



## wwPDB EM Map/Model Validation Report ⓘ

Apr 10, 2016 – 02:10 PM BST

PDB ID : 5A20  
EMDB ID: : EMD-2993  
Title : Structure of bacteriophage SPP1 head-to-tail interface filled with DNA and tape measure protein  
Authors : Chaban, Y.; Lurz, R.; Brasiles, S.; Cornilleau, C.; Karreman, M.; Zinn-Justin, S.; Tavares, P.; Orlova, E.V.  
Deposited on : 2015-05-06  
Resolution : 7.60 Å(reported)

This is a wwPDB EM Map/Model Validation Report for a publicly released PDB/EMDB entry.  
For rigid body fitted models, validation errors reported here could stem from errors in the original structure(s) used in the fitting.

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/EMValidationReportHelp>

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MolProbity : 4.02b-467  
Mogul : unknown  
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) : trunk27241

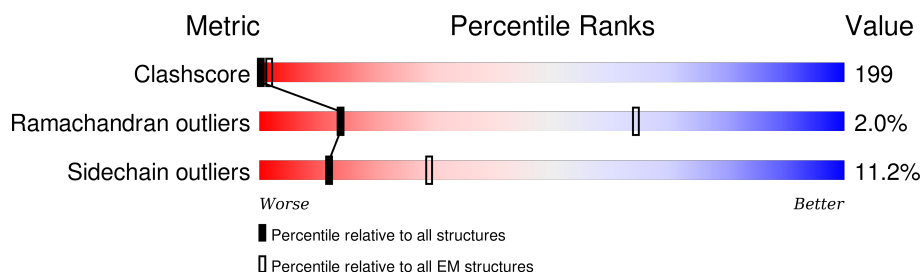
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*ELECTRON MICROSCOPY*

The reported resolution of this entry is 7.60 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	114402	924
Ramachandran outliers	111179	726
Sidechain outliers	111093	686

The table below summarises the geometric issues observed across the polymeric chains. The red, orange, yellow and green segments on the 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  $\leq 5\%$ .

Mol	Chain	Length	Quality of chain
1	A	503	17% 62% 8% • 13%
1	B	503	17% 62% 8% • 13%
2	C	102	10% 75% 12% •
2	D	102	10% 74% 14% •
3	E	109	8% 78% 12% •
3	F	109	7% 73% 19%
4	G	134	15% 69% 14% ••
5	H	177	19% 55% 15% • 9%

## 2 Entry composition

There are 5 unique types of molecules in this entry. The entry contains 12799 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called PORTAL PROTEIN.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	440	Total	C	N	O	S	0	1
			3573	2259	589	711	14		
1	B	440	Total	C	N	O	S	0	1
			3573	2259	589	711	14		

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	365	LYS	ASN	CONFLICT	UNP P54309
B	365	LYS	ASN	CONFLICT	UNP P54309

- Molecule 2 is a protein called 15 PROTEIN.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	C	99	Total	C	N	O	S	0	0
			790	502	134	149	5		
2	D	99	Total	C	N	O	S	0	0
			790	502	134	149	5		

- Molecule 3 is a protein called HEAD COMPLETION PROTEIN GP16.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	E	109	Total	C	N	O	S	0	0
			891	569	145	175	2		
3	F	109	Total	C	N	O	S	0	0
			891	569	145	175	2		

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
E	6	ARG	PRO	CONFLICT	UNP O48446
F	6	ARG	PRO	CONFLICT	UNP O48446

- Molecule 4 is a protein called TAIL-TO-HEAD JOINING PROTEIN GP17.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	G	133	Total	C	N	O	S	0	0
			1047	667	172	204	4		

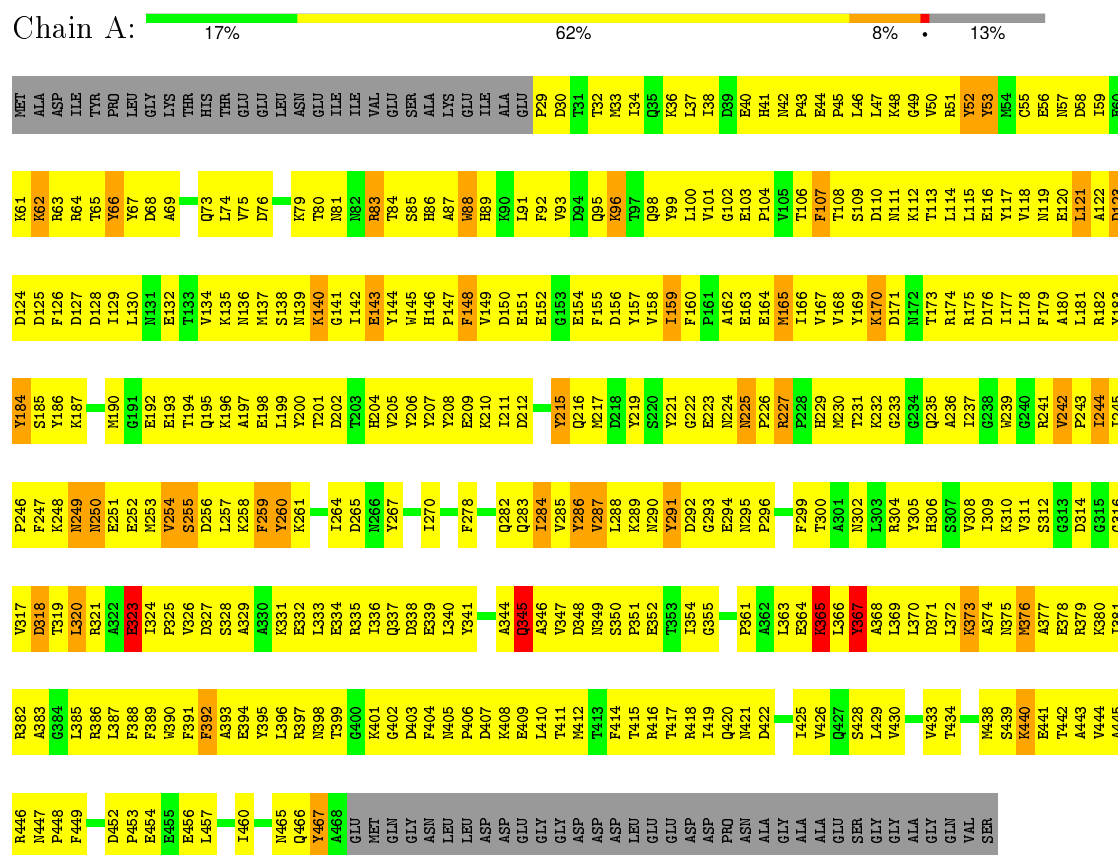
- Molecule 5 is a protein called MAJOR TAIL PROTEIN GP17.1.

Mol	Chain	Residues	Atoms				AltConf	Trace
5	H	161	Total	C	N	O	0	0
			1244	776	205	263		

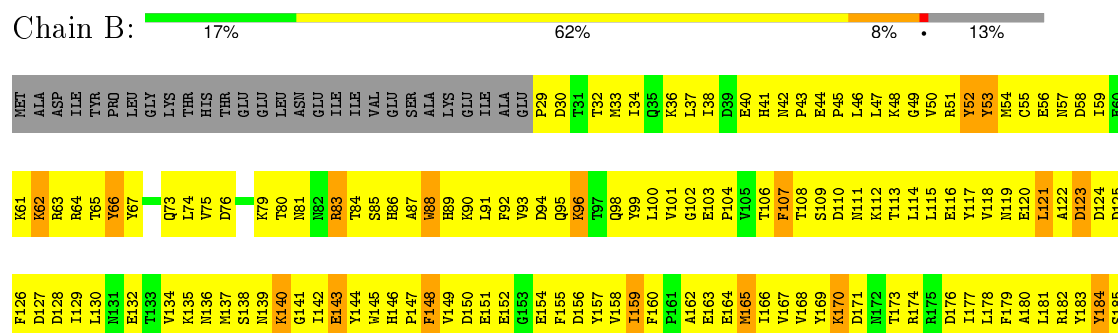
### 3 Residue-property plots

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. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

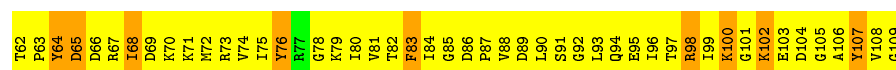
#### • Molecule 1: PORTAL PROTEIN



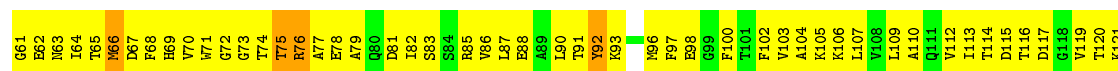
#### • Molecule 1: PORTAL PROTEIN



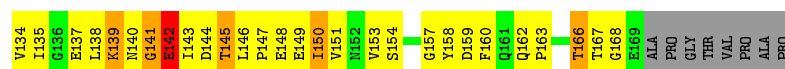
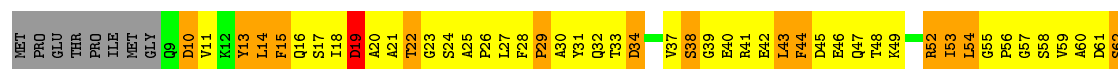




• Molecule 4: TAIL-TO-HEAD JOINING PROTEIN GP17



• Molecule 5: MAJOR TAIL PROTEIN GP17.1



## 4 Experimental information

Property	Value	Source
Reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	Depositor
Number of images	Not provided	Depositor
Resolution determination method	Not provided	Depositor
CTF correction method	EACH PARTICLE, Not provided	Depositor
Microscope	FEI TECNAI F30	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	20	Depositor
Minimum defocus (nm)	900	Depositor
Maximum defocus (nm)	3600	Depositor
Magnification	39000	Depositor
Image detector	KODAK SO-163 FILM	Depositor



## 5 Model quality

### 5.1 Standard geometry

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	$\# Z  > 2$	RMSZ	$\# Z  > 2$
1	A	0.99	0/3651	1.07	0/4941
1	B	0.99	0/3651	1.07	0/4941
2	C	0.99	0/805	1.09	0/1085
2	D	0.99	0/805	1.09	0/1085
3	E	1.02	0/911	1.14	0/1229
3	F	1.02	0/911	1.11	0/1229
4	G	0.97	0/1069	1.11	1/1451 (0.1%)
5	H	1.21	2/1264 (0.2%)	1.36	3/1703 (0.2%)
All	All	1.01	2/13067 (0.0%)	1.11	4/17664 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	6
1	B	0	6
2	C	0	4
2	D	0	4
3	E	0	2
3	F	0	2
4	G	0	3
5	H	0	5
All	All	0	32

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	H	141	GLY	C-N	18.96	1.77	1.34
5	H	53	ILE	C-N	16.64	1.72	1.34

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed( $^{\circ}$ )	Ideal( $^{\circ}$ )
5	H	141	GLY	CA-C-N	-22.88	66.86	117.20
5	H	53	ILE	O-C-N	-19.53	91.46	122.70
5	H	141	GLY	C-N-CA	-11.11	93.92	121.70
4	G	44	VAL	CB-CA-C	-5.01	101.89	111.40

There are no chirality outliers.

All (32) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	123	ASP	Peptide
1	A	255	SER	Peptide
1	A	282	GLN	Peptide
1	A	323	GLU	Peptide
1	A	365	LYS	Peptide
1	A	367	TYR	Peptide
1	B	123	ASP	Peptide
1	B	255	SER	Peptide
1	B	282	GLN	Peptide
1	B	323	GLU	Peptide
1	B	365	LYS	Peptide
1	B	367	TYR	Peptide
2	C	32	ALA	Peptide
2	C	38	ASN	Peptide
2	C	70	LEU	Peptide
2	C	87	PRO	Peptide
2	D	32	ALA	Peptide
2	D	38	ASN	Peptide
2	D	70	LEU	Peptide
2	D	87	PRO	Peptide
3	E	45	GLU	Peptide
3	E	6	ARG	Peptide
3	F	45	GLU	Peptide
3	F	54	THR	Peptide
4	G	28	VAL	Peptide
4	G	29	ASN	Peptide
4	G	75	THR	Peptide
5	H	113	ILE	Peptide
5	H	145	THR	Peptide
5	H	168	GLY	Peptide
5	H	29	PRO	Peptide
5	H	40	GLU	Peptide

## 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	3573	0	3416	1326	0
1	B	3573	0	3414	1396	0
2	C	790	0	795	628	0
2	D	790	0	794	554	0
3	E	891	0	855	606	0
3	F	891	0	858	600	0
4	G	1047	0	1027	550	0
5	H	1244	0	1160	571	0
All	All	12799	0	12319	5006	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 199.

All (5006) 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:438:MET:SD	1:B:434:THR:HA	1.26	1.74
2:C:99:LYS:CA	2:D:101:ALA:HA	1.22	1.69
4:G:100:PHE:CE1	5:H:45:ASP:HB3	1.33	1.62
1:A:259:PHE:CZ	1:B:90:LYS:HD3	1.32	1.61
4:G:59:SER:CB	5:H:138:LEU:HD12	1.11	1.58
1:A:259:PHE:CE2	1:B:90:LYS:HD3	1.35	1.58
2:C:94:LEU:HA	2:D:97:TYR:CB	1.27	1.57
2:C:66:THR:HG21	2:D:82:PHE:CE2	1.36	1.57
2:C:66:THR:CG2	2:D:82:PHE:HE2	1.14	1.57
3:E:105:GLY:H	4:G:119:VAL:CG2	1.06	1.57
4:G:100:PHE:CE2	5:H:47:GLN:HA	1.40	1.56
3:F:104:ASP:H	4:G:31:VAL:CG2	1.05	1.56
4:G:100:PHE:HE1	5:H:45:ASP:CA	1.15	1.55
2:C:98:ARG:HB2	2:D:97:TYR:CE2	1.07	1.55
2:C:99:LYS:CG	2:D:101:ALA:HB1	1.31	1.55
4:G:100:PHE:CD2	5:H:47:GLN:HA	1.04	1.54
4:G:59:SER:HB2	5:H:138:LEU:CD1	1.31	1.54
1:A:460:ILE:CG2	1:B:467:TYR:HB2	1.36	1.53
1:A:295:ASN:CB	2:C:37:HIS:HE1	1.17	1.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:438:MET:CG	1:B:434:THR:HA	1.31	1.52
1:A:295:ASN:CA	2:C:37:HIS:CE1	1.90	1.52
2:C:99:LYS:CA	2:D:101:ALA:CA	1.83	1.52
4:G:100:PHE:CE1	5:H:45:ASP:CB	1.88	1.52
2:C:98:ARG:CB	2:D:97:TYR:CE2	1.87	1.52
3:E:109:GLY:CA	4:G:114:THR:H	1.20	1.52
4:G:97:PHE:HA	5:H:49:LYS:CE	1.36	1.51
1:B:295:ASN:CA	2:D:37:HIS:CE1	1.90	1.51
1:B:295:ASN:CB	2:D:37:HIS:HE1	1.17	1.51
2:C:99:LYS:CB	2:D:101:ALA:HA	1.37	1.49
3:E:105:GLY:O	4:G:41:TYR:CE2	1.64	1.49
2:C:4:GLN:CG	3:E:1:MET:HE2	1.41	1.49
3:E:105:GLY:N	4:G:119:VAL:HG21	1.28	1.48
2:C:4:GLN:CG	3:E:1:MET:CE	1.92	1.47
4:G:59:SER:CB	5:H:138:LEU:CD1	1.84	1.47
2:C:89:THR:HG23	2:D:92:LYS:CD	1.44	1.47
1:B:295:ASN:CB	2:D:37:HIS:CE1	1.92	1.47
2:C:99:LYS:CB	2:D:101:ALA:CB	1.93	1.46
2:C:99:LYS:HB2	2:D:101:ALA:CA	1.39	1.46
2:C:4:GLN:CD	3:E:1:MET:CE	1.79	1.46
1:A:295:ASN:CB	2:C:37:HIS:CE1	1.92	1.46
2:C:99:LYS:CB	2:D:101:ALA:CA	1.88	1.45
2:D:4:GLN:HA	3:F:1:MET:CB	1.45	1.45
2:D:5:ARG:HA	3:F:3:GLU:N	1.21	1.45
3:F:104:ASP:N	4:G:31:VAL:CG2	1.74	1.43
3:F:105:GLY:CA	4:G:39:ASP:CG	1.86	1.43
3:F:104:ASP:N	4:G:31:VAL:HG21	1.29	1.43
1:B:295:ASN:CA	2:D:37:HIS:HE1	1.09	1.42
4:G:97:PHE:HA	5:H:49:LYS:CD	1.32	1.42
5:H:52:ARG:CD	5:H:54:LEU:N	1.80	1.42
2:C:4:GLN:NE2	3:E:1:MET:HE2	1.23	1.42
4:G:100:PHE:CD2	5:H:47:GLN:CA	1.97	1.42
5:H:53:ILE:C	5:H:54:LEU:N	1.72	1.42
1:A:295:ASN:CA	2:C:37:HIS:HE1	1.09	1.41
5:H:141:GLY:CA	5:H:142:GLU:N	1.81	1.41
5:H:42:GLU:CG	5:H:56:PRO:HG2	1.48	1.41
2:C:94:LEU:CA	2:D:97:TYR:CG	1.84	1.40
2:C:94:LEU:CA	2:D:97:TYR:CB	1.88	1.40
1:A:460:ILE:HG13	1:B:466:GLN:CG	1.50	1.39
1:A:354:ILE:CD1	1:B:355:GLY:HA2	1.50	1.39
1:B:310:LYS:CB	2:C:38:ASN:HD22	1.34	1.39

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:310:LYS:HB2	2:C:38:ASN:ND2	1.36	1.39
3:F:105:GLY:CA	4:G:39:ASP:OD2	1.69	1.39
1:A:259:PHE:CZ	1:B:90:LYS:CD	2.04	1.38
2:D:5:ARG:CA	3:F:3:GLU:H	1.36	1.38
1:A:438:MET:CG	1:B:434:THR:CA	2.00	1.38
5:H:141:GLY:C	5:H:142:GLU:N	1.77	1.38
4:G:100:PHE:CE1	5:H:45:ASP:C	1.98	1.36
2:C:89:THR:CG2	2:D:92:LYS:CD	2.01	1.36
1:A:295:ASN:HB2	2:C:37:HIS:CE1	1.50	1.35
3:E:105:GLY:O	4:G:41:TYR:CZ	1.77	1.35
2:C:4:GLN:NE2	3:E:1:MET:CE	1.89	1.35
1:A:438:MET:SD	1:B:434:THR:CA	2.14	1.34
1:B:295:ASN:HB2	2:D:37:HIS:CE1	1.50	1.34
1:B:313:GLY:CA	2:C:51:SER:OG	1.76	1.34
1:A:460:ILE:CG2	1:B:467:TYR:CB	2.06	1.33
2:C:99:LYS:NZ	2:D:102:ARG:H	1.27	1.33
3:E:103:GLU:CG	4:G:42:PRO:HD3	1.56	1.33
1:A:453:PRO:HB3	1:B:462:GLU:CG	1.60	1.32
1:A:339:GLU:OE1	1:B:274:THR:CG2	1.77	1.32
1:A:460:ILE:HB	1:B:467:TYR:CB	1.59	1.31
2:C:89:THR:CG2	2:D:92:LYS:HG2	1.59	1.31
5:H:42:GLU:OE2	5:H:56:PRO:CG	1.77	1.31
3:E:105:GLY:N	4:G:119:VAL:CG2	1.78	1.31
3:E:109:GLY:CA	4:G:114:THR:N	1.92	1.30
3:F:105:GLY:N	4:G:39:ASP:OD2	1.64	1.30
1:A:68:ASP:OD1	1:B:300:THR:HB	1.18	1.30
2:C:99:LYS:CG	2:D:101:ALA:CB	2.09	1.30
2:C:94:LEU:HA	2:D:97:TYR:CD1	1.68	1.29
2:C:99:LYS:N	2:D:101:ALA:HA	1.45	1.29
2:C:89:THR:CG2	2:D:92:LYS:HD3	1.57	1.29
5:H:52:ARG:HD2	5:H:54:LEU:N	1.42	1.29
1:A:460:ILE:CB	1:B:467:TYR:CB	2.10	1.29
4:G:100:PHE:HE1	5:H:45:ASP:CB	1.27	1.29
2:C:99:LYS:HA	2:D:101:ALA:CB	1.63	1.28
5:H:42:GLU:OE2	5:H:56:PRO:HG3	1.12	1.28
1:A:296:PRO:CB	2:C:36:CYS:O	1.78	1.28
2:C:5:ARG:HB3	3:E:3:GLU:N	1.48	1.28
2:C:89:THR:OG1	2:D:88:SER:HB3	1.26	1.27
1:A:441:GLU:HG3	1:B:462:GLU:OE2	1.24	1.27
3:E:109:GLY:HA2	4:G:114:THR:N	1.46	1.27
4:G:100:PHE:CE1	5:H:45:ASP:CA	2.06	1.27

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:295:ASN:HA	2:D:37:HIS:CE1	1.57	1.26
1:A:457:LEU:CG	1:B:467:TYR:CD1	2.13	1.26
1:A:460:ILE:CB	1:B:467:TYR:HB2	1.63	1.26
1:A:438:MET:CE	1:B:433:VAL:HG22	1.63	1.26
1:A:453:PRO:HB3	1:B:462:GLU:CD	1.56	1.26
2:C:71:THR:N	3:E:92:GLY:CA	1.95	1.26
3:E:103:GLU:OE2	4:G:42:PRO:CG	1.84	1.26
3:F:104:ASP:CA	4:G:31:VAL:HG23	1.62	1.26
2:C:99:LYS:HZ2	2:D:102:ARG:N	1.30	1.25
5:H:42:GLU:HG3	5:H:56:PRO:CG	1.66	1.25
2:D:4:GLN:CA	3:F:1:MET:HB3	1.65	1.25
2:C:89:THR:CG2	2:D:92:LYS:CG	2.12	1.25
2:C:100:MET:CE	2:D:100:MET:HB2	1.67	1.24
4:G:132:ASN:HA	5:H:54:LEU:O	1.12	1.24
2:C:66:THR:CG2	2:D:82:PHE:CE2	2.00	1.24
1:B:292:ASP:OD1	2:D:33:LYS:C	1.76	1.24
1:A:457:LEU:HG	1:B:467:TYR:CD1	1.24	1.23
1:B:294:GLU:HG2	2:C:42:ASP:CA	1.68	1.23
2:C:94:LEU:HA	2:D:97:TYR:CG	1.18	1.23
2:C:99:LYS:HG3	2:D:101:ALA:CB	1.63	1.23
1:A:438:MET:HG2	1:B:434:THR:C	1.58	1.22
1:A:441:GLU:CG	1:B:462:GLU:OE2	1.87	1.22
1:A:292:ASP:OD1	2:C:33:LYS:C	1.76	1.22
2:C:7:LYS:HE2	3:E:4:GLU:CA	1.67	1.22
2:D:4:GLN:HG2	3:F:1:MET:SD	1.78	1.22
2:C:98:ARG:CB	2:D:97:TYR:HE2	1.36	1.21
1:A:460:ILE:CG1	1:B:467:TYR:CD2	2.24	1.20
3:E:19:ASN:ND2	4:G:77:ALA:HB1	1.56	1.20
1:A:438:MET:HG2	1:B:434:THR:CA	1.66	1.20
1:B:170:LYS:HB3	1:B:178:LEU:HD22	1.23	1.20
2:D:69:GLY:O	3:F:93:LEU:HD13	1.07	1.20
4:G:63:ASN:H	5:H:139:LYS:HB3	1.07	1.20
1:A:460:ILE:HG21	1:B:467:TYR:CB	1.70	1.19
1:B:296:PRO:CB	2:D:36:CYS:O	1.78	1.19
2:C:7:LYS:CD	3:E:4:GLU:OE1	1.90	1.19
3:E:109:GLY:HA2	4:G:114:THR:CA	1.56	1.19
4:G:132:ASN:CA	5:H:54:LEU:O	1.91	1.19
2:C:7:LYS:CE	3:E:4:GLU:HA	1.70	1.19
4:G:97:PHE:CA	5:H:49:LYS:CE	2.17	1.18
4:G:59:SER:CA	5:H:138:LEU:HD12	1.72	1.18
1:A:170:LYS:HB3	1:A:178:LEU:HD22	1.23	1.18

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:99:LYS:CB	2:D:101:ALA:HB1	1.62	1.18
5:H:42:GLU:CG	5:H:56:PRO:CG	2.18	1.18
3:E:53:GLN:HG3	4:G:40:PRO:HG3	1.21	1.18
1:A:295:ASN:HA	2:C:37:HIS:CE1	1.56	1.18
5:H:42:GLU:CD	5:H:56:PRO:HG3	1.62	1.18
2:D:69:GLY:O	3:F:93:LEU:CD1	1.92	1.18
3:E:19:ASN:HD21	4:G:77:ALA:CB	1.57	1.18
1:B:313:GLY:HA2	2:C:51:SER:CB	1.73	1.18
4:G:100:PHE:CZ	5:H:46:GLU:N	2.11	1.18
4:G:59:SER:OG	5:H:138:LEU:HG	1.41	1.18
2:C:5:ARG:CB	3:E:3:GLU:HA	1.73	1.18
2:C:71:THR:N	3:E:92:GLY:HA2	1.11	1.17
4:G:100:PHE:CZ	5:H:45:ASP:HB3	1.77	1.17
2:C:94:LEU:HA	2:D:97:TYR:CA	1.73	1.17
4:G:134:ASN:HB3	5:H:59:VAL:CB	1.37	1.17
5:H:52:ARG:NH2	5:H:54:LEU:CG	1.98	1.17
1:A:339:GLU:OE1	1:B:274:THR:HG23	1.00	1.17
4:G:134:ASN:CA	5:H:59:VAL:HG23	1.29	1.16
1:A:367:TYR:HB3	1:A:369:LEU:HA	1.20	1.16
2:C:94:LEU:N	2:D:97:TYR:HB2	1.58	1.16
4:G:64:ILE:HD12	5:H:140:ASN:ND2	1.60	1.16
2:D:5:ARG:CA	3:F:3:GLU:N	1.99	1.16
1:A:354:ILE:HD12	1:B:355:GLY:CA	1.76	1.16
2:C:99:LYS:NZ	2:D:102:ARG:N	1.91	1.16
1:B:367:TYR:HB3	1:B:369:LEU:HA	1.20	1.16
2:D:5:ARG:HA	3:F:3:GLU:CA	1.74	1.16
3:E:109:GLY:HA3	4:G:114:THR:H	1.06	1.16
1:A:453:PRO:HB3	1:B:462:GLU:HG3	1.24	1.16
3:F:53:GLN:HG3	3:F:55:PRO:HD2	1.22	1.16
1:B:298:GLU:OE1	2:C:43:LYS:HG2	1.45	1.16
2:C:99:LYS:HA	2:D:101:ALA:HB2	1.20	1.16
4:G:134:ASN:HB3	5:H:59:VAL:HB	1.23	1.16
5:H:141:GLY:HA3	5:H:142:GLU:N	1.51	1.15
4:G:76:ARG:HG2	4:G:125:ILE:HD12	1.24	1.15
3:F:105:GLY:HA3	4:G:39:ASP:N	1.60	1.15
3:F:104:ASP:HA	4:G:31:VAL:HG23	1.21	1.15
4:G:133:ASN:N	5:H:55:GLY:HA2	1.60	1.15
3:E:75:ILE:HG13	3:E:80:ILE:HG22	1.29	1.15
2:C:66:THR:HG23	2:D:82:PHE:HE2	1.08	1.14
1:A:289:LYS:HG3	1:B:316:GLY:N	1.61	1.14
1:B:144:TYR:HB3	1:B:244:ILE:HD11	1.28	1.14

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:44:GLU:HG2	3:F:46:TYR:H	1.12	1.14
1:B:37:LEU:HD22	1:B:168:VAL:HG11	1.16	1.14
2:C:89:THR:HG23	2:D:92:LYS:CG	1.74	1.14
2:C:89:THR:HG23	2:D:92:LYS:CE	1.76	1.14
2:C:5:ARG:CB	3:E:3:GLU:CA	2.25	1.14
3:F:105:GLY:HA3	4:G:39:ASP:CB	1.77	1.14
3:F:6:ARG:HB2	3:F:8:VAL:HG12	1.16	1.14
1:A:340:LEU:CD1	1:B:275:MET:CE	2.26	1.14
1:A:460:ILE:HB	1:B:467:TYR:CD2	1.81	1.13
1:A:460:ILE:CG1	1:B:466:GLN:HG3	1.76	1.13
1:A:251:GLU:HG3	1:B:54:MET:HA	1.30	1.13
1:A:460:ILE:CG1	1:B:467:TYR:HD2	1.59	1.13
1:A:335:ARG:NH1	1:B:278:PHE:CE1	2.14	1.13
1:A:438:MET:HE1	1:B:433:VAL:HG22	1.28	1.13
1:A:460:ILE:HB	1:B:467:TYR:CG	1.82	1.13
2:C:99:LYS:HA	2:D:101:ALA:CA	1.64	1.13
1:A:37:LEU:HD22	1:A:168:VAL:HG11	1.16	1.13
3:F:102:LYS:HG3	4:G:39:ASP:OD1	1.49	1.13
1:A:295:ASN:HB2	2:C:37:HIS:NE2	1.62	1.13
1:B:295:ASN:HB2	2:D:37:HIS:NE2	1.62	1.12
5:H:49:LYS:HB2	5:H:52:ARG:HG2	1.16	1.12
1:A:144:TYR:HB3	1:A:244:ILE:HD11	1.28	1.12
2:C:7:LYS:HD3	3:E:4:GLU:OE1	0.95	1.12
1:A:110:ASP:HB3	1:A:396:LEU:HD13	1.31	1.12
2:C:98:ARG:HB2	2:D:97:TYR:CZ	1.84	1.12
2:C:94:LEU:CA	2:D:97:TYR:HB2	1.63	1.12
4:G:97:PHE:CA	5:H:49:LYS:CD	2.22	1.12
3:E:109:GLY:CA	4:G:113:ILE:HD12	1.77	1.12
1:A:429:LEU:HD22	1:A:443:ALA:HB1	1.24	1.12
2:C:100:MET:HE2	2:D:100:MET:CB	1.76	1.12
2:C:94:LEU:H	2:D:97:TYR:N	1.48	1.12
2:C:5:ARG:HB2	3:E:3:GLU:HA	1.31	1.12
4:G:62:GLU:N	5:H:139:LYS:N	1.75	1.12
1:B:38:ILE:HG23	1:B:163:GLU:HG2	1.31	1.12
3:E:65:ASP:HB3	3:E:97:THR:HB	1.31	1.12
4:G:59:SER:H	5:H:138:LEU:HD11	0.99	1.12
3:E:103:GLU:OE2	4:G:42:PRO:HG3	1.47	1.12
3:E:79:LYS:HD3	3:F:70:LYS:H	1.11	1.11
1:B:110:ASP:HB3	1:B:396:LEU:HD13	1.31	1.11
3:F:55:PRO:HG3	3:F:102:LYS:HD3	1.30	1.11
2:C:89:THR:HG21	2:D:92:LYS:HG2	1.12	1.11

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:99:LYS:CA	2:D:101:ALA:CB	2.14	1.11
3:E:103:GLU:HG3	4:G:42:PRO:CD	1.80	1.11
5:H:42:GLU:CD	5:H:56:PRO:CG	2.18	1.11
1:A:438:MET:CG	1:B:434:THR:O	1.99	1.11
5:H:60:ALA:HB3	5:H:134:VAL:HG11	1.22	1.11
1:A:167:VAL:HG13	1:A:177:ILE:HD12	1.30	1.11
2:C:89:THR:HG21	2:D:88:SER:O	1.48	1.11
4:G:100:PHE:HZ	5:H:46:GLU:N	1.45	1.10
1:A:38:ILE:HG23	1:A:163:GLU:HG2	1.31	1.10
1:B:167:VAL:HG13	1:B:177:ILE:HD12	1.30	1.10
1:B:63:ARG:HG2	1:B:79:LYS:HB2	1.30	1.10
1:B:40:GLU:HB2	1:B:166:ILE:HD11	1.12	1.10
1:B:310:LYS:CB	2:C:38:ASN:HB2	1.81	1.10
4:G:62:GLU:N	5:H:139:LYS:HB2	1.50	1.10
3:F:105:GLY:CA	4:G:39:ASP:H	1.62	1.10
5:H:32:GLN:HG3	5:H:65:VAL:HG13	1.31	1.10
1:A:453:PRO:CB	1:B:462:GLU:HG3	1.80	1.10
1:B:429:LEU:HD22	1:B:443:ALA:HB1	1.24	1.10
2:C:90:ILE:CD1	2:D:91:LEU:HG	1.81	1.10
4:G:134:ASN:C	5:H:59:VAL:HG23	1.69	1.10
2:C:4:GLN:CD	3:E:1:MET:HE2	0.96	1.10
1:B:306:HIS:HB3	1:B:308:VAL:HG12	1.31	1.10
2:D:70:LEU:O	3:F:91:SER:HB2	1.52	1.10
3:F:105:GLY:HA2	4:G:39:ASP:OD2	1.41	1.10
1:A:438:MET:HG2	1:B:434:THR:O	1.48	1.09
1:A:252:GLU:HB3	1:A:254:VAL:HG13	1.30	1.09
1:A:40:GLU:HB2	1:A:166:ILE:HD11	1.12	1.09
1:B:37:LEU:HD13	1:B:168:VAL:HG21	1.22	1.09
3:E:38:VAL:HG13	3:E:60:ILE:HG22	1.30	1.09
3:F:105:GLY:HA3	4:G:39:ASP:CG	1.56	1.09
1:B:294:GLU:HG2	2:C:42:ASP:HA	1.27	1.09
2:C:99:LYS:HZ1	2:D:102:ARG:HG3	1.16	1.09
4:G:59:SER:H	5:H:138:LEU:CD1	1.65	1.09
3:E:15:VAL:HG12	3:E:73:ARG:HE	1.17	1.09
3:F:105:GLY:HA3	4:G:39:ASP:CA	1.82	1.09
3:E:105:GLY:N	4:G:41:TYR:CD2	2.20	1.09
1:A:66:TYR:HE1	1:A:74:LEU:HB3	1.14	1.09
1:B:306:HIS:NE2	2:C:39:PRO:HG3	1.65	1.09
4:G:133:ASN:HB3	5:H:57:GLY:O	1.51	1.09
2:C:4:GLN:HG3	3:E:1:MET:CE	1.81	1.09
1:A:340:LEU:HD13	1:B:275:MET:CE	1.82	1.09

