



Full wwPDB EM Validation Report ⓘ

Mar 10, 2026 – 01:01 PM UTC

PDB ID : 4ATU / pdb_00004atu
EMDB ID : EMD-2095
Title : Human doublecortin N-DC repeat plus linker, and tubulin (2XRP) docked into an 8Å cryo-EM map of doublecortin-stabilised microtubules reconstructed in absence of kinesin
Authors : Liu, J.S.; Schubert, C.R.; Fu, X.; Fourniol, F.J.; Jaiswal, J.K.; Houdusse, A.; Stultz, C.M.; Moores, C.A.; Walsh, C.A.
Deposited on : 2012-05-09
Resolution : 8.30 Å(reported)
Based on initial model : 2XRP

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 ⓘ 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 ⓘ](#)) were used in the production of this report:

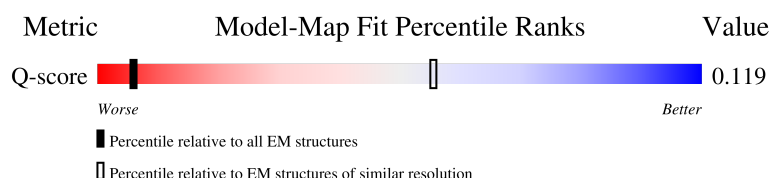
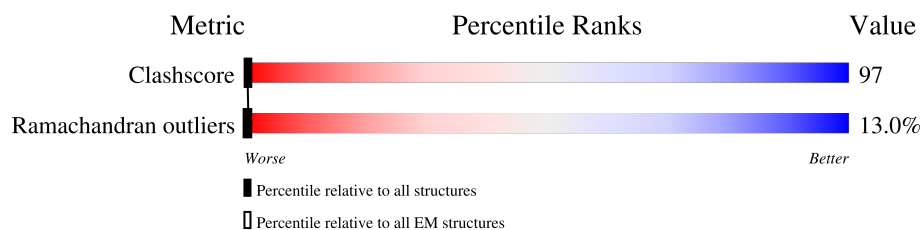
EMDB validation analysis : 0.0.1.dev132
Mogul : 2022.3.0, CSD as543be (2022)
MolProbity : 4-5-2 with Phenix2.0
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)

1 Overall quality at a glance

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

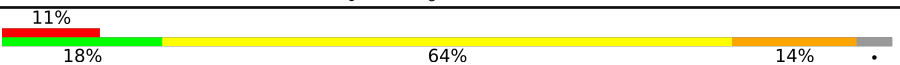
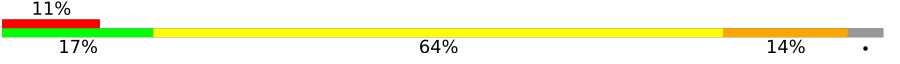
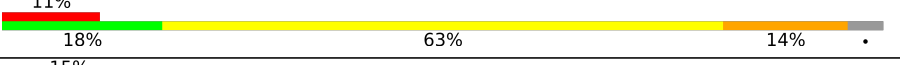
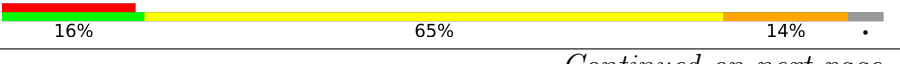
The reported resolution of this entry is 8.30 Å.

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)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Q-score	-	25397	280 (7.82 - 8.80)

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 $\leq 5\%$. 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	445	
1	C	445	
1	E	445	
1	G	445	

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Validation Pipeline (wwPDB-VP) : 2.49

Mol	Chain	Length	Quality of chain
2	B	452	12% 17% 62% 15% 5%
2	D	452	12% 18% 62% 15% 5%
2	F	452	13% 18% 62% 15% 5%
2	H	452	14% 18% 62% 15% 5%
3	I	373	7% 14% 10% 71%

2 Entry composition

There are 5 unique types of molecules in this entry. The entry contains 27840 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 TUBULIN BETA-2B CHAIN.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	426	Total	C	N	O	S	0	0
			3351	2105	575	646	25		
1	C	426	Total	C	N	O	S	0	0
			3351	2105	575	646	25		
1	E	426	Total	C	N	O	S	0	0
			3351	2105	575	646	25		
1	G	426	Total	C	N	O	S	0	0
			3351	2105	575	646	25		

There are 16 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	57	ALA	THR	conflict	UNP Q6B856
A	172	VAL	MET	conflict	UNP Q6B856
A	298	ALA	SER	conflict	UNP Q6B856
A	318	VAL	ILE	conflict	UNP Q6B856
C	57	ALA	THR	conflict	UNP Q6B856
C	172	VAL	MET	conflict	UNP Q6B856
C	298	ALA	SER	conflict	UNP Q6B856
C	318	VAL	ILE	conflict	UNP Q6B856
E	57	ALA	THR	conflict	UNP Q6B856
E	172	VAL	MET	conflict	UNP Q6B856
E	298	ALA	SER	conflict	UNP Q6B856
E	318	VAL	ILE	conflict	UNP Q6B856
G	57	ALA	THR	conflict	UNP Q6B856
G	172	VAL	MET	conflict	UNP Q6B856
G	298	ALA	SER	conflict	UNP Q6B856
G	318	VAL	ILE	conflict	UNP Q6B856

- Molecule 2 is a protein called TUBULIN ALPHA-1D CHAIN.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	429	Total 3334	C 2114	N 569	O 630	S 21	0	0
2	D	429	Total 3334	C 2114	N 569	O 630	S 21	0	0
2	F	429	Total 3334	C 2114	N 569	O 630	S 21	0	0
2	H	429	Total 3334	C 2114	N 569	O 630	S 21	0	0

There are 32 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
B	450	GLU	ASP	conflict	UNP Q2HJ86
B	7	ILE	VAL	conflict	UNP Q2HJ86
B	114	ILE	LEU	conflict	UNP Q2HJ86
B	136	SER	LEU	conflict	UNP Q2HJ86
B	137	VAL	ILE	conflict	UNP Q2HJ86
B	265	GLY	ILE	conflict	UNP Q2HJ86
B	358	GLU	GLN	conflict	UNP Q2HJ86
B	437	VAL	MET	conflict	UNP Q2HJ86
D	450	GLU	ASP	conflict	UNP Q2HJ86
D	7	ILE	VAL	conflict	UNP Q2HJ86
D	114	ILE	LEU	conflict	UNP Q2HJ86
D	136	SER	LEU	conflict	UNP Q2HJ86
D	137	VAL	ILE	conflict	UNP Q2HJ86
D	265	GLY	ILE	conflict	UNP Q2HJ86
D	358	GLU	GLN	conflict	UNP Q2HJ86
D	437	VAL	MET	conflict	UNP Q2HJ86
F	450	GLU	ASP	conflict	UNP Q2HJ86
F	7	ILE	VAL	conflict	UNP Q2HJ86
F	114	ILE	LEU	conflict	UNP Q2HJ86
F	136	SER	LEU	conflict	UNP Q2HJ86
F	137	VAL	ILE	conflict	UNP Q2HJ86
F	265	GLY	ILE	conflict	UNP Q2HJ86
F	358	GLU	GLN	conflict	UNP Q2HJ86
F	437	VAL	MET	conflict	UNP Q2HJ86
H	450	GLU	ASP	conflict	UNP Q2HJ86
H	7	ILE	VAL	conflict	UNP Q2HJ86
H	114	ILE	LEU	conflict	UNP Q2HJ86
H	136	SER	LEU	conflict	UNP Q2HJ86
H	137	VAL	ILE	conflict	UNP Q2HJ86
H	265	GLY	ILE	conflict	UNP Q2HJ86
H	358	GLU	GLN	conflict	UNP Q2HJ86
H	437	VAL	MET	conflict	UNP Q2HJ86

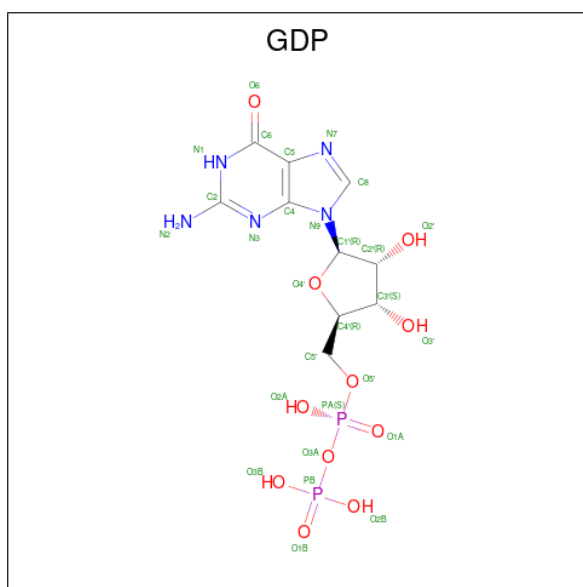
- Molecule 3 is a protein called NEURONAL MIGRATION PROTEIN DOUBLECORTIN.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	I	107	Total	C	N	O	S	0	1
			860	541	151	165	3		

There are 14 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
I	-12	GLY	-	expression tag	UNP O43602
I	-11	ALA	-	expression tag	UNP O43602
I	-10	MET	-	expression tag	UNP O43602
I	-9	ASP	-	expression tag	UNP O43602
I	-8	TYR	-	expression tag	UNP O43602
I	-7	LYS	-	expression tag	UNP O43602
I	-6	ASP	-	expression tag	UNP O43602
I	-5	ASP	-	expression tag	UNP O43602
I	-4	ASP	-	expression tag	UNP O43602
I	-3	ASP	-	expression tag	UNP O43602
I	-2	LYS	-	expression tag	UNP O43602
I	-1	ILE	-	expression tag	UNP O43602
I	0	CYS	-	expression tag	UNP O43602
I	1	ARG	-	expression tag	UNP O43602

- Molecule 4 is GUANOSINE-5'-DIPHOSPHATE (CCD ID: GDP) (formula: $C_{10}H_{15}N_5O_{11}P_2$).



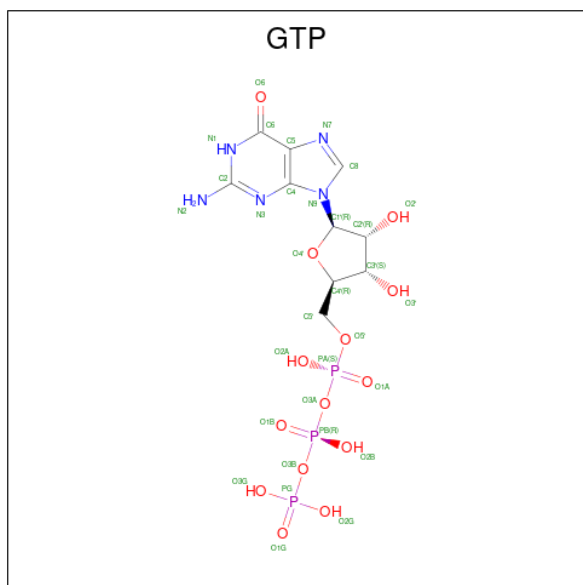
Mol	Chain	Residues	Atoms					AltConf
4	A	1	Total	C	N	O	P	0
			28	10	5	11	2	

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Mol	Chain	Residues	Atoms					AltConf
4	C	1	Total	C	N	O	P	0
			28	10	5	11	2	
4	E	1	Total	C	N	O	P	0
			28	10	5	11	2	
4	G	1	Total	C	N	O	P	0
			28	10	5	11	2	

- Molecule 5 is GUANOSINE-5'-TRIPHOSPHATE (CCD ID: GTP) (formula: $C_{10}H_{16}N_5O_{14}P_3$).

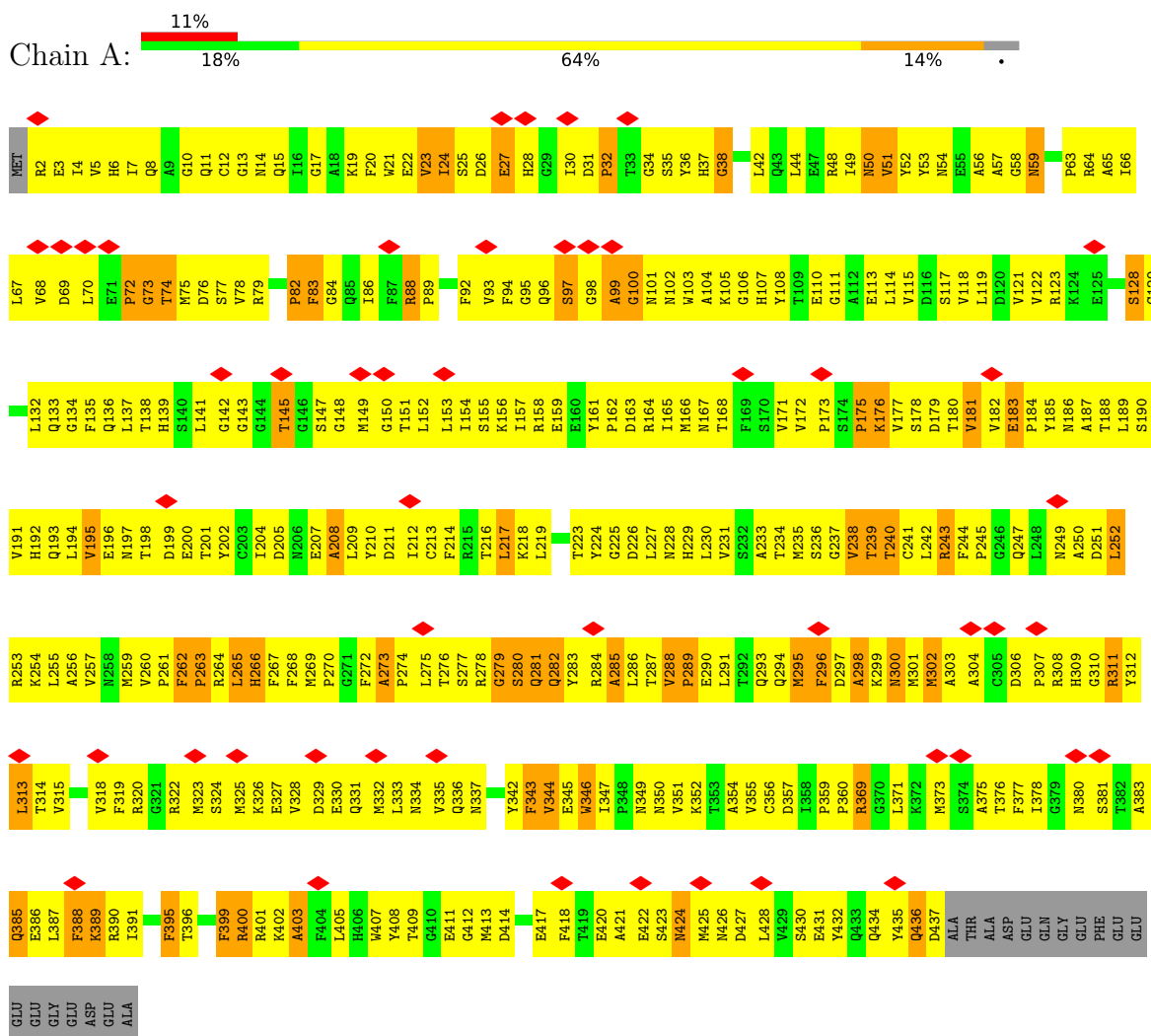


Mol	Chain	Residues	Atoms					AltConf
5	B	1	Total	C	N	O	P	0
			32	10	5	14	3	
5	D	1	Total	C	N	O	P	0
			32	10	5	14	3	
5	F	1	Total	C	N	O	P	0
			32	10	5	14	3	
5	H	1	Total	C	N	O	P	0
			32	10	5	14	3	

3 Residue-property plots

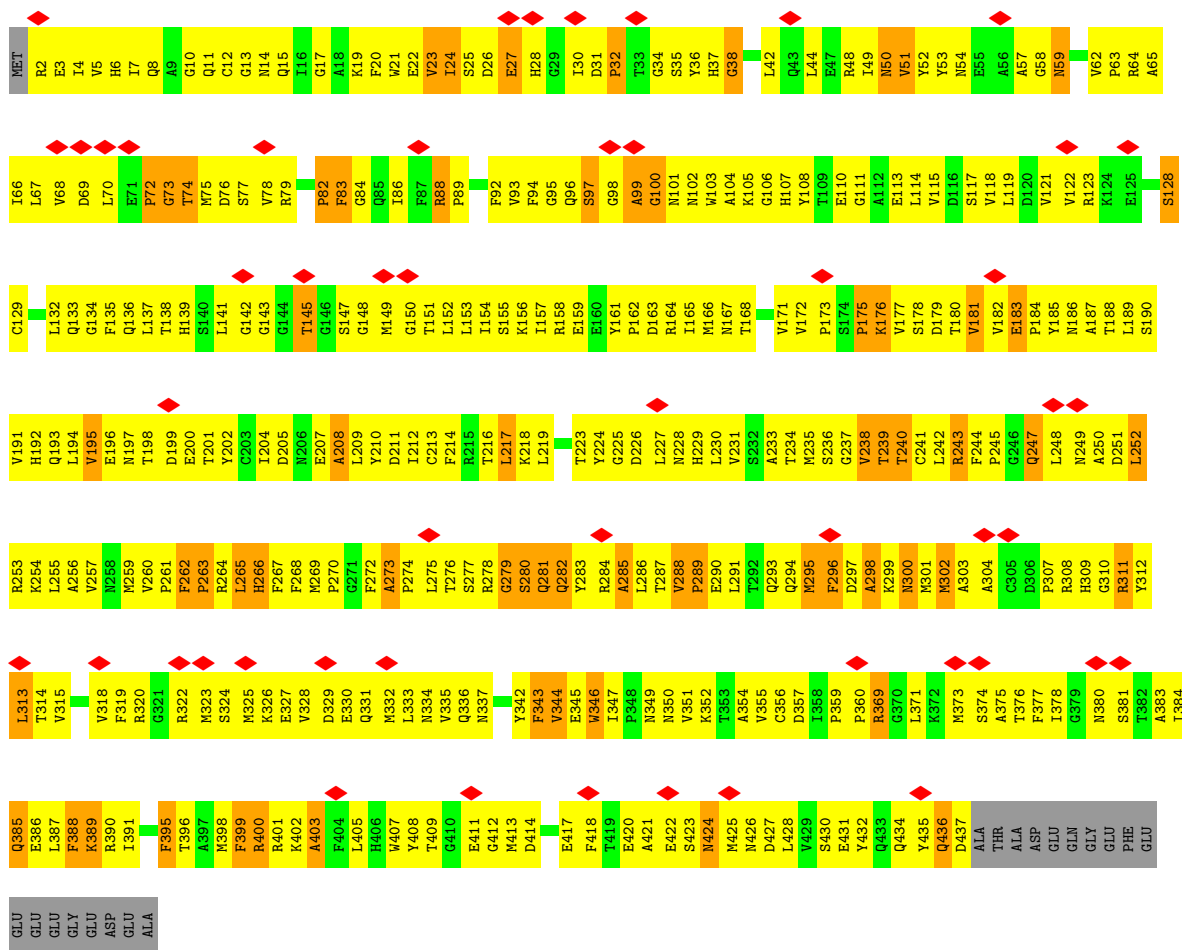
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion 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: TUBULIN BETA-2B CHAIN

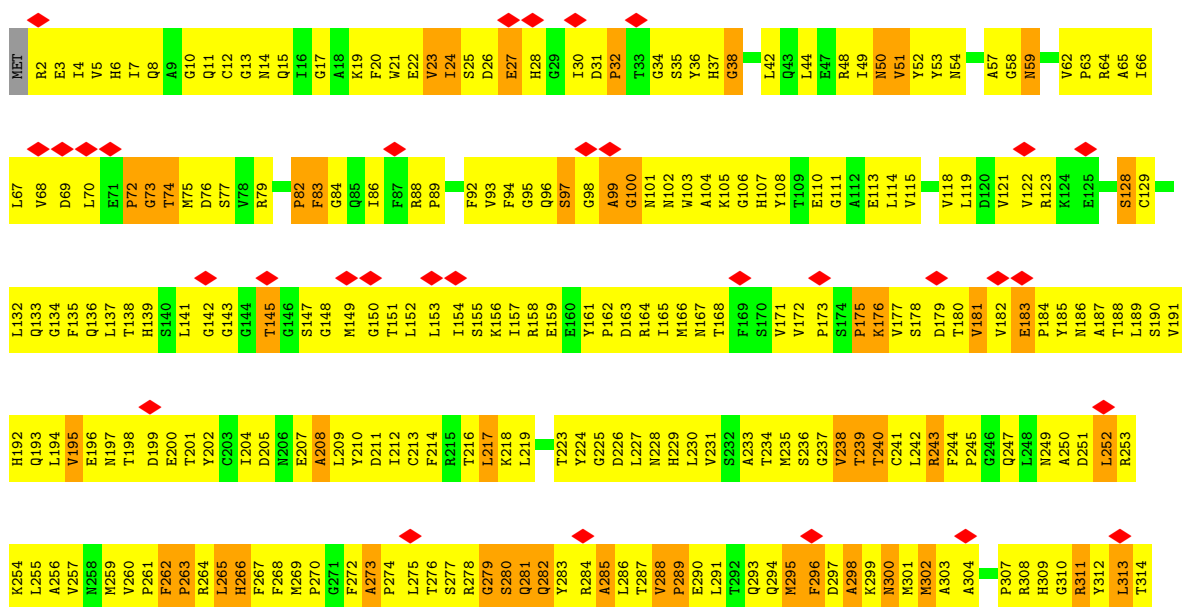


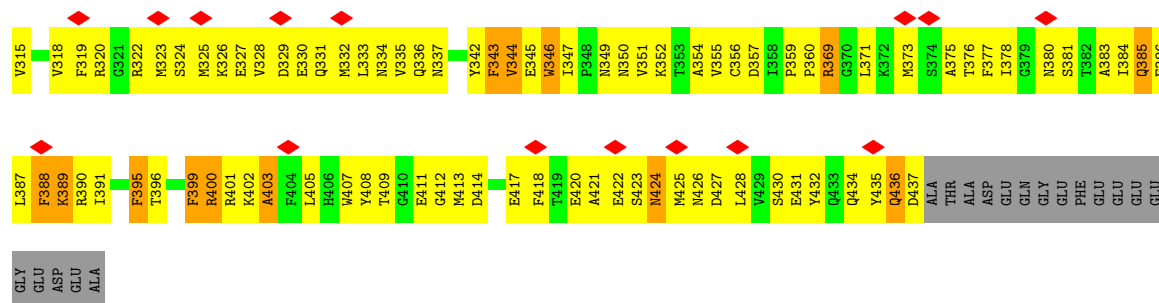
• Molecule 1: TUBULIN BETA-2B CHAIN



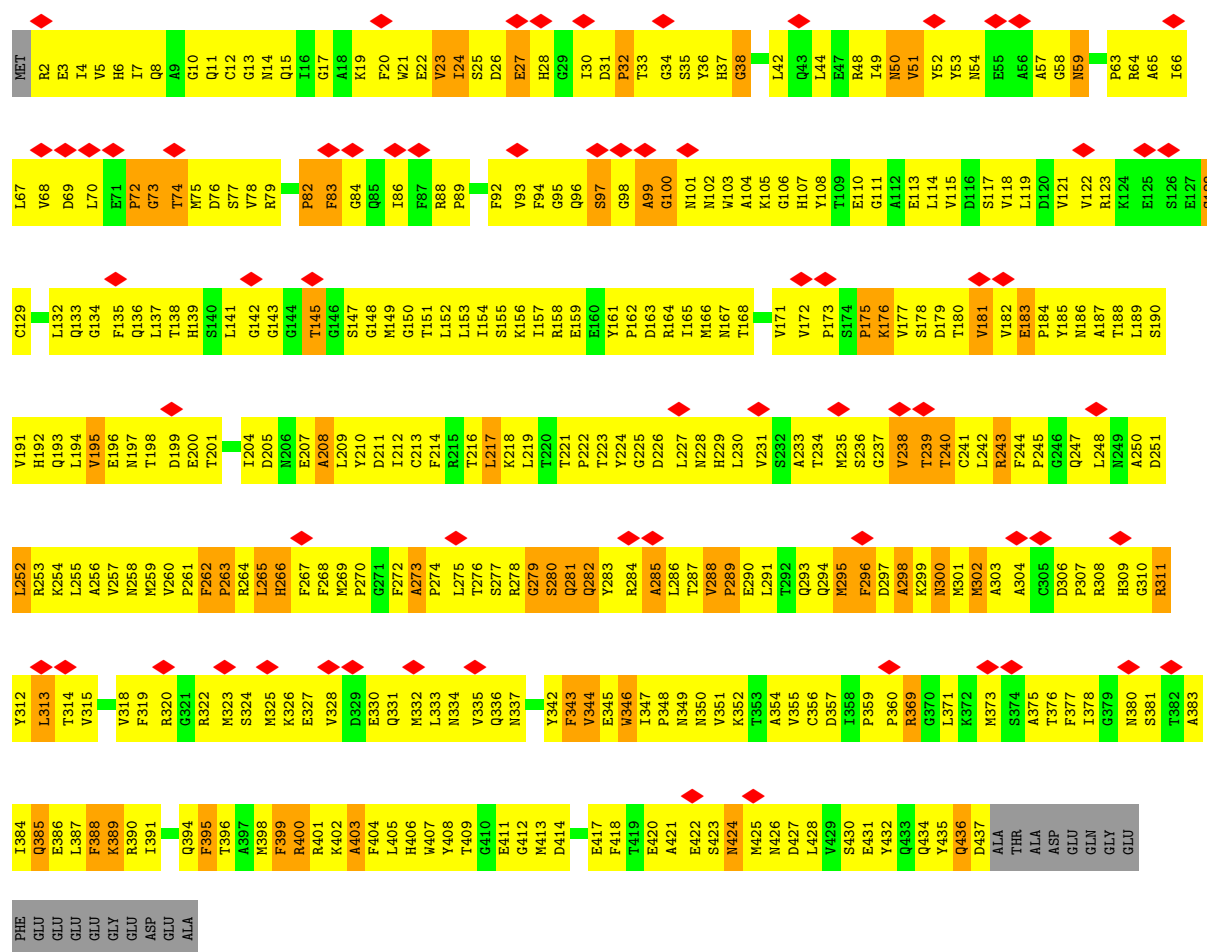


• Molecule 1: TUBULIN BETA-2B CHAIN

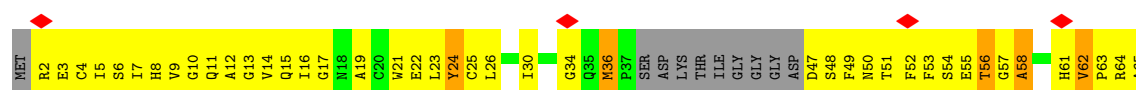


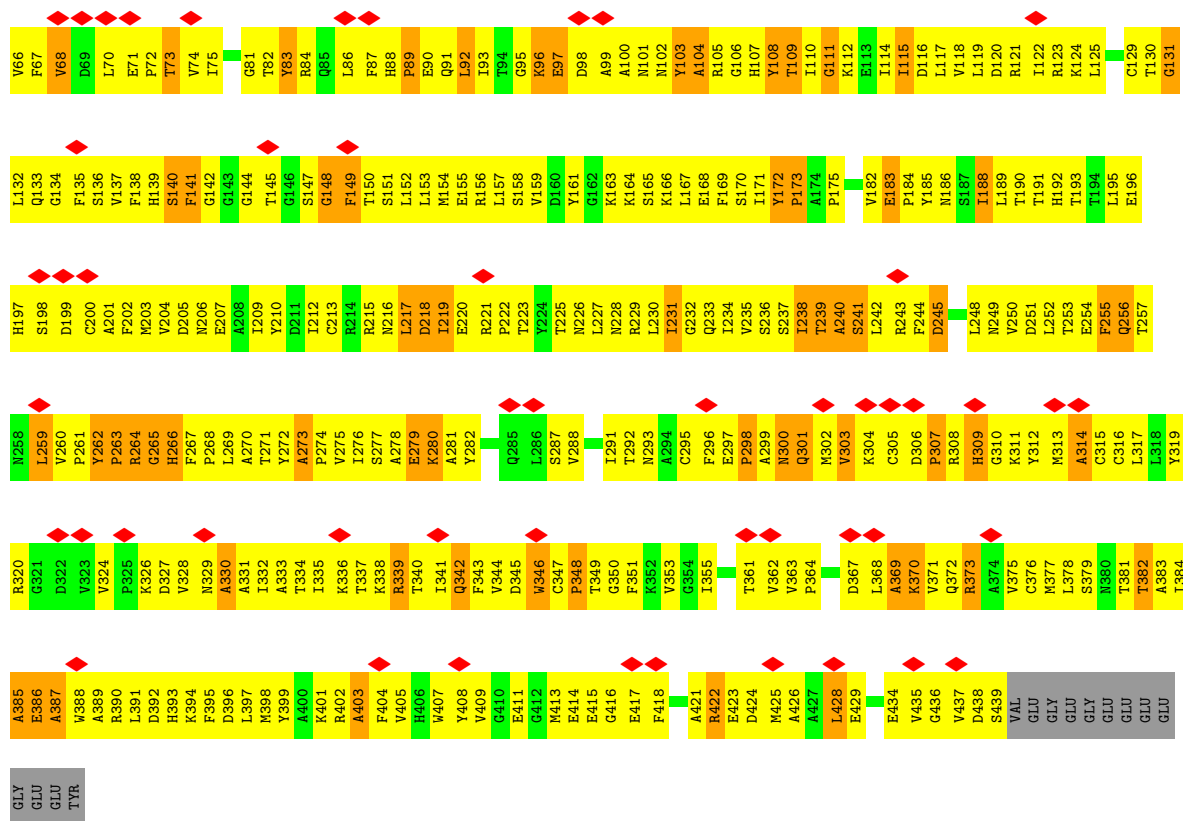


• Molecule 1: TUBULIN BETA-2B CHAIN

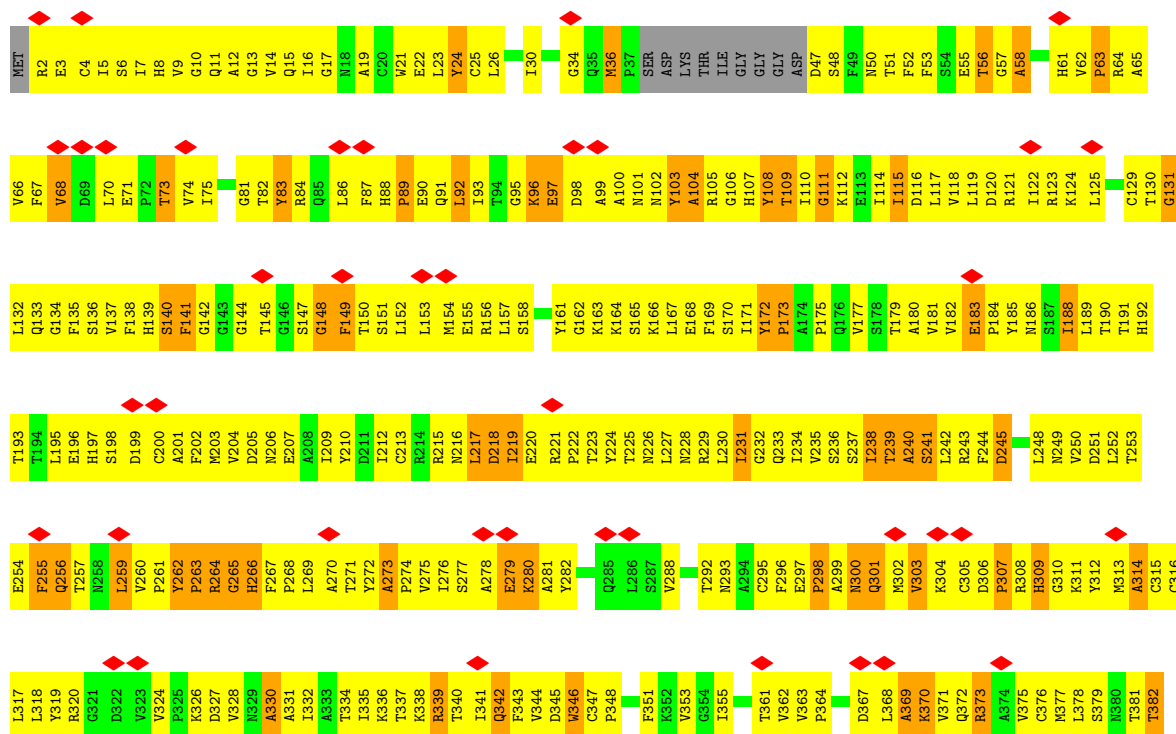


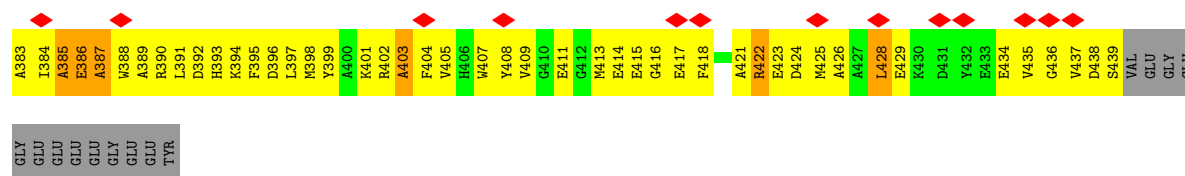
• Molecule 2: TUBULIN ALPHA-1D CHAIN



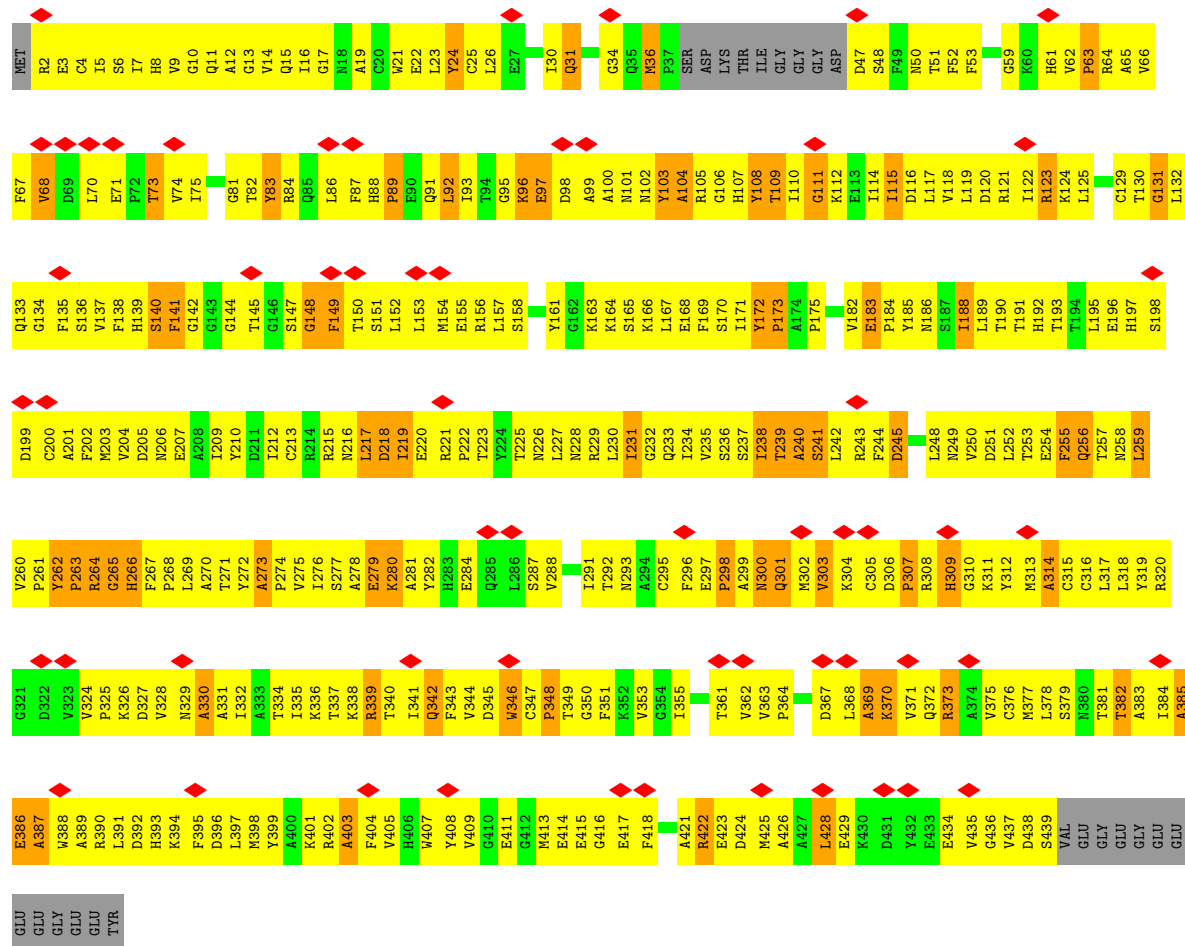


• Molecule 2: TUBULIN ALPHA-1D CHAIN



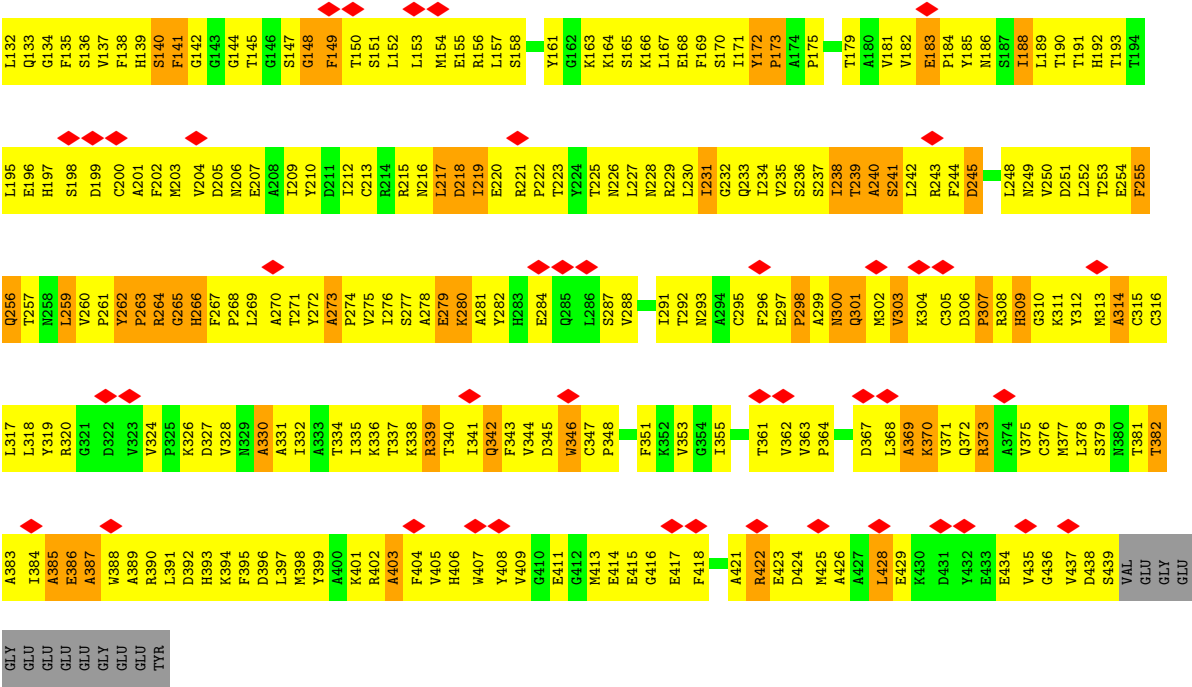


• Molecule 2: TUBULIN ALPHA-1D CHAIN

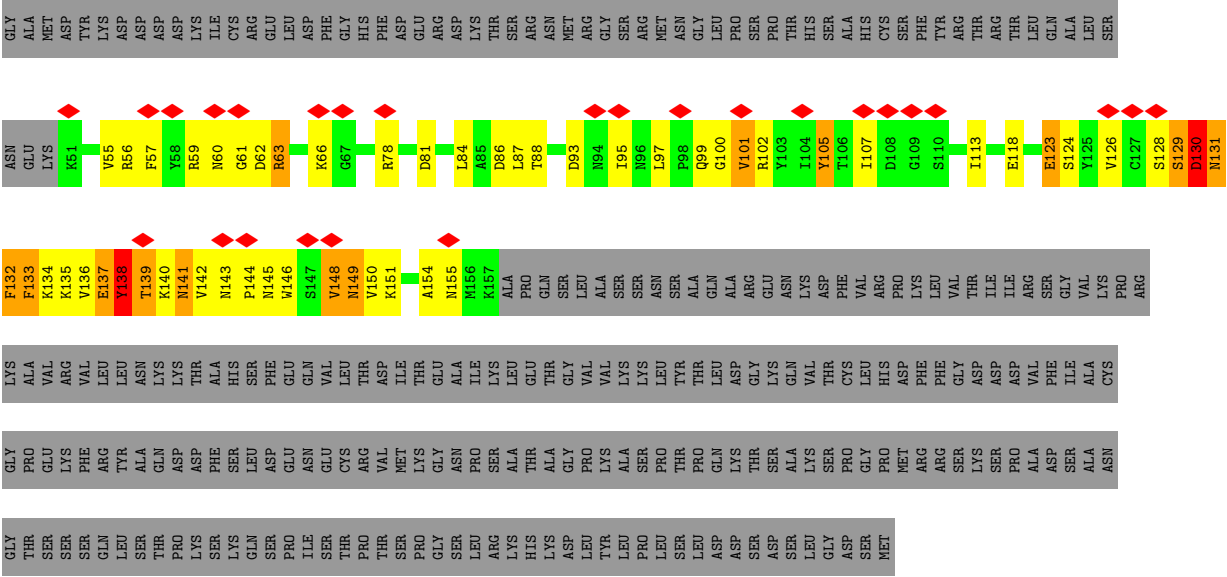


• Molecule 2: TUBULIN ALPHA-1D CHAIN





● Molecule 3: NEURONAL MIGRATION PROTEIN DOUBLECORTIN



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	HELICAL, twist=Not provided°, rise=Not provided Å, axial sym=Not provided	Depositor
Number of particles used	146000	Depositor
Resolution determination method	Not provided	
CTF correction method	DONE WITH FREALIGN	Depositor
Microscope	FEI TECNAI F20	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/\text{\AA}^2$)	17	Depositor
Minimum defocus (nm)	900	Depositor
Maximum defocus (nm)	3600	Depositor
Magnification	50000	Depositor
Image detector	KODAK SO-163 FILM	Depositor
Maximum map value	12.476	Depositor
Minimum map value	-8.861	Depositor
Average map value	0.573	Depositor
Map value standard deviation	2.008	Depositor
Recommended contour level	1.6	Depositor
Map size (Å)	238.0, 114.799995, 282.8	wwPDB
Map dimensions	85, 41, 101	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	2.8, 2.8, 2.8	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: GDP, GTP

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	0.63	0/3426	1.11	22/4642 (0.5%)
1	C	0.63	0/3426	1.11	22/4642 (0.5%)
1	E	0.63	0/3426	1.11	22/4642 (0.5%)
1	G	0.63	0/3426	1.11	23/4642 (0.5%)
2	B	1.33	4/3410 (0.1%)	1.12	23/4629 (0.5%)
2	D	1.33	4/3410 (0.1%)	1.12	23/4629 (0.5%)
2	F	1.33	4/3410 (0.1%)	1.13	23/4629 (0.5%)
2	H	1.33	4/3410 (0.1%)	1.13	23/4629 (0.5%)
3	I	1.01	0/876	1.57	21/1178 (1.8%)
All	All	1.04	16/28220 (0.1%)	1.13	202/38262 (0.5%)

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
3	I	0	8

All (16) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	D	92	LEU	C-N	52.09	1.98	1.33
2	F	92	LEU	C-N	52.06	1.98	1.33
2	H	92	LEU	C-N	52.04	1.98	1.33
2	B	92	LEU	C-N	52.01	1.98	1.33
2	B	298	PRO	C-N	35.96	1.73	1.33
2	H	298	PRO	C-N	35.33	1.73	1.33
2	F	298	PRO	C-N	35.27	1.73	1.33
2	D	298	PRO	C-N	35.17	1.73	1.33
2	D	68	VAL	C-N	24.51	1.67	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	H	68	VAL	C-N	24.43	1.67	1.33
2	B	68	VAL	C-N	24.41	1.67	1.33
2	F	68	VAL	C-N	24.36	1.67	1.33
2	F	36	MET	SD-CE	7.66	1.98	1.79
2	D	36	MET	SD-CE	7.65	1.98	1.79
2	B	36	MET	SD-CE	7.64	1.98	1.79
2	H	36	MET	SD-CE	7.62	1.98	1.79

All (202) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	68	VAL	O-C-N	-10.96	111.26	122.99
2	F	68	VAL	O-C-N	-10.89	111.33	122.99
2	B	68	VAL	O-C-N	-10.89	111.34	122.99
2	H	68	VAL	O-C-N	-10.86	111.37	122.99
2	H	172	TYR	CA-C-N	10.78	133.31	119.84
2	H	172	TYR	C-N-CA	10.78	133.31	119.84
2	F	172	TYR	CA-C-N	10.72	133.24	119.84
2	F	172	TYR	C-N-CA	10.72	133.24	119.84
2	D	172	TYR	CA-C-N	10.68	133.19	119.84
2	D	172	TYR	C-N-CA	10.68	133.19	119.84
2	B	172	TYR	CA-C-N	10.68	133.19	119.84
2	B	172	TYR	C-N-CA	10.68	133.19	119.84
1	C	262	PHE	CA-C-N	10.00	132.34	119.84
1	C	262	PHE	C-N-CA	10.00	132.34	119.84
1	A	262	PHE	CA-C-N	10.00	132.34	119.84
1	A	262	PHE	C-N-CA	10.00	132.34	119.84
1	G	262	PHE	CA-C-N	9.99	132.33	119.84
1	G	262	PHE	C-N-CA	9.99	132.33	119.84
1	E	262	PHE	CA-C-N	9.93	132.25	119.84
1	E	262	PHE	C-N-CA	9.93	132.25	119.84
3	I	129	SER	CA-C-N	-9.62	107.95	120.65
3	I	129	SER	C-N-CA	-9.62	107.95	120.65
3	I	149	ASN	CA-CB-CG	-8.73	103.87	112.60
2	F	298	PRO	O-C-N	-7.97	111.88	122.64
1	C	77	SER	N-CA-C	-7.94	104.20	114.04
2	D	298	PRO	O-C-N	-7.93	111.93	122.64
2	H	298	PRO	O-C-N	-7.93	111.94	122.64
1	A	77	SER	N-CA-C	-7.91	104.23	114.04
2	B	298	PRO	O-C-N	-7.91	111.97	122.64
1	E	77	SER	N-CA-C	-7.90	104.25	114.04
1	G	77	SER	N-CA-C	-7.88	104.26	114.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	159	GLU	N-CA-C	-7.82	104.22	114.31
1	C	159	GLU	N-CA-C	-7.82	104.22	114.31
1	E	159	GLU	N-CA-C	-7.77	104.28	114.31
1	G	159	GLU	N-CA-C	-7.76	104.29	114.31
3	I	130	ASP	CA-CB-CG	-7.75	104.85	112.60
1	G	313	LEU	N-CA-C	-7.69	103.86	113.55
1	A	313	LEU	N-CA-C	-7.69	103.86	113.55
1	C	313	LEU	N-CA-C	-7.66	103.90	113.55
1	E	313	LEU	N-CA-C	-7.66	103.90	113.55
2	D	428	LEU	N-CA-C	-7.58	104.26	113.97
2	F	428	LEU	N-CA-C	-7.55	104.31	113.97
2	H	428	LEU	N-CA-C	-7.54	104.32	113.97
2	B	428	LEU	N-CA-C	-7.52	104.34	113.97
1	A	208	ALA	N-CA-C	-7.49	102.79	112.23
1	G	293	GLN	N-CA-C	-7.49	102.81	110.97
1	C	208	ALA	N-CA-C	-7.47	102.82	112.23
1	E	208	ALA	N-CA-C	-7.46	102.83	112.23
1	G	208	ALA	N-CA-C	-7.46	102.83	112.23
1	E	293	GLN	N-CA-C	-7.44	102.86	110.97
1	A	293	GLN	N-CA-C	-7.34	102.97	110.97
1	C	293	GLN	N-CA-C	-7.32	102.99	110.97
3	I	133	PHE	CA-CB-CG	-7.27	106.53	113.80
3	I	155	ASN	CA-CB-CG	-7.16	105.44	112.60
1	A	385	GLN	N-CA-C	-7.14	103.42	111.14
1	C	385	GLN	N-CA-C	-7.10	103.47	111.14
1	G	385	GLN	N-CA-C	-7.08	103.49	111.14
1	E	385	GLN	N-CA-C	-7.05	103.52	111.14
2	H	301	GLN	N-CA-C	7.04	121.56	112.41
1	C	22	GLU	N-CA-C	-7.02	103.32	110.97
2	D	301	GLN	N-CA-C	7.01	121.52	112.41
1	A	22	GLU	N-CA-C	-7.00	103.34	110.97
1	E	399	PHE	N-CA-C	-6.99	103.59	111.07
1	E	22	GLU	N-CA-C	-6.98	103.36	110.97
1	A	399	PHE	N-CA-C	-6.98	103.60	111.07
1	G	399	PHE	N-CA-C	-6.98	103.60	111.07
2	B	301	GLN	N-CA-C	6.98	121.48	112.41
1	C	388	PHE	N-CA-C	-6.97	104.04	112.54
1	A	388	PHE	N-CA-C	-6.96	104.04	112.54
1	G	22	GLU	N-CA-C	-6.96	103.38	110.97
1	G	388	PHE	N-CA-C	-6.96	104.05	112.54
1	C	399	PHE	N-CA-C	-6.93	103.66	111.07
1	E	388	PHE	N-CA-C	-6.92	104.10	112.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	301	GLN	N-CA-C	6.92	121.40	112.41
1	G	389	LYS	N-CA-C	-6.88	103.47	110.97
2	H	422	ARG	N-CA-C	-6.86	103.03	111.40
2	F	385	ALA	N-CA-C	-6.84	103.06	111.33
2	H	385	ALA	N-CA-C	-6.83	103.06	111.33
2	B	422	ARG	N-CA-C	-6.83	103.07	111.40
1	A	389	LYS	N-CA-C	-6.83	103.53	110.97
2	F	422	ARG	N-CA-C	-6.82	103.08	111.40
1	C	389	LYS	N-CA-C	-6.81	103.54	110.97
1	E	389	LYS	N-CA-C	-6.80	103.56	110.97
2	D	422	ARG	N-CA-C	-6.77	103.14	111.40
2	F	188	ILE	N-CA-C	-6.76	103.08	113.16
2	D	385	ALA	N-CA-C	-6.73	103.18	111.33
2	H	188	ILE	N-CA-C	-6.73	103.13	113.16
2	D	188	ILE	N-CA-C	-6.71	103.16	113.16
2	B	188	ILE	N-CA-C	-6.70	103.18	113.16
2	H	92	LEU	O-C-N	6.68	129.72	122.64
3	I	130	ASP	N-CA-CB	6.67	119.64	109.91
2	B	385	ALA	N-CA-C	-6.65	103.28	111.33
2	D	92	LEU	O-C-N	6.61	129.65	122.64
2	F	92	LEU	O-C-N	6.58	129.62	122.64
2	B	92	LEU	O-C-N	6.57	129.60	122.64
2	F	123	ARG	N-CA-C	-6.55	105.86	114.31
2	B	123	ARG	N-CA-C	-6.53	105.89	114.31
2	H	123	ARG	N-CA-C	-6.50	105.92	114.31
2	D	123	ARG	N-CA-C	-6.50	105.93	114.31
1	A	217	LEU	N-CA-C	-6.48	96.40	107.23
1	C	217	LEU	N-CA-C	-6.47	96.42	107.23
1	E	217	LEU	N-CA-C	-6.47	96.42	107.23
1	G	217	LEU	N-CA-C	-6.42	96.52	107.23
1	C	27	GLU	N-CA-C	-6.24	106.04	113.21
1	G	27	GLU	N-CA-C	-6.24	106.04	113.21
1	A	27	GLU	N-CA-C	-6.23	106.04	113.21
1	E	27	GLU	N-CA-C	-6.21	106.07	113.21
3	I	132	PHE	CA-C-N	-6.19	113.96	122.93
3	I	132	PHE	C-N-CA	-6.19	113.96	122.93
1	A	181	VAL	N-CA-C	6.09	116.83	111.90
1	E	181	VAL	N-CA-C	6.06	116.81	111.90
1	A	243	ARG	N-CA-C	-6.03	106.58	112.97
1	A	88	ARG	N-CA-C	-6.01	102.19	109.83
1	G	243	ARG	N-CA-C	-6.01	106.60	112.97
1	E	88	ARG	N-CA-C	-6.00	102.21	109.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	88	ARG	N-CA-C	-5.98	102.23	109.83
1	C	88	ARG	N-CA-C	-5.97	102.24	109.83
1	G	181	VAL	N-CA-C	5.97	116.74	111.90
1	C	243	ARG	N-CA-C	-5.97	106.64	112.97
1	E	243	ARG	N-CA-C	-5.93	106.68	112.97
2	D	264	ARG	N-CA-C	-5.89	101.58	110.24
3	I	138	TYR	N-CA-C	-5.89	104.78	111.14
2	F	264	ARG	N-CA-C	-5.88	101.59	110.24
2	B	264	ARG	N-CA-C	-5.88	101.59	110.24
2	H	264	ARG	N-CA-C	-5.87	101.61	110.24
2	H	231	ILE	N-CA-C	-5.87	103.93	110.62
3	I	139	THR	N-CA-C	-5.86	105.02	111.82
1	C	181	VAL	N-CA-C	5.86	116.64	111.90
2	B	231	ILE	N-CA-C	-5.86	103.94	110.62
2	D	231	ILE	N-CA-C	-5.83	103.97	110.62
2	F	231	ILE	N-CA-C	-5.83	103.98	110.62
1	E	296	PHE	N-CA-C	5.82	120.00	113.02
1	C	296	PHE	N-CA-C	5.79	119.97	113.02
1	G	296	PHE	N-CA-C	5.79	119.96	113.02
1	A	296	PHE	N-CA-C	5.76	119.94	113.02
1	A	247	GLN	N-CA-C	-5.76	105.00	111.28
1	C	247	GLN	N-CA-C	-5.76	105.00	111.28
3	I	131	ASN	CA-CB-CG	-5.74	106.86	112.60
1	G	247	GLN	N-CA-C	-5.72	105.04	111.28
1	E	247	GLN	N-CA-C	-5.71	105.05	111.28
2	D	415	GLU	N-CA-C	-5.62	105.52	112.38
2	B	415	GLU	N-CA-C	-5.62	105.53	112.38
3	I	141	ASN	CA-CB-CG	-5.61	106.99	112.60
2	H	415	GLU	N-CA-C	-5.61	105.53	112.38
2	B	262	TYR	CA-C-N	5.60	126.84	119.84
2	B	262	TYR	C-N-CA	5.60	126.84	119.84
2	F	262	TYR	CA-C-N	5.58	126.81	119.84
2	F	262	TYR	C-N-CA	5.58	126.81	119.84
2	F	415	GLU	N-CA-C	-5.58	105.57	112.38
2	H	262	TYR	CA-C-N	5.55	126.78	119.84
2	H	262	TYR	C-N-CA	5.55	126.78	119.84
2	D	262	TYR	CA-C-N	5.51	126.72	119.84
2	D	262	TYR	C-N-CA	5.51	126.72	119.84
2	D	259	LEU	N-CA-C	5.49	120.99	113.97
2	F	259	LEU	N-CA-C	5.47	120.98	113.97
1	A	59	ASN	N-CA-C	-5.47	105.61	114.09
2	H	259	LEU	N-CA-C	5.47	120.97	113.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	59	ASN	N-CA-C	-5.46	105.62	114.09
1	G	59	ASN	N-CA-C	-5.46	105.62	114.09
2	B	259	LEU	N-CA-C	5.46	120.96	113.97
1	C	436	GLN	N-CA-C	-5.46	106.32	112.87
1	E	59	ASN	N-CA-C	-5.46	105.63	114.09
3	I	154	ALA	CA-C-N	-5.42	115.21	122.42
3	I	154	ALA	C-N-CA	-5.42	115.21	122.42
1	A	436	GLN	N-CA-C	-5.40	106.39	112.87
2	B	280	LYS	N-CA-C	-5.39	106.20	112.89
1	E	436	GLN	N-CA-C	-5.39	106.40	112.87
2	D	280	LYS	N-CA-C	-5.38	106.22	112.89
1	G	436	GLN	N-CA-C	-5.37	106.43	112.87
2	F	429	GLU	N-CA-C	-5.36	105.87	112.90
2	D	429	GLU	N-CA-C	-5.36	105.89	112.90
2	F	280	LYS	N-CA-C	-5.34	106.27	112.89
2	H	280	LYS	N-CA-C	-5.33	106.28	112.89
2	H	429	GLU	N-CA-C	-5.33	105.91	112.90
3	I	148	VAL	CA-C-N	-5.33	114.05	121.99
3	I	148	VAL	C-N-CA	-5.33	114.05	121.99
2	B	429	GLU	N-CA-C	-5.31	105.95	112.90
1	C	289	PRO	N-CA-C	-5.21	107.06	113.84
1	E	289	PRO	N-CA-C	-5.20	107.07	113.84
1	G	289	PRO	N-CA-C	-5.20	107.08	113.84
1	A	289	PRO	N-CA-C	-5.17	107.12	113.84
3	I	132	PHE	N-CA-C	-5.16	103.22	110.50
2	B	421	ALA	N-CA-C	-5.14	107.04	113.72
2	F	140	SER	N-CA-C	5.13	116.39	109.11
2	H	421	ALA	N-CA-C	-5.13	107.05	113.72
2	D	89	PRO	N-CA-C	-5.12	106.39	113.81
2	H	241	SER	N-CA-C	5.11	116.85	111.28
3	I	139	THR	CA-C-N	5.10	131.28	121.54
3	I	139	THR	C-N-CA	5.10	131.28	121.54
2	F	421	ALA	N-CA-C	-5.10	107.09	113.72
2	F	89	PRO	N-CA-C	-5.10	106.42	113.81
2	D	421	ALA	N-CA-C	-5.09	107.11	113.72
2	H	140	SER	N-CA-C	5.09	116.33	109.11
3	I	154	ALA	N-CA-C	-5.09	102.03	109.81
2	F	241	SER	N-CA-C	5.08	116.82	111.28
2	H	89	PRO	N-CA-C	-5.07	106.46	113.81
1	G	33	THR	N-CA-C	-5.07	107.13	113.72
2	B	89	PRO	N-CA-C	-5.06	106.47	113.81
2	D	140	SER	N-CA-C	5.06	116.30	109.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	140	SER	N-CA-C	5.06	116.29	109.11
2	D	241	SER	N-CA-C	5.06	116.79	111.28
2	B	241	SER	N-CA-C	5.02	116.75	111.28

There are no chirality outliers.

All (8) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
3	I	105	TYR	Sidechain
3	I	123	GLU	Sidechain
3	I	129	SER	Peptide
3	I	130	ASP	Peptide
3	I	137	GLU	Peptide
3	I	138	TYR	Peptide
3	I	81	ASP	Sidechain
3	I	93	ASP	Sidechain

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	3351	0	3229	580	0
1	C	3351	0	3229	658	0
1	E	3351	0	3229	589	0
1	G	3351	0	3229	791	0
2	B	3334	0	3223	722	0
2	D	3334	0	3223	698	0
2	F	3334	0	3223	766	0
2	H	3334	0	3223	752	0
3	I	860	0	841	99	0
4	A	28	0	12	1	0
4	C	28	0	12	1	0
4	E	28	0	12	1	0
4	G	28	0	12	4	0
5	B	32	0	12	5	0
5	D	32	0	12	4	0
5	F	32	0	12	4	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
5	H	32	0	12	5	0
All	All	27840	0	26745	5295	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 97.

All (5295) 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:G:257:VAL:HG21	2:H:407:TRP:CG	1.28	1.64
2:B:296:PHE:CE2	2:B:341:ILE:HD11	1.32	1.62
2:H:296:PHE:CE2	2:H:341:ILE:HD11	1.32	1.62
2:D:296:PHE:CE2	2:D:341:ILE:HD11	1.32	1.62
2:F:296:PHE:CE2	2:F:341:ILE:HD11	1.32	1.62
2:F:261:PRO:HA	1:G:404:PHE:CD2	1.47	1.49
2:F:349:THR:CB	1:G:178:SER:HB2	1.45	1.46
2:F:326:LYS:CB	1:G:222:PRO:HG2	1.42	1.45
2:B:298:PRO:C	2:B:299:ALA:N	1.73	1.45
2:F:349:THR:HG21	1:G:178:SER:CA	1.46	1.45
1:G:352:LYS:CD	2:H:181:VAL:HG23	1.43	1.45
1:G:250:ALA:CB	1:G:254:LYS:HD3	1.44	1.45
2:F:298:PRO:C	2:F:299:ALA:N	1.73	1.44
1:G:253:ARG:HB3	2:H:407:TRP:CH2	1.53	1.44
2:D:298:PRO:C	2:D:299:ALA:N	1.73	1.43
2:B:5:ILE:HG12	2:B:64:ARG:NH1	1.27	1.43
2:H:298:PRO:C	2:H:299:ALA:N	1.73	1.43
2:B:57:GLY:HA3	2:B:58:ALA:CB	1.45	1.42
1:G:248:LEU:HD22	2:H:179:THR:CG2	1.49	1.39
1:A:88:ARG:HD2	1:E:283:TYR:CE1	1.58	1.37
1:G:257:VAL:CG2	2:H:407:TRP:CB	2.03	1.36
1:G:257:VAL:CG2	2:H:407:TRP:CG	2.06	1.36
2:D:3:GLU:CG	2:D:51:THR:HA	1.57	1.35
2:B:3:GLU:CG	2:B:51:THR:HA	1.57	1.34
2:F:3:GLU:CG	2:F:51:THR:HA	1.57	1.34
2:H:3:GLU:CG	2:H:51:THR:HA	1.57	1.34
2:D:296:PHE:CE2	2:D:341:ILE:CD1	2.11	1.32
2:F:296:PHE:CE2	2:F:341:ILE:CD1	2.11	1.32
2:B:63:PRO:HG2	2:B:91:GLN:OE1	1.29	1.32
2:H:296:PHE:CE2	2:H:341:ILE:CD1	2.11	1.32
2:B:296:PHE:CE2	2:B:341:ILE:CD1	2.11	1.31
2:F:329:ASN:HB3	1:G:210:TYR:CE1	1.66	1.31

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:352:LYS:HD3	2:H:181:VAL:CG2	1.60	1.31
2:F:3:GLU:HG2	2:F:51:THR:CA	1.60	1.30
2:H:3:GLU:HG2	2:H:51:THR:CA	1.60	1.30
2:D:3:GLU:HG2	2:D:51:THR:CA	1.60	1.30
1:G:257:VAL:HG23	2:H:407:TRP:CB	1.57	1.30
1:G:257:VAL:CG2	2:H:407:TRP:HB2	1.59	1.29
2:D:57:GLY:HA3	2:D:58:ALA:CB	1.45	1.29
2:D:57:GLY:CA	2:D:58:ALA:HB2	1.63	1.29
2:B:3:GLU:HG2	2:B:51:THR:CA	1.60	1.29
2:F:349:THR:CG2	1:G:178:SER:HB2	1.65	1.26
2:F:326:LYS:HB2	1:G:222:PRO:CG	1.66	1.26
2:B:348:PRO:CD	1:C:398:MET:HE3	1.65	1.25
2:F:349:THR:HG21	1:G:178:SER:N	1.50	1.25
2:F:329:ASN:CG	1:G:210:TYR:HE1	1.44	1.24
2:B:62:VAL:CG1	2:B:63:PRO:HD2	1.67	1.23
2:B:57:GLY:CA	2:B:58:ALA:HB2	1.63	1.22
1:G:257:VAL:HB	2:H:407:TRP:CE3	1.73	1.22
2:F:324:VAL:CG2	1:G:221:THR:HB	1.70	1.20
2:B:5:ILE:CG1	2:B:64:ARG:NH1	2.05	1.20
2:F:324:VAL:HG21	1:G:221:THR:CB	1.70	1.20
2:B:92:LEU:C	2:B:93:ILE:N	1.98	1.20
2:D:92:LEU:C	2:D:93:ILE:N	1.98	1.20
2:H:92:LEU:C	2:H:93:ILE:N	1.98	1.20
2:B:348:PRO:CD	1:C:398:MET:CE	2.18	1.20
2:F:92:LEU:C	2:F:93:ILE:N	1.98	1.20
2:F:326:LYS:CB	1:G:222:PRO:CG	2.18	1.19
1:G:306:ASP:OD2	3:I:95:ILE:HG12	1.39	1.19
2:B:348:PRO:HD2	1:C:398:MET:CE	1.73	1.18
1:C:88:ARG:HD2	1:G:283:TYR:OH	1.43	1.18
2:F:329:ASN:CB	1:G:210:TYR:CE1	2.26	1.18
2:F:217:LEU:HD12	2:F:277:SER:CB	1.72	1.17
1:G:254:LYS:CE	1:G:352:LYS:HE3	1.73	1.17
2:H:217:LEU:HD12	2:H:277:SER:CB	1.72	1.17
1:G:306:ASP:OD2	3:I:95:ILE:CD1	1.92	1.17
1:G:2:ARG:CZ	2:H:98:ASP:HB3	1.73	1.17
2:B:217:LEU:HD12	2:B:277:SER:CB	1.72	1.17
2:D:217:LEU:HD12	2:D:277:SER:CB	1.72	1.16
2:F:261:PRO:HB3	1:G:404:PHE:CE2	1.80	1.16
2:F:349:THR:HG21	1:G:178:SER:CB	1.73	1.16
1:G:306:ASP:OD2	3:I:95:ILE:CG1	1.93	1.16
2:B:62:VAL:HG12	2:B:63:PRO:CD	1.76	1.15

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:262:TYR:OH	1:G:403:ALA:HA	1.46	1.15
2:B:5:ILE:CD1	2:B:64:ARG:HH12	1.58	1.15
1:C:88:ARG:HD2	1:G:283:TYR:CZ	1.79	1.15
2:D:56:THR:O	2:H:284:GLU:HB3	1.46	1.14
2:B:348:PRO:CG	1:C:398:MET:HE3	1.77	1.14
2:H:70:LEU:HD13	2:H:145:THR:OG1	1.49	1.13
2:B:70:LEU:HD13	2:B:145:THR:OG1	1.49	1.13
2:D:296:PHE:CE1	2:D:335:ILE:HG21	1.84	1.13
1:A:234:THR:HG21	1:A:270:PRO:HB2	1.23	1.13
2:F:70:LEU:HD13	2:F:145:THR:OG1	1.49	1.13
1:C:88:ARG:HD3	1:G:283:TYR:CE1	1.83	1.13
2:B:243:ARG:NH2	2:B:252:LEU:H	1.45	1.13
2:B:296:PHE:CE1	2:B:335:ILE:HG21	1.84	1.12
1:C:257:VAL:HG13	2:D:407:TRP:CG	1.83	1.13
2:D:30:ILE:HG12	2:D:36:MET:HB3	1.19	1.13
2:D:70:LEU:HD13	2:D:145:THR:OG1	1.49	1.13
1:G:93:VAL:HG11	1:G:118:VAL:HG22	1.30	1.12
1:A:88:ARG:CD	1:E:283:TYR:CE1	2.31	1.12
1:G:352:LYS:CD	2:H:181:VAL:CG2	2.20	1.12
2:H:243:ARG:NH2	2:H:252:LEU:H	1.45	1.12
2:D:243:ARG:NH2	2:D:252:LEU:H	1.45	1.12
2:F:30:ILE:HG12	2:F:36:MET:HB3	1.17	1.12
2:H:30:ILE:HG12	2:H:36:MET:HB3	1.17	1.12
3:I:61:GLY:HA2	3:I:136:VAL:HG21	1.26	1.12
2:F:243:ARG:NH2	2:F:252:LEU:H	1.46	1.11
1:C:234:THR:HG21	1:C:270:PRO:HB2	1.23	1.11
1:E:93:VAL:HG11	1:E:118:VAL:HG22	1.30	1.11
1:G:258:ASN:HA	2:H:404:PHE:CD2	1.84	1.11
1:G:352:LYS:HD2	2:H:181:VAL:HG23	1.24	1.11
2:H:296:PHE:CE1	2:H:335:ILE:HG21	1.84	1.11
2:F:261:PRO:CB	1:G:404:PHE:CE2	2.32	1.11
2:F:296:PHE:CE1	2:F:335:ILE:HG21	1.84	1.11
2:B:30:ILE:HG12	2:B:36:MET:HB3	1.19	1.11
2:D:274:PRO:C	2:D:275:VAL:N	2.09	1.11
2:F:261:PRO:CA	1:G:404:PHE:CD2	2.32	1.11
2:F:349:THR:HB	1:G:178:SER:HB2	1.16	1.11
2:B:274:PRO:C	2:B:275:VAL:N	2.09	1.10
2:B:439:SER:C	1:C:401:ARG:HH21	1.57	1.10
2:B:67:PHE:HE1	2:B:87:PHE:CE1	1.68	1.10
1:E:234:THR:HG21	1:E:270:PRO:HB2	1.23	1.10
2:F:274:PRO:C	2:F:275:VAL:N	2.09	1.10

