



# Full wwPDB X-ray Structure Validation Report ⓘ

Jan 31, 2016 – 06:39 PM GMT

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  
<http://wwpdb.org/validation/2016/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 : 1.7 (RC4), CSD as536be (2015)  
Xtriage (Phenix) : **NOT EXECUTED**  
EDS : **NOT EXECUTED**  
Percentile statistics : 20151230.v01 (using entries in the PDB archive December 30th 2015)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : trunk26865

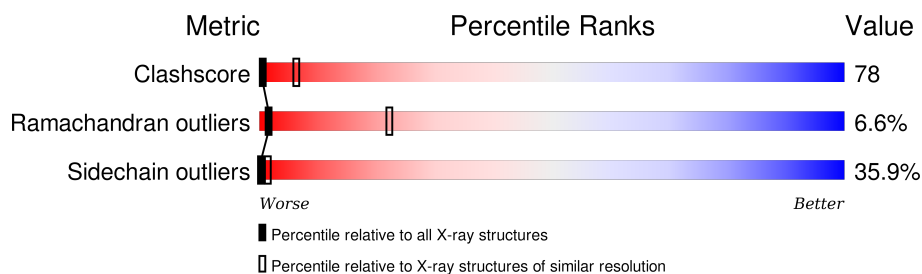
# 1 Overall quality at a glance

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	102246	1043 (3.78-3.46)
Ramachandran outliers	100387	1003 (3.78-3.46)
Sidechain outliers	100360	1003 (3.78-3.46)

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. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ . The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

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	

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Mol	Chain	Length	Quality of chain
2	H	150	<div><div></div><div>15%</div><div>52%</div><div>31%</div><div>..</div></div>

## 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			

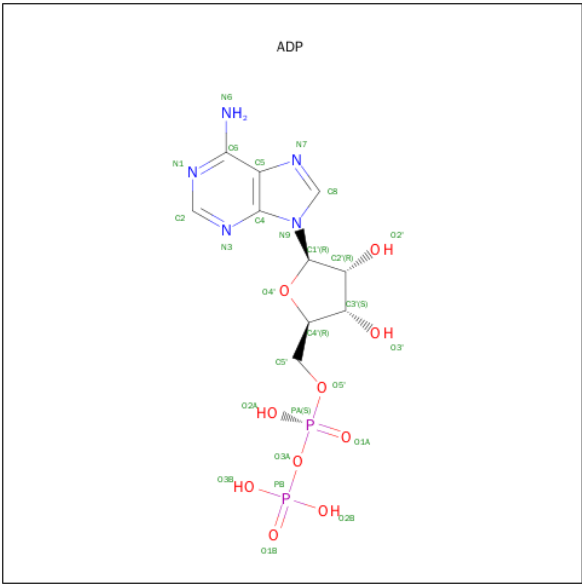
- Molecule 2 is a protein called MYOSIN.

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).

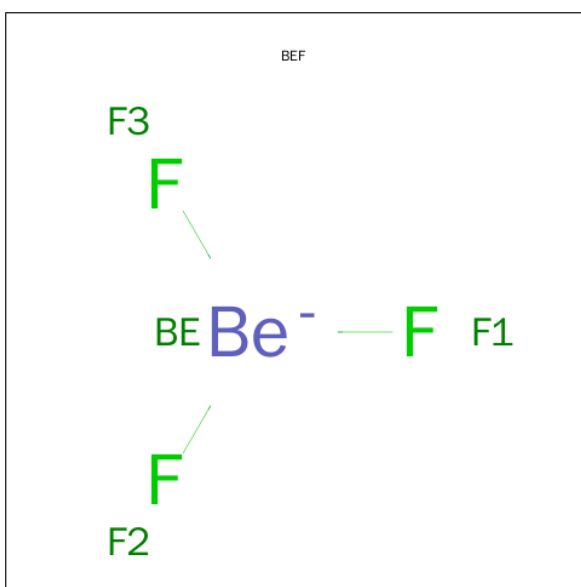
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	G	1	Total	Mg	0	0
			1	1		
3	A	1	Total	Mg	0	0
			1	1		
3	C	1	Total	Mg	0	0
			1	1		
3	E	1	Total	Mg	0	0
			1	1		

- 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 4	Be 1	F 3	0	0
5	C	1	Total 4	Be 1	F 3	0	0
5	E	1	Total 4	Be 1	F 3	0	0
5	G	1	Total 4	Be 1	F 3	0	0

- Molecule 6 is water.

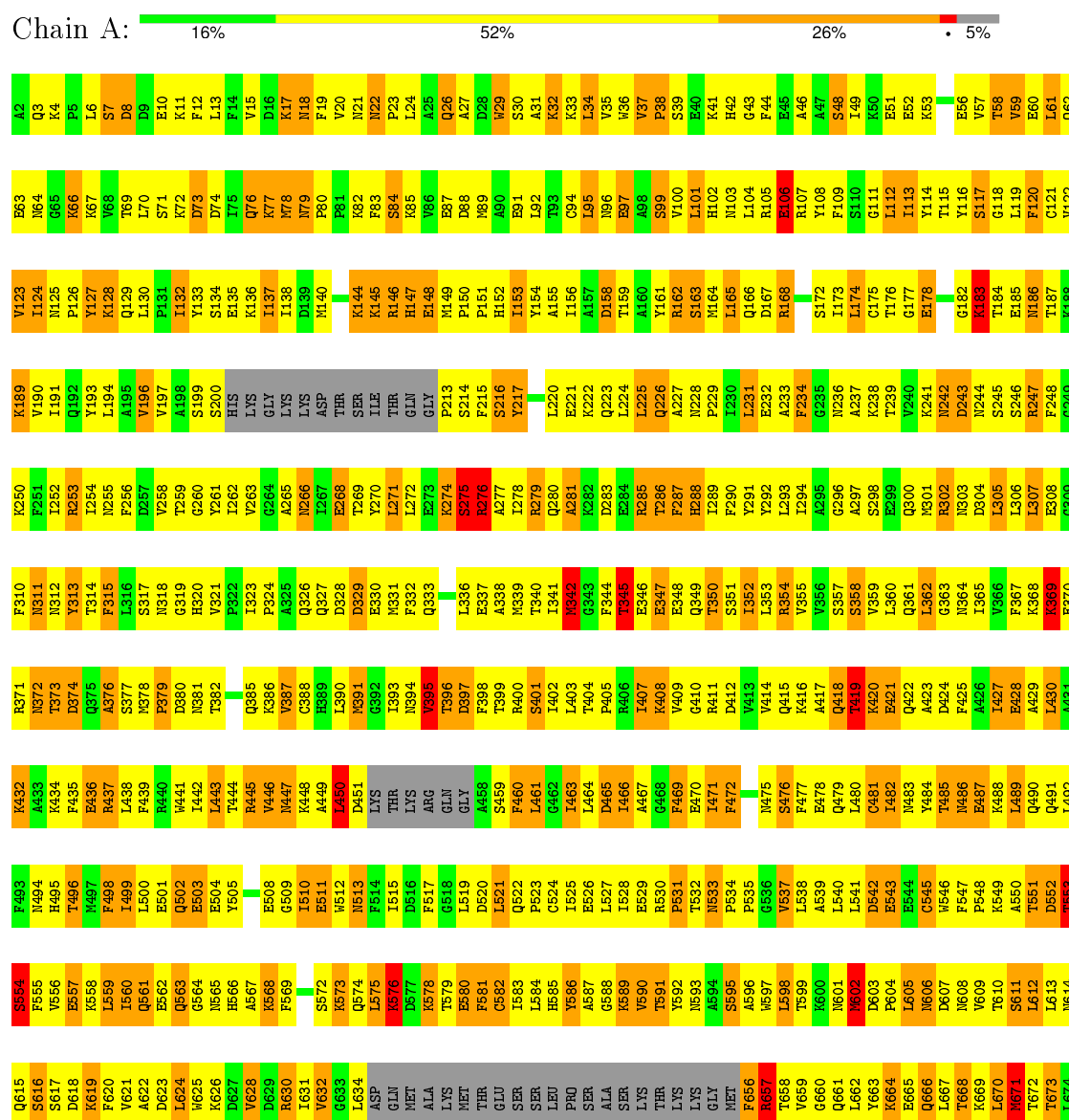
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
6	A	2	Total 2	O 2	0	0
6	C	2	Total 2	O 2	0	0
6	E	2	Total 2	O 2	0	0
6	G	2	Total 2	O 2	0	0

### 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 errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density ( $RSRZ > 2$ ). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

Note EDS was not executed.

#### • Molecule 1: MYOSIN

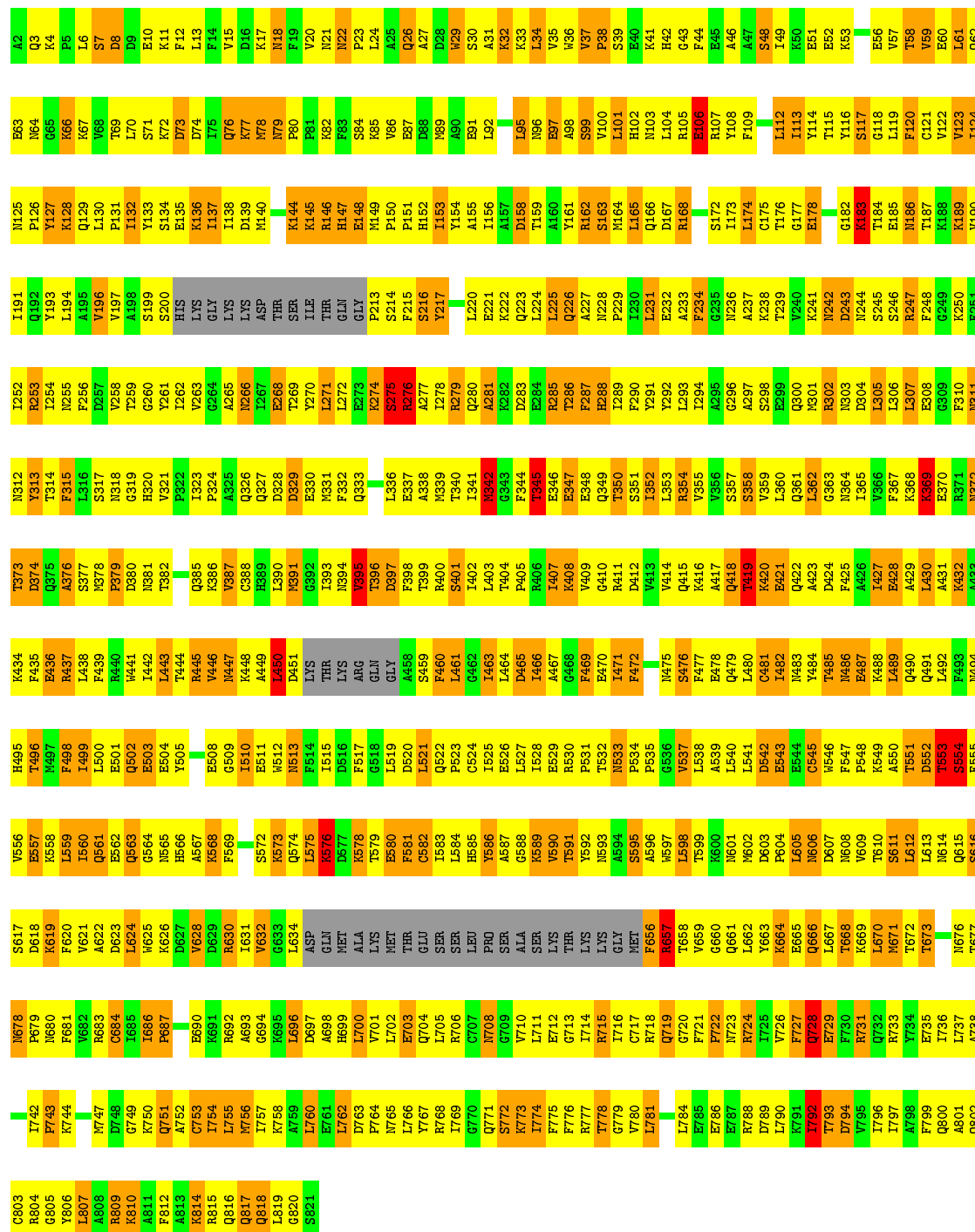
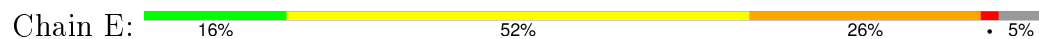




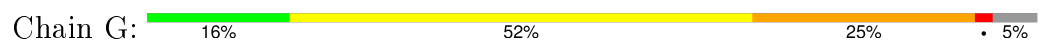





### • Molecule 1: MYOSIN



### • Molecule 1: MYOSIN





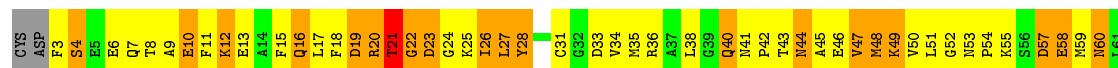
Chain B:  16% 50% 31% ..





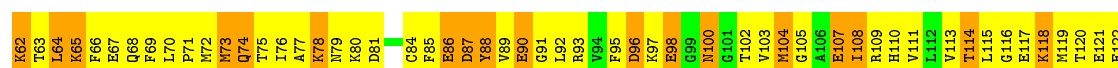
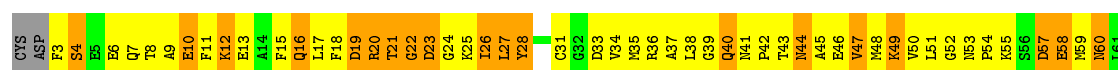
• Molecule 2: MYOSIN

Chain D: 17% 50% 30%



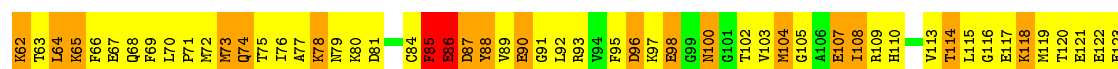
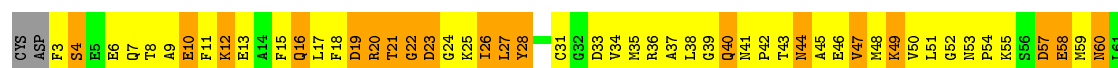
• Molecule 2: MYOSIN

Chain F: 15% 53% 31%



• Molecule 2: MYOSIN

Chain H: 15% 52% 31%



## 4 Data and refinement statistics

Xtriage (Phenix) and EDS were not executed - this section will therefore be 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:F:9:ALA:O	2:F:12:LYS:HG3	1.40	1.18
2:D:9:ALA:O	2:D: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
2:B:7:GLN:O	2:B:11:PHE:HD1	1.28	1.17
1:A:805:GLY:O	1:A:809:ARG:HG2	1.40	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
1:A:686:ILE:HD13	1:A:687:PRO:HD2	1.31	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:28:TYR:HE2	2:F:54:PRO:HG3	1.15	1.06
2:D:28:TYR:HE2	2:D:54:PRO:HG3	1.15	1.06
2:H:28:TYR:HE2	2:H:54:PRO:HG3	1.15	1.05
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
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:G:541:LEU:HD23	1:G:601:ASN:HD22	1.21	1.04
1:C:628:VAL:O	1:C:628:VAL:HG22	1.55	1.04
1:C:805:GLY:O	1:C:809:ARG:CG	2.07	1.02
1:A:298:SER:H	1:A:301:MET:HG2	1.20	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:805:GLY:O	1:A:809:ARG:CG	2.08	1.02
1:E:805:GLY:O	1:E:809:ARG:CG	2.07	1.02
1:A:753:CYS:SG	1:A:774:ILE:HD11	2.00	1.02
1:C:541:LEU:HD23	1:C:601:ASN:HD22	1.21	1.02
1:G:805:GLY:O	1:G:809:ARG:CG	2.07	1.01
2:B:28:TYR:CE2	2:B:54:PRO:HG3	1.94	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:753:CYS:SG	1:G:774:ILE:HD11	1.99	1.01
1:G:376:ALA:HB2	1:G:420:LYS:HA	1.40	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
1:G:268:GLU:HG2	1:G:270:TYR:CZ	1.97	1.00
2:F:65:LYS:HB2	2:F:68:GLN:HG3	1.44	1.00
1:G:543:GLU:HA	1:G:546:TRP:HD1	1.27	0.99
1:A:541:LEU:HD23	1:A:601:ASN:HD22	1.24	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
1:A:333:GLN:O	1:A:337:GLU:HG3	1.62	0.99
2:D:7:GLN:O	2:D:11:PHE:CD1	2.13	0.99
2:B:12:LYS:O	2:B:16:GLN:HG2	1.63	0.99
1:C:328:ASP:HA	1:C:331:MET:HB2	1.44	0.99
1:E:328:ASP:HA	1:E:331:MET:HB2	1.45	0.99
1:A:77:LYS:HD2	1:A:96:ASN:HD21	1.28	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:G:328:ASP:HA	1:G:331:MET:HB2	1.44	0.97
1:E:89:MET:HG2	1:E:92:LEU:HD11	1.46	0.97
1:C:376:ALA:HB2	1:C:420:LYS:HA	1.41	0.97
2:F:12:LYS:O	2:F:16:GLN:HG2	1.62	0.97
1:C:268:GLU:CG	1:C:270:TYR:CZ	2.48	0.97
2:H:28:TYR:CE2	2:H:54:PRO:HG3	1.98	0.97
1:A:543:GLU:HA	1:A:546:TRP:HD1	1.28	0.97
1:G:77:LYS:HD2	1:G:96:ASN:HD21	1.27	0.97
1:C:242:ASN:HB3	1:C:245:SER:HB2	1.45	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:747:MET:HG3	1:G:812:PHE:CE2	2.02	0.94
1:A:742:ILE:HD11	1:A:752:ALA:O	1.67	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:G:114:TYR:CE2	1:G:153:ILE:HB	2.02	0.94
1:C:114:TYR:CE2	1:C:153:ILE:HB	2.02	0.94
1:A:802:GLN:HG3	2:B:88:TYR:OH	1.68	0.93
1:A:145:LYS:HG3	1:A:146:ARG:HE	1.34	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:G:490:GLN:HE21	1:G:494:ASN:HD21	1.03	0.92
1:C:3:GLN:H	1:C:18:ASN:HD21	1.18	0.92
2:F:89:VAL:HG12	2:F:144:VAL:HG21	1.49	0.92
1:C:802:GLN:HG3	2:D:88:TYR:OH	1.68	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:628:VAL:CG2	1:E:628:VAL:O	2.17	0.90
1:E:323:ILE:HG23	1:E:326:GLN:HB3	1.53	0.90
1:A:490:GLN:NE2	1:A:494:ASN:HD21	1.69	0.90
1:G:527:LEU:HD11	1:G:569:PHE:HB2	1.53	0.90
1:E:3:GLN:H	1:E:18:ASN:HD21	1.18	0.90
1:G:490:GLN:NE2	1:G:494:ASN:HD21	1.69	0.90
1:C:489:LEU:HD12	1:C:489:LEU:O	1.70	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:9:ALA:HA	2:D:12:LYS:CE	2.01	0.89
1:C:527:LEU:HD11	1:C:569:PHE:HB2	1.53	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
2:H:9:ALA:HA	2:H:12:LYS:CE	2.02	0.89
1:C:800:GLN:HA	2:D:119:MET:HE2	1.52	0.89
1:C:116:TYR:CE1	1:C:151:PRO:HB3	2.08	0.89
1:G:3:GLN:H	1:G:18:ASN:HD21	1.18	0.89
1:A:3:GLN:H	1:A:18:ASN:HD21	1.18	0.89
1:A:130:LEU:HB2	1:A:132:ILE:HD13	1.55	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:E:686:ILE:HG22	1:E:704:GLN:NE2	1.88	0.88
1:A:323:ILE:HG23	1:A:326:GLN:HB3	1.53	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
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
2:B:74:GLN:O	2:B:78:LYS:HG3	1.75	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
2:H:12:LYS:HB3	2:H:66:PHE:CE2	2.10	0.87
1:E:313:TYR:CD2	1:E:360:LEU:HB3	2.09	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:G:116:TYR:CD1	1:G:151:PRO:HB3	2.10	0.87
1:A:116:TYR:CD1	1:A:151:PRO:HB3	2.10	0.87
1:G:814:LYS:O	1:G:817:GLN:CG	2.20	0.86
1:E:116:TYR:CD1	1:E:151:PRO:HB3	2.10	0.86
2:D:74:GLN:O	2:D:78:LYS:HG3	1.74	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
2:F:144:VAL:O	2:F:147:VAL:HG23	1.76	0.86
1:C:164:MET:CE	1:C:256:PHE:HE2	1.87	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: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:A:161:TYR:CE1	1:A:165:LEU:HD11	2.10	0.86
1:C:737:LEU:HD21	1:C:788:ARG:HA	1.58	0.86
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:A:164:MET:CE	1:A:256:PHE:HE2	1.88	0.85
2:D:12:LYS:HB3	2:D:66:PHE:CE2	2.10	0.85
1:C:232:GLU:O	1:C:236:ASN:HB2	1.76	0.85
1:E:161:TYR:CE1	1:E:165:LEU:HD11	2.10	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:A:291:TYR:CD2	1:A:310:PHE:HE1	1.94	0.85
1:C:391:MET:HG2	1:C:613:LEU:HD21	1.59	0.85
1:G:256:PHE:HB2	1:G:459:SER:OG	1.77	0.85
1:E:232:GLU:O	1:E:236:ASN:HB2	1.75	0.85
1:C:547:PHE:HE1	1:C:549:LYS:HB3	1.41	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: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: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:E:256:PHE:HB2	1:E:459:SER:OG	1.77	0.85
1:A:547:PHE:HE1	1:A:549:LYS:HB3	1.41	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:605:LEU:HD23	1:E:632:VAL:HG23	1.59	0.84
1:E:12:PHE:HB3	1:E:132:ILE:CG2	2.07	0.84
1:A:605:LEU:HD23	1:A:632:VAL:HG23	1.59	0.84
1:C:475:ASN:HB2	1:C:592:TYR:HA	1.57	0.84
1:A:256:PHE:HB2	1:A:459:SER:OG	1.77	0.84
1:G:737:LEU:HD21	1:G:788:ARG:HA	1.58	0.84
1:A:737:LEU:HD21	1:A:788:ARG:HA	1.58	0.84
1:C:630:ARG:HH22	1:C:657:ARG:HB2	1.41	0.84
2:F:122:GLU:O	2:F:126:GLN:HG3	1.78	0.84
1:E:391:MET:HG2	1:E:613:LEU:HD21	1.59	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: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:G:234:PHE:HB3	1:G:289:ILE:HG21	1.57	0.83
1:A:502:GLN:HG3	1:A:512:TRP:HE1	1.41	0.83
1:E:502:GLN:HG3	1:E:512:TRP:HE1	1.41	0.83
2:B:122:GLU:O	2:B:126:GLN:HG3	1.78	0.83
1:E:530:ARG:HD3	1:E:533:ASN:HB2	1.60	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:C:530:ARG:HD3	1:C:533:ASN:HB2	1.60	0.83
1:A:630:ARG:HH22	1:A:657:ARG:HB2	1.42	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:313:TYR:HD2	1:E:360:LEU:HB3	1.44	0.82
1:E:146:ARG:NH1	1:E:159:THR:HG23	1.94	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:G:268:GLU:O	1:G:270:TYR:CE1	2.32	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: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
2:D:28:TYR:HB2	2:D:62:LYS:HB2	1.62	0.81
1:C:313:TYR:HD2	1:C:360:LEU:HB3	1.44	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
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
1:E:79:ASN:ND2	1:E:92:LEU:HB3	1.94	0.81
2:D:76:ILE:O	2:D:79:ASN:ND2	2.13	0.81
1:A:82:LYS:HG2	1:A:82:LYS:O	1.80	0.81
1:A:724:ARG:HA	1:A:774:ILE:O	1.80	0.81
1:G:187:THR:O	1:G:191:ILE:HG13	1.81	0.81
1:G:187:THR:HG23	1:G:463:ILE:CG2	2.11	0.81
1:C:146:ARG:NH1	1:C:159:THR:HG23	1.95	0.81
1:C:268:GLU:O	1:C:270:TYR:CE1	2.32	0.81
1:G:187:THR:HG23	1:G:463:ILE:HG21	1.61	0.81
1:E:724:ARG:HA	1:E:774:ILE:O	1.79	0.81
1:G:724:ARG:HA	1:G:774:ILE:O	1.80	0.81
2:B:103:VAL:HG12	2:B:104:MET:H	1.46	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:G:268:GLU:HG3	1:G:270:TYR:CZ	2.15	0.81
1:C:82:LYS:HG2	1:C:82:LYS:O	1.80	0.81
1:E:342:MET:HE1	1:E:449:ALA:HB3	1.62	0.81
1:E:12:PHE:CE2	1:E:131:PRO:HD2	2.16	0.81
1:C:187:THR:O	1:C:191:ILE:HG13	1.81	0.81
1:A:146:ARG:NH1	1:A:159:THR:HG23	1.95	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
2:H:36:ARG:HA	2:H:40:GLN:O	1.82	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:187:THR:HG23	1:C:463:ILE:CG2	2.11	0.80
1:A:313:TYR:HD2	1:A:360:LEU:HB3	1.44	0.80
2:B:110:HIS:O	2:B:114:THR:OG1	1.98	0.80
1:G:36:TRP:HB2	1:G:76:GLN:HB3	1.64	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: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:C:268:GLU:HG3	1:C:270:TYR:CZ	2.15	0.80
1:A:85:LYS:HG2	1:A:106:GLU:HB3	1.61	0.80
1:G:568:LYS:HD3	1:G:584:LEU:HB2	1.62	0.80
2:H:4:SER:HB3	2:H:7:GLN:HE21	1.47	0.80
2:F:28:TYR:HB2	2:F:62:LYS:HB2	1.62	0.80
1:E:82:LYS:O	1:E:82:LYS:HG2	1.80	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:A:134:SER:O	1:A:138:ILE:HG12	1.82	0.80
1:G:134:SER:O	1:G:138:ILE:HG12	1.82	0.80
1:A:268:GLU:HG3	1:A:270:TYR:CZ	2.16	0.80
2:D:4:SER:HB3	2:D:7:GLN:HE21	1.47	0.80
1:C:125:ASN:HB3	1:C:687:PRO:HD3	1.64	0.80
1:G:152:HIS:O	1:G:155:ALA:HB3	1.81	0.80
1:A:568:LYS:HD3	1:A:584:LEU:HB2	1.62	0.80
1:G:313:TYR:HD2	1:G:360:LEU:HB3	1.44	0.80
1:A:145:LYS:HB3	1:A:148:GLU:HG3	1.64	0.80
2:D:107:GLU:HA	2:D:107:GLU:OE1	1.82	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
2:B:36:ARG:HA	2:B:40:GLN:O	1.80	0.80
1:G:82:LYS:HG2	1:G:82:LYS:O	1.80	0.80
1:C:772:SER:O	1:C:773:LYS:HB2	1.81	0.80
1:C:134:SER:O	1:C:138:ILE:HG12	1.82	0.80
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: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: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)
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
1:C:36:TRP:HB2	1:C:76:GLN:HB3	1.64	0.79
2:B:107:GLU:HA	2:B:107:GLU:OE1	1.82	0.79
2:H:121:GLU:O	2:H:124:VAL:HG23	1.81	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:B:4:SER:HB3	2:B:7:GLN:HE21	1.47	0.79
1:G:541:LEU:HD23	1:G:601:ASN:ND2	1.98	0.79
1:E:36:TRP:HB2	1:E:76:GLN:HB3	1.64	0.79
2:D:121:GLU:O	2:D:124:VAL:HG23	1.81	0.79
1:A:125:ASN:HB3	1:A:687:PRO:HD3	1.64	0.79
1:C:541:LEU:HD23	1:C:601:ASN:ND2	1.98	0.79
1:A:527:LEU:HD23	1:A:527:LEU:O	1.83	0.79
1:C:164:MET:CE	1:C:256:PHE:CE2	2.66	0.79
1:G:630:ARG:HH22	1:G:657:ARG:CB	1.94	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
1:C:152:HIS:O	1:C:155:ALA:HB3	1.81	0.79
2:D:103:VAL:HG12	2:D:104:MET:H	1.46	0.79
2:H:70:LEU:HG	2:H:74:GLN:NE2	1.97	0.79
2:D:70:LEU:HG	2:D:74:GLN:NE2	1.96	0.79
1:E:125:ASN:HB3	1:E:687:PRO:HD3	1.64	0.79
2:B:85:PHE:HE1	2:B:145:ARG:CG	1.95	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:A:123:VAL:HG12	1:A:123:VAL:O	1.83	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:G:753:CYS:HG	1:G:774:ILE:HD11	1.49	0.78
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:125:ASN:HB3	1:G:687:PRO:HD3	1.64	0.78
1:E:352:ILE:CG2	1:E:438:LEU:HD11	2.14	0.78
1:C:661:GLN:O	1:C:665:GLU:HB2	1.82	0.78
1:A:661:GLN:O	1:A:665:GLU:HB2	1.82	0.78
1:E:76:GLN:OE1	1:E:96:ASN:HB3	1.83	0.78
2:F:4:SER:HB3	2:F:7:GLN:HE21	1.47	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:G:527:LEU:HD23	1:G:527:LEU:O	1.83	0.78
1:E:812:PHE:CZ	2:F:17:LEU:CD2	2.67	0.78
1:A:517:PHE:HD2	1:A:712:GLU:HB3	1.49	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
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:381:ASN:O	1:C:385:GLN:HG3	1.83	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:G:145:LYS:HG3	1:G:146:ARG:NE	1.99	0.78
1:E:527:LEU:HD23	1:E:527:LEU:O	1.83	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:C:268:GLU:CG	1:C:270:TYR:OH	2.28	0.78
1:E:541:LEU:HD23	1:E:601:ASN:ND2	1.98	0.78
2:D:140:TYR:CD1	2:D:141:GLU:HG2	2.19	0.78
1:C:3:GLN:N	1:C:18:ASN:HD21	1.82	0.78
1:A:381:ASN:O	1:A:385:GLN:HG3	1.83	0.78
1:E:661:GLN:O	1:E:665:GLU:HB2	1.82	0.78
1:A:164:MET:CE	1:A:256:PHE:CE2	2.67	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
2:F:107:GLU:HA	2:F:107:GLU:OE1	1.82	0.77
1:E:193:TYR:CE1	1:E:197:VAL:HG21	2.19	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:HG12	1:G: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:E:123:VAL:HG12	1:E:123:VAL:O	1.83	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
2:F:89:VAL:O	2:F:92:LEU:N	2.18	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:H:140:TYR:O	2:H:144:VAL:HG23	1.83	0.77
2:H:89:VAL:O	2:H:92:LEU:N	2.18	0.77
1:G:135:GLU:H	1:G:213:PRO:HD3	1.50	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

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

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:64:LEU:HD23	2:H:68:GLN:HB2	1.68	0.75
1:C:533:ASN:HB3	1:C:534:PRO:HD2	1.67	0.75
1:A:800:GLN:O	1:A:804:ARG:HG3	1.86	0.75
1:E:368:LYS:HB2	1:E:377:SER:OG	1.87	0.75
1:C:61:LEU:HD12	1:C:64:ASN:H	1.52	0.75
1:E:607:ASP:HA	1:E:610:THR:HB	1.69	0.75
1:E:800:GLN:O	1:E:804:ARG:HG3	1.86	0.75
2:B:89:VAL:O	2:B:92:LEU:N	2.18	0.75
1:E:766:LEU:O	1:E:777:ARG:HB2	1.87	0.75
1:E:705:LEU:O	1:E:710:VAL:HG23	1.85	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:G:557:GLU:HA	1:G:560:ILE:HD12	1.68	0.75
1:E:185:GLU:O	1:E:189:LYS:HG2	1.87	0.75
1:C:164:MET:HE3	1:C:256:PHE:HE2	1.50	0.75
1:G:533:ASN:HB3	1:G:534:PRO:HD2	1.67	0.75
1:G:368:LYS:HB2	1:G:377:SER:OG	1.86	0.75
1:G:61:LEU:HD12	1:G:64:ASN:H	1.52	0.75
1:C:753:CYS:SG	1:C:774:ILE:CD1	2.74	0.75
1:A:557:GLU:HA	1:A:560:ILE:HD12	1.68	0.75
1:A:342:MET:HE1	1:A:449:ALA:HB3	1.67	0.75
1:A:185:GLU:O	1:A:189:LYS:HG2	1.87	0.75
1:G:766:LEU:O	1:G:777:ARG:HB2	1.86	0.75
1:A:766:LEU:O	1:A:777:ARG:HB2	1.86	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:368:LYS:HB2	1:A:377:SER:OG	1.87	0.75
1:G:543:GLU:HA	1:G:546:TRP:CD1	2.17	0.74
1:A:61:LEU:HD12	1:A:64:ASN:H	1.51	0.74
1:A:135:GLU:H	1:A:213:PRO:HD3	1.50	0.74
1:A:268:GLU:HG2	1:A:270:TYR:HH	1.51	0.74
1:G:628:VAL:HG23	1:G:631:ILE:HG12	1.69	0.74
2:D:64:LEU:HD23	2:D:68:GLN:HB2	1.68	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:F:64:LEU:HD23	2:F:68:GLN:HB2	1.68	0.74
2:D:9:ALA:HA	2:D:12:LYS:HE3	1.69	0.74
1:C:62:GLN:O	1:C:62:GLN:HG3	1.88	0.74
1:A:269:THR:HB	1:A:443:LEU:HD13	1.68	0.74
1:G:607:ASP:HA	1:G:610:THR:HB	1.67	0.74
1:A:148:GLU:O	1:A:149:MET:HG2	1.85	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:G:269:THR:HB	1:G:443:LEU:HD13	1.69	0.74
1:E:557:GLU:HA	1:E:560:ILE:HD12	1.67	0.74
2:B:9:ALA:HA	2:B:12:LYS:HE3	1.69	0.74
1:E:753:CYS:SG	1:E:774:ILE:CD1	2.74	0.74
2:H:113:VAL:HG23	2:H:124:VAL:HG11	1.69	0.74
1:E:140:MET:HB3	1:E:149:MET:HE3	1.70	0.74
1:G:140:MET:HB3	1:G:149:MET:HE3	1.70	0.74
1:A:517:PHE:CD2	1:A:712:GLU:HB3	2.23	0.74
1:C:766:LEU:O	1:C:777:ARG:HB2	1.86	0.74
1:A:62:GLN:O	1:A:62:GLN:HG3	1.88	0.74
1:E:305:LEU:HD12	1:E:307:LEU:HD21	1.70	0.74
1:E:269:THR:HG1	1:E:439:PHE:HE2	1.35	0.74
1:C:628:VAL:HG23	1:C:631:ILE:HG12	1.69	0.74
1:G:405:PRO:O	1:G:407:ILE:HD12	1.88	0.73
2:B:28:TYR:CE2	2:B:54:PRO:CG	2.69	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
1:C:537:VAL:HA	1:C:559:LEU:HD11	1.70	0.73
1:G:367:PHE:HB3	1:G:376:ALA:HB1	1.70	0.73
1:A:537:VAL:HG22	1:A:559:LEU:HD21	1.71	0.73
2:B:113:VAL:HG23	2:B:124:VAL:HG11	1.70	0.73
2:D:140:TYR:CE1	2:D:141:GLU:HG2	2.23	0.73
1:C:472:PHE:N	1:C:472:PHE:CD1	2.56	0.73
1:G:79:ASN:HD21	1:G:94:CYS:H	1.37	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:517:PHE:CD2	1:G:712:GLU:HB3	2.23	0.73
1:G:472:PHE:N	1:G:472:PHE:HD1	1.86	0.73
1:A:607:ASP:HA	1:A:610:THR:HB	1.68	0.73
1:E:367:PHE:HB3	1:E:376:ALA:HB1	1.70	0.73
1:A:541:LEU:HD23	1:A:601:ASN:ND2	2.02	0.73
1:C:517:PHE:CD2	1:C:712:GLU:HB3	2.23	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:A:367:PHE:HB3	1:A:376:ALA:HB1	1.71	0.73
1:E:543:GLU:HA	1:E:546:TRP:CD1	2.18	0.73
2:H:9:ALA:HA	2:H:12:LYS:HE3	1.70	0.73
1:G:485:THR:HG23	1:G:667:LEU:HD11	1.70	0.73
2:D:113:VAL:HG23	2:D:124:VAL:HG11	1.69	0.73

