



# Full wwPDB X-ray Structure Validation Report ⓘ

May 29, 2020 – 03:39 am BST

PDB ID : 1BR4  
Title : SMOOTH MUSCLE MYOSIN MOTOR DOMAIN-ESSENTIAL LIGHT CHAIN COMPLEX WITH MGADP.BEF3 BOUND AT THE ACTIVE SITE  
Authors : Dominguez, R.; Trybus, K.M.; Cohen, C.  
Deposited on : 1998-08-27  
Resolution : 3.62 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

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

MolProbity : 4.02b-467  
Mogul : 1.8.5 (274361), CSD as541be (2020)  
Xtriage (Phenix) : **NOT EXECUTED**  
EDS : **NOT EXECUTED**  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.11

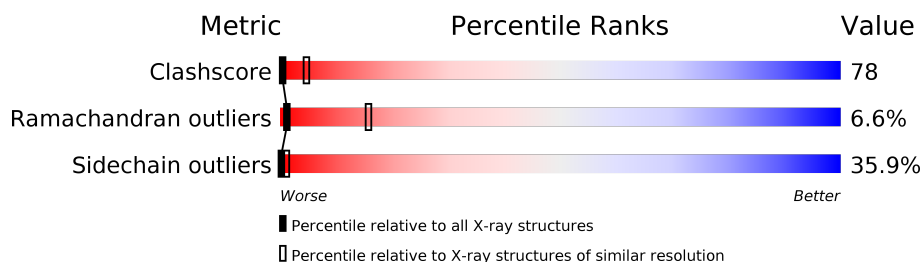
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

## *X-RAY DIFFRACTION*

The reported resolution of this entry is 3.62 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
Clashscore	141614	1387 (3.74-3.50)
Ramachandran outliers	138981	1339 (3.74-3.50)
Sidechain outliers	138945	1339 (3.74-3.50)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ .

Note EDS was not executed.

Mol	Chain	Length	Quality of chain
1	A	820	
1	C	820	
1	E	820	
1	G	820	
2	B	150	
2	D	150	
2	F	150	
2	H	150	

## 2 Entry composition

There are 6 unique types of molecules in this entry. The entry contains 29948 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called MYOSIN.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	781	Total	C	N	O	S	0	0	0
			6292	4009	1078	1176	29			
1	C	781	Total	C	N	O	S	0	0	0
			6292	4009	1078	1176	29			
1	E	781	Total	C	N	O	S	0	0	0
			6292	4009	1078	1176	29			
1	G	781	Total	C	N	O	S	0	0	0
			6292	4009	1078	1176	29			

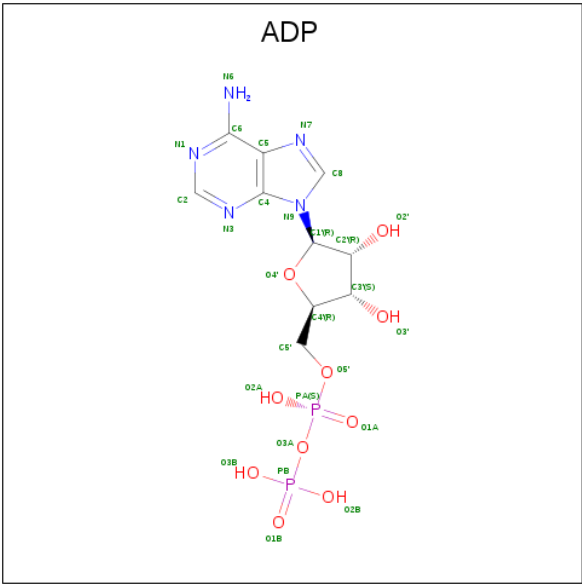
- Molecule 2 is a protein called MYOSIN.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	148	Total	C	N	O	S	0	0	0
			1161	722	193	235	11			
2	D	148	Total	C	N	O	S	0	0	0
			1161	722	193	235	11			
2	F	148	Total	C	N	O	S	0	0	0
			1161	722	193	235	11			
2	H	148	Total	C	N	O	S	0	0	0
			1161	722	193	235	11			

- Molecule 3 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	G	1	Total	Mg	0	0
			1	1		
3	A	1	Total	Mg	0	0
			1	1		
3	C	1	Total	Mg	0	0
			1	1		
3	E	1	Total	Mg	0	0
			1	1		

- Molecule 4 is ADENOSINE-5'-DIPHOSPHATE (three-letter code: ADP) (formula:  $C_{10}H_{15}N_5O_{10}P_2$ ).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
4	A	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
4	C	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
4	E	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
4	G	1	Total	C	N	O	P	0	0
			27	10	5	10	2		

- Molecule 5 is BERYLLIUM TRIFLUORIDE ION (three-letter code: BEF) (formula:  $BeF_3$ ).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
5	A	1	Total	Be	F	0	0
			4	1	3		
5	C	1	Total	Be	F	0	0
			4	1	3		
5	E	1	Total	Be	F	0	0
			4	1	3		
5	G	1	Total	Be	F	0	0
			4	1	3		

- Molecule 6 is water.

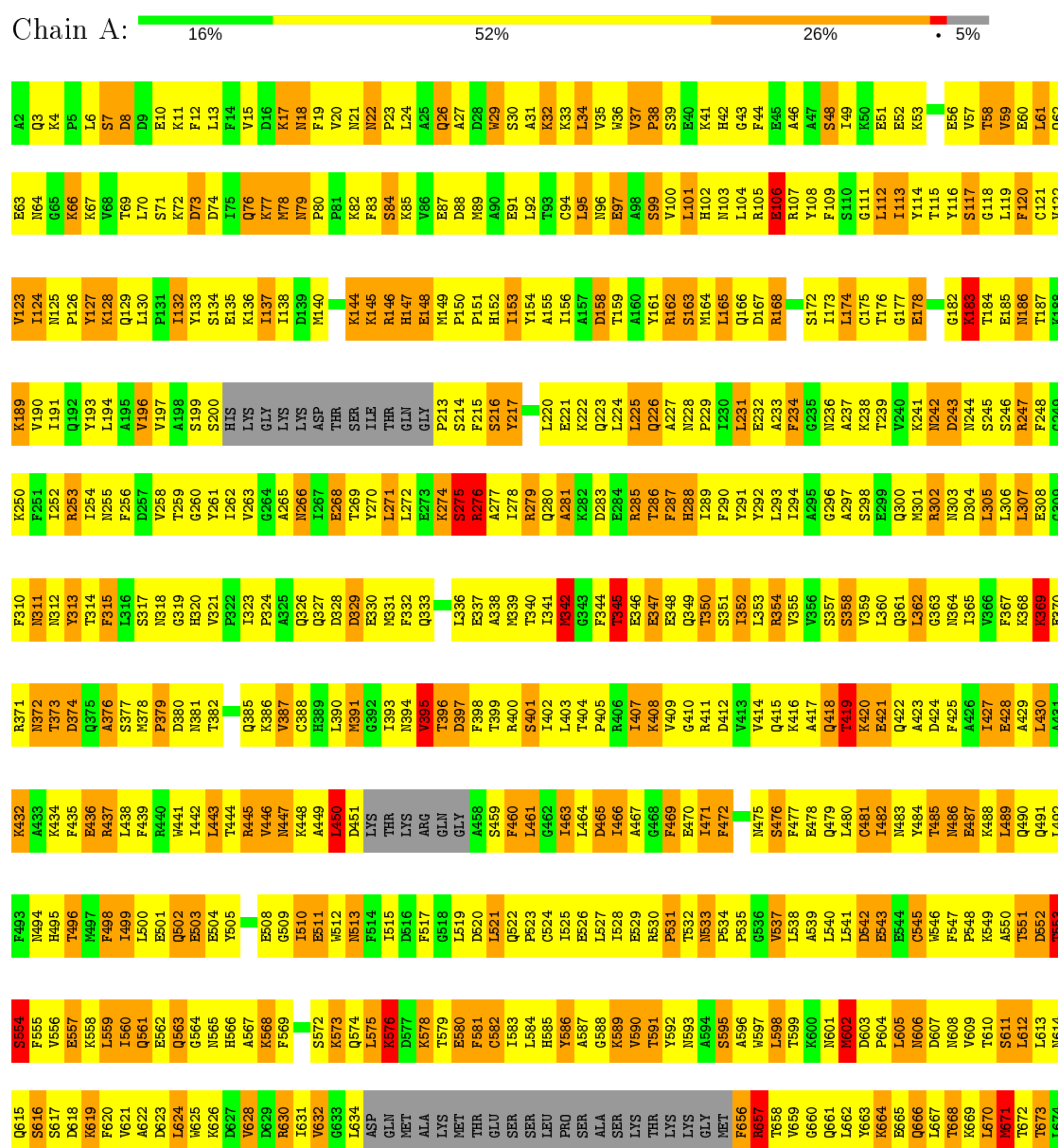
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
6	A	2	Total	O	0	0
			2	2		
6	C	2	Total	O	0	0
			2	2		
6	E	2	Total	O	0	0
			2	2		
6	G	2	Total	O	0	0
			2	2		

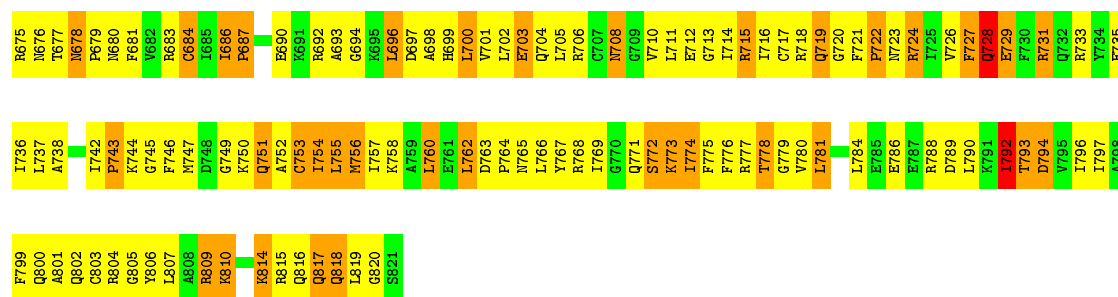
### 3 Residue-property plots

These plots are drawn for all protein, RNA and DNA 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. 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. 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.

Note EDS was not executed.

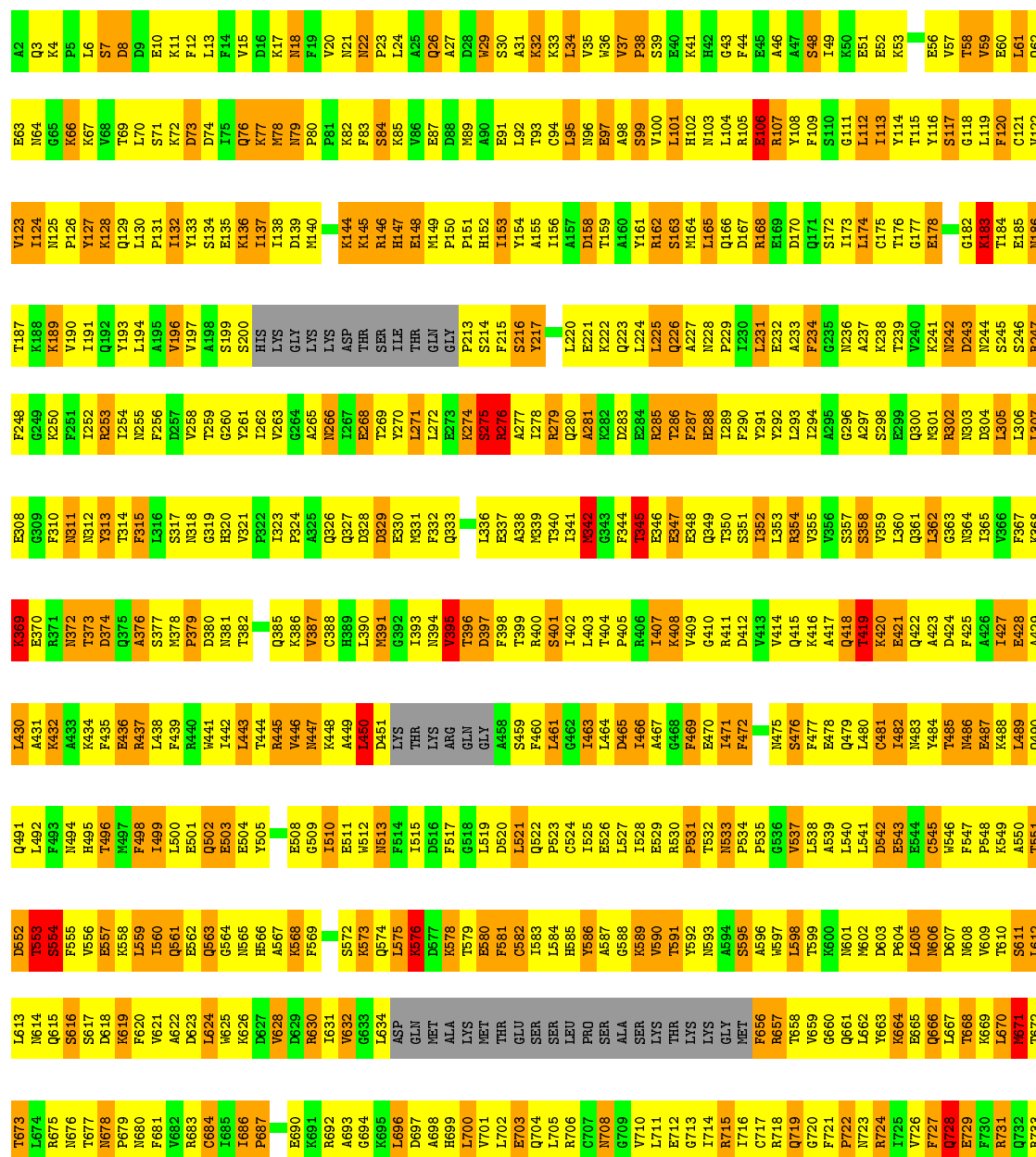
#### • Molecule 1: MYOSIN

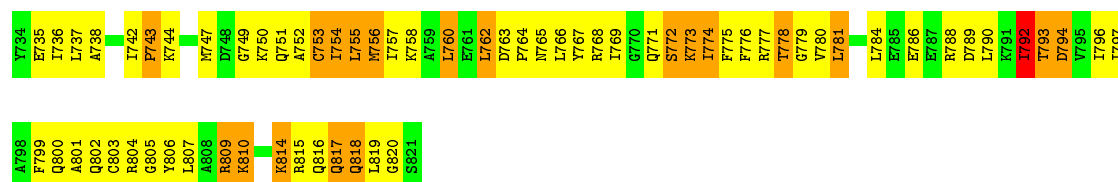




# Molecule 1: MYOSIN

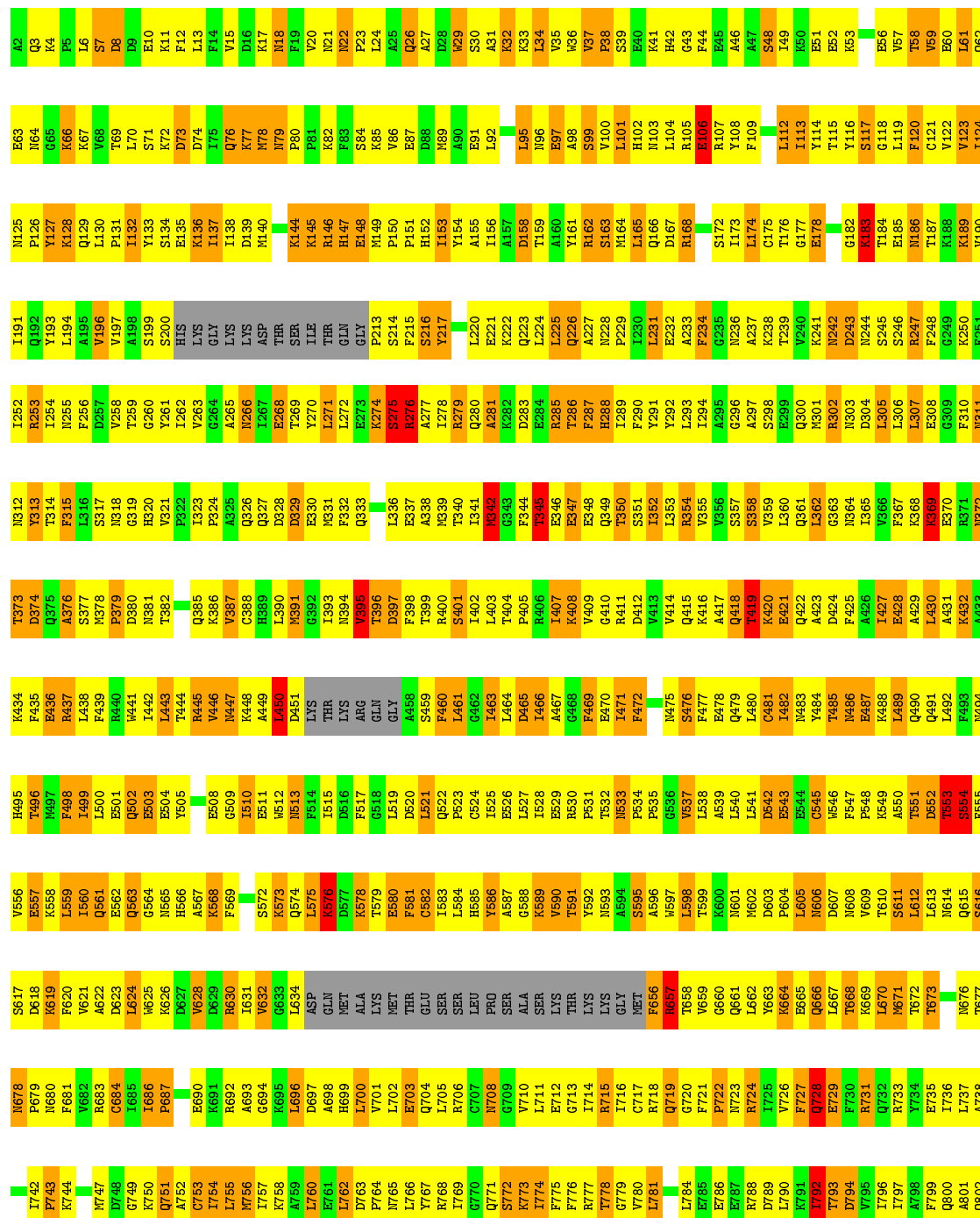
Chain C: 16% 52% 25% 5%





# Molecule 1: MYOSIN

Chain E: 16% 52% 26% 5%

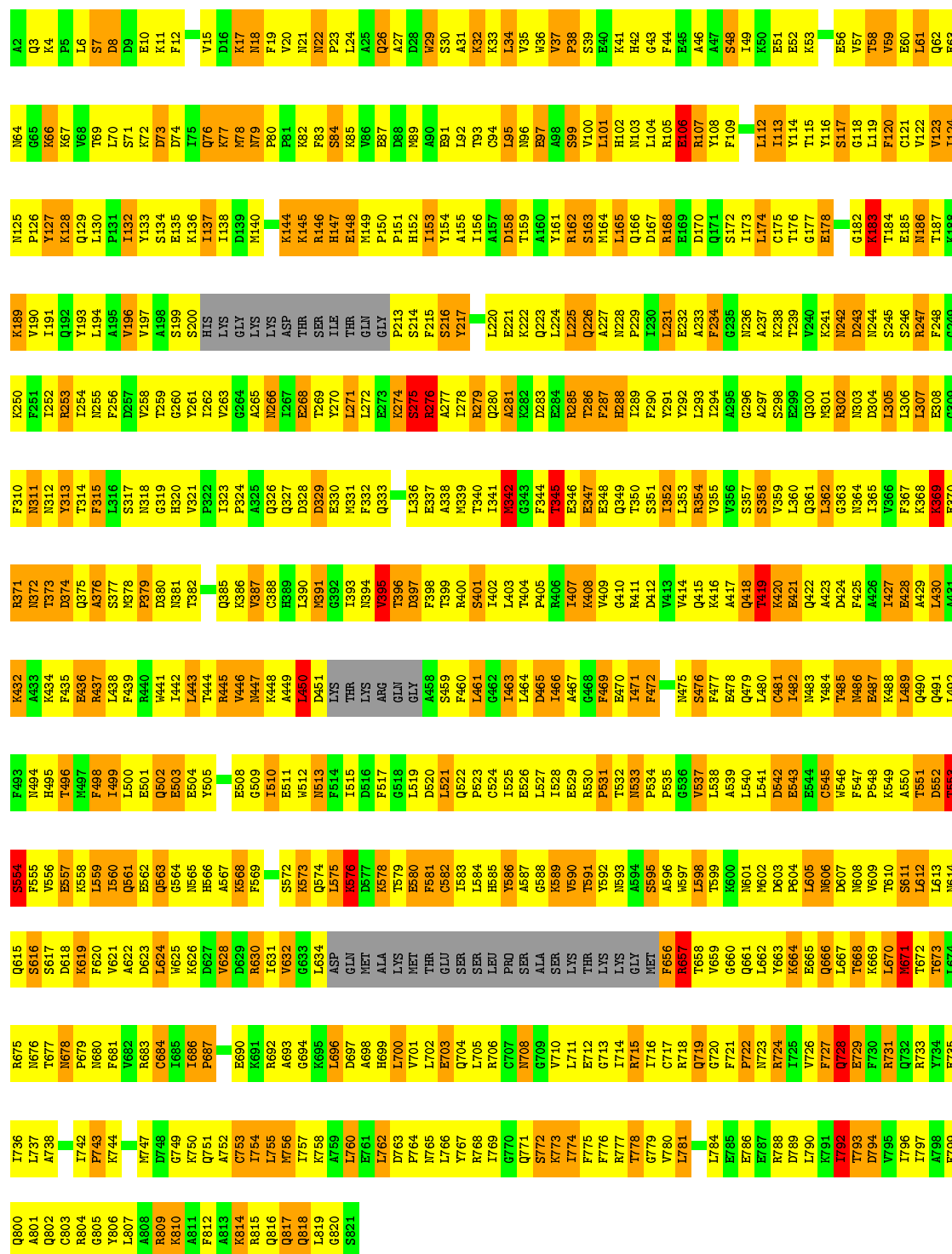





Q803  
R804  
G805  
Y806  
L807  
A808  
R809  
K810  
A811  
F812  
A813  
K814  
R815  
Q816  
Q817  
L818  
L819  
G820  
S821

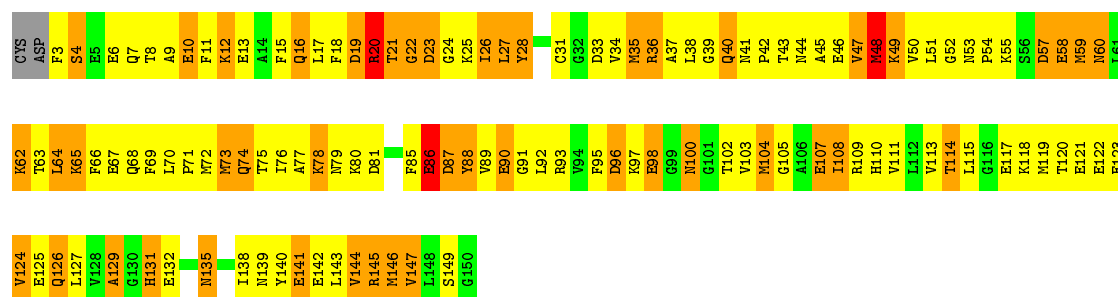
• Molecule 1: MYOSIN

Chain G: 16% 52% 25% 5%




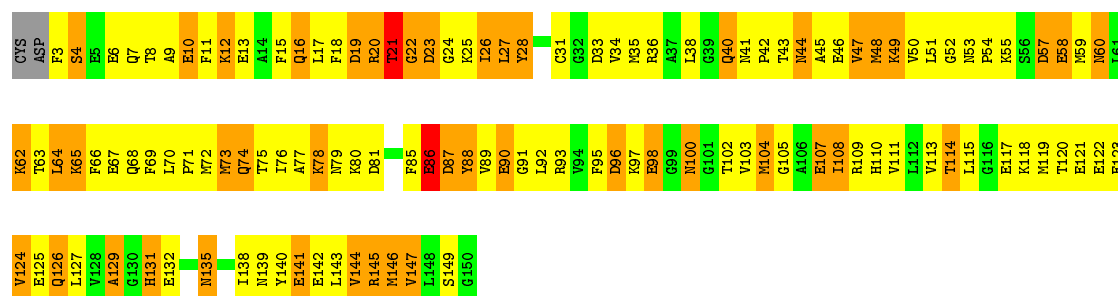
• Molecule 2: MYOSIN

Chain B: 




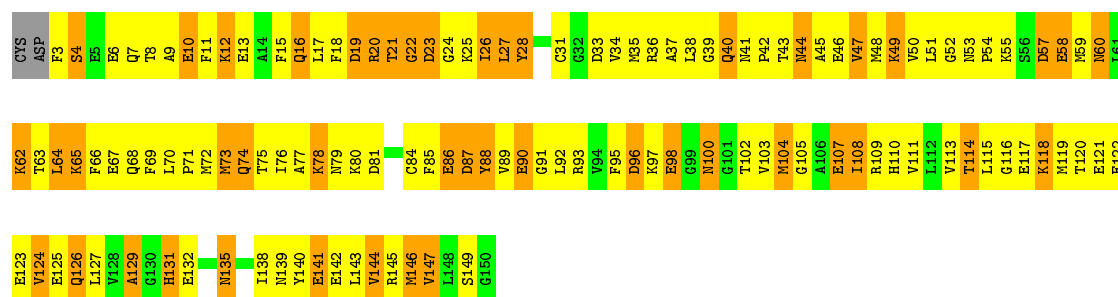
• Molecule 2: MYOSIN

Chain D: 




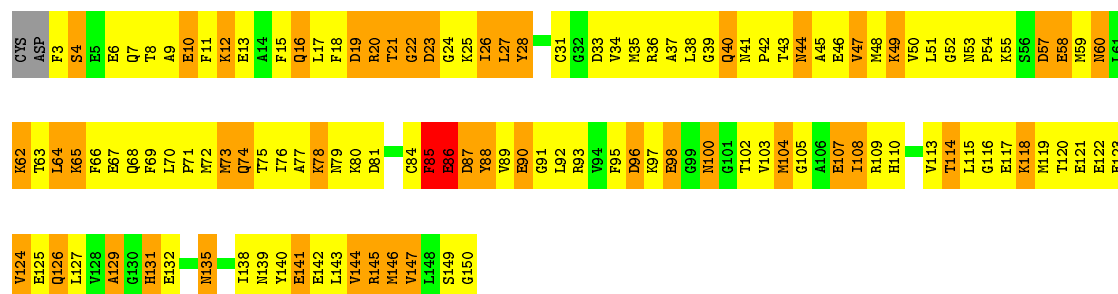
• Molecule 2: MYOSIN

Chain F: 



• Molecule 2: MYOSIN

Chain H: 



## 4 Data and refinement statistics

Xtriage (Phenix) and EDS were not executed - this section is therefore incomplete.

Property	Value	Source
Space group	P 1	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	95.32Å 144.66Å 147.29Å 111.21° 106.10° 92.58°	Depositor
Resolution (Å)	10.00 – 3.62	Depositor
% Data completeness (in resolution range)	95.7 (10.00-3.62)	Depositor
$R_{merge}$	(Not available)	Depositor
$R_{sym}$	0.11	Depositor
Refinement program	X-PLOR 3.851	Depositor
R, $R_{free}$	0.277 , 0.352	Depositor
Estimated twinning fraction	No twinning to report.	Xtriage
Total number of atoms	29948	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	48.0	wwPDB-VP

## 5 Model quality ⓘ

### 5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: MG, BEF, ADP

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	0.47	0/6410	0.73	4/8640 (0.0%)
1	C	0.48	0/6410	0.74	2/8640 (0.0%)
1	E	0.49	0/6410	0.75	3/8640 (0.0%)
1	G	0.48	0/6410	0.75	4/8640 (0.0%)
2	B	0.64	0/1176	0.91	5/1575 (0.3%)
2	D	0.59	0/1176	0.86	1/1575 (0.1%)
2	F	0.59	0/1176	0.86	1/1575 (0.1%)
2	H	0.58	0/1176	0.84	0/1575
All	All	0.50	0/30344	0.77	20/40860 (0.0%)

There are no bond length outliers.

All (20) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	276	ARG	NE-CZ-NH2	7.51	124.05	120.30
1	E	276	ARG	NE-CZ-NH2	7.50	124.05	120.30
1	A	279	ARG	NE-CZ-NH2	7.43	124.02	120.30
1	C	276	ARG	NE-CZ-NH2	7.43	124.02	120.30
1	G	276	ARG	NE-CZ-NH2	7.38	123.99	120.30
1	C	279	ARG	NE-CZ-NH2	7.37	123.98	120.30
1	G	279	ARG	NE-CZ-NH2	7.36	123.98	120.30
1	E	279	ARG	NE-CZ-NH2	7.33	123.97	120.30
1	E	657	ARG	NE-CZ-NH2	7.30	123.95	120.30
1	A	657	ARG	NE-CZ-NH2	7.28	123.94	120.30
1	G	657	ARG	NE-CZ-NH2	7.24	123.92	120.30
2	B	36	ARG	NE-CZ-NH2	7.09	123.84	120.30
2	D	20	ARG	NE-CZ-NH2	6.84	123.72	120.30
2	F	20	ARG	NE-CZ-NH2	6.79	123.69	120.30
2	B	20	ARG	NE-CZ-NH2	6.25	123.42	120.30
2	B	59	MET	CG-SD-CE	6.09	109.95	100.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	35	MET	CG-SD-CE	6.06	109.90	100.20
2	B	48	MET	CG-SD-CE	6.03	109.84	100.20
1	A	602	MET	CG-SD-CE	5.67	109.27	100.20
1	G	371	ARG	NE-CZ-NH2	5.25	122.92	120.30

There are no chirality outliers.

There are no planarity outliers.

## 5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	6292	0	6301	979	3
1	C	6292	0	6301	952	0
1	E	6292	0	6301	973	0
1	G	6292	0	6301	975	11
2	B	1161	0	1126	223	0
2	D	1161	0	1126	211	11
2	F	1161	0	1126	221	3
2	H	1161	0	1126	220	0
3	A	1	0	0	0	0
3	C	1	0	0	0	0
3	E	1	0	0	0	0
3	G	1	0	0	0	0
4	A	27	0	12	3	0
4	C	27	0	12	4	0
4	E	27	0	12	2	0
4	G	27	0	12	3	0
5	A	4	0	0	0	0
5	C	4	0	0	0	0
5	E	4	0	0	0	0
5	G	4	0	0	0	0
6	A	2	0	0	0	0
6	C	2	0	0	0	0
6	E	2	0	0	0	0
6	G	2	0	0	0	0
All	All	29948	0	29756	4645	14

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 78.

