



# Full wwPDB X-ray Structure Validation Report

Mar 1, 2014 – 01:44 AM GMT

PDB ID : 1XFX  
Title : Crystal structure of anthrax edema factor (EF) in complex with calmodulin  
in the presence of 10 millimolar exogenously added calcium chloride  
Authors : Shen, Y.; Zhukovskaya, N.L.; Guo, Q.; Florian, J.; Tang, W.J.  
Deposited on : 2004-09-15  
Resolution : 3.20 Å(reported)

This is a full wwPDB validation report for a publicly released PDB entry.  
We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)  
A user guide is available at <http://wwpdb.org/ValidationPDFNotes.html>

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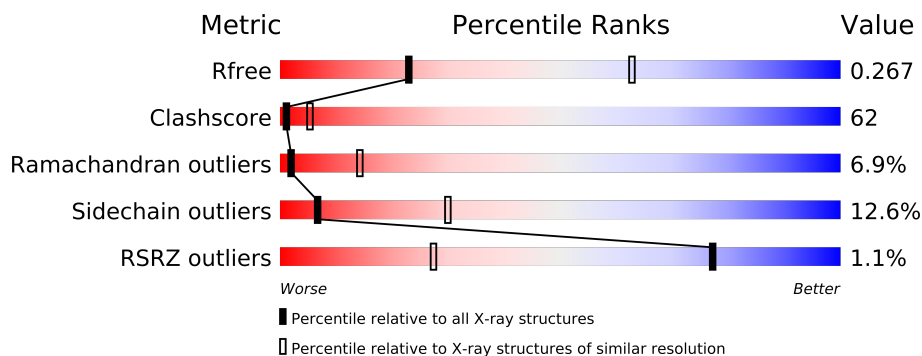
The following versions of software and data (see [references](#)) were used in the production of this report:

MolProbity : 4.02b-467  
Mogul : 1.15 2013  
Xtriage (Phenix) : dev-1323  
EDS : stable22639  
Percentile statistics : 21963  
Refmac : 5.8.0049  
CCP4 : 6.3.0 (Settle)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)  
Validation Pipeline (wwPDB-VP) : stable22683

# 1 Overall quality at a glance

The reported resolution of this entry is 3.20 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
$R_{free}$	66092	1824 (3.30-3.10)
Clashscore	79885	1078 (3.26-3.14)
Ramachandran outliers	78287	1059 (3.26-3.14)
Sidechain outliers	78261	1058 (3.26-3.14)
RSRZ outliers	66119	1825 (3.30-3.10)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density.

Mol	Chain	Length	Quality of chain
1	A	777	
1	B	777	
1	C	777	
1	D	777	
1	E	777	
1	F	777	
2	O	149	
2	P	149	
2	Q	149	
2	R	149	
2	S	149	
2	T	149	

## 2 Entry composition

There are 4 unique types of molecules in this entry. The entry contains 42858 atoms, of which 0 are hydrogen and 0 are deuterium.

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

- Molecule 1 is a protein called Calmodulin-sensitive adenylate cyclase.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	735	Total	C	N	O	S	0	0	0
			5992	3828	995	1163	6			
1	B	735	Total	C	N	O	S	0	0	0
			5992	3828	995	1163	6			
1	C	735	Total	C	N	O	S	0	0	0
			5992	3828	995	1163	6			
1	D	735	Total	C	N	O	S	0	0	0
			5992	3828	995	1163	6			
1	E	735	Total	C	N	O	S	0	0	0
			5992	3828	995	1163	6			
1	F	735	Total	C	N	O	S	0	0	0
			5992	3828	995	1163	6			

There are 54 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	24	MET	-	INITIATING METHIONINE	UNP P40136
A	25	HIS	-	EXPRESSION TAG	UNP P40136
A	26	HIS	-	EXPRESSION TAG	UNP P40136
A	27	HIS	-	EXPRESSION TAG	UNP P40136
A	28	HIS	-	EXPRESSION TAG	UNP P40136
A	29	HIS	-	EXPRESSION TAG	UNP P40136
A	30	HIS	-	EXPRESSION TAG	UNP P40136
A	31	ALA	-	CLONING ARTIFACT	UNP P40136
A	32	ALA	-	CLONING ARTIFACT	UNP P40136
B	24	MET	-	INITIATING METHIONINE	UNP P40136
B	25	HIS	-	EXPRESSION TAG	UNP P40136
B	26	HIS	-	EXPRESSION TAG	UNP P40136
B	27	HIS	-	EXPRESSION TAG	UNP P40136
B	28	HIS	-	EXPRESSION TAG	UNP P40136
B	29	HIS	-	EXPRESSION TAG	UNP P40136
B	30	HIS	-	EXPRESSION TAG	UNP P40136
B	31	ALA	-	CLONING ARTIFACT	UNP P40136

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Chain	Residue	Modelled	Actual	Comment	Reference
B	32	ALA	-	CLONING ARTIFACT	UNP P40136
C	24	MET	-	INITIATING METHIONINE	UNP P40136
C	25	HIS	-	EXPRESSION TAG	UNP P40136
C	26	HIS	-	EXPRESSION TAG	UNP P40136
C	27	HIS	-	EXPRESSION TAG	UNP P40136
C	28	HIS	-	EXPRESSION TAG	UNP P40136
C	29	HIS	-	EXPRESSION TAG	UNP P40136
C	30	HIS	-	EXPRESSION TAG	UNP P40136
C	31	ALA	-	CLONING ARTIFACT	UNP P40136
C	32	ALA	-	CLONING ARTIFACT	UNP P40136
D	24	MET	-	INITIATING METHIONINE	UNP P40136
D	25	HIS	-	EXPRESSION TAG	UNP P40136
D	26	HIS	-	EXPRESSION TAG	UNP P40136
D	27	HIS	-	EXPRESSION TAG	UNP P40136
D	28	HIS	-	EXPRESSION TAG	UNP P40136
D	29	HIS	-	EXPRESSION TAG	UNP P40136
D	30	HIS	-	EXPRESSION TAG	UNP P40136
D	31	ALA	-	CLONING ARTIFACT	UNP P40136
D	32	ALA	-	CLONING ARTIFACT	UNP P40136
E	24	MET	-	INITIATING METHIONINE	UNP P40136
E	25	HIS	-	EXPRESSION TAG	UNP P40136
E	26	HIS	-	EXPRESSION TAG	UNP P40136
E	27	HIS	-	EXPRESSION TAG	UNP P40136
E	28	HIS	-	EXPRESSION TAG	UNP P40136
E	29	HIS	-	EXPRESSION TAG	UNP P40136
E	30	HIS	-	EXPRESSION TAG	UNP P40136
E	31	ALA	-	CLONING ARTIFACT	UNP P40136
E	32	ALA	-	CLONING ARTIFACT	UNP P40136
F	24	MET	-	INITIATING METHIONINE	UNP P40136
F	25	HIS	-	EXPRESSION TAG	UNP P40136
F	26	HIS	-	EXPRESSION TAG	UNP P40136
F	27	HIS	-	EXPRESSION TAG	UNP P40136
F	28	HIS	-	EXPRESSION TAG	UNP P40136
F	29	HIS	-	EXPRESSION TAG	UNP P40136
F	30	HIS	-	EXPRESSION TAG	UNP P40136
F	31	ALA	-	CLONING ARTIFACT	UNP P40136
F	32	ALA	-	CLONING ARTIFACT	UNP P40136

- Molecule 2 is a protein called Calmodulin 2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	O	146	Total	C	N	O	Se	0	0	0
			1146	702	186	249	9			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	P	146	Total 1146	C 702	N 186	O 249	Se 9	0	0	0
2	Q	146	Total 1146	C 702	N 186	O 249	Se 9	0	0	0
2	R	146	Total 1146	C 702	N 186	O 249	Se 9	0	0	0
2	S	146	Total 1146	C 702	N 186	O 249	Se 9	0	0	0
2	T	146	Total 1146	C 702	N 186	O 249	Se 9	0	0	0

There are 60 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
O	0	MSE	MET	MODIFIED RESIDUE	UNP P62158
O	36	MSE	MET	MODIFIED RESIDUE	UNP P62158
O	51	MSE	MET	MODIFIED RESIDUE	UNP P62158
O	71	MSE	MET	MODIFIED RESIDUE	UNP P62158
O	72	MSE	MET	MODIFIED RESIDUE	UNP P62158
O	76	MSE	MET	MODIFIED RESIDUE	UNP P62158
O	109	MSE	MET	MODIFIED RESIDUE	UNP P62158
O	124	MSE	MET	MODIFIED RESIDUE	UNP P62158
O	144	MSE	MET	MODIFIED RESIDUE	UNP P62158
O	145	MSE	MET	MODIFIED RESIDUE	UNP P62158
P	0	MSE	MET	MODIFIED RESIDUE	UNP P62158
P	36	MSE	MET	MODIFIED RESIDUE	UNP P62158
P	51	MSE	MET	MODIFIED RESIDUE	UNP P62158
P	71	MSE	MET	MODIFIED RESIDUE	UNP P62158
P	72	MSE	MET	MODIFIED RESIDUE	UNP P62158
P	76	MSE	MET	MODIFIED RESIDUE	UNP P62158
P	109	MSE	MET	MODIFIED RESIDUE	UNP P62158
P	124	MSE	MET	MODIFIED RESIDUE	UNP P62158
P	144	MSE	MET	MODIFIED RESIDUE	UNP P62158
P	145	MSE	MET	MODIFIED RESIDUE	UNP P62158
Q	0	MSE	MET	MODIFIED RESIDUE	UNP P62158
Q	36	MSE	MET	MODIFIED RESIDUE	UNP P62158
Q	51	MSE	MET	MODIFIED RESIDUE	UNP P62158
Q	71	MSE	MET	MODIFIED RESIDUE	UNP P62158
Q	72	MSE	MET	MODIFIED RESIDUE	UNP P62158
Q	76	MSE	MET	MODIFIED RESIDUE	UNP P62158
Q	109	MSE	MET	MODIFIED RESIDUE	UNP P62158
Q	124	MSE	MET	MODIFIED RESIDUE	UNP P62158
Q	144	MSE	MET	MODIFIED RESIDUE	UNP P62158

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Chain	Residue	Modelled	Actual	Comment	Reference
Q	145	MSE	MET	MODIFIED RESIDUE	UNP P62158
R	0	MSE	MET	MODIFIED RESIDUE	UNP P62158
R	36	MSE	MET	MODIFIED RESIDUE	UNP P62158
R	51	MSE	MET	MODIFIED RESIDUE	UNP P62158
R	71	MSE	MET	MODIFIED RESIDUE	UNP P62158
R	72	MSE	MET	MODIFIED RESIDUE	UNP P62158
R	76	MSE	MET	MODIFIED RESIDUE	UNP P62158
R	109	MSE	MET	MODIFIED RESIDUE	UNP P62158
R	124	MSE	MET	MODIFIED RESIDUE	UNP P62158
R	144	MSE	MET	MODIFIED RESIDUE	UNP P62158
R	145	MSE	MET	MODIFIED RESIDUE	UNP P62158
S	0	MSE	MET	MODIFIED RESIDUE	UNP P62158
S	36	MSE	MET	MODIFIED RESIDUE	UNP P62158
S	51	MSE	MET	MODIFIED RESIDUE	UNP P62158
S	71	MSE	MET	MODIFIED RESIDUE	UNP P62158
S	72	MSE	MET	MODIFIED RESIDUE	UNP P62158
S	76	MSE	MET	MODIFIED RESIDUE	UNP P62158
S	109	MSE	MET	MODIFIED RESIDUE	UNP P62158
S	124	MSE	MET	MODIFIED RESIDUE	UNP P62158
S	144	MSE	MET	MODIFIED RESIDUE	UNP P62158
S	145	MSE	MET	MODIFIED RESIDUE	UNP P62158
T	0	MSE	MET	MODIFIED RESIDUE	UNP P62158
T	36	MSE	MET	MODIFIED RESIDUE	UNP P62158
T	51	MSE	MET	MODIFIED RESIDUE	UNP P62158
T	71	MSE	MET	MODIFIED RESIDUE	UNP P62158
T	72	MSE	MET	MODIFIED RESIDUE	UNP P62158
T	76	MSE	MET	MODIFIED RESIDUE	UNP P62158
T	109	MSE	MET	MODIFIED RESIDUE	UNP P62158
T	124	MSE	MET	MODIFIED RESIDUE	UNP P62158
T	144	MSE	MET	MODIFIED RESIDUE	UNP P62158
T	145	MSE	MET	MODIFIED RESIDUE	UNP P62158

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

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	D	1	Total Mg 1 1	0	0
3	E	1	Total Mg 1 1	0	0
3	B	1	Total Mg 1 1	0	0
3	C	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	A	1	Total 1	Mg 1	0	0
3	F	1	Total 1	Mg 1	0	0

- Molecule 4 is CALCIUM ION (three-letter code: CA) (formula: Ca).

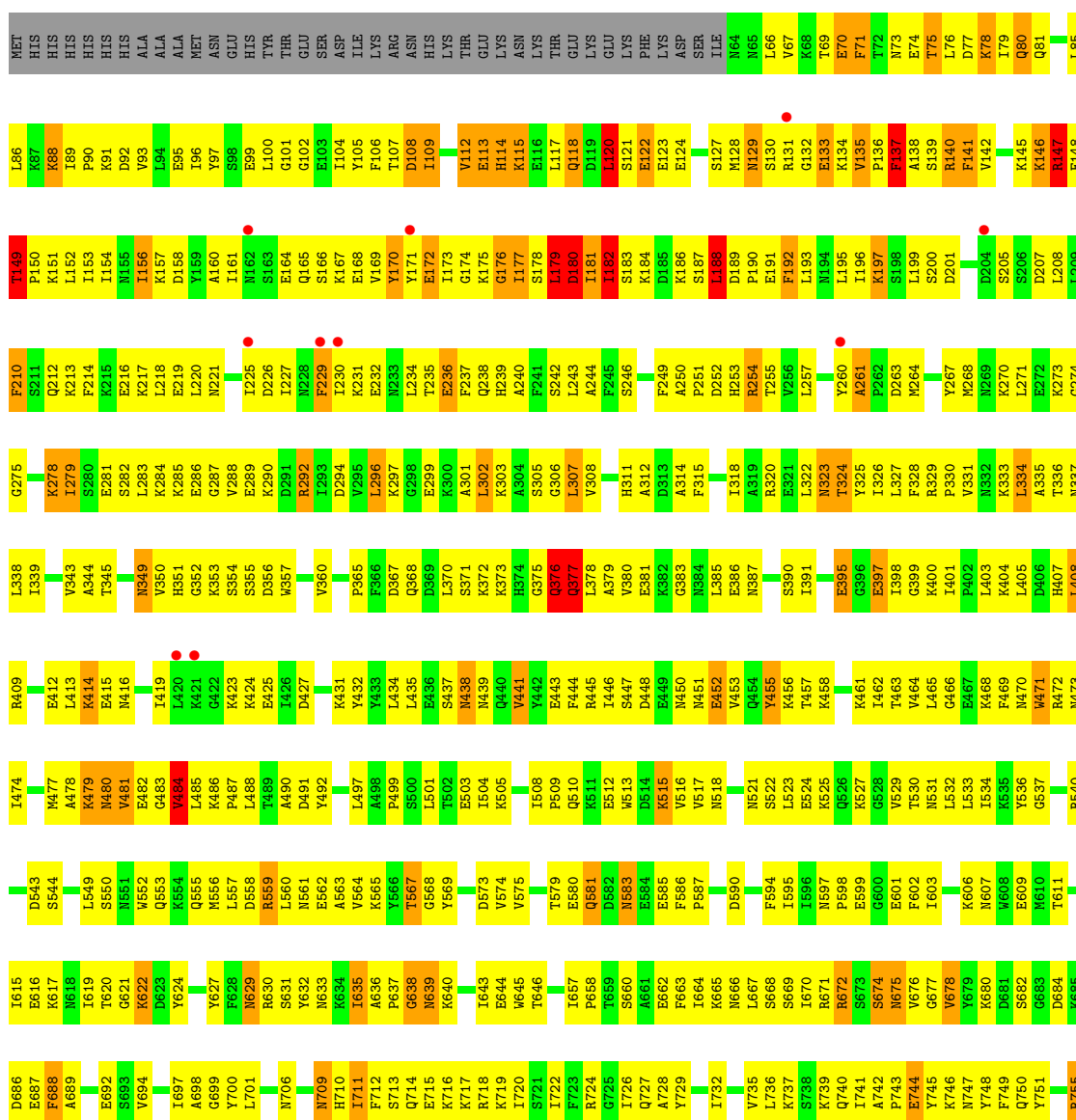
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
4	P	4	Total 4	Ca 4	0	0
4	Q	4	Total 4	Ca 4	0	0
4	T	4	Total 4	Ca 4	0	0
4	O	4	Total 4	Ca 4	0	0
4	R	4	Total 4	Ca 4	0	0
4	S	4	Total 4	Ca 4	0	0

### 3 Residue-property plots

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

- Molecule 1: Calmodulin-sensitive adenylate cyclase

Chain A: 

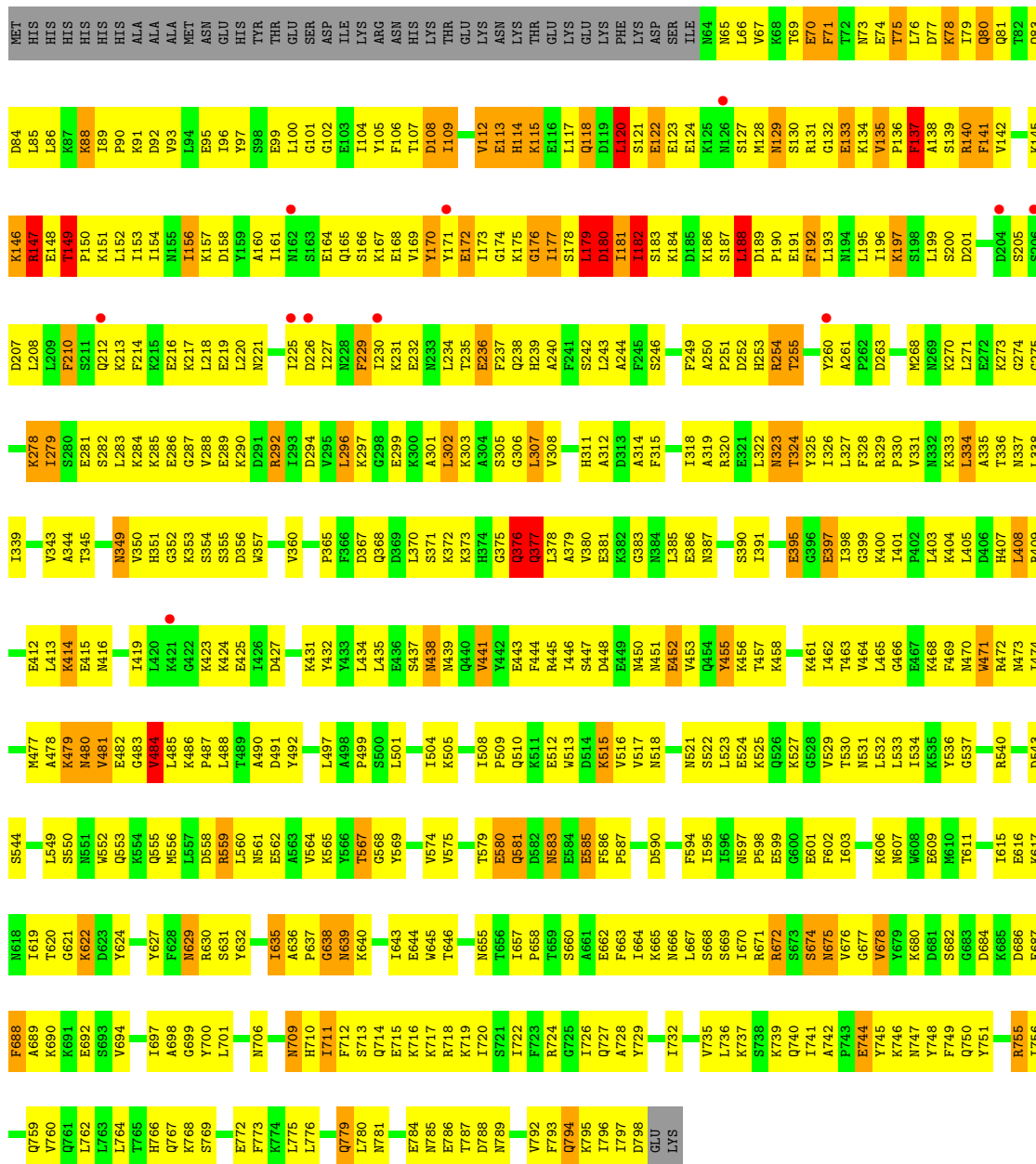






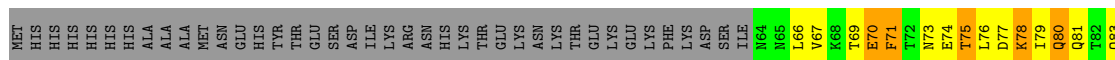
• Molecule 1: Calmodulin-sensitive adenylate cyclase

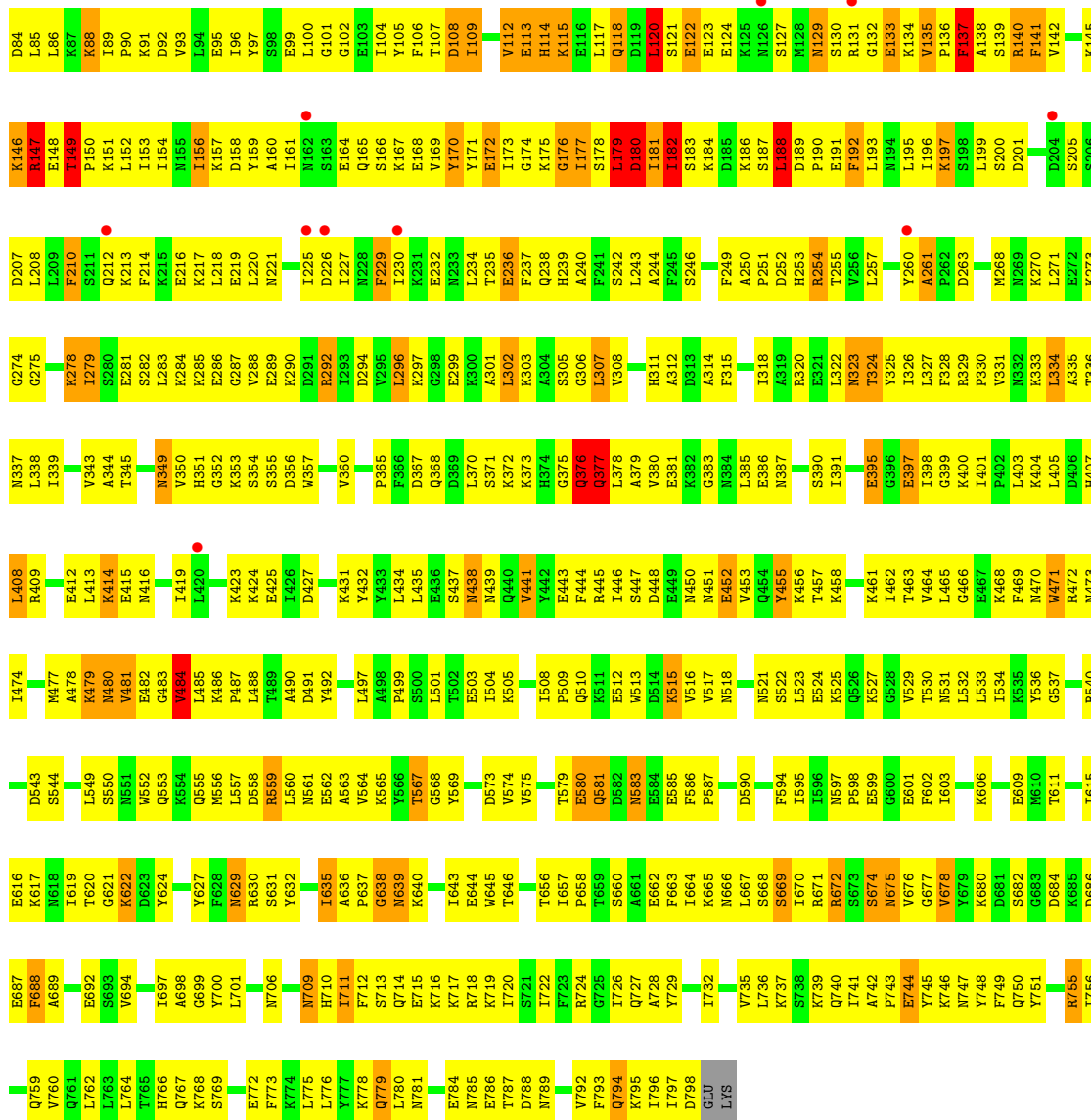
Chain B:



• Molecule 1: Calmodulin-sensitive adenylate cyclase

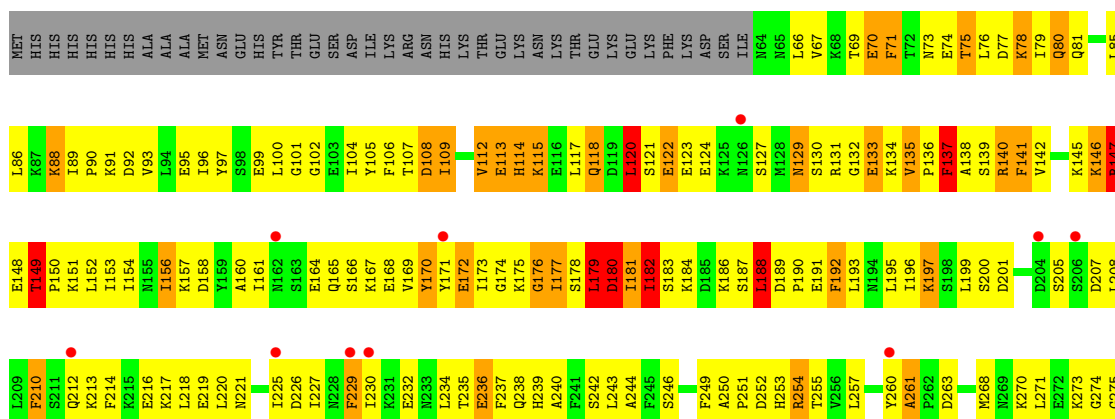
Chain C:

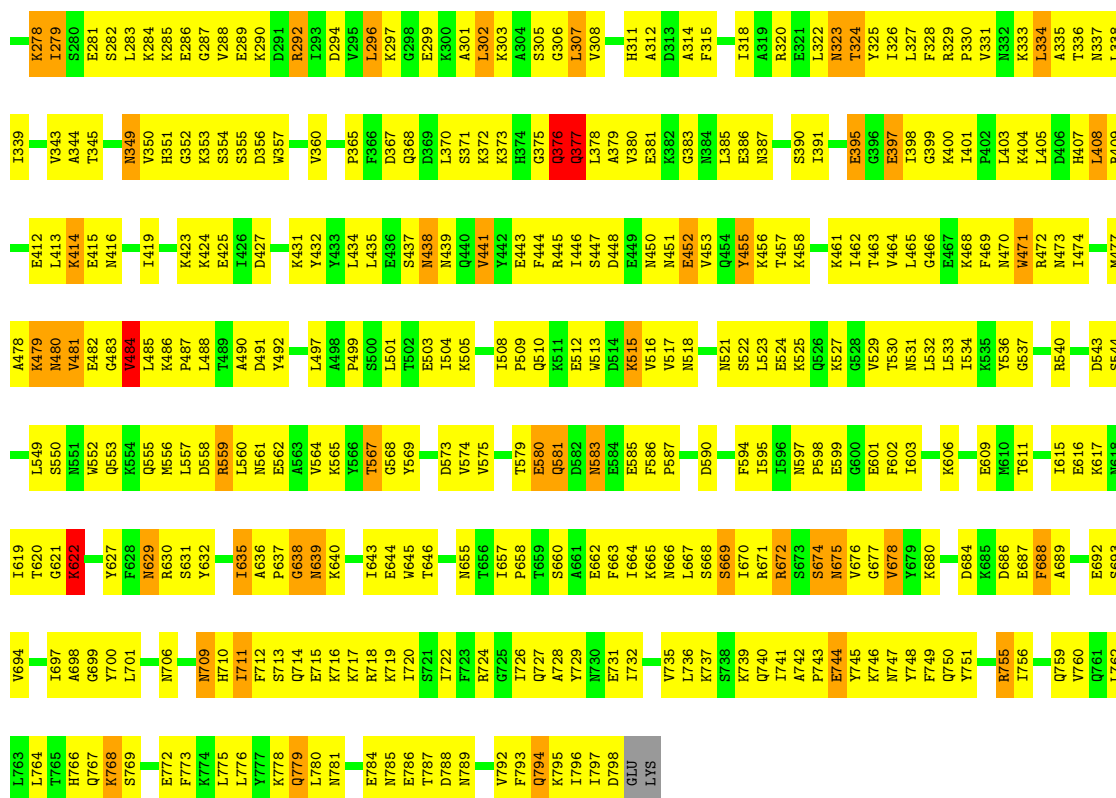




- Molecule 1: Calmodulin-sensitive adenylylate cyclase

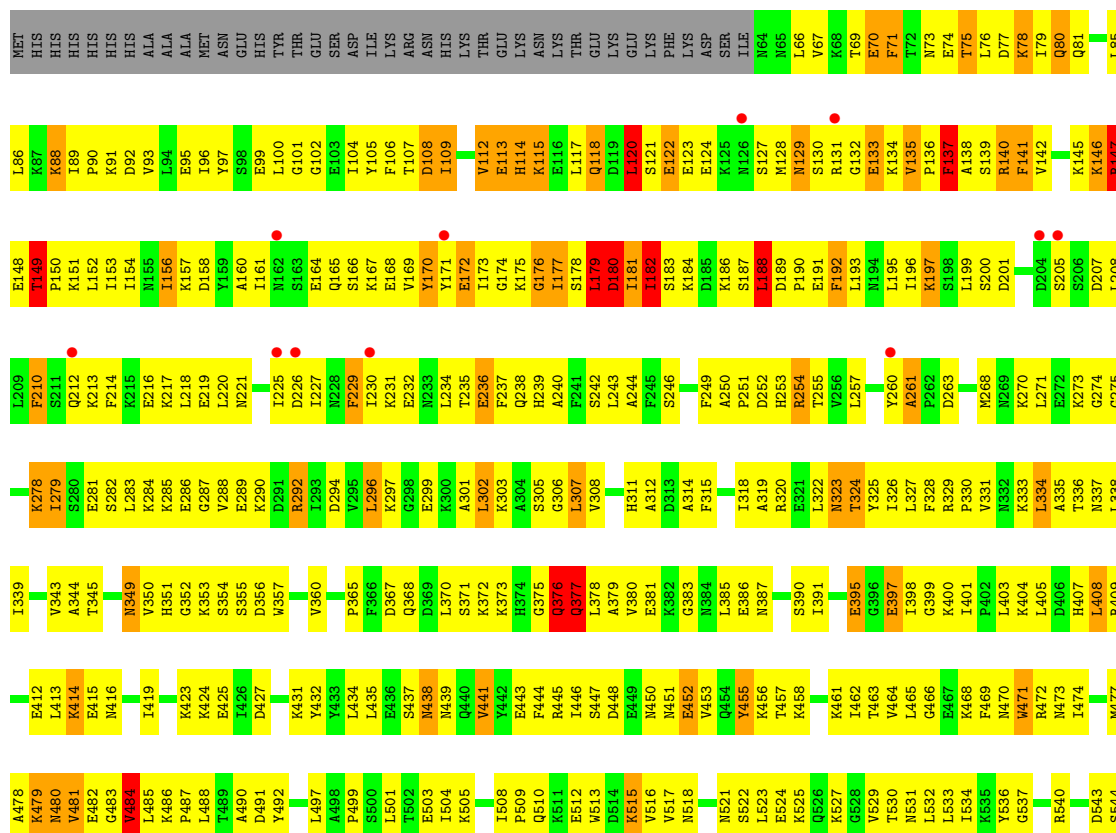
Chain D:

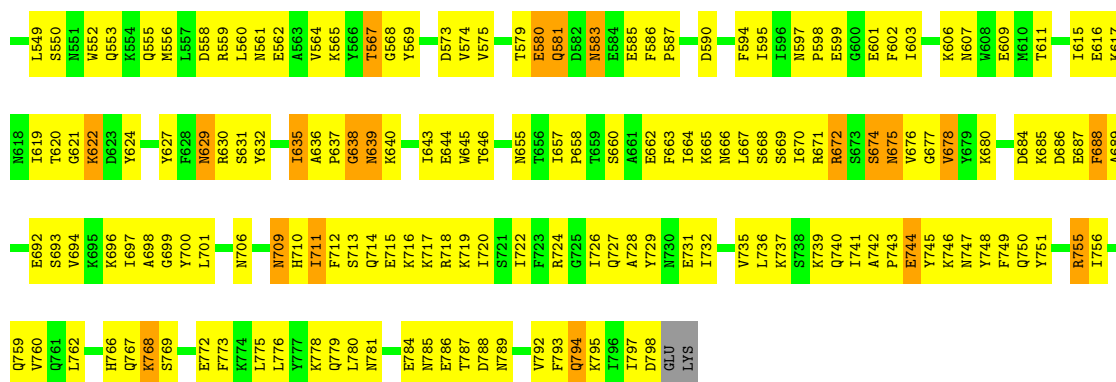




• Molecule 1: Calmodulin-sensitive adenylylate cyclase

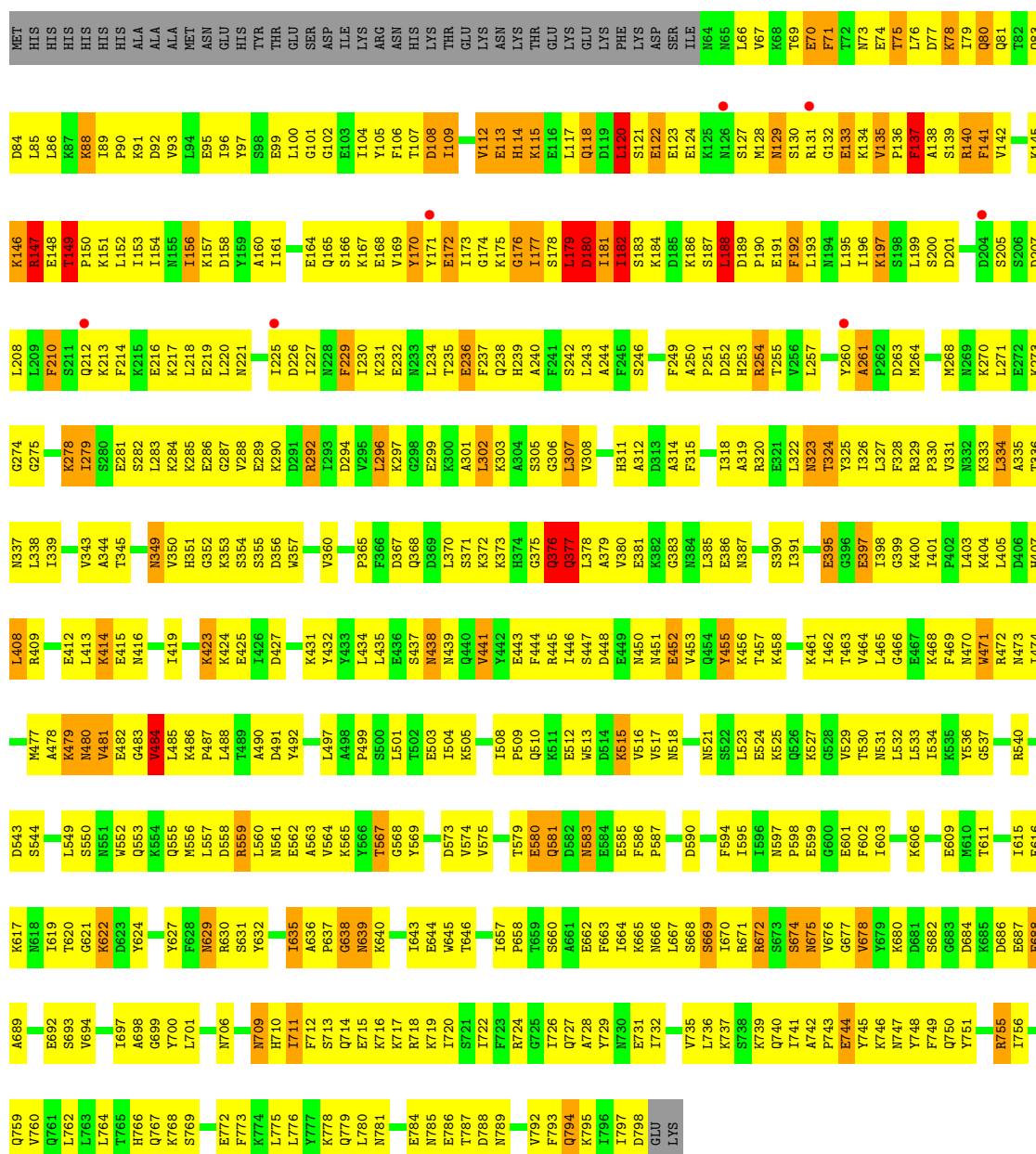
Chain E:





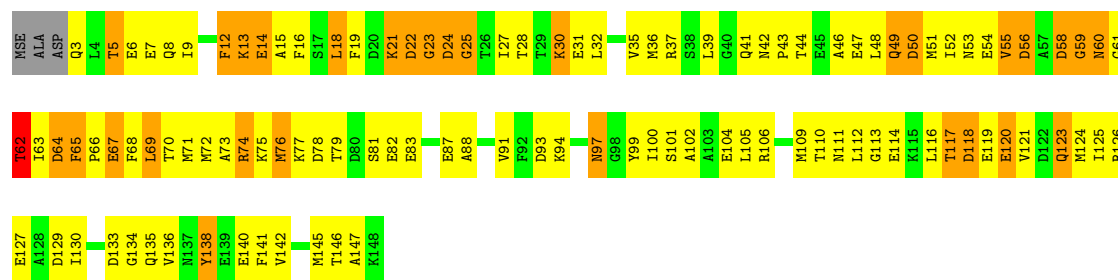
● Molecule 1: Calmodulin-sensitive adenylate cyclase

Chain F:



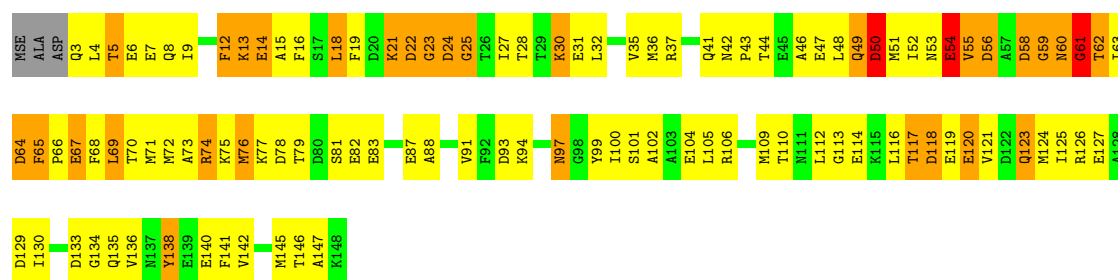
- Molecule 2: Calmodulin 2

Chain O:



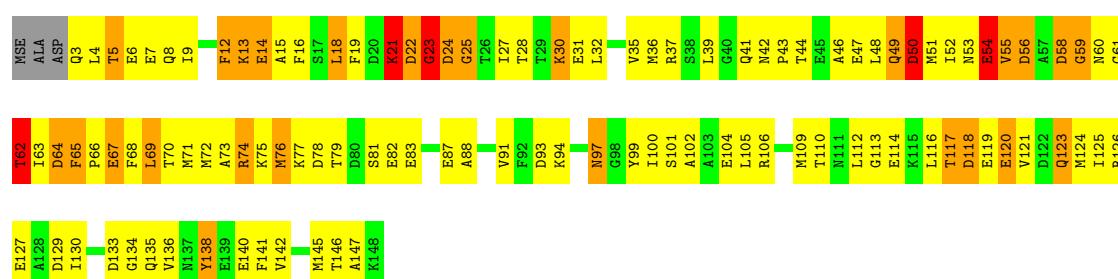
- Molecule 2: Calmodulin 2

Chain P:



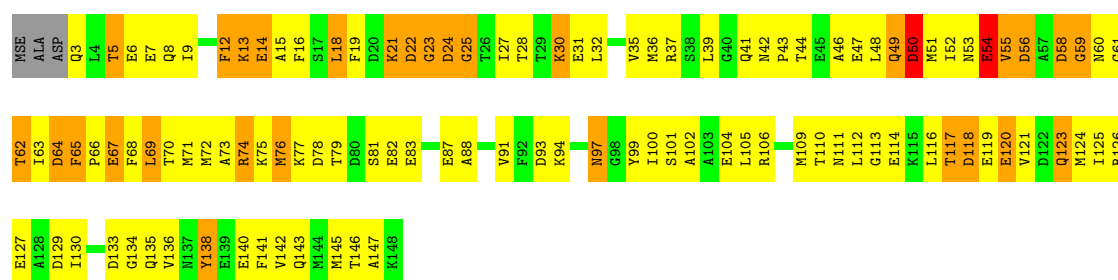
- Molecule 2: Calmodulin 2

Chain Q:



- Molecule 2: Calmodulin 2

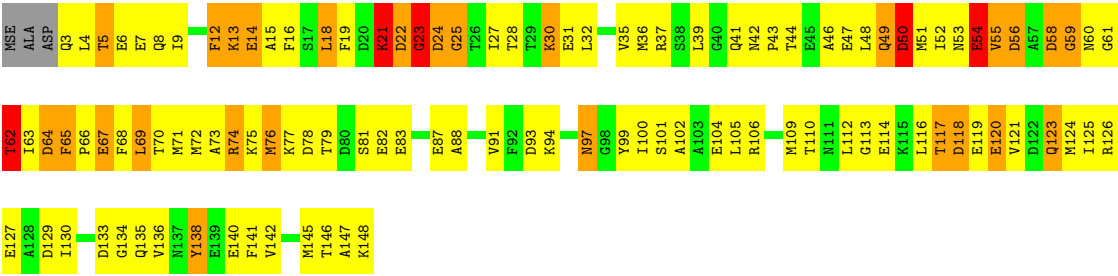
Chain R:



- Molecule 2: Calmodulin 2

Chain S:





● Molecule 2: Calmodulin 2

Chain T:



## 4 Data and refinement statistics

Property	Value	Source
Space group	C 1 2 1	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	318.30Å 183.76Å 141.52Å 90.00° 90.02° 90.00°	Depositor
Resolution (Å)	17.45 – 3.20 17.45 – 3.20	Depositor EDS
% Data completeness (in resolution range)	96.1 (17.45-3.20) 96.1 (17.45-3.20)	Depositor EDS
$R_{merge}$	0.04	Depositor
$R_{sym}$	0.03	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	2.44 (at 3.21Å)	Xtriage
Refinement program	CNS 1.1	Depositor
R, $R_{free}$	0.262 , 0.278 0.251 , 0.267	Depositor DCC
$R_{free}$ test set	6479 reflections (5.06%)	DCC
Wilson B-factor (Å <sup>2</sup> )	97.1	Xtriage
Anisotropy	0.049	Xtriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.27 , 37.4	EDS
Estimated twinning fraction	0.479 for -1/2*h-3/2*k,-1/2*h+1/2*k,-l 0.480 for -1/2*h+3/2*k,1/2*h+1/2*k,-l 0.478 for 1/2*h-3/2*k,-1/2*h-1/2*k,-l 0.480 for 1/2*h+3/2*k,1/2*h-1/2*k,-l 0.479 for -h,-k,l	Xtriage
L-test for twinning	$\langle  L  \rangle = 0.50$ , $\langle L^2 \rangle = 0.33$	Xtriage
Outliers	2 of 132318 reflections (0.002%)	Xtriage
$F_o, F_c$ correlation	0.93	EDS
Total number of atoms	42858	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	87.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.64% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

## 5 Model quality ⓘ

### 5.1 Standard geometry ⓘ

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

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with  $|Z| > 5$  is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z  > 5$	RMSZ	$\# Z  > 5$
1	A	0.58	1/6104 (0.0%)	0.81	13/8208 (0.2%)
1	B	0.58	1/6104 (0.0%)	0.81	13/8208 (0.2%)
1	C	0.57	1/6104 (0.0%)	0.81	13/8208 (0.2%)
1	D	0.58	1/6104 (0.0%)	0.81	13/8208 (0.2%)
1	E	0.57	1/6104 (0.0%)	0.81	13/8208 (0.2%)
1	F	0.57	1/6104 (0.0%)	0.81	12/8208 (0.1%)
2	O	0.66	1/1149 (0.1%)	0.86	2/1526 (0.1%)
2	P	0.69	2/1149 (0.2%)	0.88	4/1526 (0.3%)
2	Q	0.64	1/1149 (0.1%)	0.86	4/1526 (0.3%)
2	R	0.66	1/1149 (0.1%)	0.86	4/1526 (0.3%)
2	S	0.65	1/1149 (0.1%)	0.86	3/1526 (0.2%)
2	T	0.67	2/1149 (0.2%)	0.86	3/1526 (0.2%)
All	All	0.59	14/43518 (0.0%)	0.82	97/58404 (0.2%)

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	1
1	B	0	1
1	C	0	1
1	D	0	1
1	E	0	1
1	F	0	1
2	O	0	1
2	P	0	3
2	Q	0	3
2	R	0	3
2	S	0	3

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Mol	Chain	#Chirality outliers	#Planarity outliers
2	T	0	3
All	All	0	22

All (14) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	P	61	GLY	C-O	7.82	1.36	1.23
2	S	62	THR	CB-CG2	6.71	1.74	1.52
2	R	62	THR	CB-CG2	6.62	1.74	1.52
2	T	62	THR	CB-CG2	6.50	1.73	1.52
2	O	62	THR	CB-CG2	6.42	1.73	1.52
2	T	59	GLY	N-CA	-6.18	1.36	1.46
2	P	62	THR	CB-CG2	6.12	1.72	1.52
1	F	179	LEU	C-O	-5.98	1.11	1.23
2	Q	62	THR	CB-CG2	5.89	1.71	1.52
1	B	179	LEU	C-O	-5.86	1.12	1.23
1	E	179	LEU	C-O	-5.86	1.12	1.23
1	A	179	LEU	C-O	-5.82	1.12	1.23
1	D	179	LEU	C-O	-5.81	1.12	1.23
1	C	179	LEU	C-O	-5.81	1.12	1.23

All (97) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	188	LEU	N-CA-C	-11.99	78.63	111.00
1	F	188	LEU	N-CA-C	-11.96	78.71	111.00
1	A	188	LEU	N-CA-C	-11.95	78.73	111.00
1	C	188	LEU	N-CA-C	-11.95	78.75	111.00
1	D	188	LEU	N-CA-C	-11.94	78.75	111.00
1	E	188	LEU	N-CA-C	-11.92	78.82	111.00
2	T	59	GLY	N-CA-C	-9.85	88.47	113.10
1	B	147	ARG	N-CA-C	9.52	136.69	111.00
1	F	147	ARG	N-CA-C	9.40	136.39	111.00
1	E	147	ARG	N-CA-C	9.40	136.38	111.00
1	C	147	ARG	N-CA-C	9.38	136.32	111.00
1	A	147	ARG	N-CA-C	9.37	136.28	111.00
1	D	147	ARG	N-CA-C	9.36	136.28	111.00
2	P	59	GLY	N-CA-C	-9.28	89.90	113.10
2	S	59	GLY	N-CA-C	-9.04	90.49	113.10
2	O	59	GLY	N-CA-C	-8.79	91.13	113.10
1	F	160	ALA	N-CA-C	8.70	134.48	111.00
1	D	160	ALA	N-CA-C	8.67	134.40	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	160	ALA	N-CA-C	8.67	134.40	111.00
1	A	160	ALA	N-CA-C	8.66	134.38	111.00
1	C	160	ALA	N-CA-C	8.65	134.36	111.00
1	B	160	ALA	N-CA-C	8.65	134.35	111.00
2	Q	59	GLY	N-CA-C	-8.45	91.98	113.10
2	R	59	GLY	N-CA-C	-8.39	92.11	113.10
1	D	129	ASN	N-CA-C	7.50	131.25	111.00
1	B	129	ASN	N-CA-C	7.47	131.17	111.00
1	C	129	ASN	N-CA-C	7.45	131.11	111.00
1	A	129	ASN	N-CA-C	7.44	131.09	111.00
1	F	129	ASN	N-CA-C	7.43	131.07	111.00
1	E	129	ASN	N-CA-C	7.42	131.03	111.00
1	C	674	SER	N-CA-C	-6.48	93.52	111.00
1	F	674	SER	N-CA-C	-6.47	93.53	111.00
1	A	674	SER	N-CA-C	-6.46	93.57	111.00
1	D	674	SER	N-CA-C	-6.44	93.62	111.00
1	B	674	SER	N-CA-C	-6.43	93.65	111.00
1	E	674	SER	N-CA-C	-6.37	93.81	111.00
2	P	54	GLU	O-C-N	-6.36	112.53	122.70
2	Q	54	GLU	O-C-N	-6.26	112.68	122.70
2	S	54	GLU	O-C-N	-6.17	112.83	122.70
2	R	54	GLU	O-C-N	-6.16	112.85	122.70
1	F	132	GLY	N-CA-C	-6.09	97.87	113.10
1	D	132	GLY	N-CA-C	-6.05	97.97	113.10
1	B	132	GLY	N-CA-C	-6.05	97.98	113.10
1	C	132	GLY	N-CA-C	-6.02	98.05	113.10
1	E	132	GLY	N-CA-C	-5.95	98.23	113.10
1	A	132	GLY	N-CA-C	-5.94	98.25	113.10
1	B	149	THR	N-CA-C	-5.79	95.38	111.00
1	A	149	THR	N-CA-C	-5.75	95.47	111.00
1	E	149	THR	N-CA-C	-5.74	95.51	111.00
1	D	149	THR	N-CA-C	-5.73	95.53	111.00
1	D	146	LYS	N-CA-C	5.72	126.45	111.00
1	F	146	LYS	N-CA-C	5.71	126.42	111.00
1	A	146	LYS	N-CA-C	5.69	126.37	111.00
1	A	261	ALA	N-CA-C	-5.68	95.67	111.00
1	E	261	ALA	N-CA-C	-5.68	95.67	111.00
1	B	261	ALA	N-CA-C	-5.67	95.68	111.00
1	F	261	ALA	N-CA-C	-5.67	95.68	111.00
1	B	768	LYS	N-CA-C	-5.67	95.68	111.00
2	T	54	GLU	O-C-N	-5.67	113.63	122.70
1	E	146	LYS	N-CA-C	5.67	126.30	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	146	LYS	N-CA-C	5.66	126.29	111.00
1	C	149	THR	N-CA-C	-5.66	95.71	111.00
1	B	146	LYS	N-CA-C	5.66	126.27	111.00
1	F	149	THR	N-CA-C	-5.65	95.73	111.00
1	E	768	LYS	N-CA-C	-5.65	95.75	111.00
1	F	622	LYS	N-CA-C	-5.64	95.76	111.00
1	D	261	ALA	N-CA-C	-5.63	95.80	111.00
1	B	622	LYS	N-CA-C	-5.63	95.80	111.00
1	D	768	LYS	N-CA-C	-5.63	95.81	111.00
1	E	622	LYS	N-CA-C	-5.62	95.83	111.00
1	C	261	ALA	N-CA-C	-5.61	95.84	111.00
1	F	768	LYS	N-CA-C	-5.61	95.86	111.00
1	C	768	LYS	N-CA-C	-5.60	95.87	111.00
1	A	768	LYS	N-CA-C	-5.57	95.96	111.00
1	A	622	LYS	N-CA-C	-5.57	95.97	111.00
1	C	622	LYS	N-CA-C	-5.57	95.97	111.00
1	D	622	LYS	N-CA-C	-5.54	96.03	111.00
2	Q	23	GLY	N-CA-C	5.35	126.48	113.10
2	P	23	GLY	N-CA-C	5.26	126.26	113.10
2	O	23	GLY	N-CA-C	5.23	126.17	113.10
2	R	23	GLY	N-CA-C	5.22	126.16	113.10
1	E	622	LYS	C-N-CA	-5.22	108.64	121.70
2	T	23	GLY	N-CA-C	5.22	126.15	113.10
2	S	23	GLY	N-CA-C	5.21	126.14	113.10
2	R	62	THR	OG1-CB-CG2	5.20	121.96	110.00
1	D	622	LYS	C-N-CA	-5.19	108.72	121.70
1	E	120	LEU	N-CA-C	5.13	124.86	111.00
2	Q	62	THR	OG1-CB-CG2	5.13	121.81	110.00
1	A	622	LYS	C-N-CA	-5.13	108.88	121.70
1	C	622	LYS	C-N-CA	-5.12	108.89	121.70
1	C	120	LEU	N-CA-C	5.10	124.77	111.00
1	A	120	LEU	N-CA-C	5.08	124.72	111.00
2	P	62	THR	OG1-CB-CG2	5.08	121.67	110.00
1	D	120	LEU	N-CA-C	5.06	124.66	111.00
1	F	120	LEU	N-CA-C	5.06	124.65	111.00
1	B	622	LYS	C-N-CA	-5.06	109.06	121.70
1	B	120	LEU	N-CA-C	5.05	124.64	111.00

There are no chirality outliers.