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

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:537:VAL:HG22	1:G:559:LEU:HD21	1.71	0.72
1:C:368:LYS:HZ2	1:C:379:PRO:HG2	1.54	0.72
1:E:582:CYS:SG	1:E:591:THR:HG23	2.29	0.72
1:C:485:THR:HG23	1:C:667:LEU:HD11	1.70	0.72
1:A:582:CYS:SG	1:A:591:THR:HG23	2.30	0.72
1:A:140:MET:HB3	1:A:149:MET:HE3	1.70	0.72
1:C:378:MET:HE3	1:C:380:ASP:O	1.90	0.72
2:D:131:HIS:HB3	2:D:138:ILE:HG23	1.72	0.72
1:C:305:LEU:HD12	1:C:307:LEU:HD21	1.70	0.72
1:G:553:THR:O	1:G:556:VAL:HG23	1.90	0.72
1:C:437:ARG:HE	1:C:625:TRP:HA	1.55	0.72
1:C:582:CYS:SG	1:C:591:THR:HG23	2.30	0.72
1:C:657:ARG:HB2	1:C:657:ARG:HH11	1.55	0.72
1:A:747:MET:CE	1:G:812:PHE:CZ	2.73	0.72
1:G:298:SER:N	1:G:301:MET:HG2	1.99	0.72
1:A:405:PRO:O	1:A:407:ILE:HD12	1.89	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:A:766:LEU:HB3	1:A:780:VAL:HG21	1.71	0.72
1:E:553:THR:O	1:E:556:VAL:HG23	1.90	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:A:298:SER:N	1:A:301:MET:HG2	2.01	0.72
1:A:114:TYR:HE2	1:A:153:ILE:HB	1.54	0.72
1:A:472:PHE:HD1	1:A:472:PHE:N	1.87	0.72
1:A:397:ASP:O	1:A:401:SER:OG	2.07	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:E:766:LEU:HB3	1:E:780:VAL:HG21	1.72	0.72
1:C:477:PHE:O	1:C:480:LEU:HB3	1.90	0.72
1:E:298:SER:O	1:E:302:ARG:HB3	1.89	0.71
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:472:PHE:CD1	1:E:472:PHE:N	2.57	0.71
1:E:349:GLN:O	1:E:352:ILE:HG13	1.90	0.71
1:G:298:SER:O	1:G:302:ARG:HB3	1.89	0.71
1:C:628:VAL:HG23	1:C:631:ILE:CG1	2.20	0.71
2:F:140:TYR:C	2:F:142:GLU:H	1.94	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
1:A:400:ARG:HG2	1:A:404:THR:OG1	1.91	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:E:686:ILE:HD13	1:E:687:PRO:CD	2.17	0.71
1:C:349:GLN:O	1:C:352:ILE:HG13	1.90	0.71
1:G:610:THR:HG21	1:G:631:ILE:HG13	1.71	0.71
2:B:43:THR:HG23	2:B:46:GLU:OE2	1.90	0.71
1:E:472:PHE:HD1	1:E:472:PHE:N	1.87	0.71
1:A:327:GLN:O	1:A:330:GLU:HG2	1.91	0.71
1:C:327:GLN:O	1:C:330:GLU:HG2	1.91	0.71
1:E:464:LEU:HG	1:E:466:ILE:HG23	1.73	0.71
1:E:153:ILE:HA	1:E:156:ILE:HD12	1.70	0.71
1:A:361:GLN:HB3	1:A:387:VAL:HG23	1.73	0.71
1:G:805:GLY:O	1:G:809:ARG:CD	2.39	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:C:816:GLN:NE2	2:D:17:LEU:HD21	2.06	0.71
1:E:268:GLU:CG	1:E:270:TYR:OH	2.28	0.71
1:A:553:THR:O	1:A:556:VAL:HG23	1.90	0.71
1:E:802:GLN:CG	2:F:88:TYR:OH	2.38	0.71
1:E:477:PHE:O	1:E:480:LEU:HB3	1.90	0.71
1:C:393:ILE:HG23	1:C:616:SER:HB2	1.72	0.71
1:A:153:ILE:HA	1:A:156:ILE:HD12	1.71	0.71
1:A:489:LEU:HD13	1:A:492:LEU:HD23	1.71	0.71
1:A:477:PHE:O	1:A:480:LEU:HB3	1.90	0.71
1:G:400:ARG:HG2	1:G:404:THR:OG1	1.91	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
1:E:628:VAL:HG23	1:E:631:ILE:CG1	2.20	0.71
1:G:628:VAL:HG23	1:G:631:ILE:CG1	2.20	0.71
1:E:802:GLN:HG3	2:F:88:TYR:CZ	2.26	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
2:H:90:GLU:HG2	2:H:91:GLY:N	2.05	0.71
1:A:747:MET:HG3	1:G:812:PHE:HE2	1.51	0.71
1:G:268:GLU:HG2	1:G:270:TYR:HH	1.52	0.71
1:C:700:LEU:O	1:C:704:GLN:HG3	1.91	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

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:349:GLN:O	1:G:352:ILE:HG13	1.90	0.70
1:C:237:ALA:HA	1:C:288:HIS:CD2	2.26	0.70
1:G:165:LEU:HD21	1:G:260:GLY:HA3	1.73	0.70
1:E:328:ASP:CA	1:E:331:MET:HB2	2.21	0.70
1:E:193:TYR:CZ	1:E:197:VAL:HG21	2.27	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
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:400:ARG:HG2	1:E:404:THR:OG1	1.91	0.70
1:A:805:GLY:O	1:A:809:ARG:CD	2.39	0.70
2:H:28:TYR:CE2	2:H:54:PRO:CG	2.73	0.70
1:G:269:THR:HG1	1:G:439:PHE:HE2	1.36	0.70
1:C:269:THR:HG1	1:C:439:PHE:HE2	1.39	0.70
1:G:393:ILE:HG23	1:G:616:SER:HB2	1.72	0.70
1:E:510:ILE:HD12	1:E:512:TRP:HB2	1.73	0.70
1:E:268:GLU:OE2	1:E:666:GLN:NE2	2.24	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
2:H:140:TYR:C	2:H:142:GLU:H	1.94	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: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:510:ILE:HD12	1:A:512:TRP:HB2	1.73	0.70
1:G:510:ILE:HD12	1:G:512:TRP:HB2	1.73	0.70
2:B:140:TYR:C	2:B:142:GLU:H	1.94	0.70
1:E:657:ARG:HB2	1:E:657:ARG:HH11	1.55	0.70
1:E:378:MET:HE3	1:E:380:ASP:O	1.90	0.70
1:A:378:MET:HE3	1:A:380:ASP:O	1.90	0.70
1:E:498:PHE:CD1	1:E:716:ILE:HD11	2.27	0.70
1:C:704:GLN:O	1:C:708:ASN:HB2	1.92	0.70
1:G:464:LEU:HG	1:G:466:ILE:HG23	1.73	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:G:44:PHE:HD2	1:G:101:LEU:HD22	1.55	0.70
1:E:327:GLN:O	1:E:330:GLU:HG2	1.91	0.70
1:G:802:GLN:HG3	2:H:88:TYR:CZ	2.26	0.70
2:D:35:MET:HG2	2:D:69:PHE:HZ	1.57	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:E:361:GLN:HB3	1:E:387:VAL:HG23	1.73	0.70
1:A:704:GLN:O	1:A:708:ASN:HB2	1.91	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:E:124:ILE:HD12	1:E:124:ILE:H	1.57	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
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
2:F:90:GLU:HG2	2:F:91:GLY:N	2.05	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
2:B:51:LEU:HB3	2:B:54:PRO:CD	2.22	0.70
1:G:528:ILE:HD12	1:G:537:VAL:HB	1.74	0.70
1:G:328:ASP:CA	1:G:331:MET:HB2	2.21	0.70
1:A:802:GLN:CG	2:B:88:TYR:OH	2.38	0.70
1:A:254:ILE:O	1:A:460:PHE:HA	1.92	0.70
1:E:215:PHE:CD1	1:E:216:SER:N	2.60	0.70
2:D:93:ARG:O	2:D:96:ASP:HB2	1.92	0.70
1:C:464:LEU:HG	1:C:466:ILE:HG23	1.73	0.69
1:A:237:ALA:HA	1:A:288:HIS:CD2	2.26	0.69
1:G:731:ARG:O	1:G:731:ARG:HD2	1.92	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: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
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
1:A:802:GLN:HG3	2:B:88:TYR:CZ	2.26	0.69
1:E:158:ASP:OD1	1:E:193:TYR:OH	2.10	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
2:H:70:LEU:O	2:H:74:GLN:NE2	2.26	0.69
2:H:131:HIS:HB3	2:H:138:ILE:HG23	1.72	0.69
1:A:610:THR:HG21	1:A:631:ILE:HG13	1.72	0.69
1:G:405:PRO:HG3	1:G:418:GLN:NE2	2.07	0.69
2:F:113:VAL:CG2	2:F:124:VAL:HG11	2.21	0.69
1:A:164:MET:SD	1:A:256:PHE:CD2	2.85	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:49:ILE:HG12	1:C:57:VAL:HG11	1.74	0.69
1:G:815:ARG:HA	1:G:818:GLN:OE1	1.92	0.69
1:E:815:ARG:HA	1:E:818:GLN:OE1	1.93	0.69
1:E:704:GLN:O	1:E:708:ASN:HB2	1.91	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:A:528:ILE:HG13	1:A:528:ILE:O	1.92	0.69
1:E:731:ARG:HD2	1:E:731:ARG:O	1.92	0.69
2:H:113:VAL:CG2	2:H:124:VAL:HG11	2.21	0.69
1:G:498:PHE:CD1	1:G:716:ILE:HD11	2.27	0.69
2:H:43:THR:HG23	2:H:46:GLU:OE2	1.93	0.69
1:C:77:LYS:HD2	1:C:96:ASN:HD21	1.58	0.69
1:C:362:LEU:CD2	1:C:387:VAL:HG11	2.23	0.69
2:H:93:ARG:O	2:H:96:ASP:HB2	1.92	0.69
1:A:731:ARG:HD2	1:A:731:ARG:O	1.92	0.69
1:E:290:PHE:O	1:E:294:ILE:HG13	1.93	0.69
1:A:290:PHE:O	1:A:294:ILE:HG13	1.93	0.69
1:A:164:MET:SD	1:A:256:PHE:HD2	2.16	0.69
1:C:619:LYS:HD3	1:C:623:ASP:OD2	1.93	0.69
1:C:815:ARG:HA	1:C:818:GLN:OE1	1.92	0.69
1:G:619:LYS:HD3	1:G:623:ASP:OD2	1.93	0.69
2:D:43:THR:HG23	2:D:46:GLU:OE2	1.92	0.69
1:A:193:TYR:CZ	1:A:197:VAL:HG21	2.27	0.69
1:G:164:MET:SD	1:G:256:PHE:CD2	2.85	0.69
2:D:70:LEU:O	2:D:74:GLN:NE2	2.25	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:A:362:LEU:HD21	1:A:387:VAL:HG11	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:C:405:PRO:HG3	1:C:418:GLN:NE2	2.07	0.69
1:G:291:TYR:HD2	1:G:310:PHE:HE1	1.40	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:A:165:LEU:HD21	1:A:260:GLY:HA3	1.74	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:E:362:LEU:CD2	1:E:387:VAL:HG11	2.23	0.69
1:E:362:LEU:HD21	1:E:387:VAL:HG11	1.75	0.69
2:F:93:ARG:O	2:F:96:ASP:HB2	1.92	0.69
2:F:55:LYS:H	2:F:58:GLU:HG3	1.58	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:G:164:MET:SD	1:G:256:PHE:HD2	2.16	0.69
1:C:36:TRP:HE1	1:C:78:MET:HA	1.58	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:E:539:ALA:O	1:E:542:ASP:HB2	1.93	0.69
2:B:93:ARG:O	2:B:96:ASP:HB2	1.92	0.69
1:A:701:VAL:O	1:A:705:LEU:HD12	1.93	0.69
1:G:437:ARG:HE	1:G:625:TRP:HA	1.56	0.69
1:A:405:PRO:HG3	1:A:418:GLN:NE2	2.07	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:254:ILE:O	1:G:460:PHE:HA	1.92	0.69
1:A:268:GLU:OE2	1:A:666:GLN:NE2	2.24	0.68
1:G:290:PHE:O	1:G:294:ILE:HG13	1.93	0.68
1:E:434:LYS:HG3	1:E:625:TRP:CZ2	2.29	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:A:328:ASP:CA	1:A:331:MET:HB2	2.21	0.68
1:C:802:GLN:HG3	2:D:88:TYR:CZ	2.26	0.68
2:B:70:LEU:O	2:B:74:GLN:NE2	2.26	0.68
1:A:53:LYS:HA	1:A:53:LYS:HE2	1.75	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:547:PHE:HB3	1:E:550:ALA:HB2	1.75	0.68
1:E:232:GLU:HA	1:E:236:ASN:OD1	1.93	0.68
1:G:472:PHE:CD1	1:G:472:PHE:N	2.56	0.68
1:G:420:LYS:HD3	1:G:421:GLU:HG2	1.76	0.68
1:A:36:TRP:HE1	1:A:78:MET:HA	1.58	0.68
1:E:130:LEU:HB2	1:E:132:ILE:CD1	2.24	0.68
1:A:291:TYR:HD2	1:A:310:PHE:HE1	1.41	0.68
1:E:164:MET:HE3	1:E:256:PHE:CE2	2.25	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:C:498:PHE:CD1	1:C:716:ILE:HD11	2.27	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:E:735:GLU:OE2	1:E:756:MET:HE1	1.93	0.68
1:C:539:ALA:O	1:C:542:ASP:HB2	1.93	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
1:C:547:PHE:HB3	1:C:550:ALA:HB2	1.75	0.68
1:A:362:LEU:CD2	1:A:387:VAL:HG11	2.24	0.68
2:F:70:LEU:O	2:F:74:GLN:NE2	2.26	0.68
2:F:35:MET:HG2	2:F:69:PHE:HZ	1.57	0.68
1:G:482:ILE:HG22	1:G:483:ASN:N	2.09	0.68
1:E:291:TYR:HD2	1:E:310:PHE:HE1	1.39	0.68
1:C:164:MET:SD	1:C:256:PHE:HD2	2.16	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:G:362:LEU:HD21	1:G:387:VAL:HG11	1.74	0.68
1:C:361:GLN:HB3	1:C:387:VAL:HG23	1.72	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:C:434:LYS:HG3	1:C:625:TRP:CZ2	2.28	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:232:GLU:HA	1:C:236:ASN:OD1	1.94	0.68
1:E:715:ARG:O	1:E:719:GLN:CG	2.41	0.68
1:C:215:PHE:CD1	1:C:216:SER:N	2.61	0.68
1:A:215:PHE:CD1	1:A:216:SER:N	2.61	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: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:A:539:ALA:O	1:A:542:ASP:HB2	1.93	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: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:467:ALA:O	1:C:486:ASN:ND2	2.26	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:53:LYS:HE2	1:C:53:LYS:HA	1.75	0.68
1:E:701:VAL:O	1:E:705:LEU:HD12	1.93	0.68
2:H:50:VAL:CG1	2:H:72:MET:HG2	2.24	0.68
1:C:420:LYS:HD3	1:C:421:GLU:HG2	1.76	0.68
1:G:161:TYR:O	1:G:165:LEU:HD12	1.94	0.68
1:C:715:ARG:O	1:C:719:GLN:CG	2.42	0.68
1:E:470:GLU:HB2	1:E:472:PHE:HE1	1.59	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
1:E:250:LYS:HE2	1:E:465:ASP:HB3	1.76	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
2:H:51:LEU:HB3	2:H:54:PRO:CD	2.23	0.67
1:A:524:CYS:HB2	1:A:568:LYS:HG3	1.76	0.67
1:G:715:ARG:O	1:G:719:GLN:CG	2.42	0.67
1:G:250:LYS:HE2	1:G:465:ASP:HB3	1.76	0.67
1:E:53:LYS:HE2	1:E:53:LYS:HA	1.75	0.67
1:E:619:LYS:HD3	1:E:623:ASP:OD2	1.93	0.67
1:C:162:ARG:O	1:C:166:GLN:HG2	1.94	0.67
1:G:816:GLN:O	1:G:819:LEU:HG	1.94	0.67
1:C:290:PHE:O	1:C:294:ILE:HG13	1.93	0.67
1:G:528:ILE:O	1:G:528:ILE:HG13	1.92	0.67
1:E:221:GLU:O	1:E:225:LEU:HD22	1.94	0.67
1:E:36:TRP:HE1	1:E:78:MET:HA	1.58	0.67
1:C:158:ASP:OD1	1:C:193:TYR:OH	2.10	0.67
1:A:145:LYS:CG	1:A:146:ARG:H	2.07	0.67
1:E:3:GLN:H	1:E:18:ASN:ND2	1.91	0.67
1:C:524:CYS:HB2	1:C:568:LYS:HG3	1.76	0.67
1:G:568:LYS:HA	1:G:584:LEU:HB2	1.76	0.67
1:G:135:GLU:H	1:G:213:PRO:CD	2.07	0.67
1:E:816:GLN:O	1:E:819:LEU:HG	1.94	0.67
2:F:50:VAL:CG1	2:F:72:MET:HG2	2.24	0.67
1:C:221:GLU:O	1:C:225:LEU:HD22	1.94	0.67
2:F:103:VAL:HG12	2:F:104:MET:N	2.09	0.67
1:G:36:TRP:HE1	1:G:78:MET:HA	1.57	0.67
1:A:232:GLU:HA	1:A:236:ASN:OD1	1.93	0.67
1:G:524:CYS:HB2	1:G:568:LYS:HG3	1.76	0.67
1:C:362:LEU:HD21	1:C:387:VAL:HG11	1.75	0.67
1:A:250:LYS:HE2	1:A:465:ASP:HB3	1.76	0.67
1:G:337:GLU:O	1:G:341:ILE:HG12	1.95	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:A:568:LYS:HA	1:A:584:LEU:HB2	1.76	0.67
1:A:215:PHE:HD1	1:A:216:SER:N	1.93	0.67
1:G:701:VAL:O	1:G:705:LEU:HD12	1.93	0.67
2:F:51:LEU:HB3	2:F:54:PRO:CD	2.23	0.67
1:C:434:LYS:HG3	1:C:625:TRP:HZ2	1.59	0.67
1:C:266:ASN:HA	1:C:447:ASN:OD1	1.95	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:52:GLU:HA	1:C:57:VAL:HG13	1.77	0.67
1:E:162:ARG:O	1:E:166:GLN:HG2	1.94	0.67
1:A:124:ILE:H	1:A:124:ILE:HD12	1.58	0.67
1:A:434:LYS:HG3	1:A:625:TRP:CZ2	2.30	0.67
1:E:467:ALA:O	1:E:486:ASN:ND2	2.26	0.67
1:C:272:LEU:O	1:C:274:LYS:HG3	1.94	0.67
2:B:108:ILE:HG22	2:B:109:ARG:N	2.10	0.67
1:G:145:LYS:CG	1:G:146:ARG:H	2.08	0.67
1:E:161:TYR:O	1:E:165:LEU:HD12	1.94	0.67
1:G:61:LEU:CD1	1:G:64:ASN:H	2.08	0.67
1:E:272:LEU:O	1:E:274:LYS:HG3	1.94	0.67
1:A:158:ASP:OD1	1:A:193:TYR:OH	2.10	0.67
1:A:130:LEU:HB2	1:A:132:ILE:CD1	2.24	0.67
1:C:161:TYR:O	1:C:165:LEU:HD12	1.94	0.67
1:C:135:GLU:H	1:C:213:PRO:CD	2.07	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:C:337:GLU:O	1:C:341:ILE:HG12	1.95	0.67
1:G:221:GLU:O	1:G:225:LEU:HD22	1.94	0.67
1:C:291:TYR:HD2	1:C:310:PHE:CE1	2.13	0.67
1:A:135:GLU:H	1:A:213:PRO:CD	2.07	0.67
1:C:470:GLU:HB2	1:C:472:PHE:HE1	1.58	0.67
1:C:215:PHE:HD1	1:C:216:SER:N	1.93	0.67
1:A:619:LYS:HD3	1:A:623:ASP:OD2	1.93	0.67
1:G:53:LYS:HE2	1:G:53:LYS:HA	1.76	0.67
1:G:272:LEU:O	1:G:274:LYS:HG3	1.94	0.67
2:D:108:ILE:HG22	2:D:109:ARG:N	2.10	0.67
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:C:352:ILE:HG22	1:C:438:LEU:HD11	1.75	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:A:3:GLN:H	1:A:18:ASN:ND2	1.91	0.66
1:A:291:TYR:CD2	1:A:310:PHE:CE1	2.82	0.66
2:D:12:LYS:O	2:D:16:GLN:CG	2.42	0.66
2:H:55:LYS:H	2:H:58:GLU:HG3	1.58	0.66
1:C:464:LEU:CG	1:C:466:ILE:HG23	2.26	0.66
2:F:25:LYS:HE3	2:F:65:LYS:NZ	2.11	0.66
1:A:467:ALA:O	1:A:486:ASN:ND2	2.26	0.66
2:H:25:LYS:HE3	2:H:65:LYS:NZ	2.11	0.66
2:D:50:VAL:CG1	2:D:72:MET:HG2	2.24	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:145:LYS:CG	1:E:146:ARG:H	2.07	0.66
2:B:35:MET:HG2	2:B:69:PHE:HZ	1.58	0.66
1:G:162:ARG:O	1:G:166:GLN:HG2	1.94	0.66
1:A:816:GLN:O	1:A:819:LEU:HG	1.94	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:G:593:ASN:OD1	1:G:595:SER:HB3	1.96	0.66
1:C:145:LYS:CG	1:C:146:ARG:H	2.07	0.66
1:E:712:GLU:O	1:E:716:ILE:HD12	1.96	0.66
1:E:61:LEU:CD1	1:E:64:ASN:H	2.08	0.66
1:E:215:PHE:HD1	1:E:216:SER:N	1.93	0.66
1:G:175:CYS:HB3	1:G:684:CYS:SG	2.36	0.66
1:C:175:CYS:HB3	1:C:684:CYS:SG	2.36	0.66
1:A:342:MET:CE	1:A:449:ALA:HB3	2.26	0.66
2:H:64:LEU:HD11	2:H:72:MET:CE	2.25	0.66
1:G:291:TYR:CD2	1:G:310:PHE:CE1	2.81	0.66
1:A:61:LEU:CD1	1:A:64:ASN:H	2.08	0.66
1:E:583:ILE:O	1:E:589:LYS:HA	1.95	0.66
1:G:583:ILE:O	1:G:589:LYS:HA	1.95	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:A:464:LEU:CG	1:A:466:ILE:HG23	2.26	0.66
2:D:25:LYS:HE3	2:D:65:LYS:NZ	2.11	0.66
1:C:568:LYS:HA	1:C:584:LEU:HB2	1.76	0.66
1:A:138:ILE:HG21	1:A:196:VAL:HG21	1.78	0.66
1:G:735:GLU:CG	1:G:756:MET:HE1	2.26	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
1:E:77:LYS:CD	1:E:96:ASN:HD21	2.06	0.66
2:H:103:VAL:HG12	2:H:104:MET:N	2.10	0.66
1:C:500:LEU:O	1:C:503:GLU:CG	2.44	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:C:490:GLN:HG3	1:C:521:LEU:HD11	1.78	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:583:ILE:O	1:C:589:LYS:HA	1.95	0.66
1:A:593:ASN:OD1	1:A:595:SER:HB3	1.95	0.66
2:H:123:GLU:O	2:H:127:LEU:HB2	1.96	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

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

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:500:LEU:HA	1:A:503:GLU:HG3	1.78	0.65
1:E:663:TYR:CE1	1:E:667:LEU:HD13	2.31	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:A:746:PHE:HB3	2:H:10:GLU:HG2	1.79	0.65
1:G:700:LEU:HD23	1:G:701:VAL:N	2.11	0.65
2:F:108:ILE:HG22	2:F:109:ARG:N	2.11	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
1:G:500:LEU:O	1:G:503:GLU:CG	2.44	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:G:469:PHE:N	1:G:486:ASN:OD1	2.30	0.65
1:A:234:PHE:HD2	1:A:289:ILE:HG12	1.62	0.65
1:C:799:PHE:CZ	1:C:803:CYS:SG	2.90	0.65
1:E:517:PHE:CZ	1:E:716:ILE:HG13	2.32	0.65
1:E:522:GLN:N	1:E:523:PRO:HD2	2.12	0.65
1:A:769:ILE:CD1	1:A:774:ILE:HD13	2.27	0.65
2:F:84:CYS:O	2:F:87:ASP:N	2.28	0.65
2:D:104:MET:N	2:D:104:MET:SD	2.70	0.65
2:H:108:ILE:HG22	2:H:109:ARG:N	2.10	0.65
1:G:138:ILE:HG21	1:G:196:VAL:HG21	1.78	0.65
1:A:735:GLU:CG	1:A:756:MET:HE1	2.27	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:C:280:GLN:NE2	1:C:315:PHE:O	2.30	0.65
1:G:464:LEU:CG	1:G:466:ILE:HG23	2.26	0.65
1:A:799:PHE:CZ	1:A:803:CYS:SG	2.90	0.65
1:C:61:LEU:CD1	1:C:64:ASN:H	2.08	0.65
1:A:500:LEU:O	1:A:503:GLU:CG	2.45	0.65
2:H:12:LYS:O	2:H:16:GLN:CG	2.42	0.64
1:E:700:LEU:HD23	1:E:701:VAL:N	2.12	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:606:ASN:OD1	1:E:609:VAL:HG12	1.96	0.64
1:E:469:PHE:N	1:E:486:ASN:OD1	2.29	0.64
1:A:441:TRP:CE3	1:A:442:ILE:HD13	2.32	0.64
1:G:769:ILE:CD1	1:G:774:ILE:HD13	2.27	0.64
2:H:85:PHE:O	2:H:88:TYR:N	2.26	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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
2:B:85:PHE:CE1	2:B:145:ARG:CG	2.79	0.64
1:G:196:VAL:HG12	1:G:217:TYR:CE2	2.32	0.64
1:C:573:LYS:HE3	1:C:589:LYS:HZ3	1.62	0.64
1:C:372:ASN:ND2	1:C:372:ASN:H	1.95	0.64
1:A:745:GLY:HA3	1:G:816:GLN:HE21	1.60	0.64
1:A:354:ARG:HB3	1:A:354:ARG:NH1	2.12	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
2:B:104:MET:SD	2:B:104:MET:N	2.71	0.64
1:G:630:ARG:NH2	1:G:657:ARG:HB2	2.13	0.64
1:C:196:VAL:HG12	1:C:217:TYR:CE2	2.32	0.64
1:E:196:VAL:HG12	1:E:217:TYR:CE2	2.32	0.64
1:G:517:PHE:CZ	1:G:716:ILE:HG13	2.32	0.64
1:E:102:HIS:O	1:E:105:ARG:N	2.30	0.64
1:A:102:HIS:O	1:A:105:ARG:N	2.30	0.64
1:A:583:ILE:O	1:A:589:LYS:HA	1.96	0.64
1:C:469:PHE:N	1:C:486:ASN:OD1	2.30	0.64
1:C:789:ASP:HA	1:C:792:ILE:HD11	1.80	0.64
1:G:799:PHE:CZ	1:G:803:CYS:SG	2.90	0.64
1:C:533:ASN:HB3	1:C:534:PRO:CD	2.27	0.64
1:G:533:ASN:HB3	1:G:534:PRO:CD	2.27	0.64
1:C:712:GLU:O	1:C:716:ILE:HD12	1.96	0.64
1:C:234:PHE:HD2	1:C:289:ILE:HG12	1.62	0.64
1:C:510:ILE:HB	1:C:768:ARG:HG3	1.80	0.64
1:C:3:GLN:H	1:C:18:ASN:ND2	1.91	0.64
1:A:533:ASN:HB3	1:A:534:PRO:CD	2.27	0.64
1:A:196:VAL:HG12	1:A:217:TYR:CE2	2.33	0.64
1:E:52:GLU:HA	1:E:57:VAL:HG13	1.77	0.64
2:H:9:ALA:C	2:H:12:LYS:HG3	2.17	0.64
1:A:686:ILE:HD13	1:A:687:PRO:CD	2.17	0.64
1:A:522:GLN:N	1:A:523:PRO:HD2	2.13	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
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:E:393:ILE:CG2	1:E:616:SER:HB2	2.28	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:522:GLN:N	1:G:523:PRO:HD2	2.13	0.64
2:H:65:LYS:CB	2:H:68:GLN:HG3	2.26	0.64
1:E:13:LEU:HD11	1:E:137:ILE:HG23	1.77	0.64
1:C:61:LEU:HD12	1:C:63:GLU:HB3	1.80	0.64
1:A:49:ILE:HA	1:A:59:VAL:HG13	1.80	0.64
1:G:51:GLU:O	1:G:58:THR:HG23	1.98	0.64
1:C:102:HIS:O	1:C:105:ARG:N	2.31	0.64
1:A:372:ASN:H	1:A:372:ASN:ND2	1.94	0.64
1:G:467:ALA:O	1:G:486:ASN:ND2	2.26	0.64
1:C:138:ILE:HG21	1:C:196:VAL:HG21	1.78	0.64
1:E:500:LEU:HA	1:E:503:GLU:HG3	1.77	0.64
1:C:763:ASP:O	1:C:765:ASN:N	2.31	0.64
1:E:293:LEU:HD11	1:E:301:MET:HE1	1.79	0.64
1:C:354:ARG:HB3	1:C:354:ARG:NH1	2.13	0.64
1:A:280:GLN:NE2	1:A:315:PHE:O	2.30	0.64
1:G:434:LYS:HG3	1:G:625:TRP:HZ2	1.62	0.64
2:B:123:GLU:O	2:B:127:LEU:HB2	1.97	0.64
2:H:104:MET:SD	2:H:104:MET:N	2.70	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:C:735:GLU:CD	1:C:756:MET:HE1	2.18	0.64
1:G:477:PHE:CE1	1:G:480:LEU:HD23	2.33	0.64
1:G:168:ARG:HH11	2:H:97:LYS:HE3	1.63	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:E:223:GLN:HG2	1:E:342:MET:HA	1.80	0.64
1:C:630:ARG:NH2	1:C:657:ARG:HB2	2.12	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:E:409:VAL:HB	1:E:412:ASP:OD1	1.99	0.63
1:A:510:ILE:HB	1:A:768:ARG:HG3	1.80	0.63
1:A:469:PHE:N	1:A:486:ASN:OD1	2.31	0.63
1:C:49:ILE:HA	1:C:59:VAL:HG13	1.79	0.63
1:E:95:LEU:HD11	1:E:714:ILE:CG2	2.28	0.63
1:G:354:ARG:HH11	1:G:354:ARG:HB3	1.62	0.63
1:A:393:ILE:CG2	1:A:616:SER:HB2	2.27	0.63
1:C:393:ILE:CG2	1:C:616:SER:HB2	2.28	0.63
1:A:302:ARG:HA	1:A:307:LEU:HD11	1.80	0.63
1:G:409:VAL:HB	1:G:412:ASP:OD1	1.98	0.63
1:E:168:ARG:HH11	2:F:97:LYS:HE3	1.62	0.63
1:A:168:ARG:HH11	2:B:97:LYS:HE3	1.63	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:49:ILE:HA	1:E:59:VAL:HG13	1.80	0.63
2:B:44:ASN:HB3	2:B:117:GLU:OE1	1.97	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:E:234:PHE:HD2	1:E:289:ILE:HG12	1.62	0.63
1:G:293:LEU:HD11	1:G:301:MET:HE1	1.80	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: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:A:517:PHE:CZ	1:A:716:ILE:HG13	2.32	0.63
1:A:61:LEU:HD12	1:A:63:GLU:HB3	1.80	0.63
1:E:735:GLU:CD	1:E:756:MET:HE1	2.18	0.63
1:E:125:ASN:OD1	1:E:126:PRO:HD2	1.98	0.63
1:G:89:MET:O	1:G:92:LEU:HD12	1.98	0.63
1:G:789:ASP:HA	1:G:792:ILE:HD11	1.80	0.63
1:E:533:ASN:HB3	1:E:534:PRO:CD	2.27	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:G:49:ILE:HA	1:G:59:VAL:HG13	1.79	0.63
2:D:9:ALA:C	2:D:12:LYS:HG3	2.16	0.63
1:C:89:MET:O	1:C:92:LEU:HD12	1.98	0.63
1:G:393:ILE:CG2	1:G:616:SER:HB2	2.28	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:763:ASP:O	1:G:765:ASN:N	2.31	0.63
1:A:95:LEU:HD11	1:A:714:ILE:CG2	2.28	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: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:C:586:TYR:CD1	1:C:587:ALA:N	2.67	0.63
1:C:477:PHE:CE1	1:C:480:LEU:HD23	2.33	0.63
1:C:400:ARG:O	1:C:404:THR:N	2.32	0.63
1:C:51:GLU:O	1:C:58:THR:HG23	1.98	0.63
1:A:789:ASP:HA	1:A:792:ILE:HD11	1.80	0.63
1:A:777:ARG:HB3	1:A:780:VAL:HG21	1.81	0.63
1:E:477:PHE:CE1	1:E:480:LEU:HD23	2.33	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:477:PHE:CE1	1:A:480:LEU:HD23	2.33	0.63
1:G:102:HIS:O	1:G:105:ARG:N	2.31	0.63
1:G:79:ASN:ND2	1:G:94:CYS:H	1.97	0.63
1:E:89:MET:O	1:E:92:LEU:HD12	1.98	0.63
1:E:12:PHE:HB3	1:E:132:ILE:HG21	1.79	0.63
1:A:535:PRO:HG2	1:A:540:LEU:HD21	1.80	0.63
1:E:510:ILE:HB	1:E:768:ARG:HG3	1.80	0.62
1:A:223:GLN:HG2	1:A:342:MET:HA	1.80	0.62
2:H:65:LYS:H	2:H:68:GLN:HE21	1.46	0.62
1:E:733:ARG:NH1	2:F:95:PHE:HA	2.14	0.62
2:F:114:THR:C	2:F:115:LEU:HD12	2.19	0.62
1:G:508:GLU:OE1	1:G:771:GLN:N	2.32	0.62
1:C:168:ARG:HH11	2:D:97:LYS:HE3	1.63	0.62
1:E:586:TYR:CD1	1:E:587:ALA:N	2.67	0.62
2:H:114:THR:C	2:H:115:LEU:HD12	2.20	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:G:372:ASN:ND2	1:G:372:ASN:H	1.95	0.62
1:A:293:LEU:HD11	1:A:301:MET:HE1	1.82	0.62
1:E:79:ASN:HD21	1:E:92:LEU:HB3	1.64	0.62
2:D:114:THR:C	2:D:115:LEU:HD12	2.20	0.62
1:G:61:LEU:HD12	1:G:63:GLU:HB3	1.80	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
1:G:400:ARG:O	1:G:404:THR:N	2.32	0.62
1:A:409:VAL:HB	1:A:412:ASP:OD1	1.99	0.62
2:F:12:LYS:O	2:F:16:GLN:CG	2.42	0.62
1:A:705:LEU:HD23	1:A:710:VAL:HG21	1.81	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:A:733:ARG:NH1	2:B:95:PHE:HA	2.14	0.62
2:B:35:MET:SD	2:B:76:ILE:HD12	2.40	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
1:E:372:ASN:H	1:E:372:ASN:ND2	1.96	0.62
1:G:305:LEU:HB2	1:G:307:LEU:CD2	2.30	0.62
1:E:601:ASN:OD1	1:E:658:THR:OG1	2.17	0.62
2:D:65:LYS:H	2:D:68:GLN:HE21	1.45	0.62
1:G:145:LYS:HG3	1:G:146:ARG:H	1.64	0.62
2:F:40:GLN:HA	2:F:40:GLN:OE1	2.00	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)
1:E:573:LYS:HE3	1:E:589:LYS:HZ3	1.63	0.62
1:E:311:ASN:HD21	1:E:319:GLY:HA3	1.64	0.62
1:A:311:ASN:HD21	1:A:319:GLY:HA3	1.63	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
1:G:586:TYR:CE1	1:G:587:ALA:HB2	2.35	0.62
1:C:757:ILE:HA	1:C:760:LEU:HD12	1.81	0.62
2:F:71:PRO:O	2:F:75:THR:HG23	1.99	0.62
2:B:71:PRO:O	2:B:75:THR:HG23	1.99	0.62
2:D:71:PRO:O	2:D:75:THR:HG23	1.99	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
1:C:268:GLU:HG3	1:C:270:TYR:CE1	2.35	0.62
1:G:705:LEU:HD23	1:G:710:VAL:HG21	1.80	0.62
1:C:705:LEU:HD23	1:C:710:VAL:HG21	1.80	0.62
1:A:293:LEU:HD12	1:A:297:ALA:HB2	1.82	0.62
1:C:586:TYR:CE1	1:C:587:ALA:HB2	2.34	0.62
1:C:409:VAL:HB	1:C:412:ASP:OD1	1.99	0.62
1:G:36:TRP:NE1	1:G:78:MET:HG3	2.13	0.62
1:A:135:GLU:HB2	1:A:213:PRO:N	2.15	0.62
1:G:268:GLU:HG3	1:G:270:TYR:CE1	2.35	0.62
1:E:705:LEU:HD23	1:E:710:VAL:HG21	1.80	0.62
1:A:809:ARG:NH2	2:B:41:ASN:HD21	1.98	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:E:381:ASN:HB2	1:E:385:GLN:HE21	1.65	0.62
1:E:30:SER:O	1:E:32:LYS:HG2	2.00	0.62
1:A:763:ASP:O	1:A:765:ASN:N	2.31	0.62
1:E:305:LEU:HB2	1:E:307:LEU:CD2	2.30	0.62
1:G:513:ASN:HD21	1:G:515:ILE:HD11	1.65	0.62
1:A:242:ASN:CB	1:A:245:SER:HB2	2.27	0.62
1:A:145:LYS:HG3	1:A:146:ARG:H	1.64	0.62
1:C:36:TRP:O	1:C:37:VAL:HG13	2.00	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:G:712:GLU:O	1:G:716:ILE:CD1	2.47	0.62
1:C:135:GLU:HB2	1:C:213:PRO:N	2.15	0.62
1:C:712:GLU:O	1:C:716:ILE:CD1	2.47	0.62
1:E:51:GLU:O	1:E:58:THR:HG23	1.98	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:A:513:ASN:HD21	1:A:515:ILE:HD11	1.65	0.62
1:E:291:TYR:CD2	1:E:310:PHE:CE1	2.81	0.62
1:C:508:GLU:OE1	1:C:771:GLN:N	2.33	0.62
1:G:30:SER:O	1:G:32:LYS:HG2	2.00	0.62
2:F:125:GLU:O	2:F:129:ALA:HB2	2.00	0.62
1:A:747:MET:CG	1:G:812:PHE:CZ	2.83	0.61
1:E:268:GLU:HG3	1:E:270:TYR:CE1	2.34	0.61
1:A:287:PHE:HD1	1:A:287:PHE:H	1.47	0.61
1:C:223:GLN:HG2	1:C:342:MET:HA	1.81	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:446:VAL:HG12	1:A:447:ASN:N	2.15	0.61
1:G:683:ARG:NH1	1:G:708:ASN:O	2.33	0.61
1:E:490:GLN:CG	1:E:521:LEU:HD11	2.30	0.61
1:E:145:LYS:HG3	1:E:146:ARG:H	1.64	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:E:737:LEU:HD11	1:E:788:ARG:N	2.15	0.61
2:D:125:GLU:O	2:D:129:ALA:HB2	1.99	0.61
1:C:293:LEU:HD12	1:C:297:ALA:HB2	1.82	0.61
1:A:429:ALA:HA	1:A:432:LYS:HG2	1.82	0.61
1:C:513:ASN:HD21	1:C:515:ILE:HD11	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:E:226:GLN:C	1:E:229:PRO:HD2	2.20	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:G:36:TRP:O	1:G:37:VAL:HG13	2.00	0.61
1:A:630:ARG:NH2	1:A:657:ARG:HB2	2.13	0.61
1:C:381:ASN:HB2	1:C:385:GLN:HE21	1.65	0.61
1:E:535:PRO:HG2	1:E:540:LEU:HD21	1.81	0.61
1:G:490:GLN:CG	1:G:521:LEU:HD11	2.30	0.61
1:E:513:ASN:HD21	1:E:515:ILE:HD11	1.65	0.61
1:G:733:ARG:NH1	2:H:95:PHE:HA	2.14	0.61
1:G:381:ASN:HB2	1:G:385:GLN:HE21	1.65	0.61
1:E:400:ARG:O	1:E:404:THR:N	2.32	0.61
1:A:395:VAL:HG23	1:A:396:THR:H	1.65	0.61
2:B:51:LEU:C	2:B:54:PRO:HD3	2.20	0.61
2:F:51:LEU:O	2:F:54:PRO:CD	2.39	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:490:GLN:CG	1:C:521:LEU:HD11	2.30	0.61
1:A:586:TYR:CE1	1:A:587:ALA:HB2	2.35	0.61
1:A:36:TRP:NE1	1:A:78:MET:HG3	2.14	0.61
1:G:223:GLN:HG2	1:G:342:MET:HA	1.81	0.61
1:G:226:GLN:C	1:G:229:PRO:HD2	2.21	0.61
1:E:12:PHE:CE2	1:E:131:PRO:CD	2.82	0.61
1:C:243:ASP:OD1	1:C:323:ILE:HG13	2.01	0.61
1:E:135:GLU:HB2	1:E:213:PRO:N	2.15	0.61
1:E:482:ILE:HG22	1:E:483:ASN:OD1	2.00	0.61
1:C:354:ARG:HH11	1:C:354:ARG:HB3	1.66	0.61
1:A:354:ARG:HH11	1:A:354:ARG:HB3	1.64	0.61
1:C:601:ASN:OD1	1:C:658:THR:OG1	2.17	0.61
1:A:547:PHE:CG	1:A:548:PRO:HD2	2.35	0.61
1:E:391:MET:HB3	1:E:393:ILE:HG13	1.83	0.61
1:A:481:CYS:HA	1:A:484:TYR:HB3	1.83	0.61
1:G:242:ASN:CB	1:G:245:SER:HB2	2.27	0.61
1:A:511:GLU:CD	2:H:145:ARG:HH11	2.02	0.61
1:A:164:MET:HE3	1:A:256:PHE:CE2	2.29	0.61
1:C:547:PHE:CG	1:C:548:PRO:HD2	2.36	0.61
1:G:777:ARG:HB3	1:G:780:VAL:HG21	1.82	0.61
1:C:395:VAL:HG23	1:C:396:THR:H	1.66	0.61
2:D:40:GLN:OE1	2:D:40:GLN:HA	2.00	0.61
1:G:293:LEU:HD12	1:G:297:ALA:HB2	1.82	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
1:A:557:GLU:HA	1:A:560:ILE:CD1	2.31	0.61
1:E:547:PHE:CG	1:E:548:PRO:HD2	2.35	0.61
1:G:780:VAL:O	1:G:784:LEU:HD23	2.00	0.61
1:G:573:LYS:HE3	1:G:589:LYS:HZ3	1.66	0.61
1:E:395:VAL:HG23	1:E:396:THR:H	1.66	0.61
2:H:125:GLU:O	2:H:129:ALA:HB2	1.99	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
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:A:305:LEU:HB2	1:A:307:LEU:CD2	2.30	0.61
2:D:85:PHE:HE1	2:D:145:ARG:CG	2.13	0.61
1:G:517:PHE:HE2	1:G:715:ARG:HB3	1.66	0.61
1:E:265:ALA:N	1:E:450:LEU:O	2.34	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