All (4645) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:814:LYS:O	1:A:817:GLN:HG3	1.28	1.32
1:C:814:LYS:O	1:C:817:GLN:HG3	1.27	1.32
1:A:747:MET:SD	1:G:812:PHE:HZ	1.53	1.31
1:G:814:LYS:O	1:G:817:GLN:HG3	1.28	1.29
1:E:814:LYS:O	1:E:817:GLN:HG3	1.28	1.24
1:E:268:GLU:HG2	1:E:270:TYR:OH	1.39	1.23
1:C:805:GLY:O	1:C:809:ARG:HG2	1.39	1.23
1:A:268:GLU:HG2	1:A:270:TYR:OH	1.40	1.22
1:G:268:GLU:HG2	1:G:270:TYR:OH	1.39	1.22
1:G:805:GLY:O	1:G:809:ARG:HG2	1.39	1.19
2:H:9:ALA:O	2:H:12:LYS:HG3	1.40	1.18
2:D:9:ALA:O	2:D:12:LYS:HG3	1.40	1.18
2:F:9:ALA:O	2:F:12:LYS:HG3	1.40	1.18
2:B:9:ALA:O	2:B:12:LYS:HG3	1.40	1.18
1:C:268:GLU:HG2	1:C:270:TYR:OH	1.39	1.17
1:E:686:ILE:HG22	1:E:704:GLN:HE22	1.07	1.17
1:A:805:GLY:O	1:A:809:ARG:HG2	1.40	1.17
2:B:7:GLN:O	2:B:11:PHE:HD1	1.28	1.17
1:A:747:MET:SD	1:G:812:PHE:CZ	2.37	1.16
1:E:805:GLY:O	1:E:809:ARG:HG2	1.39	1.16
2:F:7:GLN:O	2:F:11:PHE:HD1	1.27	1.16
2:D:7:GLN:O	2:D:11:PHE:HD1	1.27	1.16
2:H:7:GLN:O	2:H:11:PHE:HD1	1.27	1.15
1:G:686:ILE:HG22	1:G:704:GLN:HE22	1.07	1.14
1:A:686:ILE:HG22	1:A:704:GLN:HE22	1.07	1.13
2:D:51:LEU:O	2:D:54:PRO:HD3	1.48	1.13
2:H:51:LEU:O	2:H:54:PRO:HD3	1.48	1.13
2:B:51:LEU:O	2:B:54:PRO:HD3	1.47	1.13
2:F:51:LEU:O	2:F:54:PRO:HD3	1.48	1.11
1:C:686:ILE:HD13	1:C:687:PRO:HD2	1.31	1.09
2:B:28:TYR:HE2	2:B:54:PRO:HG3	1.10	1.09
1:E:686:ILE:HD13	1:E:687:PRO:HD2	1.31	1.09
1:G:686:ILE:HD13	1:G:687:PRO:HD2	1.31	1.08
1:C:686:ILE:HG22	1:C:704:GLN:HE22	1.07	1.07
1:E:298:SER:H	1:E:301:MET:HG2	1.19	1.07
1:G:298:SER:H	1:G:301:MET:HG2	1.18	1.06
2:F:28:TYR:HE2	2:F:54:PRO:HG3	1.15	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:686:ILE:HD13	1:A:687:PRO:HD2	1.31	1.06
2:D:28:TYR:HE2	2:D:54:PRO:HG3	1.15	1.06
1:A:628:VAL:HG22	1:A:628:VAL:O	1.55	1.05
1:E:628:VAL:O	1:E:628:VAL:HG22	1.55	1.05
2:H:28:TYR:HE2	2:H:54:PRO:HG3	1.15	1.05
1:E:541:LEU:HD23	1:E:601:ASN:HD22	1.21	1.05
1:C:298:SER:H	1:C:301:MET:HG2	1.18	1.05
1:C:628:VAL:O	1:C:628:VAL:HG22	1.55	1.04
1:G:541:LEU:HD23	1:G:601:ASN:HD22	1.21	1.04
1:A:298:SER:H	1:A:301:MET:HG2	1.20	1.02
1:C:805:GLY:O	1:C:809:ARG:CG	2.07	1.02
1:G:628:VAL:HG22	1:G:628:VAL:O	1.55	1.02
1:C:753:CYS:SG	1:C:774:ILE:HD11	1.99	1.02
1:E:376:ALA:HB2	1:E:420:LYS:HA	1.42	1.02
1:A:753:CYS:SG	1:A:774:ILE:HD11	2.00	1.02
1:A:805:GLY:O	1:A:809:ARG:CG	2.08	1.02
1:C:541:LEU:HD23	1:C:601:ASN:HD22	1.21	1.02
1:E:805:GLY:O	1:E:809:ARG:CG	2.07	1.02
2:B:28:TYR:CE2	2:B:54:PRO:HG3	1.94	1.01
1:G:805:GLY:O	1:G:809:ARG:CG	2.07	1.01
1:E:753:CYS:SG	1:E:774:ILE:HD11	1.99	1.01
2:F:7:GLN:O	2:F:11:PHE:CD1	2.13	1.01
2:H:7:GLN:O	2:H:11:PHE:CD1	2.13	1.01
1:G:376:ALA:HB2	1:G:420:LYS:HA	1.40	1.01
1:G:753:CYS:SG	1:G:774:ILE:HD11	1.99	1.01
2:B:7:GLN:O	2:B:11:PHE:CD1	2.14	1.00
1:A:328:ASP:HA	1:A:331:MET:HB2	1.44	1.00
1:C:490:GLN:HE21	1:C:494:ASN:HD21	1.03	1.00
1:E:333:GLN:O	1:E:337:GLU:HG3	1.61	1.00
2:F:65:LYS:HB2	2:F:68:GLN:HG3	1.44	1.00
1:G:268:GLU:HG2	1:G:270:TYR:CZ	1.97	1.00
1:A:541:LEU:HD23	1:A:601:ASN:HD22	1.24	0.99
1:G:543:GLU:HA	1:G:546:TRP:HD1	1.27	0.99
1:A:333:GLN:O	1:A:337:GLU:HG3	1.62	0.99
1:A:490:GLN:HE21	1:A:494:ASN:HD21	1.03	0.99
1:C:333:GLN:O	1:C:337:GLU:HG3	1.61	0.99
2:B:12:LYS:O	2:B:16:GLN:HG2	1.63	0.99
2:D:7:GLN:O	2:D:11:PHE:CD1	2.13	0.99
1:C:328:ASP:HA	1:C:331:MET:HB2	1.44	0.99
1:A:77:LYS:HD2	1:A:96:ASN:HD21	1.28	0.99
1:E:328:ASP:HA	1:E:331:MET:HB2	1.45	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:268:GLU:HG2	1:C:270:TYR:CZ	1.97	0.99
2:F:28:TYR:CE2	2:F:54:PRO:HG3	1.98	0.99
1:G:242:ASN:HB3	1:G:245:SER:HB2	1.45	0.98
2:H:65:LYS:HB2	2:H:68:GLN:HG3	1.44	0.98
1:E:268:GLU:HG2	1:E:270:TYR:CZ	1.97	0.98
2:F:85:PHE:O	2:F:89:VAL:HG22	1.63	0.98
2:D:12:LYS:O	2:D:16:GLN:HG2	1.62	0.98
2:H:12:LYS:O	2:H:16:GLN:HG2	1.62	0.98
1:A:376:ALA:HB2	1:A:420:LYS:HA	1.42	0.98
1:G:333:GLN:O	1:G:337:GLU:HG3	1.61	0.98
1:A:268:GLU:HG2	1:A:270:TYR:CZ	1.98	0.98
2:D:28:TYR:CE2	2:D:54:PRO:HG3	1.98	0.97
1:E:89:MET:HG2	1:E:92:LEU:HD11	1.46	0.97
1:G:328:ASP:HA	1:G:331:MET:HB2	1.44	0.97
1:C:376:ALA:HB2	1:C:420:LYS:HA	1.41	0.97
1:A:543:GLU:HA	1:A:546:TRP:HD1	1.28	0.97
1:C:242:ASN:HB3	1:C:245:SER:HB2	1.45	0.97
1:C:268:GLU:CG	1:C:270:TYR:CZ	2.48	0.97
2:F:12:LYS:O	2:F:16:GLN:HG2	1.62	0.97
1:G:77:LYS:HD2	1:G:96:ASN:HD21	1.27	0.97
2:H:28:TYR:CE2	2:H:54:PRO:HG3	1.98	0.97
1:A:89:MET:HG2	1:A:92:LEU:HD11	1.46	0.97
1:E:12:PHE:CD2	1:E:131:PRO:HD2	1.99	0.97
1:E:543:GLU:HA	1:E:546:TRP:HD1	1.28	0.97
1:G:268:GLU:CG	1:G:270:TYR:CZ	2.48	0.97
1:C:543:GLU:HA	1:C:546:TRP:HD1	1.28	0.96
2:B:65:LYS:HB2	2:B:68:GLN:HG3	1.44	0.96
1:E:77:LYS:HD2	1:E:96:ASN:HD21	1.29	0.96
1:E:268:GLU:CG	1:E:270:TYR:CZ	2.48	0.96
1:E:742:ILE:HD11	1:E:752:ALA:O	1.67	0.95
1:A:268:GLU:CG	1:A:270:TYR:CZ	2.49	0.95
1:C:89:MET:HG2	1:C:92:LEU:HD11	1.46	0.95
2:D:65:LYS:HB2	2:D:68:GLN:HG3	1.44	0.95
1:C:268:GLU:HG2	1:C:270:TYR:HH	1.23	0.95
1:C:742:ILE:HD11	1:C:752:ALA:O	1.67	0.94
1:E:242:ASN:HB3	1:E:245:SER:HB2	1.45	0.94
1:A:242:ASN:HB3	1:A:245:SER:HB2	1.45	0.94
1:A:114:TYR:CE2	1:A:153:ILE:HB	2.03	0.94
2:H:44:ASN:CB	2:H:117:GLU:OE1	2.15	0.94
1:A:742:ILE:HD11	1:A:752:ALA:O	1.67	0.94
1:A:747:MET:HG3	1:G:812:PHE:CE2	2.02	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:742:ILE:HD11	1:G:752:ALA:O	1.67	0.94
2:B:89:VAL:HG12	2:B:144:VAL:HG21	1.49	0.94
1:E:114:TYR:CE2	1:E:153:ILE:HB	2.02	0.94
1:E:802:GLN:HG3	2:F:88:TYR:OH	1.68	0.94
1:C:114:TYR:CE2	1:C:153:ILE:HB	2.02	0.94
1:G:114:TYR:CE2	1:G:153:ILE:HB	2.02	0.94
1:A:145:LYS:HG3	1:A:146:ARG:HE	1.34	0.93
1:A:802:GLN:HG3	2:B:88:TYR:OH	1.68	0.93
2:D:89:VAL:HG12	2:D:144:VAL:HG21	1.49	0.93
1:G:89:MET:HG2	1:G:92:LEU:HD11	1.47	0.93
1:G:802:GLN:HG3	2:H:88:TYR:OH	1.68	0.93
1:C:628:VAL:O	1:C:628:VAL:CG2	2.17	0.93
1:C:145:LYS:HG3	1:C:146:ARG:HE	1.33	0.93
1:E:490:GLN:HE21	1:E:494:ASN:HD21	1.03	0.92
1:E:145:LYS:HG3	1:E:146:ARG:HE	1.34	0.92
1:C:3:GLN:H	1:C:18:ASN:HD21	1.18	0.92
1:G:490:GLN:HE21	1:G:494:ASN:HD21	1.03	0.92
1:C:802:GLN:HG3	2:D:88:TYR:OH	1.68	0.92
2:F:89:VAL:HG12	2:F:144:VAL:HG21	1.49	0.92
2:H:89:VAL:HG12	2:H:144:VAL:HG21	1.49	0.92
1:E:489:LEU:O	1:E:489:LEU:HD12	1.70	0.92
2:H:85:PHE:O	2:H:87:ASP:N	2.02	0.91
1:G:145:LYS:HG3	1:G:146:ARG:HE	1.34	0.91
1:G:489:LEU:HD12	1:G:489:LEU:O	1.70	0.91
1:A:489:LEU:O	1:A:489:LEU:HD12	1.70	0.91
2:B:9:ALA:HA	2:B:12:LYS:CE	2.01	0.91
1:E:800:GLN:HA	2:F:119:MET:HE2	1.53	0.91
1:E:490:GLN:NE2	1:E:494:ASN:HD21	1.69	0.91
1:G:628:VAL:CG2	1:G:628:VAL:O	2.17	0.91
2:F:9:ALA:HA	2:F:12:LYS:CE	2.01	0.91
1:A:628:VAL:O	1:A:628:VAL:CG2	2.18	0.91
1:E:527:LEU:HD11	1:E:569:PHE:HB2	1.53	0.91
1:A:800:GLN:HA	2:B:119:MET:HE2	1.52	0.90
1:G:800:GLN:HA	2:H:119:MET:HE2	1.53	0.90
1:E:323:ILE:HG23	1:E:326:GLN:HB3	1.53	0.90
1:E:628:VAL:CG2	1:E:628:VAL:O	2.17	0.90
1:A:490:GLN:NE2	1:A:494:ASN:HD21	1.69	0.90
1:E:3:GLN:H	1:E:18:ASN:HD21	1.18	0.90
1:G:527:LEU:HD11	1:G:569:PHE:HB2	1.53	0.90
1:C:489:LEU:HD12	1:C:489:LEU:O	1.70	0.90
1:G:490:GLN:NE2	1:G:494:ASN:HD21	1.69	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:527:LEU:HD11	1:C:569:PHE:HB2	1.53	0.89
2:D:9:ALA:HA	2:D:12:LYS:CE	2.01	0.89
1:G:323:ILE:HG23	1:G:326:GLN:HB3	1.53	0.89
1:E:130:LEU:HB2	1:E:132:ILE:HD13	1.55	0.89
1:A:527:LEU:HD11	1:A:569:PHE:HB2	1.53	0.89
1:A:130:LEU:HB2	1:A:132:ILE:HD13	1.55	0.89
1:A:3:GLN:H	1:A:18:ASN:HD21	1.18	0.89
1:C:116:TYR:CE1	1:C:151:PRO:HB3	2.08	0.89
1:C:800:GLN:HA	2:D:119:MET:HE2	1.52	0.89
1:G:3:GLN:H	1:G:18:ASN:HD21	1.18	0.89
2:H:9:ALA:HA	2:H:12:LYS:CE	2.02	0.89
1:C:130:LEU:HB2	1:C:132:ILE:HD13	1.55	0.89
1:A:686:ILE:HG22	1:A:704:GLN:NE2	1.88	0.89
1:C:490:GLN:NE2	1:C:494:ASN:HD21	1.69	0.89
1:G:116:TYR:CE1	1:G:151:PRO:HB3	2.08	0.89
1:A:323:ILE:HG23	1:A:326:GLN:HB3	1.53	0.88
1:E:686:ILE:HG22	1:E:704:GLN:NE2	1.88	0.88
1:C:686:ILE:HG22	1:C:704:GLN:NE2	1.88	0.88
1:G:313:TYR:CD2	1:G:360:LEU:HB3	2.09	0.88
1:G:130:LEU:HB2	1:G:132:ILE:HD13	1.55	0.88
2:F:74:GLN:O	2:F:78:LYS:HG3	1.74	0.88
1:C:313:TYR:CD2	1:C:360:LEU:HB3	2.09	0.88
1:C:323:ILE:HG23	1:C:326:GLN:HB3	1.53	0.88
1:A:313:TYR:CD2	1:A:360:LEU:HB3	2.09	0.87
1:A:116:TYR:CE1	1:A:151:PRO:HB3	2.08	0.87
1:E:116:TYR:CE1	1:E:151:PRO:HB3	2.08	0.87
1:E:164:MET:HE3	1:E:256:PHE:HE2	1.38	0.87
2:B:74:GLN:O	2:B:78:LYS:HG3	1.75	0.87
1:E:814:LYS:O	1:E:817:GLN:CG	2.20	0.87
2:F:12:LYS:HB3	2:F:66:PHE:CE2	2.10	0.87
1:G:686:ILE:HG22	1:G:704:GLN:NE2	1.88	0.87
2:H:74:GLN:O	2:H:78:LYS:HG3	1.74	0.87
1:E:313:TYR:CD2	1:E:360:LEU:HB3	2.09	0.87
2:H:12:LYS:HB3	2:H:66:PHE:CE2	2.10	0.87
2:H:85:PHE:HE1	2:H:145:ARG:HG2	1.39	0.87
1:G:164:MET:CE	1:G:256:PHE:HE2	1.87	0.87
1:A:116:TYR:CD1	1:A:151:PRO:HB3	2.10	0.87
1:G:116:TYR:CD1	1:G:151:PRO:HB3	2.10	0.87
2:D:74:GLN:O	2:D:78:LYS:HG3	1.74	0.86
1:E:116:TYR:CD1	1:E:151:PRO:HB3	2.10	0.86
1:G:814:LYS:O	1:G:817:GLN:CG	2.20	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:291:TYR:CD2	1:E:310:PHE:HE1	1.93	0.86
1:E:164:MET:CE	1:E:256:PHE:HE2	1.87	0.86
1:G:232:GLU:O	1:G:236:ASN:HB2	1.76	0.86
1:A:814:LYS:O	1:A:817:GLN:CG	2.21	0.86
1:C:161:TYR:CE1	1:C:165:LEU:HD11	2.11	0.86
1:C:164:MET:CE	1:C:256:PHE:HE2	1.87	0.86
2:F:144:VAL:O	2:F:147:VAL:HG23	1.76	0.86
1:A:234:PHE:HB3	1:A:289:ILE:HG21	1.58	0.86
1:E:547:PHE:HE2	1:E:549:LYS:HB3	1.41	0.86
1:G:161:TYR:CE1	1:G:165:LEU:HD11	2.10	0.86
2:B:144:VAL:O	2:B:147:VAL:HG23	1.76	0.86
1:G:291:TYR:CD2	1:G:310:PHE:HE1	1.93	0.86
1:A:232:GLU:O	1:A:236:ASN:HB2	1.75	0.86
1:A:161:TYR:CE1	1:A:165:LEU:HD11	2.10	0.86
1:C:116:TYR:CD1	1:C:151:PRO:HB3	2.10	0.86
1:C:291:TYR:CD2	1:C:310:PHE:HE1	1.93	0.86
1:C:737:LEU:HD21	1:C:788:ARG:HA	1.58	0.86
1:A:164:MET:CE	1:A:256:PHE:HE2	1.88	0.85
2:B:12:LYS:HB3	2:B:66:PHE:CE2	2.10	0.85
1:G:100:VAL:O	1:G:104:LEU:HG	1.76	0.85
1:C:232:GLU:O	1:C:236:ASN:HB2	1.76	0.85
2:D:12:LYS:HB3	2:D:66:PHE:CE2	2.10	0.85
1:E:161:TYR:CE1	1:E:165:LEU:HD11	2.10	0.85
1:A:291:TYR:CD2	1:A:310:PHE:HE1	1.94	0.85
1:C:814:LYS:O	1:C:817:GLN:CG	2.20	0.85
1:G:391:MET:HG2	1:G:613:LEU:HD21	1.59	0.85
1:C:391:MET:HG2	1:C:613:LEU:HD21	1.59	0.85
1:C:547:PHE:HE1	1:C:549:LYS:HB3	1.41	0.85
1:E:232:GLU:O	1:E:236:ASN:HB2	1.75	0.85
1:G:256:PHE:HB2	1:G:459:SER:OG	1.77	0.85
1:C:256:PHE:HB2	1:C:459:SER:OG	1.77	0.85
1:C:85:LYS:HG2	1:C:106:GLU:HB3	1.56	0.85
1:E:475:ASN:HB2	1:E:592:TYR:HA	1.58	0.85
1:G:605:LEU:HD23	1:G:632:VAL:HG23	1.59	0.85
1:G:502:GLN:HG3	1:G:512:TRP:HE1	1.41	0.85
1:E:100:VAL:O	1:E:104:LEU:HG	1.77	0.85
1:G:547:PHE:HE2	1:G:549:LYS:HB3	1.41	0.85
1:A:475:ASN:HB2	1:A:592:TYR:HA	1.57	0.85
1:A:547:PHE:HE1	1:A:549:LYS:HB3	1.41	0.85
1:E:256:PHE:HB2	1:E:459:SER:OG	1.77	0.85
1:C:100:VAL:O	1:C:104:LEU:HG	1.76	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:475:ASN:HB2	1:G:592:TYR:HA	1.57	0.84
2:H:144:VAL:O	2:H:147:VAL:HG23	1.76	0.84
1:C:234:PHE:HB3	1:C:289:ILE:HG21	1.58	0.84
1:E:12:PHE:HB3	1:E:132:ILE:CG2	2.07	0.84
1:E:605:LEU:HD23	1:E:632:VAL:HG23	1.59	0.84
1:A:256:PHE:HB2	1:A:459:SER:OG	1.77	0.84
1:A:605:LEU:HD23	1:A:632:VAL:HG23	1.59	0.84
1:A:737:LEU:HD21	1:A:788:ARG:HA	1.58	0.84
1:C:475:ASN:HB2	1:C:592:TYR:HA	1.57	0.84
1:C:630:ARG:HH22	1:C:657:ARG:HB2	1.41	0.84
1:G:737:LEU:HD21	1:G:788:ARG:HA	1.58	0.84
2:F:122:GLU:O	2:F:126:GLN:HG3	1.78	0.84
1:C:605:LEU:HD23	1:C:632:VAL:HG23	1.59	0.84
2:D:144:VAL:O	2:D:147:VAL:HG23	1.76	0.84
1:E:391:MET:HG2	1:E:613:LEU:HD21	1.59	0.84
1:E:737:LEU:HD21	1:E:788:ARG:HA	1.57	0.84
1:C:502:GLN:HG3	1:C:512:TRP:HE1	1.41	0.84
1:E:234:PHE:HB3	1:E:289:ILE:HG21	1.58	0.84
1:E:630:ARG:HH22	1:E:657:ARG:HB2	1.41	0.84
2:H:122:GLU:O	2:H:126:GLN:HG3	1.78	0.84
1:A:502:GLN:HG3	1:A:512:TRP:HE1	1.41	0.83
2:B:122:GLU:O	2:B:126:GLN:HG3	1.78	0.83
1:E:502:GLN:HG3	1:E:512:TRP:HE1	1.41	0.83
1:E:530:ARG:HD3	1:E:533:ASN:HB2	1.60	0.83
1:G:234:PHE:HB3	1:G:289:ILE:HG21	1.57	0.83
1:G:630:ARG:HH22	1:G:657:ARG:HB2	1.42	0.83
1:A:100:VAL:O	1:A:104:LEU:HG	1.77	0.83
1:A:368:LYS:HZ2	1:A:379:PRO:HG2	1.43	0.83
1:A:630:ARG:HH22	1:A:657:ARG:HB2	1.42	0.83
1:C:530:ARG:HD3	1:C:533:ASN:HB2	1.60	0.83
1:A:743:PRO:CB	1:G:816:GLN:HB3	2.08	0.83
1:E:268:GLU:O	1:E:270:TYR:CE1	2.32	0.83
2:F:44:ASN:HB3	2:F:117:GLU:OE1	1.78	0.83
1:A:391:MET:HG2	1:A:613:LEU:HD21	1.59	0.83
1:G:530:ARG:HD3	1:G:533:ASN:HB2	1.60	0.83
1:E:146:ARG:NH1	1:E:159:THR:HG23	1.94	0.82
1:E:313:TYR:HD2	1:E:360:LEU:HB3	1.44	0.82
1:G:146:ARG:NH1	1:G:159:THR:HG23	1.94	0.82
1:E:812:PHE:HZ	2:F:17:LEU:CD2	1.92	0.82
2:D:122:GLU:O	2:D:126:GLN:HG3	1.78	0.82
2:F:110:HIS:O	2:F:114:THR:OG1	1.98	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:164:MET:HE3	1:A:256:PHE:HE2	1.43	0.82
1:E:268:GLU:HG3	1:E:270:TYR:CZ	2.15	0.82
1:A:268:GLU:O	1:A:270:TYR:CE1	2.33	0.82
1:A:187:THR:HG23	1:A:463:ILE:HG21	1.61	0.82
1:A:530:ARG:HD3	1:A:533:ASN:HB2	1.60	0.82
1:G:268:GLU:O	1:G:270:TYR:CE1	2.32	0.82
1:C:568:LYS:HD3	1:C:584:LEU:HB2	1.62	0.82
2:H:76:ILE:O	2:H:79:ASN:ND2	2.13	0.82
1:G:772:SER:O	1:G:773:LYS:HB2	1.80	0.82
1:C:313:TYR:HD2	1:C:360:LEU:HB3	1.44	0.81
2:D:28:TYR:HB2	2:D:62:LYS:HB2	1.62	0.81
1:E:772:SER:O	1:E:773:LYS:HB2	1.80	0.81
1:E:187:THR:HG23	1:E:463:ILE:HG21	1.61	0.81
1:E:79:ASN:ND2	1:E:92:LEU:HB3	1.94	0.81
2:H:28:TYR:HB2	2:H:62:LYS:HB2	1.62	0.81
2:B:28:TYR:HB2	2:B:62:LYS:HB2	1.61	0.81
1:C:187:THR:HG23	1:C:463:ILE:HG21	1.61	0.81
1:C:724:ARG:HA	1:C:774:ILE:O	1.80	0.81
2:D:76:ILE:O	2:D:79:ASN:ND2	2.13	0.81
1:A:724:ARG:HA	1:A:774:ILE:O	1.80	0.81
1:A:82:LYS:HG2	1:A:82:LYS:O	1.80	0.81
1:C:146:ARG:NH1	1:C:159:THR:HG23	1.95	0.81
1:G:187:THR:HG23	1:G:463:ILE:CG2	2.11	0.81
1:G:187:THR:O	1:G:191:ILE:HG13	1.81	0.81
2:B:103:VAL:HG12	2:B:104:MET:H	1.46	0.81
1:C:268:GLU:O	1:C:270:TYR:CE1	2.32	0.81
1:E:724:ARG:HA	1:E:774:ILE:O	1.79	0.81
1:G:187:THR:HG23	1:G:463:ILE:HG21	1.61	0.81
1:G:724:ARG:HA	1:G:774:ILE:O	1.80	0.81
1:A:630:ARG:HH22	1:A:657:ARG:CB	1.94	0.81
2:D:110:HIS:O	2:D:114:THR:OG1	1.98	0.81
2:H:110:HIS:O	2:H:114:THR:OG1	1.98	0.81
1:C:82:LYS:HG2	1:C:82:LYS:O	1.80	0.81
1:E:12:PHE:CE2	1:E:131:PRO:HD2	2.16	0.81
1:E:342:MET:HE1	1:E:449:ALA:HB3	1.62	0.81
1:G:268:GLU:HG3	1:G:270:TYR:CZ	2.15	0.81
1:A:146:ARG:NH1	1:A:159:THR:HG23	1.95	0.81
1:C:187:THR:O	1:C:191:ILE:HG13	1.81	0.81
2:F:70:LEU:HG	2:F:74:GLN:NE2	1.96	0.81
2:F:76:ILE:O	2:F:79:ASN:ND2	2.13	0.81
1:A:313:TYR:HD2	1:A:360:LEU:HB3	1.44	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:110:HIS:O	2:B:114:THR:OG1	1.98	0.80
1:C:187:THR:HG23	1:C:463:ILE:CG2	2.11	0.80
2:H:36:ARG:HA	2:H:40:GLN:O	1.82	0.80
2:B:121:GLU:O	2:B:124:VAL:HG23	1.81	0.80
2:B:76:ILE:O	2:B:79:ASN:ND2	2.14	0.80
1:G:36:TRP:HB2	1:G:76:GLN:HB3	1.64	0.80
1:E:187:THR:O	1:E:191:ILE:HG13	1.81	0.80
2:F:121:GLU:O	2:F:124:VAL:HG23	1.81	0.80
1:A:152:HIS:O	1:A:155:ALA:HB3	1.82	0.80
2:B:70:LEU:HG	2:B:74:GLN:NE2	1.96	0.80
1:A:187:THR:O	1:A:191:ILE:HG13	1.80	0.80
1:E:152:HIS:O	1:E:155:ALA:HB3	1.81	0.80
1:A:85:LYS:HG2	1:A:106:GLU:HB3	1.61	0.80
1:C:268:GLU:HG3	1:C:270:TYR:CZ	2.15	0.80
1:G:568:LYS:HD3	1:G:584:LEU:HB2	1.62	0.80
1:A:134:SER:O	1:A:138:ILE:HG12	1.82	0.80
1:E:630:ARG:HH22	1:E:657:ARG:CB	1.94	0.80
1:E:812:PHE:CZ	2:F:17:LEU:HD21	2.17	0.80
1:E:82:LYS:O	1:E:82:LYS:HG2	1.80	0.80
2:F:28:TYR:HB2	2:F:62:LYS:HB2	1.62	0.80
1:G:134:SER:O	1:G:138:ILE:HG12	1.82	0.80
2:H:4:SER:HB3	2:H:7:GLN:HE21	1.47	0.80
1:A:268:GLU:HG3	1:A:270:TYR:CZ	2.16	0.80
1:A:568:LYS:HD3	1:A:584:LEU:HB2	1.62	0.80
1:C:125:ASN:HB3	1:C:687:PRO:HD3	1.64	0.80
2:D:4:SER:HB3	2:D:7:GLN:HE21	1.47	0.80
1:G:152:HIS:O	1:G:155:ALA:HB3	1.81	0.80
1:A:145:LYS:HB3	1:A:148:GLU:HG3	1.64	0.80
2:D:107:GLU:OE1	2:D:107:GLU:HA	1.82	0.80
1:G:313:TYR:HD2	1:G:360:LEU:HB3	1.44	0.80
2:B:36:ARG:HA	2:B:40:GLN:O	1.80	0.80
1:C:134:SER:O	1:C:138:ILE:HG12	1.82	0.80
1:C:772:SER:O	1:C:773:LYS:HB2	1.81	0.80
2:D:36:ARG:HA	2:D:40:GLN:O	1.82	0.80
1:E:187:THR:HG23	1:E:463:ILE:CG2	2.11	0.80
1:G:82:LYS:HG2	1:G:82:LYS:O	1.80	0.80
1:C:630:ARG:HH22	1:C:657:ARG:CB	1.94	0.79
2:F:36:ARG:HA	2:F:40:GLN:O	1.82	0.79
1:G:661:GLN:O	1:G:665:GLU:HB2	1.82	0.79
2:H:103:VAL:HG12	2:H:104:MET:H	1.46	0.79
1:A:187:THR:HG23	1:A:463:ILE:CG2	2.11	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:36:TRP:HB2	1:C:76:GLN:HB3	1.64	0.79
2:F:103:VAL:HG12	2:F:104:MET:H	1.46	0.79
2:H:44:ASN:HB2	2:H:117:GLU:OE1	1.82	0.79
2:B:107:GLU:HA	2:B:107:GLU:OE1	1.82	0.79
1:C:527:LEU:O	1:C:527:LEU:HD23	1.83	0.79
1:E:568:LYS:HD3	1:E:584:LEU:HB2	1.62	0.79
2:H:121:GLU:O	2:H:124:VAL:HG23	1.81	0.79
2:B:4:SER:HB3	2:B:7:GLN:HE21	1.47	0.79
2:D:121:GLU:O	2:D:124:VAL:HG23	1.81	0.79
1:E:36:TRP:HB2	1:E:76:GLN:HB3	1.64	0.79
1:G:541:LEU:HD23	1:G:601:ASN:ND2	1.98	0.79
1:A:527:LEU:HD23	1:A:527:LEU:O	1.83	0.79
1:A:125:ASN:HB3	1:A:687:PRO:HD3	1.64	0.79
1:C:164:MET:CE	1:C:256:PHE:CE2	2.66	0.79
1:C:541:LEU:HD23	1:C:601:ASN:ND2	1.98	0.79
1:G:630:ARG:HH22	1:G:657:ARG:CB	1.94	0.79
1:C:152:HIS:O	1:C:155:ALA:HB3	1.81	0.79
1:C:342:MET:HE1	1:C:449:ALA:HB3	1.65	0.79
1:C:543:GLU:HA	1:C:546:TRP:CD1	2.17	0.79
2:D:103:VAL:HG12	2:D:104:MET:H	1.46	0.79
2:D:70:LEU:HG	2:D:74:GLN:NE2	1.96	0.79
2:H:70:LEU:HG	2:H:74:GLN:NE2	1.97	0.79
1:A:123:VAL:HG12	1:A:123:VAL:O	1.83	0.79
2:B:85:PHE:HE1	2:B:145:ARG:CG	1.95	0.79
1:E:125:ASN:HB3	1:E:687:PRO:HD3	1.64	0.79
1:G:145:LYS:HB3	1:G:148:GLU:HG3	1.64	0.79
1:G:164:MET:CE	1:G:256:PHE:CE2	2.66	0.79
1:C:13:LEU:HD21	1:C:132:ILE:HB	1.64	0.79
1:E:134:SER:O	1:E:138:ILE:HG12	1.82	0.79
1:E:381:ASN:O	1:E:385:GLN:HG3	1.83	0.79
1:G:381:ASN:O	1:G:385:GLN:HG3	1.83	0.79
1:E:145:LYS:HB3	1:E:148:GLU:HG3	1.64	0.78
1:G:164:MET:HE3	1:G:256:PHE:HE2	1.46	0.78
1:G:753:CYS:HG	1:G:774:ILE:HD11	1.49	0.78
1:A:661:GLN:O	1:A:665:GLU:HB2	1.82	0.78
1:C:661:GLN:O	1:C:665:GLU:HB2	1.82	0.78
1:E:352:ILE:CG2	1:E:438:LEU:HD11	2.14	0.78
1:E:76:GLN:OE1	1:E:96:ASN:HB3	1.83	0.78
1:G:125:ASN:HB3	1:G:687:PRO:HD3	1.64	0.78
1:A:517:PHE:HD2	1:A:712:GLU:HB3	1.49	0.78
2:B:140:TYR:O	2:B:144:VAL:HG23	1.83	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:812:PHE:CZ	2:F:17:LEU:CD2	2.67	0.78
2:F:4:SER:HB3	2:F:7:GLN:HE21	1.47	0.78
1:G:527:LEU:HD23	1:G:527:LEU:O	1.83	0.78
1:C:145:LYS:HB3	1:C:148:GLU:HG3	1.64	0.78
1:E:368:LYS:HZ2	1:E:379:PRO:HG2	1.46	0.78
1:C:381:ASN:O	1:C:385:GLN:HG3	1.83	0.78
2:D:140:TYR:O	2:D:144:VAL:HG23	1.83	0.78
1:E:164:MET:CE	1:E:256:PHE:CE2	2.66	0.78
1:C:352:ILE:CG2	1:C:438:LEU:HD11	2.14	0.78
1:A:145:LYS:HG3	1:A:146:ARG:NE	1.99	0.78
1:E:527:LEU:HD23	1:E:527:LEU:O	1.83	0.78
1:G:145:LYS:HG3	1:G:146:ARG:NE	1.99	0.78
1:A:36:TRP:HB2	1:A:76:GLN:HB3	1.64	0.78
1:A:772:SER:O	1:A:773:LYS:HB2	1.81	0.78
1:A:381:ASN:O	1:A:385:GLN:HG3	1.83	0.78
1:C:268:GLU:CG	1:C:270:TYR:OH	2.28	0.78
1:C:3:GLN:N	1:C:18:ASN:HD21	1.82	0.78
2:D:140:TYR:CD1	2:D:141:GLU:HG2	2.19	0.78
1:E:541:LEU:HD23	1:E:601:ASN:ND2	1.98	0.78
1:A:164:MET:CE	1:A:256:PHE:CE2	2.67	0.78
1:E:661:GLN:O	1:E:665:GLU:HB2	1.82	0.78
1:A:352:ILE:CG2	1:A:438:LEU:HD11	2.13	0.77
1:C:554:SER:O	1:C:557:GLU:HG2	1.84	0.77
1:E:193:TYR:CE1	1:E:197:VAL:HG21	2.19	0.77
2:F:107:GLU:HA	2:F:107:GLU:OE1	1.82	0.77
2:H:140:TYR:CD1	2:H:141:GLU:HG2	2.19	0.77
1:E:533:ASN:HB3	1:E:534:PRO:HD2	1.67	0.77
1:G:123:VAL:O	1:G:123:VAL:HG12	1.83	0.77
1:E:123:VAL:HG12	1:E:123:VAL:O	1.83	0.77
2:F:140:TYR:O	2:F:144:VAL:HG23	1.83	0.77
1:G:148:GLU:O	1:G:149:MET:HG2	1.85	0.77
1:G:361:GLN:OE1	1:G:386:LYS:HB3	1.85	0.77
1:A:554:SER:O	1:A:557:GLU:HG2	1.84	0.77
1:C:193:TYR:CE1	1:C:197:VAL:HG21	2.19	0.77
2:D:89:VAL:O	2:D:92:LEU:N	2.18	0.77
2:F:89:VAL:O	2:F:92:LEU:N	2.18	0.77
2:H:140:TYR:O	2:H:144:VAL:HG23	1.83	0.77
1:G:135:GLU:H	1:G:213:PRO:HD3	1.50	0.77
2:H:89:VAL:O	2:H:92:LEU:N	2.18	0.77
1:C:148:GLU:O	1:C:149:MET:HG2	1.85	0.77
1:C:76:GLN:OE1	1:C:96:ASN:HB3	1.83	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:361:GLN:OE1	1:E:386:LYS:HB3	1.85	0.77
1:E:521:LEU:O	1:E:525:ILE:HG13	1.85	0.77
1:A:511:GLU:OE1	2:H:145:ARG:HD3	1.85	0.77
2:F:140:TYR:CD1	2:F:141:GLU:HG2	2.19	0.77
1:G:193:TYR:CE1	1:G:197:VAL:HG21	2.19	0.77
1:G:554:SER:O	1:G:557:GLU:HG2	1.84	0.77
1:C:123:VAL:HG12	1:C:123:VAL:O	1.83	0.77
1:C:145:LYS:HG3	1:C:146:ARG:NE	1.99	0.77
1:A:193:TYR:CE1	1:A:197:VAL:HG21	2.20	0.77
1:A:361:GLN:OE1	1:A:386:LYS:HB3	1.85	0.77
1:A:543:GLU:HA	1:A:546:TRP:CD1	2.17	0.77
2:B:140:TYR:CD1	2:B:141:GLU:HG2	2.20	0.77
1:G:352:ILE:CG2	1:G:438:LEU:HD11	2.14	0.77
2:H:107:GLU:OE1	2:H:107:GLU:HA	1.82	0.77
1:E:3:GLN:N	1:E:18:ASN:HD21	1.82	0.76
1:G:3:GLN:N	1:G:18:ASN:HD21	1.82	0.76
1:G:705:LEU:O	1:G:710:VAL:HG23	1.86	0.76
1:G:800:GLN:O	1:G:804:ARG:HG3	1.86	0.76
1:A:745:GLY:HA3	1:G:816:GLN:NE2	1.99	0.76
1:A:533:ASN:HB3	1:A:534:PRO:HD2	1.67	0.76
1:C:298:SER:N	1:C:301:MET:HG2	1.99	0.76
1:C:361:GLN:OE1	1:C:386:LYS:HB3	1.85	0.76
1:E:554:SER:O	1:E:557:GLU:HG2	1.84	0.76
1:A:521:LEU:O	1:A:525:ILE:HG13	1.85	0.76
1:C:800:GLN:O	1:C:804:ARG:HG3	1.86	0.76
1:E:145:LYS:HG3	1:E:146:ARG:NE	1.99	0.76
1:G:517:PHE:HD2	1:G:712:GLU:HB3	1.49	0.76
2:F:84:CYS:SG	2:F:86:GLU:HB2	2.25	0.76
1:A:3:GLN:N	1:A:18:ASN:HD21	1.82	0.76
1:C:607:ASP:HA	1:C:610:THR:HB	1.68	0.76
1:E:517:PHE:HD2	1:E:712:GLU:HB3	1.49	0.76
1:G:521:LEU:O	1:G:525:ILE:HG13	1.85	0.76
1:C:557:GLU:HA	1:C:560:ILE:HD12	1.68	0.76
1:E:148:GLU:O	1:E:149:MET:HG2	1.85	0.76
1:G:753:CYS:SG	1:G:774:ILE:CD1	2.74	0.76
1:E:135:GLU:H	1:E:213:PRO:HD3	1.50	0.76
1:C:135:GLU:H	1:C:213:PRO:HD3	1.50	0.76
1:C:521:LEU:O	1:C:525:ILE:HG13	1.85	0.76
1:C:517:PHE:HD2	1:C:712:GLU:HB3	1.49	0.76
2:H:85:PHE:CE1	2:H:145:ARG:HG2	2.21	0.76
1:C:533:ASN:HB3	1:C:534:PRO:HD2	1.67	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:705:LEU:O	1:C:710:VAL:HG23	1.86	0.75
2:H:64:LEU:HD23	2:H:68:GLN:HB2	1.68	0.75
1:A:800:GLN:O	1:A:804:ARG:HG3	1.86	0.75
1:C:61:LEU:HD12	1:C:64:ASN:H	1.52	0.75
1:E:368:LYS:HB2	1:E:377:SER:OG	1.87	0.75
2:B:89:VAL:O	2:B:92:LEU:N	2.18	0.75
1:E:607:ASP:HA	1:E:610:THR:HB	1.69	0.75
1:E:766:LEU:O	1:E:777:ARG:HB2	1.87	0.75
1:E:800:GLN:O	1:E:804:ARG:HG3	1.86	0.75
1:A:705:LEU:O	1:A:710:VAL:HG23	1.86	0.75
1:C:269:THR:HB	1:C:443:LEU:HD13	1.69	0.75
1:E:185:GLU:O	1:E:189:LYS:HG2	1.87	0.75
1:E:705:LEU:O	1:E:710:VAL:HG23	1.85	0.75
1:G:557:GLU:HA	1:G:560:ILE:HD12	1.68	0.75
1:C:164:MET:HE3	1:C:256:PHE:HE2	1.50	0.75
1:G:368:LYS:HB2	1:G:377:SER:OG	1.86	0.75
1:G:533:ASN:HB3	1:G:534:PRO:HD2	1.67	0.75
1:G:61:LEU:HD12	1:G:64:ASN:H	1.52	0.75
1:A:185:GLU:O	1:A:189:LYS:HG2	1.87	0.75
1:A:342:MET:HE1	1:A:449:ALA:HB3	1.67	0.75
1:A:557:GLU:HA	1:A:560:ILE:HD12	1.68	0.75
1:A:766:LEU:O	1:A:777:ARG:HB2	1.86	0.75
1:C:753:CYS:SG	1:C:774:ILE:CD1	2.74	0.75
1:G:766:LEU:O	1:G:777:ARG:HB2	1.86	0.75
1:A:368:LYS:HB2	1:A:377:SER:OG	1.87	0.75
1:E:269:THR:HB	1:E:443:LEU:HD13	1.69	0.75
1:G:185:GLU:O	1:G:189:LYS:HG2	1.87	0.75
1:A:135:GLU:H	1:A:213:PRO:HD3	1.50	0.74
1:A:61:LEU:HD12	1:A:64:ASN:H	1.51	0.74
1:G:543:GLU:HA	1:G:546:TRP:CD1	2.17	0.74
1:A:268:GLU:HG2	1:A:270:TYR:HH	1.51	0.74
1:C:185:GLU:O	1:C:189:LYS:HG2	1.87	0.74
1:C:368:LYS:HB2	1:C:377:SER:OG	1.87	0.74
2:D:64:LEU:HD23	2:D:68:GLN:HB2	1.68	0.74
1:G:628:VAL:HG23	1:G:631:ILE:HG12	1.69	0.74
2:F:64:LEU:HD23	2:F:68:GLN:HB2	1.68	0.74
1:C:62:GLN:O	1:C:62:GLN:HG3	1.88	0.74
2:D:9:ALA:HA	2:D:12:LYS:HE3	1.69	0.74
1:A:269:THR:HB	1:A:443:LEU:HD13	1.68	0.74
1:A:148:GLU:O	1:A:149:MET:HG2	1.85	0.74
1:G:607:ASP:HA	1:G:610:THR:HB	1.67	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:269:THR:HG1	1:A:439:PHE:HE2	1.34	0.74
1:E:812:PHE:HZ	2:F:17:LEU:HD23	1.52	0.74
1:E:557:GLU:HA	1:E:560:ILE:HD12	1.67	0.74
1:G:269:THR:HB	1:G:443:LEU:HD13	1.69	0.74
1:A:517:PHE:CD2	1:A:712:GLU:HB3	2.23	0.74
1:A:62:GLN:O	1:A:62:GLN:HG3	1.88	0.74
2:B:9:ALA:HA	2:B:12:LYS:HE3	1.69	0.74
1:C:766:LEU:O	1:C:777:ARG:HB2	1.86	0.74
1:E:140:MET:HB3	1:E:149:MET:HE3	1.70	0.74
1:E:753:CYS:SG	1:E:774:ILE:CD1	2.74	0.74
1:G:140:MET:HB3	1:G:149:MET:HE3	1.70	0.74
2:H:113:VAL:HG23	2:H:124:VAL:HG11	1.69	0.74
1:C:628:VAL:HG23	1:C:631:ILE:HG12	1.69	0.74
1:E:269:THR:HG1	1:E:439:PHE:HE2	1.35	0.74
1:E:305:LEU:HD12	1:E:307:LEU:HD21	1.70	0.74
1:G:405:PRO:O	1:G:407:ILE:HD12	1.88	0.73
1:A:537:VAL:HG22	1:A:559:LEU:HD21	1.71	0.73
1:A:628:VAL:HG23	1:A:631:ILE:HG12	1.70	0.73
1:A:753:CYS:SG	1:A:774:ILE:CD1	2.75	0.73
2:B:113:VAL:HG23	2:B:124:VAL:HG11	1.70	0.73
2:B:28:TYR:CE2	2:B:54:PRO:CG	2.69	0.73
1:C:472:PHE:N	1:C:472:PHE:CD1	2.56	0.73
1:C:537:VAL:HA	1:C:559:LEU:HD11	1.70	0.73
2:D:140:TYR:CE1	2:D:141:GLU:HG2	2.23	0.73
1:G:367:PHE:HB3	1:G:376:ALA:HB1	1.70	0.73
1:A:485:THR:HG23	1:A:667:LEU:HD11	1.70	0.73
1:C:405:PRO:O	1:C:407:ILE:HD12	1.88	0.73
1:G:472:PHE:N	1:G:472:PHE:HD1	1.86	0.73
1:G:517:PHE:CD2	1:G:712:GLU:HB3	2.23	0.73
1:G:79:ASN:HD21	1:G:94:CYS:H	1.37	0.73
1:A:541:LEU:HD23	1:A:601:ASN:ND2	2.02	0.73
1:A:607:ASP:HA	1:A:610:THR:HB	1.68	0.73
1:C:517:PHE:CD2	1:C:712:GLU:HB3	2.23	0.73
1:E:367:PHE:HB3	1:E:376:ALA:HB1	1.70	0.73
1:A:367:PHE:HB3	1:A:376:ALA:HB1	1.71	0.73
1:A:437:ARG:HE	1:A:625:TRP:HA	1.54	0.73
1:C:537:VAL:HG22	1:C:559:LEU:HD21	1.71	0.73
1:E:543:GLU:HA	1:E:546:TRP:CD1	2.18	0.73
2:D:113:VAL:HG23	2:D:124:VAL:HG11	1.69	0.73
1:G:485:THR:HG23	1:G:667:LEU:HD11	1.70	0.73
2:H:9:ALA:HA	2:H:12:LYS:HE3	1.70	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:537:VAL:HA	1:A:559:LEU:HD11	1.70	0.73
1:C:368:LYS:NZ	1:C:379:PRO:HG2	2.03	0.73
1:E:537:VAL:HA	1:E:559:LEU:HD11	1.71	0.73
1:E:628:VAL:HG23	1:E:631:ILE:HG12	1.69	0.73
1:E:61:LEU:HD12	1:E:64:ASN:H	1.52	0.73
2:F:113:VAL:HG23	2:F:124:VAL:HG11	1.69	0.73
1:G:114:TYR:HE2	1:G:153:ILE:HB	1.54	0.73
1:G:766:LEU:HB3	1:G:780:VAL:HG21	1.71	0.73
1:A:472:PHE:CD1	1:A:472:PHE:N	2.57	0.73
2:B:140:TYR:CE1	2:B:141:GLU:HG2	2.23	0.73
2:B:64:LEU:HD23	2:B:68:GLN:HB2	1.69	0.73
1:C:140:MET:HB3	1:C:149:MET:HE3	1.70	0.73
1:C:367:PHE:HB3	1:C:376:ALA:HB1	1.70	0.73
1:C:489:LEU:HD13	1:C:492:LEU:HD23	1.71	0.73
1:E:44:PHE:CD2	1:E:101:LEU:HD22	2.23	0.73
1:E:405:PRO:O	1:E:407:ILE:HD12	1.88	0.73
1:C:735:GLU:CG	1:C:756:MET:HE1	2.19	0.73
1:E:437:ARG:HE	1:E:625:TRP:HA	1.54	0.73
1:E:489:LEU:HD13	1:E:492:LEU:HD23	1.71	0.73
1:E:517:PHE:CD2	1:E:712:GLU:HB3	2.23	0.73
1:C:153:ILE:HA	1:C:156:ILE:HD12	1.71	0.73
1:C:686:ILE:HD13	1:C:687:PRO:CD	2.17	0.73
1:C:766:LEU:HB3	1:C:780:VAL:HG21	1.71	0.73
1:E:485:THR:HG23	1:E:667:LEU:HD11	1.69	0.73
2:F:140:TYR:CE1	2:F:141:GLU:HG2	2.23	0.73
2:F:9:ALA:HA	2:F:12:LYS:HE3	1.69	0.72
1:G:342:MET:HE1	1:G:449:ALA:HB3	1.71	0.72
1:G:489:LEU:HD13	1:G:492:LEU:HD23	1.71	0.72
1:G:62:GLN:HG3	1:G:62:GLN:O	1.88	0.72
1:A:305:LEU:HD12	1:A:307:LEU:HD21	1.70	0.72
1:G:153:ILE:HA	1:G:156:ILE:HD12	1.71	0.72
1:A:368:LYS:NZ	1:A:379:PRO:HG2	2.03	0.72
1:E:397:ASP:O	1:E:401:SER:OG	2.07	0.72
1:E:44:PHE:HD2	1:E:101:LEU:HD22	1.53	0.72
1:E:537:VAL:HG22	1:E:559:LEU:HD21	1.71	0.72
2:H:140:TYR:CE1	2:H:141:GLU:HG2	2.23	0.72
1:E:610:THR:HG21	1:E:631:ILE:HG13	1.72	0.72
1:E:62:GLN:HG3	1:E:62:GLN:O	1.88	0.72
1:G:368:LYS:NZ	1:G:379:PRO:HG2	2.03	0.72
1:G:397:ASP:O	1:G:401:SER:OG	2.07	0.72
1:C:368:LYS:HZ2	1:C:379:PRO:HG2	1.54	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:305:LEU:HD12	1:G:307:LEU:HD21	1.70	0.72
1:G:537:VAL:HG22	1:G:559:LEU:HD21	1.71	0.72
1:A:140:MET:HB3	1:A:149:MET:HE3	1.70	0.72
1:A:582:CYS:SG	1:A:591:THR:HG23	2.30	0.72
1:C:378:MET:HE3	1:C:380:ASP:O	1.90	0.72
1:C:485:THR:HG23	1:C:667:LEU:HD11	1.70	0.72
2:D:131:HIS:HB3	2:D:138:ILE:HG23	1.72	0.72
1:E:582:CYS:SG	1:E:591:THR:HG23	2.29	0.72
1:C:305:LEU:HD12	1:C:307:LEU:HD21	1.70	0.72
1:C:582:CYS:SG	1:C:591:THR:HG23	2.30	0.72
1:C:437:ARG:HE	1:C:625:TRP:HA	1.55	0.72
1:C:657:ARG:HB2	1:C:657:ARG:HH11	1.55	0.72
1:G:553:THR:O	1:G:556:VAL:HG23	1.90	0.72
1:A:405:PRO:O	1:A:407:ILE:HD12	1.89	0.72
1:A:747:MET:CE	1:G:812:PHE:CZ	2.73	0.72
1:A:766:LEU:HB3	1:A:780:VAL:HG21	1.71	0.72
1:E:114:TYR:HE2	1:E:153:ILE:HB	1.54	0.72
1:E:368:LYS:NZ	1:E:379:PRO:HG2	2.03	0.72
1:G:298:SER:N	1:G:301:MET:HG2	1.99	0.72
1:A:114:TYR:HE2	1:A:153:ILE:HB	1.54	0.72
1:A:298:SER:N	1:A:301:MET:HG2	2.01	0.72
1:A:472:PHE:HD1	1:A:472:PHE:N	1.87	0.72
1:C:298:SER:O	1:C:302:ARG:HB3	1.90	0.72
1:C:397:ASP:O	1:C:401:SER:OG	2.07	0.72
1:E:553:THR:O	1:E:556:VAL:HG23	1.90	0.72
1:A:397:ASP:O	1:A:401:SER:OG	2.07	0.72
1:C:477:PHE:O	1:C:480:LEU:HB3	1.90	0.72
1:E:766:LEU:HB3	1:E:780:VAL:HG21	1.72	0.72
1:G:582:CYS:SG	1:G:591:THR:HG23	2.29	0.72
1:G:802:GLN:CG	2:H:88:TYR:OH	2.38	0.72
1:A:298:SER:O	1:A:302:ARG:HB3	1.90	0.71
2:D:90:GLU:HG2	2:D:91:GLY:N	2.05	0.71
1:E:298:SER:O	1:E:302:ARG:HB3	1.89	0.71
1:E:472:PHE:CD1	1:E:472:PHE:N	2.57	0.71
1:A:400:ARG:HG2	1:A:404:THR:OG1	1.91	0.71
1:C:628:VAL:HG23	1:C:631:ILE:CG1	2.20	0.71
1:E:349:GLN:O	1:E:352:ILE:HG13	1.90	0.71
2:F:140:TYR:C	2:F:142:GLU:H	1.94	0.71
1:G:298:SER:O	1:G:302:ARG:HB3	1.89	0.71
1:G:327:GLN:O	1:G:330:GLU:HG2	1.91	0.71
1:G:477:PHE:O	1:G:480:LEU:HB3	1.90	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:700:LEU:O	1:A:704:GLN:HG3	1.91	0.71
1:G:657:ARG:HH11	1:G:657:ARG:HB2	1.55	0.71
1:A:327:GLN:O	1:A:330:GLU:HG2	1.91	0.71
2:B:43:THR:HG23	2:B:46:GLU:OE2	1.90	0.71
1:C:327:GLN:O	1:C:330:GLU:HG2	1.91	0.71
1:C:349:GLN:O	1:C:352:ILE:HG13	1.90	0.71
1:E:472:PHE:HD1	1:E:472:PHE:N	1.87	0.71
1:E:686:ILE:HD13	1:E:687:PRO:CD	2.17	0.71
1:G:610:THR:HG21	1:G:631:ILE:HG13	1.71	0.71
1:A:361:GLN:HB3	1:A:387:VAL:HG23	1.73	0.71
1:E:153:ILE:HA	1:E:156:ILE:HD12	1.70	0.71
1:E:464:LEU:HG	1:E:466:ILE:HG23	1.73	0.71
1:C:816:GLN:NE2	2:D:17:LEU:HD21	2.06	0.71
1:E:700:LEU:O	1:E:704:GLN:HG3	1.91	0.71
1:E:805:GLY:O	1:E:809:ARG:CD	2.39	0.71
2:F:28:TYR:CE2	2:F:54:PRO:CG	2.73	0.71
1:G:537:VAL:HA	1:G:559:LEU:HD11	1.70	0.71
1:G:805:GLY:O	1:G:809:ARG:CD	2.39	0.71
1:A:553:THR:O	1:A:556:VAL:HG23	1.90	0.71
1:E:268:GLU:CG	1:E:270:TYR:OH	2.28	0.71
1:E:477:PHE:O	1:E:480:LEU:HB3	1.90	0.71
1:E:802:GLN:CG	2:F:88:TYR:OH	2.38	0.71
1:A:153:ILE:HA	1:A:156:ILE:HD12	1.71	0.71
1:A:477:PHE:O	1:A:480:LEU:HB3	1.90	0.71
1:A:489:LEU:HD13	1:A:492:LEU:HD23	1.71	0.71
1:C:393:ILE:HG23	1:C:616:SER:HB2	1.72	0.71
1:G:400:ARG:HG2	1:G:404:THR:OG1	1.91	0.71
2:B:85:PHE:HE1	2:B:145:ARG:HG3	1.56	0.71
2:D:113:VAL:CG2	2:D:124:VAL:HG11	2.21	0.71
1:E:628:VAL:HG23	1:E:631:ILE:CG1	2.20	0.71
1:E:802:GLN:HG3	2:F:88:TYR:CZ	2.26	0.71
1:G:628:VAL:HG23	1:G:631:ILE:CG1	2.20	0.71
1:G:268:GLU:OE2	1:G:666:GLN:NE2	2.24	0.71
1:G:805:GLY:HA3	2:H:41:ASN:OD1	1.91	0.71
2:H:90:GLU:HG2	2:H:91:GLY:N	2.05	0.71
1:A:628:VAL:HG23	1:A:631:ILE:CG1	2.21	0.71
1:C:510:ILE:HD12	1:C:512:TRP:HB2	1.73	0.71
1:C:553:THR:O	1:C:556:VAL:HG23	1.90	0.71
1:C:700:LEU:O	1:C:704:GLN:HG3	1.91	0.71
1:G:268:GLU:HG2	1:G:270:TYR:HH	1.52	0.71
1:A:747:MET:HG3	1:G:812:PHE:HE2	1.51	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:237:ALA:HA	1:C:288:HIS:CD2	2.26	0.70
1:C:805:GLY:O	1:C:809:ARG:CD	2.39	0.70
2:D:28:TYR:CE2	2:D:54:PRO:CG	2.73	0.70
1:G:165:LEU:HD21	1:G:260:GLY:HA3	1.73	0.70
1:G:349:GLN:O	1:G:352:ILE:HG13	1.90	0.70
2:B:131:HIS:HB3	2:B:138:ILE:HG23	1.72	0.70
1:C:400:ARG:HG2	1:C:404:THR:OG1	1.91	0.70
1:E:193:TYR:CZ	1:E:197:VAL:HG21	2.27	0.70
1:E:328:ASP:CA	1:E:331:MET:HB2	2.21	0.70
1:E:400:ARG:HG2	1:E:404:THR:OG1	1.91	0.70
1:G:193:TYR:CZ	1:G:197:VAL:HG21	2.27	0.70
1:G:361:GLN:HB3	1:G:387:VAL:HG23	1.72	0.70
1:A:805:GLY:O	1:A:809:ARG:CD	2.39	0.70
1:C:269:THR:HG1	1:C:439:PHE:HE2	1.39	0.70
1:E:510:ILE:HD12	1:E:512:TRP:HB2	1.73	0.70
1:G:269:THR:HG1	1:G:439:PHE:HE2	1.36	0.70
1:G:393:ILE:HG23	1:G:616:SER:HB2	1.72	0.70
2:H:28:TYR:CE2	2:H:54:PRO:CG	2.73	0.70
1:C:165:LEU:HD21	1:C:260:GLY:HA3	1.73	0.70
1:C:472:PHE:HD1	1:C:472:PHE:N	1.86	0.70
1:C:610:THR:HG21	1:C:631:ILE:HG13	1.72	0.70
1:C:802:GLN:CG	2:D:88:TYR:OH	2.38	0.70
1:E:268:GLU:OE2	1:E:666:GLN:NE2	2.24	0.70
2:H:140:TYR:C	2:H:142:GLU:H	1.94	0.70
1:A:378:MET:HE3	1:A:380:ASP:O	1.90	0.70
1:A:510:ILE:HD12	1:A:512:TRP:HB2	1.73	0.70
2:B:140:TYR:C	2:B:142:GLU:H	1.94	0.70
1:E:378:MET:HE3	1:E:380:ASP:O	1.90	0.70
1:E:498:PHE:CD1	1:E:716:ILE:HD11	2.27	0.70
1:E:657:ARG:HB2	1:E:657:ARG:HH11	1.55	0.70
1:G:510:ILE:HD12	1:G:512:TRP:HB2	1.73	0.70
1:G:700:LEU:O	1:G:704:GLN:HG3	1.91	0.70
1:G:704:GLN:O	1:G:708:ASN:HB2	1.92	0.70
1:A:349:GLN:O	1:A:352:ILE:HG13	1.90	0.70
1:A:657:ARG:HB2	1:A:657:ARG:HH11	1.55	0.70
1:C:704:GLN:O	1:C:708:ASN:HB2	1.92	0.70
1:E:327:GLN:O	1:E:330:GLU:HG2	1.91	0.70
1:G:44:PHE:HD2	1:G:101:LEU:HD22	1.55	0.70
1:G:464:LEU:HG	1:G:466:ILE:HG23	1.73	0.70
2:D:35:MET:HG2	2:D:69:PHE:HZ	1.57	0.70
1:E:361:GLN:HB3	1:E:387:VAL:HG23	1.73	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:378:MET:HE3	1:G:380:ASP:O	1.90	0.70
1:G:802:GLN:HG3	2:H:88:TYR:CZ	2.26	0.70
1:A:704:GLN:O	1:A:708:ASN:HB2	1.91	0.70
1:E:124:ILE:HD12	1:E:124:ILE:H	1.57	0.70
1:E:393:ILE:HG23	1:E:616:SER:HB2	1.73	0.70
2:F:131:HIS:HB3	2:F:138:ILE:HG23	1.72	0.70
1:A:464:LEU:HG	1:A:466:ILE:HG23	1.73	0.70
1:A:528:ILE:HD12	1:A:537:VAL:HB	1.74	0.70
1:C:193:TYR:CZ	1:C:197:VAL:HG21	2.27	0.70
1:C:254:ILE:O	1:C:460:PHE:HA	1.92	0.70
1:E:298:SER:N	1:E:301:MET:HG2	2.01	0.70
1:E:405:PRO:HG3	1:E:418:GLN:NE2	2.07	0.70
2:F:90:GLU:HG2	2:F:91:GLY:N	2.05	0.70
1:A:254:ILE:O	1:A:460:PHE:HA	1.92	0.70
2:B:51:LEU:HB3	2:B:54:PRO:CD	2.22	0.70
1:A:802:GLN:CG	2:B:88:TYR:OH	2.38	0.70
2:D:93:ARG:O	2:D:96:ASP:HB2	1.92	0.70
1:E:215:PHE:CD1	1:E:216:SER:N	2.60	0.70
1:G:328:ASP:CA	1:G:331:MET:HB2	2.21	0.70
1:G:528:ILE:HD12	1:G:537:VAL:HB	1.74	0.70
1:A:237:ALA:HA	1:A:288:HIS:CD2	2.26	0.69
2:B:113:VAL:CG2	2:B:124:VAL:HG11	2.22	0.69
2:B:90:GLU:HG2	2:B:91:GLY:N	2.05	0.69
1:C:164:MET:SD	1:C:256:PHE:CD2	2.85	0.69
1:C:464:LEU:HG	1:C:466:ILE:HG23	1.73	0.69
1:E:165:LEU:HD21	1:E:260:GLY:HA3	1.73	0.69
1:E:254:ILE:O	1:E:460:PHE:HA	1.92	0.69
1:G:731:ARG:O	1:G:731:ARG:HD2	1.92	0.69
1:A:802:GLN:HG3	2:B:88:TYR:CZ	2.26	0.69
1:C:114:TYR:HE2	1:C:153:ILE:HB	1.53	0.69
2:D:140:TYR:C	2:D:142:GLU:H	1.94	0.69
1:E:158:ASP:OD1	1:E:193:TYR:OH	2.10	0.69
2:F:43:THR:HG23	2:F:46:GLU:OE2	1.92	0.69
1:G:237:ALA:HA	1:G:288:HIS:CD2	2.27	0.69
2:H:44:ASN:HB3	2:H:117:GLU:OE1	1.90	0.69
2:H:131:HIS:HB3	2:H:138:ILE:HG23	1.72	0.69
2:H:70:LEU:O	2:H:74:GLN:NE2	2.26	0.69
1:A:164:MET:SD	1:A:256:PHE:CD2	2.85	0.69
1:A:610:THR:HG21	1:A:631:ILE:HG13	1.72	0.69
1:C:49:ILE:HG12	1:C:57:VAL:HG11	1.74	0.69
2:F:113:VAL:CG2	2:F:124:VAL:HG11	2.21	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:405:PRO:HG3	1:G:418:GLN:NE2	2.07	0.69
1:A:528:ILE:HG13	1:A:528:ILE:O	1.92	0.69
1:A:393:ILE:HG23	1:A:616:SER:HB2	1.73	0.69
1:C:528:ILE:HD12	1:C:537:VAL:HB	1.74	0.69
1:E:704:GLN:O	1:E:708:ASN:HB2	1.91	0.69
1:E:731:ARG:HD2	1:E:731:ARG:O	1.92	0.69
1:E:815:ARG:HA	1:E:818:GLN:OE1	1.93	0.69
1:G:498:PHE:CD1	1:G:716:ILE:HD11	2.27	0.69
1:G:815:ARG:HA	1:G:818:GLN:OE1	1.92	0.69
2:H:113:VAL:CG2	2:H:124:VAL:HG11	2.21	0.69
1:C:362:LEU:CD2	1:C:387:VAL:HG11	2.23	0.69
1:C:77:LYS:HD2	1:C:96:ASN:HD21	1.58	0.69
2:H:43:THR:HG23	2:H:46:GLU:OE2	1.93	0.69
2:H:93:ARG:O	2:H:96:ASP:HB2	1.92	0.69
1:A:164:MET:SD	1:A:256:PHE:HD2	2.16	0.69
1:A:290:PHE:O	1:A:294:ILE:HG13	1.93	0.69
1:A:731:ARG:HD2	1:A:731:ARG:O	1.92	0.69
1:C:619:LYS:HD3	1:C:623:ASP:OD2	1.93	0.69
1:E:290:PHE:O	1:E:294:ILE:HG13	1.93	0.69
1:A:193:TYR:CZ	1:A:197:VAL:HG21	2.27	0.69
1:A:362:LEU:HD21	1:A:387:VAL:HG11	1.74	0.69
1:A:547:PHE:HB3	1:A:550:ALA:HB2	1.75	0.69
1:A:498:PHE:CD1	1:A:716:ILE:HD11	2.27	0.69
1:C:815:ARG:HA	1:C:818:GLN:OE1	1.92	0.69
2:D:43:THR:HG23	2:D:46:GLU:OE2	1.92	0.69
2:D:70:LEU:O	2:D:74:GLN:NE2	2.25	0.69
1:G:164:MET:SD	1:G:256:PHE:CD2	2.85	0.69
1:G:619:LYS:HD3	1:G:623:ASP:OD2	1.93	0.69
1:C:405:PRO:HG3	1:C:418:GLN:NE2	2.07	0.69
1:E:164:MET:SD	1:E:256:PHE:CD2	2.85	0.69
1:E:164:MET:SD	1:E:256:PHE:HD2	2.16	0.69
1:E:362:LEU:CD2	1:E:387:VAL:HG11	2.23	0.69
2:F:93:ARG:O	2:F:96:ASP:HB2	1.92	0.69
1:G:547:PHE:HB3	1:G:550:ALA:HB2	1.75	0.69
2:H:35:MET:HG2	2:H:69:PHE:HZ	1.57	0.69
1:A:165:LEU:HD21	1:A:260:GLY:HA3	1.74	0.69
2:B:55:LYS:H	2:B:58:GLU:HG3	1.57	0.69
1:E:237:ALA:HA	1:E:288:HIS:CD2	2.27	0.69
1:E:362:LEU:HD21	1:E:387:VAL:HG11	1.75	0.69
2:F:55:LYS:H	2:F:58:GLU:HG3	1.58	0.69
1:G:291:TYR:HD2	1:G:310:PHE:HE1	1.40	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:93:ARG:O	2:B:96:ASP:HB2	1.92	0.69
1:C:36:TRP:HE1	1:C:78:MET:HA	1.58	0.69
1:C:268:GLU:OE2	1:C:666:GLN:NE2	2.24	0.69
1:C:701:VAL:O	1:C:705:LEU:HD12	1.93	0.69
1:E:539:ALA:O	1:E:542:ASP:HB2	1.93	0.69
1:G:164:MET:SD	1:G:256:PHE:HD2	2.16	0.69
1:G:368:LYS:HZ2	1:G:379:PRO:HG2	1.55	0.69
1:G:470:GLU:HB2	1:G:472:PHE:HE1	1.58	0.69
1:A:405:PRO:HG3	1:A:418:GLN:NE2	2.07	0.69
1:A:701:VAL:O	1:A:705:LEU:HD12	1.93	0.69
1:C:731:ARG:O	1:C:731:ARG:HD2	1.92	0.69
1:G:215:PHE:CD1	1:G:216:SER:N	2.61	0.69
1:G:437:ARG:HE	1:G:625:TRP:HA	1.56	0.69
1:G:254:ILE:O	1:G:460:PHE:HA	1.92	0.69
1:A:328:ASP:CA	1:A:331:MET:HB2	2.21	0.68
1:A:53:LYS:HA	1:A:53:LYS:HE2	1.75	0.68
1:A:268:GLU:OE2	1:A:666:GLN:NE2	2.24	0.68
2:B:70:LEU:O	2:B:74:GLN:NE2	2.26	0.68
1:C:482:ILE:HG22	1:C:483:ASN:N	2.09	0.68
1:C:528:ILE:O	1:C:528:ILE:HG13	1.92	0.68
1:C:802:GLN:HG3	2:D:88:TYR:CZ	2.26	0.68
1:E:434:LYS:HG3	1:E:625:TRP:CZ2	2.29	0.68
1:G:290:PHE:O	1:G:294:ILE:HG13	1.93	0.68
1:G:539:ALA:O	1:G:542:ASP:HB2	1.93	0.68
1:A:747:MET:CG	1:G:812:PHE:CE2	2.76	0.68
1:C:328:ASP:CA	1:C:331:MET:HB2	2.20	0.68
1:E:232:GLU:HA	1:E:236:ASN:OD1	1.93	0.68
1:E:547:PHE:HB3	1:E:550:ALA:HB2	1.75	0.68
1:G:472:PHE:CD1	1:G:472:PHE:N	2.56	0.68
1:A:291:TYR:HD2	1:A:310:PHE:HE1	1.41	0.68
1:A:36:TRP:HE1	1:A:78:MET:HA	1.58	0.68
1:A:470:GLU:HB2	1:A:472:PHE:HE1	1.58	0.68
1:A:49:ILE:HG12	1:A:57:VAL:HG11	1.74	0.68
1:C:539:ALA:O	1:C:542:ASP:HB2	1.93	0.68
1:C:498:PHE:CD1	1:C:716:ILE:HD11	2.27	0.68
1:E:130:LEU:HB2	1:E:132:ILE:CD1	2.24	0.68
1:E:164:MET:HE3	1:E:256:PHE:CE2	2.25	0.68
1:E:735:GLU:OE2	1:E:756:MET:HE1	1.93	0.68
1:G:232:GLU:HA	1:G:236:ASN:OD1	1.94	0.68
1:G:362:LEU:CD2	1:G:387:VAL:HG11	2.23	0.68
1:G:420:LYS:HD3	1:G:421:GLU:HG2	1.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:362:LEU:CD2	1:A:387:VAL:HG11	2.24	0.68
1:C:547:PHE:HB3	1:C:550:ALA:HB2	1.75	0.68
1:E:528:ILE:O	1:E:528:ILE:HG13	1.92	0.68
1:G:158:ASP:OD1	1:G:193:TYR:OH	2.10	0.68
2:F:35:MET:HG2	2:F:69:PHE:HZ	1.57	0.68
2:F:70:LEU:O	2:F:74:GLN:NE2	2.26	0.68
1:A:161:TYR:O	1:A:165:LEU:HD12	1.94	0.68
1:A:715:ARG:O	1:A:719:GLN:CG	2.42	0.68
1:C:164:MET:SD	1:C:256:PHE:HD2	2.16	0.68
1:C:361:GLN:HB3	1:C:387:VAL:HG23	1.72	0.68
1:E:291:TYR:HD2	1:E:310:PHE:HE1	1.39	0.68
1:G:362:LEU:HD21	1:G:387:VAL:HG11	1.74	0.68
1:G:482:ILE:HG22	1:G:483:ASN:N	2.09	0.68
1:A:215:PHE:CD1	1:A:216:SER:N	2.61	0.68
1:A:352:ILE:HG22	1:A:438:LEU:HD11	1.76	0.68
1:C:130:LEU:HB2	1:C:132:ILE:CD1	2.24	0.68
1:C:215:PHE:CD1	1:C:216:SER:N	2.61	0.68
1:C:232:GLU:HA	1:C:236:ASN:OD1	1.94	0.68
1:C:434:LYS:HG3	1:C:625:TRP:CZ2	2.28	0.68
2:D:51:LEU:HB3	2:D:54:PRO:CD	2.23	0.68
1:E:528:ILE:HD12	1:E:537:VAL:HB	1.74	0.68
1:E:715:ARG:O	1:E:719:GLN:CG	2.41	0.68
1:G:49:ILE:HG12	1:G:57:VAL:HG11	1.74	0.68
1:A:221:GLU:O	1:A:225:LEU:HD22	1.94	0.68
1:A:539:ALA:O	1:A:542:ASP:HB2	1.93	0.68
1:C:816:GLN:O	1:C:819:LEU:HG	1.94	0.68
1:E:49:ILE:HG12	1:E:57:VAL:HG11	1.74	0.68
1:G:124:ILE:H	1:G:124:ILE:HD12	1.59	0.68
1:A:815:ARG:HA	1:A:818:GLN:OE1	1.93	0.68
2:B:50:VAL:CG1	2:B:72:MET:HG2	2.24	0.68
1:C:124:ILE:HD12	1:C:124:ILE:H	1.58	0.68
1:C:467:ALA:O	1:C:486:ASN:ND2	2.26	0.68
1:C:53:LYS:HA	1:C:53:LYS:HE2	1.75	0.68
2:D:55:LYS:H	2:D:58:GLU:HG3	1.57	0.68
1:G:434:LYS:HG3	1:G:625:TRP:CZ2	2.29	0.68
1:C:420:LYS:HD3	1:C:421:GLU:HG2	1.76	0.68
1:C:715:ARG:O	1:C:719:GLN:CG	2.42	0.68
1:E:250:LYS:HE2	1:E:465:ASP:HB3	1.76	0.68
1:E:470:GLU:HB2	1:E:472:PHE:HE1	1.59	0.68
1:E:701:VAL:O	1:E:705:LEU:HD12	1.93	0.68
1:G:161:TYR:O	1:G:165:LEU:HD12	1.94	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:266:ASN:HA	1:G:447:ASN:OD1	1.94	0.68
2:H:50:VAL:CG1	2:H:72:MET:HG2	2.24	0.68
1:A:482:ILE:HG22	1:A:483:ASN:N	2.08	0.67
1:C:291:TYR:CD2	1:C:310:PHE:CE1	2.81	0.67
1:A:268:GLU:CG	1:A:270:TYR:OH	2.29	0.67
1:A:524:CYS:HB2	1:A:568:LYS:HG3	1.76	0.67
1:C:162:ARG:O	1:C:166:GLN:HG2	1.94	0.67
1:E:53:LYS:HA	1:E:53:LYS:HE2	1.75	0.67
1:E:619:LYS:HD3	1:E:623:ASP:OD2	1.93	0.67
1:G:250:LYS:HE2	1:G:465:ASP:HB3	1.76	0.67
1:G:715:ARG:O	1:G:719:GLN:CG	2.42	0.67
2:H:51:LEU:HB3	2:H:54:PRO:CD	2.23	0.67
1:A:145:LYS:CG	1:A:146:ARG:H	2.07	0.67
1:C:158:ASP:OD1	1:C:193:TYR:OH	2.10	0.67
1:C:290:PHE:O	1:C:294:ILE:HG13	1.93	0.67
1:C:524:CYS:HB2	1:C:568:LYS:HG3	1.76	0.67
1:E:221:GLU:O	1:E:225:LEU:HD22	1.94	0.67
1:E:3:GLN:H	1:E:18:ASN:ND2	1.91	0.67
1:E:36:TRP:HE1	1:E:78:MET:HA	1.58	0.67
1:E:816:GLN:O	1:E:819:LEU:HG	1.94	0.67
1:G:135:GLU:H	1:G:213:PRO:CD	2.07	0.67
