	760	HIS	-	expression tag	UNP P22607
B	761	HIS	-	expression tag	UNP P22607
B	762	HIS	-	expression tag	UNP P22607

- Molecule 2 is CHLORIDE ION (three-letter code: CL) (formula: Cl).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
2	A	1	Total 1	Cl 1	0	0
2	B	1	Total 1	Cl 1	0	0

- Molecule 3 is 3-[(6-chloro-1-cyclopropyl-1H-benzimidazol-5-yl)ethynyl]-1-[(3S,5S)-5-(methoxymethyl)-1-(prop-2-enoyl)pyrrolidin-3-yl]-5-(methylamino)-1H-pyrazole-4-carboxamide (three-letter code: WIQ) (formula: $C_{26}H_{30}ClN_7O_3$) (labeled as "Ligand of Interest" by depositor).
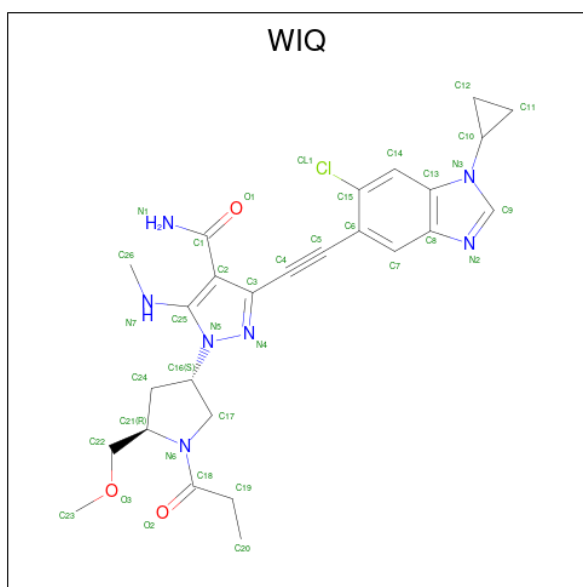
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
3	A	1	Total 37	C 26	Cl 1	N 7	O 3	0	0
3	B	1	Total 37	C 26	Cl 1	N 7	O 3	0	0

• Molecule 4 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
4	A	180	Total 181	O 181	0	1
4	B	143	Total 145	O 145	0	2

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: Fibroblast growth factor receptor 3
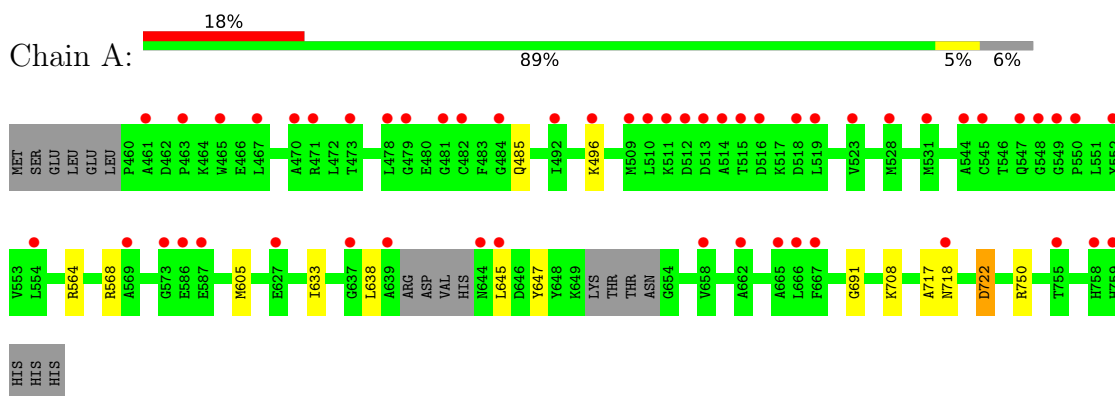
• Molecule 1: Fibroblast growth factor receptor 3
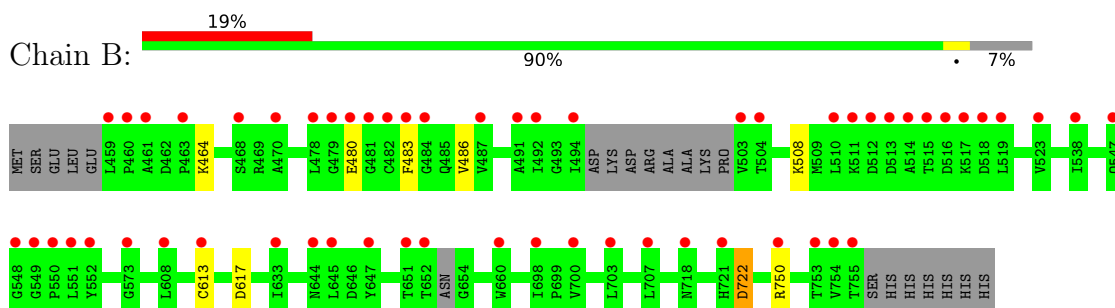
4 Data and refinement statistics ⓘ