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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:226:GLN:C	1:C:229:PRO:HD2	2.21	0.61
1:A:801:ALA:HA	1:A:804:ARG:HD2	1.83	0.61
1:C:737:LEU:HD11	1:C:788:ARG:N	2.16	0.61
1:C:572:SER:HB2	1:C:580:GLU:O	2.01	0.61
2:H:40:GLN:HA	2:H:40:GLN:OE1	2.01	0.60
1:E:683:ARG:NH1	1:E:708:ASN:O	2.34	0.60
1:C:683:ARG:NH1	1:C:708:ASN:O	2.33	0.60
1:G:308:GLU:N	1:G:313:TYR:OH	2.32	0.60
1:A:305:LEU:HD22	1:A:354:ARG:HB3	1.83	0.60
1:G:609:VAL:HG23	1:G:612:LEU:HD23	1.83	0.60
1:E:36:TRP:O	1:E:37:VAL:HG13	2.00	0.60
1:G:572:SER:HB2	1:G:580:GLU:O	2.01	0.60
1:G:305:LEU:HD22	1:G:354:ARG:HB3	1.83	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
1:E:753:CYS:HG	1:E:774:ILE:HD11	1.65	0.60
1:A:490:GLN:CG	1:A:521:LEU:HD11	2.30	0.60
1:A:601:ASN:OD1	1:A:658:THR:OG1	2.17	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
2:D:35:MET:HG2	2:D:69:PHE:CZ	2.36	0.60
1:A:120:PHE:HD1	1:A:120:PHE:H	1.48	0.60
1:A:517:PHE:HE2	1:A:715:ARG:HB3	1.66	0.60
2:B:12:LYS:O	2:B:16:GLN:CG	2.42	0.60
1:C:286:THR:HB	1:C:290:PHE:CD2	2.36	0.60
1:G:601:ASN:OD1	1:G:658:THR:OG1	2.17	0.60
1:A:354:ARG:HH11	1:A:354:ARG:CB	2.14	0.60
1:G:391:MET:HB3	1:G:393:ILE:HG13	1.83	0.60
1:A:36:TRP:O	1:A:37:VAL:HG13	2.00	0.60
1:C:145:LYS:HG3	1:C:146:ARG:H	1.64	0.60
1:C:527:LEU:HD12	1:C:566:HIS:CG	2.37	0.60
1:C:446:VAL:HG12	1:C:447:ASN:N	2.17	0.60
1:G:395:VAL:HG23	1:G:396:THR:H	1.66	0.60
1:E:354:ARG:HB3	1:E:354:ARG:HH11	1.66	0.60
1:C:391:MET:HB3	1:C:393:ILE:HG13	1.83	0.60
1:A:286:THR:HB	1:A:290:PHE:CD2	2.37	0.60
1:E:757:ILE:HA	1:E:760:LEU:HD12	1.82	0.60
2:B:70:LEU:HG	2:B:74:GLN:HE21	1.65	0.60
2:H:70:LEU:HG	2:H:74:GLN:HE21	1.65	0.60
1:A:400:ARG:O	1:A:404:THR:N	2.32	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:44:PHE:CD2	1:G:101:LEU:HD22	2.35	0.60
1:E:763:ASP:O	1:E:765:ASN:N	2.31	0.60
1:A:30:SER:O	1:A:32:LYS:HG2	2.00	0.60
1:E:786:GLU:O	1:E:790:LEU:HD13	2.02	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: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:A:381:ASN:HB2	1:A:385:GLN:HE21	1.65	0.60
1:A:735:GLU:OE2	1:A:756:MET:HE1	2.01	0.60
1:G:786:GLU:O	1:G:790:LEU:HD13	2.02	0.60
1:C:30:SER:O	1:C:32:LYS:HG2	2.00	0.60
1:A:572:SER:HB2	1:A:580:GLU:O	2.01	0.60
1:E:305:LEU:HD22	1:E:354:ARG:HB3	1.82	0.60
1:A:434:LYS:HG3	1:A:625:TRP:HZ2	1.66	0.60
2:D:113:VAL:HG13	2:D:119:MET:O	2.02	0.60
1:E:527:LEU:HD12	1:E:566:HIS:CG	2.37	0.60
1:A:243:ASP:OD1	1:A:323:ILE:HG13	2.01	0.60
2:H:35:MET:HG2	2:H:69:PHE:CZ	2.36	0.60
1:C:786:GLU:O	1:C:790:LEU:HD13	2.01	0.60
1:G:429:ALA:HA	1:G:432:LYS:HG2	1.83	0.60
1:E:609:VAL:HG23	1:E:612:LEU:HD23	1.83	0.60
1:C:557:GLU:HA	1:C:560:ILE:CD1	2.31	0.60
1:C:420:LYS:O	1:C:423:ALA:HB3	2.02	0.60
1:A:285:ARG:HB3	1:A:291:TYR:OH	2.02	0.60
1:E:495:HIS:HA	1:E:499:ILE:HD12	1.84	0.60
2:B:41:ASN:N	2:B:42:PRO:HD3	2.17	0.60
1:G:286:THR:HB	1:G:290:PHE:CD2	2.36	0.60
1:C:287:PHE:HD1	1:C:287:PHE:H	1.46	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
2:B:35:MET:HG2	2:B:69:PHE:CZ	2.37	0.60
1:E:572:SER:HB2	1:E:580:GLU:O	2.01	0.60
2:B:40:GLN:C	2:B:42:PRO:HD3	2.22	0.60
1:A:614:ASN:OD1	1:A:628:VAL:CG1	2.50	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:G:398:PHE:HE1	1:G:402:ILE:HD13	1.66	0.60
1:E:420:LYS:O	1:E:423:ALA:HB3	2.02	0.60
1:C:799:PHE:CE1	2:D:144:VAL:HG13	2.37	0.60
2:H:113:VAL:HG13	2:H:119:MET:O	2.02	0.60

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

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
1:E:298:SER:H	1:E:301:MET:CG	2.06	0.59
1:C:226:GLN:HG2	1:C:338:ALA:HA	1.83	0.59
1:E:799:PHE:CE1	2:F:144:VAL:HG13	2.37	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:E:357:SER:HA	1:E:360:LEU:HD12	1.85	0.59
1:G:298:SER:H	1:G:301:MET:CG	2.05	0.59
1:G:481:CYS:HA	1:G:484:TYR:HB3	1.84	0.59
1:A:490:GLN:HG2	1:A:586:TYR:CD2	2.37	0.59
1:A:339:MET:O	1:A:342:MET:HB2	2.03	0.59
1:G:226:GLN:HG2	1:G:338:ALA:HA	1.83	0.59
1:G:285:ARG:HB3	1:G:291:TYR:OH	2.02	0.59
1:G:61:LEU:CD1	1:G:63:GLU:HB3	2.33	0.59
1:A:327:GLN:HB3	1:A:330:GLU:CD	2.23	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:G:403:LEU:O	1:G:405:PRO:HD3	2.03	0.59
1:E:819:LEU:HG	1:E:820:GLY:H	1.68	0.59
1:A:819:LEU:HD12	1:A:820:GLY:N	2.17	0.59
1:G:278:ILE:HG21	1:G:432:LYS:NZ	2.18	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:C:242:ASN:CB	1:C:245:SER:HB2	2.27	0.59
2:B:50:VAL:HG12	2:B:72:MET:HG2	1.84	0.59
1:G:801:ALA:HA	1:G:804:ARG:HD2	1.83	0.59
1:G:265:ALA:N	1:G:450:LEU:O	2.33	0.59
1:A:56:GLU:HG3	1:A:71:SER:HA	1.84	0.59
2:F:9:ALA:HA	2:F:12:LYS:NZ	2.18	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: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:A:419:THR:O	1:A:423:ALA:HB2	2.03	0.59
1:E:242:ASN:CB	1:E:245:SER:HB2	2.27	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:8:THR:O	2:F:11:PHE:HB2	2.02	0.59
1:C:481:CYS:HA	1:C:484:TYR:HB3	1.83	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:339:MET:O	1:G:342:MET:HB2	2.02	0.59
2:D:85:PHE:O	2:D:89:VAL:HG22	2.03	0.59
1:C:517:PHE:HE2	1:C:715:ARG:HB3	1.66	0.59
1:C:61:LEU:CD1	1:C:63:GLU:HB3	2.33	0.59
1:E:61:LEU:CD1	1:E:63:GLU:HB3	2.33	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: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:495:HIS:HA	1:C:499:ILE:HD12	1.85	0.59
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:C:419:THR:O	1:C:423:ALA:HB2	2.02	0.58
1:E:285:ARG:HB3	1:E:291:TYR:OH	2.01	0.58
1:G:585:HIS:HB2	1:G:588:GLY:O	2.03	0.58
1:G:502:GLN:HG3	1:G:512:TRP:NE1	2.17	0.58
1:C:403:LEU:O	1:C:405:PRO:HD3	2.03	0.58
2:B:89:VAL:HG23	2:B:90:GLU:N	2.17	0.58
1:E:197:VAL:HG12	1:E:197:VAL:O	2.03	0.58
1:G:196:VAL:HG12	1:G:217:TYR:HE2	1.68	0.58
1:A:361:GLN:HE22	1:A:386:LYS:HD3	1.68	0.58
1:G:120:PHE:HD1	1:G:120:PHE:H	1.49	0.58
1:E:29:TRP:CD1	1:E:30:SER:N	2.71	0.58
1:G:29:TRP:CD1	1:G:30:SER:N	2.71	0.58
1:A:786:GLU:O	1:A:790:LEU:HD13	2.01	0.58
1:C:354:ARG:HH11	1:C:354:ARG:CB	2.15	0.58
1:C:196:VAL:HG12	1:C:217:TYR:HE2	1.68	0.58
1:C:120:PHE:H	1:C:120:PHE:HD1	1.50	0.58
2:D:10:GLU:HA	2:D:13:GLU:HG3	1.85	0.58
1:C:315:PHE:HE2	1:C:359:VAL:O	1.86	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:G:607:ASP:HB3	1:G:631:ILE:HG22	1.85	0.58
1:E:502:GLN:HA	1:E:505:TYR:CD2	2.39	0.58
2:F:65:LYS:CB	2:F:68:GLN:HG3	2.26	0.58
1:A:197:VAL:HG12	1:A:197:VAL:O	2.03	0.58
2:D:89:VAL:HG23	2:D:90:GLU:N	2.18	0.58
2:H:89:VAL:HG23	2:H:90:GLU:N	2.18	0.58
1:E:777:ARG:HB3	1:E:780:VAL:CG2	2.34	0.58
1:C:56:GLU:HG3	1:C:71:SER:HA	1.84	0.58
1:E:85:LYS:HG2	1:E:106:GLU:HB3	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:C:585:HIS:HB2	1:C:588:GLY:O	2.03	0.58
1:G:419:THR:O	1:G:423:ALA:HB2	2.02	0.58
1:C:816:GLN:HA	1:C:819:LEU:HD23	1.84	0.58
2:B:8:THR:O	2:B:11:PHE:HB2	2.02	0.58
2:B:9:ALA:HA	2:B:12:LYS:NZ	2.17	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
1:E:97:GLU:CD	1:E:706:ARG:HD2	2.24	0.58
1:G:819:LEU:HG	1:G:820:GLY:H	1.69	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:A:403:LEU:O	1:A:405:PRO:HD3	2.03	0.58
2:F:40:GLN:NE2	2:F:77:ALA:HA	2.19	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
1:C:29:TRP:CD1	1:C:30:SER:N	2.71	0.58
1:G:659:VAL:HG12	1:G:660:GLY:N	2.19	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:607:ASP:HB3	1:A:631:ILE:HG22	1.86	0.58
1:E:607:ASP:HB3	1:E:631:ILE:HG22	1.85	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:G:769:ILE:HD11	1:G:774:ILE:HD13	1.86	0.58
1:C:333:GLN:O	1:C:337:GLU:CG	2.46	0.58
2:F:113:VAL:HG21	2:F:124:VAL:HG21	1.86	0.58
1:A:29:TRP:CD1	1:A:30:SER:N	2.71	0.58
1:G:97:GLU:CD	1:G:706:ARG:HD2	2.24	0.58
1:C:97:GLU:CD	1:C:706:ARG:HD2	2.24	0.58
1:A:747:MET:CG	1:G:816:GLN:OE1	2.51	0.58
2:B:55:LYS:O	2:B:59:MET:HG2	2.04	0.58
2:H:140:TYR:O	2:H:142:GLU:N	2.37	0.58
1:G:489:LEU:CD1	1:G:492:LEU:HD23	2.34	0.58
1:G:164:MET:HE3	1:G:256:PHE:CE2	2.32	0.58
1:E:196:VAL:HG12	1:E:217:TYR:HE2	1.68	0.58
1:A:754:ILE:HG12	2:H:150:GLY:O	2.04	0.58
1:G:361:GLN:HE22	1:G:386:LYS:HD3	1.68	0.58
1:A:777:ARG:HB3	1:A:780:VAL:CG2	2.34	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:61:LEU:CD1	1:A:63:GLU:HB3	2.33	0.58
1:G:283:ASP:H	1:G:318:ASN:ND2	2.02	0.58
1:A:747:MET:HG3	1:G:812:PHE:CZ	2.38	0.58
2:D:28:TYR:CE2	2:D:62:LYS:HE3	2.39	0.58
1:A:391:MET:HB3	1:A:393:ILE:HG13	1.84	0.58
1:C:607:ASP:HB3	1:C:631:ILE:HG22	1.85	0.58
1:C:502:GLN:HA	1:C:505:TYR:CD2	2.39	0.58
2:B:65:LYS:CB	2:B:68:GLN:HG3	2.26	0.58
2:D:65:LYS:CB	2:D:68:GLN:HG3	2.26	0.58
2:H:113:VAL:HG21	2:H:124:VAL:HG21	1.86	0.58
1:A:489:LEU:CD1	1:A:492:LEU:HD23	2.34	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
2:B:10:GLU:HA	2:B:13:GLU:HG3	1.86	0.58
1:E:278:ILE:HG21	1:E:432:LYS:NZ	2.19	0.57
1:G:286:THR:HB	1:G:290:PHE:HD2	1.69	0.57
1:E:585:HIS:HB2	1:E:588:GLY:O	2.03	0.57
1:A:196:VAL:HG12	1:A:217:TYR:HE2	1.68	0.57
1:E:470:GLU:HB2	1:E:472:PHE:CE1	2.39	0.57
2:H:10:GLU:HA	2:H:13:GLU:HG3	1.86	0.57
1:E:596:ALA:HA	1:E:599:THR:OG1	2.04	0.57
2:H:40:GLN:NE2	2:H:77:ALA:HA	2.18	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
1:C:769:ILE:HD11	1:C:774:ILE:HD13	1.86	0.57
1:A:502:GLN:HA	1:A:505:TYR:CD2	2.39	0.57
1:C:819:LEU:HG	1:C:820:GLY:H	1.70	0.57
2:H:131:HIS:CB	2:H:138:ILE:HG23	2.34	0.57
1:C:596:ALA:HA	1:C:599:THR:OG1	2.04	0.57
1:C:103:ASN:O	1:C:107:ARG:HG3	2.04	0.57
2:D:40:GLN:NE2	2:D:77:ALA:HA	2.19	0.57
2:H:28:TYR:CE2	2:H:62:LYS:HE3	2.39	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: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
1:E:769:ILE:HD11	1:E:774:ILE:HD13	1.86	0.57
1:E:489:LEU:CD1	1:E:492:LEU:HD23	2.34	0.57
1:G:368:LYS:HZ3	1:G:379:PRO:CG	2.17	0.57
2:B:131:HIS:CB	2:B:138:ILE:HG23	2.34	0.57
1:G:254:ILE:CG2	1:G:262:ILE:HG12	2.35	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:495:HIS:HA	1:G:499:ILE:HD12	1.85	0.57
2:F:28:TYR:CE2	2:F:62:LYS:HE3	2.39	0.57
1:G:357:SER:HA	1:G:360:LEU:HD12	1.86	0.57
1:G:197:VAL:HG12	1:G:197:VAL:O	2.04	0.57
1:C:164:MET:HE1	1:C:256:PHE:CE2	2.38	0.57
1:G:777:ARG:HB3	1:G:780:VAL:CG2	2.34	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
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
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
2:F:140:TYR:O	2:F:142:GLU:N	2.37	0.57
1:A:369:LYS:O	1:A:369:LYS:CG	2.52	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:G:271:LEU:N	1:G:271:LEU:HD23	2.20	0.57
1:G:582:CYS:HA	1:G:590:VAL:O	2.05	0.57
1:C:610:THR:CG2	1:C:628:VAL:HG21	2.35	0.57
2:H:75:THR:HA	2:H:78:LYS:HD3	1.87	0.57
1:C:819:LEU:HD12	1:C:820:GLY:N	2.18	0.57
1:C:254:ILE:CG2	1:C:262:ILE:HG12	2.35	0.57
1:G:446:VAL:HG13	1:G:450:LEU:HD21	1.86	0.57
1:A:103:ASN:O	1:A:107:ARG:HG3	2.04	0.57
2:H:12:LYS:CB	2:H:66:PHE:CE2	2.85	0.57
1:E:610:THR:CG2	1:E:628:VAL:HG21	2.35	0.57
1:E:475:ASN:ND2	1:E:591:THR:O	2.38	0.57
1:A:502:GLN:CG	1:A:512:TRP:HE1	2.17	0.57
1:C:475:ASN:ND2	1:C:591:THR:O	2.38	0.57
1:G:369:LYS:CG	1:G:369:LYS:O	2.52	0.57
1:A:407:ILE:HG22	1:A:408:LYS:N	2.19	0.57
2:B:140:TYR:O	2:B:142:GLU:N	2.37	0.57
1:A:254:ILE:CG2	1:A:262:ILE:HG12	2.35	0.57
1:G:253:ARG:HG3	1:G:460:PHE:CD1	2.40	0.57
1:A:97:GLU:CD	1:A:706:ARG:HD2	2.24	0.57
2:D:12:LYS:CB	2:D:66:PHE:CE2	2.85	0.57
2:H:51:LEU:C	2:H:54:PRO:HD3	2.21	0.57
2:F:70:LEU:HB3	2:F:71:PRO:HD3	1.87	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
1:A:495:HIS:HA	1:A:499:ILE:HD12	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:95:LEU:HD11	1:C:714:ILE:HG21	1.87	0.57
1:C:659:VAL:HG12	1:C:660:GLY:N	2.19	0.57
1:G:407:ILE:HG22	1:G:408:LYS:N	2.20	0.57
2:D:70:LEU:HB3	2:D:71:PRO:HD3	1.87	0.57
1:A:713:GLY:HA2	1:A:716:ILE:HD12	1.87	0.57
2:D:55:LYS:O	2:D:59:MET:HG2	2.03	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
1:A:485:THR:CG2	1:A:667:LEU:HD11	2.33	0.57
1:E:96:ASN:HB2	1:E:99:SER:H	1.69	0.57
2:H:70:LEU:HB3	2:H:71:PRO:HD3	1.87	0.57
1:G:728:GLN:HE21	1:G:728:GLN:HA	1.70	0.57
2:D:9:ALA:HA	2:D:12:LYS:CD	2.35	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:C:757:ILE:HG23	1:C:762:LEU:HB2	1.87	0.56
1:A:630:ARG:CZ	1:A:656:PHE:HB3	2.35	0.56
1:E:368:LYS:NZ	1:E:379:PRO:CG	2.68	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:A:610:THR:CG2	1:A:628:VAL:HG21	2.35	0.56
1:G:610:THR:CG2	1:G:628:VAL:HG21	2.35	0.56
1:G:757:ILE:HG23	1:G:762:LEU:HB2	1.88	0.56
1:A:475:ASN:ND2	1:A:591:THR:O	2.38	0.56
1:E:13:LEU:HD21	1:E:132:ILE:HB	1.87	0.56
2:D:140:TYR:O	2:D:142:GLU:N	2.37	0.56
1:C:238:LYS:HD3	1:C:285:ARG:HD3	1.87	0.56
2:H:74:GLN:O	2:H:78:LYS:CG	2.51	0.56
1:G:715:ARG:O	1:G:719:GLN:CB	2.53	0.56
1:G:12:PHE:O	1:G:112:LEU:HD23	2.05	0.56
1:C:815:ARG:O	1:C:818:GLN:HG3	2.06	0.56
1:A:743:PRO:HB2	1:G:816:GLN:HB3	1.85	0.56
1:G:817:GLN:CD	1:G:818:GLN:N	2.59	0.56
1:G:279:ARG:NH2	1:G:428:GLU:HG3	2.21	0.56
1:E:394:ASN:HB3	1:E:397:ASP:HB2	1.87	0.56
1:C:234:PHE:CD2	1:C:289:ILE:HG12	2.41	0.56
1:C:485:THR:CG2	1:C:667:LEU:HD11	2.33	0.56
1:A:769:ILE:HD11	1:A:774:ILE:HD13	1.86	0.56
1:A:271:LEU:N	1:A:271:LEU:HD23	2.20	0.56
2:H:50:VAL:HG12	2:H:72:MET:HG2	1.87	0.56
2:F:109:ARG:O	2:F:113:VAL:HG23	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:109:ARG:O	2:B:113:VAL:HG23	2.06	0.56
1:C:197:VAL:O	1:C:197:VAL:HG12	2.04	0.56
1:C:489:LEU:CD1	1:C:492:LEU:HD23	2.34	0.56
1:A:13:LEU:HD21	1:A:132:ILE:HB	1.87	0.56
2:B:75:THR:HA	2:B:78:LYS:HD3	1.88	0.56
2:F:40:GLN:C	2:F:42:PRO:HD3	2.25	0.56
1:C:368:LYS:HZ3	1:C:379:PRO:CG	2.18	0.56
1:C:816:GLN:NE2	2:D:17:LEU:CD2	2.68	0.56
1:C:446:VAL:HG13	1:C:450:LEU:HD21	1.87	0.56
1:E:253:ARG:HG3	1:E:460:PHE:CD1	2.41	0.56
1:C:58:THR:HA	1:C:69:THR:OG1	2.05	0.56
1:A:30:SER:HA	1:A:32:LYS:HE2	1.88	0.56
1:C:30:SER:HA	1:C:32:LYS:HE2	1.88	0.56
1:G:97:GLU:OE2	1:G:706:ARG:HD2	2.05	0.56
1:G:103:ASN:O	1:G:107:ARG:HG3	2.04	0.56
1:A:728:GLN:HG3	1:A:729:GLU:N	2.20	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:C:358:SER:HA	1:C:390:LEU:HD12	1.88	0.56
1:C:186:ASN:O	1:C:190:VAL:HG23	2.06	0.56
1:G:815:ARG:O	1:G:818:GLN:HG3	2.06	0.56
2:D:40:GLN:C	2:D:42:PRO:HD3	2.26	0.56
1:A:394:ASN:HB3	1:A:397:ASP:HB2	1.86	0.56
1:A:308:GLU:N	1:A:313:TYR:OH	2.33	0.56
1:G:394:ASN:HB3	1:G:397:ASP:HB2	1.86	0.56
1:C:407:ILE:HG22	1:C:408:LYS:N	2.20	0.56
2:D:65:LYS:H	2:D:68:GLN:NE2	2.03	0.56
1:C:715:ARG:O	1:C:719:GLN:CB	2.53	0.56
1:C:470:GLU:HB2	1:C:472:PHE:CE1	2.39	0.56
1:A:446:VAL:HG13	1:A:450:LEU:HD21	1.87	0.56
1:E:95:LEU:HD11	1:E:714:ILE:HG21	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:286:THR:HB	1:A:290:PHE:HD2	1.69	0.56
1:C:271:LEU:HD23	1:C:271:LEU:N	2.20	0.56
1:C:369:LYS:CG	1:C:369:LYS:O	2.52	0.56
2:B:113:VAL:HG21	2:B:124:VAL:HG21	1.86	0.56
1:C:285:ARG:HB3	1:C:291:TYR:CZ	2.41	0.56
2:D:75:THR:HA	2:D:78:LYS:HD3	1.87	0.56
1:E:713:GLY:HA2	1:E:716:ILE:HD12	1.87	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:A:58:THR:HA	1:A:69:THR:OG1	2.06	0.56
1:E:103:ASN:O	1:E:107:ARG:HG3	2.05	0.56
1:C:728:GLN:HE21	1:C:728:GLN:HA	1.70	0.56
2:H:40:GLN:C	2:H:42:PRO:HD3	2.26	0.56
1:E:279:ARG:NH2	1:E:428:GLU:HG3	2.21	0.56
1:C:357:SER:HA	1:C:360:LEU:HD12	1.86	0.56
1:G:475:ASN:ND2	1:G:591:THR:O	2.38	0.56
1:A:278:ILE:HG21	1:A:432:LYS:NZ	2.20	0.56
1:E:407:ILE:HG22	1:E:408:LYS:N	2.19	0.56
1:A:238:LYS:HD3	1:A:285:ARG:HD3	1.87	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
1:E:58:THR:HA	1:E:69:THR:OG1	2.05	0.56
1:A:819:LEU:HG	1:A:820:GLY:N	2.21	0.56
1:E:522:GLN:OE1	1:E:522:GLN:HA	2.06	0.56
1:C:95:LEU:HD12	1:C:718:ARG:HE	1.70	0.56
1:A:605:LEU:HD21	1:A:631:ILE:HG23	1.87	0.56
1:E:605:LEU:HD21	1:E:631:ILE:HG23	1.87	0.56
1:E:582:CYS:HA	1:E:590:VAL:O	2.05	0.56
1:C:279:ARG:NH2	1:C:428:GLU:HG3	2.21	0.56
1:C:328:ASP:HA	1:C:331:MET:CB	2.28	0.56
2:B:65:LYS:H	2:B:68:GLN:NE2	2.03	0.56
1:E:630:ARG:CZ	1:E:656:PHE:HB3	2.35	0.56
1:A:712:GLU:CD	1:A:712:GLU:H	2.08	0.56
1:E:120:PHE:HD1	1:E:120:PHE:H	1.48	0.56
1:E:715:ARG:O	1:E:719:GLN:CB	2.53	0.56
2:D:131:HIS:CB	2:D:138:ILE:HG23	2.34	0.56
1:G:95:LEU:HD12	1:G:718:ARG:HE	1.70	0.56
1:E:97:GLU:OE2	1:E:706:ARG:HD2	2.05	0.56
1:A:728:GLN:HA	1:A:728:GLN:HE21	1.70	0.56
1:G:819:LEU:HG	1:G:820:GLY:N	2.21	0.56
1:C:79:ASN:ND2	1:C:94:CYS:H	2.04	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:609:VAL:O	1:C:612:LEU:HB3	2.06	0.56
1:A:502:GLN:HG3	1:A:512:TRP:NE1	2.17	0.56
1:A:757:ILE:HG23	1:A:762:LEU:HB2	1.87	0.56
1:G:36:TRP:NE1	1:G:78:MET:HA	2.21	0.56
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: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:A:57:VAL:O	1:A:69:THR:HG23	2.06	0.56
1:G:57:VAL:O	1:G:69:THR:HG23	2.06	0.56
1:E:57:VAL:O	1:E:69:THR:HG23	2.06	0.56
1:A:728:GLN:CA	1:A:728:GLN:HE21	2.19	0.56
1:C:283:ASP:H	1:C:318:ASN:ND2	2.02	0.56
1:C:817:GLN:CD	1:C:818:GLN:N	2.59	0.56
2:F:9:ALA:HA	2:F:12:LYS:CD	2.35	0.56
1:G:485:THR:CG2	1:G:667:LEU:HD11	2.33	0.56
1:A:234:PHE:CD2	1:A:289:ILE:HG12	2.41	0.56
1:G:609:VAL:O	1:G:612:LEU:HB3	2.06	0.56
1:A:96:ASN:HB2	1:A:99:SER:H	1.71	0.56
1:A:736:ILE:HG23	1:A:737:LEU:HD23	1.88	0.56
2:F:41:ASN:N	2:F:42:PRO:HD3	2.20	0.56
1:E:712:GLU:CD	1:E:712:GLU:H	2.08	0.56
1:C:712:GLU:CD	1:C:712:GLU:H	2.08	0.56
1:G:368:LYS:NZ	1:G:379:PRO:CG	2.68	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:G:728:GLN:HG3	1:G:729:GLU:N	2.20	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
2:H:9:ALA:HA	2:H:12:LYS:NZ	2.19	0.56
1:E:308:GLU:N	1:E:313:TYR:OH	2.31	0.56
1:G:605:LEU:HD21	1:G:631:ILE:HG23	1.87	0.56
1:A:663:TYR:CZ	1:A:667:LEU:HD13	2.41	0.56
1:E:130:LEU:N	1:E:130:LEU:HD23	2.21	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
2:D:109:ARG:O	2:D:113:VAL:HG23	2.06	0.56
2:D:113:VAL:HG21	2:D:124:VAL:HG21	1.86	0.56
2:H:109:ARG:O	2:H:113:VAL:HG23	2.06	0.56
1:A:285:ARG:HB3	1:A:291:TYR:CZ	2.41	0.56
2:F:75:THR:HA	2:F:78:LYS:HD3	1.87	0.56
2:B:74:GLN:O	2:B:78:LYS:CG	2.51	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:G:58:THR:HA	1:G:69:THR:HG23	1.87	0.56
1:C:56:GLU:HA	1:C:71:SER:HA	1.89	0.56
1:E:95:LEU:HD12	1:E:718:ARG:HE	1.70	0.56
2:D:41:ASN:N	2:D:42:PRO:HD3	2.20	0.55
2:H:41:ASN:N	2:H:42:PRO:HD3	2.21	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:435:PHE:O	1:E:438:LEU:HB3	2.05	0.55
1:C:394:ASN:HB3	1:C:397:ASP:HB2	1.86	0.55
1:A:279:ARG:NH2	1:A:428:GLU:HG3	2.21	0.55
1:E:36:TRP:NE1	1:E:78:MET:HA	2.21	0.55
2:F:74:GLN:O	2:F:78:LYS:CG	2.51	0.55
1:C:736:ILE:HG23	1:C:737:LEU:HD23	1.88	0.55
1:G:712:GLU:H	1:G:712:GLU:CD	2.08	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:E:58:THR:HA	1:E:69:THR:HG23	1.87	0.55
1:A:250:LYS:HE2	1:A:465:ASP:CB	2.35	0.55
1:A:186:ASN:O	1:A:190:VAL:HG23	2.06	0.55
1:E:817:GLN:CD	1:E:818:GLN:N	2.59	0.55
1:G:234:PHE:CD2	1:G:289:ILE:HG12	2.40	0.55
1:C:293:LEU:HD11	1:C:301:MET:CE	2.37	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:E:285:ARG:HB3	1:E:291:TYR:CZ	2.41	0.55
1:G:164:MET:HE1	1:G:256:PHE:CE2	2.41	0.55
1:A:715:ARG:O	1:A:719:GLN:CB	2.54	0.55
1:C:819:LEU:HG	1:C:820:GLY:N	2.21	0.55
1:C:57:VAL:O	1:C:69:THR:HG23	2.06	0.55
1:A:283:ASP:H	1:A:318:ASN:ND2	2.04	0.55
2:B:41:ASN:N	2:B:42:PRO:CD	2.69	0.55
1:E:234:PHE:CD2	1:E:289:ILE:HG12	2.40	0.55
1:E:272:LEU:HD22	1:E:439:PHE:CD2	2.41	0.55
1:G:469:PHE:CE1	1:G:587:ALA:HB3	2.42	0.55
2:F:50:VAL:HG12	2:F:72:MET:HG2	1.87	0.55
1:G:96:ASN:HB2	1:G:99:SER:H	1.71	0.55
1:A:253:ARG:HG3	1:A:460:PHE:CD1	2.40	0.55
1:C:522:GLN:OE1	1:C:522:GLN:HA	2.06	0.55
1:E:30:SER:HA	1:E:32:LYS:HE2	1.88	0.55
1:G:30:SER:HA	1:G:32:LYS:HE2	1.88	0.55
1:C:728:GLN:HG3	1:C:729:GLU:N	2.20	0.55
1:E:283:ASP:H	1:E:318:ASN:ND2	2.04	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
1:A:609:VAL:HG23	1:A:612:LEU:CD2	2.37	0.55
1:C:305:LEU:CD2	1:C:354:ARG:HB3	2.37	0.55
1:A:435:PHE:O	1:A:438:LEU:HB3	2.05	0.55
1:G:609:VAL:HG23	1:G:612:LEU:CD2	2.37	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
2:H:87:ASP:O	2:H:90:GLU:HB3	2.07	0.55
1:G:630:ARG:CZ	1:G:656:PHE:HB3	2.36	0.55
1:G:250:LYS:HE2	1:G:465:ASP:CB	2.35	0.55
1:A:97:GLU:OE2	1:A:706:ARG:HD2	2.05	0.55
1:E:728:GLN:HG3	1:E:729:GLU:N	2.20	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
2:B:9:ALA:HA	2:B:12:LYS:CD	2.36	0.55
1:E:187:THR:HG23	1:E:463:ILE:HG22	1.87	0.55
1:G:305:LEU:CD2	1:G:354:ARG:HB3	2.37	0.55
1:A:491:GLN:OE1	1:A:521:LEU:HG	2.07	0.55
1:G:223:GLN:O	1:G:226:GLN:N	2.37	0.55
1:C:421:GLU:HB2	1:C:422:GLN:HE21	1.71	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:C:58:THR:HA	1:C:69:THR:HG23	1.86	0.55
1:G:358:SER:HA	1:G:390:LEU:HD12	1.88	0.55
1:G:315:PHE:CE2	1:G:359:VAL:O	2.60	0.55
1:G:272:LEU:HD22	1:G:439:PHE:CD2	2.41	0.55
1:C:272:LEU:HD22	1:C:439:PHE:CD2	2.41	0.55
1:A:293:LEU:HD11	1:A:301:MET:CE	2.37	0.55
1:G:421:GLU:HB2	1:G:422:GLN:HE21	1.71	0.55
2:B:70:LEU:HB3	2:B:71:PRO:HD3	1.88	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:A:817:GLN:CD	1:A:818:GLN:N	2.60	0.55
1:A:607:ASP:CA	1:A:610:THR:HB	2.37	0.55
1:E:469:PHE:CE1	1:E:587:ALA:HB3	2.42	0.55
1:A:269:THR:HB	1:A:443:LEU:CD1	2.37	0.55
1:E:502:GLN:HA	1:E:505:TYR:HD2	1.72	0.55
2:F:65:LYS:HB2	2:F:68:GLN:CG	2.30	0.55
2:H:46:GLU:O	2:H:50:VAL:HG23	2.06	0.55
1:A:421:GLU:HB2	1:A:422:GLN:HE21	1.71	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:G:130:LEU:N	1:G:130:LEU:HD23	2.22	0.55
1:E:533:ASN:O	1:E:534:PRO:C	2.43	0.55
1:G:713:GLY:HA2	1:G:716:ILE:HD12	1.88	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