1:G:528:ILE:O	1:G:528:ILE:HG13	1.92	0.67
1:G:568:LYS:HA	1:G:584:LEU:HB2	1.76	0.67
1:G:816:GLN:O	1:G:819:LEU:HG	1.94	0.67
1:A:232:GLU:HA	1:A:236:ASN:OD1	1.93	0.67
1:A:250:LYS:HE2	1:A:465:ASP:HB3	1.76	0.67
1:C:221:GLU:O	1:C:225:LEU:HD22	1.94	0.67
1:C:362:LEU:HD21	1:C:387:VAL:HG11	1.75	0.67
2:F:103:VAL:HG12	2:F:104:MET:N	2.09	0.67
2:F:50:VAL:CG1	2:F:72:MET:HG2	2.24	0.67
1:G:524:CYS:HB2	1:G:568:LYS:HG3	1.76	0.67
1:G:36:TRP:HE1	1:G:78:MET:HA	1.57	0.67
1:A:215:PHE:HD1	1:A:216:SER:N	1.93	0.67
1:A:568:LYS:HA	1:A:584:LEU:HB2	1.76	0.67
2:B:103:VAL:HG12	2:B:104:MET:N	2.09	0.67
1:G:130:LEU:HB2	1:G:132:ILE:CD1	2.24	0.67
1:G:337:GLU:O	1:G:341:ILE:HG12	1.95	0.67
1:A:124:ILE:H	1:A:124:ILE:HD12	1.58	0.67
1:C:266:ASN:HA	1:C:447:ASN:OD1	1.95	0.67
1:C:52:GLU:HA	1:C:57:VAL:HG13	1.77	0.67
1:C:434:LYS:HG3	1:C:625:TRP:HZ2	1.59	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:162:ARG:O	1:E:166:GLN:HG2	1.94	0.67
2:F:51:LEU:HB3	2:F:54:PRO:CD	2.23	0.67
1:G:701:VAL:O	1:G:705:LEU:HD12	1.93	0.67
1:A:434:LYS:HG3	1:A:625:TRP:CZ2	2.30	0.67
2:B:108:ILE:HG22	2:B:109:ARG:N	2.10	0.67
1:C:272:LEU:O	1:C:274:LYS:HG3	1.94	0.67
1:E:161:TYR:O	1:E:165:LEU:HD12	1.94	0.67
1:E:467:ALA:O	1:E:486:ASN:ND2	2.26	0.67
1:G:145:LYS:CG	1:G:146:ARG:H	2.08	0.67
1:G:61:LEU:CD1	1:G:64:ASN:H	2.08	0.67
1:A:130:LEU:HB2	1:A:132:ILE:CD1	2.24	0.67
1:A:158:ASP:OD1	1:A:193:TYR:OH	2.10	0.67
1:C:135:GLU:H	1:C:213:PRO:CD	2.07	0.67
1:C:161:TYR:O	1:C:165:LEU:HD12	1.94	0.67
1:E:272:LEU:O	1:E:274:LYS:HG3	1.94	0.67
1:A:135:GLU:H	1:A:213:PRO:CD	2.07	0.67
1:A:619:LYS:HD3	1:A:623:ASP:OD2	1.93	0.67
1:C:215:PHE:HD1	1:C:216:SER:N	1.93	0.67
1:C:291:TYR:HD2	1:C:310:PHE:CE1	2.13	0.67
1:C:337:GLU:O	1:C:341:ILE:HG12	1.95	0.67
1:C:470:GLU:HB2	1:C:472:PHE:HE1	1.58	0.67
1:E:420:LYS:HD3	1:E:421:GLU:HG2	1.76	0.67
2:F:64:LEU:HD11	2:F:72:MET:CE	2.25	0.67
1:G:221:GLU:O	1:G:225:LEU:HD22	1.94	0.67
1:G:53:LYS:HE2	1:G:53:LYS:HA	1.76	0.67
2:D:108:ILE:HG22	2:D:109:ARG:N	2.10	0.67
1:G:272:LEU:O	1:G:274:LYS:HG3	1.94	0.67
1:A:291:TYR:CD2	1:A:310:PHE:CE1	2.82	0.66
1:A:3:GLN:H	1:A:18:ASN:ND2	1.91	0.66
1:A:420:LYS:HD3	1:A:421:GLU:HG2	1.76	0.66
2:B:25:LYS:HE3	2:B:65:LYS:NZ	2.11	0.66
1:C:352:ILE:HG22	1:C:438:LEU:HD11	1.75	0.66
1:E:352:ILE:HG22	1:E:438:LEU:HD11	1.75	0.66
1:E:593:ASN:OD1	1:E:595:SER:HB3	1.96	0.66
1:A:467:ALA:O	1:A:486:ASN:ND2	2.26	0.66
1:A:816:GLN:O	1:A:819:LEU:HG	1.94	0.66
2:B:35:MET:HG2	2:B:69:PHE:HZ	1.58	0.66
1:C:464:LEU:CG	1:C:466:ILE:HG23	2.26	0.66
2:D:12:LYS:O	2:D:16:GLN:CG	2.42	0.66
2:D:50:VAL:CG1	2:D:72:MET:HG2	2.24	0.66
1:E:145:LYS:CG	1:E:146:ARG:H	2.07	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:25:LYS:HE3	2:F:65:LYS:NZ	2.11	0.66
1:G:162:ARG:O	1:G:166:GLN:HG2	1.94	0.66
2:H:25:LYS:HE3	2:H:65:LYS:NZ	2.11	0.66
2:H:55:LYS:H	2:H:58:GLU:HG3	1.58	0.66
1:E:434:LYS:HG3	1:E:625:TRP:HZ2	1.60	0.66
1:G:52:GLU:HA	1:G:57:VAL:HG13	1.77	0.66
1:C:145:LYS:CG	1:C:146:ARG:H	2.07	0.66
1:E:215:PHE:HD1	1:E:216:SER:N	1.93	0.66
1:E:61:LEU:CD1	1:E:64:ASN:H	2.08	0.66
1:E:712:GLU:O	1:E:716:ILE:HD12	1.96	0.66
1:G:593:ASN:OD1	1:G:595:SER:HB3	1.96	0.66
1:A:342:MET:CE	1:A:449:ALA:HB3	2.26	0.66
1:A:61:LEU:CD1	1:A:64:ASN:H	2.08	0.66
1:C:175:CYS:HB3	1:C:684:CYS:SG	2.36	0.66
1:E:583:ILE:O	1:E:589:LYS:HA	1.95	0.66
1:G:175:CYS:HB3	1:G:684:CYS:SG	2.36	0.66
1:G:291:TYR:CD2	1:G:310:PHE:CE1	2.81	0.66
1:G:583:ILE:O	1:G:589:LYS:HA	1.95	0.66
2:H:64:LEU:HD11	2:H:72:MET:CE	2.25	0.66
1:A:138:ILE:HG21	1:A:196:VAL:HG21	1.78	0.66
1:A:464:LEU:CG	1:A:466:ILE:HG23	2.26	0.66
1:C:568:LYS:HA	1:C:584:LEU:HB2	1.76	0.66
2:D:25:LYS:HE3	2:D:65:LYS:NZ	2.11	0.66
1:E:175:CYS:HB3	1:E:684:CYS:SG	2.36	0.66
1:E:337:GLU:O	1:E:341:ILE:HG12	1.95	0.66
1:G:735:GLU:CG	1:G:756:MET:HE1	2.26	0.66
1:C:500:LEU:O	1:C:503:GLU:CG	2.44	0.66
1:E:77:LYS:CD	1:E:96:ASN:HD21	2.06	0.66
2:F:9:ALA:C	2:F:12:LYS:HG3	2.16	0.66
1:G:407:ILE:HB	1:G:414:VAL:O	1.96	0.66
2:H:103:VAL:HG12	2:H:104:MET:N	2.10	0.66
1:A:291:TYR:HD2	1:A:310:PHE:CE1	2.13	0.66
1:C:500:LEU:HA	1:C:503:GLU:HG3	1.78	0.66
1:C:490:GLN:HG3	1:C:521:LEU:HD11	1.78	0.66
1:C:583:ILE:O	1:C:589:LYS:HA	1.95	0.66
1:E:490:GLN:HG3	1:E:521:LEU:HD11	1.78	0.66
1:G:606:ASN:OD1	1:G:609:VAL:HG12	1.96	0.66
1:A:593:ASN:OD1	1:A:595:SER:HB3	1.95	0.66
1:E:138:ILE:HG21	1:E:196:VAL:HG21	1.78	0.66
1:E:266:ASN:HA	1:E:447:ASN:OD1	1.95	0.66
2:H:123:GLU:O	2:H:127:LEU:HB2	1.96	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:272:LEU:O	1:A:274:LYS:HG3	1.95	0.66
1:A:606:ASN:OD1	1:A:609:VAL:HG12	1.97	0.66
1:A:175:CYS:HB3	1:A:684:CYS:SG	2.36	0.66
1:C:250:LYS:HE2	1:C:465:ASP:HB3	1.76	0.66
2:D:123:GLU:O	2:D:127:LEU:HB2	1.96	0.66
1:E:407:ILE:HB	1:E:414:VAL:O	1.96	0.66
1:E:524:CYS:HB2	1:E:568:LYS:HG3	1.77	0.66
1:A:162:ARG:O	1:A:166:GLN:HG2	1.95	0.65
1:A:663:TYR:CE1	1:A:667:LEU:HD13	2.31	0.65
1:E:135:GLU:H	1:E:213:PRO:CD	2.08	0.65
1:E:291:TYR:HD2	1:E:310:PHE:CE1	2.13	0.65
1:E:482:ILE:HG22	1:E:483:ASN:N	2.10	0.65
1:E:500:LEU:O	1:E:503:GLU:CG	2.44	0.65
1:G:490:GLN:HG3	1:G:521:LEU:HD11	1.78	0.65
1:A:407:ILE:HB	1:A:414:VAL:O	1.96	0.65
1:A:266:ASN:HA	1:A:447:ASN:OD1	1.95	0.65
1:A:490:GLN:HG3	1:A:521:LEU:HD11	1.79	0.65
1:A:735:GLU:CD	1:A:756:MET:HE1	2.17	0.65
2:B:64:LEU:HD11	2:B:72:MET:CE	2.26	0.65
1:C:342:MET:CE	1:C:449:ALA:HB3	2.26	0.65
1:C:606:ASN:OD1	1:C:609:VAL:HG12	1.96	0.65
1:E:441:TRP:CE3	1:E:442:ILE:HD13	2.32	0.65
1:E:464:LEU:CG	1:E:466:ILE:HG23	2.26	0.65
1:G:291:TYR:HD2	1:G:310:PHE:CE1	2.13	0.65
1:G:352:ILE:HG22	1:G:438:LEU:HD11	1.75	0.65
1:A:337:GLU:O	1:A:341:ILE:HG12	1.95	0.65
1:A:52:GLU:HA	1:A:57:VAL:HG13	1.77	0.65
1:A:700:LEU:HD23	1:A:701:VAL:N	2.11	0.65
1:A:79:ASN:HD21	1:A:94:CYS:H	1.44	0.65
2:B:65:LYS:H	2:B:68:GLN:HE21	1.44	0.65
1:C:663:TYR:CE1	1:C:667:LEU:HD13	2.31	0.65
1:C:769:ILE:CD1	1:C:774:ILE:HD13	2.27	0.65
1:G:663:TYR:CE1	1:G:667:LEU:HD13	2.31	0.65
1:C:593:ASN:OD1	1:C:595:SER:HB3	1.96	0.65
1:C:700:LEU:HD23	1:C:701:VAL:N	2.11	0.65
1:E:342:MET:CE	1:E:449:ALA:HB3	2.26	0.65
1:E:769:ILE:CD1	1:E:774:ILE:HD13	2.27	0.65
2:F:123:GLU:O	2:F:127:LEU:HB2	1.96	0.65
1:G:441:TRP:CE3	1:G:442:ILE:HD13	2.32	0.65
1:G:500:LEU:HA	1:G:503:GLU:HG3	1.78	0.65
1:G:686:ILE:HD13	1:G:687:PRO:CD	2.17	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:500:LEU:HA	1:A:503:GLU:HG3	1.78	0.65
2:D:64:LEU:HD11	2:D:72:MET:CE	2.25	0.65
1:G:712:GLU:O	1:G:716:ILE:HD12	1.96	0.65
1:A:712:GLU:O	1:A:716:ILE:HD12	1.97	0.65
1:C:517:PHE:CZ	1:C:716:ILE:HG13	2.32	0.65
1:E:663:TYR:CE1	1:E:667:LEU:HD13	2.31	0.65
1:A:746:PHE:HB3	2:H:10:GLU:HG2	1.79	0.65
2:D:103:VAL:HG12	2:D:104:MET:N	2.10	0.65
1:E:568:LYS:HA	1:E:584:LEU:HB2	1.77	0.65
2:F:108:ILE:HG22	2:F:109:ARG:N	2.11	0.65
1:G:500:LEU:O	1:G:503:GLU:CG	2.44	0.65
1:G:700:LEU:HD23	1:G:701:VAL:N	2.11	0.65
1:A:234:PHE:HD2	1:A:289:ILE:HG12	1.62	0.65
2:B:9:ALA:C	2:B:12:LYS:HG3	2.17	0.65
1:C:441:TRP:CE3	1:C:442:ILE:HD13	2.32	0.65
1:C:799:PHE:CZ	1:C:803:CYS:SG	2.90	0.65
1:E:522:GLN:N	1:E:523:PRO:HD2	2.12	0.65
1:E:517:PHE:CZ	1:E:716:ILE:HG13	2.32	0.65
1:G:469:PHE:N	1:G:486:ASN:OD1	2.30	0.65
1:A:735:GLU:CG	1:A:756:MET:HE1	2.27	0.65
1:A:769:ILE:CD1	1:A:774:ILE:HD13	2.27	0.65
2:D:104:MET:SD	2:D:104:MET:N	2.70	0.65
2:F:84:CYS:O	2:F:87:ASP:N	2.28	0.65
1:G:138:ILE:HG21	1:G:196:VAL:HG21	1.78	0.65
2:H:108:ILE:HG22	2:H:109:ARG:N	2.10	0.65
1:A:500:LEU:O	1:A:503:GLU:CG	2.45	0.65
1:A:799:PHE:CZ	1:A:803:CYS:SG	2.90	0.65
1:C:280:GLN:NE2	1:C:315:PHE:O	2.30	0.65
1:C:61:LEU:CD1	1:C:64:ASN:H	2.08	0.65
1:G:268:GLU:CG	1:G:270:TYR:OH	2.28	0.65
1:G:234:PHE:HD2	1:G:289:ILE:HG12	1.62	0.65
1:G:464:LEU:CG	1:G:466:ILE:HG23	2.26	0.65
1:A:441:TRP:CE3	1:A:442:ILE:HD13	2.32	0.64
2:B:40:GLN:HA	2:B:40:GLN:OE1	1.97	0.64
1:E:302:ARG:HA	1:E:307:LEU:HD11	1.79	0.64
1:E:469:PHE:N	1:E:486:ASN:OD1	2.29	0.64
1:E:606:ASN:OD1	1:E:609:VAL:HG12	1.96	0.64
1:E:700:LEU:HD23	1:E:701:VAL:N	2.12	0.64
1:G:215:PHE:HD1	1:G:216:SER:N	1.94	0.64
1:G:735:GLU:CD	1:G:756:MET:HE1	2.16	0.64
1:G:769:ILE:CD1	1:G:774:ILE:HD13	2.27	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:12:LYS:O	2:H:16:GLN:CG	2.42	0.64
2:H:85:PHE:O	2:H:88:TYR:N	2.26	0.64
2:B:85:PHE:CE1	2:B:145:ARG:CG	2.79	0.64
1:C:372:ASN:ND2	1:C:372:ASN:H	1.95	0.64
1:C:573:LYS:HE3	1:C:589:LYS:HZ3	1.62	0.64
1:E:280:GLN:NE2	1:E:315:PHE:O	2.30	0.64
1:E:799:PHE:CZ	1:E:803:CYS:SG	2.90	0.64
1:G:196:VAL:HG12	1:G:217:TYR:CE2	2.32	0.64
1:A:102:HIS:O	1:A:105:ARG:N	2.30	0.64
1:A:354:ARG:HB3	1:A:354:ARG:NH1	2.12	0.64
1:A:583:ILE:O	1:A:589:LYS:HA	1.96	0.64
2:B:104:MET:SD	2:B:104:MET:N	2.71	0.64
1:C:196:VAL:HG12	1:C:217:TYR:CE2	2.32	0.64
1:E:102:HIS:O	1:E:105:ARG:N	2.30	0.64
1:E:196:VAL:HG12	1:E:217:TYR:CE2	2.32	0.64
2:F:104:MET:SD	2:F:104:MET:N	2.70	0.64
1:G:342:MET:CE	1:G:449:ALA:HB3	2.26	0.64
1:G:630:ARG:NH2	1:G:657:ARG:HB2	2.13	0.64
1:G:517:PHE:CZ	1:G:716:ILE:HG13	2.32	0.64
1:A:745:GLY:HA3	1:G:816:GLN:HE21	1.60	0.64
1:C:469:PHE:N	1:C:486:ASN:OD1	2.30	0.64
1:C:533:ASN:HB3	1:C:534:PRO:CD	2.27	0.64
1:C:712:GLU:O	1:C:716:ILE:HD12	1.96	0.64
1:C:789:ASP:HA	1:C:792:ILE:HD11	1.80	0.64
1:G:533:ASN:HB3	1:G:534:PRO:CD	2.27	0.64
1:G:799:PHE:CZ	1:G:803:CYS:SG	2.90	0.64
1:A:196:VAL:HG12	1:A:217:TYR:CE2	2.33	0.64
1:A:533:ASN:HB3	1:A:534:PRO:CD	2.27	0.64
1:C:234:PHE:HD2	1:C:289:ILE:HG12	1.62	0.64
1:C:3:GLN:H	1:C:18:ASN:ND2	1.91	0.64
1:C:510:ILE:HB	1:C:768:ARG:HG3	1.80	0.64
1:E:52:GLU:HA	1:E:57:VAL:HG13	1.77	0.64
1:A:522:GLN:N	1:A:523:PRO:HD2	2.13	0.64
1:A:686:ILE:HD13	1:A:687:PRO:CD	2.17	0.64
1:C:407:ILE:HB	1:C:414:VAL:O	1.96	0.64
1:C:95:LEU:HD11	1:C:714:ILE:CG2	2.28	0.64
1:G:311:ASN:HD21	1:G:319:GLY:HA3	1.63	0.64
2:H:9:ALA:C	2:H:12:LYS:HG3	2.17	0.64
1:A:372:ASN:H	1:A:372:ASN:ND2	1.94	0.64
1:A:49:ILE:HA	1:A:59:VAL:HG13	1.80	0.64
1:C:102:HIS:O	1:C:105:ARG:N	2.31	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:61:LEU:HD12	1:C:63:GLU:HB3	1.80	0.64
1:E:13:LEU:HD11	1:E:137:ILE:HG23	1.77	0.64
1:E:393:ILE:CG2	1:E:616:SER:HB2	2.28	0.64
1:G:125:ASN:OD1	1:G:126:PRO:HD2	1.98	0.64
1:G:280:GLN:NE2	1:G:315:PHE:O	2.30	0.64
1:G:522:GLN:N	1:G:523:PRO:HD2	2.13	0.64
1:G:51:GLU:O	1:G:58:THR:HG23	1.98	0.64
2:H:65:LYS:CB	2:H:68:GLN:HG3	2.26	0.64
1:C:138:ILE:HG21	1:C:196:VAL:HG21	1.78	0.64
1:C:763:ASP:O	1:C:765:ASN:N	2.31	0.64
1:E:500:LEU:HA	1:E:503:GLU:HG3	1.77	0.64
1:G:467:ALA:O	1:G:486:ASN:ND2	2.26	0.64
1:A:280:GLN:NE2	1:A:315:PHE:O	2.30	0.64
2:B:123:GLU:O	2:B:127:LEU:HB2	1.97	0.64
1:C:354:ARG:HB3	1:C:354:ARG:NH1	2.13	0.64
1:C:735:GLU:CD	1:C:756:MET:HE1	2.18	0.64
1:E:293:LEU:HD11	1:E:301:MET:HE1	1.79	0.64
1:E:630:ARG:NH2	1:E:657:ARG:HB2	2.12	0.64
2:F:35:MET:SD	2:F:76:ILE:HD12	2.38	0.64
1:G:168:ARG:HH11	2:H:97:LYS:HE3	1.63	0.64
1:G:434:LYS:HG3	1:G:625:TRP:HZ2	1.62	0.64
1:G:477:PHE:CE1	1:G:480:LEU:HD23	2.33	0.64
2:H:104:MET:SD	2:H:104:MET:N	2.70	0.64
1:C:311:ASN:HD21	1:C:319:GLY:HA3	1.63	0.64
1:C:522:GLN:N	1:C:523:PRO:HD2	2.13	0.64
1:C:630:ARG:NH2	1:C:657:ARG:HB2	2.12	0.64
1:E:223:GLN:HG2	1:E:342:MET:HA	1.80	0.64
1:E:354:ARG:HB3	1:E:354:ARG:NH1	2.13	0.64
1:G:510:ILE:HB	1:G:768:ARG:HG3	1.80	0.64
1:A:469:PHE:N	1:A:486:ASN:OD1	2.31	0.63
1:A:510:ILE:HB	1:A:768:ARG:HG3	1.80	0.63
1:C:49:ILE:HA	1:C:59:VAL:HG13	1.79	0.63
1:E:409:VAL:HB	1:E:412:ASP:OD1	1.99	0.63
1:E:95:LEU:HD11	1:E:714:ILE:CG2	2.28	0.63
1:A:302:ARG:HA	1:A:307:LEU:HD11	1.80	0.63
1:A:393:ILE:CG2	1:A:616:SER:HB2	2.27	0.63
2:B:44:ASN:HB3	2:B:117:GLU:OE1	1.97	0.63
1:A:168:ARG:HH11	2:B:97:LYS:HE3	1.63	0.63
1:C:393:ILE:CG2	1:C:616:SER:HB2	2.28	0.63
1:E:49:ILE:HA	1:E:59:VAL:HG13	1.80	0.63
1:E:168:ARG:HH11	2:F:97:LYS:HE3	1.62	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:354:ARG:HH11	1:G:354:ARG:HB3	1.62	0.63
1:G:409:VAL:HB	1:G:412:ASP:OD1	1.98	0.63
1:G:95:LEU:HD11	1:G:714:ILE:CG2	2.28	0.63
1:A:125:ASN:OD1	1:A:126:PRO:HD2	1.97	0.63
1:A:61:LEU:HD12	1:A:63:GLU:HB3	1.80	0.63
1:A:517:PHE:CZ	1:A:716:ILE:HG13	2.32	0.63
1:E:234:PHE:HD2	1:E:289:ILE:HG12	1.62	0.63
1:E:735:GLU:CD	1:E:756:MET:HE1	2.18	0.63
2:F:65:LYS:H	2:F:68:GLN:HE21	1.45	0.63
1:G:3:GLN:H	1:G:18:ASN:ND2	1.91	0.63
1:G:293:LEU:HD11	1:G:301:MET:HE1	1.80	0.63
1:G:535:PRO:HG2	1:G:540:LEU:HD21	1.81	0.63
2:H:35:MET:SD	2:H:76:ILE:HD12	2.38	0.63
1:C:535:PRO:HG2	1:C:540:LEU:HD21	1.80	0.63
2:D:35:MET:SD	2:D:76:ILE:HD12	2.38	0.63
1:E:125:ASN:OD1	1:E:126:PRO:HD2	1.98	0.63
1:E:533:ASN:HB3	1:E:534:PRO:CD	2.27	0.63
1:G:49:ILE:HA	1:G:59:VAL:HG13	1.79	0.63
1:G:789:ASP:HA	1:G:792:ILE:HD11	1.80	0.63
1:G:89:MET:O	1:G:92:LEU:HD12	1.98	0.63
1:A:95:LEU:HD11	1:A:714:ILE:CG2	2.28	0.63
1:C:89:MET:O	1:C:92:LEU:HD12	1.98	0.63
2:D:9:ALA:C	2:D:12:LYS:HG3	2.16	0.63
1:E:36:TRP:NE1	1:E:78:MET:HG3	2.13	0.63
1:E:61:LEU:HD12	1:E:63:GLU:HB3	1.80	0.63
1:G:393:ILE:CG2	1:G:616:SER:HB2	2.28	0.63
1:G:763:ASP:O	1:G:765:ASN:N	2.31	0.63
1:A:89:MET:O	1:A:92:LEU:HD12	1.98	0.63
1:C:302:ARG:HA	1:C:307:LEU:HD11	1.81	0.63
1:C:36:TRP:NE1	1:C:78:MET:HG3	2.13	0.63
1:C:400:ARG:O	1:C:404:THR:N	2.32	0.63
1:C:477:PHE:CE1	1:C:480:LEU:HD23	2.33	0.63
1:C:586:TYR:CD1	1:C:587:ALA:N	2.67	0.63
1:C:51:GLU:O	1:C:58:THR:HG23	1.98	0.63
1:E:287:PHE:HD1	1:E:287:PHE:H	1.46	0.63
1:G:287:PHE:H	1:G:287:PHE:HD1	1.47	0.63
1:G:354:ARG:NH1	1:G:354:ARG:HB3	2.13	0.63
1:G:586:TYR:CD1	1:G:587:ALA:N	2.67	0.63
1:A:477:PHE:CE1	1:A:480:LEU:HD23	2.33	0.63
1:A:777:ARG:HB3	1:A:780:VAL:HG21	1.81	0.63
1:A:789:ASP:HA	1:A:792:ILE:HD11	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:477:PHE:CE1	1:E:480:LEU:HD23	2.33	0.63
1:G:102:HIS:O	1:G:105:ARG:N	2.31	0.63
1:A:535:PRO:HG2	1:A:540:LEU:HD21	1.80	0.63
1:E:12:PHE:HB3	1:E:132:ILE:HG21	1.79	0.63
1:E:89:MET:O	1:E:92:LEU:HD12	1.98	0.63
1:G:79:ASN:ND2	1:G:94:CYS:H	1.97	0.63
1:A:223:GLN:HG2	1:A:342:MET:HA	1.80	0.62
1:C:168:ARG:HH11	2:D:97:LYS:HE3	1.63	0.62
1:E:510:ILE:HB	1:E:768:ARG:HG3	1.80	0.62
2:F:114:THR:C	2:F:115:LEU:HD12	2.19	0.62
1:E:733:ARG:NH1	2:F:95:PHE:HA	2.14	0.62
1:G:508:GLU:OE1	1:G:771:GLN:N	2.32	0.62
2:H:65:LYS:H	2:H:68:GLN:HE21	1.46	0.62
2:B:114:THR:C	2:B:115:LEU:HD12	2.20	0.62
1:C:777:ARG:HB3	1:C:780:VAL:HG21	1.81	0.62
1:E:586:TYR:CD1	1:E:587:ALA:N	2.67	0.62
1:G:372:ASN:ND2	1:G:372:ASN:H	1.95	0.62
2:H:114:THR:C	2:H:115:LEU:HD12	2.20	0.62
1:A:293:LEU:HD11	1:A:301:MET:HE1	1.82	0.62
1:A:409:VAL:HB	1:A:412:ASP:OD1	1.99	0.62
1:A:780:VAL:O	1:A:784:LEU:HD23	2.00	0.62
1:C:780:VAL:O	1:C:784:LEU:HD23	1.99	0.62
2:D:114:THR:C	2:D:115:LEU:HD12	2.20	0.62
1:E:79:ASN:HD21	1:E:92:LEU:HB3	1.64	0.62
1:G:400:ARG:O	1:G:404:THR:N	2.32	0.62
1:G:61:LEU:HD12	1:G:63:GLU:HB3	1.80	0.62
1:A:705:LEU:HD23	1:A:710:VAL:HG21	1.81	0.62
2:B:35:MET:SD	2:B:76:ILE:HD12	2.40	0.62
1:A:733:ARG:NH1	2:B:95:PHE:HA	2.14	0.62
1:C:125:ASN:OD1	1:C:126:PRO:HD2	1.98	0.62
1:C:733:ARG:NH1	2:D:95:PHE:HA	2.15	0.62
1:E:372:ASN:H	1:E:372:ASN:ND2	1.96	0.62
1:E:777:ARG:HB3	1:E:780:VAL:HG21	1.81	0.62
1:E:780:VAL:O	1:E:784:LEU:HD23	2.00	0.62
2:F:12:LYS:O	2:F:16:GLN:CG	2.42	0.62
1:A:311:ASN:HD21	1:A:319:GLY:HA3	1.63	0.62
2:D:65:LYS:H	2:D:68:GLN:HE21	1.45	0.62
1:E:311:ASN:HD21	1:E:319:GLY:HA3	1.64	0.62
1:E:573:LYS:HE3	1:E:589:LYS:HZ3	1.63	0.62
1:E:601:ASN:OD1	1:E:658:THR:OG1	2.17	0.62
1:E:712:GLU:O	1:E:716:ILE:CD1	2.47	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:40:GLN:OE1	2:F:40:GLN:HA	2.00	0.62
1:G:145:LYS:HG3	1:G:146:ARG:H	1.64	0.62
1:G:305:LEU:HB2	1:G:307:LEU:CD2	2.30	0.62
1:A:265:ALA:N	1:A:450:LEU:O	2.33	0.62
1:A:51:GLU:O	1:A:58:THR:HG23	1.98	0.62
2:B:125:GLU:O	2:B:129:ALA:HB2	2.00	0.62
2:B:71:PRO:O	2:B:75:THR:HG23	1.99	0.62
1:C:757:ILE:HA	1:C:760:LEU:HD12	1.81	0.62
2:D:71:PRO:O	2:D:75:THR:HG23	1.99	0.62
1:E:293:LEU:HD12	1:E:297:ALA:HB2	1.82	0.62
1:E:586:TYR:CE1	1:E:587:ALA:HB2	2.35	0.62
2:F:71:PRO:O	2:F:75:THR:HG23	1.99	0.62
1:G:586:TYR:CE1	1:G:587:ALA:HB2	2.35	0.62
1:A:135:GLU:HB2	1:A:213:PRO:N	2.15	0.62
1:A:293:LEU:HD12	1:A:297:ALA:HB2	1.82	0.62
1:C:268:GLU:HG3	1:C:270:TYR:CE1	2.35	0.62
1:C:409:VAL:HB	1:C:412:ASP:OD1	1.99	0.62
1:C:586:TYR:CE1	1:C:587:ALA:HB2	2.34	0.62
1:C:705:LEU:HD23	1:C:710:VAL:HG21	1.80	0.62
1:G:36:TRP:NE1	1:G:78:MET:HG3	2.13	0.62
1:G:705:LEU:HD23	1:G:710:VAL:HG21	1.80	0.62
1:A:763:ASP:O	1:A:765:ASN:N	2.31	0.62
1:A:809:ARG:NH2	2:B:41:ASN:HD21	1.98	0.62
1:E:30:SER:O	1:E:32:LYS:HG2	2.00	0.62
1:E:381:ASN:HB2	1:E:385:GLN:HE21	1.65	0.62
1:E:705:LEU:HD23	1:E:710:VAL:HG21	1.80	0.62
1:G:268:GLU:HG3	1:G:270:TYR:CE1	2.35	0.62
1:G:302:ARG:HA	1:G:307:LEU:HD11	1.81	0.62
1:G:757:ILE:HA	1:G:760:LEU:HD12	1.81	0.62
2:H:71:PRO:O	2:H:75:THR:HG23	1.99	0.62
1:A:145:LYS:HG3	1:A:146:ARG:H	1.64	0.62
1:A:242:ASN:CB	1:A:245:SER:HB2	2.27	0.62
1:A:712:GLU:O	1:A:716:ILE:CD1	2.48	0.62
1:A:508:GLU:OE1	1:A:771:GLN:N	2.33	0.62
1:C:135:GLU:HB2	1:C:213:PRO:N	2.15	0.62
1:C:36:TRP:O	1:C:37:VAL:HG13	2.00	0.62
1:C:712:GLU:O	1:C:716:ILE:CD1	2.47	0.62
1:E:305:LEU:HB2	1:E:307:LEU:CD2	2.30	0.62
1:E:51:GLU:O	1:E:58:THR:HG23	1.98	0.62
1:G:513:ASN:HD21	1:G:515:ILE:HD11	1.65	0.62
1:G:712:GLU:O	1:G:716:ILE:CD1	2.47	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:513:ASN:HD21	1:A:515:ILE:HD11	1.65	0.62
1:C:298:SER:H	1:C:301:MET:CG	2.05	0.62
1:C:305:LEU:HB2	1:C:307:LEU:CD2	2.30	0.62
1:C:508:GLU:OE1	1:C:771:GLN:N	2.33	0.62
1:E:291:TYR:CD2	1:E:310:PHE:CE1	2.81	0.62
2:F:125:GLU:O	2:F:129:ALA:HB2	2.00	0.62
1:G:30:SER:O	1:G:32:LYS:HG2	2.00	0.62
1:A:287:PHE:HD1	1:A:287:PHE:H	1.47	0.61
1:A:446:VAL:HG12	1:A:447:ASN:N	2.15	0.61
1:C:223:GLN:HG2	1:C:342:MET:HA	1.81	0.61
1:E:268:GLU:HG3	1:E:270:TYR:CE1	2.34	0.61
1:E:508:GLU:OE1	1:E:771:GLN:N	2.33	0.61
1:G:135:GLU:HB2	1:G:213:PRO:N	2.15	0.61
1:A:747:MET:CG	1:G:812:PHE:CZ	2.83	0.61
2:D:125:GLU:O	2:D:129:ALA:HB2	1.99	0.61
1:E:145:LYS:HG3	1:E:146:ARG:H	1.64	0.61
1:E:490:GLN:CG	1:E:521:LEU:HD11	2.30	0.61
1:E:737:LEU:HD11	1:E:788:ARG:N	2.15	0.61
2:F:70:LEU:HG	2:F:74:GLN:HE21	1.65	0.61
1:G:547:PHE:CG	1:G:548:PRO:HD2	2.35	0.61
1:G:683:ARG:NH1	1:G:708:ASN:O	2.33	0.61
1:A:429:ALA:HA	1:A:432:LYS:HG2	1.82	0.61
1:A:482:ILE:HG22	1:A:483:ASN:OD1	2.00	0.61
1:A:586:TYR:CD1	1:A:587:ALA:N	2.68	0.61
1:A:630:ARG:NH2	1:A:657:ARG:HB2	2.13	0.61
1:C:293:LEU:HD12	1:C:297:ALA:HB2	1.82	0.61
1:C:381:ASN:HB2	1:C:385:GLN:HE21	1.65	0.61
1:C:482:ILE:HG22	1:C:483:ASN:OD1	2.00	0.61
1:C:490:GLN:HE21	1:C:494:ASN:ND2	1.87	0.61
1:C:513:ASN:HD21	1:C:515:ILE:HD11	1.65	0.61
1:E:226:GLN:C	1:E:229:PRO:HD2	2.20	0.61
1:E:535:PRO:HG2	1:E:540:LEU:HD21	1.81	0.61
1:G:36:TRP:O	1:G:37:VAL:HG13	2.00	0.61
1:A:395:VAL:HG23	1:A:396:THR:H	1.65	0.61
1:E:400:ARG:O	1:E:404:THR:N	2.32	0.61
1:E:513:ASN:HD21	1:E:515:ILE:HD11	1.65	0.61
1:G:381:ASN:HB2	1:G:385:GLN:HE21	1.65	0.61
1:G:490:GLN:CG	1:G:521:LEU:HD11	2.30	0.61
1:G:733:ARG:NH1	2:H:95:PHE:HA	2.14	0.61
1:A:36:TRP:NE1	1:A:78:MET:HG3	2.14	0.61
1:A:586:TYR:CE1	1:A:587:ALA:HB2	2.35	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:51:LEU:C	2:B:54:PRO:HD3	2.20	0.61
1:C:243:ASP:OD1	1:C:323:ILE:HG13	2.01	0.61
1:C:490:GLN:CG	1:C:521:LEU:HD11	2.30	0.61
1:E:12:PHE:CE2	1:E:131:PRO:CD	2.82	0.61
1:E:135:GLU:HB2	1:E:213:PRO:N	2.15	0.61
2:F:51:LEU:O	2:F:54:PRO:CD	2.39	0.61
1:G:226:GLN:C	1:G:229:PRO:HD2	2.21	0.61
1:G:223:GLN:HG2	1:G:342:MET:HA	1.81	0.61
1:A:354:ARG:HH11	1:A:354:ARG:HB3	1.64	0.61
1:A:547:PHE:CG	1:A:548:PRO:HD2	2.35	0.61
1:C:354:ARG:HH11	1:C:354:ARG:HB3	1.66	0.61
1:C:601:ASN:OD1	1:C:658:THR:OG1	2.17	0.61
1:E:482:ILE:HG22	1:E:483:ASN:OD1	2.00	0.61
1:A:164:MET:HE3	1:A:256:PHE:CE2	2.29	0.61
1:A:481:CYS:HA	1:A:484:TYR:HB3	1.83	0.61
1:A:511:GLU:CD	2:H:145:ARG:HH11	2.02	0.61
1:C:395:VAL:HG23	1:C:396:THR:H	1.66	0.61
1:C:547:PHE:CG	1:C:548:PRO:HD2	2.36	0.61
1:E:391:MET:HB3	1:E:393:ILE:HG13	1.83	0.61
1:G:242:ASN:CB	1:G:245:SER:HB2	2.27	0.61
1:G:777:ARG:HB3	1:G:780:VAL:HG21	1.82	0.61
1:A:557:GLU:HA	1:A:560:ILE:CD1	2.31	0.61
1:C:301:MET:HE1	1:C:353:LEU:HD13	1.83	0.61
1:C:490:GLN:HG2	1:C:586:TYR:CD2	2.36	0.61
2:D:40:GLN:OE1	2:D:40:GLN:HA	2.00	0.61
1:E:395:VAL:HG23	1:E:396:THR:H	1.66	0.61
1:E:547:PHE:CG	1:E:548:PRO:HD2	2.35	0.61
1:G:293:LEU:HD12	1:G:297:ALA:HB2	1.82	0.61
1:G:573:LYS:HE3	1:G:589:LYS:HZ3	1.66	0.61
1:G:780:VAL:O	1:G:784:LEU:HD23	2.00	0.61
2:H:125:GLU:O	2:H:129:ALA:HB2	1.99	0.61
1:A:305:LEU:HB2	1:A:307:LEU:CD2	2.30	0.61
1:A:683:ARG:NH1	1:A:708:ASN:O	2.34	0.61
1:C:79:ASN:ND2	1:C:92:LEU:HB3	2.15	0.61
2:D:85:PHE:HE1	2:D:145:ARG:CG	2.13	0.61
1:E:265:ALA:N	1:E:450:LEU:O	2.34	0.61
1:G:354:ARG:HH11	1:G:354:ARG:CB	2.13	0.61
1:G:482:ILE:HG22	1:G:483:ASN:OD1	2.00	0.61
1:G:517:PHE:HE2	1:G:715:ARG:HB3	1.66	0.61
1:A:801:ALA:HA	1:A:804:ARG:HD2	1.83	0.61
1:C:226:GLN:C	1:C:229:PRO:HD2	2.21	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:398:PHE:HE1	1:C:402:ILE:HD13	1.66	0.61
1:C:572:SER:HB2	1:C:580:GLU:O	2.01	0.61
1:C:737:LEU:HD11	1:C:788:ARG:N	2.16	0.61
1:E:429:ALA:HA	1:E:432:LYS:HG2	1.83	0.61
1:E:557:GLU:HA	1:E:560:ILE:CD1	2.31	0.61
1:A:305:LEU:HD22	1:A:354:ARG:HB3	1.83	0.60
1:C:683:ARG:NH1	1:C:708:ASN:O	2.33	0.60
1:E:36:TRP:O	1:E:37:VAL:HG13	2.00	0.60
1:E:683:ARG:NH1	1:E:708:ASN:O	2.34	0.60
1:G:308:GLU:N	1:G:313:TYR:OH	2.32	0.60
1:G:572:SER:HB2	1:G:580:GLU:O	2.01	0.60
1:G:609:VAL:HG23	1:G:612:LEU:HD23	1.83	0.60
2:H:40:GLN:HA	2:H:40:GLN:OE1	2.01	0.60
1:A:120:PHE:HD1	1:A:120:PHE:H	1.48	0.60
1:A:490:GLN:CG	1:A:521:LEU:HD11	2.30	0.60
1:A:517:PHE:HE2	1:A:715:ARG:HB3	1.66	0.60
1:A:601:ASN:OD1	1:A:658:THR:OG1	2.17	0.60
1:A:609:VAL:HG23	1:A:612:LEU:HD23	1.83	0.60
1:C:429:ALA:HA	1:C:432:LYS:HG2	1.83	0.60
2:D:35:MET:HG2	2:D:69:PHE:CZ	2.36	0.60
1:E:753:CYS:HG	1:E:774:ILE:HD11	1.65	0.60
1:E:789:ASP:HA	1:E:792:ILE:HD11	1.81	0.60
1:E:801:ALA:HA	1:E:804:ARG:HD2	1.83	0.60
1:G:305:LEU:HD22	1:G:354:ARG:HB3	1.83	0.60
1:A:354:ARG:HH11	1:A:354:ARG:CB	2.14	0.60
1:A:36:TRP:O	1:A:37:VAL:HG13	2.00	0.60
2:B:12:LYS:O	2:B:16:GLN:CG	2.42	0.60
1:C:145:LYS:HG3	1:C:146:ARG:H	1.64	0.60
1:C:286:THR:HB	1:C:290:PHE:CD2	2.36	0.60
1:C:446:VAL:HG12	1:C:447:ASN:N	2.17	0.60
1:C:527:LEU:HD12	1:C:566:HIS:CG	2.37	0.60
1:G:391:MET:HB3	1:G:393:ILE:HG13	1.83	0.60
1:G:395:VAL:HG23	1:G:396:THR:H	1.66	0.60
1:G:601:ASN:OD1	1:G:658:THR:OG1	2.17	0.60
1:A:286:THR:HB	1:A:290:PHE:CD2	2.37	0.60
1:A:30:SER:O	1:A:32:LYS:HG2	2.00	0.60
1:A:400:ARG:O	1:A:404:THR:N	2.32	0.60
2:B:70:LEU:HG	2:B:74:GLN:HE21	1.65	0.60
1:C:391:MET:HB3	1:C:393:ILE:HG13	1.83	0.60
1:E:354:ARG:HB3	1:E:354:ARG:HH11	1.66	0.60
1:E:757:ILE:HA	1:E:760:LEU:HD12	1.82	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:763:ASP:O	1:E:765:ASN:N	2.31	0.60
1:E:786:GLU:O	1:E:790:LEU:HD13	2.02	0.60
1:G:44:PHE:CD2	1:G:101:LEU:HD22	2.35	0.60
2:H:70:LEU:HG	2:H:74:GLN:HE21	1.65	0.60
1:A:226:GLN:C	1:A:229:PRO:HD2	2.21	0.60
1:A:226:GLN:HG2	1:A:338:ALA:HA	1.84	0.60
1:A:381:ASN:HB2	1:A:385:GLN:HE21	1.65	0.60
1:A:572:SER:HB2	1:A:580:GLU:O	2.01	0.60
1:A:735:GLU:OE2	1:A:756:MET:HE1	2.01	0.60
1:C:30:SER:O	1:C:32:LYS:HG2	2.00	0.60
1:G:527:LEU:HD12	1:G:566:HIS:CG	2.37	0.60
1:G:737:LEU:HD11	1:G:788:ARG:N	2.16	0.60
1:G:786:GLU:O	1:G:790:LEU:HD13	2.02	0.60
1:A:243:ASP:OD1	1:A:323:ILE:HG13	2.01	0.60
1:A:434:LYS:HG3	1:A:625:TRP:HZ2	1.66	0.60
1:C:786:GLU:O	1:C:790:LEU:HD13	2.01	0.60
2:D:113:VAL:HG13	2:D:119:MET:O	2.02	0.60
1:E:305:LEU:HD22	1:E:354:ARG:HB3	1.82	0.60
1:E:527:LEU:HD12	1:E:566:HIS:CG	2.37	0.60
2:H:35:MET:HG2	2:H:69:PHE:CZ	2.36	0.60
1:A:285:ARG:HB3	1:A:291:TYR:OH	2.02	0.60
1:C:420:LYS:O	1:C:423:ALA:HB3	2.02	0.60
1:C:557:GLU:HA	1:C:560:ILE:CD1	2.31	0.60
1:E:495:HIS:HA	1:E:499:ILE:HD12	1.84	0.60
1:E:609:VAL:HG23	1:E:612:LEU:HD23	1.83	0.60
1:G:429:ALA:HA	1:G:432:LYS:HG2	1.83	0.60
2:B:41:ASN:N	2:B:42:PRO:HD3	2.17	0.60
2:B:35:MET:HG2	2:B:69:PHE:CZ	2.37	0.60
1:C:287:PHE:HD1	1:C:287:PHE:H	1.46	0.60
1:E:572:SER:HB2	1:E:580:GLU:O	2.01	0.60
1:G:286:THR:HB	1:G:290:PHE:CD2	2.36	0.60
1:G:490:GLN:HG2	1:G:586:TYR:CD2	2.36	0.60
1:G:510:ILE:CD1	1:G:512:TRP:HB2	2.32	0.60
1:A:614:ASN:OD1	1:A:628:VAL:CG1	2.50	0.60
2:B:40:GLN:C	2:B:42:PRO:HD3	2.22	0.60
1:C:305:LEU:HD22	1:C:354:ARG:HB3	1.83	0.60
1:C:609:VAL:HG23	1:C:612:LEU:HD23	1.83	0.60
1:C:799:PHE:CE1	2:D:144:VAL:HG13	2.37	0.60
1:E:243:ASP:OD1	1:E:323:ILE:HG13	2.01	0.60
1:E:420:LYS:O	1:E:423:ALA:HB3	2.02	0.60
1:E:446:VAL:HG12	1:E:447:ASN:N	2.16	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:398:PHE:HE1	1:G:402:ILE:HD13	1.66	0.60
1:G:56:GLU:HG3	1:G:71:SER:HA	1.84	0.60
1:G:735:GLU:OE2	1:G:756:MET:HE1	2.02	0.60
1:G:799:PHE:CE1	2:H:144:VAL:HG13	2.37	0.60
2:H:113:VAL:HG13	2:H:119:MET:O	2.02	0.60
1:A:420:LYS:O	1:A:423:ALA:HB3	2.02	0.60
1:A:737:LEU:HD11	1:A:788:ARG:N	2.16	0.60
1:A:757:ILE:HA	1:A:760:LEU:HD12	1.82	0.60
1:A:799:PHE:CE1	2:B:144:VAL:HG13	2.37	0.60
1:A:816:GLN:HA	1:A:819:LEU:HD23	1.84	0.60
2:B:51:LEU:O	2:B:54:PRO:CD	2.37	0.60
1:E:226:GLN:HG2	1:E:338:ALA:HA	1.83	0.60
1:E:339:MET:O	1:E:342:MET:HB2	2.02	0.60
1:E:56:GLU:HG3	1:E:71:SER:HA	1.84	0.60
1:E:614:ASN:OD1	1:E:628:VAL:CG1	2.50	0.60
2:F:35:MET:HG2	2:F:69:PHE:CZ	2.36	0.60
1:G:420:LYS:O	1:G:423:ALA:HB3	2.02	0.60
1:G:614:ASN:OD1	1:G:628:VAL:CG1	2.50	0.60
1:A:573:LYS:HE3	1:A:589:LYS:HZ3	1.67	0.59
1:C:265:ALA:N	1:C:450:LEU:O	2.33	0.59
2:D:70:LEU:HG	2:D:74:GLN:HE21	1.65	0.59
1:E:12:PHE:HB3	1:E:132:ILE:HG22	1.81	0.59
1:E:286:THR:HB	1:E:290:PHE:CD2	2.36	0.59
1:E:517:PHE:HE2	1:E:715:ARG:HB3	1.66	0.59
2:F:51:LEU:C	2:F:54:PRO:HD3	2.21	0.59
1:G:243:ASP:OD1	1:G:323:ILE:HG13	2.01	0.59
1:G:327:GLN:HB3	1:G:330:GLU:CD	2.22	0.59
2:H:51:LEU:O	2:H:54:PRO:CD	2.39	0.59
1:A:510:ILE:CD1	1:A:512:TRP:HB2	2.32	0.59
2:B:85:PHE:O	2:B:89:VAL:HG22	2.02	0.59
1:C:285:ARG:HB3	1:C:291:TYR:OH	2.02	0.59
1:C:339:MET:O	1:C:342:MET:HB2	2.02	0.59
1:E:490:GLN:HG2	1:E:586:TYR:CD2	2.36	0.59
2:F:113:VAL:HG13	2:F:119:MET:O	2.02	0.59
1:G:446:VAL:HG12	1:G:447:ASN:N	2.16	0.59
1:G:557:GLU:HA	1:G:560:ILE:CD1	2.31	0.59
1:G:816:GLN:HA	1:G:819:LEU:HD23	1.84	0.59
2:H:8:THR:O	2:H:11:PHE:HB2	2.02	0.59
1:A:268:GLU:HG3	1:A:270:TYR:CE1	2.36	0.59
1:A:527:LEU:HD12	1:A:566:HIS:CG	2.37	0.59
1:C:361:GLN:HE22	1:C:386:LYS:HD3	1.68	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:8:THR:O	2:D:11:PHE:HB2	2.02	0.59
1:E:481:CYS:HA	1:E:484:TYR:HB3	1.84	0.59
2:B:113:VAL:HG13	2:B:119:MET:O	2.02	0.59
1:C:327:GLN:HB3	1:C:330:GLU:CD	2.22	0.59
1:C:226:GLN:HG2	1:C:338:ALA:HA	1.83	0.59
1:E:298:SER:H	1:E:301:MET:CG	2.06	0.59
1:E:799:PHE:CE1	2:F:144:VAL:HG13	2.37	0.59
1:A:327:GLN:HB3	1:A:330:GLU:CD	2.23	0.59
1:A:339:MET:O	1:A:342:MET:HB2	2.03	0.59
1:A:490:GLN:HG2	1:A:586:TYR:CD2	2.37	0.59
1:E:357:SER:HA	1:E:360:LEU:HD12	1.85	0.59
1:G:285:ARG:HB3	1:G:291:TYR:OH	2.02	0.59
1:G:298:SER:H	1:G:301:MET:CG	2.05	0.59
1:G:226:GLN:HG2	1:G:338:ALA:HA	1.83	0.59
1:G:481:CYS:HA	1:G:484:TYR:HB3	1.84	0.59
1:G:61:LEU:CD1	1:G:63:GLU:HB3	2.33	0.59
1:A:819:LEU:HD12	1:A:820:GLY:N	2.17	0.59
1:C:614:ASN:OD1	1:C:628:VAL:CG1	2.50	0.59
1:E:419:THR:O	1:E:423:ALA:HB2	2.02	0.59
1:E:510:ILE:CD1	1:E:512:TRP:HB2	2.32	0.59
1:E:819:LEU:HG	1:E:820:GLY:H	1.68	0.59
1:G:403:LEU:O	1:G:405:PRO:HD3	2.03	0.59
1:A:56:GLU:HG3	1:A:71:SER:HA	1.84	0.59
2:B:50:VAL:HG12	2:B:72:MET:HG2	1.84	0.59
1:C:242:ASN:CB	1:C:245:SER:HB2	2.27	0.59
1:C:510:ILE:CD1	1:C:512:TRP:HB2	2.32	0.59
2:F:89:VAL:HG23	2:F:90:GLU:N	2.18	0.59
1:G:278:ILE:HG21	1:G:432:LYS:NZ	2.18	0.59
1:G:265:ALA:N	1:G:450:LEU:O	2.33	0.59
1:G:801:ALA:HA	1:G:804:ARG:HD2	1.83	0.59
1:A:419:THR:O	1:A:423:ALA:HB2	2.03	0.59
2:B:12:LYS:CB	2:B:66:PHE:CE2	2.85	0.59
1:C:79:ASN:HD21	1:C:94:CYS:H	1.51	0.59
1:E:242:ASN:CB	1:E:245:SER:HB2	2.27	0.59
1:E:354:ARG:CB	1:E:354:ARG:HH11	2.16	0.59
1:E:403:LEU:O	1:E:405:PRO:HD3	2.03	0.59
1:E:816:GLN:HA	1:E:819:LEU:HD23	1.85	0.59
1:E:819:LEU:HD12	1:E:820:GLY:N	2.18	0.59
2:F:9:ALA:HA	2:F:12:LYS:NZ	2.18	0.59
1:C:481:CYS:HA	1:C:484:TYR:HB3	1.83	0.59
1:C:517:PHE:HE2	1:C:715:ARG:HB3	1.66	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:61:LEU:CD1	1:C:63:GLU:HB3	2.33	0.59
2:D:85:PHE:O	2:D:89:VAL:HG22	2.03	0.59
1:E:61:LEU:CD1	1:E:63:GLU:HB3	2.33	0.59
2:F:8:THR:O	2:F:11:PHE:HB2	2.02	0.59
1:G:339:MET:O	1:G:342:MET:HB2	2.02	0.59
1:G:596:ALA:HA	1:G:599:THR:OG1	2.03	0.59
2:B:28:TYR:CE2	2:B:62:LYS:HE3	2.38	0.59
1:C:495:HIS:HA	1:C:499:ILE:HD12	1.85	0.59
1:C:801:ALA:HA	1:C:804:ARG:HD2	1.83	0.59
2:F:44:ASN:CB	2:F:117:GLU:OE1	2.48	0.59
1:C:419:THR:O	1:C:423:ALA:HB2	2.02	0.58
2:D:9:ALA:HA	2:D:12:LYS:NZ	2.17	0.58
2:D:51:LEU:O	2:D:54:PRO:CD	2.39	0.58
1:E:285:ARG:HB3	1:E:291:TYR:OH	2.01	0.58
1:A:361:GLN:HE22	1:A:386:LYS:HD3	1.68	0.58
1:A:786:GLU:O	1:A:790:LEU:HD13	2.01	0.58
2:B:89:VAL:HG23	2:B:90:GLU:N	2.17	0.58
1:C:403:LEU:O	1:C:405:PRO:HD3	2.03	0.58
1:E:197:VAL:O	1:E:197:VAL:HG12	2.03	0.58
1:E:29:TRP:CD1	1:E:30:SER:N	2.71	0.58
1:G:120:PHE:HD1	1:G:120:PHE:H	1.49	0.58
1:G:196:VAL:HG12	1:G:217:TYR:HE2	1.68	0.58
1:G:29:TRP:CD1	1:G:30:SER:N	2.71	0.58
1:G:502:GLN:HG3	1:G:512:TRP:NE1	2.17	0.58
1:G:585:HIS:HB2	1:G:588:GLY:O	2.03	0.58
1:C:120:PHE:H	1:C:120:PHE:HD1	1.50	0.58
1:C:196:VAL:HG12	1:C:217:TYR:HE2	1.68	0.58
1:C:354:ARG:HH11	1:C:354:ARG:CB	2.15	0.58
2:D:10:GLU:HA	2:D:13:GLU:HG3	1.85	0.58
1:A:197:VAL:O	1:A:197:VAL:HG12	2.03	0.58
1:A:315:PHE:HE2	1:A:359:VAL:O	1.86	0.58
1:A:357:SER:HA	1:A:360:LEU:HD12	1.84	0.58
1:C:315:PHE:HE2	1:C:359:VAL:O	1.86	0.58
1:C:56:GLU:HG3	1:C:71:SER:HA	1.84	0.58
2:D:89:VAL:HG23	2:D:90:GLU:N	2.18	0.58
1:E:85:LYS:HG2	1:E:106:GLU:HB3	1.86	0.58
1:E:502:GLN:HA	1:E:505:TYR:CD2	2.39	0.58
1:E:777:ARG:HB3	1:E:780:VAL:CG2	2.34	0.58
2:F:65:LYS:CB	2:F:68:GLN:HG3	2.26	0.58
1:G:607:ASP:HB3	1:G:631:ILE:HG22	1.85	0.58
2:H:89:VAL:HG23	2:H:90:GLU:N	2.18	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:585:HIS:HB2	1:C:588:GLY:O	2.03	0.58
1:C:816:GLN:HA	1:C:819:LEU:HD23	1.84	0.58
2:D:51:LEU:C	2:D:54:PRO:HD3	2.21	0.58
1:E:398:PHE:HE1	1:E:402:ILE:HD13	1.66	0.58
1:E:485:THR:CG2	1:E:667:LEU:HD11	2.33	0.58
1:G:419:THR:O	1:G:423:ALA:HB2	2.02	0.58
1:A:398:PHE:HE1	1:A:402:ILE:HD13	1.67	0.58
1:A:819:LEU:HG	1:A:820:GLY:H	1.68	0.58
2:B:9:ALA:HA	2:B:12:LYS:NZ	2.17	0.58
2:B:8:THR:O	2:B:11:PHE:HB2	2.02	0.58
1:E:97:GLU:CD	1:E:706:ARG:HD2	2.24	0.58
1:A:403:LEU:O	1:A:405:PRO:HD3	2.03	0.58
1:C:29:TRP:CD1	1:C:30:SER:N	2.71	0.58
1:C:777:ARG:HB3	1:C:780:VAL:CG2	2.34	0.58
1:E:327:GLN:HB3	1:E:330:GLU:CD	2.22	0.58
2:F:40:GLN:NE2	2:F:77:ALA:HA	2.19	0.58
2:F:12:LYS:CB	2:F:66:PHE:CE2	2.85	0.58
1:G:502:GLN:HA	1:G:505:TYR:CD2	2.39	0.58
1:G:659:VAL:HG12	1:G:660:GLY:N	2.19	0.58
1:G:819:LEU:HG	1:G:820:GLY:H	1.69	0.58
1:A:29:TRP:CD1	1:A:30:SER:N	2.71	0.58
1:A:607:ASP:HB3	1:A:631:ILE:HG22	1.86	0.58
1:C:333:GLN:O	1:C:337:GLU:CG	2.46	0.58
1:C:97:GLU:CD	1:C:706:ARG:HD2	2.24	0.58
1:E:271:LEU:HD23	1:E:271:LEU:N	2.19	0.58
1:E:369:LYS:CG	1:E:369:LYS:O	2.52	0.58
1:E:607:ASP:HB3	1:E:631:ILE:HG22	1.85	0.58
2:F:113:VAL:HG21	2:F:124:VAL:HG21	1.86	0.58
1:G:97:GLU:CD	1:G:706:ARG:HD2	2.24	0.58
1:G:769:ILE:HD11	1:G:774:ILE:HD13	1.86	0.58
1:G:819:LEU:HD12	1:G:820:GLY:N	2.18	0.58
2:H:55:LYS:O	2:H:59:MET:HG2	2.03	0.58
1:A:61:LEU:CD1	1:A:63:GLU:HB3	2.33	0.58
1:A:777:ARG:HB3	1:A:780:VAL:CG2	2.34	0.58
2:B:55:LYS:O	2:B:59:MET:HG2	2.04	0.58
1:E:196:VAL:HG12	1:E:217:TYR:HE2	1.68	0.58
1:G:164:MET:HE3	1:G:256:PHE:CE2	2.32	0.58
1:G:283:ASP:H	1:G:318:ASN:ND2	2.02	0.58
1:G:361:GLN:HE22	1:G:386:LYS:HD3	1.68	0.58
1:G:489:LEU:CD1	1:G:492:LEU:HD23	2.34	0.58
1:A:747:MET:CG	1:G:816:GLN:OE1	2.51	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:140:TYR:O	2:H:142:GLU:N	2.37	0.58
1:A:754:ILE:HG12	2:H:150:GLY:O	2.04	0.58
1:A:391:MET:HB3	1:A:393:ILE:HG13	1.84	0.58
1:A:489:LEU:CD1	1:A:492:LEU:HD23	2.34	0.58
2:B:10:GLU:HA	2:B:13:GLU:HG3	1.86	0.58
2:B:65:LYS:CB	2:B:68:GLN:HG3	2.26	0.58
1:C:502:GLN:HA	1:C:505:TYR:CD2	2.39	0.58
1:C:607:ASP:HB3	1:C:631:ILE:HG22	1.85	0.58
2:D:28:TYR:CE2	2:D:62:LYS:HE3	2.39	0.58
2:D:65:LYS:CB	2:D:68:GLN:HG3	2.26	0.58
1:E:361:GLN:HE22	1:E:386:LYS:HD3	1.68	0.58
2:F:55:LYS:O	2:F:59:MET:HG2	2.03	0.58
1:A:747:MET:HG3	1:G:812:PHE:CZ	2.38	0.58
2:H:113:VAL:HG21	2:H:124:VAL:HG21	1.86	0.58
1:A:196:VAL:HG12	1:A:217:TYR:HE2	1.68	0.57
1:E:278:ILE:HG21	1:E:432:LYS:NZ	2.19	0.57
1:E:470:GLU:HB2	1:E:472:PHE:CE1	2.39	0.57
1:E:585:HIS:HB2	1:E:588:GLY:O	2.03	0.57
1:E:596:ALA:HA	1:E:599:THR:OG1	2.04	0.57
1:G:286:THR:HB	1:G:290:PHE:HD2	1.69	0.57
2:H:10:GLU:HA	2:H:13:GLU:HG3	1.86	0.57
1:A:502:GLN:HA	1:A:505:TYR:CD2	2.39	0.57
1:C:103:ASN:O	1:C:107:ARG:HG3	2.04	0.57
1:C:596:ALA:HA	1:C:599:THR:OG1	2.04	0.57
1:C:769:ILE:HD11	1:C:774:ILE:HD13	1.86	0.57
1:C:819:LEU:HG	1:C:820:GLY:H	1.70	0.57
1:E:607:ASP:HB3	1:E:631:ILE:CG2	2.34	0.57
1:G:607:ASP:HB3	1:G:631:ILE:CG2	2.34	0.57
2:H:131:HIS:CB	2:H:138:ILE:HG23	2.34	0.57
2:H:40:GLN:NE2	2:H:77:ALA:HA	2.18	0.57
2:B:131:HIS:CB	2:B:138:ILE:HG23	2.34	0.57
1:C:278:ILE:HG21	1:C:432:LYS:NZ	2.19	0.57
1:C:607:ASP:HB3	1:C:631:ILE:CG2	2.34	0.57
2:D:40:GLN:NE2	2:D:77:ALA:HA	2.19	0.57
1:E:286:THR:HB	1:E:290:PHE:HD2	1.69	0.57
1:E:315:PHE:HE2	1:E:359:VAL:O	1.86	0.57
1:E:489:LEU:CD1	1:E:492:LEU:HD23	2.34	0.57
1:E:769:ILE:HD11	1:E:774:ILE:HD13	1.86	0.57
1:G:254:ILE:CG2	1:G:262:ILE:HG12	2.35	0.57
1:G:368:LYS:HZ3	1:G:379:PRO:CG	2.17	0.57
1:G:495:HIS:HA	1:G:499:ILE:HD12	1.85	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:28:TYR:CE2	2:H:62:LYS:HE3	2.39	0.57
1:C:164:MET:HE1	1:C:256:PHE:CE2	2.38	0.57
2:F:131:HIS:CB	2:F:138:ILE:HG23	2.34	0.57
2:F:10:GLU:HA	2:F:13:GLU:HG3	1.85	0.57
2:F:28:TYR:CE2	2:F:62:LYS:HE3	2.39	0.57
1:G:197:VAL:HG12	1:G:197:VAL:O	2.04	0.57
1:G:357:SER:HA	1:G:360:LEU:HD12	1.86	0.57
1:G:777:ARG:HB3	1:G:780:VAL:CG2	2.34	0.57
1:A:369:LYS:O	1:A:369:LYS:CG	2.52	0.57
1:A:582:CYS:HA	1:A:590:VAL:O	2.04	0.57
1:A:585:HIS:HB2	1:A:588:GLY:O	2.04	0.57
1:C:435:PHE:O	1:C:438:LEU:HB3	2.05	0.57
1:C:582:CYS:HA	1:C:590:VAL:O	2.04	0.57
2:F:140:TYR:O	2:F:142:GLU:N	2.37	0.57
1:G:470:GLU:HB2	1:G:472:PHE:CE1	2.39	0.57
1:G:95:LEU:HD11	1:G:714:ILE:HG21	1.87	0.57
1:A:103:ASN:O	1:A:107:ARG:HG3	2.04	0.57
1:C:254:ILE:CG2	1:C:262:ILE:HG12	2.35	0.57
1:C:610:THR:CG2	1:C:628:VAL:HG21	2.35	0.57
1:C:819:LEU:HD12	1:C:820:GLY:N	2.18	0.57
1:G:271:LEU:N	1:G:271:LEU:HD23	2.20	0.57
1:G:446:VAL:HG13	1:G:450:LEU:HD21	1.86	0.57
1:G:582:CYS:HA	1:G:590:VAL:O	2.05	0.57
2:H:75:THR:HA	2:H:78:LYS:HD3	1.87	0.57
1:A:254:ILE:CG2	1:A:262:ILE:HG12	2.35	0.57
1:A:407:ILE:HG22	1:A:408:LYS:N	2.19	0.57
1:A:502:GLN:CG	1:A:512:TRP:HE1	2.17	0.57
1:A:97:GLU:CD	1:A:706:ARG:HD2	2.24	0.57
2:B:140:TYR:O	2:B:142:GLU:N	2.37	0.57
1:C:475:ASN:ND2	1:C:591:THR:O	2.38	0.57
1:E:475:ASN:ND2	1:E:591:THR:O	2.38	0.57
1:E:610:THR:CG2	1:E:628:VAL:HG21	2.35	0.57
1:G:369:LYS:CG	1:G:369:LYS:O	2.52	0.57
1:G:253:ARG:HG3	1:G:460:PHE:CD1	2.40	0.57
2:H:12:LYS:CB	2:H:66:PHE:CE2	2.85	0.57
1:A:495:HIS:HA	1:A:499:ILE:HD12	1.86	0.57
1:C:659:VAL:HG12	1:C:660:GLY:N	2.19	0.57
1:C:95:LEU:HD11	1:C:714:ILE:HG21	1.87	0.57
2:D:12:LYS:CB	2:D:66:PHE:CE2	2.85	0.57
1:E:254:ILE:CG2	1:E:262:ILE:HG12	2.35	0.57
1:E:819:LEU:HG	1:E:820:GLY:N	2.20	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:70:LEU:HB3	2:F:71:PRO:HD3	1.87	0.57
2:H:51:LEU:C	2:H:54:PRO:HD3	2.21	0.57
1:A:713:GLY:HA2	1:A:716:ILE:HD12	1.87	0.57
2:D:70:LEU:HB3	2:D:71:PRO:HD3	1.87	0.57
1:G:407:ILE:HG22	1:G:408:LYS:N	2.20	0.57
1:A:485:THR:CG2	1:A:667:LEU:HD11	2.33	0.57
1:A:607:ASP:HB3	1:A:631:ILE:CG2	2.34	0.57
1:C:605:LEU:HD21	1:C:631:ILE:HG23	1.87	0.57
2:D:55:LYS:O	2:D:59:MET:HG2	2.03	0.57
1:E:96:ASN:HB2	1:E:99:SER:H	1.69	0.57
1:G:728:GLN:HE21	1:G:728:GLN:HA	1.70	0.57
2:H:70:LEU:HB3	2:H:71:PRO:HD3	1.87	0.57
1:A:630:ARG:CZ	1:A:656:PHE:HB3	2.35	0.56
1:C:250:LYS:HE2	1:C:465:ASP:CB	2.35	0.56
1:C:97:GLU:OE2	1:C:706:ARG:HD2	2.05	0.56
1:C:757:ILE:HG23	1:C:762:LEU:HB2	1.87	0.56
2:D:9:ALA:HA	2:D:12:LYS:CD	2.35	0.56
1:E:368:LYS:NZ	1:E:379:PRO:CG	2.68	0.56
1:G:315:PHE:HE2	1:G:359:VAL:O	1.86	0.56
1:G:435:PHE:O	1:G:438:LEU:HB3	2.05	0.56
1:A:475:ASN:ND2	1:A:591:THR:O	2.38	0.56
1:A:610:THR:CG2	1:A:628:VAL:HG21	2.35	0.56
1:C:238:LYS:HD3	1:C:285:ARG:HD3	1.87	0.56
2:D:140:TYR:O	2:D:142:GLU:N	2.37	0.56
1:E:13:LEU:HD21	1:E:132:ILE:HB	1.87	0.56
1:G:12:PHE:O	1:G:112:LEU:HD23	2.05	0.56
1:G:610:THR:CG2	1:G:628:VAL:HG21	2.35	0.56
1:G:715:ARG:O	1:G:719:GLN:CB	2.53	0.56
1:G:757:ILE:HG23	1:G:762:LEU:HB2	1.88	0.56
2:H:74:GLN:O	2:H:78:LYS:CG	2.51	0.56
1:A:13:LEU:HD21	1:A:132:ILE:HB	1.87	0.56
1:A:271:LEU:N	1:A:271:LEU:HD23	2.20	0.56
1:A:30:SER:HA	1:A:32:LYS:HE2	1.88	0.56
1:A:596:ALA:HA	1:A:599:THR:OG1	2.05	0.56
1:A:659:VAL:HG12	1:A:660:GLY:N	2.19	0.56
1:A:728:GLN:HG3	1:A:729:GLU:N	2.20	0.56
1:A:743:PRO:HB2	1:G:816:GLN:HB3	1.85	0.56
2:B:75:THR:HA	2:B:78:LYS:HD3	1.88	0.56
1:C:234:PHE:CD2	1:C:289:ILE:HG12	2.41	0.56
1:C:358:SER:HA	1:C:390:LEU:HD12	1.88	0.56
1:C:368:LYS:HZ3	1:C:379:PRO:CG	2.18	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:485:THR:CG2	1:C:667:LEU:HD11	2.33	0.56
1:C:58:THR:HA	1:C:69:THR:OG1	2.05	0.56
1:E:394:ASN:HB3	1:E:397:ASP:HB2	1.87	0.56
1:E:253:ARG:HG3	1:E:460:PHE:CD1	2.41	0.56
2:F:109:ARG:O	2:F:113:VAL:HG23	2.05	0.56
1:G:103:ASN:O	1:G:107:ARG:HG3	2.04	0.56
1:G:817:GLN:CD	1:G:818:GLN:N	2.59	0.56
2:H:50:VAL:HG12	2:H:72:MET:HG2	1.87	0.56
1:A:769:ILE:HD11	1:A:774:ILE:HD13	1.86	0.56
2:B:109:ARG:O	2:B:113:VAL:HG23	2.06	0.56
1:C:186:ASN:O	1:C:190:VAL:HG23	2.06	0.56
1:C:197:VAL:O	1:C:197:VAL:HG12	2.04	0.56
1:C:30:SER:HA	1:C:32:LYS:HE2	1.88	0.56
1:C:446:VAL:HG13	1:C:450:LEU:HD21	1.87	0.56
1:C:489:LEU:CD1	1:C:492:LEU:HD23	2.34	0.56
1:C:815:ARG:O	1:C:818:GLN:HG3	2.06	0.56
1:C:816:GLN:NE2	2:D:17:LEU:CD2	2.68	0.56
2:F:40:GLN:C	2:F:42:PRO:HD3	2.25	0.56
1:G:279:ARG:NH2	1:G:428:GLU:HG3	2.21	0.56
1:G:97:GLU:OE2	1:G:706:ARG:HD2	2.05	0.56
1:A:308:GLU:N	1:A:313:TYR:OH	2.33	0.56
1:A:394:ASN:HB3	1:A:397:ASP:HB2	1.86	0.56
1:A:446:VAL:HG13	1:A:450:LEU:HD21	1.87	0.56
1:C:407:ILE:HG22	1:C:408:LYS:N	2.20	0.56
1:C:470:GLU:HB2	1:C:472:PHE:CE1	2.39	0.56
1:C:715:ARG:O	1:C:719:GLN:CB	2.53	0.56
2:D:40:GLN:C	2:D:42:PRO:HD3	2.26	0.56
2:D:65:LYS:H	2:D:68:GLN:NE2	2.03	0.56
1:E:95:LEU:HD11	1:E:714:ILE:HG21	1.87	0.56
1:G:394:ASN:HB3	1:G:397:ASP:HB2	1.86	0.56
1:G:815:ARG:O	1:G:818:GLN:HG3	2.06	0.56
1:A:286:THR:HB	1:A:290:PHE:HD2	1.69	0.56
1:A:58:THR:HA	1:A:69:THR:OG1	2.06	0.56
2:B:113:VAL:HG21	2:B:124:VAL:HG21	1.86	0.56
1:C:271:LEU:HD23	1:C:271:LEU:N	2.20	0.56
1:C:285:ARG:HB3	1:C:291:TYR:CZ	2.41	0.56
1:C:369:LYS:CG	1:C:369:LYS:O	2.52	0.56
1:C:728:GLN:HA	1:C:728:GLN:HE21	1.70	0.56
2:D:75:THR:HA	2:D:78:LYS:HD3	1.87	0.56
1:E:103:ASN:O	1:E:107:ARG:HG3	2.05	0.56
1:E:446:VAL:HG13	1:E:450:LEU:HD21	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:713:GLY:HA2	1:E:716:ILE:HD12	1.87	0.56
1:E:815:ARG:O	1:E:818:GLN:HG3	2.06	0.56
1:G:287:PHE:N	1:G:287:PHE:CD1	2.73	0.56
1:A:238:LYS:HD3	1:A:285:ARG:HD3	1.87	0.56
1:A:278:ILE:HG21	1:A:432:LYS:NZ	2.20	0.56
1:A:819:LEU:HG	1:A:820:GLY:N	2.21	0.56
1:C:357:SER:HA	1:C:360:LEU:HD12	1.86	0.56
1:C:95:LEU:HD12	1:C:718:ARG:HE	1.70	0.56
1:E:279:ARG:NH2	1:E:428:GLU:HG3	2.21	0.56
1:E:407:ILE:HG22	1:E:408:LYS:N	2.19	0.56
1:E:522:GLN:OE1	1:E:522:GLN:HA	2.06	0.56
1:E:58:THR:HA	1:E:69:THR:OG1	2.05	0.56
1:G:475:ASN:ND2	1:G:591:THR:O	2.38	0.56
1:G:533:ASN:O	1:G:534:PRO:C	2.44	0.56
1:G:58:THR:HA	1:G:69:THR:OG1	2.05	0.56
2:H:40:GLN:C	2:H:42:PRO:HD3	2.26	0.56
1:A:605:LEU:HD21	1:A:631:ILE:HG23	1.87	0.56
1:A:712:GLU:CD	1:A:712:GLU:H	2.08	0.56
1:A:728:GLN:HA	1:A:728:GLN:HE21	1.70	0.56
2:B:65:LYS:H	2:B:68:GLN:NE2	2.03	0.56
1:C:328:ASP:HA	1:C:331:MET:CB	2.28	0.56
1:C:279:ARG:NH2	1:C:428:GLU:HG3	2.21	0.56
2:D:131:HIS:CB	2:D:138:ILE:HG23	2.34	0.56
1:E:120:PHE:HD1	1:E:120:PHE:H	1.48	0.56
1:E:582:CYS:HA	1:E:590:VAL:O	2.05	0.56
1:E:605:LEU:HD21	1:E:631:ILE:HG23	1.87	0.56
1:E:630:ARG:CZ	1:E:656:PHE:HB3	2.35	0.56
1:E:97:GLU:OE2	1:E:706:ARG:HD2	2.05	0.56
1:E:715:ARG:O	1:E:719:GLN:CB	2.53	0.56
1:G:95:LEU:HD12	1:G:718:ARG:HE	1.70	0.56
1:A:502:GLN:HG3	1:A:512:TRP:NE1	2.17	0.56
1:A:57:VAL:O	1:A:69:THR:HG23	2.06	0.56
1:A:728:GLN:CA	1:A:728:GLN:HE21	2.19	0.56
1:A:757:ILE:HG23	1:A:762:LEU:HB2	1.87	0.56
1:C:286:THR:HB	1:C:290:PHE:HD2	1.69	0.56
1:C:293:LEU:HD11	1:C:301:MET:HE1	1.88	0.56
1:C:283:ASP:H	1:C:318:ASN:ND2	2.02	0.56
1:C:609:VAL:O	1:C:612:LEU:HB3	2.06	0.56
1:C:79:ASN:ND2	1:C:94:CYS:H	2.04	0.56
1:E:57:VAL:O	1:E:69:THR:HG23	2.06	0.56
1:E:713:GLY:HA2	1:E:716:ILE:CD1	2.36	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:285:ARG:HB3	1:G:291:TYR:CZ	2.41	0.56