All (22) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	170	TYR	Sidechain
1	B	170	TYR	Sidechain
1	C	170	TYR	Sidechain
1	D	170	TYR	Sidechain
1	E	170	TYR	Sidechain
1	F	170	TYR	Sidechain
2	O	138	TYR	Sidechain
2	P	138	TYR	Sidechain
2	P	54	GLU	Mainchain,Peptide
2	Q	138	TYR	Sidechain
2	Q	54	GLU	Mainchain,Peptide
2	R	138	TYR	Sidechain
2	R	54	GLU	Mainchain,Peptide
2	S	138	TYR	Sidechain
2	S	54	GLU	Mainchain,Peptide
2	T	138	TYR	Sidechain
2	T	54	GLU	Mainchain,Peptide

## 5.2 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 hydrogens added by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, and the number in parentheses is this value normalized per 1000 atoms of the molecule in the chain. The Symm-Clashes column gives symmetry related clashes, in the same way as for the Clashes column.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	5992	0	6010	720	1
1	B	5992	0	6010	721	1
1	C	5992	0	6010	724	1
1	D	5992	0	6010	718	0
1	E	5992	0	6010	708	0
1	F	5992	0	6010	715	1
2	O	1146	0	1071	180	0
2	P	1146	0	1071	182	0
2	Q	1146	0	1071	184	0
2	R	1146	0	1071	185	0
2	S	1146	0	1071	192	0
2	T	1146	0	1071	183	0
3	A	1	0	0	0	0
3	B	1	0	0	0	0
3	C	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	D	1	0	0	0	0
3	E	1	0	0	0	0
3	F	1	0	0	0	0
4	O	4	0	0	0	0
4	P	4	0	0	0	0
4	Q	4	0	0	0	0
4	R	4	0	0	0	0
4	S	4	0	0	0	0
4	T	4	0	0	0	0
All	All	42858	0	42486	5285	2

Clashscore is defined as the number of clashes calculated for the entry per 1000 atoms (including hydrogens) of the entry. The overall clashscore for this entry is 62.

All (5285) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:S:62:THR:CG2	2:S:62:THR:CB	1.74	1.60
1:B:179:LEU:O	1:B:183:SER:HB2	1.21	1.35
1:A:179:LEU:O	1:A:183:SER:HB2	1.21	1.35
1:E:179:LEU:O	1:E:183:SER:HB2	1.21	1.32
1:D:179:LEU:O	1:D:183:SER:HB2	1.20	1.32
1:F:179:LEU:O	1:F:183:SER:HB2	1.20	1.29
1:C:179:LEU:O	1:C:183:SER:HB2	1.21	1.28
1:C:127:SER:O	1:C:133:GLU:OE2	1.63	1.17
1:E:127:SER:O	1:E:133:GLU:OE2	1.63	1.17
1:F:127:SER:O	1:F:133:GLU:OE2	1.63	1.17
1:B:127:SER:O	1:B:133:GLU:OE2	1.63	1.16
1:D:127:SER:O	1:D:133:GLU:OE2	1.63	1.16
1:A:127:SER:O	1:A:133:GLU:OE2	1.63	1.16
1:F:296:LEU:H	1:F:296:LEU:HD23	1.11	1.15
1:C:296:LEU:H	1:C:296:LEU:HD23	1.11	1.14
1:A:89:ILE:HG22	1:A:93:VAL:HG11	1.31	1.13
1:D:89:ILE:HG22	1:D:93:VAL:HG11	1.30	1.13
1:E:296:LEU:HD23	1:E:296:LEU:H	1.11	1.13
1:B:179:LEU:O	1:B:183:SER:CB	1.98	1.11
1:C:179:LEU:O	1:C:183:SER:CB	1.99	1.11
1:D:179:LEU:O	1:D:183:SER:CB	1.98	1.11
1:B:89:ILE:HG22	1:B:93:VAL:HG11	1.31	1.11
1:E:179:LEU:O	1:E:183:SER:CB	1.98	1.10
1:F:179:LEU:O	1:F:183:SER:CB	1.98	1.10
1:D:296:LEU:HD23	1:D:296:LEU:H	1.12	1.10
1:A:179:LEU:O	1:A:183:SER:CB	1.99	1.10

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:408:LEU:H	1:B:408:LEU:HD12	1.17	1.09
1:B:296:LEU:HD23	1:B:296:LEU:H	1.11	1.09
1:E:89:ILE:HG22	1:E:93:VAL:HG11	1.32	1.09
1:C:89:ILE:HG22	1:C:93:VAL:HG11	1.30	1.08
1:A:408:LEU:H	1:A:408:LEU:HD12	1.18	1.08
1:A:296:LEU:HD23	1:A:296:LEU:H	1.11	1.07
1:F:89:ILE:HG22	1:F:93:VAL:HG11	1.31	1.07
1:E:408:LEU:H	1:E:408:LEU:HD12	1.19	1.07
1:E:296:LEU:HD23	1:E:296:LEU:N	1.71	1.06
2:R:13:LYS:NZ	2:R:65:PHE:HB3	1.71	1.06
1:F:408:LEU:H	1:F:408:LEU:HD12	1.18	1.05
1:C:597:ASN:HD21	1:C:601:GLU:HB2	1.21	1.05
1:F:296:LEU:N	1:F:296:LEU:HD23	1.72	1.05
1:B:296:LEU:HD23	1:B:296:LEU:N	1.72	1.05
1:A:597:ASN:HD21	1:A:601:GLU:HB2	1.21	1.05
2:P:55:VAL:HG21	2:P:67:GLU:OE1	1.56	1.05
2:O:13:LYS:NZ	2:O:65:PHE:HB3	1.72	1.05
1:A:296:LEU:HD23	1:A:296:LEU:N	1.72	1.05
1:C:296:LEU:N	1:C:296:LEU:HD23	1.71	1.04
1:B:501:LEU:HD22	2:P:112:LEU:HD21	1.39	1.04
1:D:408:LEU:H	1:D:408:LEU:HD12	1.19	1.04
1:E:597:ASN:HD21	1:E:601:GLU:HB2	1.22	1.04
1:E:479:LYS:HG2	1:E:488:LEU:HD21	1.38	1.04
1:A:501:LEU:HD22	2:O:112:LEU:HD21	1.40	1.03
2:P:13:LYS:NZ	2:P:65:PHE:HB3	1.72	1.03
2:Q:13:LYS:NZ	2:Q:65:PHE:HB3	1.72	1.03
2:S:55:VAL:HG21	2:S:67:GLU:OE1	1.58	1.03
1:F:501:LEU:HD22	2:T:112:LEU:HD21	1.40	1.03
2:S:13:LYS:NZ	2:S:65:PHE:HB3	1.72	1.03
1:D:296:LEU:N	1:D:296:LEU:HD23	1.72	1.03
2:T:13:LYS:NZ	2:T:65:PHE:HB3	1.72	1.03
1:E:501:LEU:HD22	2:S:112:LEU:HD21	1.41	1.03
2:Q:55:VAL:HG21	2:Q:67:GLU:OE1	1.58	1.02
1:F:479:LYS:HG2	1:F:488:LEU:HD21	1.38	1.02
1:C:479:LYS:HG2	1:C:488:LEU:HD21	1.37	1.02
1:D:597:ASN:HD21	1:D:601:GLU:HB2	1.21	1.02
1:C:408:LEU:HD12	1:C:408:LEU:H	1.18	1.02
1:F:597:ASN:HD21	1:F:601:GLU:HB2	1.21	1.02
1:A:479:LYS:HG2	1:A:488:LEU:HD21	1.38	1.01
1:B:597:ASN:HD21	1:B:601:GLU:HB2	1.22	1.01
1:D:501:LEU:HD22	2:R:112:LEU:HD21	1.40	1.01
1:B:479:LYS:HG2	1:B:488:LEU:HD21	1.38	1.01

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:R:55:VAL:HG21	2:R:67:GLU:OE1	1.59	1.01
1:C:501:LEU:HD22	2:Q:112:LEU:HD21	1.41	1.00
1:D:479:LYS:HG2	1:D:488:LEU:HD21	1.39	1.00
2:T:55:VAL:HG21	2:T:67:GLU:OE1	1.59	1.00
2:S:30:LYS:HD3	2:S:30:LYS:H	1.27	0.99
2:O:55:VAL:HG21	2:O:67:GLU:OE1	1.59	0.99
1:A:112:VAL:HG12	1:A:113:GLU:H	1.27	0.99
1:C:112:VAL:HG12	1:C:113:GLU:H	1.27	0.99
1:D:90:PRO:O	1:D:93:VAL:HG12	1.62	0.99
1:B:90:PRO:O	1:B:93:VAL:HG12	1.63	0.99
2:Q:30:LYS:HD3	2:Q:30:LYS:H	1.27	0.98
1:B:112:VAL:HG12	1:B:113:GLU:H	1.28	0.98
1:E:90:PRO:O	1:E:93:VAL:HG12	1.63	0.98
1:E:112:VAL:HG12	1:E:113:GLU:H	1.26	0.98
1:B:657:ILE:HG13	1:B:756:ILE:HD13	1.46	0.98
1:F:112:VAL:HG12	1:F:113:GLU:H	1.27	0.98
1:A:182:ILE:C	1:A:187:SER:HB2	1.85	0.97
1:D:122:GLU:HG3	1:D:147:ARG:HB2	1.45	0.97
1:F:182:ILE:C	1:F:187:SER:HB2	1.85	0.97
1:C:90:PRO:O	1:C:93:VAL:HG12	1.64	0.97
1:D:182:ILE:C	1:D:187:SER:HB2	1.85	0.97
1:E:629:ASN:ND2	1:E:631:SER:H	1.63	0.97
1:B:182:ILE:C	1:B:187:SER:HB2	1.84	0.97
1:B:122:GLU:HG3	1:B:147:ARG:HB2	1.45	0.97
1:E:657:ILE:HG13	1:E:756:ILE:HD13	1.46	0.97
1:A:90:PRO:O	1:A:93:VAL:HG12	1.63	0.97
1:E:154:ILE:HG13	1:E:171:TYR:CE1	2.00	0.97
1:F:657:ILE:HG13	1:F:756:ILE:HD13	1.47	0.97
1:F:122:GLU:HG3	1:F:147:ARG:HB2	1.45	0.97
2:R:30:LYS:H	2:R:30:LYS:HD3	1.27	0.96
1:F:90:PRO:O	1:F:93:VAL:HG12	1.63	0.96
2:T:30:LYS:H	2:T:30:LYS:HD3	1.26	0.96
2:O:30:LYS:HD3	2:O:30:LYS:H	1.26	0.96
1:A:122:GLU:HG3	1:A:147:ARG:HB2	1.46	0.96
1:F:629:ASN:ND2	1:F:631:SER:H	1.63	0.96
1:D:112:VAL:HG12	1:D:113:GLU:H	1.27	0.96
1:A:657:ILE:HG13	1:A:756:ILE:HD13	1.47	0.96
1:C:629:ASN:ND2	1:C:631:SER:H	1.63	0.96
2:P:30:LYS:HD3	2:P:30:LYS:H	1.26	0.96
1:C:182:ILE:C	1:C:187:SER:HB2	1.85	0.96
1:C:657:ILE:HG13	1:C:756:ILE:HD13	1.47	0.96
1:D:629:ASN:ND2	1:D:631:SER:H	1.62	0.96

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:154:ILE:HG13	1:B:171:TYR:CE1	2.01	0.96
1:F:161:ILE:CG2	1:F:168:GLU:HB2	1.96	0.96
1:E:182:ILE:C	1:E:187:SER:HB2	1.85	0.95
1:D:657:ILE:HG13	1:D:756:ILE:HD13	1.47	0.95
1:B:161:ILE:CG2	1:B:168:GLU:HB2	1.95	0.95
1:F:154:ILE:HG13	1:F:171:TYR:CE1	2.01	0.95
1:D:154:ILE:HG13	1:D:171:TYR:CE1	2.01	0.95
1:B:629:ASN:ND2	1:B:631:SER:H	1.64	0.95
1:E:161:ILE:CG2	1:E:168:GLU:HB2	1.96	0.95
1:F:472:ARG:HH11	1:F:472:ARG:HB3	1.31	0.95
1:B:472:ARG:HB3	1:B:472:ARG:HH11	1.31	0.95
1:C:472:ARG:HH11	1:C:472:ARG:HB3	1.32	0.95
1:E:472:ARG:HH11	1:E:472:ARG:HB3	1.31	0.94
1:A:154:ILE:HG13	1:A:171:TYR:CE1	2.01	0.94
1:C:180:ASP:OD1	1:C:180:ASP:N	2.00	0.94
1:C:122:GLU:HG3	1:C:147:ARG:HB2	1.46	0.94
1:E:122:GLU:HG3	1:E:147:ARG:HB2	1.45	0.94
1:C:161:ILE:CG2	1:C:168:GLU:HB2	1.97	0.94
1:C:154:ILE:HG13	1:C:171:TYR:CE1	2.01	0.94
1:A:629:ASN:ND2	1:A:631:SER:H	1.64	0.94
1:A:161:ILE:CG2	1:A:168:GLU:HB2	1.96	0.94
1:A:472:ARG:HB3	1:A:472:ARG:HH11	1.33	0.94
1:A:180:ASP:N	1:A:180:ASP:OD1	2.00	0.94
2:R:59:GLY:O	2:R:62:THR:CG2	2.16	0.94
1:D:152:LEU:HD21	1:D:171:TYR:HE1	1.34	0.93
1:D:472:ARG:HB3	1:D:472:ARG:HH11	1.32	0.93
1:F:180:ASP:OD1	1:F:180:ASP:N	2.01	0.92
1:D:161:ILE:CG2	1:D:168:GLU:HB2	1.97	0.92
1:B:180:ASP:N	1:B:180:ASP:OD1	2.00	0.92
1:C:152:LEU:HD21	1:C:171:TYR:HE1	1.34	0.92
1:F:722:ILE:HG23	1:F:760:VAL:HG13	1.51	0.92
1:B:629:ASN:HD22	1:B:631:SER:H	1.18	0.92
1:F:629:ASN:HD22	1:F:631:SER:H	1.17	0.92
1:D:180:ASP:OD1	1:D:180:ASP:N	2.00	0.91
1:C:629:ASN:HD22	1:C:631:SER:H	1.17	0.91
1:D:629:ASN:HD22	1:D:631:SER:H	1.15	0.91
1:B:353:LYS:H	1:B:368:GLN:HE22	1.17	0.91
1:F:152:LEU:HD21	1:F:171:TYR:HE1	1.33	0.91
1:A:615:ILE:HD12	1:A:645:TRP:HH2	1.36	0.91
1:E:188:LEU:N	1:E:188:LEU:HD23	1.86	0.91
1:A:152:LEU:HD21	1:A:171:TYR:HE1	1.34	0.91
1:C:722:ILE:HG23	1:C:760:VAL:HG13	1.50	0.91

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:722:ILE:HG23	1:A:760:VAL:HG13	1.51	0.91
2:O:59:GLY:O	2:O:62:THR:CG2	2.19	0.90
1:E:353:LYS:H	1:E:368:GLN:HE22	1.17	0.90
1:D:615:ILE:HD12	1:D:645:TRP:HH2	1.36	0.90
1:B:722:ILE:HG23	1:B:760:VAL:HG13	1.51	0.90
1:B:188:LEU:HD23	1:B:188:LEU:N	1.87	0.90
1:C:615:ILE:HD12	1:C:645:TRP:HH2	1.37	0.90
1:D:186:LYS:HE3	1:D:234:LEU:HD12	1.54	0.90
1:B:152:LEU:HD21	1:B:171:TYR:HE1	1.35	0.90
2:S:28:THR:HB	2:S:30:LYS:HZ3	1.37	0.90
1:F:327:LEU:HG	1:F:595:ILE:HG23	1.54	0.90
2:Q:36:MSE:HE3	2:Q:43:PRO:HG3	1.54	0.90
1:F:188:LEU:HD23	1:F:188:LEU:N	1.87	0.90
1:C:405:LEU:HD13	1:C:453:VAL:HG21	1.54	0.90
1:A:327:LEU:HG	1:A:595:ILE:HG23	1.54	0.89
1:E:722:ILE:HG23	1:E:760:VAL:HG13	1.52	0.89
1:A:186:LYS:HE3	1:A:234:LEU:HD12	1.54	0.89
2:R:36:MSE:HE3	2:R:43:PRO:HG3	1.54	0.89
1:A:188:LEU:HD23	1:A:188:LEU:N	1.87	0.89
1:E:152:LEU:HD21	1:E:171:TYR:HE1	1.35	0.89
1:E:405:LEU:HD13	1:E:453:VAL:HG21	1.54	0.89
1:D:405:LEU:HD13	1:D:453:VAL:HG21	1.54	0.89
1:E:327:LEU:HG	1:E:595:ILE:HG23	1.55	0.89
1:F:405:LEU:HD13	1:F:453:VAL:HG21	1.55	0.89
1:C:188:LEU:HD23	1:C:188:LEU:N	1.86	0.89
1:E:615:ILE:HD12	1:E:645:TRP:HH2	1.37	0.89
1:E:629:ASN:HD22	1:E:631:SER:H	1.17	0.89
1:C:186:LYS:HE3	1:C:234:LEU:HD12	1.55	0.89
2:T:36:MSE:HE3	2:T:43:PRO:HG3	1.54	0.89
1:F:615:ILE:HD12	1:F:645:TRP:HH2	1.36	0.89
1:D:722:ILE:HG23	1:D:760:VAL:HG13	1.52	0.89
1:D:188:LEU:N	1:D:188:LEU:HD23	1.87	0.89
2:O:36:MSE:HE3	2:O:43:PRO:HG3	1.54	0.89
1:E:616:GLU:HA	1:E:620:THR:HB	1.55	0.89
1:D:130:SER:HB2	1:D:170:TYR:CE2	2.08	0.88
1:D:327:LEU:HG	1:D:595:ILE:HG23	1.53	0.88
1:B:186:LYS:HE3	1:B:234:LEU:HD12	1.54	0.88
1:A:353:LYS:H	1:A:368:GLN:HE22	1.19	0.88
1:A:616:GLU:HA	1:A:620:THR:HB	1.56	0.88
1:D:616:GLU:HA	1:D:620:THR:HB	1.55	0.88
1:E:719:LYS:HE3	1:E:797:ILE:HD11	1.55	0.88
2:R:56:ASP:OD2	2:R:60:ASN:HA	1.74	0.88

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:550:SER:HB3	1:B:553:GLN:HG3	1.55	0.88
1:B:327:LEU:HG	1:B:595:ILE:HG23	1.55	0.88
2:Q:56:ASP:OD2	2:Q:60:ASN:HA	1.74	0.88
1:C:327:LEU:HG	1:C:595:ILE:HG23	1.54	0.88
1:A:550:SER:HB3	1:A:553:GLN:HG3	1.55	0.88
2:S:36:MSE:HE3	2:S:43:PRO:HG3	1.54	0.88
1:B:616:GLU:HA	1:B:620:THR:HB	1.55	0.88
1:A:130:SER:HB2	1:A:170:TYR:CE2	2.09	0.88
1:D:275:GLY:HA2	1:D:278:LYS:HE3	1.56	0.88
1:E:275:GLY:HA2	1:E:278:LYS:HE3	1.55	0.87
1:F:616:GLU:HA	1:F:620:THR:HB	1.56	0.87
1:C:275:GLY:HA2	1:C:278:LYS:HE3	1.55	0.87
1:C:130:SER:HB2	1:C:170:TYR:CE2	2.08	0.87
1:E:161:ILE:HA	1:E:167:LYS:HD2	1.57	0.87
1:C:550:SER:HB3	1:C:553:GLN:HG3	1.57	0.87
1:F:550:SER:HB3	1:F:553:GLN:HG3	1.54	0.87
1:F:353:LYS:H	1:F:368:GLN:HE22	1.18	0.87
1:A:405:LEU:HD13	1:A:453:VAL:HG21	1.54	0.87
1:E:186:LYS:HE3	1:E:234:LEU:HD12	1.54	0.87
1:B:405:LEU:HD13	1:B:453:VAL:HG21	1.55	0.87
1:E:130:SER:HB2	1:E:170:TYR:CE2	2.09	0.87
1:A:630:ARG:CZ	2:O:83:GLU:HG2	2.04	0.87
1:B:161:ILE:HA	1:B:167:LYS:HD2	1.56	0.87
2:P:36:MSE:HE3	2:P:43:PRO:HG3	1.54	0.87
1:B:275:GLY:HA2	1:B:278:LYS:HE3	1.57	0.87
1:F:597:ASN:HB2	1:F:598:PRO:HD2	1.57	0.87
2:P:28:THR:HB	2:P:30:LYS:HZ3	1.39	0.87
1:F:275:GLY:HA2	1:F:278:LYS:HE3	1.56	0.87
1:C:616:GLU:HA	1:C:620:THR:HB	1.56	0.87
2:P:65:PHE:HB2	2:P:66:PRO:HD3	1.57	0.86
1:D:597:ASN:HB2	1:D:598:PRO:HD2	1.57	0.86
1:A:719:LYS:HE3	1:A:797:ILE:HD11	1.56	0.86
1:A:611:THR:O	1:A:615:ILE:HG13	1.74	0.86
1:E:611:THR:O	1:E:615:ILE:HG13	1.75	0.86
1:F:719:LYS:HE3	1:F:797:ILE:HD11	1.57	0.86
1:B:611:THR:O	1:B:615:ILE:HG13	1.75	0.86
1:B:615:ILE:HD12	1:B:645:TRP:HH2	1.39	0.86
1:D:719:LYS:HE3	1:D:797:ILE:HD11	1.56	0.86
1:B:130:SER:HB2	1:B:170:TYR:CE2	2.10	0.86
1:F:611:THR:O	1:F:615:ILE:HG13	1.75	0.86
1:F:161:ILE:HA	1:F:167:LYS:HD2	1.57	0.86
1:F:186:LYS:HE3	1:F:234:LEU:HD12	1.55	0.86

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:O:65:PHE:HB2	2:O:66:PRO:HD3	1.58	0.86
2:Q:65:PHE:HB2	2:Q:66:PRO:HD3	1.58	0.86
2:S:65:PHE:HB2	2:S:66:PRO:HD3	1.57	0.86
1:C:719:LYS:HE3	1:C:797:ILE:HD11	1.57	0.86
1:B:719:LYS:HE3	1:B:797:ILE:HD11	1.58	0.86
1:B:107:THR:HG21	1:B:115:LYS:HD2	1.57	0.86
1:C:611:THR:O	1:C:615:ILE:HG13	1.75	0.86
1:A:275:GLY:HA2	1:A:278:LYS:HE3	1.58	0.86
1:E:180:ASP:N	1:E:180:ASP:OD1	2.01	0.86
2:R:65:PHE:HB2	2:R:66:PRO:HD3	1.58	0.86
2:P:117:THR:HG23	2:P:120:GLU:HB2	1.58	0.86
1:B:635:ILE:HD12	1:B:635:ILE:H	1.41	0.86
1:F:130:SER:HB2	1:F:170:TYR:CE2	2.10	0.85
2:T:65:PHE:HB2	2:T:66:PRO:HD3	1.58	0.85
1:E:630:ARG:CZ	2:S:83:GLU:HG2	2.05	0.85
1:A:629:ASN:HD22	1:A:631:SER:H	1.19	0.85
1:D:89:ILE:HG22	1:D:93:VAL:CG1	2.06	0.85
1:D:353:LYS:H	1:D:368:GLN:HE22	1.17	0.85
1:D:550:SER:HB3	1:D:553:GLN:HG3	1.58	0.85
1:A:597:ASN:HB2	1:A:598:PRO:HD2	1.57	0.85
1:C:353:LYS:H	1:C:368:GLN:HE22	1.19	0.85
1:E:550:SER:HB3	1:E:553:GLN:HG3	1.57	0.85
1:A:107:THR:HG21	1:A:115:LYS:HD2	1.58	0.85
1:B:89:ILE:HG22	1:B:93:VAL:CG1	2.07	0.85
1:C:89:ILE:HG22	1:C:93:VAL:CG1	2.07	0.85
1:C:635:ILE:H	1:C:635:ILE:HD12	1.42	0.85
1:D:161:ILE:HA	1:D:167:LYS:HD2	1.58	0.85
1:A:161:ILE:HA	1:A:167:LYS:HD2	1.57	0.85
1:A:89:ILE:HG22	1:A:93:VAL:CG1	2.07	0.85
1:D:611:THR:O	1:D:615:ILE:HG13	1.76	0.85
2:S:56:ASP:OD2	2:S:60:ASN:HA	1.76	0.84
1:F:107:THR:HG21	1:F:115:LYS:HD2	1.58	0.84
1:A:161:ILE:HG21	1:A:168:GLU:HB2	1.60	0.84
1:E:89:ILE:HG22	1:E:93:VAL:CG1	2.07	0.84
1:C:288:VAL:HG23	1:C:289:GLU:H	1.42	0.84
1:C:472:ARG:NH1	1:C:472:ARG:HB3	1.92	0.84
2:R:9:ILE:HD12	2:R:69:LEU:HD11	1.59	0.84
2:R:28:THR:HB	2:R:30:LYS:HZ3	1.43	0.84
1:F:288:VAL:HG23	1:F:289:GLU:H	1.42	0.84
1:D:142:VAL:HG22	1:D:154:ILE:HG23	1.60	0.84
1:F:142:VAL:HG22	1:F:154:ILE:HG23	1.60	0.84
1:A:296:LEU:CD2	1:A:296:LEU:H	1.91	0.84

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:597:ASN:HB2	1:E:598:PRO:HD2	1.57	0.84
1:E:288:VAL:HG23	1:E:289:GLU:H	1.42	0.84
1:E:472:ARG:NH1	1:E:472:ARG:HB3	1.92	0.84
1:D:192:PHE:HA	1:D:195:LEU:HB3	1.60	0.84
1:D:107:THR:HG21	1:D:115:LYS:HD2	1.58	0.84
2:Q:9:ILE:HD12	2:Q:69:LEU:HD11	1.60	0.84
1:B:161:ILE:HG21	1:B:168:GLU:HB2	1.59	0.83
1:C:597:ASN:HB2	1:C:598:PRO:HD2	1.58	0.83
1:D:746:LYS:O	1:D:750:GLN:HG2	1.78	0.83
2:T:117:THR:HG23	2:T:120:GLU:HB2	1.59	0.83
1:F:89:ILE:HG22	1:F:93:VAL:CG1	2.07	0.83
1:A:142:VAL:HG22	1:A:154:ILE:HG23	1.60	0.83
1:B:597:ASN:HB2	1:B:598:PRO:HD2	1.57	0.83
1:D:630:ARG:CZ	2:R:83:GLU:HG2	2.08	0.83
1:A:635:ILE:HD12	1:A:635:ILE:H	1.41	0.83
1:F:472:ARG:NH1	1:F:472:ARG:HB3	1.92	0.83
1:D:288:VAL:HG23	1:D:289:GLU:H	1.43	0.83
1:C:161:ILE:HA	1:C:167:LYS:HD2	1.58	0.83
1:C:140:ARG:HA	1:C:140:ARG:HE	1.44	0.83
1:E:635:ILE:H	1:E:635:ILE:HD12	1.43	0.83
1:C:142:VAL:HG22	1:C:154:ILE:HG23	1.61	0.83
1:F:630:ARG:CZ	2:T:83:GLU:HG2	2.08	0.83
1:E:746:LYS:O	1:E:750:GLN:HG2	1.78	0.83
2:T:9:ILE:HD12	2:T:69:LEU:HD11	1.60	0.83
1:B:472:ARG:HB3	1:B:472:ARG:NH1	1.92	0.83
1:D:472:ARG:HB3	1:D:472:ARG:NH1	1.92	0.83
1:C:630:ARG:CZ	2:Q:83:GLU:HG2	2.08	0.83
2:O:117:THR:HG23	2:O:120:GLU:HB2	1.59	0.83
2:S:117:THR:HG23	2:S:120:GLU:HB2	1.59	0.83
1:E:142:VAL:HG22	1:E:154:ILE:HG23	1.61	0.83
1:F:140:ARG:HA	1:F:140:ARG:HE	1.44	0.83
1:B:746:LYS:O	1:B:750:GLN:HG2	1.78	0.83
1:F:441:VAL:HG22	1:F:461:LYS:HG2	1.61	0.83
1:E:192:PHE:HA	1:E:195:LEU:HB3	1.60	0.82
1:B:630:ARG:CZ	2:P:83:GLU:HG2	2.07	0.82
2:Q:117:THR:HG23	2:Q:120:GLU:HB2	1.59	0.82
1:A:746:LYS:O	1:A:750:GLN:HG2	1.79	0.82
1:B:89:ILE:HD13	1:B:175:LYS:HE2	1.60	0.82
1:A:93:VAL:HG23	1:A:179:LEU:HD11	1.61	0.82
2:Q:5:THR:HG23	2:Q:8:GLN:HB2	1.61	0.82
1:C:441:VAL:HG22	1:C:461:LYS:HG2	1.60	0.82
1:F:746:LYS:O	1:F:750:GLN:HG2	1.79	0.82

