



# Full wwPDB X-ray Structure Validation Report ⓘ

Mar 9, 2026 – 04:03 AM UTC

PDB ID : 3NC0 / pdb\_00003nc0  
Title : Crystal structure of the HIV-1 Rev NES-CRM1-RanGTP nuclear export complex (crystal II)  
Authors : Guttler, T.; Madl, T.; Neumann, P.; Deichsel, D.; Corsini, L.; Monecke, T.; Ficner, R.; Sattler, M.; Gorlich, D.  
Deposited on : 2010-06-04  
Resolution : 2.90 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](mailto: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 types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.49

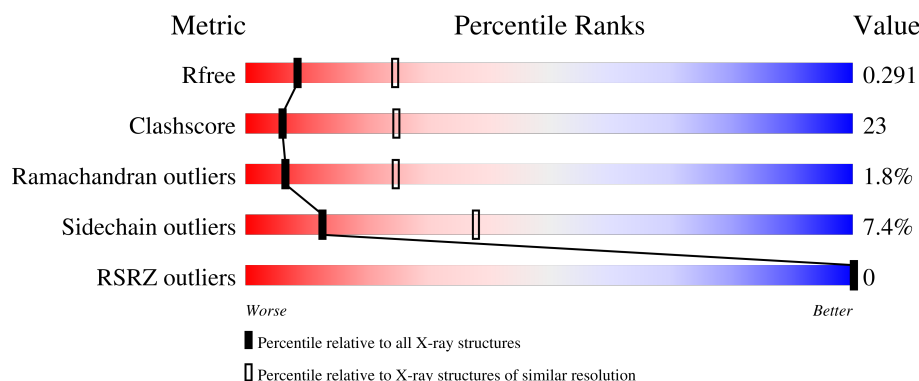
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*



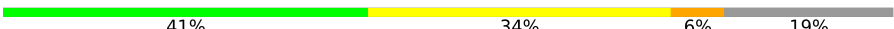

The reported resolution of this entry is 2.90 Å.

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))
$R_{free}$	180053	2481 (2.90-2.90)
Clashscore	190562	2690 (2.90-2.90)
Ramachandran outliers	187476	2623 (2.90-2.90)
Sidechain outliers	187428	2625 (2.90-2.90)
RSRZ outliers	180081	2481 (2.90-2.90)

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  $\geq 3$ , 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  $\leq 5\%$ . 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	1073	
1	D	1073	
2	B	362	
2	E	362	

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Mol	Chain	Length	Quality of chain
3	C	176	
3	F	176	

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
5	PEG	A	1075	-	-	X	-

## 2 Entry composition

There are 9 unique types of molecules in this entry. The entry contains 25190 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 Exportin-1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	1038	Total	C	N	O	S	0	0	0
			8394	5387	1411	1543	53			
1	D	1041	Total	C	N	O	S	0	0	0
			8414	5401	1413	1547	53			

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-1	GLY	-	expression tag	UNP Q6P5F9
A	0	SER	-	expression tag	UNP Q6P5F9
D	-1	GLY	-	expression tag	UNP Q6P5F9
D	0	SER	-	expression tag	UNP Q6P5F9

- Molecule 2 is a protein called Snurportin-1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	293	Total	C	N	O	S	0	0	0
			2350	1498	405	432	15			
2	E	294	Total	C	N	O	S	0	0	0
			2357	1502	406	434	15			

There are 32 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
B	-1	GLY	-	expression tag	UNP O95149
B	0	SER	-	expression tag	UNP O95149
B	1	PRO	-	expression tag	UNP O95149
B	2	VAL	-	expression tag	UNP O95149
B	3	PRO	-	expression tag	UNP O95149
B	4	LEU	-	expression tag	UNP O95149
B	5	GLN	-	expression tag	UNP O95149
B	6	LEU	-	expression tag	UNP O95149

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Chain	Residue	Modelled	Actual	Comment	Reference
B	7	PRO	-	expression tag	UNP O95149
B	8	PRO	-	expression tag	UNP O95149
B	9	LEU	-	expression tag	UNP O95149
B	10	GLU	-	expression tag	UNP O95149
B	11	ARG	-	expression tag	UNP O95149
B	12	LEU	-	expression tag	UNP O95149
B	13	THR	-	expression tag	UNP O95149
B	14	LEU	-	expression tag	UNP O95149
E	-1	GLY	-	expression tag	UNP O95149
E	0	SER	-	expression tag	UNP O95149
E	1	PRO	-	expression tag	UNP O95149
E	2	VAL	-	expression tag	UNP O95149
E	3	PRO	-	expression tag	UNP O95149
E	4	LEU	-	expression tag	UNP O95149
E	5	GLN	-	expression tag	UNP O95149
E	6	LEU	-	expression tag	UNP O95149
E	7	PRO	-	expression tag	UNP O95149
E	8	PRO	-	expression tag	UNP O95149
E	9	LEU	-	expression tag	UNP O95149
E	10	GLU	-	expression tag	UNP O95149
E	11	ARG	-	expression tag	UNP O95149
E	12	LEU	-	expression tag	UNP O95149
E	13	THR	-	expression tag	UNP O95149
E	14	LEU	-	expression tag	UNP O95149

- Molecule 3 is a protein called GTP-binding nuclear protein Ran.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	C	173	Total	C	N	O	S	0	0	0
			1405	914	246	240	5			
3	F	173	Total	C	N	O	S	0	0	0
			1405	914	246	240	5			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C	69	LEU	GLN	engineered mutation	UNP P62826
F	69	LEU	GLN	engineered mutation	UNP P62826

- Molecule 4 is GLYCEROL (CCD ID: GOL) (formula: C<sub>3</sub>H<sub>8</sub>O<sub>3</sub>).



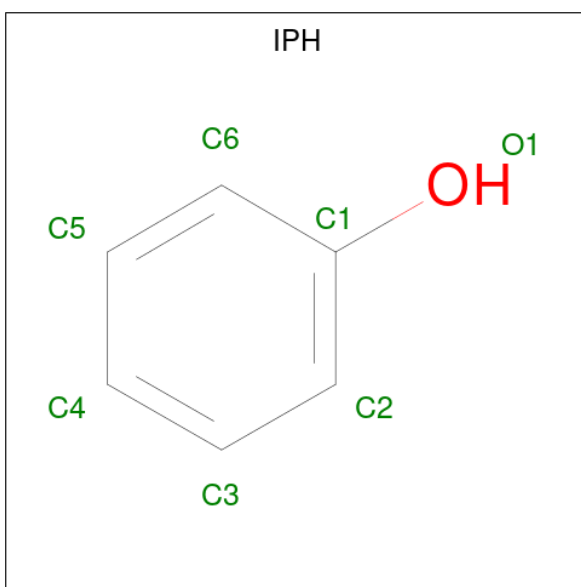
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
4	A	1	Total	C	O	0	1
			12	6	6		
4	A	1	Total	C	O	0	0
			6	3	3		
4	A	1	Total	C	O	0	0
			6	3	3		
4	A	1	Total	C	O	0	0
			6	3	3		
4	B	1	Total	C	O	0	0
			6	3	3		
4	C	1	Total	C	O	0	0
			6	3	3		
4	D	1	Total	C	O	0	0
			6	3	3		
4	D	1	Total	C	O	0	0
			6	3	3		
4	E	1	Total	C	O	0	1
			12	6	6		
4	E	1	Total	C	O	0	0
			6	3	3		

- Molecule 5 is DI(HYDROXYETHYL)ETHER (CCD ID: PEG) (formula: C<sub>4</sub>H<sub>10</sub>O<sub>3</sub>).



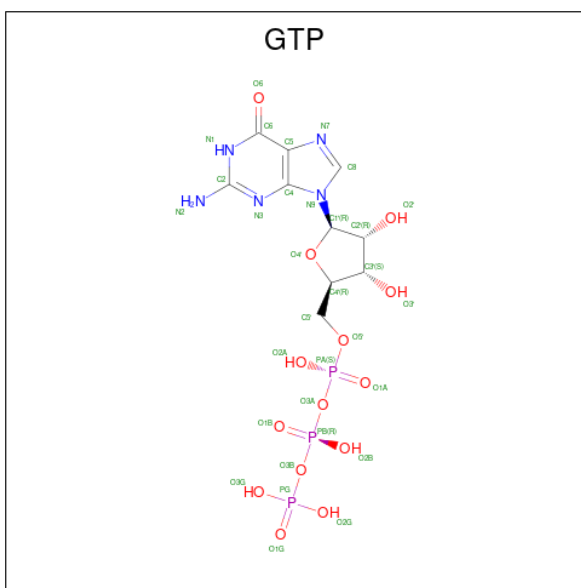
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
5	A	1	Total	C	O	0	0
			7	4	3		
5	A	1	Total	C	O	0	0
			7	4	3		
5	A	1	Total	C	O	0	0
			7	4	3		
5	A	1	Total	C	O	0	0
			7	4	3		
5	C	1	Total	C	O	0	0
			7	4	3		
5	D	1	Total	C	O	0	0
			7	4	3		
5	D	1	Total	C	O	0	0
			7	4	3		
5	D	1	Total	C	O	0	0
			7	4	3		
5	D	1	Total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

- Molecule 6 is PHENOL (CCD ID: IPH) (formula: C<sub>6</sub>H<sub>6</sub>O).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
6	B	1	Total	C	O	0	1
			14	12	2		

- Molecule 7 is GUANOSINE-5'-TRIPHOSPHATE (CCD ID: GTP) (formula:  $\text{C}_{10}\text{H}_{16}\text{N}_5\text{O}_{14}\text{P}_3$ ).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
7	C	1	Total 32	C 10	N 5	O 14	P 3	0	0
7	F	1	Total 32	C 10	N 5	O 14	P 3	0	0

- Molecule 8 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).



Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
8	C	1	Total 1	Mg 1	0	0
8	F	1	Total 1	Mg 1	0	0

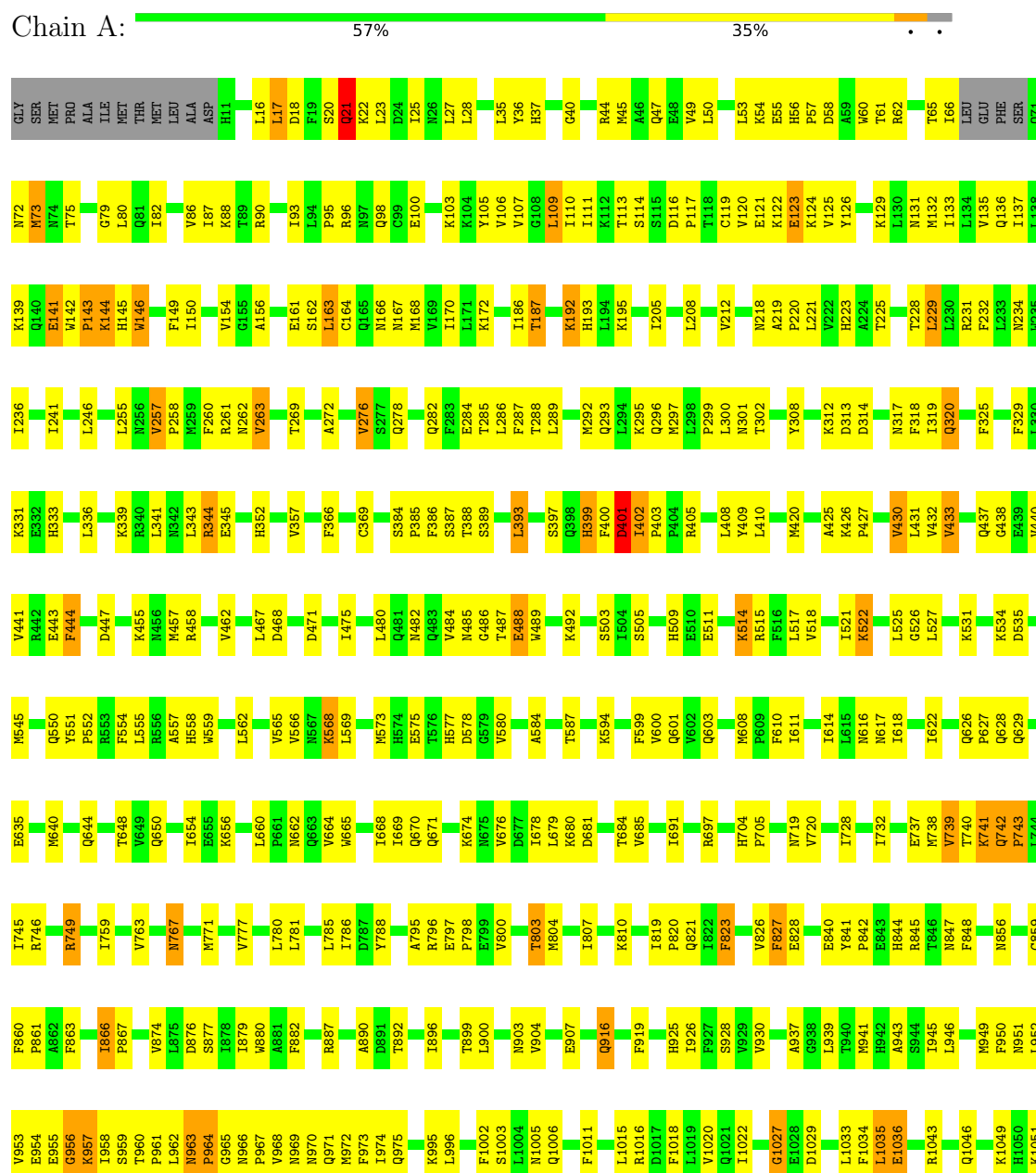
- Molecule 9 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
9	A	230	Total 230	O 230	0	0
9	B	80	Total 80	O 80	0	0
9	C	53	Total 53	O 53	0	0
9	D	183	Total 183	O 183	0	0
9	E	56	Total 56	O 56	0	0
9	F	27	Total 27	O 27	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: Exportin-1

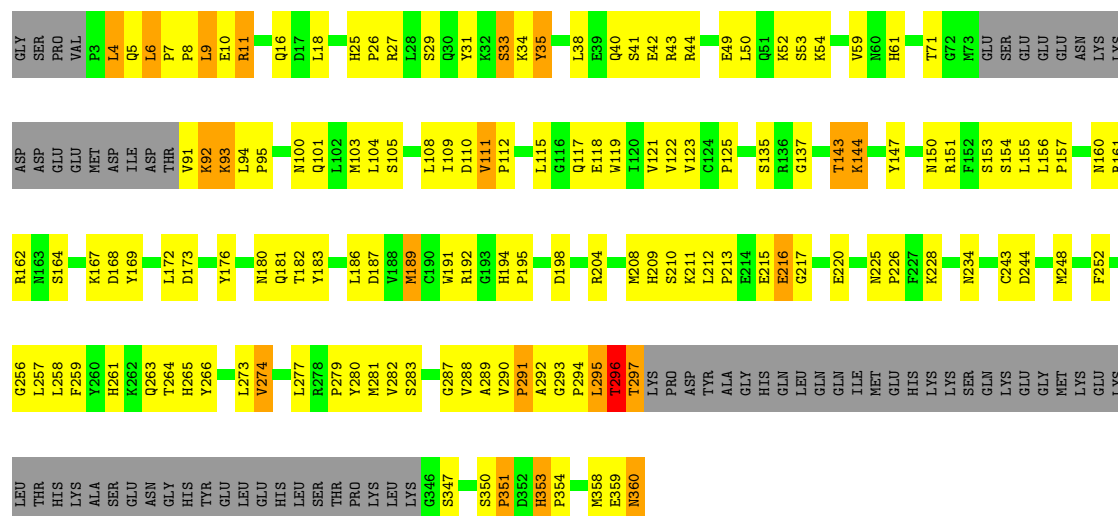


L1052
GLN
MET
SER
VAL
PRO
GLY
ILE
LEU
ASN
PRO
HIS
GLU
ILE
PRO
GLU
GLU
MET
CYS
ASP

• Molecule 1: Exportin-1

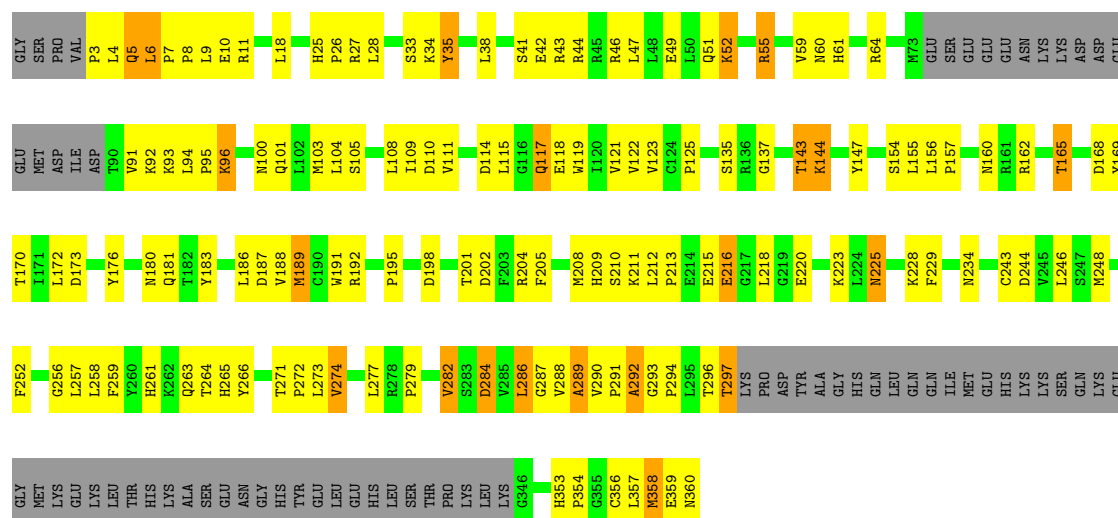
Chain D:  55% 36% 6%

GLY	SER	MET	ALA	ILE	MET	THR	MET	L8	A9	D10	H11	A12	A13	R14	Q15	L16	L17	D18	F19	S20	Q21	K22	L23	D24	I25	N26	L27	L28	V32	Y36	H37	G40	R44	M45	A46	Q47	E48	V49	L53	K54	E55	H56	P57	D58	A59	W60	T61	B62	T65	I66	L67	GLU		
PHE	SER	GLN	N72	M73	M74	T75	L80	Q81	I82	V86	I87	I83	L94	P95	R96	Q98	E99	E100	K103	K104	Y105	V106	V107	G108	L109	I110	I111	K112	T113	S114	S115	D116	F117	T118	C119	V120	E121	K122	E123	K124	V125	Y126	I127	G128	K129	L130	M131	M132	I133	V135	Q136	I137	L138	
K139	Q140	W141	W142	P143	K144	H145	W146	F149	I150	I153	V154	G155	A156	E161	S162	L163	N166	M167	M168	V169	I170	E177	T186	T187	Q188	V189	K193	I205	L208	V212	N218	A219	P220	V222	H223	A224	T225	T228	L229	L230	R231	F232	L233	N234	W235	F239	H333							
I241	K245	L246	L255	N256	P257	Q258	F260	M259	R261	N262	V263	T269	A272	V276	S277	Q278	Q282	T285	L286	F287	T288	L289	M292	Q293	K295	Q296	M297	L298	P299	L300	N301	T302	Y308	K312	D313	D314	N317	F318	I319	Q320	F325	L326	D336	Q337	L338									
L336	K339	R340	L343	R344	E345	L347	L348	L351	V357	V360	E361	E362	F366	C369	S384	P385	F386	S387	T388	S389	A390	S391	P392	L393	L394	H399	F400	D401	L402	P403	P404	L408	M420	A425	K426	P427	V430	L431	V432	V433	E434	M435	D436	Q437	G438									
E439	V440	V441	E442	E443	F444	M445	K446	D447	L453	Y454	K455	M456	M457	R458	V462	D468	D471	I475	K478	Q481	N482	Q483	V484	M485	Q486	T487	E488	W489	M495	C585	D586	T587	F588	I589	K590	R597	H598	F599	V600	Q601	V602	Q603	V604	V607	M608	F609	F610	I611						
K631	K534	D535	N543	T544	M545	Q550	Y551	P552	R553	F554	L555	H558	W559	F561	L562	V565	V566	N567	K568	L569	M573	H574	E575	T576	H577	D578	G579	V580	A584	C585	D586	T587	F588	I589	K590	R597	H598	F599	V600	Q601	V602	Q603	V604	V607	M608	F609	F610	I611						
M616	M617	I618	I622	Q626	P627	Q628	Q629	E635	M640	I641	Q644	T645	T648	L653	K656	N662	Q663	V664	W665	I668	I669	Q670	A671	A672	T673	K674	W675	V676	L677	L678	L679	K680	D681	T684	I691	L692	L693	K693	R697	A698	V702	G703	H704	P705	V720									
L724	N727	I732	E737	F738	V739	T740	R741	Q742	P743	L744	I745	R746	R749	K752	R753	I759	V763	S764	R765	S766	N767	Q770	E774	V777	P778	P779	L780	L781	D782	L785	I786	D787	Y788	Q789	R790	A795	R796	E797	P798	E799	V800	T803	M804	I807										
K810	I819	P820	Q821	R822	F823	R824	A825	R826	R827	E828	E840	Y841	P842	E843	H844	R845	C859	F860	P861	A862	F863	I866	P867	W874	L875	D876	S877	L878	L879	W880	A881	F882	R887	A890	F891	T892	I896	T899	L900	N903	V904	Q993	L996	F1002										
A911	Q916	F919	H925	I926	F927	F1018	S928	V929	V930	L939	T940	H941	H942	A943	S944	I945	M949	F950	N951	L952	V953	E954	E955	G956	K957	I958	S959	T960	P961	L962	N963	P964	G965	N966	P967	V968	N969	N970	Q971	M972	I974	Q975	A985	Q990	Q993	L996	F1002							
N1005	Q1006	F1011	L1015	L1016	D1017	F1018	L1019	V1020	G1021	I1022	K1023	G1027	E1028	D1029	A1030	T1030	S1031	D1032	L1033	F1034	L1035	E1036	E1037	L1038	E1039	T1040	A1041	L1042	R1043	E1047	E1048	K1049	H1050	K1051	L1052	GLN	MET	SER	VAL	PRO	GLY	ILE	LEU	ASN	PRO	HIS	GLU	ILE	PRO	GLU	GLU	MET	CYS	ASP



