

# wwPDB X-ray Structure Validation Summary Report (i)

Jan 6, 2024 – 11:18 pm GMT

PDB ID : 6EJW

Title : Tryptophan Repressor TrpR from E.coli wildtype with Indole-3-acetic acid as

ligand

Authors: Stiel, A.C.; Shanmugaratnam, S.; Herud-Sikimic, O.; Juergens, G.; Hocker, B.

Deposited on : 2017-09-23

Resolution : 1.99 Å(reported)

This is a wwPDB X-ray Structure Validation Summary 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 (i) symbol.

The types of validation reports are described at http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references (1)) were used in the production of this report:

MolProbity : 4.02b-467

Mogul : 1.8.4, 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)

 $Refmac \quad : \quad 5.8.0158$ 

CCP4 : 7.0.044 (Gargrove)

Ideal geometry (proteins) : Engh & Huber (2001) Ideal geometry (DNA, RNA) : Parkinson et al. (1996)

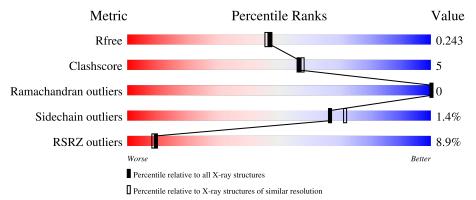
Validation Pipeline (wwPDB-VP) : 2.36

# 1 Overall quality at a glance (i)

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

The reported resolution of this entry is 1.99 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	Similar resolution
Metric	$(\#  ext{Entries})$	$(\#  ext{Entries},  ext{ resolution range}( ext{Å}))$
$R_{free}$	130704	8085 (2.00-2.00)
Clashscore	141614	9178 (2.00-2.00)
Ramachandran outliers	138981	9054 (2.00-2.00)
Sidechain outliers	138945	9053 (2.00-2.00)
RSRZ outliers	127900	7900 (2.00-2.00)

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	116	9%	10%	13%
1	В	116	72%	14% •	13%
1	С	116	78%	9%	13%
1	D	116	77%	10%	13%

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
2	IAC	A	202	-	-	-	X



# 2 Entry composition (i)

There are 3 unique types of molecules in this entry. The entry contains 3609 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 Trp operon repressor.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
1	Λ	101	Total	С	N	О	S	0	9	0
1	A	101	829	523	148	154	4	0	2	U
1	В	101	Total	С	N	О	S	0	1	0
1	Б	101	817	514	147	152	4	0	1	U
1	С	101	Total	С	N	О	S	0	2	0
1		101	827	520	152	152	3	0	2	U
1	D	101	Total	С	N	О	S	0	9	0
1	ע	101	820	516	147	153	4			U

There are 32 discrepancies between the modelled and reference sequences:

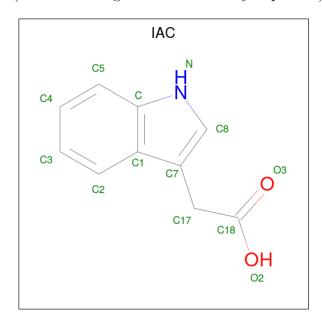
Chain	Residue	Modelled	Actual	Comment	Reference
A	109	LEU	-	expression tag	UNP P0A881
A	110	GLU	-	expression tag	UNP P0A881
A	111	HIS	-	expression tag	UNP P0A881
A	112	HIS	-	expression tag	UNP P0A881
A	113	HIS	-	expression tag	UNP P0A881
A	114	HIS	-	expression tag	UNP P0A881
A	115	HIS	-	expression tag	UNP P0A881
A	116	HIS	-	expression tag	UNP P0A881
В	109	LEU	-	expression tag	UNP P0A881
В	110	GLU	-	expression tag	UNP P0A881
В	111	HIS	-	expression tag	UNP P0A881
В	112	HIS	-	expression tag	UNP P0A881
В	113	HIS	-	expression tag	UNP P0A881
В	114	HIS	-	expression tag	UNP P0A881
В	115	HIS	-	expression tag	UNP P0A881
В	116	HIS	-	expression tag	UNP P0A881
С	109	LEU	-	expression tag	UNP P0A881
С	110	GLU	-	expression tag	UNP P0A881
С	111	HIS	-	expression tag	UNP P0A881
С	112	HIS	-	expression tag	UNP P0A881
С	113	HIS	-	expression tag	UNP P0A881