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:G:105:LYS:HG3	4:G:106:LYS:HG2	1.14	1.09
1:B:313:GLY:HA3	2:C:51:SER:OG	1.41	1.08
4:G:100:PHE:CZ	5:H:45:ASP:C	2.25	1.08
3:E:51:GLN:HG3	3:E:52:LEU:HD22	1.30	1.08
1:A:333:LEU:HD21	1:B:282:GLN:HE22	1.13	1.08
1:A:69:ALA:H	1:B:300:THR:CG2	1.65	1.08
3:E:69:ASP:HB2	3:E:87:PRO:HG3	1.20	1.08
5:H:52:ARG:HD3	5:H:54:LEU:N	1.64	1.08
1:B:142:ILE:HG13	1:B:145:TRP:HB2	1.36	1.08
4:G:21:TYR:HB3	4:G:24:LEU:HB2	1.08	1.08
1:A:142:ILE:HG13	1:A:145:TRP:HB2	1.36	1.08
1:A:37:LEU:HD13	1:A:168:VAL:HG21	1.22	1.07
1:A:306:HIS:HB3	1:A:308:VAL:HG12	1.31	1.07
1:A:63:ARG:HG2	1:A:79:LYS:HB2	1.30	1.07
1:A:259:PHE:CE2	1:B:90:LYS:CD	2.30	1.07
1:B:66:TYR:HE1	1:B:74:LEU:HB3	1.14	1.07
2:C:85:GLU:HA	2:D:86:ILE:HD12	1.34	1.07
3:E:77:ARG:HB3	3:F:66:ASP:HA	1.13	1.07
3:F:88:VAL:HG22	3:F:98:ARG:HB2	1.34	1.07
3:F:102:LYS:HD2	4:G:39:ASP:OD1	1.53	1.07
2:C:90:ILE:HG12	2:D:91:LEU:CG	1.85	1.07
4:G:59:SER:N	5:H:138:LEU:HD11	1.70	1.07
3:E:103:GLU:OE2	4:G:42:PRO:CD	2.03	1.07
1:A:69:ALA:H	1:B:300:THR:HG21	0.94	1.06
2:C:90:ILE:CG1	2:D:91:LEU:HG	1.85	1.06
1:A:252:GLU:OE2	1:B:53:TYR:O	1.73	1.06
2:C:89:THR:HG22	2:D:92:LYS:HD3	1.12	1.06
1:A:68:ASP:OD1	1:B:300:THR:CB	2.02	1.06
1:B:311:VAL:HG11	1:B:316:GLY:H	1.17	1.06
2:C:5:ARG:HB3	3:E:3:GLU:H	1.00	1.06
2:C:5:ARG:HG3	2:C:8:ARG:H	1.16	1.06
3:E:108:VAL:HB	4:G:43:TYR:OH	1.54	1.06
1:A:292:ASP:OD1	2:C:34:ASP:N	1.89	1.06
4:G:133:ASN:CB	5:H:57:GLY:O	2.00	1.06
2:D:5:ARG:HB2	3:F:3:GLU:O	1.52	1.06
2:D:69:GLY:HA3	2:D:73:ARG:HB3	1.37	1.06
1:A:439:SER:OG	1:B:459:ARG:HG3	1.54	1.06
2:C:98:ARG:HH12	2:D:102:ARG:HG2	1.15	1.06
3:F:43:GLN:HG2	3:F:53:GLN:H	1.21	1.06
2:C:74:SER:HB2	2:C:78:VAL:HG11	1.33	1.06
1:A:251:GLU:CG	1:B:54:MET:CA	2.32	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:G:100:PHE:CE2	5:H:47:GLN:CA	2.02	1.05
3:F:63:PRO:HB3	3:F:96:ILE:HG22	1.34	1.05
3:E:108:VAL:CB	4:G:43:TYR:OH	2.04	1.05
1:B:298:GLU:OE1	2:C:43:LYS:CG	2.04	1.05
4:G:63:ASN:H	5:H:139:LYS:CB	1.69	1.05
1:A:202:ASP:HB2	1:A:242:VAL:HB	1.37	1.05
2:D:5:ARG:HG3	2:D:8:ARG:H	1.16	1.05
4:G:134:ASN:OD1	5:H:138:LEU:O	1.65	1.05
2:C:87:PRO:HG3	2:C:90:ILE:HD12	1.35	1.05
2:C:99:LYS:HZ1	2:D:102:ARG:CG	1.69	1.05
1:B:294:GLU:HG2	2:C:42:ASP:N	1.71	1.05
3:F:63:PRO:HA	3:F:96:ILE:HA	1.32	1.05
2:C:100:MET:CE	2:D:100:MET:CB	2.31	1.05
1:B:252:GLU:HB3	1:B:254:VAL:HG13	1.30	1.05
1:B:202:ASP:HB2	1:B:242:VAL:HB	1.37	1.04
3:E:40:PRO:HA	3:F:100:LYS:HD2	1.40	1.04
1:A:311:VAL:HG11	1:A:316:GLY:H	1.17	1.04
2:C:93:LYS:HG2	2:C:94:LEU:HD12	1.37	1.04
2:D:93:LYS:HG2	2:D:94:LEU:HD12	1.37	1.04
4:G:97:PHE:HD2	5:H:47:GLN:HB3	1.19	1.04
1:A:259:PHE:HZ	1:B:90:LYS:CB	1.69	1.04
1:A:252:GLU:OE2	1:B:53:TYR:CD1	2.11	1.04
4:G:117:ASP:HB3	4:G:119:VAL:HG23	1.38	1.04
1:B:313:GLY:HA2	2:C:51:SER:OG	1.43	1.04
1:B:292:ASP:OD1	2:D:34:ASP:N	1.89	1.04
2:D:87:PRO:HG3	2:D:90:ILE:HD12	1.35	1.04
4:G:62:GLU:N	5:H:139:LYS:CB	1.93	1.04
3:E:40:PRO:HB2	3:E:42:SER:HB2	1.39	1.03
1:A:460:ILE:HG12	1:B:467:TYR:HD2	1.23	1.03
1:A:460:ILE:CB	1:B:467:TYR:CD2	2.42	1.03
3:F:102:LYS:CG	4:G:39:ASP:OD1	2.05	1.03
4:G:97:PHE:CA	5:H:49:LYS:HE2	1.63	1.03
5:H:52:ARG:HH21	5:H:54:LEU:CD2	1.72	1.03
2:D:73:ARG:HG2	3:F:91:SER:CB	1.88	1.03
2:D:74:SER:HB2	2:D:78:VAL:HG11	1.33	1.03
2:C:28:LEU:HD12	2:C:31:PHE:HZ	1.24	1.03
2:C:99:LYS:HB2	2:D:101:ALA:C	1.77	1.03
2:C:99:LYS:NZ	2:D:102:ARG:O	1.90	1.03
2:C:69:GLY:HA3	2:C:73:ARG:HB3	1.37	1.03
2:D:28:LEU:HD12	2:D:31:PHE:HZ	1.24	1.03
1:A:371:ASP:OD1	1:B:363:LEU:C	1.96	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:5:ARG:HB2	3:E:3:GLU:CA	1.88	1.03
4:G:100:PHE:CG	5:H:47:GLN:HG2	1.93	1.02
5:H:52:ARG:NH2	5:H:54:LEU:CD2	2.22	1.02
2:C:98:ARG:NH1	2:D:102:ARG:HG2	1.74	1.02
4:G:133:ASN:HB2	5:H:56:PRO:N	1.71	1.02
3:F:85:GLY:HA3	3:F:99:ILE:HG23	1.37	1.02
1:A:259:PHE:CZ	1:B:90:LYS:HB3	1.94	1.02
1:B:306:HIS:CD2	2:C:39:PRO:HG3	1.94	1.02
2:C:90:ILE:HG12	2:D:91:LEU:CB	1.90	1.02
5:H:111:ALA:HA	5:H:132:LEU:HD13	1.41	1.02
3:F:102:LYS:CD	4:G:39:ASP:OD1	2.07	1.02
1:A:340:LEU:HD12	1:B:275:MET:HE1	1.41	1.02
2:C:99:LYS:HZ2	2:D:102:ARG:CA	1.73	1.01
1:A:149:VAL:HB	1:A:229:HIS:HA	1.38	1.01
1:A:259:PHE:HZ	1:B:90:LYS:CD	1.55	1.01
2:D:68:ALA:O	3:E:1:MET:SD	2.16	1.01
3:E:61:TYR:HB2	3:E:98:ARG:HG3	1.39	1.01
3:F:89:ASP:HB3	3:F:95:GLU:HB3	1.43	1.01
3:F:21:GLU:HA	4:G:20:SER:HA	1.42	1.01
3:E:44:GLU:HG3	3:E:46:TYR:HB2	1.41	1.01
3:E:109:GLY:HA3	4:G:113:ILE:CD1	1.89	1.01
3:E:43:GLN:HG2	3:E:53:GLN:H	1.22	1.01
1:B:313:GLY:CA	2:C:51:SER:CB	2.36	1.01
1:A:289:LYS:HG3	1:B:315:GLY:C	1.80	1.01
1:B:294:GLU:CD	2:C:41:ILE:O	1.99	1.01
1:B:376:MET:HE2	1:B:379:ARG:HH22	1.22	1.01
1:A:367:TYR:HB3	1:A:368:ALA:HA	1.42	1.01
1:A:376:MET:HE2	1:A:379:ARG:HH22	1.23	1.01
5:H:104:TYR:HE2	5:H:106:ALA:HB2	1.18	1.00
4:G:59:SER:N	5:H:138:LEU:CD1	2.24	1.00
3:F:14:TYR:HB2	3:F:73:ARG:HD2	1.43	1.00
3:E:60:ILE:HG12	3:E:99:ILE:HG13	1.39	1.00
1:A:438:MET:HE3	1:B:433:VAL:HG22	1.42	1.00
4:G:59:SER:CB	5:H:138:LEU:CG	2.40	1.00
4:G:97:PHE:CA	5:H:49:LYS:HD3	1.84	1.00
1:B:149:VAL:HB	1:B:229:HIS:HA	1.38	1.00
3:F:65:ASP:HB3	3:F:68:ILE:HG23	1.43	1.00
1:B:292:ASP:HB3	2:D:31:PHE:O	1.58	1.00
5:H:137:GLU:O	5:H:139:LYS:NZ	1.92	1.00
1:B:367:TYR:HB3	1:B:368:ALA:HA	1.42	1.00
1:B:395:TYR:HA	1:B:398:ASN:HD22	1.26	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:G:59:SER:OG	5:H:138:LEU:CG	2.10	1.00
3:E:103:GLU:CD	4:G:42:PRO:HD3	1.82	1.00
2:C:5:ARG:CB	3:E:3:GLU:N	2.25	1.00
3:F:52:LEU:HB3	3:F:53:GLN:HA	1.42	0.99
2:D:73:ARG:HG2	3:F:91:SER:HB2	1.04	0.99
1:A:336:ILE:O	1:B:278:PHE:HE2	1.45	0.99
1:A:395:TYR:HA	1:A:398:ASN:HD22	1.26	0.99
1:A:292:ASP:HB3	2:C:31:PHE:O	1.58	0.99
1:A:145:TRP:HZ2	1:A:157:TYR:HB2	1.26	0.99
2:D:76:ASP:OD2	3:E:39:GLN:NE2	1.72	0.99
5:H:141:GLY:C	5:H:142:GLU:CB	2.30	0.99
4:G:97:PHE:HD2	5:H:47:GLN:CB	1.74	0.99
1:A:453:PRO:O	1:B:467:TYR:OH	1.79	0.99
3:E:58:TYR:HB3	3:F:100:LYS:HD3	1.44	0.99
4:G:61:GLY:C	5:H:139:LYS:HB2	1.81	0.99
1:A:335:ARG:HG3	1:B:333:LEU:HB2	1.45	0.99
1:A:111:ASN:HA	1:A:401:LYS:HD3	1.41	0.99
3:E:103:GLU:HG3	4:G:42:PRO:HD3	1.01	0.99
1:A:340:LEU:CD1	1:B:275:MET:HE1	1.89	0.98
5:H:52:ARG:HD3	5:H:54:LEU:CA	1.92	0.98
1:B:382:ARG:HG3	1:B:383:ALA:HA	1.45	0.98
2:D:4:GLN:CG	3:F:1:MET:SD	2.52	0.98
4:G:59:SER:HB2	5:H:138:LEU:CG	1.91	0.98
4:G:62:GLU:HB3	5:H:138:LEU:O	1.63	0.98
3:E:109:GLY:O	4:G:114:THR:OG1	1.81	0.98
1:A:414:PHE:CD1	1:A:415:THR:HA	1.99	0.98
2:C:98:ARG:NH1	2:D:102:ARG:CB	2.27	0.98
2:C:70:LEU:H	3:E:92:GLY:C	1.66	0.98
2:C:90:ILE:HG12	2:D:91:LEU:HG	1.43	0.98
2:C:70:LEU:HB2	3:E:92:GLY:O	1.60	0.98
1:B:111:ASN:HA	1:B:401:LYS:HD3	1.41	0.98
1:A:333:LEU:HD21	1:B:282:GLN:NE2	1.79	0.98
4:G:5:LEU:H	4:G:5:LEU:HD13	1.27	0.97
5:H:21:ALA:HA	5:H:90:LYS:HD3	1.45	0.97
1:B:145:TRP:HZ2	1:B:157:TYR:HB2	1.26	0.97
1:A:336:ILE:O	1:B:278:PHE:CE2	2.05	0.97
1:A:382:ARG:HG3	1:A:383:ALA:HA	1.45	0.97
2:C:98:ARG:HD3	2:D:97:TYR:CZ	1.99	0.97
1:A:259:PHE:CZ	1:B:90:LYS:CB	2.47	0.97
4:G:44:VAL:HG21	4:G:74:THR:H	1.29	0.97
1:B:414:PHE:CD1	1:B:415:THR:HA	1.99	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:H:42:GLU:OE2	5:H:56:PRO:CD	2.11	0.97
2:C:5:ARG:HD3	2:C:7:LYS:HB2	1.45	0.97
4:G:132:ASN:O	5:H:56:PRO:O	1.83	0.97
1:A:96:LYS:HA	1:A:373:LYS:HD3	1.47	0.97
2:D:70:LEU:N	3:F:92:GLY:C	1.87	0.97
5:H:112:TYR:H	5:H:132:LEU:HB3	1.29	0.97
1:B:96:LYS:HA	1:B:373:LYS:HD3	1.47	0.97
4:G:44:VAL:HG11	4:G:74:THR:HG22	1.44	0.97
1:A:460:ILE:HG12	1:B:467:TYR:CD2	1.95	0.97
1:B:310:LYS:HB2	2:C:38:ASN:HD22	0.88	0.97
1:A:175:ARG:NH2	1:B:156:ASP:OD2	1.97	0.97
3:E:70:LYS:HB3	3:E:84:ILE:HA	1.43	0.97
2:C:98:ARG:CG	2:D:97:TYR:CE2	2.47	0.97
5:H:90:LYS:HD3	5:H:150:ILE:HD11	1.45	0.97
2:D:5:ARG:HD3	2:D:7:LYS:HB2	1.45	0.96
3:E:105:GLY:H	4:G:119:VAL:HG23	1.30	0.96
1:A:69:ALA:N	1:B:300:THR:HG21	1.78	0.96
4:G:132:ASN:C	5:H:55:GLY:HA2	1.85	0.96
4:G:42:PRO:HB3	4:G:72:GLY:HA3	1.44	0.96
2:C:4:GLN:HG3	3:E:1:MET:HE1	1.47	0.96
2:D:28:LEU:HD12	2:D:31:PHE:CZ	2.01	0.96
3:E:36:ALA:HB2	3:E:68:ILE:HD13	1.47	0.96
1:A:251:GLU:CG	1:B:54:MET:HA	1.91	0.96
1:A:460:ILE:CB	1:B:467:TYR:HD2	1.78	0.96
1:A:285:VAL:HG12	1:A:287:VAL:HG23	1.47	0.96
2:C:99:LYS:CE	2:D:102:ARG:O	2.14	0.96
1:A:460:ILE:HB	1:B:467:TYR:HB3	1.48	0.96
2:D:4:GLN:HA	3:F:1:MET:HB2	1.47	0.96
2:C:100:MET:HE2	2:D:100:MET:HB2	0.96	0.96
2:C:28:LEU:HD12	2:C:31:PHE:CZ	2.01	0.96
3:E:43:GLN:HB2	3:E:47:TYR:HE1	1.29	0.96
3:F:105:GLY:HA3	4:G:39:ASP:H	1.21	0.96
3:E:19:ASN:HD21	4:G:77:ALA:HB1	0.79	0.96
3:E:58:TYR:CD2	3:E:81:VAL:HG11	2.00	0.96
1:A:418:ARG:HB2	1:A:421:ASN:HB3	1.48	0.96
3:F:104:ASP:C	4:G:39:ASP:OD2	2.04	0.95
5:H:52:ARG:HH21	5:H:54:LEU:HD21	1.28	0.95
1:B:140:LYS:HD3	1:B:261:LYS:HE3	1.48	0.95
1:B:410:LEU:HD22	1:B:412:MET:HE2	1.47	0.95
2:C:99:LYS:H	2:D:101:ALA:N	1.65	0.95
5:H:141:GLY:C	5:H:142:GLU:CA	2.35	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:73:ARG:CG	3:F:91:SER:HB2	1.97	0.95
2:C:94:LEU:CA	2:D:97:TYR:CD1	2.37	0.95
1:B:310:LYS:HE3	2:C:36:CYS:HB2	1.49	0.95
2:C:94:LEU:H	2:D:97:TYR:H	1.06	0.95
1:A:179:PHE:CD2	1:A:200:TYR:HB2	2.02	0.95
1:A:251:GLU:HG3	1:B:54:MET:CA	1.81	0.95
1:B:285:VAL:HG12	1:B:287:VAL:HG23	1.47	0.95
4:G:64:ILE:CD1	5:H:140:ASN:ND2	2.30	0.95
3:E:108:VAL:CG1	4:G:43:TYR:OH	2.15	0.95
2:C:99:LYS:HB2	2:D:102:ARG:N	1.80	0.94
2:D:70:LEU:H	3:F:92:GLY:C	1.56	0.94
5:H:52:ARG:CD	5:H:54:LEU:CA	2.44	0.94
1:A:379:ARG:HD2	1:B:94:ASP:CB	1.96	0.94
2:C:7:LYS:HD3	3:E:4:GLU:CD	1.87	0.94
2:C:5:ARG:CB	3:E:3:GLU:H	1.80	0.94
2:C:98:ARG:HH12	2:D:102:ARG:CG	1.80	0.94
4:G:100:PHE:CB	5:H:47:GLN:HG2	1.95	0.94
4:G:113:ILE:HG21	4:G:121:LYS:HB3	1.47	0.94
1:A:140:LYS:HD3	1:A:261:LYS:HE3	1.48	0.94
1:A:259:PHE:HZ	1:B:90:LYS:CG	1.80	0.94
3:F:74:VAL:HB	3:F:83:PHE:CZ	2.02	0.94
3:E:36:ALA:HA	3:E:62:THR:HG21	1.49	0.94
3:E:38:VAL:HB	3:F:88:VAL:HG12	1.50	0.94
5:H:21:ALA:HB2	5:H:150:ILE:HG12	1.50	0.94
1:B:179:PHE:CD2	1:B:200:TYR:HB2	2.02	0.94
2:C:4:GLN:HA	3:E:1:MET:HG2	1.49	0.94
1:B:418:ARG:HB2	1:B:421:ASN:HB3	1.48	0.94
2:C:63:PHE:CE2	2:C:86:ILE:HG23	2.03	0.94
2:C:94:LEU:N	2:D:97:TYR:CB	2.21	0.94
3:E:81:VAL:HG21	3:F:86:ASP:HB3	1.48	0.94
1:A:66:TYR:CE1	1:A:74:LEU:HB3	2.03	0.94
4:G:64:ILE:HD12	5:H:140:ASN:HD21	1.24	0.94
2:D:73:ARG:HE	3:F:91:SER:HB3	1.31	0.94
1:B:66:TYR:CE1	1:B:74:LEU:HB3	2.03	0.94
3:E:105:GLY:N	4:G:119:VAL:HG23	1.79	0.94
1:A:340:LEU:CD1	1:B:275:MET:HE3	1.98	0.94
2:C:99:LYS:HZ2	2:D:102:ARG:C	1.72	0.93
2:C:4:GLN:CG	3:E:1:MET:HE1	1.97	0.93
1:A:328:SER:OG	1:B:327:ASP:OD2	1.67	0.93
4:G:59:SER:CA	5:H:138:LEU:CD1	2.39	0.93
5:H:52:ARG:HD3	5:H:54:LEU:HA	1.50	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:145:TRP:CZ2	1:A:157:TYR:HB2	2.03	0.93
1:B:145:TRP:CZ2	1:B:157:TYR:HB2	2.03	0.93
3:E:5:PHE:CD2	3:E:7:ASP:HB2	2.02	0.93
1:B:414:PHE:CE2	1:B:415:THR:HG22	2.03	0.93
2:D:63:PHE:CE2	2:D:86:ILE:HG23	2.03	0.93
5:H:59:VAL:HG11	5:H:137:GLU:HB3	1.48	0.93
5:H:46:GLU:HB2	5:H:151:VAL:HB	1.50	0.93
3:F:59:ASN:HA	3:F:99:ILE:HD12	1.51	0.93
2:C:85:GLU:OE2	2:D:86:ILE:HG21	1.69	0.93
1:A:142:ILE:CG1	1:A:145:TRP:HB2	1.99	0.93
1:B:123:ASP:HB3	1:B:127:ASP:H	1.34	0.93
2:C:99:LYS:HZ3	2:D:102:ARG:H	1.09	0.93
2:C:89:THR:OG1	2:D:88:SER:CB	2.17	0.93
1:A:414:PHE:CE2	1:A:415:THR:HG22	2.03	0.93
2:C:99:LYS:CA	2:D:101:ALA:HB2	1.88	0.93
3:E:56:ILE:HB	3:E:103:GLU:HG3	1.47	0.93
4:G:100:PHE:HD2	5:H:47:GLN:HA	1.14	0.92
3:F:104:ASP:H	4:G:31:VAL:HG23	1.22	0.92
1:A:460:ILE:HG21	1:B:467:TYR:HB2	0.94	0.92
2:C:99:LYS:NZ	2:D:102:ARG:C	2.23	0.92
2:C:94:LEU:CA	2:D:97:TYR:CA	2.41	0.92
3:E:84:ILE:CD1	3:E:103:GLU:HG2	1.98	0.92
1:A:438:MET:HE1	1:B:433:VAL:CG2	1.98	0.92
2:C:99:LYS:NZ	2:D:102:ARG:CA	2.30	0.92
1:B:148:PHE:HA	1:B:205:VAL:HG23	1.51	0.92
3:F:11:PHE:CE2	3:F:34:ALA:HB3	2.05	0.92
5:H:13:TYR:CD1	5:H:31:TYR:HB3	2.05	0.92
1:B:289:LYS:CD	1:B:319:THR:HG23	2.00	0.92
5:H:37:VAL:HB	5:H:64:GLU:HG2	1.49	0.92
3:E:38:VAL:CG1	3:E:60:ILE:HG22	1.99	0.92
3:E:58:TYR:CG	3:F:100:LYS:HG2	2.04	0.92
2:C:89:THR:HG23	2:D:92:LYS:HE3	1.51	0.92
1:A:123:ASP:HB3	1:A:127:ASP:H	1.34	0.92
1:A:289:LYS:CD	1:A:319:THR:HG23	2.00	0.92
1:B:298:GLU:OE2	2:C:43:LYS:NZ	2.03	0.92
5:H:94:VAL:HG21	5:H:160:PHE:CE2	2.04	0.92
1:B:142:ILE:CG1	1:B:145:TRP:HB2	1.99	0.92
1:B:40:GLU:CB	1:B:166:ILE:HD11	1.98	0.92
3:F:88:VAL:CG2	3:F:98:ARG:HB2	1.99	0.92
1:A:62:LYS:CE	1:A:63:ARG:HG3	1.99	0.92
1:B:62:LYS:CE	1:B:63:ARG:HG3	1.99	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:59:LYS:HD3	2:D:90:ILE:HG21	1.50	0.92
1:A:382:ARG:HH22	1:A:385:LEU:HD23	1.34	0.92
3:E:43:GLN:HB2	3:E:47:TYR:CE1	2.04	0.92
4:G:32:THR:CG2	4:G:37:LYS:HA	2.00	0.92
1:B:429:LEU:CD2	1:B:443:ALA:HB1	2.00	0.92
5:H:104:TYR:CE2	5:H:106:ALA:HB2	2.04	0.92
1:A:46:LEU:HB2	1:A:162:ALA:HB2	1.51	0.92
1:B:382:ARG:HH22	1:B:385:LEU:HD23	1.34	0.92
2:D:5:ARG:CB	3:F:3:GLU:O	2.18	0.92
3:E:47:TYR:HB3	3:E:50:GLN:CB	2.00	0.92
2:D:5:ARG:HB2	3:F:3:GLU:C	1.91	0.92
1:A:466:GLN:HA	1:A:467:TYR:CD1	2.05	0.92
1:B:466:GLN:HA	1:B:467:TYR:CD1	2.05	0.91
1:A:92:PHE:CE1	1:A:369:LEU:HD22	2.05	0.91
1:A:429:LEU:CD2	1:A:443:ALA:HB1	2.00	0.91
1:A:296:PRO:HB3	2:C:36:CYS:O	0.96	0.91
3:F:105:GLY:HA2	4:G:39:ASP:CG	1.70	0.91
1:A:40:GLU:CB	1:A:166:ILE:HD11	1.98	0.91
3:F:46:TYR:HB3	3:F:48:LYS:HE2	1.50	0.91
4:G:27:MET:HG2	4:G:31:VAL:CG1	2.00	0.91
1:A:338:ASP:OD2	1:B:337:GLN:OE1	1.87	0.91
2:C:98:ARG:NH1	2:D:102:ARG:CG	2.33	0.91
4:G:97:PHE:CD2	5:H:47:GLN:HB3	2.05	0.91
2:D:75:MET:HE3	3:F:90:LEU:HD21	1.52	0.91
3:E:105:GLY:CA	4:G:119:VAL:HG23	1.99	0.91
3:F:105:GLY:C	4:G:39:ASP:H	1.73	0.91
5:H:22:THR:HB	5:H:108:PHE:CE2	2.06	0.91
5:H:146:LEU:HB2	5:H:147:PRO:HD3	1.53	0.91
1:B:146:HIS:HD2	1:B:205:VAL:HG22	1.34	0.91
3:F:11:PHE:CD2	3:F:34:ALA:HB3	2.06	0.91
4:G:32:THR:HG21	4:G:43:TYR:HB2	1.51	0.91
2:C:90:ILE:HD11	2:D:91:LEU:HG	1.49	0.91
4:G:100:PHE:CE1	5:H:45:ASP:N	2.38	0.91
1:A:34:ILE:HG22	1:A:181:LEU:HD13	1.51	0.91
1:A:444:VAL:CG1	1:A:449:PHE:HB2	2.01	0.91
1:B:310:LYS:HB2	2:C:38:ASN:CG	1.91	0.91
2:C:59:LYS:HD3	2:C:90:ILE:HG21	1.50	0.91
3:E:46:TYR:HB3	3:E:48:LYS:HE2	1.51	0.91
3:F:12:GLN:HG2	3:F:75:ILE:HG12	1.50	0.91
5:H:59:VAL:CG1	5:H:137:GLU:HB3	1.99	0.91
1:A:252:GLU:HB2	1:A:254:VAL:HG22	1.53	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:92:PHE:CE1	1:B:369:LEU:HD22	2.05	0.91
1:A:289:LYS:HG3	1:B:315:GLY:CA	2.00	0.91
2:C:99:LYS:HE3	2:D:102:ARG:O	1.70	0.91
4:G:132:ASN:HA	5:H:54:LEU:C	1.90	0.91
1:A:146:HIS:HD2	1:A:205:VAL:HG22	1.34	0.91
1:A:148:PHE:HA	1:A:205:VAL:HG23	1.51	0.91
1:B:252:GLU:HB2	1:B:254:VAL:HG22	1.53	0.91
5:H:41:ARG:HG3	5:H:42:GLU:H	1.34	0.90
3:E:36:ALA:CB	3:E:68:ILE:HD13	2.00	0.90
5:H:104:TYR:CE1	5:H:159:ASP:HB3	2.07	0.90
1:B:146:HIS:CD2	1:B:205:VAL:HG22	2.07	0.90
2:C:73:ARG:HH21	3:E:90:LEU:HD11	1.35	0.90
1:A:108:THR:HG23	1:A:412:MET:HE1	1.53	0.90
3:E:60:ILE:HD13	3:E:83:PHE:CE2	2.06	0.90
1:B:32:THR:CG2	1:B:36:LYS:HE2	2.02	0.90
2:C:99:LYS:N	2:D:101:ALA:CA	2.16	0.90
1:B:46:LEU:HB2	1:B:162:ALA:HB2	1.51	0.90
3:F:44:GLU:HG2	3:F:46:TYR:N	1.86	0.90
1:A:410:LEU:HD22	1:A:412:MET:HE2	1.52	0.90
3:F:43:GLN:H	3:F:53:GLN:HB2	1.37	0.90
2:D:25:VAL:HG13	2:D:53:VAL:HG11	1.54	0.90
2:C:75:MET:HB2	2:C:78:VAL:HB	1.54	0.90
3:F:6:ARG:CB	3:F:8:VAL:HG12	1.99	0.90
1:A:335:ARG:NH1	1:B:278:PHE:CZ	2.39	0.90
1:A:289:LYS:CG	1:B:316:GLY:N	2.29	0.90
1:B:444:VAL:CG1	1:B:449:PHE:HB2	2.01	0.90
2:C:25:VAL:HG13	2:C:53:VAL:HG11	1.54	0.90
2:C:99:LYS:NZ	2:D:102:ARG:CG	2.34	0.90
1:B:37:LEU:CD1	1:B:168:VAL:HG21	2.02	0.89
3:E:79:LYS:HD3	3:F:70:LYS:N	1.86	0.89
4:G:133:ASN:CB	5:H:56:PRO:N	2.31	0.89
1:A:438:MET:CG	1:B:434:THR:C	2.27	0.89
2:D:75:MET:HB2	2:D:78:VAL:HB	1.54	0.89
2:C:4:GLN:NE2	3:E:1:MET:HE3	1.87	0.89
1:B:445:ALA:HA	1:B:448:PRO:HB3	1.54	0.89
3:E:109:GLY:HA3	4:G:114:THR:N	1.71	0.89
3:F:102:LYS:HG3	4:G:39:ASP:CG	1.93	0.89
1:A:96:LYS:HE3	1:A:377:ALA:HA	1.55	0.89
1:B:96:LYS:HE3	1:B:377:ALA:HA	1.55	0.89
3:E:29:VAL:HG11	3:E:72:MET:HA	1.54	0.89
1:A:289:LYS:HD3	1:A:319:THR:HG23	1.53	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:94:LEU:N	2:D:97:TYR:N	2.20	0.89
5:H:22:THR:HB	5:H:108:PHE:CD2	2.08	0.89
1:A:146:HIS:CD2	1:A:205:VAL:HG22	2.07	0.89
1:B:34:ILE:HG22	1:B:181:LEU:HD13	1.51	0.89
3:F:43:GLN:HG2	3:F:53:GLN:N	1.88	0.89
1:A:32:THR:CG2	1:A:36:LYS:HE2	2.02	0.89
5:H:42:GLU:HG3	5:H:56:PRO:HG2	0.89	0.89
1:A:43:PRO:HA	1:A:164:GLU:H	1.37	0.89
1:B:187:LYS:HG2	1:B:193:GLU:HA	1.55	0.89
3:E:108:VAL:HG11	4:G:43:TYR:OH	1.73	0.89
3:E:38:VAL:HB	3:F:88:VAL:CG1	2.01	0.89
1:A:259:PHE:HE2	1:B:90:LYS:HD3	1.34	0.89
2:D:5:ARG:CB	3:F:3:GLU:N	2.35	0.89
2:C:94:LEU:CB	2:D:97:TYR:CD1	2.56	0.89
4:G:64:ILE:CD1	5:H:140:ASN:CG	2.41	0.89
1:A:37:LEU:CD1	1:A:168:VAL:HG21	2.02	0.89
1:A:251:GLU:HG2	1:B:54:MET:N	1.87	0.89
3:F:20:GLY:O	4:G:20:SER:O	1.89	0.89
4:G:133:ASN:CG	5:H:57:GLY:O	2.12	0.88
1:A:373:LYS:HE3	1:A:374:ALA:HB2	1.56	0.88
1:B:295:ASN:HA	2:D:37:HIS:ND1	1.86	0.88
2:D:63:PHE:HE2	2:D:86:ILE:HG23	1.35	0.88
2:C:5:ARG:CA	3:E:3:GLU:HA	2.02	0.88
3:F:104:ASP:N	4:G:31:VAL:HG23	1.58	0.88
4:G:113:ILE:HG12	4:G:121:LYS:CA	2.03	0.88
4:G:61:GLY:CA	5:H:139:LYS:HE2	2.03	0.88
1:A:167:VAL:HG13	1:A:177:ILE:CD1	2.03	0.88
3:E:77:ARG:HB3	3:F:66:ASP:CA	2.00	0.88
1:A:354:ILE:HD12	1:B:355:GLY:HA2	0.89	0.88
1:B:289:LYS:HD3	1:B:319:THR:HG23	1.53	0.88
1:A:181:LEU:H	1:A:181:LEU:HD23	1.38	0.88
1:A:204:HIS:HE1	1:A:221:TYR:HB3	1.38	0.88
1:B:43:PRO:HA	1:B:164:GLU:H	1.38	0.88
1:A:187:LYS:HG2	1:A:193:GLU:HA	1.55	0.88
2:C:4:GLN:C	3:E:1:MET:H3	1.76	0.88
2:C:74:SER:HB2	2:C:78:VAL:CG1	2.03	0.88
3:F:28:TRP:CZ3	3:F:80:ILE:HG21	2.08	0.88
1:A:339:GLU:CB	1:B:274:THR:HG21	2.04	0.88
1:A:142:ILE:HG21	1:A:145:TRP:CA	2.03	0.88
1:B:108:THR:HG23	1:B:412:MET:HE1	1.55	0.88
1:B:181:LEU:HD23	1:B:181:LEU:H	1.38	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:31:GLU:HB2	3:E:72:MET:HB2	1.55	0.88
4:G:133:ASN:OD1	5:H:57:GLY:O	1.90	0.88
1:B:142:ILE:HG21	1:B:145:TRP:CA	2.03	0.88
3:E:109:GLY:HA3	4:G:113:ILE:HD12	0.93	0.88
3:E:70:LYS:CB	3:E:84:ILE:HA	2.04	0.88
2:C:71:THR:CA	3:E:92:GLY:HA2	2.04	0.88
1:A:37:LEU:CD2	1:A:168:VAL:HG11	2.05	0.87
1:B:163:GLU:HB2	1:B:182:ARG:HG3	1.55	0.87
1:B:167:VAL:HG13	1:B:177:ILE:CD1	2.03	0.87
1:A:460:ILE:HG13	1:B:466:GLN:CD	1.92	0.87
2:C:94:LEU:N	2:D:97:TYR:CA	2.36	0.87
3:F:21:GLU:OE1	4:G:16:GLU:HG3	1.72	0.87
1:A:445:ALA:HA	1:A:448:PRO:HB3	1.54	0.87
5:H:137:GLU:C	5:H:138:LEU:HA	1.94	0.87
2:D:74:SER:HB2	2:D:78:VAL:CG1	2.03	0.87
3:E:8:VAL:HG22	3:E:34:ALA:HA	1.55	0.87
5:H:143:ILE:HG12	5:H:147:PRO:HG2	1.55	0.87
1:A:381:ILE:HG23	1:A:385:LEU:HD13	1.57	0.87
2:D:4:GLN:OE1	3:F:2:TYR:N	2.07	0.87
1:B:294:GLU:HB3	2:C:42:ASP:OD2	1.74	0.87
2:C:63:PHE:HE2	2:C:86:ILE:HG23	1.35	0.87
5:H:112:TYR:N	5:H:132:LEU:HB3	1.89	0.87
1:A:163:GLU:HB2	1:A:182:ARG:HG3	1.55	0.87
3:E:40:PRO:HA	3:F:100:LYS:CD	2.04	0.87
1:B:114:LEU:HD21	1:B:392:PHE:CE1	2.09	0.87
2:D:93:LYS:HG2	2:D:94:LEU:CD1	2.04	0.87
1:A:44:GLU:HB3	1:A:45:PRO:HD3	1.54	0.87
1:A:354:ILE:HD11	1:B:354:ILE:O	1.75	0.87
3:E:50:GLN:HE21	3:F:52:LEU:HB2	1.39	0.87
1:A:460:ILE:CG1	1:B:466:GLN:CG	2.41	0.87
5:H:16:GLN:HB3	5:H:27:LEU:H	1.39	0.87
1:B:323:GLU:HG3	1:B:325:PRO:HD2	1.55	0.87
1:A:292:ASP:OD1	2:C:34:ASP:C	2.14	0.87
2:C:54:LEU:HD11	2:D:28:LEU:HD21	1.55	0.87
5:H:90:LYS:HZ1	5:H:146:LEU:HD13	1.38	0.87
1:B:255:SER:HB2	1:B:256:ASP:HA	1.56	0.87
1:B:381:ILE:HG23	1:B:385:LEU:HD13	1.57	0.87
3:F:28:TRP:HH2	3:F:80:ILE:HD13	1.39	0.87
1:A:114:LEU:HD21	1:A:392:PHE:CE1	2.09	0.87
2:C:98:ARG:NH1	2:D:102:ARG:HB3	1.90	0.86
5:H:60:ALA:HB3	5:H:134:VAL:CG1	2.04	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:G:64:ILE:HD12	5:H:140:ASN:CG	1.94	0.86
1:A:88:TRP:HA	1:A:88:TRP:HE3	1.40	0.86
3:F:32:PHE:CD2	3:F:67:ARG:HD2	2.10	0.86
3:E:105:GLY:HA3	4:G:119:VAL:HG23	1.56	0.86
1:B:367:TYR:CB	1:B:369:LEU:HA	2.04	0.86
1:B:373:LYS:HE3	1:B:374:ALA:HB2	1.56	0.86
1:B:44:GLU:HB3	1:B:45:PRO:HD3	1.54	0.86
2:D:70:LEU:O	3:F:91:SER:CB	2.23	0.86
3:E:81:VAL:CG2	3:F:86:ASP:HB3	2.05	0.86
4:G:44:VAL:HG13	4:G:70:VAL:HA	1.57	0.86
1:B:96:LYS:CG	1:B:373:LYS:HB2	2.05	0.86
1:B:296:PRO:HB3	2:D:36:CYS:O	0.96	0.86
1:A:255:SER:HB2	1:A:256:ASP:HA	1.56	0.86
1:A:96:LYS:CG	1:A:373:LYS:HB2	2.05	0.86
1:A:379:ARG:HD2	1:B:94:ASP:OD2	1.76	0.86
4:G:113:ILE:HG21	4:G:121:LYS:HD3	1.57	0.86
5:H:42:GLU:OE2	5:H:56:PRO:HD3	1.76	0.86
1:A:367:TYR:CB	1:A:369:LEU:HA	2.04	0.86
2:D:5:ARG:HB3	3:F:2:TYR:CB	2.04	0.86
3:E:43:GLN:HG2	3:E:53:GLN:N	1.90	0.86
3:E:79:LYS:CD	3:F:70:LYS:HB3	2.05	0.86
3:F:104:ASP:CA	4:G:31:VAL:CG2	2.37	0.86
3:E:105:GLY:O	4:G:41:TYR:CD2	2.29	0.86
1:A:323:GLU:HG3	1:A:325:PRO:HD2	1.55	0.86
1:A:460:ILE:CG2	1:B:467:TYR:HB3	2.03	0.86
2:C:94:LEU:H	2:D:97:TYR:CA	1.87	0.86
1:B:225:ASN:HB2	1:B:226:PRO:HA	1.56	0.86
2:D:4:GLN:HA	3:F:1:MET:HB3	0.87	0.86
1:B:292:ASP:OD1	2:D:34:ASP:C	2.14	0.86
1:B:204:HIS:HE1	1:B:221:TYR:HB3	1.38	0.86
1:A:466:GLN:HG3	1:A:467:TYR:CG	2.11	0.86
2:C:5:ARG:HB3	3:E:3:GLU:CA	2.00	0.86
3:E:89:ASP:HA	3:E:97:THR:HA	1.57	0.86
3:F:22:GLY:H	4:G:19:GLU:HG3	1.38	0.86
2:C:93:LYS:HG2	2:C:94:LEU:CD1	2.04	0.86
5:H:91:PHE:CE2	5:H:111:ALA:HB1	2.11	0.86
4:G:59:SER:OG	5:H:138:LEU:CD1	2.19	0.86
5:H:37:VAL:CB	5:H:64:GLU:HG2	2.05	0.86
1:B:179:PHE:HE1	1:B:244:ILE:HD13	1.40	0.86
2:C:90:ILE:HG12	2:D:91:LEU:HB3	1.57	0.85
1:B:142:ILE:HG21	1:B:145:TRP:HA	1.58	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:367:TYR:HD2	1:B:369:LEU:HD23	1.40	0.85
2:D:5:ARG:HG3	2:D:8:ARG:N	1.91	0.85
2:C:34:ASP:HB3	2:C:36:CYS:H	1.38	0.85
1:A:37:LEU:HD13	1:A:168:VAL:CG2	2.06	0.85
1:A:86:HIS:CE1	1:A:88:TRP:HB2	2.11	0.85
1:B:324:ILE:HB	1:B:325:PRO:HD3	1.58	0.85
1:A:179:PHE:HE1	1:A:244:ILE:HD13	1.40	0.85
3:F:32:PHE:CZ	3:F:67:ARG:HB2	2.11	0.85
5:H:90:LYS:CD	5:H:150:ILE:HD11	2.06	0.85
3:E:29:VAL:HB	3:E:73:ARG:H	1.38	0.85
1:A:114:LEU:HD21	1:A:392:PHE:CZ	2.12	0.85
2:C:73:ARG:HH21	3:E:90:LEU:CD1	1.90	0.85
2:D:63:PHE:CE2	2:D:85:GLU:HB3	2.12	0.85
1:A:225:ASN:HB2	1:A:226:PRO:HA	1.56	0.85
2:C:5:ARG:HG3	2:C:8:ARG:N	1.92	0.85
1:B:114:LEU:HD21	1:B:392:PHE:CZ	2.12	0.85
1:A:460:ILE:HG13	1:B:466:GLN:HG3	0.87	0.85
1:A:289:LYS:CG	1:B:315:GLY:C	2.44	0.85
2:C:63:PHE:CE2	2:C:85:GLU:HB3	2.12	0.85
1:A:100:LEU:HG	1:A:377:ALA:HB1	1.59	0.85
3:F:105:GLY:C	4:G:38:ASP:N	2.27	0.85
1:B:466:GLN:HG3	1:B:467:TYR:CG	2.10	0.85
2:C:93:LYS:NZ	2:D:96:PRO:O	2.10	0.85
1:A:335:ARG:HD3	1:B:333:LEU:HB3	1.57	0.85
1:B:310:LYS:CA	2:C:38:ASN:HD22	1.89	0.85
2:D:34:ASP:HB3	2:D:36:CYS:H	1.38	0.85
3:E:1:MET:HG3	3:E:2:TYR:H	1.40	0.85
1:A:336:ILE:HD13	1:B:278:PHE:HA	1.57	0.85
1:B:292:ASP:CB	2:D:31:PHE:O	2.25	0.85
1:A:295:ASN:HA	2:C:37:HIS:ND1	1.86	0.84
4:G:102:PHE:HD1	5:H:56:PRO:HD3	1.40	0.84
1:B:100:LEU:HG	1:B:377:ALA:HB1	1.59	0.84
2:C:4:GLN:HG2	3:E:1:MET:SD	2.16	0.84
3:E:65:ASP:CB	3:E:97:THR:HB	2.07	0.84
2:C:84:THR:OG1	2:D:83:ALA:HA	1.77	0.84
5:H:91:PHE:CZ	5:H:111:ALA:HB1	2.12	0.84
1:A:34:ILE:HG22	1:A:181:LEU:CD1	2.07	0.84
3:E:56:ILE:HD13	4:G:40:PRO:O	1.77	0.84
5:H:162:GLN:HB2	5:H:163:PRO:HD3	1.56	0.84
1:A:142:ILE:HG21	1:A:145:TRP:HA	1.59	0.84
1:B:170:LYS:HB3	1:B:178:LEU:CD2	2.06	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:91:SER:O	3:E:96:ILE:HG12	1.78	0.84
2:C:89:THR:CB	2:D:88:SER:HB3	2.06	0.84
1:A:292:ASP:CB	2:C:31:PHE:O	2.25	0.84
1:B:310:LYS:HB3	2:C:38:ASN:HB2	1.59	0.84
1:B:140:LYS:HB2	1:B:257:LEU:HD23	1.59	0.84
3:F:47:TYR:HB3	3:F:50:GLN:HB3	1.58	0.84
4:G:63:ASN:N	5:H:139:LYS:HB3	1.92	0.84
5:H:60:ALA:CB	5:H:134:VAL:HG11	2.07	0.84
4:G:62:GLU:N	5:H:139:LYS:H	1.73	0.84
1:A:140:LYS:HB2	1:A:257:LEU:HD23	1.59	0.84
1:A:367:TYR:HD2	1:A:369:LEU:HD23	1.40	0.84
1:A:371:ASP:C	1:B:363:LEU:HD21	1.90	0.84
4:G:44:VAL:HG21	4:G:74:THR:N	1.93	0.84
1:A:460:ILE:CB	1:B:467:TYR:HB3	2.06	0.84
1:B:381:ILE:CG2	1:B:385:LEU:HD13	2.08	0.84
3:E:47:TYR:HB3	3:E:50:GLN:HB2	1.57	0.84
3:E:103:GLU:OE2	4:G:42:PRO:HD3	1.67	0.84
1:B:310:LYS:CB	2:C:38:ASN:ND2	2.11	0.84
2:C:94:LEU:H	2:D:97:TYR:HB2	1.42	0.84
2:C:4:GLN:HG2	3:E:1:MET:CE	2.03	0.84
1:A:333:LEU:CD2	1:B:282:GLN:NE2	2.39	0.84
1:A:324:ILE:HB	1:A:325:PRO:HD3	1.58	0.84
1:B:170:LYS:CB	1:B:178:LEU:HD22	2.08	0.84
3:E:36:ALA:HA	3:E:62:THR:CG2	2.08	0.84
3:F:64:TYR:CE1	3:F:95:GLU:HB2	2.12	0.84
2:C:99:LYS:HG3	2:D:101:ALA:HB1	0.84	0.84
1:B:86:HIS:CE1	1:B:88:TRP:HB2	2.11	0.84
3:E:15:VAL:HG12	3:E:73:ARG:NE	1.92	0.84
2:D:5:ARG:CA	3:F:3:GLU:CA	2.49	0.84
1:B:310:LYS:CB	2:C:38:ASN:CB	2.56	0.83
1:B:34:ILE:HG22	1:B:181:LEU:CD1	2.07	0.83
1:B:88:TRP:HA	1:B:88:TRP:HE3	1.40	0.83
2:D:25:VAL:HB	2:D:26:PRO:HD3	1.58	0.83
1:B:292:ASP:OD1	2:D:35:GLU:N	2.12	0.83
2:D:41:ILE:CG2	2:D:45:GLY:HA2	2.08	0.83
4:G:102:PHE:CD1	5:H:56:PRO:HD3	2.13	0.83
2:C:98:ARG:NH1	2:D:102:ARG:N	2.26	0.83
5:H:149:GLU:O	5:H:153:VAL:HG12	1.79	0.83
1:B:46:LEU:CB	1:B:162:ALA:HB2	2.08	0.83
1:A:416:ARG:HB2	1:A:417:THR:O	1.78	0.83
1:A:292:ASP:OD1	2:C:35:GLU:N	2.12	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:171:ASP:CB	1:A:178:LEU:HD11	2.08	0.83
3:E:52:LEU:HB3	3:E:53:GLN:HB2	1.58	0.83
1:A:333:LEU:CD2	1:B:282:GLN:HE22	1.91	0.83
3:F:16:GLU:O	3:F:26:TYR:HA	1.79	0.83
1:A:381:ILE:CG2	1:A:385:LEU:HD13	2.08	0.83
2:C:7:LYS:NZ	3:E:4:GLU:OE2	2.10	0.83
3:F:40:PRO:HB2	3:F:42:SER:HB3	1.58	0.83
4:G:113:ILE:HG12	4:G:121:LYS:HA	1.61	0.83
5:H:141:GLY:C	5:H:142:GLU:HB3	1.98	0.83
5:H:46:GLU:N	5:H:151:VAL:HG21	1.94	0.83
1:B:171:ASP:CB	1:B:178:LEU:HD11	2.08	0.83
3:F:45:GLU:HA	3:F:47:TYR:CE1	2.13	0.83
1:A:46:LEU:CG	1:A:162:ALA:HB2	2.07	0.83
1:B:376:MET:HE2	1:B:379:ARG:NH2	1.94	0.83
3:E:65:ASP:HB3	3:E:97:THR:CB	2.07	0.83
2:D:20:TYR:O	2:D:24:MET:HG3	1.79	0.83
2:C:25:VAL:HB	2:C:26:PRO:HD3	1.58	0.83
1:B:144:TYR:CZ	1:B:246:PRO:HB3	2.13	0.83
1:B:46:LEU:CG	1:B:162:ALA:HB2	2.07	0.83
2:C:4:GLN:HE21	3:E:1:MET:CE	1.89	0.83
3:F:60:ILE:HD12	3:F:83:PHE:CD2	2.14	0.83
1:A:64:ARG:HH21	1:B:284:ILE:CB	1.91	0.83
2:C:63:PHE:CZ	2:C:85:GLU:HB3	2.14	0.83
1:A:46:LEU:CB	1:A:162:ALA:HB2	2.08	0.83
1:B:367:TYR:CB	1:B:368:ALA:HA	2.05	0.83
2:C:20:TYR:O	2:C:24:MET:HG3	1.79	0.83
5:H:143:ILE:HG12	5:H:147:PRO:CG	2.09	0.83
2:D:70:LEU:N	3:F:93:LEU:N	2.25	0.83
3:E:44:GLU:HG2	3:E:47:TYR:H	1.42	0.83
3:E:73:ARG:NH1	3:E:80:ILE:HD12	1.92	0.83
1:B:121:LEU:HB3	1:B:124:ASP:N	1.94	0.83
1:A:248:LYS:O	1:A:253:MET:HG2	1.79	0.83
1:B:441:GLU:HG3	1:B:453:PRO:HA	1.61	0.82
1:B:294:GLU:CG	2:C:41:ILE:C	2.47	0.82
1:A:170:LYS:HB3	1:A:178:LEU:CD2	2.06	0.82
1:A:379:ARG:HD2	1:B:94:ASP:HB2	1.58	0.82
3:E:21:GLU:HG3	3:E:22:GLY:H	1.44	0.82
1:A:144:TYR:CZ	1:A:246:PRO:HB3	2.13	0.82
1:A:38:ILE:HG21	1:A:183:TYR:CE2	2.15	0.82
1:A:202:ASP:HA	1:A:242:VAL:HG23	1.61	0.82
1:B:202:ASP:HA	1:B:242:VAL:HG23	1.61	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:75:MET:CE	3:F:90:LEU:HD21	2.09	0.82
2:C:92:LYS:HB2	2:D:92:LYS:HE2	1.60	0.82
1:A:209:GLU:HG3	1:A:211:ILE:HG12	1.60	0.82
3:E:69:ASP:CB	3:E:87:PRO:HG3	2.07	0.82
3:F:12:GLN:HG2	3:F:75:ILE:CG1	2.08	0.82
1:A:115:LEU:HG	1:A:119:ASN:HD21	1.44	0.82
2:C:41:ILE:CG2	2:C:45:GLY:HA2	2.08	0.82
3:E:12:GLN:HB2	3:E:28:TRP:CE3	2.14	0.82
1:A:121:LEU:HB3	1:A:124:ASP:N	1.94	0.82
1:A:121:LEU:O	1:A:124:ASP:HB2	1.79	0.82
2:D:63:PHE:CZ	2:D:85:GLU:HB3	2.14	0.82
1:B:37:LEU:HD13	1:B:168:VAL:CG2	2.06	0.82
3:E:51:GLN:HG3	3:E:52:LEU:CD2	2.08	0.82
1:B:115:LEU:HG	1:B:119:ASN:HD21	1.44	0.82
2:C:94:LEU:HA	2:D:97:TYR:HA	1.58	0.82
2:D:55:ILE:HD11	2:D:94:LEU:HD21	1.61	0.82
1:A:169:TYR:CG	1:A:174:ARG:HA	2.15	0.82
1:A:114:LEU:O	1:A:118:VAL:HG23	1.79	0.82
1:B:209:GLU:HG3	1:B:211:ILE:HG12	1.60	0.82
4:G:62:GLU:H	5:H:139:LYS:H	1.26	0.82
1:A:376:MET:HE2	1:A:379:ARG:NH2	1.94	0.82
2:C:73:ARG:NE	3:E:91:SER:HB3	1.94	0.82
4:G:21:TYR:HB3	4:G:24:LEU:CB	2.02	0.82
4:G:76:ARG:HG2	4:G:125:ILE:CD1	2.10	0.82
4:G:49:GLN:HG2	4:G:67:ASP:OD2	1.80	0.82
3:F:43:GLN:HB2	3:F:47:TYR:HE1	1.45	0.82
2:C:89:THR:HG1	2:D:88:SER:HB3	1.45	0.82
3:F:21:GLU:CG	4:G:19:GLU:OE2	2.19	0.82
1:B:248:LYS:O	1:B:253:MET:HG2	1.79	0.82
1:B:169:TYR:CG	1:B:174:ARG:HA	2.15	0.82
2:C:71:THR:H	3:E:92:GLY:HA2	1.03	0.82
3:F:89:ASP:CB	3:F:95:GLU:HB3	2.10	0.82
3:F:90:LEU:HB2	3:F:98:ARG:HD3	1.60	0.82
1:A:251:GLU:HG2	1:B:54:MET:CA	2.05	0.82
1:B:114:LEU:O	1:B:118:VAL:HG23	1.79	0.82
3:E:47:TYR:HB3	3:E:50:GLN:CG	2.09	0.82
1:A:354:ILE:CD1	1:B:355:GLY:CA	2.45	0.82
1:B:416:ARG:HB2	1:B:417:THR:O	1.78	0.81
2:C:99:LYS:HB2	2:D:101:ALA:CB	1.78	0.81
1:A:370:LEU:O	1:A:373:LYS:HG3	1.80	0.81
1:A:232:LYS:HB2	1:A:237:ILE:HB	1.61	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:30:GLU:O	2:C:35:GLU:HG3	1.80	0.81
1:A:460:ILE:CD1	1:B:466:GLN:CD	2.49	0.81
2:D:41:ILE:HG22	2:D:42:ASP:O	1.81	0.81
4:G:100:PHE:HE1	5:H:45:ASP:N	1.73	0.81
1:A:38:ILE:HD11	1:A:181:LEU:HD12	1.61	0.81
1:B:37:LEU:CD2	1:B:168:VAL:HG11	2.05	0.81
1:B:370:LEU:O	1:B:373:LYS:HG3	1.80	0.81
3:F:104:ASP:H	4:G:31:VAL:HG21	0.65	0.81
1:B:121:LEU:O	1:B:124:ASP:HB2	1.79	0.81
2:C:63:PHE:CZ	2:C:82:PHE:HA	2.15	0.81
2:D:69:GLY:HA2	2:D:72:GLY:C	2.00	0.81
2:C:55:ILE:HD11	2:C:94:LEU:HD21	1.61	0.81
2:D:30:GLU:O	2:D:35:GLU:HG3	1.80	0.81
1:B:171:ASP:HB2	1:B:178:LEU:HD11	1.60	0.81
1:B:96:LYS:CB	1:B:373:LYS:HB2	2.10	0.81
1:B:38:ILE:HG21	1:B:183:TYR:CE2	2.15	0.81
3:E:60:ILE:HG12	3:E:99:ILE:CG1	2.10	0.81
2:D:6:VAL:H	3:F:3:GLU:HA	1.45	0.81
1:A:96:LYS:CB	1:A:373:LYS:HB2	2.10	0.81
1:A:382:ARG:NH2	1:A:385:LEU:HD23	1.95	0.81
2:C:94:LEU:C	2:D:97:TYR:HB2	2.01	0.81
1:B:241:ARG:NH2	1:B:245:ILE:HG12	1.96	0.81
3:E:40:PRO:CB	3:E:42:SER:HB2	2.11	0.81
3:F:63:PRO:CB	3:F:96:ILE:HG22	2.11	0.81
2:C:89:THR:CG2	2:D:88:SER:O	2.28	0.81
1:A:69:ALA:N	1:B:300:THR:CG2	2.38	0.81
1:B:298:GLU:HG3	2:C:42:ASP:HB3	1.62	0.81
1:A:241:ARG:NH2	1:A:245:ILE:HG12	1.96	0.81
1:B:38:ILE:HD11	1:B:181:LEU:HD12	1.61	0.81
2:C:4:GLN:HE21	3:E:1:MET:HE2	1.42	0.81
4:G:31:VAL:CG2	4:G:32:THR:HA	2.10	0.81
4:G:34:SER:O	4:G:37:LYS:HD2	1.80	0.81
1:A:352:GLU:HG3	1:A:354:ILE:H	1.45	0.81
1:B:62:LYS:HE2	1:B:63:ARG:HG3	1.61	0.81
3:E:75:ILE:CG1	3:E:80:ILE:HG22	2.11	0.81
1:A:441:GLU:HG3	1:A:453:PRO:HA	1.61	0.80
1:A:62:LYS:HE3	1:A:81:ASN:CA	2.12	0.80
2:D:63:PHE:CZ	2:D:82:PHE:HA	2.15	0.80
2:C:85:GLU:CA	2:D:86:ILE:HD12	2.08	0.80
5:H:14:LEU:HD21	5:H:160:PHE:CD1	2.16	0.80
4:G:22:GLN:O	4:G:25:MET:HG2	1.81	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:G:16:GLU:O	4:G:19:GLU:HG2	1.80	0.80
2:C:41:ILE:HG22	2:C:42:ASP:O	1.81	0.80
2:C:66:THR:HG21	2:D:82:PHE:CD2	2.13	0.80
5:H:111:ALA:HA	5:H:132:LEU:CD1	2.10	0.80
1:A:171:ASP:H	1:A:178:LEU:HD13	1.46	0.80
1:B:171:ASP:H	1:B:178:LEU:HD13	1.46	0.80
1:B:187:LYS:HD3	1:B:193:GLU:HB3	1.63	0.80
1:B:88:TRP:HA	1:B:88:TRP:CE3	2.11	0.80
2:C:69:GLY:HA2	2:C:72:GLY:C	2.00	0.80
3:E:84:ILE:HD12	3:E:103:GLU:HG2	1.61	0.80
1:A:252:GLU:CB	1:A:254:VAL:HG13	2.11	0.80
3:E:44:GLU:CG	3:E:46:TYR:HB2	2.11	0.80
3:F:45:GLU:HA	3:F:47:TYR:CD1	2.16	0.80
4:G:86:VAL:O	4:G:90:LEU:HD13	1.81	0.80
1:A:59:ILE:H	1:A:59:ILE:HD12	1.46	0.80
1:B:310:LYS:HB2	2:C:38:ASN:CB	2.11	0.80
2:D:50:PRO:HG2	2:D:53:VAL:HG21	1.62	0.80
1:A:187:LYS:HD3	1:A:193:GLU:HB3	1.64	0.80
1:A:88:TRP:HA	1:A:88:TRP:CE3	2.11	0.80
2:C:54:LEU:CD1	2:D:28:LEU:HD21	2.10	0.80
3:F:104:ASP:HB2	4:G:31:VAL:HB	1.62	0.80
1:B:58:ASP:HB3	1:B:81:ASN:HD21	1.44	0.80
2:C:99:LYS:N	2:D:101:ALA:N	2.26	0.80
4:G:41:TYR:HD2	4:G:119:VAL:HG21	1.45	0.80
1:B:62:LYS:HE3	1:B:81:ASN:CA	2.12	0.80
3:F:17:GLN:HB3	3:F:19:ASN:HD21	1.46	0.80
1:A:58:ASP:HB3	1:A:81:ASN:HD21	1.44	0.80
2:C:50:PRO:HG2	2:C:53:VAL:HG21	1.62	0.80
5:H:46:GLU:CB	5:H:151:VAL:HB	2.12	0.80
1:B:96:LYS:HB2	1:B:373:LYS:HB2	1.63	0.80
1:B:382:ARG:NH2	1:B:385:LEU:HD23	1.95	0.80
1:A:299:PHE:HA	1:A:302:ASN:HD21	1.44	0.80
1:A:62:LYS:HE2	1:A:63:ARG:HG3	1.61	0.80
5:H:14:LEU:HD21	5:H:160:PHE:CG	2.17	0.80
1:A:171:ASP:HB2	1:A:178:LEU:HD11	1.60	0.80
1:A:38:ILE:HG12	1:A:181:LEU:HG	1.64	0.80
1:A:367:TYR:HB3	1:A:369:LEU:CA	2.08	0.80
1:A:408:LYS:O	1:A:411:THR:HG22	1.81	0.80
1:B:200:TYR:CD1	1:B:205:VAL:HG13	2.17	0.80
3:E:37:HIS:CD2	3:F:88:VAL:HB	2.16	0.80
3:E:84:ILE:H	3:E:84:ILE:HD13	1.47	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:28:TRP:CH2	3:F:80:ILE:HD13	2.16	0.80
1:A:200:TYR:CD1	1:A:205:VAL:HG13	2.17	0.80
1:A:367:TYR:CB	1:A:368:ALA:HA	2.05	0.80
1:A:96:LYS:HG2	1:A:373:LYS:CD	2.12	0.80
1:A:96:LYS:HB2	1:A:373:LYS:HB2	1.63	0.80
1:B:38:ILE:HG12	1:B:181:LEU:HG	1.64	0.80
1:B:252:GLU:CB	1:B:254:VAL:HG13	2.11	0.80
1:B:408:LYS:O	1:B:411:THR:HG22	1.81	0.80
1:B:46:LEU:HD22	1:B:162:ALA:HB2	1.64	0.80
2:D:70:LEU:H	3:F:93:LEU:N	1.78	0.80
3:E:66:ASP:HA	3:E:87:PRO:CB	2.11	0.80
1:B:59:ILE:HD12	1:B:59:ILE:H	1.46	0.80
4:G:63:ASN:N	5:H:139:LYS:CB	2.44	0.80
5:H:143:ILE:HG21	5:H:147:PRO:HD3	1.64	0.80
3:F:61:TYR:HB2	3:F:98:ARG:HG3	1.64	0.80
3:E:86:ASP:OD1	3:E:100:LYS:HB3	1.82	0.80
1:A:320:LEU:HB2	1:A:321:ARG:O	1.83	0.79
2:C:98:ARG:CA	2:D:97:TYR:CE2	2.64	0.79
1:B:367:TYR:CD2	1:B:369:LEU:HB3	2.16	0.79
1:B:55:CYS:SG	1:B:83:ARG:HB2	2.21	0.79
3:F:24:LYS:HG2	3:F:25:THR:H	1.45	0.79
5:H:143:ILE:H	5:H:143:ILE:HD12	1.46	0.79
3:F:12:GLN:HG2	3:F:75:ILE:CD1	2.11	0.79
1:B:352:GLU:HG3	1:B:354:ILE:H	1.45	0.79
1:B:232:LYS:HB2	1:B:237:ILE:HB	1.61	0.79
1:B:417:THR:HB	1:B:418:ARG:HA	1.64	0.79
1:A:76:ASP:OD2	1:A:79:LYS:HG2	1.82	0.79
1:A:170:LYS:CB	1:A:178:LEU:HD22	2.08	0.79
1:A:260:TYR:O	1:A:264:ILE:HG13	1.82	0.79
1:B:96:LYS:HG2	1:B:373:LYS:HD2	1.65	0.79
3:E:79:LYS:CE	3:F:69:ASP:HB3	2.12	0.79
1:B:299:PHE:HA	1:B:302:ASN:HD21	1.44	0.79
3:F:105:GLY:CA	4:G:39:ASP:CB	2.46	0.79
3:E:77:ARG:HH12	3:F:64:TYR:HA	1.47	0.79
4:G:44:VAL:CG1	4:G:70:VAL:HG12	2.13	0.79
1:A:440:LYS:HD3	1:A:440:LYS:O	1.82	0.79
1:B:313:GLY:HA2	2:C:51:SER:H	1.47	0.79
5:H:53:ILE:O	5:H:54:LEU:N	2.14	0.79
1:A:96:LYS:HG2	1:A:373:LYS:HD2	1.65	0.79
1:B:260:TYR:O	1:B:264:ILE:HG13	1.82	0.79
1:B:96:LYS:HG2	1:B:373:LYS:CD	2.12	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:62:LYS:HE3	1:B:81:ASN:HB2	1.65	0.79
1:A:417:THR:HB	1:A:418:ARG:HA	1.64	0.79
1:A:367:TYR:CD2	1:A:369:LEU:HB3	2.16	0.79
4:G:27:MET:HG2	4:G:31:VAL:HG13	1.64	0.79
1:A:55:CYS:SG	1:A:83:ARG:HB2	2.21	0.79
2:D:82:PHE:O	2:D:86:ILE:HG12	1.83	0.79
1:A:410:LEU:CD2	1:A:412:MET:HG2	2.13	0.79