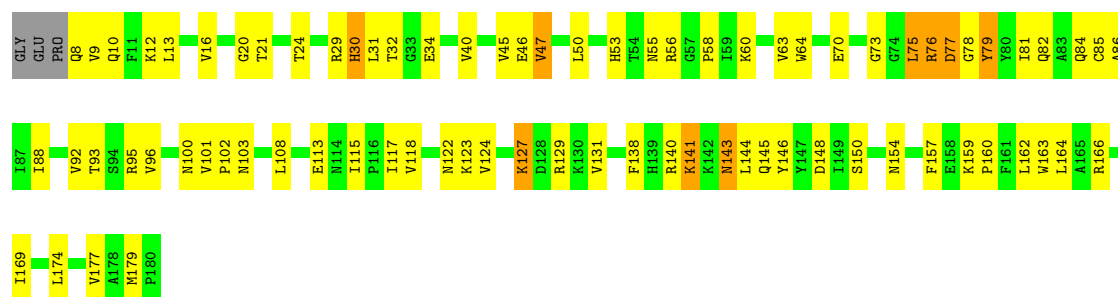
### • Molecule 2: Snurportin-1

Chain E: 41% 34% 6% 19%



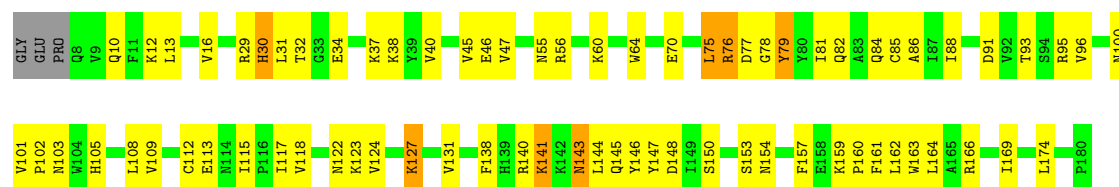
### • Molecule 3: GTP-binding nuclear protein Ran

Chain C: 53% 40% 5% .



### • Molecule 3: GTP-binding nuclear protein Ran

Chain F:



## 4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	73.26Å 225.90Å 163.98Å 90.00° 100.75° 90.00°	Depositor
Resolution (Å)	39.05 – 2.90 39.05 – 2.90	Depositor EDS
% Data completeness (in resolution range)	95.5 (39.05-2.90) 85.6 (39.05-2.90)	Depositor EDS
$R_{merge}$	0.14	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.94 (at 2.90Å)	Xtriage
Refinement program	PHENIX 1.6.1_357	Depositor
R, $R_{free}$	0.242 , 0.295 0.241 , 0.291	Depositor DCC
$R_{free}$ test set	5517 reflections (5.00%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	40.1	Xtriage
Anisotropy	0.438	Xtriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.29 , 34.8	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.43$ , $\langle L^2 \rangle = 0.25$	Xtriage
Estimated twinning fraction	0.136 for h,-k,-h-l	Xtriage
$F_o, F_c$ correlation	0.93	EDS
Total number of atoms	25190	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	49.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.61% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

<sup>2</sup>Theoretical values of  $\langle |L| \rangle$ ,  $\langle L^2 \rangle$  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: PEG, GTP, MG, GOL, IPH

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	0.31	0/8566	0.74	10/11604 (0.1%)
1	D	0.32	0/8586	0.75	16/11632 (0.1%)
2	B	0.31	0/2415	0.82	5/3278 (0.2%)
2	E	0.31	0/2422	0.80	5/3288 (0.2%)
3	C	0.47	1/1440 (0.1%)	0.79	3/1945 (0.2%)
3	F	0.43	1/1440 (0.1%)	0.77	1/1945 (0.1%)
All	All	0.33	2/24869 (0.0%)	0.76	40/33692 (0.1%)

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	D	0	1

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	78	GLY	C-N	13.41	1.52	1.34
3	F	78	GLY	C-N	11.65	1.50	1.34

All (40) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	75	LEU	N-CA-C	-7.36	100.45	110.68
1	D	124	LYS	N-CA-C	-7.25	103.54	112.38
1	A	403	PRO	CA-C-N	7.12	126.64	119.24
1	A	403	PRO	C-N-CA	7.12	126.64	119.24
1	A	37	HIS	N-CA-C	6.59	119.74	111.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	674	LYS	N-CA-C	-6.29	107.45	114.62
3	F	75	LEU	N-CA-C	-6.22	102.03	110.68
2	B	6	LEU	CA-C-N	6.17	126.73	120.38
2	B	6	LEU	C-N-CA	6.17	126.73	120.38
1	D	488	GLU	N-CA-C	-6.04	104.03	112.25
1	A	488	GLU	N-CA-C	-6.02	104.07	112.25
3	C	78	GLY	CA-C-N	6.00	129.43	120.31
3	C	78	GLY	C-N-CA	6.00	129.43	120.31
2	E	55	ARG	N-CA-C	-5.96	104.68	113.61
1	D	674	LYS	N-CA-C	-5.91	107.89	114.62
1	D	486	GLY	N-CA-C	-5.77	107.99	114.40
1	D	37	HIS	N-CA-C	5.66	118.54	111.24
1	D	66	ILE	N-CA-C	5.63	114.72	106.55
1	D	402	ILE	CA-C-N	5.62	123.71	119.66
1	D	402	ILE	C-N-CA	5.62	123.71	119.66
1	D	403	PRO	CA-C-N	5.54	126.77	119.84
1	D	403	PRO	C-N-CA	5.54	126.77	119.84
1	A	742	GLN	CA-C-N	5.54	126.77	119.84
1	A	742	GLN	C-N-CA	5.54	126.77	119.84
2	B	296	THR	N-CA-C	5.43	117.59	108.73
2	B	53	SER	N-CA-C	-5.43	101.05	108.38
1	A	866	ILE	CA-C-N	5.42	123.56	119.66
1	A	866	ILE	C-N-CA	5.42	123.56	119.66
2	E	33	SER	CB-CA-C	-5.38	110.36	116.54
2	B	33	SER	CB-CA-C	-5.19	110.57	116.54
1	D	125	VAL	CB-CA-C	-5.19	105.33	111.97
1	D	19	PHE	N-CA-C	-5.17	106.56	112.92
1	D	866	ILE	CA-C-N	5.15	123.37	119.66
1	D	866	ILE	C-N-CA	5.15	123.37	119.66
1	A	438	GLY	N-CA-C	-5.13	108.55	115.21
2	E	225	ASN	CA-C-N	5.07	124.68	119.05
2	E	225	ASN	C-N-CA	5.07	124.68	119.05
1	D	742	GLN	CA-C-N	5.04	126.14	119.84
1	D	742	GLN	C-N-CA	5.04	126.14	119.84
2	E	282	VAL	N-CA-C	5.02	115.25	110.53

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	D	119	CYS	Mainchain



## 5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	8394	0	8460	360	0
1	D	8414	0	8483	375	0
2	B	2350	0	2307	124	0
2	E	2357	0	2314	118	0
3	C	1405	0	1432	82	0
3	F	1405	0	1434	74	0
4	A	30	0	40	1	0
4	B	6	0	8	1	0
4	C	6	0	8	0	0
4	D	12	0	16	1	0
4	E	18	0	24	1	0
5	A	28	0	40	14	0
5	C	7	0	10	3	0
5	D	42	0	60	9	0
5	L	7	0	10	0	0
6	B	14	0	12	0	0
7	C	32	0	12	3	0
7	F	32	0	12	1	0
8	C	1	0	0	0	0
8	F	1	0	0	0	0
9	A	230	0	0	12	0
9	B	80	0	0	2	0
9	C	53	0	0	5	0
9	D	183	0	0	9	0
9	E	56	0	0	3	0
9	F	27	0	0	2	0
All	All	25190	0	24682	1112	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 23.

All (1112) 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:386:PHE:CZ	5:A:1075:PEG:H21	1.75	1.22