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:93:VAL:HG11	1:C:118:VAL:HG22	1.30	1.10
2:H:274:PRO:C	2:H:275:VAL:N	2.09	1.10
2:H:67:PHE:HE1	2:H:87:PHE:CE1	1.68	1.10
2:D:67:PHE:HE1	2:D:87:PHE:CE1	1.69	1.09
2:F:67:PHE:HE1	2:F:87:PHE:CE1	1.69	1.09
1:C:88:ARG:CD	1:G:283:TYR:CE1	2.33	1.09
1:G:258:ASN:ND2	1:G:352:LYS:HE2	1.67	1.09
1:A:93:VAL:HG11	1:A:118:VAL:HG22	1.30	1.09
2:F:349:THR:CG2	1:G:178:SER:H	1.65	1.09
1:G:234:THR:HG21	1:G:270:PRO:HB2	1.23	1.09
1:C:88:ARG:HD3	1:G:283:TYR:HE1	1.01	1.08
1:A:88:ARG:CD	1:E:283:TYR:HE1	1.63	1.08
2:D:5:ILE:HG21	2:D:135:PHE:HD2	1.18	1.08
2:D:56:THR:O	2:D:58:ALA:HB3	1.54	1.08
2:H:5:ILE:HG21	2:H:135:PHE:HD2	1.17	1.07
2:F:5:ILE:HG21	2:F:135:PHE:HD2	1.17	1.07
2:F:11:GLN:HG3	2:F:74:VAL:HG11	1.34	1.06
2:H:298:PRO:HB3	2:H:307:PRO:HD2	1.36	1.06
1:A:56:ALA:CB	1:E:283:TYR:CE2	2.37	1.06
2:B:11:GLN:HG3	2:B:74:VAL:HG11	1.34	1.06
2:F:298:PRO:HB3	2:F:307:PRO:HD2	1.36	1.06
2:B:298:PRO:HB3	2:B:307:PRO:HD2	1.36	1.06
2:F:109:THR:HG22	2:F:110:ILE:N	1.70	1.06
2:F:326:LYS:HG3	1:G:222:PRO:HG3	1.30	1.06
2:F:329:ASN:CG	1:G:210:TYR:CE1	2.34	1.06
2:H:11:GLN:HG3	2:H:74:VAL:HG11	1.34	1.06
2:H:109:THR:HG22	2:H:110:ILE:N	1.70	1.06
2:B:350:GLY:CA	1:C:181:VAL:HG13	1.86	1.05
2:B:350:GLY:HA2	1:C:181:VAL:CG1	1.86	1.05
1:C:172:VAL:HG11	1:C:387:LEU:HD21	1.37	1.05
1:G:172:VAL:HG11	1:G:387:LEU:HD21	1.37	1.05
2:D:217:LEU:CD1	2:D:277:SER:HB3	1.87	1.05
2:D:298:PRO:HB3	2:D:307:PRO:HD2	1.36	1.05
2:B:109:THR:HG22	2:B:110:ILE:N	1.71	1.05
2:D:296:PHE:CD2	2:D:341:ILE:CD1	2.40	1.05
2:F:217:LEU:CD1	2:F:277:SER:HB3	1.87	1.05
2:H:217:LEU:CD1	2:H:277:SER:HB3	1.87	1.05
1:A:172:VAL:HG11	1:A:387:LEU:HD21	1.37	1.04
2:B:296:PHE:CD2	2:B:341:ILE:CD1	2.40	1.04
2:D:11:GLN:HG3	2:D:74:VAL:HG11	1.34	1.04
2:D:67:PHE:CE1	2:D:87:PHE:CE1	2.45	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:329:ASN:CB	1:G:210:TYR:HE1	1.66	1.04
1:A:88:ARG:HD2	1:E:283:TYR:CZ	1.91	1.04
2:B:217:LEU:CD1	2:B:277:SER:HB3	1.87	1.04
2:H:296:PHE:CD2	2:H:341:ILE:CD1	2.40	1.04
1:E:172:VAL:HG11	1:E:387:LEU:HD21	1.37	1.04
2:F:296:PHE:CD2	2:F:341:ILE:CD1	2.40	1.04
2:B:67:PHE:CE1	2:B:87:PHE:CE1	2.45	1.04
2:D:109:THR:HG22	2:D:110:ILE:N	1.70	1.04
2:H:67:PHE:CE1	2:H:87:PHE:CE1	2.45	1.04
2:F:67:PHE:CE1	2:F:87:PHE:CE1	2.45	1.04
1:G:257:VAL:HG21	2:H:407:TRP:CD1	1.91	1.04
1:C:299:LYS:H	1:C:299:LYS:HD3	1.24	1.03
2:B:350:GLY:HA2	1:C:181:VAL:HG13	1.03	1.02
2:F:326:LYS:CG	1:G:222:PRO:CG	2.37	1.02
2:B:63:PRO:HG2	2:B:91:GLN:CD	1.84	1.02
1:G:2:ARG:NH2	2:H:98:ASP:HB3	1.74	1.02
1:A:299:LYS:HD3	1:A:299:LYS:H	1.24	1.02
1:G:248:LEU:CD2	2:H:179:THR:CG2	2.37	1.02
1:G:250:ALA:CB	1:G:254:LYS:CD	2.38	1.02
2:B:159:VAL:HG13	3:I:78:ARG:HG3	1.42	1.02
1:G:253:ARG:CB	2:H:407:TRP:CH2	2.43	1.02
1:G:352:LYS:HD3	2:H:181:VAL:HG23	1.07	1.02
2:B:56:THR:O	2:B:58:ALA:HB3	1.59	1.01
1:E:299:LYS:H	1:E:299:LYS:HD3	1.24	1.01
1:G:250:ALA:HB2	1:G:254:LYS:CD	1.88	1.01
1:A:236:SER:O	1:A:240:THR:HG23	1.61	1.01
1:C:236:SER:O	1:C:240:THR:HG23	1.61	1.01
1:G:257:VAL:HG21	2:H:407:TRP:CB	1.77	1.01
1:G:258:ASN:O	2:H:404:PHE:HE2	1.42	1.01
1:A:56:ALA:HB2	1:E:283:TYR:HE2	1.25	1.01
2:F:88:HIS:HB2	2:F:91:GLN:HE21	1.22	1.01
2:H:243:ARG:HH21	2:H:252:LEU:N	1.57	1.01
2:D:56:THR:CB	2:H:284:GLU:CD	2.34	1.01
2:D:243:ARG:HH21	2:D:252:LEU:N	1.58	1.01
2:F:325:PRO:HD2	1:G:223:THR:HA	1.40	1.01
2:F:349:THR:CG2	1:G:178:SER:CB	2.32	1.01
1:G:299:LYS:HD3	1:G:299:LYS:H	1.24	1.01
2:H:88:HIS:HB2	2:H:91:GLN:HE21	1.22	1.01
2:B:88:HIS:HB2	2:B:91:GLN:HE21	1.22	1.00
2:F:243:ARG:HH21	2:F:252:LEU:N	1.58	1.00
1:G:250:ALA:HB1	1:G:254:LYS:HD3	1.39	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:5:ILE:CG1	2:B:64:ARG:HH12	1.67	1.00
2:D:88:HIS:HB2	2:D:91:GLN:HE21	1.22	1.00
2:F:349:THR:CG2	1:G:178:SER:N	2.21	1.00
2:B:243:ARG:HH21	2:B:252:LEU:N	1.58	1.00
1:E:236:SER:O	1:E:240:THR:HG23	1.61	1.00
2:B:5:ILE:HG12	2:B:64:ARG:CZ	1.90	1.00
1:G:236:SER:O	1:G:240:THR:HG23	1.61	1.00
2:F:339:ARG:HH21	3:I:99:GLN:HE22	1.01	0.99
2:B:296:PHE:HE2	2:B:341:ILE:HD11	1.21	0.99
1:G:250:ALA:HB2	1:G:254:LYS:HD3	1.01	0.99
2:B:52:PHE:HZ	2:B:239:THR:HG21	1.27	0.99
1:A:88:ARG:NH1	1:E:283:TYR:CE1	2.29	0.99
2:B:30:ILE:HD11	2:B:61:HIS:CE1	1.97	0.99
2:B:276:ILE:HG23	2:B:369:ALA:HB2	1.43	0.99
2:D:276:ILE:HG23	2:D:369:ALA:HB2	1.43	0.99
2:F:349:THR:CB	1:G:178:SER:CB	2.40	0.99
2:F:337:THR:HG22	3:I:99:GLN:HG2	1.45	0.99
1:C:332:MET:HE3	1:C:351:VAL:HG11	1.45	0.98
1:G:254:LYS:HE2	1:G:352:LYS:CE	1.90	0.98
2:H:276:ILE:HG23	2:H:369:ALA:HB2	1.43	0.98
2:F:339:ARG:NH2	3:I:99:GLN:HE22	1.60	0.98
2:F:276:ILE:HG23	2:F:369:ALA:HB2	1.43	0.98
1:G:332:MET:HE3	1:G:351:VAL:HG11	1.45	0.98
1:A:332:MET:HE3	1:A:351:VAL:HG11	1.45	0.98
2:D:296:PHE:HE2	2:D:341:ILE:HD11	1.22	0.98
1:E:332:MET:HE3	1:E:351:VAL:HG11	1.45	0.98
1:C:329:ASP:HB3	2:D:177:VAL:CG1	1.93	0.98
1:G:253:ARG:CB	2:H:407:TRP:HH2	1.75	0.97
2:F:324:VAL:HG21	1:G:221:THR:HB	0.98	0.97
1:G:248:LEU:HD22	2:H:179:THR:HG22	1.43	0.97
2:F:349:THR:CG2	1:G:178:SER:CA	2.42	0.97
1:C:248:LEU:HD22	2:D:179:THR:HG21	1.47	0.96
2:H:296:PHE:HE2	2:H:341:ILE:HD11	1.21	0.96
2:D:5:ILE:CG2	2:D:135:PHE:HD2	1.78	0.96
1:C:88:ARG:CD	1:G:283:TYR:HE1	1.72	0.96
2:F:5:ILE:CG2	2:F:135:PHE:HD2	1.78	0.96
2:F:296:PHE:HE2	2:F:341:ILE:HD11	1.22	0.96
1:E:273:ALA:HB3	1:E:274:PRO:HD3	1.48	0.96
1:G:257:VAL:HB	2:H:407:TRP:CD2	2.01	0.96
2:H:5:ILE:CG2	2:H:135:PHE:HD2	1.78	0.96
1:C:88:ARG:CD	1:G:283:TYR:OH	2.13	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:62:VAL:HG12	2:B:63:PRO:HD2	0.97	0.96
2:F:30:ILE:CG1	2:F:36:MET:HB3	1.96	0.96
2:F:326:LYS:HG3	1:G:222:PRO:CG	1.96	0.96
1:C:273:ALA:HB3	1:C:274:PRO:HD3	1.48	0.95
1:G:248:LEU:HD22	2:H:179:THR:HG21	1.46	0.95
1:G:273:ALA:HB3	1:G:274:PRO:HD3	1.48	0.95
1:G:352:LYS:HA	2:H:181:VAL:HG22	1.44	0.95
2:H:30:ILE:CG1	2:H:36:MET:HB3	1.96	0.95
2:D:278:ALA:O	2:D:279:GLU:HB3	1.66	0.95
2:D:259:LEU:HD11	2:D:378:LEU:HD13	1.47	0.95
2:H:251:ASP:N	2:H:254:GLU:HG3	1.81	0.95
1:A:56:ALA:HB2	1:E:283:TYR:CE2	2.00	0.95
1:A:273:ALA:HB3	1:A:274:PRO:HD3	1.48	0.95
2:D:316:CYS:HB3	2:D:378:LEU:HD11	1.48	0.95
2:F:251:ASP:N	2:F:254:GLU:HG3	1.82	0.95
2:F:326:LYS:CG	1:G:222:PRO:HG3	1.94	0.95
2:F:259:LEU:HD11	2:F:378:LEU:HD13	1.47	0.95
2:H:316:CYS:HB3	2:H:378:LEU:HD11	1.48	0.95
2:D:98:ASP:HB2	2:D:105:ARG:HH21	1.31	0.95
2:B:251:ASP:N	2:B:254:GLU:HG3	1.82	0.95
2:B:278:ALA:O	2:B:279:GLU:HB3	1.66	0.95
1:G:254:LYS:HE2	1:G:352:LYS:HE3	0.97	0.95
1:A:281:GLN:O	1:A:283:TYR:N	2.00	0.95
2:F:316:CYS:HB3	2:F:378:LEU:HD11	1.48	0.95
2:H:259:LEU:HD11	2:H:378:LEU:HD13	1.47	0.94
2:B:316:CYS:HB3	2:B:378:LEU:HD11	1.49	0.94
1:C:281:GLN:O	1:C:283:TYR:N	2.00	0.94
2:D:251:ASP:N	2:D:254:GLU:HG3	1.82	0.94
1:E:281:GLN:O	1:E:283:TYR:N	2.00	0.94
2:H:98:ASP:HB2	2:H:105:ARG:HH21	1.31	0.94
2:B:57:GLY:CA	2:B:58:ALA:CB	2.30	0.94
2:B:259:LEU:HD11	2:B:378:LEU:HD13	1.47	0.94
2:F:278:ALA:O	2:F:279:GLU:HB3	1.66	0.94
2:H:278:ALA:O	2:H:279:GLU:HB3	1.66	0.94
2:F:98:ASP:HB2	2:F:105:ARG:HH21	1.31	0.94
2:D:52:PHE:CZ	2:D:239:THR:HB	2.02	0.94
2:D:217:LEU:HD12	2:D:277:SER:HB3	0.95	0.94
2:F:217:LEU:HD12	2:F:277:SER:HB3	0.95	0.94
1:G:281:GLN:O	1:G:283:TYR:N	2.00	0.94
1:G:70:LEU:H	1:G:145:THR:HG21	1.33	0.94
2:H:217:LEU:HD12	2:H:277:SER:HB3	0.95	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:251:ASP:H	2:B:254:GLU:HG3	1.33	0.94
2:F:237:SER:HB2	2:F:376:CYS:SG	2.08	0.93
2:B:217:LEU:HD12	2:B:277:SER:HB3	0.95	0.93
2:D:251:ASP:H	2:D:254:GLU:HG3	1.33	0.93
2:B:98:ASP:HB2	2:B:105:ARG:HH21	1.31	0.93
1:E:70:LEU:H	1:E:145:THR:HG21	1.33	0.93
2:H:237:SER:HB2	2:H:376:CYS:SG	2.08	0.93
1:G:253:ARG:HB3	2:H:407:TRP:HH2	1.10	0.93
2:B:237:SER:HB2	2:B:376:CYS:SG	2.08	0.93
2:F:251:ASP:H	2:F:254:GLU:HG3	1.33	0.93
2:H:251:ASP:H	2:H:254:GLU:HG3	1.33	0.93
2:D:237:SER:HB2	2:D:376:CYS:SG	2.08	0.93
1:A:132:LEU:HD23	1:A:164:ARG:HG3	1.50	0.93
1:C:132:LEU:HD23	1:C:164:ARG:HG3	1.50	0.93
2:D:62:VAL:HG21	2:D:88:HIS:CE1	2.04	0.93
1:E:132:LEU:HD23	1:E:164:ARG:HG3	1.50	0.93
1:C:346:TRP:CD1	2:D:401:LYS:HZ2	1.86	0.93
1:C:88:ARG:CD	1:G:283:TYR:CZ	2.52	0.93
2:D:52:PHE:HZ	2:D:239:THR:HG21	1.34	0.92
1:G:132:LEU:HD23	1:G:164:ARG:HG3	1.50	0.92
1:G:264:ARG:O	1:G:265:LEU:HB3	1.69	0.92
1:E:264:ARG:O	1:E:265:LEU:HB3	1.69	0.92
2:H:52:PHE:CZ	2:H:239:THR:HB	2.04	0.92
2:F:62:VAL:HG21	2:F:88:HIS:CE1	2.03	0.92
2:F:52:PHE:CZ	2:F:239:THR:HB	2.04	0.92
2:F:151:SER:HB3	2:F:193:THR:HG21	1.51	0.92
2:H:62:VAL:HG21	2:H:88:HIS:CE1	2.04	0.92
2:B:70:LEU:CD1	2:B:145:THR:OG1	2.18	0.91
2:H:151:SER:HB3	2:H:193:THR:HG21	1.51	0.91
1:A:70:LEU:H	1:A:145:THR:HG21	1.33	0.91
2:D:70:LEU:CD1	2:D:145:THR:OG1	2.18	0.91
1:C:70:LEU:H	1:C:145:THR:HG21	1.33	0.91
1:C:147:SER:O	1:C:151:THR:HB	1.71	0.91
2:D:151:SER:HB3	2:D:193:THR:HG21	1.51	0.91
1:A:264:ARG:O	1:A:265:LEU:HB3	1.69	0.91
2:B:439:SER:C	1:C:401:ARG:NH2	2.28	0.91
2:B:55:GLU:O	2:B:57:GLY:N	2.03	0.91
2:F:52:PHE:HZ	2:F:239:THR:HG21	1.35	0.91
2:D:109:THR:HG22	2:D:110:ILE:H	1.33	0.91
2:H:52:PHE:HZ	2:H:239:THR:HG21	1.35	0.91
1:A:147:SER:O	1:A:151:THR:HB	1.71	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:30:ILE:CD1	2:B:61:HIS:ND1	2.34	0.90
2:D:56:THR:C	2:H:284:GLU:CB	2.44	0.90
1:C:264:ARG:O	1:C:265:LEU:HB3	1.69	0.90
2:F:261:PRO:HG3	1:G:404:PHE:HE2	1.35	0.90
2:H:70:LEU:CD1	2:H:145:THR:OG1	2.18	0.90
2:F:70:LEU:CD1	2:F:145:THR:OG1	2.18	0.90
1:E:147:SER:O	1:E:151:THR:HB	1.71	0.90
1:G:254:LYS:CE	1:G:352:LYS:CE	2.49	0.90
2:B:52:PHE:CE1	2:B:239:THR:HB	2.07	0.90
2:B:63:PRO:CG	2:B:91:GLN:OE1	2.19	0.90
2:B:151:SER:HB3	2:B:193:THR:HG21	1.51	0.90
2:D:57:GLY:CA	2:D:58:ALA:CB	2.30	0.90
2:B:30:ILE:CG1	2:B:36:MET:HB3	2.02	0.90
1:C:88:ARG:HD2	1:G:283:TYR:CE1	2.02	0.90
2:D:296:PHE:CD2	2:D:341:ILE:HD11	2.03	0.90
2:H:5:ILE:CG2	2:H:135:PHE:CD2	2.54	0.90
2:F:5:ILE:CG2	2:F:135:PHE:CD2	2.54	0.90
2:F:262:TYR:CE2	1:G:403:ALA:O	2.24	0.90
1:G:352:LYS:HB2	2:H:181:VAL:HG21	1.52	0.90
1:G:147:SER:O	1:G:151:THR:HB	1.71	0.89
2:D:56:THR:O	2:H:284:GLU:CB	2.20	0.89
2:B:343:PHE:CZ	2:B:351:PHE:CE1	2.61	0.89
2:F:343:PHE:CZ	2:F:351:PHE:CE1	2.60	0.89
2:D:5:ILE:CG2	2:D:135:PHE:CD2	2.55	0.89
1:G:264:ARG:HB2	1:G:266:HIS:CD2	2.08	0.89
2:H:109:THR:HG22	2:H:110:ILE:H	1.33	0.89
1:E:102:ASN:HD21	1:E:408:TYR:HA	1.38	0.89
2:F:109:THR:HG22	2:F:110:ILE:H	1.33	0.89
1:G:257:VAL:HG21	2:H:407:TRP:CD2	2.08	0.89
2:H:343:PHE:CZ	2:H:351:PHE:CE1	2.61	0.89
1:E:264:ARG:HB2	1:E:266:HIS:CD2	2.08	0.89
1:G:102:ASN:HD21	1:G:408:TYR:HA	1.38	0.89
1:A:102:ASN:HD21	1:A:408:TYR:HA	1.38	0.89
2:D:147:SER:HB2	2:D:190:THR:OG1	1.73	0.89
2:B:110:ILE:HG23	2:B:111:GLY:H	1.38	0.89
2:B:296:PHE:CD2	2:B:341:ILE:HD11	2.03	0.89
2:D:343:PHE:CZ	2:D:351:PHE:CE1	2.60	0.89
1:A:264:ARG:HB2	1:A:266:HIS:CD2	2.08	0.88
2:B:147:SER:HB2	2:B:190:THR:OG1	1.73	0.88
2:D:110:ILE:HG23	2:D:111:GLY:H	1.38	0.88
2:F:349:THR:HB	1:G:178:SER:CB	2.02	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:102:ASN:HD21	1:C:408:TYR:HA	1.38	0.88
1:A:8:GLN:OE1	1:A:67:LEU:HD22	1.73	0.88
2:B:109:THR:HG22	2:B:110:ILE:H	1.33	0.88
1:C:8:GLN:OE1	1:C:67:LEU:HD22	1.73	0.88
1:C:264:ARG:HB2	1:C:266:HIS:CD2	2.08	0.88
2:D:119:LEU:HD23	2:D:122:ILE:HD11	1.53	0.88
1:G:258:ASN:HA	2:H:404:PHE:CE2	2.08	0.88
1:E:311:ARG:HD3	1:E:342:TYR:HA	1.56	0.88
2:F:296:PHE:CD2	2:F:341:ILE:HD11	2.03	0.88
1:G:93:VAL:HG11	1:G:118:VAL:CG2	2.03	0.88
1:G:311:ARG:HD3	1:G:342:TYR:HA	1.56	0.88
2:H:147:SER:HB2	2:H:190:THR:OG1	1.73	0.88
2:H:296:PHE:CD2	2:H:341:ILE:HD11	2.03	0.88
2:B:63:PRO:CD	2:B:87:PHE:HA	2.03	0.88
2:B:119:LEU:HD23	2:B:122:ILE:HD11	1.53	0.88
1:E:93:VAL:HG11	1:E:118:VAL:CG2	2.03	0.88
2:F:122:ILE:HD12	2:F:157:LEU:HD21	1.54	0.88
2:F:147:SER:HB2	2:F:190:THR:OG1	1.73	0.88
2:F:261:PRO:CA	1:G:404:PHE:CE2	2.56	0.88
2:H:122:ILE:HD12	2:H:157:LEU:HD21	1.54	0.88
1:E:8:GLN:OE1	1:E:67:LEU:HD22	1.73	0.88
1:E:323:MET:HE2	1:E:328:VAL:HG22	1.54	0.88
1:G:101:ASN:HD21	1:G:143:GLY:HA2	1.38	0.88
1:A:311:ARG:HD3	1:A:342:TYR:HA	1.56	0.87
2:B:349:THR:HG21	1:C:178:SER:OG	1.74	0.87
2:D:122:ILE:HD12	2:D:157:LEU:HD21	1.54	0.87
2:F:261:PRO:HA	1:G:404:PHE:HD2	0.87	0.87
1:G:8:GLN:OE1	1:G:67:LEU:HD22	1.73	0.87
1:G:323:MET:HE2	1:G:328:VAL:HG22	1.54	0.87
1:A:93:VAL:HG11	1:A:118:VAL:CG2	2.03	0.87
1:C:101:ASN:HD21	1:C:143:GLY:HA2	1.38	0.87
2:F:349:THR:HG21	1:G:178:SER:C	1.98	0.87
2:B:30:ILE:CD1	2:B:61:HIS:CE1	2.57	0.87
2:B:122:ILE:HD12	2:B:157:LEU:HD21	1.54	0.87
1:E:101:ASN:HD21	1:E:143:GLY:HA2	1.38	0.87
2:F:257:THR:HG21	1:G:101:ASN:HB3	1.55	0.87
1:G:2:ARG:CZ	2:H:98:ASP:CB	2.52	0.87
1:C:311:ARG:HD3	1:C:342:TYR:HA	1.56	0.87
2:F:119:LEU:HD23	2:F:122:ILE:HD11	1.53	0.87
1:G:248:LEU:HD22	2:H:179:THR:HG23	1.56	0.87
1:G:257:VAL:CB	2:H:407:TRP:CD2	2.57	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:119:LEU:HD23	2:H:122:ILE:HD11	1.53	0.87
2:F:261:PRO:CG	1:G:404:PHE:HE2	1.88	0.87
1:A:323:MET:HE2	1:A:328:VAL:HG22	1.54	0.87
1:C:93:VAL:HG11	1:C:118:VAL:CG2	2.03	0.87
1:C:19:LYS:HG3	1:C:228:ASN:HB3	1.57	0.87
1:C:276:THR:HB	1:C:281:GLN:HG3	1.56	0.87
1:G:6:HIS:CE1	1:G:8:GLN:HG2	2.10	0.87
1:E:6:HIS:CE1	1:E:8:GLN:HG2	2.10	0.87
1:G:248:LEU:CD2	2:H:179:THR:HG22	2.03	0.87
1:C:10:GLY:HA2	1:C:145:THR:HB	1.55	0.86
1:C:153:LEU:O	1:C:157:ILE:HG12	1.75	0.86
2:D:296:PHE:CD2	2:D:341:ILE:HD12	2.08	0.86
2:F:110:ILE:HG23	2:F:111:GLY:H	1.38	0.86
2:H:110:ILE:HG23	2:H:111:GLY:H	1.38	0.86
1:A:153:LEU:O	1:A:157:ILE:HG12	1.75	0.86
1:A:195:VAL:HG13	1:A:196:GLU:HG2	1.57	0.86
1:C:6:HIS:CE1	1:C:8:GLN:HG2	2.10	0.86
1:G:19:LYS:HG3	1:G:228:ASN:HB3	1.57	0.86
2:H:102:ASN:CG	2:H:407:TRP:HE1	1.83	0.86
1:A:276:THR:HB	1:A:281:GLN:HG3	1.56	0.86
2:D:5:ILE:HG21	2:D:135:PHE:CD2	2.09	0.86
1:E:19:LYS:HG3	1:E:228:ASN:HB3	1.57	0.86
1:A:6:HIS:CE1	1:A:8:GLN:HG2	2.10	0.86
2:B:333:ALA:HA	1:C:177:VAL:CG2	2.05	0.86
1:C:195:VAL:HG13	1:C:196:GLU:HG2	1.57	0.86
1:G:179:ASP:HB2	4:G:600:GDP:H3'	1.58	0.86
2:F:324:VAL:HG11	1:G:221:THR:CA	2.06	0.86
1:A:19:LYS:HG3	1:A:228:ASN:HB3	1.57	0.86
2:F:296:PHE:CD2	2:F:341:ILE:HD12	2.08	0.86
2:B:52:PHE:CZ	2:B:239:THR:HG21	2.11	0.86
2:B:63:PRO:HD3	2:B:87:PHE:HA	1.56	0.86
2:H:296:PHE:CD2	2:H:341:ILE:HD12	2.08	0.86
1:A:101:ASN:HD21	1:A:143:GLY:HA2	1.38	0.86
1:C:323:MET:HE2	1:C:328:VAL:HG22	1.54	0.86
2:D:52:PHE:HZ	2:D:239:THR:CG2	1.88	0.86
2:F:264:ARG:O	2:F:266:HIS:N	2.09	0.86
1:G:195:VAL:HG13	1:G:196:GLU:HG2	1.57	0.86
2:H:5:ILE:HG21	2:H:135:PHE:CD2	2.08	0.86
2:B:296:PHE:CD2	2:B:341:ILE:HD12	2.08	0.85
2:D:30:ILE:CG1	2:D:36:MET:HB3	2.02	0.85
2:F:326:LYS:CG	1:G:222:PRO:HG2	2.05	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:264:ARG:O	2:H:266:HIS:N	2.09	0.85
1:C:242:LEU:HD22	1:C:250:ALA:H	1.41	0.85
2:F:5:ILE:HG21	2:F:135:PHE:CD2	2.08	0.85
1:E:195:VAL:HG13	1:E:196:GLU:HG2	1.57	0.85
2:H:220:GLU:C	2:H:222:PRO:HD3	2.02	0.85
1:A:10:GLY:HA2	1:A:145:THR:HB	1.55	0.85
2:B:220:GLU:C	2:B:222:PRO:HD3	2.02	0.85
2:D:220:GLU:C	2:D:222:PRO:HD3	2.02	0.85
2:F:220:GLU:C	2:F:222:PRO:HD3	2.02	0.85
1:G:360:PRO:HG2	1:G:371:LEU:HB3	1.56	0.85
2:H:52:PHE:HZ	2:H:239:THR:CG2	1.89	0.85
1:E:10:GLY:HA2	1:E:145:THR:HB	1.55	0.85
1:E:276:THR:HB	1:E:281:GLN:HG3	1.56	0.85
1:G:10:GLY:HA2	1:G:145:THR:HB	1.55	0.85
1:C:346:TRP:CG	2:D:401:LYS:HZ2	1.95	0.85
1:G:234:THR:HG21	1:G:270:PRO:CB	2.06	0.85
1:G:352:LYS:HA	2:H:181:VAL:CG2	2.06	0.85
1:A:242:LEU:HD22	1:A:250:ALA:H	1.41	0.85
1:C:257:VAL:HG13	2:D:407:TRP:CD2	2.11	0.85
2:F:52:PHE:HZ	2:F:239:THR:CG2	1.89	0.85
1:G:276:THR:HB	1:G:281:GLN:HG3	1.56	0.85
1:C:234:THR:HG21	1:C:270:PRO:CB	2.06	0.85
1:C:360:PRO:HG2	1:C:371:LEU:HB3	1.56	0.85
1:E:153:LEU:O	1:E:157:ILE:HG12	1.75	0.85
1:E:234:THR:HG21	1:E:270:PRO:CB	2.06	0.85
1:G:153:LEU:O	1:G:157:ILE:HG12	1.76	0.85
1:G:209:LEU:HB3	1:G:227:LEU:HD22	1.59	0.85
2:B:264:ARG:O	2:B:266:HIS:N	2.09	0.85
2:D:264:ARG:O	2:D:266:HIS:N	2.09	0.85
1:E:360:PRO:HG2	1:E:371:LEU:HB3	1.56	0.85
1:A:4:ILE:HD13	1:A:136:GLN:HE21	1.42	0.84
2:D:234:ILE:HG13	2:D:270:ALA:HB1	1.59	0.84
2:B:234:ILE:HG13	2:B:270:ALA:HB1	1.59	0.84
1:C:346:TRP:HB2	2:D:401:LYS:HD2	1.56	0.84
2:F:324:VAL:HG21	1:G:221:THR:CG2	2.06	0.84
3:I:134:LYS:HD3	3:I:136:VAL:HA	1.59	0.84
2:F:106:GLY:O	2:F:111:GLY:HA3	1.77	0.84
1:A:234:THR:HG21	1:A:270:PRO:CB	2.06	0.84
1:A:360:PRO:HG2	1:A:371:LEU:HB3	1.56	0.84
1:C:4:ILE:HD13	1:C:136:GLN:HE21	1.42	0.84
2:D:204:VAL:HG11	2:D:231:ILE:HD12	1.59	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:209:LEU:HB3	1:E:227:LEU:HD22	1.59	0.84
2:D:264:ARG:HB2	2:D:266:HIS:CD2	2.13	0.84
2:F:263:PRO:HD3	1:G:406:HIS:CD2	2.12	0.84
1:G:257:VAL:CG2	2:H:407:TRP:CD2	2.59	0.84
2:H:106:GLY:O	2:H:111:GLY:HA3	1.78	0.84
1:C:3:GLU:O	1:C:133:GLN:HB3	1.78	0.84
1:C:209:LEU:HB3	1:C:227:LEU:HD22	1.59	0.84
2:D:52:PHE:CE1	2:D:239:THR:HB	2.12	0.84
1:G:150:GLY:HA2	1:G:153:LEU:HD22	1.60	0.84
2:H:102:ASN:CG	2:H:407:TRP:NE1	2.36	0.84
2:B:204:VAL:HG11	2:B:231:ILE:HD12	1.59	0.84
2:D:52:PHE:CZ	2:D:239:THR:CB	2.60	0.84
1:A:209:LEU:HB3	1:A:227:LEU:HD22	1.59	0.83
2:D:217:LEU:CD1	2:D:277:SER:CA	2.56	0.83
1:E:4:ILE:HD13	1:E:136:GLN:HE21	1.42	0.83
1:E:20:PHE:CD2	1:E:235:MET:SD	2.71	0.83
2:F:264:ARG:HB2	2:F:266:HIS:CD2	2.13	0.83
2:H:264:ARG:HB2	2:H:266:HIS:CD2	2.13	0.83
1:A:3:GLU:O	1:A:133:GLN:HB3	1.78	0.83
1:A:20:PHE:CD2	1:A:235:MET:SD	2.71	0.83
2:B:264:ARG:HB2	2:B:266:HIS:CD2	2.13	0.83
1:C:191:VAL:HG11	1:C:425:MET:HG3	1.60	0.83
1:G:3:GLU:O	1:G:133:GLN:HB3	1.78	0.83
2:H:234:ILE:HG13	2:H:270:ALA:HB1	1.59	0.83
1:A:287:THR:O	1:A:288:VAL:HG23	1.78	0.83
1:C:20:PHE:CD2	1:C:235:MET:SD	2.71	0.83
1:C:248:LEU:CD2	2:D:179:THR:HG21	2.08	0.83
1:E:150:GLY:HA2	1:E:153:LEU:HD22	1.60	0.83
1:E:287:THR:O	1:E:288:VAL:HG23	1.78	0.83
2:F:217:LEU:CD1	2:F:277:SER:CA	2.56	0.83
2:F:234:ILE:HG13	2:F:270:ALA:HB1	1.59	0.83
1:G:4:ILE:HD13	1:G:136:GLN:HE21	1.42	0.83
1:G:287:THR:O	1:G:288:VAL:HG23	1.79	0.83
1:A:56:ALA:HB1	1:E:283:TYR:CD2	2.13	0.83
1:A:324:SER:HB3	1:A:327:GLU:HG2	1.60	0.83
1:C:150:GLY:HA2	1:C:153:LEU:HD22	1.60	0.83
2:D:56:THR:CB	2:H:284:GLU:CG	2.56	0.83
1:G:20:PHE:CD2	1:G:235:MET:SD	2.71	0.83
2:H:52:PHE:CE1	2:H:239:THR:HB	2.13	0.83
2:H:217:LEU:CD1	2:H:277:SER:CA	2.56	0.83
1:A:150:GLY:HA2	1:A:153:LEU:HD22	1.60	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:191:VAL:HG11	1:A:425:MET:HG3	1.60	0.83
2:D:172:TYR:HD1	2:D:172:TYR:C	1.87	0.83
1:E:3:GLU:O	1:E:133:GLN:HB3	1.78	0.83
2:B:106:GLY:O	2:B:111:GLY:HA3	1.78	0.83
2:B:172:TYR:C	2:B:172:TYR:HD1	1.87	0.83
1:E:191:VAL:HG11	1:E:425:MET:HG3	1.60	0.83
1:G:148:GLY:O	1:G:151:THR:HG22	1.79	0.83
1:G:191:VAL:HG11	1:G:425:MET:HG3	1.60	0.83
2:H:204:VAL:HG11	2:H:231:ILE:HD12	1.59	0.83
1:A:148:GLY:O	1:A:151:THR:HG22	1.79	0.83
2:B:316:CYS:HB3	2:B:378:LEU:CD1	2.08	0.83
1:C:147:SER:HB2	1:C:190:SER:HB3	1.60	0.83
1:C:148:GLY:O	1:C:151:THR:HG22	1.79	0.83
2:D:316:CYS:HB3	2:D:378:LEU:CD1	2.08	0.83
2:F:151:SER:CB	2:F:193:THR:HG21	2.09	0.83
2:H:172:TYR:C	2:H:172:TYR:HD1	1.87	0.83
2:H:316:CYS:HB3	2:H:378:LEU:CD1	2.08	0.83
2:B:23:LEU:HD23	2:B:236:SER:HB2	1.60	0.83
1:C:156:LYS:HE2	1:C:156:LYS:HA	1.61	0.83
1:C:287:THR:O	1:C:288:VAL:HG23	1.78	0.83
1:E:148:GLY:O	1:E:151:THR:HG22	1.79	0.83
2:F:23:LEU:HD23	2:F:236:SER:HB2	1.61	0.83
2:F:52:PHE:CE1	2:F:239:THR:HB	2.14	0.83
2:F:172:TYR:HD1	2:F:172:TYR:C	1.87	0.83
2:F:316:CYS:HB3	2:F:378:LEU:CD1	2.08	0.83
2:H:23:LEU:HD23	2:H:236:SER:HB2	1.61	0.83
2:H:151:SER:CB	2:H:193:THR:HG21	2.09	0.83
1:A:88:ARG:NH1	1:E:283:TYR:HE1	1.71	0.83
2:B:217:LEU:CD1	2:B:277:SER:CA	2.56	0.83
1:C:324:SER:HB3	1:C:327:GLU:HG2	1.60	0.83
2:D:106:GLY:O	2:D:111:GLY:HA3	1.78	0.83
2:F:204:VAL:HG11	2:F:231:ILE:HD12	1.60	0.83
1:E:242:LEU:HD22	1:E:250:ALA:H	1.41	0.82
1:G:147:SER:HB2	1:G:190:SER:HB3	1.60	0.82
1:C:110:GLU:O	1:C:113:GLU:HG2	1.79	0.82
1:G:242:LEU:HD22	1:G:250:ALA:H	1.41	0.82
1:A:110:GLU:O	1:A:113:GLU:HG2	1.79	0.82
1:A:156:LYS:HE2	1:A:156:LYS:HA	1.61	0.82
2:B:52:PHE:CZ	2:B:239:THR:HB	2.14	0.82
2:B:151:SER:CB	2:B:193:THR:HG21	2.09	0.82
1:A:101:ASN:ND2	1:A:143:GLY:HA2	1.94	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:147:SER:HB2	1:A:190:SER:HB3	1.60	0.82
1:C:329:ASP:HB3	2:D:177:VAL:HG12	1.61	0.82
1:E:110:GLU:O	1:E:113:GLU:HG2	1.79	0.82
1:E:156:LYS:HE2	1:E:156:LYS:HA	1.61	0.82
2:H:52:PHE:CZ	2:H:239:THR:CB	2.62	0.82
2:D:23:LEU:HD23	2:D:236:SER:HB2	1.61	0.82
1:E:147:SER:HB2	1:E:190:SER:HB3	1.60	0.82
1:E:257:VAL:HG13	2:F:407:TRP:CG	2.15	0.82
2:F:346:TRP:O	1:G:398:MET:HE2	1.79	0.82
1:G:101:ASN:ND2	1:G:143:GLY:HA2	1.94	0.82
1:G:110:GLU:O	1:G:113:GLU:HG2	1.79	0.82
1:G:156:LYS:HA	1:G:156:LYS:HE2	1.61	0.82
1:C:101:ASN:ND2	1:C:143:GLY:HA2	1.94	0.82
1:E:101:ASN:ND2	1:E:143:GLY:HA2	1.94	0.82
2:B:276:ILE:HG23	2:B:369:ALA:CB	2.10	0.81
2:D:151:SER:CB	2:D:193:THR:HG21	2.09	0.81
2:D:276:ILE:HG23	2:D:369:ALA:CB	2.10	0.81
2:F:52:PHE:CZ	2:F:239:THR:CB	2.62	0.81
2:F:324:VAL:HG11	1:G:221:THR:C	2.05	0.81
2:D:67:PHE:CE1	2:D:87:PHE:HE1	1.96	0.81
2:F:109:THR:CG2	2:F:110:ILE:N	2.44	0.81
2:F:248:LEU:HD23	2:F:353:VAL:O	1.80	0.81
2:H:248:LEU:HD23	2:H:353:VAL:O	1.80	0.81
2:H:276:ILE:HG23	2:H:369:ALA:CB	2.10	0.81
2:F:276:ILE:HG23	2:F:369:ALA:CB	2.10	0.81
1:G:2:ARG:NH2	2:H:98:ASP:CB	2.44	0.81
1:G:20:PHE:CZ	1:G:24:ILE:HD12	2.15	0.81
2:H:52:PHE:CZ	2:H:239:THR:CG2	2.64	0.81
2:H:109:THR:CG2	2:H:110:ILE:N	2.44	0.81
1:C:20:PHE:CZ	1:C:24:ILE:HD12	2.15	0.81
2:D:52:PHE:CZ	2:D:239:THR:CG2	2.64	0.81
2:F:52:PHE:CZ	2:F:239:THR:HG21	2.15	0.81
1:E:20:PHE:CZ	1:E:24:ILE:HD12	2.15	0.81
2:F:52:PHE:CZ	2:F:239:THR:CG2	2.64	0.81
2:H:52:PHE:CZ	2:H:239:THR:HG21	2.15	0.81
2:B:248:LEU:HD23	2:B:353:VAL:O	1.80	0.81
2:D:52:PHE:CZ	2:D:239:THR:HG21	2.15	0.81
1:E:324:SER:HB3	1:E:327:GLU:HG2	1.60	0.81
1:G:346:TRP:HB2	2:H:401:LYS:HG3	1.62	0.81
2:H:6:SER:HB3	2:H:136:SER:OG	1.81	0.81
1:A:20:PHE:CZ	1:A:24:ILE:HD12	2.15	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:248:LEU:HD23	2:D:353:VAL:O	1.80	0.81
2:F:6:SER:HB3	2:F:136:SER:OG	1.81	0.81
1:G:352:LYS:HD3	2:H:181:VAL:HG21	1.61	0.81
2:B:6:SER:HB3	2:B:136:SER:OG	1.81	0.81
2:B:67:PHE:CE1	2:B:87:PHE:HE1	1.96	0.81
1:G:324:SER:HB3	1:G:327:GLU:HG2	1.60	0.81
2:B:217:LEU:CD1	2:B:277:SER:CB	2.55	0.80
2:H:67:PHE:CE1	2:H:87:PHE:HE1	1.96	0.80
2:B:5:ILE:CG1	2:B:64:ARG:CZ	2.56	0.80
2:B:109:THR:CG2	2:B:110:ILE:N	2.44	0.80
2:D:6:SER:HB3	2:D:136:SER:OG	1.81	0.80
2:F:184:PRO:HG2	2:F:398:MET:HE1	1.64	0.80
2:H:184:PRO:HG2	2:H:398:MET:HE1	1.64	0.80
2:B:70:LEU:CD1	2:B:145:THR:HG23	2.12	0.80
2:B:184:PRO:HG2	2:B:398:MET:HE1	1.64	0.80
2:D:234:ILE:HD13	2:D:234:ILE:O	1.81	0.80
2:B:348:PRO:HD3	1:C:398:MET:CE	2.12	0.80
2:D:70:LEU:CD1	2:D:145:THR:HG23	2.12	0.80
2:F:67:PHE:CE1	2:F:87:PHE:HE1	1.96	0.80
2:H:30:ILE:HG12	2:H:36:MET:CB	2.09	0.80
2:H:70:LEU:CD1	2:H:145:THR:HG23	2.12	0.80
2:H:132:LEU:HD23	2:H:132:LEU:H	1.46	0.80
1:A:236:SER:O	1:A:240:THR:CG2	2.29	0.80
2:F:70:LEU:CD1	2:F:145:THR:HG23	2.12	0.80
2:F:132:LEU:HD23	2:F:132:LEU:H	1.46	0.80
2:B:52:PHE:HZ	2:B:239:THR:CG2	1.94	0.80
2:B:234:ILE:O	2:B:234:ILE:HD13	1.81	0.80
1:C:236:SER:O	1:C:240:THR:CG2	2.29	0.80
2:B:132:LEU:HD23	2:B:132:LEU:H	1.46	0.80
2:D:184:PRO:HG2	2:D:398:MET:HE1	1.63	0.80
1:G:257:VAL:HG22	1:G:257:VAL:O	1.78	0.80
2:D:241:SER:O	2:D:244:PHE:HB3	1.82	0.80
1:E:68:VAL:HG12	1:E:149:MET:SD	2.22	0.80
1:A:68:VAL:HG12	1:A:149:MET:SD	2.22	0.80
2:B:241:SER:O	2:B:244:PHE:HB3	1.82	0.80
2:D:56:THR:O	2:D:58:ALA:CB	2.30	0.80
2:F:30:ILE:HG12	2:F:36:MET:CB	2.09	0.80
1:C:68:VAL:HG12	1:C:149:MET:SD	2.22	0.79
1:E:234:THR:CG2	1:E:270:PRO:HB2	2.11	0.79
2:F:313:MET:HB3	2:F:344:VAL:HG21	1.63	0.79
1:G:54:ASN:HD21	1:G:64:ARG:HD3	1.46	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:313:MET:HB3	2:H:344:VAL:HG21	1.63	0.79
1:C:259:MET:HA	1:C:314:THR:HG21	1.65	0.79
2:D:3:GLU:HG2	2:D:51:THR:HA	0.80	0.79
2:D:7:ILE:HG22	2:D:66:VAL:HG22	1.63	0.79
2:F:234:ILE:O	2:F:234:ILE:HD13	1.81	0.79
2:H:234:ILE:O	2:H:234:ILE:HD13	1.81	0.79
2:F:7:ILE:HG22	2:F:66:VAL:HG22	1.63	0.79
1:G:236:SER:O	1:G:240:THR:CG2	2.29	0.79
1:C:264:ARG:HB2	1:C:266:HIS:HD2	1.45	0.79
2:D:313:MET:HB3	2:D:344:VAL:HG21	1.63	0.79
1:E:413:MET:HG3	1:E:414:ASP:H	1.47	0.79
1:G:68:VAL:HG12	1:G:149:MET:SD	2.22	0.79
2:H:67:PHE:HE1	2:H:87:PHE:CD1	1.99	0.79
1:A:413:MET:HG3	1:A:414:ASP:H	1.47	0.79
1:C:346:TRP:CB	2:D:401:LYS:HD2	2.13	0.79
1:G:8:GLN:CD	1:G:67:LEU:HD22	2.07	0.79
1:G:413:MET:HG3	1:G:414:ASP:H	1.47	0.79
2:D:109:THR:CG2	2:D:110:ILE:N	2.44	0.79
2:H:7:ILE:HG22	2:H:66:VAL:HG22	1.63	0.79
3:I:61:GLY:HA2	3:I:136:VAL:CG2	2.08	0.79
1:A:259:MET:HA	1:A:314:THR:HG21	1.65	0.79
2:B:7:ILE:HG22	2:B:66:VAL:HG22	1.63	0.79
1:C:265:LEU:HD12	1:C:265:LEU:O	1.83	0.79
2:F:67:PHE:HE1	2:F:87:PHE:CD1	2.00	0.79
1:G:254:LYS:HE3	1:G:352:LYS:NZ	1.97	0.79
2:H:102:ASN:ND2	2:H:407:TRP:CD1	2.51	0.79
1:C:396:THR:HG23	1:C:422:GLU:OE2	1.83	0.79
2:D:132:LEU:HD23	2:D:132:LEU:H	1.46	0.79
2:D:267:PHE:N	2:D:267:PHE:CD1	2.49	0.79
1:E:396:THR:HG23	1:E:422:GLU:OE2	1.83	0.79
2:F:241:SER:O	2:F:244:PHE:HB3	1.82	0.79
2:H:241:SER:O	2:H:244:PHE:HB3	1.82	0.79
2:B:313:MET:HB3	2:B:344:VAL:HG21	1.63	0.79
1:G:259:MET:HA	1:G:314:THR:HG21	1.65	0.79
1:G:396:THR:HG23	1:G:422:GLU:OE2	1.83	0.79
1:A:264:ARG:HB2	1:A:266:HIS:HD2	1.45	0.79
2:D:67:PHE:HE1	2:D:87:PHE:CD1	2.00	0.79
1:E:8:GLN:CD	1:E:67:LEU:HD22	2.08	0.79
1:E:236:SER:O	1:E:240:THR:CG2	2.29	0.79
2:H:204:VAL:HG13	2:H:209:ILE:HD11	1.66	0.79
2:B:267:PHE:N	2:B:267:PHE:CD1	2.49	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:54:ASN:HD21	1:E:64:ARG:HD3	1.46	0.78
2:F:204:VAL:HG13	2:F:209:ILE:HD11	1.66	0.78
1:G:258:ASN:C	2:H:404:PHE:HE2	1.90	0.78
1:A:265:LEU:O	1:A:265:LEU:HD12	1.83	0.78
1:A:396:THR:HG23	1:A:422:GLU:OE2	1.83	0.78
2:B:56:THR:O	2:B:58:ALA:CB	2.30	0.78
1:C:234:THR:CG2	1:C:270:PRO:HB2	2.11	0.78
1:C:413:MET:HG3	1:C:414:ASP:H	1.47	0.78
1:E:259:MET:HA	1:E:314:THR:HG21	1.65	0.78
1:A:54:ASN:HD21	1:A:64:ARG:HD3	1.46	0.78
1:C:257:VAL:HA	2:D:407:TRP:CE2	2.18	0.78
1:C:325:MET:HG2	2:D:224:TYR:CE1	2.18	0.78
2:F:261:PRO:CA	1:G:404:PHE:HD2	1.82	0.78
1:A:8:GLN:CD	1:A:67:LEU:HD22	2.08	0.78
1:A:242:LEU:HD13	1:A:250:ALA:C	2.08	0.78
2:H:199:ASP:HB3	2:H:256:GLN:NE2	1.99	0.78
1:A:234:THR:CG2	1:A:270:PRO:HB2	2.11	0.78
2:B:67:PHE:HE1	2:B:87:PHE:CD1	2.00	0.78
2:B:199:ASP:HB3	2:B:256:GLN:NE2	1.99	0.78
1:C:8:GLN:CD	1:C:67:LEU:HD22	2.07	0.78
2:F:11:GLN:HE21	2:F:74:VAL:HG22	1.47	0.78
1:G:205:ASP:OD1	1:G:304:ALA:HB2	1.84	0.78
1:A:205:ASP:OD1	1:A:304:ALA:HB2	1.84	0.78
1:C:54:ASN:HD21	1:C:64:ARG:HD3	1.46	0.78
1:E:242:LEU:HD13	1:E:250:ALA:C	2.08	0.78
2:F:199:ASP:HB3	2:F:256:GLN:NE2	1.99	0.78
2:B:11:GLN:HE21	2:B:74:VAL:HG22	1.47	0.78
1:C:242:LEU:HD13	1:C:250:ALA:C	2.09	0.78
1:E:205:ASP:OD1	1:E:304:ALA:HB2	1.84	0.78
1:E:265:LEU:HD12	1:E:265:LEU:O	1.83	0.78
1:G:35:SER:HB3	1:G:59:ASN:HA	1.65	0.78
2:H:264:ARG:C	2:H:266:HIS:H	1.91	0.78
2:B:52:PHE:CZ	2:B:239:THR:CB	2.67	0.78
1:C:205:ASP:OD1	1:C:304:ALA:HB2	1.84	0.78
2:D:5:ILE:HG23	2:D:135:PHE:HB3	1.66	0.78
2:D:204:VAL:HG13	2:D:209:ILE:HD11	1.66	0.78
2:D:264:ARG:C	2:D:266:HIS:H	1.91	0.78
2:F:264:ARG:C	2:F:266:HIS:H	1.91	0.78
2:F:296:PHE:CZ	2:F:335:ILE:HG21	2.18	0.78
2:H:5:ILE:HG23	2:H:135:PHE:HB3	1.66	0.78
2:H:296:PHE:CZ	2:H:335:ILE:HG21	2.18	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:110:ILE:HG23	2:B:111:GLY:N	1.99	0.78
2:B:204:VAL:HG13	2:B:209:ILE:HD11	1.66	0.78
2:D:199:ASP:HB3	2:D:256:GLN:NE2	1.99	0.78
1:E:264:ARG:HB2	1:E:266:HIS:HD2	1.45	0.78
2:F:3:GLU:HG2	2:F:51:THR:HA	0.80	0.78
2:H:3:GLU:HG2	2:H:51:THR:HA	0.80	0.78
3:I:149:ASN:ND2	3:I:151:LYS:HD3	1.99	0.78
2:D:11:GLN:HE21	2:D:74:VAL:HG22	1.47	0.78
1:E:217:LEU:C	1:E:219:LEU:H	1.91	0.78
2:F:5:ILE:HG23	2:F:135:PHE:HB3	1.66	0.78
2:H:11:GLN:HE21	2:H:74:VAL:HG22	1.47	0.78
1:A:35:SER:HB3	1:A:59:ASN:HA	1.65	0.77
2:D:110:ILE:HG23	2:D:111:GLY:N	1.99	0.77
2:D:223:THR:HB	2:D:225:THR:HG22	1.67	0.77
2:F:276:ILE:O	2:F:369:ALA:HB2	1.83	0.77
1:G:242:LEU:HD13	1:G:250:ALA:C	2.08	0.77
2:H:276:ILE:O	2:H:369:ALA:HB2	1.84	0.77
2:B:223:THR:HB	2:B:225:THR:HG22	1.67	0.77
2:B:264:ARG:C	2:B:266:HIS:H	1.91	0.77
2:D:155:GLU:HA	2:D:197:HIS:ND1	1.99	0.77
2:F:231:ILE:HA	2:F:234:ILE:HG22	1.66	0.77
2:D:55:GLU:O	2:D:57:GLY:N	2.17	0.77
2:F:63:PRO:HD3	2:F:86:LEU:O	1.85	0.77
2:F:67:PHE:HD1	2:F:92:LEU:HD23	1.49	0.77
1:G:264:ARG:HB2	1:G:266:HIS:HD2	1.45	0.77
2:H:63:PRO:HD3	2:H:86:LEU:O	1.85	0.77
2:H:67:PHE:HD1	2:H:92:LEU:HD23	1.49	0.77
2:B:11:GLN:HG3	2:B:74:VAL:CG1	2.15	0.77
1:E:35:SER:HB3	1:E:59:ASN:HA	1.65	0.77
2:F:267:PHE:N	2:F:267:PHE:CD1	2.49	0.77
1:G:265:LEU:HD12	1:G:265:LEU:O	1.83	0.77
2:H:110:ILE:HG23	2:H:111:GLY:N	1.99	0.77
2:H:217:LEU:CD1	2:H:277:SER:HA	2.13	0.77
2:D:231:ILE:HA	2:D:234:ILE:HG22	1.66	0.77
2:D:296:PHE:CZ	2:D:335:ILE:HG21	2.18	0.77
2:F:339:ARG:HG3	3:I:102:ARG:HD2	1.66	0.77
1:G:217:LEU:C	1:G:219:LEU:H	1.91	0.77
2:H:231:ILE:HA	2:H:234:ILE:HG22	1.66	0.77
2:B:296:PHE:CZ	2:B:335:ILE:HG21	2.18	0.77
1:C:35:SER:HB3	1:C:59:ASN:HA	1.65	0.77
2:F:346:TRP:HZ3	1:G:404:PHE:CZ	2.00	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:352:LYS:CB	2:H:181:VAL:HG21	2.13	0.77
2:B:30:ILE:HD13	2:B:61:HIS:CG	2.20	0.77
2:B:155:GLU:HA	2:B:197:HIS:ND1	1.99	0.77
2:H:267:PHE:N	2:H:267:PHE:CD1	2.49	0.77
2:D:276:ILE:O	2:D:369:ALA:HB2	1.84	0.77
2:F:11:GLN:HG3	2:F:74:VAL:CG1	2.15	0.77
2:H:11:GLN:HG3	2:H:74:VAL:CG1	2.15	0.77
2:B:52:PHE:CZ	2:B:239:THR:CG2	2.66	0.77
2:B:67:PHE:HD1	2:B:92:LEU:HD23	1.49	0.77
2:B:217:LEU:CD1	2:B:277:SER:HA	2.13	0.77
2:B:231:ILE:HA	2:B:234:ILE:HG22	1.67	0.77
2:B:225:THR:O	2:B:229:ARG:HG3	1.86	0.76
2:D:63:PRO:HD3	2:D:86:LEU:O	1.85	0.76
2:D:225:THR:O	2:D:229:ARG:HG3	1.86	0.76
1:G:198:THR:O	1:G:265:LEU:HD22	1.85	0.76
2:H:155:GLU:HA	2:H:197:HIS:ND1	1.99	0.76
1:A:198:THR:O	1:A:265:LEU:HD22	1.85	0.76
2:D:221:ARG:HD3	2:D:221:ARG:O	1.85	0.76
2:F:331:ALA:O	2:F:335:ILE:HG12	1.86	0.76
2:B:221:ARG:O	2:B:221:ARG:HD3	1.85	0.76
1:C:192:HIS:ND1	1:C:424:ASN:OD1	2.18	0.76
1:C:198:THR:O	1:C:265:LEU:HD22	1.85	0.76
1:C:254:LYS:HZ2	2:D:101:ASN:CG	1.93	0.76
2:F:155:GLU:HA	2:F:197:HIS:ND1	1.99	0.76
2:F:221:ARG:O	2:F:221:ARG:HD3	1.85	0.76
2:H:331:ALA:O	2:H:335:ILE:HG12	1.86	0.76
3:I:128:SER:HB3	3:I:131:ASN:HB2	1.66	0.76
2:B:7:ILE:HD12	2:B:153:LEU:HD21	1.67	0.76
1:C:325:MET:HE1	1:C:355:VAL:HG11	1.67	0.76
2:D:62:VAL:HG21	2:D:88:HIS:HE1	1.48	0.76
2:F:7:ILE:HD12	2:F:153:LEU:HD21	1.68	0.76
1:G:306:ASP:OD2	3:I:95:ILE:HD11	1.83	0.76
2:H:172:TYR:C	2:H:172:TYR:CD1	2.61	0.76
2:F:223:THR:HB	2:F:225:THR:HG22	1.67	0.76
2:H:7:ILE:HD12	2:H:153:LEU:HD21	1.68	0.76
2:H:221:ARG:O	2:H:221:ARG:HD3	1.85	0.76
2:B:276:ILE:O	2:B:369:ALA:HB2	1.84	0.76
2:F:217:LEU:CD1	2:F:277:SER:HA	2.13	0.76
1:C:247:GLN:HB3	2:D:224:TYR:HD1	1.50	0.76
2:D:56:THR:CB	2:H:284:GLU:HG3	2.16	0.76
2:D:70:LEU:CD1	2:D:145:THR:CG2	2.64	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:217:LEU:CD1	2:D:277:SER:HA	2.13	0.76
1:G:168:THR:HB	1:G:201:THR:HG23	1.68	0.76
2:H:223:THR:HB	2:H:225:THR:HG22	1.67	0.76
1:A:217:LEU:C	1:A:219:LEU:H	1.91	0.76
1:A:325:MET:HE1	1:A:355:VAL:HG11	1.67	0.76
1:C:217:LEU:C	1:C:219:LEU:H	1.91	0.76
2:D:7:ILE:HD12	2:D:153:LEU:HD21	1.68	0.76
2:D:67:PHE:HD1	2:D:92:LEU:HD23	1.49	0.76
1:E:168:THR:HB	1:E:201:THR:HG23	1.68	0.76
1:E:198:THR:O	1:E:265:LEU:HD22	1.85	0.76
2:F:62:VAL:HG21	2:F:88:HIS:HE1	1.48	0.76
2:B:172:TYR:C	2:B:172:TYR:CD1	2.61	0.76
1:C:168:THR:HB	1:C:201:THR:HG23	1.68	0.76
2:D:172:TYR:C	2:D:172:TYR:CD1	2.61	0.76
1:A:168:THR:HB	1:A:201:THR:HG23	1.68	0.75
1:C:19:LYS:HG3	1:C:228:ASN:CB	2.17	0.75
2:F:70:LEU:CD1	2:F:145:THR:CG2	2.64	0.75
2:F:163:LYS:O	2:F:164:LYS:HG2	1.86	0.75
2:F:172:TYR:C	2:F:172:TYR:CD1	2.61	0.75
2:F:257:THR:CG2	1:G:101:ASN:HB3	2.16	0.75
2:H:163:LYS:O	2:H:164:LYS:HG2	1.86	0.75
2:D:163:LYS:O	2:D:164:LYS:HG2	1.86	0.75
2:H:344:VAL:HG11	2:H:346:TRP:CE2	2.21	0.75
1:E:325:MET:HE1	1:E:355:VAL:HG11	1.67	0.75
2:F:344:VAL:HG11	2:F:346:TRP:CE2	2.21	0.75
1:G:2:ARG:NH2	2:H:98:ASP:CA	2.49	0.75
2:H:70:LEU:CD1	2:H:145:THR:CG2	2.64	0.75
1:A:19:LYS:HG3	1:A:228:ASN:CB	2.17	0.75
1:A:259:MET:HG2	1:A:314:THR:HG21	1.67	0.75
2:B:331:ALA:O	2:B:335:ILE:HG12	1.86	0.75
2:B:70:LEU:CD1	2:B:145:THR:CG2	2.64	0.75
2:B:344:VAL:HG11	2:B:346:TRP:CE2	2.21	0.75
2:B:381:THR:C	2:B:383:ALA:H	1.95	0.75
2:D:331:ALA:O	2:D:335:ILE:HG12	1.86	0.75
2:H:62:VAL:HG21	2:H:88:HIS:HE1	1.48	0.75
2:B:167:LEU:HG	2:B:200:CYS:HB3	1.69	0.75
2:B:348:PRO:CD	1:C:398:MET:HE2	2.16	0.75
2:B:348:PRO:HD2	1:C:398:MET:HE1	1.68	0.75
2:D:167:LEU:HG	2:D:200:CYS:HB3	1.69	0.75
2:D:296:PHE:CE2	2:D:341:ILE:HD12	2.20	0.75
2:D:381:THR:C	2:D:383:ALA:H	1.95	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:348:PRO:HD3	1:G:398:MET:HE3	1.68	0.75
3:I:107:ILE:HD13	3:I:124:SER:HB3	1.68	0.75
2:B:3:GLU:HG2	2:B:51:THR:HA	0.80	0.75
1:C:259:MET:HG2	1:C:314:THR:HG21	1.67	0.75
2:F:317:LEU:HB3	2:F:319:TYR:HE1	1.52	0.75
1:E:259:MET:HG2	1:E:314:THR:HG21	1.67	0.75
2:H:225:THR:O	2:H:229:ARG:HG3	1.86	0.75
1:E:192:HIS:ND1	1:E:424:ASN:OD1	2.18	0.75
2:F:225:THR:O	2:F:229:ARG:HG3	1.86	0.75
1:G:176:LYS:HE3	1:G:207:GLU:HG3	1.68	0.75
1:G:258:ASN:O	2:H:404:PHE:CE2	2.34	0.75
1:G:325:MET:HE1	1:G:355:VAL:HG11	1.67	0.75
1:A:176:LYS:HE3	1:A:207:GLU:HG3	1.68	0.74
2:D:344:VAL:HG11	2:D:346:TRP:CE2	2.21	0.74
1:G:19:LYS:HG3	1:G:228:ASN:CB	2.17	0.74
2:H:167:LEU:HG	2:H:200:CYS:HB3	1.69	0.74
2:H:317:LEU:HB3	2:H:319:TYR:HE1	1.52	0.74
2:B:56:THR:O	2:F:284:GLU:HB3	1.87	0.74
2:B:163:LYS:O	2:B:164:LYS:HG2	1.86	0.74
1:C:176:LYS:HE3	1:C:207:GLU:HG3	1.68	0.74
2:D:362:VAL:HG13	2:D:368:LEU:HD12	1.68	0.74
1:E:19:LYS:HG3	1:E:228:ASN:CB	2.17	0.74
1:G:259:MET:HG2	1:G:314:THR:HG21	1.67	0.74
1:A:192:HIS:ND1	1:A:424:ASN:OD1	2.18	0.74
2:F:298:PRO:HB3	2:F:307:PRO:CD	2.15	0.74
1:G:192:HIS:ND1	1:G:424:ASN:OD1	2.18	0.74
2:H:70:LEU:HD11	2:H:145:THR:HG23	1.69	0.74
3:I:60:ASN:HB3	3:I:131:ASN:HD22	1.51	0.74
2:B:349:THR:CB	1:C:178:SER:HB2	2.17	0.74
1:E:176:LYS:HE3	1:E:207:GLU:HG3	1.68	0.74
2:F:70:LEU:HD11	2:F:145:THR:HG23	1.70	0.74
2:F:167:LEU:HG	2:F:200:CYS:HB3	1.69	0.74
2:F:381:THR:C	2:F:383:ALA:H	1.95	0.74
2:B:296:PHE:CE2	2:B:341:ILE:HD12	2.20	0.74
2:D:205:ASP:CB	2:D:303:VAL:HA	2.17	0.74
2:H:381:THR:C	2:H:383:ALA:H	1.95	0.74
2:B:205:ASP:CB	2:B:303:VAL:HA	2.17	0.74
2:B:243:ARG:HH21	2:B:252:LEU:H	0.79	0.74
1:C:250:ALA:HA	1:C:254:LYS:HE2	1.68	0.74
2:F:362:VAL:HG13	2:F:368:LEU:HD12	1.68	0.74
1:G:6:HIS:HE1	1:G:8:GLN:HG2	1.52	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:298:PRO:HB3	2:H:307:PRO:CD	2.15	0.74
2:B:5:ILE:CD1	2:B:64:ARG:NH1	2.38	0.74
2:D:104:ALA:CB	2:D:413:MET:HG3	2.18	0.74
2:D:317:LEU:HB3	2:D:319:TYR:HE1	1.52	0.74
1:E:103:TRP:CZ3	1:E:108:TYR:HE1	2.05	0.74
2:F:110:ILE:HG23	2:F:111:GLY:N	1.99	0.74
2:F:205:ASP:CB	2:F:303:VAL:HA	2.17	0.74
2:H:205:ASP:CB	2:H:303:VAL:HA	2.17	0.74
2:H:362:VAL:HG13	2:H:368:LEU:HD12	1.68	0.74
2:B:362:VAL:HG13	2:B:368:LEU:HD12	1.68	0.74
1:C:257:VAL:HG13	2:D:407:TRP:CD1	2.22	0.74
2:F:324:VAL:HG11	1:G:221:THR:HA	1.70	0.74
2:F:329:ASN:OD1	1:G:210:TYR:HE1	1.70	0.74
1:G:103:TRP:CZ3	1:G:108:TYR:HE1	2.05	0.74
2:H:104:ALA:CB	2:H:413:MET:HG3	2.18	0.74
2:B:4:CYS:SG	2:B:252:LEU:HD11	2.27	0.73
2:B:104:ALA:CB	2:B:413:MET:HG3	2.18	0.73
2:D:172:TYR:OH	2:D:387:ALA:HB1	1.87	0.73
1:E:6:HIS:HE1	1:E:8:GLN:HG2	1.52	0.73
1:E:250:ALA:HA	1:E:254:LYS:HE2	1.68	0.73
2:F:104:ALA:CB	2:F:413:MET:HG3	2.18	0.73
2:H:102:ASN:CB	2:H:407:TRP:CD1	2.71	0.73
1:A:6:HIS:HE1	1:A:8:GLN:HG2	1.52	0.73
2:B:62:VAL:CG1	2:B:63:PRO:CD	2.50	0.73
2:B:172:TYR:OH	2:B:387:ALA:HB1	1.87	0.73
1:C:88:ARG:CG	1:G:283:TYR:OH	2.36	0.73
2:D:70:LEU:HD11	2:D:145:THR:HG23	1.70	0.73
2:B:317:LEU:HB3	2:B:319:TYR:HE1	1.52	0.73
2:F:172:TYR:OH	2:F:387:ALA:HB1	1.87	0.73
2:H:104:ALA:HB2	2:H:413:MET:HG3	1.71	0.73
1:A:103:TRP:CZ3	1:A:108:TYR:HE1	2.05	0.73
2:B:103:TYR:CD2	2:B:189:LEU:HD13	2.24	0.73
1:C:103:TRP:CZ3	1:C:108:TYR:HE1	2.05	0.73
2:D:103:TYR:CD2	2:D:189:LEU:HD13	2.24	0.73
2:H:4:CYS:SG	2:H:252:LEU:HD11	2.27	0.73
2:D:306:ASP:O	2:D:308:ARG:N	2.20	0.73
1:E:274:PRO:HG2	1:E:371:LEU:HD21	1.69	0.73
2:H:103:TYR:CD2	2:H:189:LEU:HD13	2.24	0.73
1:A:250:ALA:HA	1:A:254:LYS:HE2	1.68	0.73
2:D:4:CYS:SG	2:D:252:LEU:HD11	2.27	0.73
2:D:56:THR:C	2:H:284:GLU:HB3	2.11	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:103:TYR:CD2	2:F:189:LEU:HD13	2.24	0.73
2:F:104:ALA:HB2	2:F:413:MET:HG3	1.71	0.73
2:H:172:TYR:OH	2:H:387:ALA:HB1	1.87	0.73
2:H:242:LEU:HG	2:H:250:VAL:O	1.88	0.73
1:A:209:LEU:HG	1:A:230:LEU:HD22	1.69	0.73
1:E:217:LEU:O	1:E:219:LEU:N	2.22	0.73
2:F:242:LEU:HG	2:F:250:VAL:O	1.88	0.73
2:F:261:PRO:HG3	1:G:404:PHE:CE2	2.23	0.73
1:G:209:LEU:HG	1:G:230:LEU:HD22	1.69	0.73
2:H:296:PHE:CE2	2:H:341:ILE:HD12	2.20	0.73
2:B:112:LYS:O	2:B:115:ILE:HG22	1.89	0.73
2:D:243:ARG:HH21	2:D:252:LEU:H	0.79	0.73
1:E:108:TYR:CD1	1:E:413:MET:HE1	2.24	0.73
2:F:62:VAL:HG11	2:F:88:HIS:ND1	2.04	0.73
1:G:217:LEU:O	1:G:219:LEU:N	2.22	0.73
1:G:258:ASN:CA	2:H:404:PHE:CD2	2.70	0.73
1:A:76:ASP:HA	1:A:79:ARG:HG2	1.71	0.73
1:A:217:LEU:O	1:A:219:LEU:N	2.22	0.73
1:A:274:PRO:HG2	1:A:371:LEU:HD21	1.70	0.73
2:B:70:LEU:HD11	2:B:145:THR:HG23	1.69	0.73
2:B:104:ALA:HB2	2:B:413:MET:HG3	1.71	0.73
2:D:104:ALA:HB2	2:D:413:MET:HG3	1.71	0.73
2:F:243:ARG:HH21	2:F:252:LEU:H	0.79	0.73
1:G:108:TYR:CD1	1:G:413:MET:HE1	2.24	0.73
1:A:111:GLY:O	1:A:115:VAL:HG23	1.89	0.73
2:D:105:ARG:O	2:D:110:ILE:HG22	1.89	0.73
2:D:112:LYS:O	2:D:115:ILE:HG22	1.89	0.73
2:F:263:PRO:HD3	1:G:406:HIS:CG	2.24	0.73
1:G:2:ARG:NH1	2:H:98:ASP:HB3	2.04	0.73
2:B:298:PRO:HB3	2:B:307:PRO:CD	2.15	0.72
1:C:217:LEU:O	1:C:219:LEU:N	2.22	0.72
2:F:4:CYS:SG	2:F:252:LEU:HD11	2.27	0.72
1:G:70:LEU:HG	1:G:145:THR:CG2	2.19	0.72
1:G:258:ASN:CA	2:H:404:PHE:CE2	2.71	0.72
2:H:62:VAL:HG11	2:H:88:HIS:ND1	2.04	0.72
2:B:7:ILE:HD11	2:B:137:VAL:HG22	1.71	0.72
2:B:166:LYS:HE3	2:B:199:ASP:OD1	1.89	0.72
2:D:7:ILE:HD11	2:D:137:VAL:HG22	1.70	0.72
2:D:154:MET:HE1	2:D:166:LYS:HB3	1.70	0.72
2:F:166:LYS:HE3	2:F:199:ASP:OD1	1.89	0.72
1:G:258:ASN:HA	2:H:404:PHE:HD2	1.52	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:6:HIS:HE1	1:C:8:GLN:HG2	1.52	0.72
1:C:88:ARG:HG3	1:G:283:TYR:OH	1.89	0.72
2:D:298:PRO:HB3	2:D:307:PRO:CD	2.15	0.72
2:F:346:TRP:CZ3	1:G:404:PHE:CZ	2.76	0.72
1:G:274:PRO:HG2	1:G:371:LEU:HD21	1.69	0.72
2:H:166:LYS:HE3	2:H:199:ASP:OD1	1.90	0.72
2:H:243:ARG:HH21	2:H:252:LEU:H	0.79	0.72
2:B:154:MET:HE1	2:B:166:LYS:HB3	1.70	0.72
2:B:242:LEU:HG	2:B:250:VAL:O	1.88	0.72
1:C:111:GLY:O	1:C:115:VAL:HG23	1.89	0.72
1:C:209:LEU:HG	1:C:230:LEU:HD22	1.69	0.72
1:E:209:LEU:HG	1:E:230:LEU:HD22	1.69	0.72
2:H:312:TYR:O	2:H:344:VAL:HG23	1.90	0.72
2:B:105:ARG:O	2:B:110:ILE:HG22	1.89	0.72
2:B:306:ASP:O	2:B:308:ARG:N	2.20	0.72
1:C:76:ASP:HA	1:C:79:ARG:HG2	1.71	0.72
2:D:166:LYS:HE3	2:D:199:ASP:OD1	1.90	0.72
1:E:70:LEU:HG	1:E:145:THR:CG2	2.20	0.72
1:E:76:ASP:HA	1:E:79:ARG:HG2	1.71	0.72
1:E:111:GLY:O	1:E:115:VAL:HG23	1.89	0.72
2:D:11:GLN:HG3	2:D:74:VAL:CG1	2.15	0.72
2:D:242:LEU:HG	2:D:250:VAL:O	1.88	0.72
2:F:154:MET:HE1	2:F:166:LYS:HB3	1.71	0.72
2:F:296:PHE:CE2	2:F:341:ILE:HD12	2.20	0.72
2:F:312:TYR:O	2:F:344:VAL:HG23	1.90	0.72
2:H:154:MET:HE1	2:H:166:LYS:HB3	1.71	0.72
2:B:312:TYR:O	2:B:344:VAL:HG23	1.90	0.72
1:C:108:TYR:CD1	1:C:413:MET:HE1	2.24	0.72
1:C:257:VAL:HA	2:D:407:TRP:NE1	2.04	0.72
2:D:7:ILE:CG1	2:D:137:VAL:HG22	2.20	0.72
2:F:259:LEU:HD11	2:F:378:LEU:CD1	2.20	0.72
2:F:261:PRO:CG	1:G:404:PHE:CE2	2.69	0.72
2:H:112:LYS:O	2:H:115:ILE:HG22	1.89	0.72
1:A:70:LEU:HG	1:A:145:THR:CG2	2.20	0.72
1:C:274:PRO:HG2	1:C:371:LEU:HD21	1.70	0.72
2:F:30:ILE:HD13	2:F:61:HIS:CD2	2.24	0.72
2:F:112:LYS:O	2:F:115:ILE:HG22	1.89	0.72
1:G:76:ASP:HA	1:G:79:ARG:HG2	1.71	0.72
1:A:66:ILE:C	1:A:67:LEU:HD23	2.15	0.72
1:A:108:TYR:CD1	1:A:413:MET:HE1	2.24	0.72
1:A:325:MET:HA	1:A:325:MET:HE3	1.72	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:66:ILE:C	1:G:67:LEU:HD23	2.15	0.72
1:G:111:GLY:O	1:G:115:VAL:HG23	1.89	0.72
2:H:259:LEU:HD11	2:H:378:LEU:CD1	2.20	0.72
2:H:306:ASP:O	2:H:308:ARG:N	2.20	0.72
2:B:259:LEU:HD11	2:B:378:LEU:CD1	2.20	0.72
1:C:66:ILE:C	1:C:67:LEU:HD23	2.15	0.72
2:D:62:VAL:HG11	2:D:88:HIS:ND1	2.05	0.72
1:E:66:ILE:C	1:E:67:LEU:HD23	2.15	0.72
2:F:326:LYS:HB3	1:G:222:PRO:HD2	1.72	0.72
1:C:243:ARG:NH2	1:C:252:LEU:HG	2.05	0.71
1:C:325:MET:HE3	1:C:325:MET:HA	1.72	0.71
2:D:259:LEU:HD11	2:D:378:LEU:CD1	2.20	0.71
2:D:343:PHE:CZ	2:D:351:PHE:HE1	2.08	0.71
2:F:148:GLY:O	2:F:151:SER:HB2	1.90	0.71
2:H:7:ILE:HD11	2:H:137:VAL:HG22	1.71	0.71
1:C:191:VAL:CG1	1:C:425:MET:HG3	2.19	0.71
2:D:317:LEU:HD12	2:D:351:PHE:HD2	1.56	0.71
2:F:306:ASP:O	2:F:308:ARG:N	2.20	0.71
2:B:317:LEU:HD12	2:B:351:PHE:HD2	1.56	0.71
1:C:70:LEU:HG	1:C:145:THR:CG2	2.20	0.71
1:C:356:CYS:SG	1:C:357:ASP:N	2.62	0.71
2:D:312:TYR:O	2:D:344:VAL:HG23	1.90	0.71
1:E:243:ARG:NH2	1:E:252:LEU:HG	2.05	0.71
2:F:105:ARG:O	2:F:110:ILE:HG22	1.89	0.71
1:A:191:VAL:CG1	1:A:425:MET:HG3	2.19	0.71
2:B:7:ILE:CG1	2:B:137:VAL:HG22	2.20	0.71
1:C:431:GLU:OE1	1:C:432:TYR:HA	1.91	0.71
2:F:317:LEU:HD12	2:F:351:PHE:HD2	1.55	0.71
1:G:10:GLY:O	1:G:14:ASN:HB2	1.90	0.71
2:H:7:ILE:CG1	2:H:137:VAL:HG22	2.20	0.71
2:H:105:ARG:O	2:H:110:ILE:HG22	1.89	0.71
2:H:148:GLY:O	2:H:151:SER:HB2	1.91	0.71
2:H:317:LEU:HD12	2:H:351:PHE:HD2	1.55	0.71
1:A:356:CYS:SG	1:A:357:ASP:N	2.62	0.71
1:A:431:GLU:OE1	1:A:432:TYR:HA	1.91	0.71
1:E:191:VAL:CG1	1:E:425:MET:HG3	2.19	0.71
1:E:325:MET:HA	1:E:325:MET:HE3	1.73	0.71
2:F:3:GLU:HG2	2:F:51:THR:C	2.14	0.71
2:B:3:GLU:HG2	2:B:51:THR:C	2.15	0.71
2:B:148:GLY:O	2:B:151:SER:HB2	1.91	0.71
2:D:148:GLY:O	2:D:151:SER:HB2	1.91	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:10:GLY:O	1:E:14:ASN:HB2	1.90	0.71
2:F:7:ILE:CG1	2:F:137:VAL:HG22	2.20	0.71
2:F:7:ILE:HD11	2:F:137:VAL:HG22	1.71	0.71
1:G:243:ARG:NH2	1:G:252:LEU:HG	2.05	0.71
1:A:8:GLN:NE2	1:A:17:GLY:HA3	2.06	0.71
1:C:8:GLN:NE2	1:C:17:GLY:HA3	2.06	0.71
2:D:242:LEU:HD21	2:D:250:VAL:HB	1.71	0.71
1:E:265:LEU:HD12	1:E:265:LEU:C	2.16	0.71
1:G:265:LEU:HD12	1:G:265:LEU:C	2.16	0.71
1:G:325:MET:HA	1:G:325:MET:HE3	1.72	0.71
2:B:242:LEU:HD21	2:B:250:VAL:HB	1.71	0.71
2:D:3:GLU:HG2	2:D:51:THR:C	2.15	0.71
2:D:56:THR:C	2:H:284:GLU:HB2	2.14	0.71
1:G:175:PRO:HD2	1:G:207:GLU:OE2	1.91	0.71
2:H:3:GLU:HG2	2:H:51:THR:C	2.15	0.71
3:I:149:ASN:HD21	3:I:151:LYS:HD3	1.56	0.71
1:A:201:THR:OG1	1:A:265:LEU:HD11	1.90	0.71
1:A:243:ARG:NH2	1:A:252:LEU:HG	2.05	0.71
1:E:175:PRO:HD2	1:E:207:GLU:OE2	1.91	0.71
2:F:51:THR:O	2:F:52:PHE:CD1	2.44	0.71
2:F:343:PHE:CZ	2:F:351:PHE:HE1	2.08	0.71
1:G:191:VAL:CG1	1:G:425:MET:HG3	2.19	0.71
1:A:237:GLY:O	1:A:241:CYS:HB3	1.90	0.71
1:C:265:LEU:HD12	1:C:265:LEU:C	2.16	0.71
2:H:343:PHE:CZ	2:H:351:PHE:HE1	2.08	0.71
2:B:11:GLN:HE21	2:B:74:VAL:CG2	2.03	0.70
2:B:343:PHE:CZ	2:B:351:PHE:HE1	2.08	0.70
1:C:237:GLY:O	1:C:241:CYS:HB3	1.90	0.70
1:C:245:PRO:HA	2:D:73:THR:CG2	2.21	0.70
1:G:291:LEU:O	1:G:295:MET:HG3	1.91	0.70
1:A:265:LEU:HD12	1:A:265:LEU:C	2.16	0.70
2:B:12:ALA:HB3	2:B:140:SER:OG	1.91	0.70
1:C:48:ARG:HG2	1:C:243:ARG:O	1.90	0.70
1:C:201:THR:OG1	1:C:265:LEU:HD11	1.90	0.70
1:E:201:THR:OG1	1:E:265:LEU:HD11	1.90	0.70
1:E:291:LEU:O	1:E:295:MET:HG3	1.91	0.70
1:G:269:MET:HE2	1:G:381:SER:OG	1.90	0.70
1:G:431:GLU:OE1	1:G:432:TYR:HA	1.91	0.70
2:H:11:GLN:HE21	2:H:74:VAL:CG2	2.03	0.70
1:E:8:GLN:NE2	1:E:17:GLY:HA3	2.06	0.70
1:E:431:GLU:OE1	1:E:432:TYR:HA	1.91	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:48:ARG:HG2	1:G:243:ARG:O	1.90	0.70
2:H:12:ALA:HB3	2:H:140:SER:OG	1.91	0.70
1:A:56:ALA:HB1	1:E:283:TYR:CE2	2.25	0.70
2:D:51:THR:O	2:D:52:PHE:CD1	2.45	0.70
1:E:356:CYS:SG	1:E:357:ASP:N	2.62	0.70
2:F:12:ALA:HB3	2:F:140:SER:OG	1.91	0.70
1:G:8:GLN:NE2	1:G:17:GLY:HA3	2.06	0.70
1:G:352:LYS:CB	2:H:181:VAL:CG2	2.70	0.70
2:H:51:THR:O	2:H:52:PHE:CD1	2.44	0.70
1:C:70:LEU:HG	1:C:145:THR:HG23	1.74	0.70
2:D:11:GLN:HE21	2:D:74:VAL:CG2	2.03	0.70
2:F:11:GLN:HE21	2:F:74:VAL:CG2	2.03	0.70
1:G:201:THR:OG1	1:G:265:LEU:HD11	1.90	0.70
2:B:5:ILE:HG22	2:B:6:SER:N	2.07	0.70
1:C:175:PRO:HD2	1:C:207:GLU:OE2	1.91	0.70
2:F:234:ILE:HG21	2:F:302:MET:HE1	1.72	0.70
2:F:371:VAL:HG12	2:F:372:GLN:H	1.57	0.70
1:G:257:VAL:HG23	2:H:407:TRP:HB2	0.77	0.70
1:A:48:ARG:HG2	1:A:243:ARG:O	1.90	0.70
1:A:70:LEU:HG	1:A:145:THR:HG23	1.74	0.70
1:C:234:THR:O	1:C:238:VAL:HG23	1.92	0.70
1:E:269:MET:HE2	1:E:381:SER:OG	1.90	0.70
2:F:237:SER:CB	2:F:376:CYS:SG	2.80	0.70
1:G:237:GLY:O	1:G:241:CYS:HB3	1.90	0.70
2:H:242:LEU:HD21	2:H:250:VAL:HB	1.71	0.70
2:H:371:VAL:HG12	2:H:372:GLN:H	1.57	0.70
1:A:260:VAL:HG23	2:B:407:TRP:HE1	1.57	0.70
1:A:269:MET:HE2	1:A:381:SER:OG	1.90	0.70
2:D:12:ALA:HB3	2:D:140:SER:OG	1.91	0.70
1:E:48:ARG:HG2	1:E:243:ARG:O	1.90	0.70
1:G:356:CYS:SG	1:G:357:ASP:N	2.62	0.70
2:H:199:ASP:HB3	2:H:256:GLN:HE21	1.57	0.70
2:B:199:ASP:HB3	2:B:256:GLN:HE21	1.57	0.70
1:C:255:LEU:O	1:C:259:MET:HG3	1.91	0.70
1:E:70:LEU:HG	1:E:145:THR:HG23	1.74	0.70
3:I:138:TYR:HB3	3:I:139:THR:CA	2.21	0.70
1:A:255:LEU:O	1:A:259:MET:HG3	1.91	0.70
2:D:30:ILE:HD13	2:D:61:HIS:CD2	2.26	0.70
2:D:234:ILE:HG21	2:D:302:MET:HE1	1.72	0.70
1:E:237:GLY:O	1:E:241:CYS:HB3	1.90	0.70
1:G:70:LEU:HG	1:G:145:THR:HG23	1.73	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:234:ILE:HG21	2:H:302:MET:HE1	1.72	0.70
2:H:237:SER:CB	2:H:376:CYS:SG	2.80	0.70
2:B:244:PHE:HD2	2:B:245:ASP:N	1.90	0.69
1:C:254:LYS:HZ3	2:D:101:ASN:HD21	1.40	0.69
1:C:291:LEU:O	1:C:295:MET:HG3	1.91	0.69
2:D:67:PHE:CD1	2:D:92:LEU:HD23	2.26	0.69
2:D:199:ASP:HB3	2:D:256:GLN:HE21	1.57	0.69
1:E:234:THR:O	1:E:238:VAL:HG23	1.92	0.69
1:E:255:LEU:O	1:E:259:MET:HG3	1.91	0.69
2:F:244:PHE:HD2	2:F:245:ASP:N	1.89	0.69
2:F:343:PHE:HZ	2:F:351:PHE:CE1	2.10	0.69
1:G:234:THR:O	1:G:238:VAL:HG23	1.92	0.69
1:G:234:THR:CG2	1:G:270:PRO:HB2	2.11	0.69
1:A:234:THR:O	1:A:238:VAL:HG23	1.92	0.69
1:C:230:LEU:HD21	1:C:302:MET:HE2	1.74	0.69
2:F:67:PHE:CD1	2:F:92:LEU:HD23	2.26	0.69
2:F:199:ASP:HB3	2:F:256:GLN:HE21	1.57	0.69
2:F:242:LEU:HD21	2:F:250:VAL:HB	1.71	0.69
2:H:67:PHE:CD1	2:H:92:LEU:HD23	2.26	0.69
2:H:244:PHE:HD2	2:H:245:ASP:N	1.90	0.69
2:H:402:ARG:O	2:H:403:ALA:C	2.36	0.69
1:A:291:LEU:O	1:A:295:MET:HG3	1.91	0.69
1:C:269:MET:HE2	1:C:381:SER:OG	1.91	0.69
1:G:179:ASP:HB2	4:G:600:GDP:C3'	2.21	0.69
1:A:175:PRO:HD2	1:A:207:GLU:OE2	1.91	0.69
2:B:133:GLN:HG2	2:B:243:ARG:HH22	1.57	0.69
2:B:205:ASP:HB3	2:B:303:VAL:HA	1.73	0.69
2:B:234:ILE:HG21	2:B:302:MET:HE1	1.72	0.69
1:C:10:GLY:O	1:C:14:ASN:HB2	1.90	0.69
2:F:402:ARG:O	2:F:403:ALA:C	2.36	0.69
3:I:130:ASP:HB3	3:I:131:ASN:HA	1.74	0.69
1:A:10:GLY:O	1:A:14:ASN:HB2	1.90	0.69
2:B:237:SER:CB	2:B:376:CYS:SG	2.80	0.69
2:D:56:THR:CA	2:H:284:GLU:HG3	2.22	0.69
1:E:230:LEU:HD21	1:E:302:MET:HE2	1.73	0.69
2:H:133:GLN:HG2	2:H:243:ARG:HH22	1.57	0.69
2:H:343:PHE:HZ	2:H:351:PHE:CE1	2.11	0.69
1:E:24:ILE:HD11	1:E:52:TYR:CE1	2.28	0.69
1:G:255:LEU:O	1:G:259:MET:HG3	1.91	0.69
2:B:402:ARG:O	2:B:403:ALA:C	2.36	0.69
1:C:24:ILE:HD11	1:C:52:TYR:CE1	2.28	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:205:ASP:HB3	2:D:303:VAL:HA	1.73	0.69
1:G:24:ILE:HD11	1:G:52:TYR:CE1	2.28	0.69
1:G:230:LEU:HD21	1:G:302:MET:HE2	1.74	0.69
2:B:67:PHE:CD1	2:B:92:LEU:HD23	2.26	0.69
2:B:371:VAL:HG12	2:B:372:GLN:H	1.57	0.69
2:D:244:PHE:HD2	2:D:245:ASP:N	1.90	0.69
1:E:251:ASP:O	1:E:253:ARG:N	2.26	0.69
1:E:299:LYS:HD3	1:E:299:LYS:N	2.04	0.69
2:F:115:ILE:CD1	2:F:119:LEU:HG	2.23	0.69
2:F:205:ASP:HB3	2:F:303:VAL:HA	1.73	0.69
2:F:339:ARG:NE	3:I:99:GLN:OE1	2.26	0.69
2:F:349:THR:CG2	1:G:178:SER:O	2.40	0.69
1:G:251:ASP:O	1:G:253:ARG:N	2.26	0.69
1:A:24:ILE:HD11	1:A:52:TYR:CE1	2.28	0.69
2:B:333:ALA:CA	1:C:177:VAL:HG21	2.23	0.69
2:D:276:ILE:O	2:D:369:ALA:N	2.25	0.69
2:D:371:VAL:HG12	2:D:372:GLN:H	1.57	0.69
2:F:133:GLN:HG2	2:F:243:ARG:HH22	1.57	0.69
2:H:115:ILE:CD1	2:H:119:LEU:HG	2.23	0.69
1:A:230:LEU:HD21	1:A:302:MET:HE2	1.74	0.69
2:B:276:ILE:O	2:B:369:ALA:N	2.26	0.69
1:G:253:ARG:CG	2:H:407:TRP:HH2	2.06	0.69
1:G:299:LYS:HD3	1:G:299:LYS:N	2.04	0.69
2:H:205:ASP:HB3	2:H:303:VAL:HA	1.73	0.69
1:A:301:MET:HE1	1:A:377:PHE:HE2	1.58	0.68
1:C:209:LEU:HD23	1:C:227:LEU:HB3	1.75	0.68
1:E:180:THR:HG22	1:E:181:VAL:N	2.07	0.68
1:E:257:VAL:O	1:E:257:VAL:HG12	1.93	0.68
1:E:301:MET:HE1	1:E:377:PHE:HE2	1.58	0.68
1:G:2:ARG:NH2	2:H:98:ASP:HA	2.08	0.68
1:A:209:LEU:HD23	1:A:227:LEU:HB3	1.75	0.68
1:A:242:LEU:CD2	1:A:250:ALA:H	2.07	0.68
1:C:359:PRO:HB2	1:C:360:PRO:HD2	1.74	0.68
2:F:326:LYS:HB2	1:G:222:PRO:HG2	0.71	0.68
1:G:301:MET:HE1	1:G:377:PHE:HE2	1.58	0.68
2:B:115:ILE:CD1	2:B:119:LEU:HG	2.23	0.68
1:C:242:LEU:CD2	1:C:250:ALA:H	2.06	0.68
2:D:133:GLN:HG2	2:D:243:ARG:HH22	1.57	0.68
1:G:359:PRO:HB2	1:G:360:PRO:HD2	1.74	0.68
2:H:276:ILE:O	2:H:369:ALA:N	2.25	0.68
1:A:180:THR:HG22	1:A:181:VAL:N	2.07	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:180:THR:HG22	1:C:181:VAL:N	2.07	0.68
1:E:243:ARG:HH22	1:E:252:LEU:HG	1.59	0.68
1:G:243:ARG:HH22	1:G:252:LEU:HG	1.59	0.68
2:H:221:ARG:N	2:H:222:PRO:HD3	2.09	0.68
2:B:343:PHE:HZ	2:B:351:PHE:CE1	2.10	0.68
1:C:204:ILE:HD13	1:C:231:VAL:HG22	1.76	0.68
1:C:256:ALA:O	1:C:260:VAL:HG22	1.94	0.68
2:D:115:ILE:CD1	2:D:119:LEU:HG	2.23	0.68
2:D:217:LEU:HD12	2:D:277:SER:CA	2.23	0.68
1:E:359:PRO:HB2	1:E:360:PRO:HD2	1.74	0.68
2:B:102:ASN:HB2	2:B:408:TYR:CE2	2.29	0.68
1:C:251:ASP:O	1:C:253:ARG:N	2.26	0.68
2:D:102:ASN:HB2	2:D:408:TYR:CE2	2.29	0.68
2:D:234:ILE:HD13	2:D:234:ILE:C	2.18	0.68
2:F:276:ILE:O	2:F:369:ALA:N	2.25	0.68
2:B:234:ILE:HD13	2:B:234:ILE:C	2.18	0.68
1:G:180:THR:HG22	1:G:181:VAL:N	2.07	0.68
1:G:242:LEU:CD2	1:G:250:ALA:H	2.07	0.68
2:B:296:PHE:CE1	2:B:335:ILE:CG2	2.73	0.68
2:B:349:THR:HB	1:C:178:SER:HB2	1.75	0.68
1:C:243:ARG:HH22	1:C:252:LEU:HG	1.59	0.68
1:C:325:MET:CE	1:C:355:VAL:HG21	2.24	0.68
2:D:221:ARG:N	2:D:222:PRO:HD3	2.09	0.68
2:F:70:LEU:HD12	2:F:145:THR:CG2	2.24	0.68
2:F:234:ILE:HD13	2:F:234:ILE:C	2.18	0.68
1:G:256:ALA:O	1:G:260:VAL:HG22	1.94	0.68
2:H:234:ILE:HD13	2:H:234:ILE:C	2.18	0.68
1:A:103:TRP:HZ3	1:A:108:TYR:HE1	1.42	0.68
1:A:204:ILE:HD13	1:A:231:VAL:HG22	1.76	0.68
1:A:251:ASP:O	1:A:253:ARG:N	2.26	0.68
1:A:256:ALA:O	1:A:260:VAL:HG22	1.94	0.68
2:B:141:PHE:O	2:B:147:SER:HB3	1.94	0.68
2:B:217:LEU:HD12	2:B:277:SER:CA	2.23	0.68
1:C:103:TRP:HZ3	1:C:108:TYR:HE1	1.42	0.68
1:E:44:LEU:HD12	1:E:49:ILE:HD13	1.76	0.68
1:E:242:LEU:CD2	1:E:250:ALA:H	2.07	0.68
1:E:310:GLY:HA3	1:E:436:GLN:HE21	1.59	0.68
1:G:310:GLY:HA3	1:G:436:GLN:HE21	1.59	0.68
2:H:70:LEU:HD12	2:H:145:THR:CG2	2.24	0.68
2:H:234:ILE:CB	2:H:302:MET:HE1	2.24	0.68
1:A:328:VAL:O	1:A:332:MET:HG2	1.94	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:70:LEU:HD12	2:B:145:THR:CG2	2.24	0.68
1:C:301:MET:HE1	1:C:377:PHE:HE2	1.58	0.68
1:C:328:VAL:O	1:C:332:MET:HG2	1.95	0.68
1:E:103:TRP:HZ3	1:E:108:TYR:HE1	1.42	0.68
1:G:204:ILE:HD13	1:G:231:VAL:HG22	1.76	0.68
3:I:138:TYR:HB3	3:I:139:THR:HA	1.74	0.68
1:C:310:GLY:HA3	1:C:436:GLN:HE21	1.59	0.67
2:D:343:PHE:HZ	2:D:351:PHE:CE1	2.10	0.67
1:E:256:ALA:O	1:E:260:VAL:HG22	1.94	0.67
2:F:102:ASN:HB2	2:F:408:TYR:CE2	2.29	0.67
2:F:234:ILE:CB	2:F:302:MET:HE1	2.24	0.67
1:G:248:LEU:HD13	2:H:179:THR:HG21	1.76	0.67
2:H:102:ASN:HB2	2:H:408:TYR:CE2	2.29	0.67
1:A:359:PRO:HB2	1:A:360:PRO:HD2	1.74	0.67
2:D:141:PHE:O	2:D:147:SER:HB3	1.94	0.67
1:E:204:ILE:HD13	1:E:231:VAL:HG22	1.76	0.67
1:E:325:MET:CE	1:E:355:VAL:HG21	2.24	0.67
2:F:141:PHE:O	2:F:147:SER:HB3	1.94	0.67
2:F:221:ARG:N	2:F:222:PRO:HD3	2.09	0.67
2:F:251:ASP:O	2:F:254:GLU:HB2	1.94	0.67
1:G:44:LEU:HD12	1:G:49:ILE:HD13	1.76	0.67
1:G:103:TRP:HZ3	1:G:108:TYR:HE1	1.42	0.67
2:H:141:PHE:O	2:H:147:SER:HB3	1.94	0.67
1:A:325:MET:CE	1:A:355:VAL:HG21	2.24	0.67
1:G:328:VAL:O	1:G:332:MET:HG2	1.94	0.67
2:H:251:ASP:O	2:H:254:GLU:HB2	1.94	0.67
1:A:310:GLY:HA3	1:A:436:GLN:HE21	1.59	0.67
2:B:49:PHE:CE1	2:B:61:HIS:HE1	2.12	0.67
2:B:221:ARG:N	2:B:222:PRO:HD3	2.09	0.67
2:D:234:ILE:CB	2:D:302:MET:HE1	2.24	0.67
2:D:237:SER:CB	2:D:376:CYS:SG	2.80	0.67
1:E:328:VAL:O	1:E:332:MET:HG2	1.95	0.67
1:G:4:ILE:HG21	1:G:136:GLN:HG2	1.76	0.67
1:G:325:MET:CE	1:G:355:VAL:HG21	2.24	0.67
1:A:257:VAL:O	1:A:257:VAL:HG12	1.93	0.67
1:C:267:PHE:N	1:C:267:PHE:CD1	2.62	0.67
2:D:402:ARG:O	2:D:403:ALA:C	2.35	0.67
1:E:4:ILE:HG21	1:E:136:GLN:HG2	1.76	0.67
2:F:22:GLU:HG3	2:F:83:TYR:OH	1.95	0.67
2:F:217:LEU:HD12	2:F:277:SER:CA	2.23	0.67
2:H:22:GLU:HG3	2:H:83:TYR:OH	1.95	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:234:ILE:CB	2:B:302:MET:HE1	2.24	0.67
2:B:251:ASP:O	2:B:254:GLU:HB2	1.94	0.67
2:B:348:PRO:HG2	1:C:398:MET:HE3	1.72	0.67
1:C:276:THR:HB	1:C:281:GLN:CG	2.25	0.67
2:F:7:ILE:HD12	2:F:153:LEU:CD2	2.24	0.67
1:G:209:LEU:HD23	1:G:227:LEU:HB3	1.75	0.67
1:G:260:VAL:HG23	2:H:406:HIS:CE1	2.29	0.67
1:A:56:ALA:CB	1:E:283:TYR:CD2	2.76	0.67
1:A:250:ALA:HB1	1:A:254:LYS:HB2	1.75	0.67
2:B:95:GLY:O	2:B:97:GLU:N	2.27	0.67
2:B:278:ALA:O	2:B:279:GLU:CB	2.43	0.67
2:D:70:LEU:HD12	2:D:145:THR:CG2	2.24	0.67
2:D:251:ASP:O	2:D:254:GLU:HB2	1.94	0.67
1:E:209:LEU:HD23	1:E:227:LEU:HB3	1.75	0.67
2:F:30:ILE:CD1	2:F:61:HIS:CD2	2.78	0.67
1:G:258:ASN:C	2:H:404:PHE:CE2	2.71	0.67
1:G:352:LYS:CA	2:H:181:VAL:CG2	2.73	0.67
1:A:4:ILE:HG21	1:A:136:GLN:HG2	1.76	0.67
2:B:22:GLU:HG3	2:B:83:TYR:OH	1.95	0.67
2:D:7:ILE:HD12	2:D:153:LEU:CD2	2.24	0.67
1:G:306:ASP:OD2	3:I:95:ILE:HD13	1.90	0.67
2:H:7:ILE:HD12	2:H:153:LEU:CD2	2.24	0.67
2:H:95:GLY:O	2:H:97:GLU:N	2.27	0.67
2:H:284:GLU:HG2	2:H:284:GLU:O	1.93	0.67
1:A:276:THR:HB	1:A:281:GLN:CG	2.25	0.67
2:B:7:ILE:HD12	2:B:153:LEU:CD2	2.24	0.67
3:I:134:LYS:N	3:I:135:LYS:HA	2.10	0.67
1:C:242:LEU:CD1	1:C:255:LEU:HD11	2.25	0.67
1:C:250:ALA:HB1	1:C:254:LYS:HB2	1.76	0.67
2:D:22:GLU:HG3	2:D:83:TYR:OH	1.95	0.67
2:D:172:TYR:HD1	2:D:173:PRO:N	1.93	0.67
2:F:95:GLY:O	2:F:97:GLU:N	2.27	0.67
2:F:175:PRO:HG3	2:F:304:LYS:HG2	1.76	0.67
2:H:175:PRO:HG3	2:H:304:LYS:HG2	1.76	0.67
2:B:152:LEU:HA	2:B:155:GLU:HB2	1.77	0.66
1:C:242:LEU:HD12	1:C:255:LEU:HD11	1.77	0.66
2:D:278:ALA:O	2:D:279:GLU:CB	2.43	0.66
1:G:242:LEU:CD1	1:G:255:LEU:HD11	2.25	0.66
1:A:172:VAL:HG11	1:A:387:LEU:CD2	2.22	0.66
2:B:341:ILE:O	2:B:341:ILE:HG12	1.95	0.66
1:C:4:ILE:HG21	1:C:136:GLN:HG2	1.76	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:107:HIS:CD2	1:C:151:THR:CG2	2.77	0.66
1:C:257:VAL:O	1:C:257:VAL:HG12	1.93	0.66
1:E:230:LEU:HD23	1:E:231:VAL:N	2.10	0.66
1:E:242:LEU:CD1	1:E:255:LEU:HD11	2.25	0.66
1:E:276:THR:HB	1:E:281:GLN:CG	2.25	0.66
2:F:284:GLU:O	2:F:284:GLU:HG2	1.93	0.66
1:A:242:LEU:CD1	1:A:255:LEU:HD11	2.25	0.66
2:B:172:TYR:HD1	2:B:173:PRO:N	1.93	0.66
2:B:345:ASP:C	2:B:347:CYS:H	2.04	0.66
1:E:250:ALA:HB1	1:E:254:LYS:HB2	1.75	0.66
2:F:349:THR:HG23	1:G:178:SER:H	1.59	0.66
2:H:67:PHE:CD1	2:H:92:LEU:CD2	2.79	0.66
1:A:44:LEU:HD12	1:A:49:ILE:HD13	1.76	0.66
1:A:88:ARG:HD2	1:E:283:TYR:OH	1.96	0.66
1:A:267:PHE:N	1:A:267:PHE:CD1	2.62	0.66
2:B:166:LYS:H	2:B:199:ASP:CG	2.03	0.66
2:B:175:PRO:HG3	2:B:304:LYS:HG2	1.76	0.66
2:D:95:GLY:O	2:D:97:GLU:N	2.28	0.66
2:D:345:ASP:C	2:D:347:CYS:H	2.04	0.66
2:F:67:PHE:CD1	2:F:92:LEU:CD2	2.79	0.66
2:F:345:ASP:C	2:F:347:CYS:H	2.04	0.66
1:G:182:VAL:HG23	1:G:186:ASN:HD21	1.60	0.66
1:A:107:HIS:CD2	1:A:151:THR:CG2	2.77	0.66
1:A:242:LEU:HD12	1:A:255:LEU:HD11	1.77	0.66
2:B:68:VAL:HG11	2:B:149:PHE:CZ	2.30	0.66
1:C:245:PRO:HA	2:D:73:THR:HG21	1.77	0.66
1:E:182:VAL:HG23	1:E:186:ASN:HD21	1.60	0.66
2:F:166:LYS:H	2:F:199:ASP:CG	2.03	0.66
2:H:68:VAL:HG11	2:H:149:PHE:CZ	2.30	0.66
2:H:341:ILE:O	2:H:341:ILE:HG12	1.95	0.66
2:B:63:PRO:CG	2:B:87:PHE:HA	2.26	0.66
2:B:67:PHE:CD1	2:B:92:LEU:CD2	2.79	0.66
2:D:175:PRO:HG3	2:D:304:LYS:HG2	1.76	0.66
1:E:107:HIS:CD2	1:E:151:THR:CG2	2.77	0.66
1:G:242:LEU:HD12	1:G:255:LEU:HD11	1.78	0.66
2:H:166:LYS:H	2:H:199:ASP:CG	2.03	0.66
2:H:345:ASP:C	2:H:347:CYS:H	2.04	0.66
1:A:281:GLN:O	1:A:283:TYR:HB2	1.96	0.66
1:C:230:LEU:HD23	1:C:231:VAL:N	2.10	0.66
1:C:324:SER:C	1:C:326:LYS:H	2.03	0.66
2:D:67:PHE:CD1	2:D:92:LEU:CD2	2.79	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:166:LYS:H	2:D:199:ASP:CG	2.03	0.66
2:D:341:ILE:HG12	2:D:341:ILE:O	1.95	0.66
2:F:68:VAL:HG11	2:F:149:PHE:CZ	2.31	0.66
2:F:100:ALA:CB	2:F:105:ARG:HD3	2.26	0.66
2:F:313:MET:HB3	2:F:344:VAL:CG2	2.26	0.66
2:F:372:GLN:O	2:F:373:ARG:HB3	1.96	0.66
1:G:107:HIS:CD2	1:G:151:THR:CG2	2.77	0.66
