Full wwPDB EM Validation Report (i)

Nov 7, 2022 – 11:39 AM JST

PDB ID	:	5H1R
EMDB ID	:	EMD-9571
Title	:	C. elegans INX-6 gap junction channel
Authors	:	Oshima, A.; Tani, K.; Fujiyoshi, Y.
Deposited on	:	2016-10-11
Resolution	:	3.60 Å(reported)

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
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 (i)) were used in the production of this report:

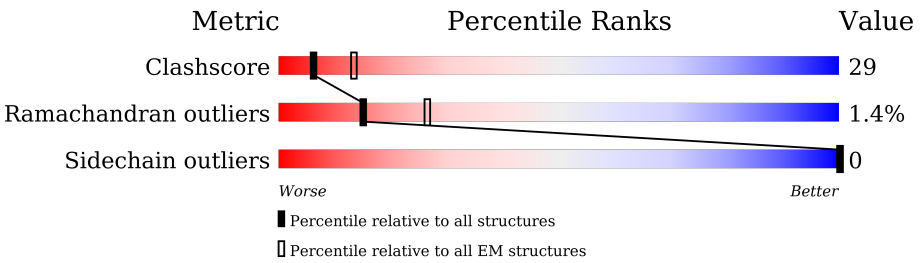
EMDB validation analysis	:	0.0.1.dev43
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.31.2

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 3.60 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the 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 EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	389	13% 46% 44% • 7%
1	B	389	13% 45% 45% • 7%
1	C	389	13% 46% 44% • 7%
1	D	389	13% 45% 45% • 7%
1	E	389	13% 46% 44% • 7%
1	F	389	13% 45% 45% • 7%
1	G	389	13% 46% 45% • 7%
1	H	389	13% 46% 45% • 7%

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Mol	Chain	Length	Quality of chain
1	I	389	13% 45% 45% • 7%
1	J	389	13% 46% 44% • 7%
1	K	389	13% 46% 44% • 7%
1	L	389	13% 45% 45% • 7%
1	M	389	13% 46% 44% • 7%
1	N	389	13% 45% 45% • 7%
1	O	389	13% 46% 45% • 7%
1	P	389	13% 45% 45% • 7%

2 Entry composition (i)

There is only 1 type of molecule in this entry. The entry contains 47440 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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 Innexin-6.

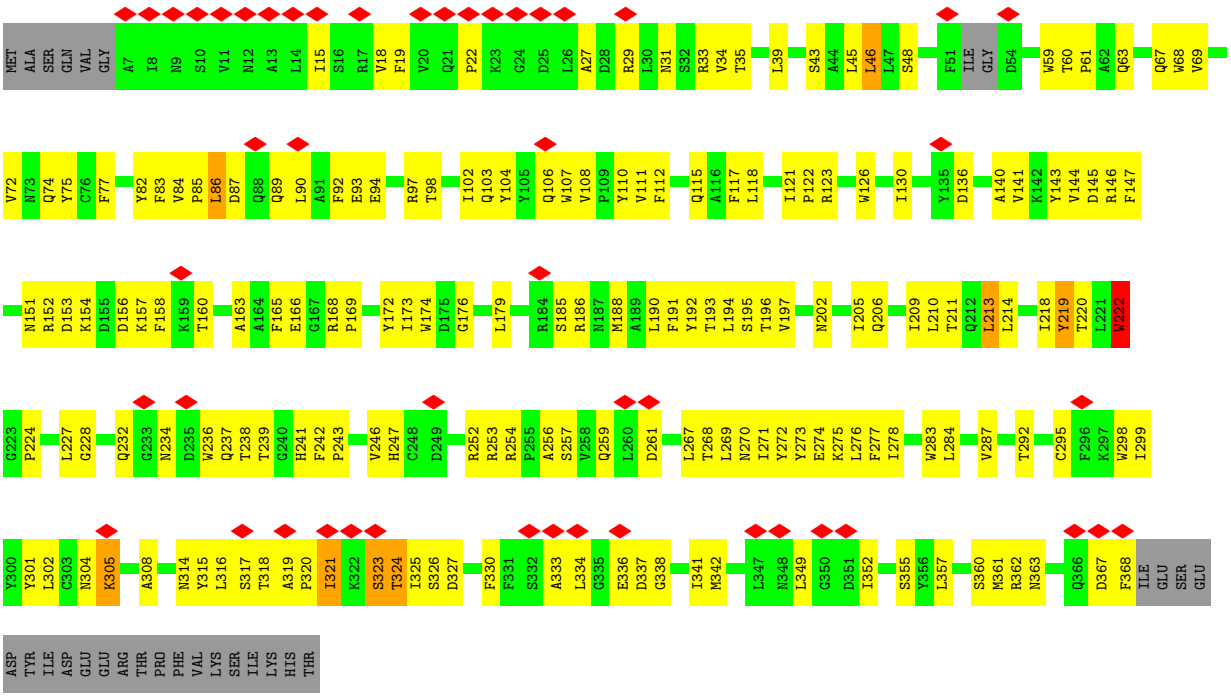
Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	A	360	2965	1950	487	516	12	0	0
1	B	360	2965	1950	487	516	12	0	0
1	C	360	2965	1950	487	516	12	0	0
1	D	360	2965	1950	487	516	12	0	0
1	E	360	2965	1950	487	516	12	0	0
1	F	360	2965	1950	487	516	12	0	0
1	G	360	2965	1950	487	516	12	0	0
1	H	360	2965	1950	487	516	12	0	0
1	I	360	2965	1950	487	516	12	0	0
1	J	360	2965	1950	487	516	12	0	0
1	K	360	2965	1950	487	516	12	0	0
1	L	360	2965	1950	487	516	12	0	0
1	M	360	2965	1950	487	516	12	0	0
1	N	360	2965	1950	487	516	12	0	0
1	O	360	2965	1950	487	516	12	0	0
1	P	360	2965	1950	487	516	12	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 atom inclusion in map 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 diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). 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.

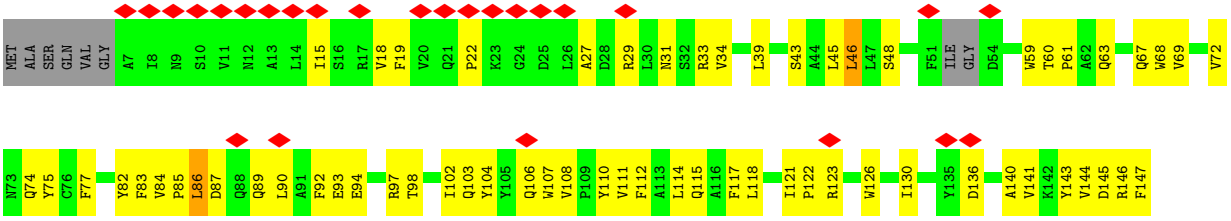
• Molecule 1: Innexin-6

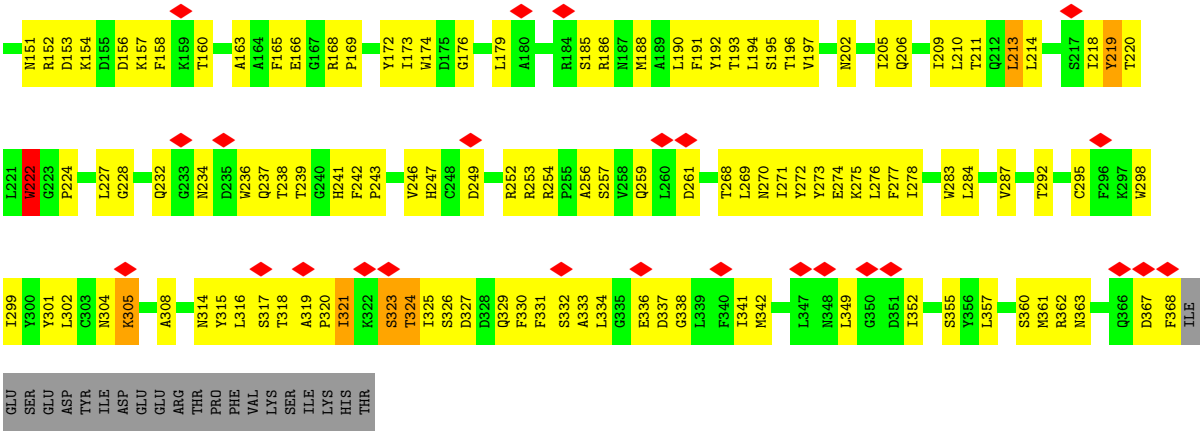
Chain A: 13% 46% 44% • 7%



• Molecule 1: Innexin-6

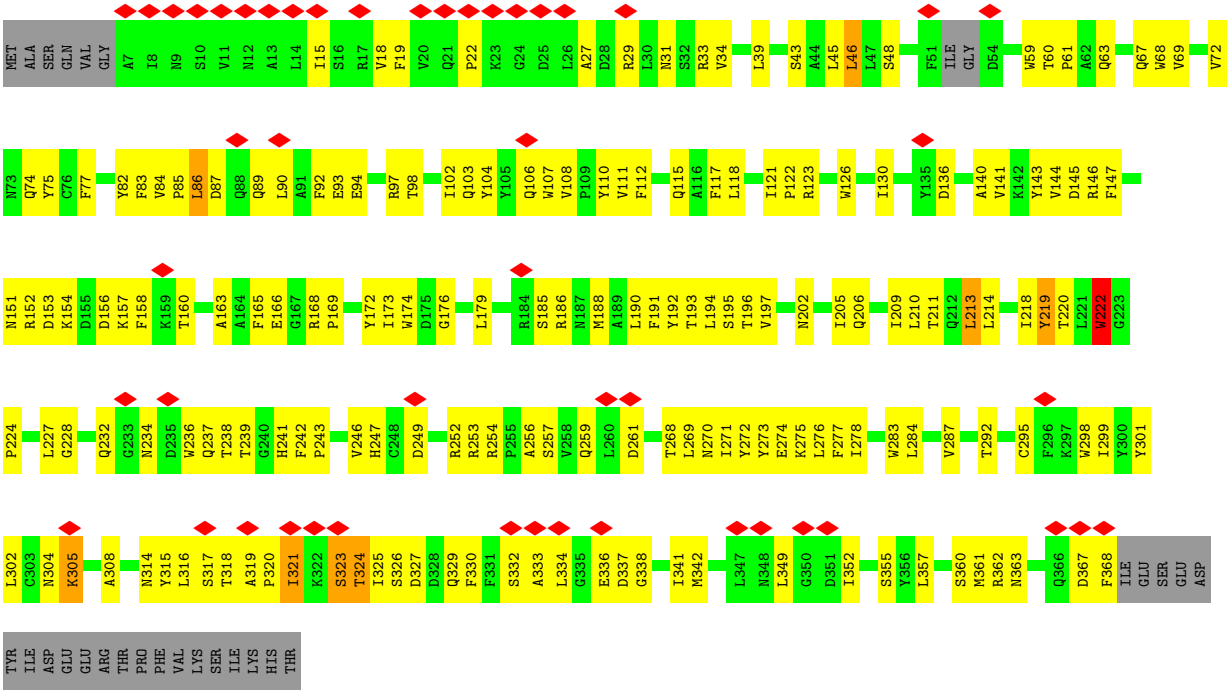
Chain B: 13% 45% 45% • 7%





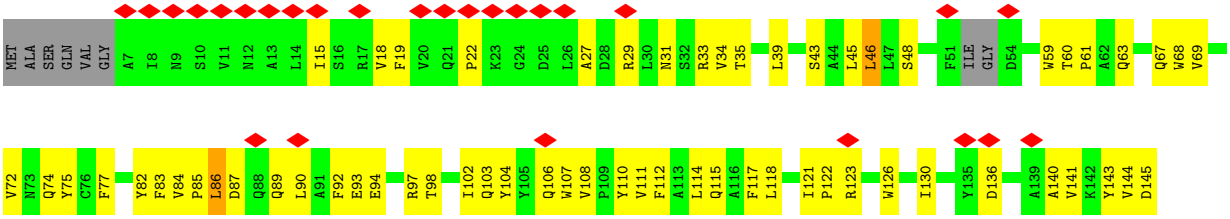
• Molecule 1: Innexin-6

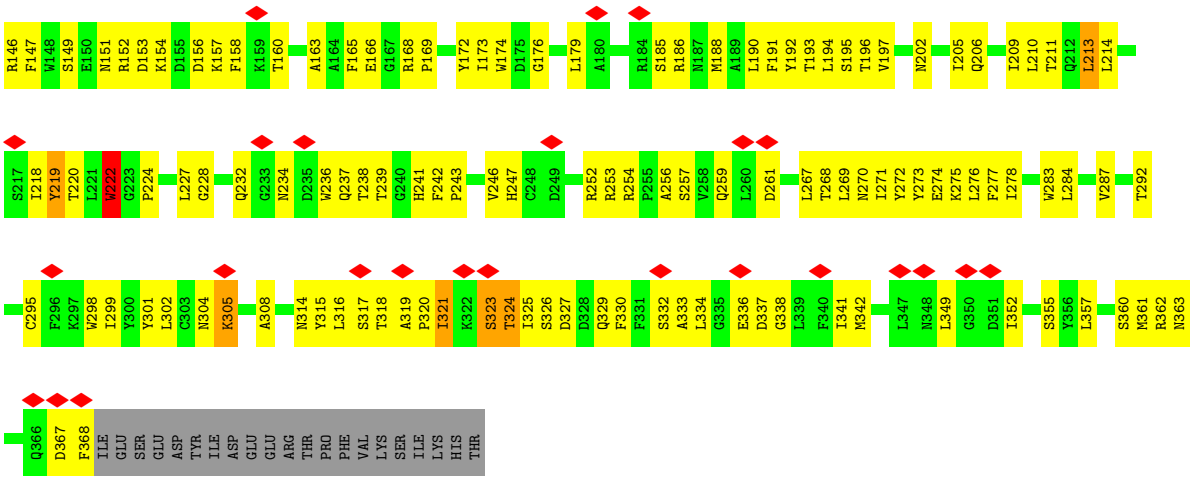
Chain C:



• Molecule 1: Innexin-6

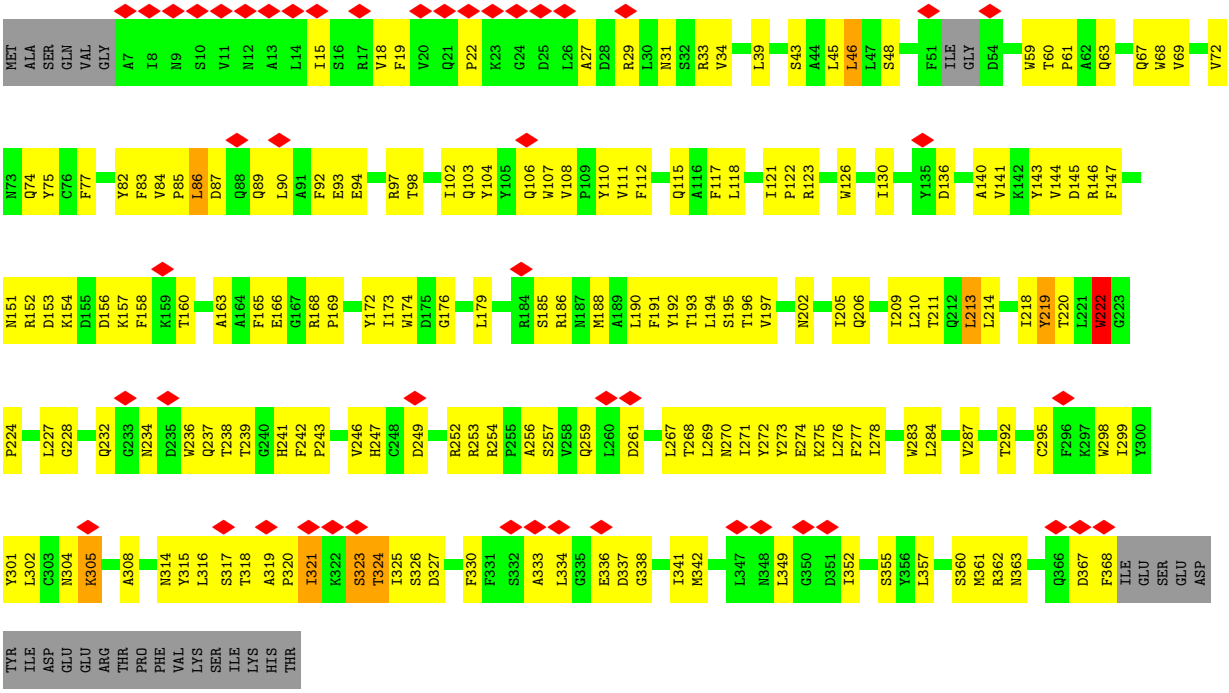
Chain D:





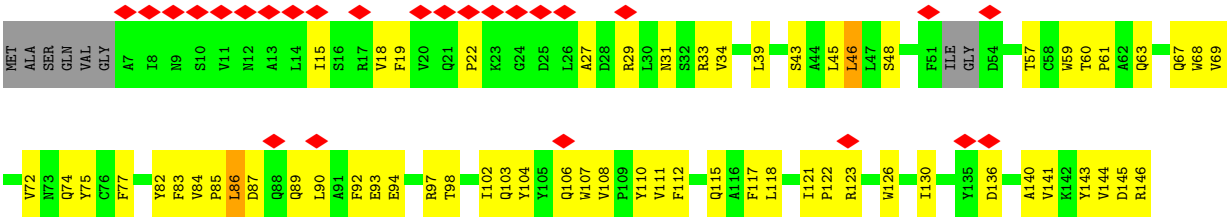
- Molecule 1: Innexin-6

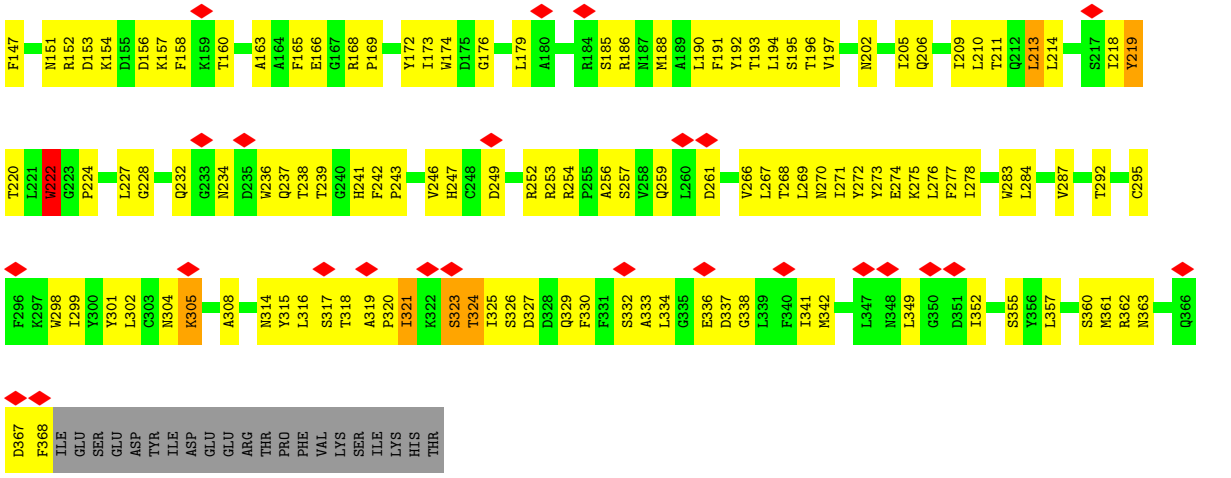
Chain E:



- Molecule 1: Innexin-6

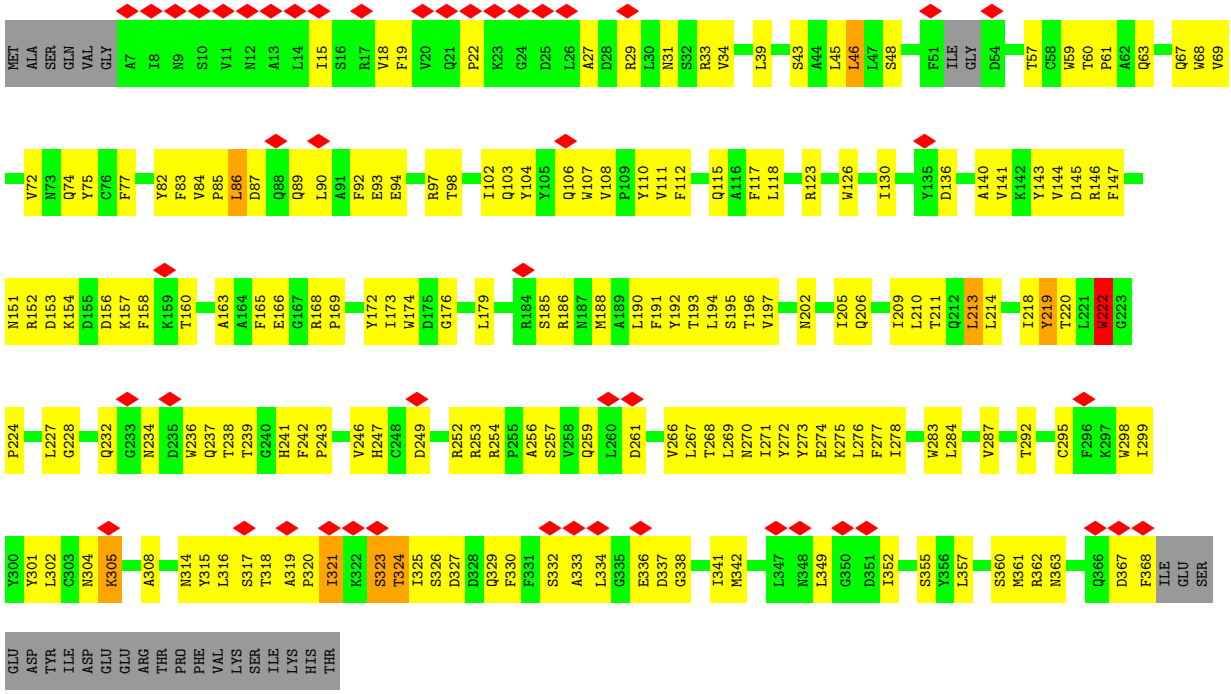
Chain F:





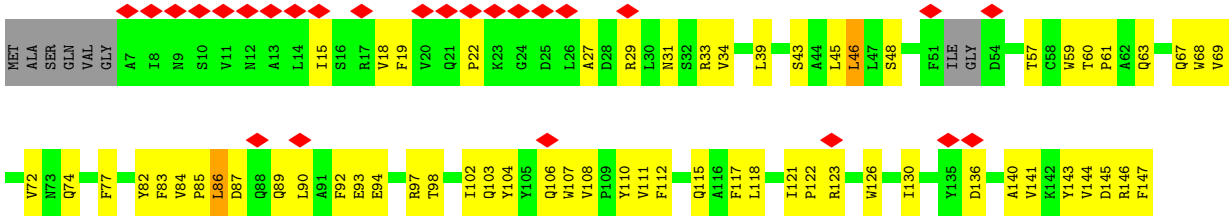
- Molecule 1: Innexin-6

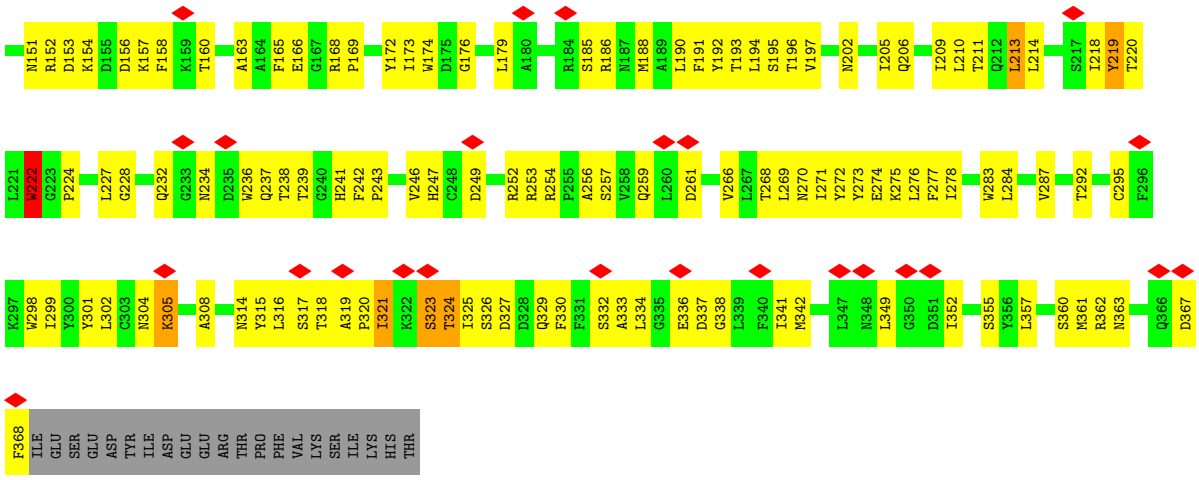
Chain G:



- Molecule 1: Innexin-6

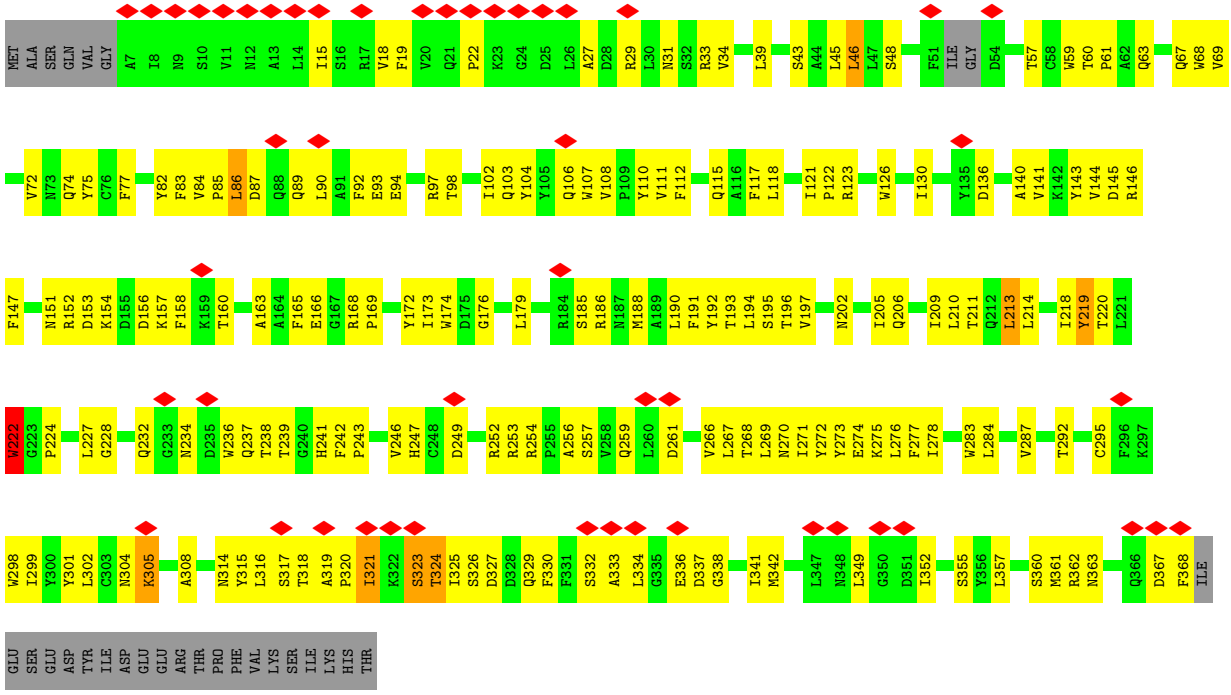
Chain H:





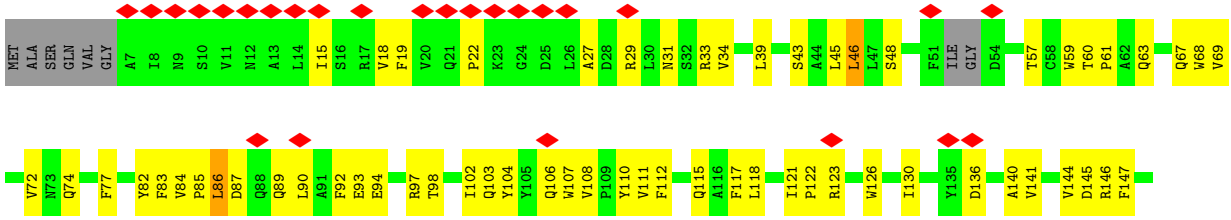
• Molecule 1: Innexin-6

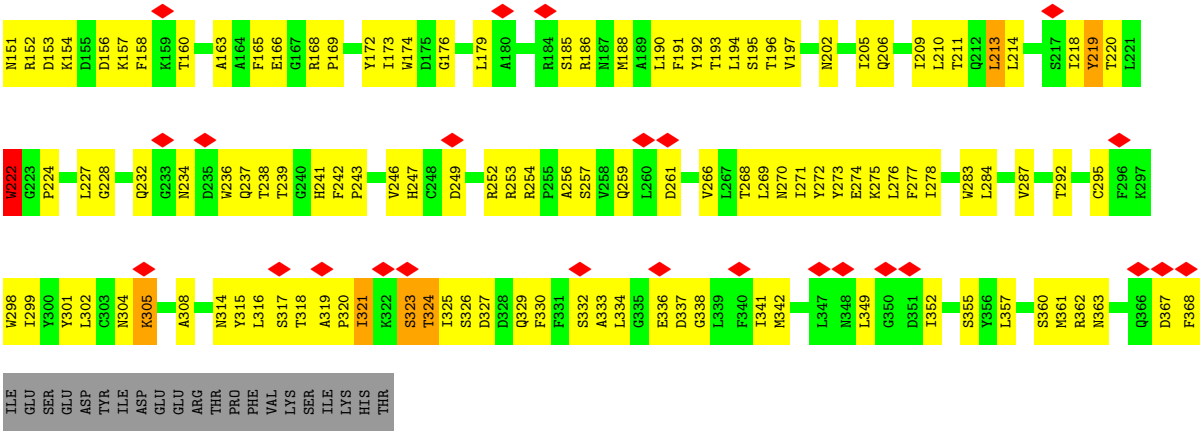
Chain I:



• Molecule 1: Innexin-6

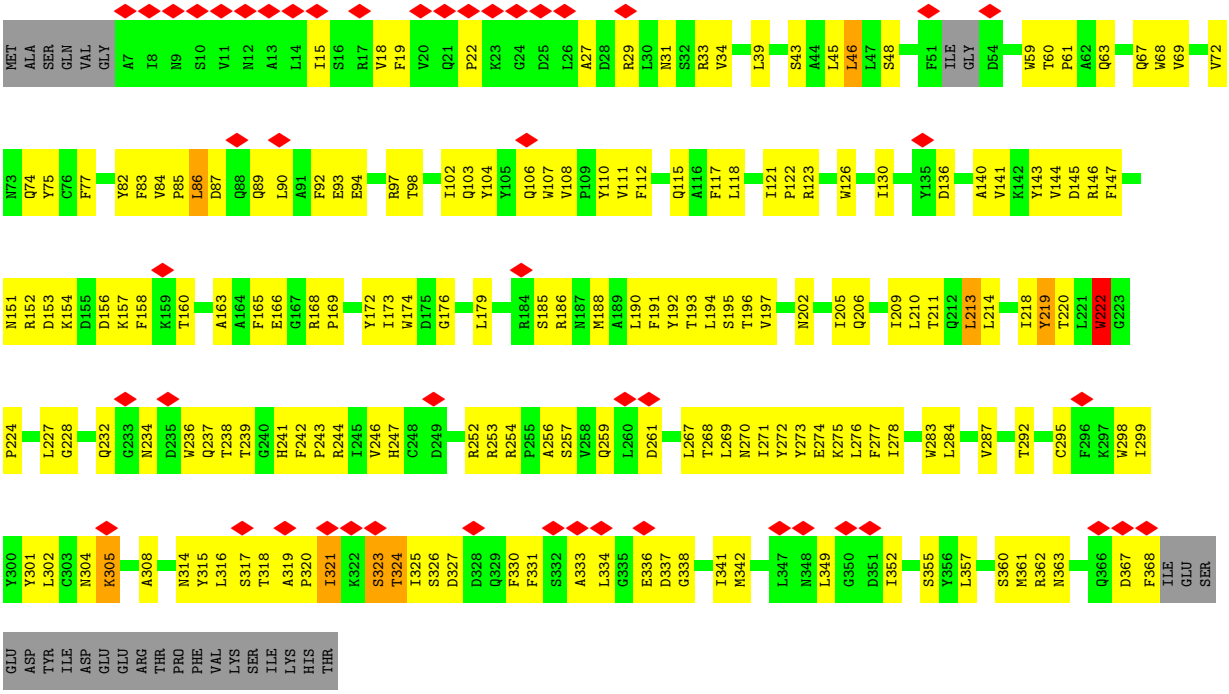
Chain J:





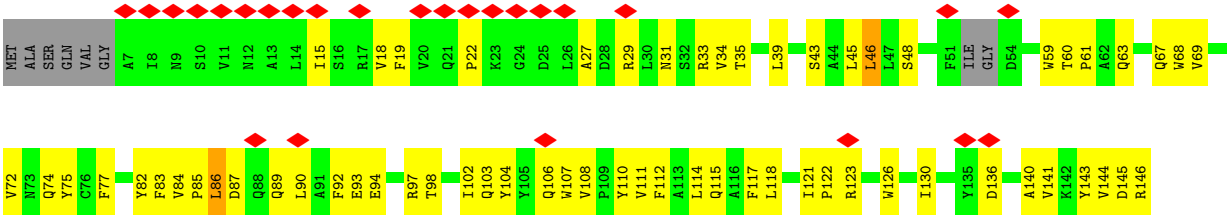
• Molecule 1: Innexin-6

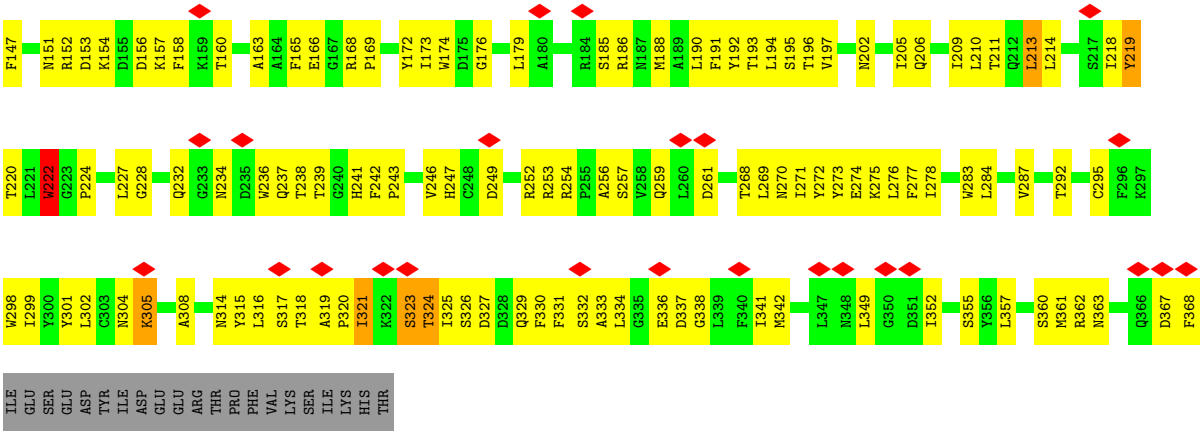
Chain K:



• Molecule 1: Innexin-6

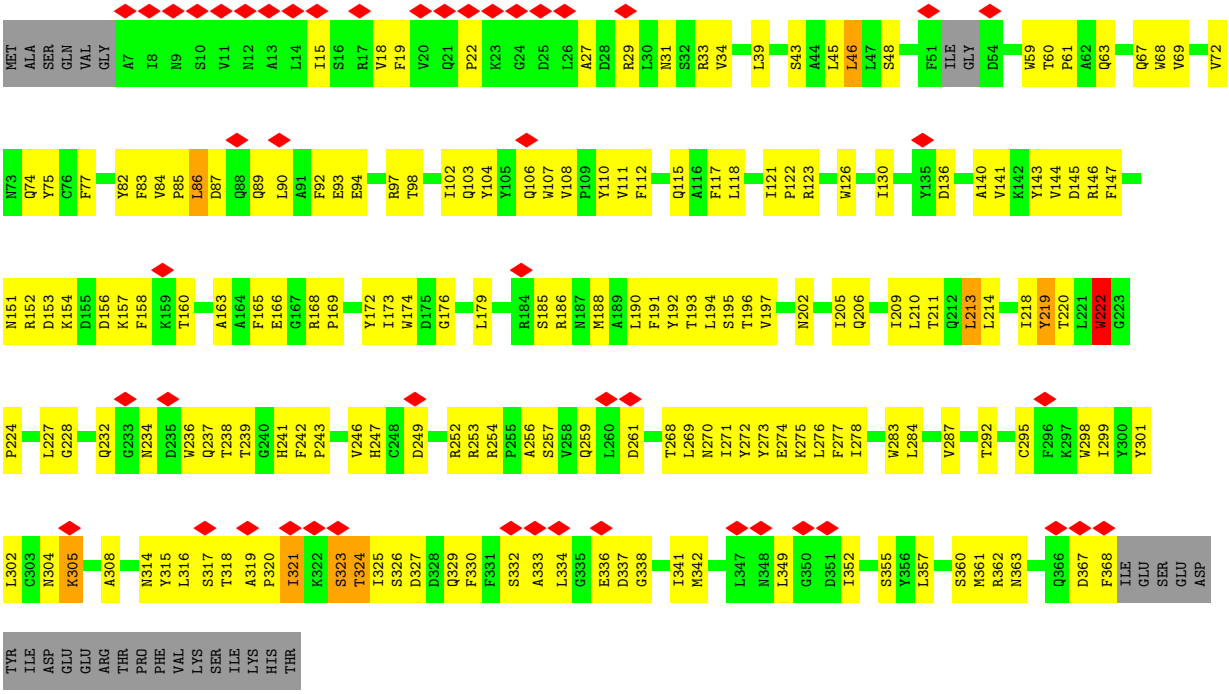
Chain L:





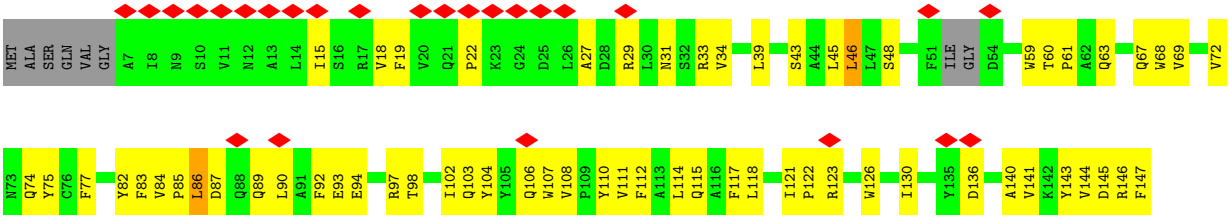
• Molecule 1: Innexin-6

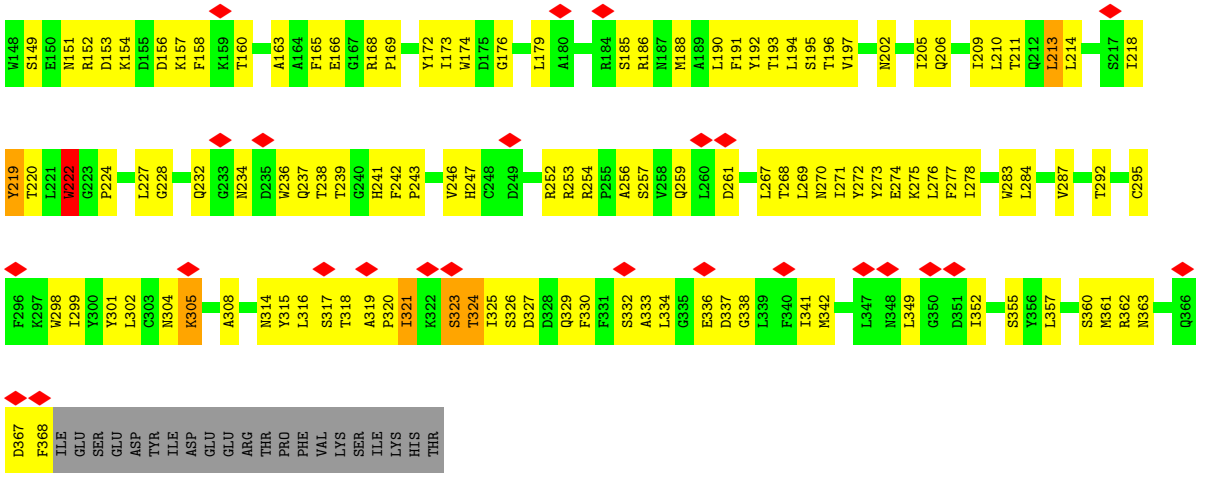
Chain M:



• Molecule 1: Innexin-6

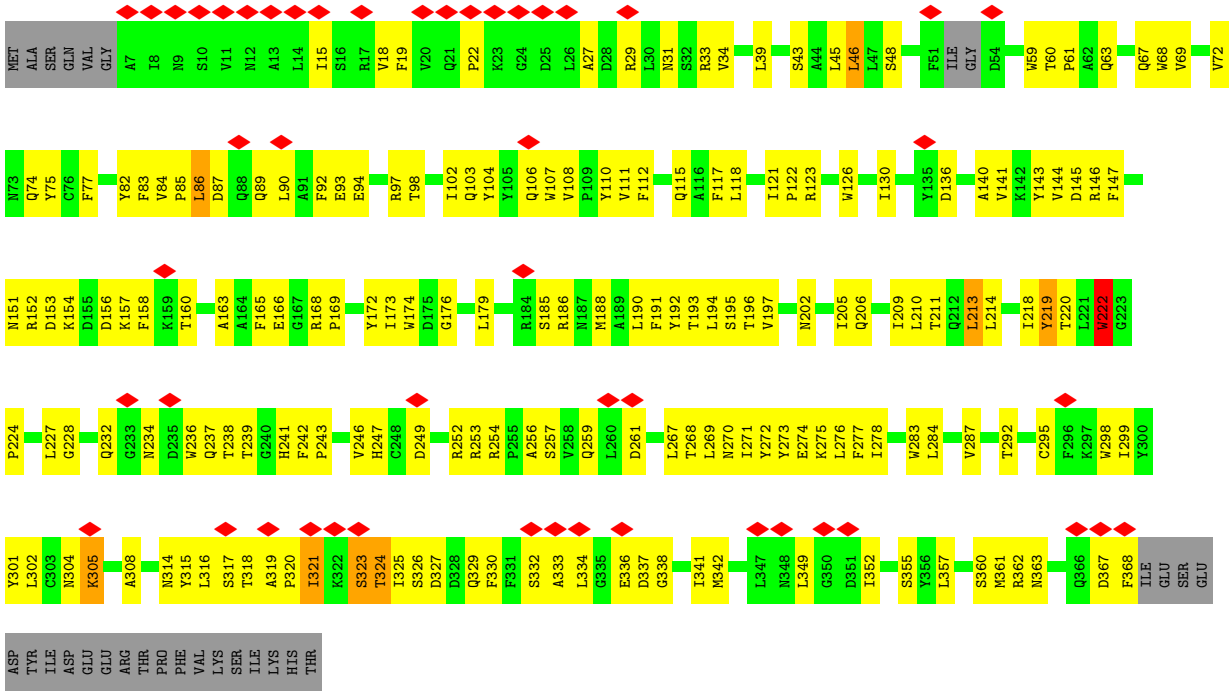
Chain N:





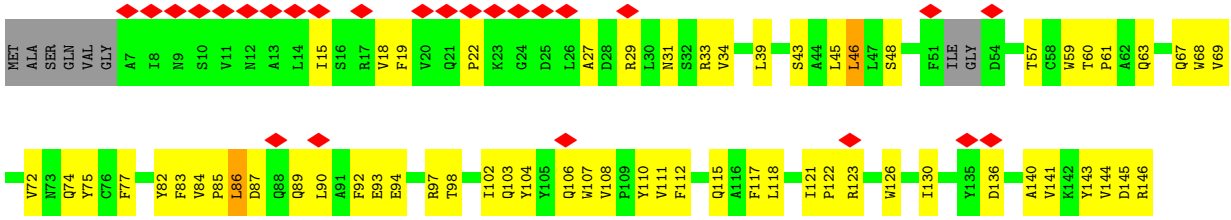
• Molecule 1: Innexin-6

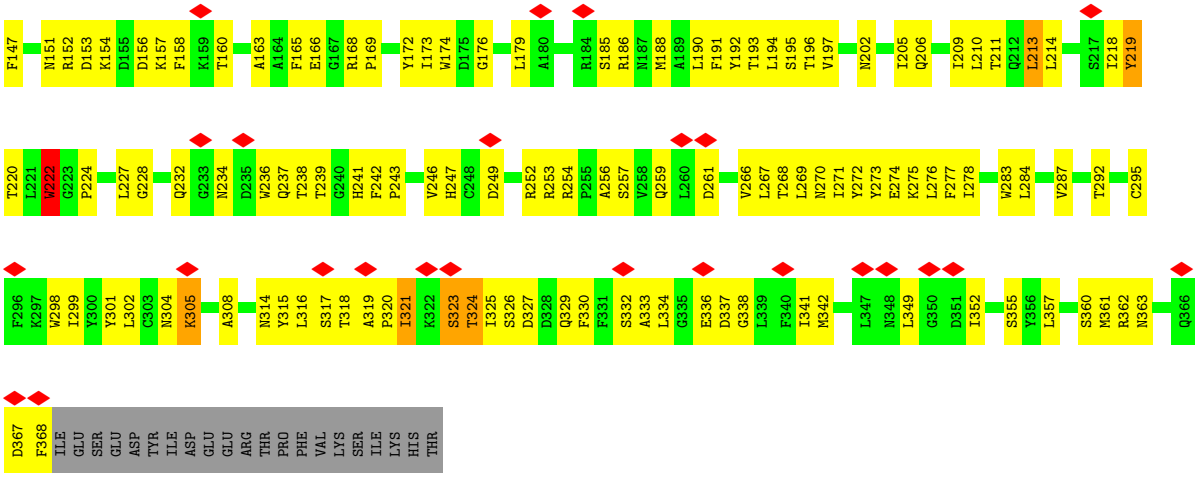
Chain O:



• Molecule 1: Innexin-6

Chain P:




F147 N151 R152 D153 K154 D155 D156 K157 F158 K159 T160 A163 A164 F165 E166 G167 R168 P169 Y172 I173 W174 D175 G176 L179 A180 R184 S185 R186 N187 M188 A189 L190 F191 Y192 T193 L194 S195 T196 V197 N202 I205 Q206 I209 L210 T211 Q212 L213 L214 S217 I218 Y219
T220 L221 W222 G223 P224 L227 G228 Q232 G233 N234 D235 W236 Q237 T238 T239 G240 H241 F242 P243 V246 H247 C248 D249 R252 R253 R254 P255 A256 S257 V258 Q259 L260 D261 V266 L267 T268 L269 N270 I271 Y272 Y273 E274 K275 L276 F277 I278 W283 L284 V287 T292 C295
F296 K297 W298 I299 Y300 Y301 L302 C303 N304 K305 A308 N314 Y315 L316 S317 T318 A319 P320 I321 K322 S323 T324 I325 S326 D327 D328 Q329 F330 F331 S332 A333 L334 G335 E336 D337 G338 L339 F340 I341 M342 L347 N348 L349 G350 D351 I352 S355 Y356 L357 S360 M361 R362 N363 Q366
D367 F368 ILE GLU SER GLU ASP TYR ILE ASP GLU GLU ARG THR PRO PHE VAL LYS SER ILE LYS HIS THR

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, D8	Depositor
Number of particles used	35608	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING ONLY	Depositor
Microscope	JEOL 3000SFF	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	7	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.092	Depositor
Minimum map value	-0.065	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.006	Depositor
Recommended contour level	0.015	Depositor
Map size (Å)	246.0, 246.0, 246.0	wwPDB
Map dimensions	200, 200, 200	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.23, 1.23, 1.23	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

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	0.74	1/3051 (0.0%)	0.71	1/4155 (0.0%)
1	B	0.74	1/3051 (0.0%)	0.71	1/4155 (0.0%)
1	C	0.74	1/3051 (0.0%)	0.71	1/4155 (0.0%)
1	D	0.74	1/3051 (0.0%)	0.71	1/4155 (0.0%)
1	E	0.74	1/3051 (0.0%)	0.71	1/4155 (0.0%)
1	F	0.74	1/3051 (0.0%)	0.71	1/4155 (0.0%)
1	G	0.74	1/3051 (0.0%)	0.71	1/4155 (0.0%)
1	H	0.74	1/3051 (0.0%)	0.71	1/4155 (0.0%)
1	I	0.74	1/3051 (0.0%)	0.71	1/4155 (0.0%)
1	J	0.74	1/3051 (0.0%)	0.71	1/4155 (0.0%)
1	K	0.74	1/3051 (0.0%)	0.71	1/4155 (0.0%)
1	L	0.74	1/3051 (0.0%)	0.71	1/4155 (0.0%)
1	M	0.74	1/3051 (0.0%)	0.71	1/4155 (0.0%)
1	N	0.74	1/3051 (0.0%)	0.71	1/4155 (0.0%)
1	O	0.74	1/3051 (0.0%)	0.71	1/4155 (0.0%)
1	P	0.74	1/3051 (0.0%)	0.71	1/4155 (0.0%)
All	All	0.74	16/48816 (0.0%)	0.71	16/66480 (0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand.A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	8
1	B	0	8
1	C	0	8
1	D	0	8
1	E	0	8
1	F	0	8
1	G	0	8
1	H	0	8
1	I	0	8

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Mol	Chain	#Chirality outliers	#Planarity outliers
1	J	0	8
1	K	0	8
1	L	0	8
1	M	0	8
1	N	0	8
1	O	0	8
1	P	0	8
All	All	0	128

All (16) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	222	TRP	CB-CG	-5.08	1.41	1.50
1	D	222	TRP	CB-CG	-5.08	1.41	1.50
1	K	222	TRP	CB-CG	-5.06	1.41	1.50
1	F	222	TRP	CB-CG	-5.05	1.41	1.50
1	H	222	TRP	CB-CG	-5.05	1.41	1.50
1	J	222	TRP	CB-CG	-5.05	1.41	1.50
1	L	222	TRP	CB-CG	-5.05	1.41	1.50
1	N	222	TRP	CB-CG	-5.05	1.41	1.50
1	P	222	TRP	CB-CG	-5.05	1.41	1.50
1	A	222	TRP	CB-CG	-5.05	1.41	1.50
1	C	222	TRP	CB-CG	-5.05	1.41	1.50
1	I	222	TRP	CB-CG	-5.05	1.41	1.50
1	E	222	TRP	CB-CG	-5.04	1.41	1.50
1	G	222	TRP	CB-CG	-5.04	1.41	1.50
1	M	222	TRP	CB-CG	-5.04	1.41	1.50
1	O	222	TRP	CB-CG	-5.04	1.41	1.50

All (16) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	J	46	LEU	CA-CB-CG	-6.89	99.45	115.30
1	N	46	LEU	CA-CB-CG	-6.89	99.45	115.30
1	G	46	LEU	CA-CB-CG	-6.89	99.46	115.30
1	A	46	LEU	CA-CB-CG	-6.88	99.47	115.30
1	O	46	LEU	CA-CB-CG	-6.88	99.47	115.30
1	C	46	LEU	CA-CB-CG	-6.88	99.48	115.30
1	E	46	LEU	CA-CB-CG	-6.88	99.48	115.30
1	P	46	LEU	CA-CB-CG	-6.88	99.48	115.30
1	K	46	LEU	CA-CB-CG	-6.88	99.48	115.30
1	B	46	LEU	CA-CB-CG	-6.87	99.49	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	F	46	LEU	CA-CB-CG	-6.87	99.49	115.30
1	H	46	LEU	CA-CB-CG	-6.87	99.49	115.30
1	L	46	LEU	CA-CB-CG	-6.87	99.49	115.30
1	M	46	LEU	CA-CB-CG	-6.87	99.49	115.30
1	D	46	LEU	CA-CB-CG	-6.87	99.51	115.30
1	I	46	LEU	CA-CB-CG	-6.87	99.51	115.30

There are no chirality outliers.

All (128) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	185	SER	Peptide
1	A	213	LEU	Peptide
1	A	222	TRP	Peptide
1	A	256	ALA	Peptide
1	A	324	THR	Peptide
1	A	334	LEU	Peptide
1	A	61	PRO	Peptide
1	A	86	LEU	Peptide
1	B	185	SER	Peptide
1	B	213	LEU	Peptide
1	B	222	TRP	Peptide
1	B	256	ALA	Peptide
1	B	324	THR	Peptide
1	B	334	LEU	Peptide
1	B	61	PRO	Peptide
1	B	86	LEU	Peptide
1	C	185	SER	Peptide
1	C	213	LEU	Peptide
1	C	222	TRP	Peptide
1	C	256	ALA	Peptide
1	C	324	THR	Peptide
1	C	334	LEU	Peptide
1	C	61	PRO	Peptide
1	C	86	LEU	Peptide
1	D	185	SER	Peptide
1	D	213	LEU	Peptide
1	D	222	TRP	Peptide
1	D	256	ALA	Peptide
1	D	324	THR	Peptide
1	D	334	LEU	Peptide
1	D	61	PRO	Peptide

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Mol	Chain	Res	Type	Group
1	D	86	LEU	Peptide
1	E	185	SER	Peptide
1	E	213	LEU	Peptide
1	E	222	TRP	Peptide
1	E	256	ALA	Peptide
1	E	324	THR	Peptide
1	E	334	LEU	Peptide
1	E	61	PRO	Peptide
1	E	86	LEU	Peptide
1	F	185	SER	Peptide
1	F	213	LEU	Peptide
1	F	222	TRP	Peptide
1	F	256	ALA	Peptide
1	F	324	THR	Peptide
1	F	334	LEU	Peptide
1	F	61	PRO	Peptide
1	F	86	LEU	Peptide
1	G	185	SER	Peptide
1	G	213	LEU	Peptide
1	G	222	TRP	Peptide
1	G	256	ALA	Peptide
1	G	324	THR	Peptide
1	G	334	LEU	Peptide
1	G	61	PRO	Peptide
1	G	86	LEU	Peptide
1	H	185	SER	Peptide
1	H	213	LEU	Peptide
1	H	222	TRP	Peptide
1	H	256	ALA	Peptide
1	H	324	THR	Peptide
1	H	334	LEU	Peptide
1	H	61	PRO	Peptide
1	H	86	LEU	Peptide
1	I	185	SER	Peptide
1	I	213	LEU	Peptide
1	I	222	TRP	Peptide
1	I	256	ALA	Peptide
1	I	324	THR	Peptide
1	I	334	LEU	Peptide
1	I	61	PRO	Peptide
1	I	86	LEU	Peptide
1	J	185	SER	Peptide

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Mol	Chain	Res	Type	Group
1	J	213	LEU	Peptide
1	J	222	TRP	Peptide
1	J	256	ALA	Peptide
1	J	324	THR	Peptide
1	J	334	LEU	Peptide
1	J	61	PRO	Peptide
1	J	86	LEU	Peptide
1	K	185	SER	Peptide
1	K	213	LEU	Peptide
1	K	222	TRP	Peptide
1	K	256	ALA	Peptide
1	K	324	THR	Peptide
1	K	334	LEU	Peptide
1	K	61	PRO	Peptide
1	K	86	LEU	Peptide
1	L	185	SER	Peptide
1	L	213	LEU	Peptide
1	L	222	TRP	Peptide
1	L	256	ALA	Peptide
1	L	324	THR	Peptide
1	L	334	LEU	Peptide
1	L	61	PRO	Peptide
1	L	86	LEU	Peptide
1	M	185	SER	Peptide
1	M	213	LEU	Peptide
1	M	222	TRP	Peptide
1	M	256	ALA	Peptide
1	M	324	THR	Peptide
1	M	334	LEU	Peptide
1	M	61	PRO	Peptide
1	M	86	LEU	Peptide
1	N	185	SER	Peptide
1	N	213	LEU	Peptide
1	N	222	TRP	Peptide
1	N	256	ALA	Peptide
1	N	324	THR	Peptide
1	N	334	LEU	Peptide
1	N	61	PRO	Peptide
1	N	86	LEU	Peptide
1	O	185	SER	Peptide
1	O	213	LEU	Peptide
1	O	222	TRP	Peptide

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Mol	Chain	Res	Type	Group
1	O	256	ALA	Peptide
1	O	324	THR	Peptide
1	O	334	LEU	Peptide
1	O	61	PRO	Peptide
1	O	86	LEU	Peptide
1	P	185	SER	Peptide
1	P	213	LEU	Peptide
1	P	222	TRP	Peptide
1	P	256	ALA	Peptide
1	P	324	THR	Peptide
1	P	334	LEU	Peptide
1	P	61	PRO	Peptide
1	P	86	LEU	Peptide

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	2965	0	2928	188	0
1	B	2965	0	2928	186	0
1	C	2965	0	2928	190	0
1	D	2965	0	2928	193	0
1	E	2965	0	2928	191	0
1	F	2965	0	2928	193	0
1	G	2965	0	2928	191	0
1	H	2965	0	2928	185	0
1	I	2965	0	2928	192	0
1	J	2965	0	2928	185	0
1	K	2965	0	2928	189	0
1	L	2965	0	2928	189	0
1	M	2965	0	2928	191	0
1	N	2965	0	2928	190	0
1	O	2965	0	2928	190	0
1	P	2965	0	2928	193	0
All	All	47440	0	46848	2728	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 29.