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:53:LEU:HG	1:D:54:LYS:H	1.17	1.08
3:C:76:ARG:HD2	5:C:182:PEG:H21	1.39	1.04
1:D:119:CYS:C	1:D:121:GLU:H	1.63	1.02
1:D:119:CYS:C	1:D:121:GLU:N	2.15	1.00
1:A:785:LEU:HD21	1:A:804:MET:HE3	1.44	0.99
1:A:386:PHE:CZ	5:A:1075:PEG:H31	1.97	0.98
1:D:388:THR:HG21	1:D:402:ILE:HD13	1.46	0.98
1:A:386:PHE:HZ	5:A:1075:PEG:H21	1.14	0.97
1:A:21:GLN:H	1:A:21:GLN:HE21	1.09	0.97
1:D:785:LEU:HD21	1:D:804:MET:HE3	1.46	0.97
1:D:966:ASN:HB3	1:D:967:PRO:HD3	1.46	0.95
3:F:45:VAL:HB	3:F:79:TYR:CE2	2.05	0.92
1:A:66:ILE:HG21	1:A:72:ASN:CB	2.00	0.91
1:D:116:ASP:HB2	1:D:119:CYS:HB2	1.51	0.91
3:C:45:VAL:HB	3:C:79:TYR:CE2	2.06	0.90
1:D:509:HIS:HD2	1:D:511:GLU:H	1.13	0.90
1:A:509:HIS:HD2	1:A:511:GLU:H	1.15	0.89
1:D:28:LEU:HD12	1:D:75:THR:HG21	1.54	0.89
1:A:962:LEU:HD12	1:A:968:VAL:HG11	1.56	0.88
3:F:75:LEU:O	3:F:79:TYR:CD1	2.25	0.88
3:F:45:VAL:HB	3:F:79:TYR:HE2	1.38	0.87
1:D:53:LEU:HG	1:D:54:LYS:N	1.89	0.87
2:B:191:TRP:CD1	2:B:192:ARG:HG3	2.10	0.86
2:E:104:LEU:HD21	2:E:144:LYS:HD2	1.55	0.86
1:A:386:PHE:CE2	5:A:1075:PEG:H21	2.11	0.85
3:F:29:ARG:HB3	3:F:157:PHE:HZ	1.39	0.85
3:C:29:ARG:HB3	3:C:157:PHE:HZ	1.40	0.85
2:E:191:TRP:CD1	2:E:192:ARG:HG3	2.12	0.85
3:C:45:VAL:HB	3:C:79:TYR:HE2	1.38	0.85
2:B:11:ARG:HH11	2:B:11:ARG:HB3	1.42	0.84
1:A:21:GLN:H	1:A:21:GLN:NE2	1.74	0.83
1:D:150:ILE:HD11	1:D:205:ILE:HD11	1.60	0.83
1:A:386:PHE:CZ	5:A:1075:PEG:C2	2.62	0.83
3:C:75:LEU:O	3:C:79:TYR:CD1	2.32	0.83
1:A:555:LEU:HB3	1:A:562:LEU:HD12	1.61	0.83
1:A:1043:ARG:HH11	1:A:1046:GLN:HG2	1.44	0.83
2:B:104:LEU:HD21	2:B:144:LYS:HD2	1.59	0.83
1:D:753:ARG:HH22	5:D:1076:PEG:H21	1.44	0.82
3:F:75:LEU:O	3:F:79:TYR:HD1	1.60	0.82
1:A:388:THR:HG21	1:A:402:ILE:HD13	1.59	0.82
1:A:66:ILE:HG21	1:A:72:ASN:HB2	1.61	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:77:ASP:OD1	9:C:495:HOH:O	1.98	0.81
3:C:10:GLN:HB3	3:C:60:LYS:HB3	1.63	0.79
1:A:131:ASN:HD21	1:A:166:ASN:HD21	1.28	0.79
1:D:393:LEU:HD23	1:D:394:LEU:H	1.46	0.79
2:B:173:ASP:HB2	2:B:189:MET:HE1	1.64	0.79
1:D:131:ASN:HD21	1:D:166:ASN:HD21	1.29	0.79
2:B:293:GLY:N	2:B:294:PRO:HD2	1.98	0.78
3:F:10:GLN:HB3	3:F:60:LYS:HB3	1.64	0.78
1:A:150:ILE:HD11	1:A:205:ILE:HD11	1.66	0.77
1:A:336:LEU:HB2	1:A:339:LYS:HE2	1.66	0.77
1:D:55:GLU:C	1:D:57:PRO:HD3	2.08	0.77
1:D:518:VAL:O	1:D:522:LYS:HB2	1.84	0.77
1:D:739:VAL:HG23	1:D:745:ILE:HG13	1.64	0.77
3:C:75:LEU:HB2	3:C:79:TYR:CE1	2.19	0.77
3:F:29:ARG:HB3	3:F:157:PHE:CZ	2.20	0.77
1:A:739:VAL:HG23	1:A:745:ILE:HG13	1.66	0.76
1:A:1003:SER:HA	1:A:1046:GLN:HE21	1.48	0.76
1:A:518:VAL:O	1:A:522:LYS:HB2	1.85	0.76
3:C:29:ARG:HB3	3:C:157:PHE:CZ	2.21	0.76
1:D:430:VAL:HG23	1:D:444:PHE:HE1	1.49	0.76
1:D:753:ARG:NH2	5:D:1076:PEG:H21	2.01	0.76
1:D:565:VAL:O	1:D:569:LEU:HD12	1.85	0.76
1:D:25:ILE:HD12	1:D:25:ILE:H	1.51	0.76
1:A:25:ILE:HD12	1:A:25:ILE:H	1.51	0.76
2:E:353:HIS:CD2	2:E:354:PRO:HD2	2.21	0.76
1:D:272:ALA:HB1	1:D:329:PHE:HD1	1.50	0.76
3:F:75:LEU:HB2	3:F:79:TYR:CE1	2.22	0.75
1:A:272:ALA:HB1	1:A:329:PHE:HD1	1.51	0.75
2:E:173:ASP:HB2	2:E:189:MET:HE1	1.68	0.74
2:E:212:LEU:HB2	2:E:213:PRO:HD3	1.67	0.74
1:A:1003:SER:HA	1:A:1046:GLN:NE2	2.02	0.74
2:B:212:LEU:HB2	2:B:213:PRO:HD3	1.68	0.74
1:D:509:HIS:CD2	1:D:511:GLU:H	2.02	0.74
3:C:75:LEU:HB2	3:C:79:TYR:HE1	1.53	0.74
1:D:962:LEU:HG	1:D:963:ASN:H	1.52	0.73
3:C:75:LEU:O	3:C:79:TYR:HD1	1.70	0.73
1:A:16:LEU:HD22	1:A:53:LEU:HD12	1.68	0.73
1:D:235:TRP:HA	5:D:1077:PEG:H11	1.70	0.72
9:D:1142:HOH:O	3:F:37:LYS:HE2	1.89	0.72
1:D:223:HIS:NE2	1:D:263:VAL:HG21	2.05	0.72
1:A:565:VAL:O	1:A:569:LEU:HD12	1.89	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:27:LEU:HD21	1:D:62:ARG:HD3	1.72	0.72
1:D:28:LEU:CD1	1:D:75:THR:HG21	2.20	0.72
1:A:509:HIS:CD2	1:A:511:GLU:H	2.04	0.72
1:A:962:LEU:HG	1:A:973:PHE:CD2	2.25	0.71
1:D:990:GLN:HE21	1:D:1033:LEU:HD11	1.53	0.71
1:A:887:ARG:HH11	1:A:937:ALA:HB3	1.55	0.71
3:C:123:LYS:HE2	7:C:217:GTP:C4	2.26	0.71
1:D:295:LYS:HE3	1:D:300:LEU:HD12	1.71	0.71
1:A:430:VAL:HG23	1:A:444:PHE:HE1	1.54	0.70
1:A:386:PHE:CE2	5:A:1075:PEG:C2	2.73	0.70
3:F:138:PHE:HA	3:F:141:LYS:HE3	1.72	0.70
1:D:626:GLN:H	1:D:629:GLN:HE21	1.38	0.70
1:D:611:ILE:HD13	1:D:640:MET:HE2	1.74	0.70
1:A:331:LYS:HD3	9:A:1215:HOH:O	1.92	0.70
1:D:15:GLN:HE22	1:D:27:LEU:HB2	1.54	0.70
2:B:25:HIS:ND1	2:B:281:MET:HE1	2.08	0.69
3:F:145:GLN:HE21	3:F:146:TYR:H	1.39	0.69
1:A:225:THR:HA	1:A:228:THR:HG22	1.74	0.69
1:A:552:PRO:HG2	1:A:594:LYS:HD2	1.75	0.69
1:A:107:VAL:O	1:A:111:ILE:HG12	1.92	0.69
1:D:697:ARG:HD3	9:D:1115:HOH:O	1.93	0.69
3:C:85:CYS:HB2	3:C:164:LEU:HD22	1.75	0.69
3:F:85:CYS:HB2	3:F:164:LEU:HD22	1.75	0.69
2:B:92:LYS:HB3	2:B:93:LYS:HD2	1.75	0.68
2:E:353:HIS:HD2	2:E:354:PRO:HD2	1.55	0.68
1:A:113:THR:HA	1:A:116:ASP:HB2	1.73	0.68
1:D:28:LEU:HG	1:D:72:ASN:HD22	1.57	0.68
3:C:81:ILE:HG22	3:C:82:GLN:HG3	1.75	0.68
1:A:900:LEU:O	1:A:904:VAL:HG23	1.93	0.68
3:F:162:LEU:HD21	3:F:166:ARG:HH21	1.59	0.68
1:D:509:HIS:HD2	1:D:511:GLU:N	1.90	0.68
1:D:223:HIS:CD2	1:D:263:VAL:HG21	2.29	0.67
1:A:23:LEU:HD23	1:A:23:LEU:H	1.58	0.67
1:A:295:LYS:HE3	1:A:300:LEU:HD12	1.74	0.67
1:A:626:GLN:H	1:A:629:GLN:HE21	1.38	0.67
1:D:225:THR:HA	1:D:228:THR:HG22	1.76	0.67
3:F:75:LEU:C	3:F:79:TYR:CE1	2.72	0.67
1:D:1051:LYS:HG3	1:D:1052:LEU:HG	1.77	0.67
3:F:123:LYS:HE2	7:F:217:GTP:C4	2.29	0.67
1:A:96:ARG:NH2	1:A:145:HIS:HB3	2.10	0.67
2:B:61:HIS:CE1	2:B:94:LEU:HB3	2.29	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1047:GLU:HA	1:D:1050:HIS:HB2	1.74	0.67
2:B:290:VAL:N	2:B:291:PRO:HD3	2.10	0.67
3:C:145:GLN:HE21	3:C:146:TYR:H	1.42	0.67
1:A:50:LEU:O	1:A:53:LEU:HG	1.95	0.67
1:A:219:ALA:HB3	1:A:220:PRO:HD3	1.78	0.66
1:A:509:HIS:HD2	1:A:511:GLU:N	1.92	0.66
1:D:107:VAL:O	1:D:111:ILE:HG12	1.95	0.66
2:E:154:SER:O	2:E:160:ASN:HB3	1.95	0.66
3:F:81:ILE:HG22	3:F:82:GLN:HG3	1.77	0.66
1:A:611:ILE:HD13	1:A:640:MET:HE2	1.77	0.66
1:D:430:VAL:HG23	1:D:444:PHE:CE1	2.30	0.66
1:A:366:PHE:HE1	1:A:457:MET:HE2	1.60	0.66
1:D:899:THR:HG22	1:D:903:ASN:HD21	1.60	0.66
1:D:150:ILE:O	1:D:154:VAL:HG23	1.95	0.66
1:A:35:LEU:O	1:A:36:TYR:HD2	1.78	0.65
1:D:440:VAL:HG23	9:D:1151:HOH:O	1.95	0.65
2:E:61:HIS:CE1	2:E:94:LEU:HB3	2.32	0.65
1:A:856:ASN:HB2	1:A:863:PHE:HE1	1.61	0.65
1:A:962:LEU:HB3	1:A:964:PRO:HD2	1.78	0.65
1:D:55:GLU:HG2	1:D:56:HIS:H	1.60	0.65
1:A:150:ILE:O	1:A:154:VAL:HG23	1.95	0.65
3:F:32:THR:OG1	3:F:34:GLU:HG2	1.97	0.65
1:A:168:MET:HA	1:A:168:MET:HE2	1.78	0.65
1:A:223:HIS:NE2	1:A:263:VAL:HG21	2.12	0.65
2:B:105:SER:HB3	2:B:274:VAL:HG22	1.77	0.65
3:C:75:LEU:C	3:C:79:TYR:CE1	2.75	0.65
1:A:258:PRO:O	1:A:261:ARG:HG2	1.97	0.65
3:C:162:LEU:O	3:C:166:ARG:HG2	1.96	0.65
1:A:430:VAL:HG23	1:A:444:PHE:CE1	2.32	0.64
1:A:939:LEU:HD21	1:A:1016:ARG:HD2	1.79	0.64
1:D:684:THR:HG22	2:E:181:GLN:HE22	1.62	0.64
1:A:899:THR:HG22	1:A:903:ASN:HD21	1.62	0.64
1:D:56:HIS:CG	1:D:56:HIS:O	2.51	0.64
1:D:218:ASN:OD1	1:D:220:PRO:HD2	1.97	0.64
1:D:939:LEU:HD21	1:D:1016:ARG:HD2	1.80	0.64
1:D:168:MET:HE2	1:D:168:MET:HA	1.79	0.64
2:E:105:SER:HB3	2:E:274:VAL:HG22	1.79	0.64
3:C:32:THR:OG1	3:C:34:GLU:HG2	1.98	0.64
2:E:137:GLY:HA3	4:E:362:GOL:H32	1.80	0.64
1:A:40:GLY:O	1:A:44:ARG:HG2	1.98	0.64
1:D:53:LEU:CG	1:D:54:LYS:N	2.59	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:116:ASP:C	1:D:118:THR:H	2.05	0.64
1:A:344:ARG:HE	1:A:408:LEU:HD22	1.63	0.64
1:A:557:ALA:C	1:A:558:HIS:HD1	2.05	0.64
3:C:138:PHE:HA	3:C:141:LYS:HE3	1.79	0.64
1:A:55:GLU:HG2	1:A:56:HIS:H	1.63	0.63
1:D:388:THR:CG2	1:D:402:ILE:HD13	2.26	0.63
3:F:75:LEU:CA	3:F:79:TYR:HE1	2.11	0.63
1:A:35:LEU:HD21	9:C:1:HOH:O	1.98	0.63
1:A:949:MET:O	1:A:953:VAL:HG23	1.98	0.63
1:D:308:TYR:HD1	1:D:319:ILE:HD12	1.63	0.63
1:D:949:MET:O	1:D:953:VAL:HG23	1.98	0.63
2:B:25:HIS:CE1	2:B:281:MET:HE1	2.33	0.63
1:D:23:LEU:HD23	1:D:23:LEU:H	1.63	0.63
1:D:36:TYR:HA	5:D:1074:PEG:H32	1.80	0.63
1:D:62:ARG:HG3	1:D:62:ARG:HH11	1.63	0.63
3:F:75:LEU:HB2	3:F:79:TYR:HE1	1.63	0.63
1:A:569:LEU:HD21	1:A:587:THR:HB	1.79	0.63
1:A:569:LEU:HD23	1:A:584:ALA:O	1.99	0.63
1:D:258:PRO:O	1:D:261:ARG:HG2	1.99	0.63
2:E:291:PRO:O	2:E:292:ALA:HB2	1.98	0.63
1:A:73:MET:HE1	1:A:123:GLU:HB2	1.79	0.63
1:A:263:VAL:HG23	9:A:1130:HOH:O	1.96	0.63
2:B:11:ARG:HH11	2:B:11:ARG:CB	2.12	0.63
1:D:80:LEU:HD11	1:D:126:TYR:CE1	2.33	0.63
1:D:996:LEU:HG	1:D:1035:LEU:HD21	1.81	0.63
1:A:431:LEU:HG	1:A:433:VAL:HG12	1.81	0.63
3:F:162:LEU:O	3:F:166:ARG:HG2	1.98	0.63
1:D:15:GLN:NE2	1:D:27:LEU:HB2	2.14	0.62
1:D:926:ILE:O	1:D:930:VAL:HG23	1.98	0.62
1:D:963:ASN:HB2	1:D:964:PRO:HD3	1.81	0.62
3:C:75:LEU:CB	3:C:79:TYR:HE1	2.11	0.62
1:D:40:GLY:O	1:D:44:ARG:HG2	1.99	0.62
1:D:219:ALA:HB3	1:D:220:PRO:HD3	1.82	0.62
1:D:856:ASN:HB2	1:D:863:PHE:HE1	1.64	0.62
1:A:386:PHE:CZ	5:A:1075:PEG:C3	2.78	0.62
3:F:75:LEU:C	3:F:79:TYR:HE1	2.08	0.62
1:D:344:ARG:HE	1:D:408:LEU:HD22	1.64	0.62
1:A:966:ASN:N	1:A:967:PRO:HD2	2.15	0.62
2:B:38:LEU:HD12	2:B:44:ARG:NH1	2.14	0.62
2:B:52:LYS:HE2	2:B:265:HIS:ND1	2.15	0.62
2:B:259:PHE:O	2:B:274:VAL:HA	1.99	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:569:LEU:HD23	1:D:584:ALA:O	2.00	0.62
2:E:108:LEU:HD23	2:E:277:LEU:HD11	1.81	0.62
1:A:740:THR:HA	1:A:745:ILE:HG21	1.81	0.61
1:D:119:CYS:O	1:D:121:GLU:N	2.32	0.61
3:C:122:ASN:O	3:C:123:LYS:HB2	1.99	0.61
1:D:12:ALA:HB3	1:D:14:ARG:HG3	1.82	0.61
2:E:92:LYS:HG3	2:E:93:LYS:O	2.00	0.61
2:B:156:LEU:HD21	2:B:172:LEU:HD11	1.83	0.61
1:D:900:LEU:O	1:D:904:VAL:HG23	2.00	0.61
1:A:684:THR:HG22	2:B:181:GLN:HE22	1.66	0.60
1:A:386:PHE:CE2	5:A:1075:PEG:H31	2.35	0.60
1:D:96:ARG:HH22	1:D:145:HIS:CB	2.14	0.60
1:D:285:THR:O	1:D:289:LEU:HB2	2.01	0.60
1:D:739:VAL:O	1:D:742:GLN:HG2	2.01	0.60
2:E:52:LYS:HE2	2:E:265:HIS:HB2	1.83	0.60
3:F:75:LEU:O	3:F:79:TYR:CE1	2.54	0.60
2:B:290:VAL:HA	2:B:294:PRO:HG3	1.83	0.60
1:A:599:PHE:HB2	1:A:640:MET:HG2	1.82	0.60
1:A:962:LEU:HB3	1:A:964:PRO:CD	2.32	0.60
2:E:38:LEU:HD12	2:E:44:ARG:NH1	2.16	0.60
1:D:299:PRO:HB2	1:D:302:THR:HG23	1.82	0.60
1:A:56:HIS:N	1:A:57:PRO:HD3	2.17	0.60
1:A:887:ARG:NH1	1:A:937:ALA:HB3	2.16	0.60
2:B:40:GLN:O	2:B:40:GLN:HG2	2.01	0.60
1:D:569:LEU:HD21	1:D:587:THR:HB	1.81	0.60
3:F:122:ASN:O	3:F:123:LYS:HB2	2.01	0.60
1:A:892:THR:O	1:A:896:ILE:HG13	2.02	0.60
3:F:31:LEU:HD12	3:F:32:THR:H	1.67	0.60
1:A:21:GLN:HE21	1:A:21:GLN:N	1.90	0.59
1:A:626:GLN:H	1:A:629:GLN:NE2	2.00	0.59
2:B:59:VAL:HA	2:B:195:PRO:HG2	1.84	0.59
1:D:554:PHE:CE1	1:D:558:HIS:CD2	2.90	0.59
1:A:308:TYR:HD1	1:A:319:ILE:HD12	1.67	0.59
3:C:162:LEU:HD21	3:C:166:ARG:HH21	1.67	0.59
2:B:108:LEU:HD23	2:B:277:LEU:HD11	1.83	0.59
1:D:626:GLN:H	1:D:629:GLN:NE2	2.00	0.59
1:A:926:ILE:O	1:A:930:VAL:HG23	2.02	0.59
3:C:75:LEU:CA	3:C:79:TYR:HE1	2.15	0.59
1:D:139:LYS:HE2	1:D:186:ILE:HD11	1.84	0.59
3:F:95:ARG:NH1	9:F:439:HOH:O	2.35	0.59
1:A:678:ILE:C	1:A:680:LYS:H	2.10	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:684:THR:HG22	2:B:181:GLN:NE2	2.18	0.59
1:A:123:GLU:C	1:A:125:VAL:N	2.60	0.59
1:A:285:THR:O	1:A:289:LEU:HB2	2.02	0.59
1:A:963:ASN:HD22	1:A:964:PRO:HD3	1.67	0.59
2:B:280:TYR:CG	2:B:296:THR:HB	2.38	0.59
3:C:31:LEU:HD12	3:C:32:THR:H	1.68	0.59
1:D:975:GLN:HG2	1:D:1002:PHE:CE1	2.37	0.59
1:A:943:ALA:HB1	1:A:1011:PHE:HD2	1.68	0.59
1:A:1033:LEU:HG	1:A:1034:PHE:H	1.68	0.59
1:D:366:PHE:HE1	1:D:457:MET:HE2	1.67	0.58
1:D:1040:THR:O	1:D:1043:ARG:HG2	2.02	0.58
2:B:154:SER:O	2:B:160:ASN:HB3	2.03	0.58
1:D:471:ASP:O	1:D:475:ILE:HG12	2.02	0.58
1:D:892:THR:O	1:D:896:ILE:HG13	2.04	0.58
3:F:75:LEU:N	3:F:79:TYR:HE1	2.02	0.58
1:A:664:VAL:CG1	1:A:691:ILE:HD11	2.33	0.58
1:A:393:LEU:H	1:A:393:LEU:HD23	1.68	0.58
1:A:393:LEU:HD23	1:A:393:LEU:N	2.18	0.58
1:D:58:ASP:HB3	1:D:62:ARG:NH2	2.18	0.58
1:A:223:HIS:CD2	1:A:263:VAL:HG21	2.39	0.58
1:A:299:PRO:HB2	1:A:302:THR:HG23	1.84	0.58
1:A:788:TYR:CE1	1:A:796:ARG:HB3	2.39	0.58
2:E:95:PRO:HG2	2:E:100:ASN:O	2.03	0.58
1:D:578:ASP:HB2	9:D:1090:HOH:O	2.04	0.58
1:D:684:THR:HG22	2:E:181:GLN:NE2	2.18	0.58
2:E:156:LEU:HD21	2:E:172:LEU:HD11	1.86	0.58
1:A:192:LYS:HE2	1:A:195:LYS:HD2	1.85	0.58
1:D:32:VAL:O	1:D:36:TYR:HD1	1.86	0.58
3:F:117:ILE:HB	3:F:144:LEU:HD22	1.85	0.58
1:A:66:ILE:HG21	1:A:72:ASN:CG	2.29	0.58
2:B:243:CYS:SG	2:B:288:VAL:HG13	2.43	0.58
2:E:259:PHE:O	2:E:274:VAL:HA	2.04	0.58
1:A:192:LYS:HA	1:A:192:LYS:HE3	1.86	0.57
1:A:399:HIS:HB3	1:A:401:ASP:H	1.69	0.57
1:D:943:ALA:HB1	1:D:1011:PHE:HD2	1.69	0.57
1:D:82:ILE:O	1:D:86:VAL:HG23	2.04	0.57
1:D:555:LEU:HB3	1:D:562:LEU:CD2	2.34	0.57
3:F:143:ASN:N	3:F:143:ASN:HD22	2.02	0.57
1:D:446:LYS:HD2	3:F:127:LYS:HG3	1.85	0.57
2:E:296:THR:O	2:E:297:THR:HG23	2.05	0.57
1:D:58:ASP:HB3	1:D:62:ARG:HH21	1.69	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:739:VAL:O	1:A:742:GLN:HG2	2.03	0.57
1:D:966:ASN:HB3	1:D:967:PRO:CD	2.28	0.57
1:A:963:ASN:ND2	1:A:964:PRO:HD3	2.19	0.57
1:A:968:VAL:O	1:A:968:VAL:HG13	2.05	0.57
3:C:143:ASN:N	3:C:143:ASN:HD22	2.03	0.57
1:D:534:LYS:HD3	1:D:577:HIS:HB2	1.86	0.57
3:C:141:LYS:H	3:C:141:LYS:HD2	1.70	0.57
1:A:739:VAL:CG2	1:A:745:ILE:HG13	2.33	0.57
3:C:117:ILE:HB	3:C:144:LEU:HD22	1.86	0.57
1:D:966:ASN:CB	1:D:967:PRO:HD3	2.28	0.57
1:D:996:LEU:HG	1:D:1035:LEU:CD2	2.35	0.57
3:F:141:LYS:H	3:F:141:LYS:HD2	1.70	0.57
1:A:534:LYS:HD3	1:A:577:HIS:HB2	1.86	0.57
1:A:975:GLN:HG2	1:A:1002:PHE:CE1	2.39	0.57
2:E:103:MET:HE2	2:E:266:TYR:CD2	2.40	0.57
1:A:887:ARG:HD3	1:A:937:ALA:HB3	1.86	0.56
1:A:963:ASN:N	1:A:964:PRO:HD3	2.20	0.56
1:D:276:VAL:HG13	1:D:278:GLN:H	1.69	0.56
1:A:73:MET:HE1	1:A:125:VAL:HB	1.87	0.56
1:A:887:ARG:HD3	1:A:937:ALA:CB	2.35	0.56
3:C:70:GLU:O	3:C:76:ARG:NH2	2.38	0.56
1:D:569:LEU:O	1:D:573:MET:HG3	2.05	0.56
3:F:31:LEU:HD12	3:F:32:THR:N	2.20	0.56
3:F:45:VAL:CB	3:F:79:TYR:HE2	2.16	0.56
1:A:956:GLY:O	1:A:958:ILE:HG23	2.05	0.56
1:D:36:TYR:CA	5:D:1074:PEG:H32	2.34	0.56
2:E:59:VAL:HA	2:E:195:PRO:HG2	1.87	0.56
2:E:92:LYS:HG2	9:E:368:HOH:O	2.05	0.56
3:F:45:VAL:HB	3:F:79:TYR:CD2	2.41	0.56
1:A:569:LEU:O	1:A:573:MET:HG3	2.06	0.56
1:D:55:GLU:CG	1:D:56:HIS:H	2.18	0.56
1:D:161:GLU:HG3	1:D:221:LEU:HD22	1.86	0.56
1:A:73:MET:CE	1:A:125:VAL:HB	2.36	0.56
1:A:187:THR:HG23	9:A:1178:HOH:O	2.05	0.56
1:A:400:PHE:O	1:A:400:PHE:CG	2.58	0.56
1:A:568:LYS:HE3	1:A:568:LYS:HA	1.88	0.56
2:E:117:GLN:HG3	2:E:117:GLN:O	2.06	0.56
1:A:276:VAL:HG13	1:A:278:GLN:H	1.70	0.56
1:D:45:MET:HE3	1:D:49:VAL:HG21	1.86	0.56
1:D:297:MET:O	1:D:299:PRO:HD3	2.05	0.56
1:D:840:GLU:O	1:D:845:ARG:NH1	2.39	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:218:ASN:OD1	1:A:220:PRO:HD2	2.05	0.56
1:A:840:GLU:O	1:A:845:ARG:NH1	2.39	0.56
1:A:969:ASN:OD1	1:A:972:MET:HB2	2.06	0.56
3:C:100:ASN:HD22	3:C:103:ASN:ND2	2.04	0.56
1:A:139:LYS:HE2	1:A:186:ILE:HD11	1.87	0.55
1:A:471:ASP:O	1:A:475:ILE:HG12	2.05	0.55
1:A:961:PRO:HD3	1:A:970:ASN:ND2	2.20	0.55
3:C:31:LEU:HD12	3:C:32:THR:N	2.21	0.55
1:D:746:ARG:HG2	5:D:1076:PEG:H11	1.88	0.55
1:D:788:TYR:CE1	1:D:796:ARG:HB3	2.41	0.55
1:A:123:GLU:HB3	1:A:125:VAL:HG23	1.87	0.55
1:D:119:CYS:O	1:D:122:LYS:N	2.38	0.55
1:A:105:TYR:O	1:A:109:LEU:HB2	2.05	0.55
1:A:866:ILE:HB	1:A:867:PRO:HD2	1.88	0.55
1:A:1043:ARG:HA	1:A:1046:GLN:HB3	1.87	0.55
1:D:568:LYS:HE3	1:D:568:LYS:HA	1.88	0.55
1:D:575:GLU:HG2	1:D:580:VAL:HG11	1.88	0.55
1:D:1038:ARG:NH2	1:D:1042:LEU:HD21	2.20	0.55
1:A:44:ARG:O	1:A:47:GLN:HG2	2.06	0.55
2:E:96:LYS:HE3	2:E:96:LYS:HA	1.87	0.55
2:E:176:TYR:HB2	2:E:183:TYR:CE1	2.41	0.55
3:F:159:LYS:HB2	3:F:160:PRO:HD3	1.87	0.55
1:A:35:LEU:O	1:A:36:TYR:CD2	2.58	0.55
1:A:1043:ARG:NH1	1:A:1046:GLN:HG2	2.17	0.55
2:B:288:VAL:HG12	2:B:289:ALA:N	2.19	0.55
1:D:953:VAL:HG11	1:D:974:ILE:HG21	1.89	0.55
1:A:120:VAL:O	1:A:123:GLU:HA	2.07	0.55
1:A:400:PHE:CD2	1:A:400:PHE:C	2.85	0.55
1:D:105:TYR:O	1:D:109:LEU:HB2	2.06	0.55
3:F:75:LEU:CB	3:F:79:TYR:HE1	2.20	0.55
1:A:82:ILE:O	1:A:86:VAL:HG23	2.07	0.55
3:C:75:LEU:O	3:C:79:TYR:CE1	2.60	0.55
1:D:517:LEU:HD11	1:D:551:TYR:CG	2.42	0.55
1:D:759:ILE:HD13	1:D:780:LEU:HD21	1.89	0.55
1:A:517:LEU:HD11	1:A:551:TYR:CG	2.42	0.55
1:A:616:ASN:OD1	1:A:656:LYS:HE2	2.06	0.55
3:C:45:VAL:HB	3:C:79:TYR:CD2	2.42	0.55
1:D:80:LEU:HD11	1:D:126:TYR:HE1	1.72	0.55
3:F:100:ASN:HD22	3:F:103:ASN:HD22	1.55	0.54
1:A:485:ASN:C	1:A:487:THR:N	2.64	0.54
1:A:953:VAL:HG11	1:A:974:ILE:HG21	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:555:LEU:HB3	1:D:562:LEU:HD23	1.88	0.54
2:E:290:VAL:N	2:E:291:PRO:HD2	2.22	0.54