1:G:230:LEU:HD23	1:G:231:VAL:N	2.10	0.66
2:H:313:MET:HB3	2:H:344:VAL:CG2	2.26	0.66
1:A:230:LEU:HD23	1:A:231:VAL:N	2.10	0.66
1:A:299:LYS:HD3	1:A:299:LYS:N	2.04	0.66
1:C:44:LEU:HD12	1:C:49:ILE:HD13	1.76	0.66
1:C:281:GLN:O	1:C:283:TYR:HB2	1.96	0.66
2:D:152:LEU:HA	2:D:155:GLU:HB2	1.77	0.66
1:E:242:LEU:HD12	1:E:255:LEU:HD11	1.78	0.66
1:A:243:ARG:HH22	1:A:252:LEU:HG	1.59	0.66
1:A:324:SER:C	1:A:326:LYS:H	2.03	0.66
2:B:333:ALA:CA	1:C:177:VAL:CG2	2.73	0.66
1:E:66:ILE:CD1	1:E:122:VAL:HG12	2.26	0.66
1:E:267:PHE:CD1	1:E:267:PHE:N	2.62	0.66
2:F:262:TYR:HH	1:G:403:ALA:HA	1.56	0.66
2:F:326:LYS:HE2	1:G:214:PHE:CB	2.26	0.66
2:F:341:ILE:O	2:F:341:ILE:HG12	1.95	0.66
1:G:35:SER:HB3	1:G:59:ASN:CA	2.26	0.66
2:H:372:GLN:O	2:H:373:ARG:HB3	1.96	0.66
2:B:217:LEU:HD11	2:B:367:ASP:O	1.96	0.66
1:C:352:LYS:NZ	2:D:180:ALA:HA	2.11	0.66
2:D:217:LEU:HD11	2:D:367:ASP:O	1.97	0.66
2:F:278:ALA:O	2:F:279:GLU:CB	2.43	0.66
2:F:296:PHE:CE1	2:F:335:ILE:CG2	2.73	0.66
2:H:100:ALA:CB	2:H:105:ARG:HD3	2.26	0.66
2:B:313:MET:HB3	2:B:344:VAL:CG2	2.26	0.65
1:C:299:LYS:HD3	1:C:299:LYS:N	2.04	0.65
2:D:100:ALA:CB	2:D:105:ARG:HD3	2.26	0.65
2:D:315:CYS:HB3	2:D:377:MET:HE1	1.78	0.65
1:E:35:SER:HB3	1:E:59:ASN:CA	2.26	0.65
1:G:324:SER:C	1:G:326:LYS:H	2.03	0.65
2:H:278:ALA:O	2:H:279:GLU:CB	2.43	0.65
2:H:296:PHE:CE1	2:H:335:ILE:CG2	2.73	0.65
2:D:68:VAL:HG11	2:D:149:PHE:CZ	2.30	0.65
1:E:281:GLN:O	1:E:283:TYR:HB2	1.96	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:152:LEU:HA	2:F:155:GLU:HB2	1.77	0.65
2:F:172:TYR:HD1	2:F:173:PRO:N	1.93	0.65
1:G:66:ILE:CD1	1:G:122:VAL:HG12	2.26	0.65
2:H:152:LEU:HA	2:H:155:GLU:HB2	1.77	0.65
2:H:206:ASN:OD1	2:H:227:LEU:HD13	1.97	0.65
2:H:217:LEU:HD11	2:H:367:ASP:O	1.96	0.65
1:C:172:VAL:HG11	1:C:387:LEU:CD2	2.22	0.65
1:E:346:TRP:CD1	2:F:401:LYS:HZ2	2.13	0.65
2:F:206:ASN:OD1	2:F:227:LEU:HD13	1.97	0.65
2:F:217:LEU:HD11	2:F:367:ASP:O	1.96	0.65
2:F:315:CYS:HB3	2:F:377:MET:HE1	1.78	0.65
1:G:267:PHE:N	1:G:267:PHE:CD1	2.62	0.65
2:H:172:TYR:HD1	2:H:173:PRO:N	1.93	0.65
1:G:413:MET:HG2	1:G:418:PHE:HE1	1.61	0.65
2:H:315:CYS:HB3	2:H:377:MET:HE1	1.78	0.65
2:B:100:ALA:CB	2:B:105:ARG:HD3	2.26	0.65
2:B:206:ASN:OD1	2:B:227:LEU:HD13	1.96	0.65
1:G:281:GLN:O	1:G:283:TYR:HB2	1.96	0.65
2:B:49:PHE:CE1	2:B:61:HIS:CE1	2.84	0.65
2:B:372:GLN:O	2:B:373:ARG:HB3	1.96	0.65
2:D:313:MET:HB3	2:D:344:VAL:CG2	2.26	0.65
2:D:372:GLN:O	2:D:373:ARG:HB3	1.96	0.65
2:F:234:ILE:CG2	2:F:302:MET:HE1	2.27	0.65
1:G:282:GLN:HG2	1:G:282:GLN:O	1.97	0.65
1:A:66:ILE:HD13	1:A:122:VAL:HG12	1.79	0.65
1:A:161:TYR:C	1:A:163:ASP:H	2.05	0.65
2:B:115:ILE:HG23	2:B:116:ASP:N	2.12	0.65
2:B:344:VAL:HG12	2:B:345:ASP:N	2.12	0.65
1:C:158:ARG:NE	1:C:197:ASN:O	2.30	0.65
2:D:115:ILE:HG23	2:D:116:ASP:N	2.12	0.65
2:D:344:VAL:HG12	2:D:345:ASP:N	2.12	0.65
1:E:413:MET:HG2	1:E:418:PHE:HE1	1.61	0.65
2:F:115:ILE:HG23	2:F:116:ASP:N	2.12	0.65
2:F:317:LEU:HD12	2:F:351:PHE:CD2	2.32	0.65
2:H:102:ASN:HB3	2:H:407:TRP:CD1	2.31	0.65
2:H:234:ILE:CG2	2:H:302:MET:HE1	2.27	0.65
2:F:311:LYS:HE3	2:F:342:GLN:CD	2.22	0.65
1:G:66:ILE:HD13	1:G:122:VAL:HG12	1.79	0.65
1:G:250:ALA:HB1	1:G:254:LYS:CD	2.18	0.65
2:H:317:LEU:HD12	2:H:351:PHE:CD2	2.32	0.65
1:A:35:SER:HB3	1:A:59:ASN:CA	2.26	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:66:ILE:CD1	1:A:122:VAL:HG12	2.26	0.65
1:A:158:ARG:NE	1:A:197:ASN:O	2.30	0.65
2:B:3:GLU:HA	2:B:51:THR:CB	2.27	0.65
2:B:5:ILE:HD11	2:B:64:ARG:HH12	1.59	0.65
2:B:293:ASN:OD1	2:B:338:LYS:NZ	2.30	0.65
2:B:315:CYS:HB3	2:B:377:MET:HE1	1.78	0.65
1:C:241:CYS:O	1:C:244:PHE:HB2	1.97	0.65
1:E:66:ILE:HD13	1:E:122:VAL:HG12	1.79	0.65
1:E:324:SER:C	1:E:326:LYS:H	2.03	0.65
2:F:344:VAL:HG12	2:F:345:ASP:N	2.12	0.65
2:H:115:ILE:HG23	2:H:116:ASP:N	2.12	0.65
2:H:209:ILE:HG23	2:H:230:LEU:HD23	1.79	0.65
2:H:344:VAL:HG12	2:H:345:ASP:N	2.12	0.65
1:A:241:CYS:O	1:A:244:PHE:HB2	1.97	0.65
1:A:431:GLU:O	1:A:434:GLN:HG2	1.97	0.65
1:C:35:SER:HB3	1:C:59:ASN:CA	2.26	0.65
1:C:422:GLU:O	1:C:426:ASN:HB2	1.97	0.65
2:D:293:ASN:OD1	2:D:338:LYS:NZ	2.30	0.65
2:D:388:TRP:CE3	2:D:425:MET:HE1	2.32	0.65
1:E:282:GLN:O	1:E:282:GLN:HG2	1.97	0.65
2:F:3:GLU:HA	2:F:51:THR:CB	2.27	0.65
1:G:158:ARG:NE	1:G:197:ASN:O	2.30	0.65
1:G:161:TYR:C	1:G:163:ASP:H	2.05	0.65
1:G:250:ALA:HB1	1:G:254:LYS:HB3	1.78	0.65
2:H:311:LYS:HE3	2:H:342:GLN:CD	2.22	0.65
1:A:422:GLU:O	1:A:426:ASN:HB2	1.97	0.64
2:B:439:SER:CA	1:C:401:ARG:NH2	2.59	0.64
2:D:3:GLU:HA	2:D:51:THR:CB	2.28	0.64
2:D:206:ASN:OD1	2:D:227:LEU:HD13	1.97	0.64
2:D:234:ILE:CG2	2:D:302:MET:HE1	2.27	0.64
2:D:311:LYS:HE3	2:D:342:GLN:CD	2.22	0.64
2:F:293:ASN:OD1	2:F:338:LYS:NZ	2.30	0.64
2:F:296:PHE:CZ	2:F:341:ILE:HD11	2.22	0.64
2:H:3:GLU:HA	2:H:51:THR:CB	2.28	0.64
2:H:102:ASN:CG	2:H:407:TRP:CD1	2.75	0.64
2:B:317:LEU:HD12	2:B:351:PHE:CD2	2.32	0.64
1:C:247:GLN:HB3	2:D:224:TYR:CD1	2.31	0.64
1:C:431:GLU:O	1:C:434:GLN:HG2	1.97	0.64
2:D:271:THR:HG23	2:D:300:ASN:O	1.97	0.64
1:E:241:CYS:O	1:E:244:PHE:HB2	1.97	0.64
1:G:241:CYS:O	1:G:244:PHE:HB2	1.97	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:311:LYS:HE3	2:B:342:GLN:CD	2.22	0.64
1:C:66:ILE:CD1	1:C:122:VAL:HG12	2.26	0.64
2:D:6:SER:HB3	2:D:136:SER:HG	1.60	0.64
1:E:158:ARG:NE	1:E:197:ASN:O	2.30	0.64
2:F:209:ILE:HG23	2:F:230:LEU:HD23	1.79	0.64
2:F:388:TRP:CE3	2:F:425:MET:HE1	2.33	0.64
2:H:293:ASN:OD1	2:H:338:LYS:NZ	2.30	0.64
2:H:388:TRP:CE3	2:H:425:MET:HE1	2.33	0.64
1:A:182:VAL:HG23	1:A:186:ASN:HD21	1.60	0.64
2:B:271:THR:HG23	2:B:300:ASN:O	1.97	0.64
2:B:388:TRP:CE3	2:B:425:MET:HE1	2.32	0.64
1:C:66:ILE:HD13	1:C:122:VAL:HG12	1.79	0.64
1:C:180:THR:CG2	1:C:181:VAL:N	2.61	0.64
2:F:337:THR:HG22	3:I:99:GLN:CG	2.25	0.64
2:B:63:PRO:HG3	2:B:87:PHE:HA	1.80	0.64
1:C:133:GLN:HG3	1:C:165:ILE:HD11	1.80	0.64
1:C:182:VAL:HG23	1:C:186:ASN:HD21	1.60	0.64
2:D:317:LEU:HD12	2:D:351:PHE:CD2	2.32	0.64
1:E:284:ARG:O	1:E:286:LEU:N	2.31	0.64
1:G:70:LEU:N	1:G:145:THR:HG21	2.11	0.64
1:G:284:ARG:O	1:G:286:LEU:N	2.31	0.64
1:A:133:GLN:HG3	1:A:165:ILE:HD11	1.80	0.64
1:A:284:ARG:O	1:A:286:LEU:N	2.31	0.64
1:E:133:GLN:HG3	1:E:165:ILE:HD11	1.80	0.64
1:E:161:TYR:C	1:E:163:ASP:H	2.05	0.64
2:F:349:THR:O	1:G:181:VAL:HA	1.96	0.64
1:G:427:ASP:O	1:G:430:SER:HB3	1.97	0.64
2:H:271:THR:HG23	2:H:300:ASN:O	1.97	0.64
1:A:180:THR:CG2	1:A:181:VAL:N	2.61	0.64
1:A:413:MET:HG2	1:A:418:PHE:HE1	1.61	0.64
2:B:234:ILE:CG2	2:B:302:MET:HE1	2.27	0.64
2:B:296:PHE:CZ	2:B:341:ILE:HD11	2.22	0.64
2:B:386:GLU:O	2:B:389:ALA:N	2.31	0.64
1:C:284:ARG:O	1:C:286:LEU:N	2.31	0.64
1:E:180:THR:CG2	1:E:181:VAL:N	2.61	0.64
1:G:133:GLN:HG3	1:G:165:ILE:HD11	1.80	0.64
1:G:217:LEU:C	1:G:219:LEU:N	2.55	0.64
2:B:25:CYS:HB2	2:B:30:ILE:O	1.98	0.64
1:C:93:VAL:CG1	1:C:118:VAL:HG22	2.19	0.64
2:D:296:PHE:CZ	2:D:341:ILE:HD11	2.22	0.64
2:D:386:GLU:O	2:D:389:ALA:N	2.31	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:427:ASP:O	1:E:430:SER:HB3	1.97	0.64
2:H:305:CYS:SG	2:H:384:ILE:HD13	2.37	0.64
1:A:93:VAL:CG1	1:A:118:VAL:HG22	2.19	0.64
1:C:192:HIS:O	1:C:195:VAL:HG12	1.98	0.64
1:E:431:GLU:O	1:E:434:GLN:HG2	1.97	0.64
2:F:271:THR:HG23	2:F:300:ASN:O	1.97	0.64
1:G:180:THR:CG2	1:G:181:VAL:N	2.61	0.64
1:G:276:THR:HB	1:G:281:GLN:CG	2.25	0.64
2:H:6:SER:HB3	2:H:136:SER:HG	1.61	0.64
2:H:296:PHE:CZ	2:H:341:ILE:HD11	2.22	0.64
3:I:137:GLU:HB2	3:I:138:TYR:HA	1.79	0.64
1:A:114:LEU:O	1:A:118:VAL:HG23	1.97	0.64
1:C:114:LEU:O	1:C:118:VAL:HG23	1.98	0.64
1:C:413:MET:HG2	1:C:418:PHE:HE1	1.61	0.64
2:D:25:CYS:HB2	2:D:30:ILE:O	1.98	0.64
2:D:209:ILE:HG23	2:D:230:LEU:HD23	1.79	0.64
2:D:305:CYS:SG	2:D:384:ILE:HD13	2.37	0.64
2:F:6:SER:HB3	2:F:136:SER:HG	1.61	0.64
1:G:431:GLU:O	1:G:434:GLN:HG2	1.97	0.64
2:H:386:GLU:O	2:H:389:ALA:N	2.31	0.64
2:B:151:SER:O	2:B:155:GLU:HB2	1.98	0.63
2:B:209:ILE:HG23	2:B:230:LEU:HD23	1.79	0.63
1:C:105:LYS:O	1:C:110:GLU:HB2	1.97	0.63
2:D:151:SER:O	2:D:155:GLU:HB2	1.98	0.63
1:E:70:LEU:N	1:E:145:THR:HG21	2.11	0.63
1:E:217:LEU:C	1:E:219:LEU:N	2.55	0.63
2:F:386:GLU:O	2:F:389:ALA:N	2.31	0.63
1:A:105:LYS:O	1:A:110:GLU:HB2	1.97	0.63
2:B:175:PRO:HG2	2:B:207:GLU:OE1	1.98	0.63
2:F:305:CYS:SG	2:F:384:ILE:HD13	2.37	0.63
2:F:317:LEU:HD11	2:F:351:PHE:HE2	1.63	0.63
1:G:105:LYS:O	1:G:110:GLU:HB2	1.97	0.63
1:G:245:PRO:HB3	2:H:73:THR:CG2	2.29	0.63
2:B:56:THR:CB	2:F:284:GLU:CG	2.76	0.63
2:B:305:CYS:SG	2:B:384:ILE:HD13	2.37	0.63
2:B:317:LEU:HD11	2:B:351:PHE:HE2	1.63	0.63
1:E:422:GLU:O	1:E:426:ASN:HB2	1.97	0.63
2:F:151:SER:O	2:F:155:GLU:HB2	1.98	0.63
1:G:192:HIS:O	1:G:195:VAL:HG12	1.98	0.63
2:H:151:SER:O	2:H:155:GLU:HB2	1.98	0.63
2:D:152:LEU:HD12	2:D:153:LEU:N	2.14	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:317:LEU:HD11	2:H:351:PHE:HE2	1.63	0.63
1:A:192:HIS:O	1:A:195:VAL:HG12	1.98	0.63
2:D:30:ILE:CD1	2:D:61:HIS:CD2	2.81	0.63
2:D:155:GLU:HA	2:D:197:HIS:HD1	1.63	0.63
1:E:192:HIS:O	1:E:195:VAL:HG12	1.98	0.63
2:F:152:LEU:HD12	2:F:153:LEU:N	2.14	0.63
1:G:70:LEU:H	1:G:145:THR:CG2	2.10	0.63
2:H:152:LEU:HD12	2:H:153:LEU:N	2.14	0.63
3:I:143:ASN:CG	3:I:144:PRO:HD2	2.24	0.63
1:E:318:VAL:HA	1:E:354:ALA:HB3	1.81	0.63
1:G:299:LYS:O	1:G:300:ASN:HB2	1.97	0.63
1:G:422:GLU:O	1:G:426:ASN:HB2	1.97	0.63
1:A:70:LEU:C	1:A:99:ALA:HB2	2.24	0.63
1:A:315:VAL:HG13	1:A:377:PHE:CE1	2.34	0.63
1:A:318:VAL:HA	1:A:354:ALA:HB3	1.81	0.63
2:B:152:LEU:HD12	2:B:153:LEU:N	2.14	0.63
1:C:254:LYS:NZ	2:D:101:ASN:ND2	2.47	0.63
1:C:282:GLN:O	1:C:282:GLN:HG2	1.97	0.63
2:F:326:LYS:CB	1:G:222:PRO:CD	2.77	0.63
1:G:309:HIS:CE1	3:I:95:ILE:CG2	2.81	0.63
1:A:137:LEU:HD22	1:A:154:ILE:CG2	2.28	0.63
1:C:4:ILE:HA	1:C:134:GLY:O	1.99	0.63
1:C:70:LEU:N	1:C:145:THR:HG21	2.11	0.63
1:C:315:VAL:HG13	1:C:377:PHE:CE1	2.34	0.63
2:D:317:LEU:HD11	2:D:351:PHE:HE2	1.63	0.63
1:E:105:LYS:O	1:E:110:GLU:HB2	1.97	0.63
1:E:114:LEU:O	1:E:118:VAL:HG23	1.97	0.63
2:F:175:PRO:HG2	2:F:207:GLU:OE1	1.98	0.63
2:H:175:PRO:HG2	2:H:207:GLU:OE1	1.98	0.63
1:C:137:LEU:HD22	1:C:154:ILE:CG2	2.28	0.63
1:C:427:ASP:O	1:C:430:SER:HB3	1.97	0.63
1:E:299:LYS:O	1:E:300:ASN:HB2	1.97	0.63
1:G:2:ARG:HH21	2:H:98:ASP:HA	1.63	0.63
1:G:114:LEU:O	1:G:118:VAL:HG23	1.97	0.63
2:H:102:ASN:OD1	2:H:105:ARG:HB3	1.99	0.63
1:A:299:LYS:O	1:A:300:ASN:HB2	1.98	0.62
2:B:155:GLU:HA	2:B:197:HIS:HD1	1.63	0.62
1:C:63:PRO:HD2	1:C:86:ILE:HG12	1.80	0.62
1:C:70:LEU:C	1:C:99:ALA:HB2	2.24	0.62
1:C:161:TYR:C	1:C:163:ASP:H	2.05	0.62
1:C:172:VAL:CG1	1:C:387:LEU:HD21	2.24	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:299:LYS:O	1:C:300:ASN:HB2	1.98	0.62
2:D:175:PRO:HG2	2:D:207:GLU:OE1	1.98	0.62
2:D:273:ALA:HB3	2:D:274:PRO:HD3	1.81	0.62
1:E:70:LEU:H	1:E:145:THR:CG2	2.10	0.62
2:F:102:ASN:OD1	2:F:105:ARG:HB3	1.99	0.62
1:G:243:ARG:HH21	1:G:252:LEU:H	1.45	0.62
1:G:258:ASN:ND2	1:G:352:LYS:CE	2.55	0.62
1:A:4:ILE:HA	1:A:134:GLY:O	1.99	0.62
1:A:253:ARG:O	1:A:254:LYS:C	2.42	0.62
1:A:282:GLN:HG2	1:A:282:GLN:O	1.98	0.62
2:B:236:SER:O	2:B:240:ALA:HB3	1.99	0.62
1:C:205:ASP:OD1	1:C:304:ALA:N	2.32	0.62
1:C:253:ARG:O	1:C:254:LYS:C	2.42	0.62
1:E:349:ASN:C	1:E:349:ASN:HD22	2.06	0.62
2:F:243:ARG:NH2	2:F:252:LEU:N	2.29	0.62
1:G:318:VAL:HA	1:G:354:ALA:HB3	1.81	0.62
2:H:7:ILE:HG22	2:H:66:VAL:CG2	2.28	0.62
3:I:134:LYS:HB3	3:I:135:LYS:C	2.24	0.62
1:A:70:LEU:N	1:A:145:THR:HG21	2.11	0.62
1:A:205:ASP:OD1	1:A:304:ALA:N	2.32	0.62
2:B:23:LEU:HD22	2:B:232:GLY:O	1.99	0.62
1:C:318:VAL:HA	1:C:354:ALA:HB3	1.81	0.62
1:G:230:LEU:O	1:G:233:ALA:HB3	2.00	0.62
1:A:154:ILE:HG22	1:A:166:MET:HE2	1.81	0.62
1:A:427:ASP:O	1:A:430:SER:HB3	1.97	0.62
2:B:315:CYS:HB3	2:B:377:MET:CE	2.29	0.62
1:C:346:TRP:CD1	2:D:401:LYS:NZ	2.66	0.62
2:D:23:LEU:HD22	2:D:232:GLY:O	1.99	0.62
2:D:236:SER:O	2:D:240:ALA:HB3	1.99	0.62
1:E:63:PRO:HD2	1:E:86:ILE:HG12	1.80	0.62
1:E:230:LEU:O	1:E:233:ALA:HB3	2.00	0.62
2:F:7:ILE:HG22	2:F:66:VAL:CG2	2.28	0.62
2:F:62:VAL:CG1	2:F:91:GLN:HE22	2.13	0.62
2:F:317:LEU:HB3	2:F:319:TYR:CE1	2.33	0.62
1:G:70:LEU:C	1:G:99:ALA:HB2	2.24	0.62
1:G:205:ASP:OD1	1:G:304:ALA:N	2.32	0.62
1:G:349:ASN:C	1:G:349:ASN:HD22	2.06	0.62
2:H:236:SER:O	2:H:240:ALA:HB3	1.99	0.62
2:H:315:CYS:HB3	2:H:377:MET:CE	2.29	0.62
1:A:63:PRO:HD2	1:A:86:ILE:HG12	1.80	0.62
2:B:5:ILE:HD13	2:B:64:ARG:HH12	1.59	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:7:ILE:HG22	2:D:66:VAL:CG2	2.28	0.62
1:E:137:LEU:HD22	1:E:154:ILE:CG2	2.29	0.62
1:E:205:ASP:OD1	1:E:304:ALA:N	2.32	0.62
2:F:315:CYS:HB3	2:F:377:MET:CE	2.29	0.62
1:G:137:LEU:HD22	1:G:154:ILE:CG2	2.28	0.62
1:G:154:ILE:HG22	1:G:166:MET:HE2	1.81	0.62
1:G:254:LYS:HE3	1:G:352:LYS:CE	2.27	0.62
2:H:62:VAL:CG1	2:H:91:GLN:HE22	2.13	0.62
2:H:70:LEU:O	2:H:95:GLY:O	2.18	0.62
3:I:134:LYS:HD2	3:I:136:VAL:HG22	1.81	0.62
2:B:243:ARG:NH2	2:B:252:LEU:N	2.29	0.62
2:D:205:ASP:HB2	2:D:303:VAL:HA	1.82	0.62
2:D:317:LEU:HB3	2:D:319:TYR:CE1	2.33	0.62
1:E:253:ARG:O	1:E:254:LYS:C	2.42	0.62
1:E:315:VAL:HG13	1:E:377:PHE:CE1	2.34	0.62
2:F:115:ILE:HG13	2:F:152:LEU:HD13	1.81	0.62
2:F:296:PHE:CZ	2:F:341:ILE:CD1	2.79	0.62
1:G:70:LEU:CG	1:G:145:THR:HG23	2.30	0.62
2:H:317:LEU:HB3	2:H:319:TYR:CE1	2.33	0.62
2:B:70:LEU:O	2:B:95:GLY:O	2.17	0.62
1:C:253:ARG:O	1:C:256:ALA:N	2.33	0.62
1:E:243:ARG:HH21	1:E:252:LEU:H	1.45	0.62
2:F:7:ILE:CD1	2:F:137:VAL:HG22	2.29	0.62
2:F:23:LEU:HD22	2:F:232:GLY:O	1.99	0.62
2:F:70:LEU:O	2:F:95:GLY:O	2.18	0.62
2:F:205:ASP:HB2	2:F:303:VAL:HA	1.82	0.62
2:F:236:SER:O	2:F:240:ALA:HB3	1.99	0.62
1:G:253:ARG:O	1:G:254:LYS:C	2.42	0.62
1:G:253:ARG:O	1:G:256:ALA:N	2.33	0.62
1:A:243:ARG:HH21	1:A:252:LEU:H	1.45	0.62
2:B:317:LEU:HB3	2:B:319:TYR:CE1	2.33	0.62
1:C:4:ILE:HG23	1:C:134:GLY:O	2.00	0.62
1:C:115:VAL:HG21	1:C:152:LEU:CD2	2.30	0.62
1:E:115:VAL:HG21	1:E:152:LEU:CD2	2.30	0.62
1:E:154:ILE:HG22	1:E:166:MET:HE2	1.81	0.62
1:E:211:ASP:OD1	1:E:212:ILE:N	2.33	0.62
2:H:436:GLY:C	2:H:438:ASP:H	2.08	0.62
1:A:115:VAL:HG21	1:A:152:LEU:CD2	2.30	0.62
2:B:205:ASP:HB2	2:B:303:VAL:HA	1.82	0.62
2:B:273:ALA:HB3	2:B:274:PRO:HD3	1.81	0.62
2:B:436:GLY:C	2:B:438:ASP:H	2.08	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:315:CYS:HB3	2:D:377:MET:CE	2.29	0.62
1:E:70:LEU:C	1:E:99:ALA:HB2	2.24	0.62
2:F:436:GLY:C	2:F:438:ASP:H	2.08	0.62
1:G:63:PRO:HD2	1:G:86:ILE:HG12	1.80	0.62
1:G:115:VAL:HG21	1:G:152:LEU:CD2	2.30	0.62
1:G:211:ASP:OD1	1:G:212:ILE:N	2.33	0.62
2:H:7:ILE:CD1	2:H:137:VAL:HG22	2.29	0.62
2:H:23:LEU:HD22	2:H:232:GLY:O	1.99	0.62
2:H:118:VAL:HG11	2:H:149:PHE:HZ	1.65	0.62
2:H:205:ASP:HB2	2:H:303:VAL:HA	1.82	0.62
2:H:277:SER:HA	2:H:367:ASP:O	2.00	0.62
1:A:253:ARG:O	1:A:256:ALA:N	2.33	0.62
1:A:349:ASN:C	1:A:349:ASN:HD22	2.07	0.62
2:B:118:VAL:HG11	2:B:149:PHE:HZ	1.65	0.62
2:B:269:LEU:O	2:B:378:LEU:HA	1.99	0.62
1:C:154:ILE:HG22	1:C:166:MET:HE2	1.81	0.62
2:D:102:ASN:OD1	2:D:105:ARG:HB3	1.99	0.62
2:D:118:VAL:HG11	2:D:149:PHE:HZ	1.65	0.62
2:D:267:PHE:HD1	2:D:267:PHE:H	1.47	0.62
1:E:70:LEU:CG	1:E:145:THR:HG23	2.30	0.62
2:F:277:SER:HA	2:F:367:ASP:O	2.00	0.62
1:G:258:ASN:OD1	2:H:181:VAL:HB	1.99	0.62
1:G:315:VAL:HG13	1:G:377:PHE:CE1	2.34	0.62
2:H:115:ILE:HG13	2:H:152:LEU:HD13	1.81	0.62
1:A:88:ARG:HD3	1:E:283:TYR:CE1	2.34	0.61
1:C:249:ASN:OD1	2:D:71:GLU:OE1	2.17	0.61
2:D:70:LEU:O	2:D:95:GLY:O	2.17	0.61
1:E:253:ARG:O	1:E:256:ALA:N	2.33	0.61
2:H:269:LEU:O	2:H:378:LEU:HA	1.99	0.61
1:A:204:ILE:CD1	1:A:231:VAL:HG13	2.30	0.61
1:A:283:TYR:C	1:A:284:ARG:HG2	2.25	0.61
2:B:102:ASN:OD1	2:B:105:ARG:HB3	1.99	0.61
2:B:277:SER:HA	2:B:367:ASP:O	2.00	0.61
1:C:243:ARG:HH21	1:C:252:LEU:H	1.45	0.61
2:D:7:ILE:CD1	2:D:137:VAL:HG22	2.29	0.61
2:D:115:ILE:HG13	2:D:152:LEU:HD13	1.81	0.61
2:D:269:LEU:O	2:D:378:LEU:HA	1.99	0.61
2:D:277:SER:HA	2:D:367:ASP:O	2.00	0.61
2:F:168:GLU:OE1	2:F:198:SER:HB2	2.01	0.61
2:H:168:GLU:OE1	2:H:198:SER:HB2	2.01	0.61
2:H:243:ARG:NH2	2:H:252:LEU:N	2.29	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:70:LEU:CG	1:A:145:THR:HG23	2.30	0.61
2:B:7:ILE:CD1	2:B:137:VAL:HG22	2.29	0.61
2:D:296:PHE:CE1	2:D:335:ILE:CG2	2.73	0.61
2:F:269:LEU:O	2:F:378:LEU:HA	1.99	0.61
2:H:296:PHE:CZ	2:H:341:ILE:CD1	2.79	0.61
1:A:4:ILE:HG23	1:A:134:GLY:O	2.00	0.61
2:B:6:SER:HB3	2:B:136:SER:HG	1.64	0.61
2:B:7:ILE:HG22	2:B:66:VAL:CG2	2.28	0.61
2:B:267:PHE:H	2:B:267:PHE:HD1	1.47	0.61
1:C:352:LYS:HZ3	2:D:180:ALA:HA	1.64	0.61
2:B:62:VAL:HG11	2:B:88:HIS:ND1	2.15	0.61
2:B:115:ILE:HG13	2:B:152:LEU:HD13	1.81	0.61
1:C:107:HIS:HD2	1:C:151:THR:CG2	2.12	0.61
1:C:254:LYS:NZ	2:D:101:ASN:HD21	1.98	0.61
1:C:283:TYR:C	1:C:284:ARG:HG2	2.25	0.61
2:D:168:GLU:OE1	2:D:198:SER:HB2	2.00	0.61
1:E:204:ILE:CD1	1:E:231:VAL:HG13	2.30	0.61
2:F:118:VAL:HG11	2:F:149:PHE:HZ	1.65	0.61
2:F:329:ASN:CB	1:G:210:TYR:CZ	2.81	0.61
1:G:4:ILE:HA	1:G:134:GLY:O	1.99	0.61
1:G:245:PRO:HA	2:H:73:THR:HG21	1.83	0.61
2:H:273:ALA:HB3	2:H:274:PRO:HD3	1.81	0.61
3:I:61:GLY:H	3:I:136:VAL:HB	1.66	0.61
1:A:211:ASP:OD1	1:A:212:ILE:N	2.33	0.61
1:C:31:ASP:O	1:C:32:PRO:C	2.44	0.61
1:C:324:SER:CB	1:C:327:GLU:HG2	2.30	0.61
2:D:62:VAL:CG1	2:D:91:GLN:HE22	2.13	0.61
2:D:276:ILE:CG2	2:D:369:ALA:HB2	2.26	0.61
1:A:31:ASP:O	1:A:32:PRO:C	2.44	0.61
2:B:168:GLU:OE1	2:B:198:SER:HB2	2.00	0.61
1:C:204:ILE:CD1	1:C:231:VAL:HG13	2.30	0.61
1:C:211:ASP:OD1	1:C:212:ILE:N	2.33	0.61
1:C:349:ASN:HD22	1:C:349:ASN:C	2.07	0.61
1:E:4:ILE:HA	1:E:134:GLY:O	1.99	0.61
1:E:31:ASP:O	1:E:32:PRO:C	2.44	0.61
2:F:284:GLU:OE1	2:F:284:GLU:N	2.30	0.61
2:F:409:VAL:C	2:F:411:GLU:H	2.09	0.61
1:G:31:ASP:O	1:G:32:PRO:C	2.44	0.61
1:G:107:HIS:HD2	1:G:151:THR:CG2	2.12	0.61
1:G:114:LEU:HD23	1:G:149:MET:CE	2.30	0.61
2:H:284:GLU:OE1	2:H:284:GLU:N	2.30	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:409:VAL:C	2:H:411:GLU:H	2.09	0.61
1:A:114:LEU:HD23	1:A:149:MET:CE	2.30	0.61
1:C:70:LEU:CG	1:C:145:THR:HG23	2.30	0.61
1:C:114:LEU:HD23	1:C:149:MET:CE	2.30	0.61
1:E:283:TYR:C	1:E:284:ARG:HG2	2.24	0.61
1:E:285:ALA:HB1	1:E:290:GLU:HG2	1.82	0.61
2:F:273:ALA:HB3	2:F:274:PRO:HD3	1.81	0.61
1:G:204:ILE:CD1	1:G:231:VAL:HG13	2.30	0.61
1:A:107:HIS:HD2	1:A:151:THR:CG2	2.12	0.61
1:C:230:LEU:O	1:C:233:ALA:HB3	2.00	0.61
2:B:296:PHE:CZ	2:B:341:ILE:CD1	2.79	0.61
1:C:128:SER:OG	1:C:129:CYS:N	2.34	0.61
1:E:172:VAL:HG11	1:E:387:LEU:CD2	2.22	0.61
2:F:339:ARG:NH2	3:I:99:GLN:NE2	2.43	0.61
1:A:279:GLY:O	1:A:282:GLN:HB3	2.01	0.60
1:A:324:SER:CB	1:A:327:GLU:HG2	2.30	0.60
2:B:88:HIS:CE1	2:F:284:GLU:OE2	2.54	0.60
2:D:436:GLY:C	2:D:438:ASP:H	2.08	0.60
1:E:188:THR:HA	1:E:425:MET:HE2	1.83	0.60
1:G:188:THR:HA	1:G:425:MET:HE2	1.83	0.60
1:A:128:SER:OG	1:A:129:CYS:N	2.34	0.60
1:A:230:LEU:O	1:A:233:ALA:HB3	2.00	0.60
2:B:56:THR:CB	2:F:284:GLU:CD	2.74	0.60
1:C:285:ALA:HB1	1:C:290:GLU:HG2	1.82	0.60
2:D:191:THR:HG21	2:D:425:MET:SD	2.41	0.60
2:D:362:VAL:HG13	2:D:368:LEU:HB2	1.83	0.60
1:E:4:ILE:HG23	1:E:134:GLY:O	2.00	0.60
2:F:169:PHE:CE1	2:F:235:VAL:HG22	2.36	0.60
1:G:54:ASN:ND2	1:G:64:ARG:HD3	2.15	0.60
1:G:172:VAL:HG11	1:G:387:LEU:CD2	2.22	0.60
2:B:5:ILE:HD11	2:B:64:ARG:HH22	1.65	0.60
2:B:30:ILE:HG12	2:B:36:MET:CB	2.12	0.60
2:B:191:THR:HG21	2:B:425:MET:SD	2.41	0.60
2:B:217:LEU:HD11	2:B:277:SER:HA	1.83	0.60
2:D:169:PHE:CE1	2:D:235:VAL:HG22	2.36	0.60
2:D:217:LEU:HD11	2:D:277:SER:HA	1.83	0.60
1:E:114:LEU:HD23	1:E:149:MET:CE	2.30	0.60
2:F:242:LEU:C	2:F:244:PHE:H	2.09	0.60
1:G:172:VAL:CG1	1:G:387:LEU:HD21	2.24	0.60
1:G:285:ALA:HB1	1:G:290:GLU:HG2	1.82	0.60
2:H:169:PHE:CE1	2:H:235:VAL:HG22	2.36	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:188:THR:HA	1:A:425:MET:HE2	1.83	0.60
1:A:204:ILE:HG21	1:A:231:VAL:HG22	1.84	0.60
2:B:362:VAL:HG13	2:B:368:LEU:HB2	1.83	0.60
1:C:248:LEU:HD22	2:D:179:THR:CG2	2.26	0.60
1:C:279:GLY:O	1:C:282:GLN:HB3	2.01	0.60
2:D:30:ILE:HG12	2:D:36:MET:CB	2.12	0.60
2:D:217:LEU:CD1	2:D:277:SER:CB	2.54	0.60
2:D:243:ARG:NH2	2:D:252:LEU:N	2.29	0.60
1:E:54:ASN:ND2	1:E:64:ARG:HD3	2.15	0.60
1:G:4:ILE:HG23	1:G:134:GLY:O	2.00	0.60
1:G:283:TYR:C	1:G:284:ARG:HG2	2.25	0.60
1:G:424:ASN:C	1:G:424:ASN:HD22	2.09	0.60
1:A:49:ILE:O	1:A:51:VAL:N	2.35	0.60
1:A:324:SER:O	1:A:328:VAL:HG23	2.01	0.60
2:B:169:PHE:CE1	2:B:235:VAL:HG22	2.36	0.60
1:E:115:VAL:HG21	1:E:152:LEU:HD23	1.84	0.60
2:F:63:PRO:CD	2:F:87:PHE:HA	2.32	0.60
2:F:119:LEU:CD2	2:F:122:ILE:HD11	2.28	0.60
1:G:204:ILE:HG21	1:G:231:VAL:HG22	1.84	0.60
2:H:362:VAL:HG13	2:H:368:LEU:HB2	1.83	0.60
3:I:150:VAL:HG23	3:I:151:LYS:N	2.16	0.60
1:A:285:ALA:HB1	1:A:290:GLU:HG2	1.82	0.60
1:A:324:SER:C	1:A:326:LYS:N	2.59	0.60
2:B:163:LYS:NZ	3:I:86:ASP:OD2	2.30	0.60
2:B:276:ILE:CG2	2:B:369:ALA:HB2	2.26	0.60
2:B:381:THR:C	2:B:383:ALA:N	2.56	0.60
1:C:115:VAL:HG21	1:C:152:LEU:HD23	1.84	0.60
1:C:204:ILE:HG21	1:C:231:VAL:HG22	1.84	0.60
1:C:324:SER:O	1:C:328:VAL:HG23	2.02	0.60
2:D:87:PHE:CD2	2:D:87:PHE:N	2.69	0.60
2:D:167:LEU:HA	2:D:200:CYS:O	2.01	0.60
2:D:229:ARG:NH1	2:D:363:VAL:HG21	2.16	0.60
1:E:128:SER:OG	1:E:129:CYS:N	2.34	0.60
1:E:204:ILE:HG21	1:E:231:VAL:HG22	1.84	0.60
1:E:279:GLY:O	1:E:282:GLN:HB3	2.01	0.60
2:F:348:PRO:CD	1:G:398:MET:HE3	2.31	0.60
1:G:115:VAL:HG21	1:G:152:LEU:HD23	1.84	0.60
2:H:242:LEU:C	2:H:244:PHE:H	2.09	0.60
2:B:57:GLY:HA3	2:B:58:ALA:HB2	0.66	0.60
2:B:167:LEU:HA	2:B:200:CYS:O	2.01	0.60
1:C:188:THR:HA	1:C:425:MET:HE2	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:107:HIS:HD2	1:E:151:THR:CG2	2.12	0.60
2:H:63:PRO:CD	2:H:87:PHE:HA	2.32	0.60
2:H:191:THR:HG21	2:H:425:MET:SD	2.41	0.60
1:A:408:TYR:CG	1:A:418:PHE:HZ	2.20	0.60
2:B:30:ILE:CD1	2:B:61:HIS:CG	2.82	0.60
2:B:229:ARG:NH1	2:B:363:VAL:HG21	2.16	0.60
2:F:267:PHE:HD1	2:F:267:PHE:H	1.47	0.60
2:F:362:VAL:HG13	2:F:368:LEU:HB2	1.84	0.60
1:G:19:LYS:CG	1:G:228:ASN:HB3	2.31	0.60
1:G:324:SER:O	1:G:328:VAL:HG23	2.01	0.60
2:H:119:LEU:CD2	2:H:122:ILE:HD11	2.28	0.60
2:H:381:THR:C	2:H:383:ALA:N	2.56	0.60
1:A:54:ASN:ND2	1:A:64:ARG:HD3	2.15	0.60
1:A:115:VAL:HG21	1:A:152:LEU:HD23	1.84	0.60
1:A:141:LEU:N	1:A:141:LEU:CD1	2.65	0.60
2:B:87:PHE:N	2:B:87:PHE:CD2	2.69	0.60
2:B:371:VAL:HG12	2:B:372:GLN:N	2.17	0.60
1:C:324:SER:C	1:C:326:LYS:N	2.59	0.60
2:D:344:VAL:HG11	2:D:346:TRP:NE1	2.16	0.60
2:D:371:VAL:HG12	2:D:372:GLN:N	2.17	0.60
2:D:409:VAL:C	2:D:411:GLU:H	2.09	0.60
1:E:324:SER:O	1:E:328:VAL:HG23	2.01	0.60
2:F:191:THR:HG21	2:F:425:MET:SD	2.41	0.60
1:C:49:ILE:O	1:C:51:VAL:N	2.35	0.60
1:C:141:LEU:N	1:C:141:LEU:CD1	2.65	0.60
1:C:408:TYR:CG	1:C:418:PHE:HZ	2.20	0.60
2:D:296:PHE:CZ	2:D:341:ILE:CD1	2.79	0.60
2:F:229:ARG:NH1	2:F:363:VAL:HG21	2.16	0.60
1:G:257:VAL:CB	2:H:407:TRP:CE3	2.65	0.60
1:A:102:ASN:ND2	1:A:407:TRP:O	2.35	0.59
2:D:435:VAL:O	2:D:435:VAL:HG12	2.02	0.59
1:E:102:ASN:ND2	1:E:407:TRP:O	2.35	0.59
1:E:172:VAL:CG1	1:E:387:LEU:HD21	2.24	0.59
1:E:205:ASP:OD1	1:E:304:ALA:CB	2.50	0.59
1:E:424:ASN:HD22	1:E:424:ASN:C	2.09	0.59
2:F:344:VAL:HG11	2:F:346:TRP:NE1	2.16	0.59
2:F:413:MET:O	2:F:414:GLU:HG3	2.02	0.59
1:G:2:ARG:NH2	2:H:99:ALA:H	2.00	0.59
2:B:348:PRO:HD3	1:C:398:MET:HE3	1.68	0.59
2:B:413:MET:O	2:B:414:GLU:HG3	2.03	0.59
2:D:413:MET:O	2:D:414:GLU:HG3	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:102:ASN:ND2	1:G:407:TRP:O	2.35	0.59
1:G:279:GLY:O	1:G:282:GLN:HB3	2.01	0.59
2:H:267:PHE:H	2:H:267:PHE:HD1	1.47	0.59
2:H:344:VAL:HG11	2:H:346:TRP:NE1	2.16	0.59
1:A:230:LEU:CD2	1:A:302:MET:HE2	2.31	0.59
1:C:102:ASN:ND2	1:C:407:TRP:O	2.35	0.59
1:C:114:LEU:HD23	1:C:149:MET:HE1	1.85	0.59
1:E:30:ILE:HD13	1:E:53:TYR:CE2	2.38	0.59
2:F:276:ILE:HD11	2:F:280:LYS:HD2	1.84	0.59
1:G:141:LEU:N	1:G:141:LEU:CD1	2.65	0.59
2:H:167:LEU:HA	2:H:200:CYS:O	2.01	0.59
2:H:413:MET:O	2:H:414:GLU:HG3	2.02	0.59
2:H:435:VAL:HG12	2:H:435:VAL:O	2.02	0.59
2:B:276:ILE:HD11	2:B:280:LYS:HD2	1.85	0.59
2:B:435:VAL:O	2:B:435:VAL:HG12	2.02	0.59
1:C:54:ASN:ND2	1:C:64:ARG:HD3	2.15	0.59
1:C:205:ASP:OD1	1:C:304:ALA:CB	2.50	0.59
1:C:230:LEU:CD2	1:C:302:MET:HE2	2.31	0.59
2:D:242:LEU:C	2:D:244:PHE:H	2.09	0.59
1:E:19:LYS:CG	1:E:228:ASN:HB3	2.31	0.59
2:F:217:LEU:HD11	2:F:277:SER:HA	1.82	0.59
2:F:435:VAL:O	2:F:435:VAL:HG12	2.02	0.59
1:G:30:ILE:HD13	1:G:53:TYR:CE2	2.38	0.59
1:G:324:SER:CB	1:G:327:GLU:HG2	2.30	0.59
2:H:229:ARG:NH1	2:H:363:VAL:HG21	2.16	0.59
2:H:371:VAL:HG12	2:H:372:GLN:N	2.17	0.59
1:A:30:ILE:HD13	1:A:53:TYR:CE2	2.38	0.59
1:A:114:LEU:HD23	1:A:149:MET:HE1	1.85	0.59
2:B:61:HIS:C	2:B:62:VAL:HG23	2.28	0.59
2:B:344:VAL:HG11	2:B:346:TRP:NE1	2.16	0.59
2:D:63:PRO:CD	2:D:87:PHE:HA	2.32	0.59
2:D:276:ILE:HD11	2:D:280:LYS:HD2	1.85	0.59
1:E:114:LEU:HD23	1:E:149:MET:HE1	1.85	0.59
2:F:155:GLU:HA	2:F:197:HIS:HD1	1.63	0.59
2:F:371:VAL:HG12	2:F:372:GLN:N	2.17	0.59
1:G:68:VAL:CG1	1:G:149:MET:SD	2.90	0.59
1:G:205:ASP:OD1	1:G:304:ALA:CB	2.50	0.59
2:H:276:ILE:HD11	2:H:280:LYS:HD2	1.85	0.59
1:A:205:ASP:OD1	1:A:304:ALA:CB	2.50	0.59
2:B:115:ILE:HD13	2:B:115:ILE:O	2.02	0.59
1:C:30:ILE:HD13	1:C:53:TYR:CE2	2.38	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:87:PHE:CD2	2:F:87:PHE:N	2.69	0.59
2:F:407:TRP:O	2:F:411:GLU:HG2	2.02	0.59
1:G:114:LEU:HD23	1:G:149:MET:HE1	1.85	0.59
2:B:242:LEU:C	2:B:244:PHE:H	2.09	0.59
2:B:339:ARG:C	2:B:341:ILE:H	2.11	0.59
1:C:424:ASN:HD22	1:C:424:ASN:C	2.09	0.59
2:F:115:ILE:O	2:F:115:ILE:HD13	2.02	0.59
2:F:167:LEU:HA	2:F:200:CYS:O	2.01	0.59
2:H:87:PHE:N	2:H:87:PHE:CD2	2.69	0.59
2:H:115:ILE:O	2:H:115:ILE:HD13	2.02	0.59
2:H:155:GLU:HA	2:H:197:HIS:HD1	1.63	0.59
1:A:89:PRO:HA	1:A:92:PHE:CD1	2.38	0.59
2:B:409:VAL:C	2:B:411:GLU:H	2.09	0.59
1:C:89:PRO:HA	1:C:92:PHE:CD1	2.38	0.59
2:D:119:LEU:CD2	2:D:122:ILE:HD11	2.28	0.59
2:D:339:ARG:C	2:D:341:ILE:H	2.11	0.59
1:E:49:ILE:O	1:E:51:VAL:N	2.35	0.59
1:E:68:VAL:CG1	1:E:149:MET:SD	2.90	0.59
1:E:141:LEU:CD1	1:E:141:LEU:N	2.65	0.59
2:F:119:LEU:O	2:F:122:ILE:HG12	2.02	0.59
2:H:119:LEU:O	2:H:122:ILE:HG12	2.02	0.59
2:B:115:ILE:HD13	2:B:115:ILE:C	2.28	0.59
2:B:317:LEU:HD11	2:B:351:PHE:CE2	2.38	0.59
1:C:183:GLU:HB3	1:C:184:PRO:CD	2.33	0.59
1:E:89:PRO:HA	1:E:92:PHE:CD1	2.38	0.59
1:E:324:SER:CB	1:E:327:GLU:HG2	2.30	0.59
1:G:49:ILE:O	1:G:51:VAL:N	2.35	0.59
1:G:183:GLU:HB3	1:G:184:PRO:CD	2.33	0.59
2:H:317:LEU:HD11	2:H:351:PHE:CE2	2.38	0.59
2:H:407:TRP:O	2:H:411:GLU:HG2	2.02	0.59
1:A:151:THR:OG1	1:A:193:GLN:HB3	2.03	0.59
1:C:151:THR:OG1	1:C:193:GLN:HB3	2.03	0.59
2:D:115:ILE:C	2:D:115:ILE:HD13	2.28	0.59
2:D:381:THR:C	2:D:383:ALA:N	2.56	0.59
1:E:230:LEU:CD2	1:E:302:MET:HE2	2.31	0.59
2:F:276:ILE:CG2	2:F:369:ALA:HB2	2.26	0.59
2:F:317:LEU:HD11	2:F:351:PHE:CE2	2.38	0.59
2:H:276:ILE:CG2	2:H:369:ALA:HB2	2.26	0.59
1:A:183:GLU:HB3	1:A:184:PRO:CD	2.33	0.58
1:C:349:ASN:O	2:D:181:VAL:HG13	2.03	0.58
2:D:115:ILE:HD13	2:D:115:ILE:O	2.02	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:369:ALA:O	2:D:370:LYS:HB3	2.03	0.58
1:E:194:LEU:C	1:E:196:GLU:H	2.11	0.58
2:F:349:THR:CG2	1:G:178:SER:C	2.72	0.58
1:G:194:LEU:C	1:G:196:GLU:H	2.11	0.58
2:H:217:LEU:HD11	2:H:277:SER:HA	1.83	0.58
2:B:260:VAL:HG22	1:C:407:TRP:HE1	1.67	0.58
2:D:119:LEU:O	2:D:122:ILE:HG12	2.02	0.58
1:E:183:GLU:HB3	1:E:184:PRO:CD	2.33	0.58
1:E:319:PHE:HA	1:E:375:ALA:HA	1.86	0.58
1:E:408:TYR:CG	1:E:418:PHE:HZ	2.20	0.58
2:F:202:PHE:CE2	2:F:378:LEU:HD22	2.38	0.58
1:G:230:LEU:CD2	1:G:302:MET:HE2	2.32	0.58
1:A:194:LEU:C	1:A:196:GLU:H	2.11	0.58
2:B:6:SER:HA	2:B:136:SER:O	2.03	0.58
2:B:119:LEU:CD2	2:B:122:ILE:HD11	2.28	0.58
1:C:70:LEU:H	1:C:145:THR:CG2	2.10	0.58
2:D:234:ILE:HB	2:D:302:MET:HE1	1.85	0.58
2:D:317:LEU:HD11	2:D:351:PHE:CE2	2.38	0.58
1:E:93:VAL:CG1	1:E:118:VAL:HG22	2.19	0.58
2:F:88:HIS:HB2	2:F:91:GLN:NE2	2.06	0.58
2:F:326:LYS:HB3	1:G:222:PRO:CD	2.33	0.58
2:F:339:ARG:C	2:F:341:ILE:H	2.11	0.58
1:G:89:PRO:HA	1:G:92:PHE:CD1	2.38	0.58
1:G:319:PHE:HA	1:G:375:ALA:HA	1.86	0.58
1:G:408:TYR:CG	1:G:418:PHE:HZ	2.20	0.58
3:I:130:ASP:HB3	3:I:131:ASN:CA	2.33	0.58
1:A:307:PRO:HB3	1:A:312:TYR:OH	2.03	0.58
1:A:424:ASN:C	1:A:424:ASN:HD22	2.09	0.58
2:B:119:LEU:O	2:B:122:ILE:HG12	2.02	0.58
2:B:369:ALA:O	2:B:370:LYS:HB3	2.03	0.58
1:C:68:VAL:CG1	1:C:149:MET:SD	2.90	0.58
1:C:270:PRO:HA	1:C:377:PHE:O	2.04	0.58
2:D:6:SER:HA	2:D:136:SER:O	2.03	0.58
2:D:202:PHE:CE2	2:D:378:LEU:HD22	2.38	0.58
2:H:115:ILE:HD13	2:H:115:ILE:C	2.28	0.58
2:H:202:PHE:CE2	2:H:378:LEU:HD22	2.38	0.58
1:A:172:VAL:CG1	1:A:387:LEU:HD21	2.24	0.58
1:A:270:PRO:HA	1:A:377:PHE:O	2.04	0.58
2:B:234:ILE:HB	2:B:302:MET:HE1	1.85	0.58
2:B:407:TRP:O	2:B:411:GLU:HG2	2.02	0.58
1:C:226:ASP:O	1:C:227:LEU:C	2.46	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:325:MET:HG2	2:D:224:TYR:CD1	2.37	0.58
2:F:6:SER:HA	2:F:136:SER:O	2.02	0.58
2:H:248:LEU:CD2	2:H:353:VAL:O	2.49	0.58
2:B:202:PHE:CE2	2:B:378:LEU:HD22	2.38	0.58
2:D:407:TRP:O	2:D:411:GLU:HG2	2.02	0.58
1:E:151:THR:OG1	1:E:193:GLN:HB3	2.04	0.58
2:F:115:ILE:HD13	2:F:115:ILE:C	2.28	0.58
2:F:324:VAL:CG1	1:G:221:THR:C	2.74	0.58
1:G:151:THR:OG1	1:G:193:GLN:HB3	2.03	0.58
2:H:6:SER:HA	2:H:136:SER:O	2.03	0.58
2:H:339:ARG:C	2:H:341:ILE:H	2.11	0.58
1:A:19:LYS:CG	1:A:228:ASN:HB3	2.31	0.58
1:A:299:LYS:O	1:A:300:ASN:CB	2.51	0.58
2:B:63:PRO:HG3	2:B:87:PHE:CB	2.34	0.58
1:C:194:LEU:C	1:C:196:GLU:H	2.11	0.58
2:D:264:ARG:HB2	2:D:266:HIS:HD2	1.67	0.58
2:F:248:LEU:CD2	2:F:353:VAL:O	2.49	0.58
1:G:352:LYS:HD2	2:H:181:VAL:CG2	2.11	0.58
2:H:369:ALA:O	2:H:370:LYS:HB3	2.03	0.58
3:I:134:LYS:HD3	3:I:136:VAL:CA	2.33	0.58
1:A:88:ARG:CZ	1:E:283:TYR:HE1	2.17	0.58
2:B:51:THR:O	2:B:52:PHE:CD1	2.57	0.58
1:C:19:LYS:CG	1:C:228:ASN:HB3	2.31	0.58
2:D:150:THR:O	2:D:151:SER:C	2.47	0.58
2:F:264:ARG:HB2	2:F:266:HIS:HD2	1.67	0.58
2:H:88:HIS:HB2	2:H:91:GLN:NE2	2.06	0.58
1:A:226:ASP:O	1:A:227:LEU:C	2.46	0.58
2:B:110:ILE:CG2	2:B:111:GLY:H	2.15	0.58
2:B:165:SER:HA	2:B:199:ASP:OD2	2.04	0.58
2:B:248:LEU:CD2	2:B:353:VAL:O	2.49	0.58
2:B:268:PRO:HA	2:B:379:SER:O	2.04	0.58
1:C:180:THR:CG2	1:C:181:VAL:H	2.17	0.58
1:C:307:PRO:HB3	1:C:312:TYR:OH	2.04	0.58
2:D:196:GLU:C	2:D:197:HIS:CD2	2.82	0.58
1:G:299:LYS:O	1:G:300:ASN:CB	2.51	0.58
2:D:248:LEU:CD2	2:D:353:VAL:O	2.49	0.58
2:D:345:ASP:O	2:D:347:CYS:N	2.37	0.58
2:F:165:SER:HA	2:F:199:ASP:OD2	2.04	0.58
2:F:369:ALA:O	2:F:370:LYS:HB3	2.03	0.58
2:H:264:ARG:HB2	2:H:266:HIS:HD2	1.67	0.58
2:B:62:VAL:HG13	2:B:63:PRO:HD2	1.78	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:345:ASP:O	2:B:347:CYS:N	2.37	0.57
1:C:299:LYS:O	1:C:300:ASN:CB	2.51	0.57
2:D:165:SER:HA	2:D:199:ASP:OD2	2.04	0.57
2:D:218:ASP:O	2:D:219:ILE:HG23	2.04	0.57
1:E:301:MET:CE	1:E:377:PHE:HE2	2.17	0.57
2:F:30:ILE:HD13	2:F:61:HIS:CG	2.38	0.57
2:F:218:ASP:O	2:F:219:ILE:HG23	2.04	0.57
2:F:268:PRO:HA	2:F:379:SER:O	2.03	0.57
2:H:218:ASP:O	2:H:219:ILE:HG23	2.04	0.57
1:A:70:LEU:H	1:A:145:THR:CG2	2.10	0.57
1:A:180:THR:CG2	1:A:181:VAL:H	2.17	0.57
1:A:198:THR:HG22	1:A:265:LEU:HD22	1.86	0.57
2:D:5:ILE:HD12	2:D:64:ARG:HH12	1.69	0.57
2:D:67:PHE:CZ	2:D:87:PHE:CE1	2.92	0.57
2:D:215:ARG:C	2:D:216:ASN:HD22	2.12	0.57
1:E:299:LYS:O	1:E:300:ASN:CB	2.51	0.57
1:E:320:ARG:O	1:E:359:PRO:HA	2.04	0.57
2:F:338:LYS:O	2:F:340:THR:N	2.34	0.57
2:H:268:PRO:HA	2:H:379:SER:O	2.04	0.57
2:B:215:ARG:C	2:B:216:ASN:HD22	2.12	0.57
2:F:150:THR:O	2:F:151:SER:C	2.47	0.57
1:G:301:MET:CE	1:G:377:PHE:HE2	2.18	0.57
1:G:324:SER:C	1:G:326:LYS:N	2.59	0.57
2:H:139:HIS:CE1	2:H:170:SER:HB3	2.40	0.57
1:A:68:VAL:CG1	1:A:149:MET:SD	2.90	0.57
1:A:229:HIS:C	1:A:229:HIS:ND1	2.62	0.57
2:B:2:ARG:N	2:B:131:GLY:O	2.36	0.57
2:B:67:PHE:CZ	2:B:87:PHE:CE1	2.92	0.57
2:B:117:LEU:HD11	2:B:121:ARG:HH22	1.69	0.57
2:B:150:THR:O	2:B:151:SER:C	2.47	0.57
2:B:196:GLU:C	2:B:197:HIS:CD2	2.82	0.57
2:B:264:ARG:HB2	2:B:266:HIS:HD2	1.67	0.57
1:C:6:HIS:HB3	1:C:65:ALA:HB2	1.87	0.57
1:C:149:MET:O	1:C:153:LEU:HD13	2.04	0.57
2:D:268:PRO:HA	2:D:379:SER:O	2.04	0.57
1:E:6:HIS:HB3	1:E:65:ALA:HB2	1.87	0.57
1:E:149:MET:O	1:E:153:LEU:HD13	2.04	0.57
1:E:226:ASP:O	1:E:227:LEU:C	2.46	0.57
1:G:149:MET:O	1:G:153:LEU:HD13	2.05	0.57
1:G:226:ASP:O	1:G:227:LEU:C	2.46	0.57
2:B:139:HIS:CE1	2:B:170:SER:HB3	2.40	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:218:ASP:O	2:B:219:ILE:HG23	2.04	0.57
2:B:313:MET:O	2:B:314:ALA:HB2	2.04	0.57
1:E:14:ASN:OD1	1:E:75:MET:HG2	2.05	0.57
1:E:270:PRO:HA	1:E:377:PHE:O	2.04	0.57
1:E:274:PRO:CG	1:E:371:LEU:HD21	2.34	0.57
2:F:67:PHE:CZ	2:F:87:PHE:CE1	2.92	0.57
2:F:139:HIS:CE1	2:F:170:SER:HB3	2.40	0.57
2:F:234:ILE:HB	2:F:302:MET:HE1	1.85	0.57
1:G:93:VAL:CG1	1:G:118:VAL:HG22	2.19	0.57
1:G:320:ARG:O	1:G:359:PRO:HA	2.04	0.57
2:H:2:ARG:N	2:H:131:GLY:O	2.36	0.57
2:H:5:ILE:HD12	2:H:64:ARG:HH12	1.68	0.57
2:H:165:SER:HA	2:H:199:ASP:OD2	2.04	0.57
3:I:63:ARG:HB3	3:I:138:TYR:CD1	2.40	0.57
1:A:6:HIS:HB3	1:A:65:ALA:HB2	1.87	0.57
1:A:149:MET:O	1:A:153:LEU:HD13	2.05	0.57
2:B:56:THR:CB	2:F:284:GLU:HG3	2.35	0.57
1:C:198:THR:HG22	1:C:265:LEU:HD22	1.86	0.57
1:C:229:HIS:ND1	1:C:229:HIS:C	2.62	0.57
1:C:248:LEU:CD2	2:D:179:THR:CG2	2.82	0.57
2:D:63:PRO:HG2	2:D:87:PHE:HA	1.86	0.57
2:D:216:ASN:O	2:D:217:LEU:HB2	2.05	0.57
2:F:5:ILE:HD12	2:F:64:ARG:HH12	1.68	0.57
2:F:313:MET:O	2:F:314:ALA:HB2	2.04	0.57
1:G:5:VAL:CG2	1:G:135:PHE:HD2	2.18	0.57
1:G:6:HIS:HB3	1:G:65:ALA:HB2	1.87	0.57
2:H:234:ILE:HB	2:H:302:MET:HE1	1.85	0.57
2:B:216:ASN:O	2:B:217:LEU:HB2	2.05	0.57
1:C:30:ILE:HA	1:C:35:SER:O	2.05	0.57
2:D:117:LEU:HD11	2:D:121:ARG:HH22	1.69	0.57
2:D:139:HIS:CE1	2:D:170:SER:HB3	2.40	0.57
2:D:313:MET:O	2:D:314:ALA:HB2	2.04	0.57
1:E:324:SER:C	1:E:326:LYS:N	2.59	0.57
2:F:2:ARG:N	2:F:131:GLY:O	2.36	0.57
2:F:110:ILE:CG2	2:F:111:GLY:H	2.15	0.57
1:G:14:ASN:OD1	1:G:75:MET:HG2	2.05	0.57
1:G:257:VAL:CG2	1:G:257:VAL:O	2.50	0.57
2:H:150:THR:O	2:H:151:SER:C	2.47	0.57
1:A:209:LEU:O	1:A:210:TYR:C	2.48	0.57
1:A:301:MET:CE	1:A:377:PHE:HE2	2.17	0.57
2:B:166:LYS:HD2	2:B:197:HIS:O	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:209:ILE:CG2	2:D:227:LEU:HD22	2.35	0.57
1:E:307:PRO:HB3	1:E:312:TYR:OH	2.04	0.57
2:F:117:LEU:HD11	2:F:121:ARG:HH22	1.69	0.57
2:F:175:PRO:HG3	2:F:304:LYS:CG	2.35	0.57
2:F:196:GLU:C	2:F:197:HIS:CD2	2.82	0.57
2:F:209:ILE:CG2	2:F:227:LEU:HD22	2.35	0.57
2:H:166:LYS:HD2	2:H:197:HIS:O	2.04	0.57
2:H:175:PRO:HG3	2:H:304:LYS:CG	2.35	0.57
2:H:209:ILE:CG2	2:H:227:LEU:HD22	2.35	0.57
2:H:215:ARG:C	2:H:216:ASN:HD22	2.12	0.57
2:H:338:LYS:O	2:H:340:THR:N	2.34	0.57
1:A:422:GLU:O	1:A:426:ASN:N	2.37	0.57
2:B:175:PRO:HG3	2:B:304:LYS:CG	2.35	0.57
1:C:5:VAL:CG2	1:C:135:PHE:HD2	2.18	0.57
2:D:166:LYS:HD2	2:D:197:HIS:O	2.04	0.57
1:E:5:VAL:CG2	1:E:135:PHE:HD2	2.18	0.57
1:E:422:GLU:O	1:E:426:ASN:N	2.37	0.57
2:F:215:ARG:C	2:F:216:ASN:HD22	2.12	0.57
1:G:198:THR:HG22	1:G:265:LEU:HD22	1.85	0.57
1:G:229:HIS:C	1:G:229:HIS:ND1	2.61	0.57
1:G:257:VAL:O	2:H:404:PHE:HD2	1.88	0.57
1:G:274:PRO:CG	1:G:371:LEU:HD21	2.34	0.57
1:G:319:PHE:CD2	1:G:375:ALA:HB2	2.40	0.57
1:G:422:GLU:O	1:G:426:ASN:N	2.37	0.57
2:H:110:ILE:CG2	2:H:111:GLY:H	2.15	0.57
2:H:196:GLU:C	2:H:197:HIS:CD2	2.82	0.57
2:H:210:TYR:CE2	2:H:227:LEU:HD11	2.40	0.57
2:H:313:MET:O	2:H:314:ALA:HB2	2.04	0.57
1:A:5:VAL:CG2	1:A:135:PHE:HD2	2.18	0.57
1:A:30:ILE:HA	1:A:35:SER:O	2.04	0.57
2:B:209:ILE:CG2	2:B:227:LEU:HD22	2.35	0.57
2:B:333:ALA:HA	1:C:177:VAL:HG21	1.84	0.57
2:B:362:VAL:HG11	2:B:368:LEU:O	2.04	0.57
1:C:259:MET:CA	1:C:314:THR:HG21	2.35	0.57
1:C:312:TYR:O	1:C:344:VAL:HB	2.05	0.57
2:D:2:ARG:N	2:D:131:GLY:O	2.36	0.57
2:D:210:TYR:CE2	2:D:227:LEU:HD11	2.40	0.57
2:D:239:THR:O	2:D:240:ALA:C	2.48	0.57
2:D:362:VAL:HG11	2:D:368:LEU:O	2.04	0.57
2:F:166:LYS:HD2	2:F:197:HIS:O	2.04	0.57
2:F:210:TYR:CE2	2:F:227:LEU:HD11	2.40	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:216:ASN:O	2:F:217:LEU:HB2	2.05	0.57
1:G:270:PRO:HA	1:G:377:PHE:O	2.04	0.57
1:G:307:PRO:HB3	1:G:312:TYR:OH	2.04	0.57
3:I:57:PHE:CE2	3:I:87:LEU:HD11	2.40	0.57
1:A:14:ASN:OD1	1:A:75:MET:HG2	2.05	0.56
1:C:273:ALA:CB	1:C:274:PRO:HD3	2.30	0.56
2:D:175:PRO:HG3	2:D:304:LYS:CG	2.35	0.56
2:D:362:VAL:CG1	2:D:368:LEU:HB2	2.35	0.56
1:E:50:ASN:O	1:E:64:ARG:NH2	2.38	0.56
1:E:198:THR:HG22	1:E:265:LEU:HD22	1.85	0.56
1:E:229:HIS:C	1:E:229:HIS:ND1	2.62	0.56
1:E:319:PHE:CD2	1:E:375:ALA:HB2	2.40	0.56
2:F:152:LEU:HA	2:F:155:GLU:CB	2.35	0.56
1:G:2:ARG:HH21	2:H:99:ALA:H	1.50	0.56
1:G:424:ASN:C	1:G:424:ASN:ND2	2.62	0.56
2:H:67:PHE:CZ	2:H:87:PHE:CE1	2.92	0.56
2:H:117:LEU:HD11	2:H:121:ARG:HH22	1.69	0.56
2:H:216:ASN:O	2:H:217:LEU:HB2	2.05	0.56
2:H:345:ASP:O	2:H:347:CYS:N	2.37	0.56
1:A:312:TYR:O	1:A:344:VAL:HB	2.05	0.56
2:B:88:HIS:HB2	2:B:91:GLN:NE2	2.06	0.56
2:B:210:TYR:CE2	2:B:227:LEU:HD11	2.41	0.56
2:B:362:VAL:CG1	2:B:368:LEU:HB2	2.35	0.56
1:C:14:ASN:OD1	1:C:75:MET:HG2	2.05	0.56
1:C:301:MET:CE	1:C:377:PHE:HE2	2.18	0.56
1:E:180:THR:CG2	1:E:181:VAL:H	2.17	0.56
2:F:345:ASP:O	2:F:347:CYS:N	2.38	0.56
1:G:50:ASN:O	1:G:64:ARG:NH2	2.38	0.56
1:G:209:LEU:O	1:G:210:TYR:C	2.48	0.56
1:G:272:PHE:HB3	1:G:275:LEU:HD22	1.88	0.56
2:H:382:THR:O	2:H:382:THR:HG22	2.05	0.56
1:A:272:PHE:HB3	1:A:275:LEU:HD22	1.88	0.56
1:A:274:PRO:CG	1:A:371:LEU:HD21	2.34	0.56
1:A:345:GLU:C	1:A:347:ILE:H	2.13	0.56
2:B:239:THR:O	2:B:240:ALA:C	2.48	0.56
1:C:191:VAL:HA	1:C:194:LEU:HD12	1.87	0.56
1:C:209:LEU:O	1:C:210:TYR:C	2.48	0.56
1:C:274:PRO:CG	1:C:371:LEU:HD21	2.35	0.56
1:C:345:GLU:C	1:C:347:ILE:H	2.13	0.56
1:C:422:GLU:O	1:C:426:ASN:N	2.37	0.56
2:D:152:LEU:HA	2:D:155:GLU:CB	2.35	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:338:LYS:O	2:D:340:THR:N	2.34	0.56
1:E:139:HIS:HE1	1:E:168:THR:HG23	1.70	0.56
1:E:209:LEU:O	1:E:210:TYR:C	2.48	0.56
2:F:382:THR:HG22	2:F:382:THR:O	2.06	0.56
1:G:30:ILE:HA	1:G:35:SER:O	2.04	0.56
1:G:128:SER:OG	1:G:129:CYS:N	2.34	0.56
1:G:165:ILE:H	1:G:165:ILE:HD13	1.71	0.56
1:G:180:THR:CG2	1:G:181:VAL:H	2.17	0.56
2:H:152:LEU:HA	2:H:155:GLU:CB	2.35	0.56
3:I:60:ASN:HD22	3:I:131:ASN:HB3	1.69	0.56
1:A:70:LEU:CD1	1:A:145:THR:HG23	2.35	0.56
1:A:273:ALA:CB	1:A:274:PRO:HD3	2.30	0.56
1:A:319:PHE:HA	1:A:375:ALA:HA	1.86	0.56
1:A:320:ARG:O	1:A:359:PRO:HA	2.04	0.56
2:B:56:THR:O	2:F:284:GLU:CB	2.53	0.56
2:B:382:THR:O	2:B:382:THR:HG22	2.06	0.56
1:C:49:ILE:O	1:C:50:ASN:C	2.48	0.56
1:C:254:LYS:NZ	2:D:101:ASN:CG	2.62	0.56
2:D:209:ILE:HG22	2:D:227:LEU:HD22	1.88	0.56
1:E:70:LEU:CD1	1:E:145:THR:HG23	2.35	0.56
1:E:251:ASP:O	1:E:252:LEU:C	2.49	0.56
1:E:272:PHE:HB3	1:E:275:LEU:HD22	1.88	0.56
1:E:345:GLU:C	1:E:347:ILE:H	2.13	0.56
2:F:349:THR:HG21	1:G:178:SER:O	2.05	0.56
2:F:388:TRP:CE3	2:F:388:TRP:HA	2.41	0.56
1:G:251:ASP:O	1:G:252:LEU:C	2.49	0.56
1:G:312:TYR:O	1:G:344:VAL:HB	2.05	0.56
1:G:352:LYS:CA	2:H:181:VAL:HG22	2.24	0.56
2:H:63:PRO:HG2	2:H:87:PHE:HA	1.86	0.56
2:H:388:TRP:CE3	2:H:388:TRP:HA	2.41	0.56
1:A:182:VAL:HG23	1:A:186:ASN:ND2	2.20	0.56
1:A:259:MET:CA	1:A:314:THR:HG21	2.35	0.56
2:B:331:ALA:O	2:B:334:THR:HG22	2.05	0.56
2:B:349:THR:O	1:C:181:VAL:HG13	2.05	0.56
2:B:388:TRP:CE3	2:B:388:TRP:HA	2.41	0.56
1:C:182:VAL:HG23	1:C:186:ASN:ND2	2.20	0.56
1:C:216:THR:O	1:C:217:LEU:HD12	2.05	0.56
1:E:30:ILE:HA	1:E:35:SER:O	2.05	0.56
1:G:70:LEU:CD1	1:G:145:THR:HG23	2.35	0.56
1:G:253:ARG:O	1:G:257:VAL:N	2.33	0.56
2:H:244:PHE:C	2:H:244:PHE:CD2	2.83	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:362:VAL:HG11	2:H:368:LEU:O	2.04	0.56
1:A:216:THR:O	1:A:217:LEU:HD12	2.05	0.56
1:A:424:ASN:C	1:A:424:ASN:ND2	2.62	0.56
2:B:277:SER:O	2:B:280:LYS:HB2	2.06	0.56
2:B:338:LYS:O	2:B:340:THR:N	2.34	0.56
1:C:108:TYR:CE1	1:C:413:MET:HE1	2.40	0.56
1:C:272:PHE:HB3	1:C:275:LEU:HD22	1.88	0.56
1:C:319:PHE:HA	1:C:375:ALA:HA	1.86	0.56
1:C:320:ARG:O	1:C:359:PRO:HA	2.04	0.56
2:D:57:GLY:HA3	2:D:58:ALA:HB2	0.66	0.56
2:D:88:HIS:HB2	2:D:91:GLN:NE2	2.06	0.56
2:D:331:ALA:O	2:D:334:THR:HG22	2.05	0.56
2:D:382:THR:O	2:D:382:THR:HG22	2.05	0.56
2:D:388:TRP:CE3	2:D:388:TRP:HA	2.41	0.56
1:E:311:ARG:HD2	1:E:344:VAL:H	1.71	0.56
1:E:312:TYR:O	1:E:344:VAL:HB	2.05	0.56
1:E:424:ASN:C	1:E:424:ASN:ND2	2.61	0.56
2:F:3:GLU:HG3	2:F:51:THR:HA	1.74	0.56
2:F:63:PRO:HG2	2:F:87:PHE:HA	1.86	0.56
2:F:253:THR:O	2:F:256:GLN:HG2	2.06	0.56
1:G:49:ILE:O	1:G:50:ASN:C	2.48	0.56
1:G:345:GLU:C	1:G:347:ILE:H	2.13	0.56
1:A:49:ILE:O	1:A:50:ASN:C	2.49	0.56
1:A:50:ASN:O	1:A:64:ARG:NH2	2.38	0.56
1:A:165:ILE:H	1:A:165:ILE:HD13	1.71	0.56
1:A:319:PHE:CD2	1:A:375:ALA:HB2	2.40	0.56
1:C:50:ASN:O	1:C:64:ARG:NH2	2.38	0.56
1:C:311:ARG:HG2	1:C:311:ARG:HH11	1.71	0.56
1:E:165:ILE:HD13	1:E:165:ILE:H	1.71	0.56
2:F:408:TYR:CD1	2:F:418:PHE:HZ	2.24	0.56
1:G:139:HIS:HE1	1:G:168:THR:HG23	1.71	0.56
1:G:259:MET:CA	1:G:314:THR:HG21	2.35	0.56
2:H:16:ILE:HD12	2:H:171:ILE:HD11	1.87	0.56
2:H:24:TYR:OH	2:H:239:THR:OG1	2.24	0.56
2:H:253:THR:O	2:H:256:GLN:HG2	2.06	0.56
2:H:362:VAL:CG1	2:H:368:LEU:HB2	2.35	0.56
2:H:408:TYR:CD1	2:H:418:PHE:HZ	2.24	0.56
1:A:108:TYR:CE1	1:A:413:MET:HE1	2.40	0.56
1:A:191:VAL:HA	1:A:194:LEU:HD12	1.88	0.56
2:B:152:LEU:HA	2:B:155:GLU:CB	2.35	0.56
1:C:147:SER:O	1:C:151:THR:CB	2.51	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:424:ASN:C	1:C:424:ASN:ND2	2.61	0.56
2:D:277:SER:O	2:D:280:LYS:HB2	2.06	0.56
1:E:108:TYR:CE1	1:E:413:MET:HE1	2.40	0.56
1:E:223:THR:HG22	1:E:224:TYR:N	2.21	0.56
2:F:19:ALA:CB	2:F:228:ASN:HB3	2.35	0.56
2:F:244:PHE:C	2:F:244:PHE:CD2	2.84	0.56
2:F:362:VAL:HG11	2:F:368:LEU:O	2.04	0.56
1:G:108:TYR:CE1	1:G:413:MET:HE1	2.40	0.56
1:G:311:ARG:HG2	1:G:311:ARG:HH11	1.71	0.56
1:G:311:ARG:HD2	1:G:344:VAL:H	1.71	0.56
2:H:209:ILE:HG22	2:H:227:LEU:HD22	1.88	0.56
3:I:134:LYS:HB3	3:I:136:VAL:N	2.20	0.56
1:A:119:LEU:O	1:A:123:ARG:HG3	2.06	0.56
1:A:311:ARG:HG2	1:A:311:ARG:HH11	1.71	0.56
2:B:209:ILE:HG22	2:B:227:LEU:HD22	1.88	0.56
2:B:231:ILE:HA	2:B:234:ILE:CG2	2.36	0.56
1:C:139:HIS:HE1	1:C:168:THR:HG23	1.70	0.56
1:C:319:PHE:CD2	1:C:375:ALA:HB2	2.40	0.56
1:E:19:LYS:O	1:E:23:VAL:HG23	2.06	0.56
1:E:49:ILE:O	1:E:50:ASN:C	2.48	0.56
1:E:259:MET:CA	1:E:314:THR:HG21	2.35	0.56
1:E:311:ARG:HG2	1:E:311:ARG:HH11	1.71	0.56
2:F:16:ILE:HD12	2:F:171:ILE:HD11	1.87	0.56
2:F:209:ILE:HG22	2:F:227:LEU:HD22	1.88	0.56
2:F:231:ILE:HA	2:F:234:ILE:CG2	2.36	0.56
2:F:362:VAL:CG1	2:F:368:LEU:HB2	2.35	0.56
1:G:216:THR:O	1:G:217:LEU:HD12	2.05	0.56
2:H:19:ALA:CB	2:H:228:ASN:HB3	2.35	0.56
2:H:231:ILE:HA	2:H:234:ILE:CG2	2.36	0.56
3:I:56:ARG:HD2	3:I:146:TRP:CD1	2.40	0.56
1:A:166:MET:HB3	1:A:198:THR:OG1	2.06	0.56
1:A:251:ASP:O	1:A:252:LEU:C	2.49	0.56
1:C:165:ILE:HD13	1:C:165:ILE:H	1.71	0.56
1:C:166:MET:HB3	1:C:198:THR:OG1	2.06	0.56
1:E:210:TYR:HD2	1:E:227:LEU:HD21	1.71	0.56
2:F:24:TYR:OH	2:F:239:THR:OG1	2.24	0.56
2:F:239:THR:O	2:F:240:ALA:C	2.48	0.56
1:G:19:LYS:O	1:G:23:VAL:HG23	2.06	0.56
1:G:151:THR:OG1	1:G:193:GLN:CB	2.54	0.56
1:G:191:VAL:HA	1:G:194:LEU:HD12	1.87	0.56
1:G:210:TYR:HD2	1:G:227:LEU:HD21	1.71	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:223:THR:HG22	1:G:224:TYR:N	2.21	0.56
3:I:128:SER:CB	3:I:131:ASN:HB2	2.33	0.56
2:B:16:ILE:HD12	2:B:171:ILE:HD11	1.88	0.55
2:B:408:TYR:CD1	2:B:418:PHE:HZ	2.24	0.55
1:C:70:LEU:CD1	1:C:145:THR:HG23	2.35	0.55
1:C:251:ASP:O	1:C:252:LEU:C	2.49	0.55
2:D:3:GLU:HG3	2:D:51:THR:HA	1.75	0.55
2:D:19:ALA:CB	2:D:228:ASN:HB3	2.35	0.55
2:D:276:ILE:O	2:D:369:ALA:CB	2.53	0.55
1:E:190:SER:O	1:E:194:LEU:HG	2.06	0.55
1:E:250:ALA:CA	1:E:254:LYS:HE2	2.36	0.55
1:E:253:ARG:O	1:E:257:VAL:N	2.33	0.55
2:F:381:THR:C	2:F:383:ALA:N	2.56	0.55
1:G:182:VAL:HG23	1:G:186:ASN:ND2	2.20	0.55
1:A:151:THR:OG1	1:A:193:GLN:CB	2.54	0.55
1:A:204:ILE:HG21	1:A:231:VAL:CG2	2.36	0.55
2:B:348:PRO:HD3	1:C:398:MET:HE2	1.83	0.55
1:C:119:LEU:O	1:C:123:ARG:HG3	2.06	0.55
1:C:223:THR:HG22	1:C:224:TYR:N	2.21	0.55
2:D:16:ILE:HD12	2:D:171:ILE:HD11	1.88	0.55
2:D:150:THR:O	2:D:153:LEU:N	2.40	0.55
2:D:231:ILE:HA	2:D:234:ILE:CG2	2.36	0.55
1:E:119:LEU:O	1:E:123:ARG:HG3	2.06	0.55
2:F:329:ASN:HB3	1:G:210:TYR:CZ	2.35	0.55
1:G:190:SER:O	1:G:194:LEU:HG	2.06	0.55
2:H:239:THR:O	2:H:240:ALA:C	2.48	0.55
1:A:19:LYS:O	1:A:23:VAL:HG23	2.06	0.55
2:B:150:THR:O	2:B:153:LEU:N	2.40	0.55
2:B:329:ASN:HB3	1:C:210:TYR:HE1	1.70	0.55
1:C:19:LYS:O	1:C:23:VAL:HG23	2.06	0.55
1:C:311:ARG:HD2	1:C:344:VAL:H	1.71	0.55
2:D:408:TYR:CD1	2:D:418:PHE:HZ	2.24	0.55
1:E:166:MET:HB3	1:E:198:THR:OG1	2.06	0.55
1:E:216:THR:O	1:E:217:LEU:HD12	2.05	0.55
2:F:264:ARG:C	2:F:266:HIS:N	2.60	0.55
2:F:276:ILE:O	2:F:369:ALA:CB	2.52	0.55
1:G:204:ILE:HD13	1:G:231:VAL:HG13	1.89	0.55
2:H:217:LEU:CD1	2:H:277:SER:CB	2.54	0.55
2:H:276:ILE:O	2:H:369:ALA:CB	2.53	0.55
1:A:204:ILE:HD13	1:A:231:VAL:HG13	1.89	0.55
2:B:19:ALA:CB	2:B:228:ASN:HB3	2.35	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:67:LEU:HD23	1:C:67:LEU:N	2.22	0.55
1:C:204:ILE:HG21	1:C:231:VAL:CG2	2.36	0.55
1:E:204:ILE:HD13	1:E:231:VAL:HG13	1.89	0.55
2:F:150:THR:O	2:F:153:LEU:N	2.40	0.55
2:F:217:LEU:CD1	2:F:277:SER:CB	2.54	0.55
1:G:245:PRO:HG3	2:H:73:THR:HG23	1.87	0.55
1:A:4:ILE:HD13	1:A:136:GLN:NE2	2.18	0.55
1:A:223:THR:HG22	1:A:224:TYR:N	2.21	0.55
1:A:298:ALA:O	1:A:299:LYS:C	2.50	0.55
1:A:311:ARG:HD2	1:A:344:VAL:H	1.71	0.55
2:B:64:ARG:HG3	2:B:64:ARG:O	2.07	0.55
1:C:2:ARG:NH2	2:D:98:ASP:HA	2.22	0.55
2:D:30:ILE:HD13	2:D:61:HIS:CG	2.41	0.55
2:D:64:ARG:HG3	2:D:64:ARG:O	2.07	0.55
1:E:182:VAL:HG23	1:E:186:ASN:ND2	2.20	0.55
1:E:191:VAL:HA	1:E:194:LEU:HD12	1.88	0.55
2:F:5:ILE:HG22	2:F:135:PHE:CD2	2.40	0.55
1:G:119:LEU:O	1:G:123:ARG:HG3	2.06	0.55
1:G:298:ALA:O	1:G:299:LYS:C	2.50	0.55
2:H:3:GLU:HG3	2:H:51:THR:HA	1.75	0.55
1:A:67:LEU:HD23	1:A:67:LEU:N	2.22	0.55
1:A:139:HIS:HE1	1:A:168:THR:HG23	1.71	0.55
2:B:346:TRP:HB3	1:C:401:ARG:HG3	1.89	0.55
1:C:4:ILE:HD13	1:C:136:GLN:NE2	2.18	0.55
1:C:151:THR:OG1	1:C:193:GLN:CB	2.54	0.55
1:C:204:ILE:HD13	1:C:231:VAL:HG13	1.89	0.55
1:C:253:ARG:O	1:C:257:VAL:N	2.33	0.55
1:C:310:GLY:CA	1:C:436:GLN:HE21	2.19	0.55
1:E:151:THR:OG1	1:E:193:GLN:CB	2.54	0.55
1:G:166:MET:HB3	1:G:198:THR:OG1	2.06	0.55
2:H:150:THR:O	2:H:153:LEU:N	2.40	0.55
1:A:147:SER:O	1:A:151:THR:CB	2.51	0.55
1:A:259:MET:CG	1:A:314:THR:HG21	2.36	0.55
1:A:310:GLY:CA	1:A:436:GLN:HE21	2.19	0.55
2:B:346:TRP:HB3	1:C:401:ARG:CG	2.36	0.55
2:D:264:ARG:C	2:D:266:HIS:N	2.60	0.55
1:E:67:LEU:HD23	1:E:67:LEU:N	2.22	0.55
1:E:298:ALA:O	1:E:299:LYS:C	2.50	0.55
2:F:331:ALA:O	2:F:334:THR:HG22	2.05	0.55
1:G:297:ASP:OD1	1:G:298:ALA:N	2.39	0.55
2:H:277:SER:O	2:H:280:LYS:HB2	2.06	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2:ARG:HH22	2:D:99:ALA:H	1.54	0.55
1:C:259:MET:CG	1:C:314:THR:HG21	2.36	0.55
1:E:297:ASP:OD1	1:E:298:ALA:N	2.39	0.55
2:F:30:ILE:HG23	2:F:34:GLY:O	2.07	0.55
2:F:64:ARG:HG3	2:F:64:ARG:O	2.06	0.55
2:F:258:ASN:OD1	1:G:180:THR:HG23	2.06	0.55
1:G:67:LEU:HD23	1:G:67:LEU:N	2.22	0.55
1:G:273:ALA:CB	1:G:274:PRO:HD3	2.31	0.55
2:H:264:ARG:C	2:H:266:HIS:N	2.60	0.55
2:H:331:ALA:O	2:H:334:THR:HG22	2.05	0.55
2:B:276:ILE:O	2:B:369:ALA:CB	2.53	0.55
1:C:325:MET:O	1:C:329:ASP:HB2	2.07	0.55
2:F:118:VAL:HG21	2:F:149:PHE:CZ	2.42	0.55
2:H:5:ILE:HG22	2:H:135:PHE:CD2	2.40	0.55
2:H:30:ILE:HG23	2:H:34:GLY:O	2.07	0.55
3:I:128:SER:HA	3:I:131:ASN:ND2	2.22	0.55
1:A:273:ALA:HB3	1:A:274:PRO:CD	2.29	0.55
1:A:325:MET:O	1:A:329:ASP:HB2	2.07	0.55
1:E:147:SER:O	1:E:151:THR:CB	2.51	0.55
2:F:30:ILE:O	2:F:30:ILE:HG22	2.07	0.55
2:F:277:SER:O	2:F:280:LYS:HB2	2.06	0.55
2:F:305:CYS:O	2:F:306:ASP:C	2.49	0.55
2:H:64:ARG:HG3	2:H:64:ARG:O	2.07	0.55
2:H:102:ASN:ND2	2:H:407:TRP:NE1	2.52	0.55
2:H:305:CYS:O	2:H:306:ASP:C	2.49	0.55
1:A:239:THR:O	1:A:241:CYS:N	2.41	0.54
1:C:5:VAL:HG22	1:C:135:PHE:CD2	2.42	0.54
1:E:239:THR:HG22	1:E:240:THR:N	2.22	0.54
1:E:257:VAL:HA	2:F:407:TRP:CE2	2.42	0.54
2:F:288:VAL:HG22	2:F:373:ARG:NH1	2.22	0.54
1:G:204:ILE:HG21	1:G:231:VAL:CG2	2.36	0.54
1:A:190:SER:O	1:A:194:LEU:HG	2.06	0.54
2:B:253:THR:O	2:B:256:GLN:HG2	2.06	0.54
2:B:288:VAL:HG22	2:B:373:ARG:NH1	2.23	0.54
2:D:6:SER:O	2:D:65:ALA:HB1	2.07	0.54
2:D:253:THR:O	2:D:256:GLN:HG2	2.06	0.54
1:E:204:ILE:HG21	1:E:231:VAL:CG2	2.36	0.54
1:E:310:GLY:CA	1:E:436:GLN:HE21	2.19	0.54
2:F:17:GLY:O	2:F:21:TRP:HB2	2.08	0.54
1:G:239:THR:HG22	1:G:240:THR:N	2.22	0.54
1:G:259:MET:CG	1:G:314:THR:HG21	2.36	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:118:VAL:HG21	2:H:149:PHE:CZ	2.42	0.54
3:I:135:LYS:HG3	3:I:136:VAL:N	2.22	0.54
1:A:5:VAL:HG22	1:A:135:PHE:CD2	2.42	0.54
1:A:369:ARG:HD2	1:A:369:ARG:C	2.32	0.54
2:B:17:GLY:O	2:B:21:TRP:HB2	2.08	0.54
2:B:30:ILE:HG23	2:B:34:GLY:O	2.07	0.54
2:B:264:ARG:C	2:B:266:HIS:N	2.60	0.54
1:C:190:SER:O	1:C:194:LEU:HG	2.07	0.54
1:C:383:ALA:C	1:C:385:GLN:H	2.15	0.54
2:D:17:GLY:O	2:D:21:TRP:HB2	2.08	0.54
2:D:30:ILE:HG23	2:D:34:GLY:O	2.08	0.54
2:D:381:THR:OG1	2:D:383:ALA:HB3	2.07	0.54
1:E:191:VAL:HG11	1:E:425:MET:HE2	1.89	0.54
1:E:273:ALA:CB	1:E:274:PRO:HD3	2.30	0.54
1:E:323:MET:HG3	1:E:328:VAL:HG21	1.90	0.54
1:E:369:ARG:HD2	1:E:369:ARG:C	2.32	0.54
2:F:6:SER:O	2:F:65:ALA:HB1	2.07	0.54
2:F:257:THR:HG21	1:G:101:ASN:CB	2.32	0.54
2:F:260:VAL:CG2	1:G:407:TRP:HE1	2.20	0.54
2:H:17:GLY:O	2:H:21:TRP:HB2	2.08	0.54
1:A:133:GLN:HE21	1:A:252:LEU:HB2	1.73	0.54
1:A:210:TYR:HD2	1:A:227:LEU:HD21	1.71	0.54
2:B:24:TYR:OH	2:B:239:THR:OG1	2.24	0.54
1:C:210:TYR:HD2	1:C:227:LEU:HD21	1.71	0.54
1:C:239:THR:O	1:C:241:CYS:N	2.41	0.54
1:E:4:ILE:HD13	1:E:136:GLN:NE2	2.18	0.54
1:E:259:MET:CG	1:E:314:THR:HG21	2.36	0.54
1:G:310:GLY:CA	1:G:436:GLN:HE21	2.20	0.54
1:G:323:MET:HG3	1:G:328:VAL:HG21	1.90	0.54
2:H:30:ILE:HG22	2:H:30:ILE:O	2.07	0.54
2:H:288:VAL:HG22	2:H:373:ARG:NH1	2.23	0.54
1:A:427:ASP:OD1	1:A:428:LEU:N	2.41	0.54
2:B:381:THR:OG1	2:B:383:ALA:HB3	2.07	0.54
1:C:239:THR:HG22	1:C:240:THR:N	2.22	0.54
2:D:110:ILE:O	2:D:112:LYS:N	2.40	0.54
2:D:288:VAL:HG22	2:D:373:ARG:NH1	2.23	0.54
2:F:332:ILE:CG2	1:G:177:VAL:HG11	2.38	0.54
1:G:2:ARG:NH2	2:H:99:ALA:N	2.54	0.54
1:G:147:SER:O	1:G:151:THR:CB	2.51	0.54
1:G:309:HIS:ND1	3:I:95:ILE:CG2	2.70	0.54
1:A:323:MET:HG3	1:A:328:VAL:HG21	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:343:PHE:O	1:A:344:VAL:O	2.26	0.54
2:B:6:SER:O	2:B:65:ALA:HB1	2.07	0.54
2:B:118:VAL:HG21	2:B:149:PHE:CZ	2.42	0.54
2:B:244:PHE:C	2:B:244:PHE:CD2	2.84	0.54
2:B:305:CYS:O	2:B:306:ASP:C	2.49	0.54
1:C:68:VAL:HG12	1:C:149:MET:CE	2.38	0.54
1:C:323:MET:HG3	1:C:328:VAL:HG21	1.90	0.54
1:C:343:PHE:O	1:C:344:VAL:O	2.26	0.54
1:E:4:ILE:CG2	1:E:136:GLN:HG2	2.38	0.54
1:E:343:PHE:O	1:E:344:VAL:O	2.26	0.54
1:G:4:ILE:CG2	1:G:136:GLN:HG2	2.38	0.54
1:G:5:VAL:HG22	1:G:135:PHE:CD2	2.42	0.54
2:H:6:SER:O	2:H:65:ALA:HB1	2.07	0.54
2:B:5:ILE:O	2:B:136:SER:N	2.39	0.54
2:B:5:ILE:CG2	2:B:6:SER:N	2.70	0.54
1:C:107:HIS:HD2	1:C:151:THR:HG22	1.72	0.54
1:C:133:GLN:HE21	1:C:252:LEU:HB2	1.73	0.54
1:C:369:ARG:HD2	1:C:369:ARG:C	2.32	0.54
1:C:427:ASP:OD1	1:C:428:LEU:N	2.41	0.54
2:D:23:LEU:HD23	2:D:236:SER:CB	2.37	0.54
2:D:118:VAL:HG21	2:D:149:PHE:CZ	2.42	0.54
2:D:163:LYS:O	2:D:163:LYS:HG2	2.08	0.54
1:E:239:THR:O	1:E:241:CYS:N	2.40	0.54
1:E:322:ARG:HH11	1:E:322:ARG:HG3	1.73	0.54
2:F:115:ILE:O	2:F:116:ASP:C	2.51	0.54
1:G:44:LEU:O	1:G:49:ILE:HG12	2.07	0.54
1:G:343:PHE:O	1:G:344:VAL:O	2.26	0.54
2:H:115:ILE:O	2:H:116:ASP:C	2.51	0.54
1:A:239:THR:HG22	1:A:240:THR:N	2.22	0.54
2:B:55:GLU:O	2:B:56:THR:C	2.50	0.54
2:B:172:TYR:OH	2:B:387:ALA:O	2.24	0.54
1:C:297:ASP:OD1	1:C:298:ALA:N	2.39	0.54
1:C:331:GLN:O	1:C:335:VAL:HG23	2.08	0.54
2:D:62:VAL:CG1	2:D:88:HIS:ND1	2.71	0.54
2:D:172:TYR:OH	2:D:387:ALA:O	2.24	0.54
2:D:244:PHE:C	2:D:244:PHE:CD2	2.84	0.54
2:D:305:CYS:O	2:D:306:ASP:C	2.49	0.54
1:E:249:ASN:OD1	2:F:71:GLU:OE1	2.25	0.54
1:E:325:MET:O	1:E:329:ASP:HB2	2.07	0.54
2:F:163:LYS:O	2:F:163:LYS:HG2	2.08	0.54
1:G:191:VAL:HG11	1:G:425:MET:HE2	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:322:ARG:HH11	1:G:322:ARG:HG3	1.73	0.54
1:G:369:ARG:HD2	1:G:369:ARG:C	2.32	0.54
1:G:427:ASP:OD1	1:G:428:LEU:N	2.41	0.54
2:H:102:ASN:CB	2:H:407:TRP:NE1	2.71	0.54
3:I:145:ASN:HA	3:I:148:VAL:O	2.08	0.54
1:A:20:PHE:CE2	1:A:24:ILE:HD12	2.43	0.54
2:B:3:GLU:HG3	2:B:51:THR:HA	1.75	0.54
1:E:427:ASP:OD1	1:E:428:LEU:N	2.41	0.54
2:F:110:ILE:O	2:F:112:LYS:N	2.41	0.54
1:G:68:VAL:HG12	1:G:149:MET:CE	2.38	0.54
2:H:110:ILE:O	2:H:112:LYS:N	2.41	0.54
2:H:163:LYS:O	2:H:163:LYS:HG2	2.08	0.54
1:A:68:VAL:HG12	1:A:149:MET:CE	2.38	0.54
1:A:253:ARG:O	1:A:257:VAL:N	2.33	0.54
2:B:110:ILE:O	2:B:112:LYS:N	2.40	0.54
1:C:36:TYR:CZ	1:C:38:GLY:HA3	2.43	0.54
2:D:121:ARG:O	2:D:125:LEU:HB2	2.08	0.54
1:E:44:LEU:O	1:E:49:ILE:HG12	2.07	0.54
1:E:68:VAL:HG12	1:E:149:MET:CE	2.38	0.54
1:E:331:GLN:O	1:E:335:VAL:HG23	2.08	0.54
2:F:110:ILE:CG2	2:F:111:GLY:N	2.71	0.54
2:F:346:TRP:HZ3	1:G:404:PHE:HZ	1.47	0.54
1:G:331:GLN:O	1:G:335:VAL:HG23	2.08	0.54
1:G:431:GLU:O	1:G:434:GLN:CG	2.56	0.54
2:H:243:ARG:CZ	2:H:252:LEU:HG	2.39	0.54
1:A:44:LEU:O	1:A:49:ILE:HG12	2.07	0.53
1:A:191:VAL:HG11	1:A:425:MET:HE2	1.89	0.53
1:A:331:GLN:O	1:A:335:VAL:HG23	2.08	0.53
2:B:121:ARG:O	2:B:125:LEU:HB2	2.08	0.53
2:B:163:LYS:O	2:B:163:LYS:HG2	2.08	0.53
2:B:324:VAL:O	2:B:327:ASP:HB2	2.08	0.53
1:C:20:PHE:CE2	1:C:24:ILE:HD12	2.42	0.53
1:C:191:VAL:HG11	1:C:425:MET:HE2	1.89	0.53
1:C:431:GLU:O	1:C:434:GLN:CG	2.56	0.53
2:D:324:VAL:O	2:D:327:ASP:HB2	2.08	0.53
1:E:5:VAL:HG22	1:E:135:PHE:CD2	2.42	0.53
1:E:431:GLU:O	1:E:434:GLN:CG	2.56	0.53
2:F:121:ARG:O	2:F:125:LEU:HB2	2.08	0.53
2:F:408:TYR:O	2:F:411:GLU:N	2.39	0.53
1:G:253:ARG:HB3	2:H:407:TRP:CZ3	2.34	0.53
2:H:102:ASN:HD22	2:H:407:TRP:CD1	2.25	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:381:THR:OG1	2:H:383:ALA:HB3	2.08	0.53
3:I:60:ASN:ND2	3:I:131:ASN:HB3	2.23	0.53
1:C:31:ASP:HB3	1:C:32:PRO:HD2	1.89	0.53
2:D:24:TYR:OH	2:D:239:THR:OG1	2.24	0.53
2:D:98:ASP:O	2:D:110:ILE:HD13	2.08	0.53
2:D:115:ILE:O	2:D:116:ASP:C	2.51	0.53
2:D:243:ARG:CZ	2:D:252:LEU:HG	2.39	0.53
2:F:381:THR:OG1	2:F:383:ALA:HB3	2.07	0.53
1:G:239:THR:O	1:G:241:CYS:N	2.41	0.53
2:H:9:VAL:CG1	2:H:139:HIS:HB3	2.38	0.53
2:H:121:ARG:O	2:H:125:LEU:HB2	2.08	0.53
3:I:134:LYS:CD	3:I:136:VAL:HG22	2.38	0.53
1:A:297:ASP:OD1	1:A:298:ALA:N	2.39	0.53
1:A:383:ALA:C	1:A:385:GLN:H	2.15	0.53
2:B:23:LEU:HD23	2:B:236:SER:CB	2.37	0.53
1:C:273:ALA:HB3	1:C:274:PRO:CD	2.29	0.53
1:C:288:VAL:HG22	1:C:323:MET:HE3	1.90	0.53
1:C:325:MET:CE	1:C:355:VAL:HG11	2.38	0.53
2:D:5:ILE:O	2:D:136:SER:N	2.39	0.53
2:D:110:ILE:CG2	2:D:111:GLY:N	2.71	0.53
2:D:173:PRO:HB2	2:D:391:LEU:CD1	2.38	0.53
2:D:248:LEU:HB3	2:D:355:ILE:H	1.73	0.53
1:E:213:CYS:SG	1:E:219:LEU:HD23	2.48	0.53
1:E:281:GLN:C	1:E:283:TYR:N	2.67	0.53
2:F:98:ASP:O	2:F:110:ILE:HD13	2.08	0.53
2:F:243:ARG:CZ	2:F:252:LEU:HG	2.39	0.53
1:A:325:MET:CE	1:A:355:VAL:HG11	2.38	0.53
2:B:182:VAL:O	2:B:184:PRO:N	2.41	0.53
2:B:243:ARG:CZ	2:B:252:LEU:HG	2.39	0.53
2:B:260:VAL:HG22	1:C:407:TRP:NE1	2.22	0.53
1:C:4:ILE:CG2	1:C:136:GLN:HG2	2.38	0.53
2:D:5:ILE:HG22	2:D:135:PHE:CD2	2.40	0.53
2:D:163:LYS:C	2:D:164:LYS:HG2	2.33	0.53
1:E:5:VAL:HG23	1:E:5:VAL:O	2.09	0.53
2:F:101:ASN:ND2	5:F:500:GTP:O1G	2.42	0.53
2:F:147:SER:CB	2:F:190:THR:OG1	2.52	0.53
2:F:173:PRO:HB2	2:F:391:LEU:CD1	2.38	0.53
2:F:182:VAL:O	2:F:184:PRO:N	2.41	0.53
2:F:332:ILE:HG22	1:G:177:VAL:HG21	1.90	0.53
1:G:4:ILE:HD13	1:G:136:GLN:NE2	2.18	0.53
1:G:27:GLU:HG2	1:G:27:GLU:O	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:101:ASN:ND2	5:H:500:GTP:O1G	2.42	0.53
2:H:173:PRO:HB2	2:H:391:LEU:CD1	2.38	0.53
2:H:248:LEU:HB3	2:H:355:ILE:H	1.72	0.53
2:H:408:TYR:O	2:H:411:GLU:N	2.39	0.53
1:A:4:ILE:CG2	1:A:136:GLN:HG2	2.38	0.53
1:A:36:TYR:CZ	1:A:38:GLY:HA3	2.43	0.53
1:A:107:HIS:HD2	1:A:151:THR:HG22	1.72	0.53
1:A:168:THR:CB	1:A:201:THR:HG23	2.38	0.53
1:A:198:THR:HG22	1:A:265:LEU:CD2	2.39	0.53
2:B:248:LEU:HB3	2:B:355:ILE:H	1.73	0.53
2:B:349:THR:HG21	1:C:178:SER:HG	1.71	0.53
1:C:44:LEU:O	1:C:49:ILE:HG12	2.07	0.53
1:C:198:THR:HG22	1:C:265:LEU:CD2	2.39	0.53
2:D:5:ILE:O	2:D:135:PHE:HA	2.09	0.53
1:E:20:PHE:CE2	1:E:24:ILE:HD12	2.43	0.53
1:E:36:TYR:CZ	1:E:38:GLY:HA3	2.43	0.53
1:E:383:ALA:C	1:E:385:GLN:H	2.15	0.53
2:F:324:VAL:O	2:F:327:ASP:HB2	2.08	0.53
1:G:5:VAL:HG23	1:G:5:VAL:O	2.09	0.53
1:G:31:ASP:HB3	1:G:32:PRO:HD2	1.89	0.53
1:G:248:LEU:CD2	2:H:179:THR:HG21	2.21	0.53
1:G:281:GLN:C	1:G:283:TYR:N	2.67	0.53
2:H:147:SER:CB	2:H:190:THR:OG1	2.52	0.53
2:H:182:VAL:O	2:H:184:PRO:N	2.41	0.53
3:I:138:TYR:CB	3:I:139:THR:HA	2.39	0.53
1:A:5:VAL:HG23	1:A:5:VAL:O	2.09	0.53
2:B:9:VAL:CG1	2:B:139:HIS:HB3	2.38	0.53
2:B:173:PRO:HB2	2:B:391:LEU:CD1	2.39	0.53
1:C:168:THR:CB	1:C:201:THR:HG23	2.38	0.53
1:E:31:ASP:HB3	1:E:32:PRO:HD2	1.90	0.53
2:F:5:ILE:HG23	2:F:135:PHE:CB	2.38	0.53
1:G:141:LEU:HA	1:G:147:SER:HB3	1.91	0.53
1:G:383:ALA:C	1:G:385:GLN:H	2.15	0.53