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Chain	Residue	Modelled	Actual	Comment	Reference
С	114	HIS	-	expression tag	UNP P0A881
С	115	HIS	-	expression tag	UNP P0A881
С	116	HIS	-	expression tag	UNP P0A881
D	109	LEU	-	expression tag	UNP P0A881
D	110	GLU	-	expression tag	UNP P0A881
D	111	HIS	_	expression tag	UNP P0A881
D	112	HIS	-	expression tag	UNP P0A881
D	113	HIS	-	expression tag	UNP P0A881
D	114	HIS	-	expression tag	UNP P0A881
D	115	HIS	-	expression tag	UNP P0A881
D	116	HIS	-	expression tag	UNP P0A881

• Molecule 2 is 1H-INDOL-3-YLACETIC ACID (three-letter code: IAC) (formula:  $C_{10}H_9NO_2$ ) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	
2	A	1	Total	С	N	О	0	1	
	Λ	1	26	20	2	4	U	1	
2	A	1	Total	$\mathbf{C}$	N	Ο	0	0	
	11	1	13	10	1	2	U	U	
2	A	1	Total	С	N	Ο	0	0	
2	Λ	1	13	10	1	2	0		
2	В	1	Total	С	N	О	0	1	
2	Ъ	1	26	20	2	4	0		
2	С	1	Total	С	N	О	0	1	
		1	26	20	2	4	0	1	



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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
2	С	1	Total 13				0	0
2	D	1	Total 13			O 2	0	0

#### • Molecule 3 is water.

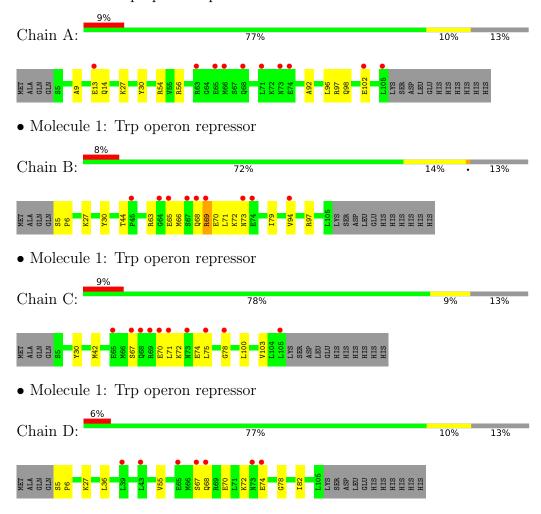
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	37	Total O 37 37	0	0
3	В	52	Total O 52 52	0	0
3	С	51	Total O 51 51	0	0
3	D	46	Total O 46 46	0	0



# 3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and 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: Trp operon repressor





# 4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 43	Depositor
Cell constants	81.31Å 81.31Å 72.00Å	Donositon
a, b, c, $\alpha$ , $\beta$ , $\gamma$	$90.00^{\circ}$ $90.00^{\circ}$ $90.00^{\circ}$	Depositor
Resolution (Å)	44.93 - 1.99	Depositor
rtesolution (A)	44.93 - 1.99	EDS
% Data completeness	99.3 (44.93-1.99)	Depositor
(in resolution range)	99.4 (44.93-1.99)	EDS
$R_{merge}$	0.09	Depositor
$R_{sym}$	(Not available)	Depositor
$< I/\sigma(I) > 1$	0.97 (at 1.98Å)	Xtriage
Refinement program	PHENIX	Depositor
D D.	0.195 , 0.243	Depositor
$R, R_{free}$	0.195 , $0.243$	DCC
$R_{free}$ test set	1606 reflections (5.00%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	39.5	Xtriage
Anisotropy	0.129	Xtriage
Bulk solvent $k_{sol}(e/Å^3)$ , $B_{sol}(Å^2)$	0.36 , 48.4	EDS
L-test for twinning <sup>2</sup>	$< L >=0.50, < L^2>=0.33$	Xtriage
Estimated twinning fraction	0.039 for h,-k,-l	Xtriage
$F_o, F_c$ correlation	0.97	EDS
Total number of atoms	3609	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	50.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: The analyses of the Patterson function reveals a significant off-origin peak that is 41.44 % of the origin peak, indicating pseudo-translational symmetry. The chance of finding a peak of this or larger height randomly in a structure without pseudo-translational symmetry is equal to 2.3603e-04. The detected translational NCS is most likely also responsible for the elevated intensity ratio.

<sup>&</sup>lt;sup>2</sup>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.