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α, β, γ	55.70Å 69.31Å 78.47Å 90.00° 90.96° 90.00°	Depositor
Resolution (Å)	34.14 – 1.74 34.14 – 1.74	Depositor EDS
% Data completeness (in resolution range)	100.0 (34.14-1.74) 100.0 (34.14-1.74)	Depositor EDS
R_{merge}	0.04	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	2.28 (at 1.74Å)	Xtriage
Refinement program	BUSTER 2.11.8	Depositor
R, R_{free}	0.230 , 0.256 0.222 , 0.248	Depositor DCC
R_{free} test set	2972 reflections (4.82%)	wwPDB-VP
Wilson B-factor (Å^2)	35.7	Xtriage
Anisotropy	0.052	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.33 , 52.0	EDS
L-test for twinning[2]	$< |L| > = 0.51, < L^2 > = 0.35$	Xtriage
Estimated twinning fraction	0.017 for h,-k,-l	Xtriage
F_o,F_c correlation	0.95	EDS
Total number of atoms	9374	wwPDB-VP
Average B, all atoms (Å^2)	47.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 5.38% 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: WIQ, CL

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	0.32	0/2345	0.47	0/3162
1	B	0.31	0/2262	0.47	0/3054
All	All	0.32	0/4607	0.47	0/6216

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	2263	2284	2250	7	1
1	B	2202	2223	2201	5	1
2	A	1	0	0	0	0
2	B	1	0	0	0	0
3	A	37	0	0	2	0
3	B	37	0	0	2	0
4	A	181	0	0	1	0
4	B	145	0	0	1	0
All	All	4867	4507	4451	14	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 (14) 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:B:483:PHE:O	1:B:508:LYS:HE3	2.07	0.54
3:A:1002:WIQ:C4	3:A:1002:WIQ:N1	2.73	0.51
3:A:1002:WIQ:C16	3:A:1002:WIQ:C26	2.90	0.50
1:A:708:LYS:NZ	4:A:1104:HOH:O	2.44	0.49
1:A:564[A]:ARG:O	1:A:568[A]:ARG:HG3	2.15	0.47
1:A:568[B]:ARG:NH2	1:A:691:GLY:O	2.43	0.46
3:B:1002:WIQ:C4	3:B:1002:WIQ:N1	2.80	0.45
1:B:613:CYS:HB2	4:B:1211:HOH:O	2.16	0.44
1:B:486:VAL:HG13	3:B:1002:WIQ:CL1	2.54	0.44
1:A:605:MET:SD	1:A:633:ILE:HD13	2.58	0.44
1:A:496:LYS:O	1:B:464:LYS:HE3	2.19	0.43
1:A:722:ASP:OD2	1:A:750:ARG:NH2	2.52	0.43
1:B:722:ASP:OD2	1:B:750:ARG:NH2	2.54	0.41
1:A:717:ALA:O	1:A:718:ASN:HB3	2.22	0.40

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)
1:A:647:TYR:HH	1:B:617:ASP:OD2[1_556]	1.60	0.00

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	284/297 (96%)	275 (97%)	9 (3%)	0	100	100
1	B	274/297 (92%)	268 (98%)	6 (2%)	0	100	100
All	All	558/594 (94%)	543 (97%)	15 (3%)	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	245/254 (96%)	241 (98%)	4 (2%)	62	44
1	B	239/254 (94%)	237 (99%)	2 (1%)	81	72
All	All	484/508 (95%)	478 (99%)	6 (1%)	69	56

All (6) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	485	GLN
1	A	638	LEU
1	A	645	LEU
1	A	722	ASP
1	B	480	GLU
1	B	722	ASP

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. There are no such sidechains identified.

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 monosaccharides in this entry.