2:H:98:ASP:O	2:H:110:ILE:HD13	2.08	0.53
2:H:324:VAL:O	2:H:327:ASP:HB2	2.08	0.53
3:I:60:ASN:HB3	3:I:131:ASN:ND2	2.22	0.53
1:A:141:LEU:HA	1:A:147:SER:HB3	1.91	0.53
1:A:288:VAL:HG22	1:A:323:MET:HE3	1.90	0.53
1:A:431:GLU:O	1:A:434:GLN:CG	2.56	0.53
2:B:98:ASP:O	2:B:110:ILE:HD13	2.08	0.53
2:B:110:ILE:CG2	2:B:111:GLY:N	2.71	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:349:THR:HG21	1:C:178:SER:CB	2.38	0.53
1:C:141:LEU:HA	1:C:147:SER:HB3	1.91	0.53
2:D:110:ILE:CG2	2:D:111:GLY:H	2.15	0.53
1:E:21:TRP:CZ2	1:E:65:ALA:HB2	2.44	0.53
2:F:248:LEU:HB3	2:F:355:ILE:H	1.73	0.53
2:F:326:LYS:HE2	1:G:214:PHE:HB3	1.91	0.53
1:G:20:PHE:CE2	1:G:24:ILE:HD12	2.42	0.53
1:G:107:HIS:HD2	1:G:151:THR:HG22	1.72	0.53
2:H:5:ILE:HG23	2:H:135:PHE:CB	2.38	0.53
2:H:172:TYR:OH	2:H:387:ALA:O	2.24	0.53
1:A:250:ALA:CA	1:A:254:LYS:HE2	2.36	0.53
2:B:163:LYS:C	2:B:164:LYS:HG2	2.33	0.53
2:B:231:ILE:CA	2:B:234:ILE:HG22	2.38	0.53
1:C:5:VAL:O	1:C:5:VAL:HG23	2.09	0.53
2:D:182:VAL:O	2:D:184:PRO:N	2.41	0.53
1:E:198:THR:HG22	1:E:265:LEU:CD2	2.39	0.53
1:E:257:VAL:HA	2:F:407:TRP:NE1	2.24	0.53
2:F:5:ILE:O	2:F:135:PHE:HA	2.08	0.53
2:F:9:VAL:CG1	2:F:139:HIS:HB3	2.38	0.53
2:F:172:TYR:OH	2:F:387:ALA:O	2.24	0.53
1:G:21:TRP:CZ2	1:G:65:ALA:HB2	2.44	0.53
1:G:36:TYR:CZ	1:G:38:GLY:HA3	2.43	0.53
1:G:198:THR:HG22	1:G:265:LEU:CD2	2.39	0.53
1:G:213:CYS:SG	1:G:219:LEU:HD23	2.48	0.53
2:H:67:PHE:CZ	2:H:87:PHE:HE1	2.27	0.53
1:A:31:ASP:HB3	1:A:32:PRO:HD2	1.90	0.53
2:B:88:HIS:HE1	2:F:284:GLU:OE2	1.92	0.53
2:B:147:SER:CB	2:B:190:THR:OG1	2.52	0.53
2:B:253:THR:O	2:B:254:GLU:C	2.52	0.53
1:C:8:GLN:OE1	1:C:14:ASN:ND2	2.42	0.53
2:D:9:VAL:CG1	2:D:139:HIS:HB3	2.38	0.53
2:F:67:PHE:CE1	2:F:87:PHE:CD1	2.89	0.53
2:F:231:ILE:CA	2:F:234:ILE:HG22	2.38	0.53
2:H:5:ILE:O	2:H:135:PHE:HA	2.08	0.53
3:I:134:LYS:HB3	3:I:136:VAL:HG23	1.91	0.53
1:A:264:ARG:HA	1:A:264:ARG:HE	1.75	0.53
1:A:322:ARG:HG3	1:A:322:ARG:HH11	1.73	0.53
2:B:408:TYR:O	2:B:411:GLU:N	2.39	0.53
1:C:210:TYR:CD2	1:C:227:LEU:HD21	2.44	0.53
1:C:226:ASP:O	1:C:229:HIS:N	2.42	0.53
1:C:264:ARG:HA	1:C:264:ARG:HE	1.75	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:253:THR:O	2:D:254:GLU:C	2.52	0.53
1:E:27:GLU:O	1:E:27:GLU:HG2	2.08	0.53
1:E:141:LEU:HA	1:E:147:SER:HB3	1.91	0.53
2:F:67:PHE:CZ	2:F:87:PHE:HE1	2.27	0.53
2:H:231:ILE:CA	2:H:234:ILE:HG22	2.38	0.53
1:A:21:TRP:CZ2	1:A:65:ALA:HB2	2.44	0.52
1:A:210:TYR:CD2	1:A:227:LEU:HD21	2.44	0.52
1:A:213:CYS:SG	1:A:219:LEU:HD23	2.48	0.52
1:A:226:ASP:O	1:A:229:HIS:N	2.42	0.52
2:B:5:ILE:O	2:B:135:PHE:HA	2.09	0.52
2:B:67:PHE:CE1	2:B:87:PHE:CD1	2.89	0.52
2:B:348:PRO:HD2	1:C:398:MET:HE2	1.75	0.52
1:C:149:MET:O	1:C:149:MET:HG2	2.10	0.52
1:C:175:PRO:O	1:C:176:LYS:C	2.52	0.52
2:D:345:ASP:OD2	2:D:439:SER:HB3	2.10	0.52
1:E:212:ILE:O	1:E:216:THR:HB	2.09	0.52
2:F:8:HIS:HB3	2:F:13:GLY:O	2.10	0.52
2:F:163:LYS:C	2:F:164:LYS:HG2	2.33	0.52
2:F:231:ILE:N	2:F:231:ILE:HD13	2.24	0.52
2:F:350:GLY:HA2	1:G:181:VAL:HG22	1.90	0.52
1:G:8:GLN:OE1	1:G:14:ASN:ND2	2.42	0.52
2:H:163:LYS:C	2:H:164:LYS:HG2	2.33	0.52
3:I:142:VAL:HG22	3:I:143:ASN:H	1.74	0.52
1:A:103:TRP:CE2	1:A:189:LEU:HB3	2.45	0.52
2:B:328:VAL:C	2:B:330:ALA:H	2.16	0.52
1:C:213:CYS:SG	1:C:219:LEU:HD23	2.48	0.52
1:C:298:ALA:O	1:C:299:LYS:C	2.49	0.52
1:E:133:GLN:HE21	1:E:252:LEU:HB2	1.73	0.52
1:E:210:TYR:CD2	1:E:227:LEU:HD21	2.44	0.52
1:E:288:VAL:HG22	1:E:323:MET:HE3	1.90	0.52
1:E:425:MET:O	1:E:428:LEU:HB3	2.09	0.52
1:G:210:TYR:CD2	1:G:227:LEU:HD21	2.44	0.52
1:G:212:ILE:O	1:G:216:THR:HB	2.10	0.52
1:G:425:MET:O	1:G:428:LEU:HB3	2.09	0.52
2:H:8:HIS:HB3	2:H:13:GLY:O	2.10	0.52
2:H:25:CYS:HB2	2:H:30:ILE:O	2.10	0.52
2:H:102:ASN:HB3	2:H:407:TRP:NE1	2.24	0.52
2:H:231:ILE:HD13	2:H:231:ILE:N	2.25	0.52
1:A:8:GLN:OE1	1:A:14:ASN:ND2	2.42	0.52
1:A:149:MET:O	1:A:149:MET:HG2	2.10	0.52
1:A:179:ASP:HB2	4:A:600:GDP:H3'	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:101:ASN:ND2	5:B:500:GTP:O1G	2.42	0.52
2:B:255:PHE:O	2:B:256:GLN:C	2.53	0.52
2:B:293:ASN:HD21	2:B:338:LYS:HZ1	1.55	0.52
1:C:21:TRP:CZ2	1:C:65:ALA:HB2	2.44	0.52
1:C:103:TRP:CE2	1:C:189:LEU:HB3	2.45	0.52
1:C:322:ARG:HH11	1:C:322:ARG:HG3	1.73	0.52
1:E:8:GLN:OE1	1:E:14:ASN:ND2	2.42	0.52
1:E:107:HIS:HD2	1:E:151:THR:HG22	1.72	0.52
1:E:179:ASP:HB2	4:E:600:GDP:H3'	1.90	0.52
1:E:346:TRP:CD1	1:E:346:TRP:H	2.27	0.52
1:G:399:PHE:O	1:G:400:ARG:C	2.52	0.52
2:H:253:THR:O	2:H:254:GLU:C	2.52	0.52
1:A:281:GLN:C	1:A:283:TYR:N	2.67	0.52
2:B:67:PHE:CZ	2:B:87:PHE:HE1	2.27	0.52
2:B:231:ILE:HD13	2:B:231:ILE:N	2.25	0.52
2:B:333:ALA:N	1:C:177:VAL:HG21	2.24	0.52
2:B:345:ASP:OD2	2:B:439:SER:HB3	2.09	0.52
1:C:250:ALA:CA	1:C:254:LYS:HE2	2.35	0.52
2:D:122:ILE:CD1	2:D:157:LEU:HD21	2.35	0.52
2:D:173:PRO:HB2	2:D:391:LEU:HD11	1.92	0.52
1:E:226:ASP:O	1:E:229:HIS:N	2.42	0.52
2:F:25:CYS:HB2	2:F:30:ILE:O	2.10	0.52
2:F:242:LEU:C	2:F:244:PHE:N	2.66	0.52
2:F:253:THR:O	2:F:254:GLU:C	2.52	0.52
1:G:133:GLN:HE21	1:G:252:LEU:HB2	1.73	0.52
1:G:288:VAL:HG22	1:G:323:MET:HE3	1.90	0.52
1:G:346:TRP:CD1	1:G:346:TRP:H	2.27	0.52
2:H:119:LEU:HD11	2:H:156:ARG:CD	2.40	0.52
2:H:201:ALA:O	2:H:267:PHE:HA	2.10	0.52
2:B:119:LEU:HD11	2:B:156:ARG:CD	2.40	0.52
1:C:399:PHE:O	1:C:400:ARG:C	2.52	0.52
2:D:24:TYR:CE2	2:D:240:ALA:HB2	2.45	0.52
2:D:63:PRO:CG	2:D:87:PHE:HA	2.40	0.52
2:D:101:ASN:ND2	5:D:500:GTP:O1G	2.42	0.52
2:D:231:ILE:CA	2:D:234:ILE:HG22	2.38	0.52
1:E:399:PHE:O	1:E:400:ARG:C	2.52	0.52
2:F:201:ALA:O	2:F:267:PHE:HA	2.10	0.52
2:F:332:ILE:HG21	1:G:177:VAL:HG11	1.91	0.52
2:H:345:ASP:OD2	2:H:439:SER:HB3	2.09	0.52
1:A:175:PRO:O	1:A:176:LYS:C	2.52	0.52
1:A:320:ARG:HA	1:A:356:CYS:HB3	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:11:GLN:NE2	2:B:74:VAL:HG22	2.22	0.52
2:B:201:ALA:O	2:B:267:PHE:HA	2.10	0.52
2:D:67:PHE:CZ	2:D:87:PHE:HE1	2.27	0.52
2:D:147:SER:CB	2:D:190:THR:OG1	2.52	0.52
2:D:231:ILE:HD13	2:D:231:ILE:N	2.25	0.52
2:D:255:PHE:O	2:D:256:GLN:C	2.53	0.52
2:D:328:VAL:C	2:D:330:ALA:H	2.15	0.52
1:E:325:MET:CE	1:E:355:VAL:HG11	2.38	0.52
2:F:23:LEU:HD23	2:F:236:SER:CB	2.37	0.52
2:F:119:LEU:HD11	2:F:156:ARG:CD	2.40	0.52
1:G:226:ASP:O	1:G:229:HIS:N	2.42	0.52
2:H:88:HIS:O	2:H:89:PRO:C	2.52	0.52
2:B:24:TYR:CE2	2:B:240:ALA:HB2	2.45	0.52
1:C:254:LYS:NZ	2:D:101:ASN:OD1	2.26	0.52
1:C:425:MET:O	1:C:428:LEU:HB3	2.09	0.52
2:D:8:HIS:HB3	2:D:13:GLY:O	2.10	0.52
2:D:11:GLN:NE2	2:D:74:VAL:HG22	2.22	0.52
1:E:103:TRP:CE2	1:E:189:LEU:HB3	2.45	0.52
1:E:168:THR:CB	1:E:201:THR:HG23	2.38	0.52
1:E:320:ARG:HA	1:E:356:CYS:HB3	1.92	0.52
2:F:345:ASP:OD2	2:F:439:SER:HB3	2.09	0.52
1:G:103:TRP:CE2	1:G:189:LEU:HB3	2.45	0.52
1:G:320:ARG:HA	1:G:356:CYS:HB3	1.92	0.52
2:H:23:LEU:HD23	2:H:236:SER:CB	2.37	0.52
2:H:67:PHE:CE1	2:H:87:PHE:CD1	2.89	0.52
2:H:251:ASP:OD1	2:H:252:LEU:N	2.43	0.52
2:H:344:VAL:HG12	2:H:345:ASP:H	1.74	0.52
1:A:70:LEU:HD12	1:A:145:THR:HG23	1.91	0.52
1:A:176:LYS:CE	1:A:207:GLU:HG3	2.39	0.52
1:A:295:MET:SD	1:A:375:ALA:O	2.68	0.52
1:A:325:MET:HE2	1:A:355:VAL:HG21	1.92	0.52
1:A:399:PHE:O	1:A:400:ARG:C	2.52	0.52
1:A:425:MET:O	1:A:428:LEU:HB3	2.09	0.52
2:B:344:VAL:HG12	2:B:345:ASP:H	1.75	0.52
1:C:27:GLU:O	1:C:27:GLU:HG2	2.08	0.52
1:C:188:THR:HA	1:C:425:MET:CE	2.40	0.52
1:C:281:GLN:C	1:C:283:TYR:N	2.67	0.52
1:C:295:MET:SD	1:C:375:ALA:O	2.68	0.52
2:D:119:LEU:HD11	2:D:156:ARG:CD	2.40	0.52
2:D:201:ALA:O	2:D:267:PHE:HA	2.10	0.52
2:F:88:HIS:O	2:F:89:PRO:C	2.52	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:251:ASP:OD1	2:F:252:LEU:N	2.43	0.52
2:H:242:LEU:C	2:H:244:PHE:N	2.66	0.52
2:B:8:HIS:HB3	2:B:13:GLY:O	2.10	0.52
2:B:206:ASN:OD1	2:B:227:LEU:CD1	2.57	0.52
2:B:349:THR:O	1:C:181:VAL:HA	2.09	0.52
1:C:200:GLU:N	1:C:265:LEU:HD13	2.25	0.52
1:C:212:ILE:O	1:C:216:THR:HB	2.10	0.52
1:E:295:MET:SD	1:E:375:ALA:O	2.68	0.52
2:F:263:PRO:HD3	1:G:406:HIS:CE1	2.45	0.52
1:G:107:HIS:CD2	1:G:151:THR:HG22	2.45	0.52
1:G:168:THR:CB	1:G:201:THR:HG23	2.38	0.52
3:I:56:ARG:HB2	3:I:146:TRP:CE2	2.45	0.52
1:A:212:ILE:O	1:A:216:THR:HB	2.10	0.52
2:B:63:PRO:HG3	2:B:87:PHE:CA	2.40	0.52
2:B:115:ILE:O	2:B:116:ASP:C	2.51	0.52
2:B:173:PRO:HB2	2:B:391:LEU:HD11	1.92	0.52
2:B:191:THR:HG23	2:B:192:HIS:N	2.25	0.52
1:C:70:LEU:HD12	1:C:145:THR:HG23	1.91	0.52
1:C:314:THR:CG2	1:C:315:VAL:N	2.73	0.52
2:D:5:ILE:HG23	2:D:135:PHE:CB	2.38	0.52
2:D:206:ASN:OD1	2:D:227:LEU:CD1	2.58	0.52
2:D:434:GLU:C	2:D:436:GLY:H	2.18	0.52
1:E:107:HIS:CD2	1:E:151:THR:HG22	2.45	0.52
1:E:175:PRO:O	1:E:176:LYS:C	2.52	0.52
1:E:264:ARG:HA	1:E:264:ARG:HE	1.74	0.52
1:E:325:MET:HE2	1:E:355:VAL:HG21	1.92	0.52
2:H:206:ASN:OD1	2:H:227:LEU:CD1	2.58	0.52
2:H:434:GLU:C	2:H:436:GLY:H	2.18	0.52
1:A:27:GLU:HG2	1:A:27:GLU:O	2.08	0.51
1:A:188:THR:HA	1:A:425:MET:CE	2.40	0.51
1:C:176:LYS:CE	1:C:207:GLU:HG3	2.39	0.51
1:C:263:PRO:O	1:C:264:ARG:C	2.52	0.51
1:C:320:ARG:HA	1:C:356:CYS:HB3	1.92	0.51
2:D:88:HIS:O	2:D:89:PRO:C	2.52	0.51
2:D:344:VAL:HG12	2:D:345:ASP:H	1.75	0.51
2:D:408:TYR:O	2:D:411:GLU:N	2.39	0.51
2:D:417:GLU:HA	2:D:417:GLU:OE1	2.10	0.51
2:F:62:VAL:CG1	2:F:88:HIS:ND1	2.71	0.51
2:F:173:PRO:HB2	2:F:391:LEU:HD11	1.92	0.51
2:F:206:ASN:OD1	2:F:227:LEU:CD1	2.58	0.51
1:G:254:LYS:HE3	1:G:352:LYS:HZ1	1.72	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:295:MET:SD	1:G:375:ALA:O	2.68	0.51
1:G:325:MET:HE2	1:G:355:VAL:HG21	1.92	0.51
2:H:62:VAL:CG1	2:H:88:HIS:ND1	2.71	0.51
2:H:151:SER:HB3	2:H:193:THR:CG2	2.34	0.51
2:H:255:PHE:O	2:H:256:GLN:C	2.53	0.51
1:A:107:HIS:CD2	1:A:151:THR:HG22	2.45	0.51
2:B:4:CYS:HA	2:B:134:GLY:O	2.10	0.51
2:B:243:ARG:NH2	2:B:251:ASP:OD1	2.43	0.51
1:C:224:TYR:O	1:C:225:GLY:C	2.53	0.51
1:C:325:MET:HE2	1:C:355:VAL:HG21	1.92	0.51
2:D:191:THR:HG23	2:D:192:HIS:N	2.25	0.51
2:D:242:LEU:C	2:D:244:PHE:N	2.66	0.51
1:E:260:VAL:O	1:E:260:VAL:HG23	2.10	0.51
2:F:328:VAL:C	2:F:330:ALA:H	2.16	0.51
2:F:329:ASN:OD1	1:G:210:TYR:CE1	2.53	0.51
2:F:344:VAL:HG12	2:F:345:ASP:H	1.74	0.51
2:F:434:GLU:C	2:F:436:GLY:H	2.18	0.51
1:G:103:TRP:HZ3	1:G:108:TYR:CE1	2.27	0.51
1:G:260:VAL:HG23	1:G:260:VAL:O	2.10	0.51
2:H:140:SER:O	2:H:142:GLY:N	2.44	0.51
3:I:60:ASN:HD22	3:I:131:ASN:CB	2.23	0.51
1:A:149:MET:O	1:A:153:LEU:HD22	2.10	0.51
1:A:200:GLU:N	1:A:265:LEU:HD13	2.25	0.51
1:A:314:THR:CG2	1:A:315:VAL:N	2.73	0.51
2:B:63:PRO:CG	2:B:91:GLN:CD	2.71	0.51
2:B:88:HIS:O	2:B:89:PRO:C	2.52	0.51
2:B:144:GLY:H	5:B:500:GTP:PG	2.33	0.51
2:D:22:GLU:O	2:D:23:LEU:C	2.54	0.51
1:E:149:MET:O	1:E:153:LEU:HD22	2.10	0.51
1:E:188:THR:HA	1:E:425:MET:CE	2.40	0.51
1:E:314:THR:CG2	1:E:315:VAL:N	2.73	0.51
2:F:4:CYS:HA	2:F:134:GLY:O	2.10	0.51
2:F:140:SER:O	2:F:142:GLY:N	2.44	0.51
2:F:151:SER:HB3	2:F:193:THR:CG2	2.34	0.51
2:F:396:ASP:O	2:F:397:LEU:C	2.53	0.51
1:G:224:TYR:O	1:G:225:GLY:C	2.53	0.51
1:G:263:PRO:O	1:G:264:ARG:C	2.52	0.51
1:G:325:MET:CE	1:G:355:VAL:HG11	2.38	0.51
2:B:242:LEU:C	2:B:244:PHE:N	2.66	0.51
2:B:434:GLU:C	2:B:436:GLY:H	2.18	0.51
2:D:3:GLU:CD	2:D:50:ASN:O	2.54	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:55:GLU:O	2:D:56:THR:C	2.52	0.51
2:D:67:PHE:CE1	2:D:87:PHE:CD1	2.89	0.51
2:D:243:ARG:NH2	2:D:251:ASP:OD1	2.44	0.51
2:D:244:PHE:CD2	2:D:245:ASP:N	2.76	0.51
1:E:149:MET:O	1:E:149:MET:HG2	2.10	0.51
1:E:224:TYR:O	1:E:225:GLY:C	2.53	0.51
2:F:63:PRO:CG	2:F:87:PHE:HA	2.40	0.51
2:F:348:PRO:HD3	1:G:398:MET:CE	2.38	0.51
1:G:149:MET:O	1:G:153:LEU:HD22	2.10	0.51
1:G:264:ARG:HA	1:G:264:ARG:HE	1.75	0.51
2:H:4:CYS:HA	2:H:134:GLY:O	2.10	0.51
2:H:173:PRO:HB2	2:H:391:LEU:HD11	1.92	0.51
2:H:396:ASP:O	2:H:397:LEU:C	2.53	0.51
3:I:149:ASN:CG	3:I:151:LYS:HD3	2.35	0.51
1:A:5:VAL:CG2	1:A:135:PHE:CD2	2.94	0.51
1:A:224:TYR:O	1:A:225:GLY:C	2.53	0.51
1:A:260:VAL:HG23	1:A:260:VAL:O	2.10	0.51
1:A:277:SER:OG	1:A:281:GLN:HB2	2.10	0.51
2:B:3:GLU:CD	2:B:50:ASN:O	2.54	0.51
2:B:10:GLY:O	2:B:11:GLN:C	2.53	0.51
2:B:122:ILE:CD1	2:B:157:LEU:HD21	2.35	0.51
2:B:439:SER:O	1:C:401:ARG:NH2	2.33	0.51
1:C:5:VAL:CG2	1:C:135:PHE:CD2	2.94	0.51
1:C:107:HIS:CD2	1:C:151:THR:HG22	2.45	0.51
1:C:149:MET:O	1:C:153:LEU:HD22	2.10	0.51
2:D:251:ASP:OD1	2:D:252:LEU:N	2.43	0.51
2:F:24:TYR:CE2	2:F:240:ALA:HB2	2.45	0.51
2:F:348:PRO:HG3	1:G:394:GLN:HB3	1.91	0.51
1:G:431:GLU:OE1	1:G:432:TYR:CA	2.57	0.51
2:H:63:PRO:CG	2:H:87:PHE:HA	2.40	0.51
1:A:323:MET:HG3	1:A:328:VAL:CG2	2.41	0.51
2:B:22:GLU:O	2:B:23:LEU:C	2.54	0.51
1:C:260:VAL:HG23	1:C:260:VAL:O	2.10	0.51
1:C:346:TRP:CD1	1:C:346:TRP:H	2.27	0.51
2:D:396:ASP:O	2:D:397:LEU:C	2.53	0.51
1:E:103:TRP:HZ3	1:E:108:TYR:CE1	2.27	0.51
1:E:175:PRO:HD2	1:E:207:GLU:CD	2.36	0.51
1:E:277:SER:OG	1:E:281:GLN:HB2	2.10	0.51
2:F:5:ILE:O	2:F:136:SER:N	2.40	0.51
1:G:5:VAL:CG2	1:G:135:PHE:CD2	2.94	0.51
1:G:149:MET:O	1:G:149:MET:HG2	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:175:PRO:HD2	1:G:207:GLU:CD	2.36	0.51
1:G:175:PRO:O	1:G:176:LYS:C	2.52	0.51
2:H:22:GLU:O	2:H:23:LEU:C	2.54	0.51
2:H:328:VAL:C	2:H:330:ALA:H	2.16	0.51
2:B:244:PHE:CD2	2:B:245:ASP:N	2.76	0.51
1:C:277:SER:OG	1:C:281:GLN:HB2	2.10	0.51
1:C:323:MET:HG3	1:C:328:VAL:CG2	2.41	0.51
2:D:4:CYS:HA	2:D:134:GLY:O	2.10	0.51
2:D:70:LEU:CD1	2:D:145:THR:CB	2.89	0.51
1:E:431:GLU:OE1	1:E:432:TYR:CA	2.57	0.51
2:F:22:GLU:O	2:F:23:LEU:C	2.54	0.51
2:F:255:PHE:O	2:F:256:GLN:C	2.53	0.51
1:G:200:GLU:N	1:G:265:LEU:HD13	2.25	0.51
1:G:288:VAL:CG2	1:G:323:MET:HE3	2.40	0.51
1:G:314:THR:CG2	1:G:315:VAL:N	2.73	0.51
2:H:24:TYR:CE2	2:H:240:ALA:HB2	2.45	0.51
2:H:87:PHE:H	2:H:87:PHE:HD2	1.59	0.51
2:B:251:ASP:OD1	2:B:252:LEU:N	2.43	0.51
2:B:396:ASP:O	2:B:397:LEU:C	2.53	0.51
2:D:14:VAL:HG11	2:D:75:ILE:HD13	1.93	0.51
2:D:119:LEU:HA	2:D:122:ILE:HG12	1.93	0.51
1:E:200:GLU:N	1:E:265:LEU:HD13	2.25	0.51
1:E:288:VAL:CG2	1:E:323:MET:HE3	2.40	0.51
1:E:296:PHE:CZ	1:E:315:VAL:HG11	2.46	0.51
2:F:9:VAL:HG21	2:F:149:PHE:CD1	2.46	0.51
2:F:14:VAL:HG11	2:F:75:ILE:HD13	1.93	0.51
2:F:133:GLN:CB	2:F:243:ARG:HH12	2.24	0.51
2:F:191:THR:HG23	2:F:192:HIS:N	2.25	0.51
1:G:188:THR:HA	1:G:425:MET:CE	2.40	0.51
2:H:14:VAL:HG11	2:H:75:ILE:HD13	1.93	0.51
2:H:119:LEU:HA	2:H:122:ILE:HG12	1.93	0.51
2:H:171:ILE:HG22	2:H:171:ILE:O	2.10	0.51
1:A:21:TRP:HZ2	1:A:65:ALA:HB2	1.76	0.51
1:A:360:PRO:O	1:A:369:ARG:C	2.54	0.51
2:B:70:LEU:CD1	2:B:145:THR:CB	2.89	0.51
2:B:140:SER:O	2:B:142:GLY:N	2.44	0.51
1:C:21:TRP:HZ2	1:C:65:ALA:HB2	1.76	0.51
1:C:307:PRO:C	1:C:309:HIS:H	2.18	0.51
2:D:133:GLN:CB	2:D:243:ARG:HH12	2.24	0.51
2:D:140:SER:O	2:D:142:GLY:N	2.44	0.51
1:E:5:VAL:CG2	1:E:135:PHE:CD2	2.94	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:70:LEU:HD12	1:E:145:THR:HG23	1.91	0.51
1:G:70:LEU:HD12	1:G:145:THR:HG23	1.91	0.51
1:G:113:GLU:HG3	1:G:114:LEU:N	2.26	0.51
1:G:323:MET:HG3	1:G:328:VAL:CG2	2.41	0.51
2:H:70:LEU:CD1	2:H:145:THR:CB	2.89	0.51
2:H:133:GLN:CB	2:H:243:ARG:HH12	2.24	0.51
2:H:191:THR:HG23	2:H:192:HIS:N	2.25	0.51
3:I:105:TYR:CD2	3:I:133:PHE:HZ	2.29	0.51
1:A:263:PRO:O	1:A:264:ARG:C	2.52	0.51
1:A:346:TRP:CD1	1:A:346:TRP:H	2.27	0.51
2:B:14:VAL:HG11	2:B:75:ILE:HD13	1.93	0.51
2:B:133:GLN:CB	2:B:243:ARG:HH12	2.24	0.51
2:B:133:GLN:HB3	2:B:243:ARG:HH12	1.76	0.51
2:B:171:ILE:O	2:B:171:ILE:HG22	2.10	0.51
1:C:156:LYS:HA	1:C:156:LYS:CE	2.38	0.51
1:C:259:MET:HG2	1:C:314:THR:CG2	2.38	0.51
2:D:87:PHE:H	2:D:87:PHE:HD2	1.59	0.51
2:D:132:LEU:CD2	2:D:164:LYS:HE3	2.41	0.51
1:E:113:GLU:HG3	1:E:114:LEU:N	2.26	0.51
1:E:323:MET:HG3	1:E:328:VAL:CG2	2.41	0.51
2:F:87:PHE:H	2:F:87:PHE:HD2	1.59	0.51
2:F:119:LEU:HA	2:F:122:ILE:HG12	1.93	0.51
2:F:417:GLU:OE1	2:F:417:GLU:HA	2.10	0.51
1:G:245:PRO:CB	2:H:73:THR:CG2	2.89	0.51
1:G:277:SER:OG	1:G:281:GLN:HB2	2.10	0.51
1:G:348:PRO:HD3	2:H:397:LEU:HB3	1.92	0.51
2:H:5:ILE:O	2:H:136:SER:N	2.40	0.51
2:H:9:VAL:HG21	2:H:149:PHE:CD1	2.46	0.51
2:H:417:GLU:OE1	2:H:417:GLU:HA	2.10	0.51
1:A:259:MET:HG2	1:A:314:THR:CG2	2.38	0.50
1:A:260:VAL:HG23	2:B:407:TRP:NE1	2.25	0.50
1:A:296:PHE:CZ	1:A:315:VAL:HG11	2.46	0.50
2:B:56:THR:C	2:F:284:GLU:CB	2.83	0.50
2:B:196:GLU:O	2:B:197:HIS:CD2	2.64	0.50
1:C:296:PHE:CZ	1:C:315:VAL:HG11	2.46	0.50
2:D:9:VAL:HG21	2:D:149:PHE:CD1	2.46	0.50
2:D:10:GLY:O	2:D:11:GLN:C	2.53	0.50
2:D:402:ARG:O	2:D:403:ALA:O	2.29	0.50
1:E:263:PRO:O	1:E:264:ARG:C	2.52	0.50
2:F:171:ILE:HG22	2:F:171:ILE:O	2.11	0.50
2:F:244:PHE:CD2	2:F:245:ASP:N	2.76	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:309:HIS:CE1	3:I:95:ILE:HG22	2.45	0.50
2:H:244:PHE:CD2	2:H:245:ASP:N	2.76	0.50
1:A:431:GLU:OE1	1:A:432:TYR:CA	2.57	0.50
2:B:119:LEU:HA	2:B:122:ILE:HG12	1.94	0.50
1:C:175:PRO:HD2	1:C:207:GLU:CD	2.36	0.50
2:D:196:GLU:O	2:D:197:HIS:CD2	2.64	0.50
2:D:241:SER:C	2:D:244:PHE:HB3	2.36	0.50
1:E:21:TRP:HZ2	1:E:65:ALA:HB2	1.76	0.50
2:F:196:GLU:O	2:F:197:HIS:CD2	2.64	0.50
2:F:243:ARG:NH2	2:F:251:ASP:OD1	2.44	0.50
2:F:260:VAL:HG22	1:G:407:TRP:HE1	1.76	0.50
1:G:296:PHE:CZ	1:G:315:VAL:HG11	2.46	0.50
2:H:243:ARG:NH2	2:H:251:ASP:OD1	2.44	0.50
1:A:103:TRP:HZ3	1:A:108:TYR:CE1	2.27	0.50
1:A:175:PRO:HD2	1:A:207:GLU:CD	2.36	0.50
1:A:288:VAL:CG2	1:A:323:MET:HE3	2.40	0.50
1:A:307:PRO:C	1:A:309:HIS:H	2.18	0.50
2:B:9:VAL:HG21	2:B:149:PHE:CD1	2.46	0.50
2:B:87:PHE:H	2:B:87:PHE:HD2	1.59	0.50
2:B:132:LEU:CD2	2:B:164:LYS:HE3	2.42	0.50
2:B:310:GLY:HA3	2:B:383:ALA:N	2.26	0.50
2:D:5:ILE:HG12	2:D:6:SER:N	2.26	0.50
2:F:3:GLU:CD	2:F:50:ASN:O	2.54	0.50
2:F:70:LEU:CD1	2:F:145:THR:CB	2.89	0.50
1:G:21:TRP:HZ2	1:G:65:ALA:HB2	1.76	0.50
2:H:10:GLY:O	2:H:11:GLN:C	2.53	0.50
2:H:148:GLY:O	2:H:149:PHE:C	2.55	0.50
2:H:261:PRO:HB2	2:H:262:TYR:CD1	2.46	0.50
1:A:242:LEU:C	1:A:244:PHE:H	2.20	0.50
2:B:261:PRO:HB2	2:B:262:TYR:CD1	2.46	0.50
2:B:413:MET:C	2:B:414:GLU:HG3	2.36	0.50
1:C:257:VAL:CG1	2:D:407:TRP:CG	2.76	0.50
1:C:265:LEU:O	1:C:266:HIS:O	2.29	0.50
1:C:360:PRO:O	1:C:369:ARG:C	2.54	0.50
2:D:16:ILE:HG23	2:D:17:GLY:N	2.26	0.50
2:F:148:GLY:O	2:F:149:PHE:C	2.55	0.50
2:F:261:PRO:HB2	2:F:262:TYR:CD1	2.46	0.50
2:H:3:GLU:CD	2:H:50:ASN:O	2.54	0.50
2:H:196:GLU:O	2:H:197:HIS:CD2	2.64	0.50
2:H:362:VAL:HG13	2:H:368:LEU:CD1	2.39	0.50
2:B:62:VAL:HG12	2:B:63:PRO:N	2.25	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:328:VAL:O	2:B:330:ALA:N	2.38	0.50
1:C:103:TRP:HZ3	1:C:108:TYR:CE1	2.27	0.50
1:C:173:PRO:HB3	1:C:183:GLU:HG2	1.93	0.50
1:C:288:VAL:CG2	1:C:323:MET:HE3	2.40	0.50
1:C:333:LEU:O	1:C:336:GLN:N	2.44	0.50
2:D:413:MET:C	2:D:414:GLU:HG3	2.36	0.50
1:E:242:LEU:C	1:E:244:PHE:H	2.20	0.50
2:F:11:GLN:O	2:F:14:VAL:HB	2.12	0.50
2:F:95:GLY:C	2:F:97:GLU:N	2.69	0.50
2:F:261:PRO:HB3	1:G:404:PHE:CD2	2.40	0.50
2:F:263:PRO:HD3	1:G:406:HIS:NE2	2.27	0.50
2:F:325:PRO:HD2	1:G:223:THR:CA	2.29	0.50
1:G:280:SER:O	1:G:282:GLN:N	2.45	0.50
2:H:132:LEU:CD2	2:H:164:LYS:HE3	2.42	0.50
2:H:310:GLY:HA3	2:H:383:ALA:N	2.26	0.50
1:A:269:MET:HB3	1:A:303:ALA:HB2	1.94	0.50
2:B:148:GLY:O	2:B:149:PHE:C	2.54	0.50
2:B:417:GLU:OE1	2:B:417:GLU:HA	2.10	0.50
1:C:49:ILE:HG13	1:C:50:ASN:H	1.76	0.50
1:C:242:LEU:HD22	1:C:250:ALA:N	2.19	0.50
1:C:262:PHE:O	1:C:264:ARG:N	2.45	0.50
1:C:431:GLU:OE1	1:C:432:TYR:CA	2.57	0.50
2:D:98:ASP:CB	2:D:105:ARG:HH21	2.14	0.50
2:D:133:GLN:HB3	2:D:243:ARG:HH12	1.76	0.50
1:E:265:LEU:HD12	1:E:266:HIS:O	2.12	0.50
1:E:307:PRO:C	1:E:309:HIS:H	2.18	0.50
1:E:387:LEU:HD23	1:E:388:PHE:CD2	2.47	0.50
2:F:132:LEU:CD2	2:F:164:LYS:HE3	2.42	0.50
2:F:362:VAL:HG13	2:F:368:LEU:CD1	2.38	0.50
2:F:413:MET:C	2:F:414:GLU:HG3	2.36	0.50
1:G:49:ILE:HG13	1:G:50:ASN:H	1.76	0.50
1:G:242:LEU:C	1:G:244:PHE:H	2.20	0.50
1:G:265:LEU:HD12	1:G:266:HIS:O	2.12	0.50
1:A:333:LEU:O	1:A:336:GLN:N	2.45	0.50
2:B:184:PRO:HG2	2:B:398:MET:CE	2.40	0.50
2:B:196:GLU:C	2:B:197:HIS:HD2	2.19	0.50
2:B:241:SER:C	2:B:244:PHE:HB3	2.36	0.50
2:B:362:VAL:HG13	2:B:368:LEU:CD1	2.38	0.50
2:D:171:ILE:O	2:D:171:ILE:HG22	2.10	0.50
2:D:310:GLY:HA3	2:D:383:ALA:N	2.27	0.50
2:D:328:VAL:O	2:D:330:ALA:N	2.38	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:269:MET:HB3	1:E:303:ALA:HB2	1.94	0.50
1:E:280:SER:O	1:E:282:GLN:N	2.45	0.50
1:E:431:GLU:HA	1:E:434:GLN:CG	2.42	0.50
2:F:10:GLY:O	2:F:11:GLN:C	2.54	0.50
2:F:98:ASP:CB	2:F:105:ARG:HH21	2.14	0.50
2:F:260:VAL:HG21	1:G:407:TRP:HZ2	1.77	0.50
2:F:310:GLY:HA3	2:F:383:ALA:N	2.27	0.50
1:G:176:LYS:HG3	1:G:177:VAL:H	1.76	0.50
1:G:240:THR:HG23	1:G:241:CYS:H	1.76	0.50
1:G:257:VAL:O	2:H:404:PHE:CD2	2.64	0.50
1:G:387:LEU:HD23	1:G:388:PHE:CD2	2.47	0.50
2:H:95:GLY:C	2:H:97:GLU:N	2.69	0.50
2:H:413:MET:C	2:H:414:GLU:HG3	2.36	0.50
1:A:345:GLU:O	1:A:347:ILE:N	2.45	0.50
2:B:30:ILE:HD12	2:B:61:HIS:ND1	2.22	0.50
2:B:95:GLY:C	2:B:97:GLU:N	2.69	0.50
2:B:227:LEU:O	2:B:231:ILE:HG12	2.12	0.50
2:B:339:ARG:C	2:B:341:ILE:N	2.68	0.50
1:C:242:LEU:C	1:C:244:PHE:H	2.19	0.50
1:C:345:GLU:O	1:C:347:ILE:N	2.45	0.50
2:D:115:ILE:HD11	2:D:119:LEU:HG	1.92	0.50
1:E:49:ILE:HG13	1:E:50:ASN:H	1.76	0.50
1:E:336:GLN:HE22	1:E:349:ASN:ND2	2.10	0.50
1:E:345:GLU:O	1:E:347:ILE:N	2.45	0.50
1:G:262:PHE:O	1:G:264:ARG:N	2.45	0.50
1:G:336:GLN:HE22	1:G:349:ASN:ND2	2.10	0.50
1:G:431:GLU:HA	1:G:434:GLN:CG	2.42	0.50
2:H:11:GLN:O	2:H:14:VAL:HB	2.12	0.50
2:H:98:ASP:CB	2:H:105:ARG:HH21	2.14	0.50
2:H:133:GLN:HB3	2:H:243:ARG:HH12	1.76	0.50
1:A:113:GLU:HG3	1:A:114:LEU:N	2.26	0.50
1:A:173:PRO:HB3	1:A:183:GLU:HG2	1.93	0.50
1:A:262:PHE:O	1:A:264:ARG:N	2.45	0.50
1:A:387:LEU:HD23	1:A:388:PHE:CD2	2.47	0.50
1:A:431:GLU:HA	1:A:434:GLN:CG	2.42	0.50
2:B:402:ARG:O	2:B:403:ALA:O	2.29	0.50
2:D:148:GLY:O	2:D:149:PHE:C	2.55	0.50
1:E:132:LEU:CD2	1:E:164:ARG:HG3	2.32	0.50
2:F:133:GLN:HB3	2:F:243:ARG:HH12	1.76	0.50
2:F:218:ASP:C	2:F:219:ILE:HG12	2.37	0.50
2:F:231:ILE:O	2:F:235:VAL:HG23	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:339:ARG:C	2:F:341:ILE:N	2.67	0.50
1:G:259:MET:HG2	1:G:314:THR:CG2	2.38	0.50
1:G:333:LEU:O	1:G:336:GLN:N	2.44	0.50
1:G:345:GLU:O	1:G:347:ILE:N	2.45	0.50
2:H:5:ILE:HG12	2:H:6:SER:N	2.26	0.50
2:H:231:ILE:O	2:H:235:VAL:HG23	2.12	0.50
1:A:24:ILE:HG22	1:A:25:SER:N	2.26	0.49
1:A:49:ILE:HG13	1:A:50:ASN:H	1.76	0.49
1:A:82:PRO:C	1:A:84:GLY:H	2.20	0.49
1:A:265:LEU:O	1:A:266:HIS:O	2.29	0.49
2:B:115:ILE:HD11	2:B:119:LEU:HG	1.92	0.49
1:C:24:ILE:HG22	1:C:25:SER:N	2.27	0.49
1:C:194:LEU:C	1:C:196:GLU:N	2.70	0.49
1:C:336:GLN:HE22	1:C:349:ASN:ND2	2.10	0.49
1:E:262:PHE:O	1:E:264:ARG:N	2.45	0.49
1:E:333:LEU:O	1:E:336:GLN:N	2.45	0.49
2:F:149:PHE:HE1	2:F:153:LEU:HD22	1.77	0.49
1:G:194:LEU:C	1:G:196:GLU:N	2.70	0.49
1:G:269:MET:HB3	1:G:303:ALA:HB2	1.94	0.49
1:G:307:PRO:C	1:G:309:HIS:H	2.18	0.49
2:H:149:PHE:HE1	2:H:153:LEU:HD22	1.77	0.49
2:H:196:GLU:C	2:H:197:HIS:HD2	2.19	0.49
3:I:126:VAL:HG11	3:I:135:LYS:HZ1	1.77	0.49
1:A:156:LYS:HA	1:A:156:LYS:CE	2.38	0.49
1:A:242:LEU:HD22	1:A:250:ALA:N	2.19	0.49
2:B:11:GLN:O	2:B:14:VAL:HB	2.12	0.49
2:B:231:ILE:O	2:B:235:VAL:HG23	2.12	0.49
2:B:238:ILE:O	2:B:242:LEU:HB2	2.11	0.49
2:B:414:GLU:OE1	2:B:414:GLU:N	2.45	0.49
1:C:3:GLU:HA	1:C:51:VAL:HA	1.93	0.49
1:C:113:GLU:HG3	1:C:114:LEU:N	2.26	0.49
1:C:269:MET:HB3	1:C:303:ALA:HB2	1.94	0.49
1:C:431:GLU:HA	1:C:434:GLN:CG	2.42	0.49
2:D:2:ARG:NH1	2:D:47:ASP:CB	2.75	0.49
2:D:11:GLN:O	2:D:14:VAL:HB	2.12	0.49
2:D:227:LEU:O	2:D:231:ILE:HG12	2.12	0.49
2:D:362:VAL:HG13	2:D:368:LEU:CD1	2.39	0.49
1:E:168:THR:O	1:E:201:THR:HA	2.12	0.49
2:F:2:ARG:NH1	2:F:47:ASP:CB	2.75	0.49
2:F:196:GLU:C	2:F:197:HIS:HD2	2.19	0.49
2:F:345:ASP:C	2:F:347:CYS:N	2.68	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:82:PRO:C	1:G:84:GLY:H	2.20	0.49
2:H:2:ARG:NH1	2:H:47:ASP:CB	2.75	0.49
2:H:115:ILE:CG2	2:H:116:ASP:N	2.75	0.49
2:H:227:LEU:O	2:H:231:ILE:HG12	2.12	0.49
3:I:130:ASP:CB	3:I:131:ASN:HA	2.41	0.49
1:A:168:THR:O	1:A:201:THR:HA	2.12	0.49
1:A:194:LEU:C	1:A:196:GLU:N	2.70	0.49
1:A:265:LEU:HD12	1:A:266:HIS:O	2.12	0.49
1:A:280:SER:O	1:A:282:GLN:N	2.45	0.49
1:A:336:GLN:HE22	1:A:349:ASN:ND2	2.10	0.49
2:B:12:ALA:CB	2:B:140:SER:OG	2.59	0.49
2:D:95:GLY:C	2:D:97:GLU:N	2.69	0.49
2:D:192:HIS:CD2	2:D:424:ASP:OD2	2.66	0.49
2:D:196:GLU:C	2:D:197:HIS:HD2	2.19	0.49
2:D:234:ILE:C	2:D:234:ILE:CD1	2.85	0.49
2:D:238:ILE:O	2:D:242:LEU:HB2	2.11	0.49
2:D:261:PRO:HB2	2:D:262:TYR:CD1	2.46	0.49
1:E:194:LEU:C	1:E:196:GLU:N	2.71	0.49
1:E:240:THR:HG23	1:E:241:CYS:H	1.76	0.49
1:E:265:LEU:O	1:E:266:HIS:O	2.29	0.49
1:E:360:PRO:O	1:E:369:ARG:C	2.54	0.49
2:F:5:ILE:HG12	2:F:6:SER:N	2.26	0.49
2:F:115:ILE:CG2	2:F:116:ASP:N	2.75	0.49
2:F:230:LEU:O	2:F:233:GLN:N	2.35	0.49
2:F:414:GLU:N	2:F:414:GLU:OE1	2.46	0.49
2:H:110:ILE:CG2	2:H:111:GLY:N	2.71	0.49
2:H:218:ASP:C	2:H:219:ILE:HG12	2.37	0.49
2:H:339:ARG:C	2:H:341:ILE:N	2.68	0.49
2:B:16:ILE:HG23	2:B:17:GLY:N	2.26	0.49
2:B:63:PRO:HD3	2:B:86:LEU:O	2.11	0.49
2:B:149:PHE:HE1	2:B:153:LEU:HD22	1.77	0.49
1:C:265:LEU:HD12	1:C:266:HIS:O	2.12	0.49
1:C:387:LEU:HD23	1:C:388:PHE:CD2	2.47	0.49
2:D:231:ILE:O	2:D:235:VAL:HG23	2.12	0.49
2:D:414:GLU:OE1	2:D:414:GLU:N	2.46	0.49
1:E:82:PRO:C	1:E:84:GLY:H	2.20	0.49
2:F:12:ALA:CB	2:F:140:SER:OG	2.60	0.49
2:F:227:LEU:O	2:F:231:ILE:HG12	2.13	0.49
1:G:8:GLN:HB3	1:G:14:ASN:HA	1.94	0.49
1:G:265:LEU:O	1:G:266:HIS:O	2.29	0.49
2:H:238:ILE:O	2:H:242:LEU:HB2	2.11	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:414:GLU:OE1	2:H:414:GLU:N	2.46	0.49
3:I:55:VAL:HG21	3:I:57:PHE:CE1	2.47	0.49
3:I:134:LYS:CB	3:I:136:VAL:HG23	2.42	0.49
1:A:3:GLU:HA	1:A:51:VAL:HA	1.93	0.49
1:A:8:GLN:HB3	1:A:14:ASN:HA	1.94	0.49
2:B:192:HIS:CD2	2:B:424:ASP:OD2	2.66	0.49
1:C:168:THR:O	1:C:201:THR:HA	2.12	0.49
2:D:12:ALA:CB	2:D:140:SER:OG	2.59	0.49
1:E:173:PRO:HB3	1:E:183:GLU:CG	2.42	0.49
1:E:245:PRO:HA	2:F:73:THR:CG2	2.42	0.49
2:F:192:HIS:CD2	2:F:424:ASP:OD2	2.66	0.49
1:G:133:GLN:NE2	1:G:252:LEU:HB2	2.28	0.49
1:G:173:PRO:HB3	1:G:183:GLU:CG	2.42	0.49
1:G:176:LYS:CE	1:G:207:GLU:HG3	2.39	0.49
2:H:12:ALA:CB	2:H:140:SER:OG	2.60	0.49
2:H:328:VAL:O	2:H:330:ALA:N	2.38	0.49
1:A:399:PHE:O	1:A:402:LYS:N	2.29	0.49
2:B:2:ARG:NH1	2:B:47:ASP:CB	2.76	0.49
2:B:118:VAL:HG21	2:B:149:PHE:CE2	2.48	0.49
1:C:82:PRO:C	1:C:84:GLY:H	2.20	0.49
1:C:280:SER:O	1:C:282:GLN:N	2.45	0.49
2:D:115:ILE:CG2	2:D:116:ASP:N	2.75	0.49
2:D:218:ASP:C	2:D:219:ILE:HG12	2.37	0.49
1:E:173:PRO:HB3	1:E:183:GLU:HG2	1.93	0.49
2:F:62:VAL:O	2:F:63:PRO:O	2.30	0.49
2:F:241:SER:C	2:F:244:PHE:HB3	2.36	0.49
2:F:402:ARG:O	2:F:403:ALA:O	2.29	0.49
1:G:3:GLU:HA	1:G:51:VAL:HA	1.93	0.49
2:H:62:VAL:O	2:H:63:PRO:O	2.30	0.49
2:H:402:ARG:O	2:H:403:ALA:O	2.29	0.49
1:A:296:PHE:HZ	1:A:315:VAL:HG11	1.78	0.49
2:B:5:ILE:CG1	2:B:64:ARG:NH2	2.75	0.49
2:B:152:LEU:HD12	2:B:152:LEU:C	2.38	0.49
2:B:188:ILE:O	2:B:191:THR:HG22	2.13	0.49
2:B:293:ASN:HD21	2:B:338:LYS:NZ	2.11	0.49
1:C:413:MET:HG3	1:C:414:ASP:N	2.22	0.49
2:D:50:ASN:ND2	2:D:53:PHE:O	2.46	0.49
2:D:56:THR:HA	2:H:284:GLU:HG3	1.92	0.49
2:D:118:VAL:HG21	2:D:149:PHE:CE2	2.48	0.49
2:D:297:GLU:HG3	2:D:299:ALA:N	2.28	0.49
1:E:133:GLN:NE2	1:E:252:LEU:HB2	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:399:PHE:O	1:E:402:LYS:N	2.29	0.49
2:F:62:VAL:HG12	2:F:91:GLN:HE22	1.77	0.49
2:F:238:ILE:O	2:F:242:LEU:HB2	2.11	0.49
1:G:4:ILE:HG22	1:G:5:VAL:N	2.27	0.49
1:G:309:HIS:HE1	3:I:95:ILE:HG22	1.78	0.49
2:H:16:ILE:HG23	2:H:17:GLY:N	2.26	0.49
2:H:118:VAL:HG21	2:H:149:PHE:CE2	2.48	0.49
2:H:192:HIS:CD2	2:H:424:ASP:OD2	2.66	0.49
2:H:345:ASP:C	2:H:347:CYS:N	2.68	0.49
1:A:4:ILE:HD12	1:A:239:THR:CG2	2.42	0.49
1:A:240:THR:HG23	1:A:241:CYS:H	1.76	0.49
2:B:96:LYS:O	2:B:97:GLU:O	2.31	0.49
1:C:431:GLU:OE1	1:C:432:TYR:N	2.46	0.49
2:D:62:VAL:O	2:D:63:PRO:O	2.30	0.49
2:D:155:GLU:OE1	2:D:197:HIS:HE1	1.96	0.49
2:D:392:ASP:O	2:D:395:PHE:HB3	2.13	0.49
1:E:8:GLN:HB3	1:E:14:ASN:HA	1.94	0.49
1:E:259:MET:HG2	1:E:314:THR:CG2	2.38	0.49
1:E:431:GLU:OE1	1:E:432:TYR:N	2.46	0.49
2:F:16:ILE:HG23	2:F:17:GLY:N	2.26	0.49
2:F:118:VAL:HG21	2:F:149:PHE:CE2	2.48	0.49
1:G:168:THR:O	1:G:201:THR:HA	2.12	0.49
2:H:102:ASN:CB	2:H:407:TRP:HE1	2.25	0.49
2:H:115:ILE:HD11	2:H:119:LEU:HG	1.92	0.49
2:H:188:ILE:O	2:H:191:THR:HG22	2.13	0.49
1:A:431:GLU:OE1	1:A:432:TYR:N	2.46	0.49
2:B:218:ASP:C	2:B:219:ILE:HG12	2.37	0.49
1:C:240:THR:HG23	1:C:241:CYS:H	1.76	0.49
1:E:3:GLU:HA	1:E:51:VAL:HA	1.93	0.49
2:F:297:GLU:HG3	2:F:299:ALA:N	2.28	0.49
1:G:24:ILE:HG22	1:G:25:SER:N	2.27	0.49
1:G:360:PRO:O	1:G:369:ARG:C	2.54	0.49
2:H:230:LEU:O	2:H:233:GLN:N	2.35	0.49
1:A:49:ILE:HG13	1:A:50:ASN:N	2.28	0.49
1:A:239:THR:O	1:A:240:THR:C	2.56	0.49
2:B:70:LEU:HD12	2:B:70:LEU:N	2.28	0.49
2:B:105:ARG:HH11	2:B:105:ARG:HG3	1.78	0.49
2:B:115:ILE:CG2	2:B:116:ASP:N	2.75	0.49
2:B:297:GLU:HG3	2:B:299:ALA:N	2.28	0.49
1:C:8:GLN:HB3	1:C:14:ASN:HA	1.94	0.49
1:C:49:ILE:HG13	1:C:50:ASN:N	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:161:TYR:C	1:C:163:ASP:N	2.71	0.49
1:C:288:VAL:C	1:C:290:GLU:N	2.70	0.49
2:D:96:LYS:O	2:D:97:GLU:O	2.31	0.49
2:D:105:ARG:HH11	2:D:105:ARG:HG3	1.78	0.49
2:D:152:LEU:HD12	2:D:152:LEU:C	2.38	0.49
2:D:339:ARG:C	2:D:341:ILE:N	2.68	0.49
1:E:24:ILE:HG22	1:E:25:SER:N	2.26	0.49
1:E:142:GLY:HA3	1:E:183:GLU:OE2	2.13	0.49
1:E:257:VAL:HG13	2:F:407:TRP:CD2	2.48	0.49
1:E:332:MET:CE	1:E:351:VAL:HG11	2.32	0.49
2:F:115:ILE:HD11	2:F:119:LEU:HG	1.92	0.49
2:F:328:VAL:O	2:F:330:ALA:N	2.38	0.49
2:F:346:TRP:CZ3	1:G:404:PHE:HZ	2.27	0.49
1:G:4:ILE:HD12	1:G:239:THR:CG2	2.42	0.49
1:G:173:PRO:HB3	1:G:183:GLU:HG2	1.93	0.49
1:G:175:PRO:CD	1:G:207:GLU:OE1	2.61	0.49
1:G:308:ARG:HG3	1:G:342:TYR:OH	2.13	0.49
1:G:431:GLU:OE1	1:G:432:TYR:N	2.46	0.49
2:H:62:VAL:HG12	2:H:91:GLN:HE22	1.78	0.49
2:H:241:SER:C	2:H:244:PHE:HB3	2.36	0.49
1:A:69:ASP:HA	1:A:145:THR:HG21	1.95	0.48
1:A:173:PRO:HB3	1:A:183:GLU:CG	2.42	0.48
1:A:199:ASP:O	1:A:200:GLU:HG3	2.13	0.48
2:B:104:ALA:CB	2:B:408:TYR:HD2	2.26	0.48
2:B:155:GLU:OE1	2:B:197:HIS:HE1	1.96	0.48
2:B:345:ASP:C	2:B:347:CYS:N	2.68	0.48
2:B:392:ASP:O	2:B:395:PHE:HB3	2.13	0.48
1:C:4:ILE:HD12	1:C:239:THR:CG2	2.42	0.48
1:C:296:PHE:HZ	1:C:315:VAL:HG11	1.78	0.48
1:C:308:ARG:HG3	1:C:342:TYR:OH	2.13	0.48
2:D:104:ALA:CB	2:D:408:TYR:HD2	2.26	0.48
2:D:188:ILE:O	2:D:191:THR:HG22	2.13	0.48
2:D:252:LEU:O	2:D:253:THR:C	2.56	0.48
1:E:4:ILE:HD12	1:E:239:THR:CG2	2.42	0.48
1:E:49:ILE:HG13	1:E:50:ASN:N	2.28	0.48
1:E:243:ARG:N	1:E:243:ARG:HD3	2.25	0.48
1:E:296:PHE:HZ	1:E:315:VAL:HG11	1.78	0.48
2:F:104:ALA:CB	2:F:408:TYR:HD2	2.26	0.48
2:F:188:ILE:O	2:F:191:THR:HG22	2.13	0.48
2:F:409:VAL:C	2:F:411:GLU:N	2.71	0.48
1:G:248:LEU:CD1	2:H:179:THR:HG21	2.41	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:296:PHE:HZ	1:G:315:VAL:HG11	1.78	0.48
2:H:104:ALA:CB	2:H:408:TYR:HD2	2.26	0.48
2:H:297:GLU:HG3	2:H:299:ALA:N	2.28	0.48
3:I:55:VAL:HA	3:I:146:TRP:HH2	1.78	0.48
1:A:133:GLN:NE2	1:A:252:LEU:HB2	2.27	0.48
1:A:161:TYR:C	1:A:163:ASP:N	2.71	0.48
2:B:191:THR:CG2	2:B:192:HIS:N	2.76	0.48
2:B:203:MET:SD	2:B:267:PHE:HB3	2.53	0.48
2:B:260:VAL:HG22	1:C:407:TRP:CZ2	2.48	0.48
1:C:132:LEU:CD2	1:C:164:ARG:HG3	2.32	0.48
1:C:142:GLY:HA3	1:C:183:GLU:OE2	2.13	0.48
1:C:175:PRO:CD	1:C:207:GLU:OE1	2.61	0.48
1:C:182:VAL:O	1:C:183:GLU:C	2.56	0.48
2:D:99:ALA:O	2:D:100:ALA:HB3	2.13	0.48
2:D:149:PHE:HE1	2:D:153:LEU:HD22	1.77	0.48
2:D:191:THR:CG2	2:D:192:HIS:N	2.76	0.48
2:D:274:PRO:CB	2:D:371:VAL:HG21	2.43	0.48
1:E:2:ARG:NH1	1:E:251:ASP:OD2	2.46	0.48
1:E:4:ILE:HG22	1:E:5:VAL:N	2.27	0.48
2:F:152:LEU:HD12	2:F:152:LEU:C	2.38	0.48
2:F:274:PRO:CB	2:F:371:VAL:HG21	2.43	0.48
1:G:49:ILE:HG13	1:G:50:ASN:N	2.28	0.48
1:G:182:VAL:O	1:G:183:GLU:C	2.56	0.48
1:G:253:ARG:CD	2:H:407:TRP:HH2	2.24	0.48
1:G:307:PRO:C	1:G:309:HIS:N	2.71	0.48
2:H:9:VAL:HG11	2:H:150:THR:OG1	2.13	0.48
2:H:203:MET:SD	2:H:267:PHE:HB3	2.53	0.48
2:H:409:VAL:C	2:H:411:GLU:N	2.71	0.48
1:A:154:ILE:HG22	1:A:166:MET:CE	2.43	0.48
2:B:234:ILE:CG1	2:B:270:ALA:HB1	2.37	0.48
2:B:409:VAL:C	2:B:411:GLU:N	2.71	0.48
1:C:2:ARG:NH1	1:C:251:ASP:OD2	2.46	0.48
1:C:173:PRO:HB3	1:C:183:GLU:CG	2.42	0.48
1:C:192:HIS:HD1	1:C:424:ASN:CG	2.20	0.48
2:D:9:VAL:HG11	2:D:150:THR:OG1	2.14	0.48
2:D:234:ILE:CG1	2:D:270:ALA:HB1	2.38	0.48
1:E:156:LYS:HA	1:E:156:LYS:CE	2.38	0.48
1:E:175:PRO:CD	1:E:207:GLU:OE1	2.61	0.48
1:E:176:LYS:CE	1:E:207:GLU:HG3	2.39	0.48
1:E:211:ASP:OD1	1:E:212:ILE:HG13	2.13	0.48
1:E:308:ARG:HG3	1:E:342:TYR:OH	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:155:GLU:OE1	2:F:197:HIS:HE1	1.96	0.48
2:F:203:MET:SD	2:F:267:PHE:HB3	2.53	0.48
1:G:2:ARG:NH1	1:G:251:ASP:OD2	2.47	0.48
1:G:132:LEU:CD2	1:G:164:ARG:HG3	2.32	0.48
1:G:191:VAL:HG13	1:G:192:HIS:N	2.28	0.48
1:G:211:ASP:OD1	1:G:212:ILE:HG13	2.13	0.48
2:H:50:ASN:ND2	2:H:53:PHE:O	2.46	0.48
2:H:152:LEU:HD12	2:H:152:LEU:C	2.38	0.48
2:H:155:GLU:OE1	2:H:197:HIS:HE1	1.96	0.48
2:H:191:THR:CG2	2:H:192:HIS:N	2.76	0.48
1:A:132:LEU:CD2	1:A:164:ARG:HG3	2.32	0.48
1:A:182:VAL:O	1:A:183:GLU:C	2.56	0.48
1:A:288:VAL:C	1:A:290:GLU:N	2.70	0.48
2:B:6:SER:OG	2:B:65:ALA:HB2	2.14	0.48
2:B:9:VAL:HG11	2:B:150:THR:OG1	2.13	0.48
2:B:50:ASN:ND2	2:B:53:PHE:O	2.46	0.48
2:B:99:ALA:O	2:B:100:ALA:HB3	2.14	0.48
1:C:69:ASP:HA	1:C:145:THR:HG21	1.95	0.48
1:C:199:ASP:O	1:C:200:GLU:HG3	2.13	0.48
1:C:239:THR:O	1:C:240:THR:C	2.56	0.48
2:D:6:SER:OG	2:D:65:ALA:HB2	2.14	0.48
2:D:13:GLY:C	2:D:16:ILE:HG22	2.38	0.48
1:E:182:VAL:O	1:E:183:GLU:C	2.56	0.48
2:F:105:ARG:HH11	2:F:105:ARG:HG3	1.78	0.48
2:F:191:THR:CG2	2:F:192:HIS:N	2.76	0.48
2:F:230:LEU:O	2:F:231:ILE:C	2.57	0.48
2:F:392:ASP:O	2:F:395:PHE:HB3	2.13	0.48
1:G:142:GLY:HA3	1:G:183:GLU:OE2	2.13	0.48
2:H:105:ARG:HG3	2:H:105:ARG:HH11	1.78	0.48
2:H:230:LEU:O	2:H:231:ILE:C	2.57	0.48
2:H:392:ASP:O	2:H:395:PHE:HB3	2.13	0.48
2:H:436:GLY:C	2:H:438:ASP:N	2.72	0.48
1:A:2:ARG:NH1	1:A:251:ASP:OD2	2.46	0.48
1:A:142:GLY:HA3	1:A:183:GLU:OE2	2.13	0.48
1:A:175:PRO:CD	1:A:207:GLU:OE1	2.61	0.48
1:A:308:ARG:HG3	1:A:342:TYR:OH	2.13	0.48
2:B:98:ASP:CB	2:B:105:ARG:HH21	2.14	0.48
2:D:203:MET:SD	2:D:267:PHE:HB3	2.53	0.48
2:D:409:VAL:C	2:D:411:GLU:N	2.71	0.48
2:D:436:GLY:C	2:D:438:ASP:N	2.72	0.48
1:E:20:PHE:CG	1:E:235:MET:SD	3.07	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:154:ILE:HG22	1:E:166:MET:CE	2.44	0.48
1:E:191:VAL:HG13	1:E:192:HIS:N	2.28	0.48
1:E:346:TRP:CG	2:F:401:LYS:HZ2	2.31	0.48
2:F:6:SER:OG	2:F:65:ALA:HB2	2.14	0.48
2:F:50:ASN:ND2	2:F:53:PHE:O	2.46	0.48
2:F:99:ALA:O	2:F:100:ALA:HB3	2.13	0.48
1:G:154:ILE:HG22	1:G:166:MET:CE	2.44	0.48
2:H:6:SER:OG	2:H:65:ALA:HB2	2.14	0.48
3:I:60:ASN:HD22	3:I:131:ASN:HD22	1.61	0.48
1:A:20:PHE:CG	1:A:235:MET:SD	3.07	0.48
1:A:192:HIS:HD1	1:A:424:ASN:CG	2.20	0.48
1:A:307:PRO:HB3	1:A:312:TYR:CZ	2.49	0.48
1:A:409:THR:C	1:A:411:GLU:H	2.22	0.48
2:B:11:GLN:NE2	2:B:74:VAL:CG2	2.76	0.48
2:B:252:LEU:O	2:B:253:THR:C	2.56	0.48
1:C:179:ASP:HB3	4:C:600:GDP:H3'	1.95	0.48
1:C:209:LEU:O	1:C:213:CYS:N	2.47	0.48
1:C:243:ARG:N	1:C:243:ARG:HD3	2.26	0.48
1:C:301:MET:HE1	1:C:377:PHE:CE2	2.43	0.48
1:C:329:ASP:HB3	2:D:177:VAL:HG11	1.91	0.48
1:C:346:TRP:HB3	2:D:401:LYS:NZ	2.28	0.48
2:D:158:SER:OG	2:D:197:HIS:HB3	2.13	0.48
2:D:293:ASN:HD21	2:D:338:LYS:NZ	2.11	0.48
1:E:115:VAL:CG2	1:E:152:LEU:HD23	2.44	0.48
1:E:239:THR:O	1:E:240:THR:C	2.56	0.48
2:F:9:VAL:HG11	2:F:150:THR:OG1	2.13	0.48
2:F:96:LYS:O	2:F:97:GLU:O	2.31	0.48
2:F:436:GLY:C	2:F:438:ASP:N	2.72	0.48
1:G:102:ASN:HB3	1:G:105:LYS:HB2	1.95	0.48
1:G:156:LYS:HA	1:G:156:LYS:CE	2.38	0.48
1:G:274:PRO:HG2	1:G:371:LEU:CD2	2.43	0.48
1:G:288:VAL:C	1:G:290:GLU:N	2.70	0.48
2:H:4:CYS:SG	2:H:252:LEU:CD1	3.01	0.48
2:H:13:GLY:C	2:H:16:ILE:HG22	2.38	0.48
2:H:99:ALA:O	2:H:100:ALA:HB3	2.14	0.48
2:H:274:PRO:CB	2:H:371:VAL:HG21	2.43	0.48
1:A:102:ASN:HB3	1:A:105:LYS:HB2	1.95	0.48
1:A:209:LEU:O	1:A:213:CYS:N	2.47	0.48
1:A:413:MET:HG3	1:A:414:ASP:N	2.22	0.48
1:C:20:PHE:CG	1:C:235:MET:SD	3.07	0.48
1:C:26:ASP:C	1:C:28:HIS:H	2.21	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:102:ASN:HB3	1:C:105:LYS:HB2	1.94	0.48
1:C:154:ILE:HG22	1:C:166:MET:CE	2.44	0.48
1:C:409:THR:C	1:C:411:GLU:H	2.22	0.48
2:D:103:TYR:O	2:D:104:ALA:C	2.57	0.48
1:E:199:ASP:O	1:E:200:GLU:HG3	2.13	0.48
1:E:264:ARG:HA	1:E:264:ARG:NE	2.29	0.48
1:E:307:PRO:C	1:E:309:HIS:N	2.71	0.48
2:F:293:ASN:HD21	2:F:338:LYS:NZ	2.10	0.48
2:F:386:GLU:O	2:F:388:TRP:N	2.47	0.48
1:G:115:VAL:CG2	1:G:152:LEU:HD23	2.44	0.48
2:H:293:ASN:HD21	2:H:338:LYS:NZ	2.10	0.48
2:H:386:GLU:O	2:H:388:TRP:N	2.47	0.48
1:A:88:ARG:NE	1:E:283:TYR:HE1	2.09	0.48
1:A:301:MET:HE1	1:A:377:PHE:CE2	2.43	0.48
2:B:13:GLY:C	2:B:16:ILE:HG22	2.39	0.48
2:B:103:TYR:O	2:B:104:ALA:C	2.57	0.48
2:B:436:GLY:C	2:B:438:ASP:N	2.72	0.48
1:C:133:GLN:NE2	1:C:252:LEU:HB2	2.28	0.48
2:D:11:GLN:NE2	2:D:74:VAL:CG2	2.76	0.48
2:D:70:LEU:HD12	2:D:70:LEU:N	2.28	0.48
2:D:107:HIS:CE1	2:D:152:LEU:HB3	2.49	0.48
1:E:242:LEU:HD22	1:E:250:ALA:N	2.19	0.48
1:E:301:MET:HE1	1:E:377:PHE:CE2	2.43	0.48
2:F:13:GLY:C	2:F:16:ILE:HG22	2.39	0.48
1:G:179:ASP:CB	4:G:600:GDP:H3'	2.36	0.48
1:G:198:THR:HG23	1:G:200:GLU:H	1.79	0.48
2:H:96:LYS:O	2:H:97:GLU:O	2.31	0.48
2:B:230:LEU:O	2:B:233:GLN:N	2.35	0.48
2:B:369:ALA:O	2:B:370:LYS:CB	2.62	0.48
1:C:211:ASP:OD1	1:C:212:ILE:HG13	2.13	0.48
2:D:62:VAL:HG12	2:D:91:GLN:HE22	1.78	0.48
2:F:11:GLN:NE2	2:F:74:VAL:HG22	2.22	0.48
2:F:115:ILE:HG23	2:F:116:ASP:H	1.79	0.48
1:G:20:PHE:CG	1:G:235:MET:SD	3.07	0.48
1:G:199:ASP:O	1:G:200:GLU:HG3	2.13	0.48
2:H:147:SER:O	2:H:190:THR:HG23	2.14	0.48
2:H:158:SER:OG	2:H:197:HIS:HB3	2.13	0.48
3:I:138:TYR:HB3	3:I:139:THR:C	2.39	0.48
1:A:70:LEU:O	1:A:99:ALA:HB2	2.14	0.48
1:A:137:LEU:HD22	1:A:154:ILE:HG21	1.95	0.48
2:B:107:HIS:CE1	2:B:152:LEU:HB3	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:110:ILE:O	2:B:111:GLY:C	2.57	0.48
1:C:274:PRO:HG2	1:C:371:LEU:CD2	2.43	0.48
1:C:307:PRO:HB3	1:C:312:TYR:CZ	2.49	0.48
2:D:241:SER:HB3	2:D:320:ARG:NH2	2.29	0.48
2:D:263:PRO:O	2:D:264:ARG:C	2.56	0.48
2:D:369:ALA:O	2:D:370:LYS:CB	2.62	0.48
1:E:102:ASN:HB3	1:E:105:LYS:HB2	1.95	0.48
1:E:274:PRO:HG2	1:E:371:LEU:CD2	2.43	0.48
1:E:288:VAL:C	1:E:290:GLU:N	2.70	0.48
1:E:409:THR:C	1:E:411:GLU:H	2.22	0.48
2:F:110:ILE:O	2:F:111:GLY:C	2.57	0.48
2:F:147:SER:O	2:F:190:THR:HG23	2.14	0.48
2:F:388:TRP:HA	2:F:388:TRP:HE3	1.79	0.48
1:G:226:ASP:O	1:G:229:HIS:HB3	2.14	0.48
1:G:239:THR:O	1:G:240:THR:C	2.56	0.48
1:G:264:ARG:HA	1:G:264:ARG:NE	2.29	0.48
2:H:70:LEU:HD12	2:H:145:THR:HG21	1.95	0.48
2:H:115:ILE:HG23	2:H:116:ASP:H	1.79	0.48
1:A:211:ASP:OD1	1:A:212:ILE:HG13	2.13	0.47
2:B:158:SER:OG	2:B:197:HIS:HB3	2.13	0.47
2:B:274:PRO:CB	2:B:371:VAL:HG21	2.43	0.47
1:C:70:LEU:O	1:C:99:ALA:HB2	2.14	0.47
1:C:226:ASP:O	1:C:229:HIS:HB3	2.14	0.47
2:D:4:CYS:SG	2:D:252:LEU:CD1	3.02	0.47
2:D:110:ILE:O	2:D:111:GLY:C	2.57	0.47
2:D:147:SER:O	2:D:190:THR:HG23	2.14	0.47
2:D:230:LEU:O	2:D:233:GLN:N	2.35	0.47
1:E:198:THR:HG23	1:E:200:GLU:H	1.79	0.47
1:E:226:ASP:O	1:E:229:HIS:HB3	2.14	0.47
1:E:383:ALA:C	1:E:385:GLN:N	2.72	0.47
1:E:413:MET:HG3	1:E:414:ASP:N	2.22	0.47
2:F:158:SER:OG	2:F:197:HIS:HB3	2.13	0.47
1:G:383:ALA:C	1:G:385:GLN:N	2.72	0.47
1:G:409:THR:C	1:G:411:GLU:H	2.22	0.47
1:G:413:MET:HG3	1:G:414:ASP:N	2.22	0.47
2:H:155:GLU:HG2	2:H:197:HIS:CE1	2.49	0.47
1:A:26:ASP:C	1:A:28:HIS:H	2.21	0.47
1:A:176:LYS:HG3	1:A:177:VAL:H	1.78	0.47
1:A:198:THR:HG23	1:A:200:GLU:H	1.79	0.47
2:B:115:ILE:HG23	2:B:116:ASP:H	1.79	0.47
2:B:149:PHE:O	2:B:150:THR:C	2.56	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:263:PRO:O	2:B:264:ARG:C	2.56	0.47
1:C:4:ILE:HG22	1:C:5:VAL:N	2.27	0.47
1:C:198:THR:HG23	1:C:200:GLU:H	1.79	0.47
2:D:97:GLU:HB2	2:D:110:ILE:HD11	1.96	0.47
2:D:175:PRO:HD2	2:D:207:GLU:HB3	1.96	0.47
1:E:20:PHE:O	1:E:24:ILE:HB	2.14	0.47
1:E:209:LEU:O	1:E:213:CYS:N	2.47	0.47
1:E:257:VAL:HG13	2:F:407:TRP:CD1	2.48	0.47
2:F:70:LEU:HD12	2:F:145:THR:HG21	1.95	0.47
2:F:115:ILE:CD1	2:F:115:ILE:C	2.88	0.47
2:F:155:GLU:HG2	2:F:197:HIS:CE1	2.49	0.47
2:F:175:PRO:HD2	2:F:207:GLU:HB3	1.97	0.47
1:G:20:PHE:O	1:G:24:ILE:HB	2.14	0.47
1:G:209:LEU:O	1:G:213:CYS:N	2.47	0.47
1:G:242:LEU:CD1	1:G:250:ALA:HB3	2.44	0.47
2:H:110:ILE:O	2:H:111:GLY:C	2.58	0.47
2:H:115:ILE:CD1	2:H:115:ILE:C	2.87	0.47
2:H:388:TRP:HA	2:H:388:TRP:HE3	1.79	0.47
1:A:20:PHE:O	1:A:24:ILE:HB	2.14	0.47
1:A:209:LEU:CD2	1:A:227:LEU:HD13	2.44	0.47
1:A:333:LEU:O	1:A:334:ASN:C	2.58	0.47
1:A:383:ALA:C	1:A:385:GLN:N	2.72	0.47
2:B:241:SER:HB3	2:B:320:ARG:NH2	2.29	0.47
2:B:348:PRO:CG	1:C:398:MET:CE	2.67	0.47
1:C:24:ILE:CD1	1:C:52:TYR:CE1	2.97	0.47
1:C:176:LYS:HG3	1:C:177:VAL:H	1.78	0.47
1:C:210:TYR:O	1:C:211:ASP:C	2.57	0.47
1:C:237:GLY:O	1:C:241:CYS:CB	2.61	0.47
1:C:383:ALA:C	1:C:385:GLN:N	2.72	0.47
2:D:115:ILE:CD1	2:D:115:ILE:C	2.87	0.47
2:D:115:ILE:HG23	2:D:116:ASP:H	1.79	0.47
2:D:210:TYR:CE2	2:D:227:LEU:HD21	2.49	0.47
2:D:335:ILE:O	2:D:337:THR:N	2.47	0.47
1:E:307:PRO:HB3	1:E:312:TYR:CZ	2.49	0.47
2:F:107:HIS:CE1	2:F:152:LEU:HB3	2.49	0.47
2:F:252:LEU:O	2:F:253:THR:C	2.56	0.47
2:F:384:ILE:HG22	2:F:388:TRP:CD1	2.49	0.47
1:G:210:TYR:O	1:G:211:ASP:C	2.57	0.47
2:H:103:TYR:O	2:H:104:ALA:C	2.57	0.47
2:H:175:PRO:HD2	2:H:207:GLU:HB3	1.97	0.47
2:H:241:SER:HB3	2:H:320:ARG:NH2	2.29	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:369:ALA:O	2:H:370:LYS:CB	2.62	0.47
1:A:24:ILE:CD1	1:A:52:TYR:CE1	2.97	0.47
1:A:187:ALA:O	1:A:188:THR:C	2.57	0.47
1:A:226:ASP:O	1:A:229:HIS:HB3	2.14	0.47
1:A:237:GLY:O	1:A:241:CYS:CB	2.61	0.47
1:A:274:PRO:HG2	1:A:371:LEU:CD2	2.43	0.47
2:B:117:LEU:HD12	2:B:121:ARG:HH12	1.80	0.47
2:B:154:MET:HA	2:B:157:LEU:HD12	1.97	0.47
2:B:175:PRO:HD2	2:B:207:GLU:HB3	1.97	0.47
2:B:335:ILE:O	2:B:337:THR:N	2.47	0.47
1:C:191:VAL:HG13	1:C:192:HIS:N	2.28	0.47
1:C:209:LEU:CD2	1:C:227:LEU:HD13	2.44	0.47
1:C:242:LEU:CD1	1:C:250:ALA:HB3	2.45	0.47
1:C:333:LEU:O	1:C:334:ASN:C	2.58	0.47
2:D:132:LEU:HD21	2:D:164:LYS:HE3	1.96	0.47
1:E:210:TYR:O	1:E:211:ASP:C	2.57	0.47
2:F:70:LEU:HD12	2:F:70:LEU:N	2.28	0.47
2:F:104:ALA:HB1	2:F:413:MET:HG3	1.95	0.47
2:F:241:SER:HB3	2:F:320:ARG:NH2	2.29	0.47
2:F:339:ARG:HH21	3:I:99:GLN:NE2	1.86	0.47
1:G:12:CYS:C	1:G:14:ASN:N	2.71	0.47
2:H:11:GLN:NE2	2:H:74:VAL:HG22	2.22	0.47
2:H:70:LEU:HD12	2:H:70:LEU:N	2.28	0.47
2:H:107:HIS:CE1	2:H:152:LEU:HB3	2.49	0.47
2:H:117:LEU:HD12	2:H:121:ARG:HH12	1.80	0.47
2:H:252:LEU:O	2:H:253:THR:C	2.56	0.47
1:A:4:ILE:HG22	1:A:5:VAL:N	2.27	0.47
1:A:384:ILE:O	1:A:384:ILE:HG23	2.14	0.47
2:B:97:GLU:HB2	2:B:110:ILE:HD11	1.96	0.47
2:B:115:ILE:CD1	2:B:115:ILE:C	2.87	0.47
2:B:145:THR:H	5:B:500:GTP:PG	2.37	0.47
1:C:20:PHE:O	1:C:24:ILE:HB	2.15	0.47
1:C:115:VAL:CG2	1:C:152:LEU:HD23	2.44	0.47
1:C:137:LEU:HD22	1:C:154:ILE:HG21	1.95	0.47
2:D:154:MET:HA	2:D:157:LEU:HD12	1.97	0.47
2:D:172:TYR:CD1	2:D:173:PRO:N	2.80	0.47
2:D:317:LEU:CD1	2:D:351:PHE:CD2	2.97	0.47
1:E:69:ASP:HA	1:E:145:THR:HG21	1.95	0.47
1:E:70:LEU:O	1:E:99:ALA:HB2	2.15	0.47
1:E:176:LYS:HG3	1:E:177:VAL:H	1.78	0.47
1:E:387:LEU:O	1:E:387:LEU:HG	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:117:LEU:HD12	2:F:121:ARG:HH12	1.80	0.47
2:F:154:MET:HA	2:F:157:LEU:HD12	1.97	0.47
2:F:369:ALA:O	2:F:370:LYS:CB	2.62	0.47
1:G:70:LEU:O	1:G:99:ALA:HB2	2.14	0.47
2:H:104:ALA:HB1	2:H:413:MET:HG3	1.95	0.47
1:A:191:VAL:HG13	1:A:192:HIS:N	2.28	0.47
1:A:243:ARG:N	1:A:243:ARG:HD3	2.26	0.47
2:B:11:GLN:O	2:B:15:GLN:HG3	2.15	0.47
2:B:147:SER:O	2:B:190:THR:HG23	2.14	0.47
2:B:151:SER:OG	2:B:193:THR:HG21	2.13	0.47
2:B:210:TYR:CE2	2:B:227:LEU:HD21	2.49	0.47
2:B:231:ILE:C	2:B:233:GLN:N	2.73	0.47
1:C:12:CYS:C	1:C:14:ASN:N	2.71	0.47
1:C:101:ASN:ND2	1:C:101:ASN:O	2.48	0.47
2:D:117:LEU:HD12	2:D:121:ARG:HH12	1.80	0.47
2:D:386:GLU:O	2:D:388:TRP:N	2.47	0.47
1:E:12:CYS:C	1:E:14:ASN:N	2.71	0.47
1:E:137:LEU:HD22	1:E:154:ILE:HG21	1.95	0.47
1:E:242:LEU:CD1	1:E:250:ALA:HB3	2.45	0.47
2:F:103:TYR:O	2:F:104:ALA:C	2.57	0.47
2:F:260:VAL:CG2	2:F:260:VAL:O	2.63	0.47
2:F:339:ARG:HG3	3:I:102:ARG:CD	2.40	0.47
1:G:209:LEU:CD2	1:G:227:LEU:HD13	2.43	0.47
1:G:253:ARG:CG	2:H:407:TRP:CH2	2.92	0.47
1:G:301:MET:HE1	1:G:377:PHE:CE2	2.43	0.47
1:G:333:LEU:O	1:G:334:ASN:C	2.58	0.47
1:A:12:CYS:C	1:A:14:ASN:N	2.71	0.47
1:A:103:TRP:CE3	1:A:189:LEU:HD13	2.50	0.47
1:A:217:LEU:C	1:A:219:LEU:N	2.55	0.47
1:A:242:LEU:CD1	1:A:250:ALA:HB3	2.45	0.47
1:A:346:TRP:CD1	2:B:401:LYS:HZ2	2.33	0.47
2:B:132:LEU:HD21	2:B:164:LYS:HE3	1.96	0.47
2:B:155:GLU:HA	2:B:197:HIS:CE1	2.49	0.47
2:B:155:GLU:HG2	2:B:197:HIS:CE1	2.49	0.47
2:B:185:TYR:OH	2:B:399:TYR:HA	2.15	0.47
2:B:191:THR:O	2:B:195:LEU:HB2	2.15	0.47
2:B:260:VAL:O	2:B:260:VAL:CG2	2.63	0.47
1:C:72:PRO:O	1:C:73:GLY:C	2.58	0.47
1:C:399:PHE:O	1:C:402:LYS:N	2.29	0.47
2:D:104:ALA:HB1	2:D:413:MET:HG3	1.96	0.47
2:D:149:PHE:O	2:D:150:THR:C	2.56	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:151:SER:OG	2:D:193:THR:HG21	2.13	0.47
2:D:155:GLU:HG2	2:D:197:HIS:CE1	2.49	0.47
2:D:185:TYR:OH	2:D:399:TYR:HA	2.15	0.47
2:D:191:THR:O	2:D:195:LEU:HB2	2.15	0.47
2:D:260:VAL:O	2:D:260:VAL:CG2	2.63	0.47
2:D:384:ILE:HG22	2:D:388:TRP:CD1	2.49	0.47
2:F:97:GLU:HB2	2:F:110:ILE:HD11	1.96	0.47
2:F:185:TYR:OH	2:F:399:TYR:HA	2.15	0.47
2:F:210:TYR:CE2	2:F:227:LEU:HD21	2.49	0.47
2:F:348:PRO:CD	1:G:398:MET:CE	2.92	0.47
1:G:26:ASP:C	1:G:28:HIS:H	2.21	0.47
1:G:69:ASP:HA	1:G:145:THR:HG21	1.95	0.47
1:G:103:TRP:CE3	1:G:189:LEU:HD13	2.50	0.47
1:G:168:THR:N	1:G:200:GLU:O	2.43	0.47
1:G:307:PRO:HB3	1:G:312:TYR:CZ	2.49	0.47
1:G:387:LEU:O	1:G:387:LEU:HG	2.15	0.47
2:H:11:GLN:O	2:H:15:GLN:HG3	2.15	0.47
2:H:97:GLU:HB2	2:H:110:ILE:HD11	1.96	0.47
2:H:102:ASN:CB	2:H:407:TRP:HD1	2.23	0.47
2:H:154:MET:HA	2:H:157:LEU:HD12	1.97	0.47
2:H:185:TYR:OH	2:H:399:TYR:HA	2.15	0.47
2:H:210:TYR:CE2	2:H:227:LEU:HD21	2.49	0.47
2:H:260:VAL:O	2:H:260:VAL:CG2	2.63	0.47
2:H:384:ILE:HG22	2:H:388:TRP:CD1	2.49	0.47
3:I:128:SER:HB3	3:I:131:ASN:H	1.80	0.47
3:I:142:VAL:HG13	3:I:143:ASN:O	2.15	0.47
1:A:72:PRO:O	1:A:73:GLY:C	2.58	0.47
1:A:237:GLY:HA3	1:A:376:THR:OG1	2.15	0.47
2:B:62:VAL:HA	2:B:86:LEU:O	2.15	0.47
2:B:384:ILE:HG22	2:B:388:TRP:CD1	2.49	0.47
2:B:386:GLU:O	2:B:388:TRP:N	2.47	0.47
2:B:388:TRP:HA	2:B:388:TRP:HE3	1.80	0.47
1:C:103:TRP:CE3	1:C:189:LEU:HD13	2.50	0.47
1:C:187:ALA:O	1:C:188:THR:C	2.57	0.47
1:C:307:PRO:C	1:C:309:HIS:N	2.71	0.47
2:D:11:GLN:O	2:D:15:GLN:HG3	2.15	0.47
2:D:335:ILE:C	2:D:337:THR:N	2.73	0.47
1:E:333:LEU:O	1:E:334:ASN:C	2.58	0.47
2:F:95:GLY:C	2:F:97:GLU:H	2.23	0.47
1:G:259:MET:HE1	1:G:378:ILE:CG2	2.45	0.47
2:H:95:GLY:C	2:H:97:GLU:H	2.23	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:155:GLU:HA	2:H:197:HIS:CE1	2.49	0.47
3:I:55:VAL:HA	3:I:146:TRP:CH2	2.50	0.47
1:A:115:VAL:CG2	1:A:152:LEU:HD23	2.44	0.47
1:A:204:ILE:HD13	1:A:231:VAL:CG2	2.45	0.47
2:B:348:PRO:HD3	1:C:398:MET:HB3	1.97	0.47
1:C:2:ARG:NH1	1:C:251:ASP:CG	2.73	0.47
1:C:204:ILE:HD13	1:C:231:VAL:CG2	2.45	0.47
1:C:297:ASP:OD2	1:C:299:LYS:HE2	2.14	0.47
1:C:384:ILE:O	1:C:384:ILE:HG23	2.14	0.47
2:D:57:GLY:N	2:H:284:GLU:HB2	2.30	0.47
2:D:231:ILE:C	2:D:233:GLN:N	2.73	0.47
2:D:256:GLN:HA	2:D:260:VAL:HG13	1.97	0.47
2:D:328:VAL:C	2:D:330:ALA:N	2.73	0.47
1:E:103:TRP:CE3	1:E:189:LEU:HD13	2.50	0.47
1:E:209:LEU:CD2	1:E:227:LEU:HD13	2.44	0.47
1:E:427:ASP:OD1	1:E:427:ASP:C	2.58	0.47
2:F:11:GLN:O	2:F:15:GLN:HG3	2.15	0.47
2:F:19:ALA:HB2	2:F:228:ASN:HB3	1.96	0.47
2:F:155:GLU:HA	2:F:197:HIS:CE1	2.49	0.47
2:F:335:ILE:O	2:F:337:THR:N	2.47	0.47
2:F:349:THR:HG22	1:G:178:SER:O	2.13	0.47
1:G:245:PRO:CB	2:H:73:THR:HG21	2.45	0.47
1:G:262:PHE:HA	1:G:263:PRO:HD2	1.65	0.47
1:G:287:THR:N	1:G:290:GLU:OE1	2.48	0.47
2:H:151:SER:OG	2:H:193:THR:HG21	2.13	0.47
2:H:335:ILE:O	2:H:337:THR:N	2.47	0.47
1:A:101:ASN:ND2	1:A:101:ASN:O	2.48	0.47
1:A:199:ASP:C	1:A:265:LEU:HD13	2.40	0.47
2:B:335:ILE:C	2:B:337:THR:N	2.73	0.47
2:D:148:GLY:O	2:D:151:SER:CB	2.61	0.47
2:F:151:SER:OG	2:F:193:THR:HG21	2.13	0.47
2:F:407:TRP:O	2:F:411:GLU:CG	2.63	0.47
1:G:242:LEU:HD22	1:G:250:ALA:N	2.19	0.47
1:G:245:PRO:HB3	2:H:73:THR:HG21	1.97	0.47
1:G:245:PRO:CA	2:H:73:THR:HG21	2.44	0.47
1:G:257:VAL:CG2	2:H:407:TRP:HB3	2.28	0.47
2:H:19:ALA:HB2	2:H:228:ASN:HB3	1.96	0.47
2:H:117:LEU:HD11	2:H:121:ARG:NH2	2.30	0.47
2:H:436:GLY:O	2:H:438:ASP:N	2.48	0.47
3:I:137:GLU:HB2	3:I:138:TYR:CA	2.44	0.47
1:A:2:ARG:NH1	1:A:251:ASP:CG	2.73	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:307:PRO:C	1:A:309:HIS:N	2.71	0.46
2:B:104:ALA:HB1	2:B:413:MET:HG3	1.95	0.46
2:B:226:ASN:O	2:B:229:ARG:N	2.48	0.46
1:C:237:GLY:HA3	1:C:376:THR:OG1	2.15	0.46
2:D:155:GLU:HA	2:D:197:HIS:CE1	2.49	0.46
2:D:226:ASN:O	2:D:229:ARG:N	2.48	0.46
2:D:256:GLN:O	2:D:260:VAL:HG13	2.15	0.46
2:D:388:TRP:HA	2:D:388:TRP:HE3	1.79	0.46
2:D:436:GLY:O	2:D:438:ASP:N	2.48	0.46
1:E:26:ASP:C	1:E:28:HIS:H	2.21	0.46
1:E:72:PRO:O	1:E:73:GLY:C	2.58	0.46
1:E:237:GLY:HA3	1:E:376:THR:OG1	2.15	0.46
2:F:381:THR:O	2:F:383:ALA:N	2.49	0.46
2:F:436:GLY:O	2:F:438:ASP:N	2.48	0.46
1:G:72:PRO:O	1:G:73:GLY:C	2.58	0.46
1:G:137:LEU:HD22	1:G:154:ILE:HG23	1.98	0.46
1:G:185:TYR:HD2	1:G:395:PHE:CE1	2.33	0.46
1:G:324:SER:OG	1:G:326:LYS:HB3	2.15	0.46
2:H:132:LEU:H	2:H:132:LEU:CD2	2.23	0.46
2:H:132:LEU:HD21	2:H:164:LYS:HE3	1.96	0.46
1:A:168:THR:N	1:A:200:GLU:O	2.43	0.46
1:A:260:VAL:HG21	2:B:407:TRP:HZ2	1.80	0.46
1:A:297:ASP:OD2	1:A:299:LYS:HE2	2.14	0.46
2:B:63:PRO:HG3	2:B:87:PHE:CG	2.50	0.46
2:B:384:ILE:C	2:B:386:GLU:N	2.71	0.46
2:B:404:PHE:CD1	2:B:404:PHE:N	2.83	0.46
2:B:436:GLY:O	2:B:438:ASP:N	2.48	0.46
2:D:120:ASP:O	2:D:124:LYS:HB2	2.15	0.46
2:D:316:CYS:HB3	2:D:378:LEU:HD12	1.95	0.46
1:E:101:ASN:ND2	1:E:101:ASN:O	2.48	0.46
1:E:137:LEU:HD22	1:E:154:ILE:HG23	1.98	0.46
1:E:185:TYR:HD2	1:E:395:PHE:CE1	2.33	0.46
1:E:259:MET:HE1	1:E:378:ILE:CG2	2.45	0.46
1:E:287:THR:N	1:E:290:GLU:OE1	2.48	0.46
1:E:421:ALA:O	1:E:422:GLU:C	2.58	0.46
2:F:117:LEU:HD11	2:F:121:ARG:NH2	2.30	0.46
2:F:148:GLY:O	2:F:151:SER:CB	2.61	0.46
2:F:149:PHE:O	2:F:150:THR:C	2.56	0.46
2:F:243:ARG:NH2	2:F:252:LEU:CB	2.78	0.46
2:F:392:ASP:OD2	2:F:422:ARG:NE	2.48	0.46
1:G:101:ASN:ND2	1:G:101:ASN:O	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:309:HIS:ND1	3:I:95:ILE:HG21	2.30	0.46
1:G:427:ASP:OD1	1:G:427:ASP:C	2.58	0.46
1:G:431:GLU:HA	1:G:434:GLN:HG3	1.97	0.46
2:H:234:ILE:CG1	2:H:270:ALA:HB1	2.38	0.46
2:H:381:THR:O	2:H:383:ALA:N	2.49	0.46
2:H:392:ASP:OD2	2:H:422:ARG:NE	2.48	0.46
2:H:407:TRP:O	2:H:411:GLU:CG	2.63	0.46
3:I:140:LYS:CB	3:I:141:ASN:HA	2.35	0.46
1:A:387:LEU:O	1:A:387:LEU:HG	2.14	0.46
2:B:23:LEU:CD2	2:B:232:GLY:O	2.64	0.46
2:B:256:GLN:O	2:B:260:VAL:HG13	2.15	0.46
2:B:328:VAL:C	2:B:330:ALA:N	2.73	0.46
2:B:384:ILE:HG22	2:B:384:ILE:O	2.15	0.46
1:C:199:ASP:C	1:C:265:LEU:HD13	2.41	0.46
2:D:84:ARG:HE	2:D:84:ARG:HB3	1.51	0.46
2:D:384:ILE:HG22	2:D:384:ILE:O	2.15	0.46
2:F:132:LEU:H	2:F:132:LEU:CD2	2.23	0.46
2:H:148:GLY:O	2:H:151:SER:CB	2.61	0.46
2:H:166:LYS:CE	2:H:199:ASP:OD1	2.62	0.46
2:H:317:LEU:CD1	2:H:351:PHE:CD2	2.97	0.46
1:A:137:LEU:HD22	1:A:154:ILE:HG23	1.97	0.46
1:A:242:LEU:HD11	1:A:250:ALA:HB3	1.97	0.46
1:A:435:TYR:C	1:A:437:ASP:N	2.72	0.46
2:B:256:GLN:HA	2:B:260:VAL:HG13	1.97	0.46
2:B:316:CYS:HB3	2:B:378:LEU:HD12	1.95	0.46
2:B:317:LEU:CD1	2:B:351:PHE:CD2	2.97	0.46
1:C:137:LEU:HD22	1:C:154:ILE:HG23	1.97	0.46
2:D:7:ILE:HD11	2:D:137:VAL:CG2	2.44	0.46
2:D:401:LYS:C	2:D:403:ALA:H	2.24	0.46
1:E:384:ILE:O	1:E:384:ILE:HG23	2.14	0.46
1:E:409:THR:C	1:E:411:GLU:N	2.73	0.46
1:E:431:GLU:HA	1:E:434:GLN:HG3	1.97	0.46
2:F:132:LEU:HD21	2:F:164:LYS:HE3	1.96	0.46
2:F:145:THR:O	2:F:149:PHE:HB3	2.15	0.46
2:F:191:THR:O	2:F:195:LEU:HB2	2.15	0.46
2:F:234:ILE:C	2:F:234:ILE:CD1	2.86	0.46
2:F:317:LEU:CD1	2:F:351:PHE:CD2	2.97	0.46
2:F:324:VAL:HG12	2:F:326:LYS:H	1.81	0.46
2:F:335:ILE:C	2:F:337:THR:N	2.73	0.46
1:G:137:LEU:HD22	1:G:154:ILE:HG21	1.95	0.46
1:G:237:GLY:HA3	1:G:376:THR:OG1	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:352:LYS:CG	2:H:181:VAL:CG2	2.93	0.46
1:G:384:ILE:O	1:G:384:ILE:HG23	2.14	0.46
2:H:191:THR:O	2:H:195:LEU:HB2	2.15	0.46
2:H:234:ILE:C	2:H:234:ILE:CD1	2.86	0.46
2:H:243:ARG:NH2	2:H:252:LEU:CB	2.78	0.46
2:H:335:ILE:C	2:H:337:THR:N	2.73	0.46
2:B:56:THR:C	2:F:284:GLU:HB2	2.40	0.46
2:B:148:GLY:O	2:B:151:SER:CB	2.61	0.46
2:B:407:TRP:O	2:B:411:GLU:CG	2.63	0.46
1:C:185:TYR:HD2	1:C:395:PHE:CE1	2.33	0.46
2:D:23:LEU:CD2	2:D:232:GLY:O	2.64	0.46
2:D:81:GLY:O	2:D:82:THR:C	2.59	0.46
2:D:243:ARG:NH2	2:D:252:LEU:CB	2.78	0.46
2:D:392:ASP:OD2	2:D:422:ARG:NE	2.48	0.46
1:E:2:ARG:NH1	1:E:251:ASP:CG	2.73	0.46
1:E:199:ASP:C	1:E:265:LEU:HD13	2.41	0.46
2:F:23:LEU:CD2	2:F:232:GLY:O	2.64	0.46
2:F:114:ILE:O	2:F:118:VAL:HG23	2.16	0.46
1:G:360:PRO:HG2	1:G:371:LEU:CB	2.38	0.46
2:H:23:LEU:CD2	2:H:232:GLY:O	2.64	0.46
2:H:145:THR:O	2:H:149:PHE:HB3	2.15	0.46
2:H:149:PHE:O	2:H:150:THR:C	2.56	0.46
2:H:226:ASN:O	2:H:229:ARG:N	2.48	0.46
2:H:324:VAL:HG12	2:H:326:LYS:H	1.81	0.46
3:I:145:ASN:HB3	3:I:149:ASN:ND2	2.30	0.46
1:A:185:TYR:HD2	1:A:395:PHE:CE1	2.33	0.46
2:B:19:ALA:HB2	2:B:228:ASN:HB3	1.96	0.46
2:B:81:GLY:O	2:B:82:THR:C	2.59	0.46
2:B:119:LEU:HD11	2:B:156:ARG:HD2	1.97	0.46
2:B:145:THR:O	2:B:149:PHE:HB3	2.15	0.46
2:B:234:ILE:C	2:B:234:ILE:CD1	2.86	0.46
2:B:243:ARG:NH2	2:B:252:LEU:CB	2.78	0.46
2:D:70:LEU:HD12	2:D:145:THR:HG21	1.95	0.46
2:D:324:VAL:HG12	2:D:326:LYS:H	1.81	0.46
2:D:407:TRP:O	2:D:411:GLU:CG	2.63	0.46
1:E:168:THR:N	1:E:200:GLU:O	2.43	0.46
1:E:187:ALA:O	1:E:188:THR:C	2.57	0.46
1:E:297:ASP:OD2	1:E:299:LYS:HE2	2.14	0.46
1:E:324:SER:OG	1:E:326:LYS:HB3	2.15	0.46
1:E:332:MET:HE3	1:E:351:VAL:CG1	2.32	0.46
2:F:401:LYS:C	2:F:403:ALA:H	2.24	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:192:HIS:HD1	1:G:424:ASN:CG	2.20	0.46
1:G:196:GLU:O	1:G:197:ASN:OD1	2.34	0.46
1:G:199:ASP:C	1:G:265:LEU:HD13	2.41	0.46
1:G:409:THR:C	1:G:411:GLU:N	2.73	0.46
2:H:114:ILE:O	2:H:118:VAL:HG23	2.16	0.46
2:H:401:LYS:C	2:H:403:ALA:H	2.24	0.46
2:H:404:PHE:CD1	2:H:404:PHE:N	2.83	0.46
1:A:259:MET:HE1	1:A:378:ILE:CG2	2.45	0.46
1:A:324:SER:OG	1:A:326:LYS:HB3	2.16	0.46
1:A:380:ASN:C	1:A:380:ASN:HD22	2.24	0.46
1:A:421:ALA:O	1:A:422:GLU:C	2.58	0.46
2:B:120:ASP:O	2:B:124:LYS:HB2	2.15	0.46
2:B:210:TYR:CZ	2:B:227:LEU:HD11	2.51	0.46
2:B:230:LEU:O	2:B:231:ILE:C	2.57	0.46
2:B:324:VAL:HG12	2:B:326:LYS:H	1.81	0.46
2:B:353:VAL:HB	1:C:179:ASP:OD1	2.15	0.46
1:C:102:ASN:ND2	1:C:104:ALA:HB3	2.31	0.46
1:C:168:THR:N	1:C:200:GLU:O	2.44	0.46
1:C:431:GLU:HA	1:C:434:GLN:HG3	1.97	0.46
2:D:9:VAL:HG21	2:D:149:PHE:HD1	1.80	0.46
2:D:52:PHE:O	2:D:64:ARG:HB3	2.14	0.46
2:D:203:MET:SD	2:D:267:PHE:CB	3.04	0.46
2:D:210:TYR:CZ	2:D:227:LEU:HD11	2.51	0.46
1:E:230:LEU:CG	1:E:302:MET:HE2	2.46	0.46
1:E:242:LEU:HD11	1:E:250:ALA:HB3	1.97	0.46
2:F:115:ILE:CG1	2:F:152:LEU:HD13	2.46	0.46
2:F:166:LYS:CE	2:F:199:ASP:OD1	2.62	0.46
2:F:226:ASN:O	2:F:229:ARG:N	2.48	0.46
1:G:2:ARG:NH1	1:G:251:ASP:CG	2.73	0.46
1:G:208:ALA:O	1:G:212:ILE:HG13	2.16	0.46
1:G:230:LEU:CG	1:G:302:MET:HE2	2.46	0.46
1:G:242:LEU:HD11	1:G:250:ALA:HB3	1.97	0.46
1:G:435:TYR:C	1:G:437:ASP:N	2.72	0.46
2:H:115:ILE:CG1	2:H:152:LEU:HD13	2.46	0.46
2:H:328:VAL:C	2:H:330:ALA:N	2.73	0.46
1:A:67:LEU:HD12	1:A:92:PHE:CD2	2.51	0.46
1:A:133:GLN:O	1:A:165:ILE:CD1	2.64	0.46
1:A:264:ARG:HA	1:A:264:ARG:NE	2.29	0.46
1:A:431:GLU:HA	1:A:434:GLN:HG3	1.97	0.46
2:B:203:MET:SD	2:B:267:PHE:CB	3.04	0.46
2:B:265:GLY:O	2:B:266:HIS:O	2.33	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:346:TRP:HZ2	2:B:435:VAL:HG12	1.81	0.46
1:C:208:ALA:O	1:C:212:ILE:HG13	2.16	0.46
1:C:408:TYR:O	1:C:411:GLU:HB2	2.15	0.46
1:C:421:ALA:O	1:C:422:GLU:C	2.58	0.46
2:D:152:LEU:C	2:D:152:LEU:CD1	2.89	0.46
2:D:404:PHE:CD1	2:D:404:PHE:N	2.83	0.46
1:E:208:ALA:O	1:E:212:ILE:HG13	2.16	0.46
2:F:63:PRO:HG2	2:F:87:PHE:CG	2.51	0.46
2:F:81:GLY:O	2:F:82:THR:C	2.59	0.46
2:F:234:ILE:CG1	2:F:270:ALA:HB1	2.38	0.46
2:F:243:ARG:NH2	2:F:252:LEU:HB2	2.30	0.46
2:F:404:PHE:CD1	2:F:404:PHE:N	2.83	0.46
1:G:187:ALA:O	1:G:188:THR:C	2.57	0.46
1:G:250:ALA:HB1	1:G:254:LYS:CB	2.44	0.46
1:G:297:ASP:OD2	1:G:299:LYS:HE2	2.14	0.46
2:H:63:PRO:HG2	2:H:87:PHE:CG	2.51	0.46
2:H:243:ARG:NH2	2:H:252:LEU:HB2	2.30	0.46
2:H:256:GLN:HA	2:H:260:VAL:HG13	1.97	0.46
3:I:113:ILE:HD12	3:I:118:GLU:HB3	1.98	0.46
3:I:133:PHE:HD2	3:I:133:PHE:HA	1.56	0.46
3:I:143:ASN:OD1	3:I:145:ASN:HB3	2.15	0.46
1:A:94:PHE:CD2	1:A:94:PHE:N	2.84	0.46
1:A:208:ALA:O	1:A:212:ILE:HG13	2.16	0.46
2:B:434:GLU:C	2:B:436:GLY:N	2.74	0.46
1:C:6:HIS:HB3	1:C:21:TRP:HZ2	1.81	0.46
1:C:67:LEU:HD12	1:C:92:PHE:CD2	2.51	0.46
1:C:133:GLN:O	1:C:165:ILE:CD1	2.64	0.46
1:C:242:LEU:HD11	1:C:250:ALA:HB3	1.97	0.46