1:A:254:VAL:CG1	1:B:85:SER:OG	2.31	0.79
1:B:99:TYR:HB2	1:B:370:LEU:HD12	1.65	0.79
3:E:53:GLN:HG3	4:G:40:PRO:CG	2.10	0.79
1:A:460:ILE:HG13	1:B:467:TYR:CD2	2.14	0.79
1:B:310:LYS:CG	2:C:38:ASN:HB2	2.13	0.79
2:D:34:ASP:HB3	2:D:36:CYS:N	1.97	0.79
5:H:139:LYS:N	5:H:139:LYS:HD3	1.96	0.79
1:A:382:ARG:CG	1:A:383:ALA:HA	2.12	0.79
3:E:77:ARG:HA	3:F:66:ASP:OD2	1.83	0.79
3:F:51:GLN:HG3	3:F:52:LEU:HD22	1.65	0.79
3:E:77:ARG:CB	3:F:66:ASP:HA	2.05	0.79
1:A:331:LYS:O	1:A:334:GLU:HG2	1.83	0.79
1:A:62:LYS:HE3	1:A:81:ASN:HB2	1.65	0.79
3:E:108:VAL:HG11	4:G:43:TYR:HH	1.45	0.79
3:E:85:GLY:HA3	3:E:99:ILE:HG23	1.63	0.79
1:B:76:ASP:OD2	1:B:79:LYS:HG2	1.83	0.79
2:C:63:PHE:HZ	2:C:82:PHE:HA	1.48	0.79
1:B:179:PHE:CE2	1:B:200:TYR:HB2	2.17	0.79
1:B:410:LEU:CD2	1:B:412:MET:HG2	2.13	0.79
2:D:4:GLN:HG2	3:F:1:MET:CE	2.13	0.79
3:E:52:LEU:HD12	3:E:53:GLN:CD	2.03	0.79
1:B:59:ILE:HG23	1:B:62:LYS:NZ	1.98	0.79
1:A:395:TYR:HA	1:A:398:ASN:ND2	1.97	0.79
1:A:130:LEU:HD22	1:A:388:PHE:CE2	2.18	0.79
1:B:367:TYR:HB3	1:B:369:LEU:CA	2.08	0.78
2:C:4:GLN:HB2	2:C:8:ARG:CZ	2.13	0.78
2:D:4:GLN:HB2	2:D:8:ARG:CZ	2.13	0.78
2:D:70:LEU:HD21	3:F:90:LEU:O	1.82	0.78
1:A:128:ASP:O	1:A:132:GLU:HG2	1.83	0.78
2:D:63:PHE:HZ	2:D:82:PHE:HA	1.48	0.78
4:G:128:ARG:HD2	4:G:128:ARG:H	1.48	0.78
1:A:367:TYR:OH	1:A:372:LEU:HB2	1.84	0.78
1:B:239:TRP:CZ3	1:B:243:PRO:HG3	2.18	0.78
4:G:21:TYR:CD1	4:G:23:PRO:HD2	2.18	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:331:LYS:O	1:B:334:GLU:HG2	1.83	0.78
1:B:416:ARG:O	1:B:418:ARG:HG2	1.84	0.78
1:B:204:HIS:CE1	1:B:221:TYR:HB3	2.18	0.78
1:B:367:TYR:OH	1:B:372:LEU:HB2	1.84	0.78
2:C:34:ASP:HB3	2:C:36:CYS:N	1.97	0.78
2:C:82:PHE:O	2:C:86:ILE:HG12	1.83	0.78
2:C:94:LEU:H	2:D:97:TYR:CB	1.91	0.78
2:D:87:PRO:O	2:D:91:LEU:HD23	1.83	0.78
4:G:63:ASN:CA	5:H:140:ASN:ND2	2.45	0.78
1:B:395:TYR:HA	1:B:398:ASN:ND2	1.97	0.78
2:C:93:LYS:HZ2	2:C:94:LEU:HD11	1.46	0.78
1:A:179:PHE:CE2	1:A:200:TYR:HB2	2.17	0.78
1:A:99:TYR:HB2	1:A:370:LEU:HD12	1.65	0.78
1:B:382:ARG:CG	1:B:383:ALA:HA	2.12	0.78
3:E:62:THR:HB	3:E:68:ILE:HD12	1.65	0.78
1:A:204:HIS:CE1	1:A:221:TYR:HB3	2.18	0.78
1:B:37:LEU:HD22	1:B:168:VAL:CG1	2.08	0.78
1:A:416:ARG:O	1:A:418:ARG:HG2	1.84	0.78
1:B:320:LEU:HB2	1:B:321:ARG:O	1.83	0.78
2:D:95:ASN:HB3	2:D:97:TYR:N	1.99	0.78
5:H:111:ALA:CA	5:H:132:LEU:HD13	2.12	0.78
5:H:16:GLN:HB2	5:H:25:ALA:O	1.83	0.78
1:B:144:TYR:HB3	1:B:244:ILE:CD1	2.10	0.78
1:B:163:GLU:CB	1:B:182:ARG:HG3	2.14	0.78
1:B:128:ASP:O	1:B:132:GLU:HG2	1.83	0.78
1:B:294:GLU:HG2	2:C:41:ILE:C	2.04	0.78
2:D:87:PRO:HB3	2:D:90:ILE:H	1.47	0.78
5:H:17:SER:HA	5:H:23:GLY:HA3	1.63	0.78
3:E:13:SER:HB2	3:E:75:ILE:HD13	1.66	0.78
3:E:84:ILE:HG21	3:E:103:GLU:OE1	1.84	0.78
1:B:130:LEU:HD22	1:B:388:PHE:CE2	2.18	0.78
2:C:87:PRO:HB3	2:C:90:ILE:H	1.47	0.78
4:G:61:GLY:HA2	5:H:139:LYS:HE2	1.63	0.78
1:A:144:TYR:HB3	1:A:244:ILE:CD1	2.10	0.78
1:B:202:ASP:HB2	1:B:242:VAL:CB	2.13	0.78
1:B:256:ASP:O	1:B:259:PHE:HB2	1.84	0.78
2:D:5:ARG:HA	3:F:3:GLU:HA	1.63	0.78
1:B:440:LYS:O	1:B:440:LYS:HD3	1.82	0.78
1:A:59:ILE:HG23	1:A:62:LYS:NZ	1.98	0.78
2:C:87:PRO:O	2:C:91:LEU:HD23	1.84	0.78
5:H:88:GLN:C	5:H:89:ILE:HD13	2.04	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:50:GLN:HG2	3:F:52:LEU:HD23	1.66	0.78
1:B:59:ILE:HA	1:B:62:LYS:HD2	1.65	0.78
1:B:190:MET:HB3	1:B:192:GLU:OE1	1.84	0.78
1:A:30:ASP:O	1:A:34:ILE:HG13	1.84	0.77
1:A:96:LYS:HE3	1:A:377:ALA:CA	2.12	0.77
1:B:38:ILE:CG1	1:B:181:LEU:HG	2.14	0.77
1:A:340:LEU:HD13	1:B:275:MET:SD	2.24	0.77
5:H:13:TYR:CE1	5:H:31:TYR:HB3	2.18	0.77
1:B:294:GLU:CG	2:C:42:ASP:N	2.47	0.77
5:H:16:GLN:HB3	5:H:27:LEU:N	1.99	0.77
1:B:96:LYS:HE3	1:B:377:ALA:CA	2.12	0.77
3:E:79:LYS:HD2	3:F:70:LYS:HB3	1.64	0.77
5:H:121:GLY:HA2	5:H:126:VAL:HA	1.66	0.77
1:A:418:ARG:HH12	1:B:426:VAL:HG21	1.48	0.77
2:C:54:LEU:HD11	2:D:28:LEU:CD2	2.12	0.77
1:A:239:TRP:CZ3	1:A:243:PRO:HG3	2.18	0.77
4:G:100:PHE:CG	5:H:47:GLN:CG	2.68	0.77
1:A:163:GLU:CB	1:A:182:ARG:HG3	2.14	0.77
1:A:224:ASN:ND2	1:A:225:ASN:HA	1.99	0.77
1:A:146:HIS:ND1	1:A:243:PRO:HB2	1.99	0.77
3:E:45:GLU:HA	3:E:47:TYR:CE1	2.20	0.77
3:E:41:ILE:H	3:F:100:LYS:HE2	1.49	0.77
3:F:51:GLN:HG3	3:F:52:LEU:CD2	2.14	0.77
1:A:190:MET:HB3	1:A:192:GLU:OE1	1.84	0.77
1:B:291:TYR:HB3	1:B:312:SER:HB2	1.67	0.77
1:B:100:LEU:CG	1:B:377:ALA:HB1	2.15	0.77
1:B:30:ASP:O	1:B:34:ILE:HG13	1.84	0.77
3:F:44:GLU:CG	3:F:46:TYR:HB2	2.14	0.77
3:F:73:ARG:HH11	3:F:80:ILE:HB	1.49	0.77
1:A:291:TYR:HB3	1:A:312:SER:HB2	1.67	0.77
1:A:202:ASP:HB2	1:A:242:VAL:CB	2.13	0.77
3:E:8:VAL:CG2	3:E:34:ALA:HA	2.14	0.77
1:B:121:LEU:HD12	1:B:124:ASP:H	1.48	0.77
1:A:59:ILE:HA	1:A:62:LYS:HD2	1.65	0.77
1:A:100:LEU:CG	1:A:377:ALA:HB1	2.15	0.77
1:B:146:HIS:ND1	1:B:243:PRO:HB2	1.99	0.77
3:E:53:GLN:HG3	3:E:55:PRO:HD3	1.65	0.77
3:E:13:SER:OG	3:E:73:ARG:HD2	1.84	0.77
3:E:79:LYS:HE2	3:F:69:ASP:HB3	1.65	0.77
4:G:21:TYR:CB	4:G:24:LEU:HB2	2.04	0.77
1:B:112:LYS:HG2	1:B:401:LYS:HZ2	1.50	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:418:ARG:HB2	1:B:421:ASN:CB	2.14	0.77
1:A:38:ILE:CG1	1:A:181:LEU:HG	2.14	0.77
2:D:4:GLN:CA	3:F:1:MET:CB	2.39	0.77
4:G:113:ILE:HG21	4:G:121:LYS:CB	2.15	0.77
2:C:55:ILE:HD12	2:C:94:LEU:HD11	1.66	0.77
3:F:41:ILE:HG23	3:F:42:SER:H	1.48	0.77
3:F:85:GLY:CA	3:F:99:ILE:HG23	2.14	0.77
1:B:64:ARG:HD3	1:B:79:LYS:NZ	2.00	0.77
2:C:95:ASN:HB3	2:C:97:TYR:N	1.99	0.77
1:A:254:VAL:HB	1:A:259:PHE:CE1	2.20	0.77
1:A:261:LYS:HG2	1:A:265:ASP:OD2	1.85	0.77
1:B:184:TYR:O	1:B:196:LYS:HB2	1.85	0.77
1:B:224:ASN:ND2	1:B:225:ASN:HA	1.99	0.77
2:D:5:ARG:HA	3:F:3:GLU:H	0.69	0.77
1:A:418:ARG:HB2	1:A:421:ASN:CB	2.14	0.76
1:B:298:GLU:CG	2:C:42:ASP:HB3	2.14	0.76
1:A:256:ASP:O	1:A:259:PHE:HB2	1.84	0.76
1:B:261:LYS:HG2	1:B:265:ASP:OD2	1.85	0.76
2:D:7:LYS:HE2	3:F:5:PHE:H	1.49	0.76
2:C:14:ASN:HD21	2:C:21:LEU:HG	1.50	0.76
1:B:444:VAL:HG13	1:B:449:PHE:HB2	1.66	0.76
1:A:64:ARG:HD3	1:A:79:LYS:NZ	2.00	0.76
5:H:143:ILE:HB	5:H:144:ASP:C	2.05	0.76
1:A:37:LEU:HD22	1:A:168:VAL:CG1	2.08	0.76
1:A:43:PRO:O	1:A:47:LEU:HG	1.85	0.76
3:E:85:GLY:HA3	3:E:99:ILE:CG2	2.15	0.76
4:G:113:ILE:HG12	4:G:121:LYS:CB	2.15	0.76
1:B:64:ARG:HD3	1:B:79:LYS:HZ2	1.50	0.76
1:B:285:VAL:CG1	1:B:287:VAL:HG23	2.16	0.76
1:A:182:ARG:CZ	1:A:184:TYR:HB3	2.16	0.76
1:A:149:VAL:HG21	1:A:227:ARG:HD2	1.67	0.76
1:B:149:VAL:HG21	1:B:227:ARG:HD2	1.67	0.76
1:B:254:VAL:HB	1:B:259:PHE:CE1	2.20	0.76
1:A:438:MET:HG3	1:B:434:THR:O	1.83	0.76
2:C:29:VAL:HG13	2:C:50:PRO:HG3	1.67	0.76
1:A:46:LEU:HD22	1:A:162:ALA:HB2	1.64	0.76
1:A:140:LYS:CD	1:A:261:LYS:HE3	2.15	0.76
1:A:34:ILE:HG22	1:A:181:LEU:HD22	1.68	0.76
2:D:14:ASN:HD21	2:D:21:LEU:HG	1.50	0.76
2:D:69:GLY:HA2	2:D:72:GLY:O	1.85	0.76
1:A:32:THR:O	1:A:36:LYS:HG2	1.86	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:439:SER:OG	1:B:459:ARG:CG	2.32	0.76
1:A:453:PRO:CB	1:B:462:GLU:CD	2.48	0.76
1:A:460:ILE:CG1	1:B:466:GLN:CD	2.54	0.76
2:C:99:LYS:CA	2:D:101:ALA:N	2.49	0.76
2:D:29:VAL:HG13	2:D:50:PRO:HG3	1.67	0.76
1:B:167:VAL:CG1	1:B:177:ILE:HD12	2.12	0.76
1:A:110:ASP:HB3	1:A:396:LEU:CD1	2.14	0.76
1:A:121:LEU:HD12	1:A:124:ASP:H	1.48	0.76
1:A:444:VAL:HG13	1:A:449:PHE:HB2	1.66	0.76
1:B:140:LYS:CD	1:B:261:LYS:HE3	2.15	0.76
3:F:84:ILE:HD12	3:F:103:GLU:OE2	1.86	0.76
3:E:105:GLY:CA	4:G:119:VAL:CG2	2.57	0.76
1:A:460:ILE:CD1	1:B:466:GLN:NE2	2.49	0.76
2:C:4:GLN:CG	3:E:1:MET:SD	2.68	0.76
3:F:44:GLU:HG3	3:F:46:TYR:HB2	1.65	0.76
3:F:52:LEU:CD1	3:F:54:THR:H	1.98	0.76
3:F:52:LEU:CB	3:F:53:GLN:HA	2.11	0.76
1:B:32:THR:O	1:B:36:LYS:HG2	1.86	0.76
2:D:55:ILE:HD12	2:D:94:LEU:HD11	1.66	0.76
1:B:364:GLU:O	1:B:368:ALA:HB3	1.84	0.76
4:G:32:THR:CG2	4:G:43:TYR:HB2	2.15	0.76
1:A:364:GLU:O	1:A:368:ALA:HB3	1.84	0.76
1:B:178:LEU:HA	1:B:242:VAL:HG13	1.66	0.76
1:B:376:MET:HB2	1:B:379:ARG:NH2	2.01	0.76
2:D:6:VAL:N	3:F:3:GLU:HA	2.01	0.76
3:F:70:LYS:HZ3	3:F:71:LYS:HB2	1.49	0.76
1:B:182:ARG:CZ	1:B:184:TYR:HB3	2.16	0.76
2:D:25:VAL:CG1	2:D:53:VAL:HG11	2.16	0.75
4:G:134:ASN:CG	5:H:138:LEU:O	2.22	0.75
5:H:14:LEU:HB2	5:H:27:LEU:O	1.85	0.75
3:F:103:GLU:HB3	4:G:31:VAL:HG11	1.69	0.75
1:B:313:GLY:C	2:C:51:SER:HB2	2.06	0.75
1:A:376:MET:HB2	1:A:379:ARG:CZ	2.16	0.75
1:B:99:TYR:CD2	1:B:370:LEU:HD12	2.20	0.75
1:A:130:LEU:HD13	1:A:388:PHE:CE2	2.22	0.75
4:G:63:ASN:OD1	5:H:139:LYS:HB3	1.86	0.75
1:A:147:PRO:HG2	1:A:239:TRP:HH2	1.51	0.75
1:A:99:TYR:CD2	1:A:370:LEU:HD12	2.20	0.75
1:A:376:MET:HB2	1:A:379:ARG:NH2	2.01	0.75
1:B:147:PRO:HG2	1:B:239:TRP:HH2	1.51	0.75
3:F:32:PHE:CE1	3:F:67:ARG:HB2	2.21	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:285:VAL:CG1	1:A:287:VAL:HG23	2.16	0.75
1:A:178:LEU:HA	1:A:242:VAL:HG13	1.66	0.75
1:A:252:GLU:OE1	1:B:53:TYR:CE1	2.39	0.75
3:E:48:LYS:HD3	3:F:48:LYS:HG3	1.69	0.75
4:G:31:VAL:HG23	4:G:32:THR:HA	1.69	0.75
1:A:112:LYS:HG2	1:A:401:LYS:HZ2	1.50	0.75
1:B:110:ASP:HB3	1:B:396:LEU:CD1	2.14	0.75
3:F:21:GLU:OE1	4:G:16:GLU:CG	2.34	0.75
2:C:56:PHE:HA	2:C:59:LYS:NZ	2.02	0.75
1:A:167:VAL:CG1	1:A:177:ILE:HD12	2.12	0.75
2:C:70:LEU:O	3:E:91:SER:OG	2.05	0.75
1:B:294:GLU:HB3	2:C:42:ASP:CG	2.06	0.75
5:H:17:SER:HB2	5:H:91:PHE:HA	1.69	0.75
1:B:376:MET:HB2	1:B:379:ARG:CZ	2.16	0.75
1:B:43:PRO:O	1:B:47:LEU:HG	1.85	0.75
4:G:45:VAL:HG22	4:G:71:TRP:HZ3	1.51	0.75
1:B:63:ARG:NE	1:B:75:VAL:HG11	2.01	0.75
2:C:100:MET:HE1	2:D:100:MET:CB	2.17	0.75
1:A:144:TYR:CE1	1:A:246:PRO:HB3	2.21	0.75
1:B:168:VAL:O	1:B:177:ILE:HG13	1.87	0.75
1:B:144:TYR:CE1	1:B:246:PRO:HB3	2.21	0.75
1:B:410:LEU:HB3	1:B:411:THR:C	2.07	0.75
2:D:70:LEU:H	3:F:93:LEU:CA	1.98	0.75
1:B:130:LEU:HD13	1:B:388:PHE:CE2	2.22	0.75
4:G:97:PHE:CD2	5:H:47:GLN:CB	2.66	0.75
1:A:45:PRO:O	1:A:48:LYS:HG2	1.87	0.75
1:B:99:TYR:CB	1:B:370:LEU:HD12	2.17	0.75
1:B:40:GLU:HB2	1:B:166:ILE:CD1	2.07	0.75
1:B:45:PRO:O	1:B:48:LYS:HG2	1.87	0.75
2:C:69:GLY:HA2	2:C:72:GLY:O	1.85	0.75
1:B:111:ASN:HD21	1:B:113:THR:HB	1.52	0.75
3:F:21:GLU:CA	4:G:20:SER:HA	2.17	0.75
2:D:56:PHE:CD1	2:D:59:LYS:HE2	2.21	0.75
2:D:59:LYS:O	2:D:62:GLN:HG2	1.87	0.75
4:G:63:ASN:HA	5:H:140:ASN:ND2	2.02	0.75
1:A:184:TYR:O	1:A:196:LYS:HB2	1.85	0.75
1:B:52:TYR:HB3	1:B:261:LYS:HD3	1.69	0.75
2:C:74:SER:CB	2:C:78:VAL:HG11	2.14	0.75
2:D:70:LEU:HB2	3:E:2:TYR:CE1	2.22	0.75
3:E:61:TYR:CE1	3:E:96:ILE:HB	2.21	0.75
4:G:105:LYS:HG3	4:G:106:LYS:CG	2.08	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:248:LYS:HB2	1:B:249:ASN:C	2.06	0.75
2:C:98:ARG:CD	2:D:97:TYR:CZ	2.70	0.74
5:H:99:ASN:HB2	5:H:104:TYR:HB2	1.67	0.74
5:H:21:ALA:CB	5:H:150:ILE:HG12	2.16	0.74
1:A:52:TYR:HB3	1:A:261:LYS:HD3	1.69	0.74
1:A:248:LYS:HB2	1:A:249:ASN:C	2.06	0.74
1:A:453:PRO:HB3	1:B:462:GLU:OE2	1.87	0.74
4:G:113:ILE:CG2	4:G:121:LYS:HB3	2.17	0.74
2:C:56:PHE:CD1	2:C:59:LYS:HE2	2.22	0.74
4:G:134:ASN:CB	5:H:138:LEU:O	2.35	0.74
1:A:99:TYR:CB	1:A:370:LEU:HD12	2.17	0.74
1:B:34:ILE:HG22	1:B:181:LEU:HD22	1.68	0.74
1:A:378:GLU:CD	1:B:98:GLN:NE2	2.40	0.74
1:A:64:ARG:HH21	1:B:284:ILE:CG2	1.99	0.74
1:B:298:GLU:OE1	2:C:43:LYS:HG3	1.87	0.74
2:D:28:LEU:HA	2:D:31:PHE:CE1	2.23	0.74
1:A:168:VAL:O	1:A:177:ILE:HG13	1.87	0.74
1:A:46:LEU:HD22	1:A:162:ALA:CB	2.18	0.74
3:E:70:LYS:HG2	3:E:85:GLY:O	1.87	0.74
3:F:87:PRO:HB3	3:F:97:THR:HG23	1.67	0.74
1:A:438:MET:SD	1:B:434:THR:CB	2.75	0.74
1:A:335:ARG:CG	1:B:333:LEU:HB2	2.17	0.74
1:A:202:ASP:OD1	1:A:242:VAL:HA	1.87	0.74
1:B:202:ASP:OD1	1:B:242:VAL:HA	1.87	0.74
1:B:46:LEU:HB2	1:B:162:ALA:CB	2.18	0.74
1:A:379:ARG:HD2	1:B:94:ASP:CG	2.07	0.74
3:E:59:ASN:H	3:F:100:LYS:HE3	1.52	0.74
1:A:111:ASN:HD21	1:A:113:THR:HB	1.52	0.74
1:A:64:ARG:HH21	1:B:284:ILE:HG21	1.51	0.74
1:B:299:PHE:HD2	2:D:35:GLU:O	1.71	0.74
1:A:48:LYS:HA	1:A:51:ARG:HH12	1.53	0.74
1:B:34:ILE:HG22	1:B:181:LEU:CD2	2.18	0.74
1:A:63:ARG:NE	1:A:75:VAL:HG11	2.01	0.74
2:C:25:VAL:CG1	2:C:53:VAL:HG11	2.16	0.74
5:H:90:LYS:HD3	5:H:150:ILE:CD1	2.18	0.74
3:E:12:GLN:O	3:E:30:ASP:HB2	1.86	0.74
2:C:88:SER:O	2:C:92:LYS:HG2	1.87	0.74
4:G:100:PHE:CD2	5:H:47:GLN:CB	2.71	0.74
1:B:99:TYR:CD2	1:B:370:LEU:HB3	2.23	0.74
1:B:48:LYS:HA	1:B:51:ARG:HH12	1.53	0.74
3:E:73:ARG:HH12	3:E:80:ILE:HD12	1.50	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:438:MET:HE3	1:B:433:VAL:O	1.88	0.74
1:B:313:GLY:CA	2:C:51:SER:HB2	2.16	0.74
1:A:299:PHE:HD2	2:C:35:GLU:O	1.71	0.74
2:D:56:PHE:HA	2:D:59:LYS:NZ	2.02	0.74
2:C:4:GLN:C	3:E:1:MET:N	2.41	0.74
3:F:7:ASP:HB3	3:F:9:ILE:N	2.02	0.74
3:F:86:ASP:OD1	3:F:100:LYS:HB3	1.88	0.74
4:G:113:ILE:CD1	4:G:122:HIS:H	2.00	0.74
1:A:426:VAL:HA	1:A:429:LEU:HD12	1.70	0.73
1:B:441:GLU:HG2	1:B:456:GLU:HB2	1.70	0.73
2:C:28:LEU:HA	2:C:31:PHE:CE1	2.23	0.73
4:G:64:ILE:HD11	5:H:140:ASN:CG	2.09	0.73
5:H:147:PRO:HA	5:H:150:ILE:HG13	1.69	0.73
1:A:38:ILE:CG2	1:A:163:GLU:HG2	2.15	0.73
1:A:259:PHE:CZ	1:B:90:LYS:HD2	2.22	0.73
1:A:46:LEU:HB2	1:A:162:ALA:CB	2.18	0.73
1:B:179:PHE:CE1	1:B:244:ILE:HD13	2.23	0.73
2:C:4:GLN:CA	3:E:1:MET:HG2	2.18	0.73
2:D:6:VAL:HG23	3:F:3:GLU:HG3	1.70	0.73
4:G:33:GLU:CD	4:G:46:ILE:HB	2.09	0.73
1:A:441:GLU:HG2	1:A:456:GLU:HB2	1.70	0.73
5:H:94:VAL:HG21	5:H:160:PHE:CZ	2.22	0.73
1:A:163:GLU:HB2	1:A:182:ARG:CG	2.18	0.73
1:B:46:LEU:CD2	1:B:162:ALA:HB2	2.18	0.73
3:F:105:GLY:CA	4:G:39:ASP:N	2.31	0.73
3:F:7:ASP:N	3:F:8:VAL:HA	2.03	0.73
1:A:457:LEU:HG	1:B:467:TYR:CG	2.14	0.73
1:B:308:VAL:HG11	2:C:36:CYS:SG	2.29	0.73
2:C:59:LYS:O	2:C:62:GLN:HG2	1.87	0.73
2:D:55:ILE:HD12	2:D:93:LYS:HZ2	1.54	0.73
1:A:410:LEU:HB3	1:A:411:THR:C	2.07	0.73
1:B:241:ARG:HH21	1:B:245:ILE:HG12	1.53	0.73
3:E:47:TYR:HB2	3:F:44:GLU:OE2	1.88	0.73
1:B:335:ARG:NH1	1:B:336:ILE:HA	2.03	0.73
1:B:163:GLU:HB2	1:B:182:ARG:CG	2.18	0.73
1:B:46:LEU:HD22	1:B:162:ALA:CB	2.18	0.73
3:E:38:VAL:HG22	3:E:60:ILE:CG2	2.17	0.73
4:G:73:GLY:HA2	4:G:76:ARG:HH21	1.53	0.73
1:B:426:VAL:HA	1:B:429:LEU:HD12	1.70	0.73
5:H:160:PHE:HB3	5:H:163:PRO:HG2	1.70	0.73
2:C:78:VAL:HG13	2:C:79:SER:O	1.89	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:62:THR:O	3:E:65:ASP:HB2	1.88	0.73
2:D:4:GLN:CD	3:F:1:MET:SD	2.66	0.73
2:D:88:SER:O	2:D:92:LYS:HG2	1.87	0.73
2:C:39:PRO:O	2:C:41:ILE:HG13	1.89	0.73
2:D:39:PRO:O	2:D:41:ILE:HG13	1.89	0.73
5:H:49:LYS:CB	5:H:52:ARG:HG2	2.08	0.73
1:A:241:ARG:HH21	1:A:245:ILE:HG12	1.53	0.73
2:D:78:VAL:HG13	2:D:79:SER:O	1.89	0.73
4:G:41:TYR:CD2	4:G:119:VAL:HG21	2.23	0.73
1:A:453:PRO:CB	1:B:462:GLU:CG	2.46	0.73
2:C:63:PHE:CG	2:C:85:GLU:HG2	2.24	0.73
3:F:63:PRO:HA	3:F:96:ILE:CA	2.15	0.73
3:F:85:GLY:HA3	3:F:99:ILE:CG2	2.16	0.73
4:G:28:VAL:HG13	4:G:29:ASN:H	1.54	0.73
4:G:133:ASN:HB2	5:H:55:GLY:C	2.08	0.73
1:A:34:ILE:HG22	1:A:181:LEU:CD2	2.18	0.73
1:A:46:LEU:CD2	1:A:162:ALA:HB2	2.18	0.73
1:A:99:TYR:CD2	1:A:370:LEU:HB3	2.23	0.73
2:C:73:ARG:NH2	3:E:90:LEU:HD11	2.04	0.73
1:A:439:SER:HB3	1:A:440:LYS:C	2.10	0.73
5:H:21:ALA:HA	5:H:90:LYS:CD	2.17	0.73
1:A:259:PHE:CZ	1:B:90:LYS:CG	2.61	0.73
1:B:163:GLU:HB3	1:B:164:GLU:C	2.10	0.73
4:G:32:THR:HG23	4:G:37:LYS:HA	1.70	0.73
1:A:416:ARG:HB2	1:A:417:THR:C	2.09	0.72
1:A:58:ASP:HB3	1:A:81:ASN:ND2	2.04	0.72
1:B:294:GLU:CG	2:C:42:ASP:HA	2.15	0.72
2:D:36:CYS:HB3	2:D:37:HIS:C	2.09	0.72
2:C:98:ARG:CA	2:D:97:TYR:HE2	2.02	0.72
1:A:335:ARG:NH1	1:A:336:ILE:HA	2.03	0.72
1:B:209:GLU:CG	1:B:211:ILE:HG12	2.19	0.72
1:B:313:GLY:HA2	2:C:51:SER:N	2.03	0.72
5:H:39:GLY:C	5:H:43:LEU:HB3	2.10	0.72
3:E:44:GLU:HG2	3:E:46:TYR:N	2.04	0.72
2:C:89:THR:HG21	2:D:88:SER:C	2.09	0.72
5:H:75:GLY:O	5:H:79:ILE:HG13	1.89	0.72
1:A:460:ILE:HD11	1:B:466:GLN:NE2	2.04	0.72
2:C:36:CYS:HB3	2:C:37:HIS:C	2.09	0.72
2:C:99:LYS:HB2	2:D:102:ARG:H	1.54	0.72
2:D:63:PHE:CD2	2:D:85:GLU:HB3	2.24	0.72
2:D:63:PHE:CG	2:D:85:GLU:HG2	2.23	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:95:ASN:HB3	2:D:96:PRO:C	2.09	0.72
1:A:171:ASP:H	1:A:178:LEU:CD1	2.02	0.72
1:B:145:TRP:N	1:B:244:ILE:HD12	2.04	0.72
2:D:74:SER:CB	2:D:78:VAL:HG11	2.14	0.72
3:E:2:TYR:CZ	3:F:95:GLU:HG2	2.24	0.72
4:G:70:VAL:O	4:G:122:HIS:HB2	1.89	0.72
2:C:92:LYS:CB	2:D:92:LYS:HE2	2.19	0.72
1:A:209:GLU:CG	1:A:211:ILE:HG12	2.19	0.72
1:B:429:LEU:HD22	1:B:443:ALA:CB	2.14	0.72
1:A:295:ASN:HB2	2:C:37:HIS:HE2	1.54	0.72
2:C:98:ARG:HD3	2:D:97:TYR:OH	1.89	0.72
4:G:4:LYS:CG	4:G:5:LEU:HD13	2.20	0.72
1:A:163:GLU:HB3	1:A:164:GLU:C	2.09	0.72
1:A:34:ILE:O	1:A:181:LEU:HD21	1.90	0.72
1:A:179:PHE:CE1	1:A:244:ILE:HD13	2.23	0.72
1:B:34:ILE:O	1:B:181:LEU:HD21	1.90	0.72
4:G:113:ILE:HG12	4:G:121:LYS:HB3	1.70	0.72
5:H:13:TYR:HD1	5:H:31:TYR:HB3	1.54	0.72
1:A:145:TRP:N	1:A:244:ILE:HD12	2.04	0.72
1:B:38:ILE:CG2	1:B:163:GLU:HG2	2.15	0.72
2:C:69:GLY:O	3:E:93:LEU:HD13	1.88	0.72
3:E:29:VAL:HG12	3:E:72:MET:CE	2.19	0.72
2:D:5:ARG:HB3	3:F:2:TYR:HB2	1.71	0.72
1:B:58:ASP:HB3	1:B:81:ASN:ND2	2.04	0.72
2:C:95:ASN:HB3	2:C:96:PRO:C	2.09	0.72
1:A:183:TYR:HB2	1:A:196:LYS:O	1.90	0.72
3:E:55:PRO:HB2	3:E:57:GLY:O	1.89	0.72
2:C:99:LYS:HA	2:D:101:ALA:N	2.03	0.72
5:H:58:SER:HB3	5:H:143:ILE:HG13	1.71	0.72
4:G:132:ASN:N	5:H:54:LEU:O	2.23	0.72
1:A:410:LEU:CB	1:A:412:MET:HG3	2.20	0.72
1:B:100:LEU:HB2	1:B:377:ALA:HB1	1.72	0.72
4:G:66:MET:HB3	4:G:68:PHE:HE1	1.54	0.72
1:B:81:ASN:HD22	1:B:83:ARG:HH11	1.38	0.72
1:A:444:VAL:O	1:A:448:PRO:HA	1.90	0.72
1:B:183:TYR:HB2	1:B:196:LYS:O	1.90	0.72
1:B:44:GLU:OE2	1:B:48:LYS:HB3	1.90	0.72
1:B:439:SER:HB3	1:B:440:LYS:C	2.10	0.72
2:D:59:LYS:HG3	2:D:60:ALA:N	2.04	0.72
4:G:97:PHE:HA	5:H:49:LYS:HD3	1.20	0.72
1:A:34:ILE:CG2	1:A:181:LEU:HD13	2.20	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:38:VAL:HG13	3:E:60:ILE:CG2	2.17	0.72
3:F:53:GLN:CG	3:F:55:PRO:HD2	2.13	0.72
1:A:332:GLU:OE2	1:B:326:VAL:O	2.08	0.72
1:B:416:ARG:HB2	1:B:417:THR:C	2.09	0.72
1:A:457:LEU:O	1:B:467:TYR:CD2	2.42	0.72
1:A:81:ASN:HD22	1:A:83:ARG:HH11	1.38	0.72
1:B:295:ASN:HB2	2:D:37:HIS:HE2	1.53	0.72
1:A:165:MET:SD	1:A:182:ARG:HB2	2.30	0.72
1:B:34:ILE:CG2	1:B:181:LEU:HD13	2.20	0.72
3:F:11:PHE:HB2	3:F:32:PHE:O	1.88	0.72
3:F:49:ALA:O	3:F:50:GLN:HG2	1.89	0.72
4:G:68:PHE:O	4:G:124:ILE:HG12	1.89	0.72
5:H:30:ALA:HB3	5:H:67:TYR:CD2	2.25	0.72
1:A:323:GLU:HG3	1:A:325:PRO:CD	2.20	0.72
1:A:100:LEU:HB2	1:A:377:ALA:HB1	1.72	0.71
1:B:84:THR:HG22	1:B:85:SER:O	1.90	0.71
4:G:21:TYR:HD2	4:G:24:LEU:HD12	1.55	0.71
1:A:414:PHE:CG	1:A:415:THR:HA	2.25	0.71
2:C:63:PHE:CD2	2:C:85:GLU:HB3	2.24	0.71
2:D:50:PRO:HG2	2:D:53:VAL:CG2	2.20	0.71
1:A:142:ILE:HB	1:A:143:GLU:C	2.11	0.71
1:A:99:TYR:CG	1:A:370:LEU:HD12	2.25	0.71
3:E:105:GLY:H	4:G:119:VAL:HG21	0.55	0.71
3:F:100:LYS:HG3	3:F:101:GLY:N	2.05	0.71
3:F:9:ILE:HG13	3:F:11:PHE:CE1	2.24	0.71
2:D:9:LEU:O	2:D:15:ASP:HB3	1.90	0.71
1:A:460:ILE:HD11	1:B:466:GLN:CD	2.09	0.71
2:C:50:PRO:HG2	2:C:53:VAL:CG2	2.20	0.71
5:H:37:VAL:CG1	5:H:63:GLY:HA2	2.20	0.71
1:B:171:ASP:H	1:B:178:LEU:CD1	2.02	0.71
1:B:410:LEU:CB	1:B:412:MET:HG3	2.20	0.71
2:C:5:ARG:HA	3:E:3:GLU:HA	1.71	0.71
2:D:75:MET:CE	3:F:90:LEU:CD2	2.68	0.71
1:A:339:GLU:HB3	1:B:274:THR:HG21	1.71	0.71
1:A:422:ASP:O	1:A:426:VAL:HG23	1.89	0.71
1:A:62:LYS:HE3	1:A:81:ASN:CB	2.19	0.71
4:G:63:ASN:CA	5:H:140:ASN:HD21	2.03	0.71
1:A:147:PRO:HG2	1:A:239:TRP:CH2	2.26	0.71
3:F:65:ASP:CB	3:F:68:ILE:HD12	2.20	0.71
3:F:74:VAL:HB	3:F:83:PHE:CE2	2.25	0.71
1:B:422:ASP:O	1:B:426:VAL:HG23	1.89	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:296:PRO:O	1:B:300:THR:HG23	1.91	0.71
1:B:294:GLU:HA	2:D:31:PHE:HB2	1.71	0.71
4:G:64:ILE:CD1	5:H:140:ASN:OD1	2.38	0.71
5:H:49:LYS:HB2	5:H:52:ARG:CG	2.09	0.71
1:A:252:GLU:OE2	1:B:53:TYR:HD1	1.68	0.71
1:B:136:ASN:HA	1:B:139:ASN:OD1	1.91	0.71
3:E:74:VAL:HB	3:E:83:PHE:CZ	2.25	0.71
4:G:32:THR:HB	4:G:44:VAL:N	2.06	0.71
2:C:9:LEU:O	2:C:15:ASP:HB3	1.90	0.71
1:B:414:PHE:CZ	1:B:415:THR:HG22	2.25	0.71
5:H:43:LEU:O	5:H:43:LEU:HD13	1.91	0.71
1:A:202:ASP:CB	1:A:242:VAL:HB	2.20	0.71
3:E:40:PRO:HG3	3:F:100:LYS:HB2	1.72	0.71
3:E:58:TYR:H	3:E:83:PHE:HB3	1.56	0.71
1:B:444:VAL:O	1:B:448:PRO:HA	1.90	0.71
1:A:64:ARG:NH2	1:B:284:ILE:HB	2.05	0.71
1:B:311:VAL:HG11	1:B:316:GLY:N	2.02	0.71
2:C:59:LYS:HD2	2:C:87:PRO:HG2	1.73	0.71
1:A:136:ASN:HA	1:A:139:ASN:OD1	1.91	0.71
1:A:44:GLU:OE2	1:A:48:LYS:HB3	1.90	0.71
1:B:165:MET:SD	1:B:182:ARG:HB2	2.30	0.71
3:E:80:ILE:HG12	3:F:70:LYS:NZ	2.06	0.71
3:E:58:TYR:HB3	3:F:100:LYS:CD	2.19	0.71
3:E:79:LYS:HG2	3:F:87:PRO:HD3	1.71	0.71
1:B:62:LYS:HE3	1:B:81:ASN:CB	2.19	0.71
1:B:414:PHE:CG	1:B:415:THR:HA	2.25	0.71
1:A:288:LEU:HD23	1:A:288:LEU:H	1.56	0.71
1:A:294:GLU:HA	2:C:31:PHE:HB2	1.71	0.71
1:B:310:LYS:HG3	2:C:38:ASN:HB2	1.72	0.71
5:H:100:GLU:O	5:H:104:TYR:HB3	1.91	0.71
1:A:179:PHE:HE1	1:A:244:ILE:CD1	2.03	0.71
1:A:88:TRP:CZ2	1:A:369:LEU:HD21	2.25	0.71
4:G:43:TYR:O	4:G:71:TRP:HB2	1.91	0.71
1:A:84:THR:HG22	1:A:85:SER:O	1.90	0.71
1:A:159:ILE:HD13	1:A:160:PHE:N	2.06	0.71
1:A:29:PRO:CG	1:A:170:LYS:HD3	2.21	0.71
1:B:29:PRO:CG	1:B:170:LYS:HD3	2.21	0.71
3:E:44:GLU:HG2	3:E:46:TYR:H	1.56	0.71
4:G:27:MET:HB3	4:G:29:ASN:C	2.11	0.71
4:G:75:THR:OG1	4:G:78:GLU:HB2	1.90	0.71
1:A:419:ILE:HA	1:A:422:ASP:OD2	1.91	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:419:ILE:HA	1:B:422:ASP:OD2	1.91	0.71
1:B:288:LEU:HD23	1:B:288:LEU:H	1.56	0.71
1:A:162:ALA:HB1	1:A:164:GLU:HB2	1.72	0.71
1:A:179:PHE:CE1	1:A:244:ILE:HG23	2.26	0.71
3:E:38:VAL:O	3:E:40:PRO:HD3	1.91	0.71
3:F:103:GLU:C	4:G:31:VAL:HG21	2.10	0.71
1:B:159:ILE:HD13	1:B:160:PHE:N	2.06	0.70
1:B:179:PHE:HE1	1:B:244:ILE:CD1	2.03	0.70
3:E:31:GLU:HB2	3:E:72:MET:CB	2.20	0.70
4:G:33:GLU:CA	4:G:45:VAL:HA	2.20	0.70
3:F:20:GLY:O	4:G:20:SER:C	2.29	0.70
1:A:414:PHE:CZ	1:A:415:THR:HG22	2.25	0.70
2:C:55:ILE:CD1	2:C:94:LEU:HD11	2.22	0.70
2:D:59:LYS:HD2	2:D:87:PRO:HG2	1.73	0.70
1:A:96:LYS:HA	1:A:373:LYS:CD	2.21	0.70
1:B:88:TRP:CZ2	1:B:369:LEU:HD21	2.25	0.70
3:E:97:THR:C	3:E:98:ARG:HD2	2.11	0.70
3:E:41:ILE:N	3:F:100:LYS:HE2	2.06	0.70
1:B:109:SER:OG	1:B:118:VAL:HG21	1.92	0.70
1:B:112:LYS:HG2	1:B:401:LYS:NZ	2.06	0.70
1:B:323:GLU:HG3	1:B:325:PRO:CD	2.20	0.70
1:A:422:ASP:HA	1:A:425:ILE:CG2	2.21	0.70
1:A:429:LEU:HD22	1:A:443:ALA:CB	2.14	0.70
2:C:87:PRO:HB2	2:C:91:LEU:HD23	1.73	0.70
2:D:87:PRO:HB2	2:D:91:LEU:HD23	1.73	0.70
4:G:5:LEU:HD22	4:G:6:ALA:N	2.05	0.70
1:B:202:ASP:CB	1:B:242:VAL:HB	2.20	0.70
1:B:255:SER:HB3	1:B:259:PHE:CE2	2.26	0.70
1:B:256:ASP:CG	1:B:380:LYS:HE3	2.11	0.70
3:E:65:ASP:HA	3:E:68:ILE:HD12	1.74	0.70
4:G:27:MET:HG2	4:G:31:VAL:HG12	1.71	0.70
1:B:62:LYS:CE	1:B:81:ASN:HB2	2.21	0.70
1:A:100:LEU:HD11	1:A:381:ILE:CG1	2.21	0.70
1:B:147:PRO:HG2	1:B:239:TRP:CH2	2.26	0.70
3:E:77:ARG:HD2	3:F:87:PRO:HB3	1.74	0.70
1:A:109:SER:OG	1:A:118:VAL:HG21	1.91	0.70
1:B:422:ASP:HA	1:B:425:ILE:CG2	2.21	0.70
1:A:296:PRO:O	1:A:300:THR:HG23	1.91	0.70
1:A:64:ARG:HD3	1:A:79:LYS:HZ2	1.55	0.70
1:B:310:LYS:C	2:C:38:ASN:HD22	1.94	0.70
1:A:242:VAL:HG22	1:A:243:PRO:O	1.91	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:256:ASP:CG	1:A:380:LYS:HE3	2.11	0.70
1:B:142:ILE:HB	1:B:143:GLU:C	2.11	0.70
3:E:61:TYR:HE1	3:E:96:ILE:HB	1.57	0.70
3:F:12:GLN:O	3:F:75:ILE:HD13	1.91	0.70
4:G:32:THR:HG21	4:G:43:TYR:CD2	2.26	0.70
4:G:59:SER:CB	5:H:138:LEU:HG	2.17	0.70
1:B:242:VAL:HG22	1:B:243:PRO:O	1.91	0.70
1:B:179:PHE:CE1	1:B:244:ILE:HG23	2.26	0.70
1:B:410:LEU:HD23	1:B:412:MET:HG2	1.73	0.70
1:B:99:TYR:CG	1:B:370:LEU:HD12	2.25	0.70
3:E:109:GLY:HA2	4:G:114:THR:CB	2.19	0.70
3:E:53:GLN:HG2	3:E:55:PRO:HG3	1.73	0.70
3:F:55:PRO:HG3	3:F:102:LYS:CD	2.16	0.70
1:A:112:LYS:HG2	1:A:401:LYS:NZ	2.06	0.70
1:A:466:GLN:HG3	1:A:467:TYR:CB	2.22	0.70
1:B:440:LYS:HE2	1:B:444:VAL:CG2	2.22	0.70
1:A:62:LYS:CE	1:A:81:ASN:HB2	2.21	0.70
5:H:16:GLN:HG3	5:H:92:TRP:CD1	2.26	0.70
1:A:144:TYR:CB	1:A:244:ILE:HD11	2.15	0.70
1:B:149:VAL:HG21	1:B:227:ARG:CD	2.22	0.70
2:C:70:LEU:O	2:C:73:ARG:HG2	1.91	0.70
3:E:66:ASP:HA	3:E:87:PRO:HB3	1.74	0.70
1:B:422:ASP:HA	1:B:425:ILE:HG22	1.74	0.70
1:A:254:VAL:O	1:A:258:LYS:HB3	1.92	0.70
1:A:410:LEU:HD23	1:A:412:MET:HG2	1.73	0.70
3:E:58:TYR:CB	3:F:100:LYS:HD3	2.20	0.70
1:B:63:ARG:HB3	1:B:75:VAL:HG13	1.73	0.70
1:A:466:GLN:HG3	1:A:467:TYR:HB2	1.74	0.70
2:C:26:PRO:O	2:C:30:GLU:HG3	1.92	0.70
2:C:66:THR:HG23	2:D:82:PHE:CE2	1.94	0.70
1:B:138:SER:O	1:B:256:ASP:HB2	1.91	0.70
2:C:70:LEU:CA	3:E:91:SER:HB2	2.18	0.70
1:B:111:ASN:ND2	1:B:113:THR:HB	2.06	0.70
1:B:466:GLN:HG3	1:B:467:TYR:CB	2.22	0.70
1:B:299:PHE:HA	1:B:302:ASN:ND2	2.07	0.70
1:A:149:VAL:HG21	1:A:227:ARG:CD	2.22	0.70
1:B:100:LEU:HD11	1:B:381:ILE:CG1	2.21	0.70
3:F:65:ASP:CB	3:F:68:ILE:HG23	2.20	0.70
4:G:22:GLN:HG3	4:G:23:PRO:HD3	1.72	0.70
1:B:111:ASN:H	1:B:396:LEU:HD22	1.57	0.70
1:B:74:LEU:HD23	1:B:75:VAL:N	2.07	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:49:ILE:HD11	2:C:54:LEU:CD1	2.22	0.69
2:C:59:LYS:HG3	2:C:60:ALA:N	2.04	0.69
2:D:49:ILE:HD11	2:D:54:LEU:CD1	2.22	0.69
5:H:143:ILE:HG21	5:H:147:PRO:CD	2.20	0.69
5:H:15:PHE:O	5:H:27:LEU:HB2	1.91	0.69
1:A:29:PRO:HG3	1:A:170:LYS:NZ	2.07	0.69
3:F:60:ILE:HG13	3:F:83:PHE:CE2	2.27	0.69
3:F:87:PRO:HB3	3:F:97:THR:CG2	2.21	0.69
1:A:111:ASN:ND2	1:A:113:THR:HB	2.06	0.69
1:A:422:ASP:HA	1:A:425:ILE:HG22	1.74	0.69
1:A:440:LYS:HE2	1:A:444:VAL:CG2	2.22	0.69
1:B:313:GLY:HA2	2:C:51:SER:CA	2.22	0.69
2:C:94:LEU:C	2:D:97:TYR:CB	2.48	0.69
2:C:73:ARG:CD	3:E:91:SER:HB3	2.21	0.69
4:G:113:ILE:CG2	4:G:121:LYS:HD3	2.21	0.69
4:G:44:VAL:HG11	4:G:74:THR:CG2	2.19	0.69
1:A:111:ASN:H	1:A:396:LEU:HD22	1.57	0.69
4:G:83:SER:O	4:G:87:LEU:HD13	1.91	0.69
1:B:130:LEU:HD22	1:B:388:PHE:HE2	1.55	0.69
1:A:456:GLU:OE2	1:B:466:GLN:OE1	2.10	0.69
2:C:98:ARG:HH12	2:D:102:ARG:N	1.90	0.69
2:D:26:PRO:O	2:D:30:GLU:HG3	1.92	0.69
1:A:41:HIS:HB3	1:A:164:GLU:O	1.93	0.69
1:B:162:ALA:HB1	1:B:164:GLU:HB2	1.72	0.69
3:E:69:ASP:CG	3:E:99:ILE:HG12	2.13	0.69
1:B:466:GLN:HG3	1:B:467:TYR:HB2	1.74	0.69
1:A:74:LEU:HD23	1:A:75:VAL:N	2.07	0.69
1:B:198:GLU:HB3	1:B:206:TYR:O	1.92	0.69
3:E:41:ILE:HG23	3:E:42:SER:H	1.58	0.69
3:F:12:GLN:HE21	3:F:80:ILE:HG22	1.57	0.69
1:A:288:LEU:HD11	2:C:34:ASP:O	1.93	0.69
2:C:63:PHE:CE1	2:C:85:GLU:HB3	2.28	0.69
4:G:63:ASN:HB2	4:G:129:PHE:O	1.93	0.69
1:A:198:GLU:HB3	1:A:206:TYR:O	1.92	0.69
1:A:43:PRO:HB2	1:A:47:LEU:CD1	2.22	0.69
2:D:70:LEU:O	2:D:73:ARG:HG2	1.91	0.69
3:F:12:GLN:CG	3:F:75:ILE:HG12	2.22	0.69
2:C:29:VAL:HG22	2:C:50:PRO:HG2	1.74	0.69
2:D:29:VAL:HG22	2:D:50:PRO:HG2	1.74	0.69
2:D:55:ILE:CD1	2:D:94:LEU:HD11	2.22	0.69
5:H:58:SER:HB3	5:H:143:ILE:CD1	2.22	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:255:SER:HB3	1:A:259:PHE:CE2	2.26	0.69
1:A:138:SER:O	1:A:256:ASP:HB2	1.91	0.69
1:B:34:ILE:CG2	1:B:181:LEU:HD22	2.21	0.69
1:B:254:VAL:O	1:B:258:LYS:HB3	1.92	0.69
1:B:41:HIS:HB3	1:B:164:GLU:O	1.93	0.69
1:A:379:ARG:CD	1:B:94:ASP:HB2	2.22	0.69
3:E:29:VAL:HG12	3:E:72:MET:HE2	1.75	0.69
4:G:70:VAL:HG21	4:G:76:ARG:NH2	2.06	0.69
5:H:68:TYR:OH	5:H:125:ALA:HB3	1.91	0.69
1:A:130:LEU:HD22	1:A:388:PHE:HE2	1.55	0.69
1:B:341:TYR:HA	1:B:344:ALA:HB2	1.74	0.69
1:B:29:PRO:HG3	1:B:170:LYS:NZ	2.07	0.69
1:B:144:TYR:CB	1:B:244:ILE:HD11	2.15	0.69
2:D:89:THR:O	2:D:92:LYS:HB2	1.92	0.69
1:A:439:SER:HA	1:B:459:ARG:HD2	1.75	0.69
1:A:63:ARG:HB3	1:A:75:VAL:HG13	1.73	0.69
2:C:98:ARG:CG	2:D:97:TYR:CZ	2.75	0.69
1:A:367:TYR:O	1:B:363:LEU:HD12	1.93	0.69
1:B:96:LYS:CA	1:B:373:LYS:HD3	2.20	0.69
1:A:34:ILE:CG2	1:A:181:LEU:HD22	2.21	0.69
3:E:79:LYS:CG	3:F:87:PRO:HD3	2.22	0.69
4:G:32:THR:HG21	4:G:43:TYR:HD2	1.57	0.69
1:A:340:LEU:HD12	1:B:275:MET:CE	2.05	0.69
1:A:334:GLU:O	1:A:337:GLN:HG2	1.92	0.69
1:A:163:GLU:HB2	1:A:182:ARG:CB	2.23	0.69
2:C:89:THR:O	2:C:92:LYS:HB2	1.92	0.69
1:A:378:GLU:CD	1:B:98:GLN:HE22	1.97	0.69
1:A:441:GLU:HG2	1:A:456:GLU:OE1	1.93	0.69
1:B:422:ASP:CA	1:B:425:ILE:HG22	2.23	0.69
2:C:53:VAL:O	2:C:57:VAL:HG22	1.93	0.69
1:B:288:LEU:HD11	2:D:34:ASP:O	1.93	0.69
2:D:63:PHE:CE1	2:D:85:GLU:HB3	2.28	0.69
4:G:61:GLY:HA2	5:H:139:LYS:CE	2.21	0.69
5:H:18:ILE:HG12	5:H:23:GLY:O	1.93	0.69
3:E:93:LEU:H	3:E:93:LEU:HD22	1.58	0.69
3:E:38:VAL:HG21	3:F:86:ASP:OD2	1.93	0.69
1:B:59:ILE:HG23	1:B:62:LYS:HZ2	1.56	0.69
1:A:299:PHE:HA	1:A:302:ASN:ND2	2.07	0.68
1:A:311:VAL:HG11	1:A:316:GLY:N	2.02	0.68
3:E:57:GLY:HA3	3:E:83:PHE:HA	1.75	0.68
3:E:104:ASP:C	4:G:119:VAL:HG21	2.11	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:466:GLN:HG3	1:B:467:TYR:CD2	2.27	0.68
2:C:29:VAL:HG22	2:C:53:VAL:HG21	1.75	0.68
2:D:29:VAL:HG22	2:D:53:VAL:HG21	1.75	0.68
5:H:141:GLY:O	5:H:142:GLU:HB2	1.93	0.68
5:H:22:THR:HG23	5:H:92:TRP:NE1	2.07	0.68
1:A:438:MET:HG3	1:B:434:THR:CA	2.16	0.68
2:D:53:VAL:O	2:D:57:VAL:HG22	1.93	0.68
4:G:63:ASN:OD1	5:H:139:LYS:CB	2.40	0.68
1:A:38:ILE:HG21	1:A:183:TYR:CD2	2.28	0.68
3:E:52:LEU:HB3	3:E:53:GLN:CB	2.24	0.68
3:E:74:VAL:HG11	3:E:83:PHE:CE2	2.28	0.68
3:F:74:VAL:C	3:F:75:ILE:HD12	2.13	0.68
4:G:30:GLN:O	4:G:33:GLU:HB3	1.93	0.68
1:A:466:GLN:HG3	1:A:467:TYR:CD2	2.27	0.68
4:G:48:ASP:HA	4:G:67:ASP:HB2	1.75	0.68
1:A:422:ASP:CA	1:A:425:ILE:HG22	2.23	0.68
2:C:34:ASP:N	2:C:35:GLU:HA	2.08	0.68
4:G:62:GLU:OE1	5:H:139:LYS:HD3	1.94	0.68
1:A:252:GLU:CG	1:B:85:SER:HB2	2.22	0.68
1:B:163:GLU:HB2	1:B:182:ARG:CB	2.23	0.68
1:B:38:ILE:HG21	1:B:183:TYR:CD2	2.28	0.68
1:B:405:ASN:ND2	1:B:406:PRO:HD2	2.09	0.68
3:F:96:ILE:HD11	3:F:98:ARG:HH21	1.58	0.68
1:A:339:GLU:HB2	1:B:274:THR:HG21	1.75	0.68
2:C:94:LEU:HG	2:D:97:TYR:CD1	2.29	0.68
1:A:43:PRO:HB2	1:A:47:LEU:HD11	1.76	0.68
1:B:167:VAL:CG1	1:B:177:ILE:HB	2.23	0.68
3:E:44:GLU:CG	3:E:47:TYR:H	2.07	0.68
1:A:341:TYR:HA	1:A:344:ALA:HB2	1.74	0.68
1:B:294:GLU:CD	2:C:41:ILE:C	2.51	0.68
5:H:58:SER:CB	5:H:143:ILE:HG13	2.23	0.68
5:H:37:VAL:HG11	5:H:62:SER:C	2.14	0.68
1:A:167:VAL:CG1	1:A:177:ILE:HB	2.23	0.68
1:A:405:ASN:ND2	1:A:406:PRO:HD2	2.09	0.68
1:B:163:GLU:N	1:B:164:GLU:HA	2.08	0.68
1:B:179:PHE:HD1	1:B:244:ILE:H	1.41	0.68
1:B:43:PRO:HB2	1:B:47:LEU:HD11	1.76	0.68
3:E:52:LEU:HD12	3:E:53:GLN:OE1	1.92	0.68
3:E:29:VAL:HG12	3:E:72:MET:CB	2.24	0.68
2:C:70:LEU:N	3:E:92:GLY:C	2.34	0.68
3:F:60:ILE:CD1	3:F:99:ILE:HD11	2.23	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:79:LYS:HB3	3:F:87:PRO:CD	2.24	0.68
1:B:123:ASP:HB2	1:B:124:ASP:CA	2.24	0.68
1:A:453:PRO:HB2	1:B:462:GLU:HG3	1.75	0.68
5:H:41:ARG:HG3	5:H:42:GLU:N	2.07	0.68
5:H:44:PHE:CZ	5:H:60:ALA:HB2	2.28	0.68
1:A:179:PHE:HD1	1:A:244:ILE:H	1.41	0.68
1:A:457:LEU:O	1:A:457:LEU:HD23	1.94	0.68
1:B:447:ASN:HB2	1:B:448:PRO:C	2.14	0.68
2:D:34:ASP:N	2:D:35:GLU:HA	2.08	0.68
4:G:61:GLY:CA	5:H:139:LYS:HB2	2.24	0.68
4:G:62:GLU:HG2	4:G:63:ASN:N	2.09	0.68
3:E:62:THR:CB	3:E:68:ILE:HD12	2.24	0.68
3:F:60:ILE:H	3:F:60:ILE:HD13	1.56	0.68
2:D:75:MET:HE1	3:F:90:LEU:CD2	2.24	0.68
1:B:334:GLU:O	1:B:337:GLN:HG2	1.92	0.68
1:B:248:LYS:HB2	1:B:249:ASN:O	1.94	0.68
3:E:103:GLU:HG3	4:G:41:TYR:O	1.92	0.68
3:E:40:PRO:HB2	3:E:42:SER:CB	2.21	0.68
3:F:52:LEU:HD13	3:F:54:THR:H	1.57	0.68
3:F:106:ALA:N	4:G:39:ASP:N	2.41	0.68
1:A:248:LYS:HB2	1:A:249:ASN:O	1.94	0.68
5:H:33:THR:HG22	5:H:34:ASP:OD2	1.94	0.68
1:A:457:LEU:HD12	1:B:467:TYR:HE1	1.58	0.68
5:H:15:PHE:HD1	5:H:16:GLN:N	1.91	0.68
1:A:241:ARG:HE	1:A:245:ILE:HD11	1.58	0.68
1:A:96:LYS:CA	1:A:373:LYS:HD3	2.20	0.68
1:B:43:PRO:HB2	1:B:47:LEU:CD1	2.23	0.68
2:D:4:GLN:OE1	3:F:1:MET:CG	2.42	0.68
3:E:50:GLN:HE21	3:F:52:LEU:CB	2.07	0.68
3:F:32:PHE:CZ	3:F:34:ALA:HB2	2.29	0.68
3:E:79:LYS:NZ	3:F:99:ILE:HG12	2.08	0.68
1:A:231:THR:CA	1:A:237:ILE:HG22	2.24	0.68
2:C:25:VAL:HG12	2:C:29:VAL:CG2	2.24	0.67
1:B:310:LYS:C	2:C:38:ASN:ND2	2.46	0.67
5:H:143:ILE:HG12	5:H:147:PRO:CD	2.23	0.67
1:A:163:GLU:N	1:A:164:GLU:HA	2.08	0.67
1:B:171:ASP:HB2	1:B:178:LEU:HD21	1.77	0.67
3:E:3:GLU:HG2	3:E:4:GLU:H	1.59	0.67
3:E:70:LYS:CG	3:E:85:GLY:H	2.06	0.67
3:F:102:LYS:HB3	3:F:102:LYS:HZ3	1.58	0.67
1:B:414:PHE:CD2	1:B:415:THR:HG22	2.29	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:425:ILE:O	1:B:429:LEU:HG	1.95	0.67
5:H:139:LYS:H	5:H:139:LYS:HD3	1.58	0.67
5:H:42:GLU:OE1	5:H:42:GLU:HA	1.93	0.67
3:E:56:ILE:N	4:G:41:TYR:O	2.27	0.67
2:C:89:THR:HG22	2:D:92:LYS:CD	1.91	0.67
5:H:32:GLN:HE22	5:H:93:ARG:HD2	1.60	0.67
1:B:457:LEU:HD23	1:B:457:LEU:O	1.94	0.67
1:A:447:ASN:HB2	1:A:448:PRO:C	2.14	0.67
1:A:418:ARG:HH22	1:B:426:VAL:CG1	2.07	0.67
1:B:284:ILE:HD11	1:B:321:ARG:HH12	1.58	0.67
5:H:112:TYR:CD2	5:H:114:GLU:HG2	2.29	0.67
1:A:142:ILE:HG13	1:A:145:TRP:CB	2.21	0.67
2:C:70:LEU:O	3:E:91:SER:CB	2.43	0.67
2:C:4:GLN:CA	3:E:1:MET:H3	2.07	0.67
1:A:123:ASP:HB2	1:A:124:ASP:CA	2.24	0.67
1:A:425:ILE:O	1:A:429:LEU:HG	1.95	0.67
5:H:42:GLU:HG3	5:H:56:PRO:CD	2.23	0.67
1:A:200:TYR:CE1	1:A:205:VAL:HG13	2.28	0.67
3:F:28:TRP:CH2	3:F:80:ILE:HG21	2.29	0.67
4:G:49:GLN:HB3	4:G:69:HIS:HE1	1.57	0.67
1:A:195:GLN:HB2	1:A:210:LYS:HG3	1.75	0.67
1:A:410:LEU:HD22	1:A:412:MET:CE	2.25	0.67
2:D:70:LEU:H	3:F:93:LEU:HA	1.60	0.67
1:A:460:ILE:CB	1:B:467:TYR:CG	2.60	0.67
1:B:441:GLU:HG2	1:B:456:GLU:OE1	1.93	0.67
2:C:56:PHE:HA	2:C:59:LYS:HZ3	1.58	0.67
5:H:16:GLN:CD	5:H:26:PRO:HA	2.14	0.67
1:A:100:LEU:CB	1:A:377:ALA:HB1	2.25	0.67
1:A:148:PHE:HA	1:A:205:VAL:CG2	2.24	0.67
1:B:241:ARG:HE	1:B:245:ILE:HD11	1.58	0.67
3:E:53:GLN:HG3	3:E:55:PRO:CD	2.24	0.67
3:E:70:LYS:HB3	3:E:84:ILE:CA	2.22	0.67
3:F:76:TYR:CD2	3:F:79:LYS:HB3	2.28	0.67
1:B:332:GLU:O	1:B:336:ILE:HG13	1.95	0.67
4:G:59:SER:HG	5:H:138:LEU:HG	1.56	0.67
1:A:410:LEU:HB2	1:A:412:MET:HG3	1.77	0.67
1:B:38:ILE:HD11	1:B:181:LEU:CD1	2.25	0.67
1:B:42:ASN:ND2	1:B:43:PRO:HD2	2.10	0.67
3:F:74:VAL:O	3:F:75:ILE:HD12	1.95	0.67
5:H:32:GLN:HA	5:H:67:TYR:CD1	2.30	0.67
4:G:62:GLU:HB3	5:H:138:LEU:C	2.14	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:183:TYR:CB	1:A:197:ALA:HA	2.25	0.67
1:B:148:PHE:HA	1:B:205:VAL:CG2	2.24	0.67
2:D:4:GLN:OE1	3:F:1:MET:HB3	1.93	0.67
2:C:99:LYS:CG	2:D:101:ALA:HB2	2.22	0.67
4:G:98:GLU:HG2	5:H:48:THR:O	1.95	0.67
1:A:142:ILE:HG21	1:A:145:TRP:CB	2.25	0.67
1:A:40:GLU:HB2	1:A:166:ILE:CD1	2.07	0.67
1:B:142:ILE:HG21	1:B:145:TRP:CB	2.25	0.67
1:B:46:LEU:HG	1:B:143:GLU:OE1	1.94	0.67
3:E:46:TYR:CB	3:E:48:LYS:HE2	2.24	0.67
3:F:35:ALA:O	3:F:62:THR:HG23	1.95	0.67
4:G:33:GLU:HB2	4:G:46:ILE:N	2.09	0.67
1:A:414:PHE:CD2	1:A:415:THR:HG22	2.29	0.67
1:A:171:ASP:HB2	1:A:178:LEU:HD21	1.77	0.67