5.6 Ligand geometry ⓘ

Of 4 ligands modelled in this entry, 2 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	$\#|Z| > 2$
3	WIQ	A	1002	1	33,41,41	2.92	4 (12%)	33,60,60	1.85	8 (24%)
3	WIQ	B	1002	1	33,41,41	1.18	2 (6%)	33,60,60	1.97	6 (18%)

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
3	WIQ	A	1002	1	-	7/11/42/42	0/5/5/5
3	WIQ	B	1002	1	-	3/11/42/42	0/5/5/5

All (6) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	1002	WIQ	C3-C4	-14.52	1.26	1.43
3	A	1002	WIQ	C20-C19	-4.95	1.29	1.51
3	B	1002	WIQ	C20-C19	-4.66	1.30	1.51
3	A	1002	WIQ	C5-C4	4.17	1.30	1.19
3	A	1002	WIQ	C2-C25	-2.52	1.38	1.42
3	B	1002	WIQ	C3-C4	-2.37	1.41	1.43

All (14) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	B	1002	WIQ	C20-C19-C18	7.89	127.30	112.72
3	A	1002	WIQ	C20-C19-C18	5.87	123.57	112.72
3	A	1002	WIQ	C3-N4-N5	4.17	107.30	104.32
3	B	1002	WIQ	C26-N7-C25	3.80	128.88	123.66
3	A	1002	WIQ	C17-N6-C18	-3.24	122.87	129.33
3	B	1002	WIQ	C3-N4-N5	2.92	106.41	104.32
3	A	1002	WIQ	C19-C18-N6	-2.72	114.81	117.52
3	B	1002	WIQ	C21-C24-C16	2.58	108.43	94.76

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A	1002	WIQ	C24-C16-C17	2.48	105.71	101.91
3	A	1002	WIQ	C25-C2-C3	2.46	109.02	105.26
3	B	1002	WIQ	C17-N6-C18	-2.35	124.65	129.33
3	B	1002	WIQ	C7-C6-C15	2.26	120.72	118.38
3	A	1002	WIQ	C7-C6-C15	2.07	120.53	118.38
3	A	1002	WIQ	C21-C24-C16	2.01	105.40	94.76