1:C:287:THR:N	1:C:290:GLU:OE1	2.48	0.46
1:C:324:SER:OG	1:C:326:LYS:HB3	2.15	0.46
1:C:380:ASN:HD22	1:C:380:ASN:C	2.24	0.46
1:C:387:LEU:O	1:C:387:LEU:HG	2.15	0.46
1:C:409:THR:C	1:C:411:GLU:N	2.73	0.46
2:D:95:GLY:C	2:D:97:GLU:H	2.23	0.46
2:D:130:THR:O	2:D:131:GLY:C	2.59	0.46
2:D:144:GLY:H	5:D:500:GTP:PG	2.39	0.46
2:D:265:GLY:O	2:D:266:HIS:O	2.33	0.46
1:E:435:TYR:C	1:E:437:ASP:N	2.72	0.46
2:F:63:PRO:HD2	2:F:87:PHE:HA	1.97	0.46
2:F:203:MET:SD	2:F:267:PHE:CB	3.04	0.46
2:F:256:GLN:HA	2:F:260:VAL:HG13	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:421:ALA:O	1:G:422:GLU:C	2.58	0.46
2:H:52:PHE:O	2:H:64:ARG:HB3	2.16	0.46
2:H:81:GLY:O	2:H:82:THR:C	2.59	0.46
2:H:203:MET:SD	2:H:267:PHE:CB	3.04	0.46
3:I:62:ASP:H	3:I:136:VAL:HG11	1.80	0.46
1:A:102:ASN:ND2	1:A:104:ALA:HB3	2.31	0.46
1:A:287:THR:N	1:A:290:GLU:OE1	2.48	0.46
1:A:360:PRO:HG2	1:A:371:LEU:CB	2.38	0.46
2:B:95:GLY:C	2:B:97:GLU:H	2.24	0.46
2:B:152:LEU:C	2:B:152:LEU:CD1	2.89	0.46
2:B:392:ASP:OD2	2:B:422:ARG:CZ	2.64	0.46
2:B:401:LYS:C	2:B:403:ALA:H	2.24	0.46
1:C:435:TYR:C	1:C:437:ASP:N	2.72	0.46
2:D:117:LEU:HD11	2:D:121:ARG:NH2	2.31	0.46
2:D:210:TYR:CD2	2:D:227:LEU:HD21	2.51	0.46
2:D:243:ARG:NH2	2:D:252:LEU:HB2	2.31	0.46
1:E:67:LEU:HD12	1:E:92:PHE:CD2	2.51	0.46
1:E:70:LEU:HD21	1:E:149:MET:HE3	1.98	0.46
1:E:113:GLU:CG	1:E:114:LEU:N	2.79	0.46
1:E:133:GLN:O	1:E:165:ILE:CD1	2.64	0.46
1:E:134:GLY:HA3	1:E:165:ILE:HG12	1.97	0.46
1:E:161:TYR:C	1:E:163:ASP:N	2.71	0.46
1:E:380:ASN:HD22	1:E:380:ASN:C	2.24	0.46
2:F:30:ILE:HD11	2:F:61:HIS:CD2	2.51	0.46
2:F:120:ASP:O	2:F:124:LYS:HB2	2.15	0.46
2:F:231:ILE:C	2:F:233:GLN:N	2.73	0.46
2:F:384:ILE:HG22	2:F:384:ILE:O	2.15	0.46
2:F:434:GLU:C	2:F:436:GLY:N	2.74	0.46
1:G:6:HIS:HB3	1:G:21:TRP:HZ2	1.81	0.46
1:G:113:GLU:CG	1:G:114:LEU:N	2.79	0.46
1:G:134:GLY:HA3	1:G:165:ILE:HG12	1.97	0.46
1:G:265:LEU:C	1:G:265:LEU:CD1	2.83	0.46
2:H:120:ASP:O	2:H:124:LYS:HB2	2.15	0.46
2:H:434:GLU:C	2:H:436:GLY:N	2.74	0.46
1:A:6:HIS:HB3	1:A:21:TRP:HZ2	1.81	0.45
1:A:134:GLY:HA3	1:A:165:ILE:HG12	1.97	0.45
1:A:259:MET:HE1	1:A:378:ILE:HG21	1.98	0.45
2:B:114:ILE:O	2:B:118:VAL:HG23	2.15	0.45
2:B:117:LEU:HD11	2:B:121:ARG:NH2	2.31	0.45
2:B:210:TYR:CD2	2:B:227:LEU:HD21	2.51	0.45
2:B:317:LEU:CD1	2:B:351:PHE:CE2	2.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:94:PHE:CD2	1:C:94:PHE:N	2.84	0.45
1:C:134:GLY:HA3	1:C:165:ILE:HG12	1.97	0.45
1:C:259:MET:HE1	1:C:378:ILE:CG2	2.45	0.45
1:C:423:SER:O	1:C:424:ASN:C	2.60	0.45
1:C:427:ASP:OD1	1:C:427:ASP:C	2.57	0.45
2:D:19:ALA:HB2	2:D:228:ASN:HB3	1.96	0.45
2:D:145:THR:O	2:D:149:PHE:HB3	2.15	0.45
2:D:204:VAL:HG21	2:D:231:ILE:HG23	1.98	0.45
2:D:392:ASP:OD2	2:D:422:ARG:CZ	2.64	0.45
1:E:72:PRO:O	1:E:74:THR:N	2.50	0.45
1:E:154:ILE:HD12	1:E:155:SER:N	2.31	0.45
1:E:196:GLU:O	1:E:197:ASN:OD1	2.34	0.45
2:F:204:VAL:HG21	2:F:231:ILE:HG23	1.97	0.45
2:F:256:GLN:O	2:F:260:VAL:HG13	2.15	0.45
2:F:308:ARG:O	2:F:309:HIS:HB3	2.16	0.45
1:G:67:LEU:HD12	1:G:92:PHE:CD2	2.51	0.45
1:G:133:GLN:O	1:G:165:ILE:CD1	2.64	0.45
1:G:154:ILE:HD12	1:G:155:SER:N	2.31	0.45
2:H:5:ILE:CG2	2:H:135:PHE:HB3	2.41	0.45
2:H:144:GLY:H	5:H:500:GTP:PG	2.40	0.45
2:H:293:ASN:HD21	2:H:338:LYS:HZ1	1.63	0.45
1:A:230:LEU:CG	1:A:302:MET:HE2	2.46	0.45
1:A:262:PHE:HA	1:A:263:PRO:HD2	1.65	0.45
1:A:408:TYR:O	1:A:411:GLU:HB2	2.15	0.45
1:A:409:THR:C	1:A:411:GLU:N	2.73	0.45
2:B:130:THR:O	2:B:131:GLY:C	2.59	0.45
2:B:132:LEU:H	2:B:132:LEU:CD2	2.23	0.45
2:B:392:ASP:OD2	2:B:422:ARG:NE	2.48	0.45
2:D:119:LEU:HD11	2:D:156:ARG:HD2	1.97	0.45
2:D:346:TRP:HZ2	2:D:435:VAL:HG12	1.81	0.45
2:D:381:THR:O	2:D:383:ALA:N	2.48	0.45
2:D:413:MET:C	2:D:414:GLU:CG	2.90	0.45
2:D:434:GLU:C	2:D:436:GLY:N	2.74	0.45
1:E:6:HIS:HB3	1:E:21:TRP:HZ2	1.81	0.45
1:E:259:MET:HE1	1:E:378:ILE:HG21	1.98	0.45
2:F:62:VAL:CG2	2:F:88:HIS:CE1	2.87	0.45
2:F:119:LEU:HD11	2:F:156:ARG:HD2	1.97	0.45
2:F:144:GLY:H	5:F:500:GTP:PG	2.40	0.45
2:F:265:GLY:O	2:F:266:HIS:O	2.33	0.45
1:G:70:LEU:HD21	1:G:149:MET:HE3	1.99	0.45
1:G:72:PRO:O	1:G:74:THR:N	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:259:MET:HE1	1:G:378:ILE:HG21	1.98	0.45
1:G:380:ASN:C	1:G:380:ASN:HD22	2.24	0.45
2:H:63:PRO:HD2	2:H:87:PHE:HA	1.98	0.45
2:H:204:VAL:HG21	2:H:231:ILE:HG23	1.97	0.45
2:H:256:GLN:O	2:H:260:VAL:HG13	2.15	0.45
2:H:384:ILE:HG22	2:H:384:ILE:O	2.15	0.45
1:A:115:VAL:HG21	1:A:152:LEU:HD21	1.99	0.45
1:A:196:GLU:O	1:A:197:ASN:OD1	2.34	0.45
1:A:409:THR:HA	1:A:413:MET:HB3	1.99	0.45
2:B:5:ILE:CG2	2:B:6:SER:H	2.29	0.45
2:B:9:VAL:HG21	2:B:149:PHE:HD1	1.80	0.45
2:B:100:ALA:C	2:B:102:ASN:H	2.24	0.45
2:B:212:ILE:HD11	2:B:302:MET:H	1.82	0.45
2:B:308:ARG:O	2:B:309:HIS:HB3	2.16	0.45
1:C:113:GLU:CG	1:C:114:LEU:N	2.79	0.45
1:C:264:ARG:HA	1:C:264:ARG:NE	2.29	0.45
2:D:61:HIS:O	2:D:62:VAL:C	2.59	0.45
2:D:308:ARG:O	2:D:309:HIS:HB3	2.16	0.45
1:E:237:GLY:O	1:E:241:CYS:CB	2.61	0.45
2:F:61:HIS:O	2:F:62:VAL:C	2.60	0.45
1:G:24:ILE:CD1	1:G:52:TYR:CE1	2.97	0.45
1:G:210:TYR:CE2	1:G:227:LEU:HD11	2.52	0.45
1:G:299:LYS:H	1:G:299:LYS:CD	2.07	0.45
2:H:263:PRO:O	2:H:264:ARG:C	2.56	0.45
2:H:265:GLY:O	2:H:266:HIS:O	2.33	0.45
2:H:308:ARG:O	2:H:309:HIS:HB3	2.16	0.45
1:A:209:LEU:HD23	1:A:227:LEU:HD13	1.98	0.45
1:A:210:TYR:CE2	1:A:227:LEU:HD11	2.52	0.45
1:A:319:PHE:CD2	1:A:323:MET:HE1	2.52	0.45
1:A:423:SER:O	1:A:424:ASN:C	2.60	0.45
2:B:243:ARG:NH2	2:B:252:LEU:HB2	2.30	0.45
2:B:274:PRO:HB2	2:B:371:VAL:HG21	1.98	0.45
2:B:381:THR:O	2:B:383:ALA:N	2.49	0.45
2:B:425:MET:O	2:B:426:ALA:C	2.60	0.45
1:C:115:VAL:HG21	1:C:152:LEU:HD21	1.99	0.45
1:C:196:GLU:O	1:C:197:ASN:OD1	2.34	0.45
1:C:210:TYR:CE2	1:C:227:LEU:HD11	2.51	0.45
1:C:230:LEU:CG	1:C:302:MET:HE2	2.46	0.45
1:C:313:LEU:O	1:C:347:ILE:HD12	2.16	0.45
2:D:62:VAL:CG2	2:D:88:HIS:CE1	2.87	0.45
2:D:63:PRO:HG2	2:D:87:PHE:CG	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:271:THR:O	2:D:376:CYS:HA	2.17	0.45
1:E:11:GLN:O	1:E:14:ASN:HB3	2.16	0.45
1:E:175:PRO:HG2	1:E:207:GLU:OE1	2.17	0.45
1:E:192:HIS:HD1	1:E:424:ASN:CG	2.20	0.45
1:E:360:PRO:HG2	1:E:371:LEU:CB	2.38	0.45
2:F:413:MET:C	2:F:414:GLU:CG	2.90	0.45
1:G:11:GLN:O	1:G:14:ASN:HB3	2.16	0.45
1:G:245:PRO:HB3	2:H:73:THR:HG22	1.98	0.45
1:G:332:MET:HE3	1:G:351:VAL:CG1	2.32	0.45
2:H:231:ILE:C	2:H:233:GLN:N	2.73	0.45
2:H:271:THR:O	2:H:376:CYS:HA	2.17	0.45
2:H:316:CYS:HB3	2:H:378:LEU:HD12	1.95	0.45
2:H:413:MET:C	2:H:414:GLU:CG	2.90	0.45
1:A:72:PRO:O	1:A:74:THR:N	2.50	0.45
1:A:135:PHE:N	1:A:135:PHE:CD1	2.85	0.45
1:A:210:TYR:O	1:A:211:ASP:C	2.57	0.45
1:A:427:ASP:OD1	1:A:427:ASP:C	2.57	0.45
2:B:5:ILE:HD11	2:B:64:ARG:NH2	2.31	0.45
2:B:115:ILE:CG1	2:B:152:LEU:HD13	2.46	0.45
1:C:72:PRO:O	1:C:74:THR:N	2.50	0.45
1:C:259:MET:HE1	1:C:378:ILE:HG21	1.97	0.45
2:D:204:VAL:O	2:D:204:VAL:HG12	2.17	0.45
2:D:204:VAL:CG1	2:D:209:ILE:HD11	2.42	0.45
2:D:212:ILE:HD11	2:D:302:MET:H	1.82	0.45
2:D:317:LEU:CD1	2:D:351:PHE:CE2	2.99	0.45
2:F:52:PHE:O	2:F:64:ARG:HB3	2.16	0.45
2:F:212:ILE:HD11	2:F:302:MET:H	1.82	0.45
2:F:226:ASN:O	2:F:227:LEU:C	2.59	0.45
2:F:263:PRO:O	2:F:264:ARG:C	2.56	0.45
2:F:271:THR:O	2:F:376:CYS:HA	2.17	0.45
2:F:317:LEU:CD1	2:F:351:PHE:CE2	2.99	0.45
2:F:384:ILE:C	2:F:386:GLU:N	2.72	0.45
1:G:135:PHE:N	1:G:135:PHE:CD1	2.85	0.45
1:G:161:TYR:C	1:G:163:ASP:N	2.71	0.45
1:G:324:SER:O	1:G:326:LYS:N	2.50	0.45
2:H:119:LEU:HD11	2:H:156:ARG:HD2	1.97	0.45
2:H:317:LEU:CD1	2:H:351:PHE:CE2	2.99	0.45
2:H:392:ASP:OD2	2:H:422:ARG:CZ	2.64	0.45
3:I:130:ASP:CB	3:I:131:ASN:CA	2.93	0.45
1:A:11:GLN:O	1:A:14:ASN:HB3	2.16	0.45
1:A:154:ILE:HD12	1:A:155:SER:N	2.31	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:313:LEU:O	1:A:347:ILE:HD12	2.16	0.45
2:B:70:LEU:HD12	2:B:145:THR:HG21	1.95	0.45
2:B:271:THR:O	2:B:376:CYS:HA	2.17	0.45
2:B:276:ILE:CG2	2:B:369:ALA:CB	2.91	0.45
2:B:393:HIS:O	2:B:394:LYS:C	2.59	0.45
1:C:12:CYS:O	1:C:13:GLY:C	2.59	0.45
1:C:82:PRO:HB2	1:C:83:PHE:H	1.56	0.45
1:C:175:PRO:HG2	1:C:207:GLU:OE1	2.16	0.45
1:C:324:SER:O	1:C:326:LYS:N	2.50	0.45
2:D:114:ILE:O	2:D:118:VAL:HG23	2.16	0.45
2:D:115:ILE:CG1	2:D:152:LEU:HD13	2.46	0.45
2:D:230:LEU:O	2:D:231:ILE:C	2.57	0.45
1:E:94:PHE:CD2	1:E:94:PHE:N	2.84	0.45
1:E:188:THR:HG23	1:E:425:MET:HE3	1.98	0.45
1:E:194:LEU:O	1:E:265:LEU:HD23	2.16	0.45
2:F:103:TYR:CD1	2:F:148:GLY:HA2	2.52	0.45
2:F:210:TYR:CD2	2:F:227:LEU:HD21	2.51	0.45
2:F:231:ILE:HD13	2:F:231:ILE:H	1.82	0.45
2:F:268:PRO:CA	2:F:379:SER:O	2.65	0.45
2:F:316:CYS:HB3	2:F:378:LEU:HD12	1.95	0.45
2:F:328:VAL:C	2:F:330:ALA:N	2.73	0.45
2:F:392:ASP:OD2	2:F:422:ARG:CZ	2.65	0.45
1:G:8:GLN:CG	1:G:67:LEU:HD22	2.47	0.45
1:G:94:PHE:N	1:G:94:PHE:CD2	2.84	0.45
1:G:175:PRO:HG2	1:G:207:GLU:OE1	2.16	0.45
1:G:257:VAL:O	2:H:404:PHE:HB3	2.16	0.45
1:G:409:THR:HA	1:G:413:MET:HB3	1.99	0.45
2:H:103:TYR:CD1	2:H:148:GLY:HA2	2.52	0.45
2:H:210:TYR:CZ	2:H:227:LEU:HD11	2.51	0.45
2:H:210:TYR:CD2	2:H:227:LEU:HD21	2.51	0.45
2:H:212:ILE:HD11	2:H:302:MET:H	1.82	0.45
2:H:226:ASN:O	2:H:227:LEU:C	2.59	0.45
2:H:346:TRP:HZ2	2:H:435:VAL:HG12	1.81	0.45
1:A:312:TYR:HA	1:A:381:SER:HA	1.99	0.45
1:A:324:SER:O	1:A:326:LYS:N	2.50	0.45
2:B:54:SER:O	2:B:61:HIS:O	2.35	0.45
2:B:204:VAL:O	2:B:204:VAL:HG12	2.17	0.45
2:B:413:MET:C	2:B:414:GLU:CG	2.90	0.45
1:C:11:GLN:O	1:C:14:ASN:HB3	2.16	0.45
1:C:23:VAL:O	1:C:24:ILE:C	2.59	0.45
1:C:106:GLY:O	1:C:149:MET:HB2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:194:LEU:O	1:C:265:LEU:HD23	2.16	0.45
1:C:319:PHE:CD2	1:C:323:MET:HE1	2.52	0.45
2:D:425:MET:O	2:D:426:ALA:C	2.60	0.45
1:E:98:GLY:C	1:E:100:GLY:H	2.24	0.45
1:E:135:PHE:N	1:E:135:PHE:CD1	2.85	0.45
1:E:242:LEU:HD22	1:E:250:ALA:O	2.17	0.45
1:E:257:VAL:O	1:E:257:VAL:CG1	2.64	0.45
2:F:5:ILE:CG2	2:F:135:PHE:HB3	2.41	0.45
2:F:152:LEU:C	2:F:152:LEU:CD1	2.89	0.45
2:F:274:PRO:HB2	2:F:371:VAL:HG21	1.98	0.45
2:F:295:CYS:SG	2:F:375:VAL:HG11	2.57	0.45
1:G:4:ILE:HD12	1:G:239:THR:HG21	1.98	0.45
1:G:209:LEU:HD23	1:G:227:LEU:HD13	1.98	0.45
1:G:287:THR:O	1:G:288:VAL:CG2	2.58	0.45
1:G:408:TYR:O	1:G:411:GLU:HB2	2.15	0.45
2:H:61:HIS:O	2:H:62:VAL:C	2.59	0.45
2:H:62:VAL:CG1	2:H:91:GLN:NE2	2.80	0.45
2:H:229:ARG:NH1	2:H:229:ARG:HG2	2.31	0.45
2:H:231:ILE:HD13	2:H:231:ILE:H	1.82	0.45
2:H:274:PRO:HB2	2:H:371:VAL:HG21	1.98	0.45
2:H:276:ILE:CG2	2:H:369:ALA:CB	2.91	0.45
2:H:334:THR:CG2	2:H:335:ILE:N	2.79	0.45
1:A:12:CYS:O	1:A:13:GLY:C	2.59	0.45
1:A:242:LEU:HD22	1:A:250:ALA:O	2.17	0.45
2:B:204:VAL:HG21	2:B:231:ILE:HG23	1.97	0.45
2:B:255:PHE:O	2:B:259:LEU:N	2.50	0.45
1:C:188:THR:HG23	1:C:425:MET:HE3	1.98	0.45
1:C:282:GLN:O	1:C:282:GLN:CG	2.65	0.45
1:C:312:TYR:HA	1:C:381:SER:HA	1.99	0.45
1:C:409:THR:HA	1:C:413:MET:HB3	1.99	0.45
2:D:393:HIS:O	2:D:394:LYS:C	2.59	0.45
1:E:209:LEU:HD23	1:E:227:LEU:HD13	1.98	0.45
1:E:210:TYR:CE2	1:E:227:LEU:HD11	2.52	0.45
1:E:299:LYS:H	1:E:299:LYS:CD	2.07	0.45
1:E:324:SER:O	1:E:326:LYS:N	2.50	0.45
2:F:172:TYR:HA	2:F:173:PRO:HD3	1.93	0.45
2:F:204:VAL:O	2:F:204:VAL:HG12	2.17	0.45
2:F:210:TYR:CZ	2:F:227:LEU:HD11	2.51	0.45
2:F:334:THR:CG2	2:F:335:ILE:N	2.79	0.45
2:F:384:ILE:O	2:F:385:ALA:C	2.59	0.45
1:G:23:VAL:O	1:G:25:SER:N	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:194:LEU:O	1:G:265:LEU:HD23	2.16	0.45
1:G:319:PHE:CD2	1:G:323:MET:HE1	2.52	0.45
1:G:325:MET:HE1	1:G:355:VAL:HG21	1.99	0.45
1:G:423:SER:O	1:G:424:ASN:C	2.60	0.45
2:H:268:PRO:CA	2:H:379:SER:O	2.65	0.45
2:H:384:ILE:O	2:H:385:ALA:C	2.59	0.45
1:A:23:VAL:O	1:A:25:SER:N	2.50	0.45
1:A:113:GLU:CG	1:A:114:LEU:N	2.79	0.45
1:A:175:PRO:HG2	1:A:207:GLU:OE1	2.17	0.45
1:A:189:LEU:HD23	1:A:421:ALA:CB	2.47	0.45
1:A:194:LEU:O	1:A:265:LEU:HD23	2.16	0.45
2:B:182:VAL:O	2:B:183:GLU:C	2.60	0.45
2:B:231:ILE:HD13	2:B:231:ILE:H	1.82	0.45
2:B:295:CYS:SG	2:B:375:VAL:HG11	2.57	0.45
1:C:23:VAL:O	1:C:25:SER:N	2.50	0.45
1:C:135:PHE:CD1	1:C:135:PHE:N	2.85	0.45
1:C:154:ILE:HD12	1:C:155:SER:N	2.31	0.45
1:C:209:LEU:HD23	1:C:227:LEU:HD13	1.98	0.45
1:C:242:LEU:HD22	1:C:250:ALA:O	2.17	0.45
2:D:63:PRO:HD2	2:D:87:PHE:HA	1.98	0.45
2:D:100:ALA:C	2:D:102:ASN:H	2.24	0.45
2:D:182:VAL:O	2:D:183:GLU:C	2.60	0.45
1:E:8:GLN:CG	1:E:67:LEU:HD22	2.47	0.45
1:E:102:ASN:ND2	1:E:104:ALA:HB3	2.31	0.45
1:E:312:TYR:HA	1:E:381:SER:HA	1.99	0.45
1:E:319:PHE:CD2	1:E:323:MET:HE1	2.52	0.45
1:E:325:MET:HE1	1:E:355:VAL:HG21	1.99	0.45
2:F:229:ARG:NH1	2:F:229:ARG:HG2	2.31	0.45
2:F:293:ASN:HD21	2:F:338:LYS:HZ1	1.64	0.45
2:F:346:TRP:HZ2	2:F:435:VAL:HG12	1.81	0.45
1:G:106:GLY:O	1:G:149:MET:HB2	2.16	0.45
1:G:288:VAL:N	1:G:289:PRO:CD	2.79	0.45
1:G:312:TYR:HA	1:G:381:SER:HA	1.99	0.45
2:H:204:VAL:O	2:H:204:VAL:HG12	2.17	0.45
2:H:295:CYS:SG	2:H:375:VAL:HG11	2.57	0.45
2:H:384:ILE:C	2:H:386:GLU:N	2.72	0.45
3:I:60:ASN:HD22	3:I:131:ASN:ND2	2.15	0.45
1:A:245:PRO:HA	2:B:73:THR:CG2	2.46	0.45
1:A:250:ALA:HB1	1:A:254:LYS:CB	2.44	0.45
1:A:280:SER:OG	1:A:281:GLN:N	2.49	0.45
1:A:282:GLN:O	1:A:282:GLN:CG	2.65	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:325:MET:HE1	1:A:355:VAL:HG21	1.99	0.45
2:B:5:ILE:HG22	2:B:6:SER:H	1.78	0.45
2:B:229:ARG:NH1	2:B:229:ARG:HG2	2.31	0.45
2:B:408:TYR:CG	2:B:418:PHE:HZ	2.34	0.45
2:B:423:GLU:O	2:B:426:ALA:HB3	2.16	0.45
1:C:70:LEU:HD21	1:C:149:MET:HE3	1.99	0.45
1:C:248:LEU:HD21	2:D:179:THR:HG21	1.97	0.45
2:D:231:ILE:HD13	2:D:231:ILE:H	1.82	0.45
2:D:295:CYS:SG	2:D:375:VAL:HG11	2.57	0.45
1:E:23:VAL:O	1:E:24:ILE:C	2.60	0.45
1:E:23:VAL:O	1:E:25:SER:N	2.50	0.45
1:E:167:ASN:HD21	1:E:252:LEU:HD22	1.82	0.45
1:E:409:THR:HA	1:E:413:MET:HB3	1.99	0.45
2:F:100:ALA:C	2:F:102:ASN:H	2.24	0.45
2:F:182:VAL:O	2:F:184:PRO:CD	2.65	0.45
2:F:344:VAL:CG1	2:F:345:ASP:N	2.78	0.45
2:F:423:GLU:O	2:F:426:ALA:HB3	2.16	0.45
1:G:98:GLY:C	1:G:100:GLY:H	2.25	0.45
1:G:188:THR:HG23	1:G:425:MET:HE3	1.98	0.45
1:G:189:LEU:HD23	1:G:421:ALA:CB	2.47	0.45
2:H:9:VAL:HG21	2:H:149:PHE:HD1	1.80	0.45
2:H:100:ALA:C	2:H:102:ASN:H	2.24	0.45
2:H:152:LEU:C	2:H:152:LEU:CD1	2.89	0.45
2:H:425:MET:O	2:H:426:ALA:C	2.60	0.45
3:I:66:LYS:HE2	3:I:139:THR:HG22	1.98	0.45
1:A:23:VAL:O	1:A:24:ILE:C	2.60	0.44
1:A:82:PRO:HB2	1:A:83:PHE:H	1.56	0.44
1:A:106:GLY:O	1:A:149:MET:HB2	2.16	0.44
2:B:103:TYR:CD1	2:B:148:GLY:HA2	2.52	0.44
2:B:121:ARG:HG2	2:B:121:ARG:HH11	1.82	0.44
2:B:439:SER:HA	1:C:401:ARG:NH2	2.32	0.44
1:C:8:GLN:CG	1:C:67:LEU:HD22	2.47	0.44
1:C:189:LEU:HD23	1:C:421:ALA:CB	2.47	0.44
1:C:332:MET:HE3	1:C:351:VAL:CG1	2.32	0.44
2:D:12:ALA:HB2	5:D:500:GTP:C8	2.52	0.44
1:E:4:ILE:HD12	1:E:239:THR:HG21	1.98	0.44
1:E:24:ILE:CD1	1:E:52:TYR:CE1	2.97	0.44
1:E:106:GLY:O	1:E:149:MET:HB2	2.16	0.44
1:E:189:LEU:HD23	1:E:421:ALA:CB	2.47	0.44
1:E:408:TYR:O	1:E:411:GLU:HB2	2.15	0.44
1:E:423:SER:O	1:E:424:ASN:C	2.60	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:12:ALA:HB2	5:F:500:GTP:C8	2.52	0.44
2:F:425:MET:O	2:F:426:ALA:C	2.60	0.44
1:G:23:VAL:O	1:G:24:ILE:C	2.60	0.44
1:G:167:ASN:HD21	1:G:252:LEU:HD22	1.82	0.44
1:G:237:GLY:O	1:G:241:CYS:CB	2.61	0.44
1:G:242:LEU:HD22	1:G:250:ALA:O	2.17	0.44
2:H:12:ALA:HB2	5:H:500:GTP:C8	2.52	0.44
2:H:182:VAL:O	2:H:184:PRO:CD	2.65	0.44
2:H:344:VAL:CG1	2:H:345:ASP:N	2.78	0.44
3:I:105:TYR:CG	3:I:133:PHE:HZ	2.34	0.44
1:A:4:ILE:HD12	1:A:239:THR:HG21	1.98	0.44
1:A:8:GLN:CG	1:A:67:LEU:HD22	2.47	0.44
1:A:14:ASN:O	1:A:17:GLY:N	2.50	0.44
2:B:12:ALA:HB2	5:B:500:GTP:C8	2.53	0.44
2:B:253:THR:HG21	1:C:105:LYS:NZ	2.32	0.44
2:B:402:ARG:O	2:B:405:VAL:N	2.49	0.44
1:C:265:LEU:C	1:C:265:LEU:CD1	2.83	0.44
2:D:121:ARG:HG2	2:D:121:ARG:HH11	1.83	0.44
2:D:121:ARG:HG2	2:D:121:ARG:NH1	2.33	0.44
2:D:175:PRO:CG	2:D:304:LYS:HG2	2.47	0.44
1:E:288:VAL:N	1:E:289:PRO:CD	2.80	0.44
2:F:9:VAL:HG21	2:F:149:PHE:HD1	1.80	0.44
2:F:153:LEU:O	2:F:157:LEU:HG	2.18	0.44
1:G:102:ASN:ND2	1:G:104:ALA:HB3	2.31	0.44
2:H:153:LEU:O	2:H:157:LEU:HG	2.18	0.44
2:H:423:GLU:O	2:H:426:ALA:HB3	2.16	0.44
3:I:55:VAL:HG21	3:I:57:PHE:CZ	2.52	0.44
3:I:142:VAL:HG22	3:I:143:ASN:N	2.32	0.44
1:A:67:LEU:HD12	1:A:92:PHE:CE2	2.52	0.44
1:A:188:THR:HG23	1:A:425:MET:HE3	1.98	0.44
1:A:243:ARG:HH21	1:A:252:LEU:N	2.13	0.44
2:B:49:PHE:HE1	2:B:61:HIS:CE1	2.34	0.44
2:B:88:HIS:C	2:B:90:GLU:N	2.74	0.44
2:B:182:VAL:O	2:B:184:PRO:CD	2.65	0.44
2:B:272:TYR:CE2	2:B:274:PRO:HD2	2.53	0.44
2:B:334:THR:CG2	2:B:335:ILE:N	2.79	0.44
1:C:67:LEU:HD12	1:C:92:PHE:CE2	2.52	0.44
1:C:325:MET:HE1	1:C:355:VAL:HG21	1.99	0.44
2:D:103:TYR:CD1	2:D:148:GLY:HA2	2.52	0.44
2:D:276:ILE:CG2	2:D:369:ALA:CB	2.91	0.44
2:D:334:THR:CG2	2:D:335:ILE:N	2.79	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:423:GLU:O	2:D:426:ALA:HB3	2.16	0.44
1:E:265:LEU:C	1:E:265:LEU:CD1	2.83	0.44
1:E:287:THR:O	1:E:288:VAL:CG2	2.58	0.44
1:E:313:LEU:O	1:E:347:ILE:HD12	2.16	0.44
2:F:296:PHE:HZ	2:F:351:PHE:HZ	1.66	0.44
1:G:257:VAL:HG11	2:H:407:TRP:CE2	2.52	0.44
1:G:313:LEU:O	1:G:347:ILE:HD12	2.16	0.44
1:A:70:LEU:HD21	1:A:149:MET:HE3	1.98	0.44
2:B:121:ARG:HG2	2:B:121:ARG:NH1	2.33	0.44
2:B:349:THR:O	1:C:181:VAL:CG1	2.65	0.44
1:C:167:ASN:HD21	1:C:252:LEU:HD22	1.82	0.44
1:C:346:TRP:CG	2:D:401:LYS:HD2	2.52	0.44
2:D:182:VAL:O	2:D:184:PRO:CD	2.65	0.44
2:D:272:TYR:CE2	2:D:274:PRO:HD2	2.53	0.44
2:D:301:GLN:O	2:D:302:MET:C	2.61	0.44
1:E:52:TYR:HE1	1:E:240:THR:HB	1.82	0.44
1:E:250:ALA:HB1	1:E:254:LYS:CB	2.43	0.44
2:F:30:ILE:O	2:F:31:GLN:O	2.35	0.44
2:F:84:ARG:HE	2:F:84:ARG:HB3	1.51	0.44
2:F:274:PRO:C	2:F:275:VAL:CA	2.88	0.44
2:F:402:ARG:O	2:F:405:VAL:N	2.49	0.44
1:G:2:ARG:HD3	2:H:98:ASP:OD2	2.18	0.44
1:G:67:LEU:HD12	1:G:92:PHE:CE2	2.52	0.44
1:G:409:THR:O	1:G:412:GLY:N	2.48	0.44
2:H:84:ARG:HE	2:H:84:ARG:HB3	1.51	0.44
1:A:141:LEU:N	1:A:141:LEU:HD12	2.33	0.44
1:A:243:ARG:HD3	1:A:243:ARG:HA	1.62	0.44
1:A:288:VAL:N	1:A:289:PRO:HD2	2.32	0.44
1:A:295:MET:SD	1:A:375:ALA:HB3	2.58	0.44
2:B:151:SER:HB3	2:B:193:THR:CG2	2.34	0.44
2:B:296:PHE:HZ	2:B:351:PHE:HZ	1.66	0.44
2:B:301:GLN:O	2:B:302:MET:C	2.61	0.44
1:C:42:LEU:C	1:C:44:LEU:H	2.26	0.44
1:C:141:LEU:N	1:C:141:LEU:HD12	2.33	0.44
1:C:295:MET:SD	1:C:375:ALA:HB3	2.57	0.44
1:C:360:PRO:HG2	1:C:371:LEU:CB	2.38	0.44
1:C:402:LYS:O	1:C:403:ALA:C	2.61	0.44
2:D:5:ILE:CG2	2:D:135:PHE:HB3	2.41	0.44
2:D:402:ARG:O	2:D:405:VAL:N	2.49	0.44
1:E:243:ARG:HH21	1:E:252:LEU:N	2.12	0.44
1:G:52:TYR:HE1	1:G:240:THR:HB	1.83	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:288:VAL:N	1:G:289:PRO:HD2	2.32	0.44
1:G:295:MET:SD	1:G:375:ALA:HB3	2.57	0.44
2:H:62:VAL:CG2	2:H:88:HIS:CE1	2.87	0.44
2:H:121:ARG:HG2	2:H:121:ARG:NH1	2.33	0.44
2:H:362:VAL:HG13	2:H:368:LEU:CG	2.48	0.44
3:I:97:LEU:HD13	3:I:100:GLY:O	2.18	0.44
1:A:167:ASN:HA	1:A:200:GLU:O	2.17	0.44
1:A:288:VAL:N	1:A:289:PRO:CD	2.79	0.44
1:A:390:ARG:O	1:A:391:ILE:C	2.61	0.44
2:B:226:ASN:O	2:B:227:LEU:C	2.59	0.44
1:C:14:ASN:O	1:C:17:GLY:N	2.51	0.44
1:C:102:ASN:OD1	1:C:408:TYR:CZ	2.70	0.44
1:C:167:ASN:HA	1:C:200:GLU:O	2.17	0.44
1:C:288:VAL:N	1:C:289:PRO:HD2	2.32	0.44
1:C:390:ARG:O	1:C:391:ILE:C	2.61	0.44
2:D:132:LEU:H	2:D:132:LEU:CD2	2.23	0.44
2:D:303:VAL:O	2:D:303:VAL:CG1	2.64	0.44
1:E:99:ALA:O	1:E:100:GLY:C	2.60	0.44
1:E:141:LEU:N	1:E:141:LEU:HD12	2.33	0.44
1:E:295:MET:SD	1:E:375:ALA:HB3	2.57	0.44
2:F:5:ILE:CG2	2:F:135:PHE:CB	2.96	0.44
2:F:105:ARG:O	2:F:110:ILE:CG2	2.64	0.44
2:F:303:VAL:O	2:F:303:VAL:CG1	2.65	0.44
1:G:102:ASN:OD1	1:G:408:TYR:CZ	2.70	0.44
1:G:167:ASN:HA	1:G:200:GLU:O	2.17	0.44
1:G:260:VAL:HG23	2:H:406:HIS:HE1	1.79	0.44
2:H:64:ARG:HD2	2:H:125:LEU:HD22	1.99	0.44
2:H:296:PHE:HZ	2:H:351:PHE:HZ	1.66	0.44
1:A:42:LEU:C	1:A:44:LEU:H	2.25	0.44
1:A:95:GLY:C	1:A:97:SER:H	2.25	0.44
1:A:167:ASN:HD21	1:A:252:LEU:HD22	1.82	0.44
1:A:402:LYS:O	1:A:403:ALA:C	2.61	0.44
2:B:7:ILE:HD11	2:B:137:VAL:CG2	2.44	0.44
2:B:84:ARG:HE	2:B:84:ARG:HB3	1.51	0.44
2:B:119:LEU:O	2:B:120:ASP:C	2.61	0.44
2:B:344:VAL:CG1	2:B:345:ASP:N	2.78	0.44
1:C:243:ARG:HH21	1:C:252:LEU:N	2.13	0.44
2:D:184:PRO:HG2	2:D:398:MET:CE	2.40	0.44
2:D:226:ASN:O	2:D:227:LEU:C	2.59	0.44
2:D:268:PRO:CA	2:D:379:SER:O	2.65	0.44
2:D:344:VAL:CG1	2:D:345:ASP:N	2.78	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:14:ASN:O	1:E:17:GLY:N	2.51	0.44
2:F:182:VAL:O	2:F:183:GLU:C	2.60	0.44
2:F:217:LEU:HD13	2:F:277:SER:N	2.32	0.44
2:F:272:TYR:CE2	2:F:274:PRO:HD2	2.53	0.44
2:F:362:VAL:HG13	2:F:368:LEU:CG	2.48	0.44
2:F:408:TYR:CG	2:F:418:PHE:HZ	2.34	0.44
1:G:12:CYS:O	1:G:13:GLY:C	2.59	0.44
1:G:161:TYR:O	1:G:163:ASP:N	2.51	0.44
1:G:258:ASN:CG	1:G:352:LYS:HE2	2.35	0.44
1:G:273:ALA:CB	1:G:274:PRO:CD	2.93	0.44
2:H:5:ILE:CG2	2:H:135:PHE:CB	2.95	0.44
2:H:7:ILE:HG13	2:H:137:VAL:HG22	1.98	0.44
2:H:30:ILE:O	2:H:31:GLN:O	2.35	0.44
2:H:217:LEU:HD13	2:H:277:SER:N	2.33	0.44
2:H:377:MET:HG3	2:H:377:MET:O	2.18	0.44
2:H:402:ARG:O	2:H:405:VAL:N	2.49	0.44
2:H:408:TYR:CG	2:H:418:PHE:HZ	2.34	0.44
3:I:84:LEU:CD2	3:I:101:VAL:HG12	2.47	0.44
2:B:64:ARG:HD2	2:B:125:LEU:HD22	1.99	0.44
1:C:4:ILE:HD12	1:C:239:THR:HG21	1.98	0.44
2:D:119:LEU:O	2:D:120:ASP:C	2.60	0.44
2:D:296:PHE:HZ	2:D:351:PHE:HZ	1.66	0.44
2:D:388:TRP:CD2	2:D:425:MET:HE1	2.52	0.44
2:D:408:TYR:CG	2:D:418:PHE:HZ	2.34	0.44
1:E:67:LEU:HD12	1:E:92:PHE:CE2	2.53	0.44
1:E:288:VAL:N	1:E:289:PRO:HD2	2.32	0.44
2:F:7:ILE:HG13	2:F:137:VAL:HG22	1.98	0.44
2:F:64:ARG:HD2	2:F:125:LEU:HD22	1.99	0.44
2:F:121:ARG:NH1	2:F:121:ARG:HG2	2.33	0.44
2:F:209:ILE:CD1	2:F:231:ILE:HD11	2.47	0.44
2:F:393:HIS:O	2:F:394:LYS:C	2.59	0.44
1:G:95:GLY:C	1:G:97:SER:H	2.25	0.44
1:G:248:LEU:HD21	2:H:179:THR:HG22	1.92	0.44
1:G:254:LYS:HA	1:G:257:VAL:HG12	1.99	0.44
1:G:258:ASN:HD21	1:G:352:LYS:HE2	1.69	0.44
2:H:8:HIS:HA	2:H:138:PHE:HB2	1.99	0.44
2:H:121:ARG:HG2	2:H:121:ARG:HH11	1.83	0.44
2:H:272:TYR:CE2	2:H:274:PRO:HD2	2.53	0.44
2:H:274:PRO:C	2:H:275:VAL:CA	2.88	0.44
2:H:343:PHE:CE1	2:H:351:PHE:HE1	2.36	0.44
2:H:363:VAL:CG1	2:H:364:PRO:HD2	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:393:HIS:O	2:H:394:LYS:C	2.59	0.44
3:I:134:LYS:N	3:I:135:LYS:CA	2.80	0.44
1:A:98:GLY:C	1:A:100:GLY:H	2.24	0.44
1:A:99:ALA:O	1:A:100:GLY:C	2.60	0.44
1:A:161:TYR:O	1:A:163:ASP:N	2.51	0.44
2:B:175:PRO:CG	2:B:304:LYS:HG2	2.47	0.44
2:B:363:VAL:CG1	2:B:364:PRO:HD2	2.48	0.44
1:C:7:ILE:N	1:C:136:GLN:O	2.51	0.44
1:C:37:HIS:O	1:C:38:GLY:C	2.61	0.44
1:C:98:GLY:C	1:C:100:GLY:H	2.24	0.44
1:C:161:TYR:O	1:C:163:ASP:N	2.51	0.44
2:D:62:VAL:CG1	2:D:91:GLN:NE2	2.80	0.44
2:D:88:HIS:C	2:D:90:GLU:N	2.74	0.44
2:D:108:TYR:O	2:D:109:THR:C	2.61	0.44
1:E:37:HIS:O	1:E:38:GLY:C	2.61	0.44
1:E:161:TYR:O	1:E:163:ASP:N	2.51	0.44
1:E:280:SER:OG	1:E:281:GLN:N	2.49	0.44
2:F:8:HIS:HA	2:F:138:PHE:HB2	2.00	0.44
2:F:276:ILE:O	2:F:369:ALA:CA	2.66	0.44
2:F:390:ARG:HH11	2:F:390:ARG:HG3	1.83	0.44
2:H:105:ARG:O	2:H:110:ILE:CG2	2.65	0.44
2:H:276:ILE:O	2:H:369:ALA:CA	2.66	0.44
2:H:303:VAL:O	2:H:303:VAL:CG1	2.65	0.44
2:H:390:ARG:HH11	2:H:390:ARG:HG3	1.83	0.44
3:I:132:PHE:HD2	3:I:133:PHE:N	2.16	0.44
1:A:7:ILE:N	1:A:136:GLN:O	2.51	0.43
1:A:102:ASN:OD1	1:A:408:TYR:CZ	2.70	0.43
1:A:147:SER:HB2	1:A:190:SER:CB	2.41	0.43
1:A:352:LYS:C	1:A:352:LYS:HD3	2.43	0.43
2:B:268:PRO:CA	2:B:379:SER:O	2.65	0.43
1:C:280:SER:OG	1:C:281:GLN:N	2.49	0.43
1:C:288:VAL:N	1:C:289:PRO:CD	2.80	0.43
2:D:8:HIS:HA	2:D:138:PHE:HB2	1.99	0.43
2:D:229:ARG:NH1	2:D:229:ARG:HG2	2.31	0.43
1:E:168:THR:CG2	1:E:201:THR:HG23	2.48	0.43
1:E:390:ARG:O	1:E:391:ILE:C	2.61	0.43
1:E:409:THR:O	1:E:412:GLY:N	2.48	0.43
2:F:23:LEU:O	2:F:26:LEU:HB3	2.17	0.43
2:F:204:VAL:CG1	2:F:209:ILE:HD11	2.42	0.43
2:F:377:MET:HG3	2:F:377:MET:O	2.18	0.43
1:G:7:ILE:N	1:G:136:GLN:O	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:14:ASN:O	1:G:17:GLY:N	2.51	0.43
1:G:99:ALA:O	1:G:100:GLY:C	2.60	0.43
1:G:141:LEU:N	1:G:141:LEU:HD12	2.33	0.43
1:G:253:ARG:HD3	2:H:407:TRP:HH2	1.82	0.43
1:G:390:ARG:O	1:G:391:ILE:C	2.61	0.43
2:H:23:LEU:O	2:H:26:LEU:HB3	2.17	0.43
2:H:182:VAL:O	2:H:183:GLU:C	2.60	0.43
2:H:184:PRO:HG2	2:H:398:MET:CE	2.40	0.43
1:A:269:MET:HB2	1:A:301:MET:HE3	2.00	0.43
2:B:209:ILE:CD1	2:B:231:ILE:HD11	2.47	0.43
2:B:384:ILE:O	2:B:385:ALA:C	2.59	0.43
2:B:388:TRP:CD2	2:B:425:MET:HE1	2.52	0.43
1:C:147:SER:HB2	1:C:190:SER:CB	2.41	0.43
1:C:179:ASP:CG	1:C:179:ASP:O	2.62	0.43
1:C:250:ALA:HB1	1:C:254:LYS:CB	2.44	0.43
1:C:269:MET:HB2	1:C:301:MET:HE3	2.00	0.43
2:D:153:LEU:O	2:D:157:LEU:HG	2.18	0.43
2:D:166:LYS:CE	2:D:199:ASP:OD1	2.62	0.43
2:D:262:TYR:HB3	2:D:263:PRO:HD2	2.00	0.43
2:D:362:VAL:HG13	2:D:368:LEU:CG	2.48	0.43
1:E:6:HIS:HB3	1:E:65:ALA:CB	2.48	0.43
1:E:7:ILE:N	1:E:136:GLN:O	2.51	0.43
1:E:95:GLY:C	1:E:97:SER:H	2.25	0.43
1:E:102:ASN:OD1	1:E:408:TYR:CZ	2.70	0.43
1:E:282:GLN:O	1:E:282:GLN:CG	2.65	0.43
1:E:352:LYS:HD3	1:E:352:LYS:C	2.43	0.43
2:F:108:TYR:O	2:F:109:THR:C	2.61	0.43
2:F:121:ARG:HG2	2:F:121:ARG:HH11	1.83	0.43
2:F:130:THR:O	2:F:131:GLY:C	2.59	0.43
2:F:363:VAL:CG1	2:F:364:PRO:HD2	2.48	0.43
1:G:6:HIS:HB3	1:G:65:ALA:CB	2.48	0.43
1:G:37:HIS:O	1:G:38:GLY:C	2.61	0.43
2:H:108:TYR:O	2:H:109:THR:C	2.61	0.43
2:H:209:ILE:CD1	2:H:231:ILE:HD11	2.48	0.43
2:H:310:GLY:HA3	2:H:383:ALA:CA	2.49	0.43
1:A:70:LEU:HB2	1:A:99:ALA:CB	2.48	0.43
2:B:108:TYR:O	2:B:109:THR:C	2.61	0.43
2:B:217:LEU:HD13	2:B:277:SER:N	2.33	0.43
2:B:262:TYR:HB3	2:B:263:PRO:HD2	2.00	0.43
2:B:304:LYS:HG3	2:B:304:LYS:O	2.18	0.43
2:B:362:VAL:HG13	2:B:368:LEU:CG	2.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:377:MET:HG3	2:B:377:MET:O	2.18	0.43
1:C:70:LEU:HB2	1:C:99:ALA:CB	2.49	0.43
1:C:95:GLY:C	1:C:97:SER:H	2.25	0.43
1:C:345:GLU:C	1:C:347:ILE:N	2.77	0.43
1:C:352:LYS:C	1:C:352:LYS:HD3	2.43	0.43
1:C:409:THR:O	1:C:412:GLY:N	2.48	0.43
2:D:209:ILE:CD1	2:D:231:ILE:HD11	2.47	0.43
2:D:274:PRO:HB2	2:D:371:VAL:HG21	1.98	0.43
2:D:343:PHE:CE1	2:D:351:PHE:HE1	2.36	0.43
2:D:390:ARG:HG3	2:D:390:ARG:HH11	1.83	0.43
1:E:105:LYS:HG2	1:E:110:GLU:CG	2.48	0.43
1:E:273:ALA:CB	1:E:274:PRO:CD	2.93	0.43
1:E:402:LYS:O	1:E:403:ALA:C	2.61	0.43
2:F:297:GLU:HA	2:F:298:PRO:HD2	1.87	0.43
2:F:310:GLY:HA3	2:F:383:ALA:CA	2.49	0.43
2:F:343:PHE:CE1	2:F:351:PHE:HE1	2.36	0.43
2:F:388:TRP:CD2	2:F:425:MET:HE1	2.52	0.43
1:G:243:ARG:HH21	1:G:252:LEU:N	2.12	0.43
2:H:71:GLU:HA	2:H:72:PRO:HD3	1.88	0.43
1:A:37:HIS:O	1:A:38:GLY:C	2.61	0.43
1:A:306:ASP:HA	1:A:307:PRO:HD3	1.92	0.43
2:B:23:LEU:O	2:B:26:LEU:HB3	2.17	0.43
2:B:153:LEU:O	2:B:157:LEU:HG	2.18	0.43
2:B:303:VAL:O	2:B:303:VAL:CG1	2.65	0.43
2:B:390:ARG:HH11	2:B:390:ARG:HG3	1.83	0.43
2:D:5:ILE:CG2	2:D:135:PHE:CB	2.96	0.43
2:D:23:LEU:O	2:D:26:LEU:HB3	2.17	0.43
1:E:167:ASN:HA	1:E:200:GLU:O	2.17	0.43
1:G:282:GLN:O	1:G:282:GLN:CG	2.65	0.43
1:G:402:LYS:O	1:G:403:ALA:C	2.61	0.43
2:H:204:VAL:CG1	2:H:209:ILE:HD11	2.42	0.43
2:H:304:LYS:HG3	2:H:304:LYS:O	2.18	0.43
2:H:388:TRP:CD2	2:H:425:MET:HE1	2.52	0.43
1:A:103:TRP:HB2	1:A:186:ASN:HA	2.01	0.43
1:A:299:LYS:H	1:A:299:LYS:CD	2.07	0.43
1:A:345:GLU:C	1:A:347:ILE:N	2.77	0.43
2:B:4:CYS:SG	2:B:252:LEU:CD1	3.02	0.43
2:B:343:PHE:CE1	2:B:351:PHE:HE1	2.36	0.43
1:C:99:ALA:O	1:C:100:GLY:C	2.60	0.43
1:C:103:TRP:HB2	1:C:186:ASN:HA	2.01	0.43
1:C:212:ILE:O	1:C:212:ILE:HG22	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:217:LEU:HD13	2:D:277:SER:N	2.33	0.43
2:D:276:ILE:O	2:D:369:ALA:CA	2.66	0.43
2:D:304:LYS:HG3	2:D:304:LYS:O	2.18	0.43
2:D:363:VAL:CG1	2:D:364:PRO:HD2	2.48	0.43
1:E:72:PRO:HG2	1:E:73:GLY:H	1.83	0.43
1:G:105:LYS:HG2	1:G:110:GLU:CG	2.48	0.43
2:H:122:ILE:CD1	2:H:157:LEU:HD21	2.35	0.43
1:A:105:LYS:HG2	1:A:110:GLU:CG	2.48	0.43
1:A:273:ALA:CB	1:A:274:PRO:CD	2.93	0.43
2:B:8:HIS:CD2	2:B:138:PHE:CD1	3.07	0.43
2:B:310:GLY:HA3	2:B:383:ALA:CA	2.49	0.43
2:B:378:LEU:HD12	2:B:378:LEU:O	2.19	0.43
1:C:168:THR:CG2	1:C:201:THR:HG23	2.48	0.43
1:C:332:MET:CE	1:C:351:VAL:HG11	2.32	0.43
2:D:64:ARG:HD2	2:D:125:LEU:HD22	1.99	0.43
1:E:269:MET:HB2	1:E:301:MET:HE3	2.00	0.43
1:E:301:MET:C	1:E:303:ALA:N	2.76	0.43
1:E:345:GLU:C	1:E:347:ILE:N	2.77	0.43
2:F:140:SER:O	2:F:141:PHE:C	2.62	0.43
2:F:292:THR:O	2:F:295:CYS:HB2	2.18	0.43
2:F:304:LYS:HG3	2:F:304:LYS:O	2.19	0.43
1:G:168:THR:CG2	1:G:201:THR:HG23	2.48	0.43
1:G:301:MET:O	1:G:303:ALA:N	2.51	0.43
1:G:345:GLU:C	1:G:347:ILE:N	2.77	0.43
2:H:8:HIS:CD2	2:H:138:PHE:CD1	3.07	0.43
2:H:130:THR:O	2:H:131:GLY:C	2.59	0.43
2:H:378:LEU:HD12	2:H:378:LEU:O	2.19	0.43
1:A:330:GLU:O	1:A:331:GLN:C	2.61	0.43
2:B:8:HIS:HA	2:B:138:PHE:HB2	2.00	0.43
2:B:105:ARG:O	2:B:110:ILE:CG2	2.65	0.43
2:B:276:ILE:O	2:B:369:ALA:CA	2.66	0.43
1:C:105:LYS:HG2	1:C:110:GLU:CG	2.48	0.43
1:C:118:VAL:O	1:C:119:LEU:C	2.62	0.43
1:C:273:ALA:CB	1:C:274:PRO:CD	2.93	0.43
2:D:5:ILE:CG1	2:D:6:SER:N	2.81	0.43
2:D:151:SER:HB3	2:D:193:THR:CG2	2.34	0.43
2:D:310:GLY:HA3	2:D:383:ALA:CA	2.49	0.43
2:D:378:LEU:HD12	2:D:378:LEU:O	2.19	0.43
2:D:384:ILE:O	2:D:385:ALA:C	2.59	0.43
1:E:68:VAL:HG11	1:E:153:LEU:HD21	2.00	0.43
1:E:282:GLN:HB3	1:E:282:GLN:HE21	1.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:5:ILE:CG1	2:F:6:SER:N	2.82	0.43
2:F:8:HIS:CD2	2:F:138:PHE:CD1	3.07	0.43
2:F:122:ILE:CD1	2:F:157:LEU:HD21	2.35	0.43
2:F:378:LEU:HD12	2:F:378:LEU:O	2.19	0.43
1:G:70:LEU:HB2	1:G:99:ALA:CB	2.48	0.43
1:G:72:PRO:HG2	1:G:73:GLY:H	1.83	0.43
1:G:103:TRP:HB2	1:G:186:ASN:HA	2.01	0.43
1:G:243:ARG:N	1:G:243:ARG:HD3	2.26	0.43
1:G:253:ARG:O	1:G:257:VAL:HG12	2.19	0.43
1:G:253:ARG:HD3	2:H:407:TRP:CH2	2.53	0.43
2:H:140:SER:O	2:H:141:PHE:C	2.62	0.43
3:I:137:GLU:CB	3:I:138:TYR:CA	2.97	0.43
1:A:168:THR:CG2	1:A:201:THR:HG23	2.48	0.43
1:A:332:MET:HE3	1:A:351:VAL:CG1	2.32	0.43
2:D:377:MET:HG3	2:D:377:MET:O	2.18	0.43
1:E:42:LEU:C	1:E:44:LEU:H	2.25	0.43
1:E:70:LEU:HB2	1:E:99:ALA:CB	2.49	0.43
1:E:161:TYR:CD1	1:E:161:TYR:N	2.86	0.43
1:E:210:TYR:O	1:E:214:PHE:N	2.52	0.43
1:E:301:MET:O	1:E:303:ALA:N	2.51	0.43
2:F:262:TYR:HE2	1:G:403:ALA:O	1.91	0.43
1:G:269:MET:HB2	1:G:301:MET:HE3	2.00	0.43
1:G:301:MET:C	1:G:303:ALA:N	2.77	0.43
1:A:68:VAL:HG11	1:A:153:LEU:HD21	2.00	0.43
1:A:118:VAL:O	1:A:119:LEU:C	2.62	0.43
1:A:118:VAL:O	1:A:122:VAL:HG13	2.19	0.43
1:C:153:LEU:HD13	1:C:153:LEU:N	2.34	0.43
1:C:243:ARG:HD3	1:C:243:ARG:HA	1.62	0.43
2:D:7:ILE:HG13	2:D:137:VAL:HG22	1.97	0.43
2:D:8:HIS:CD2	2:D:138:PHE:CD1	3.07	0.43
2:D:16:ILE:CG2	2:D:17:GLY:N	2.82	0.43
2:D:30:ILE:HD11	2:D:61:HIS:CD2	2.54	0.43
2:D:105:ARG:O	2:D:110:ILE:CG2	2.64	0.43
1:E:212:ILE:O	1:E:212:ILE:HG22	2.18	0.43
1:E:250:ALA:CB	1:E:254:LYS:HE2	2.49	0.43
2:F:184:PRO:HG2	2:F:398:MET:CE	2.40	0.43
2:F:262:TYR:OH	1:G:403:ALA:CA	2.39	0.43
1:G:11:GLN:O	1:G:15:GLN:N	2.41	0.43
1:G:210:TYR:O	1:G:214:PHE:N	2.52	0.43
1:G:212:ILE:O	1:G:212:ILE:HG22	2.18	0.43
1:G:280:SER:OG	1:G:281:GLN:N	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:5:ILE:CG1	2:H:6:SER:N	2.82	0.43
2:H:292:THR:O	2:H:295:CYS:HB2	2.18	0.43
2:H:428:LEU:HD12	2:H:428:LEU:HA	1.78	0.43
1:A:52:TYR:HE1	1:A:240:THR:HB	1.82	0.43
1:A:72:PRO:HG2	1:A:73:GLY:H	1.83	0.43
1:A:161:TYR:CD1	1:A:161:TYR:N	2.86	0.43
1:A:212:ILE:O	1:A:212:ILE:HG22	2.18	0.43
1:A:332:MET:CE	1:A:351:VAL:HG11	2.32	0.43
2:B:7:ILE:HG13	2:B:137:VAL:HG22	1.98	0.43
2:B:166:LYS:CE	2:B:199:ASP:OD1	2.62	0.43
1:C:118:VAL:O	1:C:122:VAL:HG13	2.19	0.43
1:C:301:MET:O	1:C:303:ALA:N	2.51	0.43
1:C:349:ASN:C	1:C:349:ASN:ND2	2.77	0.43
2:D:140:SER:O	2:D:141:PHE:C	2.62	0.43
1:E:115:VAL:HG21	1:E:152:LEU:HD21	1.98	0.43
2:F:30:ILE:O	2:F:31:GLN:C	2.62	0.43
2:F:104:ALA:HB3	2:F:408:TYR:HD2	1.84	0.43
1:G:42:LEU:C	1:G:44:LEU:H	2.25	0.43
1:G:147:SER:HB2	1:G:190:SER:CB	2.41	0.43
1:G:147:SER:CB	1:G:190:SER:HB3	2.42	0.43
1:G:179:ASP:OD2	4:G:600:GDP:O2'	2.15	0.43
1:G:254:LYS:HA	1:G:257:VAL:CG1	2.49	0.43
2:H:7:ILE:HD11	2:H:137:VAL:CG2	2.44	0.43
2:H:16:ILE:CG2	2:H:17:GLY:N	2.82	0.43
2:H:30:ILE:O	2:H:31:GLN:C	2.62	0.43
1:A:153:LEU:HD13	1:A:153:LEU:N	2.34	0.42
1:A:240:THR:HG23	1:A:241:CYS:N	2.33	0.42
2:B:12:ALA:C	2:B:14:VAL:N	2.75	0.42
2:B:292:THR:O	2:B:295:CYS:HB2	2.18	0.42
2:B:363:VAL:HG13	2:B:364:PRO:HD2	2.01	0.42
1:C:161:TYR:CD1	1:C:161:TYR:N	2.86	0.42
1:C:250:ALA:CB	1:C:254:LYS:HE2	2.49	0.42
1:C:310:GLY:HA3	1:C:436:GLN:NE2	2.29	0.42
2:D:292:THR:O	2:D:295:CYS:HB2	2.18	0.42
1:E:11:GLN:O	1:E:15:GLN:N	2.41	0.42
1:E:103:TRP:HB2	1:E:186:ASN:HA	2.01	0.42
2:F:4:CYS:SG	2:F:252:LEU:CD1	3.02	0.42
2:F:209:ILE:CD1	2:F:231:ILE:CD1	2.97	0.42
2:F:425:MET:O	2:F:428:LEU:N	2.45	0.42
1:G:121:VAL:C	1:G:123:ARG:N	2.76	0.42
1:G:153:LEU:HD13	1:G:153:LEU:N	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:240:THR:HG23	1:G:241:CYS:N	2.33	0.42
2:H:425:MET:O	2:H:428:LEU:N	2.45	0.42
3:I:56:ARG:HB2	3:I:146:TRP:CZ2	2.54	0.42
1:A:210:TYR:O	1:A:214:PHE:N	2.52	0.42
1:A:250:ALA:CB	1:A:254:LYS:HE2	2.49	0.42
1:A:389:LYS:O	1:A:390:ARG:C	2.62	0.42
1:A:409:THR:O	1:A:412:GLY:N	2.48	0.42
1:A:435:TYR:C	1:A:437:ASP:H	2.27	0.42
2:B:25:CYS:SG	2:B:26:LEU:N	2.92	0.42
2:B:399:TYR:C	2:B:401:LYS:N	2.77	0.42
1:C:52:TYR:HE1	1:C:240:THR:HB	1.82	0.42
1:C:72:PRO:HG2	1:C:73:GLY:H	1.83	0.42
1:C:249:ASN:OD1	2:D:71:GLU:CD	2.62	0.42
2:D:12:ALA:C	2:D:14:VAL:N	2.75	0.42
2:D:268:PRO:C	2:D:269:LEU:HD23	2.44	0.42
2:D:399:TYR:C	2:D:401:LYS:N	2.77	0.42
2:F:7:ILE:HD11	2:F:137:VAL:CG2	2.44	0.42
2:F:16:ILE:CG2	2:F:17:GLY:N	2.82	0.42
1:G:330:GLU:O	1:G:331:GLN:C	2.61	0.42
1:G:349:ASN:C	1:G:349:ASN:ND2	2.76	0.42
1:G:359:PRO:CB	1:G:360:PRO:HD2	2.45	0.42
2:H:104:ALA:HB3	2:H:408:TYR:HD2	1.84	0.42
2:H:119:LEU:HD11	2:H:156:ARG:HD3	2.01	0.42
2:H:262:TYR:HB3	2:H:263:PRO:HD2	2.00	0.42
2:H:363:VAL:HG13	2:H:364:PRO:HD2	2.02	0.42
2:B:16:ILE:CG2	2:B:17:GLY:N	2.82	0.42
2:B:63:PRO:HG3	2:B:87:PHE:CD1	2.54	0.42
2:B:119:LEU:HD11	2:B:156:ARG:HD3	2.02	0.42
2:B:140:SER:O	2:B:141:PHE:C	2.62	0.42
2:B:199:ASP:OD2	2:B:256:GLN:NE2	2.46	0.42
2:B:268:PRO:C	2:B:269:LEU:HD23	2.44	0.42
1:C:68:VAL:HG11	1:C:153:LEU:HD21	2.00	0.42
1:C:138:THR:O	1:C:139:HIS:HB3	2.20	0.42
1:C:147:SER:CB	1:C:190:SER:HB3	2.42	0.42
1:C:192:HIS:NE2	1:C:420:GLU:HG2	2.34	0.42
1:C:359:PRO:CB	1:C:360:PRO:HD2	2.45	0.42
1:C:389:LYS:O	1:C:390:ARG:C	2.62	0.42
2:D:119:LEU:HD11	2:D:156:ARG:HD3	2.01	0.42
2:D:147:SER:HB2	2:D:186:ASN:O	2.19	0.42
2:D:238:ILE:O	2:D:242:LEU:CB	2.67	0.42
1:E:12:CYS:O	1:E:13:GLY:C	2.59	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:82:PRO:HB2	1:E:83:PHE:H	1.56	0.42
1:E:153:LEU:HD13	1:E:153:LEU:N	2.34	0.42
1:E:240:THR:HG23	1:E:241:CYS:N	2.33	0.42
1:E:435:TYR:C	1:E:437:ASP:H	2.27	0.42
1:G:161:TYR:CD1	1:G:161:TYR:N	2.86	0.42
2:H:238:ILE:O	2:H:242:LEU:CB	2.67	0.42
2:H:297:GLU:HA	2:H:298:PRO:HD2	1.87	0.42
1:A:138:THR:O	1:A:139:HIS:HB3	2.19	0.42
1:A:185:TYR:HD2	1:A:185:TYR:HA	1.76	0.42
2:B:147:SER:HB2	2:B:186:ASN:O	2.19	0.42
2:B:209:ILE:CD1	2:B:231:ILE:CD1	2.97	0.42
1:C:121:VAL:C	1:C:123:ARG:N	2.76	0.42
1:C:435:TYR:C	1:C:437:ASP:H	2.27	0.42
2:D:104:ALA:HB3	2:D:408:TYR:HD2	1.84	0.42
2:D:293:ASN:HD21	2:D:338:LYS:HZ1	1.67	0.42
2:D:363:VAL:HG13	2:D:364:PRO:HD2	2.02	0.42
1:E:118:VAL:O	1:E:122:VAL:HG13	2.19	0.42
1:E:192:HIS:NE2	1:E:420:GLU:HG2	2.34	0.42
1:E:349:ASN:C	1:E:349:ASN:ND2	2.77	0.42
2:F:12:ALA:C	2:F:14:VAL:N	2.75	0.42
2:F:175:PRO:HG3	2:F:304:LYS:CB	2.50	0.42
2:F:238:ILE:O	2:F:242:LEU:CB	2.67	0.42
1:G:102:ASN:ND2	1:G:408:TYR:HA	2.19	0.42
1:G:311:ARG:HG2	1:G:311:ARG:NH1	2.34	0.42
2:H:209:ILE:CD1	2:H:231:ILE:CD1	2.97	0.42
3:I:55:VAL:HG12	3:I:123:GLU:HB2	2.01	0.42
3:I:128:SER:HB3	3:I:131:ASN:CB	2.43	0.42
1:A:6:HIS:HB3	1:A:65:ALA:CB	2.49	0.42
1:A:192:HIS:NE2	1:A:420:GLU:HG2	2.34	0.42
1:A:249:ASN:OD1	2:B:71:GLU:OE1	2.37	0.42
1:C:106:GLY:O	1:C:149:MET:CA	2.68	0.42
1:C:330:GLU:O	1:C:331:GLN:C	2.61	0.42
2:D:175:PRO:HG3	2:D:304:LYS:CB	2.50	0.42
2:D:209:ILE:CD1	2:D:231:ILE:CD1	2.97	0.42
2:D:384:ILE:C	2:D:386:GLU:N	2.72	0.42
1:E:147:SER:CB	1:E:190:SER:HB3	2.42	0.42
1:E:330:GLU:O	1:E:331:GLN:C	2.61	0.42
1:E:359:PRO:CB	1:E:360:PRO:HD2	2.45	0.42
2:F:115:ILE:CG2	2:F:116:ASP:H	2.32	0.42
2:F:119:LEU:O	2:F:120:ASP:C	2.61	0.42
2:F:119:LEU:HD11	2:F:156:ARG:HD3	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:242:LEU:HD12	2:F:242:LEU:HA	1.87	0.42
2:F:363:VAL:HG13	2:F:364:PRO:HD2	2.02	0.42
1:G:68:VAL:HG11	1:G:153:LEU:HD21	2.00	0.42
1:G:118:VAL:O	1:G:122:VAL:HG13	2.19	0.42
1:G:192:HIS:NE2	1:G:420:GLU:HG2	2.34	0.42
1:G:254:LYS:CA	1:G:257:VAL:HG12	2.49	0.42
2:H:280:LYS:O	2:H:282:TYR:N	2.52	0.42
3:I:151:LYS:HB2	3:I:151:LYS:HE2	1.53	0.42
1:A:106:GLY:O	1:A:149:MET:CA	2.68	0.42
1:A:121:VAL:C	1:A:123:ARG:N	2.76	0.42
1:A:301:MET:O	1:A:303:ALA:N	2.51	0.42
2:B:346:TRP:O	1:C:398:MET:HB2	2.20	0.42
1:C:240:THR:HG23	1:C:241:CYS:N	2.33	0.42
2:D:238:ILE:HD11	2:D:378:LEU:HD23	2.01	0.42
1:E:273:ALA:HB3	1:E:274:PRO:CD	2.29	0.42
1:E:297:ASP:CG	1:E:299:LYS:HE2	2.45	0.42
1:E:413:MET:CG	1:E:414:ASP:H	2.26	0.42
2:F:13:GLY:HA2	2:F:16:ILE:CG2	2.50	0.42
2:F:15:GLN:NE2	5:F:500:GTP:N7	2.67	0.42
2:F:262:TYR:HB3	2:F:263:PRO:HD2	2.01	0.42
2:F:280:LYS:O	2:F:282:TYR:N	2.52	0.42
1:G:133:GLN:CG	1:G:165:ILE:HD11	2.49	0.42
1:G:435:TYR:C	1:G:437:ASP:H	2.27	0.42
2:H:242:LEU:HD12	2:H:242:LEU:HA	1.87	0.42
1:A:413:MET:CG	1:A:414:ASP:H	2.26	0.42
2:B:13:GLY:HA2	2:B:16:ILE:CG2	2.50	0.42
2:B:104:ALA:HB3	2:B:408:TYR:HD2	1.84	0.42
2:B:173:PRO:HG3	2:B:183:GLU:CD	2.45	0.42
2:B:175:PRO:HG3	2:B:304:LYS:CB	2.50	0.42
1:C:6:HIS:HB3	1:C:65:ALA:CB	2.48	0.42
1:C:175:PRO:O	1:C:177:VAL:N	2.53	0.42
1:C:261:PRO:HB2	1:C:262:PHE:CD1	2.54	0.42
2:D:15:GLN:NE2	5:D:500:GTP:N7	2.67	0.42
2:D:204:VAL:CG1	2:D:231:ILE:HD12	2.42	0.42
2:D:213:CYS:O	2:D:219:ILE:HG13	2.20	0.42
2:D:383:ALA:C	2:D:385:ALA:N	2.78	0.42
1:E:35:SER:CB	1:E:59:ASN:HA	2.42	0.42
1:E:121:VAL:C	1:E:123:ARG:N	2.76	0.42
1:E:133:GLN:CG	1:E:165:ILE:HD11	2.49	0.42
1:E:238:VAL:HB	1:E:239:THR:H	1.65	0.42
1:E:273:ALA:HB1	1:E:291:LEU:HG	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:311:ARG:HG2	1:E:311:ARG:NH1	2.34	0.42
1:E:389:LYS:O	1:E:390:ARG:C	2.62	0.42
2:F:335:ILE:C	2:F:337:THR:H	2.28	0.42
2:F:347:CYS:SG	1:G:181:VAL:HG13	2.60	0.42
1:G:115:VAL:HG21	1:G:152:LEU:HD21	1.98	0.42
1:G:273:ALA:HB1	1:G:291:LEU:HG	2.01	0.42
1:G:310:GLY:HA3	1:G:436:GLN:NE2	2.29	0.42
1:G:413:MET:CG	1:G:414:ASP:H	2.26	0.42
2:H:119:LEU:O	2:H:120:ASP:C	2.61	0.42
2:H:175:PRO:HG3	2:H:304:LYS:CB	2.50	0.42
2:H:175:PRO:CG	2:H:304:LYS:HG2	2.47	0.42
2:H:255:PHE:O	2:H:257:THR:N	2.53	0.42
1:A:24:ILE:CG2	1:A:25:SER:N	2.80	0.42
2:B:213:CYS:O	2:B:219:ILE:HG13	2.20	0.42
2:B:244:PHE:HD2	2:B:244:PHE:C	2.24	0.42
2:B:335:ILE:C	2:B:337:THR:H	2.28	0.42
1:C:11:GLN:O	1:C:15:GLN:N	2.41	0.42
1:C:82:PRO:C	1:C:84:GLY:N	2.78	0.42
1:C:242:LEU:HD23	1:C:242:LEU:HA	1.76	0.42
2:D:199:ASP:OD2	2:D:256:GLN:NE2	2.46	0.42
2:D:265:GLY:O	2:D:266:HIS:C	2.62	0.42
1:E:171:VAL:O	1:E:171:VAL:HG12	2.20	0.42
1:E:178:SER:C	1:E:180:THR:H	2.27	0.42
1:E:242:LEU:HB3	1:E:250:ALA:O	2.20	0.42
1:E:310:GLY:HA3	1:E:436:GLN:NE2	2.29	0.42
2:F:255:PHE:O	2:F:257:THR:N	2.53	0.42
2:F:268:PRO:C	2:F:269:LEU:HD23	2.44	0.42
2:F:399:TYR:C	2:F:401:LYS:N	2.77	0.42
1:G:171:VAL:O	1:G:171:VAL:HG12	2.20	0.42
2:H:12:ALA:C	2:H:14:VAL:N	2.75	0.42
2:H:243:ARG:NH2	2:H:252:LEU:HG	2.35	0.42
2:H:301:GLN:O	2:H:302:MET:C	2.61	0.42
2:H:335:ILE:C	2:H:337:THR:H	2.28	0.42
2:H:399:TYR:C	2:H:401:LYS:N	2.77	0.42
1:A:82:PRO:C	1:A:84:GLY:N	2.78	0.42
1:A:297:ASP:CG	1:A:299:LYS:HE2	2.45	0.42
2:B:24:TYR:O	2:B:25:CYS:C	2.63	0.42
2:B:231:ILE:C	2:B:233:GLN:H	2.28	0.42
2:B:238:ILE:O	2:B:242:LEU:CB	2.67	0.42
2:B:260:VAL:HG22	1:C:407:TRP:CE2	2.54	0.42
2:B:329:ASN:HB3	1:C:210:TYR:CE1	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:24:ILE:CG2	1:C:25:SER:N	2.80	0.42
1:C:150:GLY:HA2	1:C:153:LEU:CD2	2.42	0.42
1:C:178:SER:C	1:C:180:THR:H	2.27	0.42
2:D:13:GLY:HA2	2:D:16:ILE:CG2	2.50	0.42
2:D:24:TYR:O	2:D:25:CYS:C	2.63	0.42
2:D:173:PRO:HG3	2:D:183:GLU:CD	2.45	0.42
2:D:280:LYS:O	2:D:282:TYR:N	2.52	0.42
1:E:138:THR:O	1:E:139:HIS:HB3	2.20	0.42
1:E:143:GLY:O	1:E:147:SER:OG	2.38	0.42
1:E:399:PHE:O	1:E:401:ARG:N	2.53	0.42
2:F:161:TYR:C	2:F:163:LYS:N	2.77	0.42
2:F:166:LYS:HB2	2:F:199:ASP:OD1	2.20	0.42
2:F:173:PRO:HG3	2:F:183:GLU:CD	2.45	0.42
2:F:207:GLU:O	2:F:210:TYR:N	2.51	0.42
2:F:262:TYR:CZ	1:G:403:ALA:O	2.70	0.42
1:G:138:THR:O	1:G:139:HIS:HB3	2.20	0.42
1:G:143:GLY:O	1:G:147:SER:OG	2.38	0.42
1:G:343:PHE:CD2	1:G:350:ASN:ND2	2.88	0.42
2:H:13:GLY:HA2	2:H:16:ILE:CG2	2.50	0.42
2:H:15:GLN:NE2	5:H:500:GTP:N7	2.67	0.42
2:H:25:CYS:SG	2:H:26:LEU:N	2.92	0.42
2:H:147:SER:HB2	2:H:186:ASN:O	2.19	0.42
2:H:166:LYS:HB2	2:H:199:ASP:OD1	2.20	0.42
2:H:268:PRO:C	2:H:269:LEU:HD23	2.44	0.42
3:I:63:ARG:CB	3:I:138:TYR:CD1	3.02	0.42
1:A:175:PRO:O	1:A:177:VAL:N	2.53	0.42
1:A:178:SER:C	1:A:180:THR:H	2.27	0.42
1:A:261:PRO:HB2	1:A:262:PHE:CD1	2.54	0.42
2:B:15:GLN:NE2	5:B:500:GTP:N7	2.67	0.42
2:B:265:GLY:O	2:B:266:HIS:C	2.62	0.42
2:B:280:LYS:O	2:B:282:TYR:N	2.52	0.42
1:C:133:GLN:CG	1:C:165:ILE:HD11	2.49	0.42
1:C:210:TYR:O	1:C:214:PHE:N	2.52	0.42
2:D:25:CYS:SG	2:D:26:LEU:N	2.92	0.42
2:D:255:PHE:O	2:D:257:THR:N	2.53	0.42
1:E:261:PRO:HB2	1:E:262:PHE:CD1	2.54	0.42
2:F:243:ARG:NH2	2:F:252:LEU:HG	2.35	0.42
2:F:301:GLN:O	2:F:302:MET:C	2.61	0.42
2:F:383:ALA:C	2:F:385:ALA:N	2.78	0.42
1:G:242:LEU:HB3	1:G:250:ALA:O	2.20	0.42
1:G:261:PRO:HB2	1:G:262:PHE:CD1	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:115:ILE:CG2	2:H:116:ASP:H	2.32	0.42
2:H:161:TYR:C	2:H:163:LYS:N	2.77	0.42
2:H:173:PRO:HG3	2:H:183:GLU:CD	2.45	0.42
2:H:383:ALA:C	2:H:385:ALA:N	2.77	0.42
1:A:150:GLY:HA2	1:A:153:LEU:CD2	2.42	0.41
1:A:343:PHE:CD2	1:A:350:ASN:ND2	2.88	0.41
2:B:243:ARG:NH2	2:B:252:LEU:HG	2.35	0.41
2:B:274:PRO:C	2:B:275:VAL:CA	2.89	0.41
1:C:299:LYS:H	1:C:299:LYS:CD	2.07	0.41
1:C:301:MET:C	1:C:303:ALA:N	2.77	0.41
2:D:335:ILE:C	2:D:337:THR:H	2.28	0.41
1:E:102:ASN:ND2	1:E:408:TYR:HA	2.19	0.41
1:E:147:SER:HB2	1:E:190:SER:CB	2.41	0.41
2:F:25:CYS:SG	2:F:26:LEU:N	2.92	0.41
2:H:414:GLU:C	2:H:416:GLY:N	2.74	0.41
3:I:88:THR:HG23	3:I:101:VAL:H	1.85	0.41
1:A:399:PHE:O	1:A:401:ARG:N	2.53	0.41
2:B:238:ILE:HD11	2:B:378:LEU:HD23	2.01	0.41
2:B:292:THR:HG21	2:B:331:ALA:HB1	2.02	0.41
2:B:296:PHE:CG	2:B:341:ILE:HD12	2.53	0.41
1:C:352:LYS:HG2	2:D:181:VAL:HG23	2.02	0.41
1:C:417:GLU:O	1:C:420:GLU:HB3	2.20	0.41
2:D:231:ILE:C	2:D:233:GLN:H	2.28	0.41
2:D:243:ARG:NH2	2:D:252:LEU:HG	2.35	0.41
2:D:292:THR:HG21	2:D:331:ALA:HB1	2.02	0.41
2:D:343:PHE:HZ	2:D:351:PHE:CZ	2.36	0.41
1:E:333:LEU:HD11	1:E:337:ASN:HD21	1.85	0.41
2:F:147:SER:HB2	2:F:186:ASN:O	2.19	0.41
2:F:175:PRO:CG	2:F:304:LYS:HG2	2.47	0.41
2:F:292:THR:HG21	2:F:331:ALA:HB1	2.02	0.41
2:F:325:PRO:HG2	1:G:224:TYR:H	1.85	0.41
2:F:414:GLU:C	2:F:416:GLY:N	2.74	0.41
1:G:48:ARG:HG2	1:G:243:ARG:HB3	2.01	0.41
1:G:297:ASP:CG	1:G:299:LYS:HE2	2.45	0.41
1:G:333:LEU:HD11	1:G:337:ASN:HD21	1.85	0.41
1:G:348:PRO:HG3	2:H:397:LEU:HB2	2.01	0.41
2:H:292:THR:HG21	2:H:331:ALA:HB1	2.02	0.41
3:I:151:LYS:H	3:I:151:LYS:HG3	1.69	0.41
1:A:310:GLY:HA3	1:A:436:GLN:NE2	2.29	0.41
2:B:199:ASP:CB	2:B:256:GLN:NE2	2.77	0.41
2:B:414:GLU:C	2:B:416:GLY:N	2.74	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2:ARG:NH2	2:D:99:ALA:H	2.17	0.41
1:C:282:GLN:HB3	1:C:282:GLN:HE21	1.50	0.41
1:C:343:PHE:CD2	1:C:350:ASN:ND2	2.88	0.41
1:C:395:PHE:HB3	1:C:396:THR:H	1.73	0.41
1:C:422:GLU:O	1:C:426:ASN:CB	2.67	0.41
2:D:242:LEU:HD12	2:D:242:LEU:HA	1.87	0.41
2:D:242:LEU:HD11	2:D:250:VAL:HG23	2.02	0.41
2:F:213:CYS:O	2:F:219:ILE:HG13	2.20	0.41
2:F:244:PHE:HD2	2:F:244:PHE:C	2.24	0.41
2:F:305:CYS:SG	2:F:383:ALA:HB1	2.60	0.41
1:G:82:PRO:C	1:G:84:GLY:N	2.78	0.41
1:G:389:LYS:O	1:G:390:ARG:C	2.62	0.41
2:H:207:GLU:O	2:H:210:TYR:N	2.51	0.41
2:H:213:CYS:O	2:H:219:ILE:HG13	2.20	0.41
2:H:408:TYR:O	2:H:409:VAL:C	2.63	0.41
1:A:147:SER:CB	1:A:190:SER:HB3	2.42	0.41
1:A:273:ALA:HB1	1:A:291:LEU:HG	2.01	0.41
1:A:333:LEU:HD11	1:A:337:ASN:HD21	1.85	0.41
1:A:359:PRO:CB	1:A:360:PRO:HD2	2.45	0.41
1:A:422:GLU:O	1:A:426:ASN:CB	2.67	0.41
2:B:255:PHE:O	2:B:257:THR:N	2.53	0.41
2:B:383:ALA:C	2:B:385:ALA:N	2.78	0.41
1:C:307:PRO:O	1:C:309:HIS:N	2.53	0.41
1:C:311:ARG:HG2	1:C:311:ARG:NH1	2.34	0.41
2:D:386:GLU:O	2:D:387:ALA:C	2.63	0.41
1:E:175:PRO:O	1:E:177:VAL:N	2.53	0.41
1:E:182:VAL:O	1:E:184:PRO:N	2.54	0.41
1:E:343:PHE:CD2	1:E:350:ASN:ND2	2.88	0.41
2:F:362:VAL:HG13	2:F:368:LEU:CB	2.50	0.41
2:F:408:TYR:O	2:F:409:VAL:C	2.63	0.41
1:G:11:GLN:O	1:G:12:CYS:C	2.63	0.41
1:G:35:SER:CB	1:G:59:ASN:HA	2.42	0.41
1:G:118:VAL:O	1:G:121:VAL:N	2.54	0.41
1:G:399:PHE:O	1:G:401:ARG:N	2.53	0.41
2:H:242:LEU:HD11	2:H:250:VAL:HG23	2.02	0.41
2:H:255:PHE:O	2:H:259:LEU:N	2.50	0.41
2:H:305:CYS:SG	2:H:383:ALA:HB1	2.60	0.41
2:H:362:VAL:HG13	2:H:368:LEU:CB	2.50	0.41
1:A:133:GLN:CG	1:A:165:ILE:HD11	2.49	0.41
1:A:301:MET:C	1:A:303:ALA:N	2.77	0.41
1:A:311:ARG:HG2	1:A:311:ARG:NH1	2.34	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:417:GLU:O	1:A:420:GLU:HB3	2.21	0.41
2:B:204:VAL:CG1	2:B:231:ILE:HD12	2.42	0.41
1:C:62:VAL:HA	1:C:63:PRO:HD2	1.92	0.41
1:C:118:VAL:O	1:C:121:VAL:N	2.54	0.41
1:C:171:VAL:O	1:C:171:VAL:HG12	2.20	0.41
1:C:259:MET:HE3	1:C:268:PHE:CZ	2.56	0.41
1:C:273:ALA:HB1	1:C:291:LEU:HG	2.02	0.41
1:C:333:LEU:HD11	1:C:337:ASN:HD21	1.85	0.41
1:C:346:TRP:CB	2:D:401:LYS:CD	2.93	0.41
1:C:399:PHE:O	1:C:401:ARG:N	2.53	0.41
2:D:23:LEU:HD11	2:D:361:THR:O	2.21	0.41
2:D:244:PHE:HD2	2:D:244:PHE:C	2.24	0.41
1:E:82:PRO:C	1:E:84:GLY:N	2.78	0.41
1:E:106:GLY:O	1:E:149:MET:CA	2.68	0.41
1:E:118:VAL:O	1:E:121:VAL:N	2.54	0.41
2:F:231:ILE:C	2:F:233:GLN:H	2.28	0.41
2:F:242:LEU:HD11	2:F:250:VAL:HG23	2.02	0.41
1:G:182:VAL:O	1:G:184:PRO:N	2.54	0.41
1:A:48:ARG:HG2	1:A:243:ARG:HB3	2.01	0.41
1:A:119:LEU:O	1:A:122:VAL:HG22	2.21	0.41
1:A:168:THR:HB	1:A:198:THR:HG21	2.03	0.41
1:A:171:VAL:O	1:A:171:VAL:HG12	2.20	0.41
1:A:242:LEU:HD23	1:A:242:LEU:HA	1.77	0.41
1:A:259:MET:HE3	1:A:268:PHE:CZ	2.56	0.41
1:A:307:PRO:O	1:A:309:HIS:N	2.53	0.41
2:B:161:TYR:C	2:B:163:LYS:N	2.77	0.41
2:B:386:GLU:O	2:B:387:ALA:C	2.63	0.41
1:C:48:ARG:HG2	1:C:243:ARG:HB3	2.01	0.41
1:C:297:ASP:CG	1:C:299:LYS:HE2	2.45	0.41
2:D:161:TYR:C	2:D:163:LYS:N	2.77	0.41
2:F:11:GLN:NE2	2:F:74:VAL:CG2	2.76	0.41
2:F:207:GLU:C	2:F:209:ILE:H	2.29	0.41
2:F:287:SER:O	2:F:291:ILE:HG12	2.21	0.41
2:F:332:ILE:CD1	2:F:353:VAL:HG22	2.51	0.41
1:G:135:PHE:CD1	1:G:166:MET:SD	3.14	0.41
1:G:307:PRO:O	1:G:309:HIS:N	2.53	0.41
2:H:100:ALA:O	2:H:102:ASN:N	2.49	0.41
2:H:207:GLU:C	2:H:209:ILE:H	2.29	0.41
3:I:59:ARG:HB3	3:I:97:LEU:HD11	2.03	0.41
1:A:52:TYR:C	1:A:53:TYR:CD1	2.99	0.41
1:A:282:GLN:HB3	1:A:282:GLN:HE21	1.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:11:GLN:CG	2:B:74:VAL:HG21	2.50	0.41
2:B:305:CYS:SG	2:B:383:ALA:HB1	2.60	0.41
1:C:135:PHE:CD1	1:C:166:MET:SD	3.14	0.41
2:D:56:THR:CA	2:H:284:GLU:CG	2.93	0.41
1:E:48:ARG:HG2	1:E:243:ARG:HB3	2.01	0.41
1:E:105:LYS:HG2	1:E:110:GLU:HG3	2.03	0.41
2:F:255:PHE:O	2:F:259:LEU:N	2.50	0.41
2:F:343:PHE:HZ	2:F:351:PHE:CZ	2.36	0.41
1:G:106:GLY:O	1:G:149:MET:CA	2.68	0.41
2:H:244:PHE:HD2	2:H:244:PHE:C	2.24	0.41
2:H:287:SER:O	2:H:291:ILE:HG12	2.21	0.41
2:H:332:ILE:CD1	2:H:353:VAL:HG22	2.51	0.41
2:H:343:PHE:HZ	2:H:351:PHE:CZ	2.36	0.41
2:B:71:GLU:HA	2:B:72:PRO:HD3	1.89	0.41
2:B:95:GLY:O	2:B:96:LYS:C	2.64	0.41
2:B:242:LEU:HD11	2:B:250:VAL:HG23	2.02	0.41
1:C:119:LEU:O	1:C:122:VAL:HG22	2.21	0.41
1:C:242:LEU:HB3	1:C:250:ALA:O	2.20	0.41
2:D:207:GLU:C	2:D:209:ILE:H	2.29	0.41
2:D:305:CYS:SG	2:D:383:ALA:HB1	2.60	0.41
1:E:307:PRO:O	1:E:309:HIS:N	2.53	0.41
2:F:184:PRO:O	2:F:185:TYR:C	2.62	0.41
2:F:265:GLY:O	2:F:266:HIS:C	2.63	0.41
1:G:70:LEU:HB2	1:G:99:ALA:HB2	2.03	0.41
1:G:82:PRO:HB2	1:G:83:PHE:H	1.56	0.41
1:G:105:LYS:HG2	1:G:110:GLU:HG3	2.03	0.41
1:G:168:THR:HB	1:G:198:THR:HG21	2.03	0.41
1:G:175:PRO:O	1:G:177:VAL:N	2.53	0.41
1:G:204:ILE:HD13	1:G:231:VAL:CG2	2.45	0.41
2:H:11:GLN:CG	2:H:74:VAL:HG21	2.50	0.41
2:H:184:PRO:O	2:H:185:TYR:C	2.62	0.41
2:H:251:ASP:CA	2:H:254:GLU:HG3	2.48	0.41
2:H:265:GLY:O	2:H:266:HIS:C	2.62	0.41
1:A:25:SER:O	1:A:28:HIS:N	2.53	0.41
1:A:26:ASP:C	1:A:26:ASP:OD1	2.64	0.41
1:A:135:PHE:CD1	1:A:166:MET:SD	3.14	0.41
1:A:182:VAL:O	1:A:184:PRO:N	2.54	0.41
1:A:242:LEU:HB3	1:A:250:ALA:O	2.20	0.41
2:B:23:LEU:HD11	2:B:361:THR:O	2.21	0.41
2:B:166:LYS:HB2	2:B:199:ASP:OD1	2.20	0.41
2:B:207:GLU:C	2:B:209:ILE:H	2.29	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:332:ILE:CD1	2:B:353:VAL:HG22	2.51	0.41
2:B:343:PHE:HZ	2:B:351:PHE:CZ	2.36	0.41
2:B:408:TYR:O	2:B:409:VAL:C	2.64	0.41
1:C:25:SER:O	1:C:28:HIS:N	2.53	0.41
1:C:52:TYR:C	1:C:53:TYR:CD1	2.99	0.41
1:C:114:LEU:HD12	1:C:117:SER:OG	2.21	0.41
1:C:168:THR:HB	1:C:198:THR:HG21	2.03	0.41
1:C:413:MET:CG	1:C:414:ASP:H	2.27	0.41
2:D:11:GLN:CG	2:D:74:VAL:HG21	2.50	0.41
2:D:251:ASP:CA	2:D:254:GLU:HG3	2.49	0.41
2:D:260:VAL:HA	2:D:261:PRO:HD3	1.95	0.41
2:D:274:PRO:C	2:D:275:VAL:CA	2.89	0.41
2:D:332:ILE:CD1	2:D:353:VAL:HG22	2.51	0.41
2:D:408:TYR:O	2:D:409:VAL:C	2.63	0.41
1:E:26:ASP:C	1:E:26:ASP:OD1	2.64	0.41
1:E:52:TYR:C	1:E:53:TYR:CD1	2.99	0.41
1:E:62:VAL:HA	1:E:63:PRO:HD2	1.92	0.41
1:E:70:LEU:HB2	1:E:99:ALA:HB2	2.03	0.41
1:E:98:GLY:O	1:E:100:GLY:N	2.49	0.41
1:E:118:VAL:O	1:E:119:LEU:C	2.62	0.41
1:E:168:THR:HB	1:E:198:THR:HG21	2.03	0.41
2:F:11:GLN:CG	2:F:74:VAL:HG21	2.50	0.41
2:F:62:VAL:CG1	2:F:91:GLN:NE2	2.80	0.41
2:F:221:ARG:N	2:F:222:PRO:CD	2.83	0.41
2:F:238:ILE:HD11	2:F:378:LEU:HD23	2.01	0.41
2:F:261:PRO:HB3	1:G:404:PHE:CZ	2.44	0.41
2:F:296:PHE:CG	2:F:341:ILE:HD12	2.53	0.41
2:F:401:LYS:O	2:F:402:ARG:HB2	2.21	0.41
1:G:25:SER:O	1:G:28:HIS:N	2.53	0.41
1:G:26:ASP:C	1:G:26:ASP:OD1	2.64	0.41
1:G:52:TYR:C	1:G:53:TYR:CD1	2.99	0.41
1:G:183:GLU:HB3	1:G:184:PRO:HD3	2.03	0.41
1:G:185:TYR:HD2	1:G:185:TYR:HA	1.76	0.41
1:G:273:ALA:HB3	1:G:274:PRO:CD	2.29	0.41
1:G:288:VAL:O	1:G:289:PRO:C	2.64	0.41
1:G:291:LEU:HD21	1:G:373:MET:HG2	2.03	0.41
1:G:306:ASP:CG	3:I:95:ILE:HG12	2.32	0.41
1:G:417:GLU:O	1:G:420:GLU:HB3	2.21	0.41
2:H:231:ILE:C	2:H:233:GLN:H	2.28	0.41
2:H:272:TYR:O	2:H:300:ASN:ND2	2.54	0.41
2:H:296:PHE:CG	2:H:341:ILE:HD12	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:401:LYS:O	2:H:402:ARG:HB2	2.21	0.41
1:A:105:LYS:HG2	1:A:110:GLU:HG3	2.03	0.41
1:A:114:LEU:HD12	1:A:117:SER:OG	2.21	0.41
2:B:172:TYR:OH	2:B:387:ALA:C	2.64	0.41
2:B:184:PRO:O	2:B:185:TYR:C	2.62	0.41
2:B:260:VAL:HA	2:B:261:PRO:HD3	1.95	0.41
1:C:26:ASP:C	1:C:26:ASP:OD1	2.64	0.41
1:C:105:LYS:HG2	1:C:110:GLU:HG3	2.03	0.41
2:D:95:GLY:O	2:D:96:LYS:C	2.64	0.41
2:D:217:LEU:HD13	2:D:277:SER:CA	2.48	0.41
2:D:272:TYR:O	2:D:300:ASN:ND2	2.54	0.41
2:D:414:GLU:C	2:D:416:GLY:N	2.74	0.41
2:D:428:LEU:HD12	2:D:428:LEU:HA	1.78	0.41
1:E:24:ILE:CG2	1:E:25:SER:N	2.80	0.41
1:E:135:PHE:CD1	1:E:166:MET:SD	3.14	0.41
1:E:259:MET:HE3	1:E:268:PHE:CZ	2.56	0.41
2:F:95:GLY:O	2:F:96:LYS:C	2.64	0.41
2:F:100:ALA:O	2:F:102:ASN:N	2.50	0.41
2:F:147:SER:OG	2:F:148:GLY:N	2.54	0.41
2:F:149:PHE:CD1	2:F:150:THR:N	2.89	0.41
2:F:172:TYR:OH	2:F:387:ALA:C	2.64	0.41
2:F:272:TYR:O	2:F:300:ASN:ND2	2.54	0.41
2:F:386:GLU:O	2:F:387:ALA:C	2.63	0.41
1:G:139:HIS:HE1	1:G:168:THR:CG2	2.34	0.41
1:G:405:LEU:HD23	1:G:405:LEU:O	2.21	0.41
2:H:172:TYR:OH	2:H:387:ALA:C	2.64	0.41
2:H:221:ARG:N	2:H:222:PRO:CD	2.83	0.41
2:H:238:ILE:HD11	2:H:378:LEU:HD23	2.01	0.41
2:H:318:LEU:HB2	2:H:376:CYS:SG	2.61	0.41
2:H:386:GLU:O	2:H:387:ALA:C	2.63	0.41
3:I:150:VAL:CG2	3:I:151:LYS:N	2.84	0.41
1:A:78:VAL:O	1:A:84:GLY:HA3	2.21	0.40
1:A:202:TYR:CE2	1:A:268:PHE:HD1	2.38	0.40
1:A:395:PHE:HB3	1:A:396:THR:H	1.73	0.40
1:A:405:LEU:HD23	1:A:405:LEU:O	2.21	0.40
2:B:34:GLY:O	2:B:61:HIS:HB2	2.20	0.40
2:B:115:ILE:CG2	2:B:116:ASP:H	2.33	0.40
2:B:272:TYR:O	2:B:300:ASN:ND2	2.54	0.40
2:B:287:SER:O	2:B:291:ILE:HG12	2.21	0.40
2:B:362:VAL:HG13	2:B:368:LEU:CB	2.50	0.40
2:B:405:VAL:C	2:B:407:TRP:N	2.79	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:78:VAL:O	1:C:84:GLY:HA3	2.21	0.40
1:C:405:LEU:O	1:C:405:LEU:HD23	2.22	0.40
2:D:115:ILE:CG2	2:D:116:ASP:H	2.32	0.40
2:D:166:LYS:HB2	2:D:199:ASP:OD1	2.20	0.40
2:D:199:ASP:CB	2:D:256:GLN:NE2	2.77	0.40
2:D:296:PHE:CG	2:D:341:ILE:HD12	2.53	0.40
1:E:183:GLU:HB3	1:E:184:PRO:HD3	2.03	0.40
1:E:288:VAL:O	1:E:289:PRO:C	2.64	0.40
1:E:291:LEU:HD21	1:E:373:MET:HG2	2.03	0.40
1:E:422:GLU:O	1:E:426:ASN:CB	2.66	0.40
2:F:251:ASP:CA	2:F:254:GLU:HG3	2.49	0.40
2:F:293:ASN:ND2	2:F:338:LYS:NZ	2.69	0.40
2:F:318:LEU:HB2	2:F:376:CYS:SG	2.61	0.40
1:G:259:MET:HE3	1:G:268:PHE:CZ	2.56	0.40
2:H:11:GLN:HG3	2:H:74:VAL:HG21	2.03	0.40
2:H:11:GLN:NE2	2:H:74:VAL:CG2	2.76	0.40
2:H:23:LEU:HD11	2:H:361:THR:O	2.21	0.40
2:H:95:GLY:O	2:H:96:LYS:C	2.64	0.40
2:H:121:ARG:C	2:H:123:ARG:H	2.29	0.40
2:H:147:SER:OG	2:H:148:GLY:N	2.54	0.40
2:H:149:PHE:CD1	2:H:150:THR:N	2.89	0.40
2:H:293:ASN:ND2	2:H:338:LYS:NZ	2.69	0.40
2:B:30:ILE:HD13	2:B:61:HIS:ND1	2.17	0.40
2:B:204:VAL:CG1	2:B:209:ILE:HD11	2.42	0.40
2:B:209:ILE:HD13	2:B:231:ILE:HD11	2.04	0.40
2:B:248:LEU:HD12	2:B:248:LEU:HA	1.93	0.40
2:B:251:ASP:CA	2:B:254:GLU:HG3	2.48	0.40
2:B:425:MET:O	2:B:428:LEU:N	2.45	0.40
1:C:182:VAL:O	1:C:184:PRO:N	2.54	0.40
1:C:183:GLU:HB3	1:C:184:PRO:HD3	2.04	0.40
1:C:274:PRO:HD3	1:C:374:SER:HA	2.03	0.40
1:C:291:LEU:HD21	1:C:373:MET:HG2	2.03	0.40
2:D:11:GLN:HG3	2:D:74:VAL:HG21	2.04	0.40
1:E:25:SER:O	1:E:28:HIS:N	2.53	0.40
1:E:139:HIS:HE1	1:E:168:THR:CG2	2.33	0.40
1:E:405:LEU:HD23	1:E:405:LEU:O	2.22	0.40
2:F:23:LEU:HD11	2:F:361:THR:O	2.21	0.40
2:F:355:ILE:HD13	2:F:355:ILE:HG21	1.90	0.40
1:G:12:CYS:O	1:G:14:ASN:N	2.55	0.40
1:G:98:GLY:O	1:G:100:GLY:N	2.49	0.40
1:G:118:VAL:O	1:G:119:LEU:C	2.62	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:119:LEU:O	1:G:122:VAL:HG22	2.21	0.40
1:G:359:PRO:HB2	1:G:360:PRO:CD	2.49	0.40
2:H:188:ILE:HD13	2:H:188:ILE:HA	1.97	0.40
1:A:11:GLN:HA	1:A:74:THR:HG21	2.04	0.40
2:B:30:ILE:HG23	2:B:34:GLY:C	2.47	0.40
2:B:149:PHE:CD1	2:B:150:THR:N	2.89	0.40
2:B:401:LYS:O	2:B:402:ARG:HB2	2.21	0.40
1:C:14:ASN:O	1:C:15:GLN:C	2.64	0.40
1:C:202:TYR:CE2	1:C:268:PHE:HD1	2.38	0.40
2:D:318:LEU:HB2	2:D:376:CYS:SG	2.61	0.40
2:D:401:LYS:O	2:D:402:ARG:HB2	2.21	0.40
1:E:12:CYS:O	1:E:14:ASN:N	2.55	0.40
2:F:121:ARG:C	2:F:123:ARG:H	2.30	0.40
2:F:273:ALA:HB2	2:F:375:VAL:HB	2.03	0.40
1:G:44:LEU:HD12	1:G:49:ILE:CD1	2.49	0.40
1:G:48:ARG:CG	1:G:243:ARG:O	2.66	0.40
2:H:397:LEU:HD23	2:H:397:LEU:HA	1.82	0.40
1:A:14:ASN:O	1:A:15:GLN:C	2.64	0.40
1:A:20:PHE:CD2	1:A:235:MET:CG	3.04	0.40
1:A:70:LEU:HB2	1:A:99:ALA:HB2	2.03	0.40
1:A:194:LEU:O	1:A:196:GLU:N	2.55	0.40
1:A:291:LEU:HD21	1:A:373:MET:HG2	2.03	0.40
2:B:11:GLN:HG3	2:B:74:VAL:HG21	2.04	0.40
1:C:139:HIS:HE1	1:C:168:THR:CG2	2.33	0.40
1:C:194:LEU:O	1:C:196:GLU:N	2.55	0.40
2:D:147:SER:OG	2:D:148:GLY:N	2.54	0.40
2:D:161:TYR:O	2:D:162:GLY:C	2.64	0.40
2:D:209:ILE:HD13	2:D:231:ILE:HD11	2.04	0.40
2:D:255:PHE:O	2:D:259:LEU:N	2.50	0.40
2:D:425:MET:O	2:D:428:LEU:N	2.45	0.40
1:E:11:GLN:HA	1:E:74:THR:HG21	2.03	0.40
1:E:20:PHE:CD2	1:E:235:MET:CG	3.04	0.40
1:E:44:LEU:HD12	1:E:49:ILE:CD1	2.49	0.40
1:E:119:LEU:O	1:E:122:VAL:HG22	2.21	0.40
1:E:176:LYS:HD2	1:E:207:GLU:HB2	2.03	0.40
1:E:202:TYR:HE2	1:E:378:ILE:HG21	1.87	0.40
1:E:417:GLU:O	1:E:420:GLU:HB3	2.21	0.40
2:F:11:GLN:HG3	2:F:74:VAL:HG21	2.04	0.40
2:F:172:TYR:CD1	2:F:173:PRO:N	2.80	0.40
2:H:98:ASP:OD1	2:H:98:ASP:N	2.55	0.40
2:H:144:GLY:N	5:H:500:GTP:O1G	2.48	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:I:134:LYS:HD3	3:I:135:LYS:O	2.21	0.40
1:A:187:ALA:O	1:A:190:SER:N	2.54	0.40
2:D:100:ALA:HB2	2:D:105:ARG:HD3	2.02	0.40
2:D:172:TYR:OH	2:D:387:ALA:C	2.64	0.40
2:D:362:VAL:HG13	2:D:368:LEU:CB	2.50	0.40
2:D:398:MET:HE3	2:D:398:MET:HB2	1.78	0.40
1:E:11:GLN:HG3	1:E:74:THR:HG23	2.04	0.40
2:F:98:ASP:OD1	2:F:98:ASP:N	2.55	0.40
1:G:24:ILE:CG2	1:G:25:SER:N	2.80	0.40
1:G:78:VAL:O	1:G:84:GLY:HA3	2.21	0.40
1:G:114:LEU:HD12	1:G:117:SER:OG	2.21	0.40
1:G:150:GLY:HA2	1:G:153:LEU:CD2	2.42	0.40
1:G:176:LYS:HD2	1:G:207:GLU:HB2	2.03	0.40
1:G:306:ASP:HA	1:G:307:PRO:HD3	1.92	0.40
2:H:172:TYR:CD1	2:H:173:PRO:N	2.80	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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	424/445 (95%)	274 (65%)	94 (22%)	56 (13%)	0	4
1	C	424/445 (95%)	273 (64%)	95 (22%)	56 (13%)	0	4
1	E	424/445 (95%)	273 (64%)	95 (22%)	56 (13%)	0	4
1	G	424/445 (95%)	273 (64%)	95 (22%)	56 (13%)	0	4
2	B	423/452 (94%)	279 (66%)	87 (21%)	57 (14%)	0	4
2	D	423/452 (94%)	281 (66%)	85 (20%)	57 (14%)	0	4
2	F	423/452 (94%)	279 (66%)	87 (21%)	57 (14%)	0	4
2	H	423/452 (94%)	278 (66%)	88 (21%)	57 (14%)	0	4