1:G:547:PHE:CE2	1:G:549:LYS:HB3	2.32	0.56
1:G:57:VAL:O	1:G:69:THR:HG23	2.06	0.56
1:G:36:TRP:NE1	1:G:78:MET:HA	2.21	0.56
1:G:819:LEU:HG	1:G:820:GLY:N	2.21	0.56
1:A:234:PHE:CD2	1:A:289:ILE:HG12	2.41	0.56
1:A:736:ILE:HG23	1:A:737:LEU:HD23	1.88	0.56
1:A:96:ASN:HB2	1:A:99:SER:H	1.71	0.56
1:C:253:ARG:HG3	1:C:460:PHE:CD1	2.40	0.56
1:C:26:GLN:O	1:C:29:TRP:HB3	2.06	0.56
1:C:712:GLU:CD	1:C:712:GLU:H	2.08	0.56
1:C:817:GLN:CD	1:C:818:GLN:N	2.59	0.56
1:E:186:ASN:O	1:E:190:VAL:HG23	2.06	0.56
1:E:659:VAL:HG12	1:E:660:GLY:N	2.20	0.56
1:E:712:GLU:CD	1:E:712:GLU:H	2.08	0.56
2:F:41:ASN:N	2:F:42:PRO:HD3	2.20	0.56
2:F:9:ALA:HA	2:F:12:LYS:CD	2.35	0.56
1:G:368:LYS:NZ	1:G:379:PRO:CG	2.68	0.56
1:G:609:VAL:O	1:G:612:LEU:HB3	2.06	0.56
1:G:485:THR:CG2	1:G:667:LEU:HD11	2.33	0.56
1:G:728:GLN:HG3	1:G:729:GLU:N	2.20	0.56
1:A:285:ARG:HB3	1:A:291:TYR:CZ	2.41	0.56
1:A:470:GLU:HB2	1:A:472:PHE:CE1	2.39	0.56
1:A:58:THR:HA	1:A:69:THR:HG23	1.86	0.56
1:A:663:TYR:CZ	1:A:667:LEU:HD13	2.41	0.56
2:B:74:GLN:O	2:B:78:LYS:CG	2.51	0.56
1:C:56:GLU:HA	1:C:71:SER:HA	1.89	0.56
2:D:113:VAL:HG21	2:D:124:VAL:HG21	1.86	0.56
2:D:109:ARG:O	2:D:113:VAL:HG23	2.06	0.56
2:D:46:GLU:O	2:D:50:VAL:HG23	2.06	0.56
2:D:50:VAL:HG12	2:D:72:MET:HG2	1.87	0.56
1:E:130:LEU:N	1:E:130:LEU:HD23	2.21	0.56
1:E:308:GLU:N	1:E:313:TYR:OH	2.31	0.56
1:E:95:LEU:HD12	1:E:718:ARG:HE	1.70	0.56
2:F:75:THR:HA	2:F:78:LYS:HD3	1.87	0.56
1:G:605:LEU:HD21	1:G:631:ILE:HG23	1.87	0.56
1:G:58:THR:HA	1:G:69:THR:HG23	1.87	0.56
2:H:109:ARG:O	2:H:113:VAL:HG23	2.06	0.56
2:H:9:ALA:HA	2:H:12:LYS:NZ	2.19	0.56
1:A:186:ASN:O	1:A:190:VAL:HG23	2.06	0.55
1:A:250:LYS:HE2	1:A:465:ASP:CB	2.35	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:279:ARG:NH2	1:A:428:GLU:HG3	2.21	0.55
1:C:394:ASN:HB3	1:C:397:ASP:HB2	1.86	0.55
1:C:736:ILE:HG23	1:C:737:LEU:HD23	1.88	0.55
2:D:41:ASN:N	2:D:42:PRO:HD3	2.20	0.55
1:E:36:TRP:NE1	1:E:78:MET:HA	2.21	0.55
1:E:435:PHE:O	1:E:438:LEU:HB3	2.05	0.55
1:E:58:THR:HA	1:E:69:THR:HG23	1.87	0.55
2:F:74:GLN:O	2:F:78:LYS:CG	2.51	0.55
1:G:163:SER:O	1:G:167:ASP:OD1	2.24	0.55
1:G:52:GLU:HA	1:G:57:VAL:HG22	1.88	0.55
1:G:712:GLU:H	1:G:712:GLU:CD	2.08	0.55
2:H:41:ASN:N	2:H:42:PRO:HD3	2.21	0.55
1:A:283:ASP:H	1:A:318:ASN:ND2	2.04	0.55
1:A:715:ARG:O	1:A:719:GLN:CB	2.54	0.55
1:C:293:LEU:HD11	1:C:301:MET:CE	2.37	0.55
1:C:57:VAL:O	1:C:69:THR:HG23	2.06	0.55
1:C:819:LEU:HG	1:C:820:GLY:N	2.21	0.55
1:E:285:ARG:HB3	1:E:291:TYR:CZ	2.41	0.55
1:E:817:GLN:CD	1:E:818:GLN:N	2.59	0.55
2:F:46:GLU:O	2:F:50:VAL:HG23	2.06	0.55
2:F:65:LYS:H	2:F:68:GLN:NE2	2.03	0.55
1:G:164:MET:HE1	1:G:256:PHE:CE2	2.41	0.55
1:G:234:PHE:CD2	1:G:289:ILE:HG12	2.40	0.55
1:A:253:ARG:HG3	1:A:460:PHE:CD1	2.40	0.55
2:B:41:ASN:N	2:B:42:PRO:CD	2.69	0.55
1:C:522:GLN:OE1	1:C:522:GLN:HA	2.06	0.55
1:C:728:GLN:HG3	1:C:729:GLU:N	2.20	0.55
1:E:272:LEU:HD22	1:E:439:PHE:CD2	2.41	0.55
1:E:283:ASP:H	1:E:318:ASN:ND2	2.04	0.55
1:E:234:PHE:CD2	1:E:289:ILE:HG12	2.40	0.55
1:E:30:SER:HA	1:E:32:LYS:HE2	1.88	0.55
2:F:50:VAL:HG12	2:F:72:MET:HG2	1.87	0.55
1:G:30:SER:HA	1:G:32:LYS:HE2	1.88	0.55
1:G:469:PHE:CE1	1:G:587:ALA:HB3	2.42	0.55
1:G:96:ASN:HB2	1:G:99:SER:H	1.71	0.55
1:A:435:PHE:O	1:A:438:LEU:HB3	2.05	0.55
1:A:609:VAL:HG23	1:A:612:LEU:CD2	2.37	0.55
1:A:97:GLU:OE2	1:A:706:ARG:HD2	2.05	0.55
1:C:305:LEU:CD2	1:C:354:ARG:HB3	2.37	0.55
1:C:187:THR:HG23	1:C:463:ILE:HG22	1.88	0.55
1:E:315:PHE:CE2	1:E:359:VAL:O	2.60	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:421:GLU:HB2	1:E:422:GLN:HE21	1.71	0.55
1:E:728:GLN:HG3	1:E:729:GLU:N	2.20	0.55
1:G:250:LYS:HE2	1:G:465:ASP:CB	2.35	0.55
1:G:609:VAL:HG23	1:G:612:LEU:CD2	2.37	0.55
1:G:630:ARG:CZ	1:G:656:PHE:HB3	2.36	0.55
2:H:87:ASP:O	2:H:90:GLU:HB3	2.07	0.55
1:A:491:GLN:OE1	1:A:521:LEU:HG	2.07	0.55
2:B:9:ALA:HA	2:B:12:LYS:CD	2.36	0.55
1:C:421:GLU:HB2	1:C:422:GLN:HE21	1.71	0.55
1:C:58:THR:HA	1:C:69:THR:HG23	1.86	0.55
1:E:187:THR:HG23	1:E:463:ILE:HG22	1.87	0.55
1:E:736:ILE:HG23	1:E:737:LEU:HD23	1.88	0.55
2:F:69:PHE:CE1	2:F:73:MET:HG2	2.41	0.55
1:G:223:GLN:O	1:G:226:GLN:N	2.37	0.55
1:G:305:LEU:CD2	1:G:354:ARG:HB3	2.37	0.55
1:G:358:SER:HA	1:G:390:LEU:HD12	1.88	0.55
1:A:745:GLY:CA	1:G:816:GLN:NE2	2.69	0.55
2:H:12:LYS:HB3	2:H:66:PHE:CD2	2.42	0.55
1:A:293:LEU:HD11	1:A:301:MET:CE	2.37	0.55
2:B:70:LEU:HB3	2:B:71:PRO:HD3	1.88	0.55
1:C:272:LEU:HD22	1:C:439:PHE:CD2	2.41	0.55
1:C:630:ARG:CZ	1:C:656:PHE:HB3	2.36	0.55
1:E:728:GLN:HE21	1:E:728:GLN:HA	1.70	0.55
1:G:272:LEU:HD22	1:G:439:PHE:CD2	2.41	0.55
1:G:315:PHE:CE2	1:G:359:VAL:O	2.60	0.55
1:G:421:GLU:HB2	1:G:422:GLN:HE21	1.71	0.55
1:A:26:GLN:O	1:A:29:TRP:HB3	2.06	0.55
1:A:358:SER:HA	1:A:390:LEU:HD12	1.87	0.55
1:A:421:GLU:HB2	1:A:422:GLN:HE21	1.71	0.55
1:A:269:THR:HB	1:A:443:LEU:CD1	2.37	0.55
1:A:607:ASP:CA	1:A:610:THR:HB	2.37	0.55
1:A:817:GLN:CD	1:A:818:GLN:N	2.60	0.55
2:D:18:PHE:CE2	2:D:34:VAL:HA	2.42	0.55
1:E:238:LYS:HD3	1:E:285:ARG:HD3	1.87	0.55
1:E:469:PHE:CE1	1:E:587:ALA:HB3	2.42	0.55
1:E:502:GLN:HA	1:E:505:TYR:HD2	1.72	0.55
1:E:533:ASN:O	1:E:534:PRO:C	2.43	0.55
2:F:65:LYS:HB2	2:F:68:GLN:CG	2.30	0.55
1:G:130:LEU:N	1:G:130:LEU:HD23	2.22	0.55
1:G:713:GLY:HA2	1:G:716:ILE:HD12	1.88	0.55
2:H:46:GLU:O	2:H:50:VAL:HG23	2.06	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:236:ASN:ND2	1:A:246:SER:HA	2.21	0.55
1:A:333:GLN:O	1:A:337:GLU:CG	2.47	0.55
1:A:437:ARG:HB3	1:A:624:LEU:HD23	1.89	0.55
1:A:36:TRP:NE1	1:A:78:MET:HA	2.21	0.55
1:C:12:PHE:CD2	1:C:131:PRO:HD2	2.42	0.55
1:C:313:TYR:CE2	1:C:360:LEU:HB3	2.42	0.55
1:C:36:TRP:NE1	1:C:78:MET:HA	2.21	0.55
1:C:663:TYR:CZ	1:C:667:LEU:HD13	2.41	0.55
1:E:305:LEU:CD2	1:E:354:ARG:HB3	2.37	0.55
1:E:609:VAL:HG23	1:E:612:LEU:CD2	2.37	0.55
2:F:87:ASP:O	2:F:90:GLU:HB3	2.06	0.55
1:G:26:GLN:O	1:G:29:TRP:HB3	2.06	0.55
1:G:663:TYR:CZ	1:G:667:LEU:HD13	2.41	0.55
1:G:64:ASN:C	1:G:66:LYS:H	2.11	0.55
2:B:28:TYR:HB2	2:B:62:LYS:CB	2.36	0.55
1:C:64:ASN:C	1:C:66:LYS:H	2.11	0.55
1:C:728:GLN:CA	1:C:728:GLN:HE21	2.19	0.55
1:E:278:ILE:HG21	1:E:428:GLU:HG2	1.89	0.55
1:E:437:ARG:HB3	1:E:624:LEU:HD23	1.89	0.55
1:G:186:ASN:O	1:G:190:VAL:HG23	2.06	0.55
1:G:238:LYS:HD3	1:G:285:ARG:HD3	1.87	0.55
1:G:313:TYR:CE2	1:G:360:LEU:HB3	2.42	0.55
2:H:18:PHE:CE2	2:H:34:VAL:HA	2.42	0.55
2:H:4:SER:H	2:H:7:GLN:NE2	2.03	0.55
1:A:713:GLY:HA2	1:A:716:ILE:CD1	2.37	0.55
1:A:95:LEU:HD11	1:A:714:ILE:HG21	1.87	0.55
1:C:236:ASN:ND2	1:C:246:SER:HA	2.22	0.55
1:C:735:GLU:HG3	1:C:756:MET:HE1	1.85	0.55
1:E:145:LYS:CG	1:E:146:ARG:N	2.70	0.55
1:E:333:GLN:O	1:E:337:GLU:CG	2.46	0.55
1:E:250:LYS:HE2	1:E:465:ASP:CB	2.36	0.55
1:E:502:GLN:HG3	1:E:512:TRP:NE1	2.17	0.55
1:E:502:GLN:CG	1:E:512:TRP:HE1	2.17	0.55
1:E:663:TYR:CZ	1:E:667:LEU:HD13	2.41	0.55
1:E:793:THR:O	1:E:796:ILE:HB	2.07	0.55
2:F:4:SER:H	2:F:7:GLN:NE2	2.05	0.55
1:G:522:GLN:HA	1:G:522:GLN:OE1	2.06	0.55
1:A:128:LYS:HG2	1:A:129:GLN:H	1.72	0.54
1:A:368:LYS:NZ	1:A:379:PRO:CG	2.69	0.54
1:A:490:GLN:HE21	1:A:494:ASN:ND2	1.88	0.54
1:A:819:LEU:CG	1:A:820:GLY:N	2.70	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:278:ILE:HG21	1:C:428:GLU:HG2	1.89	0.54
1:C:308:GLU:N	1:C:313:TYR:OH	2.32	0.54
1:C:609:VAL:HG23	1:C:612:LEU:CD2	2.37	0.54
2:D:69:PHE:CE1	2:D:73:MET:HG2	2.42	0.54
1:E:13:LEU:CD1	1:E:137:ILE:HG23	2.37	0.54
1:E:147:HIS:ND1	1:E:148:GLU:N	2.55	0.54
1:E:328:ASP:HA	1:E:331:MET:CB	2.28	0.54
1:E:728:GLN:HE21	1:E:728:GLN:CA	2.19	0.54
2:F:84:CYS:O	2:F:85:PHE:C	2.45	0.54
1:G:328:ASP:HA	1:G:331:MET:CB	2.29	0.54
1:G:69:THR:O	1:G:70:LEU:HG	2.08	0.54
1:A:56:GLU:HA	1:A:71:SER:HA	1.88	0.54
1:A:815:ARG:O	1:A:818:GLN:HG3	2.06	0.54
1:C:368:LYS:NZ	1:C:379:PRO:CG	2.68	0.54
1:C:502:GLN:HA	1:C:505:TYR:HD2	1.72	0.54
1:C:713:GLY:HA2	1:C:716:ILE:HD12	1.88	0.54
1:E:128:LYS:HG2	1:E:129:GLN:H	1.72	0.54
1:E:26:GLN:O	1:E:29:TRP:HB3	2.06	0.54
1:E:491:GLN:OE1	1:E:521:LEU:HG	2.07	0.54
1:E:52:GLU:HA	1:E:57:VAL:HG22	1.89	0.54
1:E:757:ILE:HG23	1:E:762:LEU:HB2	1.87	0.54
1:G:236:ASN:ND2	1:G:246:SER:HA	2.22	0.54
1:G:187:THR:HG23	1:G:463:ILE:HG22	1.88	0.54
2:H:69:PHE:CE1	2:H:73:MET:HG2	2.41	0.54
1:A:272:LEU:HD22	1:A:439:PHE:CD2	2.41	0.54
1:A:287:PHE:N	1:A:287:PHE:CD1	2.75	0.54
1:A:305:LEU:HD22	1:A:354:ARG:CA	2.37	0.54
2:B:69:PHE:CE1	2:B:73:MET:HG2	2.42	0.54
1:C:23:PRO:O	1:C:27:ALA:HB2	2.08	0.54
1:C:369:LYS:O	1:C:369:LYS:HG3	2.07	0.54
1:C:44:PHE:CD1	1:C:98:ALA:HB2	2.43	0.54
1:C:495:HIS:O	1:C:499:ILE:HB	2.08	0.54
1:C:96:ASN:HB2	1:C:99:SER:H	1.71	0.54
1:E:108:TYR:HE1	1:E:126:PRO:HA	1.72	0.54
1:G:35:VAL:O	1:G:46:ALA:HA	2.07	0.54
1:G:56:GLU:HA	1:G:71:SER:HA	1.88	0.54
1:A:302:ARG:NH1	1:A:302:ARG:HB2	2.23	0.54
1:A:609:VAL:O	1:A:612:LEU:HB3	2.06	0.54
2:B:12:LYS:HB3	2:B:66:PHE:CD2	2.42	0.54
1:C:164:MET:HE1	1:C:256:PHE:HE2	1.70	0.54
1:C:35:VAL:O	1:C:46:ALA:HA	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:703:GLU:OE1	1:C:706:ARG:HB2	2.08	0.54
1:E:133:TYR:HB3	1:E:154:TYR:OH	2.08	0.54
1:G:125:ASN:HB3	1:G:687:PRO:CD	2.37	0.54
1:G:114:TYR:CZ	1:G:153:ILE:HB	2.43	0.54
1:G:491:GLN:OE1	1:G:521:LEU:HG	2.07	0.54
1:G:502:GLN:CG	1:G:512:TRP:HE1	2.17	0.54
1:A:147:HIS:ND1	1:A:148:GLU:N	2.56	0.54
1:A:301:MET:HE1	1:A:353:LEU:HD13	1.88	0.54
1:A:35:VAL:O	1:A:46:ALA:HA	2.07	0.54
1:A:187:THR:HG23	1:A:463:ILE:HG22	1.88	0.54
1:A:109:PHE:HE1	1:A:694:GLY:O	1.90	0.54
1:A:796:ILE:O	1:A:800:GLN:HB2	2.08	0.54
2:B:65:LYS:HB2	2:B:68:GLN:CG	2.30	0.54
2:B:40:GLN:NE2	2:B:77:ALA:HA	2.22	0.54
2:B:87:ASP:O	2:B:90:GLU:HB3	2.08	0.54
1:C:223:GLN:O	1:C:226:GLN:N	2.37	0.54
2:D:40:GLN:HE21	2:D:77:ALA:HA	1.72	0.54
2:D:87:ASP:O	2:D:90:GLU:HB3	2.08	0.54
1:E:161:TYR:CZ	1:E:165:LEU:HD11	2.42	0.54
1:E:287:PHE:CD1	1:E:287:PHE:N	2.73	0.54
1:E:418:GLN:HB3	1:E:422:GLN:HB2	1.90	0.54
1:E:812:PHE:CE1	2:F:17:LEU:HD21	2.41	0.54
2:F:18:PHE:CE2	2:F:34:VAL:HA	2.42	0.54
1:G:736:ILE:HG23	1:G:737:LEU:HD23	1.88	0.54
2:H:17:LEU:HD12	2:H:17:LEU:O	2.08	0.54
2:H:9:ALA:HA	2:H:12:LYS:CD	2.36	0.54
1:A:305:LEU:CD2	1:A:354:ARG:HB3	2.37	0.54
2:B:46:GLU:O	2:B:50:VAL:HG23	2.07	0.54
1:C:533:ASN:O	1:C:534:PRO:C	2.44	0.54
1:C:469:PHE:CE1	1:C:587:ALA:HB3	2.42	0.54
1:C:613:LEU:HD13	1:C:625:TRP:CE2	2.43	0.54
1:C:437:ARG:HB3	1:C:624:LEU:HD23	1.89	0.54
2:D:17:LEU:O	2:D:17:LEU:HD12	2.08	0.54
1:E:489:LEU:C	1:E:489:LEU:HD12	2.28	0.54
1:E:437:ARG:NE	1:E:625:TRP:HA	2.23	0.54
1:E:703:GLU:OE1	1:E:706:ARG:HB2	2.08	0.54
1:E:56:GLU:HA	1:E:71:SER:HA	1.89	0.54
1:G:796:ILE:O	1:G:800:GLN:HB2	2.07	0.54
1:A:133:TYR:HB3	1:A:154:TYR:OH	2.08	0.54
1:A:437:ARG:NE	1:A:625:TRP:HA	2.23	0.54
1:A:553:THR:O	1:A:555:PHE:N	2.40	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:498:PHE:HD1	1:A:716:ILE:CD1	2.21	0.54
1:C:147:HIS:ND1	1:C:148:GLU:N	2.56	0.54
1:G:301:MET:HE1	1:G:353:LEU:HD13	1.90	0.54
1:G:278:ILE:HG21	1:G:428:GLU:HG2	1.90	0.54
1:G:728:GLN:CA	1:G:728:GLN:HE21	2.19	0.54
1:G:793:THR:O	1:G:796:ILE:HB	2.07	0.54
2:H:97:LYS:HB3	2:H:100:ASN:OD1	2.08	0.54
1:A:130:LEU:N	1:A:130:LEU:HD23	2.22	0.54
1:A:173:ILE:HA	1:A:680:ASN:O	2.08	0.54
1:A:369:LYS:HG3	1:A:369:LYS:O	2.07	0.54
1:A:495:HIS:O	1:A:499:ILE:HB	2.08	0.54
2:B:121:GLU:CD	2:B:121:GLU:H	2.11	0.54
2:B:40:GLN:HE21	2:B:77:ALA:HA	1.73	0.54
1:C:491:GLN:OE1	1:C:521:LEU:HG	2.07	0.54
1:C:793:THR:O	1:C:796:ILE:HB	2.07	0.54
2:D:12:LYS:HB3	2:D:66:PHE:CD2	2.42	0.54
1:E:182:GLY:O	1:E:184:THR:N	2.41	0.54
1:E:495:HIS:O	1:E:499:ILE:HB	2.08	0.54
1:E:77:LYS:HD2	1:E:96:ASN:ND2	2.12	0.54
1:G:133:TYR:HB3	1:G:154:TYR:OH	2.08	0.54
1:G:283:ASP:N	1:G:318:ASN:HD21	2.06	0.54
1:G:323:ILE:CG2	1:G:326:GLN:HB3	2.34	0.54
1:G:365:ILE:HG21	1:G:427:ILE:HD13	1.90	0.54
1:G:369:LYS:HG3	1:G:369:LYS:O	2.07	0.54
1:G:512:TRP:CG	1:G:513:ASN:N	2.76	0.54
1:G:437:ARG:HB3	1:G:624:LEU:HD23	1.89	0.54
1:G:713:GLY:HA2	1:G:716:ILE:CD1	2.37	0.54
2:H:40:GLN:HE21	2:H:77:ALA:HA	1.72	0.54
1:A:228:ASN:N	1:A:229:PRO:CD	2.71	0.54
1:A:315:PHE:CE2	1:A:359:VAL:O	2.60	0.54
1:A:313:TYR:CE2	1:A:360:LEU:HB3	2.42	0.54
1:A:365:ILE:HG21	1:A:427:ILE:HD13	1.90	0.54
1:A:522:GLN:HA	1:A:522:GLN:OE1	2.07	0.54
1:C:130:LEU:HD23	1:C:130:LEU:N	2.23	0.54
1:C:76:GLN:HG2	1:C:96:ASN:ND2	2.23	0.54
1:E:609:VAL:O	1:E:612:LEU:HB3	2.06	0.54
1:E:796:ILE:O	1:E:800:GLN:HB2	2.08	0.54
2:F:121:GLU:CD	2:F:121:GLU:H	2.11	0.54
2:F:12:LYS:HB3	2:F:66:PHE:CD2	2.42	0.54
2:F:40:GLN:HE21	2:F:77:ALA:HA	1.72	0.54
1:A:125:ASN:HB3	1:A:687:PRO:CD	2.37	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:276:ARG:O	1:A:280:GLN:HG3	2.08	0.54
1:A:23:PRO:O	1:A:27:ALA:HB2	2.08	0.54
2:B:85:PHE:CE1	2:B:145:ARG:HG2	2.43	0.54
1:C:109:PHE:HE1	1:C:694:GLY:O	1.90	0.54
1:E:176:THR:O	1:E:183:LYS:HD3	2.08	0.54
1:E:369:LYS:HG3	1:E:369:LYS:O	2.07	0.54
1:E:819:LEU:CG	1:E:820:GLY:N	2.70	0.54
1:G:145:LYS:CG	1:G:146:ARG:N	2.71	0.54
2:H:65:LYS:H	2:H:68:GLN:NE2	2.04	0.54
1:A:176:THR:O	1:A:183:LYS:HD3	2.08	0.53
1:A:186:ASN:N	1:A:186:ASN:HD22	2.06	0.53
1:A:298:SER:H	1:A:301:MET:CG	2.07	0.53
1:A:69:THR:O	1:A:70:LEU:HG	2.08	0.53
1:A:79:ASN:ND2	1:A:94:CYS:H	2.04	0.53
1:C:302:ARG:NH1	1:C:302:ARG:HB2	2.23	0.53
1:C:315:PHE:CE2	1:C:359:VAL:O	2.60	0.53
1:C:365:ILE:HG21	1:C:427:ILE:HD13	1.90	0.53
1:C:69:THR:O	1:C:70:LEU:HG	2.08	0.53
1:C:796:ILE:O	1:C:800:GLN:HB2	2.08	0.53
1:E:358:SER:HA	1:E:390:LEU:HD12	1.89	0.53
1:E:35:VAL:O	1:E:46:ALA:HA	2.07	0.53
1:E:313:TYR:CE2	1:E:360:LEU:HB3	2.42	0.53
1:E:108:TYR:CD2	1:E:696:LEU:HD13	2.43	0.53
2:F:97:LYS:N	2:F:100:ASN:HD21	2.06	0.53
1:G:108:TYR:HE1	1:G:126:PRO:HA	1.73	0.53
1:G:495:HIS:O	1:G:499:ILE:HB	2.08	0.53
1:G:614:ASN:OD1	1:G:628:VAL:HG12	2.09	0.53
1:G:108:TYR:CD2	1:G:696:LEU:HD13	2.43	0.53
2:H:121:GLU:H	2:H:121:GLU:CD	2.11	0.53
1:A:153:ILE:HG21	1:A:189:LYS:CB	2.39	0.53
1:C:145:LYS:CG	1:C:146:ARG:N	2.71	0.53
1:C:133:TYR:HB3	1:C:154:TYR:OH	2.08	0.53
1:C:161:TYR:CZ	1:C:165:LEU:HD11	2.42	0.53
1:C:337:GLU:O	1:C:340:THR:OG1	2.26	0.53
1:C:279:ARG:HH21	1:C:428:GLU:HG3	1.74	0.53
1:C:498:PHE:HD1	1:C:716:ILE:CD1	2.21	0.53
1:E:302:ARG:HB2	1:E:302:ARG:NH1	2.22	0.53
1:E:173:ILE:HA	1:E:680:ASN:O	2.08	0.53
1:G:153:ILE:HG21	1:G:189:LYS:CB	2.39	0.53
1:G:276:ARG:O	1:G:280:GLN:HG3	2.09	0.53
1:G:23:PRO:O	1:G:27:ALA:HB2	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:663:TYR:OH	1:G:667:LEU:HD13	2.09	0.53
1:A:524:CYS:CB	1:A:568:LYS:HG3	2.39	0.53
1:A:469:PHE:CE1	1:A:587:ALA:HB3	2.43	0.53
1:A:793:THR:O	1:A:796:ILE:HB	2.07	0.53
1:C:108:TYR:HE1	1:C:126:PRO:HA	1.73	0.53
1:C:297:ALA:HA	1:C:301:MET:SD	2.48	0.53
1:C:502:GLN:HG3	1:C:512:TRP:NE1	2.17	0.53
1:C:79:ASN:OD1	1:C:93:THR:OG1	2.26	0.53
1:E:307:LEU:HA	1:E:313:TYR:OH	2.08	0.53
1:E:524:CYS:CB	1:E:568:LYS:HG3	2.39	0.53
1:E:498:PHE:HD1	1:E:716:ILE:CD1	2.21	0.53
1:G:161:TYR:CZ	1:G:165:LEU:HD11	2.43	0.53
1:G:293:LEU:HD11	1:G:301:MET:CE	2.37	0.53
1:G:305:LEU:HD22	1:G:354:ARG:CA	2.38	0.53
1:G:553:THR:O	1:G:555:PHE:N	2.41	0.53
1:G:109:PHE:HE1	1:G:694:GLY:O	1.91	0.53
2:H:64:LEU:HD11	2:H:72:MET:HE1	1.90	0.53
1:A:573:LYS:CE	1:A:589:LYS:HZ3	2.22	0.53
1:A:64:ASN:C	1:A:66:LYS:H	2.11	0.53
1:A:809:ARG:NH2	2:B:41:ASN:ND2	2.56	0.53
1:C:153:ILE:HG21	1:C:189:LYS:CB	2.39	0.53
1:C:164:MET:HE3	1:C:256:PHE:CE2	2.36	0.53
1:C:274:LYS:C	1:C:276:ARG:H	2.11	0.53
1:C:287:PHE:CD1	1:C:287:PHE:N	2.73	0.53
1:C:52:GLU:HA	1:C:57:VAL:HG22	1.89	0.53
2:D:97:LYS:N	2:D:100:ASN:HD21	2.06	0.53
2:D:25:LYS:HE3	2:D:65:LYS:HZ3	1.72	0.53
2:D:97:LYS:HB3	2:D:100:ASN:OD1	2.08	0.53
1:E:421:GLU:O	1:E:424:ASP:N	2.42	0.53
1:E:553:THR:O	1:E:555:PHE:N	2.41	0.53
1:E:77:LYS:NZ	1:E:96:ASN:ND2	2.56	0.53
1:E:182:GLY:H	4:E:998:ADP:PB	2.31	0.53
1:G:279:ARG:HH21	1:G:428:GLU:HG3	1.74	0.53
1:G:418:GLN:HB3	1:G:422:GLN:HB2	1.90	0.53
1:G:573:LYS:CE	1:G:589:LYS:HZ3	2.22	0.53
1:A:279:ARG:HH21	1:A:428:GLU:HG3	1.74	0.53
1:A:512:TRP:CG	1:A:513:ASN:N	2.76	0.53
1:A:108:TYR:CD2	1:A:696:LEU:HD13	2.43	0.53
2:B:17:LEU:O	2:B:17:LEU:HD12	2.08	0.53
1:C:128:LYS:HG2	1:C:129:GLN:H	1.73	0.53
1:C:182:GLY:O	1:C:184:THR:N	2.42	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:269:THR:HB	1:C:443:LEU:CD1	2.37	0.53
1:C:305:LEU:HD22	1:C:354:ARG:CA	2.38	0.53
1:C:763:ASP:C	1:C:765:ASN:H	2.12	0.53
2:D:41:ASN:N	2:D:42:PRO:CD	2.72	0.53
1:E:274:LYS:C	1:E:276:ARG:H	2.12	0.53
1:E:305:LEU:HD22	1:E:354:ARG:CA	2.38	0.53
1:E:64:ASN:C	1:E:66:LYS:H	2.11	0.53
1:G:64:ASN:C	1:G:66:LYS:N	2.62	0.53
1:G:173:ILE:HA	1:G:680:ASN:O	2.09	0.53
1:G:703:GLU:OE1	1:G:706:ARG:HB2	2.08	0.53
1:A:223:GLN:O	1:A:226:GLN:N	2.38	0.53
1:A:663:TYR:CZ	1:A:667:LEU:HD22	2.43	0.53
2:B:18:PHE:CE2	2:B:34:VAL:HA	2.44	0.53
1:E:236:ASN:ND2	1:E:246:SER:HA	2.23	0.53
1:E:293:LEU:HD11	1:E:301:MET:CE	2.37	0.53
1:E:663:TYR:CZ	1:E:667:LEU:HD22	2.44	0.53
1:E:69:THR:O	1:E:70:LEU:HG	2.07	0.53
2:F:97:LYS:HB3	2:F:100:ASN:OD1	2.08	0.53
1:G:147:HIS:ND1	1:G:148:GLU:N	2.56	0.53
1:G:176:THR:O	1:G:183:LYS:HD3	2.08	0.53
1:A:108:TYR:HE1	1:A:126:PRO:HA	1.72	0.53
1:A:145:LYS:CG	1:A:146:ARG:N	2.71	0.53
1:A:161:TYR:CZ	1:A:165:LEU:HD11	2.43	0.53
1:A:174:LEU:HD12	1:A:681:PHE:CE1	2.44	0.53
1:A:418:GLN:HB3	1:A:422:GLN:HB2	1.90	0.53
1:A:663:TYR:OH	1:A:667:LEU:HD13	2.08	0.53
1:A:703:GLU:OE1	1:A:706:ARG:HB2	2.08	0.53
1:A:731:ARG:HH12	1:A:752:ALA:HB1	1.74	0.53
2:B:86:GLU:CD	2:B:86:GLU:H	2.12	0.53
1:C:125:ASN:HB3	1:C:687:PRO:CD	2.38	0.53
1:C:176:THR:O	1:C:183:LYS:HD3	2.08	0.53
1:C:512:TRP:CG	1:C:513:ASN:N	2.76	0.53
1:C:174:LEU:HD12	1:C:681:PHE:CE1	2.44	0.53
1:E:512:TRP:CG	1:E:513:ASN:N	2.76	0.53
1:E:613:LEU:HD13	1:E:625:TRP:CE2	2.43	0.53
1:E:663:TYR:OH	1:E:667:LEU:HD13	2.08	0.53
2:F:31:CYS:O	2:F:35:MET:HG3	2.09	0.53
1:G:226:GLN:HA	1:G:229:PRO:HG3	1.90	0.53
1:G:302:ARG:NH1	1:G:302:ARG:HB2	2.23	0.53
1:G:490:GLN:HE21	1:G:494:ASN:ND2	1.87	0.53
1:G:524:CYS:CB	1:G:568:LYS:HG3	2.39	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:498:PHE:HD1	1:G:716:ILE:CD1	2.21	0.53
1:A:95:LEU:HD12	1:A:718:ARG:HE	1.73	0.53
2:B:43:THR:O	2:B:47:VAL:HG22	2.08	0.53
1:C:182:GLY:H	4:C:998:ADP:PB	2.32	0.53
1:C:283:ASP:N	1:C:318:ASN:HD21	2.06	0.53
1:C:553:THR:O	1:C:555:PHE:N	2.41	0.53
2:D:121:GLU:CD	2:D:121:GLU:H	2.11	0.53
1:E:152:HIS:CE1	1:E:154:TYR:CD2	2.97	0.53
1:E:165:LEU:HD21	1:E:260:GLY:CA	2.38	0.53
1:E:337:GLU:O	1:E:340:THR:OG1	2.26	0.53
1:E:301:MET:HE1	1:E:353:LEU:HD13	1.91	0.53
1:E:109:PHE:HE1	1:E:694:GLY:O	1.91	0.53
1:G:502:GLN:HA	1:G:505:TYR:HD2	1.73	0.53
1:G:819:LEU:CG	1:G:820:GLY:N	2.71	0.53
1:A:163:SER:O	1:A:167:ASP:OD1	2.27	0.53
1:A:226:GLN:HA	1:A:229:PRO:HG3	1.90	0.53
1:A:323:ILE:CG2	1:A:326:GLN:HB3	2.34	0.53
1:A:278:ILE:HG21	1:A:428:GLU:HG2	1.90	0.53
1:A:487:GLU:HG3	1:A:521:LEU:HD13	1.91	0.53
1:A:533:ASN:O	1:A:534:PRO:C	2.45	0.53
1:A:52:GLU:HA	1:A:57:VAL:HG22	1.89	0.53
1:A:763:ASP:C	1:A:765:ASN:H	2.12	0.53
1:C:418:GLN:HB3	1:C:422:GLN:HB2	1.90	0.53
1:C:108:TYR:CD2	1:C:696:LEU:HD13	2.43	0.53
1:C:713:GLY:HA2	1:C:716:ILE:CD1	2.38	0.53
1:C:735:GLU:OE2	1:C:756:MET:HE1	2.09	0.53
1:E:153:ILE:HG21	1:E:189:LYS:CB	2.39	0.53
1:E:226:GLN:HA	1:E:229:PRO:CG	2.39	0.53
1:E:226:GLN:HA	1:E:229:PRO:HG3	1.90	0.53
1:E:276:ARG:O	1:E:280:GLN:HG3	2.08	0.53
1:E:365:ILE:HG21	1:E:427:ILE:HD13	1.90	0.53
1:E:573:LYS:CE	1:E:589:LYS:HZ3	2.22	0.53
2:F:17:LEU:HD12	2:F:17:LEU:O	2.08	0.53
1:G:223:GLN:C	1:G:225:LEU:N	2.62	0.53
1:G:228:ASN:N	1:G:229:PRO:CD	2.72	0.53
1:G:31:ALA:C	1:G:33:LYS:H	2.12	0.53
1:G:663:TYR:CZ	1:G:667:LEU:HD22	2.43	0.53
1:G:174:LEU:HD12	1:G:681:PHE:CE1	2.44	0.53
1:A:7:SER:N	1:A:10:GLU:OE1	2.42	0.53
1:A:307:LEU:HA	1:A:313:TYR:OH	2.09	0.53
1:A:31:ALA:C	1:A:33:LYS:H	2.12	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:51:LEU:C	2:B:53:ASN:H	2.12	0.53
1:C:223:GLN:C	1:C:225:LEU:N	2.62	0.53
2:D:4:SER:H	2:D:7:GLN:NE2	2.05	0.53
1:E:186:ASN:N	1:E:186:ASN:HD22	2.07	0.53
1:E:487:GLU:HG3	1:E:521:LEU:HD13	1.91	0.53
1:E:7:SER:N	1:E:10:GLU:OE1	2.42	0.53
2:F:123:GLU:O	2:F:127:LEU:CB	2.58	0.53
1:G:376:ALA:HB2	1:G:420:LYS:CA	2.27	0.53
1:G:800:GLN:CA	2:H:119:MET:HE2	2.33	0.53
2:H:8:THR:O	2:H:12:LYS:HG2	2.09	0.53
1:A:114:TYR:CZ	1:A:153:ILE:HB	2.43	0.52
1:A:182:GLY:O	1:A:184:THR:N	2.42	0.52
1:A:502:GLN:HA	1:A:505:TYR:HD2	1.73	0.52
1:C:165:LEU:HD21	1:C:260:GLY:CA	2.39	0.52
1:C:323:ILE:CG2	1:C:326:GLN:HB3	2.34	0.52
1:C:496:THR:HA	1:C:500:LEU:HD12	1.91	0.52
1:C:819:LEU:CG	1:C:820:GLY:N	2.72	0.52
2:D:8:THR:O	2:D:12:LYS:HG2	2.09	0.52
1:E:114:TYR:CZ	1:E:153:ILE:HB	2.43	0.52
1:E:614:ASN:OD1	1:E:628:VAL:HG12	2.09	0.52
2:F:41:ASN:N	2:F:42:PRO:CD	2.72	0.52
1:G:297:ALA:HA	1:G:301:MET:SD	2.48	0.52
1:G:421:GLU:O	1:G:424:ASP:N	2.42	0.52
1:G:471:ILE:HG12	1:G:471:ILE:O	2.09	0.52
2:H:31:CYS:O	2:H:35:MET:HG3	2.09	0.52
2:H:69:PHE:HE1	2:H:73:MET:HG2	1.74	0.52
2:B:4:SER:H	2:B:7:GLN:NE2	2.06	0.52
1:C:12:PHE:CD1	1:C:111:GLY:HA3	2.44	0.52
1:C:173:ILE:HA	1:C:680:ASN:O	2.09	0.52
1:C:731:ARG:HH12	1:C:752:ALA:HB1	1.74	0.52
2:D:140:TYR:C	2:D:142:GLU:N	2.63	0.52
2:D:85:PHE:HE1	2:D:145:ARG:HG3	1.74	0.52
2:D:31:CYS:O	2:D:35:MET:HG3	2.09	0.52
1:E:228:ASN:N	1:E:229:PRO:CD	2.72	0.52
1:E:23:PRO:O	1:E:27:ALA:HB2	2.08	0.52
1:E:272:LEU:HD23	1:E:436:GLU:CG	2.40	0.52
1:E:64:ASN:C	1:E:66:LYS:N	2.62	0.52
1:G:128:LYS:HG2	1:G:129:GLN:H	1.73	0.52
1:G:37:VAL:CB	1:G:38:PRO:HD2	2.39	0.52
1:G:272:LEU:HD23	1:G:436:GLU:CG	2.40	0.52
1:G:437:ARG:NE	1:G:625:TRP:HA	2.24	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:83:PHE:CZ	1:G:93:THR:HG23	2.45	0.52
2:H:123:GLU:O	2:H:127:LEU:CB	2.57	0.52
1:A:223:GLN:C	1:A:225:LEU:N	2.62	0.52
1:A:547:PHE:CE1	1:A:549:LYS:HB3	2.32	0.52
2:B:97:LYS:HB3	2:B:100:ASN:OD1	2.08	0.52
1:C:276:ARG:O	1:C:280:GLN:HG3	2.09	0.52
1:C:471:ILE:HG12	1:C:471:ILE:O	2.09	0.52
1:C:64:ASN:C	1:C:66:LYS:N	2.62	0.52
1:E:125:ASN:HB3	1:E:687:PRO:CD	2.37	0.52
1:E:269:THR:HB	1:E:443:LEU:CD1	2.37	0.52
1:E:464:LEU:HD21	1:E:466:ILE:CG2	2.40	0.52
1:G:120:PHE:N	1:G:120:PHE:CD1	2.71	0.52
1:G:243:ASP:OD1	1:G:324:PRO:HD2	2.10	0.52
1:G:274:LYS:C	1:G:276:ARG:H	2.12	0.52
1:G:607:ASP:CA	1:G:610:THR:HB	2.37	0.52
1:G:120:PHE:CZ	1:G:713:GLY:HA3	2.44	0.52
1:G:763:ASP:C	1:G:765:ASN:H	2.12	0.52
2:H:4:SER:O	2:H:8:THR:CB	2.58	0.52
1:A:425:PHE:CD1	1:A:425:PHE:O	2.63	0.52
2:B:97:LYS:N	2:B:100:ASN:HD21	2.07	0.52
2:B:31:CYS:O	2:B:35:MET:HG3	2.10	0.52
1:C:228:ASN:N	1:C:229:PRO:CD	2.72	0.52
1:C:226:GLN:HA	1:C:229:PRO:CG	2.40	0.52
1:C:815:ARG:O	1:C:818:GLN:CG	2.58	0.52
1:C:8:ASP:OD1	1:C:8:ASP:N	2.42	0.52
1:E:323:ILE:CG2	1:E:326:GLN:HB3	2.34	0.52
1:E:425:PHE:O	1:E:425:PHE:CD1	2.63	0.52
2:F:28:TYR:HB2	2:F:62:LYS:CB	2.37	0.52
2:F:8:THR:O	2:F:12:LYS:HG2	2.09	0.52
1:G:306:LEU:HD13	1:G:386:LYS:HG2	1.92	0.52
2:H:50:VAL:HG11	2:H:72:MET:HG2	1.91	0.52
1:A:272:LEU:HD23	1:A:436:GLU:CG	2.39	0.52
1:A:328:ASP:HA	1:A:331:MET:CB	2.28	0.52
1:A:37:VAL:CB	1:A:38:PRO:HD2	2.40	0.52
1:A:673:THR:O	1:A:677:THR:HG23	2.10	0.52
2:B:4:SER:O	2:B:8:THR:CB	2.58	0.52
1:C:552:ASP:HB3	1:C:595:SER:HA	1.92	0.52
1:C:498:PHE:CD1	1:C:716:ILE:CD1	2.93	0.52
1:E:7:SER:O	1:E:11:LYS:HG3	2.10	0.52
1:G:149:MET:SD	1:G:150:PRO:HD2	2.50	0.52
1:G:226:GLN:HA	1:G:229:PRO:CG	2.39	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:673:THR:O	1:G:677:THR:HG23	2.10	0.52
1:G:498:PHE:CD1	1:G:716:ILE:CD1	2.93	0.52
1:G:731:ARG:HH12	1:G:752:ALA:HB1	1.74	0.52
1:A:7:SER:O	1:A:11:LYS:HG3	2.10	0.52
1:A:165:LEU:HD21	1:A:260:GLY:CA	2.39	0.52
1:A:337:GLU:O	1:A:340:THR:OG1	2.26	0.52
1:A:614:ASN:OD1	1:A:628:VAL:HG12	2.09	0.52
1:A:747:MET:HE1	1:G:812:PHE:CZ	2.45	0.52
2:B:69:PHE:HE1	2:B:73:MET:HG2	1.75	0.52
1:C:524:CYS:CB	1:C:568:LYS:HG3	2.38	0.52
1:C:614:ASN:OD1	1:C:628:VAL:HG12	2.09	0.52
1:E:37:VAL:CB	1:E:38:PRO:HD2	2.39	0.52
1:E:607:ASP:CA	1:E:610:THR:HB	2.37	0.52
1:E:735:GLU:CG	1:E:756:MET:HE1	2.38	0.52
2:F:69:PHE:HE1	2:F:73:MET:HG2	1.74	0.52
1:G:127:TYR:HB3	1:G:693:ALA:HB2	1.92	0.52
1:G:464:LEU:HD21	1:G:466:ILE:CG2	2.39	0.52
2:H:55:LYS:HB3	2:H:57:ASP:OD1	2.09	0.52
1:A:152:HIS:CE1	1:A:154:TYR:CD2	2.98	0.52
1:A:226:GLN:HA	1:A:229:PRO:CG	2.39	0.52
1:A:243:ASP:OD1	1:A:324:PRO:HD2	2.10	0.52
1:A:464:LEU:HD21	1:A:466:ILE:CG2	2.40	0.52
1:A:792:ILE:O	1:A:796:ILE:HG12	2.10	0.52
2:B:85:PHE:HE1	2:B:145:ARG:HG2	1.73	0.52
1:C:113:ILE:HG13	1:C:114:TYR:CD1	2.45	0.52
1:C:663:TYR:OH	1:C:667:LEU:HD13	2.08	0.52
1:C:663:TYR:CZ	1:C:667:LEU:HD22	2.44	0.52
2:D:123:GLU:O	2:D:127:LEU:CB	2.57	0.52
2:D:28:TYR:HB2	2:D:62:LYS:CB	2.37	0.52
1:E:223:GLN:O	1:E:226:GLN:N	2.38	0.52
1:E:277:ALA:HA	1:E:286:THR:HG22	1.91	0.52
1:E:279:ARG:HH21	1:E:428:GLU:HG3	1.74	0.52
1:E:490:GLN:HE21	1:E:494:ASN:ND2	1.87	0.52
1:E:670:LEU:O	1:E:673:THR:HG23	2.10	0.52
1:E:731:ARG:NH1	1:E:752:ALA:HB1	2.25	0.52
1:E:815:ARG:O	1:E:818:GLN:CG	2.58	0.52
1:G:7:SER:O	1:G:11:LYS:HG3	2.10	0.52
1:G:152:HIS:CE1	1:G:154:TYR:CD2	2.97	0.52
1:G:186:ASN:N	1:G:186:ASN:HD22	2.08	0.52
1:G:272:LEU:HD22	1:G:439:PHE:CB	2.40	0.52
2:H:97:LYS:N	2:H:100:ASN:HD21	2.06	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:272:LEU:HD22	1:A:439:PHE:CB	2.40	0.52
1:A:496:THR:HA	1:A:500:LEU:HD12	1.91	0.52
1:A:120:PHE:CZ	1:A:713:GLY:HA3	2.45	0.52
1:A:806:TYR:CD1	2:B:147:VAL:HA	2.45	0.52
1:A:819:LEU:HD12	1:A:819:LEU:C	2.30	0.52
2:B:8:THR:O	2:B:12:LYS:HG2	2.10	0.52
1:C:127:TYR:HB3	1:C:693:ALA:HB2	1.92	0.52
1:C:272:LEU:HD23	1:C:436:GLU:CG	2.40	0.52
1:C:31:ALA:C	1:C:33:LYS:H	2.12	0.52
1:C:345:THR:OG1	1:C:348:GLU:HG3	2.10	0.52
1:C:376:ALA:HB2	1:C:420:LYS:CA	2.27	0.52
1:C:581:PHE:N	1:C:581:PHE:CD1	2.78	0.52
1:C:678:ASN:HD22	1:C:679:PRO:HD2	1.75	0.52
1:C:703:GLU:OE1	1:C:703:GLU:O	2.28	0.52
1:E:272:LEU:HD22	1:E:439:PHE:CB	2.39	0.52
1:E:44:PHE:CD1	1:E:98:ALA:HB2	2.45	0.52
2:F:4:SER:O	2:F:8:THR:CB	2.58	0.52
1:G:307:LEU:HA	1:G:313:TYR:OH	2.10	0.52
1:A:149:MET:SD	1:A:150:PRO:HD2	2.50	0.52
1:A:277:ALA:HA	1:A:286:THR:HG22	1.91	0.52
1:A:421:GLU:O	1:A:424:ASP:N	2.42	0.52
1:A:471:ILE:O	1:A:471:ILE:HG12	2.09	0.52
1:A:64:ASN:C	1:A:66:LYS:N	2.62	0.52
2:B:123:GLU:O	2:B:127:LEU:CB	2.58	0.52
1:C:425:PHE:CD1	1:C:425:PHE:O	2.63	0.52
1:C:487:GLU:HG3	1:C:521:LEU:HD13	1.91	0.52
1:C:658:THR:HG23	1:C:661:GLN:H	1.74	0.52
1:C:731:ARG:NH1	1:C:752:ALA:HB1	2.25	0.52
1:C:7:SER:N	1:C:10:GLU:OE1	2.42	0.52
1:C:809:ARG:HD3	2:D:36:ARG:HB3	1.92	0.52
2:F:51:LEU:HB3	2:F:54:PRO:HD2	1.92	0.52
2:F:64:LEU:HD11	2:F:72:MET:HE1	1.92	0.52
1:G:552:ASP:HB3	1:G:595:SER:HA	1.92	0.52
1:G:8:ASP:N	1:G:8:ASP:OD1	2.42	0.52
2:H:41:ASN:N	2:H:42:PRO:CD	2.72	0.52
1:A:113:ILE:HG13	1:A:114:TYR:CD1	2.45	0.52
1:A:553:THR:C	1:A:557:GLU:OE2	2.49	0.52
1:A:703:GLU:O	1:A:703:GLU:OE1	2.28	0.52
1:A:742:ILE:HD12	1:A:752:ALA:HA	1.91	0.52
1:A:747:MET:SD	1:G:812:PHE:CE2	2.99	0.52
1:A:8:ASP:N	1:A:8:ASP:OD1	2.42	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:89:VAL:CG2	2:B:90:GLU:N	2.73	0.52
1:C:313:TYR:N	1:C:313:TYR:CD1	2.78	0.52
1:C:657:ARG:HB3	1:C:662:LEU:HD13	1.92	0.52
2:D:74:GLN:O	2:D:78:LYS:CG	2.51	0.52
2:D:89:VAL:CG2	2:D:90:GLU:N	2.73	0.52
1:E:243:ASP:OD1	1:E:324:PRO:HD2	2.09	0.52
1:E:553:THR:C	1:E:557:GLU:OE2	2.48	0.52
1:E:673:THR:O	1:E:677:THR:HG23	2.10	0.52
1:E:174:LEU:HD12	1:E:681:PHE:CE1	2.44	0.52
1:G:313:TYR:N	1:G:313:TYR:CD1	2.78	0.52
1:G:425:PHE:CD1	1:G:425:PHE:O	2.63	0.52
1:A:747:MET:HG3	1:G:816:GLN:OE1	2.09	0.52
2:H:51:LEU:C	2:H:53:ASN:H	2.14	0.52
2:H:97:LYS:C	2:H:98:GLU:HG3	2.30	0.52
1:A:277:ALA:HA	1:A:286:THR:CG2	2.40	0.51
1:A:283:ASP:N	1:A:318:ASN:HD21	2.07	0.51
1:A:346:GLU:HG2	1:A:347:GLU:H	1.76	0.51
2:B:15:PHE:CE1	2:B:26:ILE:HD13	2.45	0.51
1:C:149:MET:SD	1:C:150:PRO:HD2	2.50	0.51
1:C:272:LEU:HD22	1:C:439:PHE:CB	2.40	0.51
1:C:792:ILE:O	1:C:796:ILE:HG12	2.10	0.51
1:C:819:LEU:C	1:C:819:LEU:HD12	2.31	0.51
2:D:4:SER:O	2:D:8:THR:CB	2.58	0.51
2:D:97:LYS:C	2:D:98:GLU:HG3	2.30	0.51
1:E:163:SER:O	1:E:167:ASP:OD1	2.28	0.51
1:E:297:ALA:HA	1:E:301:MET:SD	2.50	0.51
1:E:658:THR:HG23	1:E:661:GLN:H	1.74	0.51
1:E:763:ASP:C	1:E:765:ASN:H	2.11	0.51
1:G:165:LEU:HD21	1:G:260:GLY:CA	2.39	0.51
1:G:487:GLU:HG3	1:G:521:LEU:HD13	1.91	0.51
1:G:621:VAL:O	1:G:625:TRP:HD1	1.94	0.51
1:G:658:THR:HG23	1:G:661:GLN:H	1.74	0.51
1:G:723:ASN:O	1:G:775:PHE:HA	2.10	0.51
1:G:806:TYR:CD1	2:H:147:VAL:HA	2.45	0.51
1:A:237:ALA:HA	1:A:288:HIS:NE2	2.25	0.51
2:B:34:VAL:O	2:B:38:LEU:HD12	2.11	0.51
2:B:51:LEU:HB3	2:B:54:PRO:HD2	1.90	0.51
1:C:114:TYR:CZ	1:C:153:ILE:HB	2.43	0.51
1:C:152:HIS:CE1	1:C:154:TYR:CD2	2.97	0.51
1:C:277:ALA:HA	1:C:286:THR:CG2	2.40	0.51
1:C:729:GLU:HA	1:C:729:GLU:OE1	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:283:ASP:N	1:E:318:ASN:HD21	2.07	0.51
1:E:293:LEU:CD1	1:E:301:MET:HE1	2.39	0.51
1:E:31:ALA:C	1:E:33:LYS:H	2.12	0.51
1:E:345:THR:OG1	1:E:348:GLU:HG3	2.10	0.51
1:E:306:LEU:HD13	1:E:386:LYS:HG2	1.92	0.51
1:G:496:THR:HA	1:G:500:LEU:HD12	1.91	0.51
1:G:678:ASN:HD22	1:G:679:PRO:HD2	1.74	0.51
1:G:742:ILE:HD12	1:G:752:ALA:HA	1.91	0.51
1:A:700:LEU:HG	1:A:704:GLN:HE21	1.75	0.51
1:A:723:ASN:O	1:A:775:PHE:HA	2.10	0.51
2:D:34:VAL:O	2:D:38:LEU:HD12	2.10	0.51
1:E:471:ILE:HG12	1:E:471:ILE:O	2.09	0.51
1:G:283:ASP:N	1:G:318:ASN:ND2	2.58	0.51
1:G:337:GLU:O	1:G:340:THR:OG1	2.26	0.51
1:G:505:TYR:HB3	1:G:510:ILE:HD11	1.93	0.51
1:G:703:GLU:O	1:G:703:GLU:OE1	2.28	0.51
1:A:747:MET:CE	1:G:812:PHE:CE2	2.93	0.51
1:A:12:PHE:CD1	1:A:111:GLY:HA3	2.46	0.51
1:A:573:LYS:NZ	1:A:589:LYS:HZ3	2.09	0.51
1:A:658:THR:HG23	1:A:661:GLN:H	1.75	0.51
1:C:107:ARG:O	1:C:112:LEU:O	2.29	0.51
1:C:283:ASP:N	1:C:318:ASN:ND2	2.58	0.51
1:C:306:LEU:HD13	1:C:386:LYS:HG2	1.92	0.51
1:C:421:GLU:O	1:C:424:ASP:N	2.42	0.51
1:C:464:LEU:HD21	1:C:466:ILE:CG2	2.40	0.51
1:C:120:PHE:CZ	1:C:713:GLY:HA3	2.44	0.51
1:C:806:TYR:CD1	2:D:147:VAL:HA	2.45	0.51
2:D:135:ASN:ND2	2:D:135:ASN:N	2.58	0.51
1:E:113:ILE:HG13	1:E:114:TYR:CD1	2.45	0.51
1:E:581:PHE:N	1:E:581:PHE:CD1	2.78	0.51
2:F:43:THR:O	2:F:47:VAL:HG22	2.10	0.51
2:F:50:VAL:HG11	2:F:72:MET:HG2	1.91	0.51
1:G:269:THR:HB	1:G:443:LEU:CD1	2.37	0.51
1:G:553:THR:C	1:G:557:GLU:OE2	2.49	0.51
1:A:317:SER:O	1:A:318:ASN:HB2	2.11	0.51
1:A:498:PHE:CD1	1:A:716:ILE:CD1	2.93	0.51
1:A:800:GLN:CA	2:B:119:MET:HE2	2.34	0.51
2:B:140:TYR:C	2:B:142:GLU:N	2.63	0.51
1:C:163:SER:O	1:C:167:ASP:OD1	2.27	0.51
1:C:307:LEU:HA	1:C:313:TYR:OH	2.10	0.51
1:C:346:GLU:HG2	1:C:347:GLU:H	1.76	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:51:LEU:C	2:D:53:ASN:H	2.14	0.51
1:E:149:MET:SD	1:E:150:PRO:HD2	2.50	0.51
1:E:496:THR:HA	1:E:500:LEU:HD12	1.91	0.51
1:E:657:ARG:HB3	1:E:662:LEU:HD13	1.92	0.51
1:E:735:GLU:HG3	1:E:756:MET:CE	2.41	0.51
1:E:792:ILE:O	1:E:796:ILE:HG12	2.10	0.51
1:G:113:ILE:HG13	1:G:114:TYR:CD1	2.45	0.51
1:G:346:GLU:HG2	1:G:347:GLU:H	1.76	0.51
1:G:657:ARG:HH11	1:G:657:ARG:CB	2.24	0.51
1:G:735:GLU:HG3	1:G:756:MET:CE	2.41	0.51
1:A:306:LEU:HD13	1:A:386:LYS:HG2	1.92	0.51
1:A:657:ARG:HB3	1:A:662:LEU:HD13	1.92	0.51
1:A:678:ASN:HD22	1:A:679:PRO:HD2	1.75	0.51
1:A:772:SER:OG	1:A:772:SER:O	2.28	0.51
1:C:114:TYR:HE2	1:C:153:ILE:CB	2.24	0.51
1:C:7:SER:O	1:C:11:LYS:HG3	2.10	0.51
1:C:226:GLN:HA	1:C:229:PRO:HG3	1.91	0.51
1:C:243:ASP:OD1	1:C:324:PRO:HD2	2.10	0.51
1:E:182:GLY:O	1:E:183:LYS:C	2.49	0.51
1:E:373:THR:O	1:E:374:ASP:HB2	2.10	0.51
2:F:34:VAL:O	2:F:38:LEU:HD12	2.10	0.51
2:F:51:LEU:C	2:F:53:ASN:H	2.14	0.51
1:G:819:LEU:HD12	1:G:819:LEU:C	2.31	0.51
2:H:34:VAL:O	2:H:38:LEU:HD12	2.10	0.51
2:H:43:THR:O	2:H:47:VAL:HG22	2.11	0.51
2:H:89:VAL:CG2	2:H:90:GLU:N	2.73	0.51
1:A:345:THR:OG1	1:A:348:GLU:HG3	2.10	0.51
2:B:15:PHE:C	2:B:15:PHE:CD1	2.84	0.51
1:C:37:VAL:CB	1:C:38:PRO:HD2	2.39	0.51
1:C:250:LYS:NZ	1:C:465:ASP:OD2	2.44	0.51
1:C:621:VAL:O	1:C:625:TRP:HD1	1.94	0.51
1:C:742:ILE:HD12	1:C:752:ALA:HA	1.92	0.51
1:E:44:PHE:HB2	1:E:101:LEU:CD2	2.41	0.51
1:E:678:ASN:HD22	1:E:679:PRO:HD2	1.75	0.51
1:E:806:TYR:CD1	2:F:147:VAL:HA	2.46	0.51
2:F:15:PHE:C	2:F:15:PHE:CD1	2.84	0.51
1:G:283:ASP:H	1:G:318:ASN:HD21	1.59	0.51
1:A:731:ARG:NH1	1:A:752:ALA:HB1	2.25	0.51
1:A:815:ARG:O	1:A:818:GLN:CG	2.58	0.51
2:B:135:ASN:ND2	2:B:135:ASN:N	2.59	0.51
2:B:4:SER:O	2:B:8:THR:OG1	2.28	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:182:GLY:O	1:C:183:LYS:C	2.49	0.51
1:C:186:ASN:N	1:C:186:ASN:HD22	2.08	0.51
1:C:449:ALA:C	1:C:451:ASP:H	2.15	0.51
1:C:553:THR:C	1:C:557:GLU:OE2	2.49	0.51
1:C:723:ASN:O	1:C:775:PHE:HA	2.10	0.51
1:C:800:GLN:CA	2:D:119:MET:HE2	2.33	0.51
1:E:703:GLU:O	1:E:703:GLU:OE1	2.28	0.51
1:E:729:GLU:OE1	1:E:729:GLU:HA	2.10	0.51
2:F:97:LYS:C	2:F:98:GLU:HG3	2.29	0.51
1:G:7:SER:N	1:G:10:GLU:OE1	2.42	0.51
1:G:107:ARG:O	1:G:112:LEU:O	2.29	0.51
1:G:700:LEU:HD21	1:G:704:GLN:NE2	2.26	0.51
1:G:729:GLU:HA	1:G:729:GLU:OE1	2.10	0.51
1:G:731:ARG:NH1	1:G:752:ALA:HB1	2.25	0.51
1:A:747:MET:HG2	1:G:816:GLN:OE1	2.11	0.51
1:A:20:VAL:C	1:A:22:ASN:H	2.15	0.51
1:A:581:PHE:N	1:A:581:PHE:CD1	2.79	0.51
1:A:700:LEU:HD21	1:A:704:GLN:NE2	2.26	0.51
1:C:317:SER:O	1:C:318:ASN:HB2	2.11	0.51
1:C:373:THR:O	1:C:374:ASP:HB2	2.11	0.51
1:C:607:ASP:CA	1:C:610:THR:HB	2.37	0.51
1:C:673:THR:O	1:C:677:THR:HG23	2.10	0.51
2:D:43:THR:O	2:D:47:VAL:HG22	2.11	0.51
2:D:86:GLU:H	2:D:86:GLU:CD	2.14	0.51
1:E:8:ASP:N	1:E:8:ASP:OD1	2.42	0.51
1:G:255:ASN:O	1:G:263:VAL:HG12	2.11	0.51
1:G:333:GLN:O	1:G:337:GLU:CG	2.46	0.51
1:G:345:THR:OG1	1:G:348:GLU:HG3	2.10	0.51
1:G:792:ILE:O	1:G:796:ILE:HG12	2.10	0.51
1:A:297:ALA:HA	1:A:301:MET:SD	2.51	0.51
1:A:505:TYR:HB3	1:A:510:ILE:HD11	1.93	0.51
2:B:26:ILE:O	2:B:26:ILE:HG22	2.11	0.51
1:C:237:ALA:HA	1:C:288:HIS:NE2	2.26	0.51
1:C:277:ALA:HA	1:C:286:THR:HG22	1.92	0.51
1:C:502:GLN:CG	1:C:512:TRP:HE1	2.16	0.51
1:C:437:ARG:NE	1:C:625:TRP:HA	2.24	0.51
1:C:670:LEU:O	1:C:673:THR:HG23	2.10	0.51
1:C:735:GLU:HG3	1:C:756:MET:CE	2.41	0.51
2:D:127:LEU:O	2:D:127:LEU:HD12	2.11	0.51
2:D:15:PHE:C	2:D:15:PHE:CD1	2.84	0.51
2:D:50:VAL:HG11	2:D:72:MET:HG2	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:120:PHE:CZ	1:E:713:GLY:HA3	2.46	0.51
1:E:223:GLN:C	1:E:225:LEU:N	2.62	0.51
1:E:346:GLU:HG2	1:E:347:GLU:H	1.76	0.51
1:E:438:LEU:O	1:E:441:TRP:HB3	2.11	0.51
1:E:552:ASP:HB3	1:E:595:SER:HA	1.92	0.51
1:E:742:ILE:HD12	1:E:752:ALA:HA	1.92	0.51
1:E:819:LEU:C	1:E:819:LEU:HD12	2.31	0.51
1:G:123:VAL:O	1:G:123:VAL:CG1	2.56	0.51
1:G:505:TYR:CD1	1:G:510:ILE:HD11	2.46	0.51
1:G:670:LEU:O	1:G:673:THR:HG23	2.10	0.51
1:G:815:ARG:O	1:G:818:GLN:CG	2.58	0.51
2:H:25:LYS:HE3	2:H:65:LYS:HZ1	1.75	0.51
1:A:114:TYR:HE2	1:A:153:ILE:CB	2.24	0.50
1:A:621:VAL:O	1:A:625:TRP:HD1	1.94	0.50
1:A:729:GLU:HA	1:A:729:GLU:OE1	2.11	0.50
1:C:255:ASN:O	1:C:263:VAL:HG12	2.11	0.50
1:C:376:ALA:CB	1:C:420:LYS:HA	2.29	0.50
1:C:397:ASP:HB3	1:C:612:LEU:CD1	2.41	0.50
1:E:277:ALA:HA	1:E:286:THR:CG2	2.40	0.50
1:E:44:PHE:CE1	1:E:98:ALA:HB2	2.45	0.50
1:E:568:LYS:HD3	1:E:584:LEU:O	2.12	0.50
1:E:772:SER:OG	1:E:772:SER:O	2.28	0.50
2:F:127:LEU:O	2:F:127:LEU:HD12	2.11	0.50
1:G:613:LEU:HD13	1:G:625:TRP:CE2	2.46	0.50
1:A:107:ARG:O	1:A:112:LEU:O	2.29	0.50
1:A:31:ALA:C	1:A:33:LYS:N	2.65	0.50
1:A:481:CYS:O	1:A:485:THR:OG1	2.30	0.50
1:A:79:ASN:ND2	1:A:92:LEU:HB3	2.26	0.50
1:C:153:ILE:HG21	1:C:189:LYS:HB3	1.94	0.50
1:C:365:ILE:HG22	1:C:365:ILE:O	2.12	0.50
1:C:393:ILE:HD13	1:C:398:PHE:HB2	1.93	0.50
1:C:505:TYR:CD1	1:C:510:ILE:HD11	2.46	0.50
1:C:700:LEU:HG	1:C:704:GLN:HE21	1.76	0.50
2:D:64:LEU:HD11	2:D:72:MET:HE1	1.93	0.50
1:E:575:LEU:O	1:E:576:LYS:C	2.50	0.50
1:E:621:VAL:O	1:E:625:TRP:HD1	1.93	0.50
1:G:182:GLY:H	4:G:998:ADP:PB	2.34	0.50
1:G:373:THR:O	1:G:374:ASP:HB2	2.11	0.50
1:G:393:ILE:HD13	1:G:398:PHE:HB2	1.93	0.50
2:H:127:LEU:O	2:H:127:LEU:HD12	2.11	0.50
2:H:51:LEU:HB3	2:H:54:PRO:HD2	1.91	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:127:TYR:HB3	1:A:693:ALA:HB2	1.92	0.50
1:A:182:GLY:O	1:A:183:LYS:C	2.49	0.50
1:A:255:ASN:O	1:A:263:VAL:HG12	2.12	0.50
1:A:293:LEU:CD1	1:A:301:MET:HE1	2.42	0.50
1:A:301:MET:HG3	1:A:302:ARG:N	2.27	0.50
1:A:365:ILE:O	1:A:365:ILE:HG22	2.11	0.50
1:A:438:LEU:O	1:A:441:TRP:HB3	2.11	0.50
1:C:613:LEU:O	1:C:616:SER:HB3	2.12	0.50
2:D:49:LYS:HG3	2:D:50:VAL:N	2.23	0.50
1:E:301:MET:HG3	1:E:302:ARG:N	2.26	0.50
1:E:697:ASP:HB3	1:E:700:LEU:HD22	1.94	0.50
1:E:700:LEU:HG	1:E:704:GLN:HE21	1.76	0.50
1:E:76:GLN:HG2	1:E:96:ASN:HB3	1.91	0.50
2:F:89:VAL:CG2	2:F:90:GLU:N	2.73	0.50
1:G:237:ALA:HA	1:G:288:HIS:NE2	2.26	0.50
1:G:271:LEU:HD21	1:G:663:TYR:CE1	2.47	0.50
1:G:700:LEU:HG	1:G:704:GLN:HE21	1.76	0.50
1:A:743:PRO:HB3	1:G:816:GLN:HB3	1.91	0.50
1:A:228:ASN:N	1:A:229:PRO:HD2	2.26	0.50
1:A:252:ILE:HD12	1:A:252:ILE:H	1.76	0.50
1:A:61:LEU:HD11	1:A:64:ASN:HB2	1.93	0.50
2:B:127:LEU:HD12	2:B:127:LEU:O	2.11	0.50
1:C:271:LEU:HD21	1:C:663:TYR:CE1	2.47	0.50
2:D:65:LYS:HB2	2:D:68:GLN:CG	2.30	0.50
1:E:107:ARG:O	1:E:112:LEU:O	2.29	0.50
1:E:12:PHE:CB	1:E:132:ILE:HG22	2.41	0.50
1:E:505:TYR:CD1	1:E:510:ILE:HD11	2.46	0.50
1:E:700:LEU:HD21	1:E:704:GLN:NE2	2.26	0.50
2:F:64:LEU:HD21	2:F:72:MET:CE	2.42	0.50
1:G:277:ALA:HA	1:G:286:THR:CG2	2.41	0.50
1:G:293:LEU:CD1	1:G:301:MET:HE1	2.40	0.50
1:G:438:LEU:O	1:G:441:TRP:HB3	2.11	0.50
1:G:34:LEU:HD22	1:G:46:ALA:HB1	1.94	0.50
1:G:657:ARG:HB3	1:G:662:LEU:HD13	1.92	0.50
1:A:283:ASP:N	1:A:318:ASN:ND2	2.60	0.50
1:A:313:TYR:CD1	1:A:313:TYR:N	2.79	0.50
1:A:670:LEU:O	1:A:673:THR:HG23	2.10	0.50
1:C:481:CYS:O	1:C:485:THR:OG1	2.30	0.50
2:D:51:LEU:HB3	2:D:54:PRO:HD2	1.91	0.50
2:D:70:LEU:HG	2:D:74:GLN:HE22	1.76	0.50
1:E:283:ASP:H	1:E:318:ASN:HD21	1.60	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:34:LEU:HD22	1:E:46:ALA:HB1	1.94	0.50
1:E:613:LEU:O	1:E:616:SER:HB3	2.12	0.50
1:E:731:ARG:HH12	1:E:752:ALA:HB1	1.74	0.50
2:F:26:ILE:O	2:F:26:ILE:HG22	2.12	0.50
2:F:64:LEU:CD2	2:F:68:GLN:HB2	2.40	0.50
1:G:20:VAL:C	1:G:22:ASN:H	2.15	0.50
1:G:277:ALA:HA	1:G:286:THR:HG22	1.92	0.50
1:G:481:CYS:O	1:G:485:THR:OG1	2.30	0.50
1:G:53:LYS:HB2	1:G:56:GLU:O	2.11	0.50
1:G:581:PHE:N	1:G:581:PHE:CD1	2.78	0.50
2:H:15:PHE:CD1	2:H:15:PHE:C	2.84	0.50
1:A:8:ASP:HA	1:A:11:LYS:HD2	1.93	0.50
1:A:120:PHE:CD1	1:A:120:PHE:N	2.71	0.50
1:A:250:LYS:NZ	1:A:465:ASP:OD2	2.44	0.50
1:A:373:THR:O	1:A:374:ASP:HB2	2.10	0.50
2:B:15:PHE:CZ	2:B:26:ILE:HD13	2.47	0.50
2:B:97:LYS:C	2:B:98:GLU:HG3	2.30	0.50
1:E:127:TYR:HB3	1:E:693:ALA:HB2	1.92	0.50
1:E:619:LYS:HA	1:E:622:ALA:HB3	1.94	0.50
1:E:628:VAL:HG23	1:E:631:ILE:HG13	1.93	0.50
1:E:721:PHE:O	1:E:723:ASN:N	2.45	0.50
1:E:733:ARG:HG3	1:E:788:ARG:CD	2.42	0.50
1:G:85:LYS:HG2	1:G:106:GLU:HB3	1.92	0.50
1:G:147:HIS:C	1:G:149:MET:H	2.15	0.50
1:G:153:ILE:HG21	1:G:189:LYS:HB3	1.94	0.50
1:G:238:LYS:HE3	1:G:321:VAL:HG11	1.94	0.50
1:G:613:LEU:O	1:G:616:SER:HB3	2.12	0.50
1:A:12:PHE:O	1:A:112:LEU:HD23	2.11	0.50
1:A:449:ALA:C	1:A:451:ASP:H	2.14	0.50
1:A:733:ARG:HG3	1:A:788:ARG:CD	2.42	0.50
1:A:806:TYR:O	1:A:810:LYS:CG	2.60	0.50
1:C:223:GLN:C	1:C:225:LEU:H	2.15	0.50
1:C:20:VAL:C	1:C:22:ASN:H	2.15	0.50
1:C:53:LYS:HB2	1:C:56:GLU:O	2.11	0.50
2:D:64:LEU:HD21	2:D:72:MET:HE3	1.94	0.50
1:E:481:CYS:O	1:E:485:THR:OG1	2.30	0.50
1:E:575:LEU:HD22	1:E:578:LYS:O	2.12	0.50
1:E:397:ASP:HB3	1:E:612:LEU:CD1	2.41	0.50
1:G:449:ALA:C	1:G:451:ASP:H	2.15	0.50
1:G:552:ASP:O	1:G:555:PHE:HB3	2.12	0.50
1:G:60:GLU:HG2	1:G:66:LYS:O	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:135:ASN:N	2:H:135:ASN:ND2	2.58	0.50
1:A:505:TYR:CD1	1:A:510:ILE:HD11	2.46	0.50
2:B:103:VAL:CG1	2:B:104:MET:H	2.22	0.50
1:C:227:ALA:C	1:C:229:PRO:HD2	2.32	0.50
1:C:31:ALA:C	1:C:33:LYS:N	2.64	0.50
1:C:733:ARG:HG3	1:C:788:ARG:CD	2.42	0.50
2:D:69:PHE:HE1	2:D:73:MET:HG2	1.75	0.50
1:E:317:SER:O	1:E:318:ASN:HB2	2.11	0.50
1:E:250:LYS:NZ	1:E:465:ASP:OD2	2.44	0.50
1:E:723:ASN:O	1:E:775:PHE:HA	2.11	0.50
2:F:15:PHE:CE1	2:F:26:ILE:HD13	2.47	0.50
1:G:517:PHE:CE2	1:G:715:ARG:HB3	2.46	0.50
1:A:164:MET:HE1	1:A:256:PHE:CE2	2.47	0.50
1:A:513:ASN:O	1:A:513:ASN:ND2	2.45	0.50
1:A:568:LYS:HD3	1:A:584:LEU:O	2.12	0.50
1:A:613:LEU:O	1:A:616:SER:HB3	2.12	0.50
1:A:743:PRO:CG	1:G:816:GLN:HB3	2.42	0.50
1:C:228:ASN:N	1:C:229:PRO:HD2	2.27	0.50
1:C:416:LYS:CG	1:C:417:ALA:H	2.25	0.50
1:C:61:LEU:HD11	1:C:64:ASN:HB2	1.93	0.50
1:C:657:ARG:CB	1:C:657:ARG:HH11	2.24	0.50
1:E:8:ASP:HA	1:E:11:LYS:HD2	1.93	0.50
1:E:361:GLN:C	1:E:363:GLY:N	2.66	0.50
1:E:53:LYS:HB2	1:E:56:GLU:O	2.11	0.50
1:E:271:LEU:HD21	1:E:663:TYR:CE1	2.47	0.50
1:G:568:LYS:HD3	1:G:584:LEU:O	2.12	0.50
1:G:397:ASP:HB3	1:G:612:LEU:CD1	2.42	0.50
1:G:61:LEU:HD11	1:G:64:ASN:HB2	1.93	0.50
2:H:64:LEU:HD21	2:H:72:MET:CE	2.42	0.50
1:A:227:ALA:C	1:A:229:PRO:HD2	2.31	0.49
1:A:238:LYS:HE3	1:A:321:VAL:HG11	1.94	0.49
1:A:60:GLU:HG2	1:A:66:LYS:O	2.12	0.49
1:A:271:LEU:HD21	1:A:663:TYR:CE1	2.47	0.49
1:C:362:LEU:HD23	1:C:387:VAL:HG21	1.94	0.49
1:C:438:LEU:O	1:C:441:TRP:HB3	2.11	0.49