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:192:PHE:HA	1:F:195:LEU:HB3	1.60	0.82
1:A:192:PHE:HA	1:A:195:LEU:HB3	1.60	0.82
1:F:635:ILE:H	1:F:635:ILE:HD12	1.42	0.82
1:B:142:VAL:HG22	1:B:154:ILE:HG23	1.61	0.82
1:A:288:VAL:HG23	1:A:289:GLU:H	1.43	0.82
2:Q:5:THR:O	2:Q:9:ILE:HG12	1.79	0.82
1:C:107:THR:HG21	1:C:115:LYS:HD2	1.58	0.82
1:D:161:ILE:HG21	1:D:168:GLU:HB2	1.61	0.82
1:C:192:PHE:HA	1:C:195:LEU:HB3	1.60	0.82
1:D:140:ARG:HE	1:D:140:ARG:HA	1.44	0.82
2:Q:28:THR:HB	2:Q:30:LYS:HZ3	1.43	0.82
1:B:288:VAL:HG23	1:B:289:GLU:H	1.42	0.82
2:O:9:ILE:HD12	2:O:69:LEU:HD11	1.60	0.82
1:A:472:ARG:NH1	1:A:472:ARG:HB3	1.93	0.82
2:T:5:THR:O	2:T:9:ILE:HG12	1.80	0.82
1:A:236:GLU:HA	1:A:239:HIS:CD2	2.15	0.82
1:D:71:PHE:HB3	1:D:108:ASP:HB2	1.62	0.82
1:E:189:ASP:O	1:E:191:GLU:N	2.13	0.82
1:D:441:VAL:HG22	1:D:461:LYS:HG2	1.60	0.82
1:C:746:LYS:O	1:C:750:GLN:HG2	1.80	0.82
1:E:441:VAL:HG22	1:E:461:LYS:HG2	1.61	0.82
2:P:5:THR:HG23	2:P:8:GLN:HB2	1.61	0.82
2:P:9:ILE:HD12	2:P:69:LEU:HD11	1.60	0.82
1:D:236:GLU:HA	1:D:239:HIS:CD2	2.15	0.81
1:E:107:THR:HG21	1:E:115:LYS:HD2	1.60	0.81
1:F:161:ILE:HG21	1:F:168:GLU:HB2	1.60	0.81
1:C:391:ILE:HG12	1:C:399:GLY:HA2	1.62	0.81
1:C:71:PHE:HB3	1:C:108:ASP:HB2	1.61	0.81
1:D:635:ILE:HD12	1:D:635:ILE:H	1.43	0.81
1:B:189:ASP:O	1:B:191:GLU:N	2.14	0.81
1:B:140:ARG:HA	1:B:140:ARG:HE	1.44	0.81
1:A:140:ARG:HE	1:A:140:ARG:HA	1.44	0.81
1:E:296:LEU:CD2	1:E:296:LEU:H	1.90	0.81
2:S:5:THR:HG23	2:S:8:GLN:HB2	1.61	0.81
1:F:71:PHE:HB3	1:F:108:ASP:HB2	1.61	0.81
1:E:140:ARG:HA	1:E:140:ARG:HE	1.44	0.81
2:P:55:VAL:HB	2:P:67:GLU:OE2	1.79	0.81
1:A:71:PHE:HB3	1:A:108:ASP:HB2	1.61	0.81
2:R:117:THR:HG23	2:R:120:GLU:HB2	1.60	0.81
1:D:93:VAL:HG23	1:D:179:LEU:HD11	1.61	0.81
1:C:161:ILE:HG21	1:C:168:GLU:HB2	1.61	0.81
1:B:93:VAL:HG23	1:B:179:LEU:HD11	1.61	0.81

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:192:PHE:HA	1:B:195:LEU:HB3	1.60	0.81
1:C:189:ASP:O	1:C:191:GLU:N	2.13	0.81
1:E:161:ILE:HG21	1:E:168:GLU:HB2	1.60	0.81
1:B:236:GLU:HA	1:B:239:HIS:CD2	2.16	0.81
2:Q:55:VAL:HB	2:Q:67:GLU:OE2	1.81	0.81
2:S:9:ILE:HD12	2:S:69:LEU:HD11	1.61	0.81
1:B:71:PHE:HB3	1:B:108:ASP:HB2	1.61	0.81
1:C:131:ARG:H	1:C:170:TYR:HE2	1.28	0.80
1:E:391:ILE:HG12	1:E:399:GLY:HA2	1.63	0.80
1:C:236:GLU:HA	1:C:239:HIS:CD2	2.15	0.80
1:F:391:ILE:HG12	1:F:399:GLY:HA2	1.63	0.80
1:B:441:VAL:HG22	1:B:461:LYS:HG2	1.60	0.80
2:R:5:THR:HG23	2:R:8:GLN:HB2	1.61	0.80
2:T:5:THR:HG23	2:T:8:GLN:HB2	1.61	0.80
2:O:5:THR:HG23	2:O:8:GLN:HB2	1.61	0.80
1:B:391:ILE:HG12	1:B:399:GLY:HA2	1.63	0.80
2:R:55:VAL:HB	2:R:67:GLU:OE2	1.81	0.80
2:R:59:GLY:O	2:R:62:THR:HG22	1.80	0.80
2:S:5:THR:O	2:S:9:ILE:HG12	1.80	0.80
1:D:391:ILE:HG12	1:D:399:GLY:HA2	1.62	0.80
1:F:93:VAL:HG23	1:F:179:LEU:HD11	1.61	0.80
1:A:441:VAL:HG22	1:A:461:LYS:HG2	1.62	0.80
1:F:89:ILE:HD13	1:F:175:LYS:HE2	1.63	0.80
2:O:55:VAL:HB	2:O:67:GLU:OE2	1.81	0.80
1:A:105:TYR:HB2	1:A:153:ILE:HG12	1.64	0.80
2:R:5:THR:O	2:R:9:ILE:HG12	1.80	0.80
1:A:189:ASP:O	1:A:191:GLU:N	2.14	0.80
1:F:105:TYR:HB2	1:F:153:ILE:HG12	1.64	0.80
1:F:615:ILE:HD12	1:F:645:TRP:CH2	2.16	0.80
1:E:161:ILE:HG23	1:E:168:GLU:HB2	1.63	0.80
1:B:105:TYR:HB2	1:B:153:ILE:HG12	1.63	0.80
1:A:142:VAL:HG13	1:A:154:ILE:CD1	2.12	0.80
1:A:89:ILE:HD13	1:A:175:LYS:HE2	1.62	0.80
1:E:93:VAL:HG23	1:E:179:LEU:HD11	1.63	0.80
1:F:615:ILE:HG23	1:F:619:ILE:HD12	1.64	0.80
1:D:189:ASP:O	1:D:191:GLU:N	2.14	0.80
2:P:5:THR:O	2:P:9:ILE:HG12	1.80	0.80
1:C:109:ILE:HD13	1:C:157:LYS:HZ3	1.47	0.80
1:B:408:LEU:CD1	1:B:408:LEU:H	1.95	0.79
1:A:615:ILE:HD12	1:A:645:TRP:CH2	2.15	0.79
1:F:409:ARG:NE	1:F:413:LEU:HD21	1.97	0.79
1:A:134:LYS:O	1:A:135:VAL:HG12	1.81	0.79

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:736:LEU:HD11	1:E:750:GLN:NE2	1.97	0.79
1:A:736:LEU:HD11	1:A:750:GLN:NE2	1.97	0.79
1:B:409:ARG:NE	1:B:413:LEU:HD21	1.97	0.79
1:C:409:ARG:NE	1:C:413:LEU:HD21	1.97	0.79
1:E:89:ILE:HD13	1:E:175:LYS:HE2	1.62	0.79
1:F:189:ASP:O	1:F:191:GLU:N	2.14	0.79
1:C:408:LEU:H	1:C:408:LEU:CD1	1.95	0.79
1:E:615:ILE:HD12	1:E:645:TRP:CH2	2.17	0.79
1:C:736:LEU:HD11	1:C:750:GLN:NE2	1.97	0.79
2:O:56:ASP:OD2	2:O:60:ASN:HA	1.83	0.79
1:C:134:LYS:O	1:C:135:VAL:HG12	1.82	0.79
1:F:134:LYS:O	1:F:135:VAL:HG12	1.83	0.79
1:A:408:LEU:H	1:A:408:LEU:CD1	1.96	0.79
2:T:55:VAL:HB	2:T:67:GLU:OE2	1.81	0.79
1:D:615:ILE:HD12	1:D:645:TRP:CH2	2.16	0.79
1:D:409:ARG:NE	1:D:413:LEU:HD21	1.98	0.79
1:D:408:LEU:H	1:D:408:LEU:CD1	1.96	0.79
1:F:236:GLU:HA	1:F:239:HIS:CD2	2.16	0.79
1:E:236:GLU:HA	1:E:239:HIS:CD2	2.15	0.79
2:S:55:VAL:HB	2:S:67:GLU:OE2	1.81	0.79
1:D:446:ILE:HD11	1:D:451:ASN:HB3	1.65	0.79
1:E:134:LYS:O	1:E:135:VAL:HG12	1.82	0.79
1:C:581:GLN:HE21	1:C:629:ASN:H	1.30	0.79
2:T:6:GLU:HG3	2:T:7:GLU:N	1.98	0.79
1:B:736:LEU:HD11	1:B:750:GLN:NE2	1.97	0.79
1:F:736:LEU:HD11	1:F:750:GLN:NE2	1.97	0.79
2:O:5:THR:O	2:O:9:ILE:HG12	1.81	0.79
1:C:597:ASN:ND2	1:C:601:GLU:HB2	1.98	0.79
1:F:131:ARG:H	1:F:170:TYR:HE2	1.30	0.79
1:C:105:TYR:HB2	1:C:153:ILE:HG12	1.65	0.79
1:C:89:ILE:HD13	1:C:175:LYS:HE2	1.64	0.79
2:R:6:GLU:HG3	2:R:7:GLU:N	1.98	0.79
1:E:71:PHE:HB3	1:E:108:ASP:HB2	1.62	0.79
1:E:409:ARG:NE	1:E:413:LEU:HD21	1.98	0.79
1:E:105:TYR:HB2	1:E:153:ILE:HG12	1.65	0.78
1:F:161:ILE:HG23	1:F:168:GLU:HB2	1.65	0.78
1:C:93:VAL:HG23	1:C:179:LEU:HD11	1.63	0.78
1:C:615:ILE:HD12	1:C:645:TRP:CH2	2.17	0.78
1:E:70:GLU:HB2	1:E:107:THR:HG22	1.65	0.78
1:D:581:GLN:HE21	1:D:629:ASN:H	1.28	0.78
2:Q:6:GLU:HG3	2:Q:7:GLU:N	1.98	0.78
1:D:736:LEU:HD11	1:D:750:GLN:NE2	1.97	0.78

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:O:6:GLU:HG3	2:O:7:GLU:N	1.98	0.78
2:T:56:ASP:OD2	2:T:60:ASN:HA	1.82	0.78
1:D:105:TYR:HB2	1:D:153:ILE:HG12	1.65	0.78
1:D:131:ARG:H	1:D:170:TYR:HE2	1.28	0.78
1:E:446:ILE:HD11	1:E:451:ASN:HB3	1.65	0.78
1:E:131:ARG:H	1:E:170:TYR:HE2	1.30	0.78
1:A:391:ILE:HG12	1:A:399:GLY:HA2	1.64	0.78
1:F:446:ILE:HD11	1:F:451:ASN:HB3	1.66	0.78
1:B:134:LYS:O	1:B:135:VAL:HG12	1.82	0.78
1:D:89:ILE:HD13	1:D:175:LYS:HE2	1.64	0.78
2:O:59:GLY:O	2:O:62:THR:HG22	1.83	0.78
1:B:161:ILE:HG23	1:B:168:GLU:HB2	1.64	0.78
1:B:615:ILE:HD12	1:B:645:TRP:CH2	2.18	0.78
1:B:142:VAL:HG13	1:B:154:ILE:CD1	2.14	0.77
1:E:186:LYS:HE3	1:E:234:LEU:CD1	2.14	0.77
1:D:142:VAL:HG13	1:D:154:ILE:CD1	2.13	0.77
1:D:134:LYS:O	1:D:135:VAL:HG12	1.83	0.77
1:E:615:ILE:HG23	1:E:619:ILE:HD12	1.66	0.77
1:B:173:ILE:HG13	1:B:242:SER:HB3	1.66	0.77
1:D:173:ILE:HG13	1:D:242:SER:HB3	1.66	0.77
1:F:581:GLN:HE21	1:F:629:ASN:H	1.32	0.77
2:P:6:GLU:HG3	2:P:7:GLU:N	1.98	0.77
1:D:409:ARG:CZ	1:D:413:LEU:HD21	2.15	0.77
1:A:409:ARG:NE	1:A:413:LEU:HD21	1.99	0.77
1:A:446:ILE:HD11	1:A:451:ASN:HB3	1.65	0.77
2:S:6:GLU:HG3	2:S:7:GLU:N	1.98	0.77
1:C:446:ILE:HD11	1:C:451:ASN:HB3	1.65	0.77
1:C:142:VAL:HG13	1:C:154:ILE:CD1	2.14	0.77
1:F:409:ARG:CZ	1:F:413:LEU:HD21	2.15	0.77
1:A:131:ARG:H	1:A:170:TYR:HE2	1.31	0.77
1:A:173:ILE:HG13	1:A:242:SER:HB3	1.65	0.77
1:F:142:VAL:HG13	1:F:154:ILE:CD1	2.13	0.77
1:E:597:ASN:ND2	1:E:601:GLU:HB2	1.99	0.77
1:B:615:ILE:HG23	1:B:619:ILE:HD12	1.66	0.77
1:B:236:GLU:HA	1:B:239:HIS:HD2	1.50	0.77
1:C:236:GLU:HA	1:C:239:HIS:HD2	1.50	0.77
1:E:581:GLN:HE21	1:E:629:ASN:H	1.32	0.77
1:D:70:GLU:HB2	1:D:107:THR:HG22	1.66	0.77
1:F:450:ASN:HD22	1:F:452:GLU:HG3	1.50	0.77
1:C:70:GLU:HB2	1:C:107:THR:HG22	1.65	0.77
1:A:597:ASN:ND2	1:A:601:GLU:HB2	1.99	0.77
1:A:305:SER:OG	1:A:307:LEU:HD13	1.85	0.77

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:446:ILE:HD11	1:B:451:ASN:HB3	1.65	0.76
1:C:769:SER:OG	1:C:769:SER:O	2.00	0.76
1:F:186:LYS:HE3	1:F:234:LEU:CD1	2.15	0.76
1:B:318:ILE:H	1:B:318:ILE:HD12	1.50	0.76
1:A:318:ILE:H	1:A:318:ILE:HD12	1.50	0.76
1:B:70:GLU:HB2	1:B:107:THR:HG22	1.66	0.76
1:D:79:ILE:C	1:D:81:GLN:H	1.87	0.76
1:E:79:ILE:C	1:E:81:GLN:H	1.87	0.76
1:E:142:VAL:HG13	1:E:154:ILE:CD1	2.14	0.76
1:D:161:ILE:HG23	1:D:168:GLU:HB2	1.65	0.76
1:A:236:GLU:HA	1:A:239:HIS:HD2	1.49	0.76
1:B:79:ILE:C	1:B:81:GLN:H	1.87	0.76
1:D:597:ASN:ND2	1:D:601:GLU:HB2	1.98	0.76
1:D:615:ILE:HG23	1:D:619:ILE:HD12	1.66	0.76
2:T:100:ILE:HB	2:T:136:VAL:CG2	2.15	0.76
1:E:674:SER:O	1:E:676:VAL:N	2.19	0.76
1:C:173:ILE:HG13	1:C:242:SER:HB3	1.67	0.76
1:C:550:SER:CB	1:C:553:GLN:HG3	2.16	0.76
1:E:409:ARG:CZ	1:E:413:LEU:HD21	2.15	0.76
1:C:161:ILE:HG23	1:C:168:GLU:HB2	1.65	0.76
1:B:305:SER:OG	1:B:307:LEU:HD13	1.85	0.76
1:D:318:ILE:HD12	1:D:318:ILE:H	1.51	0.76
1:F:318:ILE:H	1:F:318:ILE:HD12	1.51	0.76
1:B:409:ARG:CZ	1:B:413:LEU:HD21	2.15	0.76
1:C:615:ILE:HG23	1:C:619:ILE:HD12	1.66	0.76
1:E:318:ILE:H	1:E:318:ILE:HD12	1.51	0.76
1:A:70:GLU:HB2	1:A:107:THR:HG22	1.66	0.76
1:F:70:GLU:HB2	1:F:107:THR:HG22	1.65	0.76
1:D:236:GLU:HA	1:D:239:HIS:HD2	1.50	0.76
1:C:217:LYS:HB3	1:C:217:LYS:HZ2	1.51	0.76
1:E:172:GLU:HB3	1:E:246:SER:HA	1.68	0.76
1:F:597:ASN:ND2	1:F:601:GLU:HB2	1.98	0.76
1:A:540:ARG:NH2	2:O:87:GLU:OE1	2.19	0.76
1:B:550:SER:CB	1:B:553:GLN:HG3	2.15	0.76
1:B:186:LYS:HE3	1:B:234:LEU:CD1	2.14	0.76
1:A:186:LYS:HE3	1:A:234:LEU:CD1	2.15	0.76
1:E:153:ILE:O	1:E:154:ILE:HD13	1.85	0.76
1:D:186:LYS:HE3	1:D:234:LEU:CD1	2.14	0.76
1:F:173:ILE:HG13	1:F:242:SER:HB3	1.66	0.76
1:E:305:SER:OG	1:E:307:LEU:HD13	1.85	0.76
1:A:79:ILE:C	1:A:81:GLN:H	1.88	0.76
1:B:769:SER:OG	1:B:769:SER:O	2.00	0.76

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:161:ILE:HG23	1:A:168:GLU:HB2	1.65	0.75
1:B:324:THR:HB	1:B:499:PRO:HA	1.68	0.75
1:D:305:SER:OG	1:D:307:LEU:HD13	1.86	0.75
1:C:409:ARG:CZ	1:C:413:LEU:HD21	2.15	0.75
1:B:674:SER:O	1:B:676:VAL:N	2.19	0.75
1:B:131:ARG:H	1:B:170:TYR:HE2	1.31	0.75
1:B:172:GLU:HB3	1:B:246:SER:HA	1.68	0.75
1:C:172:GLU:HB3	1:C:246:SER:HA	1.68	0.75
1:B:597:ASN:ND2	1:B:601:GLU:HB2	2.00	0.75
1:A:674:SER:O	1:A:676:VAL:N	2.19	0.75
1:B:540:ARG:NH2	2:P:87:GLU:OE1	2.19	0.75
1:B:153:ILE:O	1:B:154:ILE:HD13	1.87	0.75
1:E:173:ILE:HG13	1:E:242:SER:HB3	1.66	0.75
1:F:153:ILE:O	1:F:154:ILE:HD13	1.86	0.75
1:C:186:LYS:HE3	1:C:234:LEU:CD1	2.15	0.75
1:F:172:GLU:HB3	1:F:246:SER:HA	1.68	0.75
1:E:540:ARG:NH2	2:S:87:GLU:OE1	2.20	0.75
1:C:549:LEU:HB2	1:C:553:GLN:HE21	1.52	0.75
2:S:100:ILE:HB	2:S:136:VAL:CG2	2.16	0.75
1:F:674:SER:O	1:F:676:VAL:N	2.19	0.75
1:A:629:ASN:HD22	1:A:629:ASN:C	1.90	0.75
1:D:353:LYS:H	1:D:368:GLN:NE2	1.85	0.75
1:D:549:LEU:HB2	1:D:553:GLN:HE21	1.52	0.75
1:D:674:SER:O	1:D:676:VAL:N	2.19	0.75
2:O:22:ASP:O	2:O:24:ASP:N	2.20	0.75
1:F:540:ARG:NH2	2:T:87:GLU:OE1	2.20	0.75
1:B:581:GLN:HE21	1:B:629:ASN:H	1.33	0.75
1:A:581:GLN:HE21	1:A:629:ASN:H	1.32	0.75
2:O:109:MSE:HG3	2:O:116:LEU:HD11	1.69	0.75
1:E:296:LEU:N	1:E:296:LEU:CD2	2.48	0.75
1:A:615:ILE:HG23	1:A:619:ILE:HD12	1.66	0.75
1:A:550:SER:CB	1:A:553:GLN:HG3	2.16	0.75
1:C:305:SER:OG	1:C:307:LEU:HD13	1.86	0.75
2:O:100:ILE:HB	2:O:136:VAL:CG2	2.17	0.75
1:B:549:LEU:HB2	1:B:553:GLN:HE21	1.52	0.75
1:E:549:LEU:HB2	1:E:553:GLN:HE21	1.52	0.75
1:D:71:PHE:CB	1:D:108:ASP:HB2	2.17	0.75
1:F:236:GLU:HA	1:F:239:HIS:HD2	1.50	0.75
1:F:182:ILE:O	1:F:187:SER:HB2	1.87	0.74
1:D:140:ARG:NE	1:D:140:ARG:HA	2.02	0.74
1:A:668:SER:HA	2:O:14:GLU:HG3	1.69	0.74
1:A:409:ARG:CZ	1:A:413:LEU:HD21	2.16	0.74

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:S:109:MSE:HG3	2:S:116:LEU:HD11	1.68	0.74
1:C:71:PHE:CB	1:C:108:ASP:HB2	2.17	0.74
1:F:270:LYS:HD3	1:F:273:LYS:HD2	1.69	0.74
1:B:296:LEU:CD2	1:B:296:LEU:N	2.48	0.74
1:D:769:SER:O	1:D:769:SER:OG	2.00	0.74
1:E:197:LYS:HB3	1:E:197:LYS:HZ2	1.51	0.74
2:R:22:ASP:O	2:R:24:ASP:N	2.21	0.74
2:T:22:ASP:O	2:T:24:ASP:N	2.20	0.74
1:B:629:ASN:HD22	1:B:629:ASN:C	1.91	0.74
1:F:353:LYS:H	1:F:368:GLN:NE2	1.85	0.74
1:D:450:ASN:HD22	1:D:452:GLU:HG3	1.51	0.74
1:C:450:ASN:HD22	1:C:452:GLU:HG3	1.52	0.74
2:R:100:ILE:HB	2:R:136:VAL:CG2	2.16	0.74
2:T:109:MSE:HG3	2:T:116:LEU:HD11	1.70	0.74
1:A:182:ILE:O	1:A:187:SER:HB2	1.87	0.74
1:A:172:GLU:HB3	1:A:246:SER:HA	1.68	0.74
1:D:172:GLU:HB3	1:D:246:SER:HA	1.68	0.74
1:C:182:ILE:O	1:C:187:SER:HB2	1.87	0.74
1:A:140:ARG:NE	1:A:140:ARG:HA	2.03	0.74
2:S:22:ASP:O	2:S:24:ASP:N	2.21	0.74
1:F:79:ILE:C	1:F:81:GLN:H	1.88	0.74
1:E:236:GLU:HA	1:E:239:HIS:HD2	1.50	0.74
2:Q:100:ILE:HB	2:Q:136:VAL:CG2	2.17	0.74
2:S:56:ASP:HB3	2:S:60:ASN:OD1	1.86	0.74
1:F:279:ILE:HD13	1:F:279:ILE:H	1.53	0.74
2:P:6:GLU:HG3	2:P:7:GLU:H	1.53	0.74
1:B:71:PHE:CB	1:B:108:ASP:HB2	2.17	0.74
2:P:100:ILE:HB	2:P:136:VAL:CG2	2.17	0.74
1:B:96:ILE:O	1:B:100:LEU:HG	1.88	0.74
1:E:182:ILE:O	1:E:187:SER:HB2	1.87	0.74
2:T:28:THR:HB	2:T:30:LYS:HZ3	1.51	0.74
1:F:71:PHE:CB	1:F:108:ASP:HB2	2.17	0.74
1:B:182:ILE:O	1:B:187:SER:HB2	1.86	0.74
1:A:152:LEU:HD21	1:A:171:TYR:CE1	2.23	0.74
1:B:353:LYS:H	1:B:368:GLN:NE2	1.84	0.74
1:E:769:SER:OG	1:E:769:SER:O	1.99	0.74
1:D:540:ARG:NH2	2:R:87:GLU:OE1	2.21	0.74
1:C:324:THR:HB	1:C:499:PRO:HA	1.68	0.74
1:C:674:SER:O	1:C:676:VAL:N	2.20	0.74
2:S:62:THR:CG2	2:S:62:THR:CA	2.65	0.74
1:C:140:ARG:HA	1:C:140:ARG:NE	2.02	0.74
1:C:79:ILE:C	1:C:81:GLN:H	1.88	0.74