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	I	105/373 (28%)	88 (84%)	15 (14%)	2 (2%)	6	32
All	All	3493/3961 (88%)	2298 (66%)	741 (21%)	454 (13%)	0	4

All (454) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	23	VAL
1	A	24	ILE
1	A	32	PRO
1	A	50	ASN
1	A	82	PRO
1	A	97	SER
1	A	128	SER
1	A	176	LYS
1	A	183	GLU
1	A	218	LYS
1	A	238	VAL
1	A	239	THR
1	A	240	THR
1	A	252	LEU
1	A	263	PRO
1	A	266	HIS
1	A	273	ALA
1	A	278	ARG
1	A	280	SER
1	A	281	GLN
1	A	282	GLN
1	A	288	VAL
1	A	294	GLN
1	A	295	MET
1	A	343	PHE
1	A	344	VAL
1	A	346	TRP
1	A	369	ARG
1	A	403	ALA
2	B	56	THR
2	B	58	ALA
2	B	96	LYS
2	B	97	GLU
2	B	108	TYR
2	B	109	THR
2	B	141	PHE

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Mol	Chain	Res	Type
2	B	183	GLU
2	B	217	LEU
2	B	240	ALA
2	B	249	ASN
2	B	255	PHE
2	B	266	HIS
2	B	309	HIS
2	B	346	TRP
2	B	370	LYS
2	B	387	ALA
2	B	403	ALA
2	B	437	VAL
1	C	23	VAL
1	C	24	ILE
1	C	32	PRO
1	C	50	ASN
1	C	82	PRO
1	C	97	SER
1	C	128	SER
1	C	176	LYS
1	C	183	GLU
1	C	218	LYS
1	C	238	VAL
1	C	239	THR
1	C	240	THR
1	C	252	LEU
1	C	263	PRO
1	C	266	HIS
1	C	273	ALA
1	C	278	ARG
1	C	280	SER
1	C	281	GLN
1	C	282	GLN
1	C	288	VAL
1	C	294	GLN
1	C	295	MET
1	C	343	PHE
1	C	344	VAL
1	C	346	TRP
1	C	369	ARG
1	C	403	ALA
2	D	56	THR