1:C:504:GLU:OE2	1:C:508:GLU:HG2	2.12	0.49
1:C:806:TYR:O	1:C:810:LYS:CG	2.60	0.49
2:D:70:LEU:C	2:D:74:GLN:NE2	2.66	0.49
1:E:12:PHE:CD2	1:E:131:PRO:CD	2.85	0.49
1:E:147:HIS:C	1:E:149:MET:H	2.15	0.49
1:E:268:GLU:O	1:E:268:GLU:HG3	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:313:TYR:N	1:E:313:TYR:CD1	2.80	0.49
1:E:238:LYS:HE3	1:E:321:VAL:HG11	1.94	0.49
1:G:399:THR:O	1:G:403:LEU:HD12	2.12	0.49
1:G:269:THR:CB	1:G:443:LEU:HD13	2.42	0.49
1:G:250:LYS:NZ	1:G:465:ASP:OD2	2.44	0.49
1:G:504:GLU:OE2	1:G:508:GLU:HG2	2.13	0.49
2:H:15:PHE:CE1	2:H:26:ILE:HD13	2.47	0.49
1:A:393:ILE:HD13	1:A:398:PHE:HB2	1.94	0.49
1:A:53:LYS:HB2	1:A:56:GLU:O	2.11	0.49
1:A:735:GLU:HG3	1:A:756:MET:CE	2.41	0.49
2:B:65:LYS:HB2	2:B:68:GLN:HE21	1.78	0.49
1:C:147:HIS:C	1:C:149:MET:H	2.15	0.49
1:C:513:ASN:ND2	1:C:513:ASN:O	2.45	0.49
1:C:700:LEU:HD21	1:C:704:GLN:NE2	2.26	0.49
2:D:15:PHE:CE1	2:D:26:ILE:HD13	2.47	0.49
1:E:255:ASN:O	1:E:263:VAL:HG12	2.11	0.49
1:E:505:TYR:HB3	1:E:510:ILE:HD11	1.93	0.49
1:E:61:LEU:HD11	1:E:64:ASN:HB2	1.93	0.49
1:E:806:TYR:O	1:E:810:LYS:CG	2.60	0.49
2:F:52:GLY:C	2:F:53:ASN:HD22	2.16	0.49
1:G:252:ILE:H	1:G:252:ILE:HD12	1.77	0.49
1:G:618:ASP:CG	1:G:621:VAL:HG23	2.33	0.49
1:G:628:VAL:HG23	1:G:631:ILE:HG13	1.93	0.49
1:A:152:HIS:O	1:A:155:ALA:CB	2.58	0.49
1:A:223:GLN:C	1:A:225:LEU:H	2.15	0.49
1:A:552:ASP:HB3	1:A:595:SER:HA	1.93	0.49
1:A:553:THR:O	1:A:554:SER:C	2.51	0.49
1:A:613:LEU:HD13	1:A:625:TRP:CE2	2.47	0.49
1:C:575:LEU:HD22	1:C:578:LYS:O	2.12	0.49
1:C:568:LYS:HD3	1:C:584:LEU:O	2.12	0.49
1:C:628:VAL:HG23	1:C:631:ILE:HG13	1.93	0.49
1:E:237:ALA:HA	1:E:288:HIS:NE2	2.26	0.49
1:E:305:LEU:HD22	1:E:354:ARG:CB	2.42	0.49
1:E:399:THR:O	1:E:403:LEU:HD12	2.12	0.49
1:E:269:THR:CB	1:E:443:LEU:HD13	2.42	0.49
1:E:713:GLY:CA	1:E:716:ILE:HD12	2.42	0.49
1:A:361:GLN:C	1:A:363:GLY:N	2.66	0.49
1:A:34:LEU:HD22	1:A:46:ALA:HB1	1.94	0.49
1:A:482:ILE:CG2	1:A:483:ASN:N	2.76	0.49
1:A:575:LEU:HD22	1:A:578:LYS:O	2.12	0.49
1:A:397:ASP:HB3	1:A:612:LEU:CD1	2.42	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:64:LEU:HD11	2:B:72:MET:HE1	1.94	0.49
1:C:505:TYR:HB3	1:C:510:ILE:HD11	1.92	0.49
1:C:552:ASP:O	1:C:555:PHE:HB3	2.12	0.49
1:C:799:PHE:CE2	1:C:803:CYS:SG	3.06	0.49
2:D:64:LEU:HD21	2:D:72:MET:CE	2.42	0.49
1:E:20:VAL:C	1:E:22:ASN:H	2.15	0.49
1:E:376:ALA:HB2	1:E:420:LYS:CA	2.28	0.49
1:E:381:ASN:CB	1:E:385:GLN:HE21	2.25	0.49
1:E:66:LYS:HE3	1:E:67:LYS:H	1.78	0.49
1:G:416:LYS:CG	1:G:417:ALA:H	2.25	0.49
1:G:513:ASN:ND2	1:G:513:ASN:O	2.45	0.49
1:G:697:ASP:HB3	1:G:700:LEU:HD22	1.94	0.49
1:G:733:ARG:HG3	1:G:788:ARG:CD	2.42	0.49
1:G:742:ILE:CD1	1:G:752:ALA:HA	2.43	0.49
1:G:79:ASN:ND2	1:G:92:LEU:HB3	2.27	0.49
1:A:269:THR:CB	1:A:443:LEU:HD13	2.41	0.49
1:A:552:ASP:O	1:A:555:PHE:HB3	2.12	0.49
1:C:252:ILE:H	1:C:252:ILE:HD12	1.77	0.49
1:C:305:LEU:HD22	1:C:354:ARG:CB	2.42	0.49
1:E:133:TYR:CE1	1:E:189:LYS:HD2	2.48	0.49
1:E:283:ASP:N	1:E:318:ASN:ND2	2.60	0.49
1:E:31:ALA:C	1:E:33:LYS:N	2.64	0.49
1:E:398:PHE:CD1	1:E:398:PHE:O	2.66	0.49
1:E:513:ASN:O	1:E:513:ASN:ND2	2.45	0.49
1:E:487:GLU:O	1:E:521:LEU:HD12	2.13	0.49
1:E:60:GLU:HG2	1:E:66:LYS:O	2.12	0.49
1:E:630:ARG:HH22	1:E:657:ARG:HB3	1.77	0.49
2:F:64:LEU:HD21	2:F:72:MET:HE3	1.94	0.49
1:G:305:LEU:HD22	1:G:354:ARG:CB	2.42	0.49
1:G:382:THR:HA	1:G:385:GLN:OE1	2.13	0.49
1:G:362:LEU:HD23	1:G:387:VAL:HG21	1.94	0.49
1:G:398:PHE:CD1	1:G:398:PHE:O	2.66	0.49
1:G:772:SER:O	1:G:772:SER:OG	2.28	0.49
2:H:26:ILE:O	2:H:26:ILE:HG22	2.12	0.49
1:A:305:LEU:HD22	1:A:354:ARG:CB	2.42	0.49
1:A:487:GLU:O	1:A:521:LEU:HD12	2.13	0.49
1:A:525:ILE:O	1:A:529:GLU:N	2.46	0.49
1:A:742:ILE:CD1	1:A:752:ALA:HA	2.43	0.49
2:B:25:LYS:HE3	2:B:65:LYS:HZ3	1.76	0.49
1:C:8:ASP:HA	1:C:11:LYS:HD2	1.93	0.49
1:C:34:LEU:HD22	1:C:46:ALA:HB1	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:382:THR:HA	1:C:385:GLN:OE1	2.13	0.49
1:C:476:SER:OG	1:C:478:GLU:OE1	2.29	0.49
2:D:15:PHE:CZ	2:D:26:ILE:HD13	2.48	0.49
1:E:114:TYR:HE2	1:E:153:ILE:CB	2.24	0.49
1:E:362:LEU:HD23	1:E:387:VAL:HG21	1.94	0.49
1:E:393:ILE:HD13	1:E:398:PHE:HB2	1.94	0.49
1:G:31:ALA:C	1:G:33:LYS:N	2.64	0.49
2:H:108:ILE:CG2	2:H:109:ARG:N	2.76	0.49
2:H:140:TYR:C	2:H:142:GLU:N	2.62	0.49
2:H:64:LEU:CD2	2:H:68:GLN:HB2	2.40	0.49
1:A:147:HIS:C	1:A:149:MET:H	2.15	0.49
1:A:362:LEU:HD23	1:A:387:VAL:HG21	1.94	0.49
1:A:398:PHE:O	1:A:398:PHE:CD1	2.66	0.49
1:A:446:VAL:O	1:A:448:LYS:N	2.46	0.49
1:A:721:PHE:O	1:A:723:ASN:N	2.46	0.49
2:B:49:LYS:HG3	2:B:50:VAL:N	2.23	0.49
2:B:53:ASN:N	2:B:54:PRO:HD3	2.28	0.49
2:B:50:VAL:HG11	2:B:72:MET:HG2	1.95	0.49
1:C:133:TYR:CE1	1:C:189:LYS:HD2	2.48	0.49
1:C:175:CYS:HB2	1:C:183:LYS:HG3	1.95	0.49
1:C:618:ASP:CG	1:C:621:VAL:HG23	2.33	0.49
1:C:60:GLU:HG2	1:C:66:LYS:O	2.12	0.49
2:D:64:LEU:CD2	2:D:68:GLN:HB2	2.40	0.49
1:E:227:ALA:C	1:E:229:PRO:HD2	2.32	0.49
1:E:274:LYS:O	1:E:276:ARG:N	2.45	0.49
1:E:799:PHE:CE2	1:E:803:CYS:SG	3.06	0.49
2:F:55:LYS:HB3	2:F:57:ASP:OD1	2.12	0.49
2:F:70:LEU:C	2:F:74:GLN:NE2	2.66	0.49
1:G:227:ALA:C	1:G:229:PRO:HD2	2.32	0.49
1:G:475:ASN:OD1	1:G:590:VAL:HG12	2.13	0.49
1:G:806:TYR:O	1:G:810:LYS:CG	2.60	0.49
1:G:815:ARG:HA	1:G:818:GLN:CG	2.43	0.49
1:G:8:ASP:HA	1:G:11:LYS:HD2	1.93	0.49
2:H:70:LEU:C	2:H:74:GLN:NE2	2.65	0.49
1:A:153:ILE:HG21	1:A:189:LYS:HB3	1.93	0.49
1:A:274:LYS:C	1:A:276:ARG:H	2.14	0.49
1:A:274:LYS:O	1:A:276:ARG:N	2.46	0.49
1:A:381:ASN:CB	1:A:385:GLN:HE21	2.25	0.49
1:A:697:ASP:HB3	1:A:700:LEU:HD22	1.94	0.49
1:C:311:ASN:ND2	1:C:319:GLY:HA3	2.28	0.49
1:C:399:THR:O	1:C:403:LEU:HD12	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:541:LEU:CD2	1:C:601:ASN:HD22	2.09	0.49
1:C:742:ILE:CD1	1:C:752:ALA:HA	2.43	0.49
1:C:815:ARG:HA	1:C:818:GLN:CG	2.43	0.49
1:E:175:CYS:HB2	1:E:183:LYS:HG3	1.95	0.49
1:E:252:ILE:H	1:E:252:ILE:HD12	1.77	0.49
1:E:618:ASP:CG	1:E:621:VAL:HG23	2.33	0.49
1:G:145:LYS:HG3	1:G:146:ARG:CD	2.43	0.49
1:G:223:GLN:C	1:G:225:LEU:H	2.15	0.49
1:G:231:LEU:N	1:G:231:LEU:HD23	2.28	0.49
1:G:317:SER:O	1:G:318:ASN:HB2	2.11	0.49
1:G:365:ILE:O	1:G:365:ILE:HG22	2.12	0.49
1:G:575:LEU:HD22	1:G:578:LYS:O	2.12	0.49
2:H:15:PHE:CZ	2:H:26:ILE:HD13	2.48	0.49
1:A:133:TYR:CE1	1:A:189:LYS:HD2	2.48	0.49
1:A:546:TRP:HA	1:A:602:MET:HE1	1.94	0.49
1:A:575:LEU:O	1:A:576:LYS:C	2.51	0.49
1:A:657:ARG:CB	1:A:657:ARG:HH11	2.24	0.49
1:C:283:ASP:H	1:C:318:ASN:HD21	1.59	0.49
1:C:721:PHE:O	1:C:723:ASN:N	2.45	0.49
2:D:55:LYS:HB3	2:D:57:ASP:OD1	2.13	0.49
1:E:416:LYS:CG	1:E:417:ALA:H	2.25	0.49
1:E:525:ILE:O	1:E:529:GLU:N	2.46	0.49
1:E:552:ASP:O	1:E:555:PHE:HB3	2.12	0.49
1:E:575:LEU:HD22	1:E:579:THR:HA	1.95	0.49
1:G:228:ASN:N	1:G:229:PRO:HD2	2.27	0.49
1:G:381:ASN:CB	1:G:385:GLN:HE21	2.25	0.49
1:G:66:LYS:HE3	1:G:67:LYS:H	1.78	0.49
1:A:145:LYS:HG3	1:A:146:ARG:CD	2.43	0.49
1:A:505:TYR:CE1	1:A:724:ARG:NH2	2.81	0.49
1:C:268:GLU:O	1:C:268:GLU:HG3	2.12	0.49
2:D:65:LYS:HB2	2:D:68:GLN:HE21	1.78	0.49
1:E:272:LEU:HD22	1:E:439:PHE:CG	2.48	0.49
1:E:505:TYR:CE1	1:E:724:ARG:NH2	2.81	0.49
1:G:272:LEU:HD22	1:G:439:PHE:CG	2.48	0.49
1:G:301:MET:HG3	1:G:302:ARG:N	2.27	0.49
1:G:311:ASN:ND2	1:G:319:GLY:HA3	2.28	0.49
1:G:525:ILE:O	1:G:529:GLU:N	2.46	0.49
1:A:399:THR:O	1:A:403:LEU:HD12	2.12	0.48
1:A:697:ASP:O	1:A:701:VAL:HB	2.13	0.48
1:C:272:LEU:HD22	1:C:439:PHE:CG	2.48	0.48
1:C:361:GLN:C	1:C:363:GLY:N	2.66	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:36:TRP:HB2	1:C:76:GLN:CB	2.38	0.48
1:C:398:PHE:CD1	1:C:398:PHE:O	2.66	0.48
1:C:505:TYR:CE1	1:C:724:ARG:NH2	2.81	0.48
1:C:487:GLU:O	1:C:521:LEU:HD12	2.13	0.48
1:E:498:PHE:CD1	1:E:716:ILE:CD1	2.93	0.48
2:F:108:ILE:CG2	2:F:109:ARG:N	2.76	0.48
2:F:135:ASN:N	2:F:135:ASN:ND2	2.58	0.48
2:F:65:LYS:HB2	2:F:68:GLN:HE21	1.78	0.48
1:G:133:TYR:CE1	1:G:189:LYS:HD2	2.48	0.48
1:G:278:ILE:HG13	1:G:279:ARG:H	1.78	0.48
1:G:619:LYS:HA	1:G:622:ALA:HB3	1.95	0.48
1:A:175:CYS:HB2	1:A:183:LYS:HG3	1.95	0.48
1:A:601:ASN:OD1	1:A:601:ASN:O	2.31	0.48
1:A:799:PHE:CE2	1:A:803:CYS:SG	3.06	0.48
2:B:40:GLN:C	2:B:42:PRO:CD	2.81	0.48
1:C:477:PHE:CD1	1:C:480:LEU:HD23	2.48	0.48
1:C:697:ASP:HB3	1:C:700:LEU:HD22	1.94	0.48
1:C:715:ARG:O	1:C:719:GLN:HB2	2.13	0.48
1:C:71:SER:C	1:C:73:ASP:H	2.17	0.48
1:E:153:ILE:HG21	1:E:189:LYS:HB3	1.94	0.48
1:E:449:ALA:C	1:E:451:ASP:H	2.15	0.48
1:E:573:LYS:NZ	1:E:589:LYS:NZ	2.61	0.48
1:E:475:ASN:OD1	1:E:590:VAL:HG12	2.13	0.48
2:F:15:PHE:CZ	2:F:26:ILE:HD13	2.48	0.48
1:G:405:PRO:HD2	1:G:417:ALA:HA	1.95	0.48
1:G:487:GLU:O	1:G:521:LEU:HD12	2.13	0.48
1:G:573:LYS:NZ	1:G:589:LYS:NZ	2.61	0.48
2:H:52:GLY:C	2:H:53:ASN:HD22	2.15	0.48
1:A:416:LYS:CG	1:A:417:ALA:H	2.26	0.48
1:A:476:SER:OG	1:A:478:GLU:OE1	2.30	0.48
1:A:573:LYS:NZ	1:A:589:LYS:NZ	2.61	0.48
1:C:405:PRO:HD2	1:C:417:ALA:HA	1.96	0.48
1:C:720:GLY:O	1:C:722:PRO:HD3	2.14	0.48
2:D:26:ILE:O	2:D:26:ILE:HG22	2.12	0.48
1:E:344:PHE:HD1	1:E:344:PHE:N	2.12	0.48
1:E:39:SER:HB3	1:E:43:GLY:C	2.33	0.48
1:E:806:TYR:CE1	2:F:146:MET:O	2.67	0.48
1:E:79:ASN:OD1	1:E:80:PRO:HD2	2.13	0.48
1:G:487:GLU:OE1	1:G:585:HIS:ND1	2.45	0.48
1:G:573:LYS:NZ	1:G:589:LYS:HZ3	2.10	0.48
1:A:475:ASN:OD1	1:A:590:VAL:HG12	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:498:PHE:HD1	1:A:716:ILE:HD11	1.77	0.48
1:A:713:GLY:CA	1:A:716:ILE:HD12	2.44	0.48
1:A:79:ASN:OD1	1:A:80:PRO:HD2	2.13	0.48
2:B:70:LEU:C	2:B:74:GLN:NE2	2.66	0.48
1:C:311:ASN:ND2	1:C:319:GLY:CA	2.77	0.48
1:C:525:ILE:O	1:C:529:GLU:N	2.46	0.48
1:C:581:PHE:HZ	1:C:597:TRP:CH2	2.31	0.48
1:C:66:LYS:HE3	1:C:67:LYS:H	1.78	0.48
1:C:697:ASP:O	1:C:701:VAL:HB	2.14	0.48
1:E:145:LYS:HG3	1:E:146:ARG:CD	2.43	0.48
1:E:138:ILE:HG21	1:E:196:VAL:CG2	2.43	0.48
1:E:228:ASN:N	1:E:229:PRO:HD2	2.28	0.48
1:E:280:GLN:CG	1:E:286:THR:HG23	2.43	0.48
1:E:36:TRP:HB2	1:E:76:GLN:CB	2.38	0.48
1:E:405:PRO:HD2	1:E:417:ALA:HA	1.96	0.48
1:G:178:GLU:O	1:G:183:LYS:NZ	2.47	0.48
1:G:268:GLU:HG3	1:G:268:GLU:O	2.12	0.48
1:G:36:TRP:HB2	1:G:76:GLN:CB	2.38	0.48
1:G:799:PHE:CE2	1:G:803:CYS:SG	3.06	0.48
2:H:64:LEU:HD21	2:H:72:MET:HE3	1.95	0.48
1:A:272:LEU:HD22	1:A:439:PHE:CG	2.49	0.48
1:A:305:LEU:HD12	1:A:307:LEU:CD2	2.42	0.48
1:A:376:ALA:HB2	1:A:420:LYS:CA	2.28	0.48
1:A:517:PHE:CE2	1:A:715:ARG:HB3	2.46	0.48
1:A:58:THR:HA	1:A:69:THR:CG2	2.43	0.48
1:A:815:ARG:HA	1:A:818:GLN:CG	2.43	0.48
2:B:64:LEU:HD21	2:B:72:MET:CE	2.43	0.48
2:B:64:LEU:HD21	2:B:72:MET:HE3	1.94	0.48
1:C:238:LYS:HE3	1:C:321:VAL:HG11	1.94	0.48
1:C:275:SER:HB2	1:C:478:GLU:OE2	2.14	0.48
1:C:305:LEU:HD12	1:C:307:LEU:CD2	2.42	0.48
1:E:581:PHE:HZ	1:E:597:TRP:CH2	2.31	0.48
1:E:601:ASN:O	1:E:601:ASN:OD1	2.31	0.48
1:E:742:ILE:CD1	1:E:752:ALA:HA	2.44	0.48
1:G:39:SER:HB3	1:G:43:GLY:C	2.33	0.48
1:G:720:GLY:O	1:G:722:PRO:HD3	2.14	0.48
1:A:183:LYS:HB2	4:A:998:ADP:O1B	2.14	0.48
1:A:466:ILE:HD12	1:A:467:ALA:O	2.14	0.48
1:A:720:GLY:C	1:A:722:PRO:HD3	2.34	0.48
1:C:301:MET:HG3	1:C:302:ARG:N	2.26	0.48
1:C:575:LEU:HD22	1:C:579:THR:HA	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:174:LEU:HD12	1:C:681:PHE:CD1	2.49	0.48
1:C:118:GLY:HA3	1:C:717:CYS:SG	2.54	0.48
1:C:720:GLY:C	1:C:722:PRO:HD3	2.34	0.48
1:C:727:PHE:CE2	1:C:750:LYS:HA	2.48	0.48
2:D:52:GLY:C	2:D:53:ASN:HD22	2.16	0.48
1:E:275:SER:HB2	1:E:478:GLU:OE2	2.14	0.48
1:E:495:HIS:ND1	1:E:499:ILE:HG21	2.29	0.48
1:G:280:GLN:CG	1:G:286:THR:HG23	2.43	0.48
1:G:388:CYS:SG	1:G:398:PHE:HD2	2.37	0.48
1:G:505:TYR:CE1	1:G:724:ARG:NH2	2.81	0.48
1:G:58:THR:HA	1:G:69:THR:CG2	2.43	0.48
1:G:581:PHE:HZ	1:G:597:TRP:CH2	2.31	0.48
1:G:721:PHE:O	1:G:723:ASN:N	2.46	0.48
1:G:727:PHE:CE2	1:G:750:LYS:HA	2.48	0.48
1:G:806:TYR:CE1	2:H:146:MET:O	2.67	0.48
1:A:183:LYS:HE2	1:A:183:LYS:HB2	1.69	0.48
1:A:311:ASN:ND2	1:A:319:GLY:CA	2.77	0.48
1:A:806:TYR:CE1	2:B:146:MET:O	2.67	0.48
2:B:28:TYR:CD2	2:B:54:PRO:CG	2.95	0.48
1:C:167:ASP:O	1:C:168:ARG:C	2.52	0.48
1:C:280:GLN:CG	1:C:286:THR:HG23	2.43	0.48
1:C:573:LYS:CE	1:C:589:LYS:HZ3	2.24	0.48
1:E:147:HIS:CE1	1:E:148:GLU:HG2	2.49	0.48
1:E:194:LEU:CD1	1:E:461:LEU:HD22	2.44	0.48
1:E:344:PHE:CD1	1:E:344:PHE:N	2.82	0.48
1:E:477:PHE:CD1	1:E:480:LEU:HD23	2.48	0.48
1:E:697:ASP:O	1:E:701:VAL:HB	2.13	0.48
1:E:76:GLN:HG2	1:E:96:ASN:CG	2.34	0.48
1:G:194:LEU:HD11	1:G:461:LEU:HD22	1.96	0.48
1:G:71:SER:C	1:G:73:ASP:H	2.17	0.48
1:G:772:SER:O	1:G:773:LYS:CB	2.54	0.48
2:H:65:LYS:HB2	2:H:68:GLN:HE21	1.78	0.48
1:A:118:GLY:HA3	1:A:717:CYS:SG	2.54	0.48
1:A:178:GLU:O	1:A:183:LYS:NZ	2.47	0.48
1:A:194:LEU:HD11	1:A:461:LEU:HD22	1.96	0.48
1:A:231:LEU:N	1:A:231:LEU:HD23	2.29	0.48
1:A:581:PHE:HZ	1:A:597:TRP:CH2	2.31	0.48
1:A:631:ILE:HG22	1:A:632:VAL:N	2.29	0.48
1:C:281:ALA:O	1:C:318:ASN:ND2	2.47	0.48
1:C:465:ASP:O	1:C:465:ASP:CG	2.52	0.48
1:C:475:ASN:OD1	1:C:590:VAL:HG12	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:717:CYS:HA	1:C:722:PRO:HG3	1.96	0.48
1:E:244:ASN:O	1:E:244:ASN:ND2	2.47	0.48
1:E:281:ALA:O	1:E:318:ASN:ND2	2.47	0.48
1:E:487:GLU:OE1	1:E:585:HIS:ND1	2.45	0.48
1:G:275:SER:HB2	1:G:478:GLU:OE2	2.13	0.48
1:G:477:PHE:CD1	1:G:480:LEU:HD23	2.48	0.48
1:G:697:ASP:O	1:G:701:VAL:HB	2.14	0.48
1:A:477:PHE:CD1	1:A:480:LEU:HD23	2.48	0.48
1:A:618:ASP:CG	1:A:621:VAL:HG23	2.33	0.48
1:A:391:MET:O	1:A:618:ASP:HB2	2.14	0.48
1:C:145:LYS:HG3	1:C:146:ARG:CD	2.43	0.48
1:C:39:SER:HB3	1:C:43:GLY:C	2.33	0.48
1:C:517:PHE:CE2	1:C:715:ARG:HB3	2.46	0.48
1:C:806:TYR:CE1	2:D:146:MET:O	2.67	0.48
2:D:105:GLY:HA2	2:D:138:ILE:CD1	2.44	0.48
1:E:504:GLU:OE2	1:E:508:GLU:HG2	2.12	0.48
1:E:585:HIS:NE2	1:E:592:TYR:OH	2.47	0.48
1:E:71:SER:C	1:E:73:ASP:H	2.17	0.48
1:E:720:GLY:O	1:E:722:PRO:HD3	2.13	0.48
2:F:49:LYS:HG3	2:F:50:VAL:N	2.22	0.48
2:F:31:CYS:HG	2:F:69:PHE:HE2	1.61	0.48
2:F:70:LEU:CG	2:F:74:GLN:HE21	2.27	0.48
1:G:118:GLY:HA3	1:G:717:CYS:SG	2.54	0.48
1:G:167:ASP:O	1:G:168:ARG:C	2.52	0.48
1:G:175:CYS:HB2	1:G:183:LYS:HG3	1.95	0.48
1:G:244:ASN:O	1:G:244:ASN:ND2	2.47	0.48
1:G:311:ASN:ND2	1:G:319:GLY:CA	2.77	0.48
1:G:441:TRP:HE3	1:G:442:ILE:HD13	1.78	0.48
1:G:575:LEU:O	1:G:576:LYS:C	2.51	0.48
1:G:735:GLU:HG3	1:G:756:MET:HE1	1.94	0.48
1:G:733:ARG:NH1	2:H:95:PHE:HD1	2.12	0.48
1:A:288:HIS:HB3	1:A:292:TYR:CE1	2.49	0.48
1:A:727:PHE:CE2	1:A:750:LYS:HA	2.49	0.48
2:B:140:TYR:CE1	2:B:141:GLU:CG	2.97	0.48
2:B:64:LEU:CD2	2:B:68:GLN:HB2	2.40	0.48
1:C:301:MET:HE3	1:C:305:LEU:HD11	1.96	0.48
1:C:547:PHE:CD2	1:C:548:PRO:HD2	2.49	0.48
1:C:547:PHE:CE1	1:C:549:LYS:HB3	2.32	0.48
1:C:79:ASN:OD1	1:C:80:PRO:HD2	2.13	0.48
2:D:4:SER:O	2:D:8:THR:OG1	2.28	0.48
1:E:118:GLY:HA3	1:E:717:CYS:SG	2.53	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:368:LYS:HZ3	1:E:379:PRO:CG	2.26	0.48
1:E:547:PHE:CD1	1:E:548:PRO:HD2	2.49	0.48
1:E:553:THR:O	1:E:554:SER:C	2.52	0.48
1:E:663:TYR:CE1	1:E:667:LEU:HB2	2.49	0.48
1:E:717:CYS:HA	1:E:722:PRO:HG3	1.96	0.48
1:E:727:PHE:CE2	1:E:750:LYS:HA	2.49	0.48
2:F:86:GLU:H	2:F:86:GLU:CD	2.18	0.48
1:G:194:LEU:CD1	1:G:461:LEU:HD22	2.44	0.48
1:G:281:ALA:O	1:G:318:ASN:ND2	2.47	0.48
1:G:361:GLN:C	1:G:363:GLY:N	2.66	0.48
1:G:553:THR:O	1:G:554:SER:C	2.52	0.48
1:G:630:ARG:HH22	1:G:657:ARG:HB3	1.77	0.48
1:G:713:GLY:CA	1:G:716:ILE:HD12	2.44	0.48
1:G:89:MET:CG	1:G:92:LEU:HD11	2.32	0.48
1:A:504:GLU:OE2	1:A:508:GLU:HG2	2.13	0.47
1:A:585:HIS:NE2	1:A:592:TYR:OH	2.47	0.47
1:A:663:TYR:CE1	1:A:667:LEU:HB2	2.49	0.47
2:B:55:LYS:HB3	2:B:57:ASP:OD1	2.13	0.47
1:C:274:LYS:O	1:C:276:ARG:N	2.46	0.47
1:C:721:PHE:C	1:C:723:ASN:H	2.18	0.47
1:E:44:PHE:HB2	1:E:101:LEU:HD22	1.95	0.47
1:E:167:ASP:O	1:E:168:ARG:C	2.52	0.47
1:E:223:GLN:C	1:E:225:LEU:H	2.15	0.47
1:E:365:ILE:O	1:E:365:ILE:HG22	2.12	0.47
1:E:441:TRP:HE3	1:E:442:ILE:HD13	1.77	0.47
1:E:498:PHE:HD1	1:E:716:ILE:HD11	1.78	0.47
1:G:174:LEU:HD12	1:G:681:PHE:CD1	2.49	0.47
1:G:446:VAL:O	1:G:448:LYS:N	2.47	0.47
1:G:547:PHE:CD1	1:G:548:PRO:HD2	2.49	0.47
1:G:601:ASN:O	1:G:601:ASN:OD1	2.31	0.47
1:G:720:GLY:C	1:G:722:PRO:HD3	2.34	0.47
2:H:102:THR:HG22	2:H:139:ASN:HA	1.96	0.47
1:A:388:CYS:SG	1:A:398:PHE:HD2	2.37	0.47
1:A:39:SER:HB3	1:A:43:GLY:C	2.33	0.47
1:A:44:PHE:HD2	1:A:101:LEU:HD22	1.79	0.47
1:A:715:ARG:O	1:A:719:GLN:HB2	2.14	0.47
1:A:757:ILE:HG21	1:A:767:TYR:CZ	2.49	0.47
1:C:138:ILE:HG21	1:C:196:VAL:CG2	2.43	0.47
1:C:178:GLU:O	1:C:183:LYS:NZ	2.47	0.47
1:C:231:LEU:N	1:C:231:LEU:HD23	2.28	0.47
1:C:288:HIS:HB3	1:C:292:TYR:CE1	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:530:ARG:HA	1:C:531:PRO:HD3	1.72	0.47
1:C:573:LYS:NZ	1:C:589:LYS:NZ	2.61	0.47
1:C:601:ASN:O	1:C:601:ASN:OD1	2.31	0.47
1:C:182:GLY:N	4:C:998:ADP:O1B	2.47	0.47
1:E:174:LEU:HD12	1:E:681:PHE:CD1	2.49	0.47
1:E:382:THR:HA	1:E:385:GLN:OE1	2.14	0.47
1:E:398:PHE:HB2	1:E:612:LEU:HD21	1.97	0.47
1:E:388:CYS:SG	1:E:398:PHE:HD2	2.37	0.47
1:E:39:SER:OG	1:E:42:HIS:N	2.43	0.47
1:E:76:GLN:HG2	1:E:96:ASN:CB	2.44	0.47
2:F:4:SER:O	2:F:8:THR:OG1	2.28	0.47
1:G:147:HIS:CE1	1:G:148:GLU:HG2	2.49	0.47
1:G:274:LYS:O	1:G:276:ARG:N	2.47	0.47
1:G:575:LEU:HD22	1:G:579:THR:HA	1.95	0.47
1:A:174:LEU:HD12	1:A:681:PHE:CD1	2.49	0.47
1:A:274:LYS:NZ	1:A:432:LYS:HD2	2.29	0.47
1:A:280:GLN:CG	1:A:286:THR:HG23	2.43	0.47
1:A:717:CYS:HA	1:A:722:PRO:HG3	1.96	0.47
1:C:388:CYS:SG	1:C:398:PHE:HD2	2.37	0.47
1:C:441:TRP:HE3	1:C:442:ILE:HD13	1.78	0.47
1:C:553:THR:O	1:C:554:SER:C	2.51	0.47
1:E:288:HIS:HB3	1:E:292:TYR:CE1	2.49	0.47
1:E:274:LYS:NZ	1:E:432:LYS:HD2	2.29	0.47
1:E:757:ILE:HG21	1:E:767:TYR:CZ	2.49	0.47
1:G:344:PHE:N	1:G:344:PHE:CD1	2.83	0.47
1:G:395:VAL:HG23	1:G:396:THR:HG23	1.97	0.47
1:G:466:ILE:HD12	1:G:467:ALA:O	2.14	0.47
1:A:194:LEU:CD1	1:A:461:LEU:HD22	2.44	0.47
1:A:275:SER:HB2	1:A:478:GLU:OE2	2.14	0.47
1:A:405:PRO:HD2	1:A:417:ALA:HA	1.97	0.47
1:A:489:LEU:HD12	1:A:489:LEU:C	2.27	0.47
1:A:511:GLU:CD	2:H:145:ARG:NH1	2.67	0.47
1:A:575:LEU:HD22	1:A:579:THR:HA	1.95	0.47
1:A:799:PHE:HB2	2:B:88:TYR:CD1	2.49	0.47
1:C:120:PHE:N	1:C:120:PHE:CD1	2.72	0.47
1:C:381:ASN:CB	1:C:385:GLN:HE21	2.25	0.47
1:C:466:ILE:HD12	1:C:467:ALA:O	2.14	0.47
1:C:663:TYR:CE1	1:C:667:LEU:HB2	2.49	0.47
1:C:58:THR:HA	1:C:69:THR:CG2	2.43	0.47
1:E:657:ARG:CB	1:E:657:ARG:HH11	2.24	0.47
1:E:663:TYR:C	1:E:665:GLU:H	2.18	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:105:GLY:HA2	2:F:138:ILE:CD1	2.45	0.47
1:G:663:TYR:C	1:G:665:GLU:H	2.18	0.47
1:G:721:PHE:C	1:G:723:ASN:H	2.18	0.47
1:G:79:ASN:OD1	1:G:80:PRO:HD2	2.13	0.47
2:H:28:TYR:HB2	2:H:62:LYS:CB	2.37	0.47
1:A:313:TYR:HD1	1:A:313:TYR:N	2.13	0.47
1:A:281:ALA:O	1:A:318:ASN:ND2	2.47	0.47
1:A:721:PHE:C	1:A:723:ASN:H	2.18	0.47
1:A:819:LEU:CD1	1:A:820:GLY:N	2.77	0.47
1:A:733:ARG:NH1	2:B:95:PHE:HD1	2.13	0.47
1:C:176:THR:OG1	1:C:177:GLY:N	2.47	0.47
1:C:274:LYS:C	1:C:276:ARG:N	2.68	0.47
1:C:362:LEU:HD23	1:C:387:VAL:HG11	1.96	0.47
1:C:446:VAL:O	1:C:448:LYS:N	2.47	0.47
1:C:575:LEU:O	1:C:576:LYS:C	2.51	0.47
1:C:713:GLY:CA	1:C:716:ILE:HD12	2.44	0.47
2:D:140:TYR:CE1	2:D:141:GLU:CG	2.97	0.47
1:E:152:HIS:O	1:E:155:ALA:CB	2.58	0.47
1:E:466:ILE:HD12	1:E:467:ALA:O	2.14	0.47
1:E:58:THR:HA	1:E:69:THR:CG2	2.43	0.47
1:E:720:GLY:C	1:E:722:PRO:HD3	2.35	0.47
1:E:819:LEU:CD1	1:E:820:GLY:N	2.78	0.47
1:E:799:PHE:HB2	2:F:88:TYR:CD1	2.50	0.47
1:E:733:ARG:NH1	2:F:95:PHE:HD1	2.12	0.47
1:G:498:PHE:N	1:G:498:PHE:CD1	2.82	0.47
1:A:103:ASN:ND2	1:A:107:ARG:HD2	2.30	0.47
1:A:244:ASN:ND2	1:A:244:ASN:O	2.47	0.47
1:A:663:TYR:C	1:A:665:GLU:H	2.18	0.47
1:A:66:LYS:HE3	1:A:67:LYS:H	1.78	0.47
1:C:103:ASN:ND2	1:C:107:ARG:HD2	2.30	0.47
1:C:194:LEU:CD1	1:C:461:LEU:HD22	2.44	0.47
1:C:194:LEU:HD11	1:C:461:LEU:HD22	1.96	0.47
1:C:244:ASN:ND2	1:C:244:ASN:O	2.47	0.47
1:C:391:MET:O	1:C:618:ASP:HB2	2.15	0.47
1:E:146:ARG:H	1:E:146:ARG:CD	2.28	0.47
1:E:446:VAL:O	1:E:448:LYS:N	2.47	0.47
1:E:391:MET:O	1:E:618:ASP:HB2	2.15	0.47
1:E:815:ARG:HA	1:E:818:GLN:CG	2.44	0.47
1:G:103:ASN:ND2	1:G:107:ARG:HD2	2.30	0.47
1:G:489:LEU:C	1:G:489:LEU:HD12	2.28	0.47
1:G:607:ASP:HA	1:G:610:THR:CB	2.42	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:344:PHE:CD1	1:A:344:PHE:N	2.83	0.47
1:A:547:PHE:CD2	1:A:548:PRO:HD2	2.49	0.47
1:A:628:VAL:HG23	1:A:631:ILE:HG13	1.93	0.47
1:C:361:GLN:O	1:C:363:GLY:N	2.48	0.47
1:E:161:TYR:CE1	1:E:165:LEU:CD1	2.93	0.47
1:E:715:ARG:O	1:E:719:GLN:HB2	2.13	0.47
1:G:183:LYS:HB2	1:G:183:LYS:HE2	1.67	0.47
1:G:138:ILE:HG21	1:G:196:VAL:CG2	2.43	0.47
1:G:274:LYS:NZ	1:G:432:LYS:HD2	2.30	0.47
1:G:495:HIS:ND1	1:G:499:ILE:HG21	2.29	0.47
1:G:663:TYR:CE1	1:G:667:LEU:HB2	2.49	0.47
1:G:715:ARG:O	1:G:719:GLN:HB2	2.13	0.47
2:H:65:LYS:HB2	2:H:68:GLN:CG	2.30	0.47
1:A:382:THR:HA	1:A:385:GLN:OE1	2.14	0.47
1:A:395:VAL:HG23	1:A:396:THR:HG23	1.96	0.47
1:A:526:GLU:HA	1:A:529:GLU:HB3	1.97	0.47
1:A:619:LYS:HA	1:A:622:ALA:HB3	1.95	0.47
1:A:720:GLY:O	1:A:722:PRO:HD3	2.14	0.47
2:B:70:LEU:CG	2:B:74:GLN:HE21	2.27	0.47
1:C:354:ARG:HG3	1:C:355:VAL:N	2.30	0.47
1:C:274:LYS:NZ	1:C:432:LYS:HD2	2.30	0.47
1:C:619:LYS:HA	1:C:622:ALA:HB3	1.95	0.47
1:C:757:ILE:HG21	1:C:767:TYR:CZ	2.50	0.47
1:E:103:ASN:ND2	1:E:107:ARG:HD2	2.30	0.47
1:E:311:ASN:ND2	1:E:319:GLY:CA	2.78	0.47
2:F:140:TYR:C	2:F:142:GLU:N	2.62	0.47
1:G:288:HIS:HB3	1:G:292:TYR:CE1	2.49	0.47
1:G:391:MET:O	1:G:618:ASP:HB2	2.14	0.47
1:G:398:PHE:HB2	1:G:612:LEU:HD21	1.97	0.47
2:H:105:GLY:HA2	2:H:138:ILE:CD1	2.44	0.47
2:H:52:GLY:O	2:H:53:ASN:HB2	2.15	0.47
1:A:138:ILE:HG21	1:A:196:VAL:CG2	2.43	0.47
1:A:283:ASP:H	1:A:318:ASN:HD21	1.61	0.47
1:A:36:TRP:HB2	1:A:76:GLN:CB	2.38	0.47
1:A:495:HIS:ND1	1:A:499:ILE:HG21	2.30	0.47
1:A:816:GLN:NE2	2:B:17:LEU:CD2	2.77	0.47
1:C:114:TYR:CE2	1:C:153:ILE:CB	2.88	0.47
1:C:197:VAL:CG1	1:C:197:VAL:O	2.63	0.47
1:C:489:LEU:HD12	1:C:489:LEU:C	2.28	0.47
1:C:526:GLU:HA	1:C:529:GLU:HB3	1.97	0.47
1:C:663:TYR:C	1:C:665:GLU:H	2.18	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:287:PHE:O	1:E:289:ILE:N	2.48	0.47
1:E:482:ILE:CG2	1:E:483:ASN:N	2.77	0.47
1:E:517:PHE:CE2	1:E:715:ARG:HB3	2.45	0.47
1:G:361:GLN:O	1:G:363:GLY:N	2.48	0.47
1:A:197:VAL:O	1:A:197:VAL:CG1	2.63	0.47
2:B:87:ASP:HA	2:B:90:GLU:HB3	1.96	0.47
1:C:147:HIS:CE1	1:C:148:GLU:HG2	2.49	0.47
1:C:585:HIS:NE2	1:C:592:TYR:OH	2.47	0.47
1:C:631:ILE:HG22	1:C:632:VAL:N	2.30	0.47
1:E:194:LEU:HD11	1:E:461:LEU:HD22	1.96	0.47
1:E:231:LEU:HD23	1:E:231:LEU:N	2.28	0.47
1:E:407:ILE:HD12	1:E:416:LYS:H	1.80	0.47
1:G:344:PHE:HD1	1:G:344:PHE:N	2.12	0.47
1:G:354:ARG:HG3	1:G:355:VAL:N	2.29	0.47
1:G:442:ILE:O	1:G:445:ARG:N	2.39	0.47
1:G:543:GLU:O	1:G:546:TRP:N	2.45	0.47
1:G:717:CYS:HA	1:G:722:PRO:HG3	1.96	0.47
2:H:3:PHE:CZ	2:H:73:MET:HE3	2.50	0.47
1:A:465:ASP:O	1:A:465:ASP:CG	2.52	0.47
1:C:344:PHE:CD1	1:C:344:PHE:N	2.83	0.47
1:C:502:GLN:O	1:C:505:TYR:HB2	2.15	0.47
2:D:102:THR:HG22	2:D:139:ASN:HA	1.96	0.47
1:G:146:ARG:H	1:G:146:ARG:CD	2.28	0.47
1:A:147:HIS:CE1	1:A:148:GLU:HG2	2.49	0.46
1:A:167:ASP:O	1:A:168:ARG:C	2.52	0.46
1:A:268:GLU:HG3	1:A:268:GLU:O	2.13	0.46
1:A:603:ASP:O	1:A:632:VAL:HG21	2.14	0.46
1:A:699:HIS:HA	1:A:702:LEU:HB3	1.97	0.46
1:A:71:SER:C	1:A:73:ASP:H	2.17	0.46
1:C:146:ARG:CD	1:C:146:ARG:H	2.28	0.46
1:C:162:ARG:O	1:C:166:GLN:CG	2.63	0.46
1:C:184:THR:O	1:C:187:THR:N	2.48	0.46
1:C:135:GLU:HB2	1:C:213:PRO:CD	2.46	0.46
1:C:495:HIS:ND1	1:C:499:ILE:HG21	2.29	0.46
1:C:733:ARG:NH1	2:D:95:PHE:HD1	2.12	0.46
2:D:40:GLN:C	2:D:42:PRO:CD	2.84	0.46
2:D:53:ASN:N	2:D:54:PRO:HD3	2.30	0.46
2:D:87:ASP:HA	2:D:90:GLU:HB3	1.95	0.46
1:E:226:GLN:CG	1:E:338:ALA:HA	2.45	0.46
1:G:278:ILE:CG2	1:G:432:LYS:NZ	2.78	0.46
2:H:140:TYR:CE1	2:H:141:GLU:CG	2.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:498:PHE:N	1:A:498:PHE:CD1	2.82	0.46
1:C:117:SER:OG	1:C:122:VAL:HG23	2.16	0.46
1:C:498:PHE:CE1	1:C:716:ILE:HD11	2.50	0.46
1:E:442:ILE:H	1:E:442:ILE:HG12	1.60	0.46
1:E:465:ASP:O	1:E:465:ASP:CG	2.52	0.46
2:F:52:GLY:O	2:F:53:ASN:HB2	2.15	0.46
1:G:305:LEU:HB2	1:G:307:LEU:HD23	1.97	0.46
1:G:313:TYR:N	1:G:313:TYR:HD1	2.12	0.46
1:G:699:HIS:HA	1:G:702:LEU:HB3	1.97	0.46
1:G:757:ILE:HG21	1:G:767:TYR:CZ	2.50	0.46
1:A:22:ASN:OD1	1:A:24:LEU:HB2	2.16	0.46
1:A:604:PRO:O	1:A:605:LEU:HB3	2.15	0.46
1:A:664:LYS:O	1:A:668:THR:HG23	2.15	0.46
1:C:799:PHE:HB2	2:D:88:TYR:CD1	2.49	0.46
2:D:16:GLN:H	2:D:16:GLN:HG2	1.40	0.46
2:D:15:PHE:CZ	2:D:26:ILE:HB	2.51	0.46
1:E:361:GLN:O	1:E:363:GLY:N	2.49	0.46
1:E:747:MET:CE	1:E:747:MET:HA	2.46	0.46
1:G:182:GLY:O	1:G:183:LYS:C	2.52	0.46
1:G:407:ILE:HD12	1:G:416:LYS:H	1.80	0.46
1:G:526:GLU:HA	1:G:529:GLU:HB3	1.97	0.46
1:A:361:GLN:O	1:A:363:GLY:N	2.48	0.46
1:C:101:LEU:HD21	1:C:105:ARG:NH2	2.31	0.46
1:C:344:PHE:N	1:C:344:PHE:HD1	2.12	0.46
1:C:625:TRP:O	1:C:628:VAL:HG12	2.16	0.46
2:D:27:LEU:HD23	2:D:28:TYR:H	1.80	0.46
1:E:86:VAL:HG12	1:E:103:ASN:OD1	2.16	0.46
1:E:22:ASN:OD1	1:E:24:LEU:HB2	2.16	0.46
1:E:395:VAL:HG23	1:E:396:THR:HG23	1.96	0.46
1:E:664:LYS:O	1:E:668:THR:HG23	2.16	0.46
1:E:721:PHE:C	1:E:723:ASN:H	2.18	0.46
2:F:87:ASP:HA	2:F:90:GLU:HB3	1.96	0.46
1:G:362:LEU:HD23	1:G:387:VAL:HG11	1.96	0.46
1:G:585:HIS:NE2	1:G:592:TYR:OH	2.47	0.46
1:G:631:ILE:HG22	1:G:632:VAL:N	2.30	0.46
2:H:53:ASN:N	2:H:54:PRO:HD3	2.31	0.46
2:H:70:LEU:CG	2:H:74:GLN:HE21	2.27	0.46
1:A:176:THR:OG1	1:A:177:GLY:N	2.46	0.46
1:A:224:LEU:O	1:A:224:LEU:HD12	2.16	0.46
1:A:344:PHE:HD1	1:A:344:PHE:N	2.13	0.46
1:A:630:ARG:HH22	1:A:657:ARG:HB3	1.77	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:144:LYS:HG2	1:C:149:MET:HG3	1.97	0.46
1:C:278:ILE:HG13	1:C:279:ARG:H	1.80	0.46
1:C:313:TYR:N	1:C:313:TYR:HD1	2.12	0.46
1:C:395:VAL:HG23	1:C:396:THR:HG23	1.97	0.46
2:D:28:TYR:CD2	2:D:54:PRO:CG	2.99	0.46
1:E:362:LEU:HD23	1:E:387:VAL:HG11	1.96	0.46
1:E:442:ILE:O	1:E:445:ARG:N	2.39	0.46
2:F:84:CYS:O	2:F:88:TYR:N	2.44	0.46
1:G:182:GLY:O	1:G:184:THR:N	2.48	0.46
1:G:482:ILE:CG2	1:G:483:ASN:N	2.76	0.46
1:G:509:GLY:O	1:G:510:ILE:C	2.54	0.46
1:A:226:GLN:HG2	1:A:341:ILE:HG13	1.98	0.46
1:A:39:SER:OG	1:A:42:HIS:N	2.43	0.46
1:A:487:GLU:OE1	1:A:585:HIS:ND1	2.45	0.46
1:A:735:GLU:HG3	1:A:756:MET:HE1	1.95	0.46
2:B:105:GLY:HA2	2:B:138:ILE:CD1	2.45	0.46
2:B:126:GLN:HG3	2:B:126:GLN:H	1.47	0.46
2:B:52:GLY:C	2:B:53:ASN:HD22	2.19	0.46
1:C:224:LEU:HD12	1:C:224:LEU:O	2.16	0.46
1:C:238:LYS:HB2	1:C:243:ASP:O	2.16	0.46
1:C:287:PHE:O	1:C:289:ILE:N	2.49	0.46
1:C:305:LEU:HB2	1:C:307:LEU:HD23	1.97	0.46
1:C:482:ILE:CG2	1:C:483:ASN:N	2.76	0.46
1:C:563:GLN:O	1:C:565:ASN:N	2.49	0.46
2:D:70:LEU:CG	2:D:74:GLN:HE21	2.27	0.46
1:E:114:TYR:CE2	1:E:153:ILE:CB	2.88	0.46
1:E:135:GLU:HB2	1:E:213:PRO:CD	2.46	0.46
1:E:310:PHE:CE1	1:E:320:HIS:HD2	2.34	0.46
1:E:31:ALA:O	1:E:33:LYS:N	2.49	0.46
1:E:502:GLN:O	1:E:505:TYR:HB2	2.15	0.46
1:E:607:ASP:HA	1:E:610:THR:CB	2.43	0.46
2:F:15:PHE:CZ	2:F:26:ILE:HB	2.51	0.46
1:G:117:SER:OG	1:G:122:VAL:HG23	2.16	0.46
1:G:176:THR:OG1	1:G:177:GLY:N	2.47	0.46
1:G:234:PHE:HB3	1:G:289:ILE:CG2	2.37	0.46
1:G:31:ALA:O	1:G:33:LYS:N	2.49	0.46
1:G:778:THR:C	1:G:780:VAL:H	2.19	0.46
2:H:49:LYS:HG3	2:H:50:VAL:N	2.22	0.46
1:G:799:PHE:HB2	2:H:88:TYR:CD1	2.50	0.46
1:A:101:LEU:HD21	1:A:105:ARG:NH2	2.31	0.46
1:A:274:LYS:C	1:A:276:ARG:N	2.69	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:398:PHE:HB2	1:A:612:LEU:HD21	1.96	0.46
1:C:31:ALA:O	1:C:33:LYS:N	2.49	0.46
1:C:361:GLN:C	1:C:363:GLY:H	2.19	0.46
1:C:398:PHE:HB2	1:C:612:LEU:HD21	1.97	0.46
1:C:407:ILE:HD12	1:C:416:LYS:H	1.81	0.46
1:C:604:PRO:O	1:C:605:LEU:HB3	2.15	0.46
1:E:178:GLU:O	1:E:183:LYS:NZ	2.49	0.46
2:F:102:THR:HG22	2:F:139:ASN:HA	1.96	0.46
1:G:274:LYS:C	1:G:276:ARG:N	2.68	0.46
1:G:502:GLN:O	1:G:505:TYR:HB2	2.15	0.46
1:A:87:GLU:OE1	1:A:107:ARG:NH2	2.49	0.46
1:A:404:THR:O	1:A:404:THR:OG1	2.33	0.46
1:A:563:GLN:O	1:A:565:ASN:N	2.49	0.46
1:A:778:THR:C	1:A:780:VAL:H	2.20	0.46
1:A:36:TRP:CE2	1:A:78:MET:HG3	2.51	0.46
1:C:226:GLN:HG2	1:C:341:ILE:HG13	1.98	0.46
1:C:520:ASP:OD1	1:C:522:GLN:HB2	2.16	0.46
1:E:476:SER:OG	1:E:478:GLU:OE1	2.29	0.46
1:E:543:GLU:O	1:E:546:TRP:N	2.44	0.46
1:E:604:PRO:O	1:E:605:LEU:HB3	2.15	0.46
1:E:498:PHE:CE1	1:E:716:ILE:HD11	2.50	0.46
2:F:40:GLN:C	2:F:42:PRO:CD	2.84	0.46
1:G:152:HIS:O	1:G:155:ALA:CB	2.58	0.46
1:G:226:GLN:HG2	1:G:341:ILE:HG13	1.98	0.46
1:G:664:LYS:O	1:G:668:THR:HG23	2.16	0.46
2:H:103:VAL:CG1	2:H:104:MET:H	2.22	0.46
2:H:28:TYR:CD2	2:H:54:PRO:CG	2.99	0.46
1:A:117:SER:OG	1:A:122:VAL:HG23	2.15	0.46
1:A:184:THR:O	1:A:187:THR:N	2.48	0.46
1:A:397:ASP:HB3	1:A:612:LEU:HD11	1.98	0.46
1:A:407:ILE:CG2	1:A:408:LYS:N	2.79	0.46
1:A:560:ILE:H	1:A:560:ILE:HG13	1.49	0.46
1:C:298:SER:O	1:C:302:ARG:N	2.34	0.46
1:C:269:THR:CB	1:C:443:LEU:HD13	2.42	0.46
1:C:607:ASP:HA	1:C:610:THR:CB	2.42	0.46
1:C:614:ASN:HB2	1:C:628:VAL:HG11	1.98	0.46
2:D:108:ILE:HD13	2:D:108:ILE:HA	1.73	0.46
1:E:13:LEU:HD11	1:E:137:ILE:CG2	2.45	0.46
1:E:224:LEU:O	1:E:224:LEU:HD12	2.16	0.46
1:E:238:LYS:HB2	1:E:243:ASP:O	2.16	0.46
1:E:498:PHE:CD1	1:E:498:PHE:N	2.83	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:520:ASP:OD1	1:E:522:GLN:HB2	2.16	0.46
1:E:625:TRP:O	1:E:628:VAL:HG12	2.16	0.46
2:F:28:TYR:CD2	2:F:54:PRO:CG	2.99	0.46
1:G:162:ARG:O	1:G:166:GLN:CG	2.63	0.46
1:G:287:PHE:O	1:G:289:ILE:N	2.48	0.46
1:G:305:LEU:HD12	1:G:307:LEU:CD2	2.42	0.46
1:G:465:ASP:CG	1:G:465:ASP:O	2.52	0.46
1:G:625:TRP:O	1:G:628:VAL:HG12	2.16	0.46
1:A:146:ARG:CD	1:A:146:ARG:H	2.29	0.46
1:A:22:ASN:HA	1:A:23:PRO:HD3	1.84	0.46
1:A:287:PHE:O	1:A:289:ILE:N	2.49	0.46
1:A:502:GLN:O	1:A:505:TYR:HB2	2.15	0.46
1:C:345:THR:N	1:C:348:GLU:HB2	2.31	0.46
1:C:253:ARG:HG3	1:C:460:PHE:HD1	1.81	0.46
2:D:102:THR:HG22	2:D:139:ASN:CB	2.47	0.46
2:D:143:LEU:O	2:D:147:VAL:HG22	2.16	0.46
1:E:274:LYS:C	1:E:276:ARG:N	2.68	0.46
1:E:36:TRP:CE2	1:E:78:MET:HG3	2.51	0.46
1:E:547:PHE:CE2	1:E:549:LYS:HB3	2.33	0.46
1:G:224:LEU:HD12	1:G:224:LEU:O	2.16	0.46
1:G:391:MET:HB3	1:G:393:ILE:CG1	2.46	0.46
1:G:442:ILE:HG12	1:G:442:ILE:H	1.60	0.46
1:G:464:LEU:HD21	1:G:466:ILE:HG21	1.98	0.46
1:G:604:PRO:O	1:G:605:LEU:HB3	2.15	0.46
2:H:87:ASP:HA	2:H:90:GLU:HB3	1.97	0.46
1:A:310:PHE:CE1	1:A:320:HIS:HD2	2.34	0.45
1:A:509:GLY:O	1:A:510:ILE:C	2.54	0.45
2:B:102:THR:HG22	2:B:139:ASN:CB	2.46	0.45
2:B:89:VAL:HA	2:B:92:LEU:HG	1.98	0.45
1:E:87:GLU:OE1	1:E:107:ARG:NH2	2.49	0.45
1:E:137:ILE:N	1:E:137:ILE:HD13	2.31	0.45
1:E:345:THR:N	1:E:348:GLU:HB2	2.32	0.45
1:E:541:LEU:CD2	1:E:601:ASN:HD22	2.09	0.45
1:E:610:THR:HG22	1:E:611:SER:N	2.30	0.45
1:G:87:GLU:OE1	1:G:107:ARG:NH2	2.49	0.45
1:G:114:TYR:HE2	1:G:153:ILE:CB	2.24	0.45
1:G:135:GLU:HB2	1:G:213:PRO:CD	2.46	0.45
1:G:610:THR:HG22	1:G:611:SER:N	2.31	0.45
1:G:498:PHE:CE1	1:G:716:ILE:HD11	2.50	0.45
1:G:788:ARG:HH22	2:H:95:PHE:HE1	1.64	0.45
2:H:108:ILE:HD13	2:H:108:ILE:HA	1.74	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:70:LEU:HG	2:H:74:GLN:HE22	1.77	0.45
1:A:135:GLU:HB2	1:A:213:PRO:CD	2.46	0.45
1:A:311:ASN:ND2	1:A:319:GLY:HA3	2.29	0.45
1:A:407:ILE:HD12	1:A:416:LYS:H	1.81	0.45
1:A:607:ASP:HA	1:A:610:THR:CB	2.42	0.45
1:A:625:TRP:O	1:A:628:VAL:HG12	2.16	0.45
2:B:102:THR:HG22	2:B:139:ASN:HA	1.97	0.45
2:B:52:GLY:O	2:B:53:ASN:HB2	2.16	0.45
1:C:22:ASN:OD1	1:C:24:LEU:HB2	2.16	0.45
1:C:234:PHE:HB3	1:C:289:ILE:CG2	2.37	0.45
1:C:391:MET:HB3	1:C:393:ILE:CG1	2.46	0.45
1:C:819:LEU:CD1	1:C:820:GLY:N	2.79	0.45
2:D:89:VAL:O	2:D:90:GLU:C	2.55	0.45
1:E:101:LEU:HD21	1:E:105:ARG:NH2	2.31	0.45
1:E:117:SER:OG	1:E:122:VAL:HG23	2.16	0.45
1:E:176:THR:OG1	1:E:177:GLY:N	2.46	0.45
1:E:352:ILE:HG23	1:E:620:PHE:HZ	1.81	0.45
1:E:631:ILE:HG22	1:E:632:VAL:N	2.31	0.45
1:E:125:ASN:CB	1:E:687:PRO:HD3	2.42	0.45
2:F:102:THR:HG22	2:F:139:ASN:CB	2.47	0.45
2:F:53:ASN:N	2:F:54:PRO:HD3	2.31	0.45
2:F:58:GLU:H	2:F:58:GLU:HG2	1.36	0.45
1:G:469:PHE:CD1	1:G:483:ASN:ND2	2.84	0.45
1:G:747:MET:HA	1:G:747:MET:CE	2.46	0.45
2:H:89:VAL:HA	2:H:92:LEU:HG	1.98	0.45
1:A:278:ILE:CG2	1:A:432:LYS:NZ	2.79	0.45
1:A:442:ILE:O	1:A:445:ARG:N	2.38	0.45
2:B:143:LEU:O	2:B:147:VAL:HG22	2.17	0.45
2:B:15:PHE:CZ	2:B:26:ILE:HB	2.51	0.45
1:A:809:ARG:HD3	2:B:36:ARG:HB3	1.98	0.45
2:B:70:LEU:HG	2:B:74:GLN:HE22	1.76	0.45
1:C:310:PHE:CE1	1:C:320:HIS:HD2	2.34	0.45
1:C:610:THR:HG22	1:C:611:SER:N	2.31	0.45
2:D:103:VAL:CG1	2:D:104:MET:N	2.79	0.45
1:E:184:THR:O	1:E:187:THR:N	2.48	0.45
1:E:305:LEU:HD12	1:E:307:LEU:CD2	2.42	0.45
1:E:391:MET:HB3	1:E:393:ILE:CG1	2.46	0.45
1:E:526:GLU:HA	1:E:529:GLU:HB3	1.98	0.45
1:G:101:LEU:HD21	1:G:105:ARG:NH2	2.31	0.45
1:G:476:SER:OG	1:G:478:GLU:OE1	2.29	0.45
1:G:726:VAL:HA	1:G:773:LYS:HA	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:83:PHE:HZ	1:G:93:THR:HG23	1.82	0.45
2:H:40:GLN:C	2:H:42:PRO:CD	2.84	0.45
1:A:144:LYS:HG2	1:A:149:MET:HG3	1.97	0.45
1:A:558:LYS:O	1:A:561:GLN:HB2	2.16	0.45
1:C:173:ILE:HA	1:C:680:ASN:HB2	1.99	0.45
1:E:183:LYS:HB2	1:E:183:LYS:HE2	1.69	0.45
1:E:234:PHE:HB3	1:E:289:ILE:CG2	2.37	0.45
1:E:425:PHE:C	1:E:425:PHE:CD1	2.89	0.45
1:E:547:PHE:CD2	1:E:549:LYS:N	2.85	0.45
1:E:558:LYS:O	1:E:561:GLN:HB2	2.16	0.45
1:E:735:GLU:HG3	1:E:756:MET:HE2	1.98	0.45
2:F:103:VAL:HG23	2:F:140:TYR:CD2	2.52	0.45
2:F:103:VAL:CG1	2:F:104:MET:H	2.22	0.45
1:G:226:GLN:CG	1:G:338:ALA:HA	2.46	0.45
1:G:541:LEU:CD2	1:G:601:ASN:HD22	2.09	0.45
1:G:819:LEU:CD1	1:G:820:GLY:N	2.78	0.45
1:A:114:TYR:CE2	1:A:153:ILE:CB	2.88	0.45
1:A:238:LYS:HB2	1:A:243:ASP:O	2.16	0.45
1:A:697:ASP:CG	1:A:700:LEU:HB3	2.37	0.45
1:C:278:ILE:CG2	1:C:432:LYS:NZ	2.79	0.45
1:C:664:LYS:O	1:C:668:THR:HG23	2.16	0.45
1:C:703:GLU:HA	1:C:706:ARG:HD3	1.98	0.45
1:C:778:THR:C	1:C:780:VAL:H	2.19	0.45
1:C:36:TRP:CE2	1:C:78:MET:HG3	2.51	0.45
2:D:103:VAL:HG23	2:D:140:TYR:CD2	2.52	0.45
2:D:52:GLY:O	2:D:53:ASN:HB2	2.15	0.45
1:E:197:VAL:O	1:E:197:VAL:CG1	2.63	0.45
1:E:226:GLN:HG2	1:E:341:ILE:HG13	1.98	0.45
1:E:278:ILE:HG13	1:E:279:ARG:H	1.80	0.45
1:E:397:ASP:HB3	1:E:612:LEU:HD11	1.98	0.45
1:E:699:HIS:HA	1:E:702:LEU:HB3	1.97	0.45
1:E:89:MET:CG	1:E:92:LEU:HD11	2.32	0.45
1:G:22:ASN:OD1	1:G:24:LEU:HB2	2.16	0.45
2:H:103:VAL:CG1	2:H:104:MET:N	2.79	0.45
2:H:119:MET:HB3	2:H:123:GLU:CB	2.47	0.45
2:H:15:PHE:CZ	2:H:26:ILE:HB	2.51	0.45
2:H:20:ARG:HB3	2:H:20:ARG:HE	1.46	0.45
1:A:226:GLN:CG	1:A:338:ALA:HA	2.46	0.45
1:A:31:ALA:O	1:A:33:LYS:N	2.49	0.45
1:A:345:THR:N	1:A:348:GLU:HB2	2.32	0.45
1:A:354:ARG:HG3	1:A:355:VAL:N	2.31	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:726:VAL:HA	1:A:773:LYS:HA	1.99	0.45
1:C:407:ILE:CG2	1:C:408:LYS:N	2.80	0.45
1:C:558:LYS:O	1:C:561:GLN:HB2	2.16	0.45
1:E:113:ILE:HG12	1:E:113:ILE:H	1.72	0.45
1:E:301:MET:CE	1:E:305:LEU:HD11	2.47	0.45
1:E:311:ASN:ND2	1:E:319:GLY:HA3	2.29	0.45
1:E:407:ILE:CG2	1:E:408:LYS:N	2.79	0.45
1:E:469:PHE:CD1	1:E:483:ASN:ND2	2.84	0.45
1:E:703:GLU:HA	1:E:706:ARG:HD3	1.98	0.45
1:E:800:GLN:CA	2:F:119:MET:HE2	2.34	0.45
1:G:238:LYS:HB2	1:G:243:ASP:O	2.16	0.45
1:G:487:GLU:HG3	1:G:521:LEU:CD1	2.47	0.45
1:G:563:GLN:O	1:G:565:ASN:N	2.49	0.45
1:G:703:GLU:HA	1:G:706:ARG:HD3	1.99	0.45
1:G:79:ASN:OD1	1:G:93:THR:OG1	2.26	0.45
2:H:70:LEU:CD1	2:H:74:GLN:HE21	2.30	0.45
1:A:308:GLU:HB2	1:A:313:TYR:HE1	1.82	0.45
1:A:614:ASN:HB2	1:A:628:VAL:HG11	1.98	0.45
1:A:498:PHE:CE1	1:A:716:ILE:HD11	2.51	0.45
2:B:119:MET:HB3	2:B:123:GLU:CB	2.47	0.45
1:C:469:PHE:CD1	1:C:483:ASN:ND2	2.84	0.45
1:C:487:GLU:HG3	1:C:521:LEU:CD1	2.47	0.45
1:C:772:SER:O	1:C:773:LYS:CB	2.55	0.45
1:E:278:ILE:CG2	1:E:432:LYS:NZ	2.79	0.45
1:E:500:LEU:O	1:E:503:GLU:HG2	2.17	0.45
1:E:726:VAL:HA	1:E:773:LYS:HA	1.98	0.45
1:G:345:THR:N	1:G:348:GLU:HB2	2.31	0.45
1:G:361:GLN:C	1:G:363:GLY:H	2.19	0.45
1:G:253:ARG:HG3	1:G:460:PHE:HD1	1.80	0.45
1:G:558:LYS:O	1:G:561:GLN:HB2	2.16	0.45
1:G:614:ASN:HB2	1:G:628:VAL:HG11	1.98	0.45
1:G:781:LEU:HD13	1:G:781:LEU:HA	1.79	0.45
1:G:95:LEU:HD11	1:G:714:ILE:HG22	1.99	0.45
2:H:89:VAL:O	2:H:90:GLU:C	2.55	0.45
1:A:22:ASN:O	1:A:22:ASN:ND2	2.50	0.45
1:A:272:LEU:HD21	1:A:435:PHE:CE2	2.52	0.45
1:A:735:GLU:O	1:A:738:ALA:C	2.55	0.45
1:A:809:ARG:HH21	2:B:41:ASN:CG	2.18	0.45
2:B:31:CYS:HG	2:B:69:PHE:HE2	1.63	0.45
1:C:44:PHE:CG	1:C:98:ALA:HB2	2.52	0.45
1:C:498:PHE:N	1:C:498:PHE:CD1	2.82	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:699:HIS:HA	1:C:702:LEU:HB3	1.98	0.45
1:C:747:MET:CE	1:C:747:MET:HA	2.46	0.45
1:C:788:ARG:HH22	2:D:95:PHE:HE1	1.64	0.45
1:E:361:GLN:C	1:E:363:GLY:H	2.19	0.45
1:E:663:TYR:C	1:E:665:GLU:N	2.71	0.45
1:E:788:ARG:HH22	2:F:95:PHE:HE1	1.64	0.45
2:F:140:TYR:CE1	2:F:141:GLU:CG	2.97	0.45
2:F:89:VAL:O	2:F:90:GLU:C	2.55	0.45
1:G:144:LYS:HG2	1:G:149:MET:HG3	1.97	0.45
1:G:197:VAL:CG1	1:G:197:VAL:O	2.63	0.45
1:G:32:LYS:HG2	1:G:32:LYS:H	1.38	0.45
1:G:397:ASP:HB3	1:G:612:LEU:HD11	1.98	0.45
1:G:407:ILE:CG2	1:G:408:LYS:N	2.80	0.45
2:H:102:THR:HG22	2:H:139:ASN:CB	2.47	0.45
2:H:103:VAL:CG1	2:H:107:GLU:HB3	2.47	0.45
2:H:71:PRO:HA	2:H:74:GLN:OE1	2.17	0.45
1:A:137:ILE:HD13	1:A:137:ILE:N	2.31	0.45
1:A:27:ALA:O	1:A:29:TRP:HD1	2.00	0.45
2:B:103:VAL:HG23	2:B:140:TYR:CD2	2.52	0.45
1:C:399:THR:HG22	1:C:403:LEU:HD12	1.99	0.45
1:C:818:GLN:H	1:C:818:GLN:HG2	1.37	0.45
2:D:119:MET:HB3	2:D:123:GLU:CB	2.47	0.45
1:E:305:LEU:HB3	1:E:354:ARG:HA	1.99	0.45
1:E:399:THR:O	1:E:403:LEU:HB2	2.17	0.45
1:E:173:ILE:HA	1:E:680:ASN:HB2	1.99	0.45
2:F:70:LEU:HG	2:F:74:GLN:HE22	1.77	0.45
2:F:70:LEU:CD1	2:F:74:GLN:HE21	2.30	0.45
2:F:85:PHE:HA	2:F:89:VAL:HG13	1.99	0.45
1:G:126:PRO:O	1:G:127:TYR:HB2	2.17	0.45
1:G:278:ILE:HG13	1:G:279:ARG:N	2.32	0.45
1:G:520:ASP:OD1	1:G:522:GLN:HB2	2.16	0.45
1:G:553:THR:HG22	1:G:557:GLU:OE2	2.17	0.45
1:G:173:ILE:HA	1:G:680:ASN:HB2	1.99	0.45
2:H:103:VAL:HG23	2:H:140:TYR:CD2	2.52	0.45
1:A:162:ARG:HG3	1:A:166:GLN:HG2	1.99	0.45
1:A:464:LEU:HD21	1:A:466:ILE:HG21	1.99	0.45
1:A:469:PHE:CD1	1:A:483:ASN:ND2	2.84	0.45
1:A:700:LEU:CG	1:A:704:GLN:HE21	2.30	0.45
1:C:247:ARG:HH22	1:C:470:GLU:CD	2.19	0.45
1:C:272:LEU:HD21	1:C:435:PHE:CE2	2.52	0.45
1:C:697:ASP:CG	1:C:700:LEU:HB3	2.37	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:509:GLY:O	1:E:510:ILE:C	2.53	0.45
1:E:812:PHE:CZ	2:F:17:LEU:HD23	2.38	0.45
1:G:272:LEU:HD21	1:G:435:PHE:CE2	2.52	0.45
1:G:36:TRP:CE2	1:G:78:MET:HG3	2.51	0.45
1:G:172:SER:O	1:G:680:ASN:N	2.50	0.45
2:H:27:LEU:HD23	2:H:28:TYR:H	1.81	0.45
1:A:234:PHE:HB3	1:A:289:ILE:CG2	2.38	0.44
1:A:301:MET:CE	1:A:305:LEU:HD11	2.47	0.44
1:A:391:MET:HB3	1:A:393:ILE:CG1	2.47	0.44
1:A:505:TYR:CB	1:A:510:ILE:HD11	2.48	0.44
1:A:352:ILE:HG23	1:A:620:PHE:HZ	1.81	0.44
1:C:425:PHE:CD1	1:C:425:PHE:C	2.90	0.44
1:C:726:VAL:HA	1:C:773:LYS:HA	1.98	0.44
1:C:87:GLU:OE1	1:C:107:ARG:NH2	2.49	0.44
1:E:276:ARG:HG2	1:E:287:PHE:HE1	1.83	0.44
1:E:305:LEU:HB2	1:E:307:LEU:HD23	1.98	0.44
1:E:354:ARG:HG3	1:E:355:VAL:N	2.31	0.44
1:E:44:PHE:CD2	1:E:98:ALA:HA	2.52	0.44
1:E:526:GLU:C	1:E:528:ILE:N	2.71	0.44
2:F:27:LEU:HD23	2:F:28:TYR:H	1.81	0.44
1:G:399:THR:O	1:G:403:LEU:HB2	2.17	0.44
2:H:143:LEU:O	2:H:147:VAL:HG22	2.16	0.44
1:A:247:ARG:HH22	1:A:470:GLU:CD	2.20	0.44
1:A:305:LEU:HB2	1:A:307:LEU:HD23	1.98	0.44
1:A:425:PHE:CD1	1:A:425:PHE:C	2.91	0.44
1:A:504:GLU:HG3	1:A:775:PHE:HZ	1.82	0.44
1:A:526:GLU:C	1:A:528:ILE:N	2.71	0.44
1:A:663:TYR:C	1:A:665:GLU:N	2.71	0.44
1:A:703:GLU:HA	1:A:706:ARG:HD3	1.98	0.44
1:A:788:ARG:HH22	2:B:95:PHE:HE1	1.65	0.44
1:A:809:ARG:HG2	1:A:809:ARG:H	1.38	0.44
1:C:308:GLU:HB2	1:C:313:TYR:HE1	1.82	0.44
1:C:399:THR:O	1:C:403:LEU:HB2	2.17	0.44
1:C:44:PHE:HD2	1:C:101:LEU:HD22	1.83	0.44
1:C:476:SER:HB3	1:C:479:GLN:NE2	2.32	0.44
1:C:487:GLU:OE1	1:C:585:HIS:ND1	2.45	0.44
1:C:553:THR:HG22	1:C:557:GLU:OE2	2.17	0.44
1:C:735:GLU:O	1:C:738:ALA:C	2.55	0.44
2:D:89:VAL:HA	2:D:92:LEU:HG	1.99	0.44
1:E:272:LEU:HD21	1:E:435:PHE:CE2	2.52	0.44
1:E:505:TYR:CB	1:E:510:ILE:HD11	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:563:GLN:O	1:E:565:ASN:N	2.50	0.44
1:G:22:ASN:O	1:G:22:ASN:ND2	2.50	0.44
1:G:305:LEU:HB3	1:G:354:ARG:HA	1.98	0.44
1:G:310:PHE:CE1	1:G:320:HIS:HD2	2.34	0.44
1:G:394:ASN:OD1	1:G:397:ASP:HB2	2.18	0.44
1:G:504:GLU:HG3	1:G:775:PHE:HZ	1.83	0.44
1:G:505:TYR:CB	1:G:510:ILE:HD11	2.48	0.44
1:G:76:GLN:OE1	1:G:96:ASN:HB3	2.17	0.44
1:G:809:ARG:H	1:G:809:ARG:HG2	1.38	0.44
1:A:126:PRO:O	1:A:127:TYR:HB2	2.18	0.44
1:A:278:ILE:HG13	1:A:279:ARG:H	1.81	0.44
1:A:238:LYS:HB3	1:A:285:ARG:HG3	2.00	0.44
1:A:305:LEU:HB3	1:A:354:ARG:HA	1.98	0.44
1:A:503:GLU:HG2	1:A:503:GLU:H	1.60	0.44
1:A:520:ASP:OD1	1:A:522:GLN:HB2	2.16	0.44
2:B:27:LEU:HD23	2:B:28:TYR:H	1.82	0.44
2:B:70:LEU:CD1	2:B:74:GLN:HE21	2.30	0.44
1:C:172:SER:O	1:C:680:ASN:N	2.50	0.44
1:C:269:THR:OG1	1:C:439:PHE:HE2	1.98	0.44
1:C:72:LYS:O	1:C:72:LYS:HG2	2.17	0.44
1:E:247:ARG:HH22	1:E:470:GLU:CD	2.19	0.44
1:E:164:MET:HE1	1:E:256:PHE:CE2	2.49	0.44