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

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:328:ASP:HA	1:E:331:MET:CB	2.28	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: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: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
2:D:69:PHE:CE1	2:D:73:MET:HG2	2.42	0.54
1:G:69:THR:O	1:G:70:LEU:HG	2.08	0.54
1:A:819:LEU:CG	1:A:820:GLY:N	2.70	0.54
1:E:728:GLN:HE21	1:E:728:GLN:CA	2.19	0.54
1:A:815:ARG:O	1:A:818:GLN:HG3	2.06	0.54
1:G:187:THR:HG23	1:G:463:ILE:HG22	1.88	0.54
1:E:491:GLN:OE1	1:E:521:LEU:HG	2.07	0.54
1:C:502:GLN:HA	1:C:505:TYR:HD2	1.72	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
2:H:69:PHE:CE1	2:H:73:MET:HG2	2.41	0.54
1:C:713:GLY:HA2	1:C:716:ILE:HD12	1.88	0.54
1:C:368:LYS:NZ	1:C:379:PRO:CG	2.68	0.54
1:A:56:GLU:HA	1:A:71:SER:HA	1.88	0.54
1:E:52:GLU:HA	1:E:57:VAL:HG22	1.89	0.54
1:E:26:GLN:O	1:E:29:TRP:HB3	2.06	0.54
1:E:128:LYS:HG2	1:E:129:GLN:H	1.72	0.54
1:E:108:TYR:HE1	1:E:126:PRO:HA	1.72	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
1:A:272:LEU:HD22	1:A:439:PHE:CD2	2.41	0.54
1:C:369:LYS:O	1:C:369:LYS:HG3	2.07	0.54
2:B:69:PHE:CE1	2:B:73:MET:HG2	2.42	0.54
1:C:96:ASN:HB2	1:C:99:SER:H	1.71	0.54
1:G:56:GLU:HA	1:G:71:SER:HA	1.88	0.54
1:C:495:HIS:O	1:C:499:ILE:HB	2.08	0.54
1:C:44:PHE:CD1	1:C:98:ALA:HB2	2.43	0.54
1:C:23:PRO:O	1:C:27:ALA:HB2	2.08	0.54
1:G:35:VAL:O	1:G:46:ALA:HA	2.07	0.54
2:B:12:LYS:HB3	2:B:66:PHE:CD2	2.42	0.54
1:G:125:ASN:HB3	1:G:687:PRO:CD	2.37	0.54
1:A:609:VAL:O	1:A:612:LEU:HB3	2.06	0.54
1:G:491:GLN:OE1	1:G:521:LEU:HG	2.07	0.54
1:A:302:ARG:HB2	1:A:302:ARG:NH1	2.23	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:502:GLN:CG	1:G:512:TRP:HE1	2.17	0.54
1:E:133:TYR:HB3	1:E:154:TYR:OH	2.08	0.54
1:G:114:TYR:CZ	1:G:153:ILE:HB	2.43	0.54
1:C:164:MET:HE1	1:C:256:PHE:HE2	1.70	0.54
1:C:703:GLU:OE1	1:C:706:ARG:HB2	2.08	0.54
1:C:35:VAL:O	1:C:46:ALA:HA	2.07	0.54
2:D:40:GLN:HE21	2:D:77:ALA:HA	1.72	0.54
2:H:9:ALA:HA	2:H:12:LYS:CD	2.36	0.54
2:B:40:GLN:NE2	2:B:77:ALA:HA	2.22	0.54
1:A:187:THR:HG23	1:A:463:ILE:HG22	1.88	0.54
1:E:287:PHE:CD1	1:E:287:PHE:N	2.73	0.54
1:A:301:MET:HE1	1:A:353:LEU:HD13	1.88	0.54
1:E:418:GLN:HB3	1:E:422:GLN:HB2	1.90	0.54
2:F:18:PHE:CE2	2:F:34:VAL:HA	2.42	0.54
1:C:223:GLN:O	1:C:226:GLN:N	2.37	0.54
2:B:65:LYS:HB2	2:B:68:GLN:CG	2.30	0.54
1:A:796:ILE:O	1:A:800:GLN:HB2	2.08	0.54
2:B:87:ASP:O	2:B:90:GLU:HB3	2.08	0.54
1:A:147:HIS:ND1	1:A:148:GLU:N	2.56	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:G:736:ILE:HG23	1:G:737:LEU:HD23	1.88	0.54
1:E:812:PHE:CE1	2:F:17:LEU:HD21	2.41	0.54
1:A:35:VAL:O	1:A:46:ALA:HA	2.07	0.54
1:A:109:PHE:HE1	1:A:694:GLY:O	1.90	0.54
2:H:17:LEU:HD12	2:H:17:LEU:O	2.08	0.54
1:E:437:ARG:NE	1:E:625:TRP:HA	2.23	0.54
1:C:437:ARG:HB3	1:C:624:LEU:HD23	1.89	0.54
1:C:613:LEU:HD13	1:C:625:TRP:CE2	2.43	0.54
1:A:305:LEU:CD2	1:A:354:ARG:HB3	2.37	0.54
1:C:469:PHE:CE1	1:C:587:ALA:HB3	2.42	0.54
2:B:46:GLU:O	2:B:50:VAL:HG23	2.07	0.54
1:G:796:ILE:O	1:G:800:GLN:HB2	2.07	0.54
1:E:489:LEU:C	1:E:489:LEU:HD12	2.28	0.54
1:C:533:ASN:O	1:C:534:PRO:C	2.44	0.54
2:D:17:LEU:O	2:D:17:LEU:HD12	2.08	0.54
1:E:56:GLU:HA	1:E:71:SER:HA	1.89	0.54
1:E:703:GLU:OE1	1:E:706:ARG:HB2	2.08	0.54
1:G:278:ILE:HG21	1:G:428:GLU:HG2	1.90	0.54
1:G:301:MET:HE1	1:G:353:LEU:HD13	1.90	0.54
1:A:437:ARG:NE	1:A:625:TRP:HA	2.23	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:553:THR:O	1:A:555:PHE:N	2.40	0.54
1:A:133:TYR:HB3	1:A:154:TYR:OH	2.08	0.54
1:G:793:THR:O	1:G:796:ILE:HB	2.07	0.54
1:C:147:HIS:ND1	1:C:148:GLU:N	2.56	0.54
1:A:498:PHE:HD1	1:A:716:ILE:CD1	2.21	0.54
2:H:97:LYS:HB3	2:H:100:ASN:OD1	2.08	0.54
1:G:728:GLN:CA	1:G:728:GLN:HE21	2.19	0.54
2:H:40:GLN:HE21	2:H:77:ALA:HA	1.72	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
2:B:40:GLN:HE21	2:B:77:ALA:HA	1.73	0.54
1:G:437:ARG:HB3	1:G:624:LEU:HD23	1.89	0.54
1:C:491:GLN:OE1	1:C:521:LEU:HG	2.07	0.54
1:G:512:TRP:CG	1:G:513:ASN:N	2.76	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:A:369:LYS:HG3	1:A:369:LYS:O	2.07	0.54
1:E:77:LYS:HD2	1:E:96:ASN:ND2	2.12	0.54
2:B:121:GLU:CD	2:B:121:GLU:H	2.11	0.54
1:G:133:TYR:HB3	1:G:154:TYR:OH	2.08	0.54
1:C:793:THR:O	1:C:796:ILE:HB	2.07	0.54
1:G:323:ILE:CG2	1:G:326:GLN:HB3	2.34	0.54
1:A:130:LEU:N	1:A:130:LEU:HD23	2.22	0.54
1:G:713:GLY:HA2	1:G:716:ILE:CD1	2.37	0.54
1:E:495:HIS:O	1:E:499:ILE:HB	2.08	0.54
1:A:495:HIS:O	1:A:499:ILE:HB	2.08	0.54
1:G:283:ASP:N	1:G:318:ASN:HD21	2.06	0.54
1:A:173:ILE:HA	1:A:680:ASN:O	2.08	0.54
2:F:12:LYS:HB3	2:F:66:PHE:CD2	2.42	0.54
1:E:609:VAL:O	1:E:612:LEU:HB3	2.06	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:522:GLN:HA	1:A:522:GLN:OE1	2.07	0.54
1:A:228:ASN:N	1:A:229:PRO:CD	2.71	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
1:A:365:ILE:HG21	1:A:427:ILE:HD13	1.90	0.54
1:C:130:LEU:HD23	1:C:130:LEU:N	2.23	0.54
2:F:40:GLN:HE21	2:F:77:ALA:HA	1.72	0.54
1:C:76:GLN:HG2	1:C:96:ASN:ND2	2.23	0.54
1:E:176:THR:O	1:E:183:LYS:HD3	2.08	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:125:ASN:HB3	1:A:687:PRO:CD	2.37	0.54
1:A:276:ARG:O	1:A:280:GLN:HG3	2.08	0.54
1:E:369:LYS:HG3	1:E:369:LYS:O	2.07	0.54
2:H:65:LYS:H	2:H:68:GLN:NE2	2.04	0.54
2:B:85:PHE:CE1	2:B:145:ARG:HG2	2.43	0.54
1:G:145:LYS:CG	1:G:146:ARG:N	2.71	0.54
1:E:819:LEU:CG	1:E:820:GLY:N	2.70	0.54
1:A:23:PRO:O	1:A:27:ALA:HB2	2.08	0.54
1:C:109:PHE:HE1	1:C:694:GLY:O	1.90	0.54
1:E:108:TYR:CD2	1:E:696:LEU:HD13	2.43	0.53
1:G:108:TYR:CD2	1:G:696:LEU:HD13	2.43	0.53
1:G:108:TYR:HE1	1:G:126:PRO:HA	1.73	0.53
1:A:176:THR:O	1:A:183:LYS:HD3	2.08	0.53
1:A:79:ASN:ND2	1:A:94:CYS:H	2.04	0.53
1:E:313:TYR:CE2	1:E:360:LEU:HB3	2.42	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:A:298:SER:H	1:A:301:MET:CG	2.07	0.53
1:G:614:ASN:OD1	1:G:628:VAL:HG12	2.09	0.53
1:C:365:ILE:HG21	1:C:427:ILE:HD13	1.90	0.53
1:C:796:ILE:O	1:C:800:GLN:HB2	2.08	0.53
2:H:121:GLU:H	2:H:121:GLU:CD	2.11	0.53
1:C:69:THR:O	1:C:70:LEU:HG	2.08	0.53
2:F:97:LYS:N	2:F:100:ASN:HD21	2.06	0.53
1:A:69:THR:O	1:A:70:LEU:HG	2.08	0.53
1:G:495:HIS:O	1:G:499:ILE:HB	2.08	0.53
1:A:186:ASN:N	1:A:186:ASN:HD22	2.06	0.53
1:E:35:VAL:O	1:E:46:ALA:HA	2.07	0.53
1:E:358:SER:HA	1:E:390:LEU:HD12	1.89	0.53
1:E:302:ARG:HB2	1:E:302:ARG:NH1	2.22	0.53
1:G:276:ARG:O	1:G:280:GLN:HG3	2.09	0.53
1:C:279:ARG:HH21	1:C:428:GLU:HG3	1.74	0.53
1:G:663:TYR:OH	1:G:667:LEU:HD13	2.09	0.53
1:C:337:GLU:O	1:C:340:THR:OG1	2.26	0.53
1:A:153:ILE:HG21	1:A:189:LYS:CB	2.39	0.53
1:G:153:ILE:HG21	1:G:189:LYS:CB	2.39	0.53
1:C:133:TYR:HB3	1:C:154:TYR:OH	2.08	0.53
1:C:145:LYS:CG	1:C:146:ARG:N	2.71	0.53
1:C:161:TYR:CZ	1:C:165:LEU:HD11	2.42	0.53
1:C:498:PHE:HD1	1:C:716:ILE:CD1	2.21	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:E:173:ILE:HA	1:E:680:ASN:O	2.08	0.53
1:C:108:TYR:HE1	1:C:126:PRO:HA	1.73	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: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:C:297:ALA:HA	1:C:301:MET:SD	2.48	0.53
1:G:553:THR:O	1:G:555:PHE:N	2.41	0.53
1:C:502:GLN:HG3	1:C:512:TRP:NE1	2.17	0.53
1:A:469:PHE:CE1	1:A:587:ALA:HB3	2.43	0.53
2:H:64:LEU:HD11	2:H:72:MET:HE1	1.90	0.53
1:A:793:THR:O	1:A:796:ILE:HB	2.07	0.53
1:G:161:TYR:CZ	1:G:165:LEU:HD11	2.43	0.53
1:A:524:CYS:CB	1:A:568:LYS:HG3	2.39	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:109:PHE:HE1	1:G:694:GLY:O	1.91	0.53
1:E:182:GLY:H	4:E:998:ADP:PB	2.31	0.53
1:A:809:ARG:NH2	2:B:41:ASN:ND2	2.56	0.53
1:G:279:ARG:HH21	1:G:428:GLU:HG3	1.74	0.53
1:E:553:THR:O	1:E:555:PHE:N	2.41	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:E:421:GLU:O	1:E:424:ASP:N	2.42	0.53
1:G:418:GLN:HB3	1:G:422:GLN:HB2	1.90	0.53
1:E:77:LYS:NZ	1:E:96:ASN:ND2	2.56	0.53
2:D:25:LYS:HE3	2:D:65:LYS:HZ3	1.72	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:A:64:ASN:C	1:A:66:LYS:H	2.11	0.53
2:D:97:LYS:N	2:D:100:ASN:HD21	2.06	0.53
2:D:97:LYS:HB3	2:D:100:ASN:OD1	2.08	0.53
1:C:52:GLU:HA	1:C:57:VAL:HG22	1.89	0.53
1:G:573:LYS:CE	1:G:589:LYS:HZ3	2.22	0.53
1:A:573:LYS:CE	1:A:589:LYS:HZ3	2.22	0.53
2:D:41:ASN:N	2:D:42:PRO:CD	2.72	0.53
1:A:108:TYR:CD2	1:A:696:LEU:HD13	2.43	0.53
1:C:182:GLY:O	1:C:184:THR:N	2.42	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:C:269:THR:HB	1:C:443:LEU:CD1	2.37	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:305:LEU:HD22	1:C:354:ARG:CA	2.38	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:G:64:ASN:C	1:G:66:LYS:N	2.62	0.53
1:E:64:ASN:C	1:E:66:LYS:H	2.11	0.53
2:B:17:LEU:O	2:B:17:LEU:HD12	2.08	0.53
1:C:763:ASP:C	1:C:765:ASN:H	2.12	0.53
1:G:703:GLU:OE1	1:G:706:ARG:HB2	2.08	0.53
1:C:128:LYS:HG2	1:C:129:GLN:H	1.73	0.53
1:G:173:ILE:HA	1:G:680:ASN:O	2.09	0.53
1:G:176:THR:O	1:G:183:LYS:HD3	2.08	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:A:663:TYR:CZ	1:A:667:LEU:HD22	2.43	0.53
1:A:223:GLN:O	1:A:226:GLN:N	2.38	0.53
1:G:147:HIS:ND1	1:G:148:GLU:N	2.56	0.53
1:E:236:ASN:ND2	1:E:246:SER:HA	2.23	0.53
2:F:97:LYS:HB3	2:F:100:ASN:OD1	2.08	0.53
1:E:69:THR:O	1:E:70:LEU:HG	2.07	0.53
2:B:18:PHE:CE2	2:B:34:VAL:HA	2.44	0.53
1:A:731:ARG:HH12	1:A:752:ALA:HB1	1.74	0.53
1:A:108:TYR:HE1	1:A:126:PRO:HA	1.72	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:G:302:ARG:NH1	1:G:302:ARG:HB2	2.23	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
1:G:490:GLN:HE21	1:G:494:ASN:ND2	1.87	0.53
1:C:512:TRP:CG	1:C:513:ASN:N	2.76	0.53
1:E:512:TRP:CG	1:E:513:ASN:N	2.76	0.53
1:A:663:TYR:OH	1:A:667:LEU:HD13	2.08	0.53
1:A:418:GLN:HB3	1:A:422:GLN:HB2	1.90	0.53
1:G:226:GLN:HA	1:G:229:PRO:HG3	1.90	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
2:F:31:CYS:O	2:F:35:MET:HG3	2.09	0.53
1:G:524:CYS:CB	1:G:568:LYS:HG3	2.39	0.53
1:G:498:PHE:HD1	1:G:716:ILE:CD1	2.21	0.53
1:A:703:GLU:OE1	1:A:706:ARG:HB2	2.08	0.53
1:A:174:LEU:HD12	1:A:681:PHE:CE1	2.44	0.53
1:C:174:LEU:HD12	1:C:681:PHE:CE1	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:86:GLU:H	2:B:86:GLU:CD	2.12	0.53
1:G:819:LEU:CG	1:G:820:GLY:N	2.71	0.53
1:C:182:GLY:H	4:C:998:ADP:PB	2.32	0.53
1:E:301:MET:HE1	1:E:353:LEU:HD13	1.91	0.53
1:C:553:THR:O	1:C:555:PHE:N	2.41	0.53
1:G:502:GLN:HA	1:G:505:TYR:HD2	1.73	0.53
1:E:337:GLU:O	1:E:340:THR:OG1	2.26	0.53
2:B:43:THR:O	2:B:47:VAL:HG22	2.08	0.53
1:E:152:HIS:CE1	1:E:154:TYR:CD2	2.97	0.53
2:D:121:GLU:H	2:D:121:GLU:CD	2.11	0.53
1:E:165:LEU:HD21	1:E:260:GLY:CA	2.38	0.53
1:A:95:LEU:HD12	1:A:718:ARG:HE	1.73	0.53
1:C:283:ASP:N	1:C:318:ASN:HD21	2.06	0.53
1:E:109:PHE:HE1	1:E:694:GLY:O	1.91	0.53
1:C:108:TYR:CD2	1:C:696:LEU:HD13	2.43	0.53
1:E:276:ARG:O	1:E:280:GLN:HG3	2.08	0.53
1:G:663:TYR:CZ	1:G:667:LEU:HD22	2.43	0.53
1:A:278:ILE:HG21	1:A:428:GLU:HG2	1.90	0.53
1:E:365:ILE:HG21	1:E:427:ILE:HD13	1.90	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:A:487:GLU:HG3	1:A:521:LEU:HD13	1.91	0.53
1:A:226:GLN:HA	1:A:229:PRO:HG3	1.90	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:C:418:GLN:HB3	1:C:422:GLN:HB2	1.90	0.53
1:E:153:ILE:HG21	1:E:189:LYS:CB	2.39	0.53
1:A:323:ILE:CG2	1:A:326:GLN:HB3	2.34	0.53
2:F:17:LEU:HD12	2:F:17:LEU:O	2.08	0.53
1:A:533:ASN:O	1:A:534:PRO:C	2.45	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:A:163:SER:O	1:A:167:ASP:OD1	2.27	0.53
1:A:52:GLU:HA	1:A:57:VAL:HG22	1.89	0.53
1:G:31:ALA:C	1:G:33:LYS:H	2.12	0.53
1:E:573:LYS:CE	1:E:589:LYS:HZ3	2.22	0.53
1:A:763:ASP:C	1:A:765:ASN:H	2.12	0.53
1:G:174:LEU:HD12	1:G:681:PHE:CE1	2.44	0.53
2:H:8:THR:O	2:H:12:LYS:HG2	2.09	0.53
2:D:4:SER:H	2:D:7:GLN:NE2	2.05	0.53
2:B:51:LEU:C	2:B:53:ASN:H	2.12	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:487:GLU:HG3	1:E:521:LEU:HD13	1.91	0.53
1:A:307:LEU:HA	1:A:313:TYR:OH	2.09	0.53
1:G:376:ALA:HB2	1:G:420:LYS:CA	2.27	0.53
1:C:223:GLN:C	1:C:225:LEU:N	2.62	0.53
2:F:123:GLU:O	2:F:127:LEU:CB	2.58	0.53
1:E:7:SER:N	1:E:10:GLU:OE1	2.42	0.53
1:G:800:GLN:CA	2:H:119:MET:HE2	2.33	0.53
1:A:31:ALA:C	1:A:33:LYS:H	2.12	0.53
1:A:7:SER:N	1:A:10:GLU:OE1	2.42	0.53
1:E:186:ASN:N	1:E:186:ASN:HD22	2.07	0.53
2:D:8:THR:O	2:D:12:LYS:HG2	2.09	0.52
1:A:182:GLY:O	1:A:184:THR:N	2.42	0.52
1:G:297:ALA:HA	1:G:301:MET:SD	2.48	0.52
1:E:614:ASN:OD1	1:E:628:VAL:HG12	2.09	0.52
1:G:471:ILE:HG12	1:G:471:ILE:O	2.09	0.52
1:A:502:GLN:HA	1:A:505:TYR:HD2	1.73	0.52
1:G:421:GLU:O	1:G:424:ASP:N	2.42	0.52
1:A:114:TYR:CZ	1:A:153:ILE:HB	2.43	0.52
1:E:114:TYR:CZ	1:E:153:ILE:HB	2.43	0.52
1:C:323:ILE:CG2	1:C:326:GLN:HB3	2.34	0.52
1:C:165:LEU:HD21	1:C:260:GLY:CA	2.39	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:F:41:ASN:N	2:F:42:PRO:CD	2.72	0.52
1:C:819:LEU:CG	1:C:820:GLY:N	2.72	0.52
1:C:496:THR:HA	1:C:500:LEU:HD12	1.91	0.52
2:B:4:SER:H	2:B:7:GLN:NE2	2.06	0.52
1:G:83:PHE:CZ	1:G:93:THR:HG23	2.45	0.52
1:E:272:LEU:HD23	1:E:436:GLU:CG	2.40	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
1:E:228:ASN:N	1:E:229:PRO:CD	2.72	0.52
1:G:37:VAL:CB	1:G:38:PRO:HD2	2.39	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:H:123:GLU:O	2:H:127:LEU:CB	2.57	0.52
2:D:31:CYS:O	2:D:35:MET:HG3	2.09	0.52
1:E:64:ASN:C	1:E:66:LYS:N	2.62	0.52
1:E:23:PRO:O	1:E:27:ALA:HB2	2.08	0.52
1:C:12:PHE:CD1	1:C:111:GLY:HA3	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:128:LYS:HG2	1:G:129:GLN:H	1.73	0.52
1:C:173:ILE:HA	1:C:680:ASN:O	2.09	0.52
2:H:4:SER:O	2:H:8:THR:CB	2.58	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:G:274:LYS:C	1:G:276:ARG:H	2.12	0.52
1:E:464:LEU:HD21	1:E:466:ILE:CG2	2.40	0.52
1:C:276:ARG:O	1:C:280:GLN:HG3	2.09	0.52
1:G:607:ASP:CA	1:G:610:THR:HB	2.37	0.52
1:C:471:ILE:HG12	1:C:471:ILE:O	2.09	0.52
1:A:223:GLN:C	1:A:225:LEU:N	2.62	0.52
1:G:243:ASP:OD1	1:G:324:PRO:HD2	2.10	0.52
1:A:547:PHE:CE1	1:A:549:LYS:HB3	2.32	0.52
1:G:120:PHE:N	1:G:120:PHE:CD1	2.71	0.52
1:G:120:PHE:CZ	1:G:713:GLY:HA3	2.44	0.52
1:C:64:ASN:C	1:C:66:LYS:N	2.62	0.52
2:B:97:LYS:HB3	2:B:100:ASN:OD1	2.08	0.52
1:G:763:ASP:C	1:G:765:ASN:H	2.12	0.52
1:C:815:ARG:O	1:C:818:GLN:CG	2.58	0.52
2:F:8:THR:O	2:F:12:LYS:HG2	2.09	0.52
2:F:28:TYR:HB2	2:F:62:LYS:CB	2.37	0.52
1:C:226:GLN:HA	1:C:229:PRO:CG	2.40	0.52
1:C:228:ASN:N	1:C:229:PRO:CD	2.72	0.52
2:H:50:VAL:HG11	2:H:72:MET:HG2	1.91	0.52
1:E:323:ILE:CG2	1:E:326:GLN:HB3	2.34	0.52
2:B:31:CYS:O	2:B:35:MET:HG3	2.10	0.52
1:G:306:LEU:HD13	1:G:386:LYS:HG2	1.92	0.52
2:B:97:LYS:N	2:B:100:ASN:HD21	2.07	0.52
1:C:8:ASP:OD1	1:C:8:ASP:N	2.42	0.52
1:A:425:PHE:CD1	1:A:425:PHE:O	2.63	0.52
1:E:425:PHE:O	1:E:425:PHE:CD1	2.63	0.52
2:B:4:SER:O	2:B:8:THR:CB	2.58	0.52
1:A:272:LEU:HD23	1:A:436:GLU:CG	2.39	0.52
1:C:552:ASP:HB3	1:C:595:SER:HA	1.92	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:G:226:GLN:HA	1:G:229:PRO:CG	2.39	0.52
1:E:7:SER:O	1:E:11:LYS:HG3	2.10	0.52
1:G:731:ARG:HH12	1:G:752:ALA:HB1	1.74	0.52
1:G:149:MET:SD	1:G:150:PRO:HD2	2.50	0.52
1:G:498:PHE:CD1	1:G:716:ILE:CD1	2.93	0.52