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:182:ILE:O	1:D:187:SER:HB2	1.87	0.73
1:B:668:SER:HA	2:P:14:GLU:HG3	1.70	0.73
1:F:550:SER:CB	1:F:553:GLN:HG3	2.17	0.73
1:E:71:PHE:CB	1:E:108:ASP:HB2	2.18	0.73
1:D:337:ASN:ND2	1:D:412:GLU:OE2	2.21	0.73
1:F:497:LEU:HD13	1:F:556:MET:HG2	1.70	0.73
1:B:497:LEU:HD13	1:B:556:MET:HG2	1.70	0.73
1:F:176:GLY:C	1:F:178:SER:H	1.91	0.73
1:B:140:ARG:HA	1:B:140:ARG:NE	2.03	0.73
1:A:345:THR:HG22	1:A:490:ALA:O	1.87	0.73
1:C:540:ARG:NH2	2:Q:87:GLU:OE1	2.22	0.73
1:A:71:PHE:CB	1:A:108:ASP:HB2	2.17	0.73
1:D:153:ILE:O	1:D:154:ILE:HD13	1.88	0.73
1:A:324:THR:HB	1:A:499:PRO:HA	1.69	0.73
1:E:324:THR:HB	1:E:499:PRO:HA	1.69	0.73
1:B:450:ASN:HD22	1:B:452:GLU:HG3	1.53	0.73
1:F:629:ASN:C	1:F:629:ASN:HD22	1.92	0.73
1:F:549:LEU:HB2	1:F:553:GLN:HE21	1.53	0.73
1:A:279:ILE:HD13	1:A:279:ILE:H	1.53	0.73
2:T:6:GLU:HG3	2:T:7:GLU:H	1.52	0.73
1:F:450:ASN:ND2	1:F:452:GLU:HG3	2.03	0.73
2:Q:109:MSE:HG3	2:Q:116:LEU:HD11	1.71	0.73
1:C:96:ILE:O	1:C:100:LEU:HG	1.88	0.73
1:C:318:ILE:H	1:C:318:ILE:HD12	1.52	0.73
1:C:353:LYS:H	1:C:368:GLN:NE2	1.85	0.73
1:C:270:LYS:HD3	1:C:273:LYS:HD2	1.70	0.73
1:A:153:ILE:O	1:A:154:ILE:HD13	1.88	0.73
1:F:152:LEU:HD21	1:F:171:TYR:CE1	2.22	0.73
1:F:668:SER:HA	2:T:14:GLU:HG3	1.69	0.73
2:S:6:GLU:HG3	2:S:7:GLU:H	1.53	0.73
1:F:337:ASN:ND2	1:F:412:GLU:OE2	2.22	0.73
1:F:217:LYS:HZ2	1:F:217:LYS:HB3	1.54	0.73
2:P:22:ASP:O	2:P:24:ASP:N	2.20	0.73
1:E:353:LYS:H	1:E:368:GLN:NE2	1.84	0.73
2:Q:56:ASP:OD2	2:Q:61:GLY:N	2.21	0.73
2:P:109:MSE:HG3	2:P:116:LEU:HD11	1.70	0.73
1:D:270:LYS:HD3	1:D:273:LYS:HD2	1.70	0.73
1:D:308:VAL:HB	1:D:311:HIS:ND1	2.04	0.73
1:E:270:LYS:HD3	1:E:273:LYS:HD2	1.70	0.73
1:F:769:SER:O	1:F:769:SER:OG	2.00	0.73
1:D:629:ASN:C	1:D:629:ASN:HD22	1.92	0.73
2:R:6:GLU:HG3	2:R:7:GLU:H	1.53	0.73

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:728:ALA:O	1:F:732:ILE:HG12	1.88	0.73
1:E:176:GLY:C	1:E:178:SER:H	1.92	0.73
1:A:296:LEU:CD2	1:A:296:LEU:N	2.49	0.73
1:A:450:ASN:HD22	1:A:452:GLU:HG3	1.52	0.73
1:D:197:LYS:HZ2	1:D:197:LYS:HB3	1.53	0.72
2:Q:102:ALA:HB2	2:Q:125:ILE:HG13	1.71	0.72
1:E:408:LEU:H	1:E:408:LEU:CD1	1.96	0.72
1:D:668:SER:HA	2:R:14:GLU:HG3	1.70	0.72
1:A:353:LYS:H	1:A:368:GLN:NE2	1.85	0.72
1:D:550:SER:CB	1:D:553:GLN:HG3	2.18	0.72
1:E:450:ASN:HD22	1:E:452:GLU:HG3	1.54	0.72
1:E:668:SER:HA	2:S:14:GLU:HG3	1.69	0.72
1:E:629:ASN:C	1:E:629:ASN:HD22	1.92	0.72
1:A:549:LEU:HB2	1:A:553:GLN:HE21	1.52	0.72
1:C:279:ILE:H	1:C:279:ILE:HD13	1.54	0.72
2:Q:6:GLU:HG3	2:Q:7:GLU:H	1.53	0.72
1:E:96:ILE:O	1:E:100:LEU:HG	1.89	0.72
1:F:140:ARG:HA	1:F:140:ARG:NE	2.03	0.72
1:F:305:SER:OG	1:F:307:LEU:HD13	1.88	0.72
1:D:324:THR:HB	1:D:499:PRO:HA	1.70	0.72
1:D:450:ASN:ND2	1:D:452:GLU:HG3	2.04	0.72
1:A:450:ASN:ND2	1:A:452:GLU:HG3	2.04	0.72
1:A:694:VAL:HG23	2:O:18:LEU:HD11	1.71	0.72
2:R:102:ALA:HB2	2:R:125:ILE:HG13	1.71	0.72
1:C:728:ALA:O	1:C:732:ILE:HG12	1.89	0.72
1:B:152:LEU:HD21	1:B:171:TYR:CE1	2.24	0.72
1:F:179:LEU:C	1:F:183:SER:HB2	2.07	0.72
2:Q:22:ASP:O	2:Q:24:ASP:N	2.21	0.72
1:D:217:LYS:HB3	1:D:217:LYS:HZ2	1.54	0.72
2:R:109:MSE:HG3	2:R:116:LEU:HD11	1.72	0.72
1:F:296:LEU:N	1:F:296:LEU:CD2	2.48	0.72
1:C:629:ASN:C	1:C:629:ASN:HD22	1.92	0.72
1:F:308:VAL:HB	1:F:311:HIS:ND1	2.04	0.72
1:F:324:THR:HB	1:F:499:PRO:HA	1.70	0.72
1:B:279:ILE:HD13	1:B:279:ILE:H	1.54	0.72
1:D:728:ALA:O	1:D:732:ILE:HG12	1.89	0.72
1:E:152:LEU:HD21	1:E:171:TYR:CE1	2.24	0.72
1:E:345:THR:HG22	1:E:490:ALA:O	1.90	0.72
1:C:668:SER:HA	2:Q:14:GLU:HG3	1.70	0.72
1:E:279:ILE:HD13	1:E:279:ILE:H	1.54	0.72
1:A:270:LYS:HD3	1:A:273:LYS:HD2	1.70	0.72
1:A:176:GLY:C	1:A:178:SER:H	1.91	0.72

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:140:ARG:HA	1:E:140:ARG:NE	2.03	0.72
2:O:6:GLU:HG3	2:O:7:GLU:H	1.52	0.72
1:A:109:ILE:HD13	1:A:157:LYS:HZ3	1.54	0.72
1:B:345:THR:HG22	1:B:490:ALA:O	1.90	0.72
1:C:79:ILE:O	1:C:81:GLN:N	2.23	0.72
1:A:728:ALA:O	1:A:732:ILE:HG12	1.89	0.72
1:B:401:ILE:HD13	1:B:485:LEU:O	1.89	0.72
1:F:387:ASN:HB3	1:F:477:MET:SD	2.29	0.72
1:A:639:ASN:ND2	1:A:639:ASN:H	1.88	0.72
2:S:56:ASP:OD2	2:S:61:GLY:N	2.23	0.72
1:A:96:ILE:O	1:A:100:LEU:HG	1.89	0.72
1:C:179:LEU:C	1:C:183:SER:HB2	2.08	0.72
1:F:96:ILE:O	1:F:100:LEU:HG	1.89	0.71
2:T:56:ASP:OD2	2:T:61:GLY:N	2.23	0.71
1:B:270:LYS:HD3	1:B:273:LYS:HD2	1.70	0.71
1:F:401:ILE:HD13	1:F:485:LEU:O	1.91	0.71
1:A:188:LEU:HD23	1:A:188:LEU:H	1.55	0.71
1:D:96:ILE:O	1:D:100:LEU:HG	1.89	0.71
1:C:540:ARG:HD3	1:C:627:TYR:CZ	2.25	0.71
1:A:308:VAL:HB	1:A:311:HIS:ND1	2.04	0.71
1:E:550:SER:CB	1:E:553:GLN:HG3	2.18	0.71
1:B:109:ILE:CD1	1:B:157:LYS:HZ2	2.04	0.71
1:B:694:VAL:HG23	2:P:18:LEU:HD11	1.72	0.71
1:A:401:ILE:HD13	1:A:485:LEU:O	1.91	0.71
1:B:176:GLY:C	1:B:178:SER:H	1.91	0.71
1:D:188:LEU:H	1:D:188:LEU:HD23	1.55	0.71
1:C:188:LEU:HD23	1:C:188:LEU:H	1.55	0.71
2:T:51:MSE:CB	2:T:71:MSE:HE2	2.21	0.71
1:C:337:ASN:ND2	1:C:412:GLU:OE2	2.23	0.71
1:C:530:THR:O	1:C:534:ILE:HG13	1.90	0.71
1:A:769:SER:OG	1:A:769:SER:O	1.99	0.71
1:C:176:GLY:C	1:C:178:SER:H	1.92	0.71
1:D:279:ILE:H	1:D:279:ILE:HD13	1.54	0.71
1:C:308:VAL:HB	1:C:311:HIS:ND1	2.05	0.71
1:B:635:ILE:HD12	1:B:635:ILE:N	2.06	0.71
1:D:79:ILE:O	1:D:81:GLN:N	2.23	0.71
1:E:337:ASN:ND2	1:E:412:GLU:OE2	2.22	0.71
1:E:109:ILE:CD1	1:E:157:LYS:HZ2	2.04	0.71
1:E:694:VAL:HG23	2:S:18:LEU:HD11	1.71	0.71
1:F:694:VAL:HG23	2:T:18:LEU:HD11	1.72	0.71
1:B:728:ALA:O	1:B:732:ILE:HG12	1.89	0.71
1:E:728:ALA:O	1:E:732:ILE:HG12	1.90	0.71

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:401:ILE:HD13	1:D:485:LEU:O	1.90	0.71
1:F:109:ILE:HD13	1:F:157:LYS:NZ	2.06	0.71
1:F:345:THR:HG22	1:F:490:ALA:O	1.90	0.71
1:B:337:ASN:ND2	1:B:412:GLU:OE2	2.22	0.71
1:C:497:LEU:HD13	1:C:556:MET:HG2	1.72	0.71
1:C:401:ILE:HD13	1:C:485:LEU:O	1.90	0.71
1:D:109:ILE:HD13	1:D:157:LYS:NZ	2.06	0.71
1:B:308:VAL:HB	1:B:311:HIS:ND1	2.04	0.71
1:C:109:ILE:HD13	1:C:157:LYS:NZ	2.05	0.71
1:D:639:ASN:ND2	1:D:639:ASN:H	1.89	0.71
1:D:345:THR:HG22	1:D:490:ALA:O	1.89	0.71
1:A:635:ILE:HD12	1:A:635:ILE:N	2.06	0.71
1:D:270:LYS:O	1:D:273:LYS:HB2	1.91	0.71
1:A:109:ILE:HD13	1:A:157:LYS:NZ	2.06	0.71
1:A:497:LEU:HD13	1:A:556:MET:HG2	1.72	0.71
1:F:90:PRO:HD3	1:F:249:PHE:CE2	2.26	0.71
1:C:296:LEU:CD2	1:C:296:LEU:N	2.48	0.71
1:B:478:ALA:HB1	1:B:486:LYS:O	1.91	0.71
1:C:581:GLN:NE2	1:C:629:ASN:H	1.89	0.71
1:D:540:ARG:HD3	1:D:627:TYR:CZ	2.26	0.71
2:R:56:ASP:HB3	2:R:60:ASN:OD1	1.91	0.71
1:D:462:ILE:HG12	1:D:463:THR:N	2.06	0.71
1:A:337:ASN:ND2	1:A:412:GLU:OE2	2.22	0.71
1:E:109:ILE:HD13	1:E:157:LYS:NZ	2.06	0.71
1:E:497:LEU:HD13	1:E:556:MET:HG2	1.72	0.71
1:A:387:ASN:HB3	1:A:477:MET:SD	2.30	0.71
1:E:639:ASN:ND2	1:E:639:ASN:H	1.88	0.71
1:C:639:ASN:H	1:C:639:ASN:ND2	1.88	0.71
1:D:296:LEU:CD2	1:D:296:LEU:N	2.49	0.70
1:B:296:LEU:CD2	1:B:296:LEU:H	1.91	0.70
1:A:540:ARG:HD3	1:A:627:TYR:CZ	2.26	0.70
2:O:58:ASP:HB2	2:O:62:THR:HG23	1.73	0.70
2:Q:56:ASP:OD2	2:Q:60:ASN:CA	2.39	0.70
2:P:58:ASP:HB2	2:P:62:THR:HG23	1.73	0.70
1:E:179:LEU:C	1:E:183:SER:HB2	2.07	0.70
1:E:308:VAL:HB	1:E:311:HIS:ND1	2.05	0.70
1:C:462:ILE:HG12	1:C:463:THR:N	2.06	0.70
1:A:197:LYS:HZ2	1:A:197:LYS:HB3	1.56	0.70
2:O:56:ASP:HB3	2:O:60:ASN:OD1	1.91	0.70
1:E:530:THR:O	1:E:534:ILE:HG13	1.91	0.70
1:B:188:LEU:HD23	1:B:188:LEU:H	1.55	0.70
1:F:188:LEU:HD23	1:F:188:LEU:H	1.55	0.70