1:E:313:TYR:N	1:E:313:TYR:HD1	2.14	0.44
1:E:399:THR:HG22	1:E:403:LEU:HD12	1.99	0.44
1:E:464:LEU:HD21	1:E:466:ILE:HG21	1.98	0.44
1:E:48:SER:O	1:E:59:VAL:HG12	2.18	0.44
1:G:301:MET:CE	1:G:305:LEU:HD11	2.47	0.44
1:G:425:PHE:C	1:G:425:PHE:CD1	2.90	0.44
1:G:547:PHE:CD2	1:G:549:LYS:N	2.85	0.44
2:H:84:CYS:O	2:H:85:PHE:O	2.36	0.44
1:A:172:SER:O	1:A:680:ASN:N	2.51	0.44
1:A:48:SER:O	1:A:59:VAL:HG12	2.18	0.44
2:B:3:PHE:CZ	2:B:73:MET:HE3	2.53	0.44
1:C:89:MET:SD	1:C:100:VAL:HG13	2.58	0.44
1:C:293:LEU:CD1	1:C:301:MET:HE1	2.48	0.44
1:C:504:GLU:HG3	1:C:775:PHE:HZ	1.83	0.44
2:D:103:VAL:CG1	2:D:107:GLU:HB3	2.47	0.44
2:D:70:LEU:CD1	2:D:74:GLN:HE21	2.30	0.44
1:E:22:ASN:ND2	1:E:22:ASN:O	2.50	0.44
1:E:487:GLU:HG3	1:E:521:LEU:CD1	2.47	0.44
1:E:553:THR:HG22	1:E:557:GLU:OE2	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:778:THR:C	1:E:780:VAL:H	2.19	0.44
2:F:105:GLY:HA2	2:F:138:ILE:HD12	2.00	0.44
1:G:274:LYS:HZ2	1:G:432:LYS:HD2	1.82	0.44
1:G:27:ALA:O	1:G:29:TRP:HD1	2.01	0.44
1:G:323:ILE:HG23	1:G:323:ILE:O	2.17	0.44
1:G:476:SER:HB3	1:G:479:GLN:NE2	2.32	0.44
1:G:48:SER:O	1:G:59:VAL:HG12	2.18	0.44
2:H:135:ASN:HD22	2:H:135:ASN:N	2.16	0.44
1:A:72:LYS:HG2	1:A:72:LYS:O	2.18	0.44
1:A:742:ILE:HD11	1:A:752:ALA:C	2.37	0.44
1:C:231:LEU:H	1:C:231:LEU:HD23	1.83	0.44
1:C:305:LEU:HB3	1:C:354:ARG:HA	1.98	0.44
1:C:394:ASN:OD1	1:C:397:ASP:HB2	2.18	0.44
1:C:464:LEU:HD21	1:C:466:ILE:HG21	1.98	0.44
2:D:105:GLY:HA2	2:D:138:ILE:HD12	2.00	0.44
1:E:126:PRO:O	1:E:127:TYR:HB2	2.18	0.44
1:E:144:LYS:HG2	1:E:149:MET:HG3	1.98	0.44
1:E:323:ILE:HG23	1:E:323:ILE:O	2.18	0.44
1:E:700:LEU:CG	1:E:704:GLN:HE21	2.31	0.44
1:E:805:GLY:O	1:E:809:ARG:NE	2.50	0.44
1:E:89:MET:SD	1:E:100:VAL:HG13	2.58	0.44
1:E:182:GLY:N	4:E:998:ADP:O1B	2.44	0.44
2:F:119:MET:HB3	2:F:123:GLU:CB	2.47	0.44
2:F:71:PRO:HA	2:F:74:GLN:OE1	2.18	0.44
1:G:231:LEU:H	1:G:231:LEU:HD23	1.83	0.44
1:G:621:VAL:HA	1:G:624:LEU:HB2	2.00	0.44
1:G:697:ASP:CG	1:G:700:LEU:HB3	2.38	0.44
2:H:23:ASP:HB3	2:H:25:LYS:CD	2.48	0.44
1:A:610:THR:HG22	1:A:611:SER:N	2.31	0.44
1:A:619:LYS:O	1:A:623:ASP:N	2.41	0.44
1:A:173:ILE:HA	1:A:680:ASN:HB2	1.99	0.44
2:B:113:VAL:O	2:B:113:VAL:HG12	2.18	0.44
1:C:301:MET:CE	1:C:305:LEU:HD11	2.47	0.44
1:C:424:ASP:O	1:C:427:ILE:HG22	2.18	0.44
1:C:621:VAL:HA	1:C:624:LEU:HB2	2.00	0.44
1:C:742:ILE:O	1:C:743:PRO:O	2.36	0.44
2:D:3:PHE:CZ	2:D:73:MET:HE3	2.53	0.44
1:E:275:SER:CB	1:E:478:GLU:OE2	2.66	0.44
1:E:95:LEU:HD11	1:E:714:ILE:HG22	1.98	0.44
2:F:3:PHE:CZ	2:F:73:MET:HE3	2.51	0.44
1:G:184:THR:O	1:G:187:THR:N	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:238:LYS:HB3	1:G:285:ARG:HG3	2.00	0.44
1:G:39:SER:OG	1:G:42:HIS:N	2.43	0.44
1:G:33:LYS:O	1:G:48:SER:HA	2.18	0.44
1:G:500:LEU:O	1:G:503:GLU:HG2	2.17	0.44
1:G:700:LEU:CG	1:G:704:GLN:HE21	2.31	0.44
1:G:72:LYS:O	1:G:72:LYS:HG2	2.17	0.44
1:G:774:ILE:HB	1:G:776:PHE:CE2	2.53	0.44
2:H:58:GLU:HG2	2:H:58:GLU:H	1.37	0.44
1:A:361:GLN:C	1:A:363:GLY:H	2.20	0.44
1:A:275:SER:CB	1:A:478:GLU:OE2	2.66	0.44
1:C:137:ILE:HD13	1:C:137:ILE:N	2.32	0.44
1:C:405:PRO:HB2	1:C:407:ILE:CD1	2.48	0.44
1:C:44:PHE:CD2	1:C:98:ALA:HA	2.53	0.44
1:C:48:SER:O	1:C:59:VAL:HG12	2.18	0.44
1:C:509:GLY:O	1:C:510:ILE:C	2.54	0.44
1:C:663:TYR:C	1:C:665:GLU:N	2.71	0.44
2:D:28:TYR:CD1	2:D:62:LYS:HB3	2.53	0.44
1:E:33:LYS:O	1:E:48:SER:HA	2.18	0.44
1:E:721:PHE:CD1	1:E:721:PHE:N	2.85	0.44
1:E:735:GLU:O	1:E:738:ALA:C	2.56	0.44
2:F:103:VAL:CG1	2:F:107:GLU:HB3	2.47	0.44
2:F:135:ASN:N	2:F:135:ASN:HD22	2.16	0.44
1:G:89:MET:SD	1:G:100:VAL:HG13	2.58	0.44
1:G:137:ILE:HD13	1:G:137:ILE:N	2.32	0.44
1:G:227:ALA:N	1:G:229:PRO:HD2	2.33	0.44
1:G:424:ASP:O	1:G:427:ILE:HG22	2.18	0.44
1:G:805:GLY:C	1:G:809:ARG:NE	2.71	0.44
2:H:4:SER:O	2:H:8:THR:OG1	2.27	0.44
2:B:89:VAL:O	2:B:90:GLU:C	2.55	0.44
1:C:162:ARG:HG3	1:C:166:GLN:HG2	1.99	0.44
1:C:22:ASN:O	1:C:22:ASN:ND2	2.50	0.44
1:C:442:ILE:H	1:C:442:ILE:HG12	1.60	0.44
1:C:545:CYS:HB2	1:C:598:LEU:CB	2.48	0.44
1:C:805:GLY:O	1:C:809:ARG:NE	2.50	0.44
1:E:408:LYS:C	1:E:410:GLY:H	2.21	0.44
1:E:80:PRO:C	1:E:82:LYS:H	2.21	0.44
2:F:25:LYS:HE3	2:F:65:LYS:HZ3	1.82	0.44
1:G:254:ILE:HG21	1:G:262:ILE:HG12	2.00	0.44
1:G:276:ARG:HG2	1:G:287:PHE:HE1	1.82	0.44
1:G:735:GLU:O	1:G:738:ALA:C	2.55	0.44
1:G:805:GLY:O	1:G:809:ARG:NE	2.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:122:VAL:O	1:A:123:VAL:HG23	2.18	0.44
1:A:352:ILE:O	1:A:355:VAL:HB	2.18	0.44
1:A:399:THR:O	1:A:403:LEU:HB2	2.18	0.44
1:A:405:PRO:HB2	1:A:407:ILE:CD1	2.48	0.44
2:B:86:GLU:N	2:B:86:GLU:CD	2.72	0.44
1:C:10:GLU:C	1:C:12:PHE:H	2.20	0.44
1:C:122:VAL:O	1:C:123:VAL:HG23	2.18	0.44
1:C:144:LYS:HA	1:C:144:LYS:HD3	1.82	0.44
1:C:226:GLN:CG	1:C:338:ALA:HA	2.46	0.44
1:C:362:LEU:HD21	1:C:387:VAL:CG1	2.47	0.44
1:C:352:ILE:HG23	1:C:620:PHE:HZ	1.82	0.44
1:C:805:GLY:CA	1:C:809:ARG:HE	2.31	0.44
1:C:805:GLY:C	1:C:809:ARG:NE	2.71	0.44
1:E:120:PHE:N	1:E:120:PHE:CD1	2.71	0.44
1:E:352:ILE:O	1:E:355:VAL:HB	2.17	0.44
1:E:476:SER:HB3	1:E:479:GLN:NE2	2.32	0.44
2:F:143:LEU:O	2:F:147:VAL:HG22	2.16	0.44
1:G:399:THR:HG22	1:G:403:LEU:HD12	1.99	0.44
1:A:89:MET:SD	1:A:100:VAL:HG13	2.58	0.43
1:A:323:ILE:O	1:A:323:ILE:HG23	2.18	0.43
1:A:441:TRP:HE3	1:A:442:ILE:HD13	1.79	0.43
1:A:80:PRO:C	1:A:82:LYS:H	2.21	0.43
2:B:135:ASN:HD22	2:B:135:ASN:N	2.16	0.43
1:C:323:ILE:HG23	1:C:323:ILE:O	2.18	0.43
1:C:481:CYS:CA	1:C:484:TYR:HB3	2.48	0.43
1:C:505:TYR:CB	1:C:510:ILE:HD11	2.47	0.43
1:C:672:THR:O	1:C:676:ASN:ND2	2.51	0.43
1:E:254:ILE:HG21	1:E:262:ILE:HG12	2.00	0.43
1:E:268:GLU:O	1:E:270:TYR:CD1	2.71	0.43
1:E:308:GLU:HB2	1:E:313:TYR:HE1	1.82	0.43
1:E:672:THR:O	1:E:676:ASN:ND2	2.51	0.43
1:E:72:LYS:HG2	1:E:72:LYS:O	2.18	0.43
2:F:113:VAL:HG12	2:F:113:VAL:O	2.18	0.43
1:G:352:ILE:O	1:G:355:VAL:HB	2.18	0.43
1:G:405:PRO:HB2	1:G:407:ILE:HD11	2.00	0.43
1:G:275:SER:CB	1:G:478:GLU:OE2	2.66	0.43
1:G:663:TYR:C	1:G:665:GLU:N	2.70	0.43
1:G:805:GLY:CA	1:G:809:ARG:HE	2.31	0.43
2:H:16:GLN:HG2	2:H:16:GLN:H	1.41	0.43
2:H:28:TYR:CD1	2:H:62:LYS:HB3	2.53	0.43
1:A:227:ALA:N	1:A:229:PRO:HD2	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:368:LYS:HZ3	1:A:379:PRO:CG	2.30	0.43
1:A:370:GLU:O	1:A:374:ASP:HA	2.18	0.43
1:A:487:GLU:HG3	1:A:521:LEU:CD1	2.47	0.43
1:A:672:THR:O	1:A:676:ASN:ND2	2.51	0.43
1:A:774:ILE:HB	1:A:776:PHE:CE2	2.53	0.43
1:A:805:GLY:O	1:A:809:ARG:NE	2.51	0.43
1:A:818:GLN:HB3	1:A:818:GLN:HE21	1.61	0.43
2:B:105:GLY:HA2	2:B:138:ILE:HD12	2.00	0.43
1:C:274:LYS:H	1:C:274:LYS:HG3	1.50	0.43
1:C:370:GLU:O	1:C:374:ASP:HA	2.18	0.43
1:C:547:PHE:CD1	1:C:549:LYS:N	2.85	0.43
1:C:700:LEU:CG	1:C:704:GLN:HE21	2.31	0.43
1:C:774:ILE:HB	1:C:776:PHE:CE2	2.53	0.43
1:E:162:ARG:HG3	1:E:166:GLN:HG2	1.99	0.43
1:E:405:PRO:HB2	1:E:407:ILE:CD1	2.48	0.43
1:E:510:ILE:O	1:E:512:TRP:N	2.51	0.43
1:E:172:SER:O	1:E:680:ASN:N	2.51	0.43
1:E:699:HIS:O	1:E:702:LEU:HB3	2.18	0.43
2:F:89:VAL:HA	2:F:92:LEU:HG	1.99	0.43
1:G:114:TYR:CE2	1:G:153:ILE:CB	2.88	0.43
1:G:817:GLN:CD	1:G:817:GLN:C	2.77	0.43
1:A:276:ARG:HG2	1:A:287:PHE:HE1	1.83	0.43
1:A:547:PHE:CD1	1:A:549:LYS:N	2.86	0.43
1:A:568:LYS:CD	1:A:584:LEU:O	2.67	0.43
1:A:747:MET:HA	1:A:747:MET:CE	2.47	0.43
2:B:71:PRO:HA	2:B:74:GLN:OE1	2.18	0.43
1:C:568:LYS:CD	1:C:584:LEU:O	2.66	0.43
1:C:125:ASN:CB	1:C:687:PRO:HD3	2.42	0.43
1:C:773:LYS:HD2	1:C:775:PHE:CE1	2.53	0.43
1:E:614:ASN:HB2	1:E:628:VAL:HG11	1.98	0.43
1:E:806:TYR:CB	2:F:147:VAL:HG12	2.49	0.43
2:F:15:PHE:HZ	2:F:64:LEU:O	2.01	0.43
1:E:812:PHE:CE1	2:F:17:LEU:CD2	3.01	0.43
1:G:405:PRO:HB2	1:G:407:ILE:CD1	2.48	0.43
1:G:545:CYS:HB2	1:G:598:LEU:CB	2.48	0.43
1:G:728:GLN:NE2	1:G:728:GLN:CA	2.81	0.43
1:A:10:GLU:C	1:A:12:PHE:H	2.20	0.43
1:A:405:PRO:HB2	1:A:407:ILE:HD11	2.01	0.43
1:A:408:LYS:C	1:A:410:GLY:H	2.21	0.43
1:A:510:ILE:O	1:A:512:TRP:N	2.52	0.43
1:A:715:ARG:O	1:A:719:GLN:N	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:803:CYS:HB3	2:B:127:LEU:HD22	2.00	0.43
1:C:126:PRO:O	1:C:127:TYR:HB2	2.17	0.43
1:C:391:MET:O	1:C:618:ASP:CB	2.67	0.43
1:C:275:SER:CB	1:C:478:GLU:OE2	2.66	0.43
2:D:43:THR:C	2:D:45:ALA:H	2.22	0.43
2:D:71:PRO:HA	2:D:74:GLN:OE1	2.18	0.43
1:E:404:THR:O	1:E:404:THR:OG1	2.33	0.43
1:E:742:ILE:HD11	1:E:752:ALA:C	2.37	0.43
1:G:10:GLU:C	1:G:12:PHE:H	2.20	0.43
1:G:408:LYS:C	1:G:410:GLY:H	2.21	0.43
1:G:365:ILE:HD12	1:G:427:ILE:HD11	2.00	0.43
1:G:568:LYS:CD	1:G:584:LEU:O	2.66	0.43
1:G:352:ILE:HG23	1:G:620:PHE:HZ	1.82	0.43
1:G:182:GLY:N	4:G:998:ADP:O1B	2.47	0.43
1:A:362:LEU:HD23	1:A:387:VAL:HG11	1.98	0.43
1:A:424:ASP:O	1:A:427:ILE:HG22	2.17	0.43
1:A:750:LYS:O	1:A:754:ILE:HD12	2.19	0.43
1:C:33:LYS:O	1:C:48:SER:HA	2.18	0.43
1:C:397:ASP:HB3	1:C:612:LEU:HD11	1.98	0.43
1:C:522:GLN:N	1:C:523:PRO:CD	2.81	0.43
1:C:526:GLU:C	1:C:528:ILE:N	2.71	0.43
1:C:543:GLU:O	1:C:546:TRP:N	2.45	0.43
1:C:613:LEU:HD22	1:C:621:VAL:HG12	2.01	0.43
1:C:728:GLN:CA	1:C:728:GLN:NE2	2.81	0.43
1:C:80:PRO:C	1:C:82:LYS:H	2.22	0.43
1:C:816:GLN:O	1:C:819:LEU:CG	2.66	0.43
2:D:15:PHE:HZ	2:D:64:LEU:O	2.01	0.43
1:E:238:LYS:HB3	1:E:285:ARG:HG3	2.00	0.43
1:E:613:LEU:HD22	1:E:621:VAL:HG12	2.01	0.43
1:E:742:ILE:O	1:E:743:PRO:O	2.36	0.43
2:F:108:ILE:HD13	2:F:108:ILE:HA	1.73	0.43
2:H:43:THR:C	2:H:45:ALA:H	2.22	0.43
1:A:33:LYS:O	1:A:48:SER:HA	2.18	0.43
1:A:476:SER:HB3	1:A:479:GLN:NE2	2.32	0.43
1:A:513:ASN:ND2	1:A:513:ASN:C	2.72	0.43
1:A:545:CYS:HB2	1:A:598:LEU:CB	2.48	0.43
1:A:547:PHE:HE1	1:A:549:LYS:CB	2.23	0.43
1:A:721:PHE:CD1	1:A:721:PHE:N	2.87	0.43
2:B:64:LEU:HD11	2:B:72:MET:HE3	2.00	0.43
1:C:152:HIS:O	1:C:155:ALA:CB	2.58	0.43
1:C:193:TYR:CE1	1:C:197:VAL:HG11	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:442:ILE:O	1:C:445:ARG:N	2.39	0.43
1:C:76:GLN:HG2	1:C:96:ASN:CG	2.39	0.43
2:D:85:PHE:O	2:D:86:GLU:C	2.57	0.43
1:E:231:LEU:H	1:E:231:LEU:HD23	1.84	0.43
1:E:253:ARG:O	1:E:265:ALA:HA	2.18	0.43
1:E:27:ALA:O	1:E:29:TRP:HD1	2.01	0.43
1:E:302:ARG:CB	1:E:302:ARG:HH11	2.32	0.43
1:E:32:LYS:H	1:E:32:LYS:HG2	1.38	0.43
1:E:427:ILE:HG13	1:E:430:LEU:HD23	2.01	0.43
1:E:504:GLU:HG3	1:E:775:PHE:HZ	1.83	0.43
1:E:526:GLU:C	1:E:528:ILE:H	2.22	0.43
1:E:567:ALA:C	1:E:569:PHE:H	2.22	0.43
1:E:697:ASP:CG	1:E:700:LEU:HB3	2.38	0.43
2:F:109:ARG:HG2	2:F:124:VAL:HB	2.00	0.43
1:G:308:GLU:HB2	1:G:313:TYR:HE1	1.82	0.43
1:G:391:MET:O	1:G:618:ASP:CB	2.67	0.43
1:G:803:CYS:HB3	2:H:127:LEU:HD22	2.00	0.43
2:H:113:VAL:CG2	2:H:124:VAL:CG1	2.95	0.43
1:A:391:MET:O	1:A:618:ASP:CB	2.67	0.43
1:A:553:THR:HG22	1:A:557:GLU:OE2	2.17	0.43
1:A:699:HIS:O	1:A:702:LEU:HB3	2.19	0.43
1:A:742:ILE:O	1:A:743:PRO:O	2.36	0.43
2:B:115:LEU:HD12	2:B:115:LEU:N	2.34	0.43
1:C:238:LYS:HB3	1:C:285:ARG:HG3	2.00	0.43
1:C:405:PRO:HB2	1:C:407:ILE:HD11	2.01	0.43
1:C:817:GLN:CD	1:C:817:GLN:C	2.77	0.43
1:E:122:VAL:O	1:E:123:VAL:HG23	2.19	0.43
1:E:145:LYS:HE3	1:E:145:LYS:HB2	1.67	0.43
1:E:227:ALA:N	1:E:229:PRO:HD2	2.33	0.43
1:E:434:LYS:CG	1:E:625:TRP:HZ2	2.30	0.43
1:E:773:LYS:HD2	1:E:775:PHE:CE1	2.54	0.43
1:E:803:CYS:HB3	2:F:127:LEU:HD22	2.00	0.43
2:F:122:GLU:H	2:F:122:GLU:HG2	1.62	0.43
1:G:145:LYS:HE3	1:G:145:LYS:HB2	1.67	0.43
1:G:526:GLU:C	1:G:528:ILE:N	2.71	0.43
1:G:613:LEU:HD22	1:G:621:VAL:HG12	2.01	0.43
2:H:15:PHE:HZ	2:H:64:LEU:O	2.01	0.43
2:H:31:CYS:HG	2:H:69:PHE:HE2	1.66	0.43
1:A:274:LYS:HG3	1:A:274:LYS:H	1.52	0.43
1:A:818:GLN:H	1:A:818:GLN:HG2	1.36	0.43
2:B:103:VAL:CG1	2:B:107:GLU:HB3	2.47	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:43:THR:C	2:B:45:ALA:H	2.20	0.43
1:C:153:ILE:HA	1:C:156:ILE:CD1	2.46	0.43
1:C:352:ILE:O	1:C:355:VAL:HB	2.17	0.43
1:C:427:ILE:HG13	1:C:430:LEU:HD23	2.01	0.43
1:C:630:ARG:HH22	1:C:657:ARG:HB3	1.77	0.43
1:C:766:LEU:O	1:C:777:ARG:N	2.52	0.43
1:C:809:ARG:H	1:C:809:ARG:HG2	1.38	0.43
1:C:803:CYS:HB3	2:D:127:LEU:HD22	2.00	0.43
2:D:135:ASN:N	2:D:135:ASN:HD22	2.16	0.43
1:E:10:GLU:C	1:E:12:PHE:H	2.20	0.43
1:E:162:ARG:O	1:E:166:GLN:CG	2.63	0.43
1:E:278:ILE:HG21	1:E:432:LYS:HZ3	1.84	0.43
1:E:394:ASN:OD1	1:E:397:ASP:HB2	2.18	0.43
1:E:499:ILE:HG22	1:E:500:LEU:N	2.34	0.43
1:E:391:MET:O	1:E:618:ASP:CB	2.67	0.43
1:G:162:ARG:HG3	1:G:166:GLN:HG2	1.99	0.43
1:G:183:LYS:HB2	4:G:998:ADP:O1B	2.18	0.43
1:G:699:HIS:O	1:G:702:LEU:HB3	2.19	0.43
1:G:773:LYS:HD2	1:G:775:PHE:CE1	2.54	0.43
1:A:743:PRO:HG2	1:G:816:GLN:OE1	2.18	0.43
2:H:105:GLY:HA2	2:H:138:ILE:HD12	2.00	0.43
1:A:399:THR:HG22	1:A:403:LEU:HD12	1.99	0.43
1:A:469:PHE:CE1	1:A:483:ASN:ND2	2.87	0.43
1:A:747:MET:CG	1:G:812:PHE:HE2	2.21	0.43
1:A:95:LEU:HD11	1:A:714:ILE:HG22	2.00	0.43
2:B:53:ASN:N	2:B:54:PRO:CD	2.81	0.43
2:B:96:ASP:O	2:B:97:LYS:C	2.57	0.43
1:C:223:GLN:O	1:C:225:LEU:N	2.52	0.43
1:C:715:ARG:O	1:C:719:GLN:N	2.50	0.43
1:C:742:ILE:HD11	1:C:752:ALA:C	2.37	0.43
1:C:806:TYR:CB	2:D:147:VAL:HG12	2.49	0.43
2:D:40:GLN:HB3	2:D:42:PRO:HD3	2.01	0.43
1:E:424:ASP:O	1:E:427:ILE:HG22	2.18	0.43
1:E:545:CYS:HB2	1:E:598:LEU:CB	2.48	0.43
1:E:669:LYS:O	1:E:672:THR:HB	2.19	0.43
1:G:315:PHE:HD1	1:G:315:PHE:HA	1.70	0.43
1:G:427:ILE:HG13	1:G:430:LEU:HD23	2.01	0.43
1:G:721:PHE:N	1:G:721:PHE:CD1	2.87	0.43
1:G:742:ILE:O	1:G:743:PRO:O	2.36	0.43
1:A:153:ILE:CG2	1:A:154:TYR:N	2.82	0.43
1:A:256:PHE:HA	1:A:261:TYR:O	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:302:ARG:CB	1:A:302:ARG:HH11	2.32	0.43
1:A:378:MET:CE	1:A:381:ASN:HA	2.49	0.43
1:A:805:GLY:C	1:A:809:ARG:NE	2.72	0.43
1:A:817:GLN:C	1:A:817:GLN:CD	2.78	0.43
1:A:83:PHE:O	1:A:84:SER:C	2.58	0.43
2:B:65:LYS:N	2:B:68:GLN:HE21	2.14	0.43
1:C:253:ARG:O	1:C:265:ALA:HA	2.19	0.43
1:C:310:PHE:CD1	1:C:320:HIS:HD2	2.37	0.43
2:D:96:ASP:O	2:D:97:LYS:C	2.58	0.43
1:E:573:LYS:NZ	1:E:589:LYS:HZ3	2.16	0.43
1:E:728:GLN:CA	1:E:728:GLN:NE2	2.82	0.43
1:E:774:ILE:HB	1:E:776:PHE:CE2	2.53	0.43
1:E:766:LEU:O	1:E:777:ARG:N	2.51	0.43
1:E:817:GLN:C	1:E:817:GLN:CD	2.77	0.43
2:F:96:ASP:O	2:F:97:LYS:C	2.58	0.43
1:G:223:GLN:O	1:G:225:LEU:N	2.52	0.43
1:G:347:GLU:HG3	1:G:347:GLU:H	1.47	0.43
1:G:80:PRO:C	1:G:82:LYS:H	2.21	0.43
2:H:22:GLY:C	2:H:24:GLY:H	2.22	0.43
1:A:250:LYS:O	1:A:465:ASP:N	2.50	0.42
1:A:268:GLU:O	1:A:270:TYR:CD1	2.72	0.42
1:A:278:ILE:HG21	1:A:432:LYS:HZ3	1.84	0.42
1:A:310:PHE:CD1	1:A:320:HIS:HD2	2.37	0.42
1:A:567:ALA:C	1:A:569:PHE:H	2.22	0.42
1:A:619:LYS:O	1:A:623:ASP:OD1	2.37	0.42
1:A:176:THR:HG21	1:A:683:ARG:HH21	1.84	0.42
1:A:773:LYS:HD2	1:A:775:PHE:CE1	2.54	0.42
2:B:23:ASP:HB3	2:B:25:LYS:CD	2.49	0.42
1:A:809:ARG:NH2	2:B:41:ASN:OD1	2.38	0.42
2:B:28:TYR:CD1	2:B:62:LYS:HB3	2.54	0.42
1:C:145:LYS:HB2	1:C:145:LYS:HE3	1.67	0.42
1:C:227:ALA:N	1:C:229:PRO:HD2	2.33	0.42
1:C:27:ALA:O	1:C:29:TRP:HD1	2.01	0.42
1:C:347:GLU:H	1:C:347:GLU:HG3	1.47	0.42
1:C:510:ILE:O	1:C:512:TRP:N	2.52	0.42
1:C:268:GLU:CD	1:C:666:GLN:NE2	2.72	0.42
1:E:140:MET:O	1:E:149:MET:HE2	2.19	0.42
1:E:154:TYR:HB3	1:E:193:TYR:CD2	2.54	0.42
1:E:750:LYS:O	1:E:754:ILE:HD12	2.19	0.42
1:E:805:GLY:C	1:E:809:ARG:NE	2.72	0.42
1:E:76:GLN:CG	1:E:96:ASN:HB3	2.49	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:97:LYS:HG3	2:F:98:GLU:HG3	2.01	0.42
1:G:122:VAL:O	1:G:123:VAL:HG23	2.18	0.42
1:G:184:THR:O	1:G:187:THR:HB	2.19	0.42
1:G:296:GLY:HA3	1:G:332:PHE:CG	2.54	0.42
1:G:370:GLU:O	1:G:374:ASP:HA	2.18	0.42
1:G:513:ASN:C	1:G:513:ASN:ND2	2.72	0.42
1:G:268:GLU:CD	1:G:666:GLN:NE2	2.72	0.42
1:G:669:LYS:O	1:G:672:THR:HB	2.19	0.42
1:G:672:THR:O	1:G:676:ASN:ND2	2.51	0.42
1:G:816:GLN:O	1:G:819:LEU:CG	2.66	0.42
2:H:113:VAL:O	2:H:113:VAL:HG12	2.18	0.42
1:A:711:LEU:H	1:A:711:LEU:CD2	2.31	0.42
1:A:728:GLN:CA	1:A:728:GLN:NE2	2.81	0.42
2:B:109:ARG:HG2	2:B:124:VAL:HB	2.00	0.42
2:B:40:GLN:HB3	2:B:42:PRO:HD3	2.00	0.42
1:C:276:ARG:HG2	1:C:287:PHE:HE1	1.83	0.42
1:C:757:ILE:HD11	1:C:774:ILE:HD12	2.01	0.42
2:D:113:VAL:O	2:D:113:VAL:HG12	2.18	0.42
2:D:109:ARG:HG2	2:D:124:VAL:HB	2.00	0.42
2:D:64:LEU:HD11	2:D:72:MET:HE3	1.99	0.42
1:E:184:THR:O	1:E:187:THR:HB	2.20	0.42
1:E:22:ASN:HA	1:E:23:PRO:HD3	1.83	0.42
1:E:256:PHE:HA	1:E:261:TYR:O	2.20	0.42
1:E:268:GLU:CD	1:E:666:GLN:NE2	2.72	0.42
1:E:69:THR:C	1:E:70:LEU:HG	2.40	0.42
1:G:193:TYR:CE1	1:G:197:VAL:HG11	2.54	0.42
1:G:310:PHE:CD1	1:G:320:HIS:HD2	2.38	0.42
1:G:381:ASN:HB2	1:G:385:GLN:NE2	2.34	0.42
1:G:499:ILE:HG22	1:G:500:LEU:N	2.35	0.42
1:G:749:GLY:O	1:G:753:CYS:HB3	2.20	0.42
1:G:754:ILE:HG22	1:G:755:LEU:N	2.35	0.42
1:G:766:LEU:O	1:G:777:ARG:N	2.52	0.42
1:A:253:ARG:O	1:A:265:ALA:HA	2.19	0.42
1:A:500:LEU:O	1:A:503:GLU:HG2	2.17	0.42
1:A:526:GLU:C	1:A:528:ILE:H	2.22	0.42
2:B:144:VAL:C	2:B:147:VAL:HG23	2.39	0.42
2:B:18:PHE:O	2:B:19:ASP:HB2	2.19	0.42
2:B:22:GLY:C	2:B:24:GLY:H	2.23	0.42
2:B:55:LYS:N	2:B:58:GLU:HG3	2.30	0.42
1:C:365:ILE:HD12	1:C:427:ILE:HD11	2.00	0.42
1:C:499:ILE:HG22	1:C:500:LEU:N	2.35	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:534:PRO:HA	1:C:535:PRO:HD3	1.96	0.42
1:C:727:PHE:CE1	1:C:773:LYS:N	2.84	0.42
1:C:794:ASP:HA	1:C:797:ILE:HD12	2.01	0.42
2:D:74:GLN:O	2:D:78:LYS:CD	2.68	0.42
1:E:193:TYR:CE1	1:E:197:VAL:HG11	2.54	0.42
1:E:568:LYS:CD	1:E:584:LEU:O	2.66	0.42
1:E:176:THR:HG21	1:E:683:ARG:HH21	1.84	0.42
1:E:749:GLY:O	1:E:753:CYS:HB3	2.20	0.42
2:F:119:MET:HB3	2:F:123:GLU:HB3	2.01	0.42
2:F:22:GLY:C	2:F:24:GLY:H	2.22	0.42
1:G:247:ARG:HH22	1:G:470:GLU:CD	2.19	0.42
1:G:351:SER:O	1:G:354:ARG:HG2	2.20	0.42
1:G:541:LEU:HB2	1:G:555:PHE:CE1	2.55	0.42
1:G:794:ASP:HA	1:G:797:ILE:HD12	2.01	0.42
2:H:109:ARG:HG2	2:H:124:VAL:HB	2.00	0.42
2:H:51:LEU:HA	2:H:51:LEU:HD23	1.85	0.42
1:A:427:ILE:HG13	1:A:430:LEU:HD23	2.01	0.42
1:A:499:ILE:HG22	1:A:500:LEU:N	2.35	0.42
1:A:613:LEU:HD22	1:A:621:VAL:HG12	2.02	0.42
1:C:513:ASN:C	1:C:513:ASN:ND2	2.72	0.42
1:C:563:GLN:C	1:C:565:ASN:H	2.23	0.42
1:C:721:PHE:N	1:C:721:PHE:CD1	2.87	0.42
1:C:750:LYS:O	1:C:754:ILE:HD12	2.19	0.42
1:E:193:TYR:C	1:E:193:TYR:CD1	2.93	0.42
2:F:22:GLY:C	2:F:24:GLY:N	2.73	0.42
2:F:40:GLN:HB3	2:F:42:PRO:HD3	2.01	0.42
2:F:74:GLN:O	2:F:78:LYS:CD	2.68	0.42
1:G:522:GLN:N	1:G:523:PRO:CD	2.81	0.42
2:H:115:LEU:HD12	2:H:115:LEU:N	2.35	0.42
1:A:162:ARG:O	1:A:166:GLN:CG	2.64	0.42
1:A:757:ILE:HD11	1:A:774:ILE:HD12	2.01	0.42
1:A:805:GLY:CA	1:A:809:ARG:HE	2.32	0.42
2:B:119:MET:HB3	2:B:123:GLU:HB3	2.02	0.42
1:C:12:PHE:HD1	1:C:111:GLY:HA3	1.84	0.42
1:C:256:PHE:HA	1:C:261:TYR:O	2.19	0.42
1:C:671:MET:HG2	1:C:675:ARG:NH1	2.35	0.42
1:C:498:PHE:HD1	1:C:716:ILE:HD11	1.78	0.42
1:C:754:ILE:HG22	1:C:755:LEU:N	2.34	0.42
1:E:153:ILE:HA	1:E:156:ILE:CD1	2.45	0.42
1:E:278:ILE:HG13	1:E:279:ARG:N	2.34	0.42
1:E:370:GLU:O	1:E:374:ASP:HA	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:365:ILE:HD12	1:E:427:ILE:HD11	2.00	0.42
1:E:44:PHE:HE2	1:E:702:LEU:HD11	1.85	0.42
1:E:711:LEU:CD2	1:E:711:LEU:H	2.33	0.42
1:E:809:ARG:HG2	1:E:809:ARG:H	1.38	0.42
2:F:115:LEU:HD12	2:F:115:LEU:N	2.34	0.42
2:F:16:GLN:HG2	2:F:16:GLN:H	1.41	0.42
2:F:18:PHE:O	2:F:19:ASP:HB2	2.19	0.42
2:F:28:TYR:CD1	2:F:62:LYS:HB3	2.53	0.42
1:G:526:GLU:C	1:G:528:ILE:H	2.22	0.42
1:G:551:THR:O	1:G:552:ASP:C	2.58	0.42
1:G:755:LEU:HA	1:G:755:LEU:HD12	1.83	0.42
2:H:55:LYS:HB2	2:H:58:GLU:OE2	2.19	0.42
1:A:193:TYR:CE1	1:A:197:VAL:HG11	2.55	0.42
1:A:358:SER:HB2	1:A:390:LEU:HB2	2.02	0.42
1:A:409:VAL:O	1:A:409:VAL:HG12	2.19	0.42
1:A:481:CYS:CA	1:A:484:TYR:HB3	2.48	0.42
1:A:530:ARG:HA	1:A:531:PRO:HD3	1.73	0.42
1:A:48:SER:C	1:A:59:VAL:HG12	2.40	0.42
1:A:789:ASP:O	1:A:792:ILE:HG13	2.19	0.42
1:A:806:TYR:CB	2:B:147:VAL:HG12	2.49	0.42
2:B:48:MET:HE3	2:B:59:MET:SD	2.59	0.42
2:B:15:PHE:HZ	2:B:64:LEU:O	2.01	0.42
1:C:44:PHE:CE1	1:C:98:ALA:HB2	2.55	0.42
1:C:551:THR:O	1:C:552:ASP:C	2.58	0.42
1:C:83:PHE:O	1:C:84:SER:C	2.57	0.42
2:D:55:LYS:HB2	2:D:58:GLU:OE2	2.19	0.42
1:E:310:PHE:CD1	1:E:320:HIS:HD2	2.38	0.42
1:E:347:GLU:H	1:E:347:GLU:HG3	1.48	0.42
1:G:161:TYR:CE1	1:G:165:LEU:CD1	2.93	0.42
1:G:196:VAL:CG1	1:G:217:TYR:HE2	2.33	0.42
1:G:29:TRP:O	1:G:32:LYS:HE2	2.20	0.42
1:G:352:ILE:HG23	1:G:438:LEU:HD11	2.00	0.42
1:G:563:GLN:C	1:G:565:ASN:H	2.23	0.42
1:G:619:LYS:O	1:G:623:ASP:OD1	2.37	0.42
1:G:69:THR:C	1:G:70:LEU:HG	2.40	0.42
1:G:711:LEU:H	1:G:711:LEU:CD2	2.32	0.42
1:G:717:CYS:O	1:G:722:PRO:HG3	2.20	0.42
1:G:76:GLN:HB2	1:G:76:GLN:HE21	1.69	0.42
1:G:757:ILE:HD11	1:G:774:ILE:HD12	2.01	0.42
2:H:18:PHE:O	2:H:19:ASP:HB2	2.19	0.42
2:H:96:ASP:O	2:H:97:LYS:C	2.57	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:231:LEU:H	1:A:231:LEU:HD23	1.84	0.42
1:A:394:ASN:OD1	1:A:397:ASP:HB2	2.18	0.42
1:A:442:ILE:HG12	1:A:442:ILE:H	1.58	0.42
1:A:268:GLU:CD	1:A:666:GLN:NE2	2.72	0.42
1:A:754:ILE:HG22	1:A:755:LEU:N	2.34	0.42
1:C:29:TRP:O	1:C:32:LYS:HE2	2.20	0.42
1:C:567:ALA:C	1:C:569:PHE:H	2.22	0.42
1:C:619:LYS:O	1:C:623:ASP:OD1	2.37	0.42
1:C:669:LYS:O	1:C:672:THR:HB	2.19	0.42
1:E:378:MET:CE	1:E:381:ASN:HA	2.49	0.42
1:E:541:LEU:HB2	1:E:555:PHE:CE1	2.55	0.42
1:E:717:CYS:O	1:E:722:PRO:HG3	2.20	0.42
2:F:55:LYS:HB2	2:F:58:GLU:OE2	2.19	0.42
1:G:154:TYR:HB3	1:G:193:TYR:CD2	2.54	0.42
1:G:185:GLU:HG2	1:G:185:GLU:H	1.71	0.42
1:G:534:PRO:HA	1:G:535:PRO:HD3	1.96	0.42
2:H:119:MET:HB3	2:H:123:GLU:HB3	2.01	0.42
1:A:253:ARG:HG3	1:A:460:PHE:HD1	1.83	0.42
1:A:254:ILE:HG21	1:A:262:ILE:HG12	2.00	0.42
1:A:278:ILE:HG13	1:A:279:ARG:N	2.34	0.42
1:A:471:ILE:O	1:A:471:ILE:CG1	2.68	0.42
1:A:541:LEU:HB2	1:A:555:PHE:CE1	2.55	0.42
1:A:563:GLN:C	1:A:565:ASN:H	2.23	0.42
2:B:103:VAL:HG23	2:B:140:TYR:HD2	1.85	0.42
2:B:27:LEU:HD21	2:B:60:ASN:C	2.40	0.42
1:C:116:TYR:CE1	1:C:151:PRO:CB	2.94	0.42
1:C:12:PHE:CE1	1:C:111:GLY:HA3	2.55	0.42
1:C:250:LYS:O	1:C:465:ASP:N	2.49	0.42
1:C:296:GLY:HA3	1:C:332:PHE:CG	2.54	0.42
1:C:182:GLY:HA2	4:C:998:ADP:PA	2.60	0.42
1:E:351:SER:O	1:E:354:ARG:HG2	2.20	0.42
1:E:352:ILE:HG23	1:E:438:LEU:HD11	2.00	0.42
1:E:500:LEU:O	1:E:503:GLU:CB	2.68	0.42
1:E:522:GLN:N	1:E:523:PRO:CD	2.80	0.42
1:G:256:PHE:HA	1:G:261:TYR:O	2.19	0.42
1:G:278:ILE:HD13	1:G:432:LYS:HZ1	1.85	0.42
1:G:510:ILE:O	1:G:512:TRP:N	2.52	0.42
1:G:605:LEU:CD2	1:G:632:VAL:HG23	2.40	0.42
1:G:789:ASP:O	1:G:792:ILE:HG13	2.20	0.42
2:H:97:LYS:H	2:H:100:ASN:HD21	1.68	0.42
1:A:182:GLY:H	4:A:998:ADP:PB	2.43	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:183:LYS:HE2	4:A:998:ADP:O1B	2.20	0.42
1:A:369:LYS:HB2	1:A:420:LYS:HB3	2.02	0.42
1:A:464:LEU:CD2	1:A:466:ILE:HG23	2.50	0.42
1:A:663:TYR:O	1:A:665:GLU:N	2.53	0.42
1:A:666:GLN:C	1:A:668:THR:H	2.23	0.42
1:A:69:THR:C	1:A:70:LEU:HG	2.40	0.42
1:A:766:LEU:O	1:A:777:ARG:N	2.52	0.42
2:B:108:ILE:HD13	2:B:108:ILE:HA	1.74	0.42
1:A:809:ARG:HH22	2:B:41:ASN:HD21	1.67	0.42
1:C:154:TYR:HB3	1:C:193:TYR:CD2	2.54	0.42
1:C:254:ILE:HG21	1:C:262:ILE:HG12	2.00	0.42
1:C:278:ILE:HG13	1:C:279:ARG:N	2.34	0.42
1:C:280:GLN:H	1:C:280:GLN:CD	2.24	0.42
1:C:302:ARG:HH11	1:C:302:ARG:CB	2.33	0.42
1:C:351:SER:O	1:C:354:ARG:HG2	2.20	0.42
1:C:727:PHE:CE2	1:C:750:LYS:CB	3.03	0.42
2:D:44:ASN:HB3	2:D:117:GLU:OE1	2.20	0.42
2:D:22:GLY:C	2:D:24:GLY:N	2.73	0.42
2:D:23:ASP:HB3	2:D:25:LYS:CD	2.50	0.42
1:E:116:TYR:CE1	1:E:151:PRO:CB	2.94	0.42
1:E:311:ASN:HD21	1:E:319:GLY:CA	2.33	0.42
1:E:469:PHE:CE1	1:E:483:ASN:ND2	2.88	0.42
1:E:471:ILE:CG1	1:E:471:ILE:O	2.68	0.42
1:E:560:ILE:H	1:E:560:ILE:HG13	1.51	0.42
2:F:25:LYS:HE3	2:F:65:LYS:HZ1	1.81	0.42
1:G:164:MET:HE1	1:G:256:PHE:HE2	1.73	0.42
1:G:278:ILE:HG21	1:G:432:LYS:HZ3	1.83	0.42
1:G:567:ALA:C	1:G:569:PHE:H	2.22	0.42
1:G:806:TYR:CB	2:H:147:VAL:HG12	2.49	0.42
2:H:97:LYS:HG3	2:H:98:GLU:HG3	2.01	0.42
2:B:74:GLN:O	2:B:78:LYS:CD	2.68	0.42
1:C:184:THR:O	1:C:187:THR:HB	2.19	0.42
1:C:358:SER:HB2	1:C:390:LEU:HB2	2.02	0.42
1:C:378:MET:CE	1:C:381:ASN:HA	2.50	0.42
1:C:408:LYS:C	1:C:410:GLY:H	2.21	0.42
1:C:274:LYS:HZ2	1:C:432:LYS:HD2	1.85	0.42
1:C:500:LEU:O	1:C:503:GLU:CB	2.68	0.42
1:C:699:HIS:O	1:C:702:LEU:HB3	2.19	0.42
1:C:700:LEU:CD2	1:C:704:GLN:HE21	2.33	0.42
1:E:248:PHE:HB2	1:E:270:TYR:O	2.20	0.42
1:E:405:PRO:HB2	1:E:407:ILE:HD11	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:409:VAL:HG12	1:E:409:VAL:O	2.19	0.42
1:E:530:ARG:HG2	1:E:532:THR:O	2.20	0.42
1:E:754:ILE:HG22	1:E:755:LEU:N	2.34	0.42
1:E:781:LEU:HD13	1:E:781:LEU:HA	1.78	0.42
1:G:185:GLU:O	1:G:189:LYS:CG	2.64	0.42
1:G:530:ARG:HA	1:G:531:PRO:HD3	1.72	0.42
1:G:581:PHE:N	1:G:581:PHE:HD1	2.18	0.42
1:G:48:SER:C	1:G:59:VAL:HG12	2.40	0.42
1:G:715:ARG:O	1:G:719:GLN:N	2.50	0.42
1:A:746:PHE:CB	2:H:10:GLU:HG2	2.47	0.42
1:A:154:TYR:HB3	1:A:193:TYR:CD2	2.54	0.41
1:A:522:GLN:N	1:A:523:PRO:CD	2.81	0.41
1:A:671:MET:HG2	1:A:675:ARG:NH1	2.35	0.41
2:B:20:ARG:HB3	2:B:20:ARG:HE	1.49	0.41
1:C:153:ILE:CG2	1:C:154:TYR:N	2.82	0.41
1:C:369:LYS:HB2	1:C:420:LYS:HB3	2.02	0.41
1:C:530:ARG:HG2	1:C:532:THR:O	2.20	0.41
1:C:666:GLN:C	1:C:668:THR:H	2.23	0.41
1:C:69:THR:C	1:C:70:LEU:HG	2.40	0.41
1:C:89:MET:CG	1:C:92:LEU:HD11	2.32	0.41
2:D:119:MET:HB3	2:D:123:GLU:HB3	2.01	0.41
1:E:223:GLN:O	1:E:225:LEU:N	2.53	0.41
1:E:51:GLU:HB3	1:E:58:THR:CG2	2.50	0.41
1:E:621:VAL:HA	1:E:624:LEU:HB2	2.00	0.41
1:E:656:PHE:HB3	1:E:657:ARG:H	1.77	0.41
1:E:789:ASP:O	1:E:792:ILE:HG13	2.20	0.41
2:F:43:THR:C	2:F:45:ALA:H	2.22	0.41
1:G:409:VAL:HG12	1:G:409:VAL:O	2.20	0.41
1:G:269:THR:OG1	1:G:439:PHE:HE2	1.98	0.41
1:G:469:PHE:CE1	1:G:483:ASN:ND2	2.88	0.41
1:G:671:MET:HG2	1:G:675:ARG:NH1	2.35	0.41
2:H:40:GLN:HB3	2:H:42:PRO:HD3	2.02	0.41
1:A:315:PHE:HD1	1:A:315:PHE:HA	1.71	0.41
1:A:365:ILE:HD12	1:A:427:ILE:HD11	2.01	0.41
1:A:483:ASN:O	1:A:486:ASN:HB2	2.21	0.41
1:A:500:LEU:O	1:A:503:GLU:CB	2.69	0.41
1:A:551:THR:N	1:A:554:SER:OG	2.52	0.41
1:A:568:LYS:HD3	1:A:568:LYS:HA	1.90	0.41
1:A:711:LEU:N	1:A:711:LEU:HD22	2.35	0.41
1:A:727:PHE:CE2	1:A:750:LYS:CB	3.03	0.41
2:B:51:LEU:C	2:B:53:ASN:N	2.74	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:97:LYS:HG3	2:B:98:GLU:HG3	2.01	0.41
1:C:409:VAL:HG12	1:C:409:VAL:O	2.19	0.41
1:C:581:PHE:HD1	1:C:581:PHE:N	2.18	0.41
1:C:749:GLY:O	1:C:753:CYS:HB3	2.20	0.41
2:D:97:LYS:H	2:D:100:ASN:HD21	1.68	0.41
2:D:103:VAL:HG23	2:D:140:TYR:HD2	1.85	0.41
2:D:18:PHE:O	2:D:19:ASP:HB2	2.19	0.41
1:E:292:TYR:CE2	1:E:331:MET:HB3	2.55	0.41
1:E:296:GLY:HA3	1:E:332:PHE:CG	2.55	0.41
1:E:315:PHE:HD2	1:E:360:LEU:HA	1.85	0.41
1:E:362:LEU:HD21	1:E:387:VAL:CG1	2.47	0.41
1:E:376:ALA:CB	1:E:420:LYS:HA	2.30	0.41
1:E:464:LEU:CD2	1:E:466:ILE:HG23	2.50	0.41
1:E:513:ASN:C	1:E:513:ASN:ND2	2.73	0.41
1:G:153:ILE:CG2	1:G:154:TYR:N	2.82	0.41
1:G:369:LYS:HB2	1:G:420:LYS:HB3	2.02	0.41
1:G:361:GLN:NE2	1:G:386:LYS:HD3	2.35	0.41
1:G:530:ARG:HG2	1:G:532:THR:O	2.20	0.41
1:G:619:LYS:O	1:G:622:ALA:HB3	2.20	0.41
1:G:727:PHE:CE2	1:G:750:LYS:CB	3.03	0.41
2:H:53:ASN:N	2:H:54:PRO:CD	2.83	0.41
1:A:301:MET:HE3	1:A:305:LEU:HD11	2.01	0.41
1:A:292:TYR:CE2	1:A:331:MET:HB3	2.55	0.41
1:A:362:LEU:HD21	1:A:387:VAL:CG1	2.47	0.41
1:A:669:LYS:O	1:A:672:THR:HB	2.19	0.41
2:B:28:TYR:CD2	2:B:54:PRO:HG2	2.54	0.41
2:B:55:LYS:HB2	2:B:58:GLU:OE2	2.19	0.41
1:C:248:PHE:HB2	1:C:270:TYR:O	2.20	0.41
1:C:755:LEU:HA	1:C:755:LEU:HD12	1.83	0.41
1:C:789:ASP:O	1:C:792:ILE:HG13	2.20	0.41
2:D:53:ASN:N	2:D:54:PRO:CD	2.82	0.41
1:E:153:ILE:CG2	1:E:154:TYR:N	2.82	0.41
1:E:315:PHE:HD1	1:E:315:PHE:HA	1.70	0.41
1:E:369:LYS:HB2	1:E:420:LYS:HB3	2.02	0.41
1:E:173:ILE:HD11	1:E:461:LEU:HD21	2.03	0.41
1:E:481:CYS:CA	1:E:484:TYR:HB3	2.48	0.41
1:E:527:LEU:HD12	1:E:566:HIS:ND1	2.35	0.41
1:E:619:LYS:O	1:E:623:ASP:OD1	2.37	0.41
2:F:141:GLU:O	2:F:142:GLU:HG2	2.20	0.41
2:F:65:LYS:N	2:F:68:GLN:HE21	2.14	0.41
1:G:173:ILE:HD11	1:G:461:LEU:HD21	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:327:GLN:CG	1:G:329:ASP:HB2	2.51	0.41
1:G:51:GLU:HB3	1:G:58:THR:CG2	2.50	0.41
1:G:83:PHE:O	1:G:84:SER:C	2.58	0.41
1:A:551:THR:O	1:A:552:ASP:C	2.59	0.41
1:A:581:PHE:N	1:A:581:PHE:HD1	2.19	0.41
1:A:621:VAL:HA	1:A:624:LEU:HB2	2.01	0.41
1:A:700:LEU:CD2	1:A:704:GLN:HE21	2.34	0.41
1:A:742:ILE:C	1:A:743:PRO:O	2.59	0.41
1:C:526:GLU:C	1:C:528:ILE:H	2.22	0.41
1:C:757:ILE:HA	1:C:760:LEU:CD1	2.50	0.41
2:D:103:VAL:CG1	2:D:104:MET:H	2.22	0.41
2:D:141:GLU:O	2:D:142:GLU:HG2	2.21	0.41
2:D:70:LEU:O	2:D:74:GLN:CD	2.59	0.41
1:E:268:GLU:HG2	1:E:270:TYR:HH	1.70	0.41
1:E:298:SER:O	1:E:302:ARG:N	2.33	0.41
1:E:302:ARG:HB2	1:E:302:ARG:HH11	1.86	0.41
1:E:551:THR:O	1:E:552:ASP:C	2.58	0.41
1:E:742:ILE:C	1:E:743:PRO:O	2.58	0.41
1:E:77:LYS:NZ	1:E:96:ASN:HD21	2.17	0.41
1:E:794:ASP:HA	1:E:797:ILE:HD12	2.01	0.41
2:F:23:ASP:HB3	2:F:25:LYS:CD	2.50	0.41
2:F:97:LYS:H	2:F:100:ASN:HD21	1.68	0.41
1:G:302:ARG:CB	1:G:302:ARG:HH11	2.32	0.41
1:G:378:MET:CE	1:G:381:ASN:HA	2.50	0.41
1:G:483:ASN:O	1:G:486:ASN:HB2	2.21	0.41
1:A:347:GLU:HA	1:A:350:THR:OG1	2.21	0.41
1:A:376:ALA:CB	1:A:420:LYS:HA	2.30	0.41
1:A:469:PHE:CE2	1:A:471:ILE:HG21	2.55	0.41
1:A:530:ARG:HG2	1:A:532:THR:O	2.20	0.41
2:B:141:GLU:O	2:B:142:GLU:HG2	2.21	0.41
2:B:37:ALA:C	2:B:39:GLY:H	2.23	0.41
2:B:27:LEU:HD22	2:B:59:MET:O	2.21	0.41
1:C:125:ASN:OD1	1:C:126:PRO:CD	2.68	0.41
1:C:760:LEU:HG	1:C:760:LEU:H	1.67	0.41
2:D:27:LEU:HD21	2:D:60:ASN:C	2.41	0.41
2:D:26:ILE:HG12	2:D:34:VAL:HG21	2.03	0.41
1:C:809:ARG:NH2	2:D:41:ASN:OD1	2.45	0.41
1:E:196:VAL:CG1	1:E:217:TYR:HE2	2.33	0.41
1:E:311:ASN:HD22	1:E:311:ASN:HA	1.62	0.41
1:E:483:ASN:O	1:E:486:ASN:HB2	2.20	0.41
1:E:563:GLN:C	1:E:565:ASN:H	2.23	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:757:ILE:HD11	1:E:774:ILE:HD12	2.01	0.41
1:E:805:GLY:CA	1:E:809:ARG:HE	2.32	0.41
2:F:144:VAL:C	2:F:147:VAL:HG23	2.40	0.41
2:F:26:ILE:HG12	2:F:34:VAL:HG21	2.03	0.41
1:G:370:GLU:HB2	1:G:375:GLN:O	2.21	0.41
1:G:500:LEU:O	1:G:503:GLU:CB	2.68	0.41
1:G:598:LEU:HG	1:G:598:LEU:H	1.38	0.41
1:G:657:ARG:HH11	1:G:657:ARG:CG	2.34	0.41
1:G:104:LEU:HD12	1:G:705:LEU:HD11	2.03	0.41
1:G:750:LYS:O	1:G:754:ILE:HD12	2.19	0.41
2:H:27:LEU:HD22	2:H:59:MET:O	2.21	0.41
1:A:186:ASN:HD22	1:A:186:ASN:H	1.69	0.41
1:A:29:TRP:O	1:A:32:LYS:HE2	2.20	0.41
1:A:351:SER:O	1:A:354:ARG:HG2	2.20	0.41
1:A:104:LEU:HD12	1:A:705:LEU:HD11	2.03	0.41
1:A:781:LEU:HA	1:A:781:LEU:HD13	1.79	0.41
1:C:135:GLU:OE1	1:C:213:PRO:N	2.54	0.41
1:C:161:TYR:CE1	1:C:165:LEU:CD1	2.93	0.41
1:C:193:TYR:C	1:C:193:TYR:CD1	2.94	0.41
1:C:268:GLU:O	1:C:270:TYR:CD1	2.71	0.41
1:C:464:LEU:CD2	1:C:466:ILE:HG23	2.50	0.41
1:C:469:PHE:CE2	1:C:471:ILE:HG21	2.56	0.41
1:C:48:SER:C	1:C:59:VAL:HG12	2.40	0.41
1:C:434:LYS:CG	1:C:625:TRP:HZ2	2.29	0.41
1:C:711:LEU:CD2	1:C:711:LEU:H	2.32	0.41
1:C:717:CYS:O	1:C:722:PRO:HG3	2.20	0.41
2:D:48:MET:HE3	2:D:59:MET:SD	2.61	0.41
1:E:125:ASN:HB3	1:E:687:PRO:HG3	2.03	0.41
1:E:347:GLU:HA	1:E:350:THR:OG1	2.20	0.41
1:E:358:SER:HB2	1:E:390:LEU:HB2	2.01	0.41
1:E:269:THR:HG22	1:E:443:LEU:HD22	2.03	0.41
2:F:103:VAL:HG23	2:F:140:TYR:HD2	1.85	0.41
2:F:53:ASN:N	2:F:54:PRO:CD	2.83	0.41
1:G:193:TYR:CD1	1:G:193:TYR:C	2.94	0.41
1:G:280:GLN:CD	1:G:280:GLN:H	2.24	0.41
1:G:381:ASN:O	1:G:382:THR:C	2.58	0.41
1:G:410:GLY:C	1:G:412:ASP:H	2.24	0.41
1:G:663:TYR:O	1:G:665:GLU:N	2.54	0.41
1:G:125:ASN:HB3	1:G:687:PRO:HG3	2.03	0.41
1:G:818:GLN:HE21	1:G:818:GLN:HB3	1.61	0.41
2:H:141:GLU:O	2:H:142:GLU:HG2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:22:GLY:C	2:H:24:GLY:N	2.73	0.41
2:H:26:ILE:HG12	2:H:34:VAL:HG21	2.03	0.41
1:A:17:LYS:O	1:A:19:PHE:N	2.54	0.41
1:A:749:GLY:O	1:A:753:CYS:HB3	2.20	0.41
1:C:183:LYS:HB2	1:C:183:LYS:HE2	1.69	0.41
1:C:315:PHE:HD2	1:C:360:LEU:HA	1.85	0.41
1:C:361:GLN:NE2	1:C:386:LYS:HD3	2.35	0.41
1:C:125:ASN:HB3	1:C:687:PRO:HG3	2.03	0.41
1:C:711:LEU:HD22	1:C:711:LEU:N	2.36	0.41
1:C:768:ARG:HA	1:C:768:ARG:HD3	1.92	0.41
1:C:776:PHE:HB2	1:C:781:LEU:HD22	2.03	0.41
1:C:95:LEU:HD11	1:C:714:ILE:HG22	1.99	0.41
2:D:111:VAL:C	2:D:113:VAL:H	2.24	0.41
2:D:115:LEU:N	2:D:115:LEU:HD12	2.35	0.41
2:D:27:LEU:HD22	2:D:59:MET:O	2.21	0.41
2:D:97:LYS:HG3	2:D:98:GLU:HG3	2.01	0.41
1:E:128:LYS:HG2	1:E:129:GLN:N	2.35	0.41
1:E:48:SER:C	1:E:59:VAL:HG12	2.40	0.41
1:G:253:ARG:O	1:G:265:ALA:HA	2.19	0.41
1:G:358:SER:HB2	1:G:390:LEU:HB2	2.01	0.41
1:G:586:TYR:CG	1:G:587:ALA:N	2.89	0.41
1:G:666:GLN:C	1:G:668:THR:H	2.23	0.41
2:H:27:LEU:HD21	2:H:60:ASN:C	2.41	0.41
2:H:86:GLU:HA	2:H:86:GLU:OE1	2.21	0.41
1:A:184:THR:O	1:A:187:THR:HB	2.20	0.41
1:A:223:GLN:O	1:A:225:LEU:N	2.53	0.41
1:A:555:PHE:CZ	1:A:559:LEU:HD13	2.56	0.41
1:A:705:LEU:O	1:A:710:VAL:CG2	2.65	0.41
2:B:97:LYS:H	2:B:100:ASN:HD21	1.68	0.41
2:B:111:VAL:C	2:B:113:VAL:H	2.24	0.41
2:B:122:GLU:HG2	2:B:122:GLU:H	1.61	0.41
1:C:170:ASP:OD1	1:C:460:PHE:N	2.52	0.41
1:C:469:PHE:CE1	1:C:483:ASN:ND2	2.88	0.41
2:D:113:VAL:CG2	2:D:124:VAL:CG1	2.95	0.41
1:E:102:HIS:O	1:E:105:ARG:CB	2.69	0.41
2:F:113:VAL:CG2	2:F:124:VAL:CG1	2.95	0.41
2:F:37:ALA:C	2:F:39:GLY:H	2.24	0.41
1:G:162:ARG:HG3	1:G:162:ARG:O	2.20	0.41
1:G:269:THR:HG22	1:G:443:LEU:HD22	2.03	0.41
1:G:553:THR:O	1:G:556:VAL:N	2.54	0.41
1:G:527:LEU:HD12	1:G:566:HIS:ND1	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:727:PHE:CE1	1:G:773:LYS:N	2.85	0.41
1:A:128:LYS:HG2	1:A:129:GLN:N	2.35	0.41
1:A:296:GLY:HA3	1:A:332:PHE:CG	2.56	0.41
1:A:51:GLU:HB3	1:A:58:THR:HG23	2.03	0.41
1:A:603:ASP:N	1:A:604:PRO:HD3	2.35	0.41
1:A:657:ARG:CG	1:A:657:ARG:HH11	2.34	0.41
1:A:717:CYS:O	1:A:722:PRO:HG3	2.20	0.41
1:A:773:LYS:HB2	1:A:773:LYS:HE2	1.90	0.41
1:A:794:ASP:HA	1:A:797:ILE:HD12	2.01	0.41
2:B:65:LYS:HE3	2:B:68:GLN:NE2	2.36	0.41
1:C:102:HIS:O	1:C:105:ARG:CB	2.69	0.41
1:C:327:GLN:CG	1:C:329:ASP:HB2	2.50	0.41
1:C:51:GLU:HB3	1:C:58:THR:HG23	2.03	0.41
1:E:144:LYS:HD3	1:E:144:LYS:HA	1.82	0.41
1:E:145:LYS:HG3	1:E:146:ARG:HD2	2.03	0.41
1:E:410:GLY:C	1:E:412:ASP:H	2.24	0.41
1:E:430:LEU:HG	1:E:431:ALA:N	2.35	0.41
1:E:760:LEU:H	1:E:760:LEU:HG	1.68	0.41
1:G:170:ASP:OD1	1:G:460:PHE:N	2.52	0.41
1:G:3:GLN:CA	1:G:18:ASN:HD21	2.34	0.41
1:G:292:TYR:CE2	1:G:331:MET:HB3	2.55	0.41
1:G:315:PHE:HD2	1:G:360:LEU:HA	1.85	0.41
1:A:302:ARG:HH11	1:A:302:ARG:HB2	1.86	0.41
1:A:315:PHE:HD2	1:A:360:LEU:HA	1.86	0.41
1:A:327:GLN:CG	1:A:329:ASP:HB2	2.51	0.41
1:A:269:THR:OG1	1:A:439:PHE:HE2	1.98	0.41
1:A:51:GLU:HB3	1:A:58:THR:CG2	2.50	0.41
1:A:727:PHE:HE2	1:A:750:LYS:HB2	1.86	0.41
2:B:22:GLY:C	2:B:24:GLY:N	2.73	0.41
2:B:70:LEU:O	2:B:74:GLN:CD	2.59	0.41
1:C:32:LYS:HG2	1:C:32:LYS:H	1.38	0.41
1:C:292:TYR:CE2	1:C:331:MET:HB3	2.55	0.41
1:C:483:ASN:O	1:C:486:ASN:HB2	2.21	0.41
1:C:51:GLU:HB3	1:C:58:THR:CG2	2.50	0.41
1:C:182:GLY:HA2	4:C:998:ADP:O1A	2.21	0.41
2:D:108:ILE:CG2	2:D:109:ARG:N	2.76	0.41
2:D:65:LYS:HE3	2:D:68:GLN:NE2	2.36	0.41
1:E:253:ARG:HG3	1:E:460:PHE:HD1	1.84	0.41
1:E:361:GLN:HB3	1:E:387:VAL:CG2	2.48	0.41
1:E:437:ARG:HE	1:E:625:TRP:CA	2.30	0.41
1:E:469:PHE:CE2	1:E:471:ILE:HG21	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:563:GLN:C	1:E:565:ASN:N	2.75	0.41
1:E:619:LYS:O	1:E:622:ALA:HB3	2.20	0.41
1:E:727:PHE:CE2	1:E:750:LYS:CB	3.03	0.41
1:G:122:VAL:C	1:G:123:VAL:HG23	2.41	0.41
2:H:116:GLY:O	2:H:118:LYS:HG2	2.21	0.41
2:H:126:GLN:H	2:H:126:GLN:HG3	1.48	0.41
2:H:103:VAL:HG23	2:H:140:TYR:HD2	1.85	0.41
2:H:74:GLN:O	2:H:78:LYS:CD	2.68	0.41
1:A:196:VAL:CG1	1:A:217:TYR:HE2	2.33	0.41
1:A:280:GLN:CD	1:A:280:GLN:H	2.23	0.41
1:A:361:GLN:HB3	1:A:387:VAL:CG2	2.48	0.41
1:A:527:LEU:HD12	1:A:566:HIS:ND1	2.36	0.41
1:A:553:THR:O	1:A:556:VAL:N	2.54	0.41
1:A:125:ASN:HB3	1:A:687:PRO:HG3	2.03	0.41
1:C:742:ILE:C	1:C:743:PRO:O	2.58	0.41
2:D:65:LYS:N	2:D:68:GLN:HE21	2.14	0.41
1:E:162:ARG:HG3	1:E:162:ARG:O	2.20	0.41
1:E:551:THR:O	1:E:598:LEU:HD21	2.21	0.41
2:F:116:GLY:O	2:F:118:LYS:HG2	2.22	0.41
2:F:27:LEU:HD21	2:F:60:ASN:C	2.42	0.41
2:F:70:LEU:O	2:F:74:GLN:CD	2.59	0.41
1:G:119:LEU:HG	1:G:717:CYS:SG	2.61	0.41
1:G:128:LYS:HG2	1:G:129:GLN:N	2.36	0.41
1:G:342:MET:CE	1:G:449:ALA:CB	2.98	0.41
1:G:555:PHE:CZ	1:G:559:LEU:HD13	2.56	0.41
2:H:37:ALA:C	2:H:39:GLY:H	2.24	0.41
2:H:84:CYS:C	2:H:88:TYR:CD2	2.94	0.41
1:A:102:HIS:O	1:A:105:ARG:CB	2.69	0.40
1:A:193:TYR:C	1:A:193:TYR:CD1	2.94	0.40
1:A:248:PHE:HB2	1:A:270:TYR:O	2.20	0.40
1:A:521:LEU:O	1:A:522:GLN:C	2.59	0.40
1:A:727:PHE:CE1	1:A:773:LYS:N	2.85	0.40
1:A:806:TYR:O	1:A:810:LYS:HG2	2.22	0.40
2:B:16:GLN:HG2	2:B:16:GLN:H	1.40	0.40
1:C:145:LYS:HG3	1:C:146:ARG:HD2	2.03	0.40
1:C:276:ARG:HG2	1:C:287:PHE:CE1	2.56	0.40
1:C:500:LEU:O	1:C:503:GLU:HG2	2.17	0.40
1:C:541:LEU:HB2	1:C:555:PHE:CE1	2.55	0.40
1:C:527:LEU:HD12	1:C:566:HIS:ND1	2.36	0.40
1:C:119:LEU:HG	1:C:717:CYS:SG	2.61	0.40
2:D:85:PHE:CE1	2:D:145:ARG:CG	2.98	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:29:TRP:O	1:E:32:LYS:HE2	2.20	0.40
1:E:437:ARG:HH21	1:E:625:TRP:HA	1.86	0.40
1:E:495:HIS:CE1	1:E:499:ILE:HG21	2.56	0.40
1:E:586:TYR:CG	1:E:587:ALA:N	2.89	0.40
1:E:700:LEU:CD2	1:E:704:GLN:HE21	2.33	0.40
1:E:776:PHE:HB2	1:E:781:LEU:HD22	2.03	0.40
1:E:816:GLN:O	1:E:819:LEU:CG	2.66	0.40
1:E:76:GLN:CD	1:E:96:ASN:HB3	2.40	0.40
2:F:111:VAL:C	2:F:113:VAL:H	2.24	0.40
2:F:65:LYS:HE3	2:F:68:GLN:NE2	2.36	0.40
1:G:116:TYR:CE1	1:G:151:PRO:CB	2.94	0.40
1:G:122:VAL:O	1:G:123:VAL:CG2	2.70	0.40
1:G:135:GLU:OE1	1:G:213:PRO:N	2.54	0.40
1:G:17:LYS:O	1:G:19:PHE:N	2.54	0.40
1:G:250:LYS:O	1:G:465:ASP:N	2.49	0.40
1:G:276:ARG:HG2	1:G:287:PHE:CE1	2.56	0.40
1:G:678:ASN:HD22	1:G:679:PRO:CD	2.34	0.40
1:G:776:PHE:HB2	1:G:781:LEU:HD22	2.02	0.40
2:H:70:LEU:O	2:H:74:GLN:CD	2.59	0.40
1:A:145:LYS:HB2	1:A:145:LYS:HE3	1.67	0.40
1:C:122:VAL:C	1:C:123:VAL:HG23	2.41	0.40
1:C:22:ASN:HA	1:C:23:PRO:HD3	1.84	0.40
1:C:555:PHE:CZ	1:C:559:LEU:HD13	2.56	0.40
1:C:806:TYR:O	1:C:810:LYS:HG2	2.21	0.40
1:C:814:LYS:HG3	1:C:815:ARG:N	2.36	0.40
1:E:553:THR:O	1:E:556:VAL:N	2.55	0.40
1:E:657:ARG:CG	1:E:657:ARG:HH11	2.34	0.40
1:E:755:LEU:HA	1:E:755:LEU:HD12	1.82	0.40
1:G:464:LEU:CD2	1:G:466:ILE:HG23	2.50	0.40
1:G:469:PHE:CE2	1:G:471:ILE:HG21	2.56	0.40
1:G:521:LEU:O	1:G:522:GLN:C	2.60	0.40
1:G:176:THR:HG21	1:G:683:ARG:HH21	1.85	0.40
1:G:700:LEU:CD2	1:G:704:GLN:HE21	2.33	0.40
1:G:711:LEU:HD22	1:G:711:LEU:N	2.36	0.40
1:G:715:ARG:O	1:G:719:GLN:HG3	2.20	0.40
1:A:128:LYS:HB3	1:A:130:LEU:HD21	2.04	0.40
1:A:167:ASP:O	1:A:168:ARG:O	2.40	0.40
1:A:269:THR:HG22	1:A:443:LEU:HD22	2.03	0.40
1:A:513:ASN:C	1:A:513:ASN:HD22	2.25	0.40
1:A:557:GLU:H	1:A:557:GLU:CD	2.25	0.40
1:A:76:GLN:OE1	1:A:96:ASN:HB3	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:122:VAL:O	1:C:123:VAL:CG2	2.70	0.40
1:C:136:LYS:O	1:C:139:ASP:HB2	2.22	0.40
1:C:196:VAL:HG12	1:C:217:TYR:CD2	2.57	0.40
1:C:410:GLY:C	1:C:412:ASP:H	2.24	0.40
1:C:430:LEU:HG	1:C:431:ALA:N	2.34	0.40
1:C:563:GLN:C	1:C:565:ASN:N	2.74	0.40
1:C:619:LYS:O	1:C:622:ALA:HB3	2.20	0.40
1:C:663:TYR:O	1:C:665:GLU:N	2.54	0.40
2:D:22:GLY:C	2:D:24:GLY:H	2.23	0.40
1:E:135:GLU:OE1	1:E:213:PRO:N	2.55	0.40
1:E:167:ASP:O	1:E:168:ARG:O	2.40	0.40
1:E:327:GLN:CG	1:E:329:ASP:HB2	2.51	0.40
1:E:381:ASN:O	1:E:382:THR:C	2.59	0.40
1:E:555:PHE:CZ	1:E:559:LEU:HD13	2.56	0.40
1:E:575:LEU:HA	1:E:575:LEU:HD23	1.81	0.40
1:E:663:TYR:O	1:E:665:GLU:N	2.54	0.40
1:E:119:LEU:HG	1:E:717:CYS:SG	2.61	0.40
1:E:751:GLN:HG2	1:E:751:GLN:O	2.22	0.40
1:G:274:LYS:HG3	1:G:274:LYS:H	1.50	0.40
1:G:500:LEU:O	1:G:503:GLU:HG3	2.21	0.40
1:G:618:ASP:O	1:G:622:ALA:N	2.54	0.40
2:H:88:TYR:HA	2:H:88:TYR:HD1	1.79	0.40
1:A:119:LEU:HG	1:A:717:CYS:SG	2.61	0.40
1:A:495:HIS:CE1	1:A:499:ILE:HG21	2.56	0.40
1:A:563:GLN:C	1:A:565:ASN:N	2.75	0.40
1:A:605:LEU:CD2	1:A:632:VAL:HG23	2.40	0.40
1:A:64:ASN:O	1:A:66:LYS:N	2.55	0.40
1:A:751:GLN:HG2	1:A:751:GLN:O	2.21	0.40
2:B:58:GLU:O	2:B:62:LYS:HG3	2.21	0.40
1:C:296:GLY:HA3	1:C:332:PHE:CD2	2.56	0.40
1:C:269:THR:HG22	1:C:443:LEU:HD22	2.03	0.40
1:E:136:LYS:O	1:E:139:ASP:HB2	2.22	0.40
1:E:3:GLN:CA	1:E:18:ASN:HD21	2.34	0.40
2:F:51:LEU:C	2:F:53:ASN:N	2.75	0.40
1:G:248:PHE:HB2	1:G:270:TYR:O	2.20	0.40
1:G:311:ASN:HA	1:G:311:ASN:HD22	1.65	0.40
1:G:471:ILE:O	1:G:471:ILE:CG1	2.68	0.40
1:G:742:ILE:C	1:G:743:PRO:O	2.58	0.40
1:G:773:LYS:HE2	1:G:773:LYS:HB2	1.90	0.40
1:G:806:TYR:O	1:G:810:LYS:HG2	2.21	0.40
1:A:122:VAL:O	1:A:123:VAL:CG2	2.70	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:173:ILE:HD11	1:A:461:LEU:HD21	2.03	0.40
1:A:405:PRO:HD2	1:A:416:LYS:O	2.22	0.40
1:A:619:LYS:O	1:A:622:ALA:HB3	2.21	0.40
1:A:88:ASP:HA	1:A:116:TYR:HB2	2.04	0.40
2:B:113:VAL:CG2	2:B:124:VAL:CG1	2.95	0.40
1:C:104:LEU:HD12	1:C:705:LEU:HD11	2.03	0.40
1:C:162:ARG:O	1:C:162:ARG:HG3	2.20	0.40
1:C:243:ASP:O	1:C:323:ILE:HD12	2.22	0.40
1:C:678:ASN:HD22	1:C:679:PRO:CD	2.34	0.40
1:C:176:THR:HG21	1:C:683:ARG:HH21	1.86	0.40
1:E:280:GLN:CD	1:E:280:GLN:H	2.24	0.40
1:E:532:THR:O	1:E:533:ASN:HB2	2.22	0.40
1:E:807:LEU:HD22	2:F:123:GLU:HG2	2.04	0.40
1:G:502:GLN:HB2	1:G:502:GLN:HE21	1.68	0.40
1:G:553:THR:HB	1:G:554:SER:H	1.66	0.40
1:G:656:PHE:HB3	1:G:657:ARG:H	1.76	0.40