1:A:38:ILE:HD11	1:A:181:LEU:CD1	2.25	0.67
1:A:46:LEU:HG	1:A:143:GLU:OE1	1.94	0.67
1:B:200:TYR:CE1	1:B:205:VAL:HG13	2.28	0.67
3:E:29:VAL:CG1	3:E:72:MET:HA	2.25	0.67
1:A:123:ASP:HB2	1:A:124:ASP:O	1.95	0.67
1:B:123:ASP:HB2	1:B:124:ASP:O	1.95	0.67
1:A:284:ILE:HD11	1:A:321:ARG:HH12	1.58	0.66
2:D:25:VAL:HG12	2:D:29:VAL:CG2	2.24	0.66
1:B:381:ILE:HG22	1:B:385:LEU:HB2	1.76	0.66
1:B:410:LEU:HD22	1:B:412:MET:CE	2.25	0.66
1:B:86:HIS:CD2	1:B:264:ILE:HG23	2.30	0.66
1:A:332:GLU:O	1:A:336:ILE:HG13	1.95	0.66
1:A:441:GLU:CG	1:A:456:GLU:HB2	2.26	0.66
2:C:59:LYS:HD3	2:C:90:ILE:CD1	2.25	0.66
2:C:99:LYS:NZ	2:D:102:ARG:HG2	2.09	0.66
2:D:87:PRO:HB3	2:D:90:ILE:N	2.10	0.66
4:G:100:PHE:CE1	5:H:45:ASP:O	2.47	0.66
1:A:86:HIS:CD2	1:A:264:ILE:HG23	2.30	0.66
1:A:42:ASN:ND2	1:A:43:PRO:HD2	2.10	0.66
1:A:46:LEU:HA	1:A:143:GLU:OE1	1.95	0.66
1:B:62:LYS:HE3	1:B:81:ASN:N	2.11	0.66
2:D:59:LYS:HD3	2:D:90:ILE:CD1	2.25	0.66
4:G:62:GLU:OE1	5:H:139:LYS:CD	2.37	0.66
1:A:381:ILE:HG22	1:A:385:LEU:HB2	1.76	0.66
2:D:77:THR:HG21	3:E:46:TYR:OH	1.95	0.66
3:E:58:TYR:O	3:E:99:ILE:HD12	1.96	0.66
2:C:11:SER:O	3:E:93:LEU:HB3	1.96	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:110:ASP:HA	1:B:409:GLU:OE1	1.95	0.66
1:B:66:TYR:HD1	1:B:66:TYR:H	1.44	0.66
1:B:231:THR:CA	1:B:237:ILE:HG22	2.24	0.66
1:A:441:GLU:HB2	1:B:462:GLU:OE1	1.95	0.66
1:A:62:LYS:HD3	1:A:63:ARG:N	2.11	0.66
1:A:64:ARG:NH2	1:B:284:ILE:CB	2.57	0.66
2:C:98:ARG:HH12	2:C:99:LYS:HZ3	1.43	0.66
5:H:39:GLY:HA2	5:H:43:LEU:CB	2.26	0.66
2:C:33:LYS:HB2	2:C:35:GLU:OE2	1.96	0.66
2:C:62:GLN:O	2:C:65:MET:HG2	1.95	0.66
5:H:90:LYS:NZ	5:H:146:LEU:HD13	2.09	0.66
1:A:148:PHE:HB3	1:A:205:VAL:HG21	1.78	0.66
1:B:96:LYS:HA	1:B:373:LYS:CD	2.21	0.66
1:B:389:PHE:HB3	1:B:405:ASN:HD21	1.61	0.66
2:D:5:ARG:CB	3:F:3:GLU:C	2.64	0.66
3:F:73:ARG:HG3	3:F:81:VAL:O	1.96	0.66
1:B:335:ARG:NH1	1:B:336:ILE:HG12	2.11	0.66
4:G:100:PHE:HB3	5:H:47:GLN:HG2	1.76	0.66
1:A:110:ASP:HA	1:A:409:GLU:OE1	1.95	0.66
1:B:195:GLN:HB2	1:B:210:LYS:HG3	1.75	0.66
1:A:390:TRP:CH2	1:B:125:ASP:OD2	2.49	0.66
1:A:318:ASP:O	1:A:321:ARG:HA	1.95	0.66
2:C:98:ARG:CZ	2:D:102:ARG:HG2	2.25	0.66
5:H:37:VAL:HG21	5:H:62:SER:OG	1.96	0.66
1:A:389:PHE:HB3	1:A:405:ASN:HD21	1.61	0.66
4:G:18:LEU:HB3	4:G:24:LEU:CD2	2.26	0.66
5:H:122:VAL:HG13	5:H:125:ALA:H	1.60	0.66
1:A:62:LYS:HE3	1:A:81:ASN:N	2.11	0.66
1:B:183:TYR:CB	1:B:197:ALA:HA	2.25	0.66
1:B:99:TYR:HB3	1:B:373:LYS:NZ	2.11	0.66
3:E:62:THR:HG22	3:E:63:PRO:HD2	1.78	0.66
3:F:20:GLY:O	4:G:20:SER:HA	1.95	0.66
2:C:87:PRO:HB3	2:C:90:ILE:N	2.10	0.66
5:H:141:GLY:O	5:H:142:GLU:CB	2.43	0.66
1:B:169:TYR:CE1	1:B:174:ARG:HG3	2.31	0.66
1:B:169:TYR:HB3	1:B:176:ASP:O	1.96	0.66
1:B:204:HIS:HE2	1:B:226:PRO:HG2	1.60	0.66
1:B:100:LEU:CB	1:B:377:ALA:HB1	2.25	0.66
1:B:43:PRO:HA	1:B:164:GLU:N	2.09	0.66
3:E:96:ILE:HD12	3:E:98:ARG:HH21	1.61	0.66
4:G:113:ILE:HG21	4:G:121:LYS:CD	2.26	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:438:MET:HG3	1:B:434:THR:CG2	2.25	0.66
1:A:66:TYR:H	1:A:66:TYR:HD1	1.44	0.66
2:C:98:ARG:HG3	2:D:97:TYR:CE2	2.30	0.66
4:G:4:LYS:HG2	4:G:5:LEU:HD13	1.78	0.66
1:A:204:HIS:HE2	1:A:226:PRO:HG2	1.61	0.66
3:F:46:TYR:CB	3:F:48:LYS:HE2	2.24	0.66
1:B:294:GLU:OE1	2:C:41:ILE:O	2.14	0.65
2:C:94:LEU:CA	2:D:97:TYR:HA	2.20	0.65
2:D:59:LYS:HD3	2:D:90:ILE:HD13	1.77	0.65
2:D:98:ARG:HH12	2:D:99:LYS:HZ3	1.44	0.65
5:H:42:GLU:N	5:H:43:LEU:HA	2.10	0.65
1:A:169:TYR:CE1	1:A:174:ARG:HG3	2.31	0.65
1:A:99:TYR:HB3	1:A:373:LYS:NZ	2.11	0.65
2:C:5:ARG:CG	2:C:8:ARG:HB2	2.26	0.65
1:B:352:GLU:HG3	1:B:354:ILE:N	2.11	0.65
5:H:32:GLN:HB2	5:H:67:TYR:HE1	1.59	0.65
2:D:5:ARG:CG	2:D:8:ARG:HB2	2.26	0.65
3:E:76:TYR:O	3:F:87:PRO:HG2	1.95	0.65
3:E:88:VAL:C	3:E:97:THR:HG23	2.16	0.65
3:F:28:TRP:HZ3	3:F:80:ILE:HG21	1.58	0.65
3:F:47:TYR:HB3	3:F:50:GLN:CB	2.26	0.65
4:G:33:GLU:HG3	4:G:46:ILE:H	1.60	0.65
2:C:52:GLY:O	2:C:55:ILE:HG12	1.95	0.65
2:C:4:GLN:HA	3:E:1:MET:N	2.11	0.65
2:C:7:LYS:HZ3	3:E:4:GLU:CD	2.00	0.65
1:B:62:LYS:HD3	1:B:63:ARG:N	2.11	0.65
2:C:9:LEU:CD1	2:D:20:TYR:HE2	2.10	0.65
1:A:290:ASN:HB2	1:A:291:TYR:CB	2.27	0.65
2:D:33:LYS:HB2	2:D:35:GLU:OE2	1.96	0.65
1:B:187:LYS:CD	1:B:193:GLU:HB3	2.26	0.65
3:E:79:LYS:HZ1	3:F:99:ILE:HG12	1.59	0.65
4:G:21:TYR:CE1	4:G:23:PRO:HD2	2.32	0.65
4:G:44:VAL:CG1	4:G:74:THR:HG22	2.25	0.65
1:A:335:ARG:CZ	1:B:278:PHE:CE1	2.78	0.65
1:B:111:ASN:CB	1:B:396:LEU:HD22	2.26	0.65
1:A:125:ASP:O	1:A:129:ILE:HG12	1.97	0.65
1:B:318:ASP:O	1:B:321:ARG:HA	1.95	0.65
1:B:298:GLU:HG3	2:C:42:ASP:OD2	1.97	0.65
2:C:85:GLU:OE2	2:D:86:ILE:CG2	2.42	0.65
2:C:87:PRO:HG3	2:C:90:ILE:CD1	2.22	0.65
2:D:62:GLN:O	2:D:65:MET:HG2	1.95	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:169:TYR:HB3	1:A:176:ASP:O	1.96	0.65
1:A:373:LYS:HE3	1:A:374:ALA:CB	2.26	0.65
1:B:373:LYS:HE3	1:B:374:ALA:CB	2.26	0.65
1:B:53:TYR:HB2	1:B:140:LYS:HE3	1.79	0.65
2:C:12:ILE:HA	3:E:93:LEU:HG	1.78	0.65
1:A:339:GLU:CD	1:B:274:THR:CG2	2.65	0.65
1:A:121:LEU:HB3	1:A:124:ASP:H	1.60	0.65
4:G:88:GLU:O	4:G:91:THR:HG22	1.96	0.65
1:B:441:GLU:CG	1:B:456:GLU:HB2	2.25	0.65
1:B:306:HIS:CE1	2:C:39:PRO:HG3	2.30	0.65
2:C:90:ILE:O	2:C:93:LYS:HB3	1.96	0.65
2:D:56:PHE:HA	2:D:59:LYS:HZ3	1.58	0.65
1:B:148:PHE:HB3	1:B:205:VAL:HG21	1.78	0.65
1:B:410:LEU:HB2	1:B:412:MET:HG3	1.77	0.65
1:B:46:LEU:HA	1:B:143:GLU:OE1	1.95	0.65
2:D:10:LEU:O	2:D:16:LYS:HB2	1.97	0.65
4:G:44:VAL:HG13	4:G:70:VAL:HG12	1.78	0.65
1:A:187:LYS:CD	1:A:193:GLU:HB3	2.26	0.65
1:A:371:ASP:C	1:B:363:LEU:CD2	2.52	0.65
3:E:57:GLY:HA2	3:E:82:THR:O	1.97	0.65
4:G:33:GLU:CG	4:G:46:ILE:H	2.10	0.65
1:B:125:ASP:O	1:B:129:ILE:HG12	1.97	0.65
1:B:433:VAL:HB	1:B:440:LYS:HG3	1.78	0.65
1:A:59:ILE:HG23	1:A:62:LYS:HZ2	1.59	0.65
5:H:58:SER:HB3	5:H:143:ILE:CG1	2.26	0.65
1:A:53:TYR:HB2	1:A:140:LYS:HE3	1.79	0.65
1:B:199:LEU:O	1:B:206:TYR:HB2	1.96	0.65
3:E:57:GLY:CA	3:E:83:PHE:HA	2.26	0.65
3:E:30:ASP:HA	3:E:73:ARG:O	1.97	0.65
2:C:71:THR:CA	3:E:92:GLY:CA	2.70	0.65
3:F:43:GLN:HB2	3:F:47:TYR:CE1	2.31	0.65
1:B:121:LEU:HB3	1:B:124:ASP:H	1.60	0.65
1:A:456:GLU:HG2	1:B:466:GLN:OE1	1.97	0.65
1:A:460:ILE:CG1	1:B:467:TYR:HB2	2.27	0.65
4:G:61:GLY:HA3	5:H:139:LYS:HE2	1.79	0.65
1:A:43:PRO:HA	1:A:164:GLU:N	2.09	0.65
3:E:104:ASP:HB2	4:G:119:VAL:HG21	1.78	0.65
1:B:126:PHE:HE2	1:B:392:PHE:CZ	2.15	0.65
2:C:98:ARG:CB	2:D:97:TYR:CZ	2.59	0.65
2:D:59:LYS:HD3	2:D:90:ILE:CG2	2.24	0.65
4:G:65:THR:HG23	4:G:127:VAL:O	1.97	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:H:143:ILE:N	5:H:144:ASP:HA	2.12	0.65
3:F:105:GLY:C	4:G:39:ASP:N	2.47	0.65
2:D:73:ARG:NE	3:F:91:SER:HB3	2.07	0.65
4:G:74:THR:HG23	4:G:75:THR:HG22	1.77	0.65
1:A:126:PHE:HE2	1:A:392:PHE:CZ	2.15	0.65
1:A:457:LEU:HD12	1:B:467:TYR:CE1	2.31	0.64
2:C:59:LYS:HD3	2:C:90:ILE:HD13	1.77	0.64
1:A:140:LYS:HG2	1:A:141:GLY:N	2.11	0.64
4:G:76:ARG:CD	4:G:125:ILE:HG13	2.26	0.64
1:A:123:ASP:HB2	1:A:124:ASP:C	2.17	0.64
1:A:433:VAL:HB	1:A:440:LYS:HG3	1.78	0.64
2:D:52:GLY:O	2:D:55:ILE:HG12	1.95	0.64
4:G:100:PHE:HZ	5:H:46:GLU:CA	1.90	0.64
5:H:44:PHE:H	5:H:44:PHE:HD1	1.44	0.64
1:A:199:LEU:O	1:A:206:TYR:HB2	1.96	0.64
2:D:75:MET:CB	2:D:78:VAL:HB	2.27	0.64
3:F:75:ILE:HG23	3:F:79:LYS:O	1.97	0.64
2:C:10:LEU:O	2:C:16:LYS:HB2	1.97	0.64
1:A:457:LEU:CD1	1:B:467:TYR:CE1	2.60	0.64
1:A:453:PRO:HA	1:B:462:GLU:OE2	1.98	0.64
1:A:289:LYS:CG	1:B:315:GLY:CA	2.73	0.64
2:C:90:ILE:HG23	2:D:96:PRO:HG2	1.78	0.64
2:C:75:MET:CB	2:C:78:VAL:HB	2.27	0.64
3:E:62:THR:HG21	3:E:68:ILE:CD1	2.27	0.64
2:D:90:ILE:O	2:D:93:LYS:HB3	1.96	0.64
1:B:41:HIS:HD2	1:B:164:GLU:HB3	1.63	0.64
1:B:183:TYR:HB3	1:B:197:ALA:CB	2.27	0.64
3:E:56:ILE:CD1	4:G:40:PRO:O	2.45	0.64
4:G:113:ILE:HD13	4:G:122:HIS:ND1	2.11	0.64
1:A:396:LEU:O	1:A:399:THR:HB	1.98	0.64
4:G:97:PHE:HA	5:H:49:LYS:CG	2.21	0.64
1:A:165:MET:CG	1:A:182:ARG:HB2	2.28	0.64
2:C:11:SER:C	3:E:93:LEU:HB3	2.17	0.64
2:D:16:LYS:HD3	3:E:3:GLU:OE1	1.97	0.64
3:E:102:LYS:HG2	3:E:102:LYS:O	1.98	0.64
3:E:88:VAL:N	3:E:97:THR:HG23	2.12	0.64
2:C:73:ARG:NH2	3:E:90:LEU:CD1	2.60	0.64
3:F:69:ASP:CB	3:F:87:PRO:HG3	2.27	0.64
1:A:352:GLU:HG3	1:A:354:ILE:N	2.11	0.64
1:A:120:GLU:HG3	1:A:121:LEU:HD22	1.80	0.64
1:B:294:GLU:OE2	2:C:41:ILE:N	2.30	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:87:PRO:CB	2:C:90:ILE:HB	2.28	0.64
2:C:94:LEU:CD1	2:D:96:PRO:HB2	2.28	0.64
5:H:53:ILE:C	5:H:54:LEU:O	2.36	0.64
1:A:183:TYR:HB3	1:A:197:ALA:CB	2.27	0.64
1:B:221:TYR:N	1:B:222:GLY:HA3	2.12	0.64
1:A:354:ILE:HG22	1:A:355:GLY:O	1.97	0.64
1:A:291:TYR:CE1	2:C:33:LYS:HA	2.32	0.64
1:B:290:ASN:HB2	1:B:291:TYR:CB	2.27	0.64
2:C:59:LYS:HD3	2:C:90:ILE:CG2	2.24	0.64
4:G:63:ASN:HA	5:H:140:ASN:HD21	1.62	0.64
5:H:91:PHE:HE2	5:H:132:LEU:HD22	1.62	0.64
1:A:410:LEU:N	1:A:411:THR:HA	2.12	0.64
1:B:410:LEU:N	1:B:411:THR:HA	2.12	0.64
1:B:89:HIS:CE1	1:B:257:LEU:HG	2.32	0.64
3:E:3:GLU:HG2	3:E:4:GLU:N	2.13	0.64
3:E:61:TYR:CE1	3:E:96:ILE:HD12	2.33	0.64
3:E:70:LYS:CD	3:E:85:GLY:H	2.10	0.64
1:A:117:TYR:O	1:A:120:GLU:HG2	1.97	0.64
4:G:14:THR:HA	4:G:17:ASN:OD1	1.97	0.64
1:A:59:ILE:HA	1:A:81:ASN:OD1	1.98	0.64
1:A:163:GLU:CA	1:A:182:ARG:HG3	2.28	0.64
1:A:41:HIS:HD2	1:A:164:GLU:HB3	1.63	0.64
1:B:96:LYS:CD	1:B:377:ALA:HB2	2.27	0.64
4:G:70:VAL:HG11	4:G:76:ARG:NH1	2.13	0.64
1:A:111:ASN:CB	1:A:396:LEU:HD22	2.26	0.64
1:B:123:ASP:HB2	1:B:124:ASP:C	2.17	0.64
3:F:20:GLY:O	4:G:20:SER:CA	2.46	0.64
2:D:49:ILE:HD11	2:D:54:LEU:HD12	1.80	0.64
5:H:90:LYS:HE2	5:H:146:LEU:HB3	1.80	0.64
5:H:14:LEU:HD22	5:H:163:PRO:HG3	1.80	0.64
5:H:37:VAL:HG11	5:H:62:SER:O	1.97	0.64
1:A:221:TYR:HB2	1:A:222:GLY:CA	2.28	0.64
1:A:96:LYS:CD	1:A:377:ALA:HB2	2.27	0.64
1:B:239:TRP:CH2	1:B:243:PRO:HG3	2.33	0.64
3:E:60:ILE:HG13	3:E:65:ASP:OD2	1.97	0.64
3:F:76:TYR:CE2	3:F:79:LYS:HB3	2.33	0.64
3:F:74:VAL:CG1	3:F:81:VAL:HG13	2.28	0.64
4:G:113:ILE:HD13	4:G:122:HIS:H	1.61	0.64
4:G:70:VAL:HG21	4:G:76:ARG:CZ	2.27	0.64
1:B:117:TYR:O	1:B:120:GLU:HG2	1.97	0.64
5:H:137:GLU:C	5:H:138:LEU:CA	2.66	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:239:TRP:CH2	1:A:243:PRO:HG3	2.33	0.64
1:A:89:HIS:CE1	1:A:257:LEU:HG	2.32	0.64
1:B:221:TYR:HB2	1:B:222:GLY:CA	2.28	0.64
3:E:54:THR:HG23	3:F:102:LYS:O	1.98	0.64
4:G:33:GLU:HA	4:G:45:VAL:HA	1.80	0.64
1:A:68:ASP:CG	1:B:300:THR:HB	2.14	0.63
1:B:291:TYR:CE1	2:D:33:LYS:HA	2.32	0.63
2:D:87:PRO:HB2	2:D:91:LEU:CD2	2.28	0.63
2:D:87:PRO:CB	2:D:90:ILE:HB	2.28	0.63
1:B:140:LYS:HG2	1:B:141:GLY:N	2.11	0.63
1:B:120:GLU:HG3	1:B:121:LEU:HD22	1.80	0.63
1:B:396:LEU:O	1:B:399:THR:HB	1.98	0.63
1:B:433:VAL:CB	1:B:440:LYS:HG3	2.28	0.63
2:C:34:ASP:HB3	2:C:35:GLU:HA	1.80	0.63
2:D:5:ARG:HG2	2:D:8:ARG:HB2	1.79	0.63
3:E:12:GLN:HB2	3:E:28:TRP:HE3	1.61	0.63
3:E:29:VAL:O	3:E:73:ARG:HB3	1.98	0.63
2:D:4:GLN:C	3:F:1:MET:HB3	2.17	0.63
3:F:65:ASP:HB3	3:F:68:ILE:HD12	1.80	0.63
1:A:418:ARG:HH22	1:B:426:VAL:HG11	1.63	0.63
5:H:52:ARG:NE	5:H:54:LEU:CA	2.61	0.63
5:H:17:SER:HB3	5:H:89:ILE:HG22	1.80	0.63
1:A:99:TYR:HB3	1:A:373:LYS:CE	2.28	0.63
1:B:165:MET:CG	1:B:182:ARG:HB2	2.28	0.63
1:B:99:TYR:HB3	1:B:373:LYS:CE	2.28	0.63
1:B:87:ALA:O	1:B:91:LEU:HD13	1.98	0.63
3:E:12:GLN:HB3	3:E:28:TRP:HB3	1.81	0.63
3:F:41:ILE:CG2	3:F:53:GLN:HG2	2.28	0.63
1:A:338:ASP:OD2	1:B:337:GLN:CD	2.36	0.63
2:D:25:VAL:HG13	2:D:53:VAL:CG1	2.28	0.63
2:C:5:ARG:HG2	2:C:8:ARG:HB2	1.79	0.63
2:D:77:THR:CG2	3:E:46:TYR:OH	2.47	0.63
3:F:37:HIS:HB3	3:F:61:TYR:CE2	2.34	0.63
4:G:34:SER:HB3	4:G:35:PRO:HD2	1.80	0.63
2:C:49:ILE:HD11	2:C:54:LEU:HD12	1.80	0.63
2:C:94:LEU:HB3	2:D:97:TYR:CD1	2.33	0.63
5:H:41:ARG:HE	5:H:61:ASP:HB2	1.62	0.63
1:A:29:PRO:HG3	1:A:170:LYS:HD3	1.80	0.63
1:B:163:GLU:CA	1:B:182:ARG:HG3	2.28	0.63
1:B:363:LEU:HD23	1:B:363:LEU:O	1.99	0.63
1:B:99:TYR:HD2	1:B:373:LYS:HE2	1.64	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:87:PRO:HB3	3:E:97:THR:HG21	1.81	0.63
1:B:32:THR:HG23	1:B:36:LYS:HE2	1.81	0.63
1:A:387:LEU:HD11	1:A:391:PHE:CE1	2.33	0.63
1:A:363:LEU:O	1:A:363:LEU:HD23	1.99	0.63
5:H:10:ASP:OD1	5:H:167:THR:HG21	1.99	0.63
1:A:292:ASP:OD1	2:C:34:ASP:CA	2.46	0.63
2:C:87:PRO:HB3	2:C:90:ILE:HB	1.80	0.63
2:D:34:ASP:HB3	2:D:35:GLU:HA	1.80	0.63
4:G:3:TRP:CH2	5:H:52:ARG:NH2	2.67	0.63
1:B:46:LEU:HD13	1:B:162:ALA:CB	2.29	0.63
3:E:83:PHE:CD2	3:E:99:ILE:HD11	2.34	0.63
3:F:7:ASP:N	3:F:35:ALA:HB2	2.13	0.63
3:E:79:LYS:HB3	3:F:87:PRO:CG	2.28	0.63
1:A:32:THR:HG23	1:A:36:LYS:HE2	1.81	0.63
1:A:433:VAL:CB	1:A:440:LYS:HG3	2.28	0.63
1:B:442:THR:O	1:B:445:ALA:HB3	1.99	0.63
2:D:54:LEU:O	2:D:54:LEU:HD23	1.99	0.63
4:G:59:SER:CB	5:H:138:LEU:HD11	2.18	0.63
4:G:5:LEU:HD22	4:G:6:ALA:H	1.62	0.63
5:H:94:VAL:HG22	5:H:104:TYR:CE2	2.33	0.63
1:A:252:GLU:HG2	1:B:85:SER:HB2	1.80	0.63
2:D:78:VAL:HG22	2:D:79:SER:N	2.14	0.63
3:E:41:ILE:H	3:F:100:LYS:CE	2.11	0.63
3:E:46:TYR:HB3	3:E:48:LYS:CE	2.27	0.63
3:F:105:GLY:N	4:G:39:ASP:CB	2.62	0.63
1:B:418:ARG:NE	1:B:421:ASN:HB2	2.13	0.63
1:B:292:ASP:OD1	2:D:34:ASP:CA	2.46	0.63
1:B:320:LEU:N	1:B:321:ARG:HA	2.14	0.63
1:B:310:LYS:CE	2:C:36:CYS:HB2	2.27	0.63
2:C:90:ILE:CD1	2:D:91:LEU:CG	2.70	0.63
2:C:84:THR:HG23	2:D:86:ILE:HD11	1.80	0.63
1:A:221:TYR:N	1:A:222:GLY:HA3	2.12	0.63
1:A:149:VAL:CB	1:A:229:HIS:HA	2.21	0.63
1:A:108:THR:CG2	1:A:412:MET:HE1	2.25	0.63
1:A:87:ALA:O	1:A:91:LEU:HD13	1.98	0.63
1:B:179:PHE:CD1	1:B:244:ILE:HG23	2.34	0.63
3:E:53:GLN:C	3:E:55:PRO:HD3	2.18	0.63
2:D:5:ARG:HB3	3:F:3:GLU:N	2.12	0.63
4:G:33:GLU:OE1	4:G:46:ILE:HB	1.99	0.63
1:B:354:ILE:HG22	1:B:355:GLY:O	1.97	0.63
1:A:335:ARG:CZ	1:A:336:ILE:HG12	2.29	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:335:ARG:CZ	1:B:336:ILE:HG12	2.29	0.63
1:A:378:GLU:OE2	1:B:98:GLN:CD	2.37	0.63
5:H:10:ASP:HB3	5:H:167:THR:HB	1.81	0.63
1:A:442:THR:O	1:A:445:ALA:HB3	1.99	0.63
1:B:291:TYR:HB3	1:B:312:SER:CB	2.29	0.63
2:C:87:PRO:HB2	2:C:91:LEU:CD2	2.28	0.63
4:G:97:PHE:HB2	4:G:102:PHE:HE2	1.63	0.63
4:G:97:PHE:HD2	5:H:47:GLN:CA	2.00	0.63
1:A:46:LEU:HD13	1:A:162:ALA:CB	2.29	0.63
3:E:44:GLU:OE2	3:E:47:TYR:HA	1.98	0.63
1:A:111:ASN:HD22	1:A:114:LEU:H	1.46	0.63
1:B:80:THR:HG22	1:B:81:ASN:N	2.14	0.63
1:B:59:ILE:HA	1:B:81:ASN:OD1	1.98	0.63
1:A:378:GLU:CG	1:B:98:GLN:OE1	2.47	0.63
1:B:387:LEU:HD11	1:B:391:PHE:CE1	2.33	0.63
1:B:441:GLU:OE2	1:B:456:GLU:HB2	1.98	0.62
1:B:298:GLU:HG3	2:C:42:ASP:CB	2.28	0.62
2:C:54:LEU:HD23	2:C:54:LEU:O	1.99	0.62
5:H:91:PHE:CE2	5:H:132:LEU:HD22	2.33	0.62
1:A:146:HIS:CA	1:A:244:ILE:HG21	2.29	0.62
1:A:99:TYR:HD2	1:A:373:LYS:HE2	1.64	0.62
1:A:252:GLU:OE2	1:B:53:TYR:CE1	2.50	0.62
3:E:66:ASP:OD1	3:E:87:PRO:HB2	1.98	0.62
5:H:122:VAL:HG22	5:H:123:GLU:N	2.14	0.62
2:C:25:VAL:HG13	2:C:53:VAL:CG1	2.28	0.62
5:H:114:GLU:HG3	5:H:115:SER:N	2.14	0.62
1:B:146:HIS:CA	1:B:244:ILE:HG21	2.29	0.62
1:A:109:SER:HB3	1:A:114:LEU:HD23	1.81	0.62
1:A:284:ILE:CD1	1:A:321:ARG:HH12	2.11	0.62
1:A:226:PRO:HB3	1:A:227:ARG:HH21	1.63	0.62
1:B:88:TRP:NE1	1:B:92:PHE:HZ	1.97	0.62
3:E:41:ILE:HG23	3:E:42:SER:N	2.14	0.62
1:B:115:LEU:HG	1:B:119:ASN:ND2	2.14	0.62
1:A:418:ARG:NE	1:A:421:ASN:HB2	2.13	0.62
2:D:87:PRO:HB3	2:D:90:ILE:HB	1.80	0.62
1:A:179:PHE:CD1	1:A:244:ILE:HG23	2.34	0.62
1:B:29:PRO:HG3	1:B:170:LYS:HD3	1.80	0.62
1:A:371:ASP:OD1	1:B:363:LEU:O	2.16	0.62
3:F:22:GLY:O	4:G:19:GLU:HB2	1.98	0.62
1:A:447:ASN:HB2	1:A:449:PHE:N	2.14	0.62
1:B:284:ILE:CD1	1:B:321:ARG:HH12	2.11	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:63:PHE:HZ	2:C:82:PHE:CA	2.12	0.62
1:B:178:LEU:HA	1:B:242:VAL:CG1	2.29	0.62
4:G:28:VAL:HG13	4:G:29:ASN:N	2.13	0.62
4:G:44:VAL:HG21	4:G:74:THR:CB	2.29	0.62
1:B:109:SER:HB3	1:B:114:LEU:HD23	1.81	0.62
4:G:105:LYS:CG	4:G:106:LYS:HG2	2.09	0.62
3:E:9:ILE:HG13	3:E:11:PHE:CZ	2.35	0.62
1:A:101:VAL:HG23	1:A:102:GLY:N	2.15	0.62
1:A:441:GLU:OE2	1:A:456:GLU:HB2	1.98	0.62
1:A:296:PRO:HA	1:A:299:PHE:HB3	1.82	0.62
1:A:320:LEU:N	1:A:321:ARG:HA	2.14	0.62
1:A:80:THR:HG22	1:A:81:ASN:N	2.14	0.62
2:D:93:LYS:HZ2	2:D:94:LEU:HD11	1.64	0.62
2:C:94:LEU:N	2:D:97:TYR:H	1.87	0.62
4:G:97:PHE:CD2	5:H:47:GLN:CA	2.72	0.62
5:H:16:GLN:HG3	5:H:92:TRP:HD1	1.64	0.62
1:A:162:ALA:HB1	1:A:164:GLU:CB	2.29	0.62
3:F:36:ALA:HB1	3:F:61:TYR:O	2.00	0.62
3:F:73:ARG:HG2	3:F:75:ILE:CD1	2.30	0.62
1:A:74:LEU:HD23	1:A:75:VAL:H	1.64	0.62
2:C:84:THR:HG23	2:C:85:GLU:N	2.14	0.62
1:A:88:TRP:CZ3	1:A:91:LEU:HD22	2.35	0.62
3:E:88:VAL:O	3:E:97:THR:HA	2.00	0.62
3:F:14:TYR:HB2	3:F:73:ARG:CD	2.25	0.62
3:F:3:GLU:HG2	3:F:4:GLU:N	2.14	0.62
1:B:111:ASN:HD22	1:B:114:LEU:H	1.46	0.62
1:B:74:LEU:HD23	1:B:75:VAL:H	1.64	0.62
1:B:417:THR:HB	1:B:419:ILE:H	1.64	0.62
1:B:447:ASN:HB2	1:B:449:PHE:N	2.14	0.62
1:A:291:TYR:O	1:A:312:SER:HB2	2.00	0.62
1:B:148:PHE:H	1:B:148:PHE:HD1	1.46	0.62
1:B:46:LEU:HD13	1:B:162:ALA:HB2	1.81	0.62
2:D:8:ARG:HD2	2:D:8:ARG:O	2.00	0.62
2:D:5:ARG:HB3	3:F:2:TYR:HB3	1.81	0.62
3:F:61:TYR:CE1	3:F:96:ILE:HD12	2.35	0.62
1:B:425:ILE:HG12	1:B:429:LEU:HD21	1.82	0.62
2:D:87:PRO:HB3	2:D:90:ILE:CB	2.30	0.62
5:H:99:ASN:HB2	5:H:104:TYR:CB	2.29	0.62
1:A:146:HIS:HA	1:A:244:ILE:CG2	2.30	0.62
1:A:341:TYR:HA	1:A:344:ALA:CB	2.28	0.62
1:A:417:THR:HB	1:A:418:ARG:CA	2.29	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:98:ARG:HA	2:D:97:TYR:CD2	2.35	0.62
5:H:21:ALA:O	5:H:22:THR:HG22	1.99	0.62
1:A:46:LEU:HD13	1:A:162:ALA:HB2	1.81	0.62
1:B:142:ILE:HG13	1:B:145:TRP:CB	2.21	0.62
3:E:77:ARG:HB2	3:F:87:PRO:HG2	1.81	0.62
1:A:335:ARG:HD3	1:B:333:LEU:CB	2.29	0.62
1:B:438:MET:HB2	1:B:439:SER:HA	1.82	0.61
1:B:296:PRO:HA	1:B:299:PHE:HB3	1.82	0.61
2:D:84:THR:HG23	2:D:85:GLU:N	2.14	0.61
5:H:108:PHE:CD2	5:H:150:ILE:HG23	2.35	0.61
1:B:108:THR:CG2	1:B:412:MET:HE1	2.28	0.61
1:A:252:GLU:CD	1:B:53:TYR:CE1	2.74	0.61
2:C:78:VAL:HG22	2:C:79:SER:N	2.14	0.61
3:E:62:THR:CG2	3:E:63:PRO:HD2	2.29	0.61
4:G:44:VAL:HG11	4:G:70:VAL:HG12	1.81	0.61
1:A:68:ASP:CG	1:B:300:THR:HG21	2.21	0.61
1:B:291:TYR:O	1:B:312:SER:HB2	2.00	0.61
5:H:111:ALA:CB	5:H:132:LEU:HD13	2.30	0.61
4:G:59:SER:HB2	5:H:138:LEU:HD12	0.62	0.61
4:G:60:PHE:O	5:H:139:LYS:HE2	2.00	0.61
1:A:148:PHE:HD1	1:A:148:PHE:H	1.46	0.61
1:A:152:GLU:HB3	1:A:154:GLU:OE1	2.00	0.61
1:A:88:TRP:NE1	1:A:92:PHE:HZ	1.97	0.61
1:B:162:ALA:HB1	1:B:164:GLU:CB	2.29	0.61
1:B:149:VAL:CB	1:B:229:HIS:HA	2.21	0.61
2:D:6:VAL:H	3:F:3:GLU:CA	2.13	0.61
3:E:1:MET:HB2	3:F:93:LEU:HA	1.82	0.61
5:H:122:VAL:HG12	5:H:125:ALA:O	2.01	0.61
1:A:438:MET:HG3	1:B:434:THR:HG23	1.82	0.61
2:C:49:ILE:CD1	2:C:54:LEU:HG	2.30	0.61
5:H:39:GLY:CA	5:H:43:LEU:HG	2.30	0.61
1:B:226:PRO:HB3	1:B:227:ARG:HH21	1.63	0.61
1:B:88:TRP:CZ3	1:B:91:LEU:HD22	2.35	0.61
1:A:335:ARG:NH1	1:A:336:ILE:HG12	2.11	0.61
1:B:340:LEU:O	1:B:344:ALA:HB2	2.00	0.61
1:A:425:ILE:HG12	1:A:429:LEU:HD21	1.82	0.61
1:A:442:THR:OG1	1:B:459:ARG:HB2	2.00	0.61
1:A:205:VAL:C	1:A:206:TYR:HD1	2.04	0.61
1:B:229:HIS:ND1	1:B:230:MET:HG3	2.15	0.61
2:D:13:THR:HB	3:E:1:MET:H2	1.65	0.61
3:E:40:PRO:CG	3:F:100:LYS:HB2	2.30	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:66:ASP:HA	3:E:87:PRO:HB2	1.82	0.61
3:F:55:PRO:HB3	3:F:102:LYS:HB2	1.82	0.61
3:F:76:TYR:HE1	3:F:81:VAL:CG1	2.13	0.61
1:A:340:LEU:O	1:A:344:ALA:HB2	2.00	0.61
5:H:122:VAL:HG22	5:H:123:GLU:H	1.64	0.61
1:A:211:ILE:HG13	1:A:212:ASP:N	2.15	0.61
1:B:211:ILE:HG13	1:B:212:ASP:N	2.15	0.61
1:B:101:VAL:HG23	1:B:102:GLY:N	2.15	0.61
1:B:341:TYR:HA	1:B:344:ALA:CB	2.28	0.61
1:A:438:MET:HB2	1:A:439:SER:HA	1.82	0.61
1:B:416:ARG:N	1:B:417:THR:HA	2.15	0.61
1:B:417:THR:HB	1:B:418:ARG:CA	2.29	0.61
1:A:291:TYR:HB3	1:A:312:SER:CB	2.29	0.61
2:C:25:VAL:HG12	2:C:29:VAL:HG21	1.81	0.61
5:H:37:VAL:HG13	5:H:38:SER:N	2.15	0.61
1:B:146:HIS:HA	1:B:244:ILE:CG2	2.30	0.61
1:B:205:VAL:C	1:B:206:TYR:HD1	2.04	0.61
4:G:74:THR:HG23	4:G:75:THR:N	2.16	0.61
1:A:121:LEU:HB3	1:A:123:ASP:C	2.21	0.61
1:B:267:TYR:CD2	1:B:345:GLN:HG3	2.36	0.61
4:G:54:PHE:CD2	4:G:55:GLU:HG2	2.35	0.61
4:G:64:ILE:N	4:G:64:ILE:HD12	2.16	0.61
5:H:92:TRP:CZ3	5:H:106:ALA:HB3	2.36	0.61
1:B:152:GLU:HB3	1:B:154:GLU:OE1	2.00	0.61
2:C:4:GLN:HG3	3:E:1:MET:HE2	1.51	0.61
3:E:40:PRO:HA	3:F:100:LYS:CE	2.31	0.61
3:F:53:GLN:HG3	3:F:55:PRO:CD	2.15	0.61
3:F:105:GLY:N	4:G:39:ASP:HB2	2.15	0.61
1:A:267:TYR:CD2	1:A:345:GLN:HG3	2.36	0.61
1:A:428:SER:OG	1:B:430:VAL:HG11	2.00	0.61
1:A:64:ARG:HE	1:B:283:GLN:NE2	1.98	0.61
2:D:49:ILE:CD1	2:D:54:LEU:HG	2.30	0.61
2:D:49:ILE:HD12	2:D:54:LEU:HG	1.83	0.61
2:D:63:PHE:HZ	2:D:82:PHE:CA	2.12	0.61
4:G:133:ASN:N	5:H:55:GLY:CA	2.50	0.61
5:H:59:VAL:HG13	5:H:137:GLU:HB3	1.83	0.61
5:H:14:LEU:H	5:H:14:LEU:HD23	1.65	0.61
5:H:18:ILE:HG13	5:H:19:ASP:N	2.14	0.61
1:A:178:LEU:HG	1:A:242:VAL:HG11	1.82	0.61
1:A:229:HIS:ND1	1:A:230:MET:HG3	2.15	0.61
1:A:252:GLU:OE1	1:B:53:TYR:HE1	1.83	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:69:GLY:O	3:E:93:LEU:CD1	2.49	0.61
2:C:8:ARG:HD2	2:C:8:ARG:O	2.00	0.61
3:E:75:ILE:HG23	3:E:79:LYS:O	2.01	0.61
3:E:77:ARG:HG3	3:F:87:PRO:HB2	1.83	0.61
1:A:439:SER:N	1:A:440:LYS:HA	2.16	0.61
2:D:25:VAL:HG12	2:D:29:VAL:HG21	1.81	0.61
4:G:64:ILE:HD12	5:H:140:ASN:OD1	2.00	0.61
5:H:53:ILE:O	5:H:54:LEU:O	2.19	0.61
1:A:46:LEU:CD1	1:A:162:ALA:HB2	2.31	0.61
1:A:96:LYS:HD3	1:A:377:ALA:HB2	1.82	0.61
2:C:73:ARG:CD	3:E:91:SER:CB	2.79	0.61
3:F:69:ASP:OD2	3:F:97:THR:HG21	2.00	0.61
1:A:115:LEU:HG	1:A:119:ASN:ND2	2.14	0.61
1:A:210:LYS:O	1:A:210:LYS:HD3	2.01	0.61
2:C:49:ILE:HD12	2:C:54:LEU:HG	1.83	0.61
1:A:167:VAL:HA	1:A:177:ILE:HD12	1.83	0.61
1:A:46:LEU:H	1:A:46:LEU:HD12	1.66	0.61
2:C:5:ARG:HB2	3:E:3:GLU:C	2.21	0.61
2:C:4:GLN:CA	3:E:1:MET:N	2.63	0.61
3:E:70:LYS:HG2	3:E:85:GLY:H	1.66	0.61
3:F:3:GLU:HG2	3:F:4:GLU:H	1.66	0.61
1:B:121:LEU:HB3	1:B:123:ASP:C	2.21	0.61
5:H:166:THR:O	5:H:167:THR:HG22	2.00	0.61
2:C:87:PRO:HB3	2:C:90:ILE:CB	2.30	0.61
4:G:63:ASN:C	5:H:140:ASN:HD21	2.04	0.61
1:A:204:HIS:CD2	1:A:226:PRO:HB2	2.36	0.61
3:E:2:TYR:CE1	3:F:95:GLU:HA	2.35	0.61
3:F:52:LEU:HB3	3:F:53:GLN:NE2	2.16	0.61
3:E:79:LYS:HE3	3:F:86:ASP:N	2.16	0.61
3:E:71:LYS:HG2	3:E:71:LYS:O	2.00	0.61
1:A:178:LEU:HA	1:A:242:VAL:CG1	2.29	0.60
1:B:46:LEU:HD21	1:B:164:GLU:OE2	2.01	0.60
1:B:204:HIS:CD2	1:B:226:PRO:HB2	2.36	0.60
1:B:96:LYS:HD3	1:B:377:ALA:HB2	1.82	0.60
5:H:30:ALA:HB1	5:H:68:TYR:O	2.01	0.60
2:D:59:LYS:HD2	2:D:87:PRO:CG	2.31	0.60
5:H:145:THR:HG23	5:H:146:LEU:N	2.16	0.60
5:H:17:SER:CB	5:H:89:ILE:HG22	2.32	0.60
3:E:2:TYR:CE2	3:F:95:GLU:HG2	2.35	0.60
4:G:124:ILE:HD13	4:G:125:ILE:N	2.15	0.60
1:A:118:VAL:O	1:A:122:ALA:HA	2.01	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:26:PRO:HA	2:D:29:VAL:HB	1.84	0.60
2:D:28:LEU:HA	2:D:31:PHE:HE1	1.64	0.60
1:B:99:TYR:CD2	1:B:373:LYS:HE2	2.36	0.60
2:C:70:LEU:O	3:E:91:SER:HB2	1.99	0.60
3:F:73:ARG:NH1	3:F:80:ILE:HD12	2.16	0.60
1:A:335:ARG:CD	1:B:333:LEU:CB	2.79	0.60
5:H:32:GLN:HG3	5:H:65:VAL:CG1	2.20	0.60
1:B:417:THR:N	1:B:418:ARG:HA	2.16	0.60
2:C:26:PRO:HA	2:C:29:VAL:HB	1.84	0.60
1:B:41:HIS:HB2	1:B:166:ILE:CG1	2.32	0.60
1:B:167:VAL:HA	1:B:177:ILE:HD12	1.83	0.60
1:B:46:LEU:HG	1:B:143:GLU:H	1.67	0.60
3:E:31:GLU:HA	3:E:72:MET:SD	2.41	0.60
3:F:32:PHE:CE2	3:F:34:ALA:HB2	2.37	0.60
3:F:64:TYR:HE1	3:F:95:GLU:HB2	1.66	0.60
1:B:63:ARG:HB3	1:B:75:VAL:CG1	2.31	0.60
4:G:54:PHE:HD2	4:G:55:GLU:HG2	1.67	0.60
1:A:63:ARG:HB3	1:A:75:VAL:CG1	2.31	0.60
2:C:100:MET:HE2	2:D:100:MET:CG	2.32	0.60
2:C:56:PHE:CE1	2:C:59:LYS:HE2	2.35	0.60
2:D:56:PHE:CE1	2:D:59:LYS:HE2	2.35	0.60
5:H:14:LEU:HD11	5:H:16:GLN:HE21	1.66	0.60
5:H:44:PHE:CE1	5:H:60:ALA:HA	2.36	0.60
3:E:109:GLY:CA	4:G:113:ILE:CD1	2.66	0.60
3:E:84:ILE:HD11	3:E:103:GLU:H	1.65	0.60
3:E:93:LEU:HD22	3:E:93:LEU:N	2.16	0.60
3:F:6:ARG:HH11	3:F:33:THR:CG2	2.13	0.60
4:G:33:GLU:HA	4:G:45:VAL:HG12	1.84	0.60
4:G:70:VAL:HG11	4:G:76:ARG:CZ	2.31	0.60
1:B:118:VAL:O	1:B:122:ALA:HA	2.02	0.60
1:A:378:GLU:OE2	1:B:98:GLN:NE2	2.34	0.60
1:A:417:THR:N	1:A:418:ARG:HA	2.16	0.60
1:B:439:SER:N	1:B:440:LYS:HA	2.16	0.60
2:C:59:LYS:HD2	2:C:87:PRO:CG	2.31	0.60
2:D:54:LEU:HA	2:D:57:VAL:HG22	1.84	0.60
2:C:94:LEU:HD12	2:D:97:TYR:N	2.17	0.60
5:H:15:PHE:HZ	5:H:91:PHE:CE2	2.20	0.60
1:A:46:LEU:N	1:A:46:LEU:HD12	2.17	0.60
1:B:148:PHE:CE1	1:B:158:VAL:HG23	2.37	0.60
1:B:93:VAL:HG21	1:B:257:LEU:HD11	1.84	0.60
1:B:210:LYS:O	1:B:210:LYS:HD3	2.01	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:416:ARG:N	1:A:417:THR:HA	2.15	0.60
1:B:313:GLY:HA2	2:C:51:SER:HB2	1.77	0.60
2:C:57:VAL:HG23	2:C:58:ALA:N	2.16	0.60
5:H:14:LEU:HD21	5:H:160:PHE:CE1	2.36	0.60
1:A:41:HIS:HB2	1:A:166:ILE:CG1	2.32	0.60
1:A:46:LEU:HG	1:A:143:GLU:H	1.67	0.60
1:A:93:VAL:HG21	1:A:257:LEU:HD11	1.84	0.60
1:B:140:LYS:HD3	1:B:261:LYS:CE	2.30	0.60
1:B:376:MET:HA	1:B:379:ARG:HG3	1.83	0.60
1:B:385:LEU:HD11	1:B:389:PHE:CZ	2.36	0.60
4:G:113:ILE:CG1	4:G:121:LYS:HB3	2.32	0.60
1:A:68:ASP:OD1	1:B:300:THR:CG2	2.50	0.60
2:D:54:LEU:HA	2:D:57:VAL:CG2	2.31	0.60
4:G:97:PHE:HB2	4:G:102:PHE:CE2	2.37	0.60
1:A:376:MET:HA	1:A:379:ARG:HG3	1.84	0.60
1:A:46:LEU:HD22	1:A:162:ALA:CA	2.32	0.60
1:B:46:LEU:CD1	1:B:162:ALA:HB2	2.31	0.60
3:F:41:ILE:HG23	3:F:42:SER:N	2.15	0.60
1:A:339:GLU:OE1	1:B:274:THR:HG21	1.92	0.60
2:C:13:THR:HG23	2:C:14:ASN:N	2.17	0.60
1:A:440:LYS:HE2	1:A:444:VAL:HG22	1.84	0.60
1:B:440:LYS:HE2	1:B:444:VAL:HG22	1.84	0.60
1:A:283:GLN:OE1	1:A:284:ILE:HG22	2.02	0.60
1:B:314:ASP:N	2:C:51:SER:HB2	2.17	0.60
2:C:99:LYS:HZ1	2:D:102:ARG:C	2.05	0.60
2:C:99:LYS:HB2	2:D:101:ALA:HB1	1.56	0.60
1:B:46:LEU:HD22	1:B:162:ALA:CA	2.32	0.60
1:B:46:LEU:H	1:B:46:LEU:HD12	1.66	0.60
1:B:46:LEU:N	1:B:46:LEU:HD12	2.17	0.60
2:C:7:LYS:CE	3:E:4:GLU:CD	2.70	0.60
3:E:50:GLN:O	3:F:52:LEU:HD23	2.01	0.60
3:E:87:PRO:CB	3:E:97:THR:HG21	2.32	0.60
3:F:65:ASP:HB2	3:F:68:ILE:HD12	1.84	0.60
4:G:70:VAL:HG11	4:G:76:ARG:NH2	2.15	0.60
1:B:393:ALA:HA	1:B:396:LEU:HD12	1.82	0.60
1:B:62:LYS:NZ	1:B:63:ARG:HG3	2.17	0.60
1:A:417:THR:HB	1:A:419:ILE:H	1.64	0.60
2:C:54:LEU:HA	2:C:57:VAL:HG22	1.84	0.60
1:A:46:LEU:HD21	1:A:164:GLU:OE2	2.02	0.60
1:A:100:LEU:HB2	1:A:377:ALA:CB	2.32	0.60
1:B:181:LEU:CD2	1:B:181:LEU:H	2.14	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:H:32:GLN:HB2	5:H:67:TYR:CE1	2.36	0.60
1:A:460:ILE:HG22	1:B:467:TYR:CB	2.26	0.59
2:C:63:PHE:CD1	2:C:85:GLU:HB3	2.37	0.59
2:D:59:LYS:HA	2:D:62:GLN:OE1	2.02	0.59
4:G:134:ASN:HA	5:H:138:LEU:O	2.02	0.59
5:H:43:LEU:HD22	5:H:44:PHE:C	2.23	0.59
1:B:178:LEU:HG	1:B:242:VAL:HG11	1.82	0.59
4:G:109:LEU:HD13	4:G:110:ALA:N	2.17	0.59
2:C:28:LEU:HA	2:C:31:PHE:HE1	1.64	0.59
2:C:59:LYS:HA	2:C:62:GLN:OE1	2.02	0.59
2:D:33:LYS:HD3	2:D:50:PRO:HB3	1.84	0.59
4:G:59:SER:HB2	5:H:138:LEU:CB	2.32	0.59
1:A:367:TYR:CD2	1:A:369:LEU:HD23	2.31	0.59
3:E:13:SER:HB2	3:E:75:ILE:CD1	2.33	0.59
3:F:90:LEU:HB3	3:F:98:ARG:NE	2.17	0.59
2:C:54:LEU:HA	2:C:57:VAL:CG2	2.31	0.59
2:C:55:ILE:HG13	2:C:56:PHE:N	2.17	0.59
5:H:14:LEU:HD21	5:H:160:PHE:CD2	2.37	0.59
1:A:199:LEU:O	1:A:200:TYR:HD1	1.84	0.59
3:E:74:VAL:HG11	3:E:76:TYR:HE1	1.67	0.59
4:G:119:VAL:HG12	4:G:120:THR:N	2.17	0.59
1:A:426:VAL:HA	1:A:429:LEU:CD1	2.32	0.59
1:A:433:VAL:HG13	1:A:434:THR:N	2.18	0.59
1:B:433:VAL:HG13	1:B:434:THR:N	2.18	0.59
1:A:68:ASP:CG	1:B:300:THR:CG2	2.70	0.59
2:D:57:VAL:HG23	2:D:58:ALA:N	2.16	0.59
2:D:59:LYS:CD	2:D:90:ILE:HG21	2.28	0.59
5:H:91:PHE:CG	5:H:111:ALA:HB2	2.38	0.59
5:H:96:THR:HG23	5:H:97:VAL:N	2.18	0.59
1:A:46:LEU:CD2	1:A:143:GLU:H	2.16	0.59
1:A:224:ASN:ND2	1:A:227:ARG:HA	2.17	0.59
1:B:174:ARG:HG2	1:B:174:ARG:HH11	1.67	0.59
1:B:38:ILE:HG23	1:B:163:GLU:CG	2.21	0.59
3:E:29:VAL:CG1	3:E:72:MET:HG2	2.32	0.59
3:F:52:LEU:HB3	3:F:53:GLN:CA	2.26	0.59
3:E:38:VAL:HB	3:F:88:VAL:HG11	1.83	0.59
1:A:270:ILE:HD11	1:B:275:MET:SD	2.43	0.59
5:H:32:GLN:HA	5:H:67:TYR:CE1	2.37	0.59
5:H:32:GLN:HE22	5:H:93:ARG:CG	2.15	0.59
1:B:248:LYS:N	1:B:249:ASN:HA	2.17	0.59
1:A:62:LYS:NZ	1:A:63:ARG:HG3	2.17	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:63:PHE:CG	2:C:85:GLU:HB3	2.37	0.59
2:D:63:PHE:CD1	2:D:85:GLU:HB3	2.37	0.59
1:A:148:PHE:CE1	1:A:158:VAL:HG23	2.37	0.59
1:A:385:LEU:HD11	1:A:389:PHE:CZ	2.36	0.59
1:B:100:LEU:HB2	1:B:377:ALA:CB	2.32	0.59
1:B:106:THR:HG22	1:B:107:PHE:N	2.17	0.59
3:E:29:VAL:HG12	3:E:72:MET:HB3	1.85	0.59
3:E:51:GLN:HA	3:F:51:GLN:OE1	2.03	0.59
1:A:393:ALA:HA	1:A:396:LEU:HD12	1.82	0.59
1:B:419:ILE:HG23	1:B:420:GLN:N	2.18	0.59
1:B:283:GLN:OE1	1:B:284:ILE:HG22	2.02	0.59
2:C:59:LYS:CD	2:C:90:ILE:HG21	2.28	0.59
2:C:93:LYS:HZ2	2:C:94:LEU:CD1	2.15	0.59
2:D:63:PHE:CG	2:D:85:GLU:HB3	2.37	0.59
2:D:98:ARG:HH12	2:D:99:LYS:NZ	2.00	0.59
1:B:169:TYR:HD2	1:B:171:ASP:O	1.84	0.59
1:B:179:PHE:HB2	1:B:243:PRO:O	2.03	0.59
3:E:79:LYS:HE3	3:F:85:GLY:C	2.23	0.59
1:A:290:ASN:HB2	1:A:291:TYR:CA	2.32	0.59
5:H:44:PHE:HZ	5:H:60:ALA:HB2	1.66	0.59
1:A:106:THR:HG22	1:A:107:PHE:N	2.17	0.59
1:A:99:TYR:CD2	1:A:373:LYS:HE2	2.36	0.59
1:B:224:ASN:ND2	1:B:227:ARG:HA	2.17	0.59
2:D:70:LEU:HD23	2:D:70:LEU:O	2.00	0.59
4:G:44:VAL:HG13	4:G:70:VAL:CA	2.29	0.59
1:B:65:THR:HG21	1:B:73:GLN:OE1	2.03	0.59
2:D:55:ILE:HG13	2:D:56:PHE:N	2.17	0.59
1:A:184:TYR:HD1	1:A:184:TYR:H	1.51	0.59
1:A:179:PHE:HB2	1:A:243:PRO:O	2.03	0.59
1:B:46:LEU:CD2	1:B:143:GLU:H	2.16	0.59
1:B:199:LEU:O	1:B:200:TYR:HD1	1.84	0.59
2:D:13:THR:HG23	2:D:14:ASN:N	2.17	0.59
3:E:52:LEU:HB3	3:E:53:GLN:CA	2.32	0.59
3:F:98:ARG:HG2	3:F:98:ARG:NH1	2.16	0.59
2:C:14:ASN:ND2	2:C:21:LEU:HG	2.18	0.59
1:A:419:ILE:HG23	1:A:420:GLN:N	2.18	0.59
1:A:438:MET:HE3	1:B:433:VAL:C	2.23	0.59
2:D:33:LYS:HE2	2:D:50:PRO:HB3	1.84	0.59
2:C:94:LEU:HG	2:D:97:TYR:HD1	1.67	0.59
5:H:92:TRP:CE3	5:H:106:ALA:HB3	2.37	0.59
1:A:46:LEU:HD11	1:A:164:GLU:OE2	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:174:ARG:HH11	1:A:174:ARG:HG2	1.67	0.59
1:A:99:TYR:HB3	1:A:373:LYS:HE2	1.84	0.59
1:A:175:ARG:NH2	1:B:148:PHE:HZ	2.00	0.59
3:E:61:TYR:CB	3:E:98:ARG:HG3	2.23	0.59
3:E:50:GLN:NE2	3:F:52:LEU:HB2	2.14	0.59
3:F:61:TYR:HB2	3:F:97:THR:O	2.03	0.59
3:F:62:THR:HG21	3:F:68:ILE:HG21	1.85	0.59
3:F:81:VAL:HG22	3:F:82:THR:N	2.18	0.59
5:H:30:ALA:HB3	5:H:67:TYR:HD2	1.67	0.59
1:A:248:LYS:N	1:A:249:ASN:HA	2.17	0.59
4:G:82:ILE:HG13	4:G:83:SER:N	2.17	0.59
1:B:290:ASN:HB2	1:B:291:TYR:CA	2.32	0.59
1:B:291:TYR:C	1:B:312:SER:HB2	2.23	0.59
1:B:286:TYR:CD1	1:B:321:ARG:HD2	2.37	0.59
2:C:84:THR:OG1	2:D:83:ALA:CA	2.47	0.59
1:A:169:TYR:CD2	1:A:174:ARG:HA	2.37	0.59
1:A:410:LEU:HD22	1:A:412:MET:HG2	1.84	0.59
1:B:181:LEU:HD23	1:B:181:LEU:N	2.15	0.59
3:E:106:ALA:O	4:G:41:TYR:OH	2.19	0.59
3:E:80:ILE:HG12	3:F:70:LYS:HZ2	1.66	0.59
1:B:59:ILE:HD12	1:B:59:ILE:N	2.15	0.59
1:A:403:ASP:O	1:A:404:PHE:HD1	1.86	0.59
1:A:442:THR:HA	1:A:445:ALA:CB	2.32	0.58
2:C:98:ARG:HH12	2:C:99:LYS:NZ	2.00	0.58
2:C:93:LYS:NZ	2:D:96:PRO:C	2.54	0.58
4:G:133:ASN:O	5:H:58:SER:N	2.36	0.58
4:G:5:LEU:H	4:G:5:LEU:CD1	2.06	0.58
5:H:37:VAL:HG11	5:H:63:GLY:HA2	1.83	0.58
1:B:46:LEU:HD11	1:B:164:GLU:OE2	2.02	0.58
1:B:169:TYR:CD2	1:B:174:ARG:HA	2.37	0.58
1:B:206:TYR:O	1:B:207:TYR:HD1	1.84	0.58
2:D:69:GLY:CA	2:D:73:ARG:HB3	2.25	0.58
3:E:74:VAL:HG21	3:E:76:TYR:CZ	2.38	0.58
3:E:83:PHE:HD1	3:E:83:PHE:O	1.85	0.58
1:B:59:ILE:CD1	1:B:59:ILE:H	2.16	0.58
1:B:134:VAL:HG23	1:B:135:LYS:N	2.18	0.58
5:H:86:GLY:O	5:H:87:LYS:HG2	2.03	0.58
1:A:59:ILE:H	1:A:59:ILE:CD1	2.16	0.58
1:B:294:GLU:CG	2:C:41:ILE:O	2.50	0.58
4:G:4:LYS:HB3	4:G:5:LEU:HD13	1.85	0.58
5:H:55:GLY:HA2	5:H:56:PRO:C	2.22	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:167:VAL:HG13	1:B:177:ILE:HB	1.84	0.58
1:B:184:TYR:H	1:B:184:TYR:HD1	1.51	0.58
1:B:206:TYR:HD2	1:B:208:TYR:OH	1.86	0.58
1:B:53:TYR:HA	1:B:261:LYS:NZ	2.18	0.58
3:E:59:ASN:N	3:F:100:LYS:HE3	2.19	0.58
3:F:36:ALA:HB2	3:F:62:THR:OG1	2.03	0.58
3:F:7:ASP:OD2	3:F:9:ILE:HG23	2.04	0.58
3:F:96:ILE:HG13	3:F:98:ARG:HE	1.68	0.58
3:F:97:THR:HG22	3:F:98:ARG:N	2.19	0.58
4:G:86:VAL:HG13	4:G:87:LEU:N	2.17	0.58
1:B:232:LYS:CB	1:B:237:ILE:HB	2.31	0.58
1:A:65:THR:HG21	1:A:73:GLN:OE1	2.03	0.58
1:B:403:ASP:O	1:B:404:PHE:HD1	1.86	0.58
2:C:33:LYS:HD3	2:C:50:PRO:HB3	1.84	0.58
1:A:181:LEU:H	1:A:181:LEU:CD2	2.14	0.58
1:A:206:TYR:HD2	1:A:208:TYR:OH	1.86	0.58
1:B:99:TYR:HB3	1:B:373:LYS:HE2	1.84	0.58
3:E:70:LYS:HD3	3:E:84:ILE:HB	1.86	0.58
3:F:103:GLU:HB3	4:G:31:VAL:HG21	1.85	0.58
1:B:111:ASN:HB2	1:B:396:LEU:HD22	1.85	0.58
1:A:416:ARG:C	1:A:418:ARG:HG2	2.23	0.58
1:B:426:VAL:HA	1:B:429:LEU:CD1	2.32	0.58
2:C:33:LYS:HE2	2:C:50:PRO:HB3	1.85	0.58
1:A:169:TYR:HD2	1:A:171:ASP:O	1.84	0.58
1:A:187:LYS:HE2	1:A:193:GLU:HB2	1.86	0.58
1:A:232:LYS:CB	1:A:237:ILE:HB	2.31	0.58
1:A:286:TYR:HA	1:A:321:ARG:HD2	1.85	0.58
4:G:134:ASN:CG	5:H:58:SER:O	2.42	0.58
1:A:46:LEU:O	1:A:50:VAL:HG23	2.03	0.58
1:A:371:ASP:O	1:B:363:LEU:HD21	2.03	0.58
3:E:58:TYR:CB	3:F:100:LYS:HG2	2.34	0.58
2:D:5:ARG:NH2	3:F:2:TYR:CD2	2.72	0.58
3:F:70:LYS:NZ	3:F:71:LYS:HB2	2.18	0.58
3:F:73:ARG:HD3	3:F:80:ILE:HB	1.85	0.58
3:F:98:ARG:HG2	3:F:98:ARG:HH11	1.66	0.58
4:G:116:THR:HG23	4:G:117:ASP:N	2.18	0.58
1:B:442:THR:HA	1:B:445:ALA:CB	2.32	0.58
1:A:286:TYR:CD1	1:A:321:ARG:HD2	2.37	0.58
5:H:101:ASN:OD1	5:H:163:PRO:HB2	2.03	0.58
1:B:365:LYS:HD3	1:B:365:LYS:C	2.24	0.58
1:B:410:LEU:HD22	1:B:412:MET:HG2	1.84	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:79:LYS:CE	3:F:87:PRO:HD3	2.33	0.58
4:G:49:GLN:HG3	4:G:49:GLN:O	2.04	0.58
1:A:291:TYR:C	1:A:312:SER:HB2	2.23	0.58
4:G:63:ASN:OD1	5:H:139:LYS:CG	2.51	0.58
1:A:167:VAL:HG13	1:A:177:ILE:HB	1.84	0.58
1:A:254:VAL:HG13	1:B:85:SER:OG	2.04	0.58
1:A:53:TYR:HA	1:A:261:LYS:NZ	2.18	0.58
1:A:365:LYS:C	1:A:365:LYS:HD3	2.24	0.58
1:A:407:ASP:O	1:A:411:THR:HB	2.03	0.58
1:B:187:LYS:HE2	1:B:193:GLU:HB2	1.86	0.58
3:E:29:VAL:HG12	3:E:72:MET:CG	2.33	0.58
3:E:37:HIS:HE1	3:E:39:GLN:HB2	1.69	0.58
2:C:11:SER:HB3	3:E:94:GLN:N	2.18	0.58
3:F:52:LEU:HD12	3:F:54:THR:H	1.69	0.58
3:F:14:TYR:CB	3:F:73:ARG:HD2	2.27	0.58
4:G:52:THR:HG23	4:G:53:PRO:HD2	1.85	0.58
1:A:59:ILE:HD12	1:A:59:ILE:N	2.15	0.58
1:B:286:TYR:HA	1:B:321:ARG:HD2	1.85	0.58
2:C:94:LEU:CG	2:D:97:TYR:CD1	2.86	0.58
5:H:39:GLY:O	5:H:43:LEU:HD12	2.03	0.58
5:H:41:ARG:HE	5:H:61:ASP:CB	2.17	0.58
1:A:206:TYR:O	1:A:207:TYR:HD1	1.84	0.58
1:B:407:ASP:O	1:B:411:THR:HB	2.03	0.58
3:E:98:ARG:HG2	3:E:98:ARG:HH11	1.67	0.58