There are no chirality outliers.
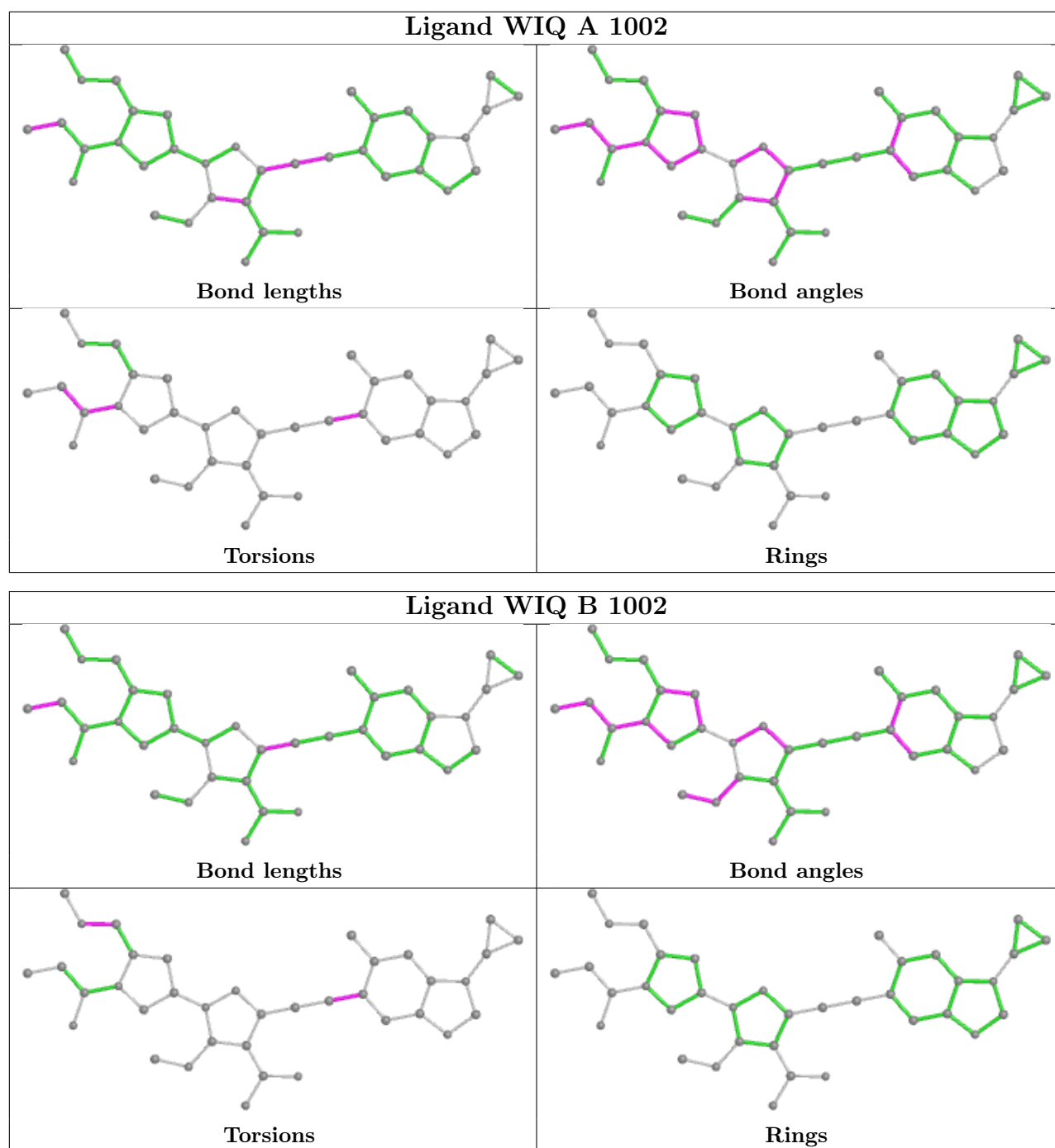
All (10) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	A	1002	WIQ	C19-C18-N6-C17
3	A	1002	WIQ	O2-C18-N6-C17
3	A	1002	WIQ	C19-C18-N6-C21
3	B	1002	WIQ	C21-C22-O3-C23
3	A	1002	WIQ	N6-C18-C19-C20
3	A	1002	WIQ	C4-C5-C6-C15
3	A	1002	WIQ	O2-C18-C19-C20
3	A	1002	WIQ	C4-C5-C6-C7
3	B	1002	WIQ	C4-C5-C6-C7
3	B	1002	WIQ	C4-C5-C6-C15

There are no ring outliers.

2 monomers are involved in 4 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	A	1002	WIQ	2	0
3	B	1002	WIQ	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 WIQ A 1002

Bond lengths

Bond angles

Torsions

Rings

Ligand WIQ B 1002

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	280/297 (94%)	1.17	53 (18%)	1	1	27, 42, 67, 79	0
1	B	276/297 (92%)	1.34	57 (20%)	1	1	25, 42, 76, 92	0
All	All	556/594 (93%)	1.25	110 (19%)	1	1	25, 42, 73, 92	0

All (110) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	482	CYS	16.5
1	B	484	GLY	14.9
1	B	483	PHE	13.8
1	A	482	CYS	10.9
1	B	481	GLY	10.1
1	B	503	VAL	7.7
1	A	759	HIS	7.0
1	B	479	GLY	6.8
1	B	548	GLY	6.8
1	A	637	GLY	6.7
1	B	459	LEU	6.7
1	A	586	GLU	6.5
1	A	481	GLY	6.4
1	B	492	ILE	6.0
1	A	548	GLY	5.9
1	B	513	ASP	5.8
1	B	511	LYS	5.8
1	A	573	GLY	5.7
1	A	470	ALA	5.6
1	A	510	LEU	5.4
1	B	754	VAL	5.4
1	A	512	ASP	5.3
1	B	549	GLY	5.2
1	A	519	LEU	5.1