1:A:297:MET:O	1:A:299:PRO:HD3	2.06	0.54
3:C:100:ASN:HD22	3:C:103:ASN:HD22	1.53	0.54
1:D:44:ARG:O	1:D:47:GLN:HG2	2.07	0.54
1:A:916:GLN:HE22	1:A:959:SER:HB3	1.72	0.54
1:A:957:LYS:NZ	1:A:961:PRO:HB3	2.22	0.54
2:B:11:ARG:NH1	2:B:35:TYR:OH	2.40	0.54
2:B:111:VAL:HG11	9:B:731:HOH:O	2.07	0.54
1:D:737:GLU:H	1:D:737:GLU:CD	2.16	0.54
1:D:739:VAL:CG2	1:D:745:ILE:HG13	2.35	0.54
1:D:765:ARG:CZ	5:D:1075:PEG:H31	2.38	0.54
3:C:159:LYS:HB2	3:C:160:PRO:HD3	1.88	0.54
3:F:124:VAL:HG22	3:F:150:SER:HB2	1.90	0.54
1:A:336:LEU:C	1:A:336:LEU:HD12	2.32	0.54
1:A:966:ASN:N	1:A:967:PRO:CD	2.70	0.54
1:A:161:GLU:HG3	1:A:221:LEU:HD22	1.89	0.54
2:B:295:LEU:C	2:B:295:LEU:HD12	2.32	0.54
1:D:27:LEU:CD2	1:D:62:ARG:HD3	2.37	0.54
1:D:393:LEU:CD2	1:D:394:LEU:H	2.19	0.54
1:D:678:ILE:C	1:D:680:LYS:H	2.16	0.54
1:D:866:ILE:HB	1:D:867:PRO:HD2	1.90	0.54
1:D:1036:GLU:O	1:D:1040:THR:HG23	2.08	0.54
1:A:133:ILE:O	1:A:136:GLN:HB2	2.07	0.54
1:A:665:TRP:O	1:A:669:ILE:HG12	2.08	0.54
1:D:945:ILE:O	1:D:949:MET:HG3	2.08	0.54
1:D:1033:LEU:O	1:D:1034:PHE:HB2	2.07	0.54
1:A:963:ASN:N	1:A:964:PRO:CD	2.71	0.54
1:D:441:VAL:HG22	1:D:442:ARG:N	2.23	0.54
2:B:103:MET:HE2	2:B:266:TYR:CD2	2.43	0.53
3:F:100:ASN:HD22	3:F:103:ASN:ND2	2.07	0.53
1:A:45:MET:HE3	1:A:49:VAL:HG21	1.90	0.53
1:A:660:LEU:HD13	9:A:1123:HOH:O	2.08	0.53
1:A:759:ILE:HD13	1:A:780:LEU:HD21	1.90	0.53
2:B:160:ASN:ND2	2:B:162:ARG:H	2.06	0.53
1:A:123:GLU:C	1:A:125:VAL:H	2.15	0.53
1:D:444:PHE:HB2	9:D:1165:HOH:O	2.09	0.53
2:E:27:ARG:HG3	2:E:27:ARG:O	2.08	0.53
1:A:110:ILE:O	1:A:114:SER:N	2.28	0.53
2:B:38:LEU:HD12	2:B:44:ARG:HH11	1.74	0.53
2:B:176:TYR:HB2	2:B:183:TYR:CE1	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:20:SER:HB2	1:A:22:LYS:HD3	1.91	0.53
1:D:525:LEU:HD21	2:E:9:LEU:HA	1.90	0.53
2:E:95:PRO:HB2	2:E:101:GLN:NE2	2.23	0.53
1:A:1046:GLN:HE22	1:A:1049:LYS:NZ	2.07	0.53
3:C:9:VAL:HG12	3:C:10:GLN:H	1.73	0.53
3:F:70:GLU:O	3:F:76:ARG:NH2	2.42	0.53
1:A:95:PRO:HG2	1:A:98:GLN:HE21	1.74	0.53
3:C:88:ILE:HG21	3:C:101:VAL:HG13	1.90	0.53
1:D:293:GLN:O	1:D:297:MET:HG3	2.08	0.53
1:D:616:ASN:OD1	1:D:656:LYS:HE2	2.08	0.53
1:A:550:GLN:C	1:A:552:PRO:HD3	2.34	0.53
2:B:280:TYR:CD2	2:B:296:THR:HB	2.44	0.53
1:D:343:LEU:C	1:D:345:GLU:H	2.16	0.53
2:E:4:LEU:C	2:E:5:GLN:HG2	2.33	0.53
2:E:38:LEU:HD12	2:E:44:ARG:HH11	1.74	0.53
1:A:741:LYS:HG3	1:A:746:ARG:NH1	2.24	0.53
1:D:599:PHE:HB2	1:D:640:MET:HG2	1.90	0.53
1:D:954:GLU:O	1:D:955:GLU:HG3	2.09	0.53
1:A:525:LEU:HD21	2:B:9:LEU:HA	1.91	0.53
1:D:521:ILE:HD11	2:E:7:PRO:HG2	1.90	0.53
1:A:262:ASN:HD21	1:A:318:PHE:HA	1.73	0.52
1:D:485:ASN:C	1:D:487:THR:N	2.66	0.52
1:D:559:TRP:CD2	1:D:603:GLN:HG3	2.44	0.52
1:A:386:PHE:CE2	5:A:1075:PEG:C3	2.93	0.52
2:B:215:GLU:O	2:B:216:GLU:C	2.52	0.52
1:D:664:VAL:CG1	1:D:691:ILE:HD11	2.39	0.52
1:D:798:PRO:HG3	1:D:844:HIS:NE2	2.24	0.52
1:D:916:GLN:HE22	1:D:959:SER:HB3	1.74	0.52
2:E:41:SER:HB2	2:E:110:ASP:HB3	1.91	0.52
2:E:160:ASN:HD21	2:E:162:ARG:HB2	1.72	0.52
2:E:215:GLU:O	2:E:216:GLU:C	2.52	0.52
1:A:343:LEU:C	1:A:345:GLU:H	2.17	0.52
1:A:900:LEU:HA	1:A:903:ASN:HD22	1.74	0.52
1:D:116:ASP:C	1:D:118:THR:N	2.65	0.52
1:D:361:GLU:HB3	4:D:1079:GOL:O3	2.08	0.52
1:D:956:GLY:O	1:D:958:ILE:HG23	2.08	0.52
1:A:954:GLU:O	1:A:955:GLU:HG3	2.10	0.52
3:C:75:LEU:C	3:C:79:TYR:HE1	2.17	0.52
1:D:121:GLU:O	1:D:123:GLU:N	2.43	0.52
1:D:262:ASN:HD21	1:D:318:PHE:HA	1.74	0.52
2:E:8:PRO:O	2:E:11:ARG:HG2	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1018:PHE:O	1:A:1022:ILE:HG23	2.09	0.52
1:D:565:VAL:HG22	2:E:9:LEU:CD2	2.40	0.52
1:A:786:ILE:HD13	1:D:645:THR:HG21	1.91	0.52
1:D:393:LEU:HG	1:D:399:HIS:CE1	2.45	0.52
3:F:95:ARG:HG2	3:F:131:VAL:HG22	1.92	0.52
2:B:288:VAL:CG1	2:B:289:ALA:N	2.72	0.52
3:C:145:GLN:NE2	3:C:146:TYR:H	2.08	0.52
1:A:16:LEU:O	1:A:17:LEU:C	2.52	0.52
2:B:293:GLY:N	2:B:294:PRO:CD	2.70	0.52
2:E:49:GLU:HA	2:E:52:LYS:HG2	1.92	0.52
1:D:437:GLN:C	1:D:439:GLU:H	2.18	0.52
1:D:957:LYS:NZ	1:D:961:PRO:HB3	2.24	0.52
1:A:458:ARG:HG3	1:A:503:SER:HB2	1.91	0.51
1:A:521:ILE:HD11	2:B:7:PRO:HG2	1.90	0.51
1:A:559:TRP:CD2	1:A:603:GLN:HG3	2.45	0.51
1:D:961:PRO:HD3	1:D:970:ASN:ND2	2.25	0.51
1:A:95:PRO:CG	1:A:98:GLN:HE21	2.23	0.51
1:A:719:ASN:OD1	2:B:358:MET:HB2	2.10	0.51
2:B:4:LEU:O	2:B:4:LEU:HD23	2.10	0.51
1:D:907:GLU:O	1:D:911:ALA:HB2	2.10	0.51
2:E:115:LEU:HD12	2:E:119:TRP:CG	2.45	0.51
1:A:80:LEU:HD11	1:A:126:TYR:CE1	2.45	0.51
1:A:664:VAL:O	1:A:668:ILE:HG13	2.11	0.51
1:A:971:GLN:O	1:A:975:GLN:HG3	2.10	0.51
3:C:75:LEU:N	3:C:79:TYR:HE1	2.09	0.51
1:D:24:ASP:O	1:D:28:LEU:HD13	2.09	0.51
1:A:87:ILE:HD13	1:A:137:ILE:HG13	1.92	0.51
1:A:132:MET:HE3	1:A:135:VAL:HB	1.93	0.51
1:A:257:VAL:HG21	1:A:260:PHE:HD2	1.74	0.51
1:A:293:GLN:O	1:A:297:MET:HG3	2.10	0.51
1:D:257:VAL:HG21	1:D:260:PHE:HD2	1.74	0.51
1:D:455:LYS:HD2	1:D:458:ARG:HH22	1.76	0.51
1:A:455:LYS:HD2	1:A:458:ARG:HH22	1.76	0.51
1:D:13:ALA:HB3	1:D:47:GLN:HE22	1.75	0.51
1:D:36:TYR:C	5:D:1074:PEG:H32	2.35	0.51
1:A:116:ASP:OD2	1:A:117:PRO:HD2	2.10	0.51
1:A:399:HIS:O	1:A:400:PHE:HB3	2.11	0.51
3:C:31:LEU:HD13	3:C:32:THR:HG23	1.93	0.51
1:D:781:LEU:HD11	1:D:821:GLN:HB3	1.93	0.51
1:D:882:PHE:HA	1:D:890:ALA:HA	1.93	0.51
1:D:961:PRO:HB2	1:D:973:PHE:CE1	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:55:GLU:CG	1:A:56:HIS:H	2.24	0.51
2:B:115:LEU:HD12	2:B:119:TRP:CG	2.46	0.51
3:F:115:ILE:O	3:F:117:ILE:HG13	2.11	0.51
1:A:400:PHE:O	1:A:400:PHE:CD2	2.64	0.51
1:A:600:VAL:HG11	1:A:640:MET:O	2.11	0.51
1:D:600:VAL:HB	1:D:644:GLN:HG2	1.93	0.51
3:C:124:VAL:HG22	3:C:150:SER:HB2	1.93	0.51
3:F:169:ILE:O	3:F:169:ILE:HG22	2.11	0.51
1:A:21:GLN:NE2	1:A:21:GLN:N	2.54	0.50
1:A:676:VAL:HG12	1:A:676:VAL:O	2.11	0.50
2:B:52:LYS:HE2	2:B:265:HIS:HB2	1.92	0.50
3:C:73:GLY:HA2	9:C:2:HOH:O	2.11	0.50
1:D:27:LEU:HD22	1:D:62:ARG:CZ	2.41	0.50
3:F:31:LEU:CD1	3:F:32:THR:HG23	2.41	0.50
1:A:156:ALA:HB1	1:A:163:LEU:HD22	1.93	0.50
1:A:229:LEU:HD11	1:A:246:LEU:HD11	1.93	0.50
1:A:400:PHE:O	1:A:401:ASP:C	2.55	0.50
1:D:484:VAL:HA	1:D:527:LEU:HD13	1.92	0.50
1:A:300:LEU:O	1:A:352:HIS:HE1	1.94	0.50
1:A:965:GLY:C	1:A:967:PRO:HD2	2.36	0.50
1:D:670:GLN:HG3	1:D:671:GLN:N	2.27	0.50
1:A:484:VAL:HA	1:A:527:LEU:HD13	1.92	0.50
1:A:676:VAL:HG13	1:A:679:LEU:HD12	1.93	0.50
2:B:296:THR:O	2:B:297:THR:C	2.54	0.50
3:C:169:ILE:HG22	3:C:169:ILE:O	2.12	0.50
1:D:425:ALA:HB2	1:D:457:MET:HE3	1.93	0.50
1:D:899:THR:HG22	1:D:903:ASN:ND2	2.26	0.50
1:D:1006:GLN:OE1	1:D:1049:LYS:HB3	2.11	0.50
1:A:167:ASN:ND2	1:A:170:ILE:HD12	2.27	0.50
1:A:961:PRO:HB2	1:A:973:PHE:CE1	2.46	0.50
2:B:41:SER:HB2	2:B:110:ASP:HB3	1.93	0.50
2:B:160:ASN:HD21	2:B:162:ARG:HB2	1.76	0.50
1:A:798:PRO:HG3	1:A:844:HIS:NE2	2.26	0.50
1:A:882:PHE:HA	1:A:890:ALA:HA	1.94	0.50
1:D:95:PRO:HG2	1:D:98:GLN:HB3	1.93	0.50
1:D:1018:PHE:O	1:D:1022:ILE:HG23	2.10	0.50
3:F:31:LEU:HD13	3:F:32:THR:HG23	1.94	0.50
1:A:389:SER:N	1:A:401:ASP:OD1	2.26	0.50
2:B:27:ARG:O	2:B:27:ARG:HG2	2.10	0.50
1:D:971:GLN:O	1:D:975:GLN:HG3	2.12	0.50
2:E:10:GLU:HB3	2:E:34:LYS:HE2	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:877:SER:O	1:A:880:TRP:HB3	2.11	0.50
2:B:35:TYR:N	2:B:35:TYR:CD1	2.78	0.50
2:B:156:LEU:HD21	2:B:172:LEU:CD1	2.41	0.50
3:F:145:GLN:HE21	3:F:146:TYR:N	2.09	0.50
2:B:187:ASP:OD1	2:B:204:ARG:HD2	2.12	0.50
1:D:156:ALA:HB1	1:D:163:LEU:HD22	1.94	0.50
1:A:1035:LEU:O	1:A:1036:GLU:C	2.55	0.49
1:A:554:PHE:CE1	1:A:558:HIS:CD2	3.00	0.49
1:A:781:LEU:HD11	1:A:821:GLN:HB3	1.95	0.49
1:D:27:LEU:HD22	1:D:62:ARG:NH1	2.26	0.49
1:D:900:LEU:HA	1:D:903:ASN:HD22	1.77	0.49
2:E:4:LEU:HD12	2:E:4:LEU:O	2.12	0.49
2:E:18:LEU:HD22	2:E:38:LEU:HG	1.94	0.49
1:A:575:GLU:HG2	1:A:580:VAL:HG11	1.94	0.49
2:B:125:PRO:HB3	2:B:252:PHE:CG	2.46	0.49
3:C:30:HIS:ND1	3:C:157:PHE:CZ	2.79	0.49
3:C:76:ARG:NH1	5:C:182:PEG:H12	2.27	0.49
1:D:95:PRO:HG2	1:D:98:GLN:CB	2.42	0.49
1:D:336:LEU:HD12	1:D:336:LEU:C	2.37	0.49
2:E:243:CYS:SG	2:E:289:ALA:HB2	2.52	0.49
2:E:291:PRO:O	2:E:292:ALA:CB	2.59	0.49
2:B:49:GLU:O	2:B:52:LYS:HB2	2.13	0.49
3:C:13:LEU:HD23	3:C:13:LEU:C	2.37	0.49
3:C:31:LEU:CD1	3:C:32:THR:HG23	2.42	0.49
1:D:8:LEU:O	1:D:8:LEU:HG	2.11	0.49
1:A:410:LEU:HB2	9:A:1183:HOH:O	2.11	0.49
1:A:509:HIS:HB2	9:A:1254:HOH:O	2.12	0.49
1:A:599:PHE:CB	1:A:640:MET:HG2	2.42	0.49
1:A:899:THR:HG22	1:A:903:ASN:ND2	2.27	0.49
2:B:122:VAL:HG22	2:B:234:ASN:HB3	1.93	0.49
2:B:216:GLU:HG2	2:B:217:GLY:H	1.76	0.49
2:B:264:THR:HG22	2:B:265:HIS:O	2.13	0.49
1:D:55:GLU:O	1:D:57:PRO:HD3	2.12	0.49
1:D:437:GLN:HE21	1:D:438:GLY:H	1.59	0.49
1:D:676:VAL:HG13	1:D:679:LEU:HD12	1.94	0.49
2:B:31:TYR:C	2:B:33:SER:H	2.20	0.49
2:B:49:GLU:HA	2:B:52:LYS:HG2	1.93	0.49
3:C:9:VAL:HG12	3:C:10:GLN:N	2.27	0.49
3:C:86:ALA:CB	3:C:108:LEU:HD21	2.42	0.49
1:D:150:ILE:CD1	1:D:205:ILE:HD11	2.38	0.49
1:D:887:ARG:NH2	3:F:91:ASP:OD2	2.45	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:963:ASN:OD1	1:D:963:ASN:N	2.45	0.49
2:E:121:VAL:HA	2:E:258:LEU:O	2.12	0.49
1:A:526:GLY:HA2	5:A:1077:PEG:H12	1.95	0.49
1:A:600:VAL:HB	1:A:644:GLN:HG2	1.95	0.49
1:A:797:GLU:HB3	1:A:800:VAL:HG23	1.95	0.49
2:B:8:PRO:HB2	2:B:11:ARG:CZ	2.42	0.49
2:B:121:VAL:HA	2:B:258:LEU:O	2.13	0.49
1:D:17:LEU:HD23	1:D:19:PHE:H	1.77	0.49
1:D:1016:ARG:HG2	1:D:1016:ARG:HH11	1.78	0.49
3:F:145:GLN:NE2	3:F:146:TYR:H	2.07	0.49
1:D:132:MET:HE3	1:D:135:VAL:HB	1.94	0.49
2:E:35:TYR:CD1	2:E:35:TYR:N	2.80	0.49
2:E:43:ARG:NH2	2:E:46:ARG:HH22	2.11	0.49
1:A:386:PHE:HZ	5:A:1075:PEG:C2	2.02	0.49
1:A:728:ILE:HD13	1:A:749:ARG:HD2	1.95	0.49
1:A:945:ILE:O	1:A:949:MET:HG3	2.12	0.49
1:D:112:LYS:HD3	1:D:112:LYS:C	2.38	0.49
1:D:482:ASN:HA	1:D:486:GLY:HA3	1.94	0.49
1:A:670:GLN:HG3	1:A:671:GLN:N	2.28	0.49
1:D:482:ASN:HB3	1:D:488:GLU:HG2	1.95	0.49
1:D:550:GLN:C	1:D:552:PRO:HD3	2.38	0.49
2:E:10:GLU:CB	2:E:34:LYS:HE2	2.42	0.49
1:A:131:ASN:ND2	1:A:166:ASN:HD21	2.03	0.48
2:B:182:THR:HG23	2:B:228:LYS:O	2.13	0.48
2:B:191:TRP:NE1	2:B:192:ARG:HG3	2.26	0.48
1:D:17:LEU:HB3	1:D:22:LYS:HE2	1.95	0.48
1:D:113:THR:CG2	1:D:122:LYS:HD2	2.43	0.48
2:E:180:ASN:O	2:E:181:GLN:C	2.56	0.48
1:A:95:PRO:HG2	1:A:98:GLN:HB2	1.94	0.48
1:A:286:LEU:HD12	1:A:286:LEU:O	2.12	0.48
1:A:485:ASN:C	1:A:487:THR:H	2.20	0.48
2:E:125:PRO:HB3	2:E:252:PHE:CG	2.47	0.48
2:E:296:THR:HG23	2:E:297:THR:N	2.27	0.48
2:B:10:GLU:CB	2:B:34:LYS:HE2	2.43	0.48
1:D:676:VAL:HG12	1:D:676:VAL:O	2.13	0.48
2:E:288:VAL:HB	2:E:290:VAL:HG23	1.95	0.48
1:A:441:VAL:HG12	1:A:628:GLN:NE2	2.28	0.48
1:A:482:ASN:HB3	1:A:488:GLU:HG2	1.95	0.48
1:D:437:GLN:C	1:D:439:GLU:N	2.68	0.48
3:F:13:LEU:C	3:F:13:LEU:HD23	2.38	0.48
1:D:458:ARG:HG3	1:D:503:SER:HB2	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:431:LEU:HG	1:A:433:VAL:CG1	2.43	0.48
1:A:482:ASN:HA	1:A:486:GLY:HA3	1.95	0.48
3:C:95:ARG:HG2	3:C:131:VAL:HG22	1.96	0.48
3:C:115:ILE:O	3:C:117:ILE:HG13	2.13	0.48
3:C:123:LYS:HE2	7:C:217:GTP:C5	2.49	0.48
1:D:289:LEU:HD12	1:D:292:MET:HE2	1.94	0.48
1:D:1030:THR:HG22	1:D:1031:SER:N	2.27	0.48
2:B:198:ASP:C	2:B:265:HIS:HD2	2.21	0.48
1:D:803:THR:O	1:D:807:ILE:HG23	2.14	0.48
3:F:75:LEU:H	3:F:79:TYR:HE1	1.59	0.48
1:A:17:LEU:HG	1:A:20:SER:OG	2.14	0.48
2:B:10:GLU:HB3	2:B:34:LYS:HE2	1.95	0.48
2:B:280:TYR:HA	2:B:294:PRO:HA	1.96	0.48
1:D:600:VAL:HG11	1:D:640:MET:O	2.14	0.48
1:D:673:THR:OG1	2:E:356:CYS:HB3	2.14	0.48
1:D:742:GLN:HB2	1:D:743:PRO:HD2	1.96	0.48
1:A:172:LYS:HG3	1:A:231:ARG:HG3	1.96	0.48
1:A:856:ASN:HB2	1:A:863:PHE:CE1	2.45	0.48
2:B:26:PRO:HG2	2:B:109:ILE:HD11	1.94	0.48
1:A:62:ARG:HE	1:A:79:GLY:HA3	1.78	0.47
1:D:87:ILE:HD13	1:D:137:ILE:HG13	1.96	0.47
1:D:941:MET:O	1:D:945:ILE:HG13	2.14	0.47
3:F:88:ILE:HG21	3:F:101:VAL:HG13	1.96	0.47
1:A:208:LEU:O	1:A:212:VAL:HG23	2.13	0.47
1:A:1016:ARG:HG2	1:A:1016:ARG:HH11	1.79	0.47
2:E:135:SER:HB3	2:E:169:TYR:HB3	1.96	0.47
2:E:165:THR:HG23	9:E:715:HOH:O	2.14	0.47
3:F:86:ALA:CB	3:F:108:LEU:HD21	2.44	0.47
1:A:704:HIS:HB3	1:A:705:PRO:HD3	1.96	0.47
3:C:75:LEU:H	3:C:79:TYR:HE1	1.62	0.47
1:D:505:SER:HA	1:D:551:TYR:CE1	2.49	0.47
2:E:118:GLU:HA	2:E:118:GLU:OE1	2.14	0.47
1:A:961:PRO:HD3	1:A:970:ASN:HD21	1.79	0.47
1:D:740:THR:HA	1:D:745:ILE:HG21	1.96	0.47
1:D:357:VAL:HG12	1:D:369:CYS:SG	2.55	0.47
1:D:635:GLU:HB2	1:D:697:ARG:HB3	1.95	0.47
1:D:964:PRO:HB2	1:D:968:VAL:HB	1.96	0.47
1:D:1043:ARG:O	1:D:1047:GLU:OE2	2.32	0.47
1:D:257:VAL:CG2	1:D:260:PHE:HD2	2.27	0.47
1:D:797:GLU:HB3	1:D:800:VAL:HG23	1.97	0.47
2:E:284:ASP:OD1	2:E:284:ASP:N	2.45	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:56:HIS:HB3	1:A:82:ILE:HG22	1.96	0.47
1:A:111:ILE:HD12	1:A:163:LEU:HD11	1.97	0.47
1:A:526:GLY:CA	5:A:1077:PEG:H12	2.44	0.47
1:A:951:ASN:HA	1:A:1005:ASN:HD22	1.80	0.47
1:D:139:LYS:HE3	1:D:177:GLU:HB3	1.97	0.47
1:D:144:LYS:HE2	1:D:193:HIS:NE2	2.30	0.47
1:D:189:VAL:HG11	1:D:1038:ARG:HG2	1.95	0.47
1:D:433:VAL:HG21	3:F:153:SER:O	2.14	0.47
1:D:943:ALA:HB2	1:D:1015:LEU:HD12	1.96	0.47
2:E:187:ASP:OD1	2:E:204:ARG:HD2	2.14	0.47
1:A:93:ILE:CG2	1:A:1027:GLY:HA3	2.44	0.47
1:A:95:PRO:HG2	1:A:98:GLN:CB	2.45	0.47
1:D:32:VAL:O	1:D:36:TYR:CD1	2.66	0.47
1:D:131:ASN:ND2	1:D:166:ASN:HD21	2.04	0.47
1:D:223:HIS:NE2	1:D:263:VAL:CG2	2.76	0.47
1:D:919:PHE:CE1	1:D:949:MET:HE2	2.50	0.47
2:E:25:HIS:CD2	2:E:26:PRO:HD2	2.50	0.47
1:A:28:LEU:HD23	1:A:28:LEU:O	2.15	0.47
1:A:257:VAL:CG2	1:A:260:PHE:HD2	2.27	0.47
1:A:296:GLN:HA	1:A:296:GLN:OE1	2.15	0.47
1:A:788:TYR:O	1:A:796:ARG:HG2	2.15	0.47
2:B:220:GLU:C	2:B:228:LYS:HG2	2.40	0.47
3:C:145:GLN:HE21	3:C:146:TYR:N	2.12	0.47
1:D:17:LEU:O	1:D:22:LYS:HE2	2.15	0.47
1:D:143:PRO:HG2	1:D:144:LYS:HD2	1.97	0.47
1:D:485:ASN:C	1:D:487:THR:H	2.21	0.47
1:D:970:ASN:N	1:D:970:ASN:HD22	2.10	0.47
2:E:122:VAL:HG22	2:E:234:ASN:HB3	1.96	0.47
2:E:173:ASP:O	2:E:186:LEU:HB3	2.15	0.47
1:D:115:SER:O	1:D:116:ASP:C	2.58	0.47
2:E:3:PRO:C	2:E:5:GLN:HE21	2.22	0.47
2:E:261:HIS:CD2	2:E:263:GLN:H	2.32	0.47
1:A:386:PHE:HE2	5:A:1075:PEG:C2	2.26	0.46
1:A:961:PRO:HB2	1:A:973:PHE:CD1	2.50	0.46
1:D:257:VAL:HG22	1:D:260:PHE:HB2	1.97	0.46
1:D:961:PRO:HB2	1:D:973:PHE:CD1	2.50	0.46
1:A:954:GLU:HB2	1:A:955:GLU:OE1	2.16	0.46
2:B:11:ARG:HH11	2:B:11:ARG:CG	2.28	0.46
2:B:16:GLN:O	2:B:16:GLN:HG2	2.16	0.46
1:D:17:LEU:HD22	1:D:20:SER:HB2	1.98	0.46
1:D:141:GLU:O	1:D:142:TRP:C	2.58	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:954:GLU:HB2	1:D:955:GLU:OE1	2.16	0.46
1:D:970:ASN:ND2	1:D:970:ASN:N	2.64	0.46
2:E:244:ASP:O	2:E:248:MET:HG3	2.15	0.46
2:B:95:PRO:HG2	2:B:100:ASN:O	2.15	0.46
3:C:79:TYR:CD1	3:C:79:TYR:N	2.82	0.46
1:D:167:ASN:ND2	1:D:170:ILE:HD12	2.30	0.46
1:D:344:ARG:O	1:D:344:ARG:HG2	2.15	0.46
2:E:52:LYS:HD2	2:E:265:HIS:ND1	2.30	0.46
2:E:191:TRP:NE1	2:E:192:ARG:HG3	2.28	0.46
1:A:16:LEU:O	1:A:18:ASP:N	2.48	0.46
1:A:66:ILE:HG22	1:A:66:ILE:O	2.15	0.46
2:B:123:VAL:HG22	2:B:257:LEU:CD2	2.45	0.46
1:D:123:GLU:C	1:D:125:VAL:N	2.71	0.46
1:D:208:LEU:O	1:D:212:VAL:HG23	2.15	0.46
1:D:482:ASN:O	1:D:487:THR:N	2.48	0.46
1:A:282:GLN:CD	1:A:282:GLN:H	2.23	0.46
1:A:505:SER:HA	1:A:551:TYR:CE1	2.50	0.46
2:B:256:GLY:HA2	2:B:279:PRO:HD3	1.98	0.46
1:D:951:ASN:HA	1:D:1005:ASN:HD22	1.80	0.46
2:E:4:LEU:HG	2:E:6:LEU:HD13	1.96	0.46
1:A:514:LYS:O	1:A:518:VAL:HG23	2.16	0.46
1:A:767:ASN:HD22	1:A:767:ASN:HA	1.62	0.46
2:B:118:GLU:OE1	2:B:118:GLU:HA	2.15	0.46
1:D:106:VAL:O	1:D:110:ILE:HG13	2.15	0.46
1:D:453:LEU:HD11	1:D:457:MET:HE2	1.97	0.46
1:D:764:SER:OG	5:D:1075:PEG:H12	2.15	0.46
2:E:288:VAL:HG23	2:E:289:ALA:H	1.81	0.46
1:A:141:GLU:O	1:A:142:TRP:C	2.59	0.46
1:A:420:MET:HE2	1:A:420:MET:HA	1.98	0.46
1:A:742:GLN:HB2	1:A:743:PRO:HD2	1.97	0.46
2:B:283:SER:OG	2:B:290:VAL:HG12	2.15	0.46
1:D:681:ASP:HB3	1:D:684:THR:HG23	1.97	0.46
1:D:788:TYR:O	1:D:796:ARG:HG2	2.15	0.46
1:A:144:LYS:HE2	1:A:193:HIS:NE2	2.31	0.46
1:A:255:LEU:HD23	1:A:255:LEU:O	2.15	0.46
1:D:317:ASN:N	1:D:317:ASN:HD22	2.14	0.46
2:E:160:ASN:ND2	2:E:162:ARG:HB2	2.30	0.46
2:B:261:HIS:CD2	2:B:263:GLN:H	2.34	0.46
2:E:264:THR:HG22	2:E:265:HIS:O	2.16	0.46
1:A:874:VAL:O	1:A:877:SER:HB3	2.15	0.45
9:A:1267:HOH:O	3:C:47:VAL:HB	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:180:ASN:O	2:B:181:GLN:C	2.59	0.45
1:D:961:PRO:HD2	1:D:962:LEU:H	1.79	0.45
1:A:257:VAL:HG22	1:A:260:PHE:HB2	1.98	0.45
1:A:635:GLU:HB2	1:A:697:ARG:HB3	1.97	0.45
1:A:803:THR:O	1:A:807:ILE:HG23	2.17	0.45
1:A:860:PHE:HE1	1:A:900:LEU:CD1	2.29	0.45
1:D:96:ARG:O	1:D:100:GLU:HG3	2.16	0.45