<sup>&</sup>lt;sup>1</sup>Intensities estimated from amplitudes.

# 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: IAC

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		
MIOI	Chain	RMSZ	# Z  > 5	RMSZ	# Z  > 5	
1	A	0.42	0/845	0.53	0/1142	
1	В	0.42	0/832	0.56	0/1124	
1	С	0.42	0/846	0.54	0/1143	
1	D	0.43	0/838	0.55	0/1132	
All	All	0.42	0/3361	0.54	0/4541	

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 (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	829	0	841	10	0
1	В	817	0	834	12	1
1	С	827	0	845	7	0
1	D	820	0	839	9	0
2	A	52	0	32	2	1
2	В	26	0	16	0	0
2	С	39	0	23	1	0
2	D	13	0	8	0	0
3	A	37	0	0	2	0



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N	Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
	3	В	52	0	0	0	0
	3	С	51	0	0	1	2
	3	D	46	0	0	0	2
	All	All	3609	0	3438	34	3

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 5.

The worst 5 of 34 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	$\begin{array}{c} {\rm Interatomic} \\ {\rm distance} \ ({\rm \AA}) \end{array}$	Clash overlap (Å)
1:A:9:ALA:O	1:A:13:GLU:OE1	1.68	1.11
1:A:56:ARG:NH1	3:A:301:HOH:O	2.26	0.68
1:B:69:ARG:O	1:B:73:ASN:N	2.32	0.62
1:B:70:GLU:HA	1:B:73:ASN:HB2	1.81	0.62
1:B:69:ARG:HA	1:B:72:LYS:HB3	1.83	0.60

All (3) 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	$\begin{array}{c} {\rm Interatomic} \\ {\rm distance} \ (\rm \mathring{A}) \end{array}$	$\begin{array}{c} \text{Clash} \\ \text{overlap (Å)} \end{array}$
3:C:338:HOH:O	3:D:305:HOH:O[3_464]	1.89	0.31
3:C:315:HOH:O	3:D:334:HOH:O[2_354]	2.14	0.06
1:B:94:VAL:CB	2:A:202:IAC:O3[4_545]	2.19	0.01

### 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	Perce	$\mathbf{ntiles}$
1	A	101/116 (87%)	99 (98%)	2 (2%)	0	100	100
1	В	100/116 (86%)	97 (97%)	3 (3%)	0	100	100



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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Perce	entiles
1	$\mathbf{C}$	101/116 (87%)	101 (100%)	0	0	100	100
1	D	101/116~(87%)	101 (100%)	0	0	100	100
All	All	403/464 (87%)	398 (99%)	5 (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	ysed Rotameric		Percentiles		
1	A	89/101 (88%)	87 (98%)	2 (2%)	52 55		
1	В	88/101 (87%)	87 (99%)	1 (1%)	73 78		
1	С	89/101 (88%)	88 (99%)	1 (1%)	73 78		
1	D	89/101 (88%)	88 (99%)	1 (1%)	73 78		
All	All	355/404~(88%)	350 (99%)	5 (1%)	67 72		

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

Mol	Chain	Res	Type
1	A	14	GLN
1	A	97	ARG
1	В	69	ARG
1	С	74	GLU
1	D	68	GLN

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

#### 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 monosaccharides in this entry.

### 5.6 Ligand geometry (i)

10 ligands are modelled in this entry.

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

N ( - 1	Т	Clasia.	Das	T : 1-	Bond lengths			Bond angles		
Mol	Type	Chain	Res	Link	Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
2	IAC	D	201	-	13,14,14	1.01	0	14,19,19	1.23	2 (14%)
2	IAC	С	201[B]	-	13,14,14	0.97	1 (7%)	14,19,19	1.49	2 (14%)
2	IAC	В	201[A]	-	13,14,14	0.87	0	14,19,19	1.54	1 (7%)
2	IAC	A	202	1	13,14,14	1.35	3 (23%)	14,19,19	1.33	1 (7%)
2	IAC	С	202	1	13,14,14	0.98	0	14,19,19	1.39	1 (7%)
2	IAC	A	203	1	13,14,14	0.96	0	14,19,19	1.49	2 (14%)
2	IAC	С	201[A]	-	13,14,14	0.98	0	14,19,19	1.41	1 (7%)
2	IAC	A	201[A]	-	13,14,14	0.95	0	14,19,19	1.43	1 (7%)
2	IAC	В	201[B]	-	13,14,14	0.92	0	14,19,19	1.32	1 (7%)
2	IAC	A	201[B]	-	13,14,14	0.99	0	14,19,19	1.26	1 (7%)