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Mol	Chain	Res	Type
2	D	58	ALA
2	D	63	PRO
2	D	96	LYS
2	D	97	GLU
2	D	108	TYR
2	D	109	THR
2	D	141	PHE
2	D	183	GLU
2	D	217	LEU
2	D	240	ALA
2	D	249	ASN
2	D	255	PHE
2	D	266	HIS
2	D	309	HIS
2	D	346	TRP
2	D	370	LYS
2	D	387	ALA
2	D	403	ALA
2	D	437	VAL
1	E	23	VAL
1	E	24	ILE
1	E	32	PRO
1	E	50	ASN
1	E	82	PRO
1	E	97	SER
1	E	128	SER
1	E	176	LYS
1	E	183	GLU
1	E	218	LYS
1	E	238	VAL
1	E	239	THR
1	E	240	THR
1	E	252	LEU
1	E	263	PRO
1	E	266	HIS
1	E	273	ALA
1	E	278	ARG
1	E	280	SER
1	E	281	GLN
1	E	282	GLN
1	E	288	VAL
1	E	294	GLN

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Mol	Chain	Res	Type
1	E	295	MET
1	E	343	PHE
1	E	344	VAL
1	E	346	TRP
1	E	369	ARG
1	E	403	ALA
2	F	63	PRO
2	F	96	LYS
2	F	97	GLU
2	F	108	TYR
2	F	109	THR
2	F	141	PHE
2	F	183	GLU
2	F	217	LEU
2	F	240	ALA
2	F	249	ASN
2	F	255	PHE
2	F	266	HIS
2	F	309	HIS
2	F	346	TRP
2	F	370	LYS
2	F	387	ALA
2	F	403	ALA
2	F	437	VAL
1	G	23	VAL
1	G	24	ILE
1	G	32	PRO
1	G	50	ASN
1	G	82	PRO
1	G	97	SER
1	G	128	SER
1	G	176	LYS
1	G	183	GLU
1	G	218	LYS
1	G	238	VAL
1	G	239	THR
1	G	240	THR
1	G	252	LEU
1	G	263	PRO
1	G	266	HIS
1	G	273	ALA
1	G	278	ARG