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

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:4:SER:O	2:F:8:THR:CB	2.58	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:E:272:LEU:HD22	1:E:439:PHE:CB	2.39	0.52
1:G:307:LEU:HA	1:G:313:TYR:OH	2.10	0.52
1:C:272:LEU:HD23	1:C:436:GLU:CG	2.40	0.52
1:A:272:LEU:HD22	1:A:439:PHE:CB	2.40	0.52
1:C:376:ALA:HB2	1:C:420:LYS:CA	2.27	0.52
1:A:806:TYR:CD1	2:B:147:VAL:HA	2.45	0.52
1:A:120:PHE:CZ	1:A:713:GLY:HA3	2.45	0.52
1:E:44:PHE:CD1	1:E:98:ALA:HB2	2.45	0.52
1:C:31:ALA:C	1:C:33:LYS:H	2.12	0.52
1:A:819:LEU:HD12	1:A:819:LEU:C	2.30	0.52
1:A:496:THR:HA	1:A:500:LEU:HD12	1.91	0.52
1:C:703:GLU:OE1	1:C:703:GLU:O	2.28	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:345:THR:OG1	1:C:348:GLU:HG3	2.10	0.52
1:C:809:ARG:HD3	2:D:36:ARG:HB3	1.92	0.52
2:H:41:ASN:N	2:H:42:PRO:CD	2.72	0.52
2:F:51:LEU:HB3	2:F:54:PRO:HD2	1.92	0.52
1:G:552:ASP:HB3	1:G:595:SER:HA	1.92	0.52
1:A:277:ALA:HA	1:A:286:THR:HG22	1.91	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
2:F:64:LEU:HD11	2:F:72:MET:HE1	1.92	0.52
1:A:471:ILE:O	1:A:471:ILE:HG12	2.09	0.52
1:A:421:GLU:O	1:A:424:ASP:N	2.42	0.52
1:C:731:ARG:NH1	1:C:752:ALA:HB1	2.25	0.52
2:B:123:GLU:O	2:B:127:LEU:CB	2.58	0.52
1:A:149:MET:SD	1:A:150:PRO:HD2	2.50	0.52
1:A:64:ASN:C	1:A:66:LYS:N	2.62	0.52
1:G:8:ASP:N	1:G:8:ASP:OD1	2.42	0.52
1:C:7:SER:N	1:C:10:GLU:OE1	2.42	0.52
1:C:425:PHE:CD1	1:C:425:PHE:O	2.63	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: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
1:G:313:TYR:N	1:G:313:TYR:CD1	2.78	0.52
1:E:553:THR:C	1:E:557:GLU:OE2	2.48	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:313:TYR:N	1:C:313:TYR:CD1	2.78	0.52
1:A:553:THR:C	1:A:557:GLU:OE2	2.49	0.52
1:A:113:ILE:HG13	1:A:114:TYR:CD1	2.45	0.52
2:B:89:VAL:CG2	2:B:90:GLU:N	2.73	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
2:D:74:GLN:O	2:D:78:LYS:CG	2.51	0.52
1:C:657:ARG:HB3	1:C:662:LEU:HD13	1.92	0.52
2:H:97:LYS:C	2:H:98:GLU:HG3	2.30	0.52
1:A:8:ASP:N	1:A:8:ASP:OD1	2.42	0.52
1:A:703:GLU:O	1:A:703:GLU:OE1	2.28	0.52
1:E:673:THR:O	1:E:677:THR:HG23	2.10	0.52
1:G:425:PHE:O	1:G:425:PHE:CD1	2.63	0.52
1:E:174:LEU:HD12	1:E:681:PHE:CE1	2.44	0.52
2:D:4:SER:O	2:D:8:THR:CB	2.58	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:C:272:LEU:HD22	1:C:439:PHE:CB	2.40	0.51
1:G:487:GLU:HG3	1:G:521:LEU:HD13	1.91	0.51
1:G:658:THR:HG23	1:G:661:GLN:H	1.74	0.51
1:A:277:ALA:HA	1:A:286:THR:CG2	2.40	0.51
1:G:621:VAL:O	1:G:625:TRP:HD1	1.94	0.51
2:B:15:PHE:CE1	2:B:26:ILE:HD13	2.45	0.51
1:C:792:ILE:O	1:C:796:ILE:HG12	2.10	0.51
1:G:806:TYR:CD1	2:H:147:VAL:HA	2.45	0.51
1:C:149:MET:SD	1:C:150:PRO:HD2	2.50	0.51
1:G:165:LEU:HD21	1:G:260:GLY:CA	2.39	0.51
1:G:723:ASN:O	1:G:775:PHE:HA	2.10	0.51
1:C:819:LEU:C	1:C:819:LEU:HD12	2.31	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:763:ASP:C	1:E:765:ASN:H	2.11	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:51:LEU:HB3	2:B:54:PRO:HD2	1.90	0.51
1:E:293:LEU:CD1	1:E:301:MET:HE1	2.39	0.51
1:C:277:ALA:HA	1:C:286:THR:CG2	2.40	0.51
1:A:237:ALA:HA	1:A:288:HIS:NE2	2.25	0.51
1:G:742:ILE:HD12	1:G:752:ALA:HA	1.91	0.51
1:C:152:HIS:CE1	1:C:154:TYR:CD2	2.97	0.51
1:C:114:TYR:CZ	1:C:153:ILE:HB	2.43	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:306:LEU:HD13	1:E:386:LYS:HG2	1.92	0.51
1:E:31:ALA:C	1:E:33:LYS:H	2.12	0.51
1:G:496:THR:HA	1:G:500:LEU:HD12	1.91	0.51
1:C:729:GLU:HA	1:C:729:GLU:OE1	2.10	0.51
1:E:283:ASP:N	1:E:318:ASN:HD21	2.07	0.51
2:B:34:VAL:O	2:B:38:LEU:HD12	2.11	0.51
1:E:345:THR:OG1	1:E:348:GLU:HG3	2.10	0.51
1:G:678:ASN:HD22	1:G:679:PRO:HD2	1.74	0.51
1:A:747:MET:CE	1:G:812:PHE:CE2	2.93	0.51
1:A:700:LEU:HG	1:A:704:GLN:HE21	1.75	0.51
1:E:471:ILE:HG12	1:E:471:ILE:O	2.09	0.51
1:G:505:TYR:HB3	1:G:510:ILE:HD11	1.93	0.51
1:G:337:GLU:O	1:G:340:THR:OG1	2.26	0.51
2:D:34:VAL:O	2:D:38:LEU:HD12	2.10	0.51
1:A:723:ASN:O	1:A:775:PHE:HA	2.10	0.51
1:G:703:GLU:O	1:G:703:GLU:OE1	2.28	0.51
1:G:283:ASP:N	1:G:318:ASN:ND2	2.58	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:C:464:LEU:HD21	1:C:466:ILE:CG2	2.40	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:A:658:THR:HG23	1:A:661:GLN:H	1.75	0.51
1:C:421:GLU:O	1:C:424:ASP:N	2.42	0.51
1:E:113:ILE:HG13	1:E:114:TYR:CD1	2.45	0.51
1:C:806:TYR:CD1	2:D:147:VAL:HA	2.45	0.51
1:C:306:LEU:HD13	1:C:386:LYS:HG2	1.92	0.51
1:C:120:PHE:CZ	1:C:713:GLY:HA3	2.44	0.51
1:A:573:LYS:NZ	1:A:589:LYS:HZ3	2.09	0.51
1:C:107:ARG:O	1:C:112:LEU:O	2.29	0.51
1:A:12:PHE:CD1	1:A:111:GLY:HA3	2.46	0.51
1:C:283:ASP:N	1:C:318:ASN:ND2	2.58	0.51
1:E:581:PHE:N	1:E:581:PHE:CD1	2.78	0.51
2:D:135:ASN:ND2	2:D:135:ASN:N	2.58	0.51
2:D:51:LEU:C	2:D:53:ASN:H	2.14	0.51
1:C:307:LEU:HA	1:C:313:TYR:OH	2.10	0.51
1:E:792:ILE:O	1:E:796:ILE:HG12	2.10	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:G:113:ILE:HG13	1:G:114:TYR:CD1	2.45	0.51
1:E:149:MET:SD	1:E:150:PRO:HD2	2.50	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:657:ARG:HB3	1:E:662:LEU:HD13	1.92	0.51
1:G:657:ARG:HH11	1:G:657:ARG:CB	2.24	0.51
1:A:498:PHE:CD1	1:A:716:ILE:CD1	2.93	0.51
1:C:163:SER:O	1:C:167:ASP:OD1	2.27	0.51
1:E:735:GLU:HG3	1:E:756:MET:CE	2.41	0.51
1:G:735:GLU:HG3	1:G:756:MET:CE	2.41	0.51
1:E:496:THR:HA	1:E:500:LEU:HD12	1.91	0.51
1:A:317:SER:O	1:A:318:ASN:HB2	2.11	0.51
1:G:346:GLU:HG2	1:G:347:GLU:H	1.76	0.51
1:C:346:GLU:HG2	1:C:347:GLU:H	1.76	0.51
1:G:819:LEU:HD12	1:G:819:LEU:C	2.31	0.51
1:E:182:GLY:O	1:E:183:LYS:C	2.49	0.51
2:F:51:LEU:C	2:F:53:ASN:H	2.14	0.51
2:F:34:VAL:O	2:F:38:LEU:HD12	2.10	0.51
1:C:226:GLN:HA	1:C:229:PRO:HG3	1.91	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
1:C:114:TYR:HE2	1:C:153:ILE:CB	2.24	0.51
2:H:89:VAL:CG2	2:H:90:GLU:N	2.73	0.51
1:C:243:ASP:OD1	1:C:324:PRO:HD2	2.10	0.51
1:A:657:ARG:HB3	1:A:662:LEU:HD13	1.92	0.51
1:A:772:SER:OG	1:A:772:SER:O	2.28	0.51
1:A:306:LEU:HD13	1:A:386:LYS:HG2	1.92	0.51
1:C:7:SER:O	1:C:11:LYS:HG3	2.10	0.51
1:E:373:THR:O	1:E:374:ASP:HB2	2.10	0.51
1:A:678:ASN:HD22	1:A:679:PRO:HD2	1.75	0.51
1:C:621:VAL:O	1:C:625:TRP:HD1	1.94	0.51
2:F:15:PHE:C	2:F:15:PHE:CD1	2.84	0.51
1:E:806:TYR:CD1	2:F:147:VAL:HA	2.46	0.51
2:B:15:PHE:C	2:B:15:PHE:CD1	2.84	0.51
1:C:742:ILE:HD12	1:C:752:ALA:HA	1.92	0.51
1:C:37:VAL:CB	1:C:38:PRO:HD2	2.39	0.51
1:E:44:PHE:HB2	1:E:101:LEU:CD2	2.41	0.51
1:C:250:LYS:NZ	1:C:465:ASP:OD2	2.44	0.51
1:G:283:ASP:H	1:G:318:ASN:HD21	1.59	0.51
1:A:345:THR:OG1	1:A:348:GLU:HG3	2.10	0.51
1:E:678:ASN:HD22	1:E:679:PRO:HD2	1.75	0.51
1:A:815:ARG:O	1:A:818:GLN:CG	2.58	0.51
1:A:731:ARG:NH1	1:A:752:ALA:HB1	2.25	0.51
1:A:747:MET:HG2	1:G:816:GLN:OE1	2.11	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:G:700:LEU:HD21	1:G:704:GLN:NE2	2.26	0.51
1:C:182:GLY:O	1:C:183:LYS:C	2.49	0.51
1:C:553:THR:C	1:C:557:GLU:OE2	2.49	0.51
1:C:449:ALA:C	1:C:451:ASP:H	2.15	0.51
1:G:731:ARG:NH1	1:G:752:ALA:HB1	2.25	0.51
1:C:800:GLN:CA	2:D:119:MET:HE2	2.33	0.51
1:C:723:ASN:O	1:C:775:PHE:HA	2.10	0.51
2:F:97:LYS:C	2:F:98:GLU:HG3	2.29	0.51
1:E:703:GLU:OE1	1:E:703:GLU:O	2.28	0.51
1:G:729:GLU:HA	1:G:729:GLU:OE1	2.10	0.51
1:G:107:ARG:O	1:G:112:LEU:O	2.29	0.51
1:G:7:SER:N	1:G:10:GLU:OE1	2.42	0.51
1:C:186:ASN:N	1:C:186:ASN:HD22	2.08	0.51
1:E:729:GLU:OE1	1:E:729:GLU:HA	2.10	0.51
2:B:135:ASN:ND2	2:B:135:ASN:N	2.59	0.51
1:A:700:LEU:HD21	1:A:704:GLN:NE2	2.26	0.51
1:C:607:ASP:CA	1:C:610:THR:HB	2.37	0.51
1:G:333:GLN:O	1:G:337:GLU:CG	2.46	0.51
1:E:8:ASP:N	1:E:8:ASP:OD1	2.42	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:G:792:ILE:O	1:G:796:ILE:HG12	2.10	0.51
1:A:20:VAL:C	1:A:22:ASN:H	2.15	0.51
1:C:317:SER:O	1:C:318:ASN:HB2	2.11	0.51
1:C:673:THR:O	1:C:677:THR:HG23	2.10	0.51
1:C:373:THR:O	1:C:374:ASP:HB2	2.11	0.51
1:G:345:THR:OG1	1:G:348:GLU:HG3	2.10	0.51
1:G:255:ASN:O	1:G:263:VAL:HG12	2.11	0.51
1:A:581:PHE:N	1:A:581:PHE:CD1	2.79	0.51
1:G:815:ARG:O	1:G:818:GLN:CG	2.58	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:C:277:ALA:HA	1:C:286:THR:HG22	1.92	0.51
1:C:437:ARG:NE	1:C:625:TRP:HA	2.24	0.51
1:A:297:ALA:HA	1:A:301:MET:SD	2.51	0.51
1:C:502:GLN:CG	1:C:512:TRP:HE1	2.16	0.51
1:A:505:TYR:HB3	1:A:510:ILE:HD11	1.93	0.51
1:G:505:TYR:CD1	1:G:510:ILE:HD11	2.46	0.51
1:E:223:GLN:C	1:E:225:LEU:N	2.62	0.51
1:C:237:ALA:HA	1:C:288:HIS:NE2	2.26	0.51
2:H:25:LYS:HE3	2:H:65:LYS:HZ1	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:26:ILE:O	2:B:26:ILE:HG22	2.11	0.51
1:E:742:ILE:HD12	1:E:752:ALA:HA	1.92	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
2:D:127:LEU:O	2:D:127:LEU:HD12	2.11	0.51
1:G:123:VAL:CG1	1:G:123:VAL:O	2.56	0.51
1:E:120:PHE:CZ	1:E:713:GLY:HA3	2.46	0.51
1:C:735:GLU:HG3	1:C:756:MET:CE	2.41	0.51
1:E:819:LEU:C	1:E:819:LEU:HD12	2.31	0.51
1:G:670:LEU:O	1:G:673:THR:HG23	2.10	0.51
1:C:670:LEU:O	1:C:673:THR:HG23	2.10	0.51
1:E:346:GLU:HG2	1:E:347:GLU:H	1.76	0.51
1:E:277:ALA:HA	1:E:286:THR:CG2	2.40	0.50
1:A:621:VAL:O	1:A:625:TRP:HD1	1.94	0.50
1:C:397:ASP:HB3	1:C:612:LEU:CD1	2.41	0.50
1:G:613:LEU:HD13	1:G:625:TRP:CE2	2.46	0.50
2:F:127:LEU:O	2:F:127:LEU:HD12	2.11	0.50
1:C:376:ALA:CB	1:C:420:LYS:HA	2.29	0.50
1:A:114:TYR:HE2	1:A:153:ILE:CB	2.24	0.50
1:E:772:SER:OG	1:E:772:SER:O	2.28	0.50
1:E:568:LYS:HD3	1:E:584:LEU:O	2.12	0.50
1:E:44:PHE:CE1	1:E:98:ALA:HB2	2.45	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:G:182:GLY:H	4:G:998:ADP:PB	2.34	0.50
1:A:79:ASN:ND2	1:A:92:LEU:HB3	2.26	0.50
2:H:51:LEU:HB3	2:H:54:PRO:HD2	1.91	0.50
1:C:700:LEU:HG	1:C:704:GLN:HE21	1.76	0.50
1:E:621:VAL:O	1:E:625:TRP:HD1	1.93	0.50
1:C:393:ILE:HD13	1:C:398:PHE:HB2	1.93	0.50
1:G:393:ILE:HD13	1:G:398:PHE:HB2	1.93	0.50
1:C:505:TYR:CD1	1:C:510:ILE:HD11	2.46	0.50
1:A:481:CYS:O	1:A:485:THR:OG1	2.30	0.50
1:C:365:ILE:HG22	1:C:365:ILE:O	2.12	0.50
2:D:64:LEU:HD11	2:D:72:MET:HE1	1.93	0.50
1:C:153:ILE:HG21	1:C:189:LYS:HB3	1.94	0.50
2:H:127:LEU:O	2:H:127:LEU:HD12	2.11	0.50
1:A:31:ALA:C	1:A:33:LYS:N	2.65	0.50
1:A:107:ARG:O	1:A:112:LEU:O	2.29	0.50
1:E:575:LEU:O	1:E:576:LYS:C	2.50	0.50
1:G:373:THR:O	1:G:374:ASP:HB2	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:743:PRO:HB3	1:G:816:GLN:HB3	1.91	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:G:700:LEU:HG	1:G:704:GLN:HE21	1.76	0.50
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:E:301:MET:HG3	1:E:302:ARG:N	2.26	0.50
1:G:271:LEU:HD21	1:G:663:TYR:CE1	2.47	0.50
1:C:613:LEU:O	1:C:616:SER:HB3	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:438:LEU:O	1:A:441:TRP:HB3	2.11	0.50
2:F:89:VAL:CG2	2:F:90:GLU:N	2.73	0.50
1:A:365:ILE:O	1:A:365:ILE:HG22	2.11	0.50
1:G:237:ALA:HA	1:G:288:HIS:NE2	2.26	0.50
1:E:76:GLN:HG2	1:E:96:ASN:HB3	1.91	0.50
2:D:49:LYS:HG3	2:D:50:VAL:N	2.23	0.50
1:A:255:ASN:O	1:A:263:VAL:HG12	2.12	0.50
1:E:700:LEU:HD21	1:E:704:GLN:NE2	2.26	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:C:271:LEU:HD21	1:C:663:TYR:CE1	2.47	0.50
1:E:505:TYR:CD1	1:E:510:ILE:HD11	2.46	0.50
2:F:64:LEU:HD21	2:F:72:MET:CE	2.42	0.50
1:A:228:ASN:N	1:A:229:PRO:HD2	2.26	0.50
1:E:12:PHE:CB	1:E:132:ILE:HG22	2.41	0.50
2:D:65:LYS:HB2	2:D:68:GLN:CG	2.30	0.50
2:B:127:LEU:HD12	2:B:127:LEU:O	2.11	0.50
1:G:657:ARG:HB3	1:G:662:LEU:HD13	1.92	0.50
1:A:61:LEU:HD11	1:A:64:ASN:HB2	1.93	0.50
1:E:107:ARG:O	1:E:112:LEU:O	2.29	0.50
1:G:34:LEU:HD22	1:G:46:ALA:HB1	1.94	0.50
1:A:252:ILE:HD12	1:A:252:ILE:H	1.76	0.50
2:D:51:LEU:HB3	2:D:54:PRO:HD2	1.91	0.50
1:G:277:ALA:HA	1:G:286:THR:HG22	1.92	0.50
1:E:613:LEU:O	1:E:616:SER:HB3	2.12	0.50
1:G:481:CYS:O	1:G:485:THR:OG1	2.30	0.50
1:A:313:TYR:CD1	1:A:313:TYR:N	2.79	0.50
1:C:481:CYS:O	1:C:485:THR:OG1	2.30	0.50
2:F:26:ILE:O	2:F:26:ILE:HG22	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:64:LEU:CD2	2:F:68:GLN:HB2	2.40	0.50
2:H:15:PHE:CD1	2:H:15:PHE:C	2.84	0.50
1:E:731:ARG:HH12	1:E:752:ALA:HB1	1.74	0.50
2:D:70:LEU:HG	2:D:74:GLN:HE22	1.76	0.50
1:G:53:LYS:HB2	1:G:56:GLU:O	2.11	0.50
1:A:283:ASP:N	1:A:318:ASN:ND2	2.60	0.50
1:E:283:ASP:H	1:E:318:ASN:HD21	1.60	0.50
1:E:34:LEU:HD22	1:E:46:ALA:HB1	1.94	0.50
1:A:670:LEU:O	1:A:673:THR:HG23	2.10	0.50
1:G:20:VAL:C	1:G:22:ASN:H	2.15	0.50
1:G:581:PHE:N	1:G:581:PHE:CD1	2.78	0.50
1:E:127:TYR:HB3	1:E:693:ALA:HB2	1.92	0.50
1:E:628:VAL:HG23	1:E:631:ILE:HG13	1.93	0.50
1:G:613:LEU:O	1:G:616:SER:HB3	2.12	0.50
2:B:15:PHE:CZ	2:B:26:ILE:HD13	2.47	0.50
1:G:153:ILE:HG21	1:G:189:LYS:HB3	1.94	0.50
1:G:147:HIS:C	1:G:149:MET:H	2.15	0.50
1:G:238:LYS:HE3	1:G:321:VAL:HG11	1.94	0.50
1:E:733:ARG:HG3	1:E:788:ARG:CD	2.42	0.50
1:E:721:PHE:O	1:E:723:ASN:N	2.45	0.50
1:A:120:PHE:CD1	1:A:120:PHE:N	2.71	0.50
2:B:97:LYS:C	2:B:98:GLU:HG3	2.30	0.50
1:E:619:LYS:HA	1:E:622:ALA:HB3	1.94	0.50
1:A:250:LYS:NZ	1:A:465:ASP:OD2	2.44	0.50
1:A:8:ASP:HA	1:A:11:LYS:HD2	1.93	0.50
1:A:373:THR:O	1:A:374:ASP:HB2	2.10	0.50
1:G:85:LYS:HG2	1:G:106:GLU:HB3	1.92	0.50
1:E:397:ASP:HB3	1:E:612:LEU:CD1	2.41	0.50
1:E:481:CYS:O	1:E:485:THR:OG1	2.30	0.50
1:G:552:ASP:O	1:G:555:PHE:HB3	2.12	0.50
1:C:223:GLN:C	1:C:225:LEU:H	2.15	0.50
1:A:449:ALA:C	1:A:451:ASP:H	2.14	0.50
1:G:449:ALA:C	1:G:451:ASP:H	2.15	0.50
2:D:64:LEU:HD21	2:D:72:MET:HE3	1.94	0.50
1:A:806:TYR:O	1:A:810:LYS:CG	2.60	0.50
1:A:733:ARG:HG3	1:A:788:ARG:CD	2.42	0.50
1:G:60:GLU:HG2	1:G:66:LYS:O	2.12	0.50
1:C:53:LYS:HB2	1:C:56:GLU:O	2.11	0.50
1:C:20:VAL:C	1:C:22:ASN:H	2.15	0.50
1:A:12:PHE:O	1:A:112:LEU:HD23	2.11	0.50
1:E:575:LEU:HD22	1:E:578: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:F:15:PHE:CE1	2:F:26:ILE:HD13	2.47	0.50
1:C:227:ALA:C	1:C:229:PRO:HD2	2.32	0.50
2:B:103:VAL:CG1	2:B:104:MET:H	2.22	0.50
1:C:733:ARG:HG3	1:C:788:ARG:CD	2.42	0.50
1:E:723:ASN:O	1:E:775:PHE:HA	2.11	0.50
2:D:69:PHE:HE1	2:D:73:MET:HG2	1.75	0.50
1:G:517:PHE:CE2	1:G:715:ARG:HB3	2.46	0.50
1:C:31:ALA:C	1:C:33:LYS:N	2.64	0.50
1:E:250:LYS:NZ	1:E:465:ASP:OD2	2.44	0.50
1:E:317:SER:O	1:E:318:ASN:HB2	2.11	0.50
1:A:743:PRO:CG	1:G:816:GLN:HB3	2.42	0.50
1:A:613:LEU:O	1:A:616:SER:HB3	2.12	0.50
1:E:271:LEU:HD21	1:E:663:TYR:CE1	2.47	0.50
1:G:397:ASP:HB3	1:G:612:LEU:CD1	2.42	0.50
1:A:513:ASN:O	1:A:513:ASN:ND2	2.45	0.50
1:C:228:ASN:N	1:C:229:PRO:HD2	2.27	0.50
2:H:64:LEU:HD21	2:H:72:MET:CE	2.42	0.50
1:C:416:LYS:CG	1:C:417:ALA:H	2.25	0.50
1:E:8:ASP:HA	1:E:11:LYS:HD2	1.93	0.50
1:A:164:MET:HE1	1:A:256:PHE:CE2	2.47	0.50
1:C:657:ARG:CB	1:C:657:ARG:HH11	2.24	0.50
1:G:568:LYS:HD3	1:G:584:LEU:O	2.12	0.50
1:A:568:LYS:HD3	1:A:584:LEU:O	2.12	0.50
1:E:361:GLN:C	1:E:363:GLY:N	2.66	0.50
1:C:61:LEU:HD11	1:C:64:ASN:HB2	1.93	0.50
1:G:61:LEU:HD11	1:G:64:ASN:HB2	1.93	0.50
1:E:53:LYS:HB2	1:E:56:GLU:O	2.11	0.50
1:E:268:GLU:O	1:E:268:GLU:HG3	2.12	0.49
1:E:313:TYR:N	1:E:313:TYR:CD1	2.80	0.49
1:G:269:THR:CB	1:G:443:LEU:HD13	2.42	0.49
1:C:438:LEU:O	1:C:441:TRP:HB3	2.11	0.49
1:G:399:THR:O	1:G:403:LEU:HD12	2.12	0.49
1:A:271:LEU:HD21	1:A:663:TYR:CE1	2.47	0.49
1:A:227:ALA:C	1:A:229:PRO:HD2	2.31	0.49
2:H:15:PHE:CE1	2:H:26:ILE:HD13	2.47	0.49
1:E:12:PHE:CD2	1:E:131:PRO:CD	2.85	0.49
1:C:806:TYR:O	1:C:810:LYS:CG	2.60	0.49
1:E:147:HIS:C	1:E:149:MET:H	2.15	0.49
1:E:238:LYS:HE3	1:E:321:VAL:HG11	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:238:LYS:HE3	1:A:321:VAL:HG11	1.94	0.49
2:D:70:LEU:C	2:D:74:GLN:NE2	2.66	0.49
1:G:504:GLU:OE2	1:G:508:GLU:HG2	2.13	0.49
1:C:504:GLU:OE2	1:C:508:GLU:HG2	2.12	0.49
1:C:362:LEU:HD23	1:C:387:VAL:HG21	1.94	0.49
1:A:60:GLU:HG2	1:A:66:LYS:O	2.12	0.49
1:G:250:LYS:NZ	1:G:465:ASP:OD2	2.44	0.49
2:F:52:GLY:C	2:F:53:ASN:HD22	2.16	0.49
1:C:700:LEU:HD21	1:C:704:GLN:NE2	2.26	0.49
1:A:393:ILE:HD13	1:A:398:PHE:HB2	1.94	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:C:513:ASN:ND2	1:C:513:ASN:O	2.45	0.49
1:E:505:TYR:HB3	1:E:510:ILE:HD11	1.93	0.49
1:E:806:TYR:O	1:E:810:LYS:CG	2.60	0.49
2:B:65:LYS:HB2	2:B:68:GLN:HE21	1.78	0.49
2:D:15:PHE:CE1	2:D:26:ILE:HD13	2.47	0.49
1:C:147:HIS:C	1:C:149:MET:H	2.15	0.49
1:E:61:LEU:HD11	1:E:64:ASN:HB2	1.93	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
1:G:252:ILE:H	1:G:252:ILE:HD12	1.77	0.49
1:E:255:ASN:O	1:E:263:VAL:HG12	2.11	0.49
1:E:305:LEU:HD22	1:E:354:ARG:CB	2.42	0.49
1:E:269:THR:CB	1:E:443:LEU:HD13	2.42	0.49
1:A:613:LEU:HD13	1:A:625:TRP:CE2	2.47	0.49
1:C:628:VAL:HG23	1:C:631:ILE:HG13	1.93	0.49
1:E:399:THR:O	1:E:403:LEU:HD12	2.12	0.49
1:A:553:THR:O	1:A:554:SER:C	2.51	0.49
1:A:552:ASP:HB3	1:A:595:SER:HA	1.93	0.49
1:A:223:GLN:C	1:A:225:LEU:H	2.15	0.49
1:E:237:ALA:HA	1:E:288:HIS:NE2	2.26	0.49
1:A:152:HIS:O	1:A:155:ALA:CB	2.58	0.49
1:C:568:LYS:HD3	1:C:584:LEU:O	2.12	0.49
1:E:713:GLY:CA	1:E:716:ILE:HD12	2.42	0.49
1:C:575:LEU:HD22	1:C:578:LYS:O	2.12	0.49
1:G:697:ASP:HB3	1:G:700:LEU:HD22	1.94	0.49
1:G:79:ASN:ND2	1:G:92:LEU:HB3	2.27	0.49
1:A:397:ASP:HB3	1:A:612:LEU:CD1	2.42	0.49
1:C:505:TYR:HB3	1:C:510:ILE:HD11	1.92	0.49
1:E:376:ALA:HB2	1:E:420:LYS:CA	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:552:ASP:O	1:C:555:PHE:HB3	2.12	0.49
1:G:513:ASN:ND2	1:G:513:ASN:O	2.45	0.49
1:G:416:LYS:CG	1:G:417:ALA:H	2.25	0.49
1:A:482:ILE:CG2	1:A:483:ASN:N	2.76	0.49
2:B:64:LEU:HD11	2:B:72:MET:HE1	1.94	0.49
2:D:64:LEU:HD21	2:D:72:MET:CE	2.42	0.49
1:G:742:ILE:CD1	1:G:752:ALA:HA	2.43	0.49
1:C:799:PHE:CE2	1:C:803:CYS:SG	3.06	0.49
1:G:733:ARG:HG3	1:G:788:ARG:CD	2.42	0.49
1:E:381:ASN:CB	1:E:385:GLN:HE21	2.25	0.49
1:A:361:GLN:C	1:A:363:GLY:N	2.66	0.49
1:E:66:LYS:HE3	1:E:67:LYS:H	1.78	0.49
1:E:20:VAL:C	1:E:22:ASN:H	2.15	0.49
1:A:34:LEU:HD22	1:A:46:ALA:HB1	1.94	0.49
1:A:575:LEU:HD22	1:A:578:LYS:O	2.12	0.49
1:G:305:LEU:HD22	1:G:354:ARG:CB	2.42	0.49
1:E:398:PHE:CD1	1:E:398:PHE:O	2.66	0.49
1:E:487:GLU:O	1:E:521:LEU:HD12	2.13	0.49
1:C:305:LEU:HD22	1:C:354:ARG:CB	2.42	0.49
1:A:269:THR:CB	1:A:443:LEU:HD13	2.41	0.49
1:G:398:PHE:CD1	1:G:398:PHE:O	2.66	0.49
1:E:513:ASN:O	1:E:513:ASN:ND2	2.45	0.49
2:F:64:LEU:HD21	2:F:72:MET:HE3	1.94	0.49
1:A:552:ASP:O	1:A:555:PHE:HB3	2.12	0.49
2:H:26:ILE:O	2:H:26:ILE:HG22	2.12	0.49
1:E:133:TYR:CE1	1:E:189:LYS:HD2	2.48	0.49
1:E:630:ARG:HH22	1:E:657:ARG:HB3	1.77	0.49
1:G:772:SER:O	1:G:772:SER:OG	2.28	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:E:60:GLU:HG2	1:E:66:LYS:O	2.12	0.49
1:E:31:ALA:C	1:E:33:LYS:N	2.64	0.49
1:E:283:ASP:N	1:E:318:ASN:ND2	2.60	0.49
1:C:252:ILE:H	1:C:252:ILE:HD12	1.77	0.49
1:A:742:ILE:CD1	1:A:752:ALA:HA	2.43	0.49
1:E:393:ILE:HD13	1:E:398:PHE:HB2	1.94	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
2:H:64:LEU:CD2	2:H:68:GLN:HB2	2.40	0.49
2:B:25:LYS:HE3	2:B:65:LYS:HZ3	1.76	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
1:C:382:THR:HA	1:C:385:GLN:OE1	2.13	0.49
1:E:362:LEU:HD23	1:E:387:VAL:HG21	1.94	0.49
1:G:31:ALA:C	1:G:33:LYS:N	2.64	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
1:C:476:SER:OG	1:C:478:GLU:OE1	2.29	0.49
1:G:815:ARG:HA	1:G:818:GLN:CG	2.43	0.49
2:B:53:ASN:N	2:B:54:PRO:HD3	2.28	0.49
1:C:175:CYS:HB2	1:C:183:LYS:HG3	1.95	0.49
1:E:274:LYS:O	1:E:276:ARG:N	2.45	0.49
1:A:398:PHE:O	1:A:398:PHE:CD1	2.66	0.49
1:G:475:ASN:OD1	1:G:590:VAL:HG12	2.13	0.49
1:C:618:ASP:CG	1:C:621:VAL:HG23	2.33	0.49
1:E:227:ALA:C	1:E:229:PRO:HD2	2.32	0.49
1:E:799:PHE:CE2	1:E:803:CYS:SG	3.06	0.49
1:G:227:ALA:C	1:G:229:PRO:HD2	2.32	0.49
2:B:49:LYS:HG3	2:B:50:VAL:N	2.23	0.49
2:B:50:VAL:HG11	2:B:72:MET:HG2	1.95	0.49
2:D:64:LEU:CD2	2:D:68:GLN:HB2	2.40	0.49
1:C:133:TYR:CE1	1:C:189:LYS:HD2	2.48	0.49
1:A:147:HIS:C	1:A:149:MET:H	2.15	0.49
1:G:806:TYR:O	1:G:810:LYS:CG	2.60	0.49
2:F:70:LEU:C	2:F:74:GLN:NE2	2.66	0.49
2:H:70:LEU:C	2:H:74:GLN:NE2	2.65	0.49
1:A:721:PHE:O	1:A:723:ASN:N	2.46	0.49
1:A:362:LEU:HD23	1:A:387:VAL:HG21	1.94	0.49
1:C:60:GLU:HG2	1:C:66:LYS:O	2.12	0.49
1:A:446:VAL:O	1:A:448:LYS:N	2.46	0.49
2:F:55:LYS:HB3	2:F:57:ASP:OD1	2.12	0.49
1:G:8:ASP:HA	1:G:11:LYS:HD2	1.93	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:A:697:ASP:HB3	1:A:700:LEU:HD22	1.94	0.49
1:E:618:ASP:CG	1:E:621:VAL:HG23	2.33	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:C:541:LEU:CD2	1:C:601:ASN:HD22	2.09	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:365:ILE:O	1:G:365:ILE:HG22	2.12	0.49
2:H:15:PHE:CZ	2:H:26:ILE:HD13	2.48	0.49
1:G:223:GLN:C	1:G:225:LEU:H	2.15	0.49
1:C:399:THR:O	1:C:403:LEU:HD12	2.12	0.49
1:C:742:ILE:CD1	1:C:752:ALA:HA	2.43	0.49
1:A:153:ILE:HG21	1:A:189:LYS:HB3	1.93	0.49
1:G:145:LYS:HG3	1:G:146:ARG:CD	2.43	0.49
1:A:381:ASN:CB	1:A:385:GLN:HE21	2.25	0.49
1:C:311:ASN:ND2	1:C:319:GLY:HA3	2.28	0.49
1:G:317:SER:O	1:G:318:ASN:HB2	2.11	0.49
1:G:575:LEU:HD22	1:G:578:LYS:O	2.12	0.49
1:E:252:ILE:H	1:E:252:ILE:HD12	1.77	0.49
1:G:231:LEU:N	1:G:231:LEU:HD23	2.28	0.49
2:D:55:LYS:HB3	2:D:57:ASP:OD1	2.13	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:416:LYS:CG	1:E:417:ALA:H	2.25	0.49
1:G:228:ASN:N	1:G:229:PRO:HD2	2.27	0.49
1:A:546:TRP:HA	1:A:602:MET:HE1	1.94	0.49
1:A:133:TYR:CE1	1:A:189:LYS:HD2	2.48	0.49
1:A:657:ARG:CB	1:A:657:ARG:HH11	2.24	0.49
1:C:721:PHE:O	1:C:723:ASN:N	2.45	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:C:283:ASP:H	1:C:318:ASN:HD21	1.59	0.49
1:E:575:LEU:HD22	1:E:579:THR:HA	1.95	0.49
1:A:575:LEU:O	1:A:576:LYS:C	2.51	0.49
1:C:268:GLU:O	1:C:268:GLU:HG3	2.12	0.49
1:E:272:LEU:HD22	1:E:439:PHE:CG	2.48	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:525:ILE:O	1:G:529:GLU:N	2.46	0.49
1:A:505:TYR:CE1	1:A:724:ARG:NH2	2.81	0.49
1:E:505:TYR:CE1	1:E:724:ARG:NH2	2.81	0.49
2:D:65:LYS:HB2	2:D:68:GLN:HE21	1.78	0.49
1:A:145:LYS:HG3	1:A:146:ARG:CD	2.43	0.49
1:G:311:ASN:ND2	1:G:319:GLY:HA3	2.28	0.49
1:A:697:ASP:O	1:A:701:VAL:HB	2.13	0.48
1:G:278:ILE:HG13	1:G:279:ARG:H	1.78	0.48
1:C:272:LEU:HD22	1:C:439:PHE:CG	2.48	0.48
1:C:398:PHE:CD1	1:C:398:PHE:O	2.66	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:619:LYS:HA	1:G:622:ALA:HB3	1.95	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
2:F:65:LYS:HB2	2:F:68:GLN:HE21	1.78	0.48
2:F:108:ILE:CG2	2:F:109:ARG:N	2.76	0.48
1:A:399:THR:O	1:A:403:LEU:HD12	2.12	0.48
1:G:133:TYR:CE1	1:G:189:LYS:HD2	2.48	0.48
1:C:36:TRP:HB2	1:C:76:GLN:CB	2.38	0.48
1:C:361:GLN:C	1:C:363:GLY:N	2.66	0.48
1:E:498:PHE:CD1	1:E:716:ILE:CD1	2.93	0.48
2:F:135:ASN:ND2	2:F:135:ASN:N	2.58	0.48
2:B:40:GLN:C	2:B:42:PRO:CD	2.81	0.48
1:A:175:CYS:HB2	1:A:183:LYS:HG3	1.95	0.48
2:H:52:GLY:C	2:H:53:ASN:HD22	2.15	0.48
1:C:697:ASP:HB3	1:C:700:LEU:HD22	1.94	0.48
1:E:475:ASN:OD1	1:E:590:VAL:HG12	2.13	0.48
1:G:487:GLU:O	1:G:521:LEU:HD12	2.13	0.48
1:G:405:PRO:HD2	1:G:417:ALA:HA	1.95	0.48
1:E:449:ALA:C	1:E:451:ASP:H	2.15	0.48
2:F:15:PHE:CZ	2:F:26:ILE:HD13	2.48	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
1:E:153:ILE:HG21	1:E:189:LYS:HB3	1.94	0.48
1:C:715:ARG:O	1:C:719:GLN:HB2	2.13	0.48
1:C:477:PHE:CD1	1:C:480:LEU:HD23	2.48	0.48
1:C:71:SER:C	1:C:73:ASP:H	2.17	0.48
1:E:573:LYS:NZ	1:E:589:LYS:NZ	2.61	0.48
1:G:573:LYS:NZ	1:G:589:LYS:NZ	2.61	0.48
1:G:487:GLU:OE1	1:G:585:HIS:ND1	2.45	0.48
1:E:806:TYR:CE1	2:F:146:MET:O	2.67	0.48
1:A:416:LYS:CG	1:A:417:ALA:H	2.26	0.48
1:E:79:ASN:OD1	1:E:80:PRO:HD2	2.13	0.48
1:C:405:PRO:HD2	1:C:417:ALA:HA	1.96	0.48
2:D:26:ILE:O	2:D:26:ILE:HG22	2.12	0.48
1:G:573:LYS:NZ	1:G:589:LYS:HZ3	2.10	0.48
1:A:573:LYS:NZ	1:A:589:LYS:NZ	2.61	0.48
1:E:39:SER:HB3	1:E:43:GLY:C	2.33	0.48
1:A:476:SER:OG	1:A:478:GLU:OE1	2.30	0.48
1:C:720:GLY:O	1:C:722:PRO:HD3	2.14	0.48
1:E:344:PHE:N	1:E:344:PHE:HD1	2.12	0.48
1:G:268:GLU:HG3	1:G:268:GLU:O	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:178:GLU:O	1:G:183:LYS:NZ	2.47	0.48
1:A:79:ASN:OD1	1:A:80:PRO:HD2	2.13	0.48
1:C:697:ASP:O	1:C:701:VAL:HB	2.14	0.48
1:E:280:GLN:CG	1:E:286:THR:HG23	2.43	0.48
1:E:405:PRO:HD2	1:E:417:ALA:HA	1.96	0.48
1:C:525:ILE:O	1:C:529:GLU:N	2.46	0.48
1:E:228:ASN:N	1:E:229:PRO:HD2	2.28	0.48
1:A:475:ASN:OD1	1:A:590:VAL:HG12	2.13	0.48
2:H:64:LEU:HD21	2:H:72:MET:HE3	1.95	0.48
1:G:36:TRP:HB2	1:G:76:GLN:CB	2.38	0.48
1:E:36:TRP:HB2	1:E:76:GLN:CB	2.38	0.48
1:G:799:PHE:CE2	1:G:803:CYS:SG	3.06	0.48
1:E:145:LYS:HG3	1:E:146:ARG:CD	2.43	0.48
2:B:70:LEU:C	2:B:74:GLN:NE2	2.66	0.48
1:E:138:ILE:HG21	1:E:196:VAL:CG2	2.43	0.48
1:A:713:GLY:CA	1:A:716:ILE:HD12	2.44	0.48