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	$\operatorname{Res}$	Link	Chirals	Torsions	Rings
2	IAC	D	201	-	-	2/4/4/4	0/2/2/2
2	IAC	С	201[B]	-	-	0/4/4/4	0/2/2/2



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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	IAC	В	201[A]	-	-	0/4/4/4	0/2/2/2
2	IAC	A	202	1	-	0/4/4/4	0/2/2/2
2	IAC	С	202	1	-	1/4/4/4	0/2/2/2
2	IAC	A	203	1	1	0/4/4/4	0/2/2/2
2	IAC	С	201[A]	-	-	2/4/4/4	0/2/2/2
2	IAC	A	201[A]	-	-	2/4/4/4	0/2/2/2
2	IAC	В	201[B]	-	-	0/4/4/4	0/2/2/2
2	IAC	A	201[B]	-	-	1/4/4/4	0/2/2/2

#### All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	$\mathbf{Z}$	$\operatorname{Observed}(\text{\AA})$	$\operatorname{Ideal}(\text{\AA})$
2	A	202	IAC	O3-C18	2.72	1.31	1.22
2	A	202	IAC	C1-C	-2.28	1.36	1.42
2	С	201[B]	IAC	C1-C	-2.05	1.37	1.42
2	A	202	IAC	C17-C18	2.03	1.55	1.51

The worst 5 of 13 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	$\mathbf{Z}$	$Observed(^o)$	$\operatorname{Ideal}({}^{o})$
2	В	201[A]	IAC	C17-C7-C1	4.54	135.41	126.50
2	A	201[A]	IAC	C17-C7-C1	4.42	135.17	126.50
2	A	202	IAC	C17-C7-C1	4.37	135.06	126.50
2	С	201[B]	IAC	C17-C7-C1	4.36	135.05	126.50
2	В	201[B]	IAC	C17-C7-C1	4.25	134.83	126.50

There are no chirality outliers.

5 of 8 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	С	201[A]	IAC	C7-C17-C18-O2
2	A	201[B]	IAC	C18-C17-C7-C1
2	С	201[A]	IAC	C7-C17-C18-O3
2	D	201	IAC	C7-C17-C18-O3
2	D	201	IAC	C7-C17-C18-O2

There are no ring outliers.

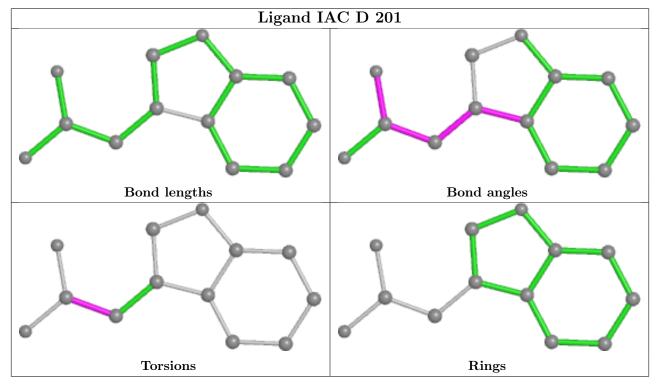
3 monomers are involved in 4 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	A	202	IAC	0	1

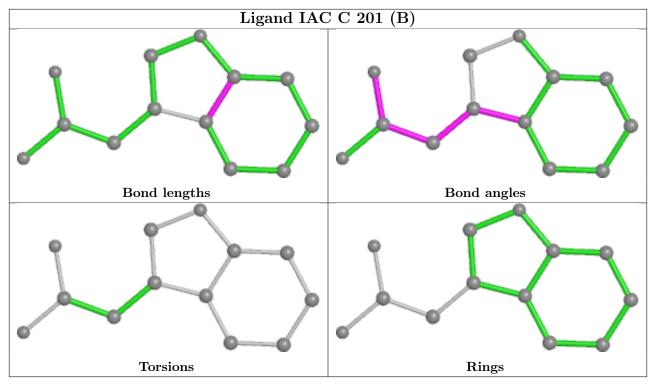
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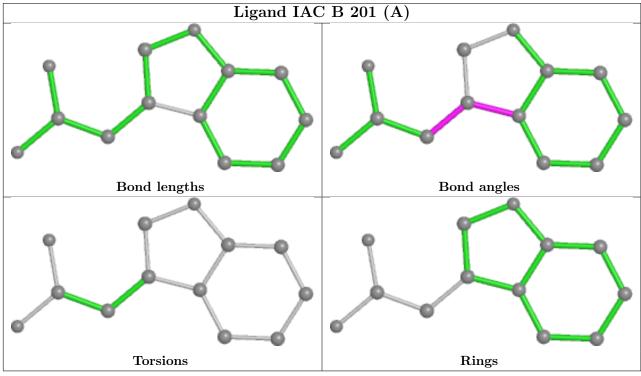
Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	С	202	IAC	1	0
2	A	201[A]	IAC	2	0

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.