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:Q:36:MSE:CE	2:Q:43:PRO:HG3	2.21	0.70
2:Q:51:MSE:CB	2:Q:71:MSE:HE2	2.21	0.70
1:E:630:ARG:NH1	2:S:83:GLU:HG2	2.07	0.70
1:A:118:GLN:HA	1:A:118:GLN:OE1	1.92	0.70
1:A:79:ILE:O	1:A:81:GLN:N	2.23	0.70
1:C:635:ILE:HD12	1:C:635:ILE:N	2.06	0.70
1:E:79:ILE:O	1:E:81:GLN:N	2.24	0.70
1:B:450:ASN:ND2	1:B:452:GLU:HG3	2.05	0.70
1:C:694:VAL:HG23	2:Q:18:LEU:HD11	1.73	0.70
1:D:152:LEU:HD21	1:D:171:TYR:CE1	2.22	0.70
1:B:118:GLN:HA	1:B:118:GLN:OE1	1.90	0.70
1:E:76:LEU:HD22	1:E:76:LEU:H	1.57	0.70
2:T:102:ALA:HB2	2:T:125:ILE:HG13	1.73	0.70
1:B:197:LYS:HB3	1:B:197:LYS:HZ2	1.55	0.70
2:Q:59:GLY:O	2:Q:62:THR:CG2	2.39	0.70
1:B:288:VAL:HG23	1:B:289:GLU:N	2.06	0.70
1:D:635:ILE:N	1:D:635:ILE:HD12	2.07	0.70
1:C:450:ASN:ND2	1:C:452:GLU:HG3	2.05	0.70
1:C:218:LEU:HD11	1:C:225:ILE:HD11	1.74	0.70
1:F:478:ALA:HB1	1:F:486:LYS:O	1.91	0.70
1:D:630:ARG:NH1	2:R:83:GLU:HG2	2.06	0.70
1:F:118:GLN:OE1	1:F:118:GLN:HA	1.92	0.70
1:B:79:ILE:O	1:B:81:GLN:N	2.23	0.70
1:E:401:ILE:HD13	1:E:485:LEU:O	1.91	0.70
1:B:109:ILE:HD13	1:B:157:LYS:NZ	2.06	0.70
1:E:225:ILE:HG22	1:E:225:ILE:O	1.92	0.70
2:S:36:MSE:CE	2:S:43:PRO:HG3	2.22	0.70
2:P:30:LYS:H	2:P:30:LYS:CD	2.04	0.70
1:F:79:ILE:O	1:F:81:GLN:N	2.25	0.70
1:E:450:ASN:ND2	1:E:452:GLU:HG3	2.06	0.70
2:R:36:MSE:CE	2:R:43:PRO:HG3	2.22	0.70
1:D:581:GLN:NE2	1:D:629:ASN:H	1.89	0.70
1:B:472:ARG:HH11	1:B:472:ARG:CB	2.05	0.70
1:E:288:VAL:HG23	1:E:289:GLU:N	2.07	0.70
1:F:462:ILE:HG12	1:F:463:THR:N	2.07	0.70
1:A:462:ILE:HG12	1:A:463:THR:N	2.07	0.70
1:A:517:VAL:HG23	1:A:518:ASN:ND2	2.06	0.70
1:D:218:LEU:HD11	1:D:225:ILE:HD11	1.74	0.70
2:S:102:ALA:HB2	2:S:125:ILE:HG13	1.73	0.70
1:E:90:PRO:HD3	1:E:249:PHE:CE2	2.27	0.69
1:C:152:LEU:HD21	1:C:171:TYR:CE1	2.23	0.69
2:T:30:LYS:H	2:T:30:LYS:CD	2.04	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:472:ARG:HH11	1:D:472:ARG:CB	2.05	0.69
1:E:635:ILE:N	1:E:635:ILE:HD12	2.07	0.69
1:C:153:ILE:O	1:C:154:ILE:HD13	1.90	0.69
2:P:51:MSE:CB	2:P:71:MSE:HE2	2.22	0.69
1:E:501:LEU:CD2	2:S:112:LEU:HD21	2.22	0.69
2:O:28:THR:HB	2:O:30:LYS:HZ3	1.57	0.69
1:F:288:VAL:HG23	1:F:289:GLU:N	2.07	0.69
1:D:497:LEU:HD13	1:D:556:MET:HG2	1.71	0.69
1:B:639:ASN:H	1:B:639:ASN:ND2	1.89	0.69
2:S:56:ASP:OD2	2:S:60:ASN:CA	2.39	0.69
1:D:130:SER:HB2	1:D:170:TYR:HE2	1.57	0.69
1:D:90:PRO:HD3	1:D:249:PHE:CE2	2.26	0.69
2:P:36:MSE:CE	2:P:43:PRO:HG3	2.23	0.69
2:S:51:MSE:CB	2:S:71:MSE:HE2	2.23	0.69
1:A:630:ARG:NH1	2:O:83:GLU:HG2	2.07	0.69
1:D:288:VAL:HG23	1:D:289:GLU:N	2.07	0.69
1:B:517:VAL:HG23	1:B:518:ASN:ND2	2.07	0.69
1:D:517:VAL:HG23	1:D:518:ASN:ND2	2.07	0.69
1:F:639:ASN:H	1:F:639:ASN:ND2	1.89	0.69
1:D:176:GLY:C	1:D:178:SER:H	1.92	0.69
2:R:51:MSE:CB	2:R:71:MSE:HE2	2.22	0.69
1:F:501:LEU:CD2	2:T:112:LEU:HD21	2.21	0.69
2:S:30:LYS:H	2:S:30:LYS:CD	2.05	0.69
1:F:472:ARG:CB	1:F:472:ARG:HH11	2.05	0.69
1:B:90:PRO:HD3	1:B:249:PHE:CE2	2.27	0.69
1:E:188:LEU:H	1:E:188:LEU:HD23	1.54	0.69
1:C:478:ALA:HB1	1:C:486:LYS:O	1.91	0.69
1:A:478:ALA:HB1	1:A:486:LYS:O	1.92	0.69
1:C:715:GLU:HA	1:C:718:ARG:NH1	2.07	0.69
1:F:76:LEU:HD22	1:F:76:LEU:H	1.57	0.69
1:F:530:THR:O	1:F:534:ILE:HG13	1.91	0.69
1:E:540:ARG:HD3	1:E:627:TYR:CZ	2.27	0.69
1:F:540:ARG:HD3	1:F:627:TYR:CZ	2.27	0.69
1:B:540:ARG:HD3	1:B:627:TYR:CZ	2.27	0.69
1:B:76:LEU:HD22	1:B:76:LEU:H	1.57	0.69
2:T:58:ASP:HB2	2:T:62:THR:HG23	1.72	0.69
2:P:56:ASP:OD2	2:P:60:ASN:HA	1.92	0.69
1:B:387:ASN:HB3	1:B:477:MET:SD	2.32	0.69
2:O:51:MSE:CB	2:O:71:MSE:HE2	2.22	0.69
1:A:288:VAL:HG23	1:A:289:GLU:N	2.08	0.69
2:P:5:THR:CG2	2:P:8:GLN:HB2	2.23	0.69
1:C:225:ILE:HG22	1:C:225:ILE:O	1.92	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:225:ILE:O	1:B:225:ILE:HG22	1.92	0.69
1:E:387:ASN:HB3	1:E:477:MET:SD	2.33	0.69
1:B:530:THR:O	1:B:534:ILE:HG13	1.92	0.69
1:F:517:VAL:HG23	1:F:518:ASN:ND2	2.06	0.69
1:D:86:LEU:HA	1:D:89:ILE:HD12	1.75	0.69
1:F:175:LYS:HB2	1:F:175:LYS:NZ	2.07	0.69
1:C:345:THR:HG22	1:C:490:ALA:O	1.92	0.69
2:O:30:LYS:H	2:O:30:LYS:CD	2.04	0.69
1:B:462:ILE:HG12	1:B:463:THR:N	2.07	0.69
1:E:218:LEU:HD11	1:E:225:ILE:HD11	1.75	0.69
1:C:387:ASN:HB3	1:C:477:MET:SD	2.32	0.69
2:O:102:ALA:HB2	2:O:125:ILE:HG13	1.74	0.69
1:C:148:GLU:HG3	1:C:149:THR:HG22	1.75	0.69
1:E:175:LYS:NZ	1:E:175:LYS:HB2	2.08	0.69
1:D:175:LYS:HB2	1:D:175:LYS:NZ	2.08	0.69
1:A:501:LEU:CD2	2:O:112:LEU:HD21	2.20	0.69
2:Q:63:ILE:HB	2:Q:67:GLU:HB3	1.75	0.69
1:A:480:ASN:HD21	1:A:483:GLY:H	1.38	0.69
1:C:403:LEU:HG	1:C:405:LEU:CD1	2.23	0.69
1:D:403:LEU:HG	1:D:405:LEU:CD1	2.23	0.69
1:D:275:GLY:HA2	1:D:278:LYS:HG3	1.75	0.69
1:B:279:ILE:CD1	1:B:279:ILE:H	2.06	0.69
1:F:635:ILE:HD12	1:F:635:ILE:N	2.07	0.69
2:P:102:ALA:HB2	2:P:125:ILE:HG13	1.74	0.69
1:C:517:VAL:HG23	1:C:518:ASN:ND2	2.07	0.69
1:D:148:GLU:HG3	1:D:149:THR:HG22	1.75	0.69
1:F:218:LEU:HD11	1:F:225:ILE:HD11	1.75	0.69
1:A:175:LYS:HB2	1:A:175:LYS:NZ	2.08	0.69
2:P:13:LYS:HZ3	2:P:65:PHE:HB3	1.58	0.69
1:B:480:ASN:HD21	1:B:483:GLY:H	1.39	0.69
1:C:118:GLN:HA	1:C:118:GLN:OE1	1.92	0.69
1:C:630:ARG:NH1	2:Q:83:GLU:HG2	2.08	0.68
1:E:122:GLU:HG3	1:E:147:ARG:CB	2.23	0.68
1:E:118:GLN:HA	1:E:118:GLN:OE1	1.92	0.68
1:B:270:LYS:O	1:B:273:LYS:HB2	1.93	0.68
1:E:148:GLU:HG3	1:E:149:THR:HG22	1.75	0.68
1:C:90:PRO:HD3	1:C:249:PHE:CE2	2.27	0.68
1:F:480:ASN:HD21	1:F:483:GLY:H	1.39	0.68
1:F:630:ARG:NH1	2:T:83:GLU:HG2	2.08	0.68
1:C:288:VAL:HG23	1:C:289:GLU:N	2.07	0.68
1:D:118:GLN:HA	1:D:118:GLN:OE1	1.93	0.68
1:E:270:LYS:O	1:E:273:LYS:HB2	1.93	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:148:GLU:HG3	1:B:149:THR:HG22	1.75	0.68
1:A:218:LEU:HD11	1:A:225:ILE:HD11	1.75	0.68
1:B:175:LYS:HB2	1:B:175:LYS:NZ	2.07	0.68
1:A:90:PRO:HD3	1:A:249:PHE:CE2	2.27	0.68
2:O:36:MSE:HE1	2:O:51:MSE:HE1	1.75	0.68
1:E:480:ASN:HD21	1:E:483:GLY:H	1.40	0.68
2:Q:36:MSE:HE1	2:Q:51:MSE:HE1	1.76	0.68
1:B:715:GLU:HA	1:B:718:ARG:NH1	2.08	0.68
1:E:74:GLU:HB2	1:E:78:LYS:HB3	1.76	0.68
1:C:130:SER:HB2	1:C:170:TYR:HE2	1.58	0.68
1:C:175:LYS:NZ	1:C:175:LYS:HB2	2.08	0.68
1:D:480:ASN:HD21	1:D:483:GLY:H	1.40	0.68
1:D:715:GLU:HA	1:D:718:ARG:NH1	2.08	0.68
2:Q:5:THR:CG2	2:Q:8:GLN:HB2	2.24	0.68
2:O:5:THR:CG2	2:O:8:GLN:HB2	2.23	0.68
1:D:225:ILE:HG22	1:D:225:ILE:O	1.92	0.68
1:B:179:LEU:C	1:B:183:SER:HB2	2.07	0.68
2:P:36:MSE:HE1	2:P:51:MSE:HE1	1.76	0.68
1:E:478:ALA:HB1	1:E:486:LYS:O	1.93	0.68
2:Q:30:LYS:H	2:Q:30:LYS:CD	2.05	0.68
2:Q:28:THR:HB	2:Q:30:LYS:NZ	2.09	0.68
1:A:715:GLU:HA	1:A:718:ARG:NH1	2.09	0.68
1:F:403:LEU:HG	1:F:405:LEU:CD1	2.24	0.68
1:D:694:VAL:HG23	2:R:18:LEU:HD11	1.73	0.68
1:D:387:ASN:HB3	1:D:477:MET:SD	2.32	0.68
1:E:517:VAL:HG23	1:E:518:ASN:ND2	2.08	0.68
1:A:186:LYS:O	1:A:188:LEU:O	2.12	0.68
2:O:36:MSE:CE	2:O:43:PRO:HG3	2.22	0.68
1:D:478:ALA:HB1	1:D:486:LYS:O	1.92	0.68
2:R:30:LYS:CD	2:R:30:LYS:H	2.05	0.68
1:E:715:GLU:HA	1:E:718:ARG:NH1	2.08	0.68
1:B:403:LEU:HG	1:B:405:LEU:CD1	2.24	0.68
1:A:275:GLY:HA2	1:A:278:LYS:HG3	1.76	0.68
2:S:5:THR:CG2	2:S:8:GLN:HB2	2.24	0.68
1:B:217:LYS:HZ2	1:B:217:LYS:HB3	1.58	0.68
1:E:186:LYS:O	1:E:188:LEU:O	2.11	0.68
1:F:86:LEU:HA	1:F:89:ILE:HD12	1.76	0.68
1:F:279:ILE:CD1	1:F:279:ILE:H	2.05	0.68
1:E:462:ILE:HG12	1:E:463:THR:N	2.07	0.68
1:C:76:LEU:O	1:C:80:GLN:N	2.27	0.68
1:A:76:LEU:HD22	1:A:76:LEU:H	1.58	0.68
1:C:270:LYS:O	1:C:273:LYS:HB2	1.93	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:715:GLU:HA	1:F:718:ARG:NH1	2.09	0.68
1:C:76:LEU:HD22	1:C:76:LEU:H	1.58	0.68
1:D:516:VAL:HG21	1:D:532:LEU:HD11	1.75	0.68
2:P:56:ASP:HB3	2:P:60:ASN:OD1	1.93	0.68
2:R:63:ILE:HB	2:R:67:GLU:HB3	1.75	0.68
2:O:63:ILE:HB	2:O:67:GLU:HB3	1.75	0.68
1:B:630:ARG:NH1	2:P:83:GLU:HG2	2.09	0.68
1:C:515:LYS:HZ2	1:C:515:LYS:HB3	1.58	0.68
2:R:94:LYS:NZ	2:R:94:LYS:HB3	2.09	0.68
2:T:28:THR:HB	2:T:30:LYS:NZ	2.09	0.68
1:D:76:LEU:H	1:D:76:LEU:HD22	1.58	0.68
1:D:76:LEU:O	1:D:80:GLN:N	2.27	0.68
1:F:74:GLU:HB2	1:F:78:LYS:HB3	1.76	0.68
1:B:218:LEU:HD11	1:B:225:ILE:HD11	1.76	0.68
2:Q:94:LYS:HB3	2:Q:94:LYS:NZ	2.09	0.68
2:S:62:THR:CG2	2:S:62:THR:N	2.57	0.67
1:D:186:LYS:O	1:D:188:LEU:O	2.12	0.67
2:R:49:GLN:NE2	2:R:49:GLN:H	1.92	0.67
1:C:480:ASN:HD21	1:C:483:GLY:H	1.39	0.67
1:E:581:GLN:NE2	1:E:629:ASN:H	1.91	0.67
2:R:5:THR:CG2	2:R:8:GLN:HB2	2.24	0.67
1:A:130:SER:HB2	1:A:170:TYR:HE2	1.58	0.67
2:P:63:ILE:HB	2:P:67:GLU:HB3	1.76	0.67
2:Q:13:LYS:HZ2	2:Q:65:PHE:HB3	1.59	0.67
1:E:403:LEU:HG	1:E:405:LEU:CD1	2.24	0.67
1:A:403:LEU:HG	1:A:405:LEU:CD1	2.25	0.67
1:E:76:LEU:O	1:E:80:GLN:N	2.28	0.67
1:F:225:ILE:HG22	1:F:225:ILE:O	1.93	0.67
1:C:186:LYS:O	1:C:188:LEU:O	2.11	0.67
1:F:581:GLN:NE2	1:F:629:ASN:H	1.93	0.67
2:Q:58:ASP:HB2	2:Q:62:THR:HG23	1.75	0.67
1:F:76:LEU:O	1:F:80:GLN:N	2.27	0.67
1:A:270:LYS:O	1:A:273:LYS:HB2	1.93	0.67
2:R:36:MSE:HE1	2:R:51:MSE:HE1	1.76	0.67
2:T:36:MSE:CE	2:T:43:PRO:HG3	2.22	0.67
2:T:63:ILE:HB	2:T:67:GLU:HB3	1.76	0.67
1:B:122:GLU:HG3	1:B:147:ARG:CB	2.23	0.67
2:O:28:THR:HB	2:O:30:LYS:NZ	2.08	0.67
1:A:788:ASP:O	1:A:792:VAL:HG23	1.95	0.67
2:R:106:ARG:O	2:R:110:THR:HG23	1.94	0.67
1:D:165:GLN:HE21	1:D:251:PRO:HG2	1.59	0.67
1:F:165:GLN:HE21	1:F:251:PRO:HG2	1.59	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:472:ARG:HH11	1:C:472:ARG:CB	2.06	0.67
1:E:472:ARG:HH11	1:E:472:ARG:CB	2.05	0.67
2:R:56:ASP:OD2	2:R:61:GLY:N	2.28	0.67
1:D:718:ARG:HH11	1:D:767:GLN:HE21	1.42	0.67
1:F:275:GLY:HA2	1:F:278:LYS:HG3	1.75	0.67
2:T:5:THR:CG2	2:T:8:GLN:HB2	2.24	0.67
1:E:739:LYS:HG2	1:E:740:GLN:H	1.60	0.67
1:B:165:GLN:HE21	1:B:251:PRO:HG2	1.59	0.67
2:S:63:ILE:HB	2:S:67:GLU:HB3	1.75	0.67
1:C:275:GLY:HA2	1:C:278:LYS:HG3	1.76	0.67
1:C:671:ARG:NH1	1:C:677:GLY:HA3	2.10	0.67
1:A:739:LYS:HG2	1:A:740:GLN:H	1.59	0.67
1:E:175:LYS:O	1:E:178:SER:N	2.28	0.67
1:F:186:LYS:O	1:F:188:LEU:O	2.12	0.67
1:F:183:SER:O	1:F:187:SER:HB3	1.94	0.67
2:R:13:LYS:HZ3	2:R:65:PHE:HB3	1.59	0.67
1:A:671:ARG:NH1	1:A:677:GLY:HA3	2.10	0.67
1:A:472:ARG:CB	1:A:472:ARG:HH11	2.06	0.67
1:F:109:ILE:HD13	1:F:157:LYS:HZ3	1.59	0.67
1:A:609:GLU:N	1:A:609:GLU:OE2	2.25	0.67
1:E:788:ASP:O	1:E:792:VAL:HG23	1.95	0.67
2:Q:106:ARG:O	2:Q:110:THR:HG23	1.95	0.67
1:A:148:GLU:HG3	1:A:149:THR:HG22	1.75	0.67
1:B:186:LYS:O	1:B:188:LEU:O	2.12	0.67
1:C:183:SER:O	1:C:187:SER:HB3	1.95	0.67
1:C:86:LEU:HA	1:C:89:ILE:HD12	1.76	0.67
1:B:671:ARG:NH1	1:B:677:GLY:HA3	2.10	0.67
2:P:49:GLN:H	2:P:49:GLN:NE2	1.93	0.67
1:D:462:ILE:HD11	1:D:466:GLY:HA2	1.77	0.67
1:A:86:LEU:HA	1:A:89:ILE:HD12	1.76	0.67
1:C:165:GLN:HE21	1:C:251:PRO:HG2	1.60	0.67
2:O:49:GLN:NE2	2:O:49:GLN:H	1.93	0.67
1:F:788:ASP:O	1:F:792:VAL:HG23	1.95	0.67
2:Q:5:THR:HG23	2:Q:8:GLN:CB	2.25	0.67
1:F:739:LYS:HG2	1:F:740:GLN:H	1.60	0.67
1:F:385:LEU:O	1:F:385:LEU:HD13	1.95	0.67
1:D:609:GLU:OE2	1:D:609:GLU:N	2.26	0.67
1:B:164:GLU:O	1:B:167:LYS:HG2	1.96	0.66
1:B:246:SER:O	1:B:250:ALA:HB2	1.95	0.66
1:D:183:SER:O	1:D:187:SER:HB3	1.94	0.66
2:S:49:GLN:H	2:S:49:GLN:NE2	1.93	0.66
2:T:36:MSE:HE1	2:T:51:MSE:HE1	1.76	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:397:GLU:HG3	1:F:480:ASN:HB3	1.78	0.66
1:D:501:LEU:CD2	2:R:112:LEU:HD21	2.21	0.66
1:A:581:GLN:NE2	1:A:629:ASN:H	1.92	0.66
1:E:275:GLY:HA2	1:E:278:LYS:CE	2.25	0.66
1:B:275:GLY:HA2	1:B:278:LYS:HG3	1.76	0.66
1:A:279:ILE:CD1	1:A:279:ILE:H	2.05	0.66
1:B:199:LEU:C	1:B:201:ASP:H	1.99	0.66
1:B:739:LYS:HG2	1:B:740:GLN:H	1.59	0.66
1:C:737:LYS:HE2	1:C:737:LYS:HA	1.76	0.66
2:O:28:THR:HG21	2:O:30:LYS:HZ1	1.59	0.66
2:O:106:ARG:O	2:O:110:THR:HG23	1.95	0.66
1:B:142:VAL:HG13	1:B:154:ILE:HD12	1.76	0.66
1:A:183:SER:O	1:A:187:SER:HB3	1.95	0.66
2:T:49:GLN:NE2	2:T:49:GLN:H	1.93	0.66
1:C:788:ASP:O	1:C:792:VAL:HG23	1.95	0.66
1:C:516:VAL:HG21	1:C:532:LEU:HD11	1.77	0.66
1:B:183:SER:O	1:B:187:SER:HB3	1.95	0.66
1:A:142:VAL:HG13	1:A:154:ILE:HD12	1.75	0.66
1:D:175:LYS:O	1:D:178:SER:N	2.28	0.66
1:C:175:LYS:O	1:C:178:SER:N	2.29	0.66
2:S:28:THR:HB	2:S:30:LYS:NZ	2.09	0.66
1:D:275:GLY:HA2	1:D:278:LYS:CE	2.26	0.66
1:D:74:GLU:HB2	1:D:78:LYS:HB3	1.77	0.66
1:C:74:GLU:HB2	1:C:78:LYS:HB3	1.76	0.66
2:O:94:LYS:NZ	2:O:94:LYS:HB3	2.11	0.66
2:P:94:LYS:HB3	2:P:94:LYS:NZ	2.10	0.66
1:B:385:LEU:O	1:B:385:LEU:HD13	1.96	0.66
1:A:175:LYS:O	1:A:178:SER:N	2.28	0.66
1:A:165:GLN:HE21	1:A:251:PRO:HG2	1.60	0.66
1:F:175:LYS:O	1:F:178:SER:N	2.28	0.66
1:B:76:LEU:O	1:B:80:GLN:N	2.28	0.66
1:C:697:ILE:C	1:C:699:GLY:H	1.98	0.66
1:C:739:LYS:HG2	1:C:740:GLN:H	1.60	0.66
1:B:609:GLU:N	1:B:609:GLU:OE2	2.26	0.66
1:F:148:GLU:HG3	1:F:149:THR:HG22	1.76	0.66
1:D:530:THR:O	1:D:534:ILE:HG13	1.95	0.66
1:F:737:LYS:HA	1:F:737:LYS:HE2	1.76	0.66
1:B:175:LYS:O	1:B:178:SER:N	2.28	0.66
1:E:86:LEU:HA	1:E:89:ILE:HD12	1.77	0.66
2:Q:49:GLN:NE2	2:Q:49:GLN:H	1.93	0.66
1:E:462:ILE:HD11	1:E:466:GLY:HA2	1.78	0.66
1:A:74:GLU:HB2	1:A:78:LYS:HB3	1.77	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:516:VAL:HG21	1:E:532:LEU:HD11	1.77	0.66
1:F:270:LYS:O	1:F:273:LYS:HB2	1.94	0.66
1:A:530:THR:O	1:A:534:ILE:HG13	1.95	0.66
1:B:737:LYS:HE2	1:B:737:LYS:HA	1.76	0.66
1:E:130:SER:HB2	1:E:170:TYR:HE2	1.58	0.66
1:F:142:VAL:HG13	1:F:154:ILE:HD12	1.76	0.66
1:D:122:GLU:HG3	1:D:147:ARG:CB	2.23	0.66
1:B:788:ASP:O	1:B:792:VAL:HG23	1.94	0.66
2:R:5:THR:HG23	2:R:8:GLN:CB	2.26	0.66
2:O:5:THR:HG23	2:O:8:GLN:CB	2.26	0.66
1:E:76:LEU:CD2	1:E:76:LEU:H	2.09	0.66
1:D:694:VAL:HA	1:D:697:ILE:HD12	1.78	0.66
1:D:199:LEU:C	1:D:201:ASP:H	1.99	0.66
1:F:90:PRO:HG2	1:F:93:VAL:HB	1.77	0.66
2:R:28:THR:HB	2:R:30:LYS:NZ	2.10	0.66
1:B:718:ARG:HH11	1:B:767:GLN:HE21	1.44	0.66
1:C:275:GLY:HA2	1:C:278:LYS:CE	2.25	0.66
1:D:788:ASP:O	1:D:792:VAL:HG23	1.95	0.66
1:A:225:ILE:O	1:A:225:ILE:HG22	1.93	0.66
1:F:671:ARG:NH1	1:F:677:GLY:HA3	2.11	0.66
1:E:165:GLN:HE21	1:E:251:PRO:HG2	1.60	0.66
2:T:5:THR:HG23	2:T:8:GLN:CB	2.26	0.66
1:B:74:GLU:HB2	1:B:78:LYS:HB3	1.77	0.66
1:E:217:LYS:HB3	1:E:217:LYS:HZ2	1.61	0.66
1:E:671:ARG:NH1	1:E:677:GLY:HA3	2.10	0.66
1:D:246:SER:O	1:D:250:ALA:HB2	1.96	0.66
1:D:397:GLU:HG3	1:D:480:ASN:HB3	1.78	0.66
1:B:581:GLN:NE2	1:B:629:ASN:H	1.92	0.66
1:D:776:LEU:O	1:D:776:LEU:HD23	1.96	0.66
1:D:737:LYS:HA	1:D:737:LYS:HE2	1.76	0.66
1:D:385:LEU:HD13	1:D:385:LEU:O	1.96	0.66
1:B:130:SER:HB2	1:B:170:TYR:HE2	1.58	0.65
1:A:246:SER:O	1:A:250:ALA:HB2	1.96	0.65
1:E:154:ILE:HG13	1:E:171:TYR:HE1	1.61	0.65
1:C:246:SER:O	1:C:250:ALA:HB2	1.95	0.65
1:B:501:LEU:CD2	2:P:112:LEU:HD21	2.21	0.65
1:A:122:GLU:HG3	1:A:147:ARG:CB	2.23	0.65
1:C:718:ARG:HH11	1:C:767:GLN:HE21	1.43	0.65
2:P:106:ARG:O	2:P:110:THR:HG23	1.94	0.65
1:D:739:LYS:HG2	1:D:740:GLN:H	1.59	0.65
2:S:58:ASP:HB2	2:S:62:THR:HG23	1.78	0.65
1:B:89:ILE:CG2	1:B:93:VAL:HG11	2.20	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:275:GLY:HA2	1:E:278:LYS:HG3	1.77	0.65
1:F:516:VAL:HG21	1:F:532:LEU:HD11	1.78	0.65
1:C:517:VAL:HB	1:C:525:LYS:HZ1	1.61	0.65
1:F:246:SER:O	1:F:250:ALA:HB2	1.95	0.65
1:C:397:GLU:HG3	1:C:480:ASN:HB3	1.79	0.65
1:A:397:GLU:HG3	1:A:480:ASN:HB3	1.78	0.65
1:A:718:ARG:HH11	1:A:767:GLN:HE21	1.44	0.65
1:A:499:PRO:HG2	1:A:504:ILE:HD11	1.79	0.65
1:A:76:LEU:H	1:A:76:LEU:CD2	2.10	0.65
1:A:76:LEU:O	1:A:80:GLN:N	2.27	0.65
1:B:462:ILE:HD11	1:B:466:GLY:HA2	1.78	0.65
1:B:697:ILE:C	1:B:699:GLY:H	1.99	0.65
2:T:94:LYS:NZ	2:T:94:LYS:HB3	2.11	0.65
1:E:246:SER:O	1:E:250:ALA:HB2	1.96	0.65
1:E:345:THR:HB	1:E:491:ASP:HB3	1.78	0.65
2:R:58:ASP:HB2	2:R:62:THR:HG23	1.79	0.65
1:C:776:LEU:HD23	1:C:776:LEU:O	1.97	0.65
1:D:671:ARG:NH1	1:D:677:GLY:HA3	2.11	0.65
1:F:199:LEU:C	1:F:201:ASP:H	2.00	0.65
1:C:142:VAL:HG13	1:C:154:ILE:HD12	1.77	0.65
1:C:122:GLU:HG3	1:C:147:ARG:CB	2.23	0.65
2:T:106:ARG:O	2:T:110:THR:HG23	1.95	0.65
1:D:697:ILE:C	1:D:699:GLY:H	2.00	0.65
1:C:199:LEU:C	1:C:201:ASP:H	2.00	0.65
1:C:385:LEU:HD13	1:C:385:LEU:O	1.96	0.65
1:C:90:PRO:HG2	1:C:93:VAL:HB	1.78	0.65
1:E:397:GLU:HG3	1:E:480:ASN:HB3	1.79	0.65
1:B:405:LEU:HD12	1:B:405:LEU:H	1.62	0.65
1:B:372:LYS:HD2	1:B:373:LYS:HE2	1.79	0.65
1:B:90:PRO:HG2	1:B:93:VAL:HB	1.78	0.65
2:Q:52:ILE:HG13	2:Q:63:ILE:HG23	1.79	0.65
1:E:164:GLU:O	1:E:167:LYS:HG2	1.97	0.65
1:B:76:LEU:H	1:B:76:LEU:CD2	2.09	0.65
1:A:674:SER:OG	1:A:674:SER:O	2.15	0.65
1:D:109:ILE:CD1	1:D:157:LYS:HZ2	2.10	0.65
1:F:609:GLU:N	1:F:609:GLU:OE2	2.26	0.65
1:F:164:GLU:O	1:F:167:LYS:HG2	1.97	0.65
1:C:164:GLU:O	1:C:167:LYS:HG2	1.96	0.65
2:R:52:ILE:HG13	2:R:63:ILE:HG23	1.79	0.65
1:D:76:LEU:H	1:D:76:LEU:CD2	2.10	0.65
1:A:462:ILE:HD11	1:A:466:GLY:HA2	1.78	0.65
1:A:385:LEU:HD13	1:A:385:LEU:O	1.96	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:164:GLU:O	1:A:167:LYS:HG2	1.97	0.65
1:E:142:VAL:HG13	1:E:154:ILE:HD12	1.77	0.65