1:D:860:PHE:HE1	1:D:900:LEU:CD1	2.29	0.45
2:E:115:LEU:HD12	2:E:119:TRP:HB2	1.97	0.45
1:A:20:SER:O	1:A:22:LYS:N	2.49	0.45
1:A:907:GLU:OE1	1:A:907:GLU:HA	2.17	0.45
2:B:54:LYS:HE3	2:B:198:ASP:HB3	1.98	0.45
2:B:93:LYS:HD2	2:B:93:LYS:N	2.32	0.45
3:C:79:TYR:HD1	3:C:79:TYR:N	2.14	0.45
1:D:437:GLN:HE21	1:D:438:GLY:N	2.13	0.45
1:D:664:VAL:O	1:D:668:ILE:HG13	2.17	0.45
2:E:156:LEU:HD21	2:E:172:LEU:CD1	2.46	0.45
2:E:264:THR:HG23	2:E:273:LEU:HD13	1.98	0.45
1:A:312:LYS:C	1:A:314:ASP:H	2.25	0.45
2:B:95:PRO:HB2	2:B:101:GLN:NE2	2.32	0.45
3:C:177:VAL:HG23	3:C:179:MET:HG2	1.99	0.45
1:D:229:LEU:HD11	1:D:246:LEU:HD11	1.99	0.45
1:D:255:LEU:HD23	1:D:255:LEU:O	2.15	0.45
1:D:525:LEU:HB3	2:E:11:ARG:HH21	1.80	0.45
1:D:607:VAL:HG23	1:D:608:MET:HG2	1.97	0.45
1:D:804:MET:O	1:D:807:ILE:HG12	2.17	0.45
1:A:55:GLU:HG2	1:A:56:HIS:N	2.29	0.45
1:A:225:THR:CA	1:A:228:THR:HG22	2.45	0.45
2:B:91:VAL:HG12	2:B:91:VAL:O	2.16	0.45
1:D:54:LYS:HG3	1:D:55:GLU:HB2	1.97	0.45
1:D:56:HIS:N	1:D:57:PRO:HD3	2.31	0.45
1:D:993:GLN:CG	1:D:1033:LEU:HD21	2.47	0.45
1:A:122:LYS:O	1:A:123:GLU:O	2.34	0.45
1:D:402:ILE:H	1:D:402:ILE:HG12	1.52	0.45
1:D:874:VAL:O	1:D:877:SER:HB3	2.15	0.45
1:D:996:LEU:HB3	9:D:1148:HOH:O	2.16	0.45
1:A:88:LYS:HD2	1:A:136:GLN:NE2	2.32	0.45
1:A:400:PHE:O	1:A:402:ILE:N	2.49	0.45
2:B:25:HIS:CD2	2:B:26:PRO:HD2	2.51	0.45
1:D:877:SER:O	1:D:880:TRP:HB3	2.17	0.45
1:A:333:HIS:O	1:A:336:LEU:HG	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:18:LEU:HD22	2:B:38:LEU:HG	1.99	0.45
3:C:45:VAL:HG22	3:C:46:GLU:N	2.32	0.45
1:D:732:ILE:HD12	1:D:795:ALA:HB2	1.99	0.45
1:D:856:ASN:HB2	1:D:863:PHE:CE1	2.47	0.45
1:D:946:LEU:HB3	1:D:950:PHE:HE1	1.81	0.45
2:E:359:GLU:O	2:E:359:GLU:HG3	2.17	0.45
1:A:289:LEU:HD12	1:A:292:MET:HE2	1.98	0.45
1:A:517:LEU:HD21	1:A:551:TYR:CE2	2.52	0.45
1:A:732:ILE:HD12	1:A:795:ALA:HB2	1.99	0.45
1:D:73:MET:HE1	1:D:123:GLU:HB2	1.99	0.45
1:D:96:ARG:HD3	1:D:96:ARG:C	2.42	0.45
1:D:312:LYS:C	1:D:314:ASP:H	2.25	0.45
2:E:49:GLU:O	2:E:52:LYS:HB2	2.16	0.45
2:E:123:VAL:HG22	2:E:257:LEU:CD2	2.47	0.45
2:E:208:MET:C	2:E:210:SER:H	2.24	0.45
1:A:341:LEU:HD23	1:A:341:LEU:O	2.17	0.45
1:D:320:GLN:HE21	1:D:320:GLN:HB3	1.54	0.45
1:D:665:TRP:O	1:D:669:ILE:HG12	2.17	0.45
1:D:879:ILE:HA	1:D:882:PHE:CE2	2.52	0.45
1:D:1027:GLY:C	1:D:1029:ASP:H	2.23	0.45
1:A:946:LEU:HB3	1:A:950:PHE:HE1	1.81	0.44
2:B:208:MET:C	2:B:210:SER:H	2.24	0.44
2:B:257:LEU:HD12	2:B:282:VAL:HG21	1.98	0.44
1:D:286:LEU:HD12	1:D:286:LEU:O	2.16	0.44
1:D:347:LEU:O	1:D:351:LEU:HG	2.17	0.44
3:C:24:THR:HG21	9:C:344:HOH:O	2.18	0.44
3:C:75:LEU:N	3:C:79:TYR:CE1	2.85	0.44
2:E:156:LEU:HD23	2:E:170:THR:HG21	2.00	0.44
2:E:359:GLU:HA	2:E:359:GLU:OE1	2.16	0.44
1:A:320:GLN:HE21	1:A:320:GLN:HB3	1.57	0.44
1:A:678:ILE:C	1:A:680:LYS:N	2.75	0.44
1:A:943:ALA:HB2	1:A:1015:LEU:HD12	1.99	0.44
2:B:135:SER:HB3	2:B:169:TYR:HB3	2.00	0.44
2:B:244:ASP:O	2:B:248:MET:HG3	2.17	0.44
1:D:236:ILE:HG13	1:D:241:ILE:HD11	1.99	0.44
1:A:23:LEU:H	1:A:23:LEU:CD2	2.29	0.44
1:A:167:ASN:HD22	1:A:170:ILE:HD12	1.82	0.44
1:A:557:ALA:C	1:A:558:HIS:ND1	2.75	0.44
1:A:610:PHE:CE2	1:A:614:ILE:HD11	2.53	0.44
1:A:859:CYS:C	1:A:861:PRO:HD2	2.43	0.44
2:B:168:ASP:OD2	2:B:192:ARG:HA	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:24:ASP:OD1	1:D:28:LEU:HD13	2.17	0.44
1:D:434:GLU:HA	1:D:440:VAL:HA	1.98	0.44
1:D:786:ILE:O	1:D:790:ARG:HG3	2.18	0.44
1:A:482:ASN:O	1:A:487:THR:N	2.50	0.44
1:A:941:MET:O	1:A:945:ILE:HG13	2.18	0.44
2:B:210:SER:C	2:B:211:LYS:HD2	2.43	0.44
3:C:76:ARG:CD	5:C:182:PEG:H21	2.28	0.44
1:D:434:GLU:H	1:D:434:GLU:HG2	1.43	0.44
1:D:680:LYS:HE2	1:D:727:ASN:HD22	1.82	0.44
1:D:788:TYR:CD2	1:D:826:VAL:HG12	2.52	0.44
2:E:286:LEU:HB3	2:E:287:GLY:H	1.52	0.44
1:A:35:LEU:C	1:A:36:TYR:CD2	2.96	0.44
3:C:20:GLY:HA3	9:C:304:HOH:O	2.18	0.44
1:D:225:THR:CA	1:D:228:THR:HG22	2.46	0.44
1:D:698:ALA:O	1:D:702:VAL:HG23	2.18	0.44
3:F:79:TYR:CD1	3:F:79:TYR:N	2.85	0.44
3:F:84:GLN:O	3:F:85:CYS:HB3	2.18	0.44
3:F:115:ILE:O	3:F:115:ILE:HG13	2.18	0.44
1:A:93:ILE:HG22	1:A:1027:GLY:HA3	1.99	0.44
1:A:879:ILE:HA	1:A:882:PHE:CE2	2.53	0.44
1:A:443:GLU:HG2	1:A:444:PHE:N	2.32	0.44
2:B:353:HIS:HA	2:B:354:PRO:HD3	1.78	0.44
1:D:435:ASN:HB2	9:D:1182:HOH:O	2.17	0.44
3:F:12:LYS:HE2	3:F:64:TRP:CE2	2.52	0.44
3:F:117:ILE:HG22	3:F:118:VAL:N	2.32	0.44
1:A:150:ILE:CD1	1:A:205:ILE:HD11	2.43	0.44
2:B:8:PRO:O	2:B:11:ARG:HG2	2.18	0.44
2:B:204:ARG:HH11	2:B:265:HIS:C	2.26	0.44
1:D:554:PHE:CE1	1:D:558:HIS:HD2	2.35	0.44
1:D:763:VAL:HG12	1:D:810:LYS:HG2	2.00	0.44
2:E:256:GLY:HA2	2:E:279:PRO:HD3	2.00	0.44
2:B:164:SER:HB3	2:B:168:ASP:HB3	2.00	0.43
1:D:495:ASN:ND2	1:D:543:ASN:HD21	2.16	0.43
1:A:681:ASP:HB3	1:A:684:THR:HG23	2.00	0.43
1:A:804:MET:O	1:A:807:ILE:HG12	2.18	0.43
1:A:1006:GLN:CD	1:A:1049:LYS:HB3	2.43	0.43
2:B:61:HIS:ND1	2:B:94:LEU:HB3	2.33	0.43
2:B:173:ASP:O	2:B:186:LEU:HB3	2.18	0.43
1:D:122:LYS:O	1:D:123:GLU:O	2.37	0.43
1:A:106:VAL:O	1:A:110:ILE:HG13	2.18	0.43
1:A:317:ASN:N	1:A:317:ASN:HD22	2.16	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:425:ALA:HB2	1:A:457:MET:HE3	1.99	0.43
1:A:777:VAL:O	1:A:780:LEU:HB2	2.17	0.43
1:A:919:PHE:CE1	1:A:949:MET:HE2	2.54	0.43
2:B:93:LYS:HE3	2:B:93:LYS:HB3	1.84	0.43
2:B:123:VAL:HG22	2:B:257:LEU:HD21	2.01	0.43
1:D:282:GLN:CD	1:D:282:GLN:H	2.26	0.43
1:D:288:THR:O	1:D:292:MET:HG3	2.18	0.43
1:A:56:HIS:N	1:A:57:PRO:CD	2.81	0.43
1:A:480:LEU:O	1:A:480:LEU:HD23	2.17	0.43
1:A:961:PRO:HD2	1:A:962:LEU:H	1.81	0.43
2:B:155:LEU:HG	2:B:225:ASN:HB2	1.98	0.43
3:C:117:ILE:HG22	3:C:118:VAL:N	2.32	0.43
1:D:393:LEU:HG	1:D:399:HIS:ND1	2.33	0.43
1:D:720:VAL:O	1:D:724:LEU:HG	2.18	0.43
2:E:296:THR:CG2	2:E:297:THR:N	2.81	0.43
1:A:763:VAL:HG12	1:A:810:LYS:HG2	2.00	0.43
1:A:925:HIS:O	1:A:928:SER:HB3	2.18	0.43
2:B:10:GLU:H	2:B:10:GLU:CD	2.26	0.43
2:B:161:ARG:HD3	2:B:161:ARG:HA	1.85	0.43
1:D:72:ASN:HB3	1:D:75:THR:HB	1.99	0.43
1:D:990:GLN:OE1	1:D:1028:GLU:HA	2.18	0.43
1:D:1034:PHE:HD1	1:D:1037:GLU:OE2	2.02	0.43
2:E:258:LEU:HD23	2:E:258:LEU:HA	1.88	0.43
1:A:113:THR:O	1:A:116:ASP:HB3	2.18	0.43
3:C:29:ARG:CZ	3:C:154:ASN:HD21	2.32	0.43
1:D:720:VAL:HG22	9:D:1178:HOH:O	2.18	0.43
1:D:859:CYS:C	1:D:861:PRO:HD2	2.44	0.43
1:A:80:LEU:HD22	1:A:133:ILE:HD12	2.01	0.43
3:C:118:VAL:HG22	3:C:163:TRP:CE3	2.53	0.43
1:D:60:TRP:CD1	1:D:60:TRP:H	2.36	0.43
1:D:957:LYS:HZ3	1:D:961:PRO:HB3	1.84	0.43
1:A:132:MET:O	1:A:136:GLN:HG2	2.19	0.43
1:A:788:TYR:CD2	1:A:826:VAL:HG12	2.53	0.43
2:B:38:LEU:HD13	2:B:40:GLN:NE2	2.34	0.43
2:B:290:VAL:H	2:B:291:PRO:HD3	1.81	0.43
1:D:420:MET:HA	1:D:420:MET:HE2	2.01	0.43
1:D:641:ILE:HD12	1:D:653:LEU:HB3	2.00	0.43
1:D:985:ALA:HA	9:D:1109:HOH:O	2.18	0.43
1:A:771:MET:HE3	1:A:771:MET:HB3	1.85	0.43
1:D:360:VAL:HG12	1:D:362:GLU:HB3	2.00	0.43
1:D:841:TYR:N	1:D:842:PRO:HD3	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:10:GLU:CD	2:E:10:GLU:H	2.27	0.43
1:A:821:GLN:HG2	1:D:597:ARG:CZ	2.48	0.43
2:B:208:MET:HE3	2:B:209:HIS:CE1	2.53	0.43
1:D:146:TRP:CE3	1:D:149:PHE:HB2	2.53	0.43
1:D:481:GLN:NE2	1:D:485:ASN:OD1	2.52	0.43
1:D:599:PHE:CB	1:D:640:MET:HG2	2.48	0.43
1:D:749:ARG:NH2	1:D:752:LYS:NZ	2.66	0.43
1:D:860:PHE:N	1:D:861:PRO:HD2	2.34	0.43
2:E:123:VAL:HG22	2:E:257:LEU:HD21	2.01	0.43
2:E:201:THR:O	2:E:202:ASP:C	2.62	0.43
2:E:357:LEU:C	2:E:358:MET:HG3	2.44	0.43
1:A:90:ARG:HG2	1:A:93:ILE:HD11	2.01	0.42
1:A:146:TRP:CE3	1:A:149:PHE:HB2	2.54	0.42
1:A:386:PHE:CE2	5:A:1075:PEG:O2	2.72	0.42
4:A:1073:GOL:H31	9:A:1301:HOH:O	2.19	0.42
1:D:566:VAL:HG11	1:D:610:PHE:HE2	1.84	0.42
2:E:155:LEU:HG	2:E:225:ASN:HB2	2.00	0.42
1:A:96:ARG:O	1:A:100:GLU:HG3	2.18	0.42
2:B:137:GLY:O	2:B:161:ARG:NH1	2.52	0.42
2:B:258:LEU:HD23	2:B:258:LEU:HA	1.87	0.42
2:B:281:MET:HE2	2:B:281:MET:HB3	1.84	0.42
3:C:12:LYS:HE2	3:C:64:TRP:CE2	2.53	0.42
3:C:45:VAL:HG22	3:C:46:GLU:H	1.83	0.42
3:C:101:VAL:HB	3:C:102:PRO:HD3	2.00	0.42
1:D:1027:GLY:C	1:D:1029:ASP:N	2.75	0.42
2:E:143:THR:HG23	2:E:147:TYR:HB3	2.00	0.42
1:A:860:PHE:N	1:A:861:PRO:HD2	2.34	0.42
1:D:58:ASP:N	1:D:58:ASP:OD1	2.52	0.42
1:D:93:ILE:HG22	1:D:1027:GLY:HA3	2.01	0.42
2:E:293:GLY:N	2:E:294:PRO:CD	2.82	0.42
3:F:29:ARG:CZ	3:F:154:ASN:HD21	2.32	0.42
1:A:121:GLU:O	1:A:123:GLU:N	2.53	0.42
1:D:287:PHE:HB2	1:D:329:PHE:CZ	2.55	0.42
1:D:403:PRO:HA	1:D:404:PRO:HD3	1.92	0.42
3:F:76:ARG:HB3	9:F:185:HOH:O	2.20	0.42
1:A:232:PHE:C	1:A:234:ASN:H	2.28	0.42
2:B:153:SER:O	2:B:226:PRO:HD2	2.19	0.42
3:C:29:ARG:NE	3:C:154:ASN:HD21	2.17	0.42
1:D:333:HIS:O	1:D:336:LEU:HG	2.18	0.42
1:D:517:LEU:HD21	1:D:551:TYR:CE2	2.54	0.42
2:E:26:PRO:HG2	2:E:109:ILE:HD11	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:114:ASP:O	2:E:118:GLU:HB2	2.20	0.42
2:E:205:PHE:HA	2:E:208:MET:HE2	2.01	0.42
2:E:210:SER:C	2:E:211:LYS:HD2	2.45	0.42
1:A:357:VAL:HG12	1:A:369:CYS:SG	2.60	0.42
1:A:437:GLN:NE2	1:A:746:ARG:HB3	2.34	0.42
1:A:492:LYS:HG2	9:A:1125:HOH:O	2.20	0.42
2:E:208:MET:HE3	2:E:209:HIS:CE1	2.54	0.42
3:F:101:VAL:HB	3:F:102:PRO:HD3	2.01	0.42
1:A:162:SER:C	1:A:164:CYS:H	2.27	0.42
1:A:952:LEU:O	1:A:952:LEU:HD23	2.20	0.42
1:D:149:PHE:O	1:D:153:ILE:HG22	2.20	0.42
1:D:617:ASN:O	1:D:618:ILE:C	2.63	0.42
1:D:763:VAL:O	1:D:810:LYS:HE3	2.20	0.42
1:D:1040:THR:HA	1:D:1043:ARG:HG2	2.00	0.42
2:E:204:ARG:HH11	2:E:265:HIS:C	2.28	0.42
1:A:236:ILE:HG13	1:A:241:ILE:HD11	2.01	0.42
2:B:143:THR:HG23	2:B:147:TYR:O	2.19	0.42
2:B:160:ASN:ND2	2:B:162:ARG:HB2	2.35	0.42
1:D:15:GLN:HE22	1:D:27:LEU:CB	2.26	0.42
1:D:312:LYS:HD3	1:D:312:LYS:HA	1.92	0.42
1:D:586:ASP:O	1:D:589:ILE:HG22	2.20	0.42
1:D:704:HIS:HB3	1:D:705:PRO:HD3	2.02	0.42
1:D:824:ASP:C	1:D:824:ASP:OD1	2.62	0.42
1:A:565:VAL:HG22	2:B:9:LEU:HD12	2.02	0.42
3:C:84:GLN:O	3:C:85:CYS:HB3	2.20	0.42
1:D:514:LYS:O	1:D:518:VAL:HG23	2.20	0.42
2:E:220:GLU:C	2:E:228:LYS:HG2	2.45	0.42
1:A:467:LEU:HD23	1:A:467:LEU:N	2.35	0.42
1:A:1051:LYS:HD2	1:A:1052:LEU:HG	2.01	0.42
1:D:749:ARG:HH21	1:D:752:LYS:NZ	2.18	0.42
1:A:103:LYS:HE3	1:A:146:TRP:CD1	2.55	0.41
1:D:778:PRO:HB2	1:D:779:PRO:HD3	2.02	0.41
1:D:782:ASP:HB3	2:E:360:ASN:ND2	2.35	0.41
1:D:847:ASN:O	1:D:848:PHE:C	2.63	0.41
2:E:264:THR:HG23	2:E:273:LEU:CD1	2.50	0.41
3:F:45:VAL:CB	3:F:79:TYR:CE2	2.91	0.41
1:A:88:LYS:HD2	1:A:136:GLN:CD	2.45	0.41
1:A:405:ARG:HD3	9:A:1156:HOH:O	2.19	0.41
1:A:426:LYS:HA	1:A:427:PRO:HD3	1.84	0.41
2:B:115:LEU:HD12	2:B:119:TRP:HB2	2.01	0.41
1:D:232:PHE:C	1:D:234:ASN:H	2.28	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:339:LYS:CG	1:D:340:ARG:N	2.83	0.41
1:D:565:VAL:HG12	1:D:569:LEU:CD1	2.50	0.41
3:F:45:VAL:HG22	3:F:46:GLU:N	2.35	0.41
1:A:860:PHE:N	1:A:861:PRO:CD	2.83	0.41
3:C:123:LYS:HE2	7:C:217:GTP:N9	2.35	0.41
1:D:561:PHE:O	1:D:565:VAL:HG23	2.21	0.41
1:D:962:LEU:CG	1:D:963:ASN:H	2.28	0.41
1:A:287:PHE:HB2	1:A:329:PHE:CZ	2.56	0.41
1:A:384:SER:HA	1:A:385:PRO:HD3	1.88	0.41
1:A:995:LYS:HB2	9:A:1188:HOH:O	2.20	0.41
2:B:194:HIS:HA	2:B:195:PRO:HD3	1.79	0.41
2:B:360:ASN:HD22	2:B:360:ASN:HA	1.53	0.41
4:B:362:GOL:H32	9:B:728:HOH:O	2.20	0.41
1:D:17:LEU:HD22	1:D:20:SER:CB	2.51	0.41
1:D:103:LYS:HE3	1:D:146:TRP:CD1	2.55	0.41
1:D:384:SER:HA	1:D:385:PRO:HD3	1.87	0.41
1:D:589:ILE:HG23	1:D:590:LYS:N	2.35	0.41
1:D:925:HIS:O	1:D:928:SER:HB3	2.20	0.41
1:D:1006:GLN:HG2	1:D:1006:GLN:O	2.21	0.41
3:F:101:VAL:N	3:F:102:PRO:CD	2.83	0.41
1:A:225:THR:HA	1:A:228:THR:CG2	2.48	0.41
1:A:344:ARG:HE	1:A:408:LEU:CD2	2.30	0.41
1:A:409:TYR:O	1:A:410:LEU:C	2.62	0.41
1:A:521:ILE:O	1:A:525:LEU:HB2	2.20	0.41
1:A:867:PRO:HA	1:D:604:VAL:HG22	2.02	0.41
2:B:198:ASP:C	2:B:265:HIS:CD2	2.98	0.41
3:C:55:ASN:OD1	3:C:56:ARG:HG3	2.21	0.41
1:D:432:VAL:O	1:D:432:VAL:HG22	2.21	0.41
1:D:521:ILE:O	1:D:525:LEU:HB2	2.20	0.41
2:E:61:HIS:ND1	2:E:94:LEU:HB3	2.35	0.41
2:B:280:TYR:CB	2:B:296:THR:HB	2.50	0.41
1:D:339:LYS:HG2	1:D:340:ARG:H	1.85	0.41
1:D:391:SER:HA	1:D:392:PRO:HD3	1.92	0.41
1:D:426:LYS:HA	1:D:427:PRO:HD3	1.84	0.41
1:D:678:ILE:C	1:D:680:LYS:N	2.78	0.41
1:D:961:PRO:HD3	1:D:970:ASN:HD21	1.85	0.41
3:F:30:HIS:CD2	3:F:161:PHE:CE2	3.09	0.41
1:A:262:ASN:HD21	1:A:318:PHE:CA	2.34	0.41
1:A:847:ASN:O	1:A:848:PHE:C	2.64	0.41
1:D:93:ILE:CG2	1:D:1027:GLY:HA3	2.50	0.41
1:D:777:VAL:O	1:D:780:LEU:HB2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:819:ILE:N	1:D:820:PRO:CD	2.83	0.41
3:F:118:VAL:HG22	3:F:163:TRP:CE3	2.55	0.41
1:A:122:LYS:O	1:A:123:GLU:C	2.64	0.41
1:A:143:PRO:HG2	1:A:144:LYS:HD2	2.03	0.41
1:A:223:HIS:NE2	1:A:263:VAL:CG2	2.80	0.41
1:A:269:THR:OG1	1:A:325:PHE:HB2	2.21	0.41
1:A:284:GLU:OE1	1:A:343:LEU:HD11	2.21	0.41
1:A:617:ASN:O	1:A:618:ILE:C	2.64	0.41
1:D:269:THR:OG1	1:D:325:PHE:HB2	2.21	0.41
1:D:860:PHE:N	1:D:861:PRO:CD	2.83	0.41
2:E:25:HIS:C	2:E:27:ARG:H	2.28	0.41
2:E:246:LEU:HD11	2:E:282:VAL:HG11	2.03	0.41
3:F:55:ASN:OD1	3:F:56:ARG:HG3	2.21	0.41
1:A:288:THR:O	1:A:292:MET:HG3	2.21	0.41
1:A:295:LYS:HG3	1:A:300:LEU:HG	2.01	0.41
1:A:566:VAL:HG11	1:A:610:PHE:HE2	1.85	0.41
1:A:841:TYR:N	1:A:842:PRO:HD3	2.36	0.41
1:A:962:LEU:HG	1:A:973:PHE:CE2	2.55	0.41
2:B:4:LEU:CD1	2:B:6:LEU:HD11	2.51	0.41
2:B:61:HIS:ND1	2:B:94:LEU:HD13	2.36	0.41
2:B:108:LEU:HD11	2:B:112:PRO:HD3	2.03	0.41
2:B:264:THR:HG23	2:B:273:LEU:HD13	2.01	0.41
3:C:73:GLY:HA3	3:C:76:ARG:CZ	2.51	0.41
3:C:92:VAL:HB	3:C:129:ARG:HG3	2.03	0.41
3:C:127:LYS:HE3	3:C:127:LYS:H	1.86	0.41
1:D:343:LEU:C	1:D:345:GLU:N	2.79	0.41
1:D:511:GLU:OE1	1:D:515:ARG:NH1	2.53	0.41
1:D:618:ILE:O	1:D:622:ILE:HG12	2.21	0.41
1:D:693:LYS:O	1:D:697:ARG:HG2	2.20	0.41
1:D:842:PRO:CG	3:F:38:LYS:HG2	2.51	0.41
1:D:1034:PHE:CD1	1:D:1037:GLU:OE2	2.74	0.41
2:E:55:ARG:HA	9:E:521:HOH:O	2.21	0.41
2:E:271:THR:HA	2:E:272:PRO:HD3	1.84	0.41
3:F:75:LEU:N	3:F:79:TYR:CE1	2.83	0.41
3:F:141:LYS:HD2	3:F:141:LYS:N	2.35	0.41
1:A:509:HIS:HB2	9:A:1090:HOH:O	2.21	0.41
1:A:650:GLN:O	1:A:654:ILE:HG13	2.21	0.41
1:A:681:ASP:O	1:A:685:VAL:HG23	2.20	0.41
1:A:819:ILE:N	1:A:820:PRO:CD	2.83	0.41
2:B:50:LEU:C	2:B:52:LYS:N	2.79	0.41
1:D:45:MET:SD	3:F:45:VAL:HG12	2.61	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:389:SER:C	1:D:391:SER:H	2.29	0.41
1:D:626:GLN:HB3	1:D:627:PRO:HD2	2.03	0.41
1:D:770:GLN:HG2	1:D:774:GLU:OE1	2.21	0.41
1:D:1023:LYS:O	1:D:1023:LYS:HG3	2.19	0.41
2:E:188:VAL:O	2:E:188:VAL:HG13	2.19	0.41
3:F:79:TYR:HD1	3:F:79:TYR:N	2.19	0.41
3:F:105:HIS:CE1	3:F:109:VAL:HG11	2.56	0.41
1:A:40:GLY:C	1:A:44:ARG:HG2	2.45	0.40
1:A:62:ARG:HD3	1:A:75:THR:O	2.21	0.40
1:D:80:LEU:HD22	1:D:133:ILE:HD12	2.03	0.40
3:F:146:TYR:CG	3:F:147:TYR:N	2.90	0.40
3:C:101:VAL:N	3:C:102:PRO:CD	2.84	0.40
1:D:10:ASP:O	1:D:11:HIS:HB2	2.20	0.40
1:D:111:ILE:HD12	1:D:163:LEU:HD11	2.03	0.40
1:D:514:LYS:NZ	2:E:4:LEU:CD1	2.84	0.40
2:E:47:LEU:O	2:E:51:GLN:HB2	2.22	0.40
2:E:60:ASN:O	2:E:64:ARG:HG3	2.22	0.40
2:E:218:LEU:HG	2:E:229:PHE:HB2	2.03	0.40
1:A:110:ILE:HG23	1:A:114:SER:OG	2.21	0.40
1:A:618:ILE:O	1:A:622:ILE:HG12	2.21	0.40
2:B:350:SER:HA	2:B:351:PRO:HD3	1.78	0.40
3:C:115:ILE:O	3:C:115:ILE:HG13	2.20	0.40
1:D:167:ASN:HD22	1:D:170:ILE:HD12	1.86	0.40
1:D:441:VAL:CG2	1:D:442:ARG:N	2.85	0.40
1:D:664:VAL:HB	1:D:691:ILE:HD11	2.04	0.40
2:E:41:SER:H	2:E:110:ASP:HB2	1.86	0.40
2:E:198:ASP:C	2:E:265:HIS:HD2	2.29	0.40
3:F:109:VAL:HA	3:F:112:CYS:O	2.22	0.40
1:A:626:GLN:HB3	1:A:627:PRO:HD2	2.03	0.40
1:A:819:ILE:N	1:A:820:PRO:HD2	2.36	0.40
2:B:150:ASN:HD22	2:B:151:ARG:N	2.20	0.40
3:C:53:HIS:CD2	3:C:58:PRO:HG3	2.56	0.40
2:E:168:ASP:OD2	2:E:192:ARG:HA	2.21	0.40
2:E:279:PRO:HB2	2:E:294:PRO:HB3	2.04	0.40
1:A:343:LEU:C	1:A:345:GLU:N	2.80	0.40
1:A:430:VAL:O	1:A:430:VAL:HG12	2.22	0.40
1:A:737:GLU:O	1:A:738:MET:C	2.65	0.40
1:A:823:PHE:O	1:A:827:PHE:HB3	2.21	0.40
2:B:167:LYS:O	2:B:167:LYS:HG2	2.20	0.40
2:B:280:TYR:HB3	2:B:294:PRO:O	2.22	0.40
3:C:50:LEU:HD12	3:C:63:VAL:HG21	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:108:LEU:HD12	3:C:108:LEU:O	2.22	0.40
3:C:141:LYS:HD2	3:C:141:LYS:N	2.35	0.40
2:E:143:THR:HG23	2:E:147:TYR:O	2.21	0.40
2:E:288:VAL:C	2:E:290:VAL:N	2.79	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	1034/1073 (96%)	919 (89%)	95 (9%)	20 (2%)	6	23
1	D	1037/1073 (97%)	918 (88%)	103 (10%)	16 (2%)	8	28
2	B	287/362 (79%)	239 (83%)	39 (14%)	9 (3%)	3	14
2	E	288/362 (80%)	247 (86%)	35 (12%)	6 (2%)	5	21
3	C	171/176 (97%)	158 (92%)	12 (7%)	1 (1%)	21	51
3	F	171/176 (97%)	157 (92%)	13 (8%)	1 (1%)	21	51
All	All	2988/3222 (93%)	2638 (88%)	297 (10%)	53 (2%)	6	25