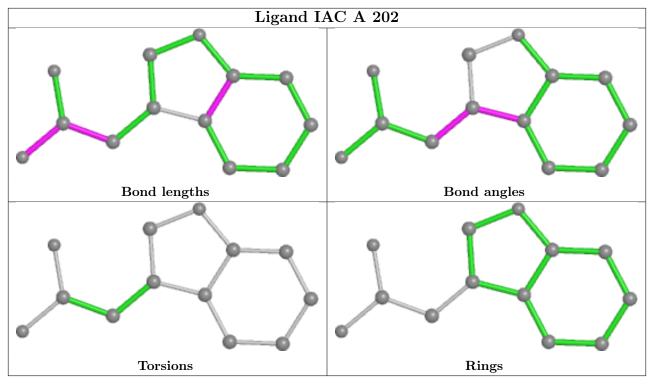


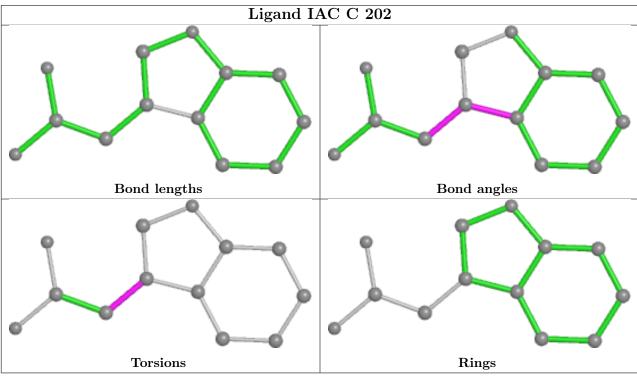




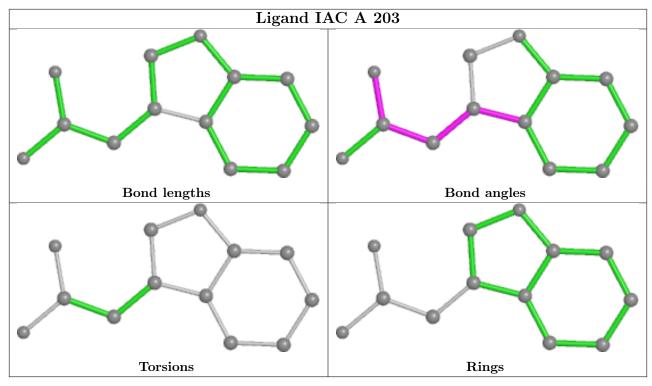


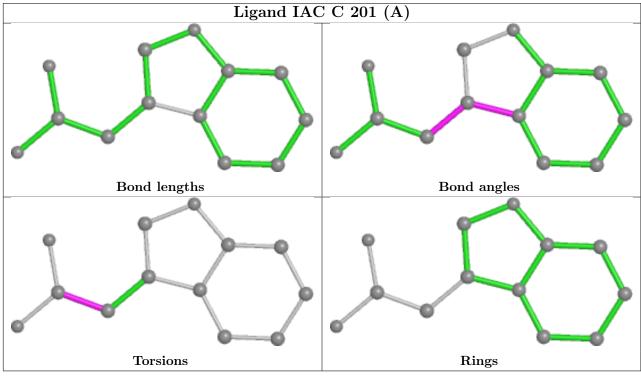




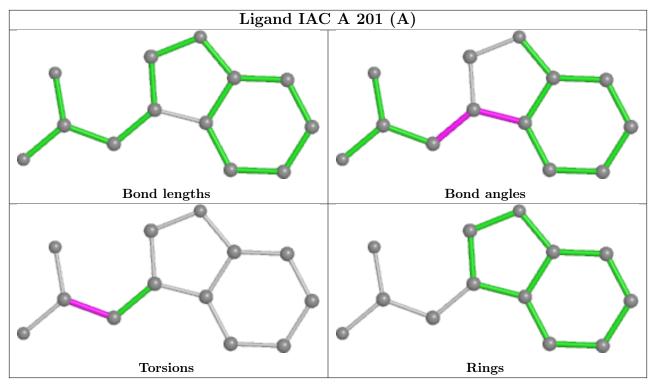


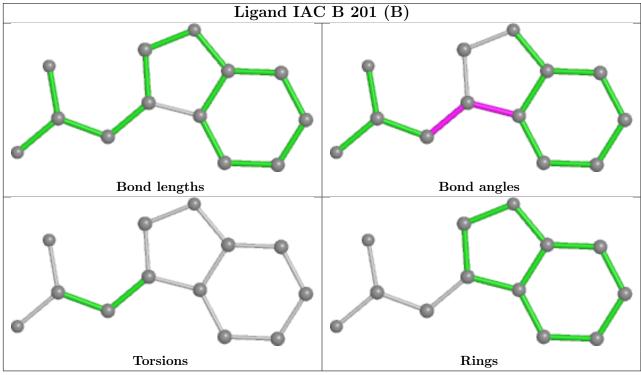




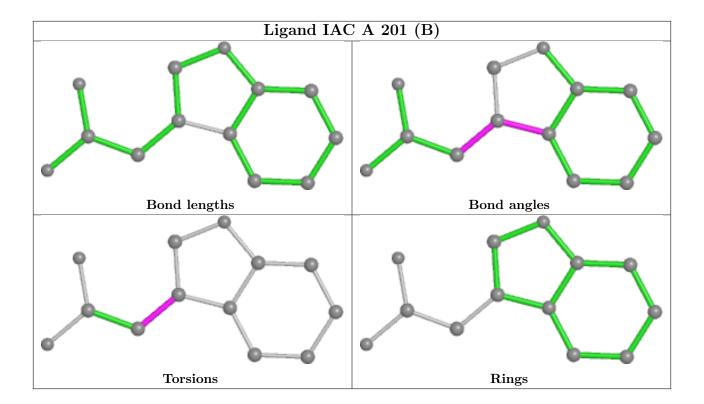












# 5.7 Other polymers (i)

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,  $95^{th}$  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	$\begin{array}{c cccc} \textbf{Analysed} & <& RSRZ> & \#RSRZ>2 \end{array}$		# RSRZ > 2	$OWAB(Å^2)$	Q < 0.9