1:A:498:PHE:HD1	1:A:716:ILE:HD11	1.77	0.48
1:C:66:LYS:HE3	1:C:67:LYS:H	1.78	0.48
1:C:311:ASN:ND2	1:C:319:GLY:CA	2.77	0.48
1:C:581:PHE:HZ	1:C:597:TRP:CH2	2.31	0.48
1:A:815:ARG:HA	1:A:818:GLN:CG	2.43	0.48
1:E:601:ASN:O	1:E:601:ASN:OD1	2.31	0.48
1:C:305:LEU:HD12	1:C:307:LEU:CD2	2.42	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
2:B:64:LEU:HD21	2:B:72:MET:HE3	1.94	0.48
2:B:64:LEU:HD21	2:B:72:MET:CE	2.43	0.48
1:E:742:ILE:CD1	1:E:752:ALA:HA	2.44	0.48
1:C:238:LYS:HE3	1:C:321:VAL:HG11	1.94	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:E:581:PHE:HZ	1:E:597:TRP:CH2	2.31	0.48
1:C:275:SER:HB2	1:C:478:GLU:OE2	2.14	0.48
1:G:720:GLY:O	1:G:722:PRO:HD3	2.14	0.48
1:G:39:SER:HB3	1:G:43:GLY:C	2.33	0.48
1:A:183:LYS:HB2	4:A:998:ADP:O1B	2.14	0.48
2:D:52:GLY:C	2:D:53:ASN:HD22	2.16	0.48
1:G:280:GLN:CG	1:G:286:THR:HG23	2.43	0.48
1:C:301:MET:HG3	1:C:302:ARG:N	2.26	0.48
1:G:388:CYS:SG	1:G:398:PHE:HD2	2.37	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:505:TYR:CE1	1:G:724:ARG:NH2	2.81	0.48
1:A:466:ILE:HD12	1:A:467:ALA:O	2.14	0.48
1:G:806:TYR:CE1	2:H:146:MET:O	2.67	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:C:727:PHE:CE2	1:C:750:LYS:HA	2.48	0.48
1:G:58:THR:HA	1:G:69:THR:CG2	2.43	0.48
1:E:495:HIS:ND1	1:E:499:ILE:HG21	2.29	0.48
1:C:174:LEU:HD12	1:C:681:PHE:CD1	2.49	0.48
1:G:581:PHE:HZ	1:G:597:TRP:CH2	2.31	0.48
1:C:575:LEU:HD22	1:C:579:THR:HA	1.95	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:E:275:SER:HB2	1:E:478:GLU:OE2	2.14	0.48
1:A:720:GLY:C	1:A:722:PRO:HD3	2.34	0.48
1:E:697:ASP:O	1:E:701:VAL:HB	2.13	0.48
1:A:183:LYS:HE2	1:A:183:LYS:HB2	1.69	0.48
2:B:28:TYR:CD2	2:B:54:PRO:CG	2.95	0.48
1:C:280:GLN:CG	1:C:286:THR:HG23	2.43	0.48
2:H:65:LYS:HB2	2:H:68:GLN:HE21	1.78	0.48
1:E:76:GLN:HG2	1:E:96:ASN:CG	2.34	0.48
1:A:806:TYR:CE1	2:B:146:MET:O	2.67	0.48
1:E:147:HIS:CE1	1:E:148:GLU:HG2	2.49	0.48
1:G:772:SER:O	1:G:773:LYS:CB	2.54	0.48
1:E:477:PHE:CD1	1:E:480:LEU:HD23	2.48	0.48
1:C:167:ASP:O	1:C:168:ARG:C	2.52	0.48
1:G:71:SER:C	1:G:73:ASP:H	2.17	0.48
1:C:573:LYS:CE	1:C:589:LYS:HZ3	2.24	0.48
1:A:311:ASN:ND2	1:A:319:GLY:CA	2.77	0.48
1:E:194:LEU:CD1	1:E:461:LEU:HD22	2.44	0.48
1:G:194:LEU:HD11	1:G:461:LEU:HD22	1.96	0.48
1:E:344:PHE:N	1:E:344:PHE:CD1	2.82	0.48
1:G:697:ASP:O	1:G:701:VAL:HB	2.14	0.48
1:A:178:GLU:O	1:A:183:LYS:NZ	2.47	0.48
1:A:631:ILE:HG22	1:A:632:VAL:N	2.29	0.48
1:E:487:GLU:OE1	1:E:585:HIS:ND1	2.45	0.48
1:C:475:ASN:OD1	1:C:590:VAL:HG12	2.13	0.48
1:G:477:PHE:CD1	1:G:480:LEU:HD23	2.48	0.48
1:C:465:ASP:O	1:C:465:ASP:CG	2.52	0.48
1:C:281:ALA:O	1:C:318:ASN:ND2	2.47	0.48
1:E:281:ALA:O	1:E:318:ASN:ND2	2.47	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:194:LEU:HD11	1:A:461:LEU:HD22	1.96	0.48
1:A:581:PHE:HZ	1:A:597:TRP:CH2	2.31	0.48
1:C:717:CYS:HA	1:C:722:PRO:HG3	1.96	0.48
1:A:118:GLY:HA3	1:A:717:CYS:SG	2.54	0.48
1:G:275:SER:HB2	1:G:478:GLU:OE2	2.13	0.48
1:A:231:LEU:N	1:A:231:LEU:HD23	2.29	0.48
1:E:244:ASN:O	1:E:244:ASN:ND2	2.47	0.48
1:G:175:CYS:HB2	1:G:183:LYS:HG3	1.95	0.48
1:G:441:TRP:HE3	1:G:442:ILE:HD13	1.78	0.48
1:A:391:MET:O	1:A:618:ASP:HB2	2.14	0.48
1:A:618:ASP:CG	1:A:621:VAL:HG23	2.33	0.48
1:E:585:HIS:NE2	1:E:592:TYR:OH	2.47	0.48
2:F:49:LYS:HG3	2:F:50:VAL:N	2.22	0.48
1:C:806:TYR:CE1	2:D:146:MET:O	2.67	0.48
1:C:145:LYS:HG3	1:C:146:ARG:CD	2.43	0.48
2:F:70:LEU:CG	2:F:74:GLN:HE21	2.27	0.48
1:G:733:ARG:NH1	2:H:95:PHE:HD1	2.12	0.48
1:E:504:GLU:OE2	1:E:508:GLU:HG2	2.12	0.48
2:F:31:CYS:HG	2:F:69:PHE:HE2	1.61	0.48
1:C:517:PHE:CE2	1:C:715:ARG:HB3	2.46	0.48
2:D:105:GLY:HA2	2:D:138:ILE:CD1	2.44	0.48
1:A:477:PHE:CD1	1:A:480:LEU:HD23	2.48	0.48
1:G:167:ASP:O	1:G:168:ARG:C	2.52	0.48
1:E:71:SER:C	1:E:73:ASP:H	2.17	0.48
1:G:735:GLU:HG3	1:G:756:MET:HE1	1.94	0.48
1:G:311:ASN:ND2	1:G:319:GLY:CA	2.77	0.48
1:G:575:LEU:O	1:G:576:LYS:C	2.51	0.48
1:G:118:GLY:HA3	1:G:717:CYS:SG	2.54	0.48
1:C:39:SER:HB3	1:C:43:GLY:C	2.33	0.48
1:G:244:ASN:O	1:G:244:ASN:ND2	2.47	0.48
1:E:720:GLY:O	1:E:722:PRO:HD3	2.13	0.48
2:D:4:SER:O	2:D:8:THR:OG1	2.28	0.48
1:G:89:MET:CG	1:G:92:LEU:HD11	2.32	0.48
1:C:79:ASN:OD1	1:C:80:PRO:HD2	2.13	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:C:301:MET:HE3	1:C:305:LEU:HD11	1.96	0.48
1:G:553:THR:O	1:G:554:SER:C	2.52	0.48
1:A:288:HIS:HB3	1:A:292:TYR:CE1	2.49	0.48
2:F:86:GLU:H	2:F:86:GLU:CD	2.18	0.48
2:B:64:LEU:CD2	2:B:68:GLN:HB2	2.40	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:140:TYR:CE1	2:B:141:GLU:CG	2.97	0.48
1:E:547:PHE:CD1	1:E:548:PRO:HD2	2.49	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:G:630:ARG:HH22	1:G:657:ARG:HB3	1.77	0.48
1:E:368:LYS:HZ3	1:E:379:PRO:CG	2.26	0.48
1:A:727:PHE:CE2	1:A:750:LYS:HA	2.49	0.48
1:G:361:GLN:C	1:G:363:GLY:N	2.66	0.48
1:G:713:GLY:CA	1:G:716:ILE:HD12	2.44	0.48
1:G:281:ALA:O	1:G:318:ASN:ND2	2.47	0.48
1:G:194:LEU:CD1	1:G:461:LEU:HD22	2.44	0.48
1:E:717:CYS:HA	1:E:722:PRO:HG3	1.96	0.48
1:E:118:GLY:HA3	1:E:717:CYS:SG	2.53	0.48
1:E:727:PHE:CE2	1:E:750:LYS:HA	2.49	0.48
2:B:55:LYS:HB3	2:B:57:ASP:OD1	2.13	0.47
1:E:441:TRP:HE3	1:E:442:ILE:HD13	1.77	0.47
1:C:274:LYS:O	1:C:276:ARG:N	2.46	0.47
1:G:601:ASN:O	1:G:601:ASN:OD1	2.31	0.47
1:E:365:ILE:HG22	1:E:365:ILE:O	2.12	0.47
1:E:223:GLN:C	1:E:225:LEU:H	2.15	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
1:G:547:PHE:CD1	1:G:548:PRO:HD2	2.49	0.47
1:C:721:PHE:C	1:C:723:ASN:H	2.18	0.47
1:A:504:GLU:OE2	1:A:508:GLU:HG2	2.13	0.47
1:E:498:PHE:HD1	1:E:716:ILE:HD11	1.78	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:G:446:VAL:O	1:G:448:LYS:N	2.47	0.47
1:G:174:LEU:HD12	1:G:681:PHE:CD1	2.49	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
2:F:4:SER:O	2:F:8:THR:OG1	2.28	0.47
1:C:178:GLU:O	1:C:183:LYS:NZ	2.47	0.47
1:C:182:GLY:N	4:C:998:ADP:O1B	2.47	0.47
1:G:274:LYS:O	1:G:276:ARG:N	2.47	0.47
1:A:388:CYS:SG	1:A:398:PHE:HD2	2.37	0.47
1:E:388:CYS:SG	1:E:398:PHE:HD2	2.37	0.47
1:E:398:PHE:HB2	1:E:612:LEU:HD21	1.97	0.47
1:A:757:ILE:HG21	1:A:767:TYR:CZ	2.49	0.47
1:C:601:ASN:O	1:C:601:ASN:OD1	2.31	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:288:HIS:HB3	1:C:292:TYR:CE1	2.49	0.47
1:E:76:GLN:HG2	1:E:96:ASN:CB	2.44	0.47
1:G:147:HIS:CE1	1:G:148:GLU:HG2	2.49	0.47
1:C:530:ARG:HA	1:C:531:PRO:HD3	1.72	0.47
1:C:138:ILE:HG21	1:C:196:VAL:CG2	2.43	0.47
1:E:382:THR:HA	1:E:385:GLN:OE1	2.14	0.47
1:A:715:ARG:O	1:A:719:GLN:HB2	2.14	0.47
1:C:573:LYS:NZ	1:C:589:LYS:NZ	2.61	0.47
1:A:44:PHE:HD2	1:A:101:LEU:HD22	1.79	0.47
1:E:174:LEU:HD12	1:E:681:PHE:CD1	2.49	0.47
1:G:575:LEU:HD22	1:G:579:THR:HA	1.95	0.47
1:E:39:SER:OG	1:E:42:HIS:N	2.43	0.47
1:A:39:SER:HB3	1:A:43:GLY:C	2.33	0.47
1:C:231:LEU:N	1:C:231:LEU:HD23	2.28	0.47
1:E:274:LYS:NZ	1:E:432:LYS:HD2	2.29	0.47
1:C:441:TRP:HE3	1:C:442:ILE:HD13	1.78	0.47
1:G:466:ILE:HD12	1:G:467:ALA:O	2.14	0.47
1:C:388:CYS:SG	1:C:398:PHE:HD2	2.37	0.47
1:A:280:GLN:CG	1:A:286:THR:HG23	2.43	0.47
1:A:274:LYS:NZ	1:A:432:LYS:HD2	2.29	0.47
1:C:553:THR:O	1:C:554:SER:C	2.51	0.47
1:E:757:ILE:HG21	1:E:767:TYR:CZ	2.49	0.47
1:E:288:HIS:HB3	1:E:292:TYR:CE1	2.49	0.47
1:G:395:VAL:HG23	1:G:396:THR:HG23	1.97	0.47
1:A:174:LEU:HD12	1:A:681:PHE:CD1	2.49	0.47
1:A:717:CYS:HA	1:A:722:PRO:HG3	1.96	0.47
1:G:344:PHE:N	1:G:344:PHE:CD1	2.83	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:E:663:TYR:C	1:E:665:GLU:H	2.18	0.47
1:G:663:TYR:C	1:G:665:GLU:H	2.18	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:A:405:PRO:HD2	1:A:417:ALA:HA	1.97	0.47
1:A:799:PHE:HB2	2:B:88:TYR:CD1	2.49	0.47
1:A:511:GLU:CD	2:H:145:ARG:NH1	2.67	0.47
1:A:489:LEU:HD12	1:A:489:LEU:C	2.27	0.47
1:E:657:ARG:CB	1:E:657:ARG:HH11	2.24	0.47
1:G:721:PHE:C	1:G:723:ASN:H	2.18	0.47
1:C:381:ASN:CB	1:C:385:GLN:HE21	2.25	0.47
1:C:120:PHE:N	1:C:120:PHE:CD1	2.72	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:C:58:THR:HA	1:C:69:THR:CG2	2.43	0.47
1:A:194:LEU:CD1	1:A:461:LEU:HD22	2.44	0.47
1:A:575:LEU:HD22	1:A:579:THR:HA	1.95	0.47
1:A:275:SER:HB2	1:A:478:GLU:OE2	2.14	0.47
1:C:176:THR:OG1	1:C:177:GLY:N	2.47	0.47
1:E:466:ILE:HD12	1:E:467:ALA:O	2.14	0.47
1:C:274:LYS:C	1:C:276:ARG:N	2.68	0.47
1:A:313:TYR:HD1	1:A:313:TYR:N	2.13	0.47
1:E:799:PHE:HB2	2:F:88:TYR:CD1	2.50	0.47
1:E:152:HIS:O	1:E:155:ALA:CB	2.58	0.47
2:D:140:TYR:CE1	2:D:141:GLU:CG	2.97	0.47
1:A:733:ARG:NH1	2:B:95:PHE:HD1	2.13	0.47
1:E:733:ARG:NH1	2:F:95:PHE:HD1	2.12	0.47
1:A:721:PHE:C	1:A:723:ASN:H	2.18	0.47
1:C:362:LEU:HD23	1:C:387:VAL:HG11	1.96	0.47
1:G:498:PHE:N	1:G:498:PHE:CD1	2.82	0.47
1:C:713:GLY:CA	1:C:716:ILE:HD12	2.44	0.47
1:C:446:VAL:O	1:C:448:LYS:N	2.47	0.47
1:E:58:THR:HA	1:E:69:THR:CG2	2.43	0.47
1:E:819:LEU:CD1	1:E:820:GLY:N	2.78	0.47
1:A:819:LEU:CD1	1:A:820:GLY:N	2.77	0.47
1:A:281:ALA:O	1:A:318:ASN:ND2	2.47	0.47
1:C:575:LEU:O	1:C:576:LYS:C	2.51	0.47
1:E:720:GLY:C	1:E:722:PRO:HD3	2.35	0.47
1:E:815:ARG:HA	1:E:818:GLN:CG	2.44	0.47
1:E:391:MET:O	1:E:618:ASP:HB2	2.15	0.47
1:C:391:MET:O	1:C:618:ASP:HB2	2.15	0.47
1:G:607:ASP:HA	1:G:610:THR:CB	2.42	0.47
1:A:663:TYR:C	1:A:665:GLU:H	2.18	0.47
1:E:146:ARG:H	1:E:146:ARG:CD	2.28	0.47
1:G:489:LEU:HD12	1:G:489:LEU:C	2.28	0.47
1:A:66:LYS:HE3	1:A:67:LYS:H	1.78	0.47
1:E:446:VAL:O	1:E:448:LYS:N	2.47	0.47
1:C:103:ASN:ND2	1:C:107:ARG:HD2	2.30	0.47
1:A:103:ASN:ND2	1:A:107:ARG:HD2	2.30	0.47
1:G:103:ASN:ND2	1:G:107:ARG:HD2	2.30	0.47
1:A:244:ASN:ND2	1:A:244:ASN:O	2.47	0.47
1:C:244:ASN:ND2	1:C:244:ASN:O	2.47	0.47
1:C:194:LEU:HD11	1:C:461:LEU:HD22	1.96	0.47
1:C:194:LEU:CD1	1:C:461:LEU:HD22	2.44	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:183:LYS:HB2	1:G:183:LYS:HE2	1.67	0.47
2:H:52:GLY:O	2:H:53:ASN:HB2	2.15	0.47
1:G:274:LYS:NZ	1:G:432:LYS:HD2	2.30	0.47
1:A:628:VAL:HG23	1:A:631:ILE:HG13	1.93	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:G:663:TYR:CE1	1:G:667:LEU:HB2	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
1:C:757:ILE:HG21	1:C:767:TYR:CZ	2.50	0.47
1:A:526:GLU:HA	1:A:529:GLU:HB3	1.97	0.47
2:H:65:LYS:HB2	2:H:68:GLN:CG	2.30	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
2:B:70:LEU:CG	2:B:74:GLN:HE21	2.27	0.47
1:E:161:TYR:CE1	1:E:165:LEU:CD1	2.93	0.47
1:A:547:PHE:CD2	1:A:548:PRO:HD2	2.49	0.47
1:G:138:ILE:HG21	1:G:196:VAL:CG2	2.43	0.47
1:A:382:THR:HA	1:A:385:GLN:OE1	2.14	0.47
1:C:361:GLN:O	1:C:363:GLY:N	2.48	0.47
1:G:715:ARG:O	1:G:719:GLN:HB2	2.13	0.47
1:E:715:ARG:O	1:E:719:GLN:HB2	2.13	0.47
2:H:105:GLY:HA2	2:H:138:ILE:CD1	2.44	0.47
1:C:619:LYS:HA	1:C:622:ALA:HB3	1.95	0.47
1:A:619:LYS:HA	1:A:622:ALA:HB3	1.95	0.47
1:G:495:HIS:ND1	1:G:499:ILE:HG21	2.29	0.47
1:E:311:ASN:ND2	1:E:319:GLY:CA	2.78	0.47
1:A:395:VAL:HG23	1:A:396:THR:HG23	1.96	0.47
1:E:103:ASN:ND2	1:E:107:ARG:HD2	2.30	0.47
1:A:720:GLY:O	1:A:722:PRO:HD3	2.14	0.47
1:A:344:PHE:CD1	1:A:344:PHE:N	2.83	0.47
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: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
1:A:36:TRP:HB2	1:A:76:GLN:CB	2.38	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:A:138:ILE:HG21	1:A:196:VAL:CG2	2.43	0.47
1:G:361:GLN:O	1:G:363:GLY:N	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:517:PHE:CE2	1:E:715:ARG:HB3	2.45	0.47
1:A:816:GLN:NE2	2:B:17:LEU:CD2	2.77	0.47
1:A:495:HIS:ND1	1:A:499:ILE:HG21	2.30	0.47
1:A:283:ASP:H	1:A:318:ASN:HD21	1.61	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:C:631:ILE:HG22	1:C:632:VAL:N	2.30	0.47
1:E:407:ILE:HD12	1:E:416:LYS:H	1.80	0.47
1:C:585:HIS:NE2	1:C:592:TYR:OH	2.47	0.47
1:G:543:GLU:O	1:G:546:TRP:N	2.45	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
2:H:3:PHE:CZ	2:H:73:MET:HE3	2.50	0.47
1:E:194:LEU:HD11	1:E:461:LEU:HD22	1.96	0.47
1:G:717:CYS:HA	1:G:722:PRO:HG3	1.96	0.47
1:G:344:PHE:HD1	1:G:344:PHE:N	2.12	0.47
1:E:231:LEU:HD23	1:E:231:LEU:N	2.28	0.47
1:C:502:GLN:O	1:C:505:TYR:HB2	2.15	0.47
1:G:146:ARG:H	1:G:146:ARG:CD	2.28	0.47
1:A:465:ASP:O	1:A:465:ASP:CG	2.52	0.47
2:D:102:THR:HG22	2:D:139:ASN:HA	1.96	0.47
1:C:344:PHE:CD1	1:C:344:PHE:N	2.83	0.47
2:D:40:GLN:C	2:D:42:PRO:CD	2.84	0.46
1:A:268:GLU:HG3	1:A:268:GLU:O	2.13	0.46
2:D:53:ASN:N	2:D:54:PRO:HD3	2.30	0.46
1:C:184:THR:O	1:C:187:THR:N	2.48	0.46
1:G:278:ILE:CG2	1:G:432:LYS:NZ	2.78	0.46
1:A:603:ASP:O	1:A:632:VAL:HG21	2.14	0.46
1:E:226:GLN:CG	1:E:338:ALA:HA	2.45	0.46
1:A:147:HIS:CE1	1:A:148:GLU:HG2	2.49	0.46
2:D:87:ASP:HA	2:D:90:GLU:HB3	1.95	0.46
2:H:140:TYR:CE1	2:H:141:GLU:CG	2.96	0.46
1:C:146:ARG:CD	1:C:146:ARG:H	2.28	0.46
1:C:733:ARG:NH1	2:D:95:PHE:HD1	2.12	0.46
1:C:135:GLU:HB2	1:C:213:PRO:CD	2.46	0.46
1:A:167:ASP:O	1:A:168:ARG:C	2.52	0.46
1:A:71:SER:C	1:A:73:ASP:H	2.17	0.46
1:C:162:ARG:O	1:C:166:GLN:CG	2.63	0.46
1:C:495:HIS:ND1	1:C:499:ILE:HG21	2.29	0.46
1:A:699:HIS:HA	1:A:702:LEU:HB3	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:52:GLY:O	2:F:53:ASN:HB2	2.15	0.46
1:E:442:ILE:HG12	1:E:442:ILE:H	1.60	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:757:ILE:HG21	1:G:767:TYR:CZ	2.50	0.46
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:465:ASP:O	1:E:465:ASP:CG	2.52	0.46
1:G:699:HIS:HA	1:G:702:LEU:HB3	1.97	0.46
1:A:664:LYS:O	1:A:668:THR:HG23	2.15	0.46
2:D:16:GLN:H	2:D:16:GLN:HG2	1.40	0.46
1:G:182:GLY:O	1:G:183:LYS:C	2.52	0.46
1:A:604:PRO:O	1:A:605:LEU:HB3	2.15	0.46
1:G:526:GLU:HA	1:G:529:GLU:HB3	1.97	0.46
1:G:407:ILE:HD12	1:G:416:LYS:H	1.80	0.46
2:D:15:PHE:CZ	2:D:26:ILE:HB	2.51	0.46
1:C:799:PHE:HB2	2:D:88:TYR:CD1	2.49	0.46
1:E:361:GLN:O	1:E:363:GLY:N	2.49	0.46
1:A:22:ASN:OD1	1:A:24:LEU:HB2	2.16	0.46
1:E:747:MET:CE	1:E:747:MET:HA	2.46	0.46
2:D:27:LEU:HD23	2:D:28:TYR:H	1.80	0.46
2:H:53:ASN:N	2:H:54:PRO:HD3	2.31	0.46
1:G:585:HIS:NE2	1:G:592:TYR:OH	2.47	0.46
1:C:625:TRP:O	1:C:628:VAL:HG12	2.16	0.46
1:G:631:ILE:HG22	1:G:632:VAL:N	2.30	0.46
2:F:87:ASP:HA	2:F:90:GLU:HB3	1.96	0.46
2:H:70:LEU:CG	2:H:74:GLN:HE21	2.27	0.46
1:E:721:PHE:C	1:E:723:ASN:H	2.18	0.46
1:G:362:LEU:HD23	1:G:387:VAL:HG11	1.96	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: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:86:VAL:HG12	1:E:103:ASN:OD1	2.16	0.46
1:C:344:PHE:N	1:C:344:PHE:HD1	2.12	0.46
1:E:664:LYS:O	1:E:668:THR:HG23	2.16	0.46
1:G:182:GLY:O	1:G:184:THR:N	2.48	0.46
1:A:176:THR:OG1	1:A:177:GLY:N	2.46	0.46
2:D:28:TYR:CD2	2:D:54:PRO:CG	2.99	0.46
1:E:442:ILE:O	1:E:445:ARG:N	2.39	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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
2:F:84:CYS:O	2:F:88:TYR:N	2.44	0.46
1:C:144:LYS:HG2	1:C:149:MET:HG3	1.97	0.46
1:A:630:ARG:HH22	1:A:657:ARG:HB3	1.77	0.46
1:E:362:LEU:HD23	1:E:387:VAL:HG11	1.96	0.46
1:C:395:VAL:HG23	1:C:396:THR:HG23	1.97	0.46
1:A:344:PHE:HD1	1:A:344:PHE:N	2.13	0.46
1:A:224:LEU:O	1:A:224:LEU:HD12	2.16	0.46
1:G:176:THR:OG1	1:G:177:GLY:N	2.47	0.46
2:B:52:GLY:C	2:B:53:ASN:HD22	2.19	0.46
1:G:234:PHE:HB3	1:G:289:ILE:CG2	2.37	0.46
1:E:607:ASP:HA	1:E:610:THR:CB	2.43	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:E:502:GLN:O	1:E:505:TYR:HB2	2.15	0.46
2:F:15:PHE:CZ	2:F:26:ILE:HB	2.51	0.46
1:A:487:GLU:OE1	1:A:585:HIS:ND1	2.45	0.46
1:A:226:GLN:HG2	1:A:341:ILE:HG13	1.98	0.46
2:H:49:LYS:HG3	2:H:50:VAL:N	2.22	0.46
1:E:114:TYR:CE2	1:E:153:ILE:CB	2.88	0.46
1:G:799:PHE:HB2	2:H:88:TYR:CD1	2.50	0.46
1:E:310:PHE:CE1	1:E:320:HIS:HD2	2.34	0.46
1:C:238:LYS:HB2	1:C:243:ASP:O	2.16	0.46
2:D:70:LEU:CG	2:D:74:GLN:HE21	2.27	0.46
2:B:126:GLN:HG3	2:B:126:GLN:H	1.47	0.46
1:G:117:SER:OG	1:G:122:VAL:HG23	2.16	0.46
1:E:135:GLU:HB2	1:E:213:PRO:CD	2.46	0.46
1:G:778:THR:C	1:G:780:VAL:H	2.19	0.46
2:B:105:GLY:HA2	2:B:138:ILE:CD1	2.45	0.46
1:G:31:ALA:O	1:G:33:LYS:N	2.49	0.46
1:E:31:ALA:O	1:E:33:LYS:N	2.49	0.46
1:A:735:GLU:HG3	1:A:756:MET:HE1	1.95	0.46
1:A:39:SER:OG	1:A:42:HIS:N	2.43	0.46
1:C:563:GLN:O	1:C:565:ASN:N	2.49	0.46
1:C:224:LEU:HD12	1:C:224:LEU:O	2.16	0.46
1:E:178:GLU:O	1:E:183:LYS:NZ	2.49	0.46
1:G:274:LYS:C	1:G:276:ARG:N	2.68	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:604:PRO:O	1:C:605:LEU:HB3	2.15	0.46
1:C:398:PHE:HB2	1:C:612:LEU:HD21	1.97	0.46
1:A:274:LYS:C	1:A:276:ARG:N	2.69	0.46
1:G:502:GLN:O	1:G:505:TYR:HB2	2.15	0.46
1:C:407:ILE:HD12	1:C:416:LYS:H	1.81	0.46
1:C:361:GLN:C	1:C:363:GLY:H	2.19	0.46
1:C:31:ALA:O	1:C:33:LYS:N	2.49	0.46
1:A:101:LEU:HD21	1:A:105:ARG:NH2	2.31	0.46
2:F:102:THR:HG22	2:F:139:ASN:HA	1.96	0.46
1:G:664:LYS:O	1:G:668:THR:HG23	2.16	0.46
2:H:28:TYR:CD2	2:H:54:PRO:CG	2.99	0.46
1:E:604:PRO:O	1:E:605:LEU:HB3	2.15	0.46
1:C:226:GLN:HG2	1:C:341:ILE:HG13	1.98	0.46
1:A:36:TRP:CE2	1:A:78:MET:HG3	2.51	0.46
1:G:226:GLN:HG2	1:G:341:ILE:HG13	1.98	0.46
1:E:543:GLU:O	1:E:546:TRP:N	2.44	0.46
1:G:152:HIS:O	1:G:155:ALA:CB	2.58	0.46
2:H:103:VAL:CG1	2:H:104:MET:H	2.22	0.46
2:F:40:GLN:C	2:F:42:PRO:CD	2.84	0.46
1:E:498:PHE:CE1	1:E:716:ILE:HD11	2.50	0.46
1:A:778:THR:C	1:A:780:VAL:H	2.20	0.46
1:A:404:THR:O	1:A:404:THR:OG1	2.33	0.46
1:C:520:ASP:OD1	1:C:522:GLN:HB2	2.16	0.46
1:A:87:GLU:OE1	1:A:107:ARG:NH2	2.49	0.46
1:E:476:SER:OG	1:E:478:GLU:OE1	2.29	0.46
1:A:563:GLN:O	1:A:565:ASN:N	2.49	0.46
1:A:184:THR:O	1:A:187:THR:N	2.48	0.46
2:F:28:TYR:CD2	2:F:54:PRO:CG	2.99	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:A:397:ASP:HB3	1:A:612:LEU:HD11	1.98	0.46
1:E:625:TRP:O	1:E:628:VAL:HG12	2.16	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
1:G:625:TRP:O	1:G:628:VAL:HG12	2.16	0.46
1:A:560:ILE:H	1:A:560:ILE:HG13	1.49	0.46
1:A:407:ILE:CG2	1:A:408:LYS:N	2.79	0.46
1:E:13:LEU:HD11	1:E:137:ILE:CG2	2.45	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:108:ILE:HD13	2:D:108:ILE:HA	1.73	0.46
1:E:238:LYS:HB2	1:E:243:ASP:O	2.16	0.46
1:A:117:SER:OG	1:A:122:VAL:HG23	2.15	0.46
1:E:498:PHE:CD1	1:E:498:PHE:N	2.83	0.46
1:G:465:ASP:CG	1:G:465:ASP:O	2.52	0.46
1:G:162:ARG:O	1:G:166:GLN:CG	2.63	0.46
1:E:520:ASP:OD1	1:E:522:GLN:HB2	2.16	0.46
1:E:224:LEU:O	1:E:224:LEU:HD12	2.16	0.46
1:E:274:LYS:C	1:E:276:ARG:N	2.68	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:A:287:PHE:O	1:A:289:ILE:N	2.49	0.46
1:G:391:MET:HB3	1:G:393:ILE:CG1	2.46	0.46
1:G:604:PRO:O	1:G:605:LEU:HB3	2.15	0.46
1:A:502:GLN:O	1:A:505:TYR:HB2	2.15	0.46
1:E:36:TRP:CE2	1:E:78:MET:HG3	2.51	0.46
1:A:146:ARG:CD	1:A:146:ARG:H	2.29	0.46
2:D:143:LEU:O	2:D:147:VAL:HG22	2.16	0.46
2:H:87:ASP:HA	2:H:90:GLU:HB3	1.97	0.46
1:E:547:PHE:CE2	1:E:549:LYS:HB3	2.33	0.46
1:C:253:ARG:HG3	1:C:460:PHE:HD1	1.81	0.46
1:A:22:ASN:HA	1:A:23:PRO:HD3	1.84	0.46
1:C:345:THR:N	1:C:348:GLU:HB2	2.31	0.46
2:D:102:THR:HG22	2:D:139:ASN:CB	2.47	0.46
1:G:224:LEU:O	1:G:224:LEU:HD12	2.16	0.46
1:E:610:THR:HG22	1:E:611:SER:N	2.30	0.45
1:E:541:LEU:CD2	1:E:601:ASN:HD22	2.09	0.45
1:G:610:THR:HG22	1:G:611:SER:N	2.31	0.45
1:A:509:GLY:O	1:A:510:ILE:C	2.54	0.45
1:E:137:ILE:N	1:E:137:ILE:HD13	2.31	0.45
2:B:89:VAL:HA	2:B:92:LEU:HG	1.98	0.45
1:G:114:TYR:HE2	1:G:153:ILE:CB	2.24	0.45
2:H:108:ILE:HD13	2:H:108:ILE:HA	1.74	0.45
1:A:310:PHE:CE1	1:A:320:HIS:HD2	2.34	0.45
2:H:70:LEU:HG	2:H:74:GLN:HE22	1.77	0.45
1:G:788:ARG:HH22	2:H:95:PHE:HE1	1.64	0.45
1:G:135:GLU:HB2	1:G:213:PRO:CD	2.46	0.45
1:G:498:PHE:CE1	1:G:716:ILE:HD11	2.50	0.45
1:G:87:GLU:OE1	1:G:107:ARG:NH2	2.49	0.45
1:E:87:GLU:OE1	1:E:107:ARG:NH2	2.49	0.45
1:E:345:THR:N	1:E:348:GLU:HB2	2.32	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:102:THR:HG22	2:B:139:ASN:CB	2.46	0.45
1:E:176:THR:OG1	1:E:177:GLY:N	2.46	0.45
1:E:125:ASN:CB	1:E:687:PRO:HD3	2.42	0.45
2:B:52:GLY:O	2:B:53:ASN:HB2	2.16	0.45
2:F:53:ASN:N	2:F:54:PRO:HD3	2.31	0.45
1:E:352:ILE:HG23	1:E:620:PHE:HZ	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
1:E:631:ILE:HG22	1:E:632:VAL:N	2.31	0.45
1:C:234:PHE:HB3	1:C:289:ILE:CG2	2.37	0.45
1:G:469:PHE:CD1	1:G:483:ASN:ND2	2.84	0.45
1:C:391:MET:HB3	1:C:393:ILE:CG1	2.46	0.45
1:A:407:ILE:HD12	1:A:416:LYS:H	1.81	0.45
2:D:89:VAL:O	2:D:90:GLU:C	2.55	0.45
2:H:89:VAL:HA	2:H:92:LEU:HG	1.98	0.45
1:E:117:SER:OG	1:E:122:VAL:HG23	2.16	0.45
1:A:135:GLU:HB2	1:A:213:PRO:CD	2.46	0.45
1:E:101:LEU:HD21	1:E:105:ARG:NH2	2.31	0.45
1:C:819:LEU:CD1	1:C:820:GLY:N	2.79	0.45
2:F:58:GLU:H	2:F:58:GLU:HG2	1.36	0.45
1:A:311:ASN:ND2	1:A:319:GLY:HA3	2.29	0.45
1:C:22:ASN:OD1	1:C:24:LEU:HB2	2.16	0.45
2:F:102:THR:HG22	2:F:139:ASN:CB	2.47	0.45
2:B:102:THR:HG22	2:B:139:ASN:HA	1.97	0.45
1:G:747:MET:HA	1:G:747:MET:CE	2.46	0.45
2:H:40:GLN:C	2:H:42:PRO:CD	2.84	0.45
1:E:184:THR:O	1:E:187:THR:N	2.48	0.45
1:A:809:ARG:HD3	2:B:36:ARG:HB3	1.98	0.45
1:G:83:PHE:HZ	1:G:93:THR:HG23	1.82	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:C:610:THR:HG22	1:C:611:SER:N	2.31	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:15:PHE:CZ	2:B:26:ILE:HB	2.51	0.45
2:B:143:LEU:O	2:B:147:VAL:HG22	2.17	0.45
2:D:103:VAL:CG1	2:D:104:MET:N	2.79	0.45
1:C:310:PHE:CE1	1:C:320:HIS:HD2	2.34	0.45
2:B:70:LEU:HG	2:B:74:GLN:HE22	1.76	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: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:819:LEU:CD1	1:G:820:GLY:N	2.78	0.45
1:E:183:LYS:HE2	1:E:183:LYS:HB2	1.69	0.45
1:E:234:PHE:HB3	1:E:289:ILE:CG2	2.37	0.45
1:G:541:LEU:CD2	1:G:601:ASN:HD22	2.09	0.45
2:F:103:VAL:CG1	2:F:104:MET:H	2.22	0.45
2:F:103:VAL:HG23	2:F:140:TYR:CD2	2.52	0.45
1:G:226:GLN:CG	1:G:338:ALA:HA	2.46	0.45
1:A:144:LYS:HG2	1:A:149:MET:HG3	1.97	0.45
1:E:547:PHE:CD2	1:E:549:LYS:N	2.85	0.45
1:E:735:GLU:HG3	1:E:756:MET:HE2	1.98	0.45
1:C:173:ILE:HA	1:C:680:ASN:HB2	1.99	0.45
1:E:425:PHE:C	1:E:425:PHE:CD1	2.89	0.45
1:E:558:LYS:O	1:E:561:GLN:HB2	2.16	0.45
1:A:558:LYS:O	1:A:561:GLN:HB2	2.16	0.45
1:C:664:LYS:O	1:C:668:THR:HG23	2.16	0.45
1:A:697:ASP:CG	1:A:700:LEU:HB3	2.37	0.45
2:D:52:GLY:O	2:D:53:ASN:HB2	2.15	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:C:278:ILE:CG2	1:C:432:LYS:NZ	2.79	0.45
1:E:226:GLN:HG2	1:E:341:ILE:HG13	1.98	0.45
2:H:15:PHE:CZ	2:H:26:ILE:HB	2.51	0.45
1:E:89:MET:CG	1:E:92:LEU:HD11	2.32	0.45
1:A:114:TYR:CE2	1:A:153:ILE:CB	2.88	0.45
1:E:197:VAL:O	1:E:197:VAL:CG1	2.63	0.45
2:D:103:VAL:HG23	2:D:140:TYR:CD2	2.52	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
1:A:238:LYS:HB2	1:A:243:ASP:O	2.16	0.45
1:C:36:TRP:CE2	1:C:78:MET:HG3	2.51	0.45
1:C:778:THR:C	1:C:780:VAL:H	2.19	0.45
1:E:699:HIS:HA	1:E:702:LEU:HB3	1.97	0.45
1:C:703:GLU:HA	1:C:706:ARG:HD3	1.98	0.45
1:G:22:ASN:OD1	1:G:24:LEU:HB2	2.16	0.45
2:H:20:ARG:HB3	2:H:20:ARG:HE	1.46	0.45
1:G:79:ASN:OD1	1:G:93:THR:OG1	2.26	0.45
1:E:301:MET:CE	1:E:305:LEU:HD11	2.47	0.45
1:E:469:PHE:CD1	1:E:483:ASN:ND2	2.84	0.45
1:G:487:GLU:HG3	1:G:521:LEU:CD1	2.47	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:354:ARG:HG3	1:A:355:VAL:N	2.31	0.45
1:E:407:ILE:CG2	1:E:408:LYS:N	2.79	0.45
1:A:226:GLN:CG	1:A:338:ALA:HA	2.46	0.45
1:E:800:GLN:CA	2:F:119:MET:HE2	2.34	0.45
1:C:407:ILE:CG2	1:C:408:LYS:N	2.80	0.45
1:E:113:ILE:HG12	1:E:113:ILE:H	1.72	0.45
1:G:238:LYS:HB2	1:G:243:ASP:O	2.16	0.45
2:H:70:LEU:CD1	2:H:74:GLN:HE21	2.30	0.45
1:A:726:VAL:HA	1:A:773:LYS:HA	1.99	0.45
1:A:31:ALA:O	1:A:33:LYS:N	2.49	0.45
1:E:311:ASN:ND2	1:E:319:GLY:HA3	2.29	0.45
1:E:703:GLU:HA	1:E:706:ARG:HD3	1.98	0.45
1:G:703:GLU:HA	1:G:706:ARG:HD3	1.99	0.45
1:A:345:THR:N	1:A:348:GLU:HB2	2.32	0.45
1:C:558:LYS:O	1:C:561:GLN:HB2	2.16	0.45
1:G:563:GLN:O	1:G:565:ASN:N	2.49	0.45
1:E:278:ILE:CG2	1:E:432:LYS:NZ	2.79	0.45
1:A:614:ASN:HB2	1:A:628:VAL:HG11	1.98	0.45
1:A:308:GLU:HB2	1:A:313:TYR:HE1	1.82	0.45
1:G:614:ASN:HB2	1:G:628:VAL:HG11	1.98	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:G:781:LEU:HD13	1:G:781:LEU:HA	1.79	0.45
2:B:119:MET:HB3	2:B:123:GLU:CB	2.47	0.45
2:H:89:VAL:O	2:H:90:GLU:C	2.55	0.45
1:E:726:VAL:HA	1:E:773:LYS:HA	1.98	0.45
1:C:772:SER:O	1:C:773:LYS:CB	2.55	0.45
1:A:498:PHE:CE1	1:A:716:ILE:HD11	2.51	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:E:500:LEU:O	1:E:503:GLU:HG2	2.17	0.45
1:G:95:LEU:HD11	1:G:714:ILE:HG22	1.99	0.45
1:G:345:THR:N	1:G:348:GLU:HB2	2.31	0.45
1:G:558:LYS:O	1:G:561:GLN:HB2	2.16	0.45
1:A:809:ARG:HH21	2:B:41:ASN:CG	2.18	0.45
1:E:663:TYR:C	1:E:665:GLU:N	2.71	0.45
1:A:272:LEU:HD21	1:A:435:PHE:CE2	2.52	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: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