2:S:36:MSE:HE1	2:S:51:MSE:HE1	1.77	0.65
2:P:28:THR:HB	2:P:30:LYS:NZ	2.09	0.65
2:R:56:ASP:OD2	2:R:60:ASN:CA	2.45	0.65
1:C:268:MET:O	1:C:271:LEU:HB2	1.97	0.65
1:A:275:GLY:HA2	1:A:278:LYS:CE	2.27	0.65
1:A:697:ILE:C	1:A:699:GLY:H	1.99	0.65
1:B:360:VAL:HG21	1:B:365:PRO:HB3	1.79	0.65
1:F:776:LEU:HD23	1:F:776:LEU:O	1.97	0.65
1:A:737:LYS:HA	1:A:737:LYS:HE2	1.77	0.65
1:B:86:LEU:HA	1:B:89:ILE:HD12	1.77	0.65
1:E:183:SER:O	1:E:187:SER:HB3	1.95	0.65
1:B:397:GLU:HG3	1:B:480:ASN:HB3	1.79	0.65
2:S:5:THR:HG23	2:S:8:GLN:CB	2.26	0.65
1:F:76:LEU:H	1:F:76:LEU:CD2	2.10	0.65
1:F:694:VAL:HA	1:F:697:ILE:HD12	1.78	0.65
1:A:694:VAL:HA	1:A:697:ILE:HD12	1.79	0.65
1:D:109:ILE:HD13	1:D:157:LYS:HZ3	1.60	0.65
1:C:148:GLU:HG3	1:C:149:THR:N	2.12	0.65
1:A:776:LEU:O	1:A:776:LEU:HD23	1.97	0.65
1:E:776:LEU:HD23	1:E:776:LEU:O	1.97	0.65
1:C:405:LEU:H	1:C:405:LEU:HD12	1.61	0.64
2:S:106:ARG:O	2:S:110:THR:HG23	1.95	0.64
1:A:148:GLU:HG3	1:A:149:THR:N	2.12	0.64
1:D:142:VAL:HG13	1:D:154:ILE:HD12	1.77	0.64
2:O:51:MSE:HB2	2:O:71:MSE:HE2	1.80	0.64
2:T:51:MSE:HB2	2:T:71:MSE:HE2	1.79	0.64
1:F:718:ARG:HH11	1:F:767:GLN:HE21	1.43	0.64
1:C:462:ILE:HD11	1:C:466:GLY:HA2	1.78	0.64
1:B:516:VAL:HG21	1:B:532:LEU:HD11	1.77	0.64
1:C:360:VAL:HG21	1:C:365:PRO:HB3	1.78	0.64
1:D:164:GLU:O	1:D:167:LYS:HG2	1.97	0.64
1:D:90:PRO:HG2	1:D:93:VAL:HB	1.78	0.64
2:O:52:ILE:HG13	2:O:63:ILE:HG23	1.79	0.64
1:C:345:THR:HB	1:C:491:ASP:HB3	1.79	0.64
1:B:122:GLU:CG	1:B:147:ARG:HB2	2.26	0.64
1:F:499:PRO:HG2	1:F:504:ILE:HD11	1.79	0.64
1:D:372:LYS:HD2	1:D:373:LYS:HE2	1.78	0.64
1:C:76:LEU:H	1:C:76:LEU:CD2	2.10	0.64
1:A:199:LEU:C	1:A:201:ASP:H	1.99	0.64
1:A:179:LEU:C	1:A:183:SER:HB2	2.08	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:130:SER:HB2	1:F:170:TYR:HE2	1.59	0.64
2:S:52:ILE:HG13	2:S:63:ILE:HG23	1.79	0.64
2:T:13:LYS:HZ2	2:T:65:PHE:HB3	1.60	0.64
1:A:516:VAL:HG21	1:A:532:LEU:HD11	1.78	0.64
1:F:697:ILE:C	1:F:699:GLY:H	1.99	0.64
1:E:737:LYS:HA	1:E:737:LYS:HE2	1.76	0.64
1:C:609:GLU:N	1:C:609:GLU:OE2	2.26	0.64
2:T:52:ILE:HG13	2:T:63:ILE:HG23	1.79	0.64
1:B:345:THR:HB	1:B:491:ASP:HB3	1.78	0.64
1:C:501:LEU:CD2	2:Q:112:LEU:HD21	2.23	0.64
1:E:279:ILE:H	1:E:279:ILE:CD1	2.06	0.64
1:B:776:LEU:HD23	1:B:776:LEU:O	1.96	0.64
2:S:94:LYS:HB3	2:S:94:LYS:NZ	2.11	0.64
1:A:90:PRO:HG2	1:A:93:VAL:HB	1.78	0.64
1:F:345:THR:HB	1:F:491:ASP:HB3	1.79	0.64
1:E:405:LEU:H	1:E:405:LEU:HD12	1.63	0.64
1:E:268:MET:O	1:E:271:LEU:HB2	1.97	0.64
1:D:499:PRO:HG2	1:D:504:ILE:HD11	1.79	0.64
1:C:109:ILE:CD1	1:C:157:LYS:NZ	2.61	0.64
1:C:694:VAL:HA	1:C:697:ILE:HD12	1.80	0.64
1:E:697:ILE:C	1:E:699:GLY:H	1.99	0.64
2:S:51:MSE:HB2	2:S:71:MSE:HE2	1.80	0.64
1:E:112:VAL:HG12	1:E:113:GLU:N	2.08	0.64
1:B:275:GLY:HA2	1:B:278:LYS:CE	2.26	0.64
1:F:268:MET:O	1:F:271:LEU:HB2	1.97	0.64
1:F:462:ILE:HD11	1:F:466:GLY:HA2	1.78	0.64
1:E:90:PRO:HG2	1:E:93:VAL:HB	1.78	0.64
1:E:674:SER:OG	1:E:674:SER:O	2.15	0.64
1:E:694:VAL:HA	1:E:697:ILE:HD12	1.78	0.64
1:F:109:ILE:CD1	1:F:157:LYS:HZ2	2.11	0.64
1:A:517:VAL:HB	1:A:525:LYS:HZ1	1.63	0.64
1:E:199:LEU:C	1:E:201:ASP:H	2.00	0.64
1:F:405:LEU:H	1:F:405:LEU:HD12	1.63	0.64
1:C:499:PRO:HG2	1:C:504:ILE:HD11	1.80	0.64
1:F:148:GLU:HG3	1:F:149:THR:N	2.13	0.64
1:F:360:VAL:HG21	1:F:365:PRO:HB3	1.79	0.64
2:R:51:MSE:HB2	2:R:71:MSE:HE2	1.79	0.64
1:A:217:LYS:HB3	1:A:217:LYS:HZ2	1.63	0.64
1:B:148:GLU:HG3	1:B:149:THR:N	2.13	0.64
1:A:360:VAL:HG21	1:A:365:PRO:HB3	1.79	0.64
1:E:385:LEU:O	1:E:385:LEU:HD13	1.97	0.64
2:P:5:THR:HG23	2:P:8:GLN:CB	2.26	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:360:VAL:HG21	1:E:365:PRO:HB3	1.79	0.63
1:C:89:ILE:CG2	1:C:93:VAL:HG11	2.20	0.63
2:O:68:PHE:O	2:O:71:MSE:HB3	1.99	0.63
1:E:718:ARG:HH11	1:E:767:GLN:HE21	1.44	0.63
1:F:372:LYS:HD2	1:F:373:LYS:HE2	1.80	0.63
1:E:504:ILE:HD12	1:E:504:ILE:H	1.63	0.63
1:F:109:ILE:CD1	1:F:157:LYS:NZ	2.61	0.63
1:D:148:GLU:HG3	1:D:149:THR:N	2.13	0.63
2:P:52:ILE:HG13	2:P:63:ILE:HG23	1.79	0.63
1:D:345:THR:HB	1:D:491:ASP:HB3	1.79	0.63
1:A:405:LEU:HD12	1:A:405:LEU:H	1.63	0.63
1:E:435:LEU:HG	1:E:446:ILE:HG22	1.81	0.63
1:B:109:ILE:CD1	1:B:157:LYS:NZ	2.61	0.63
2:P:102:ALA:HB1	2:P:121:VAL:HG12	1.80	0.63
1:C:678:VAL:HG13	1:C:745:TYR:CD2	2.34	0.63
1:E:372:LYS:HD2	1:E:373:LYS:HE2	1.80	0.63
1:B:499:PRO:HG2	1:B:504:ILE:HD11	1.80	0.63
1:C:307:LEU:HD12	1:C:331:VAL:HG21	1.81	0.63
1:A:268:MET:O	1:A:271:LEU:HB2	1.98	0.63
1:E:305:SER:HB2	1:E:594:PHE:CD1	2.34	0.63
1:E:499:PRO:HG2	1:E:504:ILE:HD11	1.79	0.63
1:A:109:ILE:CD1	1:A:157:LYS:NZ	2.61	0.63
1:B:694:VAL:HA	1:B:697:ILE:HD12	1.80	0.63
1:E:122:GLU:CG	1:E:147:ARG:HB2	2.26	0.63
1:D:268:MET:O	1:D:271:LEU:HB2	1.98	0.63
1:C:279:ILE:H	1:C:279:ILE:CD1	2.06	0.63
1:E:148:GLU:HG3	1:E:149:THR:N	2.12	0.63
1:B:193:LEU:O	1:B:197:LYS:HB2	1.99	0.63
2:Q:51:MSE:HB2	2:Q:71:MSE:HE2	1.80	0.63
1:F:504:ILE:HD12	1:F:504:ILE:H	1.64	0.63
1:B:268:MET:O	1:B:271:LEU:HB2	1.97	0.63
1:C:372:LYS:HD2	1:C:373:LYS:HE2	1.79	0.63
1:D:109:ILE:CD1	1:D:157:LYS:NZ	2.62	0.63
1:D:179:LEU:C	1:D:183:SER:HB2	2.07	0.63
1:A:372:LYS:HD2	1:A:373:LYS:HE2	1.79	0.63
1:B:107:THR:CG2	1:B:115:LYS:HD2	2.29	0.63
1:D:305:SER:HB2	1:D:594:PHE:CD1	2.34	0.63
1:D:461:LYS:HG3	1:D:462:ILE:H	1.64	0.63
1:C:338:LEU:O	1:C:343:VAL:HG23	1.99	0.63
1:F:435:LEU:HG	1:F:446:ILE:HG22	1.81	0.63
2:Q:18:LEU:HB3	2:Q:19:PHE:CD1	2.34	0.63
1:A:89:ILE:CG2	1:A:93:VAL:HG11	2.20	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:89:ILE:CG2	1:D:93:VAL:HG11	2.19	0.63
2:O:13:LYS:HZ3	2:O:65:PHE:HB3	1.59	0.63
1:A:193:LEU:O	1:A:197:LYS:HB2	1.99	0.63
2:O:56:ASP:OD2	2:O:60:ASN:CA	2.47	0.63
2:T:56:ASP:OD2	2:T:60:ASN:CA	2.47	0.63
2:P:73:ALA:O	2:P:76:MSE:N	2.32	0.63
1:D:307:LEU:HD12	1:D:307:LEU:H	1.64	0.63
1:F:461:LYS:HG3	1:F:462:ILE:H	1.64	0.63
1:E:456:LYS:HD3	1:E:471:TRP:NE1	2.14	0.63
1:B:533:LEU:O	1:B:533:LEU:HD23	1.99	0.62
1:B:504:ILE:H	1:B:504:ILE:HD12	1.65	0.62
1:C:461:LYS:HG3	1:C:462:ILE:H	1.64	0.62
1:D:435:LEU:HG	1:D:446:ILE:HG22	1.81	0.62
2:S:102:ALA:HB1	2:S:121:VAL:HG12	1.81	0.62
1:B:344:ALA:HA	1:B:569:TYR:OH	1.99	0.62
1:E:104:ILE:HG23	1:E:152:LEU:HD22	1.81	0.62
2:P:51:MSE:HB2	2:P:71:MSE:HE2	1.80	0.62
1:D:122:GLU:CG	1:D:147:ARG:HB2	2.25	0.62
1:A:305:SER:HB2	1:A:594:PHE:CD1	2.34	0.62
1:D:338:LEU:O	1:D:343:VAL:HG23	1.99	0.62
2:Q:52:ILE:HG13	2:Q:63:ILE:CG2	2.29	0.62
2:Q:68:PHE:O	2:Q:71:MSE:HB3	1.99	0.62
1:A:345:THR:HB	1:A:491:ASP:HB3	1.79	0.62
1:F:122:GLU:HG3	1:F:147:ARG:CB	2.23	0.62
1:B:789:ASN:O	1:B:792:VAL:HB	1.99	0.62
1:A:461:LYS:HG3	1:A:462:ILE:H	1.64	0.62
1:D:360:VAL:HG21	1:D:365:PRO:HB3	1.79	0.62
1:E:179:LEU:O	1:E:183:SER:CA	2.47	0.62
1:F:197:LYS:HZ2	1:F:197:LYS:HB3	1.64	0.62
1:D:405:LEU:H	1:D:405:LEU:HD12	1.63	0.62
1:A:504:ILE:HD12	1:A:504:ILE:H	1.64	0.62
1:D:193:LEU:O	1:D:197:LYS:HB2	1.99	0.62
1:A:435:LEU:HG	1:A:446:ILE:HG22	1.81	0.62
1:B:435:LEU:HG	1:B:446:ILE:HG22	1.81	0.62
1:A:456:LYS:HD3	1:A:471:TRP:NE1	2.14	0.62
1:B:104:ILE:HG23	1:B:152:LEU:HD22	1.82	0.62
1:A:104:ILE:HG23	1:A:152:LEU:HD22	1.81	0.62
1:E:193:LEU:O	1:E:197:LYS:HB2	1.98	0.62
2:T:68:PHE:O	2:T:71:MSE:HB3	2.00	0.62
1:A:307:LEU:HD12	1:A:307:LEU:H	1.64	0.62
1:A:107:THR:CG2	1:A:115:LYS:HD2	2.29	0.62
2:R:102:ALA:HB1	2:R:121:VAL:HG12	1.80	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:109:ILE:CD1	1:E:157:LYS:NZ	2.63	0.62
1:D:678:VAL:HG13	1:D:745:TYR:CD2	2.35	0.62
1:F:748:TYR:O	1:F:751:TYR:N	2.32	0.62
1:A:164:GLU:O	1:A:167:LYS:HE3	2.00	0.62
1:F:179:LEU:O	1:F:183:SER:CA	2.48	0.62
1:C:193:LEU:O	1:C:197:LYS:HB2	1.98	0.62
2:P:55:VAL:CG2	2:P:67:GLU:OE1	2.41	0.62
2:P:68:PHE:O	2:P:71:MSE:HB3	1.99	0.62
1:A:678:VAL:HG13	1:A:745:TYR:CD2	2.34	0.62
2:S:68:PHE:O	2:S:71:MSE:HB3	1.99	0.62
2:T:28:THR:HG21	2:T:30:LYS:HZ1	1.63	0.62
1:A:789:ASN:O	1:A:792:VAL:HB	2.00	0.62
1:E:461:LYS:HG3	1:E:462:ILE:H	1.64	0.62
2:Q:102:ALA:HB1	2:Q:121:VAL:HG12	1.80	0.62
2:R:18:LEU:HB3	2:R:19:PHE:CD1	2.35	0.62
1:C:504:ILE:H	1:C:504:ILE:HD12	1.64	0.62
1:F:275:GLY:HA2	1:F:278:LYS:CE	2.26	0.62
2:R:8:GLN:O	2:R:12:PHE:HD2	1.81	0.62
1:B:732:ILE:HG23	1:B:749:PHE:HD1	1.64	0.62
1:C:344:ALA:HA	1:C:569:TYR:OH	1.99	0.62
1:B:154:ILE:HG13	1:B:171:TYR:HE1	1.61	0.62
1:A:480:ASN:HD21	1:A:483:GLY:N	1.98	0.62
1:F:122:GLU:CG	1:F:147:ARG:HB2	2.25	0.62
1:B:115:LYS:NZ	1:B:115:LYS:HB3	2.14	0.62
2:P:117:THR:HG23	2:P:120:GLU:CB	2.30	0.62
1:F:107:THR:CG2	1:F:115:LYS:HD2	2.29	0.62
1:C:115:LYS:HB3	1:C:115:LYS:NZ	2.14	0.62
1:F:732:ILE:HG23	1:F:749:PHE:HD1	1.65	0.62
1:A:732:ILE:HG23	1:A:749:PHE:HD1	1.65	0.62
1:D:732:ILE:HG23	1:D:749:PHE:HD1	1.64	0.62
2:O:102:ALA:HB1	2:O:121:VAL:HG12	1.81	0.62
1:F:344:ALA:HA	1:F:569:TYR:OH	1.99	0.62
1:F:89:ILE:CG2	1:F:93:VAL:HG11	2.20	0.62
1:C:104:ILE:HG23	1:C:152:LEU:HD22	1.81	0.62
1:F:305:SER:HB2	1:F:594:PHE:CD1	2.35	0.62
1:F:789:ASN:O	1:F:792:VAL:HB	2.00	0.62
2:T:18:LEU:HB3	2:T:19:PHE:CD1	2.35	0.62
1:E:344:ALA:HA	1:E:569:TYR:OH	2.00	0.62
2:Q:73:ALA:O	2:Q:76:MSE:N	2.32	0.62
1:B:637:PRO:O	1:B:640:LYS:HG3	2.00	0.62
1:A:748:TYR:O	1:A:751:TYR:N	2.32	0.62
1:C:305:SER:HB2	1:C:594:PHE:CD1	2.34	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:307:LEU:H	1:F:307:LEU:HD12	1.65	0.62
1:E:307:LEU:HD12	1:E:331:VAL:HG21	1.82	0.62
1:A:189:ASP:HB3	1:A:190:PRO:CD	2.30	0.62
1:B:724:ARG:HG3	1:B:724:ARG:HH11	1.64	0.62
1:A:443:GLU:OE2	1:A:458:LYS:HG2	2.00	0.62
1:C:189:ASP:HB3	1:C:190:PRO:CD	2.30	0.61
2:S:13:LYS:HZ3	2:S:65:PHE:HB3	1.59	0.61
1:D:718:ARG:NH1	1:D:767:GLN:HE21	1.98	0.61
1:F:307:LEU:HD12	1:F:331:VAL:HG21	1.82	0.61
1:E:307:LEU:H	1:E:307:LEU:HD12	1.64	0.61
1:E:115:LYS:HB3	1:E:115:LYS:NZ	2.15	0.61
1:A:724:ARG:HH11	1:A:724:ARG:HG3	1.65	0.61
2:T:102:ALA:HB1	2:T:121:VAL:HG12	1.82	0.61
1:C:456:LYS:HD3	1:C:471:TRP:NE1	2.15	0.61
2:R:68:PHE:O	2:R:71:MSE:HB3	2.00	0.61
1:F:678:VAL:HG13	1:F:745:TYR:CD2	2.35	0.61
2:T:52:ILE:HG13	2:T:63:ILE:CG2	2.30	0.61
1:A:122:GLU:CG	1:A:147:ARG:HB2	2.26	0.61
1:F:722:ILE:HG23	1:F:760:VAL:CG1	2.28	0.61
1:C:279:ILE:O	1:C:283:LEU:HB2	2.01	0.61
1:D:307:LEU:HD12	1:D:331:VAL:HG21	1.83	0.61
1:D:115:LYS:HB3	1:D:115:LYS:NZ	2.14	0.61
2:O:73:ALA:O	2:O:76:MSE:N	2.33	0.61
1:F:193:LEU:O	1:F:197:LYS:HB2	1.99	0.61
2:R:52:ILE:HG13	2:R:63:ILE:CG2	2.30	0.61
1:B:480:ASN:HD21	1:B:483:GLY:N	1.98	0.61
1:F:338:LEU:O	1:F:343:VAL:HG23	1.99	0.61
1:A:412:GLU:HG2	1:A:413:LEU:HD23	1.82	0.61
1:D:724:ARG:HH11	1:D:724:ARG:HG3	1.65	0.61
1:F:748:TYR:O	1:F:751:TYR:HB3	2.01	0.61
1:D:344:ALA:HA	1:D:569:TYR:OH	2.00	0.61
1:D:443:GLU:OE2	1:D:458:LYS:HG2	2.01	0.61
1:B:182:ILE:O	1:B:187:SER:CB	2.48	0.61
1:A:165:GLN:CD	1:A:252:ASP:HB3	2.21	0.61
1:E:182:ILE:O	1:E:187:SER:CB	2.49	0.61
1:C:179:LEU:O	1:C:183:SER:CA	2.48	0.61
1:C:296:LEU:CD2	1:C:296:LEU:H	1.90	0.61
1:A:722:ILE:HG23	1:A:760:VAL:CG1	2.28	0.61
1:B:307:LEU:H	1:B:307:LEU:HD12	1.65	0.61
1:C:217:LYS:CB	1:C:236:GLU:HG3	2.31	0.61
2:O:18:LEU:HB3	2:O:19:PHE:CD1	2.35	0.61
1:F:456:LYS:HD3	1:F:471:TRP:NE1	2.14	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:188:LEU:N	1:F:188:LEU:CD2	2.63	0.61
2:P:52:ILE:HG13	2:P:63:ILE:CG2	2.30	0.61
1:F:480:ASN:HD21	1:F:483:GLY:N	1.99	0.61
2:Q:8:GLN:O	2:Q:12:PHE:HD2	1.83	0.61
1:B:412:GLU:HG2	1:B:413:LEU:HD23	1.82	0.61
1:E:338:LEU:O	1:E:343:VAL:HG23	2.00	0.61
1:E:637:PRO:O	1:E:640:LYS:HG3	2.00	0.61
1:B:565:LYS:C	1:B:567:THR:H	2.04	0.61
1:D:104:ILE:HG23	1:D:152:LEU:HD22	1.82	0.61
1:C:197:LYS:HB3	1:C:197:LYS:HZ2	1.65	0.61
1:A:533:LEU:HD23	1:A:533:LEU:O	2.00	0.61
2:S:52:ILE:HG13	2:S:63:ILE:CG2	2.29	0.61
1:C:480:ASN:HD21	1:C:483:GLY:N	1.99	0.61
1:E:165:GLN:CD	1:E:252:ASP:HB3	2.21	0.61
1:C:718:ARG:NH1	1:C:767:GLN:HE21	1.99	0.61
1:B:305:SER:HB2	1:B:594:PHE:CD1	2.36	0.61
1:D:189:ASP:HB3	1:D:190:PRO:CD	2.30	0.61
1:C:412:GLU:HG2	1:C:413:LEU:HD23	1.82	0.61
1:C:724:ARG:HG3	1:C:724:ARG:HH11	1.64	0.61
1:E:732:ILE:HG23	1:E:749:PHE:HD1	1.65	0.61
1:E:678:VAL:HG13	1:E:745:TYR:CD2	2.36	0.61
1:F:718:ARG:NH1	1:F:767:GLN:HE21	1.98	0.61
1:E:789:ASN:O	1:E:792:VAL:HB	2.00	0.61
1:C:789:ASN:O	1:C:792:VAL:HB	2.01	0.61
1:B:461:LYS:HG3	1:B:462:ILE:H	1.65	0.61
1:D:517:VAL:HB	1:D:525:LYS:HZ1	1.65	0.61
1:A:637:PRO:O	1:A:640:LYS:HG3	2.01	0.61
1:E:609:GLU:N	1:E:609:GLU:OE2	2.27	0.61
1:F:182:ILE:O	1:F:187:SER:CB	2.49	0.61
1:F:189:ASP:HB3	1:F:190:PRO:CD	2.30	0.61
2:P:50:ASP:O	2:P:54:GLU:HB2	2.01	0.61
2:S:50:ASP:O	2:S:54:GLU:HB2	2.01	0.61
1:F:478:ALA:HA	1:F:488:LEU:HG	1.83	0.61
1:C:307:LEU:HD12	1:C:307:LEU:H	1.64	0.61
1:B:279:ILE:O	1:B:283:LEU:HB2	2.01	0.61
1:E:412:GLU:HG2	1:E:413:LEU:HD23	1.82	0.61
1:C:732:ILE:HG23	1:C:749:PHE:HD1	1.65	0.61
1:E:443:GLU:OE2	1:E:458:LYS:HG2	2.01	0.61
1:C:637:PRO:O	1:C:640:LYS:HG3	2.00	0.61
1:A:344:ALA:HA	1:A:569:TYR:OH	2.01	0.61
1:E:565:LYS:C	1:E:567:THR:H	2.04	0.61
1:C:182:ILE:O	1:C:187:SER:CB	2.49	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:408:LEU:H	1:F:408:LEU:CD1	1.95	0.61
1:B:678:VAL:HG13	1:B:745:TYR:CD2	2.36	0.61
1:C:478:ALA:HA	1:C:488:LEU:HG	1.83	0.61
1:E:164:GLU:O	1:E:167:LYS:HE3	2.01	0.61
1:A:307:LEU:HD12	1:A:331:VAL:HG21	1.82	0.61
1:D:353:LYS:N	1:D:368:GLN:HE22	1.95	0.61
2:P:8:GLN:O	2:P:12:PHE:HD2	1.83	0.61
1:C:435:LEU:HG	1:C:446:ILE:HG22	1.81	0.61
1:F:565:LYS:C	1:F:567:THR:H	2.03	0.61
1:C:443:GLU:OE2	1:C:458:LYS:HG2	2.01	0.61
1:F:112:VAL:HG12	1:F:113:GLU:N	2.09	0.61
1:A:736:LEU:HD21	1:A:750:GLN:HE22	1.66	0.61
1:D:456:LYS:HD3	1:D:471:TRP:NE1	2.16	0.61
1:B:179:LEU:O	1:B:183:SER:CA	2.48	0.60
1:D:165:GLN:CD	1:D:252:ASP:HB3	2.21	0.60
2:S:55:VAL:CG2	2:S:67:GLU:OE1	2.43	0.60
1:D:533:LEU:HD23	1:D:533:LEU:O	2.01	0.60
1:D:480:ASN:HD21	1:D:483:GLY:N	1.99	0.60
1:F:279:ILE:O	1:F:283:LEU:HB2	2.01	0.60
1:D:504:ILE:HD12	1:D:504:ILE:H	1.64	0.60
1:A:115:LYS:HB3	1:A:115:LYS:NZ	2.15	0.60
2:O:117:THR:HG23	2:O:120:GLU:CB	2.30	0.60
2:O:8:GLN:O	2:O:12:PHE:HD2	1.83	0.60
1:C:736:LEU:HD21	1:C:750:GLN:HE22	1.66	0.60
2:S:8:GLN:O	2:S:12:PHE:HD2	1.82	0.60
1:B:515:LYS:HB3	1:B:515:LYS:HZ2	1.65	0.60
1:E:189:ASP:HB3	1:E:190:PRO:CD	2.31	0.60
1:D:182:ILE:O	1:D:187:SER:CB	2.49	0.60
1:F:104:ILE:HG23	1:F:152:LEU:HD22	1.82	0.60
2:R:66:PRO:O	2:R:68:PHE:N	2.34	0.60
2:O:52:ILE:HG13	2:O:63:ILE:CG2	2.30	0.60
1:A:279:ILE:O	1:A:283:LEU:HB2	2.01	0.60
1:F:78:LYS:O	1:F:81:GLN:HB3	2.00	0.60
1:A:338:LEU:O	1:A:343:VAL:HG23	2.01	0.60
2:P:18:LEU:HB3	2:P:19:PHE:CD1	2.35	0.60
1:B:189:ASP:HB3	1:B:190:PRO:CD	2.31	0.60
1:B:165:GLN:CD	1:B:252:ASP:HB3	2.21	0.60
1:E:179:LEU:O	1:E:183:SER:N	2.34	0.60
2:Q:50:ASP:O	2:Q:54:GLU:HB2	2.01	0.60
1:D:789:ASN:O	1:D:792:VAL:HB	2.00	0.60
1:C:107:THR:CG2	1:C:115:LYS:HD2	2.29	0.60
1:B:338:LEU:O	1:B:343:VAL:HG23	2.01	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:639:ASN:HD22	1:A:639:ASN:H	1.48	0.60
1:B:517:VAL:HB	1:B:525:LYS:HZ1	1.65	0.60
1:C:196:ILE:O	1:C:199:LEU:HB2	2.02	0.60
1:F:443:GLU:OE2	1:F:458:LYS:HG2	2.00	0.60
2:R:73:ALA:O	2:R:76:MSE:N	2.33	0.60
1:A:179:LEU:O	1:A:183:SER:CA	2.48	0.60
1:F:165:GLN:CD	1:F:252:ASP:HB3	2.21	0.60
1:C:188:LEU:CD2	1:C:188:LEU:N	2.62	0.60
2:R:50:ASP:O	2:R:54:GLU:HB2	2.02	0.60
2:Q:66:PRO:O	2:Q:68:PHE:N	2.34	0.60
1:C:122:GLU:CG	1:C:147:ARG:HB2	2.26	0.60
1:E:279:ILE:O	1:E:283:LEU:HB2	2.01	0.60
2:R:8:GLN:O	2:R:12:PHE:CD2	2.54	0.60
1:D:78:LYS:O	1:D:81:GLN:HB3	2.01	0.60
1:C:343:VAL:HG13	1:C:487:PRO:HG2	1.83	0.60
1:F:217:LYS:CB	1:F:236:GLU:HG3	2.32	0.60
1:E:196:ILE:O	1:E:199:LEU:HB2	2.01	0.60
1:D:637:PRO:O	1:D:640:LYS:HG3	2.01	0.60
1:E:353:LYS:N	1:E:368:GLN:HE22	1.94	0.60
1:B:718:ARG:NH1	1:B:767:GLN:HE21	2.00	0.60
2:Q:117:THR:HG23	2:Q:120:GLU:CB	2.31	0.60
1:A:515:LYS:NZ	1:A:515:LYS:HB3	2.17	0.60
1:E:639:ASN:HD22	1:E:639:ASN:N	1.99	0.60
1:E:748:TYR:O	1:E:751:TYR:N	2.35	0.60
1:B:587:PRO:HB2	1:B:643:ILE:HD12	1.84	0.60
1:E:480:ASN:HD21	1:E:483:GLY:N	2.00	0.60
2:T:66:PRO:O	2:T:68:PHE:N	2.35	0.60
1:A:718:ARG:NH1	1:A:767:GLN:HE21	1.99	0.60
1:E:718:ARG:NH1	1:E:767:GLN:HE21	1.99	0.60
1:D:279:ILE:O	1:D:283:LEU:HB2	2.01	0.60
1:C:736:LEU:HD21	1:C:750:GLN:NE2	2.17	0.60
2:S:8:GLN:O	2:S:12:PHE:CD2	2.55	0.60
2:T:56:ASP:HB3	2:T:60:ASN:OD1	2.02	0.60
1:E:724:ARG:HG3	1:E:724:ARG:HH11	1.65	0.60
1:E:567:THR:CG2	1:E:568:GLY:N	2.65	0.60
1:F:637:PRO:O	1:F:640:LYS:HG3	2.01	0.60
1:B:195:LEU:HD11	1:B:226:ASP:O	2.02	0.60
1:D:179:LEU:O	1:D:183:SER:CA	2.48	0.60
2:P:66:PRO:O	2:P:68:PHE:N	2.34	0.60
1:B:307:LEU:HD12	1:B:331:VAL:HG21	1.84	0.60
1:A:195:LEU:HD11	1:A:226:ASP:O	2.01	0.60
1:E:78:LYS:O	1:E:81:GLN:HB3	2.01	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:217:LYS:CB	1:B:236:GLU:HG3	2.31	0.60
2:S:18:LEU:HB3	2:S:19:PHE:CD1	2.36	0.60
1:E:748:TYR:O	1:E:751:TYR:HB3	2.01	0.60
2:O:66:PRO:O	2:O:68:PHE:N	2.35	0.60