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Mol	Chain	Res	Type	RSRZ
1	A	514	ALA	5.1
1	A	515	THR	5.0
1	B	755	THR	5.0
1	A	511	LYS	4.8
1	B	480	GLU	4.6
1	A	549	GLY	4.5
1	B	515	THR	4.4
1	A	463	PRO	4.2
1	B	512	ASP	4.1
1	A	516	ASP	4.0
1	B	510	LEU	4.0
1	A	518	ASP	4.0
1	A	513	ASP	4.0
1	A	639	ALA	3.9
1	B	517	LYS	3.9
1	B	651	THR	3.9
1	A	552	TYR	3.9
1	B	460	PRO	3.8
1	A	547	GLN	3.7
1	B	494	ILE	3.7
1	B	660	TRP	3.7
1	A	473	THR	3.5
1	B	644	ASN	3.5
1	B	516	ASP	3.5
1	B	487[A]	VAL	3.5
1	A	465	TRP	3.4
1	B	608	LEU	3.3
1	A	484	GLY	3.2
1	B	750	ARG	3.2
1	B	652	THR	3.2
1	B	461	ALA	3.2
1	B	645	LEU	3.2
1	A	758	HIS	3.1
1	B	478	LEU	3.1
1	B	647	TYR	3.1
1	A	479	GLY	3.1
1	A	509	MET	3.0
1	B	547	GLN	3.0
1	A	523	VAL	3.0
1	B	514	ALA	2.9
1	A	554	LEU	2.9
1	B	552	TYR	2.9

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Mol	Chain	Res	Type	RSRZ
1	B	550	PRO	2.8
1	A	718	ASN	2.8
1	A	467	LEU	2.8
1	B	491	ALA	2.8
1	B	721	HIS	2.7
1	A	545	CYS	2.6
1	A	550	PRO	2.6
1	B	468	SER	2.6
1	B	523	VAL	2.5
1	B	700	VAL	2.5
1	A	478	LEU	2.5
1	B	573	GLY	2.5
1	A	666	LEU	2.5
1	A	755	THR	2.5
1	B	470	ALA	2.4
1	A	645	LEU	2.4
1	B	613	CYS	2.3
1	A	461	ALA	2.3
1	A	528	MET	2.3
1	B	518	ASP	2.3
1	A	587	GLU	2.2
1	A	569[A]	ALA	2.2
1	B	707	LEU	2.2
1	A	627	GLU	2.2
1	B	551	LEU	2.2
1	B	633	ILE	2.2
1	B	538	ILE	2.2
1	A	665	ALA	2.2
1	A	531	MET	2.2
1	B	703[A]	LEU	2.1
1	B	718	ASN	2.1
1	B	698	ILE	2.1
1	A	667	PHE	2.1
1	A	662	ALA	2.1
1	A	471	ARG	2.1
1	A	492	ILE	2.1
1	A	496	LYS	2.1
1	A	544	ALA	2.1
1	B	519	LEU	2.1
1	A	644	ASN	2.1
1	B	463	PRO	2.0
1	B	753	THR	2.0

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Mol	Chain	Res	Type	RSRZ
1	A	658	VAL	2.0
1	B	504	THR	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 ⓘ

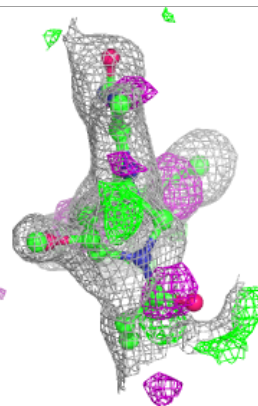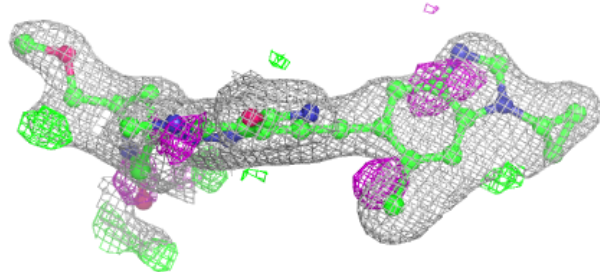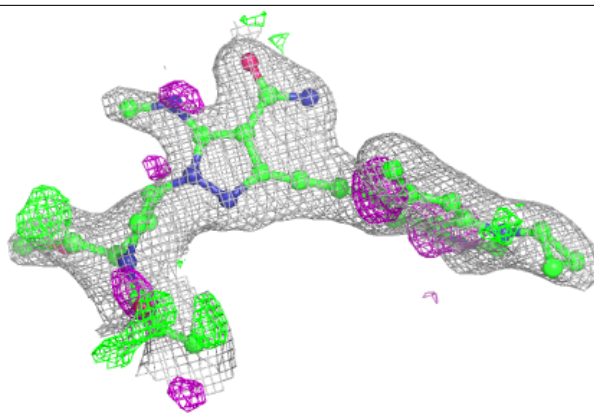There are no monosaccharides in this entry.