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:197:VAL:CG1	1:G:197:VAL:O	2.63	0.45
2:H:103:VAL:CG1	2:H:107:GLU:HB3	2.47	0.45
1:G:144:LYS:HG2	1:G:149:MET:HG3	1.97	0.45
2:H:71:PRO:HA	2:H:74:GLN:OE1	2.17	0.45
1:C:788:ARG:HH22	2:D:95:PHE:HE1	1.64	0.45
1:E:788:ARG:HH22	2:F:95:PHE:HE1	1.64	0.45
2:B:31:CYS:HG	2:B:69:PHE:HE2	1.63	0.45
1:E:361:GLN:C	1:E:363:GLY:H	2.19	0.45
1:C:498:PHE:N	1:C:498:PHE:CD1	2.82	0.45
1:A:735:GLU:O	1:A:738:ALA:C	2.55	0.45
1:C:44:PHE:CG	1:C:98:ALA:HB2	2.52	0.45
1:G:32:LYS:HG2	1:G:32:LYS:H	1.38	0.45
1:A:22:ASN:O	1:A:22:ASN:ND2	2.50	0.45
2:H:102:THR:HG22	2:H:139:ASN:CB	2.47	0.45
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:818:GLN:H	1:C:818:GLN:HG2	1.37	0.45
1:G:126:PRO:O	1:G:127:TYR:HB2	2.17	0.45
1:E:305:LEU:HB3	1:E:354:ARG:HA	1.99	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:E:399:THR:O	1:E:403:LEU:HB2	2.17	0.45
2:F:85:PHE:HA	2:F:89:VAL:HG13	1.99	0.45
1:C:399:THR:HG22	1:C:403:LEU:HD12	1.99	0.45
2:B:103:VAL:HG23	2:B:140:TYR:CD2	2.52	0.45
2:D:119:MET:HB3	2:D:123:GLU:CB	2.47	0.45
2:H:103:VAL:HG23	2:H:140:TYR:CD2	2.52	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
1:A:27:ALA:O	1:A:29:TRP:HD1	2.00	0.45
1:E:173:ILE:HA	1:E:680:ASN:HB2	1.99	0.45
1:G:173:ILE:HA	1:G:680:ASN:HB2	1.99	0.45
1:A:137:ILE:HD13	1:A:137:ILE:N	2.31	0.45
1:A:700:LEU:CG	1:A:704:GLN:HE21	2.30	0.45
2:H:27:LEU:HD23	2:H:28:TYR:H	1.81	0.45
1:C:697:ASP:CG	1:C:700:LEU:HB3	2.37	0.45
1:G:272:LEU:HD21	1:G:435:PHE:CE2	2.52	0.45
1:C:272:LEU:HD21	1:C:435:PHE:CE2	2.52	0.45
1:E:509:GLY:O	1:E:510:ILE:C	2.53	0.45
1:A:464:LEU:HD21	1:A:466:ILE:HG21	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:469:PHE:CD1	1:A:483:ASN:ND2	2.84	0.45
1:G:36:TRP:CE2	1:G:78:MET:HG3	2.51	0.45
1:E:812:PHE:CZ	2:F:17:LEU:HD23	2.38	0.45
1:C:247:ARG:HH22	1:C:470:GLU:CD	2.19	0.45
1:A:162:ARG:HG3	1:A:166:GLN:HG2	1.99	0.45
1:G:172:SER:O	1:G:680:ASN:N	2.50	0.45
2:F:27:LEU:HD23	2:F:28:TYR:H	1.81	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:A:391:MET:HB3	1:A:393:ILE:CG1	2.47	0.44
1:E:526:GLU:C	1:E:528:ILE:N	2.71	0.44
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:352:ILE:HG23	1:A:620:PHE:HZ	1.81	0.44
1:A:505:TYR:CB	1:A:510:ILE:HD11	2.48	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:C:726:VAL:HA	1:C:773:LYS:HA	1.98	0.44
1:E:44:PHE:CD2	1:E:98:ALA:HA	2.52	0.44
1:C:87:GLU:OE1	1:C:107:ARG:NH2	2.49	0.44
1:C:425:PHE:CD1	1:C:425:PHE:C	2.90	0.44
1:G:809:ARG:H	1:G:809:ARG:HG2	1.38	0.44
1:A:809:ARG:HG2	1:A:809:ARG:H	1.38	0.44
1:E:272:LEU:HD21	1:E:435:PHE:CE2	2.52	0.44
1:G:305:LEU:HB3	1:G:354:ARG:HA	1.98	0.44
1:C:308:GLU:HB2	1:C:313:TYR:HE1	1.82	0.44
1:A:305:LEU:HB2	1:A:307:LEU:HD23	1.98	0.44
1:G:394:ASN:OD1	1:G:397:ASP:HB2	2.18	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:E:505:TYR:CB	1:E:510:ILE:HD11	2.48	0.44
1:G:505:TYR:CB	1:G:510:ILE:HD11	2.48	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:C:399:THR:O	1:C:403:LEU:HB2	2.17	0.44
1:G:76:GLN:OE1	1:G:96:ASN:HB3	2.17	0.44
2:D:89:VAL:HA	2:D:92:LEU:HG	1.99	0.44
1:G:310:PHE:CE1	1:G:320:HIS:HD2	2.34	0.44
1:A:788:ARG:HH22	2:B:95:PHE:HE1	1.65	0.44
1:G:504:GLU:HG3	1:G:775:PHE:HZ	1.83	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:504:GLU:HG3	1:A:775:PHE:HZ	1.82	0.44
1:A:247:ARG:HH22	1:A:470:GLU:CD	2.20	0.44
1:C:735:GLU:O	1:C:738:ALA:C	2.55	0.44
1:C:44:PHE:HD2	1:C:101:LEU:HD22	1.83	0.44
1:A:703:GLU:HA	1:A:706:ARG:HD3	1.98	0.44
1:A:425:PHE:CD1	1:A:425:PHE:C	2.91	0.44
1:G:22:ASN:ND2	1:G:22:ASN:O	2.50	0.44
1:C:476:SER:HB3	1:C:479:GLN:NE2	2.32	0.44
1:E:563:GLN:O	1:E:565:ASN:N	2.50	0.44
1:A:126:PRO:O	1:A:127:TYR:HB2	2.18	0.44
2:B:27:LEU:HD23	2:B:28:TYR:H	1.82	0.44
1:E:313:TYR:N	1:E:313:TYR:HD1	2.14	0.44
1:G:301:MET:CE	1:G:305:LEU:HD11	2.47	0.44
1:E:464:LEU:HD21	1:E:466:ILE:HG21	1.98	0.44
1:C:269:THR:OG1	1:C:439:PHE:HE2	1.98	0.44
1:A:278:ILE:HG13	1:A:279:ARG:H	1.81	0.44
1:A:305:LEU:HB3	1:A:354:ARG:HA	1.98	0.44
1:E:399:THR:HG22	1:E:403:LEU:HD12	1.99	0.44
1:A:520:ASP:OD1	1:A:522:GLN:HB2	2.16	0.44
2:H:84:CYS:O	2:H:85:PHE:O	2.36	0.44
1:A:238:LYS:HB3	1:A:285:ARG:HG3	2.00	0.44
1:E:164:MET:HE1	1:E:256:PHE:CE2	2.49	0.44
2:B:70:LEU:CD1	2:B:74:GLN:HE21	2.30	0.44
1:G:547:PHE:CD2	1:G:549:LYS:N	2.85	0.44
1:E:247:ARG:HH22	1:E:470:GLU:CD	2.19	0.44
1:E:48:SER:O	1:E:59:VAL:HG12	2.18	0.44
1:A:503:GLU:HG2	1:A:503:GLU:H	1.60	0.44
1:C:172:SER:O	1:C:680:ASN:N	2.50	0.44
1:G:425:PHE:C	1:G:425:PHE:CD1	2.90	0.44
1:C:72:LYS:O	1:C:72:LYS:HG2	2.17	0.44
1:C:89:MET:SD	1:C:100:VAL:HG13	2.58	0.44
1:G:274:LYS:HZ2	1:G:432:LYS:HD2	1.82	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
1:C:293:LEU:CD1	1:C:301:MET:HE1	2.48	0.44
2:D:103:VAL:CG1	2:D:107:GLU:HB3	2.47	0.44
1:G:323:ILE:HG23	1:G:323:ILE:O	2.17	0.44
2:D:70:LEU:CD1	2:D:74:GLN:HE21	2.30	0.44
2:B:3:PHE:CZ	2:B:73:MET:HE3	2.53	0.44
1:C:504:GLU:HG3	1:C:775:PHE:HZ	1.83	0.44
1:E:778:THR:C	1:E:780:VAL:H	2.19	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:105:GLY:HA2	2:F:138:ILE:HD12	2.00	0.44
1:A:48:SER:O	1:A:59:VAL:HG12	2.18	0.44
1:G:48:SER:O	1:G:59:VAL:HG12	2.18	0.44
1:E:22:ASN:ND2	1:E:22:ASN:O	2.50	0.44
1:G:27:ALA:O	1:G:29:TRP:HD1	2.01	0.44
1:A:172:SER:O	1:A:680:ASN:N	2.51	0.44
2:H:135:ASN:HD22	2:H:135:ASN:N	2.16	0.44
1:G:476:SER:HB3	1:G:479:GLN:NE2	2.32	0.44
1:A:742:ILE:HD11	1:A:752:ALA:C	2.37	0.44
1:E:126:PRO:O	1:E:127:TYR:HB2	2.18	0.44
1:E:700:LEU:CG	1:E:704:GLN:HE21	2.31	0.44
1:E:182:GLY:N	4:E:998:ADP:O1B	2.44	0.44
1:E:805:GLY:O	1:E:809:ARG:NE	2.50	0.44
1:G:697:ASP:CG	1:G:700:LEU:HB3	2.38	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:G:621:VAL:HA	1:G:624:LEU:HB2	2.00	0.44
1:C:464:LEU:HD21	1:C:466:ILE:HG21	1.98	0.44
2:H:23:ASP:HB3	2:H:25:LYS:CD	2.48	0.44
2:F:119:MET:HB3	2:F:123:GLU:CB	2.47	0.44
1:E:89:MET:SD	1:E:100:VAL:HG13	2.58	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
2:F:71:PRO:HA	2:F:74:GLN:OE1	2.18	0.44
2:D:105:GLY:HA2	2:D:138:ILE:HD12	2.00	0.44
1:G:231:LEU:H	1:G:231:LEU:HD23	1.83	0.44
1:C:231:LEU:H	1:C:231:LEU:HD23	1.83	0.44
1:A:72:LYS:HG2	1:A:72:LYS:O	2.18	0.44
1:G:184:THR:O	1:G:187:THR:N	2.48	0.44
1:G:700:LEU:CG	1:G:704:GLN:HE21	2.31	0.44
2:H:58:GLU:HG2	2:H:58:GLU:H	1.37	0.44
1:A:610:THR:HG22	1:A:611:SER:N	2.31	0.44
1:C:301:MET:CE	1:C:305:LEU:HD11	2.47	0.44
1:C:621:VAL:HA	1:C:624:LEU:HB2	2.00	0.44
1:G:774:ILE:HB	1:G:776:PHE:CE2	2.53	0.44
1:C:424:ASP:O	1:C:427:ILE:HG22	2.18	0.44
1:C:742:ILE:O	1:C:743:PRO:O	2.36	0.44
2:B:113:VAL:O	2:B:113:VAL:HG12	2.18	0.44
1:G:238:LYS:HB3	1:G:285:ARG:HG3	2.00	0.44
2:D:3:PHE:CZ	2:D:73:MET:HE3	2.53	0.44
2:F:3:PHE:CZ	2:F:73:MET:HE3	2.51	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:33:LYS:O	1:G:48:SER:HA	2.18	0.44
1:A:619:LYS:O	1:A:623:ASP:N	2.41	0.44
1:G:500:LEU:O	1:G:503:GLU:HG2	2.17	0.44
1:E:95:LEU:HD11	1:E:714:ILE:HG22	1.98	0.44
1:A:173:ILE:HA	1:A:680:ASN:HB2	1.99	0.44
1:G:39:SER:OG	1:G:42:HIS:N	2.43	0.44
1:E:275:SER:CB	1:E:478:GLU:OE2	2.66	0.44
1:G:72:LYS:O	1:G:72:LYS:HG2	2.17	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
1:G:89:MET:SD	1:G:100:VAL:HG13	2.58	0.44
2:D:28:TYR:CD1	2:D:62:LYS:HB3	2.53	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
1:G:424:ASP:O	1:G:427:ILE:HG22	2.18	0.44
2:F:103:VAL:CG1	2:F:107:GLU:HB3	2.47	0.44
1:G:227:ALA:N	1:G:229:PRO:HD2	2.33	0.44
1:C:405:PRO:HB2	1:C:407:ILE:CD1	2.48	0.44
1:E:721:PHE:N	1:E:721:PHE:CD1	2.85	0.44
1:A:361:GLN:C	1:A:363:GLY:H	2.20	0.44
1:C:48:SER:O	1:C:59:VAL:HG12	2.18	0.44
1:E:735:GLU:O	1:E:738:ALA:C	2.56	0.44
1:E:33:LYS:O	1:E:48:SER:HA	2.18	0.44
1:C:44:PHE:CD2	1:C:98:ALA:HA	2.53	0.44
2:F:135:ASN:HD22	2:F:135:ASN:N	2.16	0.44
1:A:275:SER:CB	1:A:478:GLU:OE2	2.66	0.44
1:G:137:ILE:HD13	1:G:137:ILE:N	2.32	0.44
1:C:137:ILE:HD13	1:C:137:ILE:N	2.32	0.44
1:C:805:GLY:O	1:C:809:ARG:NE	2.50	0.44
1:G:805:GLY:O	1:G:809:ARG:NE	2.50	0.44
1:G:276:ARG:HG2	1:G:287:PHE:HE1	1.82	0.44
1:C:442:ILE:H	1:C:442:ILE:HG12	1.60	0.44
1:E:408:LYS:C	1:E:410:GLY:H	2.21	0.44
2:F:25:LYS:HE3	2:F:65:LYS:HZ3	1.82	0.44
1:E:80:PRO:C	1:E:82:LYS:H	2.21	0.44
2:B:89:VAL:O	2:B:90:GLU:C	2.55	0.44
1:G:254:ILE:HG21	1:G:262:ILE:HG12	2.00	0.44
1:C:162:ARG:HG3	1:C:166:GLN:HG2	1.99	0.44
1:G:735:GLU:O	1:G:738:ALA:C	2.55	0.44
1:C:22:ASN:O	1:C:22:ASN:ND2	2.50	0.44
1:C:545:CYS:HB2	1:C:598:LEU:CB	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:352:ILE:O	1:E:355:VAL:HB	2.17	0.44
1:C:352:ILE:HG23	1:C:620:PHE:HZ	1.82	0.44
1:A:352:ILE:O	1:A:355:VAL:HB	2.18	0.44
1:G:399:THR:HG22	1:G:403:LEU:HD12	1.99	0.44
1:C:226:GLN:CG	1:C:338:ALA:HA	2.46	0.44
2:F:143:LEU:O	2:F:147:VAL:HG22	2.16	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
1:C:144:LYS:HA	1:C:144:LYS:HD3	1.82	0.44
1:A:122:VAL:O	1:A:123:VAL:HG23	2.18	0.44
1:C:122:VAL:O	1:C:123:VAL:HG23	2.18	0.44
1:C:362:LEU:HD21	1:C:387:VAL:CG1	2.47	0.44
1:E:120:PHE:N	1:E:120:PHE:CD1	2.71	0.44
1:C:10:GLU:C	1:C:12:PHE:H	2.20	0.44
2:B:86:GLU:N	2:B:86:GLU:CD	2.72	0.44
1:E:476:SER:HB3	1:E:479:GLN:NE2	2.32	0.44
1:E:268:GLU:O	1:E:270:TYR:CD1	2.71	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
1:A:80:PRO:C	1:A:82:LYS:H	2.21	0.43
1:A:89:MET:SD	1:A:100:VAL:HG13	2.58	0.43
2:H:28:TYR:CD1	2:H:62:LYS:HB3	2.53	0.43
1:E:308:GLU:HB2	1:E:313:TYR:HE1	1.82	0.43
1:G:352:ILE:O	1:G:355:VAL:HB	2.18	0.43
1:G:663:TYR:C	1:G:665:GLU:N	2.70	0.43
1:A:441:TRP:HE3	1:A:442:ILE:HD13	1.79	0.43
1:C:505:TYR:CB	1:C:510:ILE:HD11	2.47	0.43
1:C:481:CYS:CA	1:C:484:TYR:HB3	2.48	0.43
1:G:405:PRO:HB2	1:G:407:ILE:HD11	2.00	0.43
2:F:113:VAL:O	2:F:113:VAL:HG12	2.18	0.43
1:A:323:ILE:O	1:A:323:ILE:HG23	2.18	0.43
1:C:323:ILE:HG23	1:C:323:ILE:O	2.18	0.43
1:E:254:ILE:HG21	1:E:262:ILE:HG12	2.00	0.43
2:B:135:ASN:HD22	2:B:135:ASN:N	2.16	0.43
1:G:275:SER:CB	1:G:478:GLU:OE2	2.66	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
1:C:672:THR:O	1:C:676:ASN:ND2	2.51	0.43
1:A:818:GLN:HB3	1:A:818:GLN:HE21	1.61	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:817:GLN:CD	1:G:817:GLN:C	2.77	0.43
1:A:805:GLY:O	1:A:809:ARG:NE	2.51	0.43
1:C:700:LEU:CG	1:C:704:GLN:HE21	2.31	0.43
1:C:274:LYS:H	1:C:274:LYS:HG3	1.50	0.43
1:C:774:ILE:HB	1:C:776:PHE:CE2	2.53	0.43
1:E:405:PRO:HB2	1:E:407:ILE:CD1	2.48	0.43
1:A:774:ILE:HB	1:A:776:PHE:CE2	2.53	0.43
1:E:510:ILE:O	1:E:512:TRP:N	2.51	0.43
1:A:487:GLU:HG3	1:A:521:LEU:CD1	2.47	0.43
1:A:227:ALA:N	1:A:229:PRO:HD2	2.33	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:C:547:PHE:CD1	1:C:549:LYS:N	2.85	0.43
1:A:368:LYS:HZ3	1:A:379:PRO:CG	2.30	0.43
1:E:699:HIS:O	1:E:702:LEU:HB3	2.18	0.43
2:B:105:GLY:HA2	2:B:138:ILE:HD12	2.00	0.43
1:E:162:ARG:HG3	1:E:166:GLN:HG2	1.99	0.43
1:E:172:SER:O	1:E:680:ASN:N	2.51	0.43
1:C:370:GLU:O	1:C:374:ASP:HA	2.18	0.43
1:A:370:GLU:O	1:A:374:ASP:HA	2.18	0.43
1:A:672:THR:O	1:A:676:ASN:ND2	2.51	0.43
1:A:747:MET:HA	1:A:747:MET:CE	2.47	0.43
1:C:125:ASN:CB	1:C:687:PRO:HD3	2.42	0.43
1:E:614:ASN:HB2	1:E:628:VAL:HG11	1.98	0.43
1:A:276:ARG:HG2	1:A:287:PHE:HE1	1.83	0.43
1:G:405:PRO:HB2	1:G:407:ILE:CD1	2.48	0.43
2:F:15:PHE:HZ	2:F:64:LEU:O	2.01	0.43
1:E:806:TYR:CB	2:F:147:VAL:HG12	2.49	0.43
2:B:71:PRO:HA	2:B:74:GLN:OE1	2.18	0.43
1:A:547:PHE:CD1	1:A:549:LYS:N	2.86	0.43
1:E:812:PHE:CE1	2:F:17:LEU:CD2	3.01	0.43
1:C:568:LYS:CD	1:C:584:LEU:O	2.66	0.43
1:A:568:LYS:CD	1:A:584:LEU:O	2.67	0.43
1:C:773:LYS:HD2	1:C:775:PHE:CE1	2.53	0.43
1:G:728:GLN:NE2	1:G:728:GLN:CA	2.81	0.43
1:G:545:CYS:HB2	1:G:598:LEU:CB	2.48	0.43
1:G:182:GLY:N	4:G:998:ADP:O1B	2.47	0.43
1:C:126:PRO:O	1:C:127:TYR:HB2	2.17	0.43
1:G:352:ILE:HG23	1:G:620:PHE:HZ	1.82	0.43
1:C:391:MET:O	1:C:618:ASP:CB	2.67	0.43
1:A:510:ILE:O	1:A:512:TRP:N	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:365:ILE:HD12	1:G:427:ILE:HD11	2.00	0.43
1:G:408:LYS:C	1:G:410:GLY:H	2.21	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:E:742:ILE:HD11	1:E:752:ALA:C	2.37	0.43
2:D:43:THR:C	2:D:45:ALA:H	2.22	0.43
1:A:803:CYS:HB3	2:B:127:LEU:HD22	2.00	0.43
2:D:71:PRO:HA	2:D:74:GLN:OE1	2.18	0.43
1:G:568:LYS:CD	1:G:584:LEU:O	2.66	0.43
1:A:715:ARG:O	1:A:719:GLN:N	2.51	0.43
1:E:404:THR:O	1:E:404:THR:OG1	2.33	0.43
1:A:10:GLU:C	1:A:12:PHE:H	2.20	0.43
1:G:10:GLU:C	1:G:12:PHE:H	2.20	0.43
1:C:275:SER:CB	1:C:478:GLU:OE2	2.66	0.43
1:C:80:PRO:C	1:C:82:LYS:H	2.22	0.43
1:E:613:LEU:HD22	1:E:621:VAL:HG12	2.01	0.43
1:C:397:ASP:HB3	1:C:612:LEU:HD11	1.98	0.43
1:C:613:LEU:HD22	1:C:621:VAL:HG12	2.01	0.43
1:C:526:GLU:C	1:C:528:ILE:N	2.71	0.43
2:H:43:THR:C	2:H:45:ALA:H	2.22	0.43
2:F:108:ILE:HD13	2:F:108:ILE:HA	1.73	0.43
1:A:424:ASP:O	1:A:427:ILE:HG22	2.17	0.43
1:C:543:GLU:O	1:C:546:TRP:N	2.45	0.43
1:E:742:ILE:O	1:E:743:PRO:O	2.36	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:A:750:LYS:O	1:A:754:ILE:HD12	2.19	0.43
1:A:362:LEU:HD23	1:A:387:VAL:HG11	1.98	0.43
1:C:816:GLN:O	1:C:819:LEU:CG	2.66	0.43
1:C:33:LYS:O	1:C:48:SER:HA	2.18	0.43
1:C:522:GLN:N	1:C:523:PRO:CD	2.81	0.43
1:C:728:GLN:CA	1:C:728:GLN:NE2	2.81	0.43
1:E:697:ASP:CG	1:E:700:LEU:HB3	2.38	0.43
1:E:302:ARG:CB	1:E:302:ARG:HH11	2.32	0.43
1:G:308:GLU:HB2	1:G:313:TYR:HE1	1.82	0.43
1:E:526:GLU:C	1:E:528:ILE:H	2.22	0.43
1:C:442:ILE:O	1:C:445:ARG:N	2.39	0.43
1:G:391:MET:O	1:G:618:ASP:CB	2.67	0.43
1:E:427:ILE:HG13	1:E:430:LEU:HD23	2.01	0.43
1:A:513:ASN:ND2	1:A:513:ASN:C	2.72	0.43
2:F:109:ARG:HG2	2:F:124:VAL:HB	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
2:D:85:PHE:O	2:D:86:GLU:C	2.57	0.43
2:H:113:VAL:CG2	2:H:124:VAL:CG1	2.95	0.43
1:G:803:CYS:HB3	2:H:127:LEU:HD22	2.00	0.43
1:E:567:ALA:C	1:E:569:PHE:H	2.22	0.43
1:A:547:PHE:HE1	1:A:549:LYS:CB	2.23	0.43
1:E:504:GLU:HG3	1:E:775:PHE:HZ	1.83	0.43
1:C:76:GLN:HG2	1:C:96:ASN:CG	2.39	0.43
1:A:721:PHE:N	1:A:721:PHE:CD1	2.87	0.43
1:E:253:ARG:O	1:E:265:ALA:HA	2.18	0.43
1:A:33:LYS:O	1:A:48:SER:HA	2.18	0.43
1:E:27:ALA:O	1:E:29:TRP:HD1	2.01	0.43
1:E:32:LYS:H	1:E:32:LYS:HG2	1.38	0.43
1:A:476:SER:HB3	1:A:479:GLN:NE2	2.32	0.43
1:E:231:LEU:H	1:E:231:LEU:HD23	1.84	0.43
1:A:545:CYS:HB2	1:A:598:LEU:CB	2.48	0.43
1:C:817:GLN:CD	1:C:817:GLN:C	2.77	0.43
1:A:742:ILE:O	1:A:743:PRO:O	2.36	0.43
1:A:391:MET:O	1:A:618:ASP:CB	2.67	0.43
1:E:434:LYS:CG	1:E:625:TRP:HZ2	2.30	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
1:E:227:ALA:N	1:E:229:PRO:HD2	2.33	0.43
1:A:553:THR:HG22	1:A:557:GLU:OE2	2.17	0.43
2:H:15:PHE:HZ	2:H:64:LEU:O	2.01	0.43
1:E:803:CYS:HB3	2:F:127:LEU:HD22	2.00	0.43
1:C:405:PRO:HB2	1:C:407:ILE:HD11	2.01	0.43
1:E:145:LYS:HE3	1:E:145:LYS:HB2	1.67	0.43
1:G:145:LYS:HE3	1:G:145:LYS:HB2	1.67	0.43
1:C:238:LYS:HB3	1:C:285:ARG:HG3	2.00	0.43
2:F:122:GLU:H	2:F:122:GLU:HG2	1.62	0.43
2:H:31:CYS:HG	2:H:69:PHE:HE2	1.66	0.43
1:E:773:LYS:HD2	1:E:775:PHE:CE1	2.54	0.43
2:B:115:LEU:HD12	2:B:115:LEU:N	2.34	0.43
1:E:122:VAL:O	1:E:123:VAL:HG23	2.19	0.43
1:A:699:HIS:O	1:A:702:LEU:HB3	2.19	0.43
1:A:818:GLN:H	1:A:818:GLN:HG2	1.36	0.43
1:A:743:PRO:HG2	1:G:816:GLN:OE1	2.18	0.43
1:C:809:ARG:H	1:C:809:ARG:HG2	1.38	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:183:LYS:HB2	4:G:998:ADP:O1B	2.18	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:391:MET:O	1:E:618:ASP:CB	2.67	0.43
1:C:352:ILE:O	1:C:355:VAL:HB	2.17	0.43
1:A:274:LYS:H	1:A:274:LYS:HG3	1.52	0.43
1:C:427:ILE:HG13	1:C:430:LEU:HD23	2.01	0.43
1:E:10:GLU:C	1:E:12:PHE:H	2.20	0.43
2:B:43:THR:C	2:B:45:ALA:H	2.20	0.43
2:B:103:VAL:CG1	2:B:107:GLU:HB3	2.47	0.43
1:C:153:ILE:HA	1:C:156:ILE:CD1	2.46	0.43
1:C:803:CYS:HB3	2:D:127:LEU:HD22	2.00	0.43
1:C:630:ARG:HH22	1:C:657:ARG:HB3	1.77	0.43
1:G:773:LYS:HD2	1:G:775:PHE:CE1	2.54	0.43
1:C:766:LEU:O	1:C:777:ARG:N	2.52	0.43
2:H:105:GLY:HA2	2:H:138:ILE:HD12	2.00	0.43
1:E:162:ARG:O	1:E:166:GLN:CG	2.63	0.43
1:G:162:ARG:HG3	1:G:166:GLN:HG2	1.99	0.43
1:E:499:ILE:HG22	1:E:500:LEU:N	2.34	0.43
2:D:135:ASN:N	2:D:135:ASN:HD22	2.16	0.43
1:G:699:HIS:O	1:G:702:LEU:HB3	2.19	0.43
1:A:747:MET:CG	1:G:812:PHE:HE2	2.21	0.43
2:D:40:GLN:HB3	2:D:42:PRO:HD3	2.01	0.43
2:B:53:ASN:N	2:B:54:PRO:CD	2.81	0.43
1:G:315:PHE:HD1	1:G:315:PHE:HA	1.70	0.43
1:E:545:CYS:HB2	1:E:598:LEU:CB	2.48	0.43
1:E:424:ASP:O	1:E:427:ILE:HG22	2.18	0.43
1:G:427:ILE:HG13	1:G:430:LEU:HD23	2.01	0.43
1:A:469:PHE:CE1	1:A:483:ASN:ND2	2.87	0.43
1:C:223:GLN:O	1:C:225:LEU:N	2.52	0.43
1:A:399:THR:HG22	1:A:403:LEU:HD12	1.99	0.43
1:C:742:ILE:HD11	1:C:752:ALA:C	2.37	0.43
1:G:742:ILE:O	1:G:743:PRO:O	2.36	0.43
1:C:806:TYR:CB	2:D:147:VAL:HG12	2.49	0.43
1:G:721:PHE:N	1:G:721:PHE:CD1	2.87	0.43
1:C:715:ARG:O	1:C:719:GLN:N	2.50	0.43
2:B:96:ASP:O	2:B:97:LYS:C	2.57	0.43
1:A:95:LEU:HD11	1:A:714:ILE:HG22	2.00	0.43
1:E:669:LYS:O	1:E:672:THR:HB	2.19	0.43
1:A:817:GLN:C	1:A:817:GLN:CD	2.78	0.43
1:E:817:GLN:C	1:E:817:GLN:CD	2.77	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:805:GLY:C	1:A:809:ARG:NE	2.72	0.43
1:G:80:PRO:C	1:G:82:LYS:H	2.21	0.43
1:A:302:ARG:CB	1:A:302:ARG:HH11	2.32	0.43
1:E:774:ILE:HB	1:E:776:PHE:CE2	2.53	0.43
1:G:223:GLN:O	1:G:225:LEU:N	2.52	0.43
2:B:65:LYS:N	2:B:68:GLN:HE21	2.14	0.43
1:A:153:ILE:CG2	1:A:154:TYR:N	2.82	0.43
1:C:310:PHE:CD1	1:C:320:HIS:HD2	2.37	0.43
1:A:256:PHE:HA	1:A:261:TYR:O	2.19	0.43
1:A:378:MET:CE	1:A:381:ASN:HA	2.49	0.43
1:E:766:LEU:O	1:E:777:ARG:N	2.51	0.43
1:C:253:ARG:O	1:C:265:ALA:HA	2.19	0.43
2:D:96:ASP:O	2:D:97:LYS:C	2.58	0.43
2:F:96:ASP:O	2:F: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:G:347:GLU:HG3	1:G:347:GLU:H	1.47	0.43
2:H:22:GLY:C	2:H:24:GLY:H	2.22	0.43
1:A:83:PHE:O	1:A:84:SER:C	2.58	0.43
1:G:816:GLN:O	1:G:819:LEU:CG	2.66	0.42
1:A:268:GLU:O	1:A:270:TYR:CD1	2.72	0.42
1:G:268:GLU:CD	1:G:666:GLN:NE2	2.72	0.42
1:C:268:GLU:CD	1:C:666:GLN:NE2	2.72	0.42
1:A:809:ARG:NH2	2:B:41:ASN:OD1	2.38	0.42
1:E:805:GLY:C	1:E:809:ARG:NE	2.72	0.42
1:G:184:THR:O	1:G:187:THR:HB	2.19	0.42
1:A:176:THR:HG21	1:A:683:ARG:HH21	1.84	0.42
2:B:28:TYR:CD1	2:B:62:LYS:HB3	2.54	0.42
1:A:278:ILE:HG21	1:A:432:LYS:HZ3	1.84	0.42
1:C:510:ILE:O	1:C:512:TRP:N	2.52	0.42
1:G:513:ASN:C	1:G:513:ASN:ND2	2.72	0.42
1:C:227:ALA:N	1:C:229:PRO:HD2	2.33	0.42
2:B:23:ASP:HB3	2:B:25:LYS:CD	2.49	0.42
1:E:76:GLN:CG	1:E:96:ASN:HB3	2.49	0.42
1:E:154:TYR:HB3	1:E:193:TYR:CD2	2.54	0.42
2:H:113:VAL:O	2:H:113:VAL:HG12	2.18	0.42
1:C:145:LYS:HB2	1:C:145:LYS:HE3	1.67	0.42
1:E:140:MET:O	1:E:149:MET:HE2	2.19	0.42
1:A:567:ALA:C	1:A:569:PHE:H	2.22	0.42
1:A:310:PHE:CD1	1:A:320:HIS:HD2	2.37	0.42
1:A:773:LYS:HD2	1:A:775:PHE:CE1	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:122:VAL:O	1:G:123:VAL:HG23	2.18	0.42
2:F:97:LYS:HG3	2:F:98:GLU:HG3	2.01	0.42
1:A:250:LYS:O	1:A:465:ASP:N	2.50	0.42
1:A:619:LYS:O	1:A:623:ASP:OD1	2.37	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:G:370:GLU:O	1:G:374:ASP:HA	2.18	0.42
1:E:750:LYS:O	1:E:754:ILE:HD12	2.19	0.42
1:G:296:GLY:HA3	1:G:332:PHE:CG	2.54	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:E:268:GLU:CD	1:E:666:GLN:NE2	2.72	0.42
1:E:184:THR:O	1:E:187:THR:HB	2.20	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
1:G:749:GLY:O	1:G:753:CYS:HB3	2.20	0.42
2:D:64:LEU:HD11	2:D:72:MET:HE3	1.99	0.42
2:B:109:ARG:HG2	2:B:124:VAL:HB	2.00	0.42
1:G:193:TYR:CE1	1:G:197:VAL:HG11	2.54	0.42
2:D:109:ARG:HG2	2:D:124:VAL:HB	2.00	0.42
2:D:113:VAL:O	2:D:113:VAL:HG12	2.18	0.42
1:G:310:PHE:CD1	1:G:320:HIS:HD2	2.38	0.42
1:E:256:PHE:HA	1:E:261:TYR:O	2.20	0.42
1:G:754:ILE:HG22	1:G:755:LEU:N	2.35	0.42
1:G:381:ASN:HB2	1:G:385:GLN:NE2	2.34	0.42
1:G:766:LEU:O	1:G:777:ARG:N	2.52	0.42
1:E:69:THR:C	1:E:70:LEU:HG	2.40	0.42
1:G:499:ILE:HG22	1:G:500:LEU:N	2.35	0.42
1:E:22:ASN:HA	1:E:23:PRO:HD3	1.83	0.42
1:A:728:GLN:CA	1:A:728:GLN:NE2	2.81	0.42
1:A:711:LEU:H	1:A:711:LEU:CD2	2.31	0.42
1:E:176:THR:HG21	1:E:683:ARG:HH21	1.84	0.42
2:H:51:LEU:HA	2:H:51:LEU:HD23	1.85	0.42
2:B:55:LYS:N	2:B:58:GLU:HG3	2.30	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:E:749:GLY:O	1:E:753:CYS:HB3	2.20	0.42
1:A:526:GLU:C	1:A:528:ILE:H	2.22	0.42
2:F:119:MET:HB3	2:F:123:GLU:HB3	2.01	0.42
1:C:365:ILE:HD12	1:C:427:ILE:HD11	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:144:VAL:C	2:B:147:VAL:HG23	2.39	0.42
1:E:193:TYR:CE1	1:E:197:VAL:HG11	2.54	0.42
2:H:109:ARG:HG2	2:H:124:VAL:HB	2.00	0.42
2:D:74:GLN:O	2:D:78:LYS:CD	2.68	0.42
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:E:568:LYS:CD	1:E:584:LEU:O	2.66	0.42
1:G:247:ARG:HH22	1:G:470:GLU:CD	2.19	0.42
1:A:253:ARG:O	1:A:265:ALA:HA	2.19	0.42
1:C:499:ILE:HG22	1:C:500:LEU:N	2.35	0.42
1:A:500:LEU:O	1:A:503:GLU:HG2	2.17	0.42
2:B:18:PHE:O	2:B:19:ASP:HB2	2.19	0.42
1:G:794:ASP:HA	1:G:797:ILE:HD12	2.01	0.42
2:F:22:GLY:C	2:F:24:GLY:H	2.22	0.42
1:C:794:ASP:HA	1:C:797:ILE:HD12	2.01	0.42
2:B:22:GLY:C	2:B:24:GLY:H	2.23	0.42
1:A:613:LEU:HD22	1:A:621:VAL:HG12	2.02	0.42
1:G:522:GLN:N	1:G:523:PRO:CD	2.81	0.42
1:C:513:ASN:C	1:C:513:ASN:ND2	2.72	0.42
1:A:427:ILE:HG13	1:A:430:LEU:HD23	2.01	0.42
1:E:193:TYR:C	1:E:193:TYR:CD1	2.93	0.42
2:F:74:GLN:O	2:F:78:LYS:CD	2.68	0.42
2:H:115:LEU:HD12	2:H:115:LEU:N	2.35	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
2:F:40:GLN:HB3	2:F:42:PRO:HD3	2.01	0.42
1:A:499:ILE:HG22	1:A:500:LEU:N	2.35	0.42
1:C:563:GLN:C	1:C:565:ASN:H	2.23	0.42
2:F:22:GLY:C	2:F:24:GLY:N	2.73	0.42
2:F:16:GLN:HG2	2:F:16:GLN:H	1.41	0.42
1:A:805:GLY:CA	1:A:809:ARG:HE	2.32	0.42
1:E:809:ARG:HG2	1:E:809:ARG:H	1.38	0.42
2:H:55:LYS:HB2	2:H:58:GLU:OE2	2.19	0.42
2:F:28:TYR:CD1	2:F:62:LYS:HB3	2.53	0.42
1:E:278:ILE:HG13	1:E:279:ARG:N	2.34	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:E:365:ILE:HD12	1:E:427:ILE:HD11	2.00	0.42
1:A:757:ILE:HD11	1:A:774:ILE:HD12	2.01	0.42
2:F:18:PHE:O	2:F:19:ASP:HB2	2.19	0.42
2:B:119:MET:HB3	2:B:123:GLU:HB3	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:153:ILE:HA	1:E:156:ILE:CD1	2.45	0.42
1:C:256:PHE:HA	1:C:261:TYR:O	2.19	0.42
2:F:115:LEU:HD12	2:F:115:LEU:N	2.34	0.42
1:G:755:LEU:HA	1:G:755:LEU:HD12	1.83	0.42
1:C:754:ILE:HG22	1:C:755:LEU:N	2.34	0.42
1:C:498:PHE:HD1	1:C:716:ILE:HD11	1.78	0.42
1:E:44:PHE:HE2	1:E:702:LEU:HD11	1.85	0.42
1:A:162:ARG:O	1:A:166:GLN:CG	2.64	0.42
1:C:12:PHE:HD1	1:C:111:GLY:HA3	1.84	0.42
1:E:370:GLU:O	1:E:374:ASP:HA	2.19	0.42
1:C:671:MET:HG2	1:C:675:ARG:NH1	2.35	0.42
1:E:711:LEU:CD2	1:E:711:LEU:H	2.33	0.42
2:D:55:LYS:HB2	2:D:58:GLU:OE2	2.19	0.42
2:B:48:MET:HE3	2:B:59:MET:SD	2.59	0.42
1:G:352:ILE:HG23	1:G:438:LEU:HD11	2.00	0.42
1:G:619:LYS:O	1:G:623:ASP:OD1	2.37	0.42
1:C:551:THR:O	1:C:552:ASP:C	2.58	0.42
1:G:757:ILE:HD11	1:G:774:ILE:HD12	2.01	0.42
1:A:481:CYS:CA	1:A:484:TYR:HB3	2.48	0.42
2:H:18:PHE:O	2:H:19:ASP:HB2	2.19	0.42
1:G:76:GLN:HB2	1:G:76:GLN:HE21	1.69	0.42
2:B:15:PHE:HZ	2:B:64:LEU:O	2.01	0.42
1:A:193:TYR:CE1	1:A:197:VAL:HG11	2.55	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
1:E:310:PHE:CD1	1:E:320:HIS:HD2	2.38	0.42
1:G:161:TYR:CE1	1:G:165:LEU:CD1	2.93	0.42
1:A:530:ARG:HA	1:A:531:PRO:HD3	1.73	0.42
1:G:196:VAL:CG1	1:G:217:TYR:HE2	2.33	0.42
2:H:96:ASP:O	2:H:97:LYS:C	2.57	0.42
1:A:48:SER:C	1:A:59:VAL:HG12	2.40	0.42
1:G:69:THR:C	1:G:70:LEU:HG	2.40	0.42
1:C:44:PHE:CE1	1:C:98:ALA:HB2	2.55	0.42
1:A:409:VAL:O	1:A:409:VAL:HG12	2.19	0.42
1:G:29:TRP:O	1:G:32:LYS:HE2	2.20	0.42
1:A:358:SER:HB2	1:A:390:LEU:HB2	2.02	0.42
1:E:347:GLU:H	1:E:347:GLU:HG3	1.48	0.42
1:G:717:CYS:O	1:G:722:PRO:HG3	2.20	0.42
1:G:563:GLN:C	1:G:565:ASN:H	2.23	0.42
1:C:83:PHE:O	1:C:84:SER:C	2.57	0.42
1:G:711:LEU:H	1:G:711:LEU:CD2	2.32	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:268:GLU:CD	1:A:666:GLN:NE2	2.72	0.42
1:A:394:ASN:OD1	1:A:397:ASP:HB2	2.18	0.42
1:E:541:LEU:HB2	1:E:555:PHE:CE1	2.55	0.42
1:A:442:ILE:HG12	1:A:442:ILE:H	1.58	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
2:H:119:MET:HB3	2:H:123:GLU:HB3	2.01	0.42
1:C:567:ALA:C	1:C:569:PHE:H	2.22	0.42
1:G:534:PRO:HA	1:G:535:PRO:HD3	1.96	0.42
1:E:378:MET:CE	1:E:381:ASN:HA	2.49	0.42
1:A:754:ILE:HG22	1:A:755:LEU:N	2.34	0.42
1:C:619:LYS:O	1:C:623:ASP:OD1	2.37	0.42
2:F:55:LYS:HB2	2:F:58:GLU:OE2	2.19	0.42
1:C:29:TRP:O	1:C:32:LYS:HE2	2.20	0.42
1:A:231:LEU:H	1:A:231:LEU:HD23	1.84	0.42
1:E:717:CYS:O	1:E:722:PRO:HG3	2.20	0.42
1:C:669:LYS:O	1:C:672:THR:HB	2.19	0.42
2:B:27:LEU:HD21	2:B:60:ASN:C	2.40	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:G:278:ILE:HD13	1:G:432:LYS:HZ1	1.85	0.42
1:A:278:ILE:HG13	1:A:279:ARG:N	2.34	0.42
1:G:605:LEU:CD2	1:G:632:VAL:HG23	2.40	0.42
1:G:510:ILE:O	1:G:512:TRP:N	2.52	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
2:B:103:VAL:HG23	2:B:140:TYR:HD2	1.85	0.42
1:G:789:ASP:O	1:G:792:ILE:HG13	2.20	0.42
1:C:116:TYR:CE1	1:C:151:PRO:CB	2.94	0.42
1:G:256:PHE:HA	1:G:261:TYR:O	2.19	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
2:H:97:LYS:H	2:H:100:ASN:HD21	1.68	0.42
1:C:250:LYS:O	1:C:465:ASP:N	2.49	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:C:12:PHE:CE1	1:C:111:GLY:HA3	2.55	0.42
1:A:563:GLN:C	1:A:565:ASN:H	2.23	0.42
1:C:296:GLY:HA3	1:C:332:PHE:CG	2.54	0.42
1:A:666:GLN:C	1:A:668:THR:H	2.23	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:809:ARG:HH22	2:B:41:ASN:HD21	1.67	0.42
1:A:183:LYS:HE2	4:A:998:ADP:O1B	2.20	0.42
1:A:182:GLY:H	4:A:998:ADP:PB	2.43	0.42
1:G:278:ILE:HG21	1:G:432:LYS:HZ3	1.83	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
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
2:F:25:LYS:HE3	2:F:65:LYS:HZ1	1.81	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:369:LYS:HB2	1:A:420:LYS:HB3	2.02	0.42
2:D:23:ASP:HB3	2:D:25:LYS:CD	2.50	0.42
2:B:108:ILE:HD13	2:B:108:ILE:HA	1.74	0.42
1:C:154:TYR:HB3	1:C:193:TYR:CD2	2.54	0.42
1:G:806:TYR:CB	2:H:147:VAL:HG12	2.49	0.42
1:G:567:ALA:C	1:G:569:PHE:H	2.22	0.42
1:E:116:TYR:CE1	1:E:151:PRO:CB	2.94	0.42
1:G:164:MET:HE1	1:G:256:PHE:HE2	1.73	0.42
1:C:727:PHE:CE2	1:C:750:LYS:CB	3.03	0.42
1:A:766:LEU:O	1:A:777:ARG:N	2.52	0.42
1:C:254:ILE:HG21	1:C:262:ILE:HG12	2.00	0.42
2:H:97:LYS:HG3	2:H:98:GLU:HG3	2.01	0.42
1:A:69:THR:C	1:A:70:LEU:HG	2.40	0.42
1:E:311:ASN:HD21	1:E:319:GLY:CA	2.33	0.42
2:D:22:GLY:C	2:D:24:GLY:N	2.73	0.42
2:D:44:ASN:HB3	2:D:117:GLU:OE1	2.20	0.42
1:E:248:PHE:HB2	1:E:270:TYR:O	2.20	0.42
1:C:184:THR:O	1:C:187:THR:HB	2.19	0.42
1:C:700:LEU:CD2	1:C:704:GLN:HE21	2.33	0.42
1:C:274:LYS:HZ2	1:C:432:LYS:HD2	1.85	0.42
1:E:405:PRO:HB2	1:E:407:ILE:HD11	2.00	0.42
1:E:409:VAL:HG12	1:E:409:VAL:O	2.19	0.42
1:E:781:LEU:HA	1:E:781:LEU:HD13	1.78	0.42
1:C:408:LYS:C	1:C:410:GLY:H	2.21	0.42
1:G:185:GLU:O	1:G:189:LYS:CG	2.64	0.42
2:B:74:GLN:O	2:B:78:LYS:CD	2.68	0.42
1:E:530:ARG:HG2	1:E:532:THR:O	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:530:ARG:HA	1:G:531:PRO:HD3	1.72	0.42
1:C:378:MET:CE	1:C:381:ASN:HA	2.50	0.42
1:G:715:ARG:O	1:G:719:GLN:N	2.50	0.42
1:G:48:SER:C	1:G:59:VAL:HG12	2.40	0.42
1:C:500:LEU:O	1:C:503:GLU:CB	2.68	0.42
1:A:746:PHE:CB	2:H:10:GLU:HG2	2.47	0.42
1:C:358:SER:HB2	1:C:390:LEU:HB2	2.02	0.42
1:G:581:PHE:N	1:G:581:PHE:HD1	2.18	0.42
1:E:754:ILE:HG22	1:E:755:LEU:N	2.34	0.42
1:C:699:HIS:O	1:C:702:LEU:HB3	2.19	0.42
2:H:40:GLN:HB3	2:H:42:PRO:HD3	2.02	0.41
1:C:666:GLN:C	1:C:668:THR:H	2.23	0.41
1:C:89:MET:CG	1:C:92:LEU:HD11	2.32	0.41
1:G:269:THR:OG1	1:G:439:PHE:HE2	1.98	0.41
1:E:621:VAL:HA	1:E:624:LEU:HB2	2.00	0.41
1:G:469:PHE:CE1	1:G:483:ASN:ND2	2.88	0.41
1:G:409:VAL:HG12	1:G:409:VAL:O	2.20	0.41
1:E:223:GLN:O	1:E:225:LEU:N	2.53	0.41
2:F:43:THR:C	2:F:45:ALA:H	2.22	0.41
1:A:522:GLN:N	1:A:523:PRO:CD	2.81	0.41
1:E:789:ASP:O	1:E:792:ILE:HG13	2.20	0.41
1:C:369:LYS:HB2	1:C:420:LYS:HB3	2.02	0.41
1:A:154:TYR:HB3	1:A:193:TYR:CD2	2.54	0.41
1:C:153:ILE:CG2	1:C:154:TYR:N	2.82	0.41
2:D:119:MET:HB3	2:D:123:GLU:HB3	2.01	0.41
1:E:656:PHE:HB3	1:E:657:ARG:H	1.77	0.41
1:C:530:ARG:HG2	1:C:532:THR:O	2.20	0.41
1:C:69:THR:C	1:C:70:LEU:HG	2.40	0.41
1:E:51:GLU:HB3	1:E:58:THR:CG2	2.50	0.41
1:G:671:MET:HG2	1:G:675:ARG:NH1	2.35	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
2:H:53:ASN:N	2:H:54:PRO:CD	2.83	0.41
2:B:51:LEU:C	2:B:53:ASN:N	2.74	0.41
1:E:315:PHE:HD2	1:E:360:LEU:HA	1.85	0.41
1:E:464:LEU:CD2	1:E:466:ILE:HG23	2.50	0.41
1:A:315:PHE:HD1	1:A:315:PHE:HA	1.71	0.41
1:G:619:LYS:O	1:G:622:ALA:HB3	2.20	0.41
1:C:749:GLY:O	1:C:753:CYS:HB3	2.20	0.41
1:E:376:ALA:CB	1:E:420:LYS:HA	2.30	0.41
1:E:513:ASN:C	1:E:513:ASN:ND2	2.73	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:369:LYS:HB2	1:G:420:LYS:HB3	2.02	0.41
1:A:483:ASN:O	1:A:486:ASN:HB2	2.21	0.41
1:A:551:THR:N	1:A:554:SER:OG	2.52	0.41
1:E:292:TYR:CE2	1:E:331:MET:HB3	2.55	0.41
1:A:365:ILE:HD12	1:A:427:ILE:HD11	2.01	0.41
1:C:409:VAL:HG12	1:C:409:VAL:O	2.19	0.41
2:D:18:PHE:O	2:D:19:ASP:HB2	2.19	0.41
1:G:153:ILE:CG2	1:G:154:TYR:N	2.82	0.41
2:D:103:VAL:HG23	2:D:140:TYR:HD2	1.85	0.41
1:G:530:ARG:HG2	1:G:532:THR:O	2.20	0.41
1:G:727:PHE:CE2	1:G:750:LYS:CB	3.03	0.41
1:A:568:LYS:HD3	1:A:568:LYS:HA	1.90	0.41
1:A:727:PHE:CE2	1:A:750:LYS:CB	3.03	0.41
1:G:361:GLN:NE2	1:G:386:LYS:HD3	2.35	0.41
1:E:362:LEU:HD21	1:E:387:VAL:CG1	2.47	0.41
2:D:97:LYS:H	2:D:100:ASN:HD21	1.68	0.41
2:B:97:LYS:HG3	2:B:98:GLU:HG3	2.01	0.41
1:A:500:LEU:O	1:A:503:GLU:CB	2.69	0.41
1:C:581:PHE:HD1	1:C:581:PHE:N	2.18	0.41
1:A:711:LEU:N	1:A:711:LEU:HD22	2.35	0.41
1:E:296:GLY:HA3	1:E:332:PHE:CG	2.55	0.41
1:C:248:PHE:HB2	1:C:270:TYR:O	2.20	0.41
1:G:83:PHE:O	1:G:84:SER:C	2.58	0.41
2:D:53:ASN:N	2:D:54:PRO:CD	2.82	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:E:315:PHE:HD1	1:E:315:PHE:HA	1.70	0.41
1:E:481:CYS:CA	1:E:484:TYR:HB3	2.48	0.41
1:A:301:MET:HE3	1:A:305:LEU:HD11	2.01	0.41
1:E:369:LYS:HB2	1:E:420:LYS:HB3	2.02	0.41
1:A:292:TYR:CE2	1:A:331:MET:HB3	2.55	0.41
2:F:65:LYS:N	2:F:68:GLN:HE21	2.14	0.41
2:F:141:GLU:O	2:F:142:GLU:HG2	2.20	0.41
1:E:153:ILE:CG2	1:E:154:TYR:N	2.82	0.41
1:C:789:ASP:O	1:C:792:ILE:HG13	2.20	0.41
1:E:527:LEU:HD12	1:E:566:HIS:ND1	2.35	0.41
1:C:755:LEU:HA	1:C:755:LEU:HD12	1.83	0.41
1:A:362:LEU:HD21	1:A:387:VAL:CG1	2.47	0.41
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:E:619:LYS:O	1:E:623:ASP:OD1	2.37	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:173:ILE:HD11	1:E:461:LEU:HD21	2.03	0.41
1:G:173:ILE:HD11	1:G:461:LEU:HD21	2.03	0.41
1:A:669:LYS:O	1:A:672:THR:HB	2.19	0.41
1:A:742:ILE:C	1:A:743:PRO:O	2.59	0.41
1:E:268:GLU:HG2	1:E:270:TYR:HH	1.70	0.41
1:A:700:LEU:CD2	1:A:704:GLN:HE21	2.34	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:G:302:ARG:CB	1:G:302:ARG:HH11	2.32	0.41
1:A:621:VAL:HA	1:A:624:LEU:HB2	2.01	0.41
1:E:551:THR:O	1:E:552:ASP:C	2.58	0.41
1:G:483:ASN:O	1:G:486:ASN:HB2	2.21	0.41
1:C:757:ILE:HA	1:C:760:LEU:CD1	2.50	0.41
1:C:526:GLU:C	1:C:528:ILE:H	2.22	0.41
2:F:23:ASP:HB3	2:F:25:LYS:CD	2.50	0.41
1:A:551:THR:O	1:A:552:ASP:C	2.59	0.41
1:E:77:LYS:NZ	1:E:96:ASN:HD21	2.17	0.41
1:E:742:ILE:C	1:E:743:PRO:O	2.58	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:G:378:MET:CE	1:G:381:ASN:HA	2.50	0.41
2:F:97:LYS:H	2:F:100:ASN:HD21	1.68	0.41
1:A:581:PHE:N	1:A:581:PHE:HD1	2.19	0.41
1:E:794:ASP:HA	1:E:797:ILE:HD12	2.01	0.41
1:C:809:ARG:NH2	2:D:41:ASN:OD1	2.45	0.41
1:E:805:GLY:CA	1:E:809:ARG:HE	2.32	0.41
1:G:104:LEU:HD12	1:G:705:LEU:HD11	2.03	0.41
2:D:27:LEU:HD21	2:D:60:ASN:C	2.41	0.41
2:H:27:LEU:HD22	2:H:59:MET:O	2.21	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:E:483:ASN:O	1:E:486:ASN:HB2	2.20	0.41
1:C:760:LEU:HG	1:C:760:LEU:H	1.67	0.41
1:E:757:ILE:HD11	1:E:774:ILE:HD12	2.01	0.41
2:F:26:ILE:HG12	2:F:34:VAL:HG21	2.03	0.41
1:A:469:PHE:CE2	1:A:471:ILE:HG21	2.55	0.41
2:F:144:VAL:C	2:F:147:VAL:HG23	2.40	0.41
1:A:376:ALA:CB	1:A:420:LYS:HA	2.30	0.41
2:D:26:ILE:HG12	2:D:34:VAL:HG21	2.03	0.41
2:B:141:GLU:O	2:B:142:GLU:HG2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:657:ARG:HH11	1:G:657:ARG:CG	2.34	0.41
1:A:530:ARG:HG2	1:A:532:THR:O	2.20	0.41
1:G:750:LYS:O	1:G:754:ILE:HD12	2.19	0.41
1:E:196:VAL:CG1	1:E:217:TYR:HE2	2.33	0.41
1:G:500:LEU:O	1:G:503:GLU:CB	2.68	0.41
1:E:311:ASN:HD22	1:E:311:ASN:HA	1.62	0.41
1:A:347:GLU:HA	1:A:350:THR:OG1	2.21	0.41
1:G:370:GLU:HB2	1:G:375:GLN:O	2.21	0.41
1:E:563:GLN:C	1:E:565:ASN:H	2.23	0.41
1:G:598:LEU:HG	1:G:598:LEU:H	1.38	0.41
2:B:37:ALA:C	2:B:39:GLY:H	2.23	0.41
1:G:818:GLN:HE21	1:G:818:GLN:HB3	1.61	0.41
1:C:268:GLU:O	1:C:270:TYR:CD1	2.71	0.41
1:E:125:ASN:HB3	1:E:687:PRO:HG3	2.03	0.41
1:G:125:ASN:HB3	1:G:687:PRO:HG3	2.03	0.41
1:A:104:LEU:HD12	1:A:705:LEU:HD11	2.03	0.41
2:D:48:MET:HE3	2:D:59:MET:SD	2.61	0.41
2:F:53:ASN:N	2:F:54:PRO:CD	2.83	0.41
1:E:269:THR:HG22	1:E:443:LEU:HD22	2.03	0.41
1:G:280:GLN:CD	1:G:280:GLN:H	2.24	0.41
1:G:663:TYR:O	1:G:665:GLU:N	2.54	0.41
1:C:434:LYS:CG	1:C:625:TRP:HZ2	2.29	0.41
1:A:351:SER:O	1:A:354:ARG:HG2	2.20	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:G:410:GLY:C	1:G:412:ASP:H	2.24	0.41
2:H:26:ILE:HG12	2:H:34:VAL:HG21	2.03	0.41
2:F:103:VAL:HG23	2:F:140:TYR:HD2	1.85	0.41
1:G:193:TYR:CD1	1:G:193:TYR:C	2.94	0.41
1:C:193:TYR:C	1:C:193:TYR:CD1	2.94	0.41
2:H:141:GLU:O	2:H:142:GLU:HG2	2.20	0.41
1:C:161:TYR:CE1	1:C:165:LEU:CD1	2.93	0.41
1:G:381:ASN:O	1:G:382:THR:C	2.58	0.41
1:C:135:GLU:OE1	1:C:213:PRO:N	2.54	0.41
1:C:48:SER:C	1:C:59:VAL:HG12	2.40	0.41
1:A:29:TRP:O	1:A:32:LYS:HE2	2.20	0.41
1:A:186:ASN:HD22	1:A:186:ASN:H	1.69	0.41
1:E:358:SER:HB2	1:E:390:LEU:HB2	2.01	0.41
1:E:347:GLU:HA	1:E:350:THR:OG1	2.20	0.41
1:C:717:CYS:O	1:C:722:PRO:HG3	2.20	0.41
2:H:22:GLY:C	2:H:24:GLY:N	2.73	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:781:LEU:HA	1:A:781:LEU:HD13	1.79	0.41
1:C:711:LEU:CD2	1:C:711:LEU:H	2.32	0.41
1:G:666:GLN:C	1:G:668:THR:H	2.23	0.41
2:D:27:LEU:HD22	2:D:59:MET:O	2.21	0.41
2:H:27:LEU:HD21	2:H:60:ASN:C	2.41	0.41
1:C:183:LYS:HB2	1:C:183:LYS:HE2	1.69	0.41
1:C:125:ASN:HB3	1:C:687:PRO:HG3	2.03	0.41
1:C:315:PHE:HD2	1:C:360:LEU:HA	1.85	0.41
1:G:586:TYR:CG	1:G:587:ALA:N	2.89	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:A:749:GLY:O	1:A:753:CYS:HB3	2.20	0.41
2:D:111:VAL:C	2:D:113:VAL:H	2.24	0.41
2:D:115:LEU:HD12	2:D:115:LEU:N	2.35	0.41
1:C:361:GLN:NE2	1:C:386:LYS:HD3	2.35	0.41
2:D:97:LYS:HG3	2:D:98:GLU:HG3	2.01	0.41
1:G:253:ARG:O	1:G:265:ALA:HA	2.19	0.41
1:E:48:SER:C	1:E:59:VAL:HG12	2.40	0.41
1:C:95:LEU:HD11	1:C:714:ILE:HG22	1.99	0.41
1:G:358:SER:HB2	1:G:390:LEU:HB2	2.01	0.41
1:E:128:LYS:HG2	1:E:129:GLN:N	2.35	0.41
1:C:711:LEU:HD22	1:C:711:LEU:N	2.36	0.41
1:A:17:LYS:O	1:A:19:PHE:N	2.54	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:705:LEU:O	1:A:710:VAL:CG2	2.65	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:C:469:PHE:CE1	1:C:483:ASN:ND2	2.88	0.41
1:A:555:PHE:CZ	1:A:559:LEU:HD13	2.56	0.41
1:A:223:GLN:O	1:A:225:LEU:N	2.53	0.41
2:F:113:VAL:CG2	2:F:124:VAL:CG1	2.95	0.41
2:B:111:VAL:C	2:B:113:VAL:H	2.24	0.41
2:D:113:VAL:CG2	2:D:124:VAL:CG1	2.95	0.41
1:G:527:LEU:HD12	1:G:566:HIS:ND1	2.35	0.41
2:B:122:GLU:HG2	2:B:122:GLU:H	1.61	0.41
1:G:727:PHE:CE1	1:G:773:LYS:N	2.85	0.41
1:E:102:HIS:O	1:E:105:ARG:CB	2.69	0.41
1:C:170:ASP:OD1	1:C:460:PHE:N	2.52	0.41
2:B:97:LYS:H	2:B:100:ASN:HD21	1.68	0.41
1:G:162:ARG:HG3	1:G:162:ARG:O	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:37:ALA:C	2:F:39:GLY:H	2.24	0.41
1:C:182:GLY:HA2	4:C:998:ADP:O1A	2.21	0.41
1:G:315:PHE:HD2	1:G:360:LEU:HA	1.85	0.41
1:A:603:ASP:N	1:A:604:PRO:HD3	2.35	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
1:A:302:ARG:HB2	1:A:302:ARG:HH11	1.86	0.41
1:A:315:PHE:HD2	1:A:360:LEU:HA	1.86	0.41
1:A:269:THR:OG1	1:A:439:PHE:HE2	1.98	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:C:483:ASN:O	1:C:486:ASN:HB2	2.21	0.41
1:E:760:LEU:HG	1:E:760:LEU:H	1.68	0.41
1:C:292:TYR:CE2	1:C:331:MET:HB3	2.55	0.41
1:G:292:TYR:CE2	1:G:331:MET:HB3	2.55	0.41
2:B:65:LYS:HE3	2:B:68:GLN:NE2	2.36	0.41
2:D:65:LYS:HE3	2:D:68:GLN:NE2	2.36	0.41
2:D:108:ILE:CG2	2:D:109:ARG:N	2.76	0.41
2:H:103:VAL:HG23	2:H:140:TYR:HD2	1.85	0.41
1:E:144:LYS:HA	1:E:144:LYS:HD3	1.82	0.41
1:E:145:LYS:HG3	1:E:146:ARG:HD2	2.03	0.41
1:G:3:GLN:CA	1:G:18:ASN:HD21	2.34	0.41
1:A:128:LYS:HG2	1:A:129:GLN:N	2.35	0.41
2:B:70:LEU:O	2:B:74:GLN:CD	2.59	0.41
2:H:74:GLN:O	2:H:78:LYS:CD	2.68	0.41
2:H:126:GLN:H	2:H:126:GLN:HG3	1.48	0.41
1:A:657:ARG:CG	1:A:657:ARG:HH11	2.34	0.41
1:A:773:LYS:HB2	1:A:773:LYS:HE2	1.90	0.41
1:A:727:PHE:HE2	1:A:750:LYS:HB2	1.86	0.41
1:G:122:VAL:C	1:G:123:VAL:HG23	2.41	0.41
1:E:361:GLN:HB3	1:E:387:VAL:CG2	2.48	0.41
1:C:327:GLN:CG	1:C:329:ASP:HB2	2.50	0.41
1:A:327:GLN:CG	1:A:329:ASP:HB2	2.51	0.41
1:E:253:ARG:HG3	1:E:460:PHE:HD1	1.84	0.41
1:C:51:GLU:HB3	1:C:58:THR:HG23	2.03	0.41
1:C:51:GLU:HB3	1:C:58:THR:CG2	2.50	0.41
1:G:170:ASP:OD1	1:G:460:PHE:N	2.52	0.41
1:A:51:GLU:HB3	1:A:58:THR:HG23	2.03	0.41
1:A:51:GLU:HB3	1:A:58:THR:CG2	2.50	0.41
1:E:619:LYS:O	1:E:622:ALA:HB3	2.20	0.41
1:C:102:HIS:O	1:C:105:ARG:CB	2.69	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:32:LYS:HG2	1:C:32:LYS:H	1.38	0.41
1:A:717:CYS:O	1:A:722:PRO:HG3	2.20	0.41
1:E:727:PHE:CE2	1:E:750:LYS:CB	3.03	0.41
1:E:563:GLN:C	1:E:565:ASN:N	2.75	0.41
2:B:22:GLY:C	2:B:24:GLY:N	2.73	0.41
1:A:794:ASP:HA	1:A:797:ILE:HD12	2.01	0.41
1:A:296:GLY:HA3	1:A:332:PHE:CG	2.56	0.41
2:H:116:GLY:O	2:H:118:LYS:HG2	2.21	0.41
1:A:125:ASN:HB3	1:A:687:PRO:HG3	2.03	0.41
2:F:27:LEU:HD21	2:F:60:ASN:C	2.42	0.41
1:E:551:THR:O	1:E:598:LEU:HD21	2.21	0.41
1:G:555:PHE:CZ	1:G:559:LEU:HD13	2.56	0.41
1:A:280:GLN:H	1:A:280:GLN:CD	2.23	0.41
1:A:553:THR:O	1:A:556:VAL:N	2.54	0.41
1:G:342:MET:CE	1:G:449:ALA:CB	2.98	0.41
2:D:65:LYS:N	2:D:68:GLN:HE21	2.14	0.41
1:C:742:ILE:C	1:C:743:PRO:O	2.58	0.41
2:H:84:CYS:C	2:H:88:TYR:CD2	2.94	0.41
1:A:527:LEU:HD12	1:A:566:HIS:ND1	2.36	0.41
2:F:70:LEU:O	2:F:74:GLN:CD	2.59	0.41
1:A:196:VAL:CG1	1:A:217:TYR:HE2	2.33	0.41
1:A:361:GLN:HB3	1:A:387:VAL:CG2	2.48	0.41
1:E:162:ARG:O	1:E:162:ARG:HG3	2.20	0.41
1:G:128:LYS:HG2	1:G:129:GLN:N	2.36	0.41
1:G:119:LEU:HG	1:G:717:CYS:SG	2.61	0.41
2:F:116:GLY:O	2:F:118:LYS:HG2	2.22	0.41
2:H:37:ALA:C	2:H:39:GLY:H	2.24	0.41
1:A:248:PHE:HB2	1:A:270:TYR:O	2.20	0.40
2:B:16:GLN:HG2	2:B:16:GLN:H	1.40	0.40
1:E:700:LEU:CD2	1:E:704:GLN:HE21	2.33	0.40
1:G:276:ARG:HG2	1:G:287:PHE:CE1	2.56	0.40
1:E:437:ARG:HH21	1:E:625:TRP:HA	1.86	0.40
1:E:586:TYR:CG	1:E:587:ALA:N	2.89	0.40
1:C:276:ARG:HG2	1:C:287:PHE:CE1	2.56	0.40
1:C:541:LEU:HB2	1:C:555:PHE:CE1	2.55	0.40
1:E:776:PHE:HB2	1:E:781:LEU:HD22	2.03	0.40
1:G:776:PHE:HB2	1:G:781:LEU:HD22	2.02	0.40
2:F:65:LYS:HE3	2:F:68:GLN:NE2	2.36	0.40
1:A:521:LEU:O	1:A:522:GLN:C	2.59	0.40
2:F:111:VAL:C	2:F:113:VAL:H	2.24	0.40
1:E:76:GLN:CD	1:E:96:ASN:HB3	2.40	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:193:TYR:C	1:A:193:TYR:CD1	2.94	0.40
1:A:806:TYR:O	1:A:810:LYS:HG2	2.22	0.40
2:D:85:PHE:CE1	2:D:145:ARG:CG	2.98	0.40
1:C:145:LYS:HG3	1:C:146:ARG:HD2	2.03	0.40
1:C:527:LEU:HD12	1:C:566:HIS:ND1	2.36	0.40
1:G:116:TYR:CE1	1:G:151:PRO:CB	2.94	0.40
2:H:70:LEU:O	2:H:74:GLN:CD	2.59	0.40
1:A:727:PHE:CE1	1:A:773:LYS:N	2.85	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:250:LYS:O	1:G:465:ASP:N	2.49	0.40
1:E:816:GLN:O	1:E:819:LEU:CG	2.66	0.40
1:C:500:LEU:O	1:C:503:GLU:HG2	2.17	0.40
1:E:495:HIS:CE1	1:E:499:ILE:HG21	2.56	0.40
1:A:102:HIS:O	1:A:105:ARG:CB	2.69	0.40
1:E:29:TRP:O	1:E:32:LYS:HE2	2.20	0.40
1:G:678:ASN:HD22	1:G:679:PRO:CD	2.34	0.40
1:C:119:LEU:HG	1:C:717:CYS:SG	2.61	0.40
1:G:17:LYS:O	1:G:19:PHE:N	2.54	0.40
1:C:814:LYS:HG3	1:C:815:ARG:N	2.36	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:E:553:THR:O	1:E:556:VAL:N	2.55	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:C:555:PHE:CZ	1:C:559:LEU:HD13	2.56	0.40
1:A:145:LYS:HB2	1:A:145:LYS:HE3	1.67	0.40
1:C:806:TYR:O	1:C:810:LYS:HG2	2.21	0.40
1:E:657:ARG:CG	1:E:657:ARG:HH11	2.34	0.40
1:C:122:VAL:C	1:C:123:VAL:HG23	2.41	0.40
1:G:715:ARG:O	1:G:719:GLN:HG3	2.20	0.40
1:C:22:ASN:HA	1:C:23:PRO:HD3	1.84	0.40
1:E:755:LEU:HA	1:E:755:LEU:HD12	1.82	0.40
1:G:711:LEU:HD22	1:G:711:LEU:N	2.36	0.40
1:G:274:LYS:HG3	1:G:274:LYS:H	1.50	0.40
1:E:555:PHE:CZ	1:E:559:LEU:HD13	2.56	0.40
1:E:663:TYR:O	1:E:665:GLU:N	2.54	0.40
1:A:269:THR:HG22	1:A:443:LEU:HD22	2.03	0.40
1:G:618:ASP:O	1:G:622:ALA:N	2.54	0.40
1:A:513:ASN:C	1:A:513:ASN:HD22	2.25	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:663:TYR:O	1:C:665:GLU:N	2.54	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
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
2:H:88:TYR:HA	2:H:88:TYR:HD1	1.79	0.40
1:A:128:LYS:HB3	1:A:130:LEU:HD21	2.04	0.40
1:C:196:VAL:HG12	1:C:217:TYR:CD2	2.57	0.40
1:E:381:ASN:O	1:E:382:THR:C	2.59	0.40
1:C:122:VAL:O	1:C:123:VAL:CG2	2.70	0.40
1:E:135:GLU:OE1	1:E:213:PRO:N	2.55	0.40
1:E:327:GLN:CG	1:E:329:ASP:HB2	2.51	0.40
1:C:619:LYS:O	1:C:622:ALA:HB3	2.20	0.40
1:E:167:ASP:O	1:E:168:ARG:O	2.40	0.40
1:A:167:ASP:O	1:A:168:ARG:O	2.40	0.40
1:G:500:LEU:O	1:G:503:GLU:HG3	2.21	0.40
1:E:575:LEU:HA	1:E:575:LEU:HD23	1.81	0.40
1:E:119:LEU:HG	1:E:717:CYS:SG	2.61	0.40
1:C:563:GLN:C	1:C:565:ASN:N	2.74	0.40
2:D:22:GLY:C	2:D:24:GLY:H	2.23	0.40
1:C:136:LYS:O	1:C:139:ASP:HB2	2.22	0.40
1:E:751:GLN:HG2	1:E:751:GLN:O	2.22	0.40
1:G:248:PHE:HB2	1:G:270:TYR:O	2.20	0.40
2:B:58:GLU:O	2:B:62:LYS:HG3	2.21	0.40
2:F:51:LEU:C	2:F:53:ASN:N	2.75	0.40
1:A:605:LEU:CD2	1:A:632:VAL:HG23	2.40	0.40
1:C:269:THR:HG22	1:C:443:LEU:HD22	2.03	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:806:TYR:O	1:G:810:LYS:HG2	2.21	0.40
1:E:3:GLN:CA	1:E:18:ASN:HD21	2.34	0.40
1:G:773:LYS:HE2	1:G:773:LYS:HB2	1.90	0.40
1:A:64:ASN:O	1:A:66:LYS:N	2.55	0.40
1:A:495:HIS:CE1	1:A:499:ILE:HG21	2.56	0.40
1:G:311:ASN:HA	1:G:311:ASN:HD22	1.65	0.40
1:A:119:LEU:HG	1:A:717:CYS:SG	2.61	0.40
1:A:563:GLN:C	1:A:565:ASN:N	2.75	0.40
1:C:296:GLY:HA3	1:C:332:PHE:CD2	2.56	0.40
1:E:136:LYS:O	1:E:139:ASP:HB2	2.22	0.40
1:A:751:GLN:HG2	1:A:751:GLN:O	2.21	0.40
1:C:104:LEU:HD12	1:C:705:LEU:HD11	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:G:553:THR:HB	1:G:554:SER:H	1.66	0.40
1:G:502:GLN:HE21	1:G:502:GLN:HB2	1.68	0.40
1:E:807:LEU:HD22	2:F:123:GLU:HG2	2.04	0.40
1:A:405:PRO:HD2	1:A:416:LYS:O	2.22	0.40
2:B:113:VAL:CG2	2:B:124:VAL:CG1	2.95	0.40
1:C:243:ASP:O	1:C:323:ILE:HD12	2.22	0.40
1:A:88:ASP:HA	1:A:116:TYR:HB2	2.04	0.40
1:E:532:THR:O	1:E:533:ASN:HB2	2.22	0.40
1:G:656:PHE:HB3	1:G:657:ARG:H	1.76	0.40
1:A:122:VAL:O	1:A:123:VAL:CG2	2.70	0.40
1:C:162:ARG:O	1:C:162:ARG:HG3	2.20	0.40
1:A:619:LYS:O	1:A:622:ALA:HB3	2.21	0.40
1:A:173:ILE:HD11	1:A:461:LEU:HD21	2.03	0.40
1:C:678:ASN:HD22	1:C:679:PRO:CD	2.34	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	19
1	C	773/820 (94%)	580 (75%)	138 (18%)	55 (7%)	1	19
1	E	773/820 (94%)	580 (75%)	138 (18%)	55 (7%)	1	19
1	G	773/820 (94%)	580 (75%)	138 (18%)	55 (7%)	1	19
2	B	146/150 (97%)	111 (76%)	29 (20%)	6 (4%)	3	34
2	D	146/150 (97%)	112 (77%)	28 (19%)	6 (4%)	3	34
2	F	146/150 (97%)	112 (77%)	29 (20%)	5 (3%)	5	41
2	H	146/150 (97%)	113 (77%)	26 (18%)	7 (5%)	3	30
All	All	3676/3880 (95%)	2767 (75%)	665 (18%)	244 (7%)	1	22