All (2728) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:243:PRO:O	1:B:270:ASN:ND2	1.97	0.98
1:G:243:PRO:O	1:G:270:ASN:ND2	1.97	0.98
1:J:243:PRO:O	1:J:270:ASN:ND2	1.97	0.98
1:L:243:PRO:O	1:L:270:ASN:ND2	1.97	0.98
1:I:243:PRO:O	1:I:270:ASN:ND2	1.97	0.98
1:H:243:PRO:O	1:H:270:ASN:ND2	1.97	0.98
1:M:243:PRO:O	1:M:270:ASN:ND2	1.97	0.98
1:C:243:PRO:O	1:C:270:ASN:ND2	1.97	0.97
1:F:243:PRO:O	1:F:270:ASN:ND2	1.97	0.97
1:P:243:PRO:O	1:P:270:ASN:ND2	1.97	0.97
1:E:243:PRO:O	1:E:270:ASN:ND2	1.97	0.96
1:N:243:PRO:O	1:N:270:ASN:ND2	1.97	0.96
1:D:243:PRO:O	1:D:270:ASN:ND2	1.97	0.96
1:O:243:PRO:O	1:O:270:ASN:ND2	1.97	0.96
1:A:243:PRO:O	1:A:270:ASN:ND2	1.97	0.96
1:K:243:PRO:O	1:K:270:ASN:ND2	1.97	0.95
1:D:252:ARG:HH11	1:D:254:ARG:HH12	1.14	0.94
1:I:252:ARG:HH11	1:I:254:ARG:HH12	1.14	0.94
1:E:252:ARG:HH11	1:E:254:ARG:HH12	1.14	0.94
1:N:252:ARG:HH11	1:N:254:ARG:HH12	1.14	0.94
1:O:252:ARG:HH11	1:O:254:ARG:HH12	1.14	0.94
1:P:252:ARG:HH11	1:P:254:ARG:HH12	1.14	0.94
1:G:252:ARG:HH11	1:G:254:ARG:HH12	1.14	0.94
1:F:252:ARG:HH11	1:F:254:ARG:HH12	1.14	0.93
1:H:252:ARG:HH11	1:H:254:ARG:HH12	1.14	0.92
1:J:252:ARG:HH11	1:J:254:ARG:HH12	1.14	0.92
1:M:252:ARG:HH11	1:M:254:ARG:HH12	1.14	0.92
1:C:252:ARG:HH11	1:C:254:ARG:HH12	1.14	0.92
1:A:252:ARG:HH11	1:A:254:ARG:HH12	1.14	0.90
1:L:252:ARG:HH11	1:L:254:ARG:HH12	1.14	0.90
1:B:252:ARG:HH11	1:B:254:ARG:HH12	1.14	0.89
1:K:252:ARG:HH11	1:K:254:ARG:HH12	1.14	0.89
1:A:89:GLN:HG3	1:A:90:LEU:H	1.44	0.83
1:K:89:GLN:HG3	1:K:90:LEU:H	1.44	0.83
1:F:89:GLN:HG3	1:F:90:LEU:H	1.44	0.83
1:I:89:GLN:HG3	1:I:90:LEU:H	1.44	0.83
1:G:89:GLN:HG3	1:G:90:LEU:H	1.44	0.83
1:P:89:GLN:HG3	1:P:90:LEU:H	1.44	0.83
1:L:89:GLN:HG3	1:L:90:LEU:H	1.44	0.82
1:B:89:GLN:HG3	1:B:90:LEU:H	1.44	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:89:GLN:HG3	1:E:90:LEU:H	1.44	0.81
1:P:314:ASN:O	1:P:317:SER:OG	1.99	0.81
1:F:314:ASN:O	1:F:317:SER:OG	1.99	0.81
1:E:314:ASN:O	1:E:317:SER:OG	1.99	0.81
1:O:89:GLN:HG3	1:O:90:LEU:H	1.44	0.81
1:O:314:ASN:O	1:O:317:SER:OG	1.99	0.81
1:K:314:ASN:O	1:K:317:SER:OG	1.99	0.81
1:M:89:GLN:HG3	1:M:90:LEU:H	1.44	0.81
1:L:314:ASN:O	1:L:317:SER:OG	1.99	0.81
1:A:314:ASN:O	1:A:317:SER:OG	1.99	0.81
1:C:89:GLN:HG3	1:C:90:LEU:H	1.44	0.81
1:G:314:ASN:O	1:G:317:SER:OG	1.99	0.81
1:I:314:ASN:O	1:I:317:SER:OG	1.99	0.81
1:B:314:ASN:O	1:B:317:SER:OG	1.99	0.81
1:H:314:ASN:O	1:H:317:SER:OG	1.99	0.81
1:J:110:TYR:HD2	1:K:275:LYS:HZ2	1.28	0.81
1:J:314:ASN:O	1:J:317:SER:OG	1.99	0.81
1:O:252:ARG:HH11	1:O:254:ARG:NH1	1.79	0.81
1:D:89:GLN:HG3	1:D:90:LEU:H	1.44	0.80
1:D:252:ARG:HH11	1:D:254:ARG:NH1	1.79	0.80
1:M:252:ARG:HH11	1:M:254:ARG:NH1	1.79	0.80
1:N:252:ARG:HH11	1:N:254:ARG:NH1	1.80	0.80
1:C:252:ARG:HH11	1:C:254:ARG:NH1	1.80	0.80
1:E:252:ARG:HH11	1:E:254:ARG:NH1	1.80	0.80
1:H:89:GLN:HG3	1:H:90:LEU:H	1.44	0.80
1:I:252:ARG:HH11	1:I:254:ARG:NH1	1.79	0.80
1:N:89:GLN:HG3	1:N:90:LEU:H	1.44	0.80
1:P:252:ARG:HH11	1:P:254:ARG:NH1	1.80	0.80
1:B:110:TYR:HD2	1:C:275:LYS:HZ2	1.30	0.80
1:F:252:ARG:HH11	1:F:254:ARG:NH1	1.80	0.80
1:L:252:ARG:HH11	1:L:254:ARG:NH1	1.79	0.80
1:B:252:ARG:HH11	1:B:254:ARG:NH1	1.79	0.80
1:D:314:ASN:O	1:D:317:SER:OG	1.99	0.80
1:N:314:ASN:O	1:N:317:SER:OG	1.99	0.80
1:G:252:ARG:HH11	1:G:254:ARG:NH1	1.80	0.80
1:J:89:GLN:HG3	1:J:90:LEU:H	1.44	0.80
1:J:252:ARG:HH11	1:J:254:ARG:NH1	1.80	0.80
1:H:252:ARG:HH11	1:H:254:ARG:NH1	1.79	0.80
1:A:252:ARG:HH11	1:A:254:ARG:NH1	1.79	0.80
1:K:252:ARG:HH11	1:K:254:ARG:NH1	1.80	0.80
1:L:110:TYR:HD2	1:M:275:LYS:HZ2	1.30	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:314:ASN:O	1:M:317:SER:OG	1.99	0.79
1:C:314:ASN:O	1:C:317:SER:OG	1.99	0.79
1:A:275:LYS:HZ2	1:H:110:TYR:HD2	1.30	0.79
1:A:110:TYR:HD2	1:B:275:LYS:HZ2	1.31	0.79
1:C:110:TYR:HD2	1:D:275:LYS:HZ2	1.31	0.79
1:N:110:TYR:HD2	1:O:275:LYS:HZ2	1.31	0.79
1:L:239:THR:HB	1:L:241:HIS:CE1	2.19	0.78
1:B:239:THR:HB	1:B:241:HIS:CE1	2.19	0.78
1:H:239:THR:HB	1:H:241:HIS:CE1	2.19	0.78
1:J:239:THR:HB	1:J:241:HIS:CE1	2.19	0.78
1:M:110:TYR:HD2	1:N:275:LYS:HZ2	1.31	0.78
1:E:110:TYR:HD2	1:F:275:LYS:HZ2	1.31	0.78
1:F:239:THR:HB	1:F:241:HIS:CE1	2.19	0.78
1:P:239:THR:HB	1:P:241:HIS:CE1	2.19	0.78
1:F:110:TYR:HD2	1:G:275:LYS:HZ2	1.30	0.78
1:O:110:TYR:HD2	1:P:275:LYS:HZ2	1.31	0.78
1:G:110:TYR:HD2	1:H:275:LYS:HZ2	1.31	0.78
1:K:239:THR:HB	1:K:241:HIS:CE1	2.19	0.78
1:A:239:THR:HB	1:A:241:HIS:CE1	2.19	0.77
1:I:110:TYR:HD2	1:J:275:LYS:HZ2	1.31	0.77
1:O:239:THR:HB	1:O:241:HIS:CE1	2.19	0.77
1:E:239:THR:HB	1:E:241:HIS:CE1	2.19	0.77
1:G:239:THR:HB	1:G:241:HIS:CE1	2.19	0.77
1:I:239:THR:HB	1:I:241:HIS:CE1	2.19	0.77
1:D:239:THR:HB	1:D:241:HIS:CE1	2.19	0.77
1:N:239:THR:HB	1:N:241:HIS:CE1	2.19	0.77
1:C:239:THR:HB	1:C:241:HIS:CE1	2.19	0.76
1:M:239:THR:HB	1:M:241:HIS:CE1	2.19	0.76
1:G:257:SER:HB2	1:K:92:PHE:HE1	1.50	0.76
1:F:18:VAL:O	1:F:33:ARG:NH1	2.20	0.75
1:B:18:VAL:O	1:B:33:ARG:NH1	2.20	0.75
1:H:18:VAL:O	1:H:33:ARG:NH1	2.20	0.75
1:K:46:LEU:HD13	1:K:273:TYR:HE1	1.52	0.75
1:L:18:VAL:O	1:L:33:ARG:NH1	2.20	0.75
1:M:46:LEU:HD13	1:M:273:TYR:HE1	1.52	0.75
1:O:18:VAL:O	1:O:33:ARG:NH1	2.20	0.75
1:P:18:VAL:O	1:P:33:ARG:NH1	2.20	0.75
1:C:46:LEU:HD13	1:C:273:TYR:HE1	1.52	0.74
1:E:18:VAL:O	1:E:33:ARG:NH1	2.20	0.74
1:J:18:VAL:O	1:J:33:ARG:NH1	2.20	0.74
1:D:18:VAL:O	1:D:33:ARG:NH1	2.20	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:92:PHE:HE1	1:L:257:SER:HB2	1.52	0.74
1:N:18:VAL:O	1:N:33:ARG:NH1	2.20	0.74
1:A:46:LEU:HD13	1:A:273:TYR:HE1	1.52	0.74
1:B:257:SER:HB2	1:P:92:PHE:HE1	1.52	0.74
1:D:92:PHE:HE1	1:N:257:SER:HB2	1.52	0.74
1:E:92:PHE:HE1	1:M:257:SER:HB2	1.53	0.74
1:C:257:SER:HB2	1:O:92:PHE:HE1	1.53	0.74
1:D:257:SER:HB2	1:N:92:PHE:HE1	1.53	0.74
1:G:18:VAL:O	1:G:33:ARG:NH1	2.20	0.74
1:M:18:VAL:O	1:M:33:ARG:NH1	2.20	0.74
1:C:18:VAL:O	1:C:33:ARG:NH1	2.20	0.74
1:E:46:LEU:HD13	1:E:273:TYR:HE1	1.52	0.74
1:K:18:VAL:O	1:K:33:ARG:NH1	2.20	0.74
1:C:92:PHE:HE1	1:O:257:SER:HB2	1.53	0.74
1:I:18:VAL:O	1:I:33:ARG:NH1	2.20	0.74
1:O:46:LEU:HD13	1:O:273:TYR:HE1	1.52	0.74
1:A:18:VAL:O	1:A:33:ARG:NH1	2.20	0.74
1:G:46:LEU:HD13	1:G:273:TYR:HE1	1.52	0.74
1:E:257:SER:HB2	1:M:92:PHE:HE1	1.53	0.74
1:I:46:LEU:HD13	1:I:273:TYR:HE1	1.52	0.74
1:L:236:TRP:O	1:L:239:THR:OG1	2.05	0.74
1:F:236:TRP:O	1:F:239:THR:OG1	2.05	0.73
1:F:257:SER:HB2	1:L:92:PHE:HE1	1.53	0.73
1:P:236:TRP:O	1:P:239:THR:OG1	2.05	0.73
1:B:92:PHE:HE1	1:P:257:SER:HB2	1.52	0.73
1:N:46:LEU:HD13	1:N:273:TYR:HE1	1.52	0.73
1:A:272:TYR:O	1:A:275:LYS:N	2.22	0.73
1:D:46:LEU:HD13	1:D:273:TYR:HE1	1.52	0.73
1:H:257:SER:HB2	1:J:92:PHE:HE1	1.52	0.73
1:K:272:TYR:O	1:K:275:LYS:N	2.22	0.73
1:M:237:GLN:OE1	1:M:237:GLN:N	2.21	0.73
1:C:237:GLN:N	1:C:237:GLN:OE1	2.21	0.73
1:L:237:GLN:OE1	1:L:237:GLN:N	2.21	0.73
1:B:237:GLN:OE1	1:B:237:GLN:N	2.21	0.73
1:E:272:TYR:O	1:E:275:LYS:N	2.22	0.73
1:J:272:TYR:O	1:J:275:LYS:N	2.22	0.73
1:B:93:GLU:HG3	1:B:94:GLU:H	1.54	0.73
1:E:93:GLU:HG3	1:E:94:GLU:H	1.54	0.73
1:H:46:LEU:HD13	1:H:273:TYR:HE1	1.52	0.73
1:H:92:PHE:HE1	1:J:257:SER:HB2	1.53	0.73
1:H:236:TRP:O	1:H:239:THR:OG1	2.05	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:272:TYR:O	1:H:275:LYS:N	2.22	0.73
1:L:93:GLU:HG3	1:L:94:GLU:H	1.54	0.73
1:O:272:TYR:O	1:O:275:LYS:N	2.22	0.73
1:D:93:GLU:HG3	1:D:94:GLU:H	1.54	0.73
1:G:118:LEU:O	1:G:202:ASN:ND2	2.22	0.73
1:N:272:TYR:O	1:N:275:LYS:N	2.22	0.73
1:A:92:PHE:HE1	1:I:257:SER:HB2	1.53	0.73
1:B:46:LEU:HD13	1:B:273:TYR:HE1	1.52	0.73
1:D:237:GLN:OE1	1:D:237:GLN:N	2.21	0.73
1:D:272:TYR:O	1:D:275:LYS:N	2.22	0.73
1:F:93:GLU:HG3	1:F:94:GLU:H	1.54	0.73
1:I:118:LEU:O	1:I:202:ASN:ND2	2.22	0.73
1:J:46:LEU:HD13	1:J:273:TYR:HE1	1.52	0.73
1:N:93:GLU:HG3	1:N:94:GLU:H	1.54	0.73
1:N:237:GLN:N	1:N:237:GLN:OE1	2.21	0.73
1:O:93:GLU:HG3	1:O:94:GLU:H	1.54	0.73
1:P:118:LEU:O	1:P:202:ASN:ND2	2.22	0.73
1:A:257:SER:HB2	1:I:92:PHE:HE1	1.53	0.72
1:B:272:TYR:O	1:B:275:LYS:N	2.22	0.72
1:F:118:LEU:O	1:F:202:ASN:ND2	2.22	0.72
1:P:93:GLU:HG3	1:P:94:GLU:H	1.54	0.72
1:F:272:TYR:O	1:F:275:LYS:N	2.22	0.72
1:G:93:GLU:HG3	1:G:94:GLU:H	1.54	0.72
1:L:46:LEU:HD13	1:L:273:TYR:HE1	1.52	0.72
1:L:272:TYR:O	1:L:275:LYS:N	2.22	0.72
1:G:237:GLN:OE1	1:G:237:GLN:N	2.21	0.72
1:I:93:GLU:HG3	1:I:94:GLU:H	1.54	0.72
1:I:272:TYR:O	1:I:275:LYS:N	2.22	0.72
1:P:272:TYR:O	1:P:275:LYS:N	2.22	0.72
1:A:93:GLU:HG3	1:A:94:GLU:H	1.54	0.72
1:E:237:GLN:OE1	1:E:237:GLN:N	2.21	0.72
1:G:272:TYR:O	1:G:275:LYS:N	2.22	0.72
1:H:237:GLN:N	1:H:237:GLN:OE1	2.21	0.72
1:O:237:GLN:OE1	1:O:237:GLN:N	2.21	0.72
1:F:237:GLN:OE1	1:F:237:GLN:N	2.21	0.72
1:I:237:GLN:OE1	1:I:237:GLN:N	2.21	0.72
1:J:237:GLN:OE1	1:J:237:GLN:N	2.21	0.72
1:M:93:GLU:HG3	1:M:94:GLU:H	1.54	0.72
1:C:93:GLU:HG3	1:C:94:GLU:H	1.54	0.72
1:K:93:GLU:HG3	1:K:94:GLU:H	1.54	0.72
1:P:237:GLN:N	1:P:237:GLN:OE1	2.21	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:118:LEU:O	1:H:202:ASN:ND2	2.22	0.72
1:M:272:TYR:O	1:M:275:LYS:N	2.22	0.72
1:A:237:GLN:OE1	1:A:237:GLN:N	2.21	0.72
1:C:118:LEU:O	1:C:202:ASN:ND2	2.22	0.72
1:J:118:LEU:O	1:J:202:ASN:ND2	2.22	0.72
1:M:118:LEU:O	1:M:202:ASN:ND2	2.22	0.72
1:P:46:LEU:HD13	1:P:273:TYR:HE1	1.52	0.72
1:C:272:TYR:O	1:C:275:LYS:N	2.22	0.72
1:K:236:TRP:O	1:K:239:THR:OG1	2.05	0.72
1:J:93:GLU:HG3	1:J:94:GLU:H	1.54	0.71
1:K:237:GLN:N	1:K:237:GLN:OE1	2.21	0.71
1:H:93:GLU:HG3	1:H:94:GLU:H	1.54	0.71
1:A:236:TRP:O	1:A:239:THR:OG1	2.05	0.71
1:O:118:LEU:O	1:O:202:ASN:ND2	2.22	0.71
1:E:318:THR:HG23	1:E:319:ALA:H	1.56	0.71
1:F:46:LEU:HD13	1:F:273:TYR:HE1	1.52	0.71
1:K:118:LEU:O	1:K:202:ASN:ND2	2.22	0.71
1:L:118:LEU:O	1:L:202:ASN:ND2	2.22	0.71
1:N:318:THR:HG23	1:N:319:ALA:H	1.56	0.71
1:B:118:LEU:O	1:B:202:ASN:ND2	2.22	0.71
1:D:318:THR:HG23	1:D:319:ALA:H	1.56	0.71
1:E:118:LEU:O	1:E:202:ASN:ND2	2.22	0.71
1:O:318:THR:HG23	1:O:319:ALA:H	1.56	0.71
1:A:118:LEU:O	1:A:202:ASN:ND2	2.22	0.71
1:C:318:THR:HG23	1:C:319:ALA:H	1.56	0.71
1:I:236:TRP:O	1:I:239:THR:OG1	2.05	0.71
1:M:318:THR:HG23	1:M:319:ALA:H	1.56	0.71
1:D:118:LEU:O	1:D:202:ASN:ND2	2.22	0.71
1:G:236:TRP:O	1:G:239:THR:OG1	2.05	0.71
1:N:118:LEU:O	1:N:202:ASN:ND2	2.22	0.70
1:F:318:THR:HG23	1:F:319:ALA:H	1.56	0.70
1:B:318:THR:HG23	1:B:319:ALA:H	1.56	0.70
1:K:318:THR:HG23	1:K:319:ALA:H	1.56	0.70
1:L:318:THR:HG23	1:L:319:ALA:H	1.56	0.70
1:P:318:THR:HG23	1:P:319:ALA:H	1.56	0.70
1:A:318:THR:HG23	1:A:319:ALA:H	1.56	0.70
1:J:318:THR:HG23	1:J:319:ALA:H	1.56	0.70
1:H:318:THR:HG23	1:H:319:ALA:H	1.56	0.70
1:B:236:TRP:O	1:B:239:THR:OG1	2.05	0.70
1:N:236:TRP:O	1:N:239:THR:OG1	2.05	0.69
1:O:236:TRP:O	1:O:239:THR:OG1	2.05	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:236:TRP:O	1:M:239:THR:OG1	2.05	0.69
1:D:236:TRP:O	1:D:239:THR:OG1	2.05	0.69
1:E:236:TRP:O	1:E:239:THR:OG1	2.05	0.69
1:I:318:THR:HG23	1:I:319:ALA:H	1.56	0.69
1:C:236:TRP:O	1:C:239:THR:OG1	2.05	0.69
1:G:318:THR:HG23	1:G:319:ALA:H	1.56	0.69
1:G:92:PHE:HE1	1:K:257:SER:HB2	1.57	0.69
1:G:257:SER:HB2	1:K:92:PHE:CE1	2.29	0.68
1:J:236:TRP:O	1:J:239:THR:OG1	2.05	0.68
1:B:236:TRP:HB2	1:B:242:PHE:O	1.95	0.67
1:J:179:LEU:HD22	1:K:352:ILE:HA	1.76	0.67
1:L:236:TRP:HB2	1:L:242:PHE:O	1.95	0.67
1:O:236:TRP:HB2	1:O:242:PHE:O	1.95	0.67
1:P:236:TRP:HB2	1:P:242:PHE:O	1.95	0.67
1:F:236:TRP:HB2	1:F:242:PHE:O	1.95	0.67
1:G:236:TRP:HB2	1:G:242:PHE:O	1.95	0.67
1:E:236:TRP:HB2	1:E:242:PHE:O	1.95	0.67
1:I:236:TRP:HB2	1:I:242:PHE:O	1.95	0.67
1:C:236:TRP:HB2	1:C:242:PHE:O	1.95	0.67
1:M:236:TRP:HB2	1:M:242:PHE:O	1.95	0.67
1:J:236:TRP:HB2	1:J:242:PHE:O	1.95	0.67
1:H:236:TRP:HB2	1:H:242:PHE:O	1.95	0.67
1:D:236:TRP:HB2	1:D:242:PHE:O	1.95	0.66
1:A:39:LEU:HD23	1:A:115:GLN:HB3	1.77	0.66
1:N:236:TRP:HB2	1:N:242:PHE:O	1.95	0.66
1:A:179:LEU:HD22	1:B:352:ILE:HA	1.78	0.66
1:K:236:TRP:HB2	1:K:242:PHE:O	1.95	0.66
1:C:39:LEU:HD23	1:C:115:GLN:HB3	1.77	0.66
1:G:39:LEU:HD23	1:G:115:GLN:HB3	1.78	0.66
1:I:39:LEU:HD23	1:I:115:GLN:HB3	1.78	0.66
1:K:39:LEU:HD23	1:K:115:GLN:HB3	1.78	0.66
1:A:236:TRP:HB2	1:A:242:PHE:O	1.95	0.66
1:E:179:LEU:HD22	1:F:352:ILE:HA	1.78	0.66
1:F:31:ASN:HA	1:F:34:VAL:HG12	1.78	0.66
1:I:352:ILE:HA	1:P:179:LEU:HD22	1.77	0.66
1:O:179:LEU:HD22	1:P:352:ILE:HA	1.78	0.66
1:P:31:ASN:HA	1:P:34:VAL:HG12	1.78	0.66
1:D:228:GLY:O	1:D:232:GLN:HG2	1.96	0.66
1:F:141:VAL:O	1:F:145:ASP:HB2	1.96	0.66
1:L:39:LEU:HD23	1:L:115:GLN:HB3	1.78	0.66
1:M:39:LEU:HD23	1:M:115:GLN:HB3	1.77	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:141:VAL:O	1:P:145:ASP:HB2	1.96	0.66
1:N:228:GLY:O	1:N:232:GLN:HG2	1.96	0.66
1:B:39:LEU:HD23	1:B:115:GLN:HB3	1.78	0.66
1:D:179:LEU:HD22	1:E:352:ILE:HA	1.78	0.66
1:G:31:ASN:HA	1:G:34:VAL:HG12	1.78	0.66
1:M:179:LEU:HD22	1:N:352:ILE:HA	1.78	0.66
1:N:141:VAL:O	1:N:145:ASP:HB2	1.96	0.66
1:F:228:GLY:O	1:F:232:GLN:HG2	1.96	0.66
1:I:31:ASN:HA	1:I:34:VAL:HG12	1.78	0.66
1:O:141:VAL:O	1:O:145:ASP:HB2	1.96	0.66
1:P:228:GLY:O	1:P:232:GLN:HG2	1.96	0.66
1:D:141:VAL:O	1:D:145:ASP:HB2	1.96	0.66
1:B:179:LEU:HD22	1:C:352:ILE:HA	1.78	0.65
1:C:179:LEU:HD22	1:D:352:ILE:HA	1.78	0.65
1:E:31:ASN:HA	1:E:34:VAL:HG12	1.78	0.65
1:E:141:VAL:O	1:E:145:ASP:HB2	1.96	0.65
1:G:179:LEU:HD22	1:H:352:ILE:HA	1.78	0.65
1:J:39:LEU:HD23	1:J:115:GLN:HB3	1.78	0.65
1:O:31:ASN:HA	1:O:34:VAL:HG12	1.78	0.65
1:F:179:LEU:HD22	1:G:352:ILE:HA	1.78	0.65
1:K:141:VAL:O	1:K:145:ASP:HB2	1.96	0.65
1:N:39:LEU:HD23	1:N:115:GLN:HB3	1.78	0.65
1:A:141:VAL:O	1:A:145:ASP:HB2	1.96	0.65
1:D:39:LEU:HD23	1:D:115:GLN:HB3	1.78	0.65
1:E:39:LEU:HD23	1:E:115:GLN:HB3	1.78	0.65
1:H:39:LEU:HD23	1:H:115:GLN:HB3	1.78	0.65
1:J:31:ASN:HA	1:J:34:VAL:HG12	1.78	0.65
1:A:228:GLY:O	1:A:232:GLN:HG2	1.96	0.65
1:A:352:ILE:HA	1:H:179:LEU:HD22	1.79	0.65
1:H:31:ASN:HA	1:H:34:VAL:HG12	1.78	0.65
1:H:228:GLY:O	1:H:232:GLN:HG2	1.96	0.65
1:J:228:GLY:O	1:J:232:GLN:HG2	1.96	0.65
1:K:228:GLY:O	1:K:232:GLN:HG2	1.96	0.65
1:N:179:LEU:HD22	1:O:352:ILE:HA	1.79	0.65
1:O:39:LEU:HD23	1:O:115:GLN:HB3	1.78	0.65
1:C:141:VAL:O	1:C:145:ASP:HB2	1.96	0.65
1:L:179:LEU:HD22	1:M:352:ILE:HA	1.79	0.65
1:B:228:GLY:O	1:B:232:GLN:HG2	1.96	0.65
1:D:31:ASN:HA	1:D:34:VAL:HG12	1.78	0.65
1:L:228:GLY:O	1:L:232:GLN:HG2	1.96	0.65
1:M:141:VAL:O	1:M:145:ASP:HB2	1.96	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:31:ASN:HA	1:N:34:VAL:HG12	1.78	0.65
1:P:39:LEU:HD23	1:P:115:GLN:HB3	1.77	0.65
1:G:141:VAL:O	1:G:145:ASP:HB2	1.96	0.65
1:A:31:ASN:HA	1:A:34:VAL:HG12	1.78	0.65
1:B:141:VAL:O	1:B:145:ASP:HB2	1.96	0.65
1:E:236:TRP:HD1	1:E:243:PRO:HA	1.62	0.65
1:I:141:VAL:O	1:I:145:ASP:HB2	1.96	0.65
1:I:179:LEU:HD22	1:J:352:ILE:HA	1.78	0.65
1:M:228:GLY:O	1:M:232:GLN:HG2	1.96	0.65
1:O:236:TRP:HD1	1:O:243:PRO:HA	1.62	0.65
1:C:228:GLY:O	1:C:232:GLN:HG2	1.96	0.65
1:F:39:LEU:HD23	1:F:115:GLN:HB3	1.78	0.65
1:I:228:GLY:O	1:I:232:GLN:HG2	1.96	0.65
1:J:252:ARG:NH1	1:J:254:ARG:HH12	1.93	0.65
1:L:141:VAL:O	1:L:145:ASP:HB2	1.96	0.65
1:D:236:TRP:HD1	1:D:243:PRO:HA	1.62	0.64
1:G:228:GLY:O	1:G:232:GLN:HG2	1.96	0.64
1:K:31:ASN:HA	1:K:34:VAL:HG12	1.78	0.64
1:N:236:TRP:HD1	1:N:243:PRO:HA	1.62	0.64
1:O:228:GLY:O	1:O:232:GLN:HG2	1.96	0.64
1:H:252:ARG:NH1	1:H:254:ARG:HH12	1.93	0.64
1:L:222:TRP:CZ3	1:L:224:PRO:HG2	2.33	0.64
1:B:222:TRP:CZ3	1:B:224:PRO:HG2	2.33	0.64
1:E:228:GLY:O	1:E:232:GLN:HG2	1.96	0.64
1:C:31:ASN:HA	1:C:34:VAL:HG12	1.78	0.64
1:F:236:TRP:HD1	1:F:243:PRO:HA	1.62	0.64
1:H:141:VAL:O	1:H:145:ASP:HB2	1.96	0.64
1:H:222:TRP:CZ3	1:H:224:PRO:HG2	2.33	0.64
1:J:222:TRP:CZ3	1:J:224:PRO:HG2	2.33	0.64
1:L:31:ASN:HA	1:L:34:VAL:HG12	1.78	0.64
1:M:31:ASN:HA	1:M:34:VAL:HG12	1.78	0.64
1:J:141:VAL:O	1:J:145:ASP:HB2	1.96	0.64
1:P:236:TRP:HD1	1:P:243:PRO:HA	1.62	0.64
1:G:222:TRP:CZ3	1:G:224:PRO:HG2	2.33	0.64
1:I:222:TRP:CZ3	1:I:224:PRO:HG2	2.33	0.64
1:B:31:ASN:HA	1:B:34:VAL:HG12	1.78	0.64
1:D:92:PHE:CE1	1:N:257:SER:HB2	2.33	0.64
1:P:222:TRP:CZ3	1:P:224:PRO:HG2	2.33	0.64
1:F:222:TRP:CZ3	1:F:224:PRO:HG2	2.33	0.64
1:M:236:TRP:HD1	1:M:243:PRO:HA	1.62	0.64
1:C:236:TRP:HD1	1:C:243:PRO:HA	1.62	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:222:TRP:CZ3	1:D:224:PRO:HG2	2.33	0.64
1:N:222:TRP:CZ3	1:N:224:PRO:HG2	2.33	0.64
1:C:92:PHE:CE1	1:O:257:SER:HB2	2.33	0.64
1:D:257:SER:HB2	1:N:92:PHE:CE1	2.33	0.64
1:I:252:ARG:NH1	1:I:254:ARG:HH12	1.93	0.64
1:O:222:TRP:CZ3	1:O:224:PRO:HG2	2.33	0.64
1:B:236:TRP:HD1	1:B:243:PRO:HA	1.62	0.63
1:G:236:TRP:HD1	1:G:243:PRO:HA	1.62	0.63
1:I:236:TRP:HD1	1:I:243:PRO:HA	1.62	0.63
1:L:236:TRP:HD1	1:L:243:PRO:HA	1.62	0.63
1:E:222:TRP:CZ3	1:E:224:PRO:HG2	2.33	0.63
1:M:222:TRP:CZ3	1:M:224:PRO:HG2	2.33	0.63
1:C:222:TRP:CZ3	1:C:224:PRO:HG2	2.33	0.63
1:G:252:ARG:NH1	1:G:254:ARG:HH12	1.93	0.63
1:K:222:TRP:CZ3	1:K:224:PRO:HG2	2.33	0.63
1:B:257:SER:HB2	1:P:92:PHE:CE1	2.33	0.63
1:F:92:PHE:CE1	1:L:257:SER:HB2	2.33	0.63
1:K:179:LEU:HD22	1:L:352:ILE:HA	1.81	0.63
1:A:222:TRP:CZ3	1:A:224:PRO:HG2	2.33	0.63
1:F:257:SER:HB2	1:L:92:PHE:CE1	2.33	0.63
1:F:357:LEU:O	1:F:360:SER:OG	2.11	0.63
1:B:92:PHE:CE1	1:P:257:SER:HB2	2.33	0.63
1:H:257:SER:HB2	1:J:92:PHE:CE1	2.33	0.63
1:N:84:VAL:HG12	1:N:247:HIS:CD2	2.34	0.63
1:P:357:LEU:O	1:P:360:SER:OG	2.11	0.63
1:B:84:VAL:HG12	1:B:247:HIS:CD2	2.34	0.63
1:D:84:VAL:HG12	1:D:247:HIS:CD2	2.34	0.63
1:L:84:VAL:HG12	1:L:247:HIS:CD2	2.34	0.63
1:A:92:PHE:CE1	1:I:257:SER:HB2	2.34	0.63
1:C:84:VAL:HG12	1:C:247:HIS:CD2	2.34	0.63
1:J:84:VAL:HG12	1:J:247:HIS:CD2	2.34	0.63
1:M:84:VAL:HG12	1:M:247:HIS:CD2	2.34	0.63
1:A:84:VAL:HG12	1:A:247:HIS:CD2	2.34	0.62
1:E:84:VAL:HG12	1:E:247:HIS:CD2	2.34	0.62
1:G:357:LEU:O	1:G:360:SER:OG	2.11	0.62
1:H:84:VAL:HG12	1:H:247:HIS:CD2	2.34	0.62
1:N:261:ASP:N	1:N:261:ASP:OD1	2.32	0.62
1:O:84:VAL:HG12	1:O:247:HIS:CD2	2.34	0.62
1:A:357:LEU:O	1:A:360:SER:OG	2.11	0.62
1:D:261:ASP:OD1	1:D:261:ASP:N	2.32	0.62
1:K:84:VAL:HG12	1:K:247:HIS:CD2	2.34	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:92:PHE:CE1	1:J:257:SER:HB2	2.33	0.62
1:I:357:LEU:O	1:I:360:SER:OG	2.11	0.62
1:K:357:LEU:O	1:K:360:SER:OG	2.11	0.62
1:P:252:ARG:NH1	1:P:254:ARG:HH12	1.93	0.62
1:M:261:ASP:OD1	1:M:261:ASP:N	2.32	0.62
1:C:261:ASP:N	1:C:261:ASP:OD1	2.32	0.62
1:E:284:LEU:O	1:E:287:VAL:N	2.33	0.62
1:A:284:LEU:O	1:A:287:VAL:N	2.33	0.62
1:N:284:LEU:O	1:N:287:VAL:N	2.33	0.62
1:O:284:LEU:O	1:O:287:VAL:N	2.33	0.62
1:A:236:TRP:HD1	1:A:243:PRO:HA	1.62	0.62
1:D:284:LEU:O	1:D:287:VAL:N	2.33	0.62
1:F:252:ARG:NH1	1:F:254:ARG:HH12	1.93	0.62
1:F:284:LEU:O	1:F:287:VAL:N	2.33	0.62
1:K:284:LEU:O	1:K:287:VAL:N	2.33	0.62
1:P:284:LEU:O	1:P:287:VAL:N	2.33	0.62
1:K:236:TRP:HD1	1:K:243:PRO:HA	1.62	0.62
1:H:236:TRP:HD1	1:H:243:PRO:HA	1.62	0.62
1:M:284:LEU:O	1:M:287:VAL:N	2.33	0.62
1:C:284:LEU:O	1:C:287:VAL:N	2.33	0.61
1:E:357:LEU:O	1:E:360:SER:OG	2.11	0.61
1:G:84:VAL:HG12	1:G:247:HIS:CD2	2.34	0.61
1:I:84:VAL:HG12	1:I:247:HIS:CD2	2.34	0.61
1:J:236:TRP:HD1	1:J:243:PRO:HA	1.62	0.61
1:O:357:LEU:O	1:O:360:SER:OG	2.11	0.61
1:P:84:VAL:HG12	1:P:247:HIS:CD2	2.34	0.61
1:F:84:VAL:HG12	1:F:247:HIS:CD2	2.34	0.61
1:H:284:LEU:O	1:H:287:VAL:N	2.33	0.61
1:J:284:LEU:O	1:J:287:VAL:N	2.33	0.61
1:E:92:PHE:CE1	1:M:257:SER:HB2	2.33	0.61
1:G:284:LEU:O	1:G:287:VAL:N	2.33	0.61
1:H:261:ASP:N	1:H:261:ASP:OD1	2.32	0.61
1:L:261:ASP:OD1	1:L:261:ASP:N	2.32	0.61
1:C:257:SER:HB2	1:O:92:PHE:CE1	2.33	0.61
1:I:284:LEU:O	1:I:287:VAL:N	2.33	0.61
1:B:261:ASP:OD1	1:B:261:ASP:N	2.32	0.61
1:G:111:VAL:O	1:G:115:GLN:HG2	2.01	0.61
1:I:111:VAL:O	1:I:115:GLN:HG2	2.01	0.61
1:J:261:ASP:OD1	1:J:261:ASP:N	2.32	0.61
1:A:257:SER:HB2	1:I:92:PHE:CE1	2.34	0.61
1:K:111:VAL:O	1:K:115:GLN:HG2	2.01	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:252:ARG:NH1	1:O:254:ARG:HH12	1.93	0.61
1:A:111:VAL:O	1:A:115:GLN:HG2	2.01	0.61
1:O:168:ARG:NH2	1:P:153:ASP:O	2.28	0.61
1:B:111:VAL:O	1:B:115:GLN:HG2	2.01	0.61
1:C:59:TRP:CG	1:C:59:TRP:O	2.54	0.61
1:E:168:ARG:NH2	1:F:153:ASP:O	2.29	0.61
1:E:261:ASP:OD1	1:E:261:ASP:N	2.32	0.61
1:M:59:TRP:O	1:M:59:TRP:CG	2.54	0.61
1:O:261:ASP:OD1	1:O:261:ASP:N	2.32	0.61
1:B:59:TRP:CG	1:B:59:TRP:O	2.54	0.61
1:D:327:ASP:O	1:D:330:PHE:N	2.34	0.61
1:L:59:TRP:CG	1:L:59:TRP:O	2.54	0.61
1:L:284:LEU:O	1:L:287:VAL:N	2.33	0.61
1:N:111:VAL:O	1:N:115:GLN:HG2	2.01	0.61
1:N:327:ASP:O	1:N:330:PHE:N	2.34	0.61
1:B:284:LEU:O	1:B:287:VAL:N	2.33	0.60
1:D:111:VAL:O	1:D:115:GLN:HG2	2.01	0.60
1:E:111:VAL:O	1:E:115:GLN:HG2	2.01	0.60
1:E:252:ARG:NH1	1:E:254:ARG:HH12	1.93	0.60
1:F:102:ILE:HD11	1:F:104:TYR:HE2	1.66	0.60
1:F:136:ASP:OD1	1:F:136:ASP:N	2.31	0.60
1:H:111:VAL:O	1:H:115:GLN:HG2	2.01	0.60
1:J:111:VAL:O	1:J:115:GLN:HG2	2.01	0.60
1:L:111:VAL:O	1:L:115:GLN:HG2	2.01	0.60
1:O:111:VAL:O	1:O:115:GLN:HG2	2.01	0.60
1:P:136:ASP:N	1:P:136:ASP:OD1	2.31	0.60
1:E:102:ILE:HD11	1:E:104:TYR:HE2	1.66	0.60
1:E:327:ASP:O	1:E:330:PHE:N	2.34	0.60
1:G:147:PHE:HD1	1:G:168:ARG:HH11	1.49	0.60
1:I:147:PHE:HD1	1:I:168:ARG:HH11	1.49	0.60
1:O:102:ILE:HD11	1:O:104:TYR:HE2	1.66	0.60
1:O:327:ASP:O	1:O:330:PHE:N	2.34	0.60
1:D:59:TRP:CG	1:D:59:TRP:O	2.54	0.60
1:F:261:ASP:N	1:F:261:ASP:OD1	2.32	0.60
1:G:102:ILE:HD11	1:G:104:TYR:HE2	1.66	0.60
1:H:102:ILE:HD11	1:H:104:TYR:HE2	1.66	0.60
1:H:147:PHE:HD1	1:H:168:ARG:HH11	1.49	0.60
1:H:357:LEU:O	1:H:360:SER:OG	2.11	0.60
1:I:102:ILE:HD11	1:I:104:TYR:HE2	1.66	0.60
1:J:102:ILE:HD11	1:J:104:TYR:HE2	1.66	0.60
1:J:147:PHE:HD1	1:J:168:ARG:HH11	1.49	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:338:GLY:O	1:D:342:MET:HG2	2.02	0.60
1:I:338:GLY:O	1:I:342:MET:HG2	2.02	0.60
1:J:74:GLN:O	1:J:77:PHE:N	2.35	0.60
1:K:102:ILE:HD11	1:K:104:TYR:HE2	1.66	0.60
1:M:111:VAL:O	1:M:115:GLN:HG2	2.01	0.60
1:N:59:TRP:CG	1:N:59:TRP:O	2.54	0.60
1:N:338:GLY:O	1:N:342:MET:HG2	2.02	0.60
1:P:102:ILE:HD11	1:P:104:TYR:HE2	1.66	0.60
1:A:102:ILE:HD11	1:A:104:TYR:HE2	1.66	0.60
1:A:327:ASP:O	1:A:330:PHE:N	2.34	0.60
1:C:111:VAL:O	1:C:115:GLN:HG2	2.01	0.60
1:C:327:ASP:O	1:C:330:PHE:N	2.34	0.60
1:F:327:ASP:O	1:F:330:PHE:N	2.34	0.60
1:H:74:GLN:O	1:H:77:PHE:N	2.35	0.60
1:P:261:ASP:N	1:P:261:ASP:OD1	2.32	0.60
1:G:338:GLY:O	1:G:342:MET:HG2	2.02	0.60
1:I:327:ASP:O	1:I:330:PHE:N	2.34	0.60
1:J:357:LEU:O	1:J:360:SER:OG	2.11	0.60
1:K:327:ASP:O	1:K:330:PHE:N	2.34	0.60
1:P:327:ASP:O	1:P:330:PHE:N	2.34	0.60
1:B:327:ASP:O	1:B:330:PHE:N	2.34	0.60
1:D:147:PHE:HD1	1:D:168:ARG:HH11	1.49	0.60
1:F:74:GLN:O	1:F:77:PHE:N	2.35	0.60
1:G:74:GLN:O	1:G:77:PHE:N	2.35	0.60
1:G:327:ASP:O	1:G:330:PHE:N	2.34	0.60
1:K:261:ASP:N	1:K:261:ASP:OD1	2.32	0.60
1:M:327:ASP:O	1:M:330:PHE:N	2.34	0.60
1:P:74:GLN:O	1:P:77:PHE:N	2.35	0.60
1:A:144:VAL:O	1:A:147:PHE:HB3	2.02	0.60
1:E:257:SER:HB2	1:M:92:PHE:CE1	2.33	0.60
1:H:327:ASP:O	1:H:330:PHE:N	2.34	0.60
1:I:74:GLN:O	1:I:77:PHE:N	2.35	0.60
1:J:327:ASP:O	1:J:330:PHE:N	2.34	0.60
1:K:144:VAL:O	1:K:147:PHE:HB3	2.02	0.60
1:K:147:PHE:HD1	1:K:168:ARG:HH11	1.49	0.60
1:L:327:ASP:O	1:L:330:PHE:N	2.34	0.60
1:M:147:PHE:HD1	1:M:168:ARG:HH11	1.49	0.60
1:N:147:PHE:HD1	1:N:168:ARG:HH11	1.49	0.60
1:O:144:VAL:O	1:O:147:PHE:HB3	2.02	0.60
1:A:147:PHE:HD1	1:A:168:ARG:HH11	1.49	0.60
1:A:261:ASP:N	1:A:261:ASP:OD1	2.32	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:144:VAL:O	1:B:147:PHE:HB3	2.02	0.60
1:C:147:PHE:HD1	1:C:168:ARG:HH11	1.49	0.60
1:K:59:TRP:CG	1:K:59:TRP:O	2.54	0.60
1:P:59:TRP:O	1:P:59:TRP:CG	2.54	0.60
1:D:102:ILE:HD11	1:D:104:TYR:HE2	1.66	0.60
1:E:144:VAL:O	1:E:147:PHE:HB3	2.02	0.60
1:E:338:GLY:O	1:E:342:MET:HG2	2.02	0.60
1:F:59:TRP:CG	1:F:59:TRP:O	2.54	0.60
1:F:111:VAL:O	1:F:115:GLN:HG2	2.01	0.60
1:F:140:ALA:O	1:F:144:VAL:HG12	2.02	0.60
1:M:252:ARG:NH1	1:M:254:ARG:HH12	1.93	0.60
1:N:102:ILE:HD11	1:N:104:TYR:HE2	1.66	0.60
1:N:252:ARG:NH1	1:N:254:ARG:HH12	1.93	0.60
1:P:140:ALA:O	1:P:144:VAL:HG12	2.02	0.60
1:P:144:VAL:O	1:P:147:PHE:HB3	2.02	0.60
1:A:59:TRP:CG	1:A:59:TRP:O	2.54	0.59
1:F:144:VAL:O	1:F:147:PHE:HB3	2.02	0.59
1:G:59:TRP:CG	1:G:59:TRP:O	2.54	0.59
1:I:59:TRP:CG	1:I:59:TRP:O	2.54	0.59
1:I:140:ALA:O	1:I:144:VAL:HG12	2.02	0.59
1:J:144:VAL:O	1:J:147:PHE:HB3	2.02	0.59
1:K:74:GLN:O	1:K:77:PHE:N	2.35	0.59
1:L:144:VAL:O	1:L:147:PHE:HB3	2.02	0.59
1:M:357:LEU:O	1:M:360:SER:OG	2.11	0.59
1:P:111:VAL:O	1:P:115:GLN:HG2	2.01	0.59
1:A:74:GLN:O	1:A:77:PHE:N	2.35	0.59
1:A:140:ALA:O	1:A:144:VAL:HG12	2.02	0.59
1:B:102:ILE:HD11	1:B:104:TYR:HE2	1.66	0.59
1:B:338:GLY:O	1:B:342:MET:HG2	2.02	0.59
1:C:252:ARG:NH1	1:C:254:ARG:HH12	1.93	0.59
1:E:59:TRP:O	1:E:59:TRP:CG	2.54	0.59
1:G:140:ALA:O	1:G:144:VAL:HG12	2.02	0.59
1:H:144:VAL:O	1:H:147:PHE:HB3	2.02	0.59
1:L:338:GLY:O	1:L:342:MET:HG2	2.02	0.59
1:M:338:GLY:O	1:M:342:MET:HG2	2.02	0.59
1:O:59:TRP:CG	1:O:59:TRP:O	2.54	0.59
1:A:168:ARG:NH2	1:B:153:ASP:O	2.28	0.59
1:B:74:GLN:O	1:B:77:PHE:N	2.35	0.59
1:C:144:VAL:O	1:C:147:PHE:HB3	2.02	0.59
1:C:338:GLY:O	1:C:342:MET:HG2	2.02	0.59
1:F:147:PHE:HD1	1:F:168:ARG:HH11	1.49	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:352:ILE:O	1:F:355:SER:OG	2.17	0.59
1:G:144:VAL:O	1:G:147:PHE:HB3	2.02	0.59
1:H:338:GLY:O	1:H:342:MET:HG2	2.02	0.59
1:I:144:VAL:O	1:I:147:PHE:HB3	2.02	0.59
1:I:261:ASP:N	1:I:261:ASP:OD1	2.32	0.59
1:J:140:ALA:O	1:J:144:VAL:HG12	2.02	0.59
1:J:338:GLY:O	1:J:342:MET:HG2	2.02	0.59
1:K:140:ALA:O	1:K:144:VAL:HG12	2.02	0.59
1:L:74:GLN:O	1:L:77:PHE:N	2.35	0.59
1:L:102:ILE:HD11	1:L:104:TYR:HE2	1.66	0.59
1:N:144:VAL:O	1:N:147:PHE:HB3	2.02	0.59
1:N:357:LEU:O	1:N:360:SER:OG	2.11	0.59
1:O:338:GLY:O	1:O:342:MET:HG2	2.02	0.59
1:P:352:ILE:O	1:P:355:SER:OG	2.17	0.59
1:C:168:ARG:NH2	1:D:153:ASP:O	2.28	0.59
1:D:144:VAL:O	1:D:147:PHE:HB3	2.02	0.59
1:D:252:ARG:NH1	1:D:254:ARG:HH12	1.93	0.59
1:E:136:ASP:N	1:E:136:ASP:OD1	2.31	0.59
1:E:140:ALA:O	1:E:144:VAL:HG12	2.02	0.59
1:H:59:TRP:CG	1:H:59:TRP:O	2.54	0.59
1:H:140:ALA:O	1:H:144:VAL:HG12	2.02	0.59
1:J:59:TRP:CG	1:J:59:TRP:O	2.54	0.59
1:J:253:ARG:HH22	1:K:89:GLN:HA	1.67	0.59
1:K:338:GLY:O	1:K:342:MET:HG2	2.02	0.59
1:M:144:VAL:O	1:M:147:PHE:HB3	2.02	0.59
1:O:74:GLN:O	1:O:77:PHE:N	2.35	0.59
1:O:147:PHE:HD1	1:O:168:ARG:HH11	1.49	0.59
1:A:338:GLY:O	1:A:342:MET:HG2	2.02	0.59
1:E:74:GLN:O	1:E:77:PHE:N	2.35	0.59
1:L:147:PHE:HD1	1:L:168:ARG:HH11	1.49	0.59
1:O:136:ASP:OD1	1:O:136:ASP:N	2.31	0.59
1:O:140:ALA:O	1:O:144:VAL:HG12	2.02	0.59
1:P:147:PHE:HD1	1:P:168:ARG:HH11	1.49	0.59
1:B:147:PHE:HD1	1:B:168:ARG:HH11	1.49	0.59
1:C:89:GLN:HG2	1:P:89:GLN:HG2	1.85	0.59
1:G:261:ASP:OD1	1:G:261:ASP:N	2.32	0.59
1:C:74:GLN:O	1:C:77:PHE:N	2.35	0.59
1:D:89:GLN:HG2	1:O:89:GLN:HG2	1.84	0.59
1:E:147:PHE:HD1	1:E:168:ARG:HH11	1.49	0.59
1:E:188:MET:HA	1:E:191:PHE:HD2	1.68	0.59
1:F:89:GLN:HG2	1:M:89:GLN:HG2	1.85	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:352:ILE:O	1:G:355:SER:OG	2.17	0.59
1:I:352:ILE:O	1:I:355:SER:OG	2.17	0.59
1:K:188:MET:HA	1:K:191:PHE:HD2	1.68	0.59
1:L:140:ALA:O	1:L:144:VAL:HG12	2.02	0.59
1:M:74:GLN:O	1:M:77:PHE:N	2.35	0.59
1:B:140:ALA:O	1:B:144:VAL:HG12	2.02	0.59
1:B:357:LEU:O	1:B:360:SER:OG	2.11	0.59
1:O:188:MET:HA	1:O:191:PHE:HD2	1.68	0.59
1:P:188:MET:HA	1:P:191:PHE:HD2	1.68	0.59
1:A:188:MET:HA	1:A:191:PHE:HD2	1.68	0.59
1:C:357:LEU:O	1:C:360:SER:OG	2.11	0.59
1:F:188:MET:HA	1:F:191:PHE:HD2	1.68	0.59
1:P:338:GLY:O	1:P:342:MET:HG2	2.02	0.59
1:F:338:GLY:O	1:F:342:MET:HG2	2.02	0.58
1:L:357:LEU:O	1:L:360:SER:OG	2.11	0.58
1:D:140:ALA:O	1:D:144:VAL:HG12	2.02	0.58
1:D:357:LEU:O	1:D:360:SER:OG	2.11	0.58
1:H:188:MET:HA	1:H:191:PHE:HD2	1.68	0.58
1:J:188:MET:HA	1:J:191:PHE:HD2	1.68	0.58
1:M:168:ARG:NH2	1:N:153:ASP:O	2.29	0.58
1:N:140:ALA:O	1:N:144:VAL:HG12	2.02	0.58
1:D:74:GLN:O	1:D:77:PHE:N	2.35	0.58
1:E:352:ILE:O	1:E:355:SER:OG	2.17	0.58
1:G:168:ARG:NH2	1:H:153:ASP:O	2.29	0.58
1:L:188:MET:HA	1:L:191:PHE:HD2	1.68	0.58
1:B:188:MET:HA	1:B:191:PHE:HD2	1.68	0.58
1:C:188:MET:HA	1:C:191:PHE:HD2	1.68	0.58
1:E:89:GLN:HG2	1:N:89:GLN:HG2	1.85	0.58
1:M:102:ILE:HD11	1:M:104:TYR:HE2	1.66	0.58
1:O:352:ILE:O	1:O:355:SER:OG	2.17	0.58
1:M:188:MET:HA	1:M:191:PHE:HD2	1.68	0.58
1:A:15:ILE:O	1:A:19:PHE:CB	2.52	0.58
1:N:74:GLN:O	1:N:77:PHE:N	2.35	0.58
1:C:15:ILE:O	1:C:19:PHE:CB	2.52	0.58
1:G:136:ASP:N	1:G:136:ASP:OD1	2.31	0.58
1:H:15:ILE:O	1:H:19:PHE:CB	2.52	0.58
1:H:136:ASP:N	1:H:136:ASP:OD1	2.31	0.58
1:I:168:ARG:NH2	1:J:153:ASP:O	2.29	0.58
1:K:15:ILE:O	1:K:19:PHE:CB	2.52	0.58
1:C:102:ILE:HD11	1:C:104:TYR:HE2	1.66	0.58
1:J:15:ILE:O	1:J:19:PHE:CB	2.52	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:136:ASP:N	1:J:136:ASP:OD1	2.31	0.58
1:M:15:ILE:O	1:M:19:PHE:CB	2.52	0.58
1:B:15:ILE:O	1:B:19:PHE:CB	2.52	0.58
1:C:140:ALA:O	1:C:144:VAL:HG12	2.02	0.58
1:D:15:ILE:O	1:D:19:PHE:CB	2.52	0.58
1:F:15:ILE:O	1:F:19:PHE:CB	2.52	0.58
1:G:15:ILE:O	1:G:19:PHE:CB	2.52	0.58
1:I:15:ILE:O	1:I:19:PHE:CB	2.52	0.58
1:L:15:ILE:O	1:L:19:PHE:CB	2.52	0.58
1:N:15:ILE:O	1:N:19:PHE:CB	2.52	0.58
1:P:15:ILE:O	1:P:19:PHE:CB	2.52	0.58
1:I:136:ASP:OD1	1:I:136:ASP:N	2.31	0.58
1:L:60:THR:HG21	1:L:69:VAL:HG22	1.86	0.58
1:M:140:ALA:O	1:M:144:VAL:HG12	2.02	0.58
1:O:106:GLN:O	1:P:275:LYS:NZ	2.37	0.58
1:B:60:THR:HG21	1:B:69:VAL:HG22	1.86	0.57
1:B:252:ARG:NH1	1:B:254:ARG:HH12	1.93	0.57
1:E:106:GLN:O	1:F:275:LYS:NZ	2.37	0.57
1:I:355:SER:HB3	1:P:179:LEU:HD21	1.86	0.57
1:L:252:ARG:NH1	1:L:254:ARG:HH12	1.93	0.57
1:A:89:GLN:HG2	1:J:89:GLN:HG2	1.85	0.57
1:C:60:THR:HG21	1:C:69:VAL:HG22	1.86	0.57
1:I:188:MET:HA	1:I:191:PHE:HD2	1.68	0.57
1:M:60:THR:HG21	1:M:69:VAL:HG22	1.86	0.57
1:E:15:ILE:O	1:E:19:PHE:CB	2.52	0.57
1:G:92:PHE:CE1	1:K:257:SER:HB2	2.38	0.57
1:G:188:MET:HA	1:G:191:PHE:HD2	1.68	0.57
1:H:352:ILE:O	1:H:355:SER:OG	2.17	0.57
1:I:15:ILE:O	1:I:19:PHE:HB3	2.05	0.57
1:J:352:ILE:O	1:J:355:SER:OG	2.17	0.57
1:A:60:THR:HG21	1:A:69:VAL:HG22	1.86	0.57
1:D:60:THR:HG21	1:D:69:VAL:HG22	1.86	0.57
1:F:106:GLN:O	1:G:275:LYS:NZ	2.38	0.57
1:G:15:ILE:O	1:G:19:PHE:HB3	2.05	0.57
1:H:67:GLN:OE1	1:H:67:GLN:N	2.38	0.57
1:H:89:GLN:HG2	1:K:89:GLN:HG2	1.85	0.57
1:J:67:GLN:OE1	1:J:67:GLN:N	2.38	0.57
1:K:60:THR:HG21	1:K:69:VAL:HG22	1.86	0.57
1:N:60:THR:HG21	1:N:69:VAL:HG22	1.86	0.57
1:P:15:ILE:O	1:P:19:PHE:HB3	2.05	0.57
1:D:136:ASP:OD1	1:D:136:ASP:N	2.31	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:15:ILE:O	1:F:19:PHE:HB3	2.05	0.57
1:H:15:ILE:O	1:H:19:PHE:HB3	2.05	0.57
1:J:15:ILE:O	1:J:19:PHE:HB3	2.05	0.57
1:O:15:ILE:O	1:O:19:PHE:CB	2.52	0.57
1:A:104:TYR:OH	1:A:270:ASN:OD1	2.23	0.57
1:A:179:LEU:HD21	1:B:355:SER:HB3	1.86	0.57
1:B:104:TYR:OH	1:B:270:ASN:OD1	2.23	0.57
1:C:179:LEU:HD21	1:D:355:SER:HB3	1.87	0.57
1:D:188:MET:HA	1:D:191:PHE:HD2	1.68	0.57
1:E:67:GLN:OE1	1:E:67:GLN:N	2.38	0.57
1:K:104:TYR:OH	1:K:270:ASN:OD1	2.23	0.57
1:N:136:ASP:OD1	1:N:136:ASP:N	2.31	0.57
1:O:67:GLN:OE1	1:O:67:GLN:N	2.38	0.57
1:P:67:GLN:OE1	1:P:67:GLN:N	2.38	0.57
1:C:106:GLN:O	1:D:275:LYS:NZ	2.37	0.57
1:F:67:GLN:N	1:F:67:GLN:OE1	2.38	0.57
1:G:89:GLN:HG2	1:L:89:GLN:HG2	1.85	0.57
1:L:104:TYR:OH	1:L:270:ASN:OD1	2.23	0.57
1:O:60:THR:HG21	1:O:69:VAL:HG22	1.86	0.57
1:P:211:THR:O	1:P:220:THR:OG1	2.20	0.57
1:E:60:THR:HG21	1:E:69:VAL:HG22	1.86	0.57
1:G:106:GLN:O	1:H:275:LYS:NZ	2.38	0.57
1:N:106:GLN:O	1:O:275:LYS:NZ	2.38	0.57
1:N:188:MET:HA	1:N:191:PHE:HD2	1.68	0.57
1:O:15:ILE:O	1:O:19:PHE:HB3	2.05	0.57
1:A:106:GLN:O	1:B:275:LYS:NZ	2.37	0.57
1:B:89:GLN:HG2	1:I:89:GLN:HG2	1.85	0.57
1:C:15:ILE:O	1:C:19:PHE:HB3	2.05	0.57
1:D:15:ILE:O	1:D:19:PHE:HB3	2.05	0.57
1:D:179:LEU:HD21	1:E:355:SER:HB3	1.87	0.57
1:E:15:ILE:O	1:E:19:PHE:HB3	2.05	0.57
1:E:179:LEU:HD21	1:F:355:SER:HB3	1.87	0.57
1:F:104:TYR:OH	1:F:270:ASN:OD1	2.23	0.57
1:F:168:ARG:NH2	1:G:153:ASP:O	2.29	0.57
1:G:67:GLN:OE1	1:G:67:GLN:N	2.38	0.57
1:N:15:ILE:O	1:N:19:PHE:HB3	2.05	0.57
1:N:67:GLN:OE1	1:N:67:GLN:N	2.38	0.57
1:O:179:LEU:HD21	1:P:355:SER:HB3	1.86	0.57
1:P:104:TYR:OH	1:P:270:ASN:OD1	2.23	0.57
1:A:136:ASP:OD1	1:A:136:ASP:N	2.31	0.56
1:C:211:THR:O	1:C:220:THR:OG1	2.20	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:211:THR:O	1:G:220:THR:OG1	2.20	0.56
1:I:67:GLN:N	1:I:67:GLN:OE1	2.38	0.56
1:K:136:ASP:N	1:K:136:ASP:OD1	2.31	0.56
1:B:15:ILE:O	1:B:19:PHE:HB3	2.05	0.56
1:B:106:GLN:O	1:C:275:LYS:NZ	2.37	0.56
1:B:130:ILE:HD11	1:B:188:MET:HE3	1.87	0.56
1:B:179:LEU:HD21	1:C:355:SER:HB3	1.87	0.56
1:D:67:GLN:OE1	1:D:67:GLN:N	2.38	0.56
1:F:179:LEU:HD21	1:G:355:SER:HB3	1.87	0.56
1:G:145:ASP:HA	1:G:349:LEU:HD21	1.87	0.56
1:I:145:ASP:HA	1:I:349:LEU:HD21	1.87	0.56
1:K:15:ILE:O	1:K:19:PHE:HB3	2.05	0.56
1:K:168:ARG:NH2	1:L:153:ASP:O	2.30	0.56
1:L:67:GLN:N	1:L:67:GLN:OE1	2.38	0.56
1:L:106:GLN:O	1:M:275:LYS:NZ	2.38	0.56
1:L:130:ILE:HD11	1:L:188:MET:HE3	1.87	0.56
1:M:15:ILE:O	1:M:19:PHE:HB3	2.05	0.56
1:M:179:LEU:HD21	1:N:355:SER:HB3	1.87	0.56
1:O:104:TYR:OH	1:O:270:ASN:OD1	2.23	0.56
1:A:15:ILE:O	1:A:19:PHE:HB3	2.05	0.56
1:A:67:GLN:N	1:A:67:GLN:OE1	2.38	0.56
1:A:252:ARG:NH1	1:A:254:ARG:HH12	1.93	0.56
1:B:67:GLN:OE1	1:B:67:GLN:N	2.38	0.56
1:C:173:ILE:O	1:C:176:GLY:N	2.39	0.56
1:D:352:ILE:O	1:D:355:SER:OG	2.17	0.56
1:E:104:TYR:OH	1:E:270:ASN:OD1	2.23	0.56
1:F:211:THR:O	1:F:220:THR:OG1	2.20	0.56
1:G:104:TYR:OH	1:G:270:ASN:OD1	2.23	0.56
1:H:60:THR:HG21	1:H:69:VAL:HG22	1.86	0.56
1:I:153:ASP:O	1:P:168:ARG:NH2	2.29	0.56
1:I:211:THR:O	1:I:220:THR:OG1	2.20	0.56
1:J:60:THR:HG21	1:J:69:VAL:HG22	1.86	0.56
1:J:104:TYR:OH	1:J:270:ASN:OD1	2.23	0.56
1:K:67:GLN:OE1	1:K:67:GLN:N	2.38	0.56
1:K:252:ARG:NH1	1:K:254:ARG:HH12	1.93	0.56
1:L:15:ILE:O	1:L:19:PHE:HB3	2.05	0.56
1:M:173:ILE:O	1:M:176:GLY:N	2.39	0.56
1:M:211:THR:O	1:M:220:THR:OG1	2.20	0.56
1:O:130:ILE:HD11	1:O:188:MET:HE3	1.87	0.56
1:P:130:ILE:HD11	1:P:188:MET:HE3	1.87	0.56
1:H:104:TYR:OH	1:H:270:ASN:OD1	2.23	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:211:THR:O	1:H:220:THR:OG1	2.20	0.56
1:I:106:GLN:O	1:J:275:LYS:NZ	2.38	0.56
1:L:145:ASP:HA	1:L:349:LEU:HD21	1.87	0.56
1:M:130:ILE:HD11	1:M:188:MET:HE3	1.87	0.56
1:N:173:ILE:O	1:N:176:GLY:N	2.39	0.56
1:N:179:LEU:HD21	1:O:355:SER:HB3	1.88	0.56
1:N:352:ILE:O	1:N:355:SER:OG	2.17	0.56
1:A:89:GLN:HA	1:H:253:ARG:HH22	1.71	0.56
1:B:145:ASP:HA	1:B:349:LEU:HD21	1.87	0.56
1:C:130:ILE:HD11	1:C:188:MET:HE3	1.87	0.56
1:C:253:ARG:HH22	1:D:89:GLN:HA	1.71	0.56
1:D:130:ILE:HD11	1:D:188:MET:HE3	1.87	0.56
1:D:173:ILE:O	1:D:176:GLY:N	2.39	0.56
1:G:60:THR:HG21	1:G:69:VAL:HG22	1.86	0.56
1:H:130:ILE:HD11	1:H:188:MET:HE3	1.87	0.56
1:I:104:TYR:OH	1:I:270:ASN:OD1	2.23	0.56
1:J:106:GLN:O	1:K:275:LYS:NZ	2.38	0.56
1:K:179:LEU:HD21	1:L:355:SER:HB3	1.87	0.56
1:M:145:ASP:HA	1:M:349:LEU:HD21	1.87	0.56
1:M:253:ARG:HH22	1:N:89:GLN:HA	1.71	0.56
1:N:253:ARG:HH22	1:O:89:GLN:HA	1.71	0.56
1:O:173:ILE:O	1:O:176:GLY:N	2.39	0.56
1:P:154:LYS:HG2	1:P:156:ASP:H	1.71	0.56
1:C:67:GLN:OE1	1:C:67:GLN:N	2.38	0.56
1:C:104:TYR:OH	1:C:270:ASN:OD1	2.23	0.56
1:E:173:ILE:O	1:E:176:GLY:N	2.39	0.56
1:F:60:THR:HG21	1:F:69:VAL:HG22	1.86	0.56
1:F:130:ILE:HD11	1:F:188:MET:HE3	1.87	0.56
1:F:154:LYS:HG2	1:F:156:ASP:H	1.71	0.56
1:H:89:GLN:HB2	1:K:92:PHE:CZ	2.41	0.56
1:N:130:ILE:HD11	1:N:188:MET:HE3	1.87	0.56
1:P:60:THR:HG21	1:P:69:VAL:HG22	1.86	0.56
1:D:253:ARG:HH22	1:E:89:GLN:HA	1.71	0.56
1:E:130:ILE:HD11	1:E:188:MET:HE3	1.87	0.56
1:I:60:THR:HG21	1:I:69:VAL:HG22	1.86	0.56
1:I:253:ARG:HH22	1:J:89:GLN:HA	1.71	0.56
1:J:211:THR:O	1:J:220:THR:OG1	2.20	0.56
1:L:179:LEU:HD21	1:M:355:SER:HB3	1.88	0.56
1:M:67:GLN:OE1	1:M:67:GLN:N	2.38	0.56
1:N:104:TYR:OH	1:N:270:ASN:OD1	2.23	0.56
1:N:154:LYS:HG2	1:N:156:ASP:H	1.71	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:130:ILE:HD11	1:A:188:MET:HE3	1.87	0.56
1:A:253:ARG:HH22	1:B:89:GLN:HA	1.71	0.56
1:B:173:ILE:O	1:B:176:GLY:N	2.39	0.56
1:B:253:ARG:HH22	1:C:89:GLN:HA	1.71	0.56
1:C:145:ASP:HA	1:C:349:LEU:HD21	1.87	0.56
1:D:104:TYR:OH	1:D:270:ASN:OD1	2.23	0.56
1:D:154:LYS:HG2	1:D:156:ASP:H	1.71	0.56
1:E:211:THR:O	1:E:220:THR:OG1	2.20	0.56
1:F:173:ILE:O	1:F:176:GLY:N	2.39	0.56
1:F:253:ARG:HH22	1:G:89:GLN:HA	1.71	0.56
1:J:154:LYS:HG2	1:J:156:ASP:H	1.71	0.56
1:L:173:ILE:O	1:L:176:GLY:N	2.39	0.56
1:L:253:ARG:HH22	1:M:89:GLN:HA	1.71	0.56
1:M:104:TYR:OH	1:M:270:ASN:OD1	2.23	0.56
1:N:145:ASP:HA	1:N:349:LEU:HD21	1.87	0.56
1:P:173:ILE:O	1:P:176:GLY:N	2.39	0.56
1:C:154:LYS:HG2	1:C:156:ASP:H	1.71	0.56
1:D:145:ASP:HA	1:D:349:LEU:HD21	1.87	0.56
1:E:145:ASP:HA	1:E:349:LEU:HD21	1.87	0.56
1:E:253:ARG:HH22	1:F:89:GLN:HA	1.71	0.56
1:G:179:LEU:HD21	1:H:355:SER:HB3	1.87	0.56
1:M:154:LYS:HG2	1:M:156:ASP:H	1.71	0.56
1:O:145:ASP:HA	1:O:349:LEU:HD21	1.87	0.56
1:G:253:ARG:HH22	1:H:89:GLN:HA	1.71	0.56
1:H:154:LYS:HG2	1:H:156:ASP:H	1.71	0.56
1:K:130:ILE:HD11	1:K:188:MET:HE3	1.87	0.56
1:O:211:THR:O	1:O:220:THR:OG1	2.21	0.56
1:O:253:ARG:HH22	1:P:89:GLN:HA	1.71	0.56
1:K:219:TYR:CD1	1:K:220:THR:N	2.74	0.55
1:A:145:ASP:HA	1:A:349:LEU:HD21	1.87	0.55
1:A:219:TYR:CD1	1:A:220:THR:N	2.74	0.55
1:B:219:TYR:CD1	1:B:220:THR:N	2.75	0.55
1:C:219:TYR:CD1	1:C:220:THR:N	2.74	0.55
1:D:211:THR:O	1:D:220:THR:OG1	2.21	0.55
1:I:89:GLN:HA	1:P:253:ARG:HH22	1.72	0.55
1:L:219:TYR:CD1	1:L:220:THR:N	2.75	0.55
1:M:219:TYR:CD1	1:M:220:THR:N	2.74	0.55
1:N:211:THR:O	1:N:220:THR:OG1	2.20	0.55
1:A:154:LYS:HG2	1:A:156:ASP:H	1.71	0.55
1:B:136:ASP:OD1	1:B:136:ASP:N	2.31	0.55
1:C:136:ASP:N	1:C:136:ASP:OD1	2.31	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:186:ARG:HB3	1:G:336:GLU:HG2	1.89	0.55
1:H:92:PHE:CZ	1:K:89:GLN:HB2	2.42	0.55
1:K:145:ASP:HA	1:K:349:LEU:HD21	1.87	0.55
1:K:154:LYS:HG2	1:K:156:ASP:H	1.71	0.55
1:A:173:ILE:O	1:A:176:GLY:N	2.39	0.55
1:E:154:LYS:HG2	1:E:156:ASP:H	1.71	0.55
1:G:130:ILE:HD11	1:G:188:MET:HE3	1.87	0.55
1:H:173:ILE:O	1:H:176:GLY:N	2.39	0.55
1:I:186:ARG:HB3	1:I:336:GLU:HG2	1.89	0.55
1:J:173:ILE:O	1:J:176:GLY:N	2.39	0.55
1:K:173:ILE:O	1:K:176:GLY:N	2.39	0.55
1:L:136:ASP:OD1	1:L:136:ASP:N	2.31	0.55
1:M:136:ASP:N	1:M:136:ASP:OD1	2.31	0.55
1:A:211:THR:O	1:A:220:THR:OG1	2.20	0.55
1:F:145:ASP:HA	1:F:349:LEU:HD21	1.87	0.55
1:H:186:ARG:HB3	1:H:336:GLU:HG2	1.89	0.55
1:O:154:LYS:HG2	1:O:156:ASP:H	1.71	0.55
1:C:168:ARG:HB3	1:C:169:PRO:HD3	1.89	0.55
1:C:188:MET:HA	1:C:191:PHE:CD2	2.42	0.55
1:F:186:ARG:HB3	1:F:336:GLU:HG2	1.89	0.55
1:F:188:MET:HA	1:F:191:PHE:CD2	2.42	0.55
1:I:130:ILE:HD11	1:I:188:MET:HE3	1.87	0.55
1:M:168:ARG:HB3	1:M:169:PRO:HD3	1.89	0.55
1:N:219:TYR:CD1	1:N:220:THR:N	2.74	0.55
1:P:186:ARG:HB3	1:P:336:GLU:HG2	1.89	0.55
1:F:219:TYR:CD1	1:F:220:THR:N	2.75	0.55
1:G:154:LYS:HG2	1:G:156:ASP:H	1.71	0.55
1:G:173:ILE:O	1:G:176:GLY:N	2.39	0.55
1:I:188:MET:HA	1:I:191:PHE:CD2	2.42	0.55
1:J:186:ARG:HB3	1:J:336:GLU:HG2	1.89	0.55
1:K:186:ARG:HB3	1:K:336:GLU:HG2	1.89	0.55
1:K:211:THR:O	1:K:220:THR:OG1	2.20	0.55
1:L:154:LYS:HG2	1:L:156:ASP:H	1.71	0.55
1:L:168:ARG:HB3	1:L:169:PRO:HD3	1.89	0.55
1:L:186:ARG:HB3	1:L:336:GLU:HG2	1.89	0.55
1:P:145:ASP:HA	1:P:349:LEU:HD21	1.87	0.55
1:P:188:MET:HA	1:P:191:PHE:CD2	2.42	0.55
1:P:219:TYR:CD1	1:P:220:THR:N	2.75	0.55
1:B:186:ARG:HB3	1:B:336:GLU:HG2	1.89	0.55
1:D:219:TYR:CD1	1:D:220:THR:N	2.75	0.55
1:F:63:GLN:OE1	1:F:63:GLN:N	2.38	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:188:MET:HA	1:G:191:PHE:CD2	2.42	0.55
1:I:173:ILE:O	1:I:176:GLY:N	2.39	0.55
1:M:188:MET:HA	1:M:191:PHE:CD2	2.42	0.55
1:N:188:MET:HA	1:N:191:PHE:CD2	2.42	0.55
1:P:63:GLN:OE1	1:P:63:GLN:N	2.38	0.55
1:A:186:ARG:HB3	1:A:336:GLU:HG2	1.89	0.55
1:A:355:SER:HB3	1:H:179:LEU:HD21	1.88	0.55
1:B:154:LYS:HG2	1:B:156:ASP:H	1.71	0.55
1:B:168:ARG:HB3	1:B:169:PRO:HD3	1.89	0.55
1:D:188:MET:HA	1:D:191:PHE:CD2	2.42	0.55