All (14) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:22:GLY:N	1:G:371:ARG:CZ[1_545]	1.62	0.58
2:D:22:GLY:CA	1:G:371:ARG:NE[1_545]	1.63	0.57
2:D:22:GLY:N	1:G:371:ARG:NE[1_545]	1.74	0.46
2:D:23:ASP:N	1:G:371:ARG:NH2[1_545]	1.83	0.37
2:D:22:GLY:N	1:G:371:ARG:NH1[1_545]	1.91	0.29
1:A:371:ARG:CZ	2:F:22:GLY:CA[1_544]	1.94	0.26
1:A:371:ARG:NE	2:F:22:GLY:CA[1_544]	1.94	0.26
2:D:21:THR:OG1	1:G:371:ARG:NH1[1_545]	1.97	0.23
1:A:371:ARG:NH1	2:F:22:GLY:N[1_544]	2.00	0.20
2:D:16:GLN:O	1:G:371:ARG:O[1_545]	2.04	0.16
2:D:21:THR:CA	1:G:371:ARG:NH1[1_545]	2.14	0.06
2:D:21:THR:C	1:G:371:ARG:NH1[1_545]	2.15	0.05
2:D:21:THR:CB	1:G:371:ARG:NH1[1_545]	2.16	0.04
2:D:22:GLY:CA	1:G:371:ARG:CD[1_545]	2.18	0.02