1	A	101/116 (87%)	0.57	10 (9%) 7 6	30, 43, 88, 101	0
1	В	101/116 (87%)	0.69	9 (8%) 9 8	32, 44, 98, 125	0
1	С	101/116 (87%)	0.70	10 (9%) 7 6	29, 45, 96, 123	0
1	D	101/116 (87%)	0.67	7 (6%) 16 16	31, 43, 90, 118	0
All	All	404/464 (87%)	0.66	36 (8%) 9 8	29, 44, 96, 125	0

The worst 5 of 36 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	С	73	ASN	6.7
1	A	65	GLU	5.2
1	С	65	GLU	4.9
1	В	74	GLU	4.3
1	В	67	SER	4.1

### 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 monosaccharides in this entry.

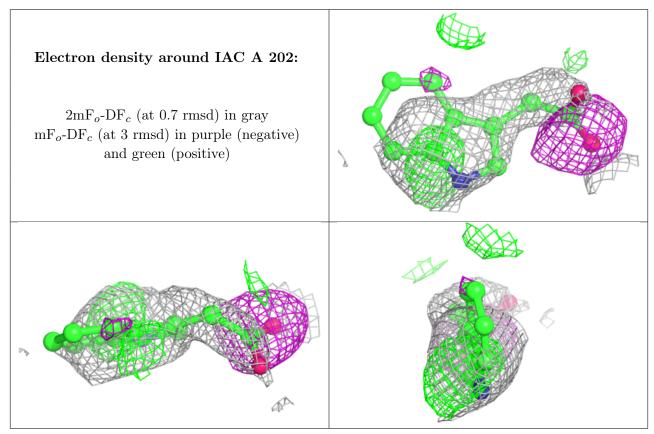
## 6.4 Ligands (i)