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.
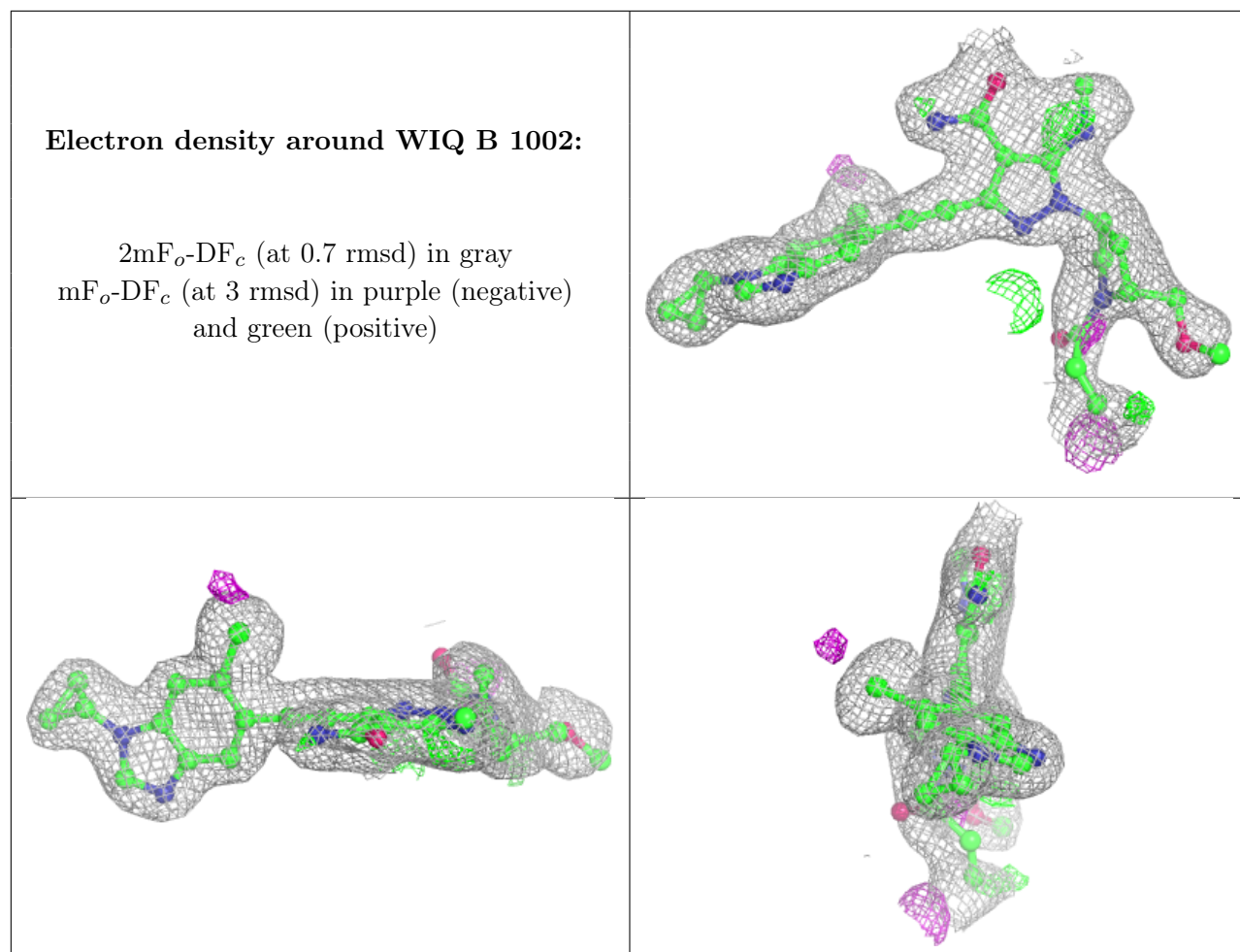
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
3	WIQ	A	1002	37/37	0.77	0.18	47,52,66,69	0
3	WIQ	B	1002	37/37	0.89	0.14	38,49,68,73	0
2	CL	B	1001	1/1	0.94	0.07	52,52,52,52	0
2	CL	A	1001	1/1	0.99	0.07	38,38,38,38	0

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.

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PROTEIN DATA BANK

Electron density around WIQ A 1002:

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

Electron density around WIQ B 1002:

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

6.5 Other polymers ⓘ

There are no such residues in this entry.