1:H:219:TYR:CD1	1:H:220:THR:N	2.75	0.55
1:I:154:LYS:HG2	1:I:156:ASP:H	1.71	0.55
1:J:130:ILE:HD11	1:J:188:MET:HE3	1.87	0.55
1:J:145:ASP:HA	1:J:349:LEU:HD21	1.87	0.55
1:A:188:MET:HA	1:A:191:PHE:CD2	2.42	0.55
1:B:188:MET:HA	1:B:191:PHE:CD2	2.42	0.55
1:C:268:THR:O	1:C:271:ILE:HG22	2.07	0.55
1:D:168:ARG:HB3	1:D:169:PRO:HD3	1.89	0.55
1:F:268:THR:O	1:F:271:ILE:HG22	2.07	0.55
1:G:22:PRO:HG2	1:G:33:ARG:HH12	1.72	0.55
1:I:22:PRO:HG2	1:I:33:ARG:HH12	1.72	0.55
1:I:219:TYR:CD1	1:I:220:THR:N	2.75	0.55
1:K:188:MET:HA	1:K:191:PHE:CD2	2.42	0.55
1:K:352:ILE:O	1:K:355:SER:OG	2.17	0.55
1:L:188:MET:HA	1:L:191:PHE:CD2	2.42	0.55
1:M:268:THR:O	1:M:271:ILE:HG22	2.07	0.55
1:N:168:ARG:HB3	1:N:169:PRO:HD3	1.89	0.55
1:O:63:GLN:OE1	1:O:63:GLN:N	2.38	0.55
1:O:219:TYR:CD1	1:O:220:THR:N	2.74	0.55
1:A:352:ILE:O	1:A:355:SER:OG	2.17	0.54
1:C:22:PRO:HG2	1:C:33:ARG:HH12	1.72	0.54
1:E:63:GLN:OE1	1:E:63:GLN:N	2.38	0.54
1:E:168:ARG:HB3	1:E:169:PRO:HD3	1.89	0.54
1:G:219:TYR:CD1	1:G:220:THR:N	2.74	0.54
1:G:268:THR:O	1:G:271:ILE:HG22	2.07	0.54
1:H:268:THR:O	1:H:271:ILE:HG22	2.07	0.54
1:I:268:THR:O	1:I:271:ILE:HG22	2.07	0.54
1:J:219:TYR:CD1	1:J:220:THR:N	2.75	0.54
1:J:268:THR:O	1:J:271:ILE:HG22	2.07	0.54
1:L:22:PRO:HG2	1:L:33:ARG:HH12	1.72	0.54
1:M:22:PRO:HG2	1:M:33:ARG:HH12	1.72	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:186:ARG:HB3	1:M:336:GLU:HG2	1.89	0.54
1:O:168:ARG:HB3	1:O:169:PRO:HD3	1.89	0.54
1:P:268:THR:O	1:P:271:ILE:HG22	2.07	0.54
1:B:22:PRO:HG2	1:B:33:ARG:HH12	1.72	0.54
1:C:186:ARG:HB3	1:C:336:GLU:HG2	1.89	0.54
1:E:219:TYR:CD1	1:E:220:THR:N	2.75	0.54
1:H:145:ASP:HA	1:H:349:LEU:HD21	1.87	0.54
1:A:22:PRO:HG2	1:A:33:ARG:HH12	1.72	0.54
1:D:22:PRO:HG2	1:D:33:ARG:HH12	1.72	0.54
1:N:22:PRO:HG2	1:N:33:ARG:HH12	1.72	0.54
1:N:186:ARG:HB3	1:N:336:GLU:HG2	1.89	0.54
1:O:186:ARG:HB3	1:O:336:GLU:HG2	1.89	0.54
1:D:186:ARG:HB3	1:D:336:GLU:HG2	1.89	0.54
1:E:186:ARG:HB3	1:E:336:GLU:HG2	1.89	0.54
1:F:84:VAL:HG12	1:F:247:HIS:HD2	1.73	0.54
1:O:22:PRO:HG2	1:O:33:ARG:HH12	1.72	0.54
1:C:352:ILE:O	1:C:355:SER:OG	2.17	0.54
1:E:22:PRO:HG2	1:E:33:ARG:HH12	1.72	0.54
1:H:84:VAL:HG12	1:H:247:HIS:HD2	1.73	0.54
1:I:179:LEU:HD21	1:J:355:SER:HB3	1.88	0.54
1:J:84:VAL:HG12	1:J:247:HIS:HD2	1.73	0.54
1:K:22:PRO:HG2	1:K:33:ARG:HH12	1.72	0.54
1:K:168:ARG:HB3	1:K:169:PRO:HD3	1.89	0.54
1:K:268:THR:O	1:K:271:ILE:HG22	2.07	0.54
1:N:268:THR:O	1:N:271:ILE:HG22	2.07	0.54
1:A:168:ARG:HB3	1:A:169:PRO:HD3	1.89	0.54
1:D:268:THR:O	1:D:271:ILE:HG22	2.07	0.54
1:E:188:MET:HA	1:E:191:PHE:CD2	2.42	0.54
1:F:22:PRO:HG2	1:F:33:ARG:HH12	1.72	0.54
1:J:188:MET:HA	1:J:191:PHE:CD2	2.42	0.54
1:P:84:VAL:HG12	1:P:247:HIS:HD2	1.73	0.54
1:A:268:THR:O	1:A:271:ILE:HG22	2.07	0.54
1:D:193:THR:O	1:D:196:THR:HG22	2.08	0.54
1:G:222:TRP:HZ3	1:G:224:PRO:HG2	1.73	0.54
1:H:188:MET:HA	1:H:191:PHE:CD2	2.42	0.54
1:I:63:GLN:OE1	1:I:63:GLN:N	2.38	0.54
1:M:352:ILE:O	1:M:355:SER:OG	2.17	0.54
1:N:193:THR:O	1:N:196:THR:HG22	2.08	0.54
1:O:188:MET:HA	1:O:191:PHE:CD2	2.42	0.54
1:O:193:THR:O	1:O:196:THR:HG22	2.08	0.54
1:O:222:TRP:HZ3	1:O:224:PRO:HG2	1.73	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:168:ARG:HB3	1:P:169:PRO:HD3	1.89	0.54
1:E:193:THR:O	1:E:196:THR:HG22	2.08	0.54
1:F:193:THR:O	1:F:196:THR:HG22	2.08	0.54
1:G:63:GLN:OE1	1:G:63:GLN:N	2.38	0.54
1:I:213:LEU:HD23	1:I:214:LEU:H	1.73	0.54
1:I:222:TRP:HZ3	1:I:224:PRO:HG2	1.73	0.54
1:J:22:PRO:HG2	1:J:33:ARG:HH12	1.72	0.54
1:P:22:PRO:HG2	1:P:33:ARG:HH12	1.72	0.54
1:E:222:TRP:HZ3	1:E:224:PRO:HG2	1.73	0.54
1:F:168:ARG:HB3	1:F:169:PRO:HD3	1.89	0.54
1:G:213:LEU:HD23	1:G:214:LEU:H	1.73	0.54
1:K:106:GLN:O	1:L:275:LYS:NZ	2.35	0.54
1:O:268:THR:O	1:O:271:ILE:HG22	2.07	0.54
1:P:193:THR:O	1:P:196:THR:HG22	2.08	0.54
1:H:22:PRO:HG2	1:H:33:ARG:HH12	1.72	0.53
1:I:193:THR:O	1:I:196:THR:HG22	2.08	0.53
1:A:27:ALA:O	1:A:29:ARG:N	2.41	0.53
1:B:213:LEU:HD23	1:B:214:LEU:H	1.73	0.53
1:G:193:THR:O	1:G:196:THR:HG22	2.08	0.53
1:H:168:ARG:HB3	1:H:169:PRO:HD3	1.89	0.53
1:N:84:VAL:HG12	1:N:247:HIS:HD2	1.73	0.53
1:D:84:VAL:HG12	1:D:247:HIS:HD2	1.73	0.53
1:D:222:TRP:HZ3	1:D:224:PRO:HG2	1.73	0.53
1:E:268:THR:O	1:E:271:ILE:HG22	2.07	0.53
1:F:27:ALA:O	1:F:29:ARG:N	2.41	0.53
1:K:27:ALA:C	1:K:29:ARG:H	2.12	0.53
1:K:27:ALA:O	1:K:29:ARG:N	2.41	0.53
1:L:84:VAL:HG12	1:L:247:HIS:HD2	1.73	0.53
1:L:268:THR:O	1:L:271:ILE:HG22	2.07	0.53
1:O:213:LEU:HD23	1:O:214:LEU:H	1.73	0.53
1:P:27:ALA:O	1:P:29:ARG:N	2.41	0.53
1:A:193:THR:O	1:A:196:THR:HG22	2.08	0.53
1:B:84:VAL:HG12	1:B:247:HIS:HD2	1.73	0.53
1:E:213:LEU:HD23	1:E:214:LEU:H	1.74	0.53
1:G:27:ALA:O	1:G:29:ARG:N	2.41	0.53
1:G:168:ARG:HB3	1:G:169:PRO:HD3	1.89	0.53
1:I:168:ARG:HB3	1:I:169:PRO:HD3	1.89	0.53
1:J:168:ARG:HB3	1:J:169:PRO:HD3	1.89	0.53
1:L:213:LEU:HD23	1:L:214:LEU:H	1.74	0.53
1:M:106:GLN:O	1:N:275:LYS:NZ	2.38	0.53
1:N:86:LEU:HD21	1:N:247:HIS:NE2	2.24	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:222:TRP:HZ3	1:N:224:PRO:HG2	1.73	0.53
1:A:27:ALA:C	1:A:29:ARG:H	2.12	0.53
1:A:97:ARG:HG3	1:A:98:THR:N	2.24	0.53
1:B:97:ARG:HG3	1:B:98:THR:N	2.24	0.53
1:B:268:THR:O	1:B:271:ILE:HG22	2.07	0.53
1:D:63:GLN:OE1	1:D:63:GLN:N	2.38	0.53
1:D:86:LEU:HD21	1:D:247:HIS:NE2	2.24	0.53
1:F:299:ILE:O	1:F:302:LEU:N	2.42	0.53
1:I:27:ALA:O	1:I:29:ARG:N	2.41	0.53
1:K:97:ARG:HG3	1:K:98:THR:N	2.24	0.53
1:L:97:ARG:HG3	1:L:98:THR:N	2.24	0.53
1:L:193:THR:O	1:L:196:THR:HG22	2.08	0.53
1:C:193:THR:O	1:C:196:THR:HG22	2.08	0.53
1:D:213:LEU:HD23	1:D:214:LEU:H	1.73	0.53
1:H:97:ARG:HG3	1:H:98:THR:N	2.24	0.53
1:J:27:ALA:O	1:J:29:ARG:N	2.41	0.53
1:J:97:ARG:HG3	1:J:98:THR:N	2.24	0.53
1:O:86:LEU:HD21	1:O:247:HIS:NE2	2.24	0.53
1:P:299:ILE:O	1:P:302:LEU:N	2.42	0.53
1:B:193:THR:O	1:B:196:THR:HG22	2.08	0.53
1:B:211:THR:O	1:B:220:THR:OG1	2.20	0.53
1:E:86:LEU:HD21	1:E:247:HIS:NE2	2.24	0.53
1:F:97:ARG:HG3	1:F:98:THR:N	2.24	0.53
1:H:63:GLN:OE1	1:H:63:GLN:N	2.38	0.53
1:K:193:THR:O	1:K:196:THR:HG22	2.08	0.53
1:M:213:LEU:HD23	1:M:214:LEU:H	1.73	0.53
1:N:63:GLN:OE1	1:N:63:GLN:N	2.38	0.53
1:O:299:ILE:O	1:O:302:LEU:N	2.42	0.53
1:P:97:ARG:HG3	1:P:98:THR:N	2.24	0.53
1:B:86:LEU:HD21	1:B:247:HIS:NE2	2.24	0.53
1:E:299:ILE:O	1:E:302:LEU:N	2.42	0.53
1:H:27:ALA:O	1:H:29:ARG:N	2.41	0.53
1:H:27:ALA:C	1:H:29:ARG:H	2.12	0.53
1:J:63:GLN:OE1	1:J:63:GLN:N	2.38	0.53
1:N:213:LEU:HD23	1:N:214:LEU:H	1.73	0.53
1:O:84:VAL:HG12	1:O:247:HIS:HD2	1.73	0.53
1:A:213:LEU:HD23	1:A:214:LEU:H	1.73	0.53
1:B:92:PHE:CZ	1:I:89:GLN:HB2	2.44	0.53
1:C:213:LEU:HD23	1:C:214:LEU:H	1.74	0.53
1:E:97:ARG:HG3	1:E:98:THR:N	2.24	0.53
1:F:27:ALA:C	1:F:29:ARG:H	2.12	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:27:ALA:C	1:J:29:ARG:H	2.12	0.53
1:J:213:LEU:HD23	1:J:214:LEU:H	1.73	0.53
1:K:146:ARG:HH21	1:L:152:ARG:HE	1.56	0.53
1:L:86:LEU:HD21	1:L:247:HIS:NE2	2.24	0.53
1:L:211:THR:O	1:L:220:THR:OG1	2.20	0.53
1:M:97:ARG:HG3	1:M:98:THR:N	2.24	0.53
1:M:193:THR:O	1:M:196:THR:HG22	2.08	0.53
1:P:27:ALA:C	1:P:29:ARG:H	2.12	0.53
1:P:213:LEU:HD23	1:P:214:LEU:H	1.73	0.53
1:C:97:ARG:HG3	1:C:98:THR:N	2.24	0.53
1:I:299:ILE:O	1:I:302:LEU:N	2.42	0.53
1:K:213:LEU:HD23	1:K:214:LEU:H	1.73	0.53
1:A:299:ILE:O	1:A:302:LEU:N	2.42	0.52
1:B:115:GLN:NE2	1:B:206:GLN:OE1	2.42	0.52
1:B:352:ILE:O	1:B:355:SER:OG	2.17	0.52
1:F:213:LEU:HD23	1:F:214:LEU:H	1.74	0.52
1:F:222:TRP:HZ3	1:F:224:PRO:HG2	1.73	0.52
1:G:97:ARG:HG3	1:G:98:THR:N	2.24	0.52
1:G:115:GLN:NE2	1:G:206:GLN:OE1	2.42	0.52
1:I:97:ARG:HG3	1:I:98:THR:N	2.24	0.52
1:I:115:GLN:NE2	1:I:206:GLN:OE1	2.43	0.52
1:M:299:ILE:O	1:M:302:LEU:N	2.42	0.52
1:N:299:ILE:O	1:N:302:LEU:N	2.42	0.52
1:O:97:ARG:HG3	1:O:98:THR:N	2.24	0.52
1:B:89:GLN:HB2	1:I:92:PHE:CZ	2.44	0.52
1:C:115:GLN:NE2	1:C:206:GLN:OE1	2.43	0.52
1:C:299:ILE:O	1:C:302:LEU:N	2.42	0.52
1:D:110:TYR:HD2	1:E:275:LYS:HZ3	1.56	0.52
1:G:299:ILE:O	1:G:302:LEU:N	2.42	0.52
1:H:213:LEU:HD23	1:H:214:LEU:H	1.73	0.52
1:K:299:ILE:O	1:K:302:LEU:N	2.42	0.52
1:L:115:GLN:NE2	1:L:206:GLN:OE1	2.43	0.52
1:L:299:ILE:O	1:L:302:LEU:N	2.42	0.52
1:M:86:LEU:HD21	1:M:247:HIS:NE2	2.24	0.52
1:B:299:ILE:O	1:B:302:LEU:N	2.42	0.52
1:C:27:ALA:C	1:C:29:ARG:H	2.12	0.52
1:C:86:LEU:HD21	1:C:247:HIS:NE2	2.24	0.52
1:D:168:ARG:NH2	1:E:153:ASP:O	2.29	0.52
1:D:299:ILE:O	1:D:302:LEU:N	2.42	0.52
1:J:179:LEU:HD21	1:K:355:SER:HB3	1.90	0.52
1:L:27:ALA:C	1:L:29:ARG:H	2.12	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:115:GLN:NE2	1:M:206:GLN:OE1	2.43	0.52
1:A:115:GLN:NE2	1:A:206:GLN:OE1	2.42	0.52
1:B:27:ALA:O	1:B:29:ARG:N	2.42	0.52
1:F:115:GLN:NE2	1:F:206:GLN:OE1	2.42	0.52
1:H:299:ILE:O	1:H:302:LEU:N	2.42	0.52
1:I:27:ALA:C	1:I:29:ARG:H	2.12	0.52
1:K:115:GLN:NE2	1:K:206:GLN:OE1	2.43	0.52
1:L:27:ALA:O	1:L:29:ARG:N	2.42	0.52
1:L:352:ILE:O	1:L:355:SER:OG	2.17	0.52
1:M:27:ALA:C	1:M:29:ARG:H	2.12	0.52
1:P:115:GLN:NE2	1:P:206:GLN:OE1	2.42	0.52
1:P:222:TRP:HZ3	1:P:224:PRO:HG2	1.73	0.52
1:C:92:PHE:CZ	1:P:89:GLN:HB2	2.45	0.52
1:H:193:THR:O	1:H:196:THR:HG22	2.08	0.52
1:I:84:VAL:HG12	1:I:247:HIS:HD2	1.73	0.52
1:N:27:ALA:C	1:N:29:ARG:H	2.12	0.52
1:B:27:ALA:C	1:B:29:ARG:H	2.12	0.52
1:B:242:PHE:CE1	1:B:274:GLU:HB2	2.45	0.52
1:D:27:ALA:C	1:D:29:ARG:H	2.12	0.52
1:E:115:GLN:NE2	1:E:206:GLN:OE1	2.42	0.52
1:G:27:ALA:C	1:G:29:ARG:H	2.12	0.52
1:G:89:GLN:HB2	1:L:92:PHE:CZ	2.45	0.52
1:H:242:PHE:CE1	1:H:274:GLU:HB2	2.45	0.52
1:I:275:LYS:NZ	1:P:106:GLN:O	2.37	0.52
1:J:222:TRP:HZ3	1:J:224:PRO:HG2	1.73	0.52
1:J:242:PHE:CE1	1:J:274:GLU:HB2	2.45	0.52
1:J:299:ILE:O	1:J:302:LEU:N	2.42	0.52
1:L:242:PHE:CE1	1:L:274:GLU:HB2	2.45	0.52
1:O:27:ALA:O	1:O:29:ARG:N	2.42	0.52
1:O:115:GLN:NE2	1:O:206:GLN:OE1	2.43	0.52
1:A:84:VAL:HG12	1:A:247:HIS:HD2	1.73	0.52
1:B:168:ARG:NH2	1:C:153:ASP:O	2.30	0.52
1:D:97:ARG:HG3	1:D:98:THR:N	2.24	0.52
1:E:27:ALA:O	1:E:29:ARG:N	2.42	0.52
1:G:84:VAL:HG12	1:G:247:HIS:HD2	1.73	0.52
1:H:115:GLN:NE2	1:H:206:GLN:OE1	2.42	0.52
1:J:193:THR:O	1:J:196:THR:HG22	2.08	0.52
1:M:84:VAL:HG12	1:M:247:HIS:HD2	1.73	0.52
1:A:86:LEU:HD21	1:A:247:HIS:NE2	2.24	0.52
1:C:84:VAL:HG12	1:C:247:HIS:HD2	1.73	0.52
1:D:115:GLN:NE2	1:D:206:GLN:OE1	2.42	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:89:GLN:HB2	1:M:92:PHE:CZ	2.45	0.52
1:G:242:PHE:CE1	1:G:274:GLU:HB2	2.45	0.52
1:H:222:TRP:HZ3	1:H:224:PRO:HG2	1.73	0.52
1:J:110:TYR:CE2	1:K:275:LYS:HG3	2.45	0.52
1:J:115:GLN:NE2	1:J:206:GLN:OE1	2.42	0.52
1:M:242:PHE:CE1	1:M:274:GLU:HB2	2.45	0.52
1:N:97:ARG:HG3	1:N:98:THR:N	2.24	0.52
1:N:115:GLN:NE2	1:N:206:GLN:OE1	2.42	0.52
1:A:89:GLN:HB2	1:J:92:PHE:CZ	2.45	0.52
1:A:275:LYS:NZ	1:H:106:GLN:O	2.38	0.52
1:C:89:GLN:HB2	1:P:92:PHE:CZ	2.45	0.52
1:D:92:PHE:CZ	1:O:89:GLN:HB2	2.45	0.52
1:G:86:LEU:HD21	1:G:247:HIS:NE2	2.24	0.52
1:G:92:PHE:CZ	1:L:89:GLN:HB2	2.45	0.52
1:H:92:PHE:HZ	1:K:89:GLN:HB2	1.75	0.52
1:I:86:LEU:HD21	1:I:247:HIS:NE2	2.24	0.52
1:I:242:PHE:CE1	1:I:274:GLU:HB2	2.45	0.52
1:J:86:LEU:HD21	1:J:247:HIS:NE2	2.24	0.52
1:K:84:VAL:HG12	1:K:247:HIS:HD2	1.73	0.52
1:K:86:LEU:HD21	1:K:247:HIS:NE2	2.24	0.52
1:L:222:TRP:HZ3	1:L:224:PRO:HG2	1.73	0.52
1:A:63:GLN:OE1	1:A:63:GLN:N	2.38	0.52
1:C:242:PHE:CE1	1:C:274:GLU:HB2	2.45	0.52
1:F:86:LEU:HD21	1:F:247:HIS:NE2	2.24	0.52
1:H:86:LEU:HD21	1:H:247:HIS:NE2	2.24	0.52
1:L:168:ARG:NH2	1:M:153:ASP:O	2.30	0.52
1:N:168:ARG:NH2	1:O:153:ASP:O	2.30	0.52
1:P:86:LEU:HD21	1:P:247:HIS:NE2	2.24	0.52
1:A:222:TRP:HZ3	1:A:224:PRO:HG2	1.73	0.51
1:A:234:ASN:O	1:A:238:THR:HG23	2.10	0.51
1:E:27:ALA:C	1:E:29:ARG:H	2.12	0.51
1:E:89:GLN:HB2	1:N:92:PHE:CZ	2.45	0.51
1:J:102:ILE:HG23	1:J:102:ILE:O	2.10	0.51
1:K:234:ASN:O	1:K:238:THR:HG23	2.10	0.51
1:B:222:TRP:HZ3	1:B:224:PRO:HG2	1.73	0.51
1:D:89:GLN:HB2	1:O:92:PHE:CZ	2.45	0.51
1:D:102:ILE:O	1:D:102:ILE:HG23	2.10	0.51
1:F:92:PHE:CZ	1:M:89:GLN:HB2	2.45	0.51
1:H:102:ILE:HG23	1:H:102:ILE:O	2.10	0.51
1:K:63:GLN:N	1:K:63:GLN:OE1	2.38	0.51
1:K:222:TRP:HZ3	1:K:224:PRO:HG2	1.73	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:102:ILE:HG23	1:N:102:ILE:O	2.10	0.51
1:O:146:ARG:HH21	1:P:152:ARG:HE	1.58	0.51
1:A:102:ILE:HG23	1:A:102:ILE:O	2.10	0.51
1:A:146:ARG:HH21	1:B:152:ARG:HE	1.58	0.51
1:C:63:GLN:N	1:C:63:GLN:OE1	2.38	0.51
1:K:102:ILE:HG23	1:K:102:ILE:O	2.10	0.51
1:M:63:GLN:OE1	1:M:63:GLN:N	2.38	0.51
1:O:27:ALA:C	1:O:29:ARG:H	2.12	0.51
1:A:92:PHE:CZ	1:J:89:GLN:HB2	2.45	0.51
1:E:92:PHE:CZ	1:N:89:GLN:HB2	2.45	0.51
1:C:27:ALA:O	1:C:29:ARG:N	2.41	0.51
1:D:234:ASN:O	1:D:238:THR:HG23	2.10	0.51
1:E:102:ILE:HG23	1:E:102:ILE:O	2.10	0.51
1:G:234:ASN:O	1:G:238:THR:HG23	2.10	0.51
1:I:234:ASN:O	1:I:238:THR:HG23	2.10	0.51
1:N:234:ASN:O	1:N:238:THR:HG23	2.10	0.51
1:E:146:ARG:HH21	1:F:152:ARG:HE	1.58	0.51
1:M:27:ALA:O	1:M:29:ARG:N	2.41	0.51
1:O:102:ILE:O	1:O:102:ILE:HG23	2.10	0.51
1:E:234:ASN:O	1:E:238:THR:HG23	2.10	0.51
1:F:242:PHE:CE1	1:F:274:GLU:HB2	2.45	0.51
1:H:234:ASN:O	1:H:238:THR:HG23	2.10	0.51
1:N:242:PHE:CE1	1:N:274:GLU:HB2	2.45	0.51
1:O:234:ASN:O	1:O:238:THR:HG23	2.10	0.51
1:C:89:GLN:HG3	1:C:90:LEU:N	2.22	0.51
1:D:242:PHE:CE1	1:D:274:GLU:HB2	2.45	0.51
1:E:84:VAL:HG12	1:E:247:HIS:HD2	1.73	0.51
1:I:102:ILE:HG23	1:I:102:ILE:O	2.10	0.51
1:J:234:ASN:O	1:J:238:THR:HG23	2.10	0.51
1:K:197:VAL:HA	1:K:295:CYS:SG	2.51	0.51
1:M:222:TRP:HZ3	1:M:224:PRO:HG2	1.73	0.51
1:C:197:VAL:HA	1:C:295:CYS:SG	2.51	0.51
1:D:227:LEU:HD21	1:D:278:ILE:HG21	1.93	0.51
1:E:242:PHE:CE1	1:E:274:GLU:HB2	2.45	0.51
1:K:242:PHE:CE1	1:K:274:GLU:HB2	2.45	0.51
1:L:63:GLN:OE1	1:L:63:GLN:N	2.38	0.51
1:M:89:GLN:HG3	1:M:90:LEU:N	2.22	0.51
1:N:27:ALA:O	1:N:29:ARG:N	2.42	0.51
1:N:146:ARG:HH21	1:O:152:ARG:HE	1.58	0.51
1:P:242:PHE:CE1	1:P:274:GLU:HB2	2.45	0.51
1:A:153:ASP:O	1:H:168:ARG:NH2	2.30	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:242:PHE:CE1	1:A:274:GLU:HB2	2.45	0.51
1:B:63:GLN:OE1	1:B:63:GLN:N	2.38	0.51
1:C:222:TRP:HZ3	1:C:224:PRO:HG2	1.73	0.51
1:D:117:PHE:HD2	1:D:118:LEU:HD12	1.76	0.51
1:G:102:ILE:O	1:G:102:ILE:HG23	2.10	0.51
1:M:197:VAL:HA	1:M:295:CYS:SG	2.51	0.51
1:N:117:PHE:HD2	1:N:118:LEU:HD12	1.76	0.51
1:N:227:LEU:HD21	1:N:278:ILE:HG21	1.93	0.51
1:N:269:LEU:O	1:N:272:TYR:N	2.44	0.51
1:O:197:VAL:HA	1:O:295:CYS:SG	2.51	0.51
1:O:242:PHE:CE1	1:O:274:GLU:HB2	2.45	0.51
1:A:197:VAL:HA	1:A:295:CYS:SG	2.51	0.50
1:C:146:ARG:HH21	1:D:152:ARG:HE	1.58	0.50
1:D:27:ALA:O	1:D:29:ARG:N	2.41	0.50
1:D:269:LEU:O	1:D:272:TYR:N	2.45	0.50
1:E:197:VAL:HA	1:E:295:CYS:SG	2.51	0.50
1:F:234:ASN:O	1:F:238:THR:HG23	2.10	0.50
1:H:39:LEU:HD23	1:H:115:GLN:CB	2.42	0.50
1:I:39:LEU:HD23	1:I:115:GLN:CB	2.42	0.50
1:J:197:VAL:HA	1:J:295:CYS:SG	2.51	0.50
1:M:117:PHE:HD2	1:M:118:LEU:HD12	1.76	0.50
1:M:234:ASN:O	1:M:238:THR:HG23	2.10	0.50
1:O:269:LEU:O	1:O:272:TYR:N	2.45	0.50
1:P:234:ASN:O	1:P:238:THR:HG23	2.10	0.50
1:C:234:ASN:O	1:C:238:THR:HG23	2.10	0.50
1:E:89:GLN:HG3	1:E:90:LEU:N	2.22	0.50
1:E:269:LEU:O	1:E:272:TYR:N	2.45	0.50
1:G:39:LEU:HD23	1:G:115:GLN:CB	2.42	0.50
1:I:197:VAL:HA	1:I:295:CYS:SG	2.51	0.50
1:J:39:LEU:HD23	1:J:115:GLN:CB	2.42	0.50
1:O:89:GLN:HG3	1:O:90:LEU:N	2.22	0.50
1:A:269:LEU:O	1:A:272:TYR:N	2.45	0.50
1:C:117:PHE:HD2	1:C:118:LEU:HD12	1.76	0.50
1:F:146:ARG:HH21	1:G:152:ARG:HE	1.58	0.50
1:H:197:VAL:HA	1:H:295:CYS:SG	2.51	0.50
1:J:269:LEU:O	1:J:272:TYR:N	2.45	0.50
1:K:269:LEU:O	1:K:272:TYR:N	2.45	0.50
1:A:152:ARG:HE	1:H:146:ARG:HH21	1.58	0.50
1:C:102:ILE:HG23	1:C:102:ILE:O	2.10	0.50
1:C:269:LEU:O	1:C:272:TYR:N	2.44	0.50
1:D:146:ARG:HH21	1:E:152:ARG:HE	1.58	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:117:PHE:HD2	1:E:118:LEU:HD12	1.76	0.50
1:F:236:TRP:CG	1:F:237:GLN:N	2.80	0.50
1:G:236:TRP:CG	1:G:237:GLN:N	2.80	0.50
1:H:269:LEU:O	1:H:272:TYR:N	2.45	0.50
1:I:236:TRP:CG	1:I:237:GLN:N	2.80	0.50
1:L:197:VAL:HA	1:L:295:CYS:SG	2.51	0.50
1:M:102:ILE:HG23	1:M:102:ILE:O	2.10	0.50
1:O:227:LEU:HD21	1:O:278:ILE:HG21	1.93	0.50
1:P:236:TRP:CG	1:P:237:GLN:N	2.80	0.50
1:B:234:ASN:O	1:B:238:THR:HG23	2.10	0.50
1:C:87:ASP:N	1:C:87:ASP:OD1	2.45	0.50
1:E:227:LEU:HD21	1:E:278:ILE:HG21	1.93	0.50
1:G:197:VAL:HA	1:G:295:CYS:SG	2.51	0.50
1:I:152:ARG:HE	1:P:146:ARG:HH21	1.59	0.50
1:I:227:LEU:HD21	1:I:278:ILE:HG21	1.93	0.50
1:K:117:PHE:HD2	1:K:118:LEU:HD12	1.76	0.50
1:L:102:ILE:O	1:L:102:ILE:HG23	2.10	0.50
1:L:146:ARG:HH21	1:M:152:ARG:HE	1.58	0.50
1:M:87:ASP:N	1:M:87:ASP:OD1	2.45	0.50
1:M:227:LEU:HD21	1:M:278:ILE:HG21	1.93	0.50
1:M:269:LEU:O	1:M:272:TYR:N	2.45	0.50
1:A:117:PHE:HD2	1:A:118:LEU:HD12	1.76	0.50
1:B:102:ILE:HG23	1:B:102:ILE:O	2.10	0.50
1:B:197:VAL:HA	1:B:295:CYS:SG	2.51	0.50
1:C:227:LEU:HD21	1:C:278:ILE:HG21	1.93	0.50
1:E:210:LEU:O	1:E:213:LEU:N	2.44	0.50
1:G:227:LEU:HD21	1:G:278:ILE:HG21	1.93	0.50
1:J:168:ARG:NH2	1:K:153:ASP:O	2.32	0.50
1:L:87:ASP:OD1	1:L:87:ASP:N	2.45	0.50
1:L:117:PHE:HD2	1:L:118:LEU:HD12	1.76	0.50
1:N:210:LEU:O	1:N:213:LEU:N	2.44	0.50
1:O:117:PHE:HD2	1:O:118:LEU:HD12	1.76	0.50
1:P:39:LEU:HD23	1:P:115:GLN:CB	2.42	0.50
1:P:227:LEU:HD21	1:P:278:ILE:HG21	1.93	0.50
1:A:227:LEU:HD21	1:A:278:ILE:HG21	1.93	0.50
1:B:87:ASP:N	1:B:87:ASP:OD1	2.45	0.50
1:B:146:ARG:HH21	1:C:152:ARG:HE	1.59	0.50
1:F:39:LEU:HD23	1:F:115:GLN:CB	2.42	0.50
1:F:227:LEU:HD21	1:F:278:ILE:HG21	1.93	0.50
1:G:269:LEU:O	1:G:272:TYR:N	2.45	0.50
1:H:227:LEU:HD21	1:H:278:ILE:HG21	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:236:TRP:CG	1:H:237:GLN:N	2.80	0.50
1:J:227:LEU:HD21	1:J:278:ILE:HG21	1.93	0.50
1:J:236:TRP:CG	1:J:237:GLN:N	2.80	0.50
1:K:318:THR:HG23	1:K:319:ALA:N	2.26	0.50
1:L:234:ASN:O	1:L:238:THR:HG23	2.10	0.50
1:O:210:LEU:O	1:O:213:LEU:N	2.44	0.50
1:B:117:PHE:HD2	1:B:118:LEU:HD12	1.76	0.50
1:C:318:THR:HG23	1:C:319:ALA:N	2.26	0.50
1:D:210:LEU:O	1:D:213:LEU:N	2.44	0.50
1:D:318:THR:HG23	1:D:319:ALA:N	2.27	0.50
1:F:102:ILE:HG23	1:F:102:ILE:O	2.10	0.50
1:I:269:LEU:O	1:I:272:TYR:N	2.45	0.50
1:K:227:LEU:HD21	1:K:278:ILE:HG21	1.93	0.50
1:L:227:LEU:HD21	1:L:278:ILE:HG21	1.93	0.50
1:L:269:LEU:O	1:L:272:TYR:N	2.45	0.50
1:N:197:VAL:HA	1:N:295:CYS:SG	2.51	0.50
1:O:87:ASP:OD1	1:O:87:ASP:N	2.45	0.50
1:B:269:LEU:O	1:B:272:TYR:N	2.45	0.50
1:E:87:ASP:N	1:E:87:ASP:OD1	2.45	0.50
1:E:236:TRP:CG	1:E:237:GLN:N	2.80	0.50
1:F:269:LEU:O	1:F:272:TYR:N	2.45	0.50
1:M:146:ARG:HH21	1:N:152:ARG:HE	1.58	0.50
1:N:318:THR:HG23	1:N:319:ALA:N	2.26	0.50
1:O:236:TRP:CG	1:O:237:GLN:N	2.80	0.50
1:P:197:VAL:HA	1:P:295:CYS:SG	2.51	0.50
1:P:269:LEU:O	1:P:272:TYR:N	2.45	0.50
1:A:236:TRP:CG	1:A:237:GLN:N	2.80	0.49
1:B:227:LEU:HD21	1:B:278:ILE:HG21	1.93	0.49
1:B:236:TRP:CG	1:B:237:GLN:N	2.80	0.49
1:B:318:THR:HG23	1:B:319:ALA:N	2.26	0.49
1:D:197:VAL:HA	1:D:295:CYS:SG	2.51	0.49
1:I:146:ARG:HH21	1:J:152:ARG:HE	1.58	0.49
1:K:236:TRP:CG	1:K:237:GLN:N	2.80	0.49
1:M:39:LEU:HD23	1:M:115:GLN:CB	2.42	0.49
1:M:318:THR:HG23	1:M:319:ALA:N	2.27	0.49
1:P:102:ILE:HG23	1:P:102:ILE:O	2.10	0.49
1:A:89:GLN:HG3	1:A:90:LEU:N	2.22	0.49
1:A:242:PHE:HE1	1:A:270:ASN:O	1.96	0.49
1:C:39:LEU:HD23	1:C:115:GLN:CB	2.42	0.49
1:E:205:ILE:O	1:E:209:ILE:HG12	2.12	0.49
1:F:205:ILE:O	1:F:209:ILE:HG12	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:242:PHE:HE1	1:J:270:ASN:O	1.95	0.49
1:K:242:PHE:HE1	1:K:270:ASN:O	1.96	0.49
1:K:253:ARG:HH22	1:L:89:GLN:HA	1.78	0.49
1:L:318:THR:HG23	1:L:319:ALA:N	2.27	0.49
1:N:39:LEU:HD23	1:N:115:GLN:CB	2.42	0.49
1:N:236:TRP:CG	1:N:237:GLN:N	2.80	0.49
1:O:39:LEU:HD23	1:O:115:GLN:CB	2.42	0.49
1:O:205:ILE:O	1:O:209:ILE:HG12	2.12	0.49
1:P:205:ILE:O	1:P:209:ILE:HG12	2.13	0.49
1:A:205:ILE:O	1:A:209:ILE:HG12	2.12	0.49
1:D:39:LEU:HD23	1:D:115:GLN:CB	2.42	0.49
1:D:236:TRP:CG	1:D:237:GLN:N	2.80	0.49
1:E:39:LEU:HD23	1:E:115:GLN:CB	2.42	0.49
1:E:318:THR:HG23	1:E:319:ALA:N	2.27	0.49
1:F:197:VAL:HA	1:F:295:CYS:SG	2.51	0.49
1:G:146:ARG:HH21	1:H:152:ARG:HE	1.58	0.49
1:H:242:PHE:HE1	1:H:270:ASN:O	1.96	0.49
1:L:236:TRP:CG	1:L:237:GLN:N	2.80	0.49
1:E:242:PHE:O	1:E:242:PHE:CG	2.66	0.49
1:F:87:ASP:OD1	1:F:87:ASP:N	2.45	0.49
1:K:89:GLN:HG3	1:K:90:LEU:N	2.22	0.49
1:K:205:ILE:O	1:K:209:ILE:HG12	2.13	0.49
1:M:236:TRP:CG	1:M:237:GLN:N	2.80	0.49
1:N:205:ILE:O	1:N:209:ILE:HG12	2.12	0.49
1:O:242:PHE:O	1:O:242:PHE:CG	2.66	0.49
1:D:205:ILE:O	1:D:209:ILE:HG12	2.12	0.49
1:F:242:PHE:O	1:F:242:PHE:CG	2.66	0.49
1:K:87:ASP:N	1:K:87:ASP:OD1	2.45	0.49
1:L:39:LEU:HD23	1:L:115:GLN:CB	2.41	0.49
1:L:205:ILE:O	1:L:209:ILE:HG12	2.12	0.49
1:N:242:PHE:HE1	1:N:270:ASN:O	1.96	0.49
1:O:318:THR:HG23	1:O:319:ALA:N	2.27	0.49
1:P:87:ASP:N	1:P:87:ASP:OD1	2.45	0.49
1:P:242:PHE:O	1:P:242:PHE:CG	2.66	0.49
1:A:87:ASP:OD1	1:A:87:ASP:N	2.45	0.49
1:B:205:ILE:O	1:B:209:ILE:HG12	2.12	0.49
1:B:242:PHE:HE1	1:B:270:ASN:O	1.96	0.49
1:C:236:TRP:CG	1:C:237:GLN:N	2.80	0.49
1:D:242:PHE:HE1	1:D:270:ASN:O	1.96	0.49
1:F:236:TRP:CD1	1:F:243:PRO:HA	2.47	0.49
1:G:205:ILE:O	1:G:209:ILE:HG12	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:205:ILE:O	1:I:209:ILE:HG12	2.12	0.49
1:J:205:ILE:O	1:J:209:ILE:HG12	2.13	0.49
1:D:242:PHE:O	1:D:242:PHE:CG	2.66	0.49
1:F:117:PHE:HD2	1:F:118:LEU:HD12	1.76	0.49
1:G:87:ASP:OD1	1:G:87:ASP:N	2.45	0.49
1:H:205:ILE:O	1:H:209:ILE:HG12	2.12	0.49
1:I:87:ASP:OD1	1:I:87:ASP:N	2.45	0.49
1:L:242:PHE:HE1	1:L:270:ASN:O	1.96	0.49
1:B:39:LEU:HD23	1:B:115:GLN:CB	2.42	0.49
1:B:110:TYR:CE2	1:C:275:LYS:HG3	2.48	0.49
1:G:242:PHE:HE1	1:G:270:ASN:O	1.96	0.49
1:H:87:ASP:N	1:H:87:ASP:OD1	2.45	0.49
1:I:242:PHE:HE1	1:I:270:ASN:O	1.96	0.49
1:J:87:ASP:N	1:J:87:ASP:OD1	2.45	0.49
1:M:242:PHE:HE1	1:M:270:ASN:O	1.96	0.49
1:N:87:ASP:N	1:N:87:ASP:OD1	2.45	0.49
1:N:141:VAL:O	1:N:145:ASP:CB	2.61	0.49
1:N:242:PHE:O	1:N:242:PHE:CG	2.66	0.49
1:P:117:PHE:HD2	1:P:118:LEU:HD12	1.76	0.49
1:P:236:TRP:CD1	1:P:243:PRO:HA	2.47	0.49
1:A:236:TRP:CD1	1:A:243:PRO:HA	2.47	0.49
1:C:242:PHE:HE1	1:C:270:ASN:O	1.96	0.49
1:D:87:ASP:OD1	1:D:87:ASP:N	2.45	0.49
1:D:141:VAL:O	1:D:145:ASP:CB	2.61	0.49
1:D:316:LEU:HD13	1:D:362:ARG:HD3	1.95	0.49
1:E:123:ARG:O	1:E:126:TRP:N	2.46	0.49
1:G:123:ARG:O	1:G:126:TRP:N	2.46	0.49
1:N:316:LEU:HD13	1:N:362:ARG:HD3	1.95	0.49
1:O:123:ARG:O	1:O:126:TRP:N	2.46	0.49
1:C:316:LEU:HD13	1:C:362:ARG:HD3	1.95	0.49
1:E:141:VAL:O	1:E:145:ASP:CB	2.61	0.49
1:F:89:GLN:HG3	1:F:90:LEU:N	2.22	0.49
1:G:186:ARG:O	1:G:336:GLU:HB3	2.13	0.49
1:G:242:PHE:O	1:G:242:PHE:CG	2.66	0.49
1:I:117:PHE:HD2	1:I:118:LEU:HD12	1.76	0.49
1:I:123:ARG:O	1:I:126:TRP:N	2.46	0.49
1:I:242:PHE:O	1:I:242:PHE:CG	2.66	0.49
1:K:236:TRP:CD1	1:K:243:PRO:HA	2.47	0.49
1:O:242:PHE:HE1	1:O:270:ASN:O	1.96	0.49
1:P:89:GLN:HG3	1:P:90:LEU:N	2.22	0.49
1:A:275:LYS:HG3	1:H:110:TYR:CE2	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:92:PHE:HZ	1:I:89:GLN:HB2	1.79	0.48
1:E:242:PHE:HE1	1:E:270:ASN:O	1.96	0.48
1:E:316:LEU:HD13	1:E:362:ARG:HD3	1.95	0.48
1:F:242:PHE:HE1	1:F:270:ASN:O	1.96	0.48
1:G:117:PHE:HD2	1:G:118:LEU:HD12	1.76	0.48
1:H:186:ARG:O	1:H:336:GLU:HB3	2.13	0.48
1:I:186:ARG:O	1:I:336:GLU:HB3	2.13	0.48
1:J:186:ARG:O	1:J:336:GLU:HB3	2.13	0.48
1:K:186:ARG:O	1:K:336:GLU:HB3	2.13	0.48
1:L:102:ILE:HD11	1:L:104:TYR:CE2	2.48	0.48
1:L:110:TYR:CE2	1:M:275:LYS:HG3	2.48	0.48
1:M:316:LEU:HD13	1:M:362:ARG:HD3	1.95	0.48
1:N:110:TYR:CE2	1:O:275:LYS:HG3	2.48	0.48
1:O:141:VAL:O	1:O:145:ASP:CB	2.61	0.48
1:O:316:LEU:HD13	1:O:362:ARG:HD3	1.95	0.48
1:P:242:PHE:HE1	1:P:270:ASN:O	1.96	0.48
1:B:89:GLN:HB2	1:I:92:PHE:HZ	1.78	0.48
1:B:102:ILE:HD11	1:B:104:TYR:CE2	2.48	0.48
1:D:110:TYR:CE2	1:E:275:LYS:HG3	2.48	0.48
1:G:261:ASP:HB3	1:K:259:GLN:HE22	1.78	0.48
1:H:89:GLN:HB2	1:K:92:PHE:HZ	1.77	0.48
1:H:186:ARG:HH11	1:H:336:GLU:CD	2.17	0.48
1:I:275:LYS:HG3	1:P:110:TYR:CE2	2.48	0.48
1:J:186:ARG:HH11	1:J:336:GLU:CD	2.17	0.48
1:N:186:ARG:O	1:N:336:GLU:HB3	2.13	0.48
1:A:186:ARG:O	1:A:336:GLU:HB3	2.13	0.48
1:C:236:TRP:CD1	1:C:243:PRO:HA	2.47	0.48
1:C:242:PHE:O	1:C:242:PHE:CG	2.66	0.48
1:D:186:ARG:O	1:D:336:GLU:HB3	2.13	0.48
1:G:316:LEU:HD13	1:G:362:ARG:HD3	1.95	0.48
1:I:316:LEU:HD13	1:I:362:ARG:HD3	1.95	0.48
1:A:22:PRO:HG2	1:A:33:ARG:NH1	2.29	0.48
1:A:110:TYR:CE2	1:B:275:LYS:HG3	2.49	0.48
1:B:89:GLN:HG3	1:B:90:LEU:N	2.22	0.48
1:B:186:ARG:HH11	1:B:336:GLU:CD	2.17	0.48
1:C:22:PRO:HG2	1:C:33:ARG:NH1	2.29	0.48
1:E:202:ASN:O	1:E:206:GLN:HG2	2.14	0.48
1:F:110:TYR:CE2	1:G:275:LYS:HG3	2.48	0.48
1:G:202:ASN:O	1:G:206:GLN:HG2	2.14	0.48
1:H:102:ILE:HD13	1:H:243:PRO:HD2	1.95	0.48
1:I:202:ASN:O	1:I:206:GLN:HG2	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:102:ILE:HD13	1:K:243:PRO:HD2	1.95	0.48
1:K:210:LEU:O	1:K:213:LEU:N	2.44	0.48
1:L:186:ARG:HH11	1:L:336:GLU:CD	2.17	0.48
1:L:242:PHE:O	1:L:242:PHE:CG	2.66	0.48
1:M:242:PHE:O	1:M:242:PHE:CG	2.66	0.48
1:O:186:ARG:O	1:O:336:GLU:HB3	2.13	0.48
1:P:123:ARG:O	1:P:126:TRP:N	2.46	0.48
1:A:102:ILE:HD13	1:A:243:PRO:HD2	1.95	0.48
1:E:102:ILE:HD11	1:E:104:TYR:CE2	2.48	0.48
1:E:186:ARG:O	1:E:336:GLU:HB3	2.13	0.48
1:F:123:ARG:O	1:F:126:TRP:N	2.46	0.48
1:J:102:ILE:HD13	1:J:243:PRO:HD2	1.95	0.48
1:K:22:PRO:HG2	1:K:33:ARG:NH1	2.29	0.48
1:M:22:PRO:HG2	1:M:33:ARG:NH1	2.29	0.48
1:O:202:ASN:O	1:O:206:GLN:HG2	2.14	0.48
1:A:210:LEU:O	1:A:213:LEU:N	2.44	0.48
1:B:242:PHE:O	1:B:242:PHE:CG	2.66	0.48
1:C:205:ILE:O	1:C:209:ILE:HG12	2.12	0.48
1:D:89:GLN:HB2	1:O:92:PHE:HZ	1.79	0.48
1:F:22:PRO:HG2	1:F:33:ARG:NH1	2.29	0.48
1:G:22:PRO:HG2	1:G:33:ARG:NH1	2.29	0.48
1:H:242:PHE:O	1:H:242:PHE:CG	2.66	0.48
1:I:22:PRO:HG2	1:I:33:ARG:NH1	2.29	0.48
1:J:242:PHE:O	1:J:242:PHE:CG	2.66	0.48
1:L:89:GLN:HG3	1:L:90:LEU:N	2.22	0.48
1:M:205:ILE:O	1:M:209:ILE:HG12	2.12	0.48
1:M:236:TRP:CD1	1:M:243:PRO:HA	2.47	0.48
1:O:102:ILE:HD11	1:O:104:TYR:CE2	2.48	0.48
1:P:22:PRO:HG2	1:P:33:ARG:NH1	2.29	0.48
1:A:141:VAL:O	1:A:145:ASP:CB	2.61	0.48
1:A:316:LEU:HD13	1:A:362:ARG:HD3	1.95	0.48
1:E:102:ILE:HD13	1:E:243:PRO:HD2	1.95	0.48
1:F:186:ARG:O	1:F:336:GLU:HB3	2.13	0.48
1:G:89:GLN:CG	1:G:90:LEU:H	2.23	0.48
1:H:123:ARG:O	1:H:126:TRP:N	2.46	0.48
1:J:123:ARG:O	1:J:126:TRP:N	2.46	0.48
1:J:316:LEU:HD13	1:J:362:ARG:HD3	1.95	0.48
1:K:141:VAL:O	1:K:145:ASP:CB	2.61	0.48
1:M:102:ILE:HD11	1:M:104:TYR:CE2	2.48	0.48
1:P:186:ARG:HH11	1:P:336:GLU:CD	2.17	0.48
1:A:168:ARG:HG3	1:B:158:PHE:CE2	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:89:GLN:HB2	1:P:92:PHE:HZ	1.79	0.48
1:C:123:ARG:O	1:C:126:TRP:N	2.46	0.48
1:F:186:ARG:HH11	1:F:336:GLU:CD	2.17	0.48
1:F:202:ASN:O	1:F:206:GLN:HG2	2.14	0.48
1:F:318:THR:HG23	1:F:319:ALA:N	2.27	0.48
1:G:89:GLN:HB2	1:L:92:PHE:HZ	1.79	0.48
1:G:92:PHE:HZ	1:L:89:GLN:HB2	1.79	0.48
1:H:117:PHE:HD2	1:H:118:LEU:HD12	1.76	0.48
1:H:210:LEU:O	1:H:213:LEU:N	2.44	0.48
1:J:22:PRO:HG2	1:J:33:ARG:NH1	2.29	0.48
1:K:316:LEU:HD13	1:K:362:ARG:HD3	1.95	0.48
1:L:186:ARG:O	1:L:336:GLU:HB3	2.13	0.48
1:L:316:LEU:HD13	1:L:362:ARG:HD3	1.95	0.48
1:M:123:ARG:O	1:M:126:TRP:N	2.46	0.48
1:N:202:ASN:O	1:N:206:GLN:HG2	2.14	0.48
1:O:102:ILE:HD13	1:O:243:PRO:HD2	1.95	0.48
1:P:186:ARG:O	1:P:336:GLU:HB3	2.13	0.48
1:A:123:ARG:O	1:A:126:TRP:N	2.46	0.48
1:A:190:LEU:HA	1:A:193:THR:HG22	1.96	0.48
1:A:202:ASN:O	1:A:206:GLN:HG2	2.14	0.48
1:A:242:PHE:O	1:A:242:PHE:CG	2.66	0.48
1:B:123:ARG:O	1:B:126:TRP:N	2.46	0.48
1:B:202:ASN:O	1:B:206:GLN:HG2	2.14	0.48
1:B:316:LEU:HD13	1:B:362:ARG:HD3	1.95	0.48
1:C:102:ILE:HD11	1:C:104:TYR:CE2	2.48	0.48
1:C:168:ARG:HG3	1:D:158:PHE:CE2	2.49	0.48
1:C:186:ARG:O	1:C:336:GLU:HB3	2.13	0.48
1:E:22:PRO:HG2	1:E:33:ARG:NH1	2.29	0.48
1:H:22:PRO:HG2	1:H:33:ARG:NH1	2.29	0.48
1:H:316:LEU:HD13	1:H:362:ARG:HD3	1.95	0.48
1:I:89:GLN:CG	1:I:90:LEU:H	2.23	0.48
1:J:117:PHE:HD2	1:J:118:LEU:HD12	1.76	0.48
1:J:210:LEU:O	1:J:213:LEU:N	2.44	0.48
1:K:39:LEU:HD23	1:K:115:GLN:CB	2.42	0.48
1:K:190:LEU:HA	1:K:193:THR:HG22	1.96	0.48
1:K:202:ASN:O	1:K:206:GLN:HG2	2.14	0.48
1:L:123:ARG:O	1:L:126:TRP:N	2.46	0.48
1:M:186:ARG:HH11	1:M:336:GLU:CD	2.17	0.48
1:O:22:PRO:HG2	1:O:33:ARG:NH1	2.29	0.48
1:O:168:ARG:HG3	1:P:158:PHE:CE2	2.49	0.48
1:P:202:ASN:O	1:P:206:GLN:HG2	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:141:VAL:O	1:B:145:ASP:CB	2.61	0.48
1:B:186:ARG:O	1:B:336:GLU:HB3	2.13	0.48
1:C:186:ARG:HH11	1:C:336:GLU:CD	2.17	0.48
1:D:202:ASN:O	1:D:206:GLN:HG2	2.14	0.48
1:F:92:PHE:HZ	1:M:89:GLN:HB2	1.79	0.48
1:F:141:VAL:O	1:F:145:ASP:CB	2.61	0.48
1:G:89:GLN:HG3	1:G:90:LEU:N	2.22	0.48
1:I:89:GLN:HG3	1:I:90:LEU:N	2.22	0.48
1:K:123:ARG:O	1:K:126:TRP:N	2.46	0.48
1:K:242:PHE:O	1:K:242:PHE:CG	2.66	0.48
1:L:22:PRO:HG2	1:L:33:ARG:NH1	2.29	0.48
1:L:202:ASN:O	1:L:206:GLN:HG2	2.14	0.48
1:M:102:ILE:HD13	1:M:243:PRO:HD2	1.95	0.48
1:M:186:ARG:O	1:M:336:GLU:HB3	2.13	0.48
1:M:275:LYS:HA	1:M:275:LYS:HD3	1.70	0.48
1:N:102:ILE:HD13	1:N:243:PRO:HD2	1.95	0.48
1:A:39:LEU:HD23	1:A:115:GLN:CB	2.42	0.47
1:B:22:PRO:HG2	1:B:33:ARG:NH1	2.29	0.47
1:C:102:ILE:HD13	1:C:243:PRO:HD2	1.95	0.47
1:D:102:ILE:HD13	1:D:243:PRO:HD2	1.95	0.47
1:G:110:TYR:CE2	1:H:275:LYS:HG3	2.49	0.47
1:H:190:LEU:HA	1:H:193:THR:HG22	1.96	0.47
1:L:141:VAL:O	1:L:145:ASP:CB	2.61	0.47
1:P:318:THR:HG23	1:P:319:ALA:N	2.27	0.47
1:B:102:ILE:HD13	1:B:243:PRO:HD2	1.95	0.47
1:C:202:ASN:O	1:C:206:GLN:HG2	2.14	0.47
1:E:186:ARG:HH11	1:E:336:GLU:CD	2.17	0.47
1:G:102:ILE:HD13	1:G:243:PRO:HD2	1.95	0.47
1:I:102:ILE:HD13	1:I:243:PRO:HD2	1.95	0.47
1:K:186:ARG:HH11	1:K:336:GLU:CD	2.17	0.47
1:L:102:ILE:HD13	1:L:243:PRO:HD2	1.95	0.47
1:N:22:PRO:HG2	1:N:33:ARG:NH1	2.29	0.47
1:N:102:ILE:HD11	1:N:104:TYR:CE2	2.48	0.47
1:O:186:ARG:HH11	1:O:336:GLU:CD	2.17	0.47
1:P:141:VAL:O	1:P:145:ASP:CB	2.61	0.47
1:A:186:ARG:HH11	1:A:336:GLU:CD	2.17	0.47
1:A:276:LEU:HD12	1:A:277:PHE:N	2.30	0.47
1:B:210:LEU:O	1:B:213:LEU:N	2.44	0.47
1:C:190:LEU:HA	1:C:193:THR:HG22	1.96	0.47
1:D:102:ILE:HD11	1:D:104:TYR:CE2	2.48	0.47
1:H:141:VAL:O	1:H:145:ASP:CB	2.61	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:46:LEU:HD23	1:J:46:LEU:HA	1.58	0.47
1:J:141:VAL:O	1:J:145:ASP:CB	2.61	0.47
1:J:190:LEU:HA	1:J:193:THR:HG22	1.96	0.47
1:J:276:LEU:HD12	1:J:277:PHE:N	2.30	0.47
1:K:276:LEU:HD12	1:K:277:PHE:N	2.30	0.47
1:M:202:ASN:O	1:M:206:GLN:HG2	2.14	0.47
1:D:22:PRO:HG2	1:D:33:ARG:NH1	2.29	0.47
1:D:123:ARG:O	1:D:126:TRP:N	2.46	0.47
1:D:190:LEU:HA	1:D:193:THR:HG22	1.96	0.47
1:E:92:PHE:HZ	1:N:89:GLN:HB2	1.79	0.47
1:E:168:ARG:HG3	1:F:158:PHE:CE2	2.49	0.47
1:F:89:GLN:CG	1:F:90:LEU:H	2.23	0.47
1:F:316:LEU:HD13	1:F:362:ARG:HD3	1.95	0.47
1:G:186:ARG:HH11	1:G:336:GLU:CD	2.17	0.47
1:G:210:LEU:O	1:G:213:LEU:N	2.44	0.47
1:H:276:LEU:HD12	1:H:277:PHE:N	2.30	0.47
1:I:210:LEU:O	1:I:213:LEU:N	2.44	0.47
1:L:210:LEU:O	1:L:213:LEU:N	2.44	0.47
1:M:168:ARG:HG3	1:N:158:PHE:CE2	2.50	0.47
1:N:190:LEU:HA	1:N:193:THR:HG22	1.96	0.47
1:B:276:LEU:HD12	1:B:277:PHE:N	2.30	0.47
1:C:110:TYR:CE2	1:D:275:LYS:HG3	2.49	0.47
1:E:110:TYR:CE2	1:F:275:LYS:HG3	2.49	0.47
1:G:276:LEU:HD12	1:G:277:PHE:N	2.30	0.47
1:I:186:ARG:HH11	1:I:336:GLU:CD	2.17	0.47
1:I:276:LEU:HD12	1:I:277:PHE:N	2.30	0.47
1:L:276:LEU:HD12	1:L:277:PHE:N	2.30	0.47
1:M:190:LEU:HA	1:M:193:THR:HG22	1.96	0.47
1:N:123:ARG:O	1:N:126:TRP:N	2.46	0.47
1:P:89:GLN:CG	1:P:90:LEU:H	2.23	0.47
1:P:102:ILE:HD13	1:P:243:PRO:HD2	1.95	0.47
1:P:316:LEU:HD13	1:P:362:ARG:HD3	1.95	0.47
1:A:275:LYS:HD3	1:A:275:LYS:HA	1.70	0.47
1:H:89:GLN:HG3	1:H:90:LEU:N	2.22	0.47
1:I:110:TYR:CE2	1:J:275:LYS:HG3	2.49	0.47
1:J:89:GLN:HG3	1:J:90:LEU:N	2.22	0.47
1:L:46:LEU:HA	1:L:46:LEU:HD23	1.58	0.47
1:M:110:TYR:CE2	1:N:275:LYS:HG3	2.49	0.47
1:P:190:LEU:HA	1:P:193:THR:HG22	1.96	0.47
1:A:89:GLN:HB2	1:J:92:PHE:HZ	1.79	0.47
1:D:92:PHE:HZ	1:O:89:GLN:HB2	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:168:ARG:HG3	1:E:158:PHE:CE2	2.50	0.47
1:E:89:GLN:HB2	1:N:92:PHE:HZ	1.79	0.47
1:E:190:LEU:HA	1:E:193:THR:HG22	1.96	0.47
1:F:102:ILE:HD13	1:F:243:PRO:HD2	1.95	0.47
1:F:190:LEU:HA	1:F:193:THR:HG22	1.96	0.47
1:F:276:LEU:HD12	1:F:277:PHE:N	2.30	0.47
1:F:305:LYS:HA	1:F:308:ALA:HB2	1.97	0.47
1:F:333:ALA:HB1	1:F:368:PHE:CE2	2.50	0.47
1:G:168:ARG:HG3	1:H:158:PHE:CE2	2.49	0.47
1:H:46:LEU:HD23	1:H:46:LEU:HA	1.58	0.47
1:I:158:PHE:CE2	1:P:168:ARG:HG3	2.50	0.47
1:J:146:ARG:HH21	1:K:152:ARG:HE	1.62	0.47
1:O:110:TYR:CE2	1:P:275:LYS:HG3	2.49	0.47
1:O:190:LEU:HA	1:O:193:THR:HG22	1.96	0.47
1:O:267:LEU:HA	1:O:267:LEU:HD12	1.67	0.47
1:P:154:LYS:HE3	1:P:157:LYS:HG2	1.97	0.47
1:P:276:LEU:HD12	1:P:277:PHE:N	2.30	0.47
1:P:305:LYS:HA	1:P:308:ALA:HB2	1.97	0.47
1:F:154:LYS:HE3	1:F:157:LYS:HG2	1.97	0.47
1:H:333:ALA:HB1	1:H:368:PHE:CE2	2.50	0.47
1:J:202:ASN:O	1:J:206:GLN:HG2	2.14	0.47
1:P:29:ARG:HH22	1:P:196:THR:HB	1.80	0.47
1:P:333:ALA:HB1	1:P:368:PHE:CE2	2.50	0.47
1:A:92:PHE:HZ	1:J:89:GLN:HB2	1.79	0.47
1:B:104:TYR:HA	1:B:107:TRP:HE3	1.80	0.47
1:B:333:ALA:HB1	1:B:368:PHE:CE2	2.50	0.47
1:D:29:ARG:HH22	1:D:196:THR:HB	1.80	0.47
1:D:186:ARG:HH11	1:D:336:GLU:CD	2.17	0.47
1:E:89:GLN:CG	1:E:90:LEU:H	2.23	0.47
1:E:305:LYS:HA	1:E:308:ALA:HB2	1.97	0.47
1:F:29:ARG:HH22	1:F:196:THR:HB	1.80	0.47
1:G:305:LYS:HA	1:G:308:ALA:HB2	1.97	0.47
1:H:202:ASN:O	1:H:206:GLN:HG2	2.14	0.47
1:H:236:TRP:CD1	1:H:243:PRO:HA	2.47	0.47
1:I:305:LYS:HA	1:I:308:ALA:HB2	1.97	0.47
1:L:190:LEU:HA	1:L:193:THR:HG22	1.96	0.47
1:N:29:ARG:HH22	1:N:196:THR:HB	1.80	0.47
1:N:168:ARG:HG3	1:O:158:PHE:CE2	2.50	0.47
1:O:89:GLN:CG	1:O:90:LEU:H	2.23	0.47
1:E:29:ARG:HH22	1:E:196:THR:HB	1.80	0.47
1:F:168:ARG:HG3	1:G:158:PHE:CE2	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:154:LYS:HE3	1:G:157:LYS:HG2	1.97	0.47
1:I:333:ALA:HB1	1:I:368:PHE:CE2	2.50	0.47
1:J:333:ALA:HB1	1:J:368:PHE:CE2	2.50	0.47
1:L:104:TYR:HA	1:L:107:TRP:HE3	1.80	0.47
1:L:333:ALA:HB1	1:L:368:PHE:CE2	2.50	0.47
1:M:276:LEU:HD12	1:M:277:PHE:N	2.30	0.47
1:N:218:ILE:HG13	1:N:219:TYR:CD2	2.50	0.47
1:O:154:LYS:HE3	1:O:157:LYS:HG2	1.97	0.47
1:O:305:LYS:HA	1:O:308:ALA:HB2	1.97	0.47
1:A:333:ALA:HB1	1:A:368:PHE:CE2	2.50	0.46
1:B:190:LEU:HA	1:B:193:THR:HG22	1.96	0.46
1:C:29:ARG:HH22	1:C:196:THR:HB	1.80	0.46
1:C:92:PHE:HZ	1:P:89:GLN:HB2	1.79	0.46
1:C:141:VAL:O	1:C:145:ASP:CB	2.61	0.46
1:C:276:LEU:HD12	1:C:277:PHE:N	2.30	0.46
1:C:333:ALA:HB1	1:C:368:PHE:CE2	2.50	0.46
1:E:236:TRP:CD1	1:E:243:PRO:HA	2.47	0.46
1:H:169:PRO:O	1:H:172:TYR:HB3	2.16	0.46
1:I:190:LEU:HA	1:I:193:THR:HG22	1.96	0.46
1:J:169:PRO:O	1:J:172:TYR:HB3	2.16	0.46
1:K:275:LYS:HD3	1:K:275:LYS:HA	1.70	0.46
1:M:29:ARG:HH22	1:M:196:THR:HB	1.80	0.46
1:M:333:ALA:HB1	1:M:368:PHE:CE2	2.50	0.46
1:N:186:ARG:HH11	1:N:336:GLU:CD	2.17	0.46
1:O:29:ARG:HH22	1:O:196:THR:HB	1.80	0.46
1:C:218:ILE:HG13	1:C:219:TYR:CD2	2.50	0.46
1:D:104:TYR:HA	1:D:107:TRP:HE3	1.80	0.46
1:D:218:ILE:HG13	1:D:219:TYR:CD2	2.50	0.46
1:D:305:LYS:HA	1:D:308:ALA:HB2	1.97	0.46
1:E:154:LYS:HE3	1:E:157:LYS:HG2	1.97	0.46
1:F:89:GLN:HB2	1:M:92:PHE:HZ	1.79	0.46
1:F:104:TYR:HA	1:F:107:TRP:HE3	1.80	0.46
1:G:169:PRO:O	1:G:172:TYR:HB3	2.16	0.46
1:G:333:ALA:HB1	1:G:368:PHE:CE2	2.50	0.46
1:H:29:ARG:HH22	1:H:196:THR:HB	1.80	0.46
1:I:169:PRO:O	1:I:172:TYR:HB3	2.16	0.46
1:J:179:LEU:CD2	1:K:352:ILE:HA	2.45	0.46
1:J:236:TRP:CD1	1:J:243:PRO:HA	2.47	0.46
1:K:333:ALA:HB1	1:K:368:PHE:CE2	2.50	0.46
1:M:218:ILE:HG13	1:M:219:TYR:CD2	2.50	0.46
1:G:190:LEU:HA	1:G:193:THR:HG22	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:104:TYR:HA	1:H:107:TRP:HE3	1.80	0.46
1:H:154:LYS:HE3	1:H:157:LYS:HG2	1.97	0.46
1:I:154:LYS:HE3	1:I:157:LYS:HG2	1.97	0.46
1:J:29:ARG:HH22	1:J:196:THR:HB	1.80	0.46
1:J:104:TYR:HA	1:J:107:TRP:HE3	1.80	0.46
1:J:218:ILE:HG13	1:J:219:TYR:CD2	2.50	0.46
1:M:141:VAL:O	1:M:145:ASP:CB	2.61	0.46
1:N:104:TYR:HA	1:N:107:TRP:HE3	1.80	0.46
1:N:276:LEU:HD12	1:N:277:PHE:N	2.30	0.46
1:N:305:LYS:HA	1:N:308:ALA:HB2	1.97	0.46
1:O:173:ILE:HA	1:O:173:ILE:HD13	1.77	0.46
1:P:104:TYR:HA	1:P:107:TRP:HE3	1.80	0.46
1:A:169:PRO:O	1:A:172:TYR:HB3	2.16	0.46
1:C:169:PRO:O	1:C:172:TYR:HB3	2.16	0.46
1:D:239:THR:OG1	1:D:241:HIS:O	2.34	0.46
1:D:276:LEU:HD12	1:D:277:PHE:N	2.30	0.46
1:D:333:ALA:HB1	1:D:368:PHE:CE2	2.50	0.46
1:E:275:LYS:HD3	1:E:275:LYS:HA	1.70	0.46
1:H:218:ILE:HG13	1:H:219:TYR:CD2	2.50	0.46
1:K:169:PRO:O	1:K:172:TYR:HB3	2.16	0.46
1:N:239:THR:OG1	1:N:241:HIS:O	2.34	0.46
1:O:236:TRP:CD1	1:O:243:PRO:HA	2.47	0.46
1:O:276:LEU:HD12	1:O:277:PHE:N	2.30	0.46
1:B:29:ARG:HH22	1:B:196:THR:HB	1.80	0.46
1:B:168:ARG:HG3	1:C:158:PHE:CE2	2.50	0.46
1:E:173:ILE:HD13	1:E:173:ILE:HA	1.77	0.46
1:E:218:ILE:HG13	1:E:219:TYR:CD2	2.50	0.46
1:E:267:LEU:HA	1:E:267:LEU:HD12	1.67	0.46
1:F:186:ARG:HD3	1:F:336:GLU:OE2	2.16	0.46
1:G:218:ILE:HG13	1:G:219:TYR:CD2	2.50	0.46
1:I:218:ILE:HG13	1:I:219:TYR:CD2	2.50	0.46
1:J:154:LYS:HE3	1:J:157:LYS:HG2	1.97	0.46
1:K:168:ARG:HG3	1:L:158:PHE:CE2	2.50	0.46
1:M:169:PRO:O	1:M:172:TYR:HB3	2.16	0.46
1:N:333:ALA:HB1	1:N:368:PHE:CE2	2.50	0.46
1:O:218:ILE:HG13	1:O:219:TYR:CD2	2.50	0.46
1:P:173:ILE:HD13	1:P:173:ILE:HA	1.77	0.46
1:P:186:ARG:HD3	1:P:336:GLU:OE2	2.16	0.46
1:B:239:THR:OG1	1:B:241:HIS:O	2.34	0.46
1:D:186:ARG:HD3	1:D:336:GLU:OE2	2.16	0.46
1:E:239:THR:OG1	1:E:241:HIS:O	2.34	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:276:LEU:HD12	1:E:277:PHE:N	2.30	0.46
1:G:141:VAL:O	1:G:145:ASP:CB	2.61	0.46
1:I:141:VAL:O	1:I:145:ASP:CB	2.61	0.46
1:L:29:ARG:HH22	1:L:196:THR:HB	1.80	0.46
1:L:168:ARG:HG3	1:M:158:PHE:CE2	2.50	0.46
1:M:239:THR:OG1	1:M:241:HIS:O	2.34	0.46
1:N:186:ARG:HD3	1:N:336:GLU:OE2	2.16	0.46
1:O:333:ALA:HB1	1:O:368:PHE:CE2	2.50	0.46
1:E:333:ALA:HB1	1:E:368:PHE:CE2	2.50	0.46
1:F:169:PRO:O	1:F:172:TYR:HB3	2.16	0.46
1:I:104:TYR:HA	1:I:107:TRP:HE3	1.80	0.46
1:I:168:ARG:HG3	1:J:158:PHE:CE2	2.50	0.46
1:L:239:THR:OG1	1:L:241:HIS:O	2.34	0.46
1:O:169:PRO:O	1:O:172:TYR:HB3	2.16	0.46
1:O:239:THR:OG1	1:O:241:HIS:O	2.34	0.46
1:P:169:PRO:O	1:P:172:TYR:HB3	2.16	0.46
1:B:186:ARG:HD3	1:B:336:GLU:OE2	2.16	0.46
1:B:218:ILE:HG13	1:B:219:TYR:CD2	2.50	0.46
1:C:89:GLN:CG	1:C:90:LEU:H	2.23	0.46
1:C:104:TYR:HA	1:C:107:TRP:HE3	1.80	0.46
1:C:186:ARG:HD3	1:C:336:GLU:OE2	2.16	0.46
1:C:239:THR:OG1	1:C:241:HIS:O	2.34	0.46
1:C:305:LYS:HA	1:C:308:ALA:HB2	1.97	0.46
1:D:154:LYS:HE3	1:D:157:LYS:HG2	1.97	0.46
1:E:169:PRO:O	1:E:172:TYR:HB3	2.16	0.46
1:G:29:ARG:HH22	1:G:196:THR:HB	1.80	0.46
1:G:104:TYR:HA	1:G:107:TRP:HE3	1.80	0.46
1:L:186:ARG:HD3	1:L:336:GLU:OE2	2.16	0.46
1:L:218:ILE:HG13	1:L:219:TYR:CD2	2.50	0.46
1:L:305:LYS:HA	1:L:308:ALA:HB2	1.97	0.46
1:N:154:LYS:HE3	1:N:157:LYS:HG2	1.97	0.46
1:H:305:LYS:HA	1:H:308:ALA:HB2	1.97	0.46
1:I:29:ARG:HH22	1:I:196:THR:HB	1.80	0.46
1:I:46:LEU:HA	1:I:46:LEU:HD23	1.58	0.46
1:K:29:ARG:HH22	1:K:196:THR:HB	1.80	0.46
1:M:186:ARG:HD3	1:M:336:GLU:OE2	2.16	0.46
1:M:305:LYS:HA	1:M:308:ALA:HB2	1.97	0.46
1:A:218:ILE:HG13	1:A:219:TYR:CD2	2.50	0.46
1:A:239:THR:OG1	1:A:241:HIS:O	2.34	0.46
1:C:367:ASP:OD1	1:C:368:PHE:N	2.49	0.46
1:E:186:ARG:HD3	1:E:336:GLU:OE2	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:173:ILE:HD13	1:F:173:ILE:HA	1.77	0.46
1:H:186:ARG:HD3	1:H:336:GLU:OE2	2.16	0.46
1:J:305:LYS:HA	1:J:308:ALA:HB2	1.97	0.46
1:K:110:TYR:CE2	1:L:275:LYS:HG3	2.51	0.46
1:K:154:LYS:HE3	1:K:157:LYS:HG2	1.97	0.46
1:K:239:THR:OG1	1:K:241:HIS:O	2.34	0.46
1:L:367:ASP:OD1	1:L:368:PHE:N	2.49	0.46
1:M:104:TYR:HA	1:M:107:TRP:HE3	1.80	0.46
1:M:367:ASP:OD1	1:M:368:PHE:N	2.49	0.46
1:N:367:ASP:OD1	1:N:368:PHE:N	2.49	0.46
1:A:29:ARG:HH22	1:A:196:THR:HB	1.80	0.45
1:A:154:LYS:HE3	1:A:157:LYS:HG2	1.97	0.45
1:B:305:LYS:HA	1:B:308:ALA:HB2	1.97	0.45
1:B:367:ASP:OD1	1:B:368:PHE:N	2.50	0.45
1:D:106:GLN:O	1:E:275:LYS:NZ	2.38	0.45
1:D:367:ASP:OD1	1:D:368:PHE:N	2.50	0.45