3:F:13:SER:HB2	3:F:29:VAL:CG2	2.33	0.58
3:E:109:GLY:C	4:G:114:THR:H	2.03	0.58
3:F:108:VAL:HG22	3:F:109:GLY:N	2.17	0.58
5:H:104:TYR:CD1	5:H:159:ASP:HB3	2.39	0.58
5:H:37:VAL:CG2	5:H:64:GLU:HG2	2.33	0.58
5:H:96:THR:HG23	5:H:97:VAL:H	1.68	0.58
1:A:165:MET:HB2	1:A:180:ALA:HB3	1.86	0.58
1:B:201:THR:HG22	1:B:202:ASP:N	2.18	0.58
1:B:202:ASP:CA	1:B:242:VAL:HG23	2.32	0.58
3:E:53:GLN:CG	3:E:55:PRO:HG3	2.34	0.58
3:E:61:TYR:HB2	3:E:98:ARG:CG	2.25	0.58
3:E:61:TYR:HE1	3:E:96:ILE:CB	2.15	0.58
2:D:5:ARG:N	3:F:3:GLU:H	1.97	0.58
1:B:326:VAL:HG12	1:B:327:ASP:N	2.17	0.58
1:A:111:ASN:HB2	1:A:396:LEU:HD22	1.85	0.58
2:D:40:PHE:O	2:D:48:SER:HB3	2.04	0.58
5:H:100:GLU:HB3	5:H:103:LYS:HB3	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:88:TRP:HZ3	1:B:91:LEU:HD22	1.68	0.58
2:D:14:ASN:ND2	2:D:21:LEU:HG	2.18	0.58
3:F:7:ASP:HB2	3:F:35:ALA:HA	1.86	0.58
5:H:32:GLN:HE22	5:H:93:ARG:CD	2.16	0.58
1:B:416:ARG:C	1:B:418:ARG:HG2	2.23	0.57
5:H:113:ILE:HG23	5:H:114:GLU:N	2.18	0.57
5:H:138:LEU:HD22	5:H:138:LEU:N	2.19	0.57
5:H:53:ILE:O	5:H:54:LEU:C	2.42	0.57
1:A:181:LEU:N	1:A:181:LEU:HD23	2.15	0.57
1:A:183:TYR:HB2	1:A:197:ALA:HA	1.85	0.57
1:B:163:GLU:HA	1:B:182:ARG:HG3	1.85	0.57
3:E:38:VAL:HA	3:E:60:ILE:HB	1.84	0.57
3:E:79:LYS:HD3	3:F:70:LYS:HB3	1.85	0.57
4:G:18:LEU:HB3	4:G:24:LEU:HD22	1.86	0.57
1:A:134:VAL:HG23	1:A:135:LYS:N	2.18	0.57
2:C:85:GLU:HA	2:D:86:ILE:CD1	2.24	0.57
1:B:148:PHE:CZ	1:B:158:VAL:HG23	2.39	0.57
1:B:165:MET:HB2	1:B:180:ALA:HB3	1.86	0.57
3:E:54:THR:OG1	3:F:105:GLY:HA3	2.02	0.57
2:D:7:LYS:HD3	3:F:4:GLU:OE1	2.04	0.57
3:F:32:PHE:CE2	3:F:67:ARG:HD2	2.38	0.57
4:G:31:VAL:HG22	4:G:32:THR:HA	1.87	0.57
1:A:109:SER:H	1:A:115:LEU:HD13	1.68	0.57
1:B:387:LEU:HD11	1:B:391:PHE:CZ	2.40	0.57
1:B:415:THR:HB	1:B:417:THR:OG1	2.04	0.57
1:A:441:GLU:CB	1:B:462:GLU:OE2	2.52	0.57
1:A:148:PHE:CZ	1:A:158:VAL:HG23	2.39	0.57
1:A:182:ARG:HG2	1:A:183:TYR:N	2.19	0.57
1:A:187:LYS:CE	1:A:193:GLU:HB3	2.35	0.57
1:B:162:ALA:HB1	1:B:164:GLU:CA	2.35	0.57
2:D:4:GLN:OE1	3:F:1:MET:CB	2.52	0.57
3:E:1:MET:HG3	3:E:2:TYR:N	2.16	0.57
2:C:5:ARG:HA	3:E:3:GLU:CA	2.34	0.57
3:F:53:GLN:OE1	3:F:102:LYS:HE3	2.03	0.57
1:A:326:VAL:HG12	1:A:327:ASP:N	2.17	0.57
2:D:34:ASP:HB3	2:D:35:GLU:CA	2.35	0.57
1:B:182:ARG:HG2	1:B:183:TYR:N	2.20	0.57
1:B:51:ARG:HD2	1:B:57:ASN:OD1	2.04	0.57
3:E:37:HIS:HB2	3:F:89:ASP:OD1	2.04	0.57
4:G:32:THR:HG21	4:G:43:TYR:CB	2.31	0.57
4:G:37:LYS:H	4:G:37:LYS:HD3	1.69	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:415:THR:HB	1:A:417:THR:OG1	2.04	0.57
1:A:290:ASN:HB2	1:A:291:TYR:HB2	1.87	0.57
5:H:52:ARG:CD	5:H:54:LEU:HA	2.21	0.57
5:H:59:VAL:HG12	5:H:60:ALA:N	2.18	0.57
1:A:88:TRP:HZ3	1:A:91:LEU:HD22	1.68	0.57
1:A:96:LYS:HE3	1:A:377:ALA:CB	2.34	0.57
2:C:71:THR:N	2:C:72:GLY:HA3	2.18	0.57
1:A:112:LYS:O	1:A:116:GLU:HG3	2.05	0.57
1:B:216:GLN:HG2	1:B:217:MET:H	1.70	0.57
1:A:460:ILE:HG22	1:B:467:TYR:HB3	1.85	0.57
2:C:34:ASP:HB3	2:C:35:GLU:CA	2.35	0.57
2:C:36:CYS:N	2:C:37:HIS:HA	2.20	0.57
2:C:100:MET:HE1	2:D:100:MET:HB3	1.86	0.57
4:G:6:ALA:O	4:G:9:ALA:HB3	2.05	0.57
5:H:108:PHE:HD2	5:H:150:ILE:HG23	1.68	0.57
1:A:201:THR:HG22	1:A:202:ASP:N	2.18	0.57
3:E:97:THR:HG22	3:E:98:ARG:N	2.18	0.57
3:F:106:ALA:O	3:F:107:TYR:HB2	2.05	0.57
1:A:216:GLN:HG2	1:A:217:MET:H	1.70	0.57
4:G:98:GLU:N	5:H:49:LYS:HD3	2.20	0.57
4:G:9:ALA:O	4:G:12:LYS:HB3	2.04	0.57
1:A:159:ILE:O	1:A:160:PHE:HD1	1.87	0.57
1:A:202:ASP:HB2	1:A:242:VAL:CG2	2.35	0.57
1:A:207:TYR:O	1:A:208:TYR:HD1	1.88	0.57
1:B:207:TYR:O	1:B:208:TYR:HD1	1.88	0.57
1:B:46:LEU:O	1:B:50:VAL:HG23	2.04	0.57
4:G:76:ARG:HD2	4:G:125:ILE:HG13	1.87	0.57
4:G:73:GLY:HA2	4:G:76:ARG:NH2	2.20	0.57
1:A:46:LEU:HG	1:A:143:GLU:HB2	1.85	0.57
1:A:162:ALA:HB1	1:A:164:GLU:CA	2.35	0.57
1:A:202:ASP:CA	1:A:242:VAL:HG23	2.32	0.57
1:B:159:ILE:O	1:B:160:PHE:HD1	1.87	0.57
1:B:183:TYR:HB2	1:B:197:ALA:HA	1.85	0.57
2:D:70:LEU:CB	3:E:2:TYR:CE1	2.87	0.57
3:E:62:THR:H	3:E:65:ASP:HB2	1.68	0.57
1:A:317:VAL:HG23	1:A:317:VAL:O	2.05	0.57
5:H:46:GLU:H	5:H:151:VAL:HG11	1.70	0.57
1:A:51:ARG:HD2	1:A:57:ASN:OD1	2.04	0.57
2:D:71:THR:N	2:D:72:GLY:HA3	2.18	0.57
5:H:112:TYR:HD2	5:H:114:GLU:HG2	1.68	0.57
1:A:136:ASN:HB2	1:A:145:TRP:CZ3	2.40	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:204:HIS:NE2	1:A:226:PRO:HG2	2.20	0.57
1:B:187:LYS:CE	1:B:193:GLU:HB3	2.35	0.57
3:E:58:TYR:CD2	3:F:100:LYS:HG2	2.39	0.57
3:F:12:GLN:NE2	3:F:75:ILE:HG12	2.20	0.57
3:F:88:VAL:O	3:F:97:THR:HA	2.02	0.57
3:E:16:GLU:HB3	3:E:24:LYS:HD3	1.87	0.57
1:A:422:ASP:C	1:A:425:ILE:HG22	2.25	0.56
1:A:440:LYS:HD3	1:A:440:LYS:C	2.26	0.56
2:C:40:PHE:O	2:C:48:SER:HB3	2.04	0.56
2:C:84:THR:CG2	2:D:86:ILE:HD11	2.35	0.56
1:A:169:TYR:CD1	1:A:174:ARG:HA	2.40	0.56
1:A:92:PHE:CZ	1:A:369:LEU:HD22	2.40	0.56
1:B:204:HIS:NE2	1:B:226:PRO:HG2	2.19	0.56
1:B:52:TYR:HE1	1:B:56:GLU:CB	2.18	0.56
3:E:105:GLY:O	4:G:41:TYR:CE1	2.48	0.56
3:F:83:PHE:O	3:F:83:PHE:HD1	1.88	0.56
1:A:387:LEU:HD11	1:A:391:PHE:CZ	2.40	0.56
1:A:417:THR:CB	1:A:418:ARG:HA	2.28	0.56
1:A:83:ARG:N	1:A:83:ARG:HD3	2.19	0.56
2:C:100:MET:CE	2:D:100:MET:HB3	2.33	0.56
2:D:63:PHE:CB	2:D:85:GLU:HG2	2.35	0.56
5:H:89:ILE:CG2	5:H:91:PHE:HE1	2.18	0.56
1:A:100:LEU:HD11	1:A:381:ILE:HG13	1.87	0.56
1:A:38:ILE:HG23	1:A:163:GLU:CG	2.21	0.56
1:B:99:TYR:HB3	1:B:373:LYS:HZ1	1.70	0.56
3:F:57:GLY:O	3:F:58:TYR:HD1	1.88	0.56
3:F:90:LEU:HB3	3:F:98:ARG:CZ	2.35	0.56
1:B:134:VAL:HA	1:B:137:MET:HE2	1.87	0.56
1:A:439:SER:O	1:B:459:ARG:NH1	2.38	0.56
2:C:63:PHE:CB	2:C:85:GLU:HG2	2.35	0.56
1:A:59:ILE:HG23	1:A:62:LYS:HZ3	1.69	0.56
2:C:29:VAL:CG1	2:C:50:PRO:HG3	2.35	0.56
2:C:98:ARG:NH1	2:D:102:ARG:CA	2.67	0.56
2:D:36:CYS:N	2:D:37:HIS:HA	2.19	0.56
5:H:99:ASN:CB	5:H:104:TYR:HB2	2.35	0.56
1:A:140:LYS:HD3	1:A:261:LYS:CE	2.30	0.56
1:A:364:GLU:C	1:A:368:ALA:HB3	2.25	0.56
3:E:12:GLN:O	3:E:13:SER:HB3	2.04	0.56
3:E:13:SER:CB	3:E:75:ILE:HD13	2.35	0.56
3:E:58:TYR:HD2	3:F:86:ASP:CG	2.09	0.56
2:D:5:ARG:CD	2:D:7:LYS:HB2	2.29	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:G:46:ILE:HG22	4:G:66:MET:HE1	1.86	0.56
1:A:104:PRO:HG2	1:A:127:ASP:OD2	2.05	0.56
1:B:112:LYS:O	1:B:116:GLU:HG3	2.05	0.56
1:B:390:TRP:O	1:B:394:GLU:HG2	2.05	0.56
4:G:57:LYS:HG2	4:G:57:LYS:O	2.05	0.56
1:A:52:TYR:HE1	1:A:56:GLU:CB	2.18	0.56
1:B:46:LEU:HG	1:B:143:GLU:HB2	1.86	0.56
1:B:96:LYS:HE3	1:B:377:ALA:CB	2.34	0.56
1:A:270:ILE:CD1	1:B:275:MET:SD	2.93	0.56
1:A:319:THR:O	1:A:319:THR:HG22	2.06	0.56
1:B:294:GLU:CG	2:C:42:ASP:CG	2.74	0.56
1:B:317:VAL:O	1:B:317:VAL:HG23	2.05	0.56
5:H:52:ARG:NE	5:H:54:LEU:N	2.51	0.56
1:B:148:PHE:CB	1:B:205:VAL:HG21	2.35	0.56
1:B:202:ASP:HB2	1:B:242:VAL:CG2	2.35	0.56
3:F:44:GLU:O	3:F:45:GLU:HB3	2.05	0.56
4:G:113:ILE:CB	4:G:121:LYS:HB3	2.35	0.56
1:B:109:SER:H	1:B:115:LEU:HD13	1.69	0.56
3:F:26:TYR:HD1	3:F:26:TYR:O	1.89	0.56
1:A:63:ARG:HD2	1:A:76:ASP:O	2.05	0.56
1:B:319:THR:O	1:B:319:THR:HG22	2.06	0.56
2:D:54:LEU:CA	2:D:57:VAL:HG22	2.35	0.56
1:A:163:GLU:HA	1:A:182:ARG:HG3	1.85	0.56
1:A:148:PHE:CB	1:A:205:VAL:HG21	2.35	0.56
1:A:367:TYR:N	1:A:368:ALA:HB2	2.21	0.56
1:B:177:ILE:HG23	1:B:177:ILE:O	2.05	0.56
1:B:255:SER:HB2	1:B:256:ASP:CA	2.34	0.56
1:B:367:TYR:H	1:B:368:ALA:HB2	1.70	0.56
1:B:100:LEU:HD11	1:B:381:ILE:HG13	1.87	0.56
1:B:46:LEU:HD13	1:B:164:GLU:HB2	1.88	0.56
3:E:79:LYS:HE3	3:F:86:ASP:CA	2.35	0.56
1:B:298:GLU:CB	2:C:42:ASP:HB3	2.36	0.56
4:G:133:ASN:ND2	5:H:42:GLU:HG3	2.20	0.56
1:B:136:ASN:HB2	1:B:145:TRP:CZ3	2.41	0.56
1:B:367:TYR:N	1:B:368:ALA:HB2	2.21	0.56
2:D:75:MET:N	2:D:78:VAL:HG11	2.21	0.56
3:E:88:VAL:O	3:E:97:THR:HG23	2.06	0.56
1:A:111:ASN:ND2	1:A:114:LEU:H	2.04	0.56
1:B:111:ASN:ND2	1:B:114:LEU:H	2.04	0.56
1:B:83:ARG:HD3	1:B:83:ARG:N	2.19	0.56
5:H:116:ARG:NH2	5:H:128:ILE:HD13	2.20	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:290:ASN:HB2	1:B:291:TYR:HB2	1.87	0.56
5:H:54:LEU:HD12	5:H:54:LEU:N	2.18	0.56
1:A:365:LYS:O	1:A:365:LYS:HD3	2.05	0.56
1:B:243:PRO:CB	1:B:244:ILE:HG22	2.36	0.56
1:B:254:VAL:HB	1:B:259:PHE:CD1	2.40	0.56
1:B:46:LEU:HD22	1:B:162:ALA:HA	1.88	0.56
3:E:15:VAL:HG11	3:E:73:ARG:HB2	1.88	0.56
3:E:83:PHE:HB2	3:E:99:ILE:HD13	1.88	0.56
3:F:69:ASP:OD1	3:F:97:THR:HG21	2.06	0.56
1:A:123:ASP:HB2	1:A:124:ASP:HA	1.87	0.56
1:B:123:ASP:HB2	1:B:124:ASP:HA	1.87	0.56
1:A:390:TRP:O	1:A:394:GLU:HG2	2.05	0.56
1:A:177:ILE:HG23	1:A:177:ILE:O	2.05	0.56
1:A:254:VAL:HB	1:A:259:PHE:CD1	2.40	0.56
1:B:165:MET:HG3	1:B:182:ARG:HB2	1.87	0.56
1:A:134:VAL:HA	1:A:137:MET:HE2	1.87	0.56
1:A:439:SER:HB2	1:A:442:THR:HB	1.88	0.56
1:B:422:ASP:C	1:B:425:ILE:HG22	2.25	0.56
1:A:292:ASP:CG	2:C:31:PHE:O	2.43	0.56
1:B:292:ASP:CG	2:D:31:PHE:O	2.43	0.56
1:B:293:GLY:O	2:D:31:PHE:HD2	1.89	0.56
2:C:54:LEU:CA	2:C:57:VAL:HG22	2.35	0.56
2:C:95:ASN:HB2	2:D:97:TYR:HD2	1.70	0.56
5:H:110:PHE:O	5:H:132:LEU:HD12	2.07	0.56
5:H:138:LEU:HB2	5:H:140:ASN:O	2.05	0.56
5:H:143:ILE:HB	5:H:144:ASP:O	2.06	0.56
5:H:15:PHE:CE1	5:H:91:PHE:CG	2.94	0.56
1:A:46:LEU:HD13	1:A:164:GLU:HB2	1.88	0.56
1:A:367:TYR:H	1:A:368:ALA:HB2	1.71	0.56
1:B:365:LYS:O	1:B:365:LYS:HD3	2.05	0.56
3:E:55:PRO:HG2	3:F:100:LYS:HZ3	1.71	0.56
2:C:73:ARG:HG2	3:E:91:SER:CB	2.36	0.56
3:E:98:ARG:HG2	3:E:98:ARG:NH1	2.20	0.56
1:B:63:ARG:HD2	1:B:76:ASP:O	2.05	0.56
1:A:456:GLU:CG	1:B:466:GLN:OE1	2.54	0.55
1:B:284:ILE:HG23	1:B:284:ILE:O	2.06	0.55
5:H:110:PHE:HE1	5:H:150:ILE:CD1	2.18	0.55
1:A:254:VAL:HG12	1:B:85:SER:OG	2.06	0.55
1:B:34:ILE:HG22	1:B:181:LEU:CG	2.35	0.55
1:B:104:PRO:HG2	1:B:127:ASP:OD2	2.05	0.55
1:A:348:ASP:OD2	1:A:350:SER:HB2	2.06	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:438:MET:SD	1:B:434:THR:N	2.78	0.55
1:B:440:LYS:C	1:B:440:LYS:HD3	2.26	0.55
1:A:63:ARG:CZ	1:A:75:VAL:HG11	2.36	0.55
2:C:99:LYS:HZ3	2:D:102:ARG:HG2	1.71	0.55
1:A:41:HIS:HB2	1:A:166:ILE:HG13	1.87	0.55
1:A:34:ILE:HG22	1:A:181:LEU:CG	2.35	0.55
1:B:41:HIS:HB2	1:B:166:ILE:HG13	1.87	0.55
1:B:92:PHE:CZ	1:B:369:LEU:HD22	2.40	0.55
3:E:38:VAL:HG22	3:E:60:ILE:HG22	1.87	0.55
3:E:36:ALA:HB1	3:E:68:ILE:HD13	1.87	0.55
3:E:89:ASP:CB	3:E:95:GLU:HB3	2.36	0.55
1:B:63:ARG:CZ	1:B:75:VAL:HG11	2.36	0.55
1:A:453:PRO:CB	1:B:462:GLU:OE2	2.54	0.55
1:B:298:GLU:CD	2:C:43:LYS:NZ	2.60	0.55
1:A:299:PHE:CD2	2:C:35:GLU:O	2.56	0.55
5:H:42:GLU:HB2	5:H:43:LEU:CA	2.37	0.55
1:A:165:MET:HG3	1:A:182:ARG:HB2	1.87	0.55
1:A:410:LEU:HB3	1:A:412:MET:HG3	1.86	0.55
1:A:48:LYS:HA	1:A:51:ARG:NH1	2.21	0.55
1:B:182:ARG:NH2	1:B:184:TYR:HB3	2.22	0.55
1:B:410:LEU:HB3	1:B:412:MET:HG3	1.86	0.55
2:C:69:GLY:CA	2:C:73:ARG:HB3	2.25	0.55
3:E:109:GLY:HA2	4:G:114:THR:OG1	2.05	0.55
3:E:89:ASP:HA	3:E:96:ILE:O	2.05	0.55
3:F:45:GLU:O	3:F:45:GLU:HG2	2.06	0.55
3:F:8:VAL:HG23	3:F:8:VAL:O	2.06	0.55
4:G:113:ILE:HG21	4:G:121:LYS:CG	2.36	0.55
1:A:68:ASP:CG	1:B:300:THR:CB	2.73	0.55
2:D:87:PRO:HG3	2:D:90:ILE:CD1	2.22	0.55
5:H:58:SER:HB3	5:H:143:ILE:HD12	1.86	0.55
1:B:169:TYR:CD1	1:B:174:ARG:HA	2.40	0.55
1:B:163:GLU:HB2	1:B:182:ARG:HB2	1.89	0.55
1:B:146:HIS:HA	1:B:244:ILE:HG21	1.89	0.55
1:B:367:TYR:CD2	1:B:369:LEU:HD23	2.31	0.55
1:B:48:LYS:HA	1:B:51:ARG:NH1	2.21	0.55
3:E:45:GLU:HA	3:E:47:TYR:CZ	2.41	0.55
3:E:47:TYR:O	3:E:50:GLN:HB2	2.07	0.55
3:F:9:ILE:HB	3:F:76:TYR:HA	1.89	0.55
1:A:335:ARG:HD2	1:A:335:ARG:C	2.27	0.55
1:B:59:ILE:HG23	1:B:62:LYS:HZ3	1.72	0.55
1:B:74:LEU:HD22	1:B:75:VAL:O	2.07	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:335:ARG:HH11	1:B:336:ILE:HA	1.71	0.55
5:H:11:VAL:HG23	5:H:11:VAL:O	2.05	0.55
1:A:460:ILE:HG21	1:B:467:TYR:CA	2.35	0.55
2:C:50:PRO:O	2:C:54:LEU:HB2	2.07	0.55
2:D:33:LYS:CE	2:D:50:PRO:HB3	2.36	0.55
5:H:42:GLU:H	5:H:43:LEU:HA	1.69	0.55
1:B:86:HIS:ND1	1:B:88:TRP:HB2	2.20	0.55
3:F:32:PHE:CG	3:F:67:ARG:HD2	2.41	0.55
4:G:44:VAL:HG21	4:G:74:THR:HB	1.88	0.55
1:A:335:ARG:CZ	1:B:278:PHE:HE1	2.19	0.55
5:H:167:THR:HG23	5:H:167:THR:O	2.07	0.55
1:B:439:SER:HB2	1:B:442:THR:HB	1.88	0.55
1:A:296:PRO:HG2	2:C:37:HIS:CD2	2.41	0.55
4:G:133:ASN:HB2	5:H:56:PRO:CD	2.37	0.55
1:A:46:LEU:HD22	1:A:162:ALA:HA	1.88	0.55
1:B:379:ARG:HA	1:B:382:ARG:O	2.07	0.55
1:B:99:TYR:HD2	1:B:370:LEU:HB3	1.68	0.55
3:F:12:GLN:HG2	3:F:75:ILE:HD13	1.86	0.55
3:F:93:LEU:H	3:F:93:LEU:HD22	1.71	0.55
4:G:25:MET:O	4:G:28:VAL:HA	2.05	0.55
1:B:63:ARG:HD2	1:B:75:VAL:HG12	1.88	0.55
1:B:335:ARG:C	1:B:335:ARG:HD2	2.27	0.55
2:C:98:ARG:HH12	2:D:102:ARG:CB	2.04	0.55
5:H:18:ILE:H	5:H:23:GLY:CA	2.19	0.55
1:A:100:LEU:HD13	1:A:100:LEU:C	2.27	0.55
1:A:86:HIS:ND1	1:A:88:TRP:HB2	2.20	0.55
1:B:147:PRO:HB3	1:B:155:PHE:CZ	2.42	0.55
3:E:55:PRO:HG2	3:F:100:LYS:NZ	2.21	0.55
3:F:9:ILE:HG13	3:F:11:PHE:HE1	1.68	0.55
1:A:335:ARG:HH11	1:A:336:ILE:HA	1.71	0.55
1:B:417:THR:CB	1:B:418:ARG:HA	2.28	0.55
1:A:441:GLU:HG2	1:B:462:GLU:OE2	1.98	0.55
1:A:291:TYR:HE1	2:C:33:LYS:HA	1.70	0.55
2:C:94:LEU:C	2:C:96:PRO:HA	2.27	0.55
5:H:104:TYR:CE1	5:H:160:PHE:CG	2.95	0.55
1:A:163:GLU:HB2	1:A:182:ARG:HB2	1.89	0.55
1:A:187:LYS:HE2	1:A:193:GLU:CB	2.37	0.55
1:A:146:HIS:HA	1:A:244:ILE:HG21	1.88	0.55
1:B:224:ASN:HD22	1:B:227:ARG:HA	1.70	0.55
2:D:73:ARG:CG	3:F:91:SER:CB	2.70	0.55
3:F:88:VAL:HG22	3:F:98:ARG:CB	2.22	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:96:ILE:CG1	3:F:98:ARG:HE	2.20	0.55
3:F:59:ASN:HD22	3:F:99:ILE:HG21	1.72	0.55
3:F:104:ASP:OD1	4:G:34:SER:O	2.24	0.55
1:A:251:GLU:CG	1:B:54:MET:N	2.59	0.55
1:A:284:ILE:O	1:A:284:ILE:HG23	2.06	0.55
1:A:63:ARG:HD2	1:A:75:VAL:HG12	1.88	0.55
1:A:74:LEU:HD22	1:A:75:VAL:O	2.07	0.55
2:C:84:THR:CB	2:D:83:ALA:HA	2.37	0.55
5:H:39:GLY:CA	5:H:43:LEU:HB3	2.36	0.55
5:H:57:GLY:C	5:H:58:SER:N	2.60	0.55
1:B:166:ILE:HG22	1:B:167:VAL:O	2.07	0.55
1:B:179:PHE:CE2	1:B:200:TYR:CD2	2.95	0.55
1:B:178:LEU:CA	1:B:242:VAL:HG13	2.37	0.55
3:F:90:LEU:CB	3:F:98:ARG:HD3	2.33	0.55
1:A:293:GLY:O	2:C:31:PHE:HD2	1.89	0.55
2:C:33:LYS:CE	2:C:50:PRO:HB3	2.36	0.55
2:D:93:LYS:O	2:D:94:LEU:HB2	2.07	0.55
5:H:91:PHE:HE2	5:H:132:LEU:CD2	2.20	0.55
5:H:14:LEU:CD1	5:H:26:PRO:HB3	2.36	0.55
5:H:96:THR:HA	5:H:99:ASN:OD1	2.07	0.55
1:A:147:PRO:HB3	1:A:155:PHE:CZ	2.42	0.55
1:A:379:ARG:HA	1:A:382:ARG:O	2.07	0.55
3:E:32:PHE:HD1	3:E:34:ALA:O	1.90	0.55
3:E:57:GLY:O	3:E:58:TYR:HD1	1.88	0.55
2:D:7:LYS:HD3	3:F:4:GLU:CD	2.26	0.55
3:E:37:HIS:HD2	3:F:89:ASP:N	2.05	0.55
3:F:93:LEU:N	3:F:93:LEU:HD22	2.22	0.55
1:B:284:ILE:HD11	1:B:321:ARG:NH1	2.22	0.54
1:A:289:LYS:HG2	1:B:315:GLY:C	2.27	0.54
1:B:294:GLU:CG	2:C:42:ASP:OD1	2.55	0.54
2:C:93:LYS:O	2:C:94:LEU:HB2	2.07	0.54
2:D:94:LEU:C	2:D:96:PRO:HA	2.27	0.54
5:H:94:VAL:HG13	5:H:104:TYR:CD2	2.41	0.54
5:H:94:VAL:HG22	5:H:104:TYR:HE2	1.72	0.54
1:A:178:LEU:CA	1:A:242:VAL:HG13	2.37	0.54
2:D:70:LEU:HD21	3:F:90:LEU:C	1.90	0.54
3:E:38:VAL:HG22	3:E:60:ILE:HG21	1.87	0.54
3:E:76:TYR:HB2	3:F:87:PRO:HD2	1.89	0.54
3:E:81:VAL:HG21	3:F:86:ASP:CB	2.31	0.54
3:E:84:ILE:HD13	3:E:84:ILE:N	2.18	0.54
4:G:30:GLN:HG2	4:G:34:SER:OG	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:H:37:VAL:HG12	5:H:63:GLY:HA2	1.89	0.54
1:A:165:MET:HB3	1:A:180:ALA:HB1	1.89	0.54
1:A:243:PRO:CB	1:A:244:ILE:HG22	2.36	0.54
1:A:99:TYR:HD2	1:A:370:LEU:HB3	1.68	0.54
3:E:66:ASP:HA	3:E:97:THR:HG21	1.89	0.54
3:F:14:TYR:CZ	3:F:28:TRP:CE2	2.95	0.54
2:D:7:LYS:HD3	3:F:4:GLU:OE2	2.08	0.54
3:F:69:ASP:CG	3:F:97:THR:HG21	2.27	0.54
1:B:216:GLN:HG2	1:B:217:MET:N	2.22	0.54
1:A:216:GLN:HG2	1:A:217:MET:N	2.22	0.54
2:C:94:LEU:HG	2:D:97:TYR:HA	1.89	0.54
1:B:296:PRO:HG2	2:D:37:HIS:CD2	2.41	0.54
2:D:50:PRO:O	2:D:54:LEU:HB2	2.07	0.54
5:H:42:GLU:HB2	5:H:43:LEU:C	2.28	0.54
5:H:15:PHE:CZ	5:H:91:PHE:CE2	2.96	0.54
1:A:165:MET:HB2	1:A:180:ALA:CB	2.37	0.54
1:A:179:PHE:CE2	1:A:200:TYR:CD2	2.95	0.54
1:B:364:GLU:C	1:B:368:ALA:HB3	2.25	0.54
2:C:75:MET:N	2:C:78:VAL:HG11	2.21	0.54
3:E:40:PRO:HB3	3:F:100:LYS:HA	1.89	0.54
3:E:96:ILE:CD1	3:E:98:ARG:HH21	2.19	0.54
1:A:336:ILE:HD13	1:B:278:PHE:CA	2.25	0.54
1:B:348:ASP:OD2	1:B:350:SER:HB2	2.06	0.54
1:A:422:ASP:O	1:A:425:ILE:HG22	2.07	0.54
1:B:425:ILE:HG23	1:B:426:VAL:N	2.22	0.54
1:A:59:ILE:HA	1:A:81:ASN:CG	2.28	0.54
4:G:4:LYS:CB	4:G:5:LEU:HD13	2.38	0.54
5:H:104:TYR:CE1	5:H:160:PHE:HB2	2.43	0.54
1:A:368:ALA:C	1:A:370:LEU:HD22	2.28	0.54
1:A:175:ARG:NH2	1:B:148:PHE:CZ	2.76	0.54
3:F:89:ASP:HA	3:F:96:ILE:O	2.06	0.54
4:G:18:LEU:HB3	4:G:24:LEU:HD21	1.90	0.54
1:B:111:ASN:N	1:B:396:LEU:HD22	2.23	0.54
1:B:59:ILE:HA	1:B:81:ASN:CG	2.28	0.54
4:G:103:VAL:HG12	4:G:104:ALA:N	2.21	0.54
1:A:425:ILE:HG23	1:A:426:VAL:N	2.22	0.54
1:B:421:ASN:O	1:B:425:ILE:HG22	2.08	0.54
1:B:442:THR:HA	1:B:445:ALA:HB2	1.90	0.54
2:C:98:ARG:CB	2:D:97:TYR:CD2	2.78	0.54
4:G:127:VAL:HG22	4:G:129:PHE:CE1	2.43	0.54
4:G:62:GLU:HG2	4:G:63:ASN:H	1.72	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:H:88:GLN:O	5:H:89:ILE:HD13	2.07	0.54
5:H:22:THR:H	5:H:90:LYS:HB2	1.71	0.54
1:A:166:ILE:HG22	1:A:167:VAL:O	2.07	0.54
1:A:224:ASN:HD22	1:A:227:ARG:HA	1.70	0.54
1:B:165:MET:HB2	1:B:180:ALA:CB	2.37	0.54
1:B:165:MET:HB3	1:B:180:ALA:HB1	1.89	0.54
3:E:44:GLU:HG2	3:E:47:TYR:N	2.18	0.54
2:C:70:LEU:HA	3:E:91:SER:HB2	1.90	0.54
3:F:51:GLN:HG3	3:F:52:LEU:HD23	1.89	0.54
3:E:19:ASN:ND2	4:G:81:ASP:OD2	2.41	0.54
1:A:445:ALA:CA	1:A:448:PRO:HB3	2.34	0.54
1:A:311:VAL:O	1:A:311:VAL:HG13	2.08	0.54
2:C:94:LEU:CG	2:D:97:TYR:HA	2.38	0.54
1:B:299:PHE:CD2	2:D:35:GLU:O	2.56	0.54
5:H:22:THR:HG23	5:H:24:SER:H	1.73	0.54
1:A:142:ILE:HG21	1:A:145:TRP:HB2	1.89	0.54
1:A:140:LYS:CB	1:A:257:LEU:HD23	2.35	0.54
1:A:48:LYS:HG3	1:A:49:GLY:N	2.22	0.54
2:C:4:GLN:HA	3:E:1:MET:H3	1.69	0.54
2:C:73:ARG:HE	3:E:91:SER:HB3	1.72	0.54
3:F:74:VAL:HG13	3:F:81:VAL:CG1	2.37	0.54
4:G:32:THR:HB	4:G:44:VAL:O	2.07	0.54
2:C:19:GLU:OE2	2:C:23:GLU:HG2	2.08	0.54
2:C:99:LYS:NZ	2:D:102:ARG:HG3	2.01	0.54
5:H:39:GLY:HA2	5:H:43:LEU:HB3	1.89	0.54
1:B:187:LYS:HE2	1:B:193:GLU:CB	2.37	0.54
1:B:368:ALA:N	1:B:370:LEU:H	2.06	0.54
2:C:70:LEU:HD21	3:E:90:LEU:O	1.97	0.54
3:F:11:PHE:H	3:F:33:THR:HA	1.73	0.54
3:F:58:TYR:O	3:F:83:PHE:HB2	2.07	0.54
1:A:182:ARG:NH2	1:A:184:TYR:HB3	2.22	0.54
1:B:100:LEU:HD13	1:B:100:LEU:C	2.27	0.54
1:B:368:ALA:C	1:B:370:LEU:HD22	2.28	0.54
3:E:77:ARG:HH12	3:F:64:TYR:CA	2.18	0.54
3:F:76:TYR:HE1	3:F:81:VAL:HG12	1.73	0.54
3:F:22:GLY:O	4:G:19:GLU:CD	2.47	0.54
1:A:421:ASN:O	1:A:425:ILE:HG22	2.08	0.54
1:B:291:TYR:HE1	2:D:33:LYS:HA	1.70	0.54
2:D:19:GLU:OE2	2:D:23:GLU:HG2	2.08	0.54
5:H:142:GLU:HG2	5:H:144:ASP:N	2.22	0.54
1:A:162:ALA:HB1	1:A:164:GLU:HA	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:167:VAL:HG22	1:A:246:PRO:HG3	1.90	0.54
1:B:142:ILE:HG21	1:B:145:TRP:HB2	1.89	0.54
1:B:48:LYS:HG3	1:B:49:GLY:N	2.22	0.54
2:D:5:ARG:CB	3:F:3:GLU:CA	2.84	0.54
4:G:21:TYR:CE1	4:G:23:PRO:HG2	2.42	0.54
1:A:338:ASP:OD2	1:B:337:GLN:NE2	2.41	0.54
1:B:422:ASP:O	1:B:425:ILE:HG22	2.07	0.54
2:D:41:ILE:HG22	2:D:42:ASP:N	2.23	0.54
1:A:138:SER:HB3	1:A:256:ASP:CB	2.38	0.54
1:A:199:LEU:C	1:A:200:TYR:HD1	2.11	0.54
1:A:368:ALA:N	1:A:370:LEU:H	2.06	0.54
2:C:73:ARG:HD3	3:E:91:SER:CB	2.38	0.54
3:E:36:ALA:HB3	3:E:76:TYR:CE2	2.42	0.54
3:F:87:PRO:CB	3:F:97:THR:HG23	2.36	0.54
4:G:21:TYR:CD2	4:G:24:LEU:HD12	2.40	0.54
4:G:49:GLN:HB3	4:G:69:HIS:CE1	2.40	0.54
1:A:59:ILE:HG13	1:A:81:ASN:CB	2.39	0.53
1:A:138:SER:HB3	1:A:256:ASP:HB2	1.90	0.53
1:A:88:TRP:CH2	1:A:369:LEU:HD21	2.43	0.53
1:A:96:LYS:HG2	1:A:373:LYS:HB2	1.89	0.53
1:B:88:TRP:CH2	1:B:369:LEU:HD21	2.43	0.53
1:A:332:GLU:OE2	1:B:330:ALA:HB2	2.08	0.53
5:H:31:TYR:HE1	5:H:70:LYS:HG3	1.72	0.53
3:F:24:LYS:HG2	3:F:25:THR:N	2.21	0.53
1:A:231:THR:HA	1:A:237:ILE:HG22	1.90	0.53
4:G:86:VAL:HG13	4:G:87:LEU:CD1	2.37	0.53
1:B:311:VAL:O	1:B:311:VAL:HG13	2.08	0.53
2:C:99:LYS:HA	2:D:100:MET:C	2.27	0.53
2:C:99:LYS:HA	2:D:100:MET:O	2.07	0.53
2:D:29:VAL:CG1	2:D:50:PRO:HG3	2.35	0.53
1:A:89:HIS:ND1	1:A:260:TYR:HD2	2.07	0.53
1:B:138:SER:HB3	1:B:256:ASP:HB2	1.90	0.53
1:B:148:PHE:HZ	1:B:156:ASP:OD2	1.91	0.53
1:B:167:VAL:HG22	1:B:246:PRO:HG3	1.90	0.53
3:E:59:ASN:H	3:F:100:LYS:CE	2.19	0.53
3:F:10:THR:O	3:F:75:ILE:HG22	2.09	0.53
3:F:87:PRO:HA	3:F:98:ARG:O	2.09	0.53
1:B:76:ASP:CG	1:B:79:LYS:HG2	2.29	0.53
1:A:442:THR:HA	1:A:445:ALA:HB2	1.90	0.53
1:B:292:ASP:OD2	2:D:31:PHE:O	2.25	0.53
4:G:61:GLY:HA2	5:H:139:LYS:CD	2.38	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:H:94:VAL:HG12	5:H:95:ASP:O	2.09	0.53
5:H:97:VAL:HG13	5:H:97:VAL:O	2.08	0.53
1:A:148:PHE:HZ	1:A:156:ASP:OD2	1.91	0.53
1:A:250:ASN:ND2	1:B:90:LYS:HD2	2.24	0.53
1:A:89:HIS:HD1	1:A:260:TYR:HD2	1.56	0.53
1:B:162:ALA:HB1	1:B:164:GLU:HA	1.90	0.53
1:B:178:LEU:CB	1:B:242:VAL:HG11	2.38	0.53
1:A:371:ASP:O	1:B:363:LEU:CD2	2.54	0.53
4:G:41:TYR:CZ	4:G:43:TYR:CE1	2.96	0.53
4:G:46:ILE:HG22	4:G:66:MET:CE	2.38	0.53
4:G:86:VAL:HG13	4:G:87:LEU:HD12	1.88	0.53
1:A:84:THR:HG22	1:A:85:SER:N	2.22	0.53
1:A:311:VAL:HG22	1:A:312:SER:O	2.09	0.53
1:B:199:LEU:C	1:B:200:TYR:HD1	2.11	0.53
1:B:138:SER:HB3	1:B:256:ASP:CB	2.38	0.53
2:C:70:LEU:H	3:E:93:LEU:N	2.05	0.53
2:C:4:GLN:HB3	2:C:8:ARG:HB3	1.89	0.53
2:D:5:ARG:CA	3:F:3:GLU:HA	2.27	0.53
2:D:70:LEU:N	3:F:93:LEU:CA	2.70	0.53
1:A:456:GLU:CD	1:B:466:GLN:OE1	2.46	0.53
1:A:418:ARG:NH1	1:B:426:VAL:HG21	2.22	0.53
1:A:289:LYS:CG	1:B:315:GLY:HA3	2.38	0.53
1:B:294:GLU:HG3	2:C:42:ASP:OD1	2.08	0.53
1:B:311:VAL:HG22	1:B:312:SER:O	2.09	0.53
1:B:89:HIS:HD1	1:B:260:TYR:HD2	1.55	0.53
2:D:21:LEU:C	2:D:21:LEU:HD13	2.28	0.53
3:E:74:VAL:CG1	3:E:76:TYR:HE1	2.20	0.53
3:E:74:VAL:C	3:E:75:ILE:HD12	2.29	0.53
3:E:48:LYS:NZ	3:F:48:LYS:HE3	2.23	0.53
3:F:11:PHE:HE2	3:F:68:ILE:CG2	2.22	0.53
4:G:113:ILE:HD12	4:G:114:THR:N	2.23	0.53
4:G:117:ASP:CB	4:G:119:VAL:HG23	2.18	0.53
3:E:105:GLY:C	4:G:41:TYR:CE2	2.70	0.53
2:C:21:LEU:HD13	2:C:21:LEU:C	2.28	0.53
1:A:378:GLU:HG2	1:B:98:GLN:OE1	2.09	0.53
4:G:109:LEU:C	4:G:109:LEU:HD13	2.29	0.53
4:G:52:THR:CG2	4:G:53:PRO:HD2	2.39	0.53
1:A:453:PRO:CA	1:B:462:GLU:OE2	2.57	0.53
1:A:284:ILE:HD11	1:A:321:ARG:NH1	2.22	0.53
1:A:292:ASP:OD2	2:C:31:PHE:O	2.25	0.53
2:C:100:MET:CE	2:D:100:MET:CG	2.86	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:142:ILE:N	1:A:143:GLU:HA	2.23	0.53
2:C:12:ILE:HA	3:E:93:LEU:CG	2.39	0.53
2:C:5:ARG:CD	2:C:7:LYS:HB2	2.29	0.53
3:E:79:LYS:HB3	3:F:87:PRO:HD3	1.90	0.53
3:F:1:MET:HG2	3:F:2:TYR:N	2.23	0.53
3:F:70:LYS:CE	3:F:71:LYS:HB2	2.39	0.53
3:F:69:ASP:CG	3:F:87:PRO:HG3	2.27	0.53
3:F:9:ILE:CG1	3:F:11:PHE:HE1	2.21	0.53
4:G:32:THR:HB	4:G:44:VAL:H	1.73	0.53
1:B:235:GLN:HA	1:B:235:GLN:OE1	2.08	0.53
2:C:34:ASP:H	2:C:35:GLU:HA	1.72	0.53
2:C:90:ILE:CG1	2:D:91:LEU:CG	2.58	0.53
5:H:39:GLY:O	5:H:43:LEU:HB3	2.07	0.53
5:H:90:LYS:CE	5:H:150:ILE:HD11	2.38	0.53
1:A:178:LEU:CB	1:A:242:VAL:HG11	2.38	0.53
1:A:379:ARG:CD	1:B:94:ASP:CB	2.79	0.53
4:G:43:TYR:CE1	4:G:71:TRP:CG	2.97	0.53
1:B:195:GLN:NE2	1:B:195:GLN:HA	2.24	0.53
3:E:9:ILE:CD1	3:E:11:PHE:HZ	2.21	0.53
1:A:320:LEU:HD21	1:B:318:ASP:HA	1.91	0.53
1:A:225:ASN:HB2	1:A:226:PRO:CA	2.34	0.53
3:F:73:ARG:HG2	3:F:75:ILE:HD12	1.89	0.53
3:F:75:ILE:HG21	3:F:78:GLY:HA2	1.91	0.53
3:E:79:LYS:HG2	3:F:86:ASP:HA	1.90	0.53
1:A:121:LEU:CD1	1:A:124:ASP:H	2.18	0.53
1:A:209:GLU:HA	1:A:209:GLU:OE1	2.08	0.53
5:H:120:ASP:O	5:H:126:VAL:HG23	2.09	0.53
2:C:41:ILE:HG22	2:C:42:ASP:N	2.23	0.53
5:H:14:LEU:CD1	5:H:16:GLN:HE21	2.21	0.53
1:A:171:ASP:HB3	1:A:178:LEU:HD11	1.90	0.53
1:A:146:HIS:HB2	1:A:244:ILE:HG21	1.89	0.53
3:E:81:VAL:HG12	3:E:82:THR:N	2.24	0.53
3:E:2:TYR:CZ	3:F:95:GLU:HA	2.44	0.53
3:F:9:ILE:CD1	3:F:11:PHE:HE1	2.21	0.53
1:A:76:ASP:CG	1:A:79:LYS:HG2	2.29	0.53
1:A:80:THR:HG22	1:A:81:ASN:H	1.73	0.53
1:A:314:ASP:OD2	2:D:97:TYR:OH	2.27	0.53
5:H:100:GLU:HB3	5:H:103:LYS:CB	2.38	0.53
1:B:142:ILE:N	1:B:143:GLU:HA	2.23	0.53
3:E:38:VAL:CG2	3:E:60:ILE:HG22	2.39	0.53
4:G:42:PRO:HB3	4:G:72:GLY:CA	2.28	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:21:GLU:HG3	3:E:22:GLY:N	2.19	0.53
5:H:18:ILE:HG12	5:H:23:GLY:HA2	1.91	0.52
1:B:146:HIS:HB2	1:B:244:ILE:HG21	1.89	0.52
1:A:199:LEU:HB2	1:A:208:TYR:CE2	2.44	0.52
1:B:199:LEU:HB2	1:B:208:TYR:CE2	2.44	0.52
3:E:15:VAL:HG13	3:E:29:VAL:HG23	1.91	0.52
3:F:41:ILE:HG23	3:F:53:GLN:HG2	1.91	0.52
1:B:59:ILE:HG13	1:B:81:ASN:CB	2.38	0.52
1:A:195:GLN:NE2	1:A:195:GLN:HA	2.24	0.52
1:A:433:VAL:HB	1:A:440:LYS:CG	2.38	0.52
2:C:84:THR:OG1	2:D:86:ILE:HD11	2.10	0.52
2:C:98:ARG:NH2	2:D:102:ARG:HG2	2.23	0.52
1:B:140:LYS:CB	1:B:257:LEU:HD23	2.35	0.52
1:B:84:THR:HG22	1:B:85:SER:N	2.22	0.52
1:B:89:HIS:ND1	1:B:260:TYR:HD2	2.06	0.52
2:C:11:SER:CB	3:E:93:LEU:HB2	2.39	0.52
3:E:47:TYR:HB3	3:E:50:GLN:CD	2.30	0.52
3:F:7:ASP:CB	3:F:9:ILE:HG12	2.40	0.52
3:F:96:ILE:CD1	3:F:98:ARG:HE	2.22	0.52
1:B:209:GLU:OE1	1:B:209:GLU:HA	2.08	0.52
1:A:132:GLU:HA	1:A:132:GLU:OE1	2.10	0.52
5:H:119:SER:CB	5:H:128:ILE:HG12	2.39	0.52
2:C:25:VAL:HG12	2:C:29:VAL:HG23	1.90	0.52
4:G:131:ILE:O	4:G:131:ILE:HG13	2.09	0.52
5:H:18:ILE:H	5:H:23:GLY:HA3	1.74	0.52
5:H:64:GLU:OE1	5:H:64:GLU:HA	2.08	0.52
1:B:174:ARG:NH1	1:B:174:ARG:HG2	2.25	0.52
1:B:99:TYR:HB2	1:B:370:LEU:CD1	2.38	0.52
2:D:4:GLN:HB3	2:D:8:ARG:HB3	1.90	0.52
3:F:65:ASP:HB3	3:F:68:ILE:CG2	2.30	0.52
1:B:111:ASN:CG	1:B:399:THR:HG21	2.30	0.52
1:A:289:LYS:HB3	1:B:315:GLY:HA3	1.91	0.52
2:C:94:LEU:HD12	2:C:94:LEU:N	2.25	0.52
2:D:94:LEU:HD12	2:D:94:LEU:N	2.25	0.52
5:H:110:PHE:CE1	5:H:150:ILE:HD12	2.45	0.52
5:H:22:THR:O	5:H:22:THR:HG23	2.09	0.52
1:B:33:MET:O	1:B:37:LEU:HG	2.09	0.52
3:E:58:TYR:HB3	3:F:100:LYS:CG	2.40	0.52
3:E:93:LEU:H	3:E:93:LEU:CD2	2.21	0.52
3:E:104:ASP:CA	4:G:119:VAL:HG21	2.39	0.52
1:A:111:ASN:CG	1:A:399:THR:HG21	2.30	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:121:LEU:CD1	1:B:124:ASP:H	2.18	0.52
1:A:324:ILE:CB	1:A:325:PRO:HD3	2.36	0.52
2:C:9:LEU:HD13	2:D:20:TYR:HE2	1.74	0.52
2:C:21:LEU:HD13	2:C:21:LEU:O	2.10	0.52
1:B:433:VAL:HB	1:B:440:LYS:CG	2.38	0.52
1:A:367:TYR:CZ	1:A:372:LEU:HB2	2.45	0.52
1:A:99:TYR:HB2	1:A:370:LEU:CD1	2.38	0.52
3:E:58:TYR:HA	3:F:100:LYS:NZ	2.24	0.52
2:D:7:LYS:HG3	3:F:4:GLU:HA	1.91	0.52
3:F:14:TYR:HB3	3:F:73:ARG:NE	2.24	0.52
4:G:22:GLN:CG	4:G:23:PRO:HD3	2.38	0.52
4:G:33:GLU:HG2	4:G:34:SER:N	2.25	0.52
4:G:44:VAL:CG2	4:G:74:THR:H	2.14	0.52
1:A:308:VAL:HG22	1:A:309:ILE:N	2.25	0.52
3:F:17:GLN:HB3	3:F:19:ASN:ND2	2.21	0.52
1:A:211:ILE:HG13	1:A:212:ASP:OD1	2.10	0.52
1:B:190:MET:HE1	1:B:194:THR:HG21	1.91	0.52
2:D:33:LYS:CD	2:D:50:PRO:HB3	2.40	0.52
4:G:127:VAL:HG21	4:G:129:PHE:CZ	2.45	0.52
5:H:91:PHE:CD2	5:H:111:ALA:HB1	2.44	0.52
1:B:179:PHE:HD2	1:B:200:TYR:HB2	1.69	0.52
2:D:5:ARG:HD3	2:D:7:LYS:HE3	1.92	0.52
3:E:40:PRO:CB	3:F:100:LYS:HB2	2.40	0.52
2:D:5:ARG:HB3	3:F:3:GLU:O	2.08	0.52
4:G:18:LEU:O	4:G:24:LEU:HD22	2.10	0.52
1:A:341:TYR:CA	1:A:344:ALA:HB2	2.40	0.52
1:B:132:GLU:HA	1:B:132:GLU:OE1	2.10	0.52
3:E:9:ILE:HD11	3:E:11:PHE:HZ	1.75	0.52
1:A:151:GLU:HA	1:A:151:GLU:OE1	2.10	0.52
1:A:292:ASP:OD1	2:C:33:LYS:O	2.26	0.52
1:B:367:TYR:CZ	1:B:372:LEU:HB2	2.45	0.52
2:C:4:GLN:HG2	2:D:68:ALA:HB1	1.91	0.52
1:A:329:ALA:O	1:A:333:LEU:HG	2.09	0.52
1:B:211:ILE:HG13	1:B:212:ASP:OD1	2.10	0.52
1:B:232:LYS:N	1:B:237:ILE:HB	2.24	0.52
1:B:231:THR:HA	1:B:237:ILE:HG22	1.90	0.52
1:B:130:LEU:O	1:B:134:VAL:HG22	2.10	0.52
1:A:441:GLU:HG2	1:A:456:GLU:CB	2.38	0.52
2:C:30:GLU:HA	2:C:40:PHE:CZ	2.45	0.52
5:H:43:LEU:HD22	5:H:43:LEU:C	2.31	0.52
1:A:146:HIS:CB	1:A:244:ILE:HG21	2.40	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:4:GLN:HB2	2:C:8:ARG:NH2	2.25	0.52
2:D:21:LEU:HD13	2:D:21:LEU:O	2.09	0.52
2:D:4:GLN:HB2	2:D:8:ARG:NH2	2.25	0.52
3:E:58:TYR:HB3	3:F:100:LYS:HG2	1.92	0.52
1:B:80:THR:HG22	1:B:81:ASN:H	1.73	0.52
1:B:101:VAL:HG23	1:B:102:GLY:H	1.73	0.52
1:A:101:VAL:HG23	1:A:102:GLY:H	1.73	0.52
1:B:151:GLU:OE1	1:B:151:GLU:HA	2.10	0.52
1:B:439:SER:CB	1:B:442:THR:HB	2.40	0.52
1:B:308:VAL:HG22	1:B:309:ILE:N	2.25	0.52
2:D:35:GLU:OE1	2:D:37:HIS:HA	2.10	0.52
2:C:94:LEU:HB3	2:D:97:TYR:CE1	2.45	0.52
5:H:22:THR:HB	5:H:108:PHE:CZ	2.44	0.52
5:H:58:SER:HA	5:H:143:ILE:HD11	1.91	0.52
1:A:159:ILE:HD13	1:A:159:ILE:C	2.30	0.52
1:B:146:HIS:CB	1:B:244:ILE:HG21	2.40	0.52
1:B:88:TRP:CD1	1:B:92:PHE:CZ	2.98	0.52
3:E:108:VAL:HG22	3:E:109:GLY:N	2.24	0.52
3:F:13:SER:HA	3:F:73:ARG:HB3	1.91	0.52
4:G:75:THR:O	4:G:75:THR:HG23	2.10	0.52
1:B:387:LEU:HG	1:B:391:PHE:CZ	2.45	0.52
1:A:165:MET:CB	1:A:180:ALA:HB1	2.40	0.51
1:A:222:GLY:HA2	1:A:223:GLU:C	2.30	0.51
1:A:368:ALA:O	1:A:370:LEU:HD22	2.10	0.51
3:E:31:GLU:HG2	3:E:67:ARG:O	2.11	0.51
3:F:75:ILE:HA	3:F:79:LYS:O	2.09	0.51
3:F:9:ILE:HG13	3:F:34:ALA:O	2.10	0.51
1:B:32:THR:HG22	1:B:36:LYS:HE2	1.91	0.51
1:A:249:ASN:HD22	1:A:249:ASN:H	1.56	0.51
1:B:249:ASN:H	1:B:249:ASN:HD22	1.56	0.51
1:A:387:LEU:HG	1:A:391:PHE:CZ	2.45	0.51
4:G:63:ASN:N	5:H:139:LYS:HB2	2.25	0.51
5:H:104:TYR:HE1	5:H:160:PHE:HB2	1.76	0.51
1:B:159:ILE:C	1:B:159:ILE:HD13	2.30	0.51
1:B:165:MET:CB	1:B:180:ALA:HB1	2.40	0.51
1:B:147:PRO:HD2	1:B:243:PRO:CB	2.40	0.51
3:E:84:ILE:CG1	3:E:103:GLU:HG2	2.40	0.51
4:G:124:ILE:C	4:G:124:ILE:HD13	2.31	0.51
3:F:17:GLN:OE1	3:F:24:LYS:HB3	2.10	0.51
1:A:232:LYS:N	1:A:237:ILE:HB	2.24	0.51
1:A:130:LEU:O	1:A:134:VAL:HG22	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:441:GLU:O	1:A:444:VAL:HB	2.10	0.51
1:B:441:GLU:HG2	1:B:456:GLU:CB	2.38	0.51
1:B:466:GLN:CG	1:B:467:TYR:HB2	2.39	0.51
1:A:460:ILE:HD12	1:B:466:GLN:NE2	2.23	0.51
5:H:110:PHE:HE1	5:H:150:ILE:HD12	1.75	0.51
5:H:145:THR:HG23	5:H:146:LEU:HD23	1.91	0.51
5:H:52:ARG:HD2	5:H:52:ARG:C	2.30	0.51
5:H:37:VAL:HG11	5:H:63:GLY:CA	2.40	0.51
1:B:222:GLY:HA2	1:B:223:GLU:C	2.30	0.51
1:B:368:ALA:O	1:B:370:LEU:HD22	2.10	0.51
1:B:376:MET:O	1:B:379:ARG:HB2	2.10	0.51
2:C:4:GLN:CD	2:C:5:ARG:H	2.14	0.51
2:D:14:ASN:HD21	2:D:21:LEU:CG	2.23	0.51
3:E:44:GLU:H	3:E:44:GLU:CD	2.14	0.51
3:E:60:ILE:O	3:E:98:ARG:HA	2.09	0.51
3:F:12:GLN:NE2	3:F:28:TRP:HZ3	2.09	0.51
1:A:235:GLN:HA	1:A:235:GLN:OE1	2.08	0.51
1:A:439:SER:CB	1:A:442:THR:H	2.24	0.51
5:H:91:PHE:CE1	5:H:111:ALA:HB1	2.46	0.51
5:H:14:LEU:HG	5:H:160:PHE:CE1	2.45	0.51
4:G:3:TRP:HZ2	5:H:52:ARG:HH21	1.51	0.51
1:A:150:ASP:HB2	1:A:156:ASP:HB2	1.91	0.51
1:A:33:MET:O	1:A:37:LEU:HG	2.09	0.51
1:A:100:LEU:HD23	1:A:377:ALA:HB3	1.93	0.51
2:C:7:LYS:NZ	3:E:4:GLU:CD	2.61	0.51
3:F:38:VAL:HG22	3:F:60:ILE:HB	1.93	0.51
3:F:60:ILE:HG13	3:F:83:PHE:HE2	1.76	0.51
3:F:6:ARG:HH11	3:F:33:THR:HG23	1.74	0.51
2:D:70:LEU:N	3:F:93:LEU:HA	2.25	0.51
1:A:110:ASP:HA	1:A:409:GLU:CD	2.30	0.51
1:B:324:ILE:CB	1:B:325:PRO:HD3	2.36	0.51
1:B:439:SER:CB	1:B:442:THR:H	2.24	0.51
1:B:283:GLN:CD	1:B:284:ILE:HG22	2.31	0.51
1:A:174:ARG:HG2	1:A:174:ARG:NH1	2.25	0.51
1:B:38:ILE:HG12	1:B:181:LEU:O	2.11	0.51
1:B:88:TRP:CD2	1:B:92:PHE:CE1	2.99	0.51
2:C:5:ARG:HD3	2:C:7:LYS:HE3	1.92	0.51
4:G:73:GLY:CA	4:G:76:ARG:HH21	2.22	0.51
1:B:329:ALA:O	1:B:333:LEU:HG	2.09	0.51
1:B:110:ASP:CB	1:B:396:LEU:HD13	2.22	0.51
1:B:341:TYR:CA	1:B:344:ALA:HB2	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:62:LYS:HD3	1:A:63:ARG:H	1.75	0.51
4:G:128:ARG:N	4:G:128:ARG:HD2	2.20	0.51
1:A:163:GLU:HB3	1:A:165:MET:N	2.24	0.51
1:B:95:GLN:HG2	1:B:370:LEU:HD13	1.92	0.51
3:E:80:ILE:O	3:E:80:ILE:HG13	2.10	0.51
3:E:65:ASP:HB3	3:E:97:THR:C	2.31	0.51
3:E:40:PRO:HG3	3:F:100:LYS:CB	2.41	0.51
3:F:14:TYR:H	3:F:73:ARG:HB3	1.75	0.51
4:G:41:TYR:CE1	4:G:43:TYR:CE1	2.98	0.51
1:A:394:GLU:O	1:A:397:ARG:HB3	2.11	0.51
1:A:460:ILE:CG1	1:B:467:TYR:CG	2.84	0.51
1:B:441:GLU:O	1:B:444:VAL:HB	2.10	0.51
1:A:439:SER:OG	1:B:459:ARG:CD	2.58	0.51
2:D:30:GLU:HA	2:D:40:PHE:CZ	2.45	0.51
5:H:108:PHE:CB	5:H:150:ILE:HG23	2.40	0.51
1:A:147:PRO:HD2	1:A:243:PRO:CB	2.40	0.51
1:A:46:LEU:CG	1:A:143:GLU:H	2.23	0.51
1:A:88:TRP:CD2	1:A:92:PHE:CE1	2.99	0.51
1:A:96:LYS:HB2	1:A:373:LYS:CB	2.38	0.51
1:B:150:ASP:HB2	1:B:156:ASP:HB2	1.91	0.51
1:B:163:GLU:HB3	1:B:165:MET:N	2.24	0.51
1:B:34:ILE:HG21	1:B:199:LEU:HD13	1.92	0.51
1:B:382:ARG:HA	1:B:383:ALA:C	2.31	0.51
2:D:4:GLN:CD	2:D:5:ARG:H	2.14	0.51
3:E:43:GLN:HE22	3:F:53:GLN:CD	2.14	0.51
3:E:5:PHE:CZ	3:F:64:TYR:CE1	2.98	0.51
1:B:110:ASP:HA	1:B:409:GLU:CD	2.30	0.51
3:F:22:GLY:C	4:G:19:GLU:HB2	2.30	0.51
4:G:98:GLU:H	5:H:49:LYS:HD3	1.76	0.51
1:A:175:ARG:HH22	1:B:148:PHE:HZ	1.58	0.51
1:A:382:ARG:HA	1:A:383:ALA:C	2.31	0.51
1:B:225:ASN:HB2	1:B:226:PRO:CA	2.34	0.51
2:C:8:ARG:NH1	2:D:64:TYR:OH	2.43	0.51
3:E:48:LYS:HZ3	3:F:48:LYS:HE3	1.75	0.51
3:E:79:LYS:CD	3:F:69:ASP:HB3	2.40	0.51
3:F:75:ILE:HG13	3:F:80:ILE:HG22	1.91	0.51
3:F:88:VAL:H	3:F:98:ARG:H	1.58	0.51
3:E:104:ASP:CB	4:G:119:VAL:HG21	2.41	0.51
4:G:124:ILE:O	4:G:124:ILE:HG23	2.10	0.51
1:A:111:ASN:N	1:A:396:LEU:HD22	2.23	0.51
1:A:439:SER:CB	1:A:442:THR:HB	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:63:ARG:HG2	1:A:79:LYS:CB	2.22	0.51
1:A:69:ALA:HB2	1:B:300:THR:HG23	1.92	0.51
1:A:64:ARG:HH21	1:B:284:ILE:CG1	2.24	0.51
1:B:292:ASP:OD1	2:D:33:LYS:O	2.26	0.51
2:C:33:LYS:CD	2:C:50:PRO:HB3	2.40	0.51
2:C:35:GLU:OE1	2:C:37:HIS:HA	2.10	0.51
1:B:298:GLU:CD	2:C:43:LYS:HG2	2.28	0.51
2:D:34:ASP:H	2:D:35:GLU:HA	1.72	0.51
2:C:93:LYS:CE	2:D:96:PRO:O	2.58	0.51
4:G:61:GLY:HA2	5:H:139:LYS:H	1.76	0.51
5:H:26:PRO:HB2	5:H:162:GLN:OE1	2.11	0.51
1:A:243:PRO:HB2	1:A:244:ILE:HG22	1.93	0.51
1:A:29:PRO:HG3	1:A:170:LYS:CD	2.41	0.51
1:A:34:ILE:HG21	1:A:199:LEU:HD13	1.92	0.51
1:A:95:GLN:HG2	1:A:370:LEU:HD13	1.92	0.51
1:A:88:TRP:CD1	1:A:92:PHE:CZ	2.98	0.51
1:B:186:TYR:O	1:B:196:LYS:HE3	2.11	0.51
3:E:14:TYR:OH	3:E:26:TYR:HB2	2.10	0.51
4:G:33:GLU:HB2	4:G:46:ILE:H	1.76	0.51
5:H:29:PRO:HA	5:H:30:ALA:O	2.10	0.51
1:B:294:GLU:CB	2:C:42:ASP:CG	2.77	0.51
2:C:54:LEU:HD23	2:C:54:LEU:C	2.32	0.51
2:C:63:PHE:HB2	2:C:85:GLU:HG2	1.93	0.51
2:D:25:VAL:HG12	2:D:29:VAL:HG23	1.90	0.51
5:H:47:GLN:HE22	5:H:55:GLY:N	2.09	0.51
1:A:186:TYR:O	1:A:196:LYS:HE3	2.11	0.51
1:A:204:HIS:CD2	1:A:206:TYR:CE1	2.99	0.51
1:B:204:HIS:CD2	1:B:206:TYR:CE1	2.99	0.51
1:B:239:TRP:HB2	1:B:241:ARG:O	2.11	0.51
4:G:44:VAL:CG2	4:G:74:THR:HB	2.41	0.51
1:B:63:ARG:HG2	1:B:79:LYS:CB	2.22	0.51
1:A:210:LYS:C	1:A:210:LYS:HD3	2.31	0.51
1:B:195:GLN:O	1:B:210:LYS:HB2	2.11	0.51
1:B:345:GLN:CD	1:B:345:GLN:H	2.13	0.51
1:A:460:ILE:HG13	1:B:467:TYR:CG	2.46	0.50
1:A:283:GLN:CD	1:A:284:ILE:HG22	2.31	0.50