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,  $95^{th}$  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	$\mathbf{B} ext{-}\mathbf{factors}(\mathbf{\mathring{A}}^2)$	Q < 0.9
2	IAC	A	202	13/13	0.55	0.45	53,70,74,74	0
2	IAC	С	202	13/13	0.77	0.21	52,66,76,77	0
2	IAC	A	203	13/13	0.85	0.23	45,58,59,59	0
2	IAC	D	201	13/13	0.92	0.16	36,39,60,60	0
2	IAC	В	201[A]	13/13	0.95	0.14	29,30,35,36	13
2	IAC	В	201[B]	13/13	0.95	0.14	29,30,35,35	13
2	IAC	A	201[A]	13/13	0.95	0.15	38,39,42,42	13
2	IAC	A	201[B]	13/13	0.95	0.15	38,39,42,42	13
2	IAC	С	201[A]	13/13	0.96	0.16	39,40,43,43	13
2	IAC	С	201[B]	13/13	0.96	0.16	39,40,43,43	13

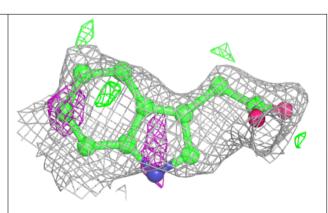
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

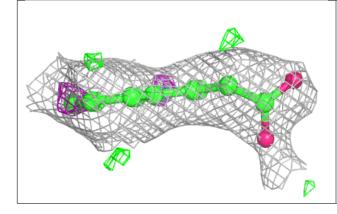


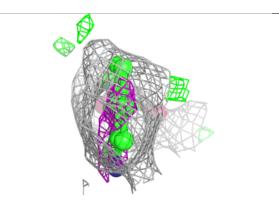


#### Electron density around IAC C 202:

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

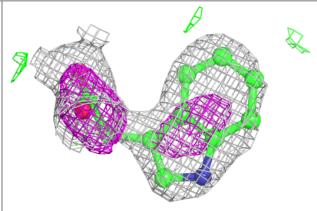


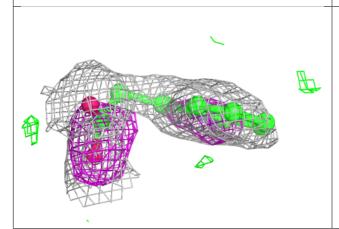


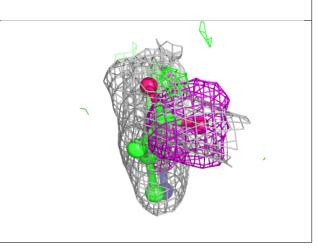


#### Electron density around IAC A 203:

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



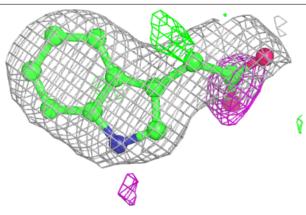


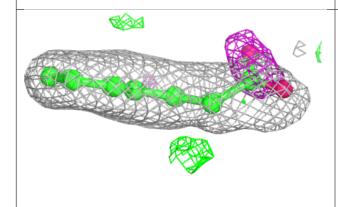


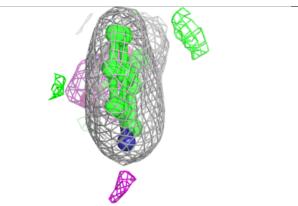