## 5.3 Torsion angles

### 5.3.1 Protein backbone

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	773/820 (94%)	579 (75%)	139 (18%)	55 (7%)	1	14
1	C	773/820 (94%)	580 (75%)	138 (18%)	55 (7%)	1	14
1	E	773/820 (94%)	580 (75%)	138 (18%)	55 (7%)	1	14
1	G	773/820 (94%)	580 (75%)	138 (18%)	55 (7%)	1	14
2	B	146/150 (97%)	111 (76%)	29 (20%)	6 (4%)	3	25
2	D	146/150 (97%)	112 (77%)	28 (19%)	6 (4%)	3	25
2	F	146/150 (97%)	112 (77%)	29 (20%)	5 (3%)	3	30
2	H	146/150 (97%)	113 (77%)	26 (18%)	7 (5%)	2	22
All	All	3676/3880 (95%)	2767 (75%)	665 (18%)	244 (7%)	1	16

All (244) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	38	PRO
1	A	145	LYS
1	A	183	LYS
1	A	233	ALA
1	A	288	HIS
1	A	342	MET
1	A	407	ILE
1	A	419	THR
1	A	469	PHE
1	A	499	ILE
1	A	553	THR
1	A	554	SER
1	A	698	ALA
2	B	21	THR
1	C	38	PRO
1	C	145	LYS
1	C	183	LYS

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Mol	Chain	Res	Type
1	C	233	ALA
1	C	288	HIS
1	C	342	MET
1	C	407	ILE
1	C	419	THR
1	C	469	PHE
1	C	499	ILE
1	C	553	THR
1	C	554	SER
1	C	698	ALA
2	D	21	THR
1	E	38	PRO
1	E	145	LYS
1	E	183	LYS
1	E	233	ALA
1	E	288	HIS
1	E	342	MET
1	E	407	ILE
1	E	419	THR
1	E	469	PHE
1	E	499	ILE
1	E	553	THR
1	E	554	SER
1	E	698	ALA
2	F	21	THR
1	G	38	PRO
1	G	145	LYS
1	G	183	LYS
1	G	233	ALA
1	G	288	HIS
1	G	342	MET
1	G	407	ILE
1	G	419	THR
1	G	469	PHE
1	G	499	ILE
1	G	553	THR
1	G	554	SER
1	G	698	ALA
2	H	21	THR
2	H	85	PHE
2	H	86	GLU
1	A	7	SER

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Mol	Chain	Res	Type
1	A	18	ASN
1	A	106	GLU
1	A	275	SER
1	A	395	VAL
1	A	447	ASN
1	A	511	GLU
1	A	533	ASN
1	A	542	ASP
1	A	576	LYS
1	A	606	ASN
1	A	773	LYS
2	B	129	ALA
2	B	141	GLU
1	C	7	SER
1	C	18	ASN
1	C	106	GLU
1	C	395	VAL
1	C	447	ASN
1	C	511	GLU
1	C	533	ASN
1	C	542	ASP
1	C	576	LYS
1	C	606	ASN
1	C	773	LYS
2	D	129	ALA
2	D	141	GLU
1	E	7	SER
1	E	18	ASN
1	E	106	GLU
1	E	275	SER
1	E	395	VAL
1	E	447	ASN
1	E	511	GLU
1	E	533	ASN
1	E	542	ASP
1	E	576	LYS
1	E	606	ASN
1	E	773	LYS
2	F	129	ALA
2	F	141	GLU
1	G	7	SER
1	G	18	ASN

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Mol	Chain	Res	Type
1	G	106	GLU
1	G	395	VAL
1	G	447	ASN
1	G	511	GLU
1	G	533	ASN
1	G	542	ASP
1	G	576	LYS
1	G	606	ASN
1	G	773	LYS
2	H	129	ALA
2	H	141	GLU
1	A	123	VAL
1	A	168	ARG
1	A	242	ASN
1	A	345	THR
1	A	362	LEU
1	A	531	PRO
1	A	727	PHE
1	A	764	PRO
1	C	123	VAL
1	C	168	ARG
1	C	242	ASN
1	C	275	SER
1	C	345	THR
1	C	362	LEU
1	C	531	PRO
1	C	727	PHE
1	C	764	PRO
2	D	86	GLU
1	E	123	VAL
1	E	148	GLU
1	E	168	ARG
1	E	242	ASN
1	E	362	LEU
1	E	531	PRO
1	E	727	PHE
1	E	764	PRO
1	G	123	VAL
1	G	168	ARG
1	G	242	ASN
1	G	275	SER
1	G	345	THR

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Mol	Chain	Res	Type
1	G	362	LEU
1	G	531	PRO
1	G	727	PHE
1	G	764	PRO
1	A	148	GLU
1	A	281	ALA
1	A	376	ALA
1	A	379	PRO
1	A	421	GLU
1	A	537	VAL
1	A	670	LEU
1	A	671	MET
1	A	722	PRO
1	A	728	GLN
1	A	743	PRO
2	B	19	ASP
2	B	22	GLY
1	C	148	GLU
1	C	281	ALA
1	C	376	ALA
1	C	379	PRO
1	C	421	GLU
1	C	537	VAL
1	C	670	LEU
1	C	671	MET
1	C	722	PRO
1	C	728	GLN
1	C	743	PRO
2	D	19	ASP
2	D	22	GLY
1	E	281	ALA
1	E	345	THR
1	E	376	ALA
1	E	379	PRO
1	E	421	GLU
1	E	537	VAL
1	E	670	LEU
1	E	671	MET
1	E	722	PRO
1	E	728	GLN
1	E	743	PRO
2	F	19	ASP

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Mol	Chain	Res	Type
2	F	22	GLY
1	G	148	GLU
1	G	281	ALA
1	G	376	ALA
1	G	379	PRO
1	G	421	GLU
1	G	537	VAL
1	G	670	LEU
1	G	671	MET
1	G	722	PRO
1	G	728	GLN
1	G	743	PRO
2	H	19	ASP
2	H	22	GLY
1	A	476	SER
1	A	687	PRO
2	B	86	GLU
1	C	369	LYS
1	C	476	SER
1	C	687	PRO
1	E	476	SER
1	E	687	PRO
1	G	369	LYS
1	G	476	SER
1	G	687	PRO
1	A	369	LYS
1	A	450	LEU
1	A	564	GLY
1	C	450	LEU
1	C	564	GLY
1	E	369	LYS
1	E	450	LEU
1	G	450	LEU
1	E	564	GLY
1	G	564	GLY
1	A	124	ILE
1	A	510	ILE
1	A	792	ILE
1	C	510	ILE
1	C	792	ILE
1	E	124	ILE
1	E	510	ILE

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Mol	Chain	Res	Type
1	E	792	ILE
1	G	124	ILE
1	G	510	ILE
1	G	792	ILE
1	A	779	GLY
1	C	124	ILE
1	C	779	GLY
1	E	779	GLY
1	G	779	GLY
1	A	4	LYS
1	A	466	ILE
1	C	4	LYS
1	C	466	ILE
1	E	4	LYS
1	E	466	ILE
1	G	4	LYS
1	G	466	ILE

### 5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	685/718 (95%)	447 (65%)	238 (35%)	0	1
1	C	685/718 (95%)	446 (65%)	239 (35%)	0	1
1	E	685/718 (95%)	446 (65%)	239 (35%)	0	1
1	G	685/718 (95%)	446 (65%)	239 (35%)	0	1
2	B	127/129 (98%)	75 (59%)	52 (41%)	0	0
2	D	127/129 (98%)	74 (58%)	53 (42%)	0	0
2	F	127/129 (98%)	74 (58%)	53 (42%)	0	0
2	H	127/129 (98%)	73 (58%)	54 (42%)	0	0
All	All	3248/3388 (96%)	2081 (64%)	1167 (36%)	0	1

All (1167) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	6	LEU
1	A	8	ASP
1	A	15	VAL
1	A	17	LYS
1	A	21	ASN
1	A	22	ASN
1	A	26	GLN
1	A	29	TRP
1	A	32	LYS
1	A	34	LEU
1	A	37	VAL
1	A	41	LYS
1	A	48	SER
1	A	58	THR
1	A	59	VAL
1	A	61	LEU
1	A	66	LYS
1	A	73	ASP
1	A	74	ASP
1	A	76	GLN
1	A	77	LYS
1	A	78	MET
1	A	79	ASN
1	A	84	SER
1	A	91	GLU
1	A	95	LEU
1	A	97	GLU
1	A	99	SER
1	A	101	LEU
1	A	106	GLU
1	A	112	LEU
1	A	113	ILE
1	A	115	THR
1	A	117	SER
1	A	120	PHE
1	A	121	CYS
1	A	127	TYR
1	A	128	LYS
1	A	132	ILE
1	A	136	LYS
1	A	137	ILE
1	A	144	LYS
1	A	146	ARG

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Mol	Chain	Res	Type
1	A	147	HIS
1	A	153	ILE
1	A	158	ASP
1	A	162	ARG
1	A	163	SER
1	A	165	LEU
1	A	174	LEU
1	A	178	GLU
1	A	183	LYS
1	A	186	ASN
1	A	189	LYS
1	A	196	VAL
1	A	199	SER
1	A	200	SER
1	A	214	SER
1	A	216	SER
1	A	217	TYR
1	A	220	LEU
1	A	222	LYS
1	A	225	LEU
1	A	226	GLN
1	A	231	LEU
1	A	234	PHE
1	A	239	THR
1	A	241	LYS
1	A	243	ASP
1	A	247	ARG
1	A	253	ARG
1	A	258	VAL
1	A	259	THR
1	A	266	ASN
1	A	268	GLU
1	A	271	LEU
1	A	274	LYS
1	A	275	SER
1	A	276	ARG
1	A	285	ARG
1	A	286	THR
1	A	287	PHE
1	A	300	GLN
1	A	302	ARG
1	A	303	ASN

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Mol	Chain	Res	Type
1	A	304	ASP
1	A	305	LEU
1	A	307	LEU
1	A	311	ASN
1	A	312	ASN
1	A	313	TYR
1	A	314	THR
1	A	315	PHE
1	A	329	ASP
1	A	336	LEU
1	A	342	MET
1	A	345	THR
1	A	347	GLU
1	A	350	THR
1	A	352	ILE
1	A	354	ARG
1	A	358	SER
1	A	364	ASN
1	A	369	LYS
1	A	372	ASN
1	A	373	THR
1	A	374	ASP
1	A	387	VAL
1	A	391	MET
1	A	395	VAL
1	A	396	THR
1	A	397	ASP
1	A	401	SER
1	A	408	LYS
1	A	411	ARG
1	A	415	GLN
1	A	418	GLN
1	A	419	THR
1	A	420	LYS
1	A	427	ILE
1	A	428	GLU
1	A	430	LEU
1	A	432	LYS
1	A	436	GLU
1	A	437	ARG
1	A	443	LEU
1	A	444	THR

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Mol	Chain	Res	Type
1	A	445	ARG
1	A	446	VAL
1	A	450	LEU
1	A	460	PHE
1	A	461	LEU
1	A	463	ILE
1	A	465	ASP
1	A	471	ILE
1	A	472	PHE
1	A	481	CYS
1	A	482	ILE
1	A	485	THR
1	A	486	ASN
1	A	487	GLU
1	A	488	LYS
1	A	489	LEU
1	A	496	THR
1	A	498	PHE
1	A	501	GLU
1	A	502	GLN
1	A	503	GLU
1	A	513	ASN
1	A	519	LEU
1	A	521	LEU
1	A	538	LEU
1	A	543	GLU
1	A	545	CYS
1	A	551	THR
1	A	552	ASP
1	A	553	THR
1	A	554	SER
1	A	557	GLU
1	A	559	LEU
1	A	560	ILE
1	A	561	GLN
1	A	562	GLU
1	A	563	GLN
1	A	568	LYS
1	A	573	LYS
1	A	574	GLN
1	A	575	LEU
1	A	576	LYS

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Mol	Chain	Res	Type
1	A	578	LYS
1	A	580	GLU
1	A	581	PHE
1	A	582	CYS
1	A	586	TYR
1	A	589	LYS
1	A	590	VAL
1	A	591	THR
1	A	595	SER
1	A	598	LEU
1	A	602	MET
1	A	605	LEU
1	A	608	ASN
1	A	611	SER
1	A	612	LEU
1	A	615	GLN
1	A	616	SER
1	A	617	SER
1	A	619	LYS
1	A	624	LEU
1	A	626	LYS
1	A	628	VAL
1	A	630	ARG
1	A	632	VAL
1	A	634	LEU
1	A	656	PHE
1	A	657	ARG
1	A	664	LYS
1	A	666	GLN
1	A	668	THR
1	A	671	MET
1	A	673	THR
1	A	678	ASN
1	A	684	CYS
1	A	686	ILE
1	A	690	GLU
1	A	692	ARG
1	A	696	LEU
1	A	700	LEU
1	A	703	GLU
1	A	708	ASN
1	A	715	ARG

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Mol	Chain	Res	Type
1	A	719	GLN
1	A	724	ARG
1	A	728	GLN
1	A	729	GLU
1	A	731	ARG
1	A	744	LYS
1	A	751	GLN
1	A	753	CYS
1	A	754	ILE
1	A	755	LEU
1	A	756	MET
1	A	758	LYS
1	A	760	LEU
1	A	762	LEU
1	A	772	SER
1	A	774	ILE
1	A	778	THR
1	A	781	LEU
1	A	792	ILE
1	A	793	THR
1	A	794	ASP
1	A	807	LEU
1	A	809	ARG
1	A	810	LYS
1	A	814	LYS
1	A	817	GLN
1	A	818	GLN
2	B	4	SER
2	B	6	GLU
2	B	10	GLU
2	B	12	LYS
2	B	16	GLN
2	B	20	ARG
2	B	21	THR
2	B	23	ASP
2	B	26	ILE
2	B	27	LEU
2	B	28	TYR
2	B	33	ASP
2	B	40	GLN
2	B	47	VAL
2	B	48	MET

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Mol	Chain	Res	Type
2	B	49	LYS
2	B	57	ASP
2	B	58	GLU
2	B	60	ASN
2	B	62	LYS
2	B	63	THR
2	B	64	LEU
2	B	65	LYS
2	B	67	GLU
2	B	73	MET
2	B	74	GLN
2	B	78	LYS
2	B	80	LYS
2	B	81	ASP
2	B	86	GLU
2	B	87	ASP
2	B	88	TYR
2	B	90	GLU
2	B	96	ASP
2	B	98	GLU
2	B	100	ASN
2	B	104	MET
2	B	107	GLU
2	B	108	ILE
2	B	114	THR
2	B	118	LYS
2	B	120	THR
2	B	124	VAL
2	B	126	GLN
2	B	131	HIS
2	B	132	GLU
2	B	135	ASN
2	B	144	VAL
2	B	145	ARG
2	B	146	MET
2	B	147	VAL
2	B	149	SER
1	C	6	LEU
1	C	8	ASP
1	C	15	VAL
1	C	17	LYS
1	C	21	ASN

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Mol	Chain	Res	Type
1	C	22	ASN
1	C	26	GLN
1	C	29	TRP
1	C	32	LYS
1	C	34	LEU
1	C	37	VAL
1	C	41	LYS
1	C	48	SER
1	C	58	THR
1	C	59	VAL
1	C	61	LEU
1	C	66	LYS
1	C	73	ASP
1	C	74	ASP
1	C	76	GLN
1	C	77	LYS
1	C	78	MET
1	C	79	ASN
1	C	84	SER
1	C	91	GLU
1	C	95	LEU
1	C	97	GLU
1	C	99	SER
1	C	101	LEU
1	C	106	GLU
1	C	107	ARG
1	C	112	LEU
1	C	113	ILE
1	C	115	THR
1	C	117	SER
1	C	120	PHE
1	C	121	CYS
1	C	127	TYR
1	C	128	LYS
1	C	132	ILE
1	C	136	LYS
1	C	137	ILE
1	C	144	LYS
1	C	146	ARG
1	C	147	HIS
1	C	153	ILE
1	C	158	ASP

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Mol	Chain	Res	Type
1	C	162	ARG
1	C	163	SER
1	C	165	LEU
1	C	174	LEU
1	C	178	GLU
1	C	183	LYS
1	C	186	ASN
1	C	189	LYS
1	C	196	VAL
1	C	199	SER
1	C	200	SER
1	C	214	SER
1	C	216	SER
1	C	217	TYR
1	C	220	LEU
1	C	222	LYS
1	C	225	LEU
1	C	226	GLN
1	C	231	LEU
1	C	234	PHE
1	C	239	THR
1	C	241	LYS
1	C	243	ASP
1	C	247	ARG
1	C	253	ARG
1	C	258	VAL
1	C	259	THR
1	C	266	ASN
1	C	268	GLU
1	C	271	LEU
1	C	274	LYS
1	C	275	SER
1	C	276	ARG
1	C	285	ARG
1	C	286	THR
1	C	287	PHE
1	C	300	GLN
1	C	302	ARG
1	C	303	ASN
1	C	304	ASP
1	C	305	LEU
1	C	307	LEU

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Mol	Chain	Res	Type
1	C	311	ASN
1	C	312	ASN
1	C	313	TYR
1	C	314	THR
1	C	315	PHE
1	C	329	ASP
1	C	336	LEU
1	C	342	MET
1	C	345	THR
1	C	347	GLU
1	C	350	THR
1	C	352	ILE
1	C	354	ARG
1	C	358	SER
1	C	364	ASN
1	C	369	LYS
1	C	372	ASN
1	C	373	THR
1	C	374	ASP
1	C	387	VAL
1	C	391	MET
1	C	395	VAL
1	C	396	THR
1	C	397	ASP
1	C	401	SER
1	C	408	LYS
1	C	411	ARG
1	C	415	GLN
1	C	418	GLN
1	C	419	THR
1	C	420	LYS
1	C	427	ILE
1	C	428	GLU
1	C	430	LEU
1	C	432	LYS
1	C	436	GLU
1	C	437	ARG
1	C	443	LEU
1	C	444	THR
1	C	445	ARG
1	C	446	VAL
1	C	450	LEU

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Mol	Chain	Res	Type
1	C	461	LEU
1	C	463	ILE
1	C	465	ASP
1	C	471	ILE
1	C	472	PHE
1	C	481	CYS
1	C	482	ILE
1	C	485	THR
1	C	486	ASN
1	C	487	GLU
1	C	488	LYS
1	C	489	LEU
1	C	496	THR
1	C	498	PHE
1	C	501	GLU
1	C	502	GLN
1	C	503	GLU
1	C	513	ASN
1	C	519	LEU
1	C	521	LEU
1	C	538	LEU
1	C	543	GLU
1	C	545	CYS
1	C	551	THR
1	C	552	ASP
1	C	553	THR
1	C	554	SER
1	C	557	GLU
1	C	559	LEU
1	C	560	ILE
1	C	561	GLN
1	C	562	GLU
1	C	563	GLN
1	C	568	LYS
1	C	573	LYS
1	C	574	GLN
1	C	575	LEU
1	C	576	LYS
1	C	578	LYS
1	C	580	GLU
1	C	581	PHE
1	C	582	CYS

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Mol	Chain	Res	Type
1	C	586	TYR
1	C	589	LYS
1	C	590	VAL
1	C	591	THR
1	C	595	SER
1	C	598	LEU
1	C	602	MET
1	C	603	ASP
1	C	605	LEU
1	C	608	ASN
1	C	611	SER
1	C	612	LEU
1	C	615	GLN
1	C	616	SER
1	C	617	SER
1	C	619	LYS
1	C	624	LEU
1	C	626	LYS
1	C	628	VAL
1	C	630	ARG
1	C	632	VAL
1	C	634	LEU
1	C	656	PHE
1	C	657	ARG
1	C	664	LYS
1	C	666	GLN
1	C	668	THR
1	C	671	MET
1	C	673	THR
1	C	678	ASN
1	C	684	CYS
1	C	686	ILE
1	C	690	GLU
1	C	692	ARG
1	C	696	LEU
1	C	700	LEU
1	C	703	GLU
1	C	708	ASN
1	C	715	ARG
1	C	719	GLN
1	C	724	ARG
1	C	728	GLN

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Mol	Chain	Res	Type
1	C	729	GLU
1	C	731	ARG
1	C	744	LYS
1	C	751	GLN
1	C	753	CYS
1	C	754	ILE
1	C	755	LEU
1	C	756	MET
1	C	758	LYS
1	C	760	LEU
1	C	762	LEU
1	C	772	SER
1	C	774	ILE
1	C	778	THR
1	C	781	LEU
1	C	792	ILE
1	C	793	THR
1	C	794	ASP
1	C	807	LEU
1	C	809	ARG
1	C	810	LYS
1	C	814	LYS
1	C	817	GLN
1	C	818	GLN
2	D	4	SER
2	D	6	GLU
2	D	10	GLU
2	D	12	LYS
2	D	16	GLN
2	D	20	ARG
2	D	21	THR
2	D	23	ASP
2	D	26	ILE
2	D	27	LEU
2	D	28	TYR
2	D	33	ASP
2	D	40	GLN
2	D	44	ASN
2	D	47	VAL
2	D	48	MET
2	D	49	LYS
2	D	57	ASP

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Mol	Chain	Res	Type
2	D	58	GLU
2	D	60	ASN
2	D	62	LYS
2	D	63	THR
2	D	64	LEU
2	D	65	LYS
2	D	67	GLU
2	D	73	MET
2	D	74	GLN
2	D	78	LYS
2	D	80	LYS
2	D	81	ASP
2	D	86	GLU
2	D	87	ASP
2	D	88	TYR
2	D	90	GLU
2	D	96	ASP
2	D	98	GLU
2	D	100	ASN
2	D	104	MET
2	D	107	GLU
2	D	108	ILE
2	D	114	THR
2	D	118	LYS
2	D	120	THR
2	D	124	VAL
2	D	126	GLN
2	D	131	HIS
2	D	132	GLU
2	D	135	ASN
2	D	144	VAL
2	D	145	ARG
2	D	146	MET
2	D	147	VAL
2	D	149	SER
1	E	6	LEU
1	E	8	ASP
1	E	15	VAL
1	E	17	LYS
1	E	21	ASN
1	E	22	ASN
1	E	26	GLN

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Mol	Chain	Res	Type
1	E	29	TRP
1	E	32	LYS
1	E	34	LEU
1	E	37	VAL
1	E	41	LYS
1	E	48	SER
1	E	58	THR
1	E	59	VAL
1	E	61	LEU
1	E	66	LYS
1	E	73	ASP
1	E	74	ASP
1	E	76	GLN
1	E	77	LYS
1	E	78	MET
1	E	79	ASN
1	E	84	SER
1	E	91	GLU
1	E	95	LEU
1	E	97	GLU
1	E	99	SER
1	E	101	LEU
1	E	106	GLU
1	E	112	LEU
1	E	113	ILE
1	E	115	THR
1	E	117	SER
1	E	120	PHE
1	E	121	CYS
1	E	127	TYR
1	E	128	LYS
1	E	132	ILE
1	E	136	LYS
1	E	137	ILE
1	E	144	LYS
1	E	146	ARG
1	E	147	HIS
1	E	153	ILE
1	E	158	ASP
1	E	162	ARG
1	E	163	SER
1	E	165	LEU

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Mol	Chain	Res	Type
1	E	174	LEU
1	E	178	GLU
1	E	183	LYS
1	E	186	ASN
1	E	189	LYS
1	E	196	VAL
1	E	199	SER
1	E	200	SER
1	E	214	SER
1	E	216	SER
1	E	217	TYR
1	E	220	LEU
1	E	222	LYS
1	E	225	LEU
1	E	226	GLN
1	E	231	LEU
1	E	234	PHE
1	E	239	THR
1	E	241	LYS
1	E	243	ASP
1	E	247	ARG
1	E	253	ARG
1	E	258	VAL
1	E	259	THR
1	E	266	ASN
1	E	268	GLU
1	E	271	LEU
1	E	274	LYS
1	E	275	SER
1	E	276	ARG
1	E	285	ARG
1	E	286	THR
1	E	287	PHE
1	E	300	GLN
1	E	302	ARG
1	E	303	ASN
1	E	304	ASP
1	E	305	LEU
1	E	307	LEU
1	E	311	ASN
1	E	312	ASN
1	E	313	TYR

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Mol	Chain	Res	Type
1	E	314	THR
1	E	315	PHE
1	E	329	ASP
1	E	336	LEU
1	E	342	MET
1	E	345	THR
1	E	347	GLU
1	E	350	THR
1	E	352	ILE
1	E	354	ARG
1	E	358	SER
1	E	364	ASN
1	E	369	LYS
1	E	372	ASN
1	E	373	THR
1	E	374	ASP
1	E	387	VAL
1	E	391	MET
1	E	395	VAL
1	E	396	THR
1	E	397	ASP
1	E	401	SER
1	E	408	LYS
1	E	411	ARG
1	E	415	GLN
1	E	418	GLN
1	E	419	THR
1	E	420	LYS
1	E	427	ILE
1	E	428	GLU
1	E	430	LEU
1	E	432	LYS
1	E	436	GLU
1	E	437	ARG
1	E	443	LEU
1	E	444	THR
1	E	445	ARG
1	E	446	VAL
1	E	450	LEU
1	E	460	PHE
1	E	461	LEU
1	E	463	ILE

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Mol	Chain	Res	Type
1	E	465	ASP
1	E	471	ILE
1	E	472	PHE
1	E	481	CYS
1	E	482	ILE
1	E	485	THR
1	E	486	ASN
1	E	487	GLU
1	E	488	LYS
1	E	489	LEU
1	E	496	THR
1	E	498	PHE
1	E	501	GLU
1	E	502	GLN
1	E	503	GLU
1	E	513	ASN
1	E	519	LEU
1	E	521	LEU
1	E	538	LEU
1	E	543	GLU
1	E	545	CYS
1	E	551	THR
1	E	552	ASP
1	E	553	THR
1	E	554	SER
1	E	557	GLU
1	E	559	LEU
1	E	560	ILE
1	E	561	GLN
1	E	562	GLU
1	E	563	GLN
1	E	568	LYS
1	E	573	LYS
1	E	574	GLN
1	E	575	LEU
1	E	576	LYS
1	E	578	LYS
1	E	580	GLU
1	E	581	PHE
1	E	582	CYS
1	E	586	TYR
1	E	589	LYS

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Mol	Chain	Res	Type
1	E	590	VAL
1	E	591	THR
1	E	595	SER
1	E	598	LEU
1	E	602	MET
1	E	603	ASP
1	E	605	LEU
1	E	608	ASN
1	E	611	SER
1	E	612	LEU
1	E	615	GLN
1	E	616	SER
1	E	617	SER
1	E	619	LYS
1	E	624	LEU
1	E	626	LYS
1	E	628	VAL
1	E	630	ARG
1	E	632	VAL
1	E	634	LEU
1	E	656	PHE
1	E	657	ARG
1	E	664	LYS
1	E	666	GLN
1	E	668	THR
1	E	671	MET
1	E	673	THR
1	E	678	ASN
1	E	684	CYS
1	E	686	ILE
1	E	690	GLU
1	E	692	ARG
1	E	696	LEU
1	E	700	LEU
1	E	703	GLU
1	E	708	ASN
1	E	715	ARG
1	E	719	GLN
1	E	724	ARG
1	E	728	GLN
1	E	729	GLU
1	E	731	ARG

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Mol	Chain	Res	Type
1	E	744	LYS
1	E	751	GLN
1	E	753	CYS
1	E	754	ILE
1	E	755	LEU
1	E	756	MET
1	E	758	LYS
1	E	760	LEU
1	E	762	LEU
1	E	772	SER
1	E	774	ILE
1	E	778	THR
1	E	781	LEU
1	E	792	ILE
1	E	793	THR
1	E	794	ASP
1	E	807	LEU
1	E	809	ARG
1	E	810	LYS
1	E	814	LYS
1	E	817	GLN
1	E	818	GLN
2	F	4	SER
2	F	6	GLU
2	F	10	GLU
2	F	12	LYS
2	F	16	GLN
2	F	20	ARG
2	F	21	THR
2	F	23	ASP
2	F	26	ILE
2	F	27	LEU
2	F	28	TYR
2	F	33	ASP
2	F	40	GLN
2	F	44	ASN
2	F	47	VAL
2	F	48	MET
2	F	49	LYS
2	F	57	ASP
2	F	58	GLU
2	F	60	ASN

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Mol	Chain	Res	Type
2	F	62	LYS
2	F	63	THR
2	F	64	LEU
2	F	65	LYS
2	F	67	GLU
2	F	73	MET
2	F	74	GLN
2	F	78	LYS
2	F	80	LYS
2	F	81	ASP
2	F	86	GLU
2	F	87	ASP
2	F	88	TYR
2	F	90	GLU
2	F	96	ASP
2	F	98	GLU
2	F	100	ASN
2	F	104	MET
2	F	107	GLU
2	F	108	ILE
2	F	114	THR
2	F	118	LYS
2	F	120	THR
2	F	124	VAL
2	F	126	GLN
2	F	131	HIS
2	F	132	GLU
2	F	135	ASN
2	F	144	VAL
2	F	145	ARG
2	F	146	MET
2	F	147	VAL
2	F	149	SER
1	G	6	LEU
1	G	8	ASP
1	G	15	VAL
1	G	17	LYS
1	G	21	ASN
1	G	22	ASN
1	G	26	GLN
1	G	29	TRP
1	G	32	LYS

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Mol	Chain	Res	Type
1	G	34	LEU
1	G	37	VAL
1	G	41	LYS
1	G	48	SER
1	G	58	THR
1	G	59	VAL
1	G	61	LEU
1	G	66	LYS
1	G	73	ASP
1	G	74	ASP
1	G	76	GLN
1	G	77	LYS
1	G	78	MET
1	G	79	ASN
1	G	84	SER
1	G	91	GLU
1	G	95	LEU
1	G	97	GLU
1	G	99	SER
1	G	101	LEU
1	G	106	GLU
1	G	107	ARG
1	G	112	LEU
1	G	113	ILE
1	G	115	THR
1	G	117	SER
1	G	120	PHE
1	G	121	CYS
1	G	127	TYR
1	G	128	LYS
1	G	132	ILE
1	G	136	LYS
1	G	137	ILE
1	G	144	LYS
1	G	146	ARG
1	G	147	HIS
1	G	153	ILE
1	G	158	ASP
1	G	162	ARG
1	G	163	SER
1	G	165	LEU
1	G	174	LEU

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Mol	Chain	Res	Type
1	G	178	GLU
1	G	183	LYS
1	G	186	ASN
1	G	189	LYS
1	G	196	VAL
1	G	199	SER
1	G	200	SER
1	G	214	SER
1	G	216	SER
1	G	217	TYR
1	G	220	LEU
1	G	222	LYS
1	G	225	LEU
1	G	226	GLN
1	G	231	LEU
1	G	234	PHE
1	G	239	THR
1	G	241	LYS
1	G	243	ASP
1	G	247	ARG
1	G	253	ARG
1	G	258	VAL
1	G	259	THR
1	G	266	ASN
1	G	268	GLU
1	G	271	LEU
1	G	274	LYS
1	G	275	SER
1	G	276	ARG
1	G	285	ARG
1	G	286	THR
1	G	287	PHE
1	G	300	GLN
1	G	302	ARG
1	G	303	ASN
1	G	304	ASP
1	G	305	LEU
1	G	307	LEU
1	G	311	ASN
1	G	312	ASN
1	G	313	TYR
1	G	314	THR

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Mol	Chain	Res	Type
1	G	315	PHE
1	G	329	ASP
1	G	336	LEU
1	G	342	MET
1	G	345	THR
1	G	347	GLU
1	G	350	THR
1	G	352	ILE
1	G	354	ARG
1	G	358	SER
1	G	364	ASN
1	G	369	LYS
1	G	372	ASN
1	G	373	THR
1	G	374	ASP
1	G	387	VAL
1	G	391	MET
1	G	395	VAL
1	G	396	THR
1	G	397	ASP
1	G	401	SER
1	G	408	LYS
1	G	411	ARG
1	G	415	GLN
1	G	418	GLN
1	G	419	THR
1	G	420	LYS
1	G	427	ILE
1	G	428	GLU
1	G	430	LEU
1	G	432	LYS
1	G	436	GLU
1	G	437	ARG
1	G	443	LEU
1	G	444	THR
1	G	445	ARG
1	G	446	VAL
1	G	450	LEU
1	G	461	LEU
1	G	463	ILE
1	G	465	ASP
1	G	471	ILE

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Mol	Chain	Res	Type
1	G	472	PHE
1	G	481	CYS
1	G	482	ILE
1	G	485	THR
1	G	486	ASN
1	G	487	GLU
1	G	488	LYS
1	G	489	LEU
1	G	496	THR
1	G	498	PHE
1	G	501	GLU
1	G	502	GLN
1	G	503	GLU
1	G	513	ASN
1	G	519	LEU
1	G	521	LEU
1	G	538	LEU
1	G	543	GLU
1	G	545	CYS
1	G	551	THR
1	G	552	ASP
1	G	553	THR
1	G	554	SER
1	G	557	GLU
1	G	559	LEU
1	G	560	ILE
1	G	561	GLN
1	G	562	GLU
1	G	563	GLN
1	G	568	LYS
1	G	573	LYS
1	G	574	GLN
1	G	575	LEU
1	G	576	LYS
1	G	578	LYS
1	G	580	GLU
1	G	581	PHE
1	G	582	CYS
1	G	586	TYR
1	G	589	LYS
1	G	590	VAL
1	G	591	THR

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Mol	Chain	Res	Type
1	G	595	SER
1	G	598	LEU
1	G	602	MET
1	G	603	ASP
1	G	605	LEU
1	G	608	ASN
1	G	611	SER
1	G	612	LEU
1	G	615	GLN
1	G	616	SER
1	G	617	SER
1	G	619	LYS
1	G	624	LEU
1	G	626	LYS
1	G	628	VAL
1	G	630	ARG
1	G	632	VAL
1	G	634	LEU
1	G	656	PHE
1	G	657	ARG
1	G	664	LYS
1	G	666	GLN
1	G	668	THR
1	G	671	MET
1	G	673	THR
1	G	678	ASN
1	G	684	CYS
1	G	686	ILE
1	G	690	GLU
1	G	692	ARG
1	G	696	LEU
1	G	700	LEU
1	G	703	GLU
1	G	708	ASN
1	G	715	ARG
1	G	719	GLN
1	G	724	ARG
1	G	728	GLN
1	G	729	GLU
1	G	731	ARG
1	G	744	LYS
1	G	751	GLN

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Mol	Chain	Res	Type
1	G	753	CYS
1	G	754	ILE
1	G	755	LEU
1	G	756	MET
1	G	758	LYS
1	G	760	LEU
1	G	762	LEU
1	G	772	SER
1	G	774	ILE
1	G	778	THR
1	G	781	LEU
1	G	792	ILE
1	G	793	THR
1	G	794	ASP
1	G	807	LEU
1	G	809	ARG
1	G	810	LYS
1	G	814	LYS
1	G	817	GLN
1	G	818	GLN
2	H	4	SER
2	H	6	GLU
2	H	10	GLU
2	H	12	LYS
2	H	16	GLN
2	H	20	ARG
2	H	21	THR
2	H	23	ASP
2	H	26	ILE
2	H	27	LEU
2	H	28	TYR
2	H	33	ASP
2	H	40	GLN
2	H	44	ASN
2	H	47	VAL
2	H	48	MET
2	H	49	LYS
2	H	57	ASP
2	H	58	GLU
2	H	60	ASN
2	H	62	LYS
2	H	63	THR

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Mol	Chain	Res	Type
2	H	64	LEU
2	H	65	LYS
2	H	67	GLU
2	H	73	MET
2	H	74	GLN
2	H	78	LYS
2	H	80	LYS
2	H	81	ASP
2	H	85	PHE
2	H	86	GLU
2	H	87	ASP
2	H	88	TYR
2	H	90	GLU
2	H	96	ASP
2	H	98	GLU
2	H	100	ASN
2	H	104	MET
2	H	107	GLU
2	H	108	ILE
2	H	114	THR
2	H	118	LYS
2	H	120	THR
2	H	124	VAL
2	H	126	GLN
2	H	131	HIS
2	H	132	GLU
2	H	135	ASN
2	H	144	VAL
2	H	145	ARG
2	H	146	MET
2	H	147	VAL
2	H	149	SER

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (126) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	18	ASN
1	A	64	ASN
1	A	96	ASN
1	A	223	GLN
1	A	226	GLN
1	A	244	ASN

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Mol	Chain	Res	Type
1	A	288	HIS
1	A	303	ASN
1	A	311	ASN
1	A	312	ASN
1	A	318	ASN
1	A	320	HIS
1	A	372	ASN
1	A	385	GLN
1	A	422	GLN
1	A	490	GLN
1	A	513	ASN
1	A	566	HIS
1	A	601	ASN
1	A	661	GLN
1	A	678	ASN
1	A	680	ASN
1	A	689	HIS
1	A	704	GLN
1	A	728	GLN
1	A	751	GLN
1	A	816	GLN
2	B	7	GLN
2	B	53	ASN
2	B	68	GLN
2	B	74	GLN
2	B	135	ASN
2	B	139	ASN
1	C	18	ASN
1	C	64	ASN
1	C	96	ASN
1	C	223	GLN
1	C	226	GLN
1	C	303	ASN
1	C	311	ASN
1	C	312	ASN
1	C	318	ASN
1	C	320	HIS
1	C	372	ASN
1	C	385	GLN
1	C	422	GLN
1	C	490	GLN
1	C	513	ASN

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Mol	Chain	Res	Type
1	C	566	HIS
1	C	601	ASN
1	C	661	GLN
1	C	678	ASN
1	C	680	ASN
1	C	689	HIS
1	C	704	GLN
1	C	728	GLN
1	C	751	GLN
1	C	816	GLN
2	D	7	GLN
2	D	53	ASN
2	D	68	GLN
2	D	74	GLN
2	D	135	ASN
2	D	139	ASN
1	E	18	ASN
1	E	64	ASN
1	E	96	ASN
1	E	223	GLN
1	E	226	GLN
1	E	244	ASN
1	E	288	HIS
1	E	303	ASN
1	E	311	ASN
1	E	312	ASN
1	E	318	ASN
1	E	320	HIS
1	E	372	ASN
1	E	385	GLN
1	E	422	GLN
1	E	490	GLN
1	E	513	ASN
1	E	566	HIS
1	E	601	ASN
1	E	661	GLN
1	E	678	ASN
1	E	680	ASN
1	E	689	HIS
1	E	704	GLN
1	E	728	GLN
1	E	751	GLN

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Mol	Chain	Res	Type
1	E	816	GLN
2	F	7	GLN
2	F	53	ASN
2	F	68	GLN
2	F	74	GLN
2	F	135	ASN
2	F	139	ASN
1	G	18	ASN
1	G	64	ASN
1	G	96	ASN
1	G	223	GLN
1	G	226	GLN
1	G	303	ASN
1	G	311	ASN
1	G	312	ASN
1	G	318	ASN
1	G	320	HIS
1	G	372	ASN
1	G	422	GLN
1	G	490	GLN
1	G	513	ASN
1	G	566	HIS
1	G	601	ASN
1	G	661	GLN
1	G	678	ASN
1	G	680	ASN
1	G	689	HIS
1	G	704	GLN
1	G	728	GLN
1	G	751	GLN
2	H	7	GLN
2	H	53	ASN
2	H	68	GLN
2	H	74	GLN
2	H	135	ASN
2	H	139	ASN

### 5.3.3 RNA ⓘ

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 carbohydrates in this entry.

## 5.6 Ligand geometry [i](#)

Of 12 ligands modelled in this entry, 4 are monoatomic - leaving 8 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z  > 2$	Counts	RMSZ	$\# Z  > 2$
4	ADP	G	998	3,5	24,29,29	1.18	2 (8%)	29,45,45	1.33	3 (10%)
5	BEF	G	999	3,4	0,3,3	0.00	-	-		
4	ADP	A	998	3,5	24,29,29	1.18	2 (8%)	29,45,45	1.34	3 (10%)
5	BEF	E	999	3,4	0,3,3	0.00	-	-		
4	ADP	C	998	3,5	24,29,29	1.19	2 (8%)	29,45,45	1.33	3 (10%)
5	BEF	C	999	3,4	0,3,3	0.00	-	-		
5	BEF	A	999	3,4	0,3,3	0.00	-	-		
4	ADP	E	998	3,5	24,29,29	1.18	2 (8%)	29,45,45	1.33	3 (10%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
4	ADP	A	998	3,5	-	3/12/32/32	0/3/3/3
4	ADP	C	998	3,5	-	3/12/32/32	0/3/3/3
4	ADP	E	998	3,5	-	3/12/32/32	0/3/3/3
4	ADP	G	998	3,5	-	3/12/32/32	0/3/3/3

All (8) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	A	998	ADP	C2'-C1'	-3.44	1.48	1.53
4	G	998	ADP	C2'-C1'	-3.39	1.48	1.53
4	C	998	ADP	C2'-C1'	-3.39	1.48	1.53
4	E	998	ADP	C2'-C1'	-3.38	1.48	1.53
4	G	998	ADP	C2-N3	2.32	1.35	1.32
4	C	998	ADP	C2-N3	2.30	1.35	1.32
4	E	998	ADP	C2-N3	2.29	1.35	1.32
4	A	998	ADP	C2-N3	2.27	1.35	1.32

All (12) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	A	998	ADP	C5-C6-N6	5.05	128.02	120.35
4	E	998	ADP	C5-C6-N6	5.03	128.00	120.35
4	G	998	ADP	C5-C6-N6	5.03	128.00	120.35
4	C	998	ADP	C5-C6-N6	5.03	128.00	120.35
4	A	998	ADP	N6-C6-N1	-2.74	112.89	118.57
4	C	998	ADP	N6-C6-N1	-2.72	112.93	118.57
4	G	998	ADP	N6-C6-N1	-2.71	112.95	118.57
4	E	998	ADP	N6-C6-N1	-2.68	113.01	118.57
4	A	998	ADP	C1'-N9-C4	-2.39	122.43	126.64
4	G	998	ADP	C1'-N9-C4	-2.38	122.46	126.64
4	C	998	ADP	C1'-N9-C4	-2.37	122.48	126.64
4	E	998	ADP	C1'-N9-C4	-2.37	122.48	126.64

There are no chirality outliers.

All (12) torsion outliers are listed below:

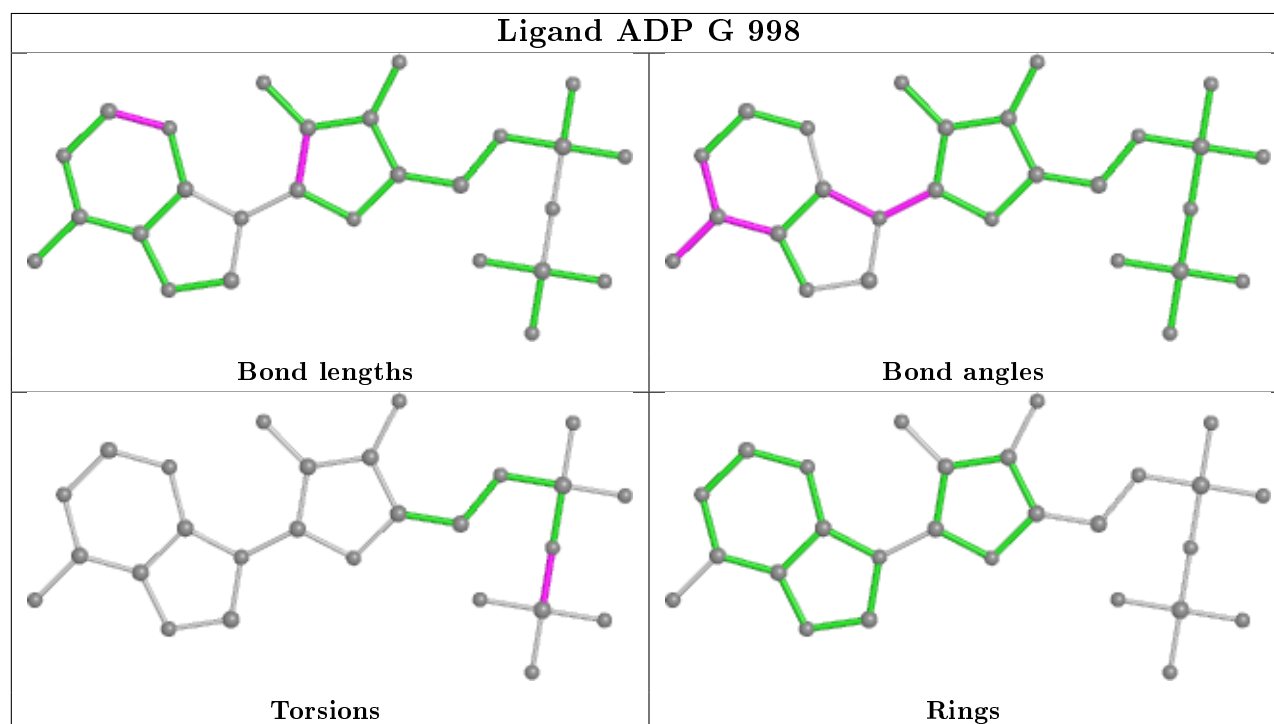
Mol	Chain	Res	Type	Atoms
4	G	998	ADP	PA-O3A-PB-O2B
4	A	998	ADP	PA-O3A-PB-O2B
4	C	998	ADP	PA-O3A-PB-O2B
4	E	998	ADP	PA-O3A-PB-O2B
4	G	998	ADP	PA-O3A-PB-O1B
4	A	998	ADP	PA-O3A-PB-O1B
4	C	998	ADP	PA-O3A-PB-O1B
4	E	998	ADP	PA-O3A-PB-O1B
4	G	998	ADP	PA-O3A-PB-O3B
4	A	998	ADP	PA-O3A-PB-O3B
4	C	998	ADP	PA-O3A-PB-O3B
4	E	998	ADP	PA-O3A-PB-O3B

There are no ring outliers.

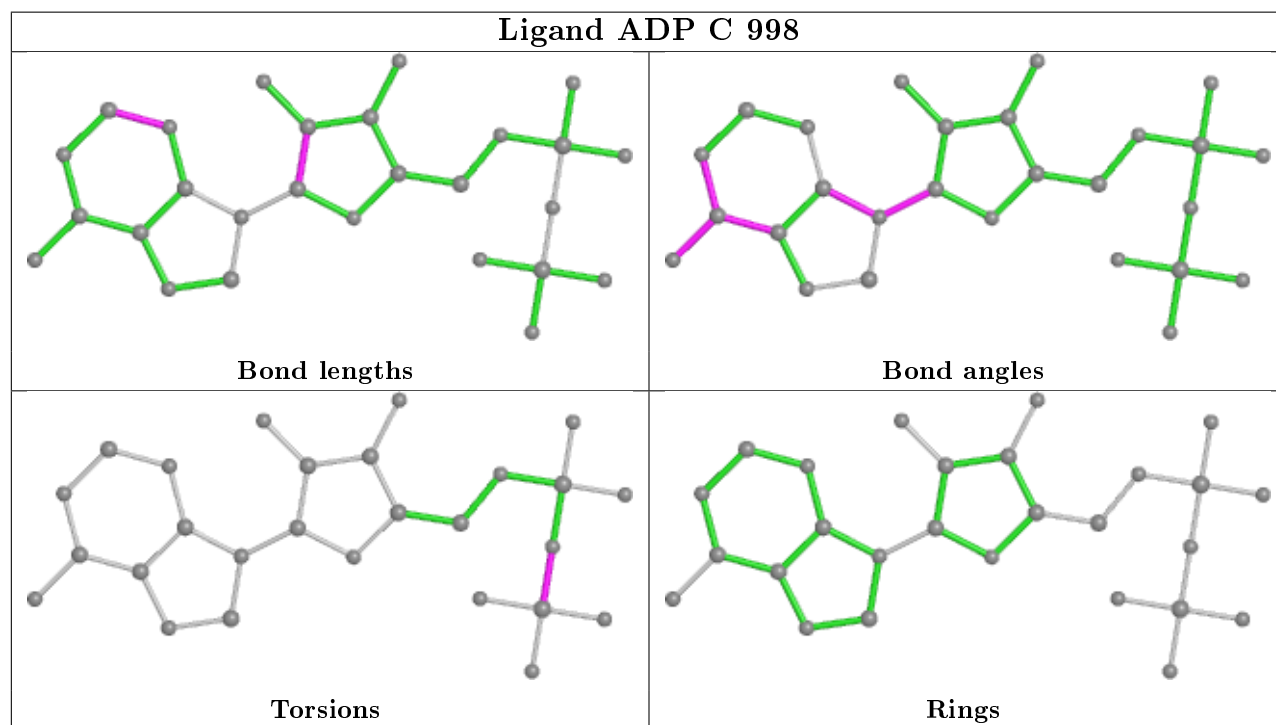
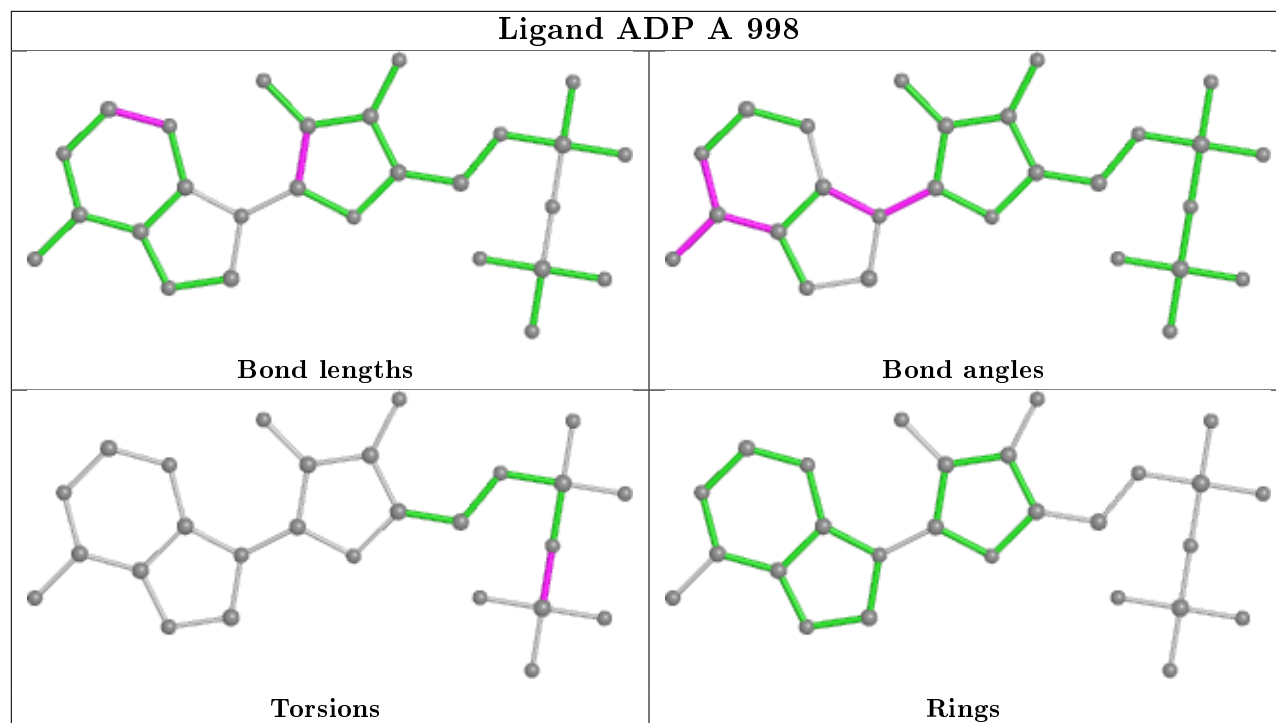
4 monomers are involved in 12 short contacts:

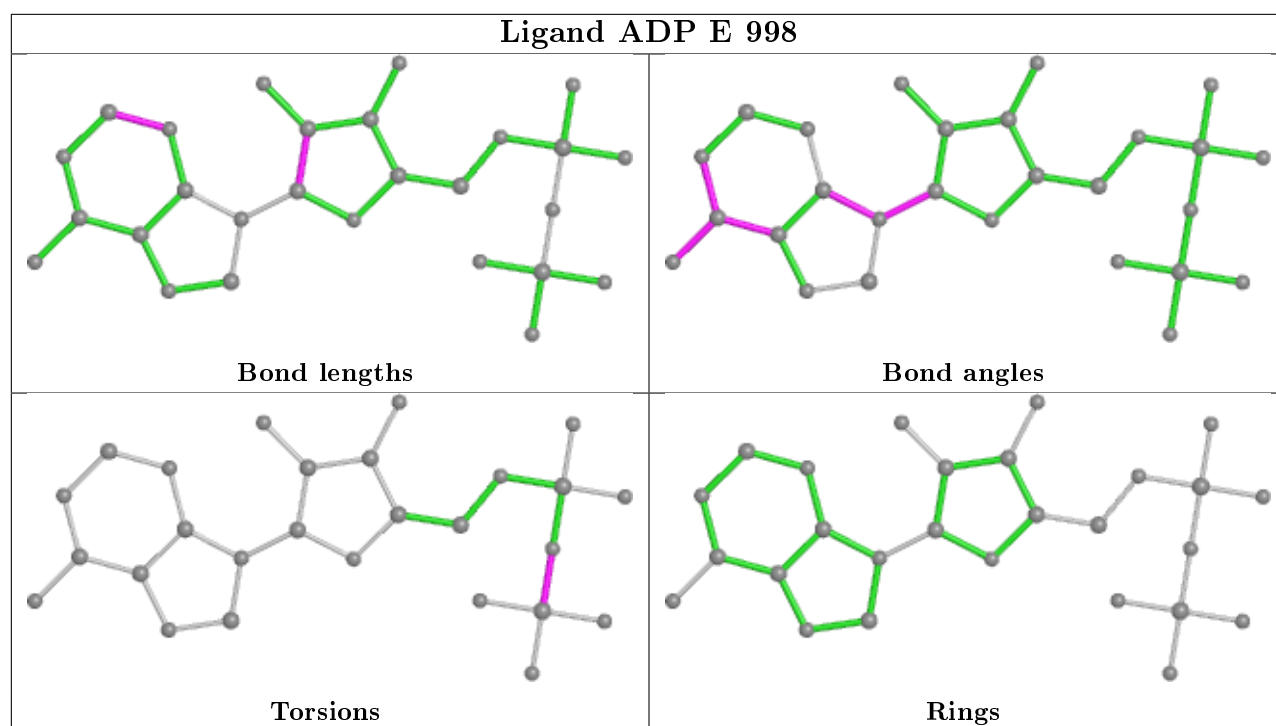
Mol	Chain	Res	Type	Clashes	Symm-Clashes
4	G	998	ADP	3	0
4	A	998	ADP	3	0
4	C	998	ADP	4	0
4	E	998	ADP	2	0

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









## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

## 6 Fit of model and data ⓘ

### 6.1 Protein, DNA and RNA chains ⓘ

EDS was not executed - this section is therefore empty.

### 6.2 Non-standard residues in protein, DNA, RNA chains ⓘ

EDS was not executed - this section is therefore empty.

### 6.3 Carbohydrates ⓘ

EDS was not executed - this section is therefore empty.

### 6.4 Ligands ⓘ

EDS was not executed - this section is therefore empty.

### 6.5 Other polymers ⓘ

EDS was not executed - this section is therefore empty.