4:G:100:PHE:CD2	5:H:47:GLN:CG	2.94	0.50
5:H:15:PHE:CZ	5:H:91:PHE:CD2	2.99	0.50
5:H:91:PHE:CG	5:H:111:ALA:CB	2.94	0.50
1:A:96:LYS:HA	1:A:373:LYS:CG	2.41	0.50
1:A:46:LEU:HD23	1:A:143:GLU:H	1.76	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:42:SER:C	3:E:43:GLN:HG3	2.30	0.50
3:E:46:TYR:CG	3:E:48:LYS:HE2	2.46	0.50
3:E:96:ILE:HG13	3:E:96:ILE:O	2.09	0.50
1:A:332:GLU:CG	1:B:326:VAL:HG13	2.40	0.50
1:B:62:LYS:HG3	1:B:81:ASN:HA	1.93	0.50
1:A:466:GLN:CG	1:A:467:TYR:HB2	2.39	0.50
1:A:457:LEU:C	1:A:457:LEU:HD23	2.31	0.50
1:A:62:LYS:HG3	1:A:81:ASN:HA	1.93	0.50
2:D:87:PRO:CG	2:D:90:ILE:HB	2.41	0.50
5:H:108:PHE:CE2	5:H:153:VAL:HG11	2.47	0.50
1:A:148:PHE:CE1	1:A:156:ASP:HB3	2.47	0.50
1:A:376:MET:O	1:A:379:ARG:HB2	2.10	0.50
1:A:38:ILE:HG12	1:A:181:LEU:O	2.11	0.50
1:A:89:HIS:HE1	1:A:257:LEU:HG	1.75	0.50
1:B:221:TYR:HB2	1:B:222:GLY:HA2	1.93	0.50
3:E:61:TYR:CD1	3:E:96:ILE:HB	2.46	0.50
3:F:46:TYR:CD2	3:F:48:LYS:HE2	2.46	0.50
3:E:43:GLN:HE22	3:F:53:GLN:NE2	2.09	0.50
3:F:76:TYR:CE1	3:F:81:VAL:HG12	2.47	0.50
5:H:66:THR:O	5:H:67:TYR:HD1	1.93	0.50
3:F:24:LYS:CG	3:F:25:THR:H	2.19	0.50
1:A:345:GLN:CD	1:A:345:GLN:H	2.13	0.50
1:A:439:SER:CA	1:B:459:ARG:HD2	2.40	0.50
1:A:290:ASN:O	1:A:317:VAL:HG11	2.12	0.50
2:D:54:LEU:C	2:D:54:LEU:HD23	2.32	0.50
5:H:53:ILE:HG13	5:H:53:ILE:O	2.10	0.50
5:H:52:ARG:NH2	5:H:54:LEU:HD21	2.03	0.50
1:A:239:TRP:HB2	1:A:241:ARG:O	2.11	0.50
1:A:379:ARG:HB2	1:A:380:LYS:HZ3	1.76	0.50
1:B:142:ILE:HB	1:B:144:TYR:N	2.26	0.50
1:B:46:LEU:CG	1:B:143:GLU:H	2.23	0.50
1:B:46:LEU:HD23	1:B:143:GLU:H	1.76	0.50
1:B:373:LYS:HE3	1:B:374:ALA:CA	2.41	0.50
3:E:6:ARG:NE	3:E:6:ARG:HA	2.27	0.50
3:F:43:GLN:H	3:F:53:GLN:CB	2.18	0.50
4:G:24:LEU:O	4:G:28:VAL:HG23	2.12	0.50
1:B:63:ARG:HD2	1:B:75:VAL:CG1	2.42	0.50
1:B:394:GLU:O	1:B:397:ARG:HB3	2.11	0.50
1:A:417:THR:HB	1:A:419:ILE:N	2.27	0.50
2:C:87:PRO:CG	2:C:90:ILE:HB	2.41	0.50
2:C:94:LEU:CB	2:D:97:TYR:CG	2.78	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:146:HIS:CD2	1:A:200:TYR:CD2	2.99	0.50
1:A:255:SER:HB2	1:A:256:ASP:CA	2.34	0.50
1:B:158:VAL:HG12	1:B:159:ILE:N	2.27	0.50
1:B:96:LYS:HA	1:B:373:LYS:CG	2.41	0.50
1:B:100:LEU:HD23	1:B:377:ALA:HB3	1.93	0.50
4:G:32:THR:HG22	4:G:37:LYS:HA	1.91	0.50
1:A:121:LEU:HD12	1:A:124:ASP:N	2.23	0.50
1:B:62:LYS:HE3	1:B:80:THR:C	2.32	0.50
1:A:438:MET:HA	1:A:439:SER:C	2.31	0.50
1:B:433:VAL:CG2	1:B:440:LYS:HG3	2.42	0.50
1:B:445:ALA:CA	1:B:448:PRO:HB3	2.34	0.50
1:B:288:LEU:HD23	1:B:288:LEU:N	2.27	0.50
4:G:134:ASN:CA	5:H:138:LEU:O	2.60	0.50
1:A:29:PRO:HG3	1:A:170:LYS:CE	2.42	0.50
1:A:175:ARG:CZ	1:B:148:PHE:HE2	2.24	0.50
1:B:146:HIS:CD2	1:B:200:TYR:CD2	2.99	0.50
3:E:46:TYR:CD2	3:E:48:LYS:HE2	2.46	0.50
3:F:104:ASP:OD1	4:G:34:SER:C	2.49	0.50
5:H:65:VAL:HG12	5:H:66:THR:N	2.27	0.50
1:A:235:GLN:HG3	1:A:236:ALA:N	2.27	0.50
1:B:417:THR:HB	1:B:419:ILE:N	2.27	0.50
1:A:62:LYS:HE3	1:A:80:THR:C	2.32	0.50
2:D:49:ILE:CD1	2:D:54:LEU:HD12	2.40	0.50
1:A:158:VAL:HG12	1:A:159:ILE:N	2.27	0.50
1:A:221:TYR:HB2	1:A:222:GLY:HA2	1.93	0.50
1:A:373:LYS:HE3	1:A:374:ALA:CA	2.41	0.50
1:A:96:LYS:CE	1:A:377:ALA:HA	2.36	0.50
1:A:376:MET:SD	1:A:380:LYS:HE2	2.52	0.50
1:B:51:ARG:HB3	1:B:51:ARG:NH1	2.26	0.50
2:C:11:SER:HB3	3:E:93:LEU:HB2	1.94	0.50
2:D:5:ARG:NH2	3:F:2:TYR:HD2	2.07	0.50
4:G:91:THR:O	4:G:92:TYR:HD1	1.95	0.50
4:G:10:LEU:C	4:G:10:LEU:HD12	2.31	0.50
1:B:391:PHE:O	1:B:394:GLU:HB2	2.12	0.50
1:B:235:GLN:HG3	1:B:236:ALA:N	2.27	0.50
2:C:25:VAL:CB	2:C:26:PRO:HD3	2.36	0.50
2:D:63:PHE:CE1	2:D:85:GLU:CB	2.95	0.50
5:H:108:PHE:CE2	5:H:153:VAL:CG1	2.95	0.50
5:H:91:PHE:CD1	5:H:111:ALA:CB	2.95	0.50
5:H:14:LEU:CD2	5:H:160:PHE:CZ	2.95	0.50
5:H:42:GLU:HG2	5:H:56:PRO:HG2	1.76	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:148:PHE:CE1	1:B:156:ASP:HB3	2.47	0.50
3:E:2:TYR:HD1	3:F:93:LEU:O	1.95	0.50
3:E:61:TYR:HE1	3:E:96:ILE:CG2	2.25	0.50
3:F:60:ILE:CG1	3:F:83:PHE:CE2	2.95	0.50
4:G:33:GLU:CB	4:G:46:ILE:H	2.24	0.50
4:G:74:THR:HG23	4:G:75:THR:H	1.77	0.50
1:B:121:LEU:N	1:B:122:ALA:HA	2.27	0.50
4:G:79:ALA:O	4:G:82:ILE:HG12	2.10	0.50
1:B:457:LEU:C	1:B:457:LEU:HD23	2.31	0.50
1:B:295:ASN:OD1	2:C:42:ASP:OD2	2.30	0.50
2:C:98:ARG:HG3	2:D:97:TYR:CD2	2.47	0.50
4:G:127:VAL:CG2	4:G:129:PHE:CE1	2.95	0.50
1:B:254:VAL:CG2	1:B:259:PHE:CE1	2.95	0.50
3:F:14:TYR:CZ	3:F:28:TRP:NE1	2.80	0.50
3:F:47:TYR:CB	3:F:50:GLN:HB3	2.34	0.50
1:B:190:MET:HE1	1:B:194:THR:CG2	2.42	0.50
1:A:391:PHE:O	1:A:394:GLU:HB2	2.12	0.50
1:A:433:VAL:HG23	1:A:440:LYS:HG3	1.93	0.50
1:B:433:VAL:HG23	1:B:440:LYS:HG3	1.93	0.50
1:A:64:ARG:NE	1:B:283:GLN:O	2.45	0.50
2:C:59:LYS:HB2	2:C:90:ILE:HD13	1.94	0.50
2:C:99:LYS:NZ	2:D:102:ARG:CB	2.75	0.50
1:A:51:ARG:HB3	1:A:51:ARG:NH1	2.26	0.50
2:D:8:ARG:CZ	2:D:12:ILE:HD11	2.41	0.50
3:F:9:ILE:CD1	3:F:11:PHE:CE1	2.95	0.50
3:F:2:TYR:O	3:F:3:GLU:HB3	2.12	0.50
3:F:46:TYR:HB3	3:F:48:LYS:CE	2.32	0.50
3:F:14:TYR:HD2	3:F:73:ARG:NH1	2.09	0.50
4:G:22:GLN:CB	4:G:23:PRO:HD3	2.42	0.50
1:A:195:GLN:O	1:A:210:LYS:HB2	2.11	0.50
1:B:210:LYS:C	1:B:210:LYS:HD3	2.31	0.50
4:G:10:LEU:O	4:G:13:ALA:HB3	2.10	0.50
1:A:288:LEU:N	1:A:288:LEU:HD23	2.27	0.49
1:B:298:GLU:HB3	2:C:42:ASP:HB3	1.92	0.49
2:D:59:LYS:HB2	2:D:90:ILE:HD13	1.94	0.49
5:H:92:TRP:CE3	5:H:106:ALA:CB	2.95	0.49
1:A:52:TYR:CZ	1:A:265:ASP:CB	2.95	0.49
1:B:144:TYR:C	1:B:244:ILE:HD12	2.32	0.49
1:A:365:LYS:O	1:B:359:THR:HG21	2.08	0.49
1:B:376:MET:SD	1:B:380:LYS:HE2	2.52	0.49
2:C:8:ARG:CZ	2:C:12:ILE:HD11	2.41	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:103:GLU:HG3	4:G:41:TYR:C	2.32	0.49
3:F:68:ILE:HD13	3:F:69:ASP:H	1.76	0.49
3:F:74:VAL:CB	3:F:83:PHE:CE2	2.95	0.49
3:F:74:VAL:HG13	3:F:81:VAL:HG13	1.94	0.49
3:E:109:GLY:C	4:G:114:THR:OG1	2.51	0.49
1:A:121:LEU:N	1:A:122:ALA:HA	2.27	0.49
2:C:37:HIS:O	2:C:39:PRO:HD3	2.12	0.49
5:H:46:GLU:H	5:H:151:VAL:HG21	1.75	0.49
5:H:160:PHE:C	5:H:163:PRO:HD2	2.32	0.49
1:A:142:ILE:HB	1:A:144:TYR:N	2.26	0.49
1:B:29:PRO:HG3	1:B:170:LYS:CE	2.42	0.49
2:D:75:MET:H	2:D:78:VAL:CB	2.25	0.49
3:E:53:GLN:CG	3:E:55:PRO:HD3	2.40	0.49
3:E:60:ILE:HG12	3:E:99:ILE:CD1	2.42	0.49
3:F:12:GLN:HE21	3:F:80:ILE:CG2	2.24	0.49
3:F:59:ASN:HD22	3:F:99:ILE:CG2	2.25	0.49
3:F:76:TYR:CE2	3:F:79:LYS:CG	2.95	0.49
2:C:14:ASN:HD21	2:C:21:LEU:CG	2.23	0.49
1:A:387:LEU:CD1	1:A:391:PHE:CE1	2.95	0.49
1:A:63:ARG:HD2	1:A:75:VAL:CG1	2.42	0.49
1:B:298:GLU:HA	2:C:43:LYS:HZ1	1.77	0.49
2:C:49:ILE:CD1	2:C:54:LEU:HD12	2.40	0.49
1:A:254:VAL:CG2	1:A:259:PHE:CE1	2.95	0.49
1:A:373:LYS:C	1:A:373:LYS:HD2	2.33	0.49
1:A:99:TYR:CD2	1:A:373:LYS:CE	2.95	0.49
1:B:136:ASN:CB	1:B:145:TRP:CH2	2.95	0.49
1:B:243:PRO:HB2	1:B:244:ILE:HG22	1.93	0.49
2:D:16:LYS:CD	3:E:3:GLU:OE1	2.59	0.49
1:A:387:LEU:CG	1:A:391:PHE:CZ	2.95	0.49
1:A:65:THR:HB	1:A:73:GLN:HG3	1.94	0.49
1:B:290:ASN:O	1:B:317:VAL:HG11	2.12	0.49
2:C:85:GLU:CA	2:D:86:ILE:CD1	2.87	0.49
2:C:84:THR:HB	2:D:83:ALA:CB	2.43	0.49
1:A:255:SER:CB	1:A:259:PHE:CE2	2.95	0.49
1:B:52:TYR:CZ	1:B:265:ASP:CB	2.95	0.49
1:B:373:LYS:HD2	1:B:373:LYS:C	2.33	0.49
2:C:7:LYS:CD	3:E:4:GLU:CD	2.61	0.49
3:E:38:VAL:CB	3:E:60:ILE:HG22	2.41	0.49
3:F:14:TYR:H	3:F:73:ARG:CB	2.26	0.49
3:F:43:GLN:CB	3:F:47:TYR:CE1	2.95	0.49
3:F:60:ILE:HD13	3:F:99:ILE:CD1	2.42	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:96:ILE:HD11	3:F:98:ARG:HE	1.77	0.49
3:F:21:GLU:HA	4:G:20:SER:CA	2.28	0.49
1:B:130:LEU:HD13	1:B:388:PHE:CZ	2.47	0.49
5:H:119:SER:OG	5:H:128:ILE:HG12	2.12	0.49
2:C:95:ASN:HB3	2:C:98:ARG:N	2.28	0.49
5:H:143:ILE:HG21	5:H:146:LEU:HB2	1.93	0.49
1:A:198:GLU:HB2	1:A:200:TYR:HE1	1.77	0.49
1:A:99:TYR:CE2	1:A:370:LEU:HB3	2.48	0.49
1:B:142:ILE:CG2	1:B:145:TRP:HB2	2.42	0.49
1:B:159:ILE:HG23	1:B:159:ILE:O	2.12	0.49
1:B:48:LYS:HE3	1:B:258:LYS:NZ	2.27	0.49
1:A:336:ILE:CD1	1:B:278:PHE:HA	2.34	0.49
1:B:81:ASN:ND2	1:B:83:ARG:HD2	2.27	0.49
1:A:306:HIS:HB3	1:A:308:VAL:CG1	2.23	0.49
1:B:65:THR:HB	1:B:73:GLN:HG3	1.94	0.49
2:D:63:PHE:HB2	2:D:85:GLU:HG2	1.93	0.49
5:H:16:GLN:CG	5:H:92:TRP:CD1	2.95	0.49
5:H:42:GLU:HB2	5:H:43:LEU:HA	1.94	0.49
1:A:140:LYS:HG2	1:A:141:GLY:H	1.77	0.49
1:A:142:ILE:CG2	1:A:145:TRP:HB2	2.42	0.49
1:B:136:ASN:O	1:B:139:ASN:HB2	2.12	0.49
1:B:96:LYS:HB2	1:B:373:LYS:CB	2.38	0.49
2:C:7:LYS:HE2	3:E:4:GLU:HA	0.74	0.49
2:D:77:THR:HG21	3:E:46:TYR:CZ	2.47	0.49
3:F:7:ASP:HB2	3:F:9:ILE:HG12	1.95	0.49
1:B:64:ARG:H	1:B:79:LYS:HG3	1.78	0.49
5:H:68:TYR:HA	5:H:127:GLU:HG3	1.94	0.49
5:H:32:GLN:CA	5:H:67:TYR:CE1	2.95	0.49
1:A:418:ARG:HH22	1:B:426:VAL:HG13	1.77	0.49
1:A:433:VAL:CG2	1:A:440:LYS:HG3	2.42	0.49
1:B:438:MET:HA	1:B:439:SER:C	2.31	0.49
1:A:64:ARG:H	1:A:79:LYS:HG3	1.78	0.49
2:D:55:ILE:CD1	2:D:93:LYS:HZ2	2.22	0.49
5:H:92:TRP:HE3	5:H:106:ALA:CB	2.25	0.49
5:H:91:PHE:CD2	5:H:111:ALA:CB	2.95	0.49
1:A:144:TYR:C	1:A:244:ILE:HD12	2.32	0.49
1:A:167:VAL:HG22	1:A:246:PRO:CG	2.43	0.49
1:A:179:PHE:CE2	1:A:200:TYR:CB	2.95	0.49
1:A:175:ARG:NH1	1:B:150:ASP:OD1	2.45	0.49
1:B:167:VAL:HG13	1:B:177:ILE:CB	2.42	0.49
1:B:29:PRO:HG3	1:B:170:LYS:CD	2.41	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:146:HIS:HA	1:B:244:ILE:HG22	1.94	0.49
3:E:2:TYR:CE1	3:F:95:GLU:CA	2.95	0.49
4:G:41:TYR:CE1	4:G:43:TYR:CD1	3.00	0.49
3:F:22:GLY:O	4:G:19:GLU:OE2	2.31	0.49
1:A:387:LEU:HD21	1:A:391:PHE:CZ	2.48	0.49
5:H:157:GLY:O	5:H:158:TYR:HD1	1.95	0.49
1:A:430:VAL:O	1:A:433:VAL:HG12	2.13	0.49
2:D:35:GLU:HA	2:D:35:GLU:OE1	2.13	0.49
1:A:136:ASN:O	1:A:139:ASN:HB2	2.12	0.49
1:A:159:ILE:O	1:A:159:ILE:HG23	2.12	0.49
1:B:167:VAL:HG22	1:B:246:PRO:CG	2.43	0.49
1:B:179:PHE:CE2	1:B:200:TYR:CB	2.95	0.49
1:B:198:GLU:HB2	1:B:200:TYR:HE1	1.77	0.49
1:A:379:ARG:CD	1:B:94:ASP:OD2	2.54	0.49
1:B:99:TYR:CD2	1:B:373:LYS:CE	2.95	0.49
2:C:5:ARG:HG3	2:C:8:ARG:HB2	1.95	0.49
3:E:15:VAL:CG1	3:E:29:VAL:HG23	2.42	0.49
3:E:74:VAL:CG1	3:E:83:PHE:CE2	2.95	0.49
3:E:50:GLN:HB3	3:F:49:ALA:HB3	1.95	0.49
3:E:24:LYS:HB2	3:E:24:LYS:NZ	2.27	0.49
2:C:33:LYS:HB2	2:C:35:GLU:CD	2.33	0.49
5:H:97:VAL:O	5:H:98:LYS:HG3	2.13	0.49
1:A:175:ARG:CZ	1:B:148:PHE:CE2	2.96	0.49
1:A:365:LYS:C	1:B:359:THR:HG21	2.30	0.49
1:A:88:TRP:NE1	1:A:92:PHE:CZ	2.79	0.49
1:B:89:HIS:HE1	1:B:257:LEU:HG	1.75	0.49
2:C:75:MET:H	2:C:78:VAL:CB	2.26	0.49
3:E:38:VAL:CG2	3:E:76:TYR:CZ	2.95	0.49
3:E:48:LYS:CD	3:F:48:LYS:HG3	2.39	0.49
4:G:81:ASP:O	4:G:85:ARG:HG2	2.13	0.49
1:A:111:ASN:H	1:A:396:LEU:CD2	2.26	0.49
1:B:62:LYS:HD3	1:B:63:ARG:H	1.75	0.49
5:H:32:GLN:HE22	5:H:93:ARG:HG2	1.78	0.49
1:B:231:THR:C	1:B:237:ILE:HG22	2.34	0.49
1:A:195:GLN:HE21	1:A:195:GLN:HA	1.78	0.49
1:B:195:GLN:HE21	1:B:195:GLN:HA	1.78	0.49
1:B:387:LEU:CG	1:B:391:PHE:CZ	2.95	0.49
1:B:387:LEU:HD21	1:B:391:PHE:CZ	2.48	0.49
3:E:9:ILE:CD1	3:E:11:PHE:CZ	2.95	0.49
1:A:68:ASP:OD2	1:B:300:THR:HG21	2.13	0.49
1:B:291:TYR:CD2	2:C:51:SER:OG	2.65	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:33:LYS:HB2	2:D:35:GLU:CD	2.33	0.49
5:H:53:ILE:CA	5:H:54:LEU:N	2.69	0.49
5:H:55:GLY:HA2	5:H:57:GLY:N	2.24	0.49
1:A:136:ASN:CB	1:A:145:TRP:CH2	2.95	0.49
1:A:149:VAL:HG22	1:A:150:ASP:O	2.13	0.49
1:A:158:VAL:HG11	1:A:160:PHE:HE1	1.78	0.49
1:B:149:VAL:HG22	1:B:150:ASP:O	2.13	0.49
1:B:145:TRP:O	1:B:244:ILE:HB	2.12	0.49
1:B:51:ARG:HD2	1:B:57:ASN:HD21	1.78	0.49
1:B:52:TYR:CE1	1:B:56:GLU:HB3	2.48	0.49
1:B:88:TRP:NE1	1:B:92:PHE:CZ	2.79	0.49
3:E:13:SER:O	3:E:28:TRP:HB3	2.12	0.49
3:E:74:VAL:CG2	3:E:76:TYR:CE1	2.96	0.49
4:G:44:VAL:HA	4:G:71:TRP:H	1.78	0.49
1:A:341:TYR:O	1:A:344:ALA:HB3	2.12	0.49
5:H:121:GLY:CA	5:H:126:VAL:HA	2.39	0.49
1:B:467:TYR:HA	1:B:467:TYR:HD1	1.42	0.48
1:A:62:LYS:CD	1:A:63:ARG:HG3	2.43	0.48
2:D:37:HIS:O	2:D:39:PRO:HD3	2.12	0.48
5:H:91:PHE:CE2	5:H:132:LEU:CD2	2.95	0.48
5:H:17:SER:HB2	5:H:90:LYS:O	2.13	0.48
1:A:146:HIS:HA	1:A:244:ILE:HG22	1.94	0.48
1:A:91:LEU:N	1:A:91:LEU:HD12	2.28	0.48
1:B:140:LYS:HG2	1:B:141:GLY:H	1.77	0.48
1:B:158:VAL:HG11	1:B:160:PHE:HE1	1.78	0.48
1:B:38:ILE:CD1	1:B:183:TYR:HD2	2.26	0.48
3:E:44:GLU:O	3:E:45:GLU:HB3	2.12	0.48
3:F:70:LYS:HG2	3:F:71:LYS:H	1.78	0.48
1:B:387:LEU:CD1	1:B:391:PHE:CE1	2.95	0.48
1:A:48:LYS:HE3	1:A:258:LYS:NZ	2.27	0.48
1:A:52:TYR:CE1	1:A:56:GLU:HB3	2.48	0.48
1:B:187:LYS:HD3	1:B:193:GLU:CB	2.41	0.48
3:E:40:PRO:HB3	3:F:100:LYS:CB	2.43	0.48
3:E:52:LEU:HD12	3:E:53:GLN:NE2	2.28	0.48
1:B:334:GLU:HA	1:B:337:GLN:HG2	1.95	0.48
5:H:148:GLU:HA	5:H:148:GLU:OE1	2.13	0.48
1:A:64:ARG:NH2	1:B:284:ILE:CG1	2.76	0.48
1:A:81:ASN:ND2	1:A:83:ARG:HD2	2.27	0.48
1:A:66:TYR:OH	1:B:304:ARG:CD	2.61	0.48
5:H:58:SER:HB2	5:H:143:ILE:HG13	1.95	0.48
1:A:158:VAL:CG1	1:A:160:PHE:CE1	2.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:51:ARG:HD2	1:A:57:ASN:HD21	1.78	0.48
1:B:170:LYS:HE2	1:B:170:LYS:O	2.13	0.48
2:D:4:GLN:OE1	3:F:1:MET:SD	2.70	0.48
3:E:70:LYS:HD3	3:E:84:ILE:CA	2.43	0.48
3:F:74:VAL:CG1	3:F:83:PHE:CE2	2.96	0.48
1:B:326:VAL:O	1:B:329:ALA:HB3	2.14	0.48
1:A:231:THR:C	1:A:237:ILE:HG22	2.34	0.48
1:B:341:TYR:O	1:B:344:ALA:HB3	2.12	0.48
1:B:347:VAL:HB	1:B:349:ASN:OD1	2.13	0.48
1:B:430:VAL:O	1:B:433:VAL:HG12	2.13	0.48
2:C:48:SER:HG	2:D:31:PHE:HE2	1.60	0.48
4:G:3:TRP:O	4:G:6:ALA:HB3	2.13	0.48
5:H:94:VAL:CG2	5:H:104:TYR:CE2	2.96	0.48
1:A:170:LYS:O	1:A:170:LYS:HE2	2.14	0.48
1:A:200:TYR:CE1	1:A:205:VAL:CG1	2.95	0.48
1:A:38:ILE:CD1	1:A:183:TYR:HD2	2.26	0.48
2:D:4:GLN:OE1	3:F:2:TYR:HB2	2.13	0.48
2:D:5:ARG:CZ	3:F:2:TYR:HD2	2.25	0.48
3:F:70:LYS:HG2	3:F:71:LYS:N	2.28	0.48
3:F:7:ASP:HB3	3:F:8:VAL:C	2.33	0.48
4:G:27:MET:HB2	4:G:28:VAL:O	2.13	0.48
1:A:130:LEU:HD13	1:A:388:PHE:CZ	2.47	0.48
1:A:267:TYR:CD2	1:A:345:GLN:CG	2.96	0.48
1:A:296:PRO:HA	1:A:299:PHE:CB	2.44	0.48
1:A:318:ASP:OD1	2:D:102:ARG:HD3	2.12	0.48
2:C:63:PHE:CD2	2:C:86:ILE:HG23	2.48	0.48
2:C:94:LEU:HD12	2:D:96:PRO:C	2.33	0.48
5:H:91:PHE:CE1	5:H:111:ALA:CB	2.97	0.48
1:B:158:VAL:CG1	1:B:160:PHE:CE1	2.96	0.48
1:B:179:PHE:CG	1:B:180:ALA:N	2.82	0.48
1:B:370:LEU:H	1:B:370:LEU:HD22	1.79	0.48
1:B:91:LEU:N	1:B:91:LEU:HD12	2.28	0.48
2:C:5:ARG:HG3	2:C:8:ARG:CB	2.43	0.48
3:F:11:PHE:CE2	3:F:68:ILE:CG2	2.96	0.48
3:F:43:GLN:CB	3:F:47:TYR:HE1	2.20	0.48
3:F:103:GLU:CA	4:G:31:VAL:HG21	2.43	0.48
1:A:334:GLU:HA	1:A:337:GLN:HG2	1.95	0.48
1:A:111:ASN:ND2	1:A:399:THR:HG21	2.28	0.48
1:A:110:ASP:CB	1:A:396:LEU:HD13	2.22	0.48
1:A:326:VAL:O	1:A:329:ALA:HB3	2.14	0.48
3:F:22:GLY:H	4:G:19:GLU:CG	2.18	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:63:PHE:CD1	2:D:85:GLU:CB	2.97	0.48
5:H:52:ARG:NH2	5:H:54:LEU:HG	1.28	0.48
1:A:167:VAL:HG13	1:A:177:ILE:CB	2.42	0.48
1:A:43:PRO:CB	1:A:47:LEU:HD11	2.43	0.48
1:B:198:GLU:CB	1:B:200:TYR:HE1	2.27	0.48
1:B:99:TYR:CE2	1:B:370:LEU:HB3	2.48	0.48
2:C:78:VAL:HG22	2:C:79:SER:H	1.79	0.48
1:A:335:ARG:CG	1:B:333:LEU:CB	2.89	0.48
1:B:111:ASN:ND2	1:B:399:THR:HG21	2.28	0.48
2:C:82:PHE:HD1	2:C:82:PHE:HA	1.49	0.48
1:A:179:PHE:CG	1:A:180:ALA:N	2.82	0.48
1:A:96:LYS:HE3	1:A:377:ALA:HB2	1.96	0.48
2:D:13:THR:HB	3:E:1:MET:N	2.27	0.48
2:C:89:THR:CB	2:D:88:SER:CB	2.86	0.48
1:B:83:ARG:HD3	1:B:83:ARG:H	1.78	0.48
1:A:426:VAL:HA	1:A:429:LEU:CG	2.43	0.48
1:A:83:ARG:H	1:A:83:ARG:HD3	1.78	0.48
4:G:102:PHE:CD1	5:H:56:PRO:CD	2.91	0.48
4:G:63:ASN:HB3	4:G:130:THR:OG1	2.14	0.48
4:G:97:PHE:HB3	4:G:100:PHE:HB2	1.96	0.48
2:D:5:ARG:HG3	2:D:8:ARG:HB2	1.95	0.48
2:D:78:VAL:HG22	2:D:79:SER:H	1.79	0.48
3:E:36:ALA:HA	3:E:62:THR:HG23	1.94	0.48
3:E:40:PRO:HA	3:F:100:LYS:HE2	1.95	0.48
3:E:43:GLN:CG	3:E:53:GLN:H	2.10	0.48
3:F:104:ASP:HB2	4:G:31:VAL:CB	2.40	0.48
3:F:43:GLN:N	3:F:53:GLN:HB2	2.19	0.48
3:E:108:VAL:CG1	4:G:43:TYR:HH	2.11	0.48
1:B:267:TYR:CD2	1:B:345:GLN:CG	2.96	0.48
1:A:66:TYR:CE2	1:B:304:ARG:HG2	2.49	0.48
2:C:63:PHE:CD1	2:C:85:GLU:CB	2.97	0.48
2:D:95:ASN:HB3	2:D:98:ARG:N	2.28	0.48
5:H:100:GLU:HB3	5:H:103:LYS:H	1.79	0.48
1:A:198:GLU:CB	1:A:200:TYR:HE1	2.27	0.48
1:B:158:VAL:CG1	1:B:160:PHE:HE1	2.27	0.48
1:B:200:TYR:CE1	1:B:205:VAL:CG1	2.95	0.48
2:C:70:LEU:C	3:E:91:SER:HB2	2.34	0.48
3:F:32:PHE:CE1	3:F:67:ARG:CB	2.95	0.48
3:F:60:ILE:CD1	3:F:83:PHE:CE2	2.97	0.48
4:G:34:SER:HB3	4:G:35:PRO:CD	2.43	0.48
4:G:70:VAL:HG11	4:G:76:ARG:HH12	1.77	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:G:10:LEU:HG	4:G:11:GLN:N	2.29	0.48
2:C:35:GLU:HA	2:C:35:GLU:OE1	2.13	0.48
2:C:98:ARG:HD3	2:D:97:TYR:CE1	2.47	0.48
5:H:16:GLN:NE2	5:H:26:PRO:HA	2.28	0.48
4:G:100:PHE:HD1	5:H:45:ASP:H	1.59	0.48
1:A:158:VAL:CG1	1:A:160:PHE:HE1	2.27	0.48
1:A:370:LEU:HD22	1:A:370:LEU:H	1.79	0.48
1:B:379:ARG:HB2	1:B:380:LYS:NZ	2.29	0.48
3:E:65:ASP:OD1	3:E:68:ILE:HB	2.14	0.48
3:F:105:GLY:N	4:G:39:ASP:CG	2.33	0.48
1:B:426:VAL:HA	1:B:429:LEU:CG	2.43	0.47
1:B:466:GLN:HA	1:B:467:TYR:HD1	1.74	0.47
2:C:63:PHE:CE1	2:C:85:GLU:CB	2.95	0.47
4:G:100:PHE:CZ	5:H:46:GLU:CA	2.49	0.47
1:A:379:ARG:HB2	1:A:380:LYS:NZ	2.29	0.47
1:B:144:TYR:CD1	1:B:144:TYR:N	2.82	0.47
1:B:52:TYR:CE1	1:B:56:GLU:CB	2.97	0.47
3:E:108:VAL:HB	4:G:43:TYR:CZ	2.48	0.47
1:B:291:TYR:HD2	2:C:51:SER:OG	1.97	0.47
5:H:14:LEU:HG	5:H:160:PHE:CZ	2.49	0.47
1:A:145:TRP:O	1:A:244:ILE:HB	2.12	0.47
1:A:155:PHE:CD1	1:A:156:ASP:N	2.82	0.47
1:A:187:LYS:HD3	1:A:193:GLU:CB	2.41	0.47
3:E:38:VAL:HA	3:E:60:ILE:CB	2.43	0.47
3:E:62:THR:HG22	3:E:63:PRO:CD	2.43	0.47
3:F:69:ASP:OD2	3:F:87:PRO:HB3	2.13	0.47
1:B:59:ILE:HG13	1:B:81:ASN:CG	2.35	0.47
1:B:442:THR:HA	1:B:445:ALA:HB3	1.96	0.47
1:A:290:ASN:HB2	1:A:291:TYR:HA	1.96	0.47
1:A:59:ILE:HG13	1:A:81:ASN:CG	2.35	0.47
2:D:56:PHE:HA	2:D:59:LYS:HZ2	1.78	0.47
4:G:131:ILE:HG22	5:H:53:ILE:HD12	1.95	0.47
5:H:58:SER:HB3	5:H:143:ILE:N	2.29	0.47
1:A:144:TYR:CD1	1:A:144:TYR:N	2.82	0.47
1:B:227:ARG:HE	1:B:227:ARG:N	2.12	0.47
1:B:96:LYS:HE3	1:B:377:ALA:HB2	1.96	0.47
3:E:85:GLY:CA	3:E:99:ILE:HG23	2.41	0.47
4:G:18:LEU:C	4:G:24:LEU:HD22	2.35	0.47
5:H:30:ALA:CB	5:H:67:TYR:CD2	2.97	0.47
1:B:298:GLU:CD	2:C:43:LYS:HZ1	2.17	0.47
1:B:43:PRO:CA	1:B:164:GLU:H	2.17	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:5:ARG:HG3	2:D:8:ARG:CB	2.43	0.47
3:E:60:ILE:HG23	3:E:99:ILE:HD12	1.97	0.47
2:D:4:GLN:OE1	3:F:1:MET:HG2	2.13	0.47
3:E:77:ARG:HD2	3:F:87:PRO:CB	2.44	0.47
1:A:64:ARG:NE	1:B:283:GLN:NE2	2.60	0.47
1:B:291:TYR:HD2	2:C:51:SER:HG	1.61	0.47
2:C:98:ARG:HH11	2:D:102:ARG:N	2.06	0.47
2:D:38:ASN:O	2:D:40:PHE:HD2	1.97	0.47
5:H:112:TYR:H	5:H:132:LEU:CB	2.14	0.47
5:H:150:ILE:O	5:H:154:SER:HB3	2.14	0.47
5:H:94:VAL:CG2	5:H:160:PHE:CZ	2.95	0.47
1:A:179:PHE:CD1	1:A:244:ILE:N	2.83	0.47
1:A:186:TYR:CD1	1:A:187:LYS:N	2.83	0.47
1:A:88:TRP:CE2	1:A:92:PHE:CE1	3.03	0.47
1:B:171:ASP:HB3	1:B:178:LEU:HD11	1.90	0.47
1:B:186:TYR:CD1	1:B:187:LYS:N	2.83	0.47
1:B:53:TYR:HA	1:B:261:LYS:HZ2	1.79	0.47
1:B:96:LYS:HG2	1:B:373:LYS:HB2	1.89	0.47
3:F:74:VAL:HG11	3:F:83:PHE:CE2	2.50	0.47
3:E:107:TYR:N	4:G:117:ASP:N	2.62	0.47
3:E:21:GLU:CG	3:E:22:GLY:H	2.21	0.47
1:A:347:VAL:HB	1:A:349:ASN:OD1	2.13	0.47
1:A:438:MET:SD	1:B:434:THR:OG1	2.68	0.47
1:B:296:PRO:HA	1:B:299:PHE:CB	2.44	0.47
2:D:93:LYS:C	2:D:95:ASN:H	2.16	0.47
5:H:111:ALA:HA	5:H:132:LEU:HB3	1.96	0.47
5:H:16:GLN:CB	5:H:26:PRO:HA	2.44	0.47
5:H:22:THR:HB	5:H:108:PHE:CG	2.47	0.47
5:H:39:GLY:HA2	5:H:43:LEU:HG	1.96	0.47
1:A:107:PHE:CD1	1:A:108:THR:N	2.83	0.47
1:A:52:TYR:CE1	1:A:56:GLU:CB	2.97	0.47
1:A:99:TYR:CD2	1:A:370:LEU:CD1	2.95	0.47
1:A:99:TYR:HD2	1:A:373:LYS:CE	2.28	0.47
1:B:46:LEU:CG	1:B:143:GLU:HB2	2.45	0.47
1:B:255:SER:CB	1:B:259:PHE:CE2	2.95	0.47
1:B:361:PRO:O	1:B:364:GLU:HG2	2.15	0.47
1:B:368:ALA:HA	1:B:369:LEU:HA	1.63	0.47
1:B:375:ASN:O	1:B:379:ARG:HG3	2.15	0.47
3:E:2:TYR:CE1	3:F:95:GLU:N	2.83	0.47
3:F:41:ILE:HG21	3:F:53:GLN:HG2	1.97	0.47
3:F:70:LYS:HD3	3:F:70:LYS:C	2.35	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:108:VAL:CG2	4:G:43:TYR:OH	2.63	0.47
4:G:44:VAL:HG13	4:G:70:VAL:CB	2.44	0.47
4:G:105:LYS:NZ	4:G:105:LYS:HB2	2.30	0.47
1:A:460:ILE:CB	1:B:466:GLN:HG3	2.42	0.47
1:B:290:ASN:HB2	1:B:291:TYR:HA	1.96	0.47
2:C:31:PHE:CD2	2:C:32:ALA:N	2.83	0.47
2:C:98:ARG:CA	2:D:97:TYR:CD2	2.97	0.47
1:A:64:ARG:HD3	1:A:79:LYS:HZ3	1.78	0.47
2:C:56:PHE:CD1	2:C:59:LYS:CE	2.95	0.47
2:D:102:ARG:CZ	2:D:102:ARG:HB2	2.45	0.47
2:D:56:PHE:CD1	2:D:59:LYS:CE	2.95	0.47
5:H:17:SER:OG	5:H:89:ILE:HG22	2.14	0.47
5:H:143:ILE:N	5:H:143:ILE:HD12	2.23	0.47
1:A:148:PHE:CD1	1:A:148:PHE:N	2.83	0.47
1:A:199:LEU:CB	1:A:208:TYR:CE2	2.98	0.47
1:A:46:LEU:CG	1:A:143:GLU:HB2	2.45	0.47
1:B:148:PHE:CD1	1:B:148:PHE:N	2.83	0.47
1:B:198:GLU:HB2	1:B:200:TYR:CE1	2.49	0.47
1:B:52:TYR:CE1	1:B:265:ASP:HB3	2.50	0.47
1:B:53:TYR:HB2	1:B:140:LYS:CE	2.45	0.47
1:A:139:ASN:HA	1:A:257:LEU:HB2	1.96	0.47
1:A:382:ARG:HE	1:A:386:ARG:NH1	2.13	0.47
1:B:155:PHE:CD1	1:B:156:ASP:N	2.83	0.47
1:B:382:ARG:HE	1:B:386:ARG:NH1	2.13	0.47
4:G:32:THR:OG1	4:G:43:TYR:HB2	2.14	0.47
4:G:43:TYR:CD1	4:G:71:TRP:HB2	2.49	0.47
1:A:251:GLU:HG2	1:B:54:MET:H	1.78	0.47
1:B:62:LYS:CD	1:B:63:ARG:HG3	2.43	0.47
1:B:66:TYR:N	1:B:66:TYR:CD1	2.83	0.47
5:H:68:TYR:CD1	5:H:69:GLY:N	2.83	0.47
1:A:32:THR:HG22	1:A:36:LYS:HE2	1.91	0.47
1:B:441:GLU:CD	1:B:456:GLU:HB2	2.35	0.47
2:C:55:ILE:HD12	2:C:93:LYS:HZ2	1.79	0.47
4:G:97:PHE:CD1	4:G:98:GLU:N	2.83	0.47
5:H:21:ALA:HB1	5:H:108:PHE:HD2	1.79	0.47
5:H:21:ALA:HB1	5:H:150:ILE:HA	1.97	0.47
1:A:52:TYR:CE1	1:A:265:ASP:HB3	2.50	0.47
1:B:107:PHE:CD1	1:B:108:THR:N	2.83	0.47
1:B:88:TRP:CE2	1:B:92:PHE:CE1	3.03	0.47
2:C:8:ARG:HD2	2:C:8:ARG:C	2.35	0.47
3:E:109:GLY:CA	4:G:114:THR:OG1	2.62	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:74:VAL:HG21	3:E:76:TYR:CE1	2.49	0.47
3:F:32:PHE:N	3:F:32:PHE:HD1	2.13	0.47
3:F:57:GLY:HA3	3:F:84:ILE:HG12	1.97	0.47
5:H:31:TYR:N	5:H:31:TYR:CD1	2.83	0.47
2:C:38:ASN:O	2:C:40:PHE:HD2	1.97	0.47
4:G:133:ASN:CB	5:H:56:PRO:CD	2.92	0.47
4:G:4:LYS:HG2	4:G:5:LEU:N	2.29	0.47
1:A:206:TYR:HB3	1:A:208:TYR:CE1	2.50	0.47
1:A:375:ASN:O	1:A:379:ARG:HG3	2.15	0.47
1:B:155:PHE:CD1	1:B:229:HIS:CE1	3.03	0.47
1:B:164:GLU:OE1	1:B:164:GLU:HA	2.15	0.47
1:B:199:LEU:CB	1:B:208:TYR:CE2	2.98	0.47
2:D:73:ARG:HG3	2:D:74:SER:O	2.15	0.47
3:E:2:TYR:O	3:E:3:GLU:HB3	2.15	0.47
3:E:79:LYS:CB	3:F:87:PRO:HD3	2.44	0.47
3:E:79:LYS:HE2	3:F:87:PRO:CD	2.45	0.47
3:F:96:ILE:O	3:F:96:ILE:HG13	2.15	0.47
1:B:111:ASN:H	1:B:396:LEU:CD2	2.26	0.47
1:B:121:LEU:HD12	1:B:124:ASP:N	2.23	0.47
1:A:287:VAL:HG12	1:A:319:THR:HG21	1.97	0.47
1:B:291:TYR:CD1	1:B:292:ASP:N	2.83	0.47
2:C:34:ASP:CB	2:C:35:GLU:CA	2.93	0.47
1:B:298:GLU:CG	2:C:42:ASP:OD2	2.61	0.47
2:D:31:PHE:CD2	2:D:32:ALA:N	2.83	0.47
2:C:84:THR:HG21	2:D:83:ALA:HA	1.96	0.47
5:H:90:LYS:CE	5:H:146:LEU:HB3	2.45	0.47
1:B:184:TYR:CD1	1:B:184:TYR:N	2.82	0.47
1:B:206:TYR:CD1	1:B:206:TYR:N	2.83	0.47
3:E:2:TYR:HE1	3:F:94:GLN:C	2.18	0.47
3:E:30:ASP:OD2	3:E:32:PHE:HE2	1.98	0.47
3:E:45:GLU:CA	3:E:47:TYR:CE1	2.94	0.47
3:E:62:THR:HG22	3:E:63:PRO:O	2.15	0.47
3:E:15:VAL:CG1	3:E:73:ARG:HE	2.08	0.47
3:E:66:ASP:OD1	3:E:97:THR:HG21	2.14	0.47
3:E:79:LYS:HE2	3:F:87:PRO:HD3	1.96	0.47
3:F:96:ILE:HD11	3:F:98:ARG:NH2	2.29	0.47
1:A:121:LEU:CB	1:A:124:ASP:H	2.28	0.47
1:B:121:LEU:CB	1:B:124:ASP:H	2.28	0.47
1:B:395:TYR:O	1:B:398:ASN:HB2	2.15	0.47
3:F:26:TYR:N	3:F:26:TYR:CD1	2.83	0.47
4:G:54:PHE:CD1	4:G:54:PHE:N	2.83	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:440:LYS:CD	1:A:444:VAL:HG23	2.46	0.46
1:A:441:GLU:CD	1:A:456:GLU:HB2	2.35	0.46
2:C:93:LYS:C	2:C:95:ASN:H	2.16	0.46
2:D:82:PHE:HD1	2:D:82:PHE:HA	1.49	0.46
5:H:135:ILE:O	5:H:135:ILE:HG23	2.14	0.46
1:A:41:HIS:CD2	1:A:164:GLU:HB3	2.47	0.46
1:A:88:TRP:CE2	1:A:92:PHE:CZ	3.04	0.46
1:B:206:TYR:HB3	1:B:208:TYR:CE1	2.50	0.46
1:B:96:LYS:HG2	1:B:373:LYS:HD3	1.95	0.46
1:B:99:TYR:CD2	1:B:370:LEU:CB	2.97	0.46
3:E:70:LYS:HD3	3:E:84:ILE:CB	2.45	0.46
4:G:76:ARG:HG3	4:G:76:ARG:HH11	1.80	0.46
1:A:395:TYR:O	1:A:398:ASN:HB2	2.15	0.46
1:A:418:ARG:NH2	1:B:426:VAL:HG11	2.30	0.46
1:A:291:TYR:CD1	1:A:292:ASP:N	2.83	0.46
1:B:287:VAL:HG12	1:B:319:THR:HG21	1.97	0.46
2:D:99:LYS:O	2:D:99:LYS:HG2	2.16	0.46
1:A:184:TYR:N	1:A:184:TYR:CD1	2.83	0.46
3:E:64:TYR:O	3:E:68:ILE:HG13	2.16	0.46
3:E:40:PRO:HB3	3:F:100:LYS:CA	2.45	0.46
4:G:37:LYS:CD	4:G:37:LYS:H	2.28	0.46
1:B:401:LYS:HG2	1:B:402:GLY:N	2.31	0.46
1:B:58:ASP:HB3	1:B:81:ASN:OD1	2.15	0.46
1:A:308:VAL:HG21	1:A:310:LYS:HE2	1.97	0.46
1:B:232:LYS:CA	1:B:237:ILE:HB	2.46	0.46
1:A:292:ASP:HB3	1:A:293:GLY:O	2.16	0.46
4:G:65:THR:HA	4:G:128:ARG:HA	1.97	0.46
5:H:15:PHE:HE1	5:H:91:PHE:CD1	2.33	0.46
1:B:369:LEU:HD12	1:B:369:LEU:H	1.80	0.46
1:B:99:TYR:CD2	1:B:370:LEU:CD1	2.95	0.46
3:E:74:VAL:HG13	3:E:74:VAL:O	2.15	0.46
3:F:5:PHE:HD1	3:F:5:PHE:HA	1.53	0.46
3:F:67:ARG:O	3:F:72:MET:HB2	2.15	0.46
3:F:60:ILE:CD1	3:F:83:PHE:CD2	2.95	0.46
4:G:27:MET:HB3	4:G:29:ASN:O	2.16	0.46
4:G:68:PHE:N	4:G:68:PHE:CD1	2.83	0.46
5:H:13:TYR:CE1	5:H:31:TYR:CB	2.95	0.46
3:F:21:GLU:OE1	4:G:16:GLU:HG2	2.15	0.46
1:B:305:TYR:CD1	1:B:305:TYR:N	2.83	0.46
1:B:292:ASP:HB3	1:B:293:GLY:O	2.16	0.46
1:B:308:VAL:HG21	1:B:310:LYS:HE2	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:H:14:LEU:CD2	5:H:160:PHE:CE2	2.99	0.46
1:A:164:GLU:HA	1:A:164:GLU:OE1	2.15	0.46
1:A:361:PRO:O	1:A:364:GLU:HG2	2.15	0.46
1:A:51:ARG:HD2	1:A:57:ASN:ND2	2.30	0.46
1:A:99:TYR:HB3	1:A:373:LYS:HZ1	1.81	0.46
1:B:206:TYR:C	1:B:207:TYR:HD1	2.19	0.46
1:B:179:PHE:CD1	1:B:244:ILE:N	2.83	0.46
1:B:92:PHE:N	1:B:92:PHE:CD1	2.82	0.46
2:C:11:SER:OG	3:E:94:GLN:HB3	2.15	0.46
3:E:5:PHE:CD1	3:E:6:ARG:N	2.83	0.46
5:H:13:TYR:CD1	5:H:13:TYR:N	2.82	0.46
1:B:130:LEU:CD2	1:B:388:PHE:CE2	2.95	0.46
2:C:102:ARG:HB2	2:C:102:ARG:CZ	2.45	0.46
1:A:66:TYR:N	1:A:66:TYR:CD1	2.83	0.46
1:A:55:CYS:HG	1:A:83:ARG:HB2	1.81	0.46
5:H:143:ILE:HG12	5:H:147:PRO:HD2	1.95	0.46
1:A:155:PHE:CE1	1:A:229:HIS:CE1	3.03	0.46
1:B:205:VAL:HG12	1:B:206:TYR:N	2.30	0.46
1:B:56:GLU:HB3	1:B:265:ASP:HB3	1.97	0.46
1:B:43:PRO:CB	1:B:47:LEU:HD11	2.43	0.46
1:B:99:TYR:HD2	1:B:373:LYS:CE	2.28	0.46
2:C:73:ARG:HG3	2:C:74:SER:O	2.15	0.46
3:E:39:GLN:HG3	3:F:90:LEU:HD13	1.97	0.46
2:C:5:ARG:CA	3:E:3:GLU:H	2.26	0.46
3:E:58:TYR:O	3:E:83:PHE:HB3	2.15	0.46
3:F:68:ILE:HD13	3:F:69:ASP:N	2.31	0.46
4:G:31:VAL:HA	4:G:32:THR:C	2.35	0.46
1:A:232:LYS:CA	1:A:237:ILE:HB	2.46	0.46
1:A:442:THR:HA	1:A:445:ALA:HB3	1.96	0.46
2:D:63:PHE:CG	2:D:85:GLU:CG	2.96	0.46
4:G:62:GLU:HG2	5:H:139:LYS:HB3	1.66	0.46
4:G:3:TRP:HH2	5:H:52:ARG:NH2	2.14	0.46
5:H:37:VAL:HG23	5:H:64:GLU:HG2	1.97	0.46
5:H:91:PHE:H	5:H:111:ALA:HB2	1.80	0.46
1:A:158:VAL:HG12	1:A:160:PHE:CE1	2.51	0.46
1:A:43:PRO:CA	1:A:164:GLU:H	2.17	0.46
1:A:227:ARG:N	1:A:227:ARG:HE	2.12	0.46
3:F:60:ILE:O	3:F:60:ILE:HD13	2.16	0.46
3:E:19:ASN:HB3	3:E:24:LYS:HG3	1.95	0.46
1:A:401:LYS:HG2	1:A:402:GLY:N	2.31	0.46
1:A:466:GLN:HA	1:A:467:TYR:HD1	1.74	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:16:GLU:O	3:F:17:GLN:HG3	2.16	0.46
1:B:98:GLN:O	1:B:101:VAL:HG22	2.16	0.46
1:A:428:SER:CB	1:B:430:VAL:HG11	2.46	0.46
1:A:290:ASN:HD22	1:A:291:TYR:HB2	1.81	0.46
1:A:58:ASP:HB3	1:A:81:ASN:OD1	2.15	0.46
1:B:306:HIS:NE2	2:C:39:PRO:CG	2.57	0.46
5:H:14:LEU:CG	5:H:160:PHE:CE1	2.99	0.46
4:G:97:PHE:C	5:H:49:LYS:HD3	2.34	0.46
1:A:41:HIS:CD2	1:A:164:GLU:CG	2.99	0.46
1:A:206:TYR:N	1:A:206:TYR:CD1	2.83	0.46
1:B:41:HIS:CD2	1:B:164:GLU:CG	2.99	0.46
1:B:241:ARG:NE	1:B:245:ILE:HD11	2.28	0.46
1:B:51:ARG:HB3	1:B:51:ARG:CZ	2.46	0.46
4:G:7:SER:O	4:G:10:LEU:HG	2.16	0.46
1:A:439:SER:HB3	1:A:443:ALA:H	1.81	0.46
1:B:439:SER:HB3	1:B:443:ALA:H	1.81	0.46
2:C:99:LYS:O	2:C:99:LYS:HG2	2.16	0.46
2:C:94:LEU:HD12	2:D:97:TYR:HA	1.97	0.46
1:A:46:LEU:HD23	1:A:143:GLU:N	2.30	0.46
1:A:148:PHE:CZ	1:A:156:ASP:HB3	2.50	0.46
1:A:198:GLU:HB2	1:A:200:TYR:CE1	2.49	0.46
1:A:92:PHE:N	1:A:92:PHE:HD1	2.13	0.46
1:B:225:ASN:HA	1:B:226:PRO:C	2.37	0.46
1:B:155:PHE:CE1	1:B:229:HIS:CE1	3.03	0.46
1:B:86:HIS:CD2	1:B:264:ILE:CG2	2.99	0.46
3:E:38:VAL:O	3:F:88:VAL:HG11	2.16	0.46
3:F:11:PHE:CD2	3:F:68:ILE:HG22	2.51	0.46
4:G:41:TYR:HA	4:G:42:PRO:C	2.23	0.46
1:A:190:MET:HE1	1:A:194:THR:HG21	1.97	0.46
1:A:305:TYR:CD1	1:A:305:TYR:N	2.83	0.46
1:A:155:PHE:CD1	1:A:229:HIS:CE1	3.03	0.46
1:A:99:TYR:CD2	1:A:370:LEU:CG	2.99	0.46
1:B:139:ASN:HA	1:B:257:LEU:HB2	1.96	0.46
1:B:148:PHE:CZ	1:B:156:ASP:HB3	2.50	0.46
1:B:158:VAL:HG12	1:B:160:PHE:CE1	2.51	0.46
1:B:179:PHE:CD1	1:B:180:ALA:N	2.83	0.46
1:B:51:ARG:HD2	1:B:57:ASN:ND2	2.30	0.46
2:D:4:GLN:HG3	2:D:8:ARG:HG3	1.97	0.46
3:E:14:TYR:CD1	3:E:15:VAL:N	2.84	0.46
3:F:32:PHE:CD1	3:F:32:PHE:N	2.83	0.46
3:F:71:LYS:HG2	3:F:71:LYS:O	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:G:41:TYR:N	4:G:41:TYR:CD1	2.82	0.46
1:B:440:LYS:CD	1:B:444:VAL:HG23	2.46	0.46
1:B:290:ASN:HD22	1:B:291:TYR:HB2	1.81	0.46
2:C:36:CYS:N	2:C:37:HIS:CA	2.80	0.46
2:D:63:PHE:CE2	2:D:86:ILE:N	2.84	0.46
1:A:163:GLU:HA	1:A:182:ARG:HE	1.81	0.46
1:A:205:VAL:HG12	1:A:206:TYR:N	2.30	0.46
1:A:225:ASN:HA	1:A:226:PRO:C	2.37	0.46
1:A:56:GLU:HB3	1:A:265:ASP:HB3	1.97	0.46
1:A:96:LYS:HG2	1:A:373:LYS:HD3	1.95	0.46
1:B:99:TYR:CD2	1:B:370:LEU:CG	2.99	0.46
3:E:59:ASN:HA	3:E:99:ILE:HB	1.97	0.46
2:C:73:ARG:HD3	3:E:91:SER:HB2	1.98	0.46
3:F:6:ARG:NH1	3:F:33:THR:HG23	2.32	0.46
3:F:60:ILE:N	3:F:60:ILE:HD13	2.28	0.46
4:G:71:TRP:N	4:G:71:TRP:CE3	2.84	0.46
1:A:109:SER:CB	1:A:114:LEU:HD23	2.45	0.46
1:B:81:ASN:HD22	1:B:83:ARG:HD2	1.81	0.46
1:A:425:ILE:HG12	1:A:429:LEU:CD2	2.46	0.45
1:A:58:ASP:HB3	1:A:81:ASN:CG	2.37	0.45
2:C:63:PHE:CE2	2:C:86:ILE:N	2.84	0.45
5:H:143:ILE:HG21	5:H:147:PRO:HD2	1.97	0.45
5:H:14:LEU:N	5:H:14:LEU:HD23	2.31	0.45
1:A:206:TYR:C	1:A:207:TYR:HD1	2.19	0.45
1:B:163:GLU:HA	1:B:182:ARG:HE	1.81	0.45
1:B:88:TRP:CE2	1:B:92:PHE:CZ	3.04	0.45
2:C:4:GLN:HG3	2:C:8:ARG:HG3	1.97	0.45
2:D:75:MET:H	2:D:78:VAL:HG11	1.80	0.45
3:F:36:ALA:HB2	3:F:62:THR:HG23	1.98	0.45
3:E:81:VAL:CB	3:F:86:ASP:HB3	2.45	0.45
1:A:232:LYS:HG2	1:A:233:GLY:N	2.31	0.45
2:D:63:PHE:CD2	2:D:86:ILE:HG23	2.48	0.45
4:G:129:PHE:CD1	4:G:129:PHE:N	2.83	0.45
5:H:17:SER:HB3	5:H:89:ILE:CG2	2.44	0.45
1:A:165:MET:CB	1:A:180:ALA:CB	2.94	0.45
1:A:184:TYR:N	1:A:184:TYR:HD1	2.14	0.45
1:A:46:LEU:HG	1:A:143:GLU:CB	2.46	0.45
1:B:389:PHE:N	1:B:389:PHE:CD1	2.83	0.45
2:C:71:THR:HB	2:C:72:GLY:HA3	1.98	0.45
3:E:60:ILE:HG13	3:E:65:ASP:CG	2.37	0.45
1:B:403:ASP:C	1:B:404:PHE:HD1	2.20	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:419:ILE:O	1:A:422:ASP:HB2	2.17	0.45
2:D:86:ILE:HG13	2:D:86:ILE:O	2.16	0.45
5:H:14:LEU:CD2	5:H:160:PHE:CE1	2.99	0.45
5:H:43:LEU:HD22	5:H:44:PHE:N	2.31	0.45
5:H:91:PHE:N	5:H:91:PHE:CD1	2.82	0.45
1:A:53:TYR:HB2	1:A:140:LYS:CE	2.45	0.45
1:A:167:VAL:CG2	1:A:246:PRO:HG2	2.46	0.45
1:A:92:PHE:CD1	1:A:92:PHE:N	2.82	0.45
1:B:46:LEU:HG	1:B:143:GLU:CB	2.46	0.45
1:B:46:LEU:H	1:B:46:LEU:CD1	2.30	0.45
2:D:8:ARG:HD2	2:D:8:ARG:C	2.35	0.45
3:E:48:LYS:HA	3:F:48:LYS:HB2	1.98	0.45
3:E:38:VAL:HG13	3:E:59:ASN:O	2.17	0.45
1:B:109:SER:CB	1:B:114:LEU:HD23	2.45	0.45
1:B:63:ARG:CD	1:B:75:VAL:CG1	2.95	0.45
1:A:378:GLU:CD	1:B:98:GLN:CD	2.75	0.45
1:A:98:GLN:O	1:A:101:VAL:HG22	2.16	0.45
1:A:169:TYR:HB2	1:A:173:THR:O	2.17	0.45
1:A:171:ASP:N	1:A:178:LEU:HD22	2.31	0.45
1:B:171:ASP:N	1:B:178:LEU:HD22	2.31	0.45
1:B:99:TYR:CB	1:B:373:LYS:HE2	2.46	0.45
1:B:46:LEU:HD23	1:B:143:GLU:N	2.30	0.45
1:A:252:GLU:HG3	1:B:85:SER:HB2	1.98	0.45
3:F:70:LYS:HB2	3:F:84:ILE:HA	1.98	0.45
3:F:17:GLN:HE21	3:F:19:ASN:ND2	2.14	0.45
1:A:403:ASP:C	1:A:404:PHE:HD1	2.20	0.45
1:B:215:TYR:O	1:B:216:GLN:HB3	2.16	0.45
1:A:460:ILE:HG21	1:B:467:TYR:N	2.32	0.45
1:A:63:ARG:CD	1:A:75:VAL:CG1	2.95	0.45
1:B:317:VAL:HB	1:B:319:THR:OG1	2.16	0.45
2:C:63:PHE:CG	2:C:85:GLU:CG	2.96	0.45
5:H:42:GLU:CB	5:H:43:LEU:CA	2.95	0.45
5:H:43:LEU:HD13	5:H:43:LEU:C	2.36	0.45
5:H:44:PHE:CD1	5:H:44:PHE:N	2.83	0.45
1:A:178:LEU:CA	1:A:242:VAL:CG1	2.95	0.45
1:A:369:LEU:H	1:A:369:LEU:HD12	1.80	0.45
1:B:169:TYR:CD1	1:B:169:TYR:N	2.84	0.45
1:B:169:TYR:HB2	1:B:173:THR:O	2.17	0.45
3:E:37:HIS:CE1	3:E:39:GLN:HB2	2.51	0.45
3:E:58:TYR:HA	3:F:100:LYS:HZ2	1.81	0.45
3:F:62:THR:HB	3:F:65:ASP:HB2	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:130:LEU:CD2	1:A:388:PHE:CE2	2.95	0.45
4:G:11:GLN:O	4:G:14:THR:HB	2.16	0.45
1:A:363:LEU:C	1:A:363:LEU:HD23	2.36	0.45
2:D:67:ASN:HA	2:D:81:ASN:OD1	2.17	0.45
1:A:64:ARG:NH2	1:B:284:ILE:HG12	2.31	0.45
1:A:179:PHE:CD1	1:A:180:ALA:N	2.83	0.45
1:B:165:MET:CB	1:B:180:ALA:CB	2.94	0.45
1:B:92:PHE:N	1:B:92:PHE:HD1	2.13	0.45
2:C:12:ILE:HG12	3:E:93:LEU:HG	1.99	0.45
2:D:75:MET:O	2:D:78:VAL:HG12	2.16	0.45
2:C:5:ARG:CA	3:E:3:GLU:N	2.80	0.45
3:E:50:GLN:CG	3:F:52:LEU:HB2	2.46	0.45
3:E:65:ASP:CA	3:E:97:THR:HB	2.46	0.45
3:F:44:GLU:HG2	3:F:46:TYR:HB2	1.95	0.45
3:E:50:GLN:CB	3:F:49:ALA:HB3	2.46	0.45
4:G:105:LYS:HA	4:G:106:LYS:HA	1.65	0.45
1:A:418:ARG:HH21	1:A:446:ARG:NH2	2.15	0.45
1:A:289:LYS:HD2	1:A:319:THR:HG23	1.94	0.45
2:C:84:THR:CG2	2:D:83:ALA:HA	2.47	0.45
2:C:98:ARG:HH12	2:D:102:ARG:H	1.63	0.45
1:A:206:TYR:HD1	1:A:206:TYR:N	2.15	0.45
1:A:86:HIS:CB	1:A:264:ILE:HG21	2.47	0.45
2:C:75:MET:O	2:C:78:VAL:HG12	2.16	0.45
3:E:35:ALA:O	3:E:36:ALA:HB3	2.16	0.45
3:E:38:VAL:H	3:F:88:VAL:HB	1.82	0.45
3:F:28:TRP:HZ3	3:F:80:ILE:CG2	2.26	0.45
3:F:21:GLU:HG3	4:G:19:GLU:OE2	2.08	0.45
1:A:190:MET:HE1	1:A:194:THR:CG2	2.47	0.45
2:D:59:LYS:HB2	2:D:90:ILE:CD1	2.47	0.45
1:A:142:ILE:CD1	1:A:145:TRP:HB2	2.46	0.45
1:A:187:LYS:CE	1:A:193:GLU:CB	2.95	0.45
1:A:88:TRP:CD2	1:A:92:PHE:HE1	2.34	0.45
1:A:99:TYR:CD2	1:A:370:LEU:CB	2.97	0.45
2:D:75:MET:H	2:D:78:VAL:HB	1.81	0.45
3:E:47:TYR:OH	3:F:41:ILE:HD11	2.17	0.45
3:E:53:GLN:O	3:F:102:LYS:HE2	2.17	0.45
3:F:103:GLU:OE1	4:G:31:VAL:HG11	2.17	0.45
5:H:65:VAL:HG11	5:H:67:TYR:CE1	2.52	0.45
1:A:466:GLN:HA	1:A:467:TYR:HA	1.58	0.45
1:A:390:TRP:CZ3	1:B:125:ASP:OD2	2.69	0.45
2:C:67:ASN:HA	2:C:81:ASN:OD1	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:419:ILE:O	1:B:422:ASP:HB2	2.17	0.45
1:A:291:TYR:CB	1:A:312:SER:HB2	2.43	0.45
1:A:62:LYS:HB3	1:A:81:ASN:OD1	2.17	0.45
1:A:63:ARG:CD	1:A:75:VAL:HG11	2.46	0.45
1:B:320:LEU:N	1:B:321:ARG:CA	2.80	0.45
2:C:53:VAL:O	2:C:57:VAL:HG13	2.17	0.45
2:D:36:CYS:N	2:D:37:HIS:CA	2.80	0.45
2:C:95:ASN:N	2:D:97:TYR:HB2	2.30	0.45
2:D:95:ASN:CB	2:D:98:ARG:N	2.80	0.45