All (53) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	123	GLU
1	A	1029	ASP
1	A	1035	LEU
2	B	29	SER
2	B	216	GLU
2	B	351	PRO
3	C	76	ARG
1	D	120	VAL

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Mol	Chain	Res	Type
1	D	123	GLU
2	E	216	GLU
3	F	76	ARG
1	A	17	LEU
1	A	54	LYS
1	A	468	ASP
1	A	827	PHE
1	A	956	GLY
2	B	291	PRO
1	D	122	LYS
1	D	468	ASP
1	D	827	PHE
1	D	956	GLY
2	E	292	ALA
1	A	401	ASP
1	A	957	LYS
1	D	957	LYS
2	E	52	LYS
2	E	289	ALA
1	A	124	LYS
1	A	141	GLU
1	A	313	ASP
1	A	1036	GLU
2	B	42	GLU
2	B	157	PRO
2	B	359	GLU
1	D	313	ASP
2	E	42	GLU
2	E	157	PRO
1	A	143	PRO
1	A	344	ARG
1	A	964	PRO
2	B	292	ALA
1	D	141	GLU
1	D	143	PRO
1	D	344	ARG
1	D	392	PRO
1	A	21	GLN
1	A	743	PRO
1	A	1027	GLY
1	D	11	HIS
1	D	743	PRO