## Electron density around IAC D 201:

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

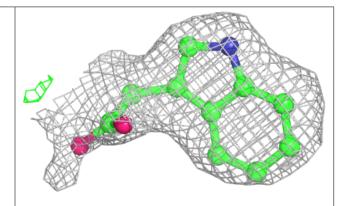


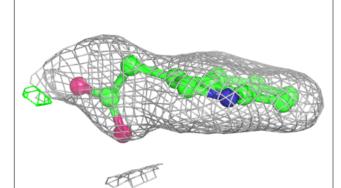


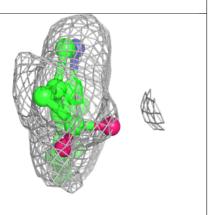


#### Electron density around IAC B 201 (A):

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



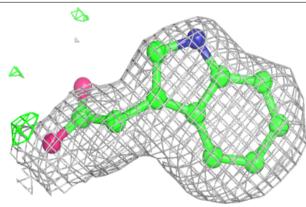


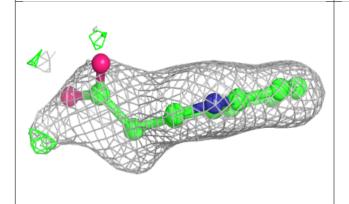


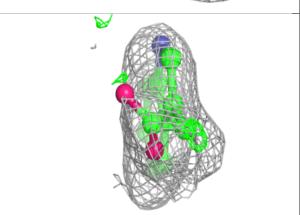


# Electron density around IAC B 201 (B):

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

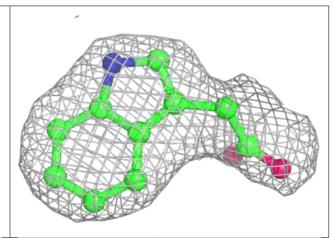


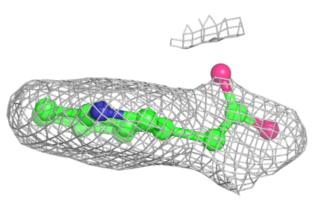


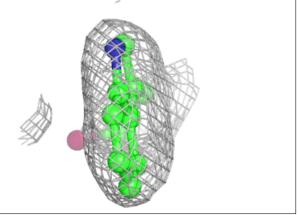


#### Electron density around IAC A 201 (A):

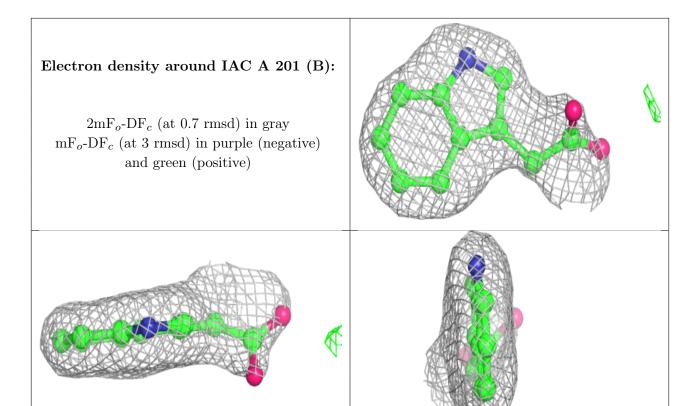
 $2 {
m mF}_o {
m -DF}_c$  (at 0.7 rmsd) in gray  ${
m mF}_o {
m -DF}_c$  (at 3 rmsd) in purple (negative) and green (positive)





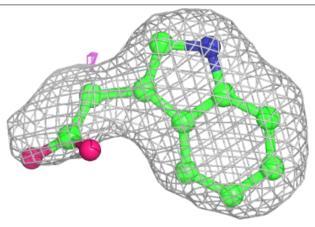


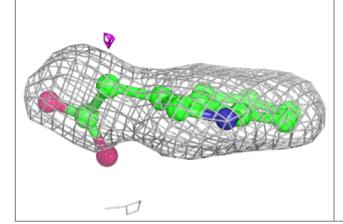


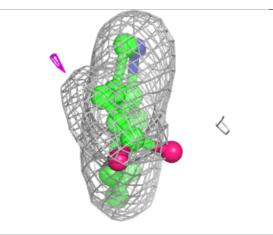


#### Electron density around IAC C 201 (A):

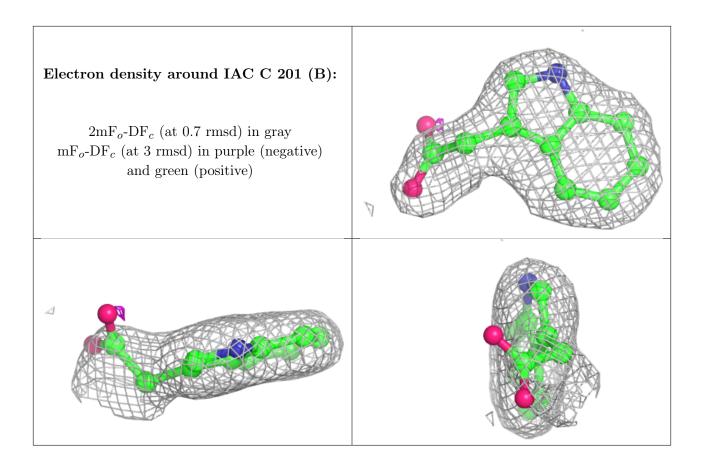
 $2 {\rm mF}_o\text{-}{\rm DF}_c$  (at 0.7 rmsd) in gray  ${\rm mF}_o\text{-}{\rm DF}_c$  (at 3 rmsd) in purple (negative) and green (positive)











# 6.5 Other polymers (i)

There are no such residues in this entry.