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	2
1	C	685/718 (95%)	446 (65%)	239 (35%)	0	2
1	E	685/718 (95%)	446 (65%)	239 (35%)	0	2
1	G	685/718 (95%)	446 (65%)	239 (35%)	0	2
2	B	127/129 (98%)	75 (59%)	52 (41%)	0	1
2	D	127/129 (98%)	74 (58%)	53 (42%)	0	1
2	F	127/129 (98%)	74 (58%)	53 (42%)	0	1
2	H	127/129 (98%)	73 (58%)	54 (42%)	0	1
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 ⓘ

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

## 5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

## 5.6 Ligand geometry ⓘ

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	A	998	3,5	22,29,29	1.01	2 (9%)	27,45,45	1.32	4 (14%)
5	BEF	A	999	3,4	0,3,3	0.00	-	0,3,3	0.00	-
4	ADP	C	998	3,5	22,29,29	1.02	2 (9%)	27,45,45	1.32	4 (14%)
5	BEF	C	999	3,4	0,3,3	0.00	-	0,3,3	0.00	-
4	ADP	E	998	3,5	22,29,29	1.01	2 (9%)	27,45,45	1.31	4 (14%)
5	BEF	E	999	3,4	0,3,3	0.00	-	0,3,3	0.00	-
4	ADP	G	998	3,5	22,29,29	1.01	2 (9%)	27,45,45	1.32	4 (14%)
5	BEF	G	999	3,4	0,3,3	0.00	-	0,3,3	0.00	-

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	-	0/12/32/32	0/3/3/3
5	BEF	A	999	3,4	-	0/0/0/0	0/0/0/0
4	ADP	C	998	3,5	-	0/12/32/32	0/3/3/3
5	BEF	C	999	3,4	-	0/0/0/0	0/0/0/0
4	ADP	E	998	3,5	-	0/12/32/32	0/3/3/3
5	BEF	E	999	3,4	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
4	ADP	G	998	3,5	-	0/12/32/32	0/3/3/3
5	BEF	G	999	3,4	-	0/0/0/0	0/0/0/0

All (8) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	C	998	ADP	O4'-C1'	-2.30	1.38	1.41
4	E	998	ADP	O4'-C1'	-2.28	1.38	1.41
4	G	998	ADP	O4'-C1'	-2.23	1.38	1.41
4	A	998	ADP	O4'-C1'	-2.23	1.38	1.41
4	A	998	ADP	C2-N3	2.01	1.35	1.32
4	E	998	ADP	C2-N3	2.02	1.35	1.32
4	C	998	ADP	C2-N3	2.03	1.35	1.32
4	G	998	ADP	C2-N3	2.05	1.35	1.32

All (16) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	A	998	ADP	C1'-N9-C4	-2.99	122.43	126.94
4	G	998	ADP	C1'-N9-C4	-2.97	122.46	126.94
4	C	998	ADP	C1'-N9-C4	-2.96	122.48	126.94
4	E	998	ADP	C1'-N9-C4	-2.96	122.48	126.94
4	A	998	ADP	N6-C6-N1	-2.94	112.89	119.20
4	C	998	ADP	N6-C6-N1	-2.92	112.93	119.20
4	G	998	ADP	N6-C6-N1	-2.91	112.95	119.20
4	E	998	ADP	N6-C6-N1	-2.89	113.01	119.20
4	E	998	ADP	C2'-C1'-N9	2.64	118.33	114.29
4	A	998	ADP	C2'-C1'-N9	2.70	118.42	114.29
4	C	998	ADP	C2'-C1'-N9	2.71	118.44	114.29
4	G	998	ADP	C2'-C1'-N9	2.74	118.48	114.29
4	C	998	ADP	O4'-C1'-N9	3.39	115.20	108.10
4	A	998	ADP	O4'-C1'-N9	3.40	115.22	108.10
4	G	998	ADP	O4'-C1'-N9	3.41	115.23	108.10
4	E	998	ADP	O4'-C1'-N9	3.42	115.25	108.10

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

4 monomers are involved in 12 short contacts:



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

## 5.7 Other polymers [i](#)

There are no such residues in this entry.

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

There are no chain breaks in this entry.

## 6 Fit of model and data [i](#)

### 6.1 Protein, DNA and RNA chains [i](#)

EDS was not executed - this section will therefore be empty.

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

EDS was not executed - this section will therefore be empty.

### 6.3 Carbohydrates [i](#)

EDS was not executed - this section will therefore be empty.

### 6.4 Ligands [i](#)

EDS was not executed - this section will therefore be empty.

### 6.5 Other polymers [i](#)

EDS was not executed - this section will therefore be empty.