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Mol	Chain	Res	Type
1	G	280	SER
1	G	281	GLN
1	G	282	GLN
1	G	288	VAL
1	G	294	GLN
1	G	295	MET
1	G	343	PHE
1	G	344	VAL
1	G	346	TRP
1	G	369	ARG
1	G	403	ALA
2	H	63	PRO
2	H	96	LYS
2	H	97	GLU
2	H	108	TYR
2	H	109	THR
2	H	141	PHE
2	H	183	GLU
2	H	217	LEU
2	H	240	ALA
2	H	249	ASN
2	H	255	PHE
2	H	266	HIS
2	H	309	HIS
2	H	346	TRP
2	H	370	LYS
2	H	387	ALA
2	H	403	ALA
2	H	437	VAL
1	A	38	GLY
1	A	73	GLY
1	A	175	PRO
1	A	265	LEU
1	A	279	GLY
1	A	298	ALA
1	A	300	ASN
1	A	311	ARG
2	B	24	TYR
2	B	73	THR
2	B	83	TYR
2	B	103	TYR
2	B	111	GLY

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Mol	Chain	Res	Type
2	B	131	GLY
2	B	218	ASP
2	B	219	ILE
2	B	238	ILE
2	B	265	GLY
2	B	281	ALA
2	B	314	ALA
2	B	339	ARG
2	B	342	GLN
2	B	373	ARG
2	B	386	GLU
1	C	38	GLY
1	C	73	GLY
1	C	175	PRO
1	C	265	LEU
1	C	279	GLY
1	C	298	ALA
1	C	300	ASN
1	C	311	ARG
2	D	24	TYR
2	D	73	THR
2	D	83	TYR
2	D	103	TYR
2	D	111	GLY
2	D	131	GLY
2	D	218	ASP
2	D	219	ILE
2	D	238	ILE
2	D	265	GLY
2	D	281	ALA
2	D	314	ALA
2	D	339	ARG
2	D	342	GLN
2	D	373	ARG
2	D	386	GLU
1	E	38	GLY
1	E	73	GLY
1	E	175	PRO
1	E	265	LEU
1	E	279	GLY
1	E	298	ALA
1	E	300	ASN

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Mol	Chain	Res	Type
1	E	311	ARG
2	F	24	TYR
2	F	73	THR
2	F	83	TYR
2	F	103	TYR
2	F	111	GLY
2	F	131	GLY
2	F	218	ASP
2	F	219	ILE
2	F	238	ILE
2	F	265	GLY
2	F	281	ALA
2	F	314	ALA
2	F	339	ARG
2	F	342	GLN
2	F	373	ARG
2	F	386	GLU
1	G	38	GLY
1	G	73	GLY
1	G	175	PRO
1	G	265	LEU
1	G	279	GLY
1	G	298	ALA
1	G	300	ASN
1	G	311	ARG
2	H	24	TYR
2	H	73	THR
2	H	83	TYR
2	H	103	TYR
2	H	111	GLY
2	H	131	GLY
2	H	218	ASP
2	H	219	ILE
2	H	238	ILE
2	H	265	GLY
2	H	281	ALA
2	H	314	ALA
2	H	339	ARG
2	H	342	GLN
2	H	373	ARG
2	H	386	GLU
1	A	34	GLY

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Mol	Chain	Res	Type
1	A	83	PHE
1	A	99	ALA
1	A	100	GLY
1	A	302	MET
1	A	386	GLU
2	B	48	SER
2	B	104	ALA
2	B	148	GLY
2	B	149	PHE
2	B	173	PRO
2	B	239	THR
2	B	245	ASP
2	B	263	PRO
2	B	279	GLU
2	B	330	ALA
2	B	336	LYS
2	B	369	ALA
1	C	34	GLY
1	C	83	PHE
1	C	99	ALA
1	C	100	GLY
1	C	302	MET
1	C	386	GLU
2	D	48	SER
2	D	104	ALA
2	D	148	GLY
2	D	149	PHE
2	D	173	PRO
2	D	239	THR
2	D	245	ASP
2	D	263	PRO
2	D	279	GLU
2	D	330	ALA
2	D	336	LYS
2	D	369	ALA
1	E	83	PHE
1	E	99	ALA
1	E	100	GLY
1	E	302	MET
1	E	386	GLU
2	F	48	SER
2	F	59	GLY

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Mol	Chain	Res	Type
2	F	104	ALA
2	F	148	GLY
2	F	149	PHE
2	F	173	PRO
2	F	239	THR
2	F	245	ASP
2	F	263	PRO
2	F	279	GLU
2	F	330	ALA
2	F	336	LYS
2	F	369	ALA
1	G	34	GLY
1	G	83	PHE
1	G	99	ALA
1	G	100	GLY
1	G	302	MET
1	G	386	GLU
2	H	48	SER
2	H	59	GLY
2	H	104	ALA
2	H	148	GLY
2	H	149	PHE
2	H	173	PRO
2	H	239	THR
2	H	245	ASP
2	H	263	PRO
2	H	279	GLU
2	H	330	ALA
2	H	336	LYS
2	H	369	ALA
1	A	96	GLN
1	A	395	PHE
2	B	129	CYS
2	B	300	ASN
2	B	348	PRO
1	C	96	GLN
1	C	395	PHE
2	D	300	ASN
2	D	348	PRO
1	E	34	GLY
1	E	96	GLN
1	E	395	PHE

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Mol	Chain	Res	Type
2	F	300	ASN
2	F	348	PRO
1	G	96	GLN
1	G	395	PHE
2	H	129	CYS
2	H	300	ASN
2	H	348	PRO
3	I	63	ARG
1	A	57	ALA
1	A	74	THR
1	A	285	ALA
1	A	424	ASN
2	B	256	GLN
2	B	303	VAL
2	B	382	THR
1	C	57	ALA
1	C	74	THR
1	C	285	ALA
2	D	129	CYS
2	D	256	GLN
2	D	303	VAL
2	D	382	THR
1	E	57	ALA
1	E	74	THR
1	E	285	ALA
1	E	424	ASN
2	F	129	CYS
2	F	256	GLN
2	F	303	VAL
2	F	307	PRO
2	F	382	THR
1	G	57	ALA
1	G	74	THR
1	G	285	ALA
1	G	424	ASN
2	H	256	GLN
2	H	303	VAL
2	H	307	PRO
2	H	382	THR
1	A	51	VAL
1	A	58	GLY
1	A	145	THR

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Mol	Chain	Res	Type
1	A	162	PRO
1	A	400	ARG
2	B	62	VAL
2	B	273	ALA
2	B	307	PRO
1	C	51	VAL
1	C	58	GLY
1	C	145	THR
1	C	162	PRO
1	C	400	ARG
1	C	424	ASN
2	D	273	ALA
2	D	307	PRO
1	E	58	GLY
1	E	145	THR
1	E	162	PRO
1	E	400	ARG
2	F	273	ALA
1	G	51	VAL
1	G	58	GLY
1	G	145	THR
1	G	162	PRO
1	G	400	ARG
2	H	273	ALA
1	A	195	VAL
1	C	195	VAL
1	E	51	VAL
1	E	195	VAL
2	F	31	GLN
1	G	195	VAL
2	H	31	GLN
3	I	101	VAL
2	B	115	ILE
1	C	72	PRO
2	D	115	ILE
1	E	72	PRO
2	F	115	ILE
2	H	115	ILE
1	A	72	PRO
1	G	72	PRO

5.3.2 Protein sidechains [i](#)

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

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

8 ligands are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
5	GTP	D	500	-	33,34,34	1.89	3 (9%)	50,54,54	0.91	3 (6%)
4	GDP	C	600	-	29,30,30	2.95	11 (37%)	45,47,47	3.48	18 (40%)
4	GDP	E	600	-	29,30,30	2.94	11 (37%)	45,47,47	3.48	18 (40%)
4	GDP	A	600	-	29,30,30	2.95	11 (37%)	45,47,47	3.48	17 (37%)
4	GDP	G	600	-	29,30,30	2.95	11 (37%)	45,47,47	3.48	17 (37%)
5	GTP	F	500	-	33,34,34	1.89	3 (9%)	50,54,54	0.91	3 (6%)
5	GTP	H	500	-	33,34,34	1.90	3 (9%)	50,54,54	0.91	3 (6%)
5	GTP	B	500	-	33,34,34	2.02	4 (12%)	50,54,54	1.20	3 (6%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the

Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns.
'-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
5	GTP	D	500	-	-	4/22/38/38	0/3/3/3
4	GDP	C	600	-	-	4/16/32/32	0/3/3/3
4	GDP	E	600	-	-	4/16/32/32	0/3/3/3
4	GDP	A	600	-	-	4/16/32/32	0/3/3/3
4	GDP	G	600	-	-	4/16/32/32	0/3/3/3
5	GTP	F	500	-	-	4/22/38/38	0/3/3/3
5	GTP	H	500	-	-	4/22/38/38	0/3/3/3
5	GTP	B	500	-	-	5/22/38/38	0/3/3/3

All (57) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	A	600	GDP	PA-O3A	7.56	1.67	1.59
4	C	600	GDP	PA-O3A	7.51	1.67	1.59
4	G	600	GDP	PA-O3A	7.48	1.67	1.59
4	E	600	GDP	PA-O3A	7.43	1.67	1.59
5	B	500	GTP	PA-O3A	-5.99	1.53	1.59
5	H	500	GTP	PA-O3A	-5.98	1.53	1.59
5	F	500	GTP	PA-O3A	-5.94	1.53	1.59
4	C	600	GDP	O6-C6	5.92	1.34	1.23
4	A	600	GDP	C8-N9	5.91	1.50	1.37
4	G	600	GDP	O6-C6	5.91	1.34	1.23
4	E	600	GDP	C8-N9	5.89	1.50	1.37
4	G	600	GDP	C8-N9	5.89	1.50	1.37
5	D	500	GTP	PA-O3A	-5.89	1.53	1.59
4	C	600	GDP	C8-N9	5.88	1.50	1.37
4	E	600	GDP	O6-C6	5.88	1.34	1.23
4	A	600	GDP	O6-C6	5.87	1.34	1.23
5	H	500	GTP	PB-O3A	-5.78	1.53	1.59
5	B	500	GTP	PB-O3A	-5.74	1.53	1.59
5	D	500	GTP	PB-O3A	-5.73	1.53	1.59
5	F	500	GTP	PB-O3A	-5.69	1.53	1.59
5	B	500	GTP	PB-O3B	5.51	1.65	1.59
5	F	500	GTP	PB-O3B	5.49	1.65	1.59
5	D	500	GTP	PB-O3B	5.48	1.65	1.59
5	H	500	GTP	PB-O3B	5.41	1.65	1.59
4	E	600	GDP	C2-N1	4.78	1.49	1.37
4	C	600	GDP	C2-N1	4.77	1.49	1.37
4	A	600	GDP	C2-N1	4.73	1.49	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	G	600	GDP	C2-N1	4.71	1.49	1.37
4	G	600	GDP	PB-O1B	4.37	1.64	1.50
4	A	600	GDP	PB-O1B	4.36	1.64	1.50
4	E	600	GDP	PB-O1B	4.33	1.64	1.50
4	C	600	GDP	PB-O1B	4.32	1.63	1.50
4	G	600	GDP	PB-O2B	-3.95	1.40	1.54
4	A	600	GDP	PB-O2B	-3.95	1.40	1.54
4	C	600	GDP	PB-O2B	-3.93	1.40	1.54
4	E	600	GDP	PB-O2B	-3.92	1.40	1.54
4	A	600	GDP	O4'-C1'	3.41	1.49	1.42
4	G	600	GDP	O4'-C1'	3.39	1.49	1.42
4	C	600	GDP	O4'-C1'	3.37	1.49	1.42
4	E	600	GDP	O4'-C1'	3.30	1.49	1.42
4	G	600	GDP	C8-N7	3.03	1.41	1.32
4	A	600	GDP	C8-N7	3.00	1.41	1.32
4	C	600	GDP	C8-N7	3.00	1.41	1.32
4	E	600	GDP	C8-N7	2.96	1.40	1.32
5	B	500	GTP	PG-O1G	2.94	1.59	1.50
4	G	600	GDP	C5-N7	-2.87	1.33	1.39
4	A	600	GDP	C5-N7	-2.86	1.33	1.39
4	E	600	GDP	C5-N7	-2.77	1.33	1.39
4	C	600	GDP	C5-N7	-2.77	1.33	1.39
4	G	600	GDP	C5-C4	2.64	1.46	1.38
4	A	600	GDP	C5-C4	2.63	1.45	1.38
4	C	600	GDP	C5-C4	2.63	1.45	1.38
4	E	600	GDP	C5-C4	2.61	1.45	1.38
4	E	600	GDP	C2-N3	-2.42	1.27	1.33
4	A	600	GDP	C2-N3	-2.42	1.27	1.33
4	C	600	GDP	C2-N3	-2.42	1.27	1.33
4	G	600	GDP	C2-N3	-2.39	1.27	1.33

All (82) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	A	600	GDP	N9-C8-N7	-10.79	93.40	113.40
4	G	600	GDP	N9-C8-N7	-10.76	93.44	113.40
4	E	600	GDP	N9-C8-N7	-10.75	93.46	113.40
4	C	600	GDP	N9-C8-N7	-10.74	93.48	113.40
4	A	600	GDP	C8-N7-C5	9.25	120.73	104.26
4	G	600	GDP	C8-N7-C5	9.20	120.66	104.26
4	E	600	GDP	C8-N7-C5	9.20	120.66	104.26
4	C	600	GDP	C8-N7-C5	9.20	120.64	104.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	A	600	GDP	C6-C5-N7	8.58	145.91	130.29
4	G	600	GDP	C6-C5-N7	8.56	145.88	130.29
4	C	600	GDP	C6-C5-N7	8.56	145.87	130.29
4	E	600	GDP	C6-C5-N7	8.55	145.86	130.29
4	C	600	GDP	N2-C2-N3	6.31	131.99	119.67
4	E	600	GDP	N2-C2-N3	6.31	131.99	119.67
4	A	600	GDP	N2-C2-N3	6.30	131.96	119.67
4	G	600	GDP	N2-C2-N3	6.27	131.91	119.67
4	G	600	GDP	C6-C5-C4	-6.20	109.51	118.83
4	A	600	GDP	C6-C5-C4	-6.17	109.55	118.83
4	E	600	GDP	C6-C5-C4	-6.14	109.59	118.83
4	C	600	GDP	C6-C5-C4	-6.13	109.61	118.83
4	G	600	GDP	C8-N9-C4	5.88	117.04	106.03
4	A	600	GDP	C8-N9-C4	5.87	117.03	106.03
4	E	600	GDP	C8-N9-C4	5.87	117.03	106.03
4	C	600	GDP	C8-N9-C4	5.86	117.01	106.03
5	B	500	GTP	O2G-PG-O3B	5.04	121.53	104.64
4	C	600	GDP	C5-C6-N1	4.48	124.66	113.25
4	G	600	GDP	C5-C6-N1	4.48	124.65	113.25
4	E	600	GDP	C5-C6-N1	4.48	124.65	113.25
4	A	600	GDP	C5-C6-N1	4.46	124.61	113.25
4	C	600	GDP	N2-C2-N1	-4.25	107.80	116.76
4	A	600	GDP	N2-C2-N1	-4.25	107.80	116.76
4	E	600	GDP	N2-C2-N1	-4.25	107.80	116.76
4	G	600	GDP	N2-C2-N1	-4.22	107.86	116.76
4	C	600	GDP	C2-N3-C4	4.11	119.38	112.30
4	A	600	GDP	C2-N3-C4	4.11	119.37	112.30
4	E	600	GDP	C2-N3-C4	4.10	119.36	112.30
4	G	600	GDP	C2-N3-C4	4.08	119.33	112.30
4	A	600	GDP	O6-C6-C5	-3.96	116.08	126.53
4	G	600	GDP	O6-C6-C5	-3.96	116.08	126.53
4	C	600	GDP	O6-C6-C5	-3.94	116.13	126.53
4	E	600	GDP	O6-C6-C5	-3.91	116.20	126.53
4	C	600	GDP	C4-C5-N7	-3.88	104.52	110.67
4	A	600	GDP	C4-C5-N7	-3.86	104.55	110.67
4	E	600	GDP	C4-C5-N7	-3.86	104.56	110.67
4	G	600	GDP	C4-C5-N7	-3.82	104.62	110.67
4	C	600	GDP	C2-N1-C6	-3.78	118.25	125.11
4	E	600	GDP	C2-N1-C6	-3.78	118.26	125.11
4	A	600	GDP	C2-N1-C6	-3.77	118.28	125.11
4	G	600	GDP	C2-N1-C6	-3.75	118.31	125.11
4	C	600	GDP	C2'-C3'-C4'	3.43	109.24	102.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	E	600	GDP	C2'-C3'-C4'	3.42	109.21	102.61
4	G	600	GDP	C2'-C3'-C4'	3.40	109.19	102.61
4	A	600	GDP	C2'-C3'-C4'	3.38	109.15	102.61
5	B	500	GTP	O2G-PG-O1G	-3.34	97.80	110.83
5	D	500	GTP	O2G-PG-O3B	2.98	114.63	104.64
5	H	500	GTP	O2G-PG-O3B	2.93	114.46	104.64
5	F	500	GTP	O2G-PG-O3B	2.92	114.44	104.64
4	E	600	GDP	C1'-N9-C8	-2.70	119.07	126.73
4	A	600	GDP	C1'-N9-C8	-2.68	119.11	126.73
4	C	600	GDP	C1'-N9-C8	-2.67	119.14	126.73
4	G	600	GDP	C1'-N9-C8	-2.67	119.14	126.73
4	C	600	GDP	O2'-C2'-C3'	2.28	119.13	111.82
4	G	600	GDP	O2'-C2'-C3'	2.27	119.09	111.82
4	E	600	GDP	O2'-C2'-C3'	2.25	119.04	111.82
4	A	600	GDP	O2'-C2'-C3'	2.25	119.04	111.82
4	A	600	GDP	O3B-PB-O2B	2.24	116.21	107.80
4	C	600	GDP	O3B-PB-O2B	2.23	116.17	107.80
4	G	600	GDP	O3B-PB-O2B	2.22	116.13	107.80
4	E	600	GDP	O3B-PB-O2B	2.22	116.12	107.80
5	D	500	GTP	O2G-PG-O1G	-2.12	102.58	110.83
4	C	600	GDP	C4'-O4'-C1'	2.11	114.13	109.47
5	H	500	GTP	O2G-PG-O1G	-2.11	102.62	110.83
4	E	600	GDP	C4'-O4'-C1'	2.11	114.11	109.47
5	F	500	GTP	O2G-PG-O1G	-2.10	102.66	110.83
5	H	500	GTP	O5'-C5'-C4'	2.08	116.08	108.99
4	A	600	GDP	C4'-O4'-C1'	2.08	114.06	109.47
5	D	500	GTP	O5'-C5'-C4'	2.08	116.07	108.99
5	B	500	GTP	O5'-C5'-C4'	2.07	116.04	108.99
4	G	600	GDP	C4'-O4'-C1'	2.07	114.03	109.47
5	F	500	GTP	O5'-C5'-C4'	2.05	115.99	108.99
4	E	600	GDP	O4'-C4'-C3'	-2.00	101.17	105.15
4	C	600	GDP	O4'-C4'-C3'	-2.00	101.18	105.15

There are no chirality outliers.

All (33) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	A	600	GDP	PA-O3A-PB-O2B
4	A	600	GDP	C5'-O5'-PA-O3A
4	A	600	GDP	C5'-O5'-PA-O2A
4	C	600	GDP	PA-O3A-PB-O2B
4	C	600	GDP	C5'-O5'-PA-O3A

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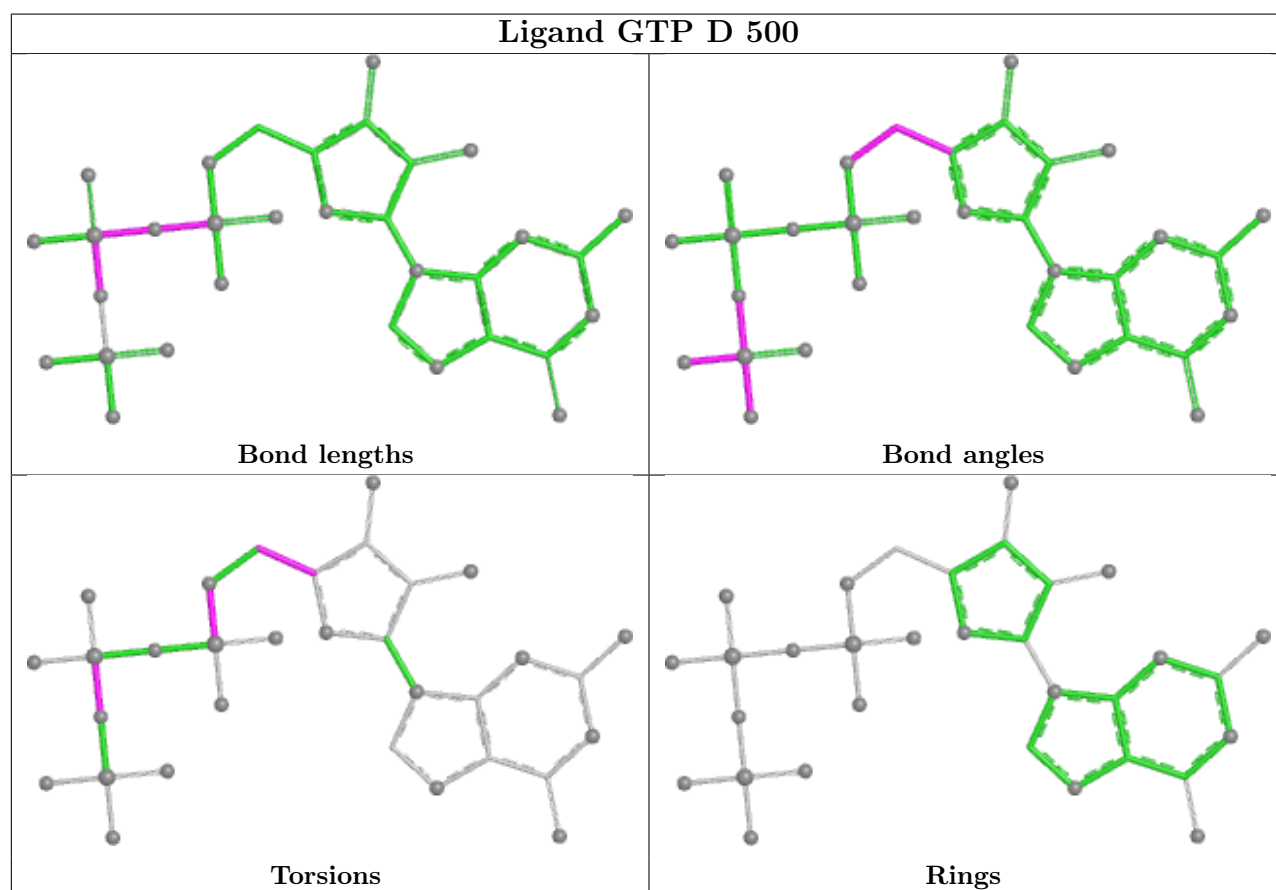
Mol	Chain	Res	Type	Atoms
4	C	600	GDP	C5'-O5'-PA-O2A
4	E	600	GDP	PA-O3A-PB-O2B
4	E	600	GDP	C5'-O5'-PA-O3A
4	E	600	GDP	C5'-O5'-PA-O2A
4	G	600	GDP	PA-O3A-PB-O2B
4	G	600	GDP	C5'-O5'-PA-O3A
4	G	600	GDP	C5'-O5'-PA-O2A
5	D	500	GTP	C3'-C4'-C5'-O5'
5	F	500	GTP	C3'-C4'-C5'-O5'
5	B	500	GTP	C3'-C4'-C5'-O5'
5	H	500	GTP	C3'-C4'-C5'-O5'
5	D	500	GTP	O4'-C4'-C5'-O5'
5	B	500	GTP	C5'-O5'-PA-O1A
5	D	500	GTP	C5'-O5'-PA-O1A
5	F	500	GTP	C5'-O5'-PA-O1A
5	H	500	GTP	C5'-O5'-PA-O1A
5	B	500	GTP	O4'-C4'-C5'-O5'
5	F	500	GTP	O4'-C4'-C5'-O5'
5	H	500	GTP	O4'-C4'-C5'-O5'
4	A	600	GDP	PA-O3A-PB-O3B
4	C	600	GDP	PA-O3A-PB-O3B
4	E	600	GDP	PA-O3A-PB-O3B
4	G	600	GDP	PA-O3A-PB-O3B
5	B	500	GTP	PG-O3B-PB-O2B
5	D	500	GTP	PG-O3B-PB-O2B
5	F	500	GTP	PG-O3B-PB-O2B
5	H	500	GTP	PG-O3B-PB-O2B
5	B	500	GTP	PG-O3B-PB-O3A

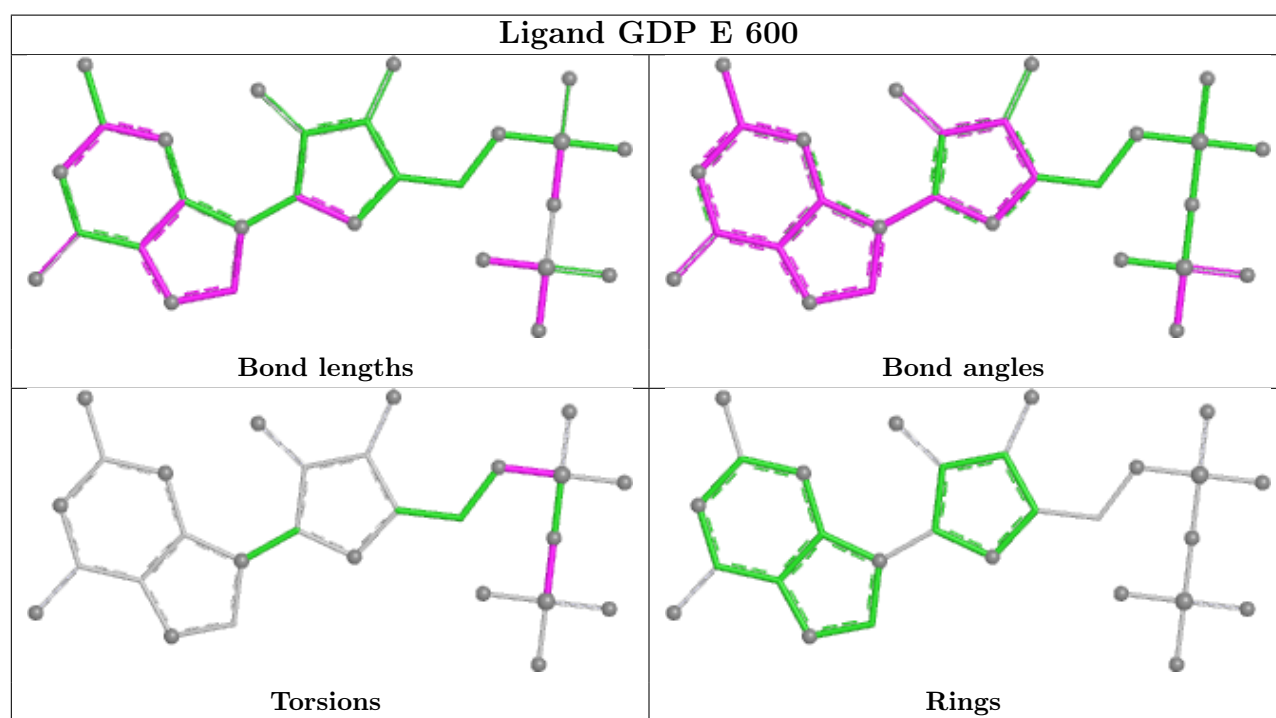
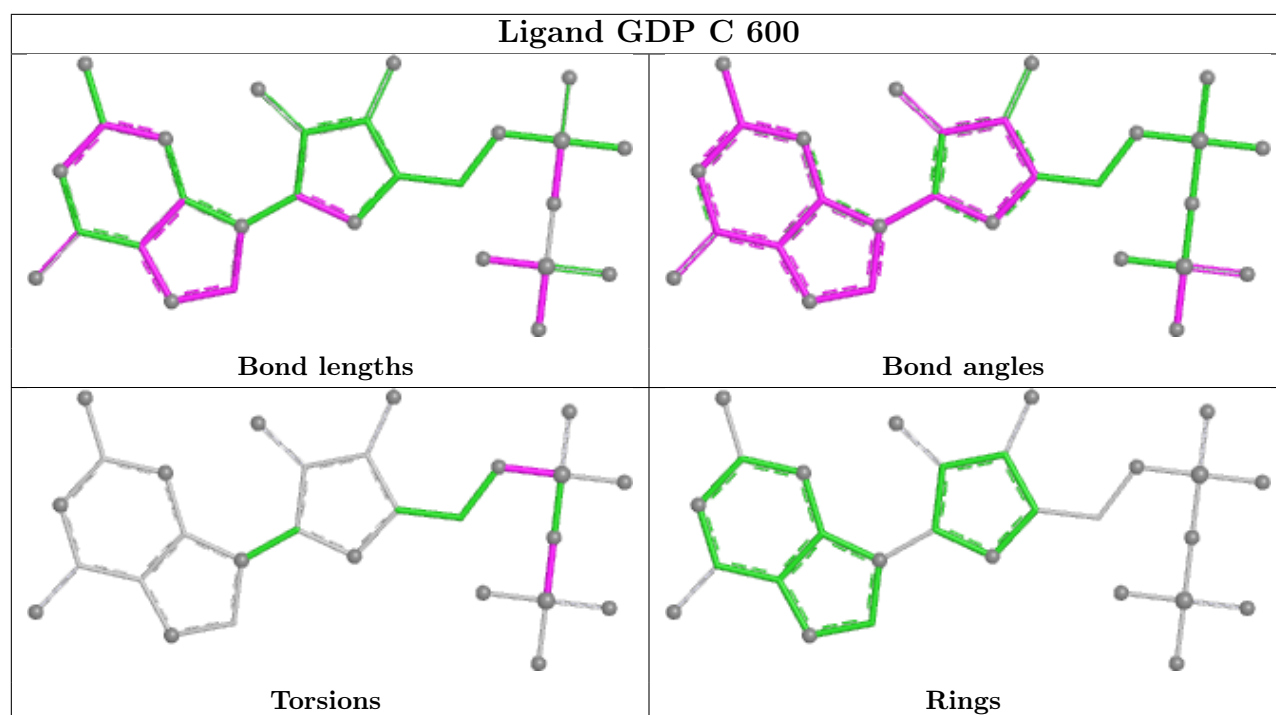
There are no ring outliers.

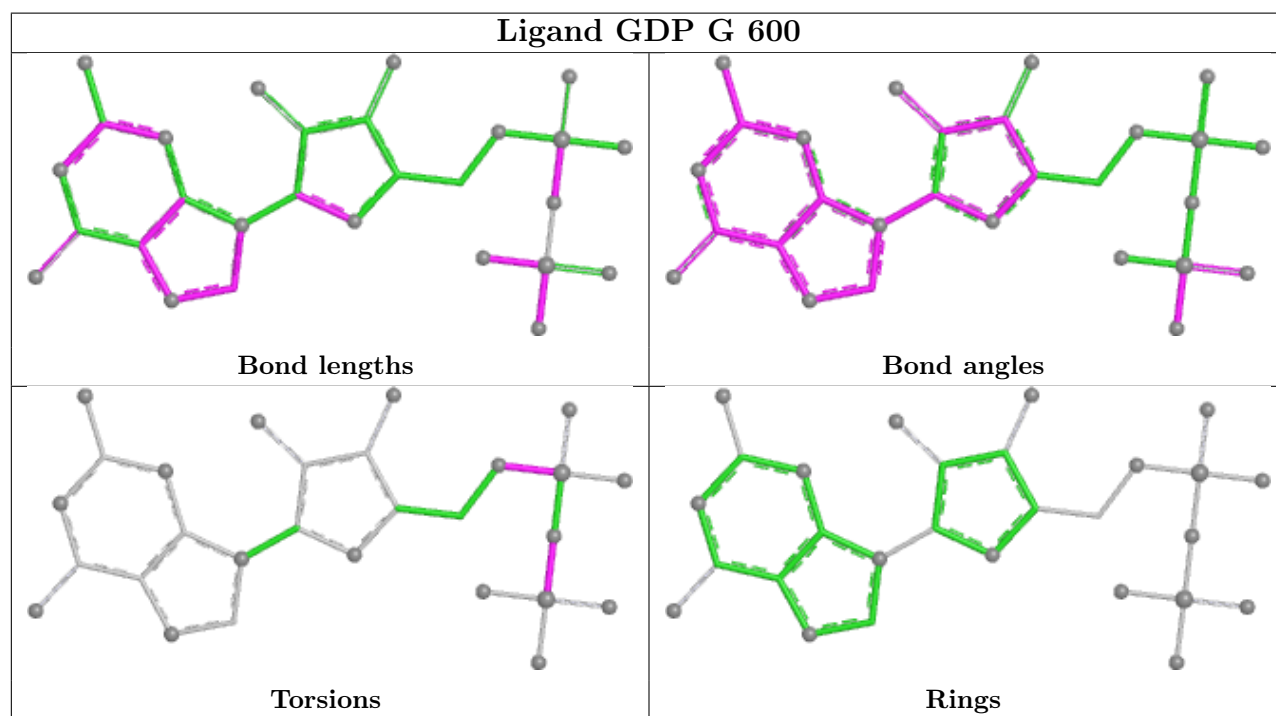
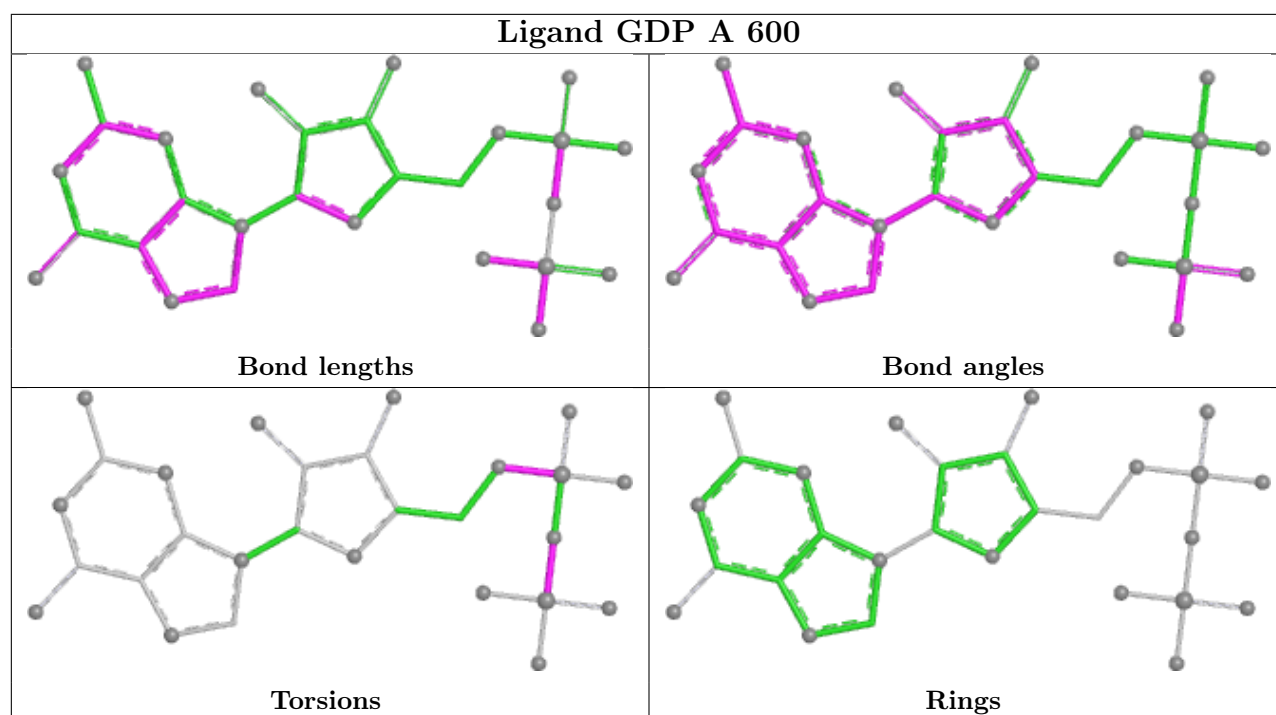
8 monomers are involved in 25 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
5	D	500	GTP	4	0
4	C	600	GDP	1	0
4	E	600	GDP	1	0
4	A	600	GDP	1	0
4	G	600	GDP	4	0
5	F	500	GTP	4	0
5	H	500	GTP	5	0
5	B	500	GTP	5	0

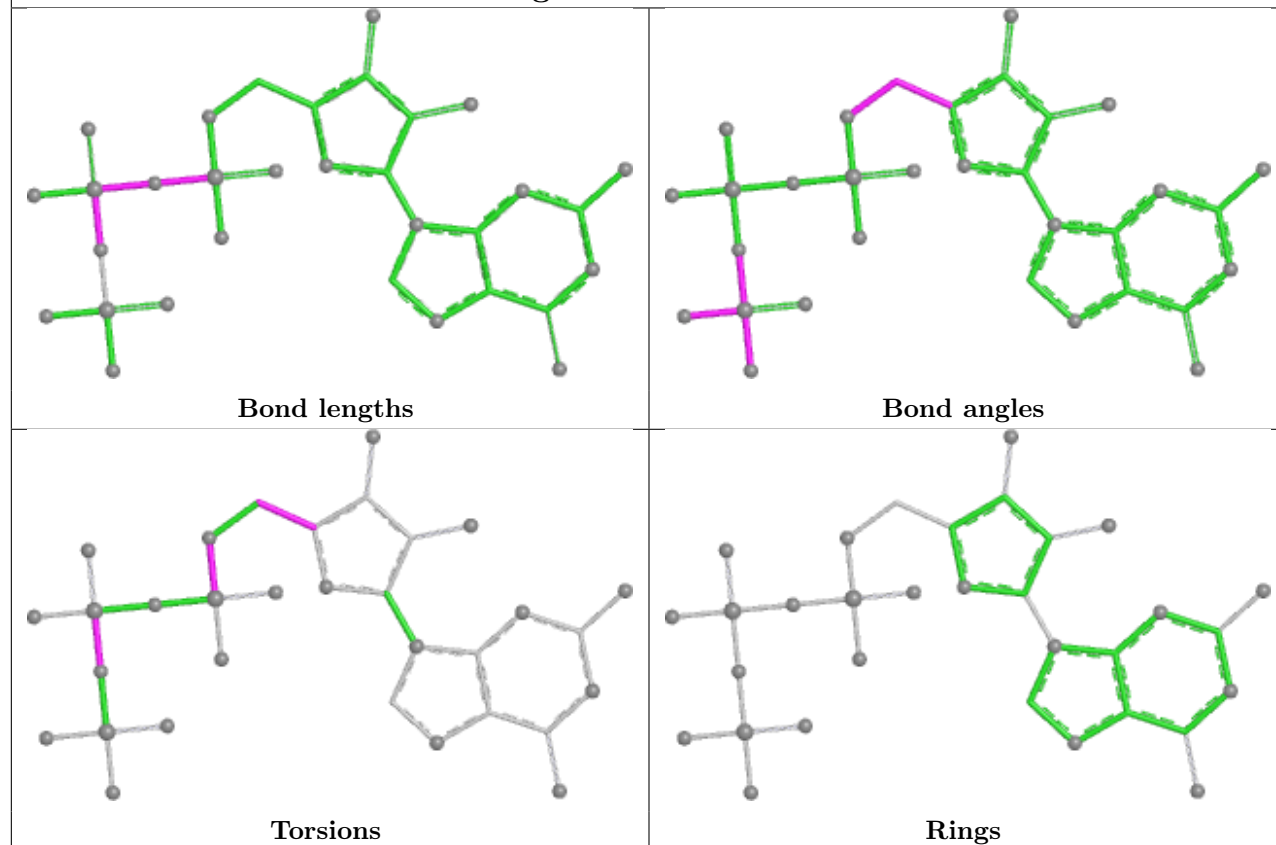
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.



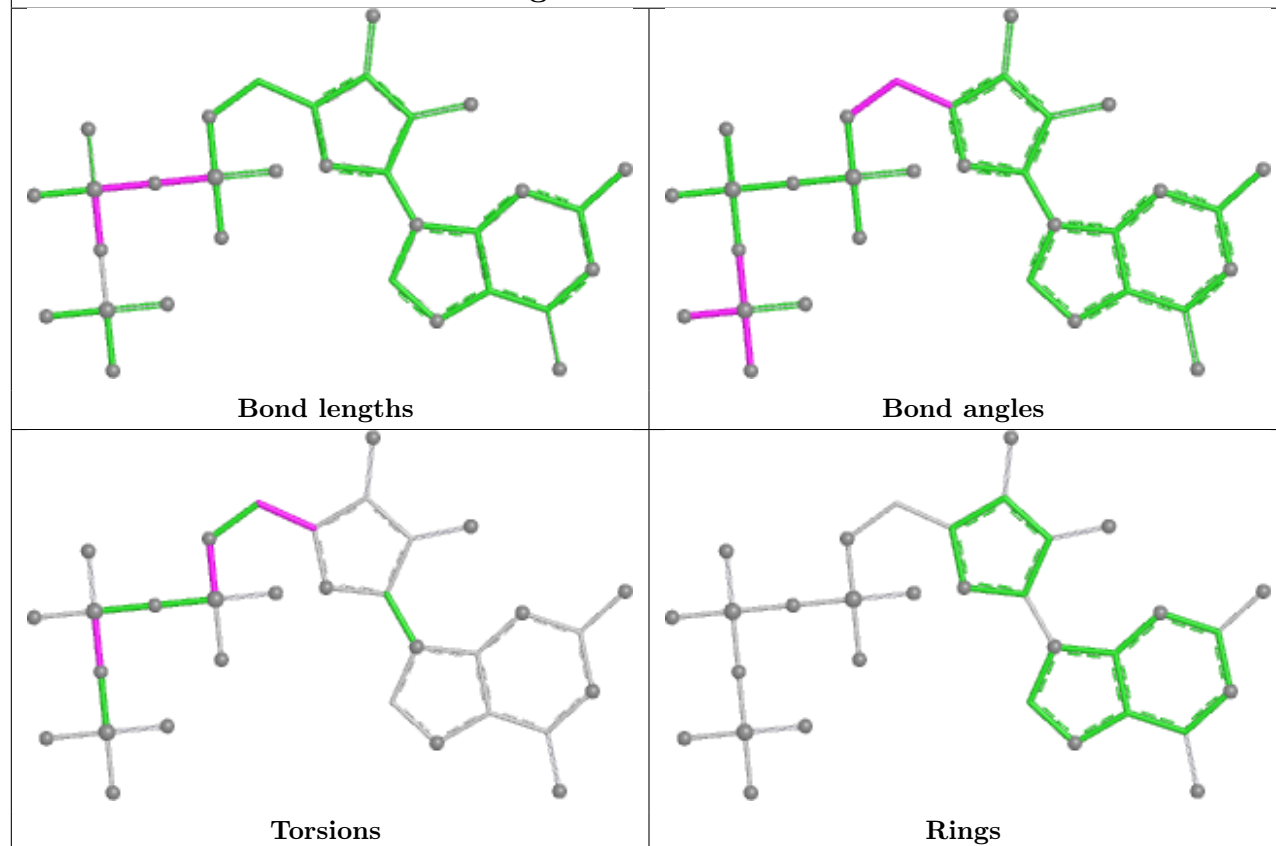


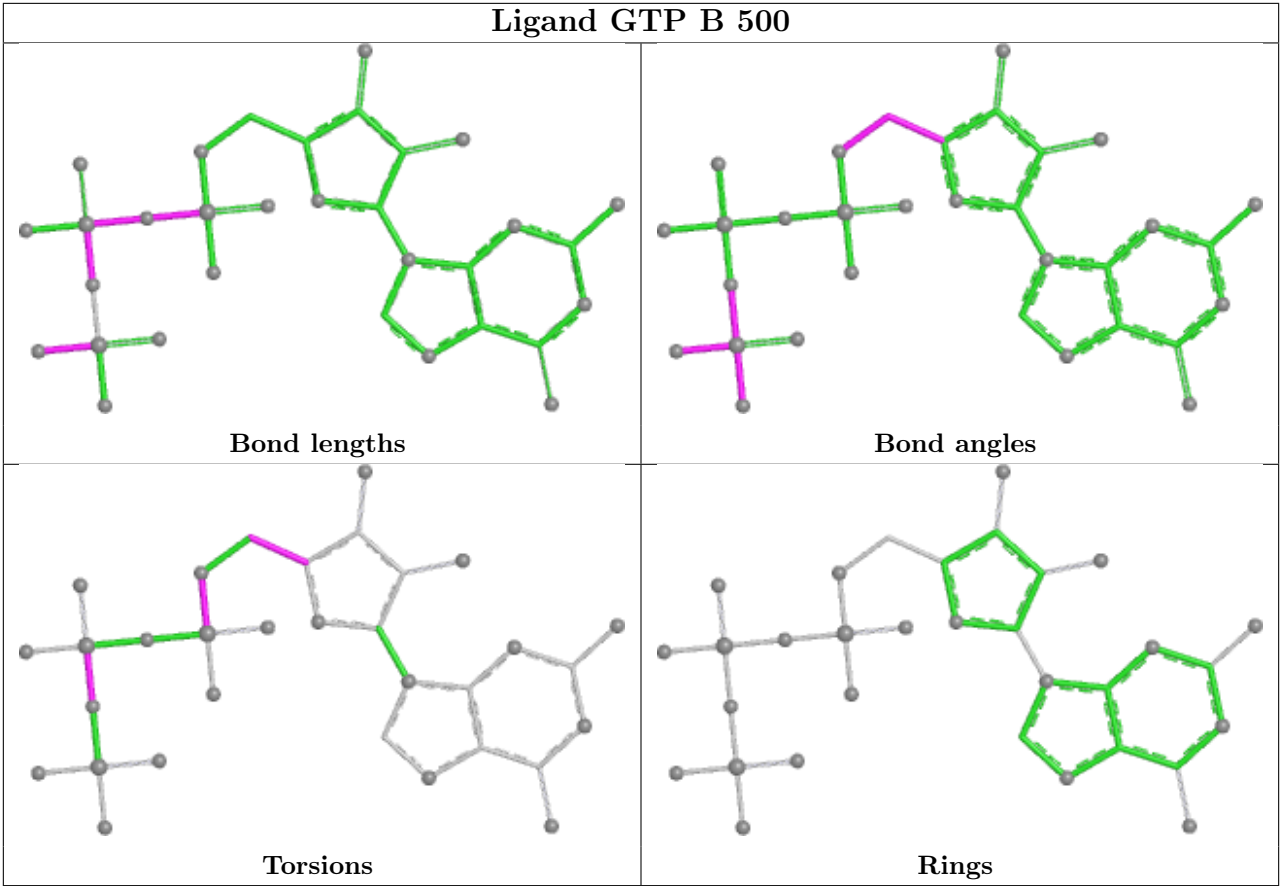


Ligand GTP F 500



Ligand GTP H 500





5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

The following chains have linkage breaks:

Mol	Chain	Number of breaks
2	B	4
2	D	4
2	F	4
2	H	4

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	B	274:PRO	C	275:VAL	N	2.09
1	D	274:PRO	C	275:VAL	N	2.09
1	F	274:PRO	C	275:VAL	N	2.09

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	H	274:PRO	C	275:VAL	N	2.09
1	B	92:LEU	C	93:ILE	N	1.98
1	D	92:LEU	C	93:ILE	N	1.98
1	F	92:LEU	C	93:ILE	N	1.98
1	H	92:LEU	C	93:ILE	N	1.98
1	B	298:PRO	C	299:ALA	N	1.73
1	D	298:PRO	C	299:ALA	N	1.73
1	F	298:PRO	C	299:ALA	N	1.73
1	H	298:PRO	C	299:ALA	N	1.73
1	B	68:VAL	C	69:ASP	N	1.67
1	D	68:VAL	C	69:ASP	N	1.67
1	F	68:VAL	C	69:ASP	N	1.67
1	H	68:VAL	C	69:ASP	N	1.67

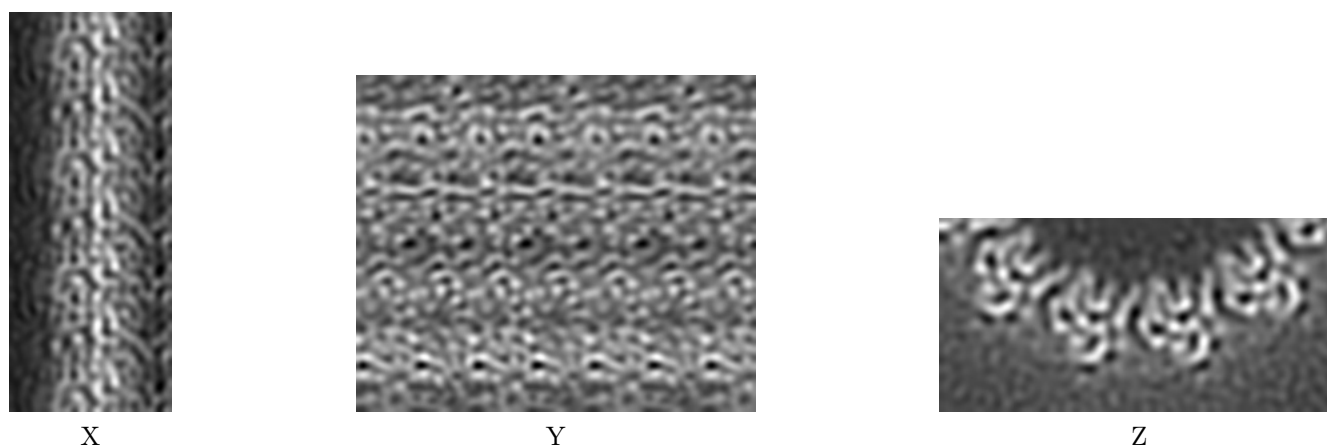
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-2095. 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](#)

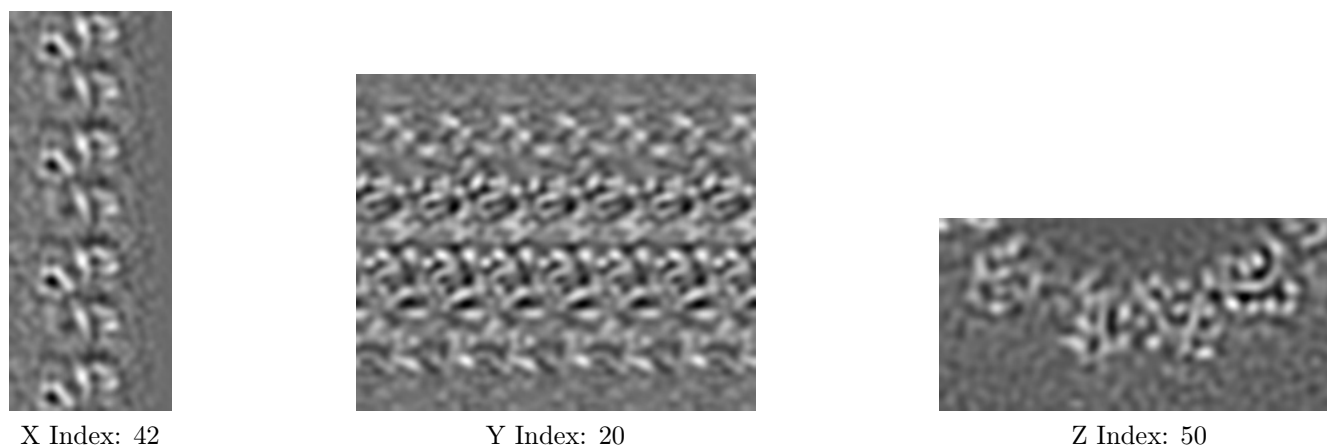
6.1.1 Primary map



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

6.2 Central slices [i](#)

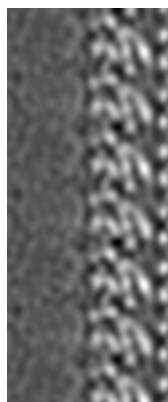
6.2.1 Primary map



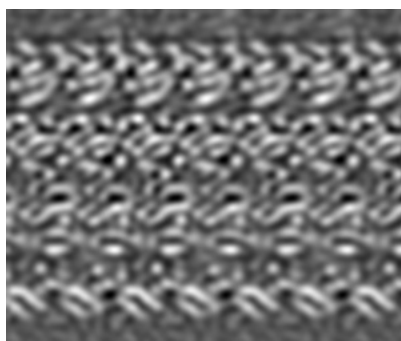
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

6.3.1 Primary map



X Index: 9



Y Index: 22

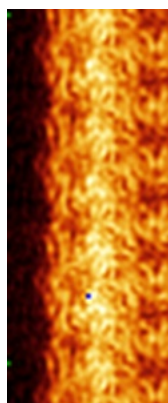


Z Index: 28

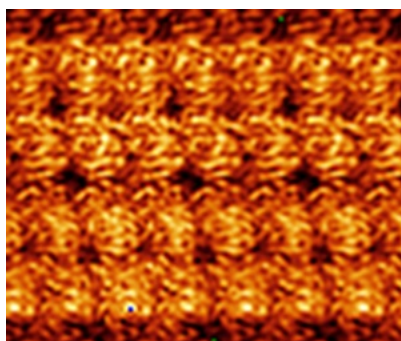
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

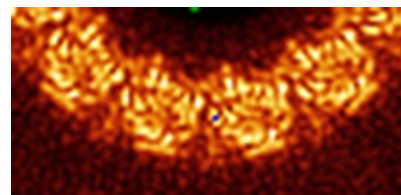
6.4.1 Primary map



X



Y

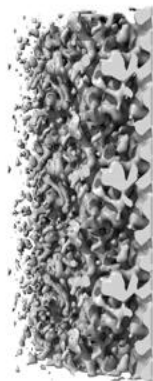


Z

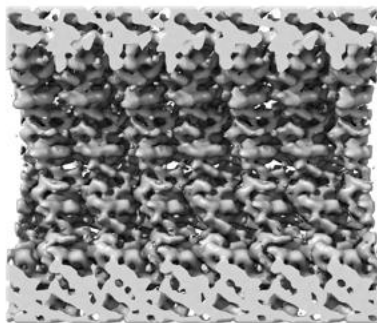
The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 1.6. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

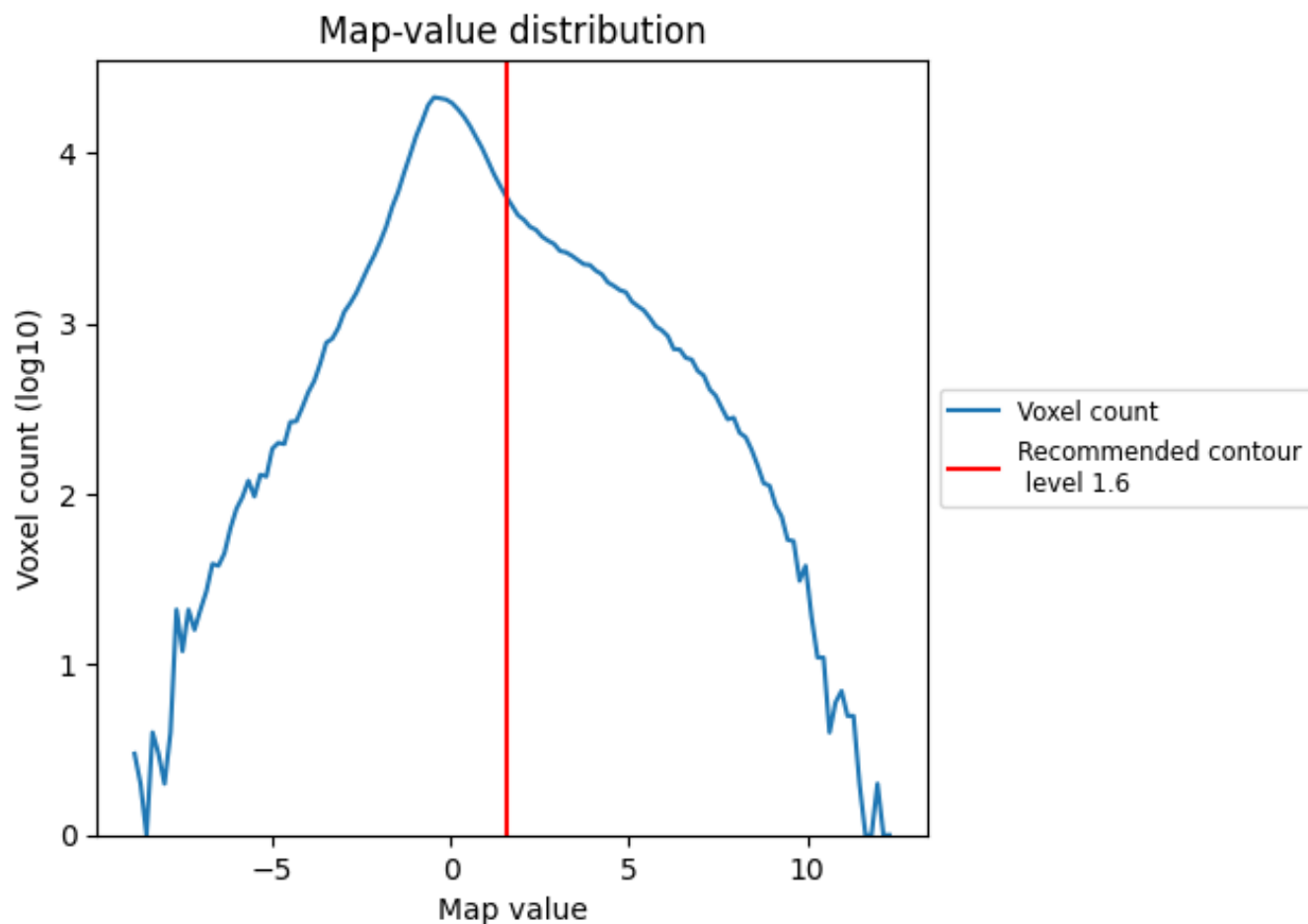
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

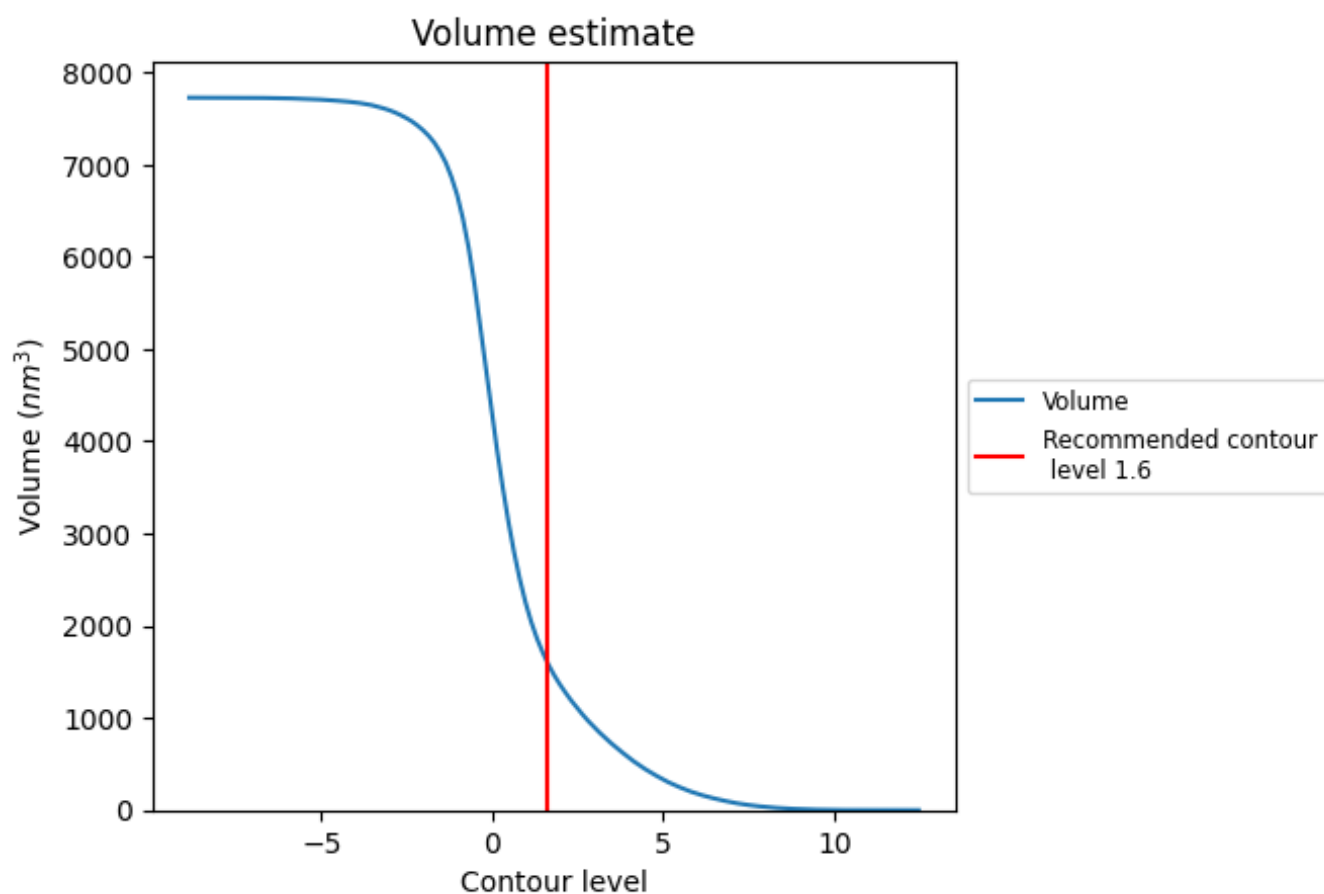
This section contains the results of statistical analysis of the map.

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 1613 nm³; this corresponds to an approximate mass of 1457 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](#)

This section was not generated. The rotationally averaged power spectrum is only generated for cubic maps.

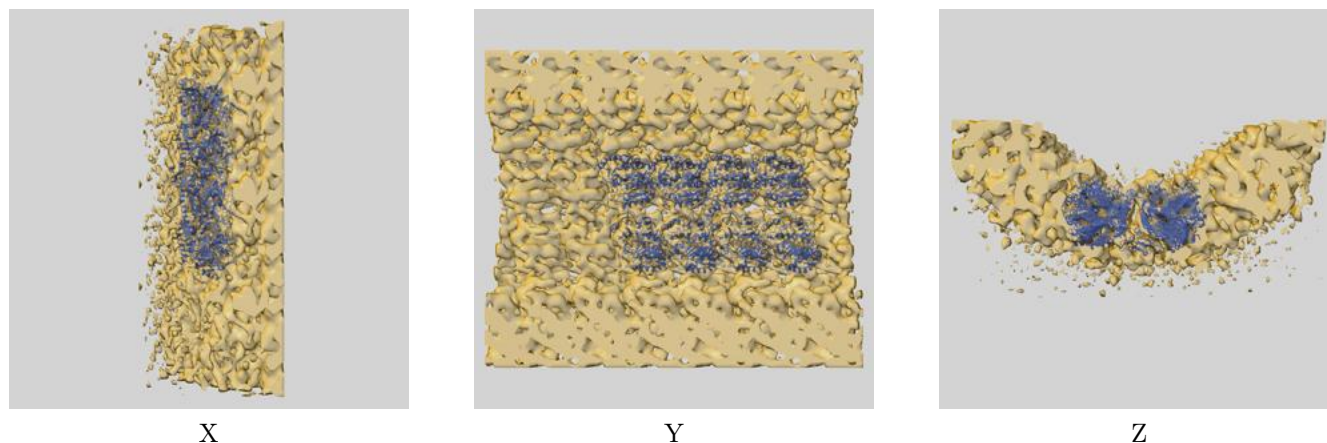
8 Fourier-Shell correlation

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

9 Map-model fit [i](#)

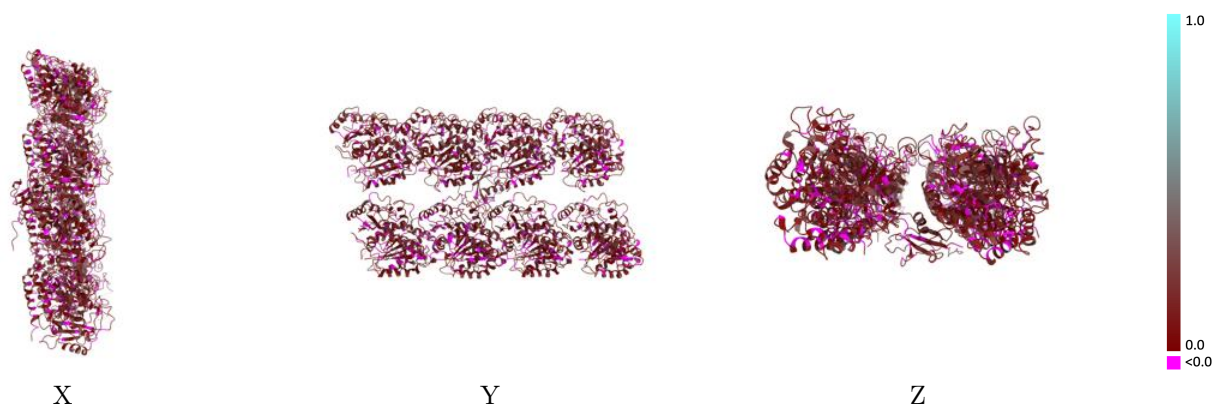
This section contains information regarding the fit between EMDB map EMD-2095 and PDB model 4ATU. Per-residue inclusion information can be found in section [3](#) on page [8](#).

9.1 Map-model overlay [i](#)



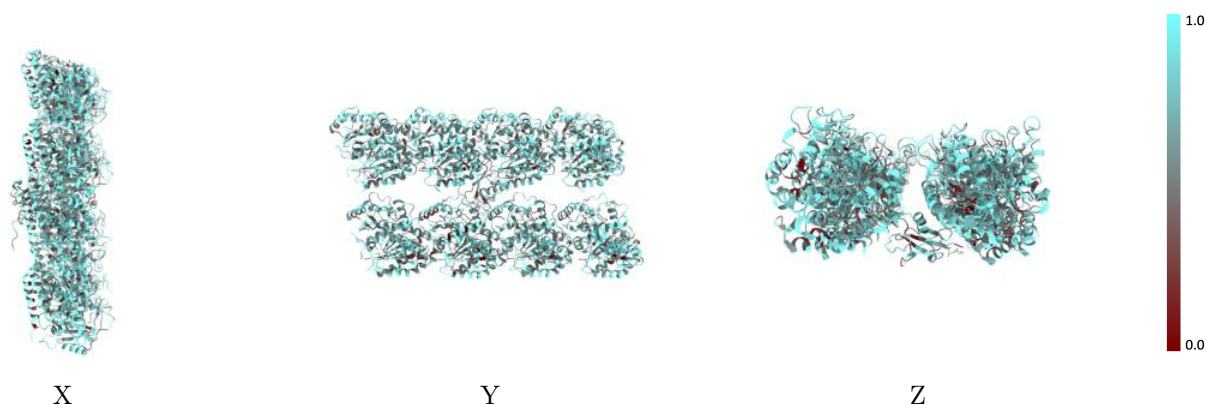
The images above show the 3D surface view of the map at the recommended contour level 1.6 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



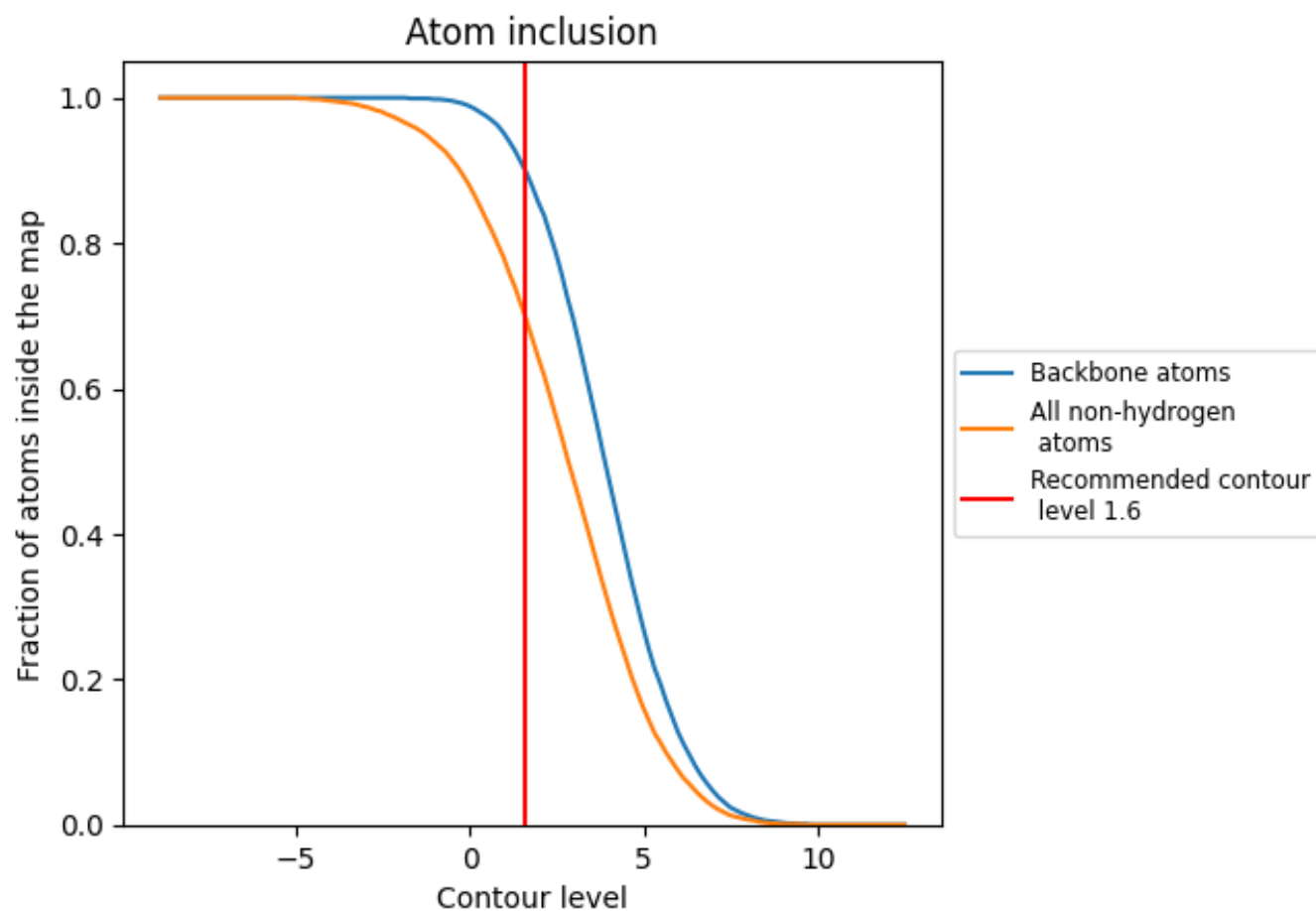
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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](#)



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 (1.6).

9.4 Atom inclusion [i](#)



At the recommended contour level, 90% of all backbone atoms, 70% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (1.6) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.6990	0.1190
A	0.7150	0.1260
B	0.7000	0.1170
C	0.7130	0.1200
D	0.6960	0.1200
E	0.7120	0.1220
F	0.6980	0.1220
G	0.6890	0.1070
H	0.6920	0.1180
I	0.5990	0.1110

1.0

0.0

<0.0