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Mol	Chain	Res	Type
1	D	1027	GLY
1	D	966	ASN
2	B	287	GLY

### 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	942/973 (97%)	881 (94%)	61 (6%)	15	44
1	D	944/973 (97%)	875 (93%)	69 (7%)	13	38
2	B	264/327 (81%)	243 (92%)	21 (8%)	11	34
2	E	265/327 (81%)	247 (93%)	18 (7%)	14	42
3	C	152/154 (99%)	135 (89%)	17 (11%)	6	19
3	F	152/154 (99%)	137 (90%)	15 (10%)	7	24
All	All	2719/2908 (94%)	2518 (93%)	201 (7%)	13	38

All (201) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	21	GLN
1	A	27	LEU
1	A	58	ASP
1	A	60	TRP
1	A	61	THR
1	A	65	THR
1	A	73	MET
1	A	109	LEU
1	A	119	CYS
1	A	129	LYS
1	A	144	LYS
1	A	146	TRP
1	A	163	LEU
1	A	187	THR
1	A	192	LYS

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Mol	Chain	Res	Type
1	A	229	LEU
1	A	257	VAL
1	A	263	VAL
1	A	276	VAL
1	A	301	ASN
1	A	320	GLN
1	A	387	SER
1	A	393	LEU
1	A	397	SER
1	A	399	HIS
1	A	401	ASP
1	A	402	ILE
1	A	430	VAL
1	A	432	VAL
1	A	433	VAL
1	A	440	VAL
1	A	444	PHE
1	A	447	ASP
1	A	462	VAL
1	A	489	TRP
1	A	514	LYS
1	A	515	ARG
1	A	522	LYS
1	A	531	LYS
1	A	535	ASP
1	A	545	MET
1	A	568	LYS
1	A	578	ASP
1	A	601	GLN
1	A	608	MET
1	A	648	THR
1	A	662	ASN
1	A	720	VAL
1	A	739	VAL
1	A	741	LYS
1	A	749	ARG
1	A	767	ASN
1	A	803	THR
1	A	823	PHE
1	A	828	GLU
1	A	876	ASP
1	A	916	GLN

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Mol	Chain	Res	Type
1	A	960	THR
1	A	963	ASN
1	A	996	LEU
1	A	1020	VAL
2	B	4	LEU
2	B	5	GLN
2	B	9	LEU
2	B	11	ARG
2	B	35	TYR
2	B	43	ARG
2	B	71	THR
2	B	92	LYS
2	B	93	LYS
2	B	111	VAL
2	B	117	GLN
2	B	143	THR
2	B	144	LYS
2	B	189	MET
2	B	274	VAL
2	B	295	LEU
2	B	296	THR
2	B	297	THR
2	B	347	SER
2	B	353	HIS
2	B	360	ASN
3	C	8	GLN
3	C	16	VAL
3	C	21	THR
3	C	30	HIS
3	C	40	VAL
3	C	47	VAL
3	C	77	ASP
3	C	79	TYR
3	C	93	THR
3	C	96	VAL
3	C	113	GLU
3	C	127	LYS
3	C	140	ARG
3	C	141	LYS
3	C	143	ASN
3	C	148	ASP
3	C	174	LEU

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Mol	Chain	Res	Type
1	D	11	HIS
1	D	25	ILE
1	D	27	LEU
1	D	53	LEU
1	D	55	GLU
1	D	60	TRP
1	D	61	THR
1	D	65	THR
1	D	73	MET
1	D	96	ARG
1	D	109	LEU
1	D	113	THR
1	D	127	ILE
1	D	129	LYS
1	D	144	LYS
1	D	146	TRP
1	D	163	LEU
1	D	187	THR
1	D	229	LEU
1	D	231	ARG
1	D	245	LYS
1	D	257	VAL
1	D	263	VAL
1	D	276	VAL
1	D	317	ASN
1	D	320	GLN
1	D	387	SER
1	D	393	LEU
1	D	394	LEU
1	D	399	HIS
1	D	401	ASP
1	D	402	ILE
1	D	430	VAL
1	D	432	VAL
1	D	434	GLU
1	D	437	GLN
1	D	440	VAL
1	D	444	PHE
1	D	447	ASP
1	D	462	VAL
1	D	478	LYS
1	D	489	TRP

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Mol	Chain	Res	Type
1	D	515	ARG
1	D	522	LYS
1	D	531	LYS
1	D	535	ASP
1	D	545	MET
1	D	562	LEU
1	D	568	LYS
1	D	601	GLN
1	D	648	THR
1	D	662	ASN
1	D	720	VAL
1	D	739	VAL
1	D	749	ARG
1	D	767	ASN
1	D	803	THR
1	D	823	PHE
1	D	828	GLU
1	D	876	ASP
1	D	960	THR
1	D	963	ASN
1	D	996	LEU
1	D	1020	VAL
1	D	1028	GLU
1	D	1048	GLU
1	D	1050	HIS
1	D	1051	LYS
1	D	1052	LEU
2	E	5	GLN
2	E	6	LEU
2	E	28	LEU
2	E	35	TYR
2	E	91	VAL
2	E	96	LYS
2	E	111	VAL
2	E	117	GLN
2	E	143	THR
2	E	144	LYS
2	E	165	THR
2	E	189	MET
2	E	223	LYS
2	E	274	VAL
2	E	284	ASP

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Mol	Chain	Res	Type
2	E	286	LEU
2	E	297	THR
2	E	358	MET
3	F	16	VAL
3	F	30	HIS
3	F	40	VAL
3	F	47	VAL
3	F	77	ASP
3	F	79	TYR
3	F	93	THR
3	F	96	VAL
3	F	113	GLU
3	F	127	LYS
3	F	140	ARG
3	F	141	LYS
3	F	143	ASN
3	F	148	ASP
3	F	174	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (120) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	21	GLN
1	A	26	ASN
1	A	52	HIS
1	A	81	GLN
1	A	98	GLN
1	A	131	ASN
1	A	140	GLN
1	A	165	GLN
1	A	167	ASN
1	A	185	GLN
1	A	188	GLN
1	A	200	ASN
1	A	204	GLN
1	A	215	ASN
1	A	217	GLN
1	A	234	ASN
1	A	262	ASN
1	A	301	ASN
1	A	320	GLN
1	A	321	ASN

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Mol	Chain	Res	Type
1	A	335	GLN
1	A	399	HIS
1	A	456	ASN
1	A	483	GLN
1	A	493	ASN
1	A	495	ASN
1	A	509	HIS
1	A	543	ASN
1	A	577	HIS
1	A	619	ASN
1	A	628	GLN
1	A	629	GLN
1	A	662	ASN
1	A	675	ASN
1	A	709	GLN
1	A	727	ASN
1	A	742	GLN
1	A	767	ASN
1	A	853	GLN
1	A	903	ASN
1	A	924	GLN
1	A	963	ASN
1	A	970	ASN
1	A	971	GLN
1	A	988	HIS
1	A	1006	GLN
1	A	1046	GLN
2	B	19	ASN
2	B	150	ASN
2	B	160	ASN
2	B	163	ASN
2	B	180	ASN
2	B	200	GLN
2	B	261	HIS
2	B	263	GLN
2	B	360	ASN
3	C	48	HIS
3	C	53	HIS
3	C	100	ASN
3	C	105	HIS
3	C	145	GLN
3	C	154	ASN

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Mol	Chain	Res	Type
3	C	156	ASN
1	D	15	GLN
1	D	52	HIS
1	D	72	ASN
1	D	81	GLN
1	D	131	ASN
1	D	136	GLN
1	D	140	GLN
1	D	165	GLN
1	D	167	ASN
1	D	200	ASN
1	D	204	GLN
1	D	210	GLN
1	D	215	ASN
1	D	234	ASN
1	D	262	ASN
1	D	320	GLN
1	D	321	ASN
1	D	437	GLN
1	D	456	ASN
1	D	483	GLN
1	D	493	ASN
1	D	495	ASN
1	D	509	HIS
1	D	574	HIS
1	D	577	HIS
1	D	629	GLN
1	D	662	ASN
1	D	675	ASN
1	D	709	GLN
1	D	727	ASN
1	D	742	GLN
1	D	767	ASN
1	D	775	ASN
1	D	903	ASN
1	D	924	GLN
1	D	970	ASN
1	D	971	GLN
1	D	1044	GLN
2	E	5	GLN
2	E	19	ASN
2	E	25	HIS

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Mol	Chain	Res	Type
2	E	150	ASN
2	E	160	ASN
2	E	163	ASN
2	E	180	ASN
2	E	200	GLN
2	E	261	HIS
2	E	263	GLN
2	E	353	HIS
3	F	48	HIS
3	F	53	HIS
3	F	82	GLN
3	F	100	ASN
3	F	105	HIS
3	F	145	GLN
3	F	154	ASN
3	F	156	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 oligosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

Of 30 ligands modelled in this entry, 2 are monoatomic - leaving 28 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	GOL	A	1072[B]	-	5,5,5	0.36	0	5,5,5	0.31	0
5	PEG	D	1076	-	6,6,6	0.53	0	5,5,5	0.41	0
5	PEG	C	182	-	6,6,6	0.59	0	5,5,5	0.40	0
4	GOL	A	1079	-	5,5,5	0.38	0	5,5,5	0.33	0
4	GOL	D	1072	-	5,5,5	0.34	0	5,5,5	0.31	0
5	PEG	D	1073	-	6,6,6	0.57	0	5,5,5	0.35	0
4	GOL	A	1072[A]	-	5,5,5	0.37	0	5,5,5	0.28	0
4	GOL	E	361[B]	-	5,5,5	0.37	0	5,5,5	0.32	0
7	GTP	F	217	8	33,34,34	0.98	2 (6%)	50,54,54	1.63	10 (20%)
4	GOL	B	362	-	5,5,5	0.35	0	5,5,5	0.37	0
5	PEG	D	1078	-	6,6,6	0.56	0	5,5,5	0.49	0
4	GOL	A	1073	-	5,5,5	0.38	0	5,5,5	0.40	0
4	GOL	D	1079	-	5,5,5	0.37	0	5,5,5	0.30	0
5	PEG	L	29	-	6,6,6	0.39	0	5,5,5	0.79	0
4	GOL	E	361[A]	-	5,5,5	0.40	0	5,5,5	0.35	0
4	GOL	C	181	-	5,5,5	0.42	0	5,5,5	0.28	0
5	PEG	A	1076	-	6,6,6	0.60	0	5,5,5	0.37	0
5	PEG	A	1075	-	6,6,6	0.47	0	5,5,5	0.58	0
6	IPH	B	361[B]	-	7,7,7	0.42	0	8,8,8	0.35	0
5	PEG	D	1074	-	6,6,6	0.59	0	5,5,5	0.46	0
6	IPH	B	361[A]	-	7,7,7	0.45	0	8,8,8	0.30	0
5	PEG	D	1075	-	6,6,6	0.56	0	5,5,5	0.35	0
4	GOL	A	1074	-	5,5,5	0.38	0	5,5,5	0.37	0
5	PEG	D	1077	-	6,6,6	0.59	0	5,5,5	0.37	0
4	GOL	E	362	-	5,5,5	0.39	0	5,5,5	0.39	0
7	GTP	C	217	8	33,34,34	0.93	2 (6%)	50,54,54	1.55	8 (16%)
5	PEG	A	1078	-	6,6,6	0.54	0	5,5,5	0.57	0
5	PEG	A	1077	-	6,6,6	0.58	0	5,5,5	0.33	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	GOL	A	1072[B]	-	-	2/4/4/4	-
5	PEG	D	1076	-	-	0/4/4/4	-
5	PEG	C	182	-	-	0/4/4/4	-
4	GOL	A	1079	-	-	2/4/4/4	-
4	GOL	D	1072	-	-	3/4/4/4	-
5	PEG	D	1073	-	-	1/4/4/4	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
4	GOL	A	1072[A]	-	-	2/4/4/4	-
4	GOL	E	361[B]	-	-	2/4/4/4	-
7	GTP	F	217	8	-	2/22/38/38	0/3/3/3
4	GOL	B	362	-	-	2/4/4/4	-
5	PEG	D	1078	-	-	0/4/4/4	-
4	GOL	A	1073	-	-	0/4/4/4	-
4	GOL	D	1079	-	-	2/4/4/4	-
5	PEG	L	29	-	-	0/4/4/4	-
4	GOL	E	361[A]	-	-	2/4/4/4	-
4	GOL	C	181	-	-	1/4/4/4	-
5	PEG	A	1076	-	-	1/4/4/4	-
5	PEG	A	1075	-	-	0/4/4/4	-
6	IPH	B	361[B]	-	-	-	0/1/1/1
5	PEG	D	1074	-	-	1/4/4/4	-
6	IPH	B	361[A]	-	-	-	0/1/1/1
5	PEG	D	1075	-	-	0/4/4/4	-
4	GOL	A	1074	-	-	3/4/4/4	-
5	PEG	D	1077	-	-	0/4/4/4	-
4	GOL	E	362	-	-	0/4/4/4	-
7	GTP	C	217	8	-	2/22/38/38	0/3/3/3
5	PEG	A	1078	-	-	0/4/4/4	-
5	PEG	A	1077	-	-	2/4/4/4	-