1:G:318:THR:HG23	1:G:319:ALA:N	2.27	0.45
1:J:186:ARG:HD3	1:J:336:GLU:OE2	2.16	0.45
1:M:89:GLN:CG	1:M:90:LEU:H	2.23	0.45
1:N:236:TRP:CD1	1:N:243:PRO:HA	2.47	0.45
1:O:104:TYR:HA	1:O:107:TRP:HE3	1.80	0.45
1:O:275:LYS:HD3	1:O:275:LYS:HA	1.70	0.45
1:E:104:TYR:HA	1:E:107:TRP:HE3	1.80	0.45
1:F:130:ILE:HD12	1:F:130:ILE:HA	1.84	0.45
1:K:218:ILE:HG13	1:K:219:TYR:CD2	2.50	0.45
1:K:305:LYS:HA	1:K:308:ALA:HB2	1.97	0.45
1:O:186:ARG:HD3	1:O:336:GLU:OE2	2.16	0.45
1:P:218:ILE:HG13	1:P:219:TYR:CD2	2.50	0.45
1:B:154:LYS:HE3	1:B:157:LYS:HG2	1.97	0.45
1:C:130:ILE:HD12	1:C:130:ILE:HA	1.84	0.45
1:F:218:ILE:HG13	1:F:219:TYR:CD2	2.50	0.45
1:L:169:PRO:O	1:L:172:TYR:HB3	2.16	0.45
1:A:158:PHE:CE2	1:H:168:ARG:HG3	2.51	0.45
1:B:169:PRO:O	1:B:172:TYR:HB3	2.16	0.45
1:F:239:THR:OG1	1:F:241:HIS:O	2.34	0.45
1:G:173:ILE:HD13	1:G:173:ILE:HA	1.77	0.45
1:G:275:LYS:HD3	1:G:275:LYS:HA	1.70	0.45
1:I:318:THR:HG23	1:I:319:ALA:N	2.27	0.45
1:J:367:ASP:OD1	1:J:368:PHE:N	2.49	0.45
1:K:104:TYR:HA	1:K:107:TRP:HE3	1.80	0.45
1:N:169:PRO:O	1:N:172:TYR:HB3	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:305:LYS:HA	1:A:308:ALA:HB2	1.97	0.45
1:C:46:LEU:HA	1:C:46:LEU:HD23	1.58	0.45
1:C:154:LYS:HE3	1:C:157:LYS:HG2	1.97	0.45
1:C:275:LYS:HD3	1:C:275:LYS:HA	1.70	0.45
1:D:103:GLN:HG3	1:D:103:GLN:O	2.17	0.45
1:D:169:PRO:O	1:D:172:TYR:HB3	2.16	0.45
1:E:103:GLN:HG3	1:E:103:GLN:O	2.17	0.45
1:H:367:ASP:OD1	1:H:368:PHE:N	2.50	0.45
1:K:186:ARG:HD3	1:K:336:GLU:OE2	2.16	0.45
1:L:154:LYS:HE3	1:L:157:LYS:HG2	1.97	0.45
1:L:275:LYS:HD3	1:L:275:LYS:HA	1.70	0.45
1:M:154:LYS:HE3	1:M:157:LYS:HG2	1.97	0.45
1:O:103:GLN:HG3	1:O:103:GLN:O	2.17	0.45
1:P:239:THR:OG1	1:P:241:HIS:O	2.34	0.45
1:A:103:GLN:HG3	1:A:103:GLN:O	2.17	0.45
1:A:104:TYR:HA	1:A:107:TRP:HE3	1.80	0.45
1:A:367:ASP:OD1	1:A:368:PHE:N	2.49	0.45
1:B:259:GLN:HE22	1:P:261:ASP:HB3	1.82	0.45
1:B:261:ASP:HB3	1:P:259:GLN:HE22	1.82	0.45
1:G:46:LEU:HA	1:G:46:LEU:HD23	1.58	0.45
1:H:239:THR:OG1	1:H:241:HIS:O	2.34	0.45
1:J:239:THR:OG1	1:J:241:HIS:O	2.34	0.45
1:K:367:ASP:OD1	1:K:368:PHE:N	2.50	0.45
1:A:186:ARG:HD3	1:A:336:GLU:OE2	2.16	0.45
1:A:214:LEU:HD23	1:A:214:LEU:HA	1.76	0.45
1:K:103:GLN:HG3	1:K:103:GLN:O	2.17	0.45
1:K:146:ARG:NH2	1:L:152:ARG:HE	2.15	0.45
1:M:210:LEU:O	1:M:213:LEU:N	2.44	0.45
1:N:103:GLN:O	1:N:103:GLN:HG3	2.17	0.45
1:O:108:VAL:HG11	1:O:273:TYR:CE1	2.52	0.45
1:B:84:VAL:HG22	1:B:85:PRO:O	2.17	0.45
1:D:89:GLN:O	1:D:90:LEU:HD23	2.17	0.45
1:E:108:VAL:HG11	1:E:273:TYR:CE1	2.52	0.45
1:J:103:GLN:HG3	1:J:103:GLN:O	2.17	0.45
1:L:84:VAL:HG22	1:L:85:PRO:O	2.17	0.45
1:M:89:GLN:O	1:M:90:LEU:HD23	2.17	0.45
1:M:130:ILE:HD12	1:M:130:ILE:HA	1.84	0.45
1:N:89:GLN:O	1:N:90:LEU:HD23	2.17	0.45
1:O:89:GLN:O	1:O:90:LEU:HD23	2.17	0.45
1:P:130:ILE:HD12	1:P:130:ILE:HA	1.84	0.45
1:A:84:VAL:HG22	1:A:85:PRO:O	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:267:LEU:HA	1:A:267:LEU:HD12	1.67	0.45
1:B:89:GLN:O	1:B:90:LEU:HD23	2.17	0.45
1:B:236:TRP:CD1	1:B:243:PRO:HA	2.47	0.45
1:C:89:GLN:O	1:C:90:LEU:HD23	2.17	0.45
1:C:210:LEU:O	1:C:213:LEU:N	2.44	0.45
1:D:259:GLN:HE22	1:N:261:ASP:HB3	1.82	0.45
1:D:320:PRO:O	1:D:321:ILE:HG12	2.17	0.45
1:E:84:VAL:HG22	1:E:85:PRO:O	2.17	0.45
1:E:89:GLN:O	1:E:90:LEU:HD23	2.17	0.45
1:F:320:PRO:O	1:F:321:ILE:HG12	2.17	0.45
1:G:102:ILE:HD11	1:G:104:TYR:CE2	2.48	0.45
1:G:239:THR:OG1	1:G:241:HIS:O	2.34	0.45
1:G:325:ILE:H	1:G:325:ILE:HD12	1.82	0.45
1:I:102:ILE:HD11	1:I:104:TYR:CE2	2.48	0.45
1:I:186:ARG:HD3	1:I:336:GLU:OE2	2.16	0.45
1:I:239:THR:OG1	1:I:241:HIS:O	2.34	0.45
1:I:325:ILE:H	1:I:325:ILE:HD12	1.82	0.45
1:K:108:VAL:HG11	1:K:273:TYR:CE1	2.52	0.45
1:L:89:GLN:O	1:L:90:LEU:HD23	2.17	0.45
1:L:320:PRO:O	1:L:321:ILE:HG12	2.17	0.45
1:N:320:PRO:O	1:N:321:ILE:HG12	2.17	0.45
1:O:84:VAL:HG22	1:O:85:PRO:O	2.17	0.45
1:P:320:PRO:O	1:P:321:ILE:HG12	2.17	0.45
1:P:367:ASP:OD1	1:P:368:PHE:N	2.49	0.45
1:A:108:VAL:HG11	1:A:273:TYR:CE1	2.52	0.45
1:A:320:PRO:O	1:A:321:ILE:HG12	2.17	0.45
1:B:320:PRO:O	1:B:321:ILE:HG12	2.17	0.45
1:F:367:ASP:OD1	1:F:368:PHE:N	2.50	0.45
1:G:84:VAL:HG22	1:G:85:PRO:O	2.17	0.45
1:G:186:ARG:HD3	1:G:336:GLU:OE2	2.16	0.45
1:H:103:GLN:HG3	1:H:103:GLN:O	2.17	0.45
1:H:261:ASP:HB3	1:J:259:GLN:HE22	1.82	0.45
1:H:318:THR:HG23	1:H:319:ALA:N	2.27	0.45
1:I:275:LYS:HD3	1:I:275:LYS:HA	1.70	0.45
1:J:84:VAL:HG22	1:J:85:PRO:O	2.17	0.45
1:K:84:VAL:HG22	1:K:85:PRO:O	2.17	0.45
1:N:46:LEU:HD23	1:N:46:LEU:HA	1.58	0.45
1:F:108:VAL:HG11	1:F:273:TYR:CE1	2.52	0.44
1:F:261:ASP:HB3	1:L:259:GLN:HE22	1.82	0.44
1:H:84:VAL:HG22	1:H:85:PRO:O	2.17	0.44
1:H:108:VAL:HG11	1:H:273:TYR:CE1	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:152:ARG:HD2	1:P:143:TYR:CD1	2.53	0.44
1:J:102:ILE:HD11	1:J:104:TYR:CE2	2.48	0.44
1:J:108:VAL:HG11	1:J:273:TYR:CE1	2.52	0.44
1:J:320:PRO:O	1:J:321:ILE:HG12	2.17	0.44
1:K:110:TYR:HD2	1:L:275:LYS:HZ3	1.64	0.44
1:K:320:PRO:O	1:K:321:ILE:HG12	2.17	0.44
1:N:108:VAL:HG11	1:N:273:TYR:CE1	2.52	0.44
1:P:108:VAL:HG11	1:P:273:TYR:CE1	2.52	0.44
1:B:46:LEU:HD23	1:B:46:LEU:HA	1.58	0.44
1:B:103:GLN:HG3	1:B:103:GLN:O	2.17	0.44
1:B:108:VAL:HG11	1:B:273:TYR:CE1	2.52	0.44
1:F:84:VAL:HG22	1:F:85:PRO:O	2.17	0.44
1:F:259:GLN:HE22	1:L:261:ASP:HB3	1.82	0.44
1:H:102:ILE:HD11	1:H:104:TYR:CE2	2.48	0.44
1:H:320:PRO:O	1:H:321:ILE:HG12	2.17	0.44
1:I:84:VAL:HG22	1:I:85:PRO:O	2.17	0.44
1:J:318:THR:HG23	1:J:319:ALA:N	2.27	0.44
1:L:103:GLN:HG3	1:L:103:GLN:O	2.17	0.44
1:L:108:VAL:HG11	1:L:273:TYR:CE1	2.52	0.44
1:L:236:TRP:CD1	1:L:243:PRO:HA	2.47	0.44
1:M:84:VAL:HG22	1:M:85:PRO:O	2.17	0.44
1:P:46:LEU:HD23	1:P:46:LEU:HA	1.58	0.44
1:P:84:VAL:HG22	1:P:85:PRO:O	2.17	0.44
1:P:103:GLN:HG3	1:P:103:GLN:O	2.17	0.44
1:P:210:LEU:O	1:P:213:LEU:N	2.44	0.44
1:A:143:TYR:CD1	1:B:152:ARG:HD2	2.52	0.44
1:C:84:VAL:HG22	1:C:85:PRO:O	2.17	0.44
1:C:259:GLN:HE22	1:O:261:ASP:HB3	1.83	0.44
1:C:292:THR:O	1:C:295:CYS:N	2.50	0.44
1:D:108:VAL:HG11	1:D:273:TYR:CE1	2.52	0.44
1:D:261:ASP:HB3	1:N:259:GLN:HE22	1.82	0.44
1:D:315:TYR:O	1:D:318:THR:HG22	2.17	0.44
1:E:261:ASP:HB3	1:M:259:GLN:HE22	1.83	0.44
1:F:103:GLN:O	1:F:103:GLN:HG3	2.17	0.44
1:F:292:THR:O	1:F:295:CYS:N	2.50	0.44
1:M:46:LEU:HA	1:M:46:LEU:HD23	1.58	0.44
1:M:163:ALA:O	1:M:166:GLU:HB3	2.18	0.44
1:B:163:ALA:O	1:B:166:GLU:HB3	2.18	0.44
1:C:163:ALA:O	1:C:166:GLU:HB3	2.18	0.44
1:E:367:ASP:OD1	1:E:368:PHE:N	2.49	0.44
1:F:210:LEU:O	1:F:213:LEU:N	2.44	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:163:ALA:O	1:H:166:GLU:HB3	2.18	0.44
1:I:367:ASP:OD1	1:I:368:PHE:N	2.50	0.44
1:J:163:ALA:O	1:J:166:GLU:HB3	2.18	0.44
1:L:173:ILE:HA	1:L:173:ILE:HD13	1.77	0.44
1:L:315:TYR:O	1:L:318:THR:HG22	2.17	0.44
1:M:292:THR:O	1:M:295:CYS:N	2.50	0.44
1:N:163:ALA:O	1:N:166:GLU:HB3	2.18	0.44
1:N:315:TYR:O	1:N:318:THR:HG22	2.17	0.44
1:P:292:THR:O	1:P:295:CYS:N	2.50	0.44
1:A:89:GLN:O	1:A:90:LEU:HD23	2.17	0.44
1:A:163:ALA:O	1:A:166:GLU:HB3	2.18	0.44
1:C:146:ARG:NH2	1:D:152:ARG:HE	2.15	0.44
1:D:163:ALA:O	1:D:166:GLU:HB3	2.18	0.44
1:D:186:ARG:NH1	1:D:336:GLU:OE2	2.49	0.44
1:E:315:TYR:O	1:E:318:THR:HG22	2.17	0.44
1:G:367:ASP:OD1	1:G:368:PHE:N	2.49	0.44
1:H:259:GLN:HE22	1:J:261:ASP:HB3	1.82	0.44
1:J:110:TYR:CD2	1:K:275:LYS:HG3	2.52	0.44
1:M:325:ILE:H	1:M:325:ILE:HD12	1.82	0.44
1:O:315:TYR:O	1:O:318:THR:HG22	2.17	0.44
1:O:367:ASP:OD1	1:O:368:PHE:N	2.49	0.44
1:P:89:GLN:O	1:P:90:LEU:HD23	2.17	0.44
1:B:315:TYR:O	1:B:318:THR:HG22	2.17	0.44
1:C:45:LEU:O	1:C:48:SER:HB3	2.18	0.44
1:C:103:GLN:HG3	1:C:103:GLN:O	2.17	0.44
1:C:325:ILE:HD12	1:C:325:ILE:H	1.82	0.44
1:D:45:LEU:O	1:D:48:SER:HB3	2.18	0.44
1:D:84:VAL:HG22	1:D:85:PRO:O	2.17	0.44
1:D:292:THR:O	1:D:295:CYS:N	2.50	0.44
1:F:315:TYR:O	1:F:318:THR:HG22	2.17	0.44
1:K:89:GLN:O	1:K:90:LEU:HD23	2.17	0.44
1:K:163:ALA:O	1:K:166:GLU:HB3	2.18	0.44
1:K:173:ILE:HA	1:K:173:ILE:HD13	1.77	0.44
1:L:163:ALA:O	1:L:166:GLU:HB3	2.18	0.44
1:N:45:LEU:O	1:N:48:SER:HB3	2.18	0.44
1:N:186:ARG:NH1	1:N:336:GLU:OE2	2.49	0.44
1:N:292:THR:O	1:N:295:CYS:N	2.50	0.44
1:O:320:PRO:O	1:O:321:ILE:HG12	2.17	0.44
1:A:146:ARG:NH2	1:B:152:ARG:HE	2.15	0.44
1:B:325:ILE:H	1:B:325:ILE:HD12	1.82	0.44
1:C:186:ARG:NH1	1:C:336:GLU:OE2	2.49	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:163:ALA:O	1:E:166:GLU:HB3	2.18	0.44
1:E:186:ARG:NH1	1:E:336:GLU:OE2	2.49	0.44
1:F:89:GLN:O	1:F:90:LEU:HD23	2.17	0.44
1:G:82:TYR:O	1:G:246:VAL:HB	2.18	0.44
1:G:315:TYR:O	1:G:318:THR:HG22	2.17	0.44
1:G:320:PRO:O	1:G:321:ILE:HG12	2.17	0.44
1:J:89:GLN:O	1:J:90:LEU:HD23	2.17	0.44
1:K:267:LEU:HD12	1:K:267:LEU:HA	1.67	0.44
1:M:45:LEU:O	1:M:48:SER:HB3	2.18	0.44
1:M:103:GLN:HG3	1:M:103:GLN:O	2.17	0.44
1:M:214:LEU:HD23	1:M:214:LEU:HA	1.76	0.44
1:N:84:VAL:HG22	1:N:85:PRO:O	2.17	0.44
1:O:163:ALA:O	1:O:166:GLU:HB3	2.18	0.44
1:P:315:TYR:O	1:P:318:THR:HG22	2.17	0.44
1:D:46:LEU:HA	1:D:46:LEU:HD23	1.58	0.44
1:D:325:ILE:H	1:D:325:ILE:HD12	1.82	0.44
1:E:46:LEU:HA	1:E:46:LEU:HD23	1.58	0.44
1:E:320:PRO:O	1:E:321:ILE:HG12	2.17	0.44
1:F:102:ILE:HD11	1:F:104:TYR:CE2	2.48	0.44
1:F:325:ILE:HD12	1:F:325:ILE:H	1.82	0.44
1:G:143:TYR:CD1	1:H:152:ARG:HD2	2.53	0.44
1:H:89:GLN:O	1:H:90:LEU:HD23	2.17	0.44
1:I:82:TYR:O	1:I:246:VAL:HB	2.18	0.44
1:I:315:TYR:O	1:I:318:THR:HG22	2.17	0.44
1:I:320:PRO:O	1:I:321:ILE:HG12	2.17	0.44
1:K:45:LEU:O	1:K:48:SER:HB3	2.18	0.44
1:K:143:TYR:CD1	1:L:152:ARG:HD2	2.53	0.44
1:M:179:LEU:CD2	1:N:352:ILE:HA	2.48	0.44
1:A:261:ASP:HB3	1:I:259:GLN:HE22	1.83	0.44
1:B:292:THR:O	1:B:295:CYS:N	2.50	0.44
1:C:315:TYR:O	1:C:318:THR:HG22	2.17	0.44
1:E:45:LEU:O	1:E:48:SER:HB3	2.18	0.44
1:E:82:TYR:O	1:E:246:VAL:HB	2.18	0.44
1:F:46:LEU:HD23	1:F:46:LEU:HA	1.58	0.44
1:G:108:VAL:HG11	1:G:273:TYR:CE1	2.52	0.44
1:H:315:TYR:O	1:H:318:THR:HG22	2.17	0.44
1:K:315:TYR:O	1:K:318:THR:HG22	2.17	0.44
1:L:325:ILE:H	1:L:325:ILE:HD12	1.82	0.44
1:M:173:ILE:HA	1:M:173:ILE:HD13	1.77	0.44
1:M:186:ARG:NH1	1:M:336:GLU:OE2	2.49	0.44
1:O:211:THR:HG23	1:O:220:THR:OG1	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:102:ILE:HD11	1:P:104:TYR:CE2	2.48	0.44
1:A:45:LEU:O	1:A:48:SER:HB3	2.18	0.43
1:C:320:PRO:O	1:C:321:ILE:HG12	2.17	0.43
1:E:211:THR:HG23	1:E:220:THR:OG1	2.18	0.43
1:E:259:GLN:HE22	1:M:261:ASP:HB3	1.82	0.43
1:H:211:THR:HG23	1:H:220:THR:OG1	2.18	0.43
1:I:108:VAL:HG11	1:I:273:TYR:CE1	2.52	0.43
1:J:45:LEU:O	1:J:48:SER:HB3	2.18	0.43
1:J:211:THR:HG23	1:J:220:THR:OG1	2.18	0.43
1:J:315:TYR:O	1:J:318:THR:HG22	2.17	0.43
1:J:325:ILE:H	1:J:325:ILE:HD12	1.82	0.43
1:L:292:THR:O	1:L:295:CYS:N	2.50	0.43
1:M:108:VAL:HG11	1:M:273:TYR:CE1	2.52	0.43
1:M:315:TYR:O	1:M:318:THR:HG22	2.17	0.43
1:N:325:ILE:HD12	1:N:325:ILE:H	1.82	0.43
1:O:45:LEU:O	1:O:48:SER:HB3	2.18	0.43
1:O:186:ARG:NH1	1:O:336:GLU:OE2	2.49	0.43
1:P:325:ILE:H	1:P:325:ILE:HD12	1.82	0.43
1:A:259:GLN:HE22	1:I:261:ASP:HB3	1.83	0.43
1:A:315:TYR:O	1:A:318:THR:HG22	2.17	0.43
1:B:211:THR:HG23	1:B:220:THR:OG1	2.18	0.43
1:C:82:TYR:O	1:C:246:VAL:HB	2.18	0.43
1:C:108:VAL:HG11	1:C:273:TYR:CE1	2.52	0.43
1:F:45:LEU:O	1:F:48:SER:HB3	2.18	0.43
1:F:186:ARG:NH1	1:F:336:GLU:OE2	2.49	0.43
1:H:45:LEU:O	1:H:48:SER:HB3	2.18	0.43
1:I:103:GLN:O	1:I:103:GLN:HG3	2.17	0.43
1:J:68:TRP:N	1:J:68:TRP:CD1	2.86	0.43
1:L:211:THR:HG23	1:L:220:THR:OG1	2.18	0.43
1:O:82:TYR:O	1:O:246:VAL:HB	2.18	0.43
1:O:146:ARG:NH2	1:P:152:ARG:HE	2.15	0.43
1:P:45:LEU:O	1:P:48:SER:HB3	2.18	0.43
1:P:186:ARG:NH1	1:P:336:GLU:OE2	2.49	0.43
1:H:68:TRP:N	1:H:68:TRP:CD1	2.86	0.43
1:J:253:ARG:NH2	1:K:90:LEU:HG	2.32	0.43
1:K:102:ILE:HD11	1:K:104:TYR:CE2	2.48	0.43
1:K:325:ILE:HD12	1:K:325:ILE:H	1.82	0.43
1:M:82:TYR:O	1:M:246:VAL:HB	2.18	0.43
1:N:68:TRP:CD1	1:N:68:TRP:N	2.85	0.43
1:P:82:TYR:O	1:P:246:VAL:HB	2.18	0.43
1:A:325:ILE:H	1:A:325:ILE:HD12	1.82	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:82:TYR:O	1:B:246:VAL:HB	2.18	0.43
1:C:214:LEU:HD23	1:C:214:LEU:HA	1.76	0.43
1:D:68:TRP:N	1:D:68:TRP:CD1	2.85	0.43
1:D:89:GLN:CG	1:D:90:LEU:H	2.23	0.43
1:D:267:LEU:HA	1:D:267:LEU:HD12	1.67	0.43
1:E:292:THR:O	1:E:295:CYS:N	2.50	0.43
1:G:103:GLN:HG3	1:G:103:GLN:O	2.17	0.43
1:G:186:ARG:NH1	1:G:336:GLU:OE2	2.49	0.43
1:G:236:TRP:CD1	1:G:243:PRO:HA	2.47	0.43
1:G:292:THR:O	1:G:295:CYS:N	2.50	0.43
1:H:186:ARG:NH1	1:H:336:GLU:OE2	2.49	0.43
1:H:213:LEU:HD23	1:H:214:LEU:N	2.34	0.43
1:I:186:ARG:NH1	1:I:336:GLU:OE2	2.49	0.43
1:J:186:ARG:NH1	1:J:336:GLU:OE2	2.49	0.43
1:J:213:LEU:HD23	1:J:214:LEU:N	2.34	0.43
1:L:68:TRP:N	1:L:68:TRP:CD1	2.85	0.43
1:L:82:TYR:O	1:L:246:VAL:HB	2.18	0.43
1:M:146:ARG:NH2	1:N:152:ARG:HE	2.16	0.43
1:M:320:PRO:O	1:M:321:ILE:HG12	2.17	0.43
1:O:143:TYR:CD1	1:P:152:ARG:HD2	2.53	0.43
1:A:102:ILE:HD11	1:A:104:TYR:CE2	2.48	0.43
1:B:45:LEU:O	1:B:48:SER:HB3	2.18	0.43
1:B:68:TRP:N	1:B:68:TRP:CD1	2.85	0.43
1:C:179:LEU:CD2	1:D:352:ILE:HA	2.48	0.43
1:C:211:THR:HG23	1:C:220:THR:OG1	2.18	0.43
1:C:261:ASP:HB3	1:O:259:GLN:HE22	1.83	0.43
1:D:82:TYR:O	1:D:246:VAL:HB	2.18	0.43
1:D:236:TRP:CD1	1:D:243:PRO:HA	2.47	0.43
1:E:325:ILE:H	1:E:325:ILE:HD12	1.82	0.43
1:F:82:TYR:O	1:F:246:VAL:HB	2.18	0.43
1:F:143:TYR:CD1	1:G:152:ARG:HD2	2.54	0.43
1:G:163:ALA:O	1:G:166:GLU:HB3	2.18	0.43
1:G:213:LEU:HD23	1:G:214:LEU:N	2.34	0.43
1:H:325:ILE:H	1:H:325:ILE:HD12	1.82	0.43
1:I:158:PHE:CZ	1:P:168:ARG:HG3	2.53	0.43
1:I:292:THR:O	1:I:295:CYS:N	2.50	0.43
1:I:298:TRP:HA	1:I:301:TYR:HB3	2.01	0.43
1:J:168:ARG:HG3	1:K:158:PHE:CE2	2.53	0.43
1:L:146:ARG:NH2	1:M:152:ARG:HE	2.16	0.43
1:N:82:TYR:O	1:N:246:VAL:HB	2.18	0.43
1:O:168:ARG:HG3	1:P:158:PHE:CZ	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:292:THR:O	1:O:295:CYS:N	2.50	0.43
1:P:163:ALA:O	1:P:166:GLU:HB3	2.18	0.43
1:B:143:TYR:CD1	1:C:152:ARG:HD2	2.54	0.43
1:F:151:ASN:OD1	1:F:152:ARG:N	2.52	0.43
1:F:163:ALA:O	1:F:166:GLU:HB3	2.18	0.43
1:G:298:TRP:HA	1:G:301:TYR:HB3	2.01	0.43
1:I:75:TYR:CD2	1:I:75:TYR:C	2.92	0.43
1:I:213:LEU:HD23	1:I:214:LEU:N	2.34	0.43
1:L:45:LEU:O	1:L:48:SER:HB3	2.18	0.43
1:M:211:THR:HG23	1:M:220:THR:OG1	2.18	0.43
1:N:83:PHE:CG	1:N:84:VAL:N	2.87	0.43
1:N:89:GLN:CG	1:N:90:LEU:H	2.23	0.43
1:O:325:ILE:H	1:O:325:ILE:HD12	1.82	0.43
1:A:168:ARG:HG3	1:B:158:PHE:CZ	2.53	0.43
1:C:151:ASN:OD1	1:C:152:ARG:N	2.52	0.43
1:D:83:PHE:CG	1:D:84:VAL:N	2.87	0.43
1:D:275:LYS:HD3	1:D:275:LYS:HA	1.70	0.43
1:E:146:ARG:NH2	1:F:152:ARG:HE	2.16	0.43
1:F:298:TRP:HA	1:F:301:TYR:HB3	2.01	0.43
1:G:75:TYR:CD2	1:G:75:TYR:C	2.92	0.43
1:G:146:ARG:NH2	1:H:152:ARG:HE	2.16	0.43
1:G:151:ASN:OD1	1:G:152:ARG:N	2.52	0.43
1:G:211:THR:HG23	1:G:220:THR:OG1	2.18	0.43
1:I:151:ASN:OD1	1:I:152:ARG:N	2.52	0.43
1:I:163:ALA:O	1:I:166:GLU:HB3	2.18	0.43
1:I:236:TRP:CD1	1:I:243:PRO:HA	2.47	0.43
1:L:75:TYR:CD2	1:L:75:TYR:C	2.92	0.43
1:N:146:ARG:NH2	1:O:152:ARG:HE	2.16	0.43
1:O:46:LEU:HA	1:O:46:LEU:HD23	1.58	0.43
1:O:213:LEU:HD23	1:O:214:LEU:N	2.34	0.43
1:O:219:TYR:HD1	1:O:220:THR:H	1.67	0.43
1:P:151:ASN:OD1	1:P:152:ARG:N	2.52	0.43
1:P:211:THR:HG23	1:P:220:THR:OG1	2.18	0.43
1:P:213:LEU:HD23	1:P:214:LEU:N	2.34	0.43
1:A:82:TYR:O	1:A:246:VAL:HB	2.18	0.43
1:B:75:TYR:CD2	1:B:75:TYR:C	2.92	0.43
1:B:146:ARG:NH2	1:C:152:ARG:HE	2.17	0.43
1:B:186:ARG:NH1	1:B:336:GLU:OE2	2.49	0.43
1:C:68:TRP:N	1:C:68:TRP:CD1	2.86	0.43
1:C:174:TRP:HE3	1:C:361:MET:CE	2.32	0.43
1:D:146:ARG:NH2	1:E:152:ARG:HE	2.16	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:83:PHE:CG	1:E:84:VAL:N	2.87	0.43
1:E:143:TYR:CD1	1:F:152:ARG:HD2	2.53	0.43
1:E:168:ARG:HG3	1:F:158:PHE:CZ	2.54	0.43
1:E:213:LEU:HD23	1:E:214:LEU:N	2.34	0.43
1:E:337:ASP:O	1:E:341:ILE:HG23	2.19	0.43
1:F:174:TRP:HE3	1:F:361:MET:CE	2.32	0.43
1:F:213:LEU:HD23	1:F:214:LEU:N	2.34	0.43
1:G:83:PHE:CG	1:G:84:VAL:N	2.87	0.43
1:G:168:ARG:HG3	1:H:158:PHE:CZ	2.54	0.43
1:H:174:TRP:HE3	1:H:361:MET:CE	2.32	0.43
1:I:83:PHE:CG	1:I:84:VAL:N	2.87	0.43
1:I:146:ARG:NH2	1:J:152:ARG:HE	2.16	0.43
1:I:211:THR:HG23	1:I:220:THR:OG1	2.18	0.43
1:I:352:ILE:HA	1:P:179:LEU:CD2	2.48	0.43
1:J:174:TRP:HE3	1:J:361:MET:CE	2.32	0.43
1:M:151:ASN:OD1	1:M:152:ARG:N	2.52	0.43
1:M:174:TRP:HE3	1:M:361:MET:CE	2.32	0.43
1:N:213:LEU:HD23	1:N:214:LEU:N	2.34	0.43
1:A:213:LEU:HD23	1:A:214:LEU:N	2.34	0.43
1:A:283:TRP:O	1:A:287:VAL:HG23	2.19	0.43
1:C:143:TYR:CD1	1:D:152:ARG:HD2	2.53	0.43
1:D:174:TRP:HE3	1:D:361:MET:CE	2.32	0.43
1:D:213:LEU:HD23	1:D:214:LEU:N	2.34	0.43
1:E:151:ASN:OD1	1:E:152:ARG:N	2.52	0.43
1:F:211:THR:HG23	1:F:220:THR:OG1	2.18	0.43
1:F:219:TYR:HD1	1:F:220:THR:H	1.67	0.43
1:G:89:GLN:O	1:G:90:LEU:HD23	2.17	0.43
1:H:283:TRP:O	1:H:287:VAL:HG23	2.19	0.43
1:I:89:GLN:O	1:I:90:LEU:HD23	2.17	0.43
1:I:283:TRP:O	1:I:287:VAL:HG23	2.19	0.43
1:J:283:TRP:O	1:J:287:VAL:HG23	2.19	0.43
1:K:168:ARG:HG3	1:L:158:PHE:CZ	2.54	0.43
1:K:213:LEU:HD23	1:K:214:LEU:N	2.34	0.43
1:L:143:TYR:CD1	1:M:152:ARG:HD2	2.54	0.43
1:M:68:TRP:N	1:M:68:TRP:CD1	2.85	0.43
1:N:174:TRP:HE3	1:N:361:MET:CE	2.32	0.43
1:O:68:TRP:N	1:O:68:TRP:CD1	2.86	0.43
1:O:83:PHE:CG	1:O:84:VAL:N	2.87	0.43
1:O:151:ASN:OD1	1:O:152:ARG:N	2.52	0.43
1:O:337:ASP:O	1:O:341:ILE:HG23	2.19	0.43
1:P:174:TRP:HE3	1:P:361:MET:CE	2.32	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:298:TRP:HA	1:P:301:TYR:HB3	2.01	0.43
1:D:151:ASN:OD1	1:D:152:ARG:N	2.52	0.43
1:D:337:ASP:O	1:D:341:ILE:HG23	2.19	0.43
1:E:219:TYR:HD1	1:E:220:THR:H	1.67	0.43
1:J:130:ILE:HD12	1:J:130:ILE:HA	1.84	0.43
1:J:173:ILE:HD13	1:J:173:ILE:HA	1.77	0.43
1:K:82:TYR:O	1:K:246:VAL:HB	2.18	0.43
1:K:283:TRP:O	1:K:287:VAL:HG23	2.19	0.43
1:L:186:ARG:NH1	1:L:336:GLU:OE2	2.49	0.43
1:N:211:THR:HG23	1:N:220:THR:OG1	2.18	0.43
1:N:337:ASP:O	1:N:341:ILE:HG23	2.19	0.43
1:P:219:TYR:HD1	1:P:220:THR:H	1.67	0.43
1:A:152:ARG:HE	1:H:146:ARG:NH2	2.17	0.42
1:A:179:LEU:CD2	1:B:352:ILE:HA	2.48	0.42
1:A:211:THR:HG23	1:A:220:THR:OG1	2.18	0.42
1:E:68:TRP:N	1:E:68:TRP:CD1	2.86	0.42
1:E:174:TRP:HE3	1:E:361:MET:CE	2.32	0.42
1:F:43:SER:HB2	1:F:112:PHE:HB3	2.01	0.42
1:F:68:TRP:CD1	1:F:68:TRP:N	2.86	0.42
1:G:174:TRP:HE3	1:G:361:MET:CE	2.32	0.42
1:G:219:TYR:HD1	1:G:220:THR:H	1.67	0.42
1:G:283:TRP:O	1:G:287:VAL:HG23	2.19	0.42
1:H:151:ASN:OD1	1:H:152:ARG:N	2.52	0.42
1:I:45:LEU:O	1:I:48:SER:HB3	2.18	0.42
1:I:174:TRP:HE3	1:I:361:MET:CE	2.32	0.42
1:J:151:ASN:OD1	1:J:152:ARG:N	2.52	0.42
1:J:292:THR:O	1:J:295:CYS:N	2.50	0.42
1:M:143:TYR:CD1	1:N:152:ARG:HD2	2.53	0.42
1:N:151:ASN:OD1	1:N:152:ARG:N	2.52	0.42
1:N:267:LEU:HD12	1:N:267:LEU:HA	1.67	0.42
1:O:174:TRP:HE3	1:O:361:MET:CE	2.32	0.42
1:A:219:TYR:HD1	1:A:220:THR:N	2.17	0.42
1:B:83:PHE:CG	1:B:84:VAL:N	2.87	0.42
1:D:143:TYR:CD1	1:E:152:ARG:HD2	2.54	0.42
1:D:211:THR:HG23	1:D:220:THR:OG1	2.18	0.42
1:F:337:ASP:O	1:F:341:ILE:HG23	2.19	0.42
1:G:43:SER:HB2	1:G:112:PHE:HB3	2.02	0.42
1:G:337:ASP:O	1:G:341:ILE:HG23	2.19	0.42
1:H:292:THR:O	1:H:295:CYS:N	2.50	0.42
1:I:43:SER:HB2	1:I:112:PHE:HB3	2.01	0.42
1:I:219:TYR:HD1	1:I:220:THR:H	1.67	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:337:ASP:O	1:I:341:ILE:HG23	2.19	0.42
1:M:154:LYS:HE2	1:M:154:LYS:HB3	1.87	0.42
1:N:219:TYR:HD1	1:N:220:THR:H	1.67	0.42
1:P:75:TYR:CD2	1:P:75:TYR:C	2.92	0.42
1:P:337:ASP:O	1:P:341:ILE:HG23	2.19	0.42
1:C:168:ARG:HG3	1:D:158:PHE:CZ	2.54	0.42
1:E:69:VAL:HA	1:E:72:VAL:HG12	2.01	0.42
1:F:75:TYR:CD2	1:F:75:TYR:C	2.92	0.42
1:G:45:LEU:O	1:G:48:SER:HB3	2.18	0.42
1:H:43:SER:HB2	1:H:112:PHE:HB3	2.02	0.42
1:I:69:VAL:HA	1:I:72:VAL:HG12	2.01	0.42
1:I:143:TYR:CD1	1:J:152:ARG:HD2	2.55	0.42
1:K:211:THR:HG23	1:K:220:THR:OG1	2.18	0.42
1:K:214:LEU:HA	1:K:214:LEU:HD23	1.76	0.42
1:K:219:TYR:HD1	1:K:220:THR:N	2.17	0.42
1:L:83:PHE:CG	1:L:84:VAL:N	2.87	0.42
1:O:69:VAL:HA	1:O:72:VAL:HG12	2.01	0.42
1:P:43:SER:HB2	1:P:112:PHE:HB3	2.02	0.42
1:P:68:TRP:N	1:P:68:TRP:CD1	2.86	0.42
1:P:283:TRP:O	1:P:287:VAL:HG23	2.19	0.42
1:A:292:THR:O	1:A:295:CYS:N	2.50	0.42
1:E:43:SER:HB2	1:E:112:PHE:HB3	2.02	0.42
1:F:168:ARG:HG3	1:G:158:PHE:CZ	2.54	0.42
1:F:283:TRP:O	1:F:287:VAL:HG23	2.19	0.42
1:G:69:VAL:HA	1:G:72:VAL:HG12	2.01	0.42
1:J:82:TYR:O	1:J:246:VAL:HB	2.18	0.42
1:J:337:ASP:O	1:J:341:ILE:HG23	2.19	0.42
1:L:151:ASN:OD1	1:L:152:ARG:N	2.52	0.42
1:M:168:ARG:HG3	1:N:158:PHE:CZ	2.54	0.42
1:O:43:SER:HB2	1:O:112:PHE:HB3	2.02	0.42
1:O:219:TYR:HD1	1:O:220:THR:N	2.17	0.42
1:B:151:ASN:OD1	1:B:152:ARG:N	2.52	0.42
1:C:154:LYS:HE2	1:C:154:LYS:HB3	1.87	0.42
1:D:219:TYR:HD1	1:D:220:THR:H	1.67	0.42
1:F:179:LEU:CD2	1:G:352:ILE:HA	2.48	0.42
1:G:165:PHE:O	1:G:169:PRO:HD2	2.20	0.42
1:H:82:TYR:O	1:H:246:VAL:HB	2.18	0.42
1:H:173:ILE:HD13	1:H:173:ILE:HA	1.77	0.42
1:H:337:ASP:O	1:H:341:ILE:HG23	2.19	0.42
1:I:165:PHE:O	1:I:169:PRO:HD2	2.20	0.42
1:J:43:SER:HB2	1:J:112:PHE:HB3	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:292:THR:O	1:K:295:CYS:N	2.50	0.42
1:M:337:ASP:O	1:M:341:ILE:HG23	2.19	0.42
1:N:275:LYS:HD3	1:N:275:LYS:HA	1.70	0.42
1:O:75:TYR:CD2	1:O:75:TYR:C	2.92	0.42
1:B:168:ARG:HG3	1:C:158:PHE:CZ	2.54	0.42
1:C:83:PHE:CG	1:C:84:VAL:N	2.87	0.42
1:C:337:ASP:O	1:C:341:ILE:HG23	2.19	0.42
1:D:173:ILE:HA	1:D:173:ILE:HD13	1.77	0.42
1:K:174:TRP:HE3	1:K:361:MET:CE	2.32	0.42
1:L:213:LEU:HD23	1:L:214:LEU:N	2.34	0.42
1:L:331:PHE:HD1	1:L:331:PHE:HA	1.72	0.42
1:N:75:TYR:CD2	1:N:75:TYR:C	2.92	0.42
1:P:83:PHE:CG	1:P:84:VAL:N	2.87	0.42
1:A:165:PHE:O	1:A:169:PRO:HD2	2.20	0.42
1:A:174:TRP:HE3	1:A:361:MET:CE	2.32	0.42
1:A:298:TRP:HA	1:A:301:TYR:HB3	2.01	0.42
1:B:165:PHE:O	1:B:169:PRO:HD2	2.20	0.42
1:B:213:LEU:HD23	1:B:214:LEU:N	2.34	0.42
1:B:283:TRP:O	1:B:287:VAL:HG23	2.19	0.42
1:D:298:TRP:HA	1:D:301:TYR:HB3	2.01	0.42
1:E:75:TYR:CD2	1:E:75:TYR:C	2.92	0.42
1:E:219:TYR:HD1	1:E:220:THR:N	2.17	0.42
1:E:323:SER:OG	1:E:324:THR:N	2.53	0.42
1:F:83:PHE:CG	1:F:84:VAL:N	2.87	0.42
1:F:146:ARG:NH2	1:G:152:ARG:HE	2.16	0.42
1:F:323:SER:OG	1:F:324:THR:N	2.53	0.42
1:G:68:TRP:CD1	1:G:68:TRP:N	2.86	0.42
1:H:165:PHE:O	1:H:169:PRO:HD2	2.20	0.42
1:I:275:LYS:HG3	1:P:110:TYR:CD2	2.54	0.42
1:J:165:PHE:O	1:J:169:PRO:HD2	2.20	0.42
1:L:98:THR:O	1:L:98:THR:HG22	2.20	0.42
1:L:165:PHE:O	1:L:169:PRO:HD2	2.20	0.42
1:L:174:TRP:HE3	1:L:361:MET:CE	2.32	0.42
1:O:323:SER:OG	1:O:324:THR:N	2.53	0.42
1:P:267:LEU:HA	1:P:267:LEU:HD12	1.67	0.42
1:P:323:SER:OG	1:P:324:THR:N	2.53	0.42
1:A:83:PHE:CG	1:A:84:VAL:N	2.87	0.42
1:A:151:ASN:OD1	1:A:152:ARG:N	2.52	0.42
1:A:337:ASP:O	1:A:341:ILE:HG23	2.19	0.42
1:B:98:THR:O	1:B:98:THR:HG22	2.20	0.42
1:B:174:TRP:HE3	1:B:361:MET:CE	2.32	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:298:TRP:HA	1:B:301:TYR:HB3	2.01	0.42
1:C:98:THR:HG22	1:C:98:THR:O	2.20	0.42
1:D:43:SER:HB2	1:D:112:PHE:HB3	2.01	0.42
1:D:75:TYR:CD2	1:D:75:TYR:C	2.92	0.42
1:D:110:TYR:CD2	1:E:275:LYS:HG3	2.55	0.42
1:E:298:TRP:HA	1:E:301:TYR:HB3	2.01	0.42
1:F:236:TRP:CD1	1:F:237:GLN:N	2.88	0.42
1:G:236:TRP:CD1	1:G:237:GLN:N	2.88	0.42
1:H:236:TRP:CD1	1:H:237:GLN:N	2.88	0.42
1:I:152:ARG:HE	1:P:146:ARG:NH2	2.16	0.42
1:I:236:TRP:CD1	1:I:237:GLN:N	2.88	0.42
1:J:219:TYR:HD1	1:J:220:THR:H	1.67	0.42
1:J:236:TRP:CD1	1:J:237:GLN:N	2.88	0.42
1:K:151:ASN:OD1	1:K:152:ARG:N	2.52	0.42
1:K:165:PHE:O	1:K:169:PRO:HD2	2.20	0.42
1:K:298:TRP:HA	1:K:301:TYR:HB3	2.01	0.42
1:L:298:TRP:HA	1:L:301:TYR:HB3	2.01	0.42
1:M:83:PHE:CG	1:M:84:VAL:N	2.87	0.42
1:M:298:TRP:HA	1:M:301:TYR:HB3	2.01	0.42
1:N:114:LEU:HA	1:N:114:LEU:HD12	1.84	0.42
1:N:283:TRP:O	1:N:287:VAL:HG23	2.19	0.42
1:O:298:TRP:HA	1:O:301:TYR:HB3	2.01	0.42
1:P:165:PHE:O	1:P:169:PRO:HD2	2.20	0.42
1:P:236:TRP:CD1	1:P:237:GLN:N	2.88	0.42
1:A:43:SER:HB2	1:A:112:PHE:HB3	2.02	0.42
1:A:46:LEU:HA	1:A:46:LEU:HD23	1.58	0.42
1:C:298:TRP:HA	1:C:301:TYR:HB3	2.01	0.42
1:D:283:TRP:O	1:D:287:VAL:HG23	2.19	0.42
1:E:283:TRP:O	1:E:287:VAL:HG23	2.19	0.42
1:F:165:PHE:O	1:F:169:PRO:HD2	2.20	0.42
1:G:323:SER:OG	1:G:324:THR:N	2.53	0.42
1:H:219:TYR:HD1	1:H:220:THR:H	1.67	0.42
1:I:68:TRP:CD1	1:I:68:TRP:N	2.86	0.42
1:I:323:SER:OG	1:I:324:THR:N	2.53	0.42
1:J:219:TYR:HD1	1:J:220:THR:N	2.17	0.42
1:K:69:VAL:HA	1:K:72:VAL:HG12	2.01	0.42
1:K:83:PHE:CG	1:K:84:VAL:N	2.87	0.42
1:K:337:ASP:O	1:K:341:ILE:HG23	2.19	0.42
1:L:43:SER:HB2	1:L:112:PHE:HB3	2.01	0.42
1:L:69:VAL:HA	1:L:72:VAL:HG12	2.01	0.42
1:L:283:TRP:O	1:L:287:VAL:HG23	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:337:ASP:O	1:L:341:ILE:HG23	2.19	0.42
1:M:98:THR:O	1:M:98:THR:HG22	2.20	0.42
1:M:283:TRP:O	1:M:287:VAL:HG23	2.19	0.42
1:N:43:SER:HB2	1:N:112:PHE:HB3	2.02	0.42
1:N:143:TYR:CD1	1:O:152:ARG:HD2	2.54	0.42
1:N:298:TRP:HA	1:N:301:TYR:HB3	2.01	0.42
1:O:98:THR:O	1:O:98:THR:HG22	2.20	0.42
1:O:283:TRP:O	1:O:287:VAL:HG23	2.19	0.42
1:P:277:PHE:HD1	1:P:277:PHE:HA	1.71	0.42
1:A:69:VAL:HA	1:A:72:VAL:HG12	2.01	0.42
1:A:173:ILE:HD13	1:A:173:ILE:HA	1.77	0.42
1:B:43:SER:HB2	1:B:112:PHE:HB3	2.02	0.42
1:B:69:VAL:HA	1:B:72:VAL:HG12	2.01	0.42
1:B:219:TYR:HD1	1:B:220:THR:N	2.17	0.42
1:B:325:ILE:HG22	1:B:326:SER:O	2.20	0.42
1:B:337:ASP:O	1:B:341:ILE:HG23	2.19	0.42
1:C:219:TYR:HD1	1:C:220:THR:H	1.67	0.42
1:D:98:THR:O	1:D:98:THR:HG22	2.20	0.42
1:E:236:TRP:CD1	1:E:237:GLN:N	2.88	0.42
1:G:98:THR:O	1:G:98:THR:HG22	2.20	0.42
1:G:325:ILE:HG22	1:G:326:SER:O	2.20	0.42
1:I:98:THR:HG22	1:I:98:THR:O	2.20	0.42
1:I:325:ILE:HG22	1:I:326:SER:O	2.20	0.42
1:J:191:PHE:O	1:J:194:LEU:HB2	2.20	0.42
1:K:43:SER:HB2	1:K:112:PHE:HB3	2.02	0.42
1:L:31:ASN:O	1:L:35:THR:OG1	2.31	0.42
1:L:168:ARG:HG3	1:M:158:PHE:CZ	2.55	0.42
1:L:325:ILE:HG22	1:L:326:SER:O	2.20	0.42
1:M:213:LEU:HD23	1:M:214:LEU:N	2.34	0.42
1:M:219:TYR:HD1	1:M:220:THR:H	1.67	0.42
1:N:98:THR:HG22	1:N:98:THR:O	2.20	0.42
1:O:236:TRP:CD1	1:O:237:GLN:N	2.88	0.42
1:A:158:PHE:CZ	1:H:168:ARG:HG3	2.56	0.41
1:A:318:THR:HG23	1:A:319:ALA:N	2.27	0.41
1:B:110:TYR:CD2	1:C:275:LYS:HG3	2.55	0.41
1:B:114:LEU:HD12	1:B:114:LEU:HA	1.84	0.41
1:C:43:SER:HB2	1:C:112:PHE:HB3	2.02	0.41
1:C:283:TRP:O	1:C:287:VAL:HG23	2.19	0.41
1:D:323:SER:OG	1:D:324:THR:N	2.53	0.41
1:E:98:THR:O	1:E:98:THR:HG22	2.20	0.41
1:E:110:TYR:CD2	1:F:275:LYS:HG3	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:277:PHE:HD1	1:F:277:PHE:HA	1.71	0.41
1:G:267:LEU:HD12	1:G:267:LEU:HA	1.67	0.41
1:H:191:PHE:O	1:H:194:LEU:HB2	2.21	0.41
1:H:219:TYR:HD1	1:H:220:THR:N	2.17	0.41
1:J:83:PHE:CG	1:J:84:VAL:N	2.87	0.41
1:K:75:TYR:CD2	1:K:75:TYR:C	2.92	0.41
1:M:43:SER:HB2	1:M:112:PHE:HB3	2.02	0.41
1:M:277:PHE:HD1	1:M:277:PHE:HA	1.71	0.41
1:M:362:ARG:NH2	1:M:363:ASN:OD1	2.53	0.41
1:N:110:TYR:CD2	1:O:275:LYS:HG3	2.55	0.41
1:N:323:SER:OG	1:N:324:THR:N	2.53	0.41
1:A:110:TYR:CD2	1:B:275:LYS:HG3	2.55	0.41
1:A:152:ARG:HD2	1:H:143:TYR:CD1	2.55	0.41
1:A:325:ILE:HG22	1:A:326:SER:O	2.20	0.41
1:B:331:PHE:HD1	1:B:331:PHE:HA	1.72	0.41
1:C:69:VAL:HA	1:C:72:VAL:HG12	2.01	0.41
1:C:191:PHE:O	1:C:194:LEU:HB2	2.20	0.41
1:C:213:LEU:HD23	1:C:214:LEU:N	2.34	0.41
1:C:219:TYR:HD1	1:C:220:THR:N	2.17	0.41
1:C:362:ARG:NH2	1:C:363:ASN:OD1	2.53	0.41
1:D:114:LEU:HA	1:D:114:LEU:HD12	1.84	0.41
1:F:15:ILE:O	1:F:19:PHE:HB2	2.20	0.41
1:F:325:ILE:HG22	1:F:326:SER:O	2.20	0.41
1:H:298:TRP:HA	1:H:301:TYR:HB3	2.01	0.41
1:H:323:SER:OG	1:H:324:THR:N	2.53	0.41
1:I:168:ARG:HG3	1:J:158:PHE:CZ	2.55	0.41
1:I:214:LEU:HD23	1:I:214:LEU:HA	1.76	0.41
1:K:325:ILE:HG22	1:K:326:SER:O	2.20	0.41
1:L:219:TYR:HD1	1:L:220:THR:N	2.17	0.41
1:M:69:VAL:HA	1:M:72:VAL:HG12	2.01	0.41
1:M:165:PHE:O	1:M:169:PRO:HD2	2.20	0.41
1:M:191:PHE:O	1:M:194:LEU:HB2	2.20	0.41
1:M:219:TYR:HD1	1:M:220:THR:N	2.17	0.41
1:M:325:ILE:HG22	1:M:326:SER:O	2.20	0.41
1:N:173:ILE:HA	1:N:173:ILE:HD13	1.77	0.41
1:A:75:TYR:CD2	1:A:75:TYR:C	2.92	0.41
1:A:157:LYS:NZ	1:A:160:THR:HG21	2.35	0.41
1:C:192:TYR:O	1:C:195:SER:N	2.54	0.41
1:C:325:ILE:HG22	1:C:326:SER:O	2.20	0.41
1:E:15:ILE:O	1:E:19:PHE:HB2	2.20	0.41
1:F:267:LEU:HA	1:F:267:LEU:HD12	1.67	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:83:PHE:CG	1:H:84:VAL:N	2.87	0.41
1:J:323:SER:OG	1:J:324:THR:N	2.53	0.41
1:K:157:LYS:NZ	1:K:160:THR:HG21	2.35	0.41
1:K:236:TRP:CD1	1:K:237:GLN:N	2.88	0.41
1:N:191:PHE:O	1:N:194:LEU:HB2	2.21	0.41
1:O:165:PHE:O	1:O:169:PRO:HD2	2.20	0.41
1:O:271:ILE:O	1:O:275:LYS:HG2	2.20	0.41
1:P:15:ILE:O	1:P:19:PHE:HB2	2.20	0.41
1:P:325:ILE:HG22	1:P:326:SER:O	2.20	0.41
1:A:15:ILE:O	1:A:19:PHE:HB2	2.20	0.41
1:A:191:PHE:O	1:A:194:LEU:HB2	2.21	0.41
1:A:219:TYR:HD1	1:A:220:THR:H	1.67	0.41
1:A:236:TRP:CD1	1:A:237:GLN:N	2.88	0.41
1:B:191:PHE:O	1:B:194:LEU:HB2	2.21	0.41
1:C:165:PHE:O	1:C:169:PRO:HD2	2.20	0.41
1:C:277:PHE:HD1	1:C:277:PHE:HA	1.71	0.41
1:D:106:GLN:C	1:E:275:LYS:HZ1	2.20	0.41
1:D:191:PHE:O	1:D:194:LEU:HB2	2.21	0.41
1:F:157:LYS:NZ	1:F:160:THR:HG21	2.35	0.41
1:F:192:TYR:O	1:F:195:SER:N	2.54	0.41
1:G:191:PHE:O	1:G:194:LEU:HB2	2.21	0.41
1:I:157:LYS:NZ	1:I:160:THR:HG21	2.35	0.41
1:J:298:TRP:HA	1:J:301:TYR:HB3	2.01	0.41
1:K:15:ILE:O	1:K:19:PHE:HB2	2.21	0.41
1:K:191:PHE:O	1:K:194:LEU:HB2	2.21	0.41
1:K:219:TYR:HD1	1:K:220:THR:H	1.67	0.41
1:L:191:PHE:O	1:L:194:LEU:HB2	2.21	0.41
1:M:110:TYR:CD2	1:N:275:LYS:HG3	2.55	0.41
1:M:192:TYR:O	1:M:195:SER:N	2.54	0.41
1:N:325:ILE:HG22	1:N:326:SER:O	2.20	0.41
1:O:110:TYR:CD2	1:P:275:LYS:HG3	2.55	0.41
1:P:192:TYR:O	1:P:195:SER:N	2.54	0.41
1:A:98:THR:HG22	1:A:98:THR:O	2.20	0.41
1:B:219:TYR:HD1	1:B:220:THR:H	1.67	0.41
1:B:236:TRP:CD1	1:B:237:GLN:N	2.88	0.41
1:B:329:GLN:O	1:B:332:SER:N	2.53	0.41
1:D:325:ILE:HG22	1:D:326:SER:O	2.20	0.41
1:D:362:ARG:NH2	1:D:363:ASN:OD1	2.53	0.41
1:E:165:PHE:O	1:E:169:PRO:HD2	2.20	0.41
1:E:271:ILE:O	1:E:275:LYS:HG2	2.20	0.41
1:E:277:PHE:HD1	1:E:277:PHE:HA	1.71	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:157:LYS:NZ	1:G:160:THR:HG21	2.35	0.41
1:H:362:ARG:NH2	1:H:363:ASN:OD1	2.53	0.41
1:J:362:ARG:NH2	1:J:363:ASN:OD1	2.53	0.41
1:K:271:ILE:O	1:K:275:LYS:HG2	2.20	0.41
1:L:114:LEU:HD12	1:L:114:LEU:HA	1.84	0.41
1:L:236:TRP:CD1	1:L:237:GLN:N	2.88	0.41
1:L:329:GLN:O	1:L:332:SER:N	2.53	0.41
1:M:292:THR:O	1:M:295:CYS:HB3	2.21	0.41
1:N:271:ILE:O	1:N:275:LYS:HG2	2.20	0.41
1:N:362:ARG:NH2	1:N:363:ASN:OD1	2.53	0.41
1:O:15:ILE:O	1:O:19:PHE:HB2	2.21	0.41
1:O:277:PHE:HD1	1:O:277:PHE:HA	1.71	0.41
1:O:362:ARG:NH2	1:O:363:ASN:OD1	2.53	0.41
1:P:157:LYS:NZ	1:P:160:THR:HG21	2.35	0.41
1:P:271:ILE:O	1:P:275:LYS:HG2	2.20	0.41
1:A:271:ILE:O	1:A:275:LYS:HG2	2.20	0.41
1:A:362:ARG:NH2	1:A:363:ASN:OD1	2.53	0.41
1:B:192:TYR:O	1:B:195:SER:N	2.54	0.41
1:C:271:ILE:O	1:C:275:LYS:HG2	2.20	0.41
1:C:292:THR:O	1:C:295:CYS:HB3	2.21	0.41
1:C:329:GLN:O	1:C:332:SER:N	2.53	0.41
1:D:165:PHE:O	1:D:169:PRO:HD2	2.20	0.41
1:D:168:ARG:HG3	1:E:158:PHE:CZ	2.54	0.41
1:D:271:ILE:O	1:D:275:LYS:HG2	2.20	0.41
1:E:362:ARG:NH2	1:E:363:ASN:OD1	2.53	0.41
1:F:69:VAL:HA	1:F:72:VAL:HG12	2.01	0.41
1:F:110:TYR:CD2	1:G:275:LYS:HG3	2.55	0.41
1:F:191:PHE:O	1:F:194:LEU:HB2	2.21	0.41
1:F:271:ILE:O	1:F:275:LYS:HG2	2.20	0.41
1:G:192:TYR:O	1:G:195:SER:N	2.54	0.41
1:H:329:GLN:O	1:H:332:SER:N	2.53	0.41
1:I:191:PHE:O	1:I:194:LEU:HB2	2.21	0.41
1:I:192:TYR:O	1:I:195:SER:N	2.54	0.41
1:I:275:LYS:HZ3	1:P:110:TYR:HD2	1.69	0.41
1:I:329:GLN:O	1:I:332:SER:N	2.53	0.41
1:J:69:VAL:HA	1:J:72:VAL:HG12	2.01	0.41
1:J:98:THR:O	1:J:98:THR:HG22	2.20	0.41
1:K:46:LEU:HA	1:K:46:LEU:HD23	1.58	0.41
1:K:362:ARG:NH2	1:K:363:ASN:OD1	2.53	0.41
1:L:219:TYR:HD1	1:L:220:THR:H	1.67	0.41
1:M:329:GLN:O	1:M:332:SER:N	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:165:PHE:O	1:N:169:PRO:HD2	2.20	0.41
1:O:157:LYS:NZ	1:O:160:THR:HG21	2.35	0.41
1:A:46:LEU:HD13	1:A:273:TYR:CE1	2.44	0.41
1:B:173:ILE:HD13	1:B:173:ILE:HA	1.77	0.41
1:B:271:ILE:O	1:B:275:LYS:HG2	2.20	0.41
1:C:110:TYR:CD2	1:D:275:LYS:HG3	2.56	0.41
1:D:110:TYR:HD2	1:E:275:LYS:NZ	2.19	0.41
1:D:157:LYS:NZ	1:D:160:THR:HG21	2.35	0.41
1:D:179:LEU:CD2	1:E:352:ILE:HA	2.48	0.41
1:D:239:THR:HB	1:D:241:HIS:ND1	2.36	0.41
1:D:292:THR:O	1:D:295:CYS:HB3	2.21	0.41
1:E:157:LYS:NZ	1:E:160:THR:HG21	2.35	0.41
1:F:98:THR:HG22	1:F:98:THR:O	2.20	0.41
1:F:112:PHE:O	1:F:115:GLN:HB2	2.21	0.41
1:F:239:THR:HB	1:F:241:HIS:ND1	2.36	0.41
1:G:82:TYR:HE2	1:G:249:ASP:OD2	2.04	0.41
1:G:214:LEU:HD23	1:G:214:LEU:HA	1.76	0.41
1:G:329:GLN:O	1:G:332:SER:N	2.53	0.41
1:H:98:THR:O	1:H:98:THR:HG22	2.20	0.41
1:H:121:ILE:N	1:H:122:PRO:HD2	2.36	0.41
1:H:157:LYS:NZ	1:H:160:THR:HG21	2.35	0.41
1:H:192:TYR:O	1:H:195:SER:N	2.54	0.41
1:H:239:THR:OG1	1:H:241:HIS:N	2.41	0.41
1:I:275:LYS:NZ	1:P:110:TYR:HD2	2.19	0.41
1:J:15:ILE:O	1:J:19:PHE:HB2	2.21	0.41
1:J:325:ILE:HG22	1:J:326:SER:O	2.20	0.41
1:J:329:GLN:O	1:J:332:SER:N	2.53	0.41
1:K:98:THR:HG22	1:K:98:THR:O	2.20	0.41
1:L:110:TYR:CD2	1:M:275:LYS:HG3	2.55	0.41
1:L:192:TYR:O	1:L:195:SER:N	2.54	0.41
1:L:271:ILE:O	1:L:275:LYS:HG2	2.20	0.41
1:M:236:TRP:CD1	1:M:237:GLN:N	2.88	0.41
1:M:271:ILE:O	1:M:275:LYS:HG2	2.20	0.41
1:N:239:THR:HB	1:N:241:HIS:ND1	2.36	0.41
1:N:329:GLN:O	1:N:332:SER:N	2.53	0.41
1:P:98:THR:O	1:P:98:THR:HG22	2.20	0.41
1:P:112:PHE:O	1:P:115:GLN:HB2	2.21	0.41
1:P:121:ILE:N	1:P:122:PRO:HD2	2.36	0.41
1:P:191:PHE:O	1:P:194:LEU:HB2	2.21	0.41
1:P:239:THR:HB	1:P:241:HIS:ND1	2.36	0.41
1:P:292:THR:O	1:P:295:CYS:HB3	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:275:LYS:HG3	1:H:110:TYR:CD2	2.55	0.41
1:B:157:LYS:NZ	1:B:160:THR:HG21	2.35	0.41
1:C:236:TRP:CD1	1:C:237:GLN:N	2.88	0.41
1:C:323:SER:OG	1:C:324:THR:N	2.53	0.41
1:D:236:TRP:CD1	1:D:237:GLN:N	2.88	0.41
1:D:329:GLN:O	1:D:332:SER:N	2.53	0.41
1:E:292:THR:O	1:E:295:CYS:HB3	2.21	0.41
1:F:82:TYR:HE2	1:F:249:ASP:OD2	2.04	0.41
1:F:121:ILE:N	1:F:122:PRO:HD2	2.36	0.41
1:F:292:THR:O	1:F:295:CYS:HB3	2.21	0.41
1:H:15:ILE:O	1:H:19:PHE:HB2	2.21	0.41
1:H:69:VAL:HA	1:H:72:VAL:HG12	2.01	0.41
1:H:325:ILE:HG22	1:H:326:SER:O	2.20	0.41
1:I:82:TYR:HE2	1:I:249:ASP:OD2	2.04	0.41
1:I:239:THR:OG1	1:I:241:HIS:N	2.41	0.41
1:I:267:LEU:HD12	1:I:267:LEU:HA	1.67	0.41
1:I:271:ILE:O	1:I:275:LYS:HG2	2.20	0.41
1:J:121:ILE:N	1:J:122:PRO:HD2	2.36	0.41
1:J:157:LYS:NZ	1:J:160:THR:HG21	2.35	0.41
1:J:192:TYR:O	1:J:195:SER:N	2.54	0.41
1:M:75:TYR:CD2	1:M:75:TYR:C	2.92	0.41
1:M:323:SER:OG	1:M:324:THR:N	2.53	0.41
1:N:154:LYS:HE2	1:N:154:LYS:HB3	1.87	0.41
1:N:157:LYS:NZ	1:N:160:THR:HG21	2.36	0.41
1:N:292:THR:O	1:N:295:CYS:HB3	2.21	0.41
1:O:292:THR:O	1:O:295:CYS:HB3	2.21	0.41
1:P:69:VAL:HA	1:P:72:VAL:HG12	2.01	0.41
1:P:239:THR:OG1	1:P:241:HIS:N	2.41	0.41
1:A:112:PHE:O	1:A:115:GLN:HB2	2.21	0.41
1:A:186:ARG:NH1	1:A:336:GLU:OE2	2.49	0.41
1:A:323:SER:OG	1:A:324:THR:N	2.53	0.41
1:B:112:PHE:O	1:B:115:GLN:HB2	2.21	0.41
1:C:75:TYR:CD2	1:C:75:TYR:C	2.92	0.41
1:D:112:PHE:O	1:D:115:GLN:HB2	2.21	0.41
1:D:192:TYR:O	1:D:195:SER:N	2.54	0.41
1:D:269:LEU:HA	1:D:269:LEU:HD23	1.92	0.41
1:E:121:ILE:N	1:E:122:PRO:HD2	2.36	0.41
1:E:192:TYR:O	1:E:195:SER:N	2.54	0.41
1:F:112:PHE:HD1	1:F:112:PHE:HA	1.68	0.41
1:F:362:ARG:NH2	1:F:363:ASN:OD1	2.53	0.41
1:G:179:LEU:CD2	1:H:352:ILE:HA	2.48	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:259:GLN:HE22	1:K:261:ASP:HB3	1.86	0.41
1:G:271:ILE:O	1:G:275:LYS:HG2	2.20	0.41
1:G:292:THR:O	1:G:295:CYS:HB3	2.21	0.41
1:H:112:PHE:O	1:H:115:GLN:HB2	2.21	0.41
1:H:292:THR:O	1:H:295:CYS:HB3	2.21	0.41
1:I:292:THR:O	1:I:295:CYS:HB3	2.21	0.41
1:J:292:THR:O	1:J:295:CYS:HB3	2.21	0.41
1:K:46:LEU:HD13	1:K:273:TYR:CE1	2.44	0.41
1:K:106:GLN:C	1:L:275:LYS:HZ1	2.19	0.41
1:K:112:PHE:O	1:K:115:GLN:HB2	2.21	0.41
1:L:121:ILE:N	1:L:122:PRO:HD2	2.36	0.41
1:M:157:LYS:NZ	1:M:160:THR:HG21	2.36	0.41
1:N:112:PHE:O	1:N:115:GLN:HB2	2.21	0.41
1:N:168:ARG:HG3	1:O:158:PHE:CZ	2.55	0.41
1:N:179:LEU:CD2	1:O:352:ILE:HA	2.49	0.41
1:N:192:TYR:O	1:N:195:SER:N	2.54	0.41
1:N:236:TRP:CD1	1:N:237:GLN:N	2.88	0.41
1:O:121:ILE:N	1:O:122:PRO:HD2	2.36	0.41
1:O:192:TYR:O	1:O:195:SER:N	2.54	0.41
1:O:239:THR:OG1	1:O:241:HIS:N	2.41	0.41
1:O:325:ILE:HG22	1:O:326:SER:O	2.20	0.41
1:P:82:TYR:HE2	1:P:249:ASP:OD2	2.04	0.41
1:P:362:ARG:NH2	1:P:363:ASN:OD1	2.53	0.41
1:A:192:TYR:O	1:A:195:SER:N	2.54	0.41
1:B:121:ILE:N	1:B:122:PRO:HD2	2.36	0.41
1:B:362:ARG:NH2	1:B:363:ASN:OD1	2.53	0.41
1:C:157:LYS:NZ	1:C:160:THR:HG21	2.36	0.41
1:D:69:VAL:HA	1:D:72:VAL:HG12	2.01	0.41
1:E:325:ILE:HG22	1:E:326:SER:O	2.20	0.41
1:F:239:THR:OG1	1:F:241:HIS:N	2.41	0.41
1:G:219:TYR:HD1	1:G:220:THR:N	2.17	0.41
1:J:112:PHE:O	1:J:115:GLN:HB2	2.21	0.41
1:J:271:ILE:O	1:J:275:LYS:HG2	2.20	0.41
1:K:192:TYR:O	1:K:195:SER:N	2.54	0.41
1:K:323:SER:OG	1:K:324:THR:N	2.53	0.41
1:L:112:PHE:O	1:L:115:GLN:HB2	2.21	0.41
1:L:157:LYS:NZ	1:L:160:THR:HG21	2.36	0.41
1:L:323:SER:OG	1:L:324:THR:N	2.53	0.41
1:N:69:VAL:HA	1:N:72:VAL:HG12	2.01	0.41
1:P:112:PHE:HD1	1:P:112:PHE:HA	1.68	0.41
1:B:292:THR:O	1:B:295:CYS:HB3	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:323:SER:OG	1:B:324:THR:N	2.53	0.40
1:C:121:ILE:N	1:C:122:PRO:HD2	2.36	0.40
1:G:57:THR:HB	1:G:266:VAL:HG12	2.03	0.40
1:G:239:THR:OG1	1:G:241:HIS:N	2.41	0.40
1:H:271:ILE:O	1:H:275:LYS:HG2	2.20	0.40
1:I:57:THR:HB	1:I:266:VAL:HG12	2.04	0.40
1:I:179:LEU:CD2	1:J:352:ILE:HA	2.48	0.40
1:K:186:ARG:NH1	1:K:336:GLU:OE2	2.49	0.40
1:M:121:ILE:N	1:M:122:PRO:HD2	2.36	0.40
1:N:121:ILE:N	1:N:122:PRO:HD2	2.36	0.40
1:D:31:ASN:O	1:D:35:THR:OG1	2.31	0.40
1:D:154:LYS:HE2	1:D:154:LYS:HB3	1.87	0.40
1:F:318:THR:CG2	1:F:319:ALA:H	2.31	0.40
1:G:15:ILE:O	1:G:19:PHE:HB2	2.21	0.40
1:H:57:THR:HB	1:H:266:VAL:HG12	2.04	0.40
1:H:82:TYR:HE2	1:H:249:ASP:OD2	2.04	0.40
1:K:110:TYR:CD2	1:L:275:LYS:HG3	2.56	0.40
1:K:292:THR:O	1:K:295:CYS:HB3	2.21	0.40
1:L:362:ARG:NH2	1:L:363:ASN:OD1	2.53	0.40
1:M:112:PHE:O	1:M:115:GLN:HB2	2.21	0.40
1:O:191:PHE:O	1:O:194:LEU:HB2	2.21	0.40
1:P:57:THR:HB	1:P:266:VAL:HG12	2.04	0.40
1:A:31:ASN:O	1:A:35:THR:OG1	2.31	0.40
1:A:68:TRP:N	1:A:68:TRP:CD1	2.86	0.40
1:A:292:THR:O	1:A:295:CYS:HB3	2.21	0.40
1:C:112:PHE:O	1:C:115:GLN:HB2	2.21	0.40
1:D:121:ILE:N	1:D:122:PRO:HD2	2.36	0.40
1:E:191:PHE:O	1:E:194:LEU:HB2	2.21	0.40
1:E:239:THR:OG1	1:E:241:HIS:N	2.41	0.40
1:F:57:THR:HB	1:F:266:VAL:HG12	2.04	0.40
1:F:329:GLN:O	1:F:332:SER:N	2.53	0.40
1:G:362:ARG:NH2	1:G:363:ASN:OD1	2.53	0.40
1:I:15:ILE:O	1:I:19:PHE:HB2	2.21	0.40
1:I:112:PHE:O	1:I:115:GLN:HB2	2.21	0.40
1:I:219:TYR:HD1	1:I:220:THR:N	2.17	0.40
1:I:362:ARG:NH2	1:I:363:ASN:OD1	2.53	0.40
1:J:57:THR:HB	1:J:266:VAL:HG12	2.04	0.40
1:J:82:TYR:HE2	1:J:249:ASP:OD2	2.04	0.40
1:K:121:ILE:N	1:K:122:PRO:HD2	2.36	0.40
1:K:172:TYR:CE1	1:L:352:ILE:HD13	2.56	0.40
1:L:82:TYR:HE2	1:L:249:ASP:OD2	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:292:THR:O	1:L:295:CYS:HB3	2.21	0.40
1:O:112:PHE:O	1:O:115:GLN:HB2	2.21	0.40
1:A:121:ILE:N	1:A:122:PRO:HD2	2.36	0.40
1:C:15:ILE:O	1:C:19:PHE:HB2	2.21	0.40
1:E:112:PHE:O	1:E:115:GLN:HB2	2.21	0.40
1:G:112:PHE:O	1:G:115:GLN:HB2	2.21	0.40
1:I:239:THR:HB	1:I:241:HIS:ND1	2.36	0.40
1:K:68:TRP:N	1:K:68:TRP:CD1	2.86	0.40
1:M:15:ILE:O	1:M:19:PHE:HB2	2.21	0.40
1:N:239:THR:OG1	1:N:241:HIS:N	2.41	0.40
1:O:82:TYR:HE2	1:O:249:ASP:OD2	2.04	0.40
1:P:329:GLN:O	1:P:332:SER:N	2.53	0.40
1:B:82:TYR:HE2	1:B:249:ASP:OD2	2.04	0.40
1:C:82:TYR:HE2	1:C:249:ASP:OD2	2.04	0.40
1:D:149:SER:HA	1:D:152:ARG:NH1	2.37	0.40
1:E:82:TYR:HE2	1:E:249:ASP:OD2	2.04	0.40
1:G:239:THR:HB	1:G:241:HIS:ND1	2.36	0.40
1:I:121:ILE:N	1:I:122:PRO:HD2	2.36	0.40
1:J:106:GLN:OE1	1:K:244:ARG:NH1	2.54	0.40
1:K:331:PHE:HD1	1:K:331:PHE:HA	1.72	0.40
1:M:82:TYR:HE2	1:M:249:ASP:OD2	2.04	0.40
1:N:149:SER:HA	1:N:152:ARG:NH1	2.37	0.40
1:O:329:GLN:O	1:O:332:SER:N	2.53	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 PDB entries followed by that with respect to all EM entries.