1:A:51:ARG:CZ	1:A:51:ARG:HB3	2.46	0.45
1:B:183:TYR:CB	1:B:197:ALA:CB	2.95	0.45
1:B:99:TYR:CB	1:B:373:LYS:HZ1	2.29	0.45
1:B:379:ARG:HB2	1:B:380:LYS:HZ3	1.81	0.45
3:E:60:ILE:HD11	3:E:69:ASP:OD1	2.16	0.45
3:E:74:VAL:CG1	3:E:76:TYR:CE1	2.99	0.45
3:F:63:PRO:CA	3:F:96:ILE:HA	2.24	0.45
4:G:33:GLU:O	4:G:34:SER:HB2	2.17	0.45
1:B:232:LYS:HG2	1:B:233:GLY:N	2.31	0.45
1:B:418:ARG:HH21	1:B:446:ARG:NH2	2.15	0.45
1:A:317:VAL:HB	1:A:319:THR:OG1	2.16	0.45
1:A:320:LEU:N	1:A:321:ARG:CA	2.80	0.45
1:A:81:ASN:HD22	1:A:83:ARG:HD2	1.81	0.45
1:B:300:THR:O	1:B:304:ARG:HG3	2.17	0.45
2:D:53:VAL:O	2:D:57:VAL:HG13	2.17	0.45
5:H:108:PHE:CZ	5:H:153:VAL:CG2	3.00	0.45
5:H:15:PHE:HZ	5:H:91:PHE:CZ	2.33	0.45
5:H:22:THR:CG2	5:H:92:TRP:NE1	2.79	0.45
1:A:382:ARG:CZ	1:A:385:LEU:HD23	2.47	0.45
1:B:382:ARG:CZ	1:B:385:LEU:HD23	2.47	0.45
2:D:71:THR:HB	2:D:72:GLY:HA3	1.98	0.45
3:E:50:GLN:HB3	3:F:49:ALA:CB	2.47	0.45
3:F:60:ILE:CG2	3:F:83:PHE:HD2	2.29	0.45
1:B:63:ARG:CD	1:B:75:VAL:HG11	2.46	0.45
2:C:49:ILE:CD1	2:C:54:LEU:CG	2.95	0.44
1:A:146:HIS:CE1	1:A:243:PRO:HB2	2.52	0.44
1:A:99:TYR:CB	1:A:373:LYS:HE2	2.46	0.44
1:B:254:VAL:CB	1:B:259:PHE:CE1	2.95	0.44
3:E:14:TYR:HD1	3:E:15:VAL:H	1.66	0.44
3:E:12:GLN:C	3:E:30:ASP:HB2	2.36	0.44
3:E:45:GLU:O	3:F:44:GLU:HB3	2.17	0.44
2:C:86:ILE:HG13	2:C:86:ILE:O	2.16	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:23:GLU:O	2:D:26:PRO:HD2	2.18	0.44
5:H:108:PHE:CB	5:H:150:ILE:CG2	2.95	0.44
1:B:206:TYR:HD1	1:B:206:TYR:N	2.15	0.44
1:B:178:LEU:CA	1:B:242:VAL:CG1	2.95	0.44
1:B:258:LYS:HA	1:B:261:LYS:HB3	1.98	0.44
2:C:75:MET:H	2:C:78:VAL:HG11	1.81	0.44
3:E:83:PHE:CD1	3:E:83:PHE:N	2.83	0.44
3:E:85:GLY:HA3	3:E:99:ILE:HG22	1.98	0.44
3:F:60:ILE:HD13	3:F:99:ILE:HD11	1.98	0.44
4:G:33:GLU:HB2	4:G:45:VAL:HA	1.98	0.44
4:G:41:TYR:N	4:G:41:TYR:HD1	2.14	0.44
1:A:215:TYR:O	1:A:216:GLN:HB3	2.16	0.44
5:H:128:ILE:HG22	5:H:129:SER:N	2.33	0.44
2:C:23:GLU:O	2:C:26:PRO:HD2	2.18	0.44
4:G:4:LYS:CD	4:G:5:LEU:CD1	2.96	0.44
5:H:43:LEU:CD1	5:H:43:LEU:H	2.30	0.44
5:H:47:GLN:HE22	5:H:55:GLY:H	1.64	0.44
5:H:89:ILE:N	5:H:89:ILE:HD13	2.32	0.44
1:A:389:PHE:CD1	1:A:389:PHE:N	2.83	0.44
1:B:167:VAL:CG2	1:B:246:PRO:HG2	2.46	0.44
1:B:88:TRP:CD2	1:B:92:PHE:HE1	2.34	0.44
3:E:108:VAL:CB	4:G:43:TYR:HH	2.23	0.44
2:C:4:GLN:O	3:E:1:MET:N	2.50	0.44
3:E:5:PHE:CE2	3:E:7:ASP:HB2	2.49	0.44
3:F:76:TYR:HE1	3:F:81:VAL:HG11	1.80	0.44
4:G:44:VAL:HG21	4:G:74:THR:CA	2.45	0.44
4:G:44:VAL:HG12	4:G:45:VAL:N	2.32	0.44
4:G:42:PRO:CB	4:G:72:GLY:HA3	2.32	0.44
1:B:58:ASP:HB3	1:B:81:ASN:CG	2.37	0.44
3:F:15:VAL:HG12	3:F:17:GLN:N	2.32	0.44
1:A:211:ILE:HG13	1:A:212:ASP:H	1.81	0.44
1:A:63:ARG:CB	1:A:75:VAL:CG1	2.95	0.44
1:B:292:ASP:HA	1:B:293:GLY:HA3	1.73	0.44
1:A:292:ASP:OD2	2:C:31:PHE:C	2.56	0.44
2:C:95:ASN:CB	2:C:98:ARG:N	2.80	0.44
2:D:49:ILE:CD1	2:D:54:LEU:CG	2.95	0.44
2:D:93:LYS:NZ	2:D:94:LEU:HD11	2.30	0.44
1:A:187:LYS:CD	1:A:193:GLU:CB	2.95	0.44
1:A:138:SER:HB3	1:A:256:ASP:CG	2.37	0.44
1:B:179:PHE:CE1	1:B:244:ILE:CG2	2.98	0.44
1:B:86:HIS:CB	1:B:264:ILE:HG21	2.47	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:6:ARG:HD2	3:F:33:THR:HG21	1.99	0.44
4:G:18:LEU:HA	4:G:24:LEU:HD13	1.98	0.44
4:G:35:PRO:HA	4:G:37:LYS:HZ3	1.82	0.44
1:B:392:PHE:HD1	1:B:392:PHE:HA	1.56	0.44
1:A:300:THR:O	1:A:304:ARG:HG3	2.17	0.44
5:H:160:PHE:CB	5:H:163:PRO:HG2	2.45	0.44
1:A:178:LEU:CG	1:A:242:VAL:HG11	2.45	0.44
1:A:96:LYS:CE	1:A:377:ALA:HB2	2.47	0.44
1:A:86:HIS:CD2	1:A:264:ILE:CG2	2.99	0.44
1:B:38:ILE:CD1	1:B:181:LEU:CD1	2.95	0.44
1:B:146:HIS:CE1	1:B:243:PRO:HB2	2.52	0.44
1:B:44:GLU:HB3	1:B:45:PRO:CD	2.37	0.44
2:C:75:MET:H	2:C:78:VAL:HB	1.81	0.44
4:G:113:ILE:HG12	4:G:122:HIS:N	2.32	0.44
1:A:335:ARG:NH2	1:A:336:ILE:HG12	2.32	0.44
5:H:68:TYR:HH	5:H:125:ALA:HB3	1.82	0.44
4:G:48:ASP:HB2	4:G:51:SER:HB3	1.99	0.44
1:A:387:LEU:HG	1:A:391:PHE:CE2	2.53	0.44
1:B:425:ILE:HG12	1:B:429:LEU:CD2	2.46	0.44
1:B:310:LYS:HG3	2:C:38:ASN:CB	2.44	0.44
2:D:41:ILE:HG22	2:D:45:GLY:HA2	1.97	0.44
4:G:59:SER:HB2	5:H:138:LEU:HB3	2.00	0.44
5:H:53:ILE:C	5:H:54:LEU:CA	2.75	0.44
5:H:89:ILE:CG2	5:H:91:PHE:CE1	3.01	0.44
1:A:199:LEU:HB3	1:A:208:TYR:CZ	2.53	0.44
1:A:243:PRO:HA	1:A:244:ILE:HA	1.53	0.44
1:B:108:THR:CG2	1:B:412:MET:CE	2.95	0.44
1:B:138:SER:HB3	1:B:256:ASP:CG	2.37	0.44
1:B:157:TYR:CD1	1:B:157:TYR:N	2.85	0.44
3:E:37:HIS:NE2	3:F:90:LEU:HA	2.32	0.44
3:E:79:LYS:HD3	3:F:69:ASP:HB3	1.98	0.44
3:F:75:ILE:CG2	3:F:78:GLY:H	2.30	0.44
4:G:113:ILE:CG1	4:G:122:HIS:H	2.31	0.44
1:B:62:LYS:HB3	1:B:81:ASN:OD1	2.17	0.44
1:A:426:VAL:HA	1:A:429:LEU:HG	2.00	0.44
1:B:452:ASP:OD1	1:B:453:PRO:HD2	2.18	0.44
1:A:288:LEU:CD2	1:B:310:LYS:NZ	2.81	0.44
1:A:148:PHE:CB	1:A:205:VAL:CG2	2.96	0.44
1:A:183:TYR:CB	1:A:197:ALA:CB	2.95	0.44
1:A:258:LYS:HA	1:A:261:LYS:HB3	1.98	0.44
2:C:73:ARG:HD3	3:E:91:SER:HB3	1.95	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:64:TYR:CE1	3:F:95:GLU:CB	2.95	0.44
4:G:113:ILE:HG13	4:G:115:ASP:OD1	2.17	0.44
5:H:32:GLN:NE2	5:H:93:ARG:HG2	2.32	0.44
1:B:426:VAL:HA	1:B:429:LEU:HG	2.00	0.44
2:C:59:LYS:HB2	2:C:90:ILE:CD1	2.47	0.44
4:G:4:LYS:HG2	4:G:5:LEU:H	1.83	0.44
5:H:42:GLU:CG	5:H:56:PRO:CD	2.90	0.44
1:B:187:LYS:CE	1:B:193:GLU:CB	2.95	0.44
1:B:187:LYS:CD	1:B:193:GLU:CB	2.95	0.44
1:B:149:VAL:CG2	1:B:227:ARG:CD	2.95	0.44
1:B:370:LEU:N	1:B:370:LEU:HD22	2.33	0.44
1:B:42:ASN:OD1	1:B:44:GLU:HB2	2.18	0.44
3:E:52:LEU:CB	3:E:53:GLN:HA	2.46	0.44
3:E:74:VAL:HB	3:E:83:PHE:HZ	1.79	0.44
3:F:37:HIS:ND1	3:F:61:TYR:HE2	2.15	0.44
4:G:32:THR:OG1	4:G:43:TYR:HA	2.17	0.44
3:F:15:VAL:HG12	3:F:17:GLN:H	1.82	0.44
5:H:120:ASP:C	5:H:126:VAL:HG23	2.38	0.44
1:A:247:PHE:CD1	1:A:247:PHE:N	2.83	0.44
1:A:439:SER:N	1:A:440:LYS:CA	2.81	0.44
2:C:95:ASN:CB	2:C:98:ARG:H	2.31	0.44
2:C:98:ARG:NH2	2:D:102:ARG:HD2	2.33	0.44
2:C:98:ARG:CZ	2:D:102:ARG:CG	2.90	0.44
1:B:292:ASP:OD2	2:D:31:PHE:C	2.56	0.44
2:D:34:ASP:CB	2:D:35:GLU:CA	2.93	0.44
2:D:95:ASN:CB	2:D:98:ARG:H	2.31	0.44
5:H:143:ILE:CG1	5:H:147:PRO:HG2	2.37	0.44
1:A:167:VAL:HG21	1:A:246:PRO:HG2	1.99	0.44
1:B:96:LYS:CE	1:B:377:ALA:HB2	2.47	0.44
3:E:15:VAL:CG1	3:E:73:ARG:HB2	2.47	0.44
3:F:46:TYR:CG	3:F:48:LYS:HE2	2.52	0.44
3:E:38:VAL:O	3:F:88:VAL:HB	2.17	0.44
4:G:45:VAL:HG22	4:G:71:TRP:CZ3	2.41	0.44
1:B:117:TYR:O	1:B:121:LEU:HD23	2.18	0.44
1:B:211:ILE:HG13	1:B:212:ASP:H	1.81	0.44
1:B:439:SER:N	1:B:440:LYS:CA	2.81	0.43
1:A:252:GLU:CG	1:B:85:SER:CB	2.95	0.43
1:A:370:LEU:HD22	1:A:370:LEU:N	2.33	0.43
1:A:389:PHE:HD2	1:A:407:ASP:OD2	2.01	0.43
1:A:48:LYS:O	1:A:52:TYR:HB2	2.18	0.43
1:B:204:HIS:NE2	1:B:206:TYR:CE1	2.86	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:148:PHE:CB	1:B:205:VAL:CG2	2.96	0.43
2:C:4:GLN:OE1	3:E:2:TYR:N	2.46	0.43
2:D:4:GLN:HG2	3:F:1:MET:HE3	1.93	0.43
3:F:93:LEU:CD2	3:F:93:LEU:H	2.30	0.43
1:A:120:GLU:HG3	1:A:121:LEU:N	2.33	0.43
1:A:126:PHE:CE2	1:A:392:PHE:CZ	3.03	0.43
1:B:120:GLU:HG3	1:B:121:LEU:N	2.33	0.43
1:B:63:ARG:CB	1:B:75:VAL:CG1	2.95	0.43
1:A:130:LEU:CD1	1:A:388:PHE:CE2	2.98	0.43
1:A:452:ASP:OD1	1:A:453:PRO:HD2	2.18	0.43
1:A:42:ASN:OD1	1:A:44:GLU:HB2	2.18	0.43
1:A:53:TYR:O	1:A:53:TYR:HD1	2.01	0.43
1:B:142:ILE:CD1	1:B:145:TRP:HB2	2.46	0.43
1:B:199:LEU:HB3	1:B:208:TYR:CZ	2.53	0.43
3:E:38:VAL:CB	3:F:88:VAL:HG12	2.36	0.43
4:G:32:THR:CB	4:G:43:TYR:HB2	2.47	0.43
1:A:466:GLN:CG	1:A:467:TYR:CB	2.95	0.43
1:A:219:TYR:N	1:A:219:TYR:CD1	2.83	0.43
2:C:94:LEU:HD12	2:D:97:TYR:CA	2.46	0.43
4:G:4:LYS:HG2	4:G:5:LEU:CD1	2.46	0.43
4:G:63:ASN:CB	4:G:130:THR:HA	2.48	0.43
5:H:112:TYR:HD1	5:H:112:TYR:HA	1.56	0.43
4:G:63:ASN:OD1	5:H:139:LYS:HG2	2.18	0.43
5:H:15:PHE:HE1	5:H:91:PHE:CG	2.36	0.43
1:A:43:PRO:HB2	1:A:47:LEU:HD12	2.00	0.43
1:B:146:HIS:CG	1:B:200:TYR:HD2	2.37	0.43
1:B:163:GLU:N	1:B:182:ARG:HD2	2.33	0.43
1:B:178:LEU:CG	1:B:242:VAL:HG11	2.45	0.43
2:D:4:GLN:HB2	2:D:8:ARG:NE	2.33	0.43
3:E:53:GLN:NE2	3:E:102:LYS:HD2	2.34	0.43
2:C:71:THR:HA	3:E:92:GLY:CA	2.49	0.43
4:G:28:VAL:HG22	4:G:29:ASN:N	2.33	0.43
4:G:44:VAL:HG13	4:G:70:VAL:CG1	2.44	0.43
4:G:48:ASP:HB2	4:G:51:SER:CB	2.49	0.43
1:A:144:TYR:HD2	1:A:165:MET:HE2	1.82	0.43
1:A:38:ILE:CD1	1:A:181:LEU:CD1	2.95	0.43
1:B:389:PHE:HD2	1:B:407:ASP:OD2	2.01	0.43
1:B:53:TYR:HD1	1:B:53:TYR:O	2.01	0.43
3:E:12:GLN:CB	3:E:28:TRP:CE3	2.95	0.43
3:F:41:ILE:CG2	3:F:42:SER:H	2.24	0.43
1:A:290:ASN:CB	1:A:291:TYR:CA	2.95	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:169:TYR:CD1	1:A:169:TYR:N	2.84	0.43
1:A:146:HIS:CG	1:A:200:TYR:HD2	2.37	0.43
1:B:167:VAL:HG21	1:B:246:PRO:HG2	1.99	0.43
2:C:4:GLN:HB2	2:C:8:ARG:NE	2.33	0.43
3:E:50:GLN:OE1	3:F:49:ALA:HB3	2.18	0.43
3:E:55:PRO:HB3	3:E:102:LYS:HB2	1.99	0.43
3:F:80:ILE:HG13	3:F:80:ILE:O	2.17	0.43
3:F:90:LEU:CB	3:F:98:ARG:CD	2.97	0.43
4:G:70:VAL:HG11	4:G:76:ARG:HH22	1.80	0.43
1:B:335:ARG:NH2	1:B:336:ILE:HG12	2.32	0.43
2:C:41:ILE:HG22	2:C:45:GLY:HA2	1.97	0.43
2:D:41:ILE:HG21	2:D:45:GLY:HA2	1.95	0.43
4:G:96:MET:HG2	4:G:97:PHE:N	2.33	0.43
5:H:108:PHE:CZ	5:H:153:VAL:HG22	2.54	0.43
1:A:148:PHE:HD1	1:A:148:PHE:N	2.14	0.43
1:A:204:HIS:NE2	1:A:206:TYR:CE1	2.86	0.43
1:A:221:TYR:CD1	1:A:221:TYR:N	2.83	0.43
1:A:230:MET:SD	1:A:239:TRP:NE1	2.91	0.43
1:A:410:LEU:CB	1:A:412:MET:CG	2.95	0.43
1:B:147:PRO:HB2	1:B:229:HIS:NE2	2.33	0.43
1:B:376:MET:HG3	1:B:377:ALA:N	2.30	0.43
3:E:52:LEU:CB	3:E:53:GLN:CA	2.95	0.43
3:E:62:THR:CB	3:E:68:ILE:CD1	2.95	0.43
4:G:74:THR:CG2	4:G:75:THR:N	2.81	0.43
5:H:32:GLN:CB	5:H:67:TYR:CE1	3.01	0.43
1:A:417:THR:N	1:A:418:ARG:CA	2.82	0.43
1:B:291:TYR:CB	1:B:312:SER:HB2	2.43	0.43
2:C:95:ASN:OD1	2:C:97:TYR:HB3	2.18	0.43
2:D:95:ASN:OD1	2:D:97:TYR:HB3	2.18	0.43
5:H:58:SER:CB	5:H:143:ILE:CD1	2.95	0.43
1:A:163:GLU:N	1:A:182:ARG:HD2	2.33	0.43
1:A:179:PHE:CE1	1:A:244:ILE:CG2	2.98	0.43
1:A:254:VAL:CB	1:A:259:PHE:CE1	2.95	0.43
1:A:46:LEU:H	1:A:46:LEU:CD1	2.30	0.43
1:B:142:ILE:N	1:B:143:GLU:CA	2.81	0.43
1:B:144:TYR:HD2	1:B:165:MET:HE2	1.83	0.43
1:B:364:GLU:HG3	1:B:365:LYS:N	2.34	0.43
3:E:84:ILE:HG13	3:E:103:GLU:HG2	2.01	0.43
2:C:11:SER:HB3	3:E:93:LEU:CB	2.49	0.43
3:F:76:TYR:N	3:F:76:TYR:CD1	2.83	0.43
3:F:76:TYR:CE2	3:F:79:LYS:CB	3.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:387:LEU:HG	1:B:391:PHE:CE2	2.53	0.43
1:B:219:TYR:CD1	1:B:219:TYR:N	2.83	0.43
1:B:290:ASN:CB	1:B:291:TYR:CA	2.95	0.43
4:G:134:ASN:C	5:H:57:GLY:C	2.77	0.43
1:A:157:TYR:CD1	1:A:157:TYR:N	2.85	0.43
1:B:221:TYR:N	1:B:221:TYR:CD1	2.82	0.43
1:B:48:LYS:O	1:B:52:TYR:HB2	2.18	0.43
3:E:105:GLY:N	4:G:119:VAL:HG22	2.11	0.43
3:E:81:VAL:CG1	3:E:82:THR:N	2.82	0.43
3:F:43:GLN:HG2	3:F:52:LEU:C	2.39	0.43
3:F:42:SER:O	3:F:43:GLN:HG3	2.19	0.43
3:F:45:GLU:CA	3:F:47:TYR:CE1	2.95	0.43
3:F:57:GLY:C	3:F:58:TYR:HD1	2.21	0.43
3:E:77:ARG:HD3	3:F:65:ASP:O	2.18	0.43
3:F:70:LYS:CG	3:F:71:LYS:N	2.82	0.43
3:F:9:ILE:HD12	3:F:11:PHE:HE1	1.83	0.43
3:E:109:GLY:N	4:G:113:ILE:HD12	2.30	0.43
4:G:33:GLU:CB	4:G:45:VAL:HA	2.49	0.43
1:A:117:TYR:O	1:A:121:LEU:HD23	2.18	0.43
3:F:17:GLN:HB2	3:F:19:ASN:OD1	2.18	0.43
4:G:48:ASP:CA	4:G:67:ASP:HB2	2.47	0.43
1:B:404:PHE:CD1	1:B:404:PHE:N	2.84	0.43
1:A:347:VAL:HG12	1:A:348:ASP:N	2.34	0.43
1:A:438:MET:HG2	1:B:433:VAL:O	2.19	0.43
1:A:288:LEU:HG	1:A:288:LEU:O	2.19	0.43
2:C:99:LYS:HZ3	2:D:102:ARG:N	1.89	0.43
5:H:37:VAL:HB	5:H:64:GLU:N	2.34	0.43
1:A:163:GLU:OE1	1:A:163:GLU:HA	2.19	0.43
1:B:149:VAL:CG2	1:B:227:ARG:HD3	2.49	0.43
2:C:5:ARG:CB	3:E:3:GLU:C	2.85	0.43
2:D:76:ASP:OD1	3:F:90:LEU:HD11	2.18	0.43
3:E:13:SER:CB	3:E:75:ILE:CD1	2.96	0.43
3:E:58:TYR:CE2	3:E:81:VAL:HG11	2.50	0.43
3:E:58:TYR:CG	3:E:81:VAL:HG11	2.51	0.43
3:F:103:GLU:CB	4:G:31:VAL:HG21	2.49	0.43
1:A:339:GLU:CD	1:B:274:THR:HG21	2.38	0.43
2:D:80:TYR:HA	2:D:80:TYR:HD1	1.38	0.43
4:G:4:LYS:CG	4:G:5:LEU:CD1	2.95	0.43
4:G:100:PHE:CZ	5:H:47:GLN:N	2.46	0.43
1:A:44:GLU:HB3	1:A:45:PRO:CD	2.37	0.43
1:B:140:LYS:N	1:B:257:LEU:CB	2.82	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:221:TYR:CB	1:B:222:GLY:CA	2.94	0.43
3:E:62:THR:CG2	3:E:68:ILE:CD1	2.95	0.43
3:E:8:VAL:HG22	3:E:34:ALA:CA	2.38	0.43
3:F:55:PRO:HG3	3:F:102:LYS:CB	2.48	0.43
3:E:54:THR:HG23	3:F:102:LYS:HG3	2.01	0.43
3:F:76:TYR:CE2	3:F:79:LYS:HG2	2.53	0.43
5:H:67:TYR:O	5:H:127:GLU:HG3	2.19	0.43
1:B:417:THR:N	1:B:418:ARG:CA	2.82	0.42
1:B:439:SER:CB	1:B:442:THR:N	2.82	0.42
1:B:466:GLN:CG	1:B:467:TYR:CG	2.95	0.42
2:C:94:LEU:O	2:C:96:PRO:HA	2.19	0.42
2:D:49:ILE:HD11	2:D:54:LEU:HG	2.01	0.42
5:H:143:ILE:H	5:H:143:ILE:CD1	2.23	0.42
5:H:41:ARG:NE	5:H:61:ASP:HB2	2.30	0.42
1:A:221:TYR:CB	1:A:222:GLY:CA	2.94	0.42
1:A:37:LEU:O	1:A:166:ILE:HD12	2.19	0.42
1:A:52:TYR:CZ	1:A:265:ASP:HB2	2.54	0.42
1:B:148:PHE:HD1	1:B:148:PHE:N	2.14	0.42
1:B:140:LYS:N	1:B:257:LEU:HB3	2.34	0.42
1:B:260:TYR:N	1:B:260:TYR:CD1	2.82	0.42
1:B:52:TYR:CZ	1:B:265:ASP:HB2	2.54	0.42
3:F:12:GLN:HB2	3:F:29:VAL:O	2.19	0.42
4:G:46:ILE:CG2	4:G:66:MET:CE	2.96	0.42
1:A:112:LYS:N	1:A:401:LYS:HZ2	2.17	0.42
4:G:7:SER:O	4:G:10:LEU:HD23	2.19	0.42
1:B:347:VAL:HG12	1:B:348:ASP:N	2.34	0.42
2:D:94:LEU:O	2:D:96:PRO:HA	2.19	0.42
4:G:63:ASN:C	5:H:140:ASN:ND2	2.68	0.42
5:H:46:GLU:HB3	5:H:151:VAL:HB	1.99	0.42
5:H:26:PRO:O	5:H:27:LEU:HD23	2.20	0.42
1:A:142:ILE:N	1:A:143:GLU:CA	2.81	0.42
1:A:364:GLU:HG3	1:A:365:LYS:N	2.34	0.42
1:A:373:LYS:CE	1:A:374:ALA:HA	2.49	0.42
1:A:376:MET:HA	1:A:379:ARG:CZ	2.50	0.42
3:F:75:ILE:CG1	3:F:80:ILE:HG22	2.49	0.42
1:A:452:ASP:OD2	1:A:454:GLU:HB2	2.19	0.42
1:B:425:ILE:CG2	1:B:426:VAL:N	2.83	0.42
1:B:440:LYS:HE2	1:B:444:VAL:HG23	1.99	0.42
1:A:288:LEU:CD2	1:A:288:LEU:H	2.30	0.42
2:C:84:THR:CB	2:D:83:ALA:CB	2.97	0.42
2:D:84:THR:HG23	2:D:85:GLU:H	1.82	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:G:134:ASN:ND2	5:H:58:SER:O	2.53	0.42
5:H:96:THR:CG2	5:H:97:VAL:H	2.30	0.42
1:A:361:PRO:O	1:A:365:LYS:HB2	2.19	0.42
1:B:41:HIS:CD2	1:B:164:GLU:HB3	2.47	0.42
1:B:46:LEU:CD2	1:B:143:GLU:N	2.82	0.42
3:F:105:GLY:O	4:G:38:ASP:N	2.44	0.42
3:F:9:ILE:CG1	3:F:11:PHE:CE1	2.95	0.42
3:F:14:TYR:N	3:F:73:ARG:HB3	2.34	0.42
3:F:68:ILE:CG1	3:F:69:ASP:N	2.82	0.42
4:G:22:GLN:HG3	4:G:23:PRO:CD	2.43	0.42
4:G:27:MET:N	4:G:28:VAL:CA	2.82	0.42
4:G:43:TYR:CE1	4:G:71:TRP:HB2	2.54	0.42
1:B:185:SER:HB3	1:B:195:GLN:NE2	2.35	0.42
1:B:247:PHE:CD1	1:B:247:PHE:N	2.83	0.42
1:A:425:ILE:CG2	1:A:426:VAL:N	2.83	0.42
1:A:439:SER:HB3	1:A:442:THR:N	2.34	0.42
1:A:447:ASN:ND2	1:A:449:PHE:CE1	2.87	0.42
5:H:111:ALA:HA	5:H:132:LEU:CB	2.49	0.42
5:H:150:ILE:O	5:H:153:VAL:HG13	2.20	0.42
1:A:140:LYS:N	1:A:257:LEU:CB	2.82	0.42
1:A:177:ILE:HG23	1:A:241:ARG:HH22	1.85	0.42
1:B:138:SER:HB3	1:B:256:ASP:OD2	2.20	0.42
1:B:177:ILE:HG23	1:B:241:ARG:HH22	1.85	0.42
1:B:96:LYS:HD3	1:B:377:ALA:CB	2.50	0.42
2:D:78:VAL:CG2	2:D:79:SER:N	2.82	0.42
3:E:85:GLY:O	3:E:87:PRO:HD3	2.19	0.42
3:F:12:GLN:HE21	3:F:75:ILE:HG12	1.82	0.42
3:F:76:TYR:HE2	3:F:79:LYS:HG2	1.84	0.42
1:B:112:LYS:N	1:B:401:LYS:HZ2	2.17	0.42
1:B:80:THR:CG2	1:B:81:ASN:N	2.83	0.42
2:C:80:TYR:HA	2:C:80:TYR:HD1	1.38	0.42
1:A:441:GLU:HB2	1:B:462:GLU:CD	2.39	0.42
1:B:439:SER:HB3	1:B:442:THR:N	2.35	0.42
1:A:286:TYR:O	1:A:321:ARG:HG2	2.20	0.42
1:B:298:GLU:OE1	2:C:44:ASP:N	2.49	0.42
2:C:55:ILE:CG1	2:C:56:PHE:N	2.82	0.42
2:C:97:TYR:O	2:C:98:ARG:HB3	2.19	0.42
5:H:53:ILE:C	5:H:54:LEU:C	2.78	0.42
1:A:146:HIS:CG	1:A:200:TYR:CD2	3.07	0.42
1:A:171:ASP:N	1:A:178:LEU:CD2	2.83	0.42
1:A:147:PRO:HB2	1:A:229:HIS:NE2	2.33	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:138:SER:HB3	1:A:256:ASP:OD2	2.20	0.42
1:A:48:LYS:CG	1:A:49:GLY:N	2.83	0.42
1:B:136:ASN:HB2	1:B:145:TRP:CH2	2.54	0.42
1:B:410:LEU:CB	1:B:412:MET:CG	2.95	0.42
2:D:71:THR:N	2:D:72:GLY:CA	2.83	0.42
3:E:31:GLU:CA	3:E:72:MET:SD	3.07	0.42
3:F:45:GLU:CA	3:F:47:TYR:CD1	2.96	0.42
3:F:65:ASP:CB	3:F:68:ILE:CG2	2.95	0.42
5:H:29:PRO:HG2	5:H:31:TYR:CE2	2.55	0.42
1:B:334:GLU:HG3	1:B:335:ARG:N	2.35	0.42
1:B:345:GLN:CG	1:B:346:ALA:H	2.33	0.42
1:B:216:GLN:CG	1:B:217:MET:N	2.83	0.42
1:B:452:ASP:OD2	1:B:454:GLU:HB2	2.19	0.42
1:A:320:LEU:HB2	1:A:321:ARG:C	2.38	0.42
1:A:80:THR:CG2	1:A:81:ASN:N	2.83	0.42
1:A:83:ARG:N	1:A:83:ARG:CD	2.83	0.42
2:C:84:THR:CG2	2:C:85:GLU:N	2.82	0.42
2:C:98:ARG:HH22	2:D:102:ARG:HG2	1.81	0.42
2:D:59:LYS:CB	2:D:90:ILE:HD13	2.50	0.42
5:H:22:THR:CG2	5:H:24:SER:H	2.32	0.42
5:H:44:PHE:CZ	5:H:60:ALA:CB	3.02	0.42
1:A:159:ILE:HD13	1:A:160:PHE:C	2.40	0.42
1:A:140:LYS:N	1:A:257:LEU:HB3	2.34	0.42
1:B:106:THR:CG2	1:B:107:PHE:N	2.83	0.42
1:B:171:ASP:N	1:B:178:LEU:CD2	2.83	0.42
1:B:255:SER:HB3	1:B:259:PHE:CZ	2.54	0.42
1:B:361:PRO:O	1:B:365:LYS:HB2	2.19	0.42
1:B:373:LYS:CE	1:B:374:ALA:HA	2.49	0.42
1:B:96:LYS:CE	1:B:377:ALA:HA	2.36	0.42
3:E:8:VAL:HG11	3:E:33:THR:HG22	2.01	0.42
3:E:84:ILE:CD1	3:E:84:ILE:N	2.83	0.42
2:D:5:ARG:CB	3:F:2:TYR:HB2	2.46	0.42
1:B:417:THR:CB	1:B:418:ARG:CA	2.95	0.42
1:A:69:ALA:N	1:B:300:THR:HG22	2.28	0.42
2:C:59:LYS:CB	2:C:90:ILE:HD13	2.50	0.42
4:G:134:ASN:HB2	5:H:138:LEU:O	2.15	0.42
1:A:106:THR:CG2	1:A:107:PHE:N	2.83	0.42
1:A:150:ASP:OD2	1:A:152:GLU:HG3	2.20	0.42
1:A:46:LEU:CD2	1:A:143:GLU:N	2.82	0.42
1:B:150:ASP:OD2	1:B:152:GLU:HG3	2.20	0.42
1:B:230:MET:SD	1:B:239:TRP:NE1	2.91	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:243:PRO:HA	1:B:244:ILE:HA	1.53	0.42
3:F:42:SER:C	3:F:43:GLN:HG3	2.40	0.42
3:F:6:ARG:HD2	3:F:33:THR:CG2	2.49	0.42
3:F:70:LYS:HE2	3:F:71:LYS:HB2	2.02	0.42
3:E:24:LYS:HG2	3:E:25:THR:N	2.35	0.42
1:A:270:ILE:HD13	1:B:275:MET:SD	2.60	0.42
1:B:350:SER:OG	1:B:351:PRO:HD2	2.20	0.42
1:A:440:LYS:HE2	1:A:444:VAL:HG23	2.00	0.42
1:A:438:MET:CE	1:B:433:VAL:C	2.88	0.42
1:B:447:ASN:ND2	1:B:449:PHE:CE1	2.87	0.42
1:B:286:TYR:O	1:B:321:ARG:HG2	2.20	0.42
2:C:49:ILE:HD11	2:C:54:LEU:HG	2.01	0.42
2:C:90:ILE:HG23	2:D:96:PRO:CG	2.48	0.42
5:H:22:THR:C	5:H:24:SER:H	2.22	0.42
1:A:149:VAL:CG2	1:A:227:ARG:HD3	2.49	0.42
1:A:89:HIS:CE1	1:A:257:LEU:CD1	3.03	0.42
1:B:37:LEU:O	1:B:166:ILE:HD12	2.19	0.42
1:B:43:PRO:HB2	1:B:47:LEU:HD12	2.00	0.42
3:E:41:ILE:CG2	3:E:42:SER:H	2.29	0.42
3:E:83:PHE:CD2	3:E:99:ILE:CD1	3.02	0.42
3:E:37:HIS:HB2	3:F:89:ASP:CG	2.40	0.42
4:G:68:PHE:N	4:G:68:PHE:HD1	2.18	0.42
3:F:17:GLN:CB	3:F:19:ASN:HD21	2.25	0.42
1:A:211:ILE:CG1	1:A:212:ASP:N	2.83	0.42
1:B:134:VAL:CG2	1:B:135:LYS:N	2.83	0.42
1:B:67:TYR:N	1:B:67:TYR:CD1	2.83	0.42
1:B:288:LEU:O	1:B:288:LEU:HG	2.19	0.42
1:B:310:LYS:O	2:C:38:ASN:ND2	2.52	0.42
2:C:87:PRO:HB3	2:C:90:ILE:CA	2.49	0.42
2:D:29:VAL:HG22	2:D:50:PRO:CG	2.48	0.42
2:D:97:TYR:O	2:D:98:ARG:HB3	2.19	0.42
4:G:100:PHE:CZ	5:H:45:ASP:CB	2.59	0.42
5:H:21:ALA:C	5:H:23:GLY:H	2.23	0.42
1:A:108:THR:CG2	1:A:412:MET:CE	2.95	0.42
1:A:201:THR:CG2	1:A:202:ASP:N	2.82	0.42
1:B:227:ARG:HD2	1:B:227:ARG:O	2.19	0.42
2:D:75:MET:N	2:D:78:VAL:CG1	2.83	0.42
3:F:87:PRO:HB3	3:F:97:THR:HG21	2.01	0.42
2:D:70:LEU:HD23	3:F:91:SER:HB2	1.28	0.42
3:F:97:THR:CG2	3:F:98:ARG:N	2.83	0.42
1:B:66:TYR:N	1:B:66:TYR:HD1	2.12	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:H:122:VAL:CG1	5:H:125:ALA:H	2.30	0.42
4:G:49:GLN:HA	4:G:69:HIS:HE2	1.85	0.42
1:B:130:LEU:CD1	1:B:388:PHE:CE2	2.98	0.42
1:A:65:THR:HB	1:A:73:GLN:CG	2.49	0.42
1:A:350:SER:OG	1:A:351:PRO:HD2	2.20	0.42
2:C:84:THR:HG23	2:C:85:GLU:H	1.82	0.42
4:G:61:GLY:O	5:H:140:ASN:OD1	2.38	0.42
5:H:21:ALA:CB	5:H:150:ILE:HA	2.50	0.42
5:H:37:VAL:CG1	5:H:63:GLY:CA	2.95	0.42
5:H:61:ASP:O	5:H:62:SER:HB3	2.20	0.42
1:A:146:HIS:CB	1:A:244:ILE:CG2	2.98	0.42
1:A:38:ILE:HD12	1:A:183:TYR:HD2	1.84	0.42
1:B:201:THR:CG2	1:B:202:ASP:N	2.82	0.42
1:B:367:TYR:N	1:B:368:ALA:CA	2.82	0.42
2:D:73:ARG:NE	3:F:91:SER:CB	2.80	0.42
3:E:12:GLN:HB3	3:E:28:TRP:CB	2.50	0.42
3:E:47:TYR:CB	3:E:50:GLN:HB2	2.41	0.42
3:E:70:LYS:HE2	3:E:85:GLY:C	2.40	0.42
3:F:11:PHE:HE2	3:F:68:ILE:HG21	1.85	0.42
3:F:47:TYR:CB	3:F:50:GLN:CB	2.95	0.42
3:F:60:ILE:CG2	3:F:83:PHE:CD2	3.03	0.42
3:F:75:ILE:HG21	3:F:78:GLY:CA	2.50	0.42
5:H:126:VAL:HG13	5:H:126:VAL:O	2.20	0.42
1:A:439:SER:CB	1:A:442:THR:N	2.82	0.41
1:B:292:ASP:HB3	1:B:293:GLY:C	2.40	0.41
1:B:320:LEU:HB2	1:B:321:ARG:C	2.39	0.41
2:C:33:LYS:HE3	2:C:50:PRO:HG3	2.02	0.41
1:B:313:GLY:CA	2:C:51:SER:H	2.24	0.41
4:G:128:ARG:N	4:G:128:ARG:CD	2.83	0.41
5:H:39:GLY:HA2	5:H:43:LEU:CG	2.49	0.41
1:A:149:VAL:CG1	1:A:227:ARG:CZ	2.98	0.41
1:A:227:ARG:HD2	1:A:227:ARG:O	2.19	0.41
1:A:367:TYR:N	1:A:368:ALA:CA	2.82	0.41
1:B:146:HIS:CG	1:B:200:TYR:CD2	3.07	0.41
2:C:5:ARG:CD	2:C:7:LYS:HE3	2.50	0.41
2:D:5:ARG:CD	2:D:7:LYS:HE3	2.50	0.41
3:E:29:VAL:CG1	3:E:72:MET:CB	2.97	0.41
4:G:28:VAL:HG12	4:G:28:VAL:H	1.52	0.41
1:B:211:ILE:CG1	1:B:212:ASP:N	2.83	0.41
5:H:10:ASP:CG	5:H:167:THR:HG21	2.39	0.41
1:A:345:GLN:CG	1:A:346:ALA:H	2.33	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:215:TYR:HD1	1:A:215:TYR:HA	1.36	0.41
1:A:216:GLN:CG	1:A:217:MET:N	2.83	0.41
1:A:278:PHE:HA	1:A:278:PHE:HD1	1.66	0.41
4:G:107:LEU:HD23	4:G:107:LEU:HA	1.80	0.41
1:A:67:TYR:CD1	1:A:67:TYR:N	2.83	0.41
5:H:118:TYR:HA	5:H:118:TYR:HD1	1.43	0.41
1:A:433:VAL:CG1	1:A:434:THR:N	2.83	0.41
1:B:433:VAL:CG1	1:B:434:THR:N	2.83	0.41
1:A:292:ASP:HA	1:A:293:GLY:HA3	1.73	0.41
1:A:66:TYR:N	1:A:66:TYR:HD1	2.12	0.41
2:D:95:ASN:HB2	2:D:98:ARG:HA	2.01	0.41
4:G:63:ASN:C	4:G:64:ILE:HD12	2.40	0.41
5:H:17:SER:CA	5:H:23:GLY:HA3	2.40	0.41
1:A:171:ASP:HB2	1:A:178:LEU:CD1	2.39	0.41
1:A:29:PRO:HG3	1:A:170:LYS:HZ2	1.83	0.41
1:B:149:VAL:CG1	1:B:227:ARG:CZ	2.98	0.41
3:E:29:VAL:CG1	3:E:72:MET:CA	2.95	0.41
3:E:72:MET:HE2	3:E:72:MET:HB3	1.78	0.41
3:E:87:PRO:HB3	3:E:97:THR:CG2	2.50	0.41
3:E:58:TYR:CA	3:F:100:LYS:HD3	2.49	0.41
3:F:64:TYR:HD1	3:F:64:TYR:HA	1.53	0.41
3:E:104:ASP:OD2	4:G:43:TYR:CE1	2.73	0.41
1:A:335:ARG:HB2	1:B:330:ALA:HB1	2.02	0.41
1:A:334:GLU:HG3	1:A:335:ARG:N	2.35	0.41
5:H:29:PRO:CG	5:H:31:TYR:CE2	3.04	0.41
4:G:82:ILE:CG1	4:G:83:SER:N	2.83	0.41
1:A:190:MET:HE2	1:A:190:MET:HB2	1.91	0.41
1:A:456:GLU:O	1:A:460:ILE:HG12	2.21	0.41
1:B:289:LYS:HD2	1:B:319:THR:HG23	1.94	0.41
2:C:39:PRO:O	2:C:40:PHE:CG	2.74	0.41
2:C:57:VAL:CG2	2:C:58:ALA:N	2.83	0.41
2:D:33:LYS:HE3	2:D:50:PRO:HG3	2.02	0.41
2:D:57:VAL:CG2	2:D:58:ALA:N	2.83	0.41
2:D:59:LYS:CD	2:D:90:ILE:CD1	2.95	0.41
5:H:145:THR:CG2	5:H:146:LEU:N	2.83	0.41
5:H:17:SER:HB3	5:H:91:PHE:HD1	1.85	0.41
5:H:18:ILE:HG12	5:H:23:GLY:CA	2.50	0.41
1:A:158:VAL:HG11	1:A:160:PHE:CE1	2.55	0.41
1:B:100:LEU:O	1:B:100:LEU:HD13	2.20	0.41
1:B:146:HIS:CB	1:B:244:ILE:CG2	2.98	0.41
1:B:159:ILE:HD13	1:B:160:PHE:C	2.40	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:163:GLU:HA	1:B:163:GLU:OE1	2.19	0.41
1:B:376:MET:HA	1:B:379:ARG:CZ	2.50	0.41
1:B:89:HIS:CE1	1:B:257:LEU:CD1	3.03	0.41
2:C:75:MET:H	2:C:78:VAL:CG1	2.33	0.41
3:E:38:VAL:HG11	3:F:86:ASP:OD2	2.20	0.41
3:E:41:ILE:CG2	3:E:42:SER:N	2.82	0.41
3:E:74:VAL:HG11	3:E:76:TYR:CE1	2.52	0.41
3:E:47:TYR:CE2	3:F:53:GLN:NE2	2.88	0.41
4:G:33:GLU:N	4:G:45:VAL:HA	2.35	0.41
4:G:76:ARG:CZ	4:G:76:ARG:N	2.83	0.41
1:A:251:GLU:C	1:B:54:MET:SD	2.96	0.41
4:G:86:VAL:CG1	4:G:87:LEU:N	2.83	0.41
1:A:185:SER:HB3	1:A:195:GLN:NE2	2.35	0.41
1:A:387:LEU:CD1	1:A:391:PHE:CZ	3.03	0.41
1:B:65:THR:HB	1:B:73:GLN:CG	2.49	0.41
4:G:103:VAL:CG1	4:G:104:ALA:N	2.83	0.41
1:A:441:GLU:CG	1:A:456:GLU:CB	2.95	0.41
1:A:442:THR:OG1	1:B:459:ARG:CB	2.66	0.41
1:B:456:GLU:O	1:B:460:ILE:HG12	2.21	0.41
4:G:64:ILE:N	4:G:64:ILE:CD1	2.83	0.41
5:H:134:VAL:HG22	5:H:135:ILE:N	2.34	0.41
4:G:64:ILE:HD11	5:H:140:ASN:OD1	2.16	0.41
5:H:147:PRO:O	5:H:151:VAL:HG23	2.20	0.41
5:H:162:GLN:HB2	5:H:163:PRO:CD	2.39	0.41
5:H:21:ALA:HB1	5:H:108:PHE:CD2	2.54	0.41
1:B:34:ILE:HG23	1:B:181:LEU:HD22	2.00	0.41
1:B:373:LYS:CD	1:B:374:ALA:N	2.83	0.41
1:B:373:LYS:CE	1:B:374:ALA:CA	2.99	0.41
1:B:48:LYS:CG	1:B:49:GLY:N	2.83	0.41
2:C:71:THR:N	2:C:72:GLY:CA	2.83	0.41
3:E:84:ILE:HD11	3:E:103:GLU:HG2	1.96	0.41
3:E:62:THR:HG21	3:E:68:ILE:HD11	2.02	0.41
3:F:14:TYR:CE2	3:F:28:TRP:CZ2	3.09	0.41
3:F:81:VAL:CG2	3:F:82:THR:N	2.83	0.41
1:A:121:LEU:HB3	1:A:122:ALA:C	2.40	0.41
2:C:49:ILE:CD1	2:C:54:LEU:CD1	2.95	0.41
2:C:95:ASN:HB2	2:C:98:ARG:HA	2.01	0.41
2:C:100:MET:CE	2:D:100:MET:HG3	2.50	0.41
2:D:84:THR:CG2	2:D:85:GLU:N	2.82	0.41
5:H:113:ILE:CG2	5:H:114:GLU:N	2.83	0.41
4:G:64:ILE:N	5:H:140:ASN:HD21	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:H:15:PHE:CD1	5:H:15:PHE:C	2.94	0.41
5:H:54:LEU:CD1	5:H:54:LEU:N	2.84	0.41
5:H:59:VAL:CG1	5:H:60:ALA:N	2.83	0.41
1:A:183:TYR:CB	1:A:197:ALA:CA	2.97	0.41
1:A:149:VAL:CG2	1:A:227:ARG:CD	2.95	0.41
1:B:89:HIS:HB2	1:B:264:ILE:CD1	2.51	0.41
2:D:69:GLY:HA3	2:D:73:ARG:CB	2.27	0.41
2:D:70:LEU:HD23	2:D:73:ARG:HG2	1.96	0.41
2:D:75:MET:H	2:D:78:VAL:CG1	2.33	0.41
3:E:47:TYR:HB3	3:E:50:GLN:HG3	1.99	0.41
3:E:62:THR:N	3:E:65:ASP:HB2	2.35	0.41
3:E:40:PRO:CB	3:F:100:LYS:HA	2.51	0.41
2:D:5:ARG:HB3	3:F:2:TYR:C	2.41	0.41
3:F:62:THR:HG22	3:F:65:ASP:OD1	2.20	0.41
3:F:75:ILE:CG2	3:F:76:TYR:N	2.83	0.41
3:F:60:ILE:HG23	3:F:83:PHE:HD2	1.85	0.41
3:E:37:HIS:HD2	3:F:88:VAL:HB	1.73	0.41
1:A:334:GLU:CG	1:A:335:ARG:N	2.84	0.41
5:H:31:TYR:CE1	5:H:70:LYS:HG3	2.53	0.41
1:B:334:GLU:CG	1:B:335:ARG:N	2.84	0.41
1:A:61:LYS:NZ	1:A:61:LYS:HB3	2.35	0.41
2:C:59:LYS:HD3	2:C:90:ILE:CB	2.50	0.41
2:D:41:ILE:CG2	2:D:42:ASP:N	2.83	0.41
4:G:96:MET:HG2	4:G:97:PHE:O	2.19	0.41
1:A:100:LEU:HD13	1:A:100:LEU:O	2.20	0.41
1:A:373:LYS:CD	1:A:374:ALA:N	2.83	0.41
1:A:91:LEU:N	1:A:91:LEU:CD1	2.83	0.41
1:B:181:LEU:HG	1:B:181:LEU:O	2.21	0.41
3:E:64:TYR:HD1	3:E:64:TYR:HA	1.35	0.41
3:F:106:ALA:N	4:G:38:ASP:C	2.53	0.41
3:F:68:ILE:HG12	3:F:69:ASP:N	2.33	0.41
3:E:109:GLY:N	4:G:113:ILE:CD1	2.84	0.41
4:G:32:THR:HG23	4:G:36:GLY:O	2.20	0.41
1:B:101:VAL:CG2	1:B:102:GLY:N	2.82	0.41
5:H:33:THR:O	5:H:34:ASP:HB3	2.20	0.41
1:B:387:LEU:CD1	1:B:391:PHE:CZ	3.03	0.41
1:A:439:SER:OG	1:B:459:ARG:HD2	2.20	0.41
1:B:419:ILE:CG2	1:B:420:GLN:N	2.83	0.41
1:A:62:LYS:CG	1:A:63:ARG:N	2.83	0.41
1:A:69:ALA:HB1	1:B:296:PRO:HB2	2.03	0.41
2:C:29:VAL:HG22	2:C:50:PRO:CG	2.48	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:35:GLU:HB3	2:C:37:HIS:ND1	2.36	0.41
2:C:59:LYS:CD	2:C:90:ILE:CD1	2.95	0.41
1:A:100:LEU:HG	1:A:377:ALA:CB	2.42	0.41
1:A:136:ASN:HB2	1:A:145:TRP:CH2	2.54	0.41
1:A:89:HIS:HB2	1:A:264:ILE:CD1	2.51	0.41
1:B:167:VAL:CA	1:B:177:ILE:HD12	2.50	0.41
1:B:227:ARG:HD2	1:B:227:ARG:C	2.41	0.41
1:B:46:LEU:HD21	1:B:144:TYR:H	1.86	0.41
1:B:84:THR:CG2	1:B:85:SER:N	2.84	0.41
1:B:91:LEU:N	1:B:91:LEU:CD1	2.83	0.41
3:E:109:GLY:N	4:G:71:TRP:HE1	2.14	0.41
3:F:13:SER:HB2	3:F:29:VAL:HG23	2.03	0.41
3:F:38:VAL:CG2	3:F:60:ILE:HB	2.51	0.41
3:F:60:ILE:HD12	3:F:83:PHE:CE2	2.53	0.41
4:G:119:VAL:CG1	4:G:120:THR:N	2.83	0.41
5:H:13:TYR:O	5:H:31:TYR:HA	2.21	0.41
1:A:235:GLN:CG	1:A:236:ALA:N	2.84	0.41
1:B:61:LYS:NZ	1:B:61:LYS:HB3	2.35	0.41
1:B:417:THR:H	1:B:418:ARG:HA	1.85	0.41
1:A:289:LYS:HG3	1:B:316:GLY:H	1.66	0.41
1:A:292:ASP:HB3	1:A:293:GLY:C	2.40	0.41
1:B:306:HIS:CE1	2:C:39:PRO:CG	3.03	0.41
2:C:56:PHE:HA	2:C:59:LYS:HZ2	1.79	0.41
5:H:92:TRP:HZ3	5:H:106:ALA:HB3	1.84	0.41
5:H:14:LEU:HD21	5:H:160:PHE:CE2	2.55	0.41
1:A:167:VAL:CA	1:A:177:ILE:HD12	2.50	0.41
1:A:46:LEU:HD21	1:A:144:TYR:H	1.86	0.41
1:A:53:TYR:HA	1:A:261:LYS:HZ1	1.86	0.41
1:B:183:TYR:CB	1:B:197:ALA:CA	2.97	0.41
1:B:38:ILE:HD12	1:B:183:TYR:HD2	1.84	0.41
2:D:4:GLN:OE1	3:F:2:TYR:CB	2.68	0.41
3:E:37:HIS:ND1	3:E:61:TYR:CD2	2.86	0.41
3:E:70:LYS:CD	3:E:85:GLY:N	2.83	0.41
3:F:14:TYR:CB	3:F:73:ARG:CD	2.95	0.41
3:F:73:ARG:CG	3:F:74:VAL:N	2.84	0.41
1:B:215:TYR:HA	1:B:215:TYR:HD1	1.36	0.41
1:B:235:GLN:CG	1:B:236:ALA:N	2.84	0.41
1:A:419:ILE:CG2	1:A:420:GLN:N	2.83	0.41
1:A:288:LEU:CD2	1:B:310:LYS:HZ2	2.34	0.41
1:A:74:LEU:HD11	1:B:304:ARG:NH2	2.35	0.41
1:B:291:TYR:HB3	1:B:312:SER:C	2.40	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:54:LEU:C	2:C:57:VAL:HG22	2.41	0.41
2:D:35:GLU:HB3	2:D:37:HIS:ND1	2.36	0.41
1:A:285:VAL:CG1	1:A:287:VAL:CG2	2.95	0.41
1:A:290:ASN:CB	1:A:291:TYR:HA	2.49	0.41
2:C:41:ILE:CG2	2:C:42:ASP:N	2.83	0.41
2:D:54:LEU:C	2:D:57:VAL:HG22	2.41	0.41
2:D:87:PRO:HB3	2:D:90:ILE:CA	2.49	0.41
5:H:143:ILE:H	5:H:144:ASP:HA	1.84	0.41
5:H:14:LEU:HD21	5:H:160:PHE:CZ	2.55	0.41
5:H:43:LEU:CD1	5:H:43:LEU:N	2.83	0.41
5:H:98:LYS:O	5:H:98:LYS:HG3	2.20	0.41
1:A:149:VAL:HG21	1:A:227:ARG:HD3	2.02	0.41
1:A:177:ILE:HG21	1:A:246:PRO:CD	2.51	0.41
1:A:376:MET:HG3	1:A:377:ALA:N	2.30	0.41
1:A:376:MET:CB	1:A:379:ARG:CZ	2.96	0.41
1:B:96:LYS:HG3	1:B:373:LYS:HB2	1.97	0.41
1:A:42:ASN:HA	1:A:43:PRO:HD3	1.81	0.41
1:B:171:ASP:HB2	1:B:178:LEU:CD1	2.39	0.41
1:B:376:MET:CB	1:B:379:ARG:CZ	2.96	0.41
3:E:37:HIS:CG	3:E:38:VAL:N	2.87	0.41
3:F:75:ILE:CG2	3:F:78:GLY:CA	2.99	0.41
2:D:12:ILE:HG12	3:F:93:LEU:HG	2.03	0.41
2:C:75:MET:N	2:C:78:VAL:CG1	2.83	0.41
3:E:6:ARG:HE	3:E:6:ARG:HA	1.86	0.41
2:C:73:ARG:CG	3:E:91:SER:CB	2.99	0.41
3:E:89:ASP:HB2	3:E:95:GLU:HB3	2.01	0.41
3:F:51:GLN:HG3	3:F:52:LEU:N	2.36	0.41
3:E:37:HIS:CD2	3:F:89:ASP:N	2.87	0.41
3:E:1:MET:HB3	3:F:93:LEU:HD13	2.03	0.41
4:G:43:TYR:CG	4:G:43:TYR:O	2.74	0.41
1:B:121:LEU:HB3	1:B:122:ALA:C	2.40	0.41
1:A:130:LEU:HD22	1:A:388:PHE:CD2	2.55	0.41
1:A:84:THR:CG2	1:A:85:SER:N	2.84	0.41
4:G:91:THR:C	4:G:93:LYS:H	2.24	0.41
1:B:441:GLU:CG	1:B:456:GLU:CB	2.95	0.41
1:A:456:GLU:O	1:B:467:TYR:CD2	2.63	0.41
2:D:28:LEU:O	2:D:31:PHE:CE1	2.74	0.41
2:D:27:LEU:O	2:D:31:PHE:CE1	2.74	0.41
2:D:29:VAL:HG21	2:D:50:PRO:CD	2.51	0.41
2:D:49:ILE:HA	2:D:50:PRO:HD3	1.84	0.41
5:H:21:ALA:CB	5:H:150:ILE:CG1	2.95	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:H:97:VAL:HG22	5:H:97:VAL:O	2.20	0.41
1:A:260:TYR:N	1:A:260:TYR:CD1	2.82	0.41
1:A:373:LYS:HD2	1:A:374:ALA:N	2.36	0.41
1:A:410:LEU:N	1:A:411:THR:CA	2.82	0.41
1:B:227:ARG:NE	1:B:227:ARG:H	2.19	0.41
1:B:29:PRO:HG3	1:B:170:LYS:HZ2	1.84	0.41
1:B:410:LEU:N	1:B:411:THR:CA	2.83	0.41
1:B:52:TYR:HE1	1:B:56:GLU:HB2	1.84	0.41
3:E:98:ARG:HD2	3:E:98:ARG:N	2.35	0.41
3:E:40:PRO:HG3	3:F:100:LYS:CA	2.51	0.41
3:E:47:TYR:CZ	3:F:53:GLN:NE2	2.89	0.41
3:F:61:TYR:CG	3:F:61:TYR:O	2.74	0.41
3:F:83:PHE:N	3:F:83:PHE:CD1	2.83	0.41
4:G:21:TYR:CZ	4:G:23:PRO:HG2	2.56	0.41
4:G:92:TYR:CG	4:G:92:TYR:O	2.74	0.41
5:H:117:GLU:OE1	5:H:117:GLU:HA	2.21	0.41
1:B:418:ARG:CB	1:B:421:ASN:CB	2.95	0.40
1:A:291:TYR:HB3	1:A:312:SER:C	2.40	0.40
1:A:69:ALA:HB2	1:B:300:THR:CG2	2.51	0.40
2:C:29:VAL:HG21	2:C:50:PRO:CD	2.51	0.40
2:D:39:PRO:O	2:D:40:PHE:CG	2.74	0.40
5:H:108:PHE:HB2	5:H:150:ILE:CG2	2.50	0.40
5:H:143:ILE:CG1	5:H:147:PRO:HD2	2.51	0.40
5:H:18:ILE:N	5:H:23:GLY:HA3	2.36	0.40
5:H:89:ILE:HG21	5:H:91:PHE:HE1	1.84	0.40
1:A:373:LYS:CE	1:A:374:ALA:CA	2.99	0.40
1:B:136:ASN:CB	1:B:145:TRP:CZ3	3.05	0.40
1:B:184:TYR:CE1	1:B:198:GLU:OE2	2.75	0.40
1:B:96:LYS:CE	1:B:377:ALA:CB	2.99	0.40
2:D:13:THR:CG2	2:D:14:ASN:N	2.83	0.40
2:C:5:ARG:HH21	3:E:2:TYR:HB3	1.86	0.40
3:E:29:VAL:CG1	3:E:72:MET:HE3	2.51	0.40
3:F:75:ILE:HG13	3:F:79:LYS:O	2.20	0.40
2:D:65:MET:HG3	2:D:66:THR:N	2.36	0.40
5:H:112:TYR:CG	5:H:133:GLN:O	2.75	0.40
4:G:61:GLY:CA	5:H:139:LYS:H	2.34	0.40
5:H:37:VAL:CG1	5:H:38:SER:N	2.82	0.40
5:H:22:THR:O	5:H:92:TRP:CD1	2.74	0.40
1:A:181:LEU:O	1:A:181:LEU:HG	2.21	0.40
1:A:163:GLU:OE2	1:A:183:TYR:CD2	2.75	0.40
1:A:184:TYR:O	1:A:184:TYR:CD1	2.75	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:369:LEU:HD12	1:A:369:LEU:N	2.35	0.40
1:A:52:TYR:CD2	1:A:265:ASP:OD2	2.75	0.40
1:A:89:HIS:CE1	1:A:257:LEU:CG	3.03	0.40
1:B:183:TYR:HB3	1:B:197:ALA:HB2	2.01	0.40
2:C:6:VAL:HG23	3:E:3:GLU:HG3	2.03	0.40
3:F:37:HIS:O	3:F:61:TYR:CD2	2.74	0.40
1:B:393:ALA:O	1:B:396:LEU:HB2	2.21	0.40
5:H:13:TYR:CD1	5:H:32:GLN:O	2.75	0.40
1:A:64:ARG:HH21	1:B:284:ILE:HG12	1.86	0.40
1:A:66:TYR:OH	1:B:304:ARG:HD2	2.21	0.40
1:A:74:LEU:CD1	1:B:304:ARG:CZ	2.99	0.40
2:C:38:ASN:O	2:C:40:PHE:CD2	2.75	0.40
5:H:101:ASN:O	5:H:104:TYR:HD1	2.04	0.40
5:H:16:GLN:HB3	5:H:26:PRO:HA	2.03	0.40
5:H:20:ALA:C	5:H:90:LYS:HD2	2.41	0.40
1:A:227:ARG:H	1:A:227:ARG:NE	2.19	0.40
1:B:183:TYR:HB2	1:B:197:ALA:CA	2.52	0.40
1:B:52:TYR:CD2	1:B:265:ASP:OD2	2.75	0.40
1:B:369:LEU:HD12	1:B:369:LEU:N	2.35	0.40
2:C:69:GLY:HA3	2:C:73:ARG:CB	2.27	0.40
1:B:126:PHE:CE2	1:B:392:PHE:CZ	3.03	0.40
1:B:345:GLN:HE21	1:B:345:GLN:HB3	1.60	0.40
5:H:117:GLU:O	5:H:118:TYR:CD1	2.75	0.40
2:C:27:LEU:HD12	2:C:27:LEU:N	2.36	0.40
1:A:417:THR:H	1:A:418:ARG:HA	1.85	0.40
1:A:426:VAL:O	1:A:430:VAL:HG23	2.21	0.40
2:C:40:PHE:CD1	2:C:40:PHE:O	2.74	0.40
2:C:63:PHE:O	2:C:63:PHE:CD1	2.74	0.40
1:B:292:ASP:CG	2:D:35:GLU:N	2.73	0.40
2:D:63:PHE:O	2:D:63:PHE:CD1	2.74	0.40
4:G:97:PHE:CD2	5:H:52:ARG:NH1	2.82	0.40
5:H:104:TYR:CE1	5:H:160:PHE:CB	3.04	0.40
1:A:146:HIS:NE2	1:A:200:TYR:HB3	2.37	0.40
1:A:206:TYR:C	1:A:207:TYR:CD1	2.95	0.40
1:A:221:TYR:HB2	1:A:222:GLY:HA3	2.03	0.40
1:A:241:ARG:NE	1:A:245:ILE:HD11	2.28	0.40
1:A:366:LEU:N	1:A:368:ALA:HB2	2.36	0.40
1:B:183:TYR:CD1	1:B:183:TYR:O	2.74	0.40
2:D:75:MET:HE1	3:F:90:LEU:HD23	2.01	0.40
3:E:97:THR:CG2	3:E:98:ARG:N	2.82	0.40
3:E:40:PRO:CG	3:F:100:LYS:HA	2.51	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:58:TYR:CE2	3:F:100:LYS:O	2.75	0.40
3:F:57:GLY:C	3:F:58:TYR:CD1	2.95	0.40
3:F:37:HIS:HD1	3:F:61:TYR:HE2	1.69	0.40
1:B:62:LYS:CG	1:B:63:ARG:N	2.83	0.40
3:F:21:GLU:HG3	3:F:22:GLY:N	2.37	0.40
2:C:41:ILE:HG21	2:C:45:GLY:HA2	1.95	0.40
2:C:65:MET:HG3	2:C:66:THR:N	2.36	0.40
2:D:63:PHE:CD1	2:D:85:GLU:OE1	2.74	0.40
4:G:61:GLY:CA	5:H:139:LYS:CE	2.82	0.40
5:H:162:GLN:CB	5:H:163:PRO:HD3	2.37	0.40
4:G:100:PHE:HE2	5:H:47:GLN:CA	2.06	0.40
1:A:183:TYR:HB3	1:A:197:ALA:HB2	2.01	0.40
1:A:255:SER:HB3	1:A:259:PHE:CZ	2.54	0.40
1:B:159:ILE:C	1:B:160:PHE:CD1	2.95	0.40
1:B:159:ILE:C	1:B:160:PHE:HD1	2.24	0.40
1:B:146:HIS:NE2	1:B:200:TYR:HB3	2.37	0.40
1:B:206:TYR:C	1:B:207:TYR:CD1	2.95	0.40
1:B:373:LYS:HD2	1:B:374:ALA:N	2.36	0.40
3:F:44:GLU:CG	3:F:46:TYR:CB	2.95	0.40
4:G:112:VAL:O	4:G:122:HIS:HE1	2.04	0.40
4:G:43:TYR:O	4:G:43:TYR:CD1	2.75	0.40
1:A:332:GLU:HG3	1:B:326:VAL:HG13	2.02	0.40
1:A:134:VAL:CG2	1:A:135:LYS:N	2.83	0.40
1:A:101:VAL:CG2	1:A:102:GLY:N	2.82	0.40
1:A:267:TYR:O	1:A:267:TYR:CD1	2.75	0.40
1:A:403:ASP:C	1:A:404:PHE:CD1	2.95	0.40