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	F	217	GTP	PB-O3B	2.77	1.62	1.59
7	C	217	GTP	PB-O3B	2.21	1.61	1.59
7	F	217	GTP	C2-N3	2.15	1.38	1.33
7	C	217	GTP	C2-N3	2.05	1.38	1.33

All (18) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	F	217	GTP	C5-C4-N3	-5.06	120.34	128.39
7	C	217	GTP	C5-C4-N3	-4.90	120.59	128.39
7	F	217	GTP	C2-N3-C4	4.78	120.54	112.30
7	C	217	GTP	C2-N3-C4	4.70	120.39	112.30
7	C	217	GTP	N9-C4-N3	3.02	131.98	125.95
7	F	217	GTP	N9-C4-N3	2.92	131.80	125.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	F	217	GTP	C2-N1-C6	-2.78	120.07	125.11
7	C	217	GTP	N9-C8-N7	-2.77	108.26	113.40
7	C	217	GTP	C2-N1-C6	-2.74	120.15	125.11
7	F	217	GTP	N9-C8-N7	-2.70	108.40	113.40
7	F	217	GTP	C8-N7-C5	2.70	109.06	104.26
7	C	217	GTP	C8-N7-C5	2.59	108.88	104.26
7	C	217	GTP	C5-C6-N1	2.43	119.45	113.25
7	F	217	GTP	C5-C6-N1	2.40	119.35	113.25
7	C	217	GTP	O6-C6-C5	-2.22	120.66	126.53
7	F	217	GTP	C4-C5-N7	-2.11	107.32	110.67
7	F	217	GTP	O6-C6-C5	-2.06	121.10	126.53
7	F	217	GTP	O2G-PG-O3B	2.05	111.52	104.64

There are no chirality outliers.

All (30) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	A	1072[A]	GOL	O1-C1-C2-C3
4	A	1072[B]	GOL	O1-C1-C2-C3
4	A	1074	GOL	O1-C1-C2-C3
4	A	1079	GOL	O1-C1-C2-C3
4	B	362	GOL	O1-C1-C2-O2
4	B	362	GOL	O1-C1-C2-C3
4	D	1079	GOL	C1-C2-C3-O3
4	D	1079	GOL	O2-C2-C3-O3
4	E	361[A]	GOL	O1-C1-C2-O2
4	E	361[A]	GOL	O1-C1-C2-C3
4	E	361[B]	GOL	O1-C1-C2-O2
4	E	361[B]	GOL	O1-C1-C2-C3
4	A	1072[A]	GOL	O1-C1-C2-O2
4	A	1072[B]	GOL	O1-C1-C2-O2
4	A	1074	GOL	O1-C1-C2-O2
7	C	217	GTP	O4'-C4'-C5'-O5'
4	A	1079	GOL	O1-C1-C2-O2
4	C	181	GOL	O1-C1-C2-O2
4	D	1072	GOL	O1-C1-C2-O2
4	D	1072	GOL	O2-C2-C3-O3
5	D	1074	PEG	C1-C2-O2-C3
7	F	217	GTP	C5'-O5'-PA-O3A
5	D	1073	PEG	C1-C2-O2-C3
5	A	1076	PEG	C1-C2-O2-C3
7	F	217	GTP	O4'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
5	A	1077	PEG	C1-C2-O2-C3
5	A	1077	PEG	C4-C3-O2-C2
4	D	1072	GOL	C1-C2-C3-O3
4	A	1074	GOL	O2-C2-C3-O3
7	C	217	GTP	PA-O3A-PB-O2B

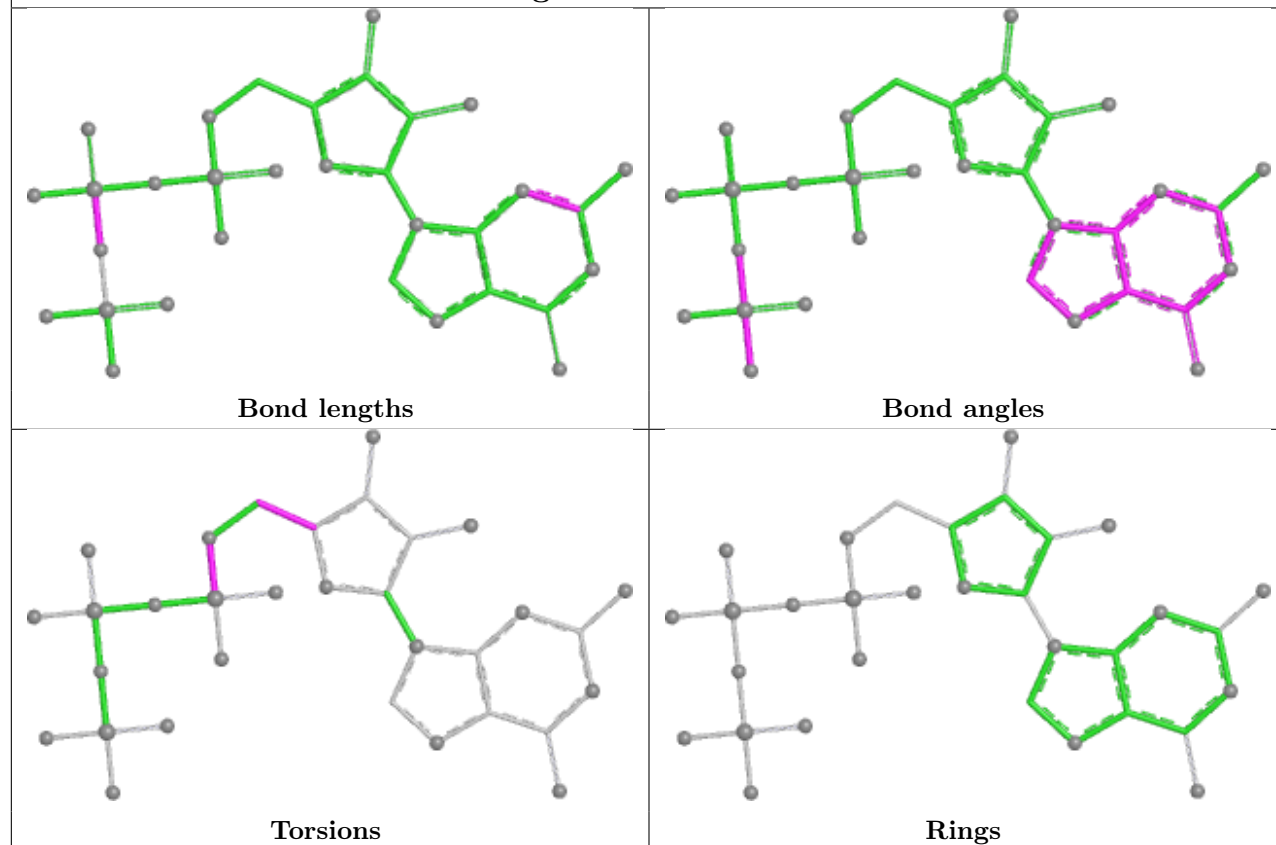
There are no ring outliers.

13 monomers are involved in 34 short contacts:

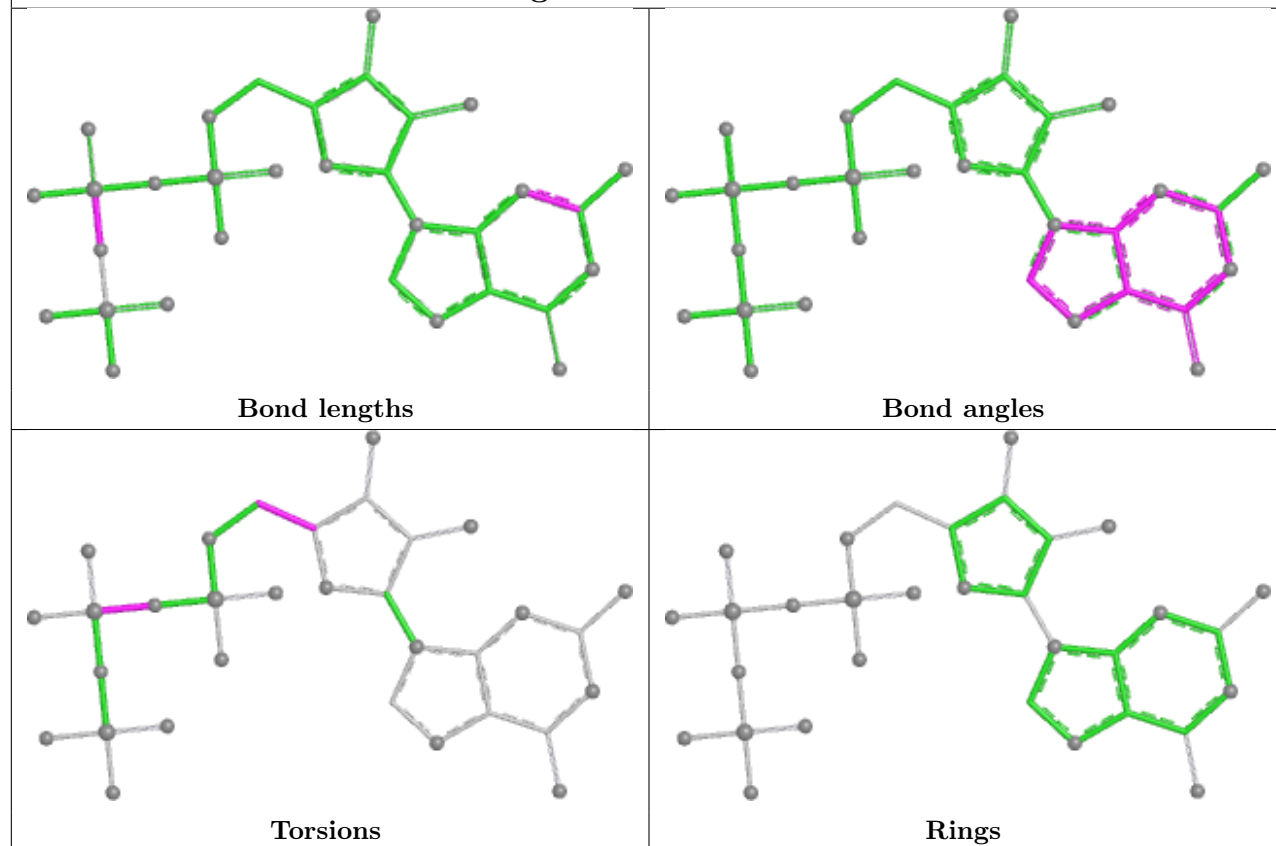
Mol	Chain	Res	Type	Clashes	Symm-Clashes
5	D	1076	PEG	3	0
5	C	182	PEG	3	0
7	F	217	GTP	1	0
4	B	362	GOL	1	0
4	A	1073	GOL	1	0
4	D	1079	GOL	1	0
5	A	1075	PEG	12	0
5	D	1074	PEG	3	0
5	D	1075	PEG	2	0
5	D	1077	PEG	1	0
4	E	362	GOL	1	0
7	C	217	GTP	3	0
5	A	1077	PEG	2	0

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 than 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 GTP F 217



## Ligand GTP C 217



## 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, 95<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
1	A	1038/1073 (96%)	-1.32	0 100 100	10, 47, 101, 138	0
1	D	1041/1073 (97%)	-1.31	0 100 100	10, 47, 103, 163	0
2	B	293/362 (80%)	-1.36	0 100 100	15, 43, 104, 134	0
2	E	294/362 (81%)	-1.27	0 100 100	13, 43, 107, 145	0
3	C	173/176 (98%)	-1.47	0 100 100	17, 39, 79, 107	0
3	F	173/176 (98%)	-1.49	0 100 100	18, 39, 80, 118	0
All	All	3012/3222 (93%)	-1.34	0 100 100	10, 45, 101, 163	0

There are no RSRZ outliers to report.

### 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 oligosaccharides 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<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
5	PEG	D	1077	7/7	0.93	0.19	59,76,82,91	7

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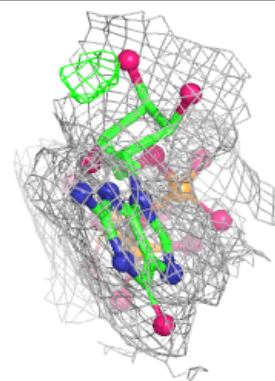
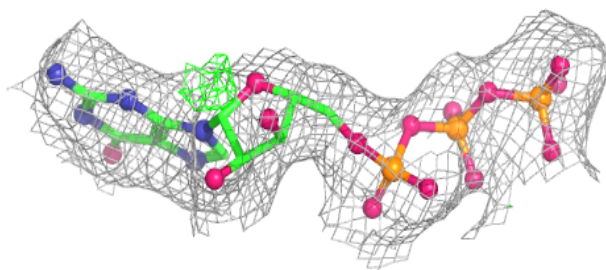
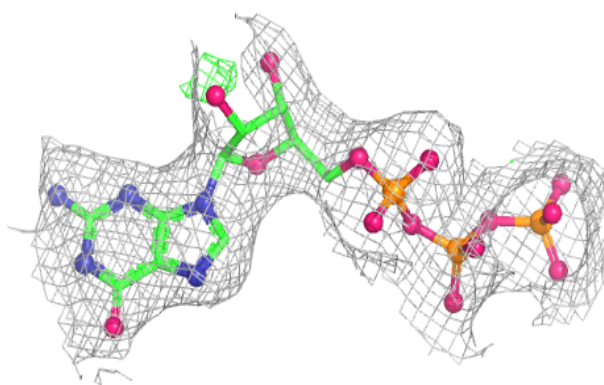
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
4	GOL	A	1072[B]	6/6	0.94	0.10	14,18,51,51	6
4	GOL	A	1072[A]	6/6	0.94	0.10	3,27,51,51	6
4	GOL	D	1072	6/6	0.95	0.18	45,61,70,77	6
5	PEG	A	1078	7/7	0.95	0.16	49,62,74,77	7
5	PEG	C	182	7/7	0.95	0.16	55,60,68,72	7
4	GOL	A	1073	6/6	0.95	0.17	37,54,56,59	6
5	PEG	L	29	7/7	0.95	0.20	41,69,79,79	7
4	GOL	C	181	6/6	0.96	0.15	48,50,59,63	6
4	GOL	B	362	6/6	0.96	0.13	59,67,72,73	6
5	PEG	A	1075	7/7	0.96	0.09	84,88,95,101	7
5	PEG	A	1077	7/7	0.96	0.21	44,63,83,84	7
4	GOL	D	1079	6/6	0.97	0.14	42,66,72,73	6
4	GOL	E	361[A]	6/6	0.97	0.12	18,46,56,59	6
4	GOL	E	361[B]	6/6	0.97	0.12	18,40,57,60	6
5	PEG	D	1076	7/7	0.97	0.18	50,70,96,100	7
4	GOL	A	1079	6/6	0.97	0.10	56,72,75,79	6
5	PEG	D	1078	7/7	0.97	0.17	52,65,72,74	7
5	PEG	A	1076	7/7	0.97	0.14	47,59,73,76	7
5	PEG	D	1075	7/7	0.98	0.14	46,54,69,75	7
4	GOL	E	362	6/6	0.98	0.12	51,59,61,62	6
4	GOL	A	1074	6/6	0.98	0.14	41,55,66,71	6
5	PEG	D	1073	7/7	0.98	0.13	47,51,60,68	7
5	PEG	D	1074	7/7	0.98	0.10	36,49,54,61	7
6	IPH	B	361[A]	7/7	0.98	0.06	14,46,57,57	7
6	IPH	B	361[B]	7/7	0.98	0.06	43,54,55,56	7
7	GTP	C	217	32/32	1.00	0.02	9,21,46,53	1
7	GTP	F	217	32/32	1.00	0.03	5,27,48,65	0
8	MG	C	218	1/1	1.00	0.03	54,54,54,54	0
8	MG	F	218	1/1	1.00	0.02	35,35,35,35	0

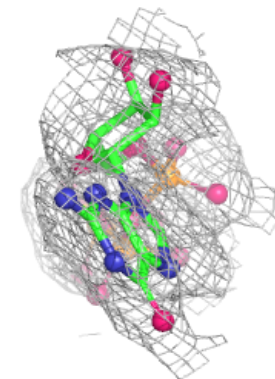
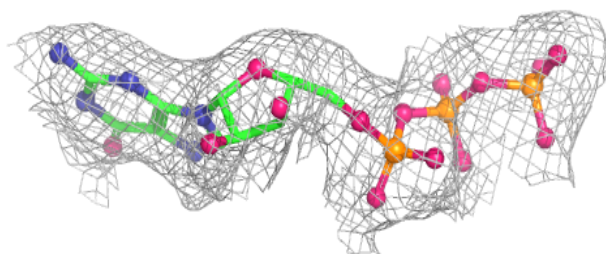
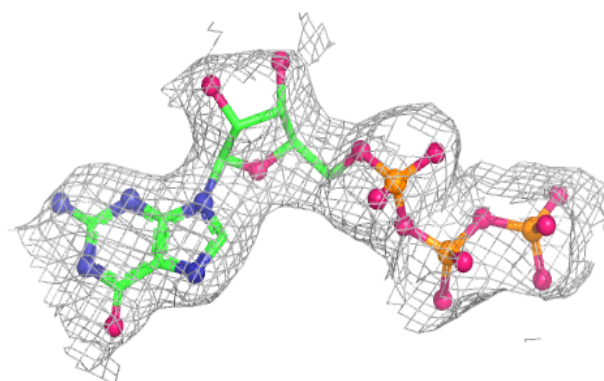
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

**Electron density around GTP C 217:**

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

**Electron density around GTP F 217:**

$2mF_o-DF_c$  (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.