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	356/389 (92%)	305 (86%)	46 (13%)	5 (1%)	11 48
1	B	356/389 (92%)	305 (86%)	46 (13%)	5 (1%)	11 48

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	C	356/389 (92%)	304 (85%)	47 (13%)	5 (1%)	11	48
1	D	356/389 (92%)	305 (86%)	46 (13%)	5 (1%)	11	48
1	E	356/389 (92%)	305 (86%)	46 (13%)	5 (1%)	11	48
1	F	356/389 (92%)	305 (86%)	46 (13%)	5 (1%)	11	48
1	G	356/389 (92%)	305 (86%)	46 (13%)	5 (1%)	11	48
1	H	356/389 (92%)	305 (86%)	46 (13%)	5 (1%)	11	48
1	I	356/389 (92%)	305 (86%)	46 (13%)	5 (1%)	11	48
1	J	356/389 (92%)	305 (86%)	46 (13%)	5 (1%)	11	48
1	K	356/389 (92%)	305 (86%)	46 (13%)	5 (1%)	11	48
1	L	356/389 (92%)	305 (86%)	46 (13%)	5 (1%)	11	48
1	M	356/389 (92%)	305 (86%)	46 (13%)	5 (1%)	11	48
1	N	356/389 (92%)	305 (86%)	46 (13%)	5 (1%)	11	48
1	O	356/389 (92%)	305 (86%)	46 (13%)	5 (1%)	11	48
1	P	356/389 (92%)	305 (86%)	46 (13%)	5 (1%)	11	48
All	All	5696/6224 (92%)	4879 (86%)	737 (13%)	80 (1%)	15	48