There are no symmetry-related clashes.

## 5.3 Torsion angles [i](#)

### 5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	438/503 (87%)	426 (97%)	7 (2%)	5 (1%)	17	63
1	B	438/503 (87%)	426 (97%)	7 (2%)	5 (1%)	17	63
2	C	97/102 (95%)	90 (93%)	4 (4%)	3 (3%)	5	42
2	D	97/102 (95%)	90 (93%)	4 (4%)	3 (3%)	5	42
3	E	107/109 (98%)	98 (92%)	7 (6%)	2 (2%)	10	52
3	F	107/109 (98%)	98 (92%)	7 (6%)	2 (2%)	10	52
4	G	131/134 (98%)	122 (93%)	6 (5%)	3 (2%)	8	48
5	H	155/177 (88%)	140 (90%)	7 (4%)	8 (5%)	2	30
All	All	1570/1739 (90%)	1490 (95%)	49 (3%)	31 (2%)	14	51

All (31) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	284	ILE
1	A	287	VAL
1	B	284	ILE
1	B	287	VAL
2	C	95	ASN
2	C	101	ALA
2	D	95	ASN
2	D	101	ALA
5	H	54	LEU
5	H	142	GLU
1	A	103	GLU
1	A	320	LEU
1	B	103	GLU
1	B	320	LEU
2	C	98	ARG
2	D	98	ARG
5	H	19	ASP
5	H	38	SER
3	E	43	GLN
5	H	34	ASP
5	H	62	SER
5	H	166	THR
1	A	345	GLN
1	B	345	GLN
3	E	36	ALA
3	F	43	GLN
4	G	28	VAL

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Mol	Chain	Res	Type
4	G	34	SER
3	F	107	TYR
4	G	55	GLU
5	H	97	VAL

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	388/436 (89%)	349 (90%)	39 (10%)	9	38
1	B	388/436 (89%)	349 (90%)	39 (10%)	9	38
2	C	88/91 (97%)	81 (92%)	7 (8%)	15	50
2	D	88/91 (97%)	81 (92%)	7 (8%)	15	50
3	E	94/94 (100%)	81 (86%)	13 (14%)	4	27
3	F	94/94 (100%)	77 (82%)	17 (18%)	2	15
4	G	117/118 (99%)	102 (87%)	15 (13%)	5	29
5	H	130/142 (92%)	111 (85%)	19 (15%)	4	24
All	All	1387/1502 (92%)	1231 (89%)	156 (11%)	12	33

All (156) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	52	TYR
1	A	53	TYR
1	A	62	LYS
1	A	66	TYR
1	A	83	ARG
1	A	88	TRP
1	A	96	LYS
1	A	107	PHE
1	A	121	LEU
1	A	140	LYS
1	A	143	GLU

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Mol	Chain	Res	Type
1	A	148	PHE
1	A	159	ILE
1	A	165	MET
1	A	170	LYS
1	A	184	TYR
1	A	215	TYR
1	A	225	ASN
1	A	227	ARG
1	A	242	VAL
1	A	244	ILE
1	A	249	ASN
1	A	250	ASN
1	A	254	VAL
1	A	259	PHE
1	A	260	TYR
1	A	286	TYR
1	A	291	TYR
1	A	318	ASP
1	A	323	GLU
1	A	345	GLN
1	A	365	LYS
1	A	367	TYR
1	A	373	LYS
1	A	376	MET
1	A	392	PHE
1	A	440	LYS
1	A	465	ASN
1	A	467	TYR
1	B	52	TYR
1	B	53	TYR
1	B	62	LYS
1	B	66	TYR
1	B	83	ARG
1	B	88	TRP
1	B	96	LYS
1	B	107	PHE
1	B	121	LEU
1	B	140	LYS
1	B	143	GLU
1	B	148	PHE
1	B	159	ILE
1	B	165	MET

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Mol	Chain	Res	Type
1	B	170	LYS
1	B	184	TYR
1	B	215	TYR
1	B	225	ASN
1	B	227	ARG
1	B	242	VAL
1	B	244	ILE
1	B	249	ASN
1	B	250	ASN
1	B	254	VAL
1	B	259	PHE
1	B	260	TYR
1	B	286	TYR
1	B	291	TYR
1	B	318	ASP
1	B	323	GLU
1	B	345	GLN
1	B	365	LYS
1	B	367	TYR
1	B	373	LYS
1	B	376	MET
1	B	392	PHE
1	B	440	LYS
1	B	465	ASN
1	B	467	TYR
2	C	4	GLN
2	C	64	TYR
2	C	80	TYR
2	C	82	PHE
2	C	97	TYR
2	C	100	MET
2	C	102	ARG
2	D	4	GLN
2	D	64	TYR
2	D	80	TYR
2	D	82	PHE
2	D	97	TYR
2	D	100	MET
2	D	102	ARG
3	E	6	ARG
3	E	14	TYR
3	E	21	GLU

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Mol	Chain	Res	Type
3	E	26	TYR
3	E	29	VAL
3	E	43	GLN
3	E	44	GLU
3	E	61	TYR
3	E	64	TYR
3	E	83	PHE
3	E	84	ILE
3	E	98	ARG
3	E	102	LYS
3	F	5	PHE
3	F	14	TYR
3	F	16	GLU
3	F	19	ASN
3	F	26	TYR
3	F	32	PHE
3	F	44	GLU
3	F	60	ILE
3	F	61	TYR
3	F	64	TYR
3	F	65	ASP
3	F	68	ILE
3	F	76	TYR
3	F	83	PHE
3	F	98	ARG
3	F	100	LYS
3	F	102	LYS
4	G	5	LEU
4	G	12	LYS
4	G	21	TYR
4	G	22	GLN
4	G	24	LEU
4	G	27	MET
4	G	28	VAL
4	G	30	GLN
4	G	37	LYS
4	G	43	TYR
4	G	66	MET
4	G	76	ARG
4	G	92	TYR
4	G	124	ILE
4	G	128	ARG

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Mol	Chain	Res	Type
5	H	10	ASP
5	H	13	TYR
5	H	14	LEU
5	H	15	PHE
5	H	19	ASP
5	H	22	THR
5	H	28	PHE
5	H	43	LEU
5	H	44	PHE
5	H	52	ARG
5	H	67	TYR
5	H	87	LYS
5	H	98	LYS
5	H	110	PHE
5	H	112	TYR
5	H	118	TYR
5	H	139	LYS
5	H	142	GLU
5	H	150	ILE

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (53) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	41	HIS
1	A	119	ASN
1	A	131	ASN
1	A	136	ASN
1	A	195	GLN
1	A	224	ASN
1	A	225	ASN
1	A	302	ASN
1	A	337	GLN
1	A	345	GLN
1	A	398	ASN
1	A	405	ASN
1	A	420	GLN
1	A	431	GLN
1	A	451	GLN
1	A	465	ASN
1	B	41	HIS
1	B	119	ASN
1	B	131	ASN

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Mol	Chain	Res	Type
1	B	136	ASN
1	B	195	GLN
1	B	224	ASN
1	B	225	ASN
1	B	282	GLN
1	B	302	ASN
1	B	337	GLN
1	B	345	GLN
1	B	398	ASN
1	B	405	ASN
1	B	420	GLN
1	B	431	GLN
1	B	451	GLN
1	B	465	ASN
2	C	14	ASN
2	C	37	HIS
2	C	38	ASN
2	D	14	ASN
2	D	17	HIS
2	D	37	HIS
3	E	19	ASN
3	E	43	GLN
3	E	51	GLN
3	E	53	GLN
3	E	59	ASN
3	F	12	GLN
3	F	19	ASN
3	F	53	GLN
4	G	22	GLN
4	G	49	GLN
5	H	16	GLN
5	H	47	GLN
5	H	85	ASN
5	H	88	GLN

### 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 [i](#)

There are no carbohydrates in this entry.

## 5.6 Ligand geometry [i](#)

There are no ligands in this entry.

## 5.7 Other polymers [i](#)

There are no such residues in this entry.

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

There are no chain breaks in this entry.