All (80) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	321	ILE
1	B	321	ILE
1	C	321	ILE
1	D	321	ILE
1	E	321	ILE
1	F	321	ILE
1	G	321	ILE
1	H	321	ILE
1	I	321	ILE
1	J	321	ILE
1	K	321	ILE
1	L	321	ILE
1	M	321	ILE
1	N	321	ILE
1	O	321	ILE
1	P	321	ILE
1	A	219	TYR
1	B	219	TYR

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Mol	Chain	Res	Type
1	C	219	TYR
1	D	219	TYR
1	E	219	TYR
1	F	219	TYR
1	G	219	TYR
1	H	219	TYR
1	I	219	TYR
1	J	219	TYR
1	K	219	TYR
1	L	219	TYR
1	M	219	TYR
1	N	219	TYR
1	O	219	TYR
1	P	219	TYR
1	A	323	SER
1	B	323	SER
1	C	323	SER
1	D	323	SER
1	E	323	SER
1	F	323	SER
1	G	323	SER
1	H	323	SER
1	I	323	SER
1	J	323	SER
1	K	323	SER
1	L	323	SER
1	M	323	SER
1	N	323	SER
1	O	323	SER
1	P	323	SER
1	A	304	ASN
1	A	305	LYS
1	B	304	ASN
1	B	305	LYS
1	C	304	ASN
1	C	305	LYS
1	D	304	ASN
1	D	305	LYS
1	E	304	ASN
1	E	305	LYS
1	F	304	ASN
1	F	305	LYS

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Mol	Chain	Res	Type
1	G	304	ASN
1	G	305	LYS
1	H	304	ASN
1	H	305	LYS
1	I	304	ASN
1	I	305	LYS
1	J	304	ASN
1	J	305	LYS
1	K	304	ASN
1	K	305	LYS
1	L	304	ASN
1	L	305	LYS
1	M	304	ASN
1	M	305	LYS
1	N	304	ASN
1	N	305	LYS
1	O	304	ASN
1	O	305	LYS
1	P	304	ASN
1	P	305	LYS

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 PDB entries followed by that with respect to all EM entries.

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	320/346 (92%)	320 (100%)	0	100	100
1	B	320/346 (92%)	320 (100%)	0	100	100
1	C	320/346 (92%)	320 (100%)	0	100	100
1	D	320/346 (92%)	320 (100%)	0	100	100
1	E	320/346 (92%)	320 (100%)	0	100	100
1	F	320/346 (92%)	320 (100%)	0	100	100
1	G	320/346 (92%)	320 (100%)	0	100	100
1	H	320/346 (92%)	320 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	I	320/346 (92%)	320 (100%)	0	100	100
1	J	320/346 (92%)	320 (100%)	0	100	100
1	K	320/346 (92%)	320 (100%)	0	100	100
1	L	320/346 (92%)	320 (100%)	0	100	100
1	M	320/346 (92%)	320 (100%)	0	100	100
1	N	320/346 (92%)	320 (100%)	0	100	100
1	O	320/346 (92%)	320 (100%)	0	100	100
1	P	320/346 (92%)	320 (100%)	0	100	100
All	All	5120/5536 (92%)	5120 (100%)	0	100	100

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

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (24) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	241	HIS
1	A	259	GLN
1	B	241	HIS
1	B	259	GLN
1	C	241	HIS
1	C	259	GLN
1	D	241	HIS
1	D	259	GLN
1	E	241	HIS
1	E	259	GLN
1	F	241	HIS
1	G	241	HIS
1	H	241	HIS
1	I	241	HIS
1	J	241	HIS
1	J	259	GLN
1	K	241	HIS
1	K	259	GLN
1	L	241	HIS
1	L	259	GLN
1	M	241	HIS
1	N	241	HIS
1	O	241	HIS
1	P	241	HIS

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)

There are no ligands in this entry.

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.

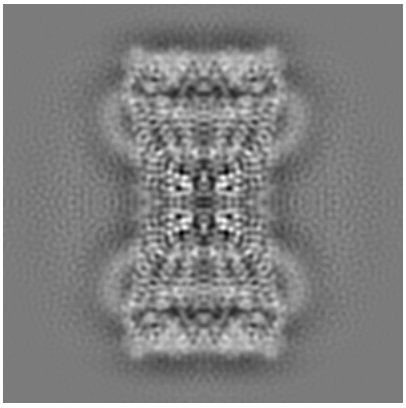
6 Map visualisation (i)

This section contains visualisations of the EMDB entry EMD-9571. These allow visual inspection of the internal detail of the map and identification of artifacts.

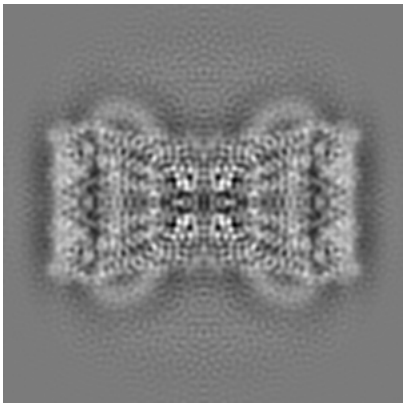
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections (i)

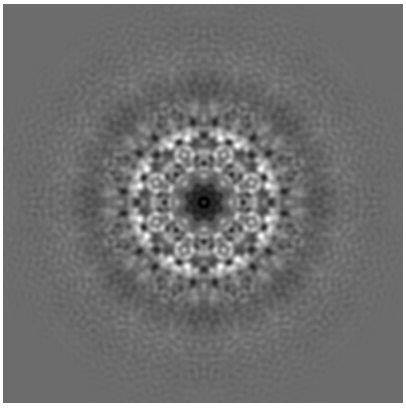
6.1.1 Primary map



X



Y

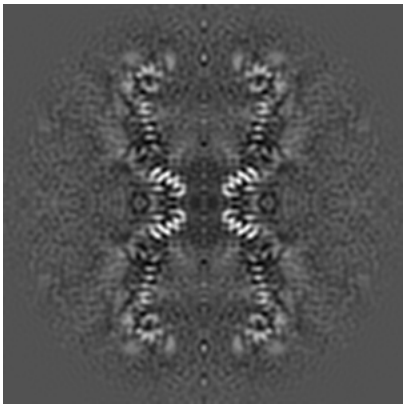


Z

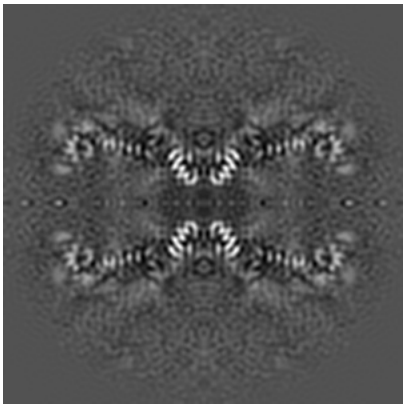
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

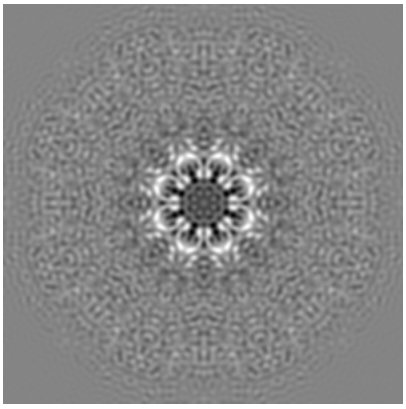
6.2.1 Primary map



X Index: 100



Y Index: 100

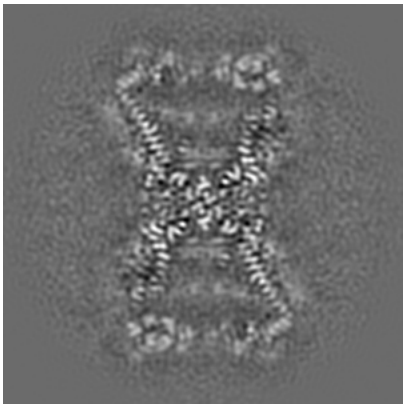


Z Index: 100

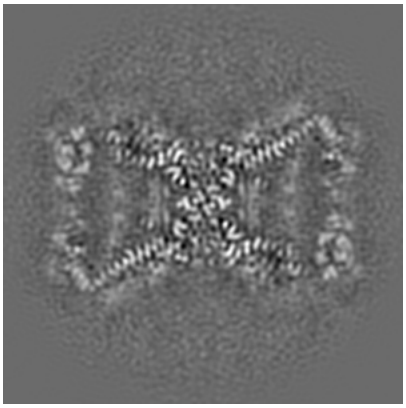
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

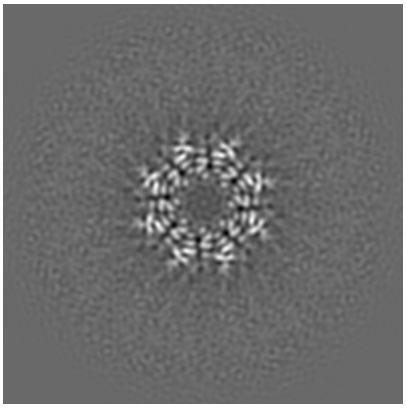
6.3.1 Primary map



X Index: 114



Y Index: 114

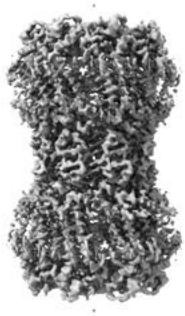


Z Index: 113

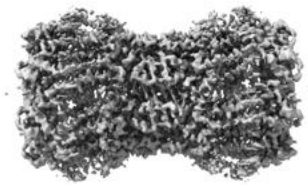
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views (i)

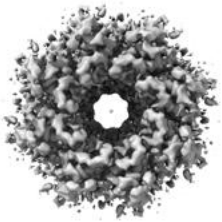
6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.015. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

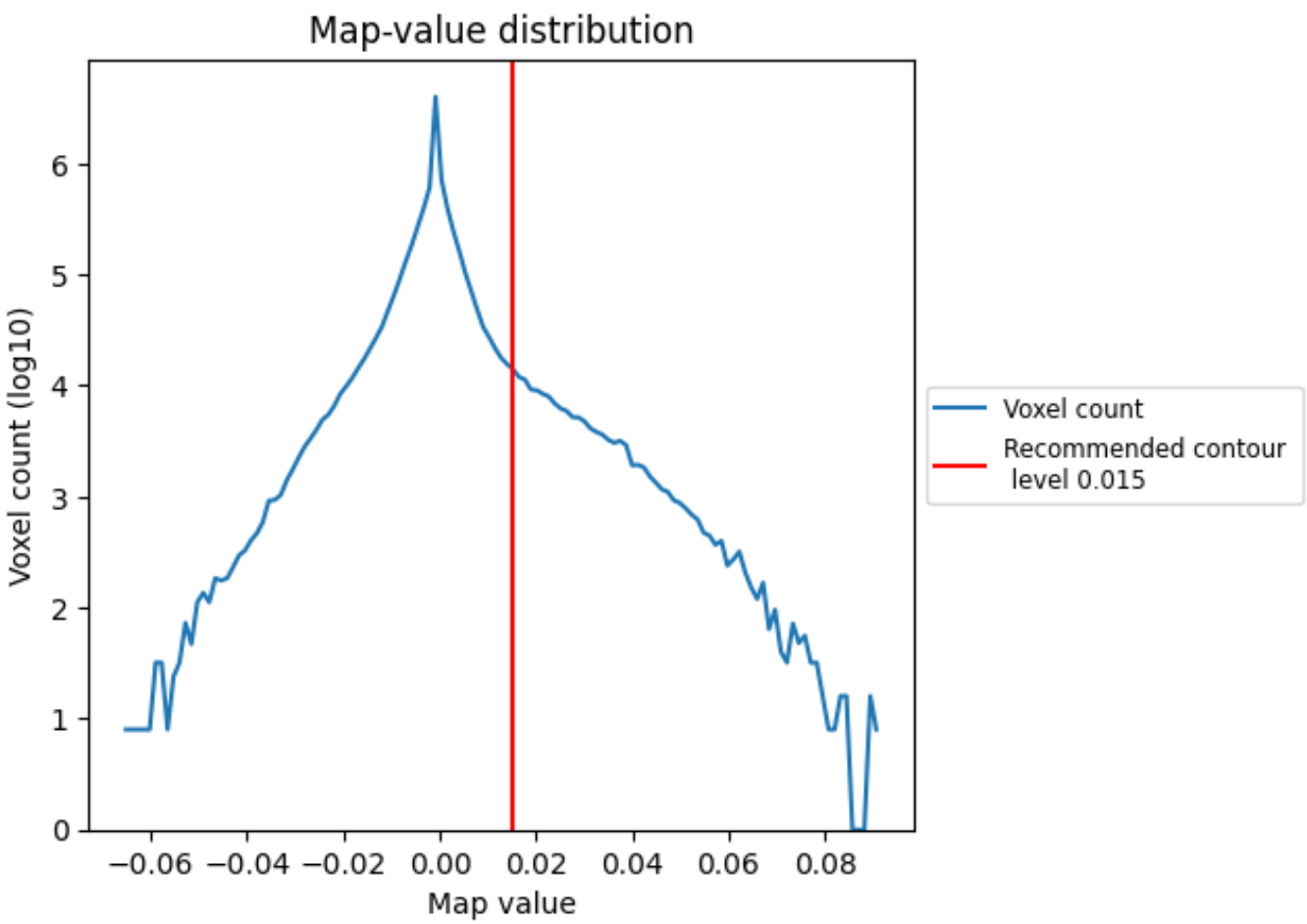
6.5 Mask visualisation (i)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis (i)

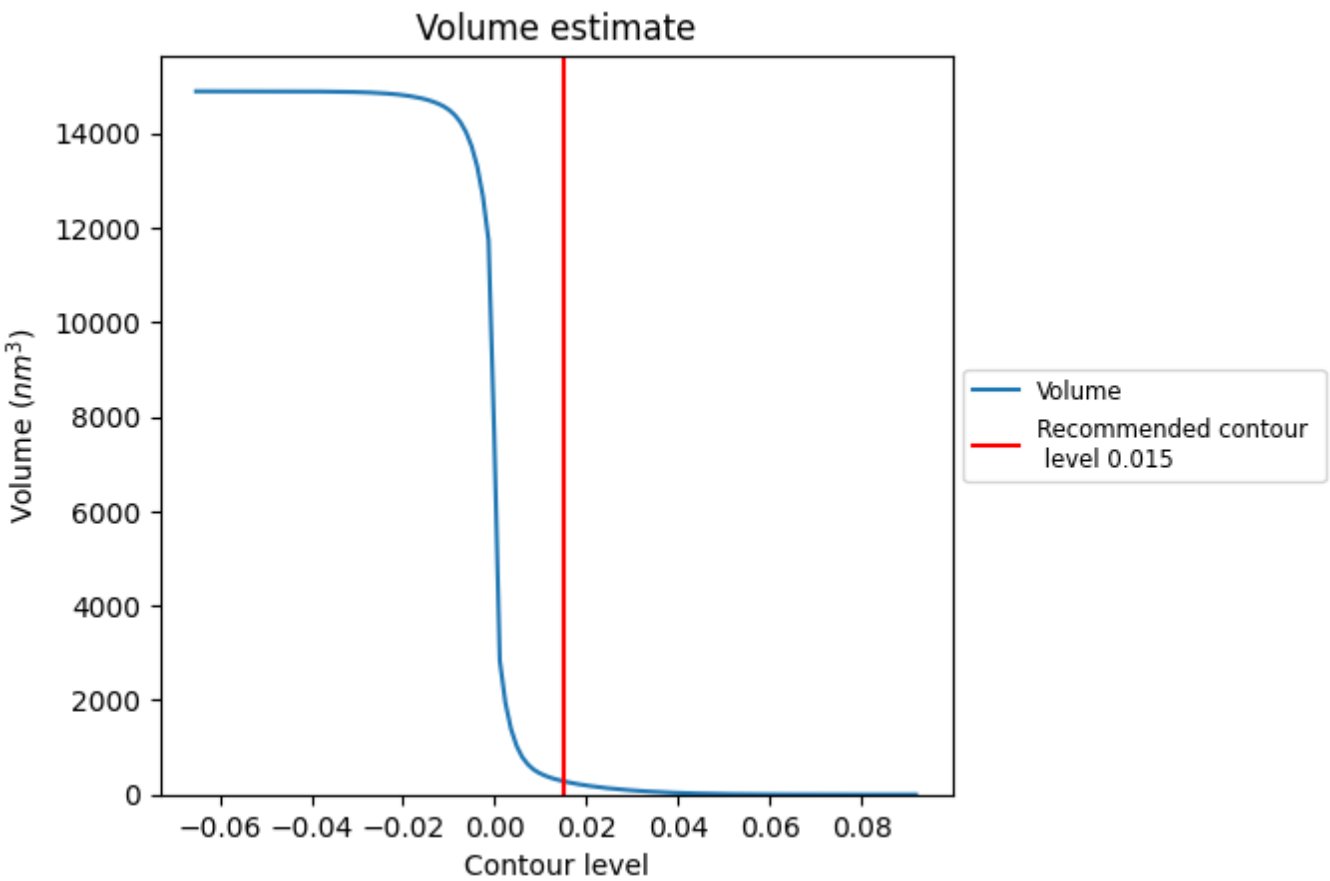
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution (i)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

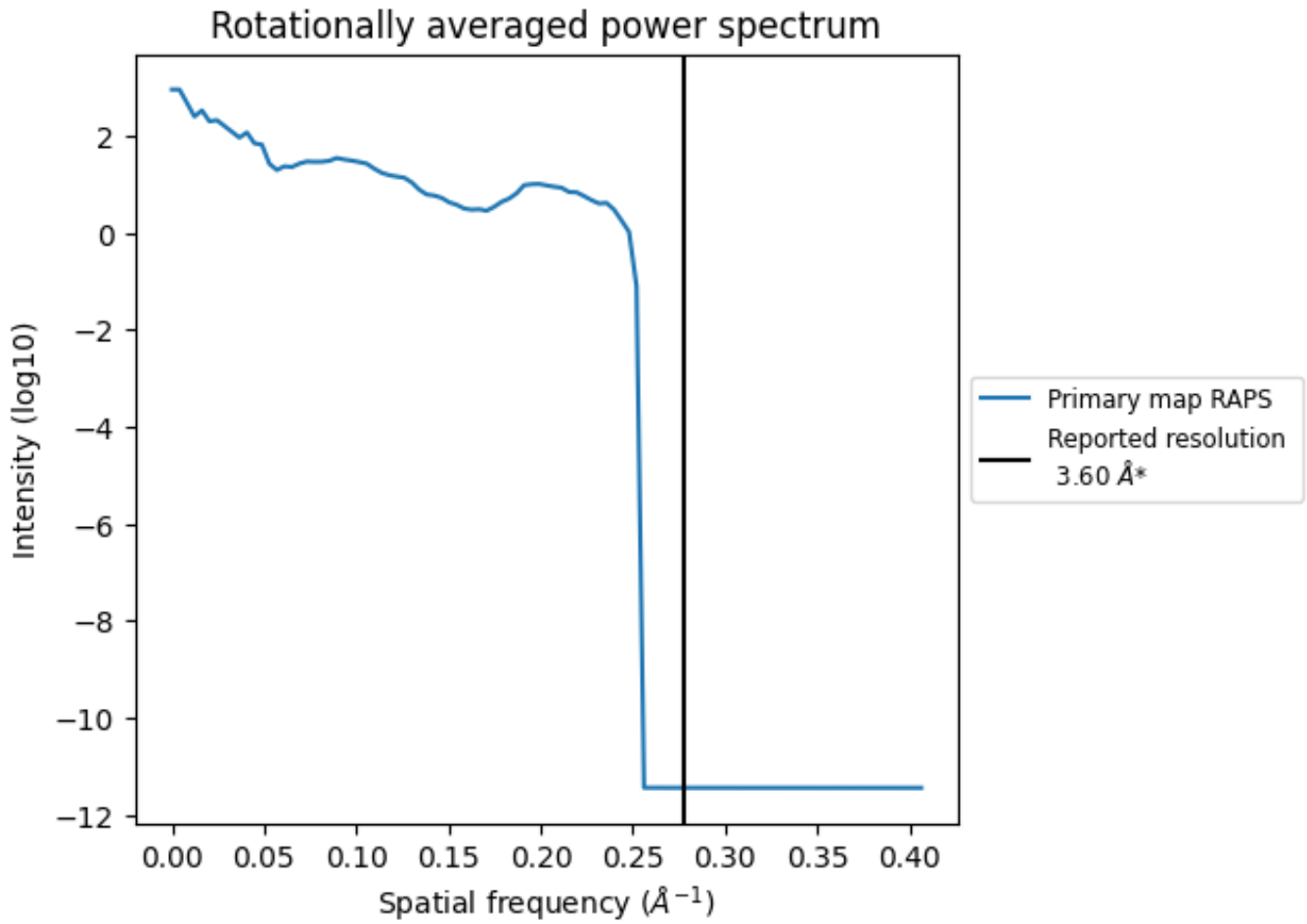
7.2 Volume estimate (i)



The volume at the recommended contour level is 283 nm^3; this corresponds to an approximate mass of 256 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum (i)



*Reported resolution corresponds to spatial frequency of 0.278 Å^{-1}

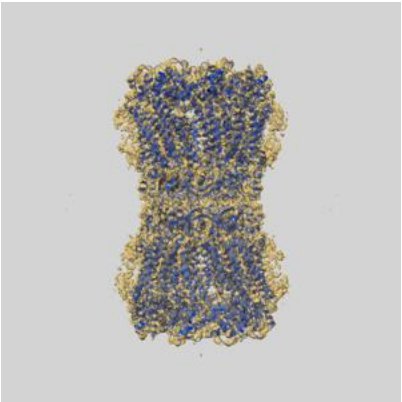
8 Fourier-Shell correlation (i)

This section was not generated. No FSC curve or half-maps provided.

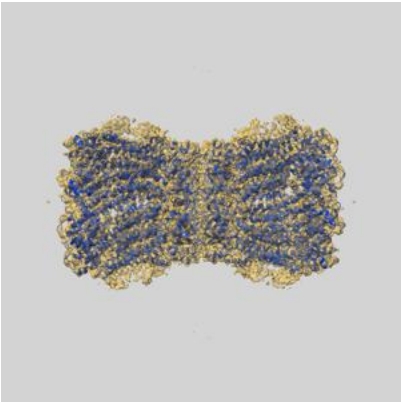
9 Map-model fit (i)

This section contains information regarding the fit between EMDB map EMD-9571 and PDB model 5H1R. Per-residue inclusion information can be found in section 3 on page 5.

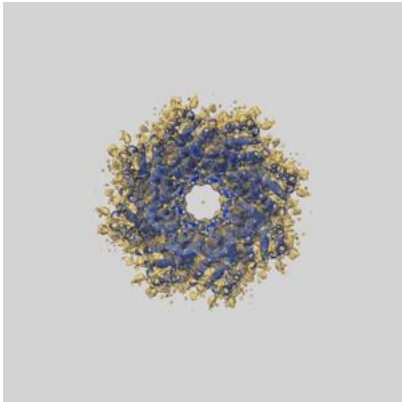
9.1 Map-model overlay (i)



X



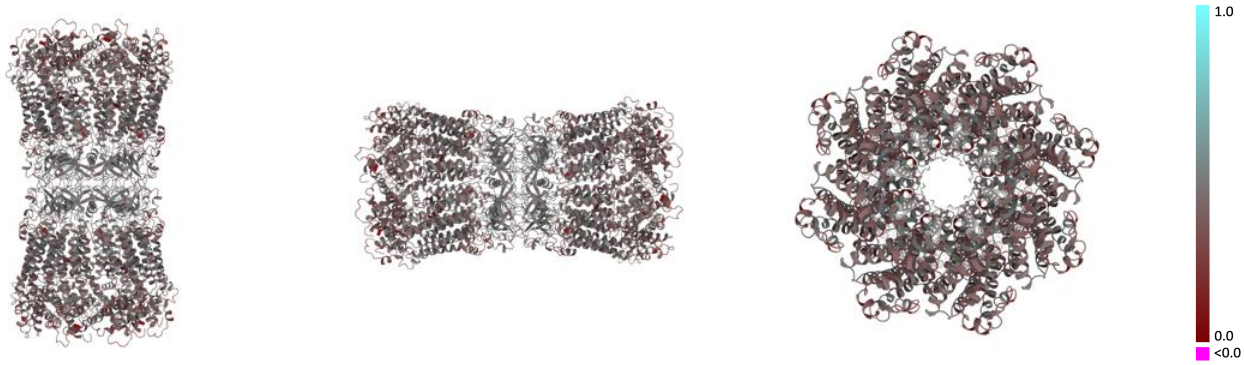
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.015 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

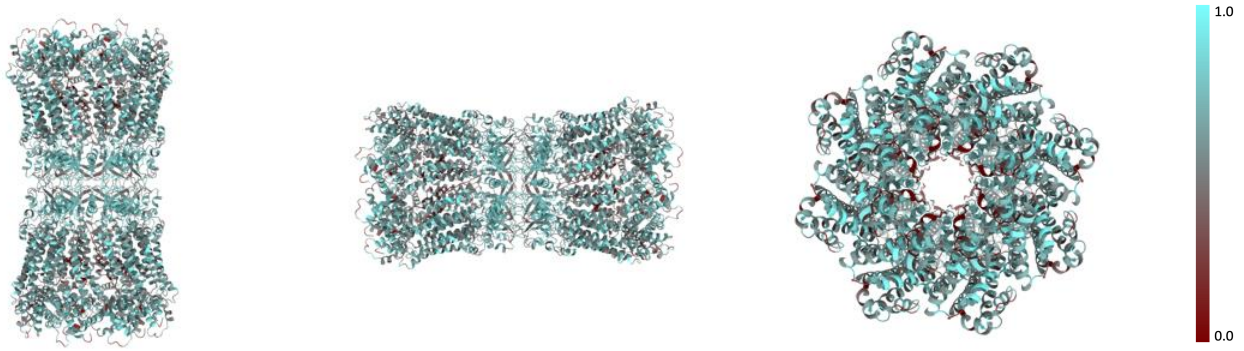
9.2 Q-score mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

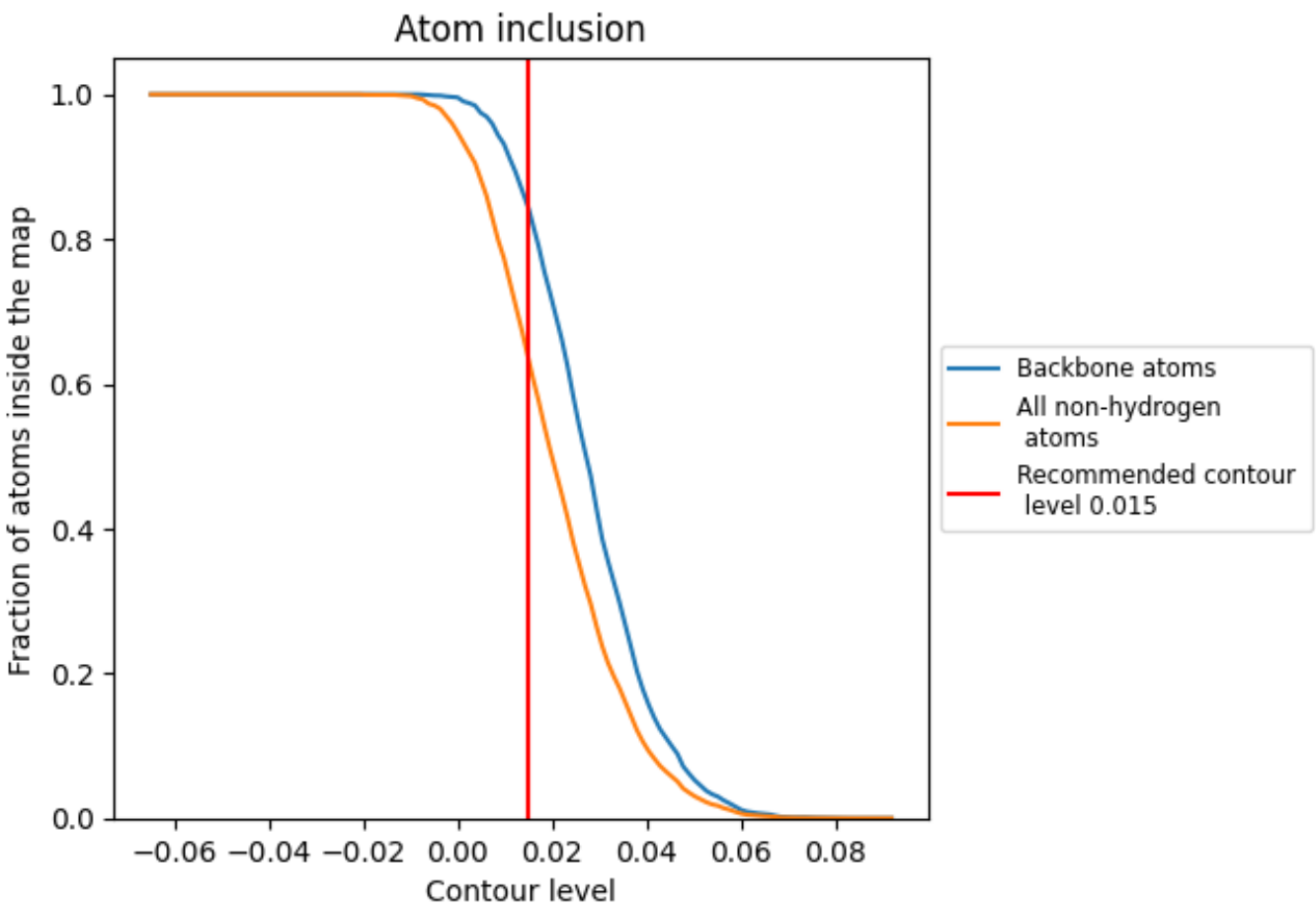
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.015).

9.4 Atom inclusion (i)



At the recommended contour level, 84% of all backbone atoms, 63% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary (i)

The table lists the average atom inclusion at the recommended contour level (0.015) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.6329	0.4010
A	0.6344	0.4030
B	0.6317	0.4020
C	0.6338	0.4020
D	0.6310	0.4010
E	0.6341	0.4010
F	0.6317	0.4000
G	0.6338	0.4010
H	0.6320	0.4020
I	0.6348	0.4020
J	0.6313	0.4020
K	0.6341	0.4010
L	0.6317	0.4010
M	0.6338	0.4010
N	0.6317	0.4010
O	0.6341	0.4010
P	0.6324	0.4020