1:B:353:LYS:N	1:B:368:GLN:HE22	1.95	0.60
1:D:736:LEU:HD21	1:D:750:GLN:HE22	1.67	0.60
2:T:117:THR:HG21	2:T:120:GLU:OE2	2.02	0.60
1:C:639:ASN:HD22	1:C:639:ASN:H	1.48	0.60
1:C:688:PHE:C	1:C:688:PHE:CD2	2.75	0.60
1:B:179:LEU:O	1:B:183:SER:N	2.35	0.60
1:A:182:ILE:O	1:A:187:SER:CB	2.49	0.60
1:F:164:GLU:O	1:F:167:LYS:HE3	2.01	0.60
1:A:729:TYR:HB2	1:A:756:ILE:HG21	1.84	0.60
1:A:630:ARG:HH11	1:A:630:ARG:HG3	1.66	0.60
2:T:8:GLN:O	2:T:12:PHE:HD2	1.83	0.60
1:D:217:LYS:CB	1:D:236:GLU:HG3	2.32	0.60
1:C:748:TYR:O	1:C:751:TYR:N	2.33	0.60
1:B:196:ILE:O	1:B:199:LEU:HB2	2.02	0.60
1:A:196:ILE:O	1:A:199:LEU:HB2	2.02	0.60
1:C:587:PRO:HB2	1:C:643:ILE:HD12	1.84	0.60
1:F:688:PHE:CD2	1:F:688:PHE:C	2.75	0.60
1:A:179:LEU:O	1:A:183:SER:N	2.35	0.60
1:F:97:TYR:CE1	1:F:178:SER:HB2	2.37	0.60
1:A:112:VAL:HG12	1:A:113:GLU:N	2.09	0.60
1:E:217:LYS:CB	1:E:236:GLU:HG3	2.32	0.60
1:D:639:ASN:HD22	1:D:639:ASN:N	2.00	0.60
1:A:565:LYS:C	1:A:567:THR:H	2.04	0.60
1:F:412:GLU:HG2	1:F:413:LEU:HD23	1.83	0.59
1:D:674:SER:O	1:D:674:SER:OG	2.15	0.59
1:C:515:LYS:NZ	1:C:515:LYS:HB3	2.16	0.59
1:C:748:TYR:O	1:C:751:TYR:HB3	2.01	0.59
1:B:567:THR:CG2	1:B:568:GLY:N	2.65	0.59
1:B:456:LYS:HD3	1:B:471:TRP:NE1	2.16	0.59
1:B:164:GLU:O	1:B:167:LYS:HE3	2.01	0.59
1:F:195:LEU:HD11	1:F:226:ASP:O	2.01	0.59
1:B:748:TYR:O	1:B:751:TYR:N	2.35	0.59
1:A:748:TYR:O	1:A:751:TYR:HB3	2.02	0.59
2:O:43:PRO:CG	2:O:48:LEU:HD13	2.32	0.59
2:S:66:PRO:O	2:S:68:PHE:N	2.35	0.59
1:E:533:LEU:HD23	1:E:533:LEU:O	2.03	0.59
2:R:59:GLY:O	2:R:62:THR:HG23	2.00	0.59
1:A:353:LYS:N	1:A:368:GLN:HE22	1.96	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:379:ALA:O	1:C:383:GLY:N	2.35	0.59
1:F:115:LYS:NZ	1:F:115:LYS:HB3	2.16	0.59
1:D:107:THR:CG2	1:D:115:LYS:HD2	2.30	0.59
1:D:412:GLU:HG2	1:D:413:LEU:HD23	1.82	0.59
1:F:515:LYS:HB3	1:F:515:LYS:NZ	2.17	0.59
1:D:516:VAL:HG21	1:D:532:LEU:CD1	2.32	0.59
1:B:379:ALA:O	1:B:383:GLY:N	2.36	0.59
1:E:196:ILE:HA	1:E:199:LEU:HD12	1.82	0.59
1:F:567:THR:CG2	1:F:568:GLY:N	2.65	0.59
1:D:377:GLN:O	1:D:381:GLU:HB2	2.02	0.59
1:B:97:TYR:CE1	1:B:178:SER:HB2	2.37	0.59
1:C:195:LEU:HD11	1:C:226:ASP:O	2.02	0.59
1:C:165:GLN:CD	1:C:252:ASP:HB3	2.22	0.59
1:B:478:ALA:HA	1:B:488:LEU:HG	1.83	0.59
1:C:112:VAL:HG12	1:C:113:GLU:N	2.09	0.59
1:C:353:LYS:N	1:C:368:GLN:HE22	1.96	0.59
2:T:8:GLN:O	2:T:12:PHE:CD2	2.55	0.59
2:P:8:GLN:O	2:P:12:PHE:CD2	2.55	0.59
2:R:117:THR:HG23	2:R:120:GLU:CB	2.32	0.59
1:B:78:LYS:O	1:B:81:GLN:HB3	2.02	0.59
2:T:73:ALA:O	2:T:76:MSE:N	2.32	0.59
1:C:164:GLU:O	1:C:167:LYS:HE3	2.01	0.59
1:E:478:ALA:HA	1:E:488:LEU:HG	1.84	0.59
2:T:50:ASP:O	2:T:54:GLU:HB2	2.01	0.59
1:D:478:ALA:HA	1:D:488:LEU:HG	1.84	0.59
1:F:379:ALA:O	1:F:383:GLY:N	2.35	0.59
2:Q:117:THR:HG21	2:Q:120:GLU:OE2	2.03	0.59
2:R:117:THR:HG21	2:R:120:GLU:OE2	2.03	0.59
1:E:517:VAL:HB	1:E:525:LYS:HZ1	1.66	0.59
1:C:567:THR:CG2	1:C:568:GLY:N	2.65	0.59
1:A:154:ILE:HG13	1:A:171:TYR:HE1	1.62	0.59
1:E:175:LYS:HB2	1:E:175:LYS:HZ3	1.68	0.59
1:D:97:TYR:CE1	1:D:178:SER:HB2	2.37	0.59
1:C:179:LEU:O	1:C:183:SER:N	2.36	0.59
1:A:515:LYS:HZ2	1:A:515:LYS:HB3	1.66	0.59
1:B:515:LYS:NZ	1:B:515:LYS:HB3	2.18	0.59
2:O:97:ASN:N	2:O:97:ASN:HD22	2.01	0.59
1:B:443:GLU:OE2	1:B:458:LYS:HG2	2.02	0.59
1:C:711:ILE:HG13	1:C:712:PHE:CD2	2.38	0.59
1:D:688:PHE:C	1:D:688:PHE:CD2	2.76	0.59
1:E:736:LEU:HD21	1:E:750:GLN:HE22	1.67	0.59
1:A:78:LYS:O	1:A:81:GLN:HB3	2.01	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:343:VAL:HG13	1:F:487:PRO:HG2	1.85	0.59
1:D:196:ILE:O	1:D:199:LEU:HB2	2.02	0.59
1:E:688:PHE:C	1:E:688:PHE:CD2	2.75	0.59
2:R:13:LYS:HZ1	2:R:65:PHE:HB3	1.66	0.59
2:Q:8:GLN:O	2:Q:12:PHE:CD2	2.56	0.59
1:A:217:LYS:CB	1:A:236:GLU:HG3	2.32	0.59
1:F:196:ILE:O	1:F:199:LEU:HB2	2.02	0.59
1:D:565:LYS:C	1:D:567:THR:H	2.04	0.59
2:P:43:PRO:CG	2:P:48:LEU:HD13	2.33	0.59
1:E:379:ALA:O	1:E:383:GLY:N	2.36	0.59
2:Q:56:ASP:HB3	2:Q:60:ASN:OD1	2.02	0.59
1:B:343:VAL:HG13	1:B:487:PRO:HG2	1.83	0.59
1:E:515:LYS:HB3	1:E:515:LYS:NZ	2.17	0.59
1:D:748:TYR:O	1:D:751:TYR:N	2.35	0.59
1:F:196:ILE:HA	1:F:199:LEU:HD12	1.84	0.59
1:B:688:PHE:C	1:B:688:PHE:CD2	2.75	0.59
1:A:97:TYR:CE1	1:A:178:SER:HB2	2.38	0.59
1:A:243:LEU:HA	1:A:246:SER:OG	2.03	0.59
1:E:195:LEU:HD11	1:E:226:ASP:O	2.02	0.59
1:D:164:GLU:O	1:D:167:LYS:HE3	2.01	0.59
1:D:179:LEU:O	1:D:183:SER:N	2.36	0.59
1:C:92:ASP:O	1:C:96:ILE:HG13	2.03	0.59
2:R:43:PRO:CG	2:R:48:LEU:HD13	2.32	0.59
2:Q:43:PRO:CG	2:Q:48:LEU:HD13	2.33	0.59
2:T:117:THR:HG23	2:T:120:GLU:CB	2.31	0.59
2:S:117:THR:HG21	2:S:120:GLU:OE2	2.02	0.59
1:C:78:LYS:O	1:C:81:GLN:HB3	2.02	0.59
1:C:639:ASN:N	1:C:639:ASN:HD22	1.99	0.59
1:F:639:ASN:H	1:F:639:ASN:HD22	1.49	0.59
1:C:565:LYS:C	1:C:567:THR:H	2.04	0.59
1:B:92:ASP:O	1:B:96:ILE:HG13	2.03	0.59
1:C:131:ARG:HG3	1:C:243:LEU:CD2	2.33	0.59
1:F:501:LEU:HD22	2:T:112:LEU:CD2	2.27	0.59
2:T:13:LYS:HZ1	2:T:65:PHE:HB3	1.68	0.59
1:F:353:LYS:N	1:F:368:GLN:HE22	1.96	0.59
1:B:700:TYR:HD1	1:B:728:ALA:HA	1.68	0.59
1:E:700:TYR:HD1	1:E:728:ALA:HA	1.67	0.59
1:A:377:GLN:O	1:A:381:GLU:HB2	2.03	0.59
1:B:243:LEU:HA	1:B:246:SER:OG	2.03	0.58
1:B:748:TYR:O	1:B:751:TYR:HB3	2.02	0.58
2:O:55:VAL:CG2	2:O:67:GLU:OE1	2.44	0.58
2:T:51:MSE:HB3	2:T:71:MSE:HE2	1.85	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:478:ALA:HA	1:A:488:LEU:HG	1.84	0.58
1:D:722:ILE:HG23	1:D:760:VAL:CG1	2.30	0.58
1:C:307:LEU:HD12	1:C:331:VAL:CG2	2.33	0.58
1:B:79:ILE:C	1:B:81:GLN:N	2.56	0.58
1:C:674:SER:OG	1:C:674:SER:O	2.14	0.58
1:D:515:LYS:NZ	1:D:515:LYS:HB3	2.18	0.58
1:B:639:ASN:HD22	1:B:639:ASN:N	2.00	0.58
1:B:776:LEU:O	1:B:780:LEU:HD13	2.03	0.58
1:A:587:PRO:HB2	1:A:643:ILE:HD12	1.85	0.58
1:F:179:LEU:O	1:F:183:SER:N	2.35	0.58
1:F:630:ARG:HG3	1:F:630:ARG:HH11	1.69	0.58
2:P:117:THR:HG21	2:P:120:GLU:OE2	2.03	0.58
2:O:100:ILE:HB	2:O:136:VAL:HG22	1.85	0.58
1:A:711:ILE:HG13	1:A:712:PHE:CD2	2.39	0.58
1:F:377:GLN:O	1:F:381:GLU:HB2	2.03	0.58
1:B:176:GLY:C	1:B:178:SER:N	2.57	0.58
1:B:88:LYS:NZ	1:B:172:GLU:OE2	2.36	0.58
1:D:154:ILE:HG13	1:D:171:TYR:HE1	1.62	0.58
2:S:43:PRO:CG	2:S:48:LEU:HD13	2.33	0.58
1:B:480:ASN:ND2	1:B:481:VAL:N	2.51	0.58
1:D:379:ALA:O	1:D:383:GLY:N	2.35	0.58
2:O:117:THR:HG21	2:O:120:GLU:OE2	2.03	0.58
1:E:79:ILE:C	1:E:81:GLN:N	2.57	0.58
1:D:700:TYR:HD1	1:D:728:ALA:HA	1.68	0.58
1:F:711:ILE:HG13	1:F:712:PHE:CD2	2.38	0.58
2:R:49:GLN:NE2	2:R:49:GLN:N	2.51	0.58
1:F:533:LEU:HD23	1:F:533:LEU:O	2.04	0.58
1:E:729:TYR:HB2	1:E:756:ILE:HG21	1.85	0.58
1:F:736:LEU:HD21	1:F:750:GLN:HE22	1.68	0.58
2:O:8:GLN:O	2:O:12:PHE:CD2	2.56	0.58
1:F:639:ASN:HD22	1:F:639:ASN:N	2.00	0.58
1:D:196:ILE:HA	1:D:199:LEU:HD12	1.85	0.58
1:B:711:ILE:HG13	1:B:712:PHE:CD2	2.39	0.58
1:C:197:LYS:HZ3	1:C:197:LYS:C	2.05	0.58
1:C:533:LEU:HD23	1:C:533:LEU:O	2.03	0.58
1:E:307:LEU:HD12	1:E:331:VAL:CG2	2.33	0.58
1:D:736:LEU:HD21	1:D:750:GLN:NE2	2.18	0.58
1:B:736:LEU:HD21	1:B:750:GLN:HE22	1.69	0.58
1:F:736:LEU:HD21	1:F:750:GLN:NE2	2.19	0.58
1:A:700:TYR:HD1	1:A:728:ALA:HA	1.69	0.58
1:C:700:TYR:HD1	1:C:728:ALA:HA	1.67	0.58
1:B:639:ASN:HD22	1:B:639:ASN:H	1.49	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:196:ILE:HA	1:A:199:LEU:HD12	1.85	0.58
1:D:711:ILE:HG13	1:D:712:PHE:CD2	2.39	0.58
1:A:688:PHE:C	1:A:688:PHE:CD2	2.75	0.58
1:E:97:TYR:CE1	1:E:178:SER:HB2	2.38	0.58
1:E:88:LYS:NZ	1:E:172:GLU:OE2	2.37	0.58
1:D:243:LEU:HA	1:D:246:SER:OG	2.03	0.58
1:D:92:ASP:O	1:D:96:ILE:HG13	2.04	0.58
1:F:243:LEU:HA	1:F:246:SER:OG	2.04	0.58
1:F:88:LYS:NZ	1:F:172:GLU:OE2	2.37	0.58
1:E:301:ALA:O	1:E:303:LYS:N	2.37	0.58
2:T:49:GLN:NE2	2:T:49:GLN:N	2.52	0.58
2:T:52:ILE:HG23	2:T:53:ASN:N	2.19	0.58
1:A:736:LEU:HD21	1:A:750:GLN:NE2	2.17	0.58
1:A:446:ILE:HG13	1:A:452:GLU:O	2.04	0.58
1:E:515:LYS:HB3	1:E:515:LYS:HZ2	1.67	0.58
1:D:776:LEU:O	1:D:780:LEU:HD13	2.04	0.58
1:D:748:TYR:O	1:D:751:TYR:HB3	2.03	0.58
1:A:88:LYS:NZ	1:A:172:GLU:OE2	2.37	0.58
1:E:131:ARG:HG3	1:E:243:LEU:CD2	2.32	0.58
1:D:88:LYS:NZ	1:D:172:GLU:OE2	2.37	0.58
1:D:97:TYR:HE1	1:D:178:SER:HB2	1.69	0.58
1:F:175:LYS:O	1:F:177:ILE:N	2.36	0.58
2:Q:52:ILE:HG23	2:Q:53:ASN:N	2.19	0.58
1:D:195:LEU:HD11	1:D:226:ASP:O	2.03	0.58
1:F:724:ARG:HG3	1:F:724:ARG:HH11	1.67	0.58
2:P:56:ASP:OD2	2:P:60:ASN:CA	2.51	0.58
2:Q:49:GLN:NE2	2:Q:49:GLN:N	2.52	0.58
2:T:41:GLN:O	2:T:42:ASN:HB3	2.04	0.58
2:T:43:PRO:CG	2:T:48:LEU:HD13	2.33	0.58
1:B:729:TYR:HB2	1:B:756:ILE:HG21	1.84	0.58
1:D:372:LYS:HG3	1:D:373:LYS:N	2.19	0.58
1:C:196:ILE:HA	1:C:199:LEU:HD12	1.84	0.58
1:B:175:LYS:O	1:B:177:ILE:N	2.36	0.58
1:A:188:LEU:CD2	1:A:188:LEU:N	2.63	0.58
1:F:97:TYR:HE1	1:F:178:SER:HB2	1.69	0.58
1:C:243:LEU:HA	1:C:246:SER:OG	2.03	0.58
1:E:107:THR:CG2	1:E:115:LYS:HD2	2.31	0.58
1:B:196:ILE:HA	1:B:199:LEU:HD12	1.85	0.58
1:A:567:THR:CG2	1:A:568:GLY:N	2.66	0.58
1:D:587:PRO:HB2	1:D:643:ILE:HD12	1.85	0.58
1:C:377:GLN:O	1:C:381:GLU:HB2	2.04	0.58
1:B:97:TYR:HE1	1:B:178:SER:HB2	1.68	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:176:GLY:C	1:A:178:SER:N	2.57	0.58
1:E:175:LYS:O	1:E:177:ILE:N	2.37	0.58
1:C:154:ILE:HG13	1:C:171:TYR:HE1	1.62	0.58
1:C:175:LYS:O	1:C:177:ILE:N	2.37	0.58
1:F:729:TYR:HB2	1:F:756:ILE:HG21	1.84	0.58
1:D:630:ARG:HG3	1:D:630:ARG:HH11	1.68	0.58
1:D:657:ILE:HD11	1:D:701:LEU:HD23	1.86	0.58
1:D:729:TYR:HB2	1:D:756:ILE:HG21	1.86	0.58
1:B:722:ILE:HG23	1:B:760:VAL:CG1	2.29	0.58
2:O:56:ASP:OD2	2:O:61:GLY:N	2.37	0.58
1:C:776:LEU:O	1:C:780:LEU:HD13	2.03	0.58
2:Q:97:ASN:HD22	2:Q:97:ASN:N	2.01	0.58
1:F:480:ASN:HD22	1:F:481:VAL:H	1.52	0.57
1:A:307:LEU:HD12	1:A:331:VAL:CG2	2.34	0.57
1:D:446:ILE:HG13	1:D:452:GLU:O	2.04	0.57
1:E:508:ILE:HG23	1:E:536:TYR:CD2	2.39	0.57
1:F:515:LYS:HB3	1:F:515:LYS:HZ2	1.68	0.57
1:C:697:ILE:CD1	1:C:732:ILE:HD13	2.34	0.57
2:S:121:VAL:C	2:S:123:GLN:N	2.57	0.57
2:S:49:GLN:NE2	2:S:49:GLN:N	2.52	0.57
2:S:52:ILE:HG23	2:S:53:ASN:N	2.19	0.57
1:F:480:ASN:ND2	1:F:481:VAL:N	2.52	0.57
1:E:372:LYS:HG3	1:E:373:LYS:N	2.19	0.57
1:B:324:THR:CB	1:B:499:PRO:HA	2.34	0.57
1:C:282:SER:HA	1:C:285:LYS:HD3	1.87	0.57
2:T:100:ILE:HB	2:T:136:VAL:HG22	1.84	0.57
2:P:100:ILE:HB	2:P:136:VAL:HG22	1.86	0.57
1:C:516:VAL:HG21	1:C:532:LEU:CD1	2.34	0.57
1:E:776:LEU:O	1:E:780:LEU:HD13	2.04	0.57
1:E:587:PRO:HB2	1:E:643:ILE:HD12	1.86	0.57
1:F:587:PRO:HB2	1:F:643:ILE:HD12	1.85	0.57
1:B:377:GLN:O	1:B:381:GLU:HB2	2.03	0.57
1:E:176:GLY:C	1:E:178:SER:N	2.57	0.57
1:C:301:ALA:O	1:C:303:LYS:N	2.37	0.57
1:D:301:ALA:O	1:D:303:LYS:N	2.37	0.57
1:A:657:ILE:HD11	1:A:701:LEU:HD23	1.87	0.57
1:C:729:TYR:HB2	1:C:756:ILE:HG21	1.84	0.57
1:B:630:ARG:HG3	1:B:630:ARG:HH11	1.69	0.57
1:A:324:THR:CB	1:A:499:PRO:HA	2.34	0.57
1:E:736:LEU:HD21	1:E:750:GLN:NE2	2.18	0.57
2:R:102:ALA:CB	2:R:125:ILE:HG13	2.34	0.57
1:A:109:ILE:CD1	1:A:157:LYS:HZ2	2.15	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:688:PHE:HD2	1:F:688:PHE:C	2.07	0.57
1:B:131:ARG:HG3	1:B:243:LEU:CD2	2.34	0.57
1:D:171:TYR:O	1:D:175:LYS:NZ	2.38	0.57
1:C:88:LYS:NZ	1:C:172:GLU:OE2	2.37	0.57
1:E:480:ASN:ND2	1:E:481:VAL:N	2.53	0.57
1:A:480:ASN:ND2	1:A:481:VAL:N	2.51	0.57
1:A:379:ALA:O	1:A:383:GLY:N	2.36	0.57
1:C:446:ILE:HG13	1:C:452:GLU:O	2.04	0.57
1:A:697:ILE:CD1	1:A:732:ILE:HD13	2.34	0.57
1:E:639:ASN:HD22	1:E:639:ASN:H	1.48	0.57
1:A:776:LEU:O	1:A:780:LEU:HD13	2.05	0.57
1:E:377:GLN:O	1:E:381:GLU:HB2	2.03	0.57
1:A:354:SER:O	1:A:371:SER:HB2	2.05	0.57
2:S:97:ASN:N	2:S:97:ASN:HD22	2.01	0.57
1:C:252:ASP:O	1:C:254:ARG:HD2	2.05	0.57
2:Q:51:MSE:HB3	2:Q:71:MSE:HE2	1.85	0.57
1:E:252:ASP:O	1:E:254:ARG:HD2	2.05	0.57
1:A:372:LYS:HG3	1:A:373:LYS:N	2.19	0.57
1:F:307:LEU:HD12	1:F:331:VAL:CG2	2.34	0.57
1:A:79:ILE:C	1:A:81:GLN:N	2.57	0.57
1:D:214:PHE:HB3	1:D:218:LEU:HB3	1.87	0.57
2:Q:97:ASN:H	2:Q:97:ASN:ND2	2.02	0.57
1:E:97:TYR:HE1	1:E:178:SER:HB2	1.69	0.57
1:E:243:LEU:HA	1:E:246:SER:OG	2.03	0.57
1:E:89:ILE:CG2	1:E:93:VAL:HG11	2.20	0.57
1:F:176:GLY:C	1:F:178:SER:N	2.57	0.57
1:B:480:ASN:HD22	1:B:481:VAL:N	2.03	0.57
1:C:657:ILE:HD11	1:C:701:LEU:HD23	1.86	0.57
2:O:59:GLY:O	2:O:62:THR:HG23	2.02	0.57
1:E:282:SER:HA	1:E:285:LYS:HD3	1.87	0.57
1:A:516:VAL:HG21	1:A:532:LEU:CD1	2.35	0.57
1:A:508:ILE:HG23	1:A:536:TYR:CD2	2.39	0.57
1:F:700:TYR:HD1	1:F:728:ALA:HA	1.68	0.57
1:B:697:ILE:CD1	1:B:732:ILE:HD13	2.34	0.57
2:P:59:GLY:O	2:P:62:THR:CG2	2.52	0.57
1:D:131:ARG:HG3	1:D:243:LEU:CD2	2.35	0.57
1:D:175:LYS:O	1:D:177:ILE:N	2.37	0.57
1:E:137:PHE:HD2	1:E:137:PHE:C	2.08	0.57
2:O:52:ILE:HG23	2:O:53:ASN:N	2.18	0.57
2:T:13:LYS:HZ3	2:T:65:PHE:HB3	1.68	0.57
1:C:480:ASN:HD22	1:C:481:VAL:H	1.52	0.57
1:C:372:LYS:HG3	1:C:373:LYS:N	2.19	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:343:VAL:HG13	1:E:487:PRO:HG2	1.86	0.57
1:B:516:VAL:HG21	1:B:532:LEU:CD1	2.34	0.57
1:A:214:PHE:HB3	1:A:218:LEU:HB3	1.86	0.57
1:C:688:PHE:C	1:C:688:PHE:HD2	2.08	0.57
1:D:567:THR:CG2	1:D:568:GLY:N	2.66	0.57
2:S:97:ASN:ND2	2:S:97:ASN:H	2.02	0.57
1:F:197:LYS:HZ3	1:F:197:LYS:C	2.06	0.57
1:B:137:PHE:C	1:B:137:PHE:HD2	2.08	0.57
2:R:52:ILE:HG23	2:R:53:ASN:N	2.19	0.57
2:P:49:GLN:N	2:P:49:GLN:NE2	2.52	0.57
2:Q:49:GLN:HE21	2:Q:49:GLN:H	1.52	0.57
1:C:480:ASN:HD22	1:C:481:VAL:N	2.03	0.57
1:A:112:VAL:O	1:A:114:HIS:N	2.38	0.57
1:F:657:ILE:HD11	1:F:701:LEU:HD23	1.86	0.57
1:C:722:ILE:HG23	1:C:760:VAL:CG1	2.28	0.57
1:E:722:ILE:HG23	1:E:760:VAL:CG1	2.30	0.57
1:F:372:LYS:HG3	1:F:373:LYS:N	2.19	0.57
2:Q:102:ALA:CB	2:Q:125:ILE:HG13	2.34	0.57
2:R:121:VAL:C	2:R:123:GLN:N	2.57	0.57
2:P:121:VAL:C	2:P:123:GLN:N	2.57	0.57
1:B:372:LYS:HG3	1:B:373:LYS:N	2.19	0.57
1:E:354:SER:O	1:E:371:SER:HB2	2.05	0.57
1:A:326:ILE:HG22	1:A:328:PHE:CE1	2.40	0.57
2:P:97:ASN:N	2:P:97:ASN:HD22	2.02	0.57
2:R:97:ASN:N	2:R:97:ASN:HD22	2.02	0.57
1:A:97:TYR:HE1	1:A:178:SER:HB2	1.70	0.57
1:C:97:TYR:CE1	1:C:178:SER:HB2	2.38	0.57
1:C:137:PHE:HD2	1:C:137:PHE:C	2.08	0.57
2:R:51:MSE:HB3	2:R:71:MSE:HE2	1.86	0.57
2:P:55:VAL:HG21	2:P:67:GLU:CD	2.24	0.57
1:E:480:ASN:HD22	1:E:481:VAL:N	2.03	0.57
2:T:49:GLN:H	2:T:49:GLN:HE21	1.52	0.57
1:E:630:ARG:HH11	1:E:630:ARG:HG3	1.69	0.57
1:A:282:SER:HA	1:A:285:LYS:HD3	1.86	0.57
1:B:446:ILE:HG13	1:B:452:GLU:O	2.05	0.57
1:A:639:ASN:HD22	1:A:639:ASN:N	1.99	0.57
1:C:354:SER:O	1:C:371:SER:HB2	2.05	0.57
1:B:93:VAL:CG2	1:B:179:LEU:HD11	2.35	0.57
1:B:301:ALA:O	1:B:303:LYS:N	2.38	0.57
2:R:41:GLN:O	2:R:42:ASN:HB3	2.04	0.57
2:P:51:MSE:HB3	2:P:71:MSE:HE2	1.86	0.57
1:E:480:ASN:HD22	1:E:481:VAL:H	1.53	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:480:ASN:HD22	1:B:481:VAL:H	1.51	0.57
1:B:657:ILE:HD11	1:B:701:LEU:HD23	1.87	0.57
1:B:282:SER:HA	1:B:285:LYS:HD3	1.87	0.57
1:B:674:SER:OG	1:B:674:SER:O	2.15	0.57
2:S:100:ILE:HB	2:S:136:VAL:HG22	1.85	0.57
1:E:516:VAL:HG21	1:E:532:LEU:CD1	2.34	0.57
1:F:776:LEU:O	1:F:780:LEU:HD13	2.04	0.57
1:B:688:PHE:C	1:B:688:PHE:HD2	2.08	0.57
1:E:171:TYR:O	1:E:175:LYS:NZ	2.38	0.56
1:F:171:TYR:O	1:F:175:LYS:NZ	2.38	0.56
1:F:92:ASP:O	1:F:96:ILE:HG13	2.05	0.56
1:F:137:PHE:C	1:F:137:PHE:HD2	2.07	0.56
2:S:51:MSE:HB3	2:S:71:MSE:HE2	1.87	0.56
1:F:668:SER:CA	2:T:14:GLU:HG3	2.35	0.56
1:A:615:ILE:CD1	1:A:645:TRP:HH2	2.16	0.56
1:C:508:ILE:HG23	1:C:536:TYR:CD2	2.40	0.56
1:A:697:ILE:CG2	1:A:732:ILE:HD11	2.35	0.56
1:D:639:ASN:HD22	1:D:639:ASN:H	1.49	0.56
1:A:175:LYS:O	1:A:177:ILE:N	2.37	0.56
1:D:131:ARG:HB3	1:D:170:TYR:OH	2.05	0.56
1:D:137:PHE:C	1:D:137:PHE:HD2	2.08	0.56
1:A:137:PHE:HD2	1:A:137:PHE:C	2.08	0.56
2:P:13:LYS:HZ2	2:P:65:PHE:HB3	1.68	0.56
2:O:41:GLN:O	2:O:42:ASN:HB3	2.05	0.56
1:C:668:SER:CA	2:Q:14:GLU:HG3	2.36	0.56
1:C:480:ASN:ND2	1:C:481:VAL:N	2.52	0.56
1:B:122:GLU:H	1:B:122:GLU:CD	2.09	0.56
1:B:307:LEU:HD12	1:B:331:VAL:CG2	2.35	0.56
1:F:279:ILE:HD13	1:F:279:ILE:N	2.20	0.56
1:D:343:VAL:HG13	1:D:487:PRO:HG2	1.86	0.56
1:F:446:ILE:HG13	1:F:452:GLU:O	2.05	0.56
1:A:343:VAL:HG13	1:A:487:PRO:HG2	1.86	0.56
1:F:516:VAL:HG21	1:F:532:LEU:CD1	2.35	0.56
1:C:214:PHE:HB3	1:C:218:LEU:HB3	1.87	0.56
2:S:102:ALA:CB	2:S:125:ILE:HG13	2.35	0.56
1:A:688:PHE:C	1:A:688:PHE:HD2	2.08	0.56
2:T:97:ASN:HD22	2:T:97:ASN:N	2.03	0.56
1:B:354:SER:O	1:B:371:SER:HB2	2.04	0.56
2:S:73:ALA:O	2:S:76:MSE:N	2.33	0.56
1:A:92:ASP:O	1:A:96:ILE:HG13	2.05	0.56
1:A:131:ARG:HG3	1:A:243:LEU:CD2	2.35	0.56
1:A:93:VAL:CG2	1:A:179:LEU:HD11	2.34	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:92:ASP:O	1:E:96:ILE:HG13	2.05	0.56
1:D:175:LYS:HZ1	1:D:175:LYS:HB2	1.69	0.56
1:C:176:GLY:C	1:C:178:SER:N	2.58	0.56
1:C:180:ASP:O	1:C:183:SER:N	2.32	0.56
2:O:49:GLN:NE2	2:O:49:GLN:N	2.52	0.56
1:F:480:ASN:HD22	1:F:481:VAL:N	2.03	0.56
2:Q:28:THR:HG21	2:Q:30:LYS:HZ1	1.68	0.56
1:E:657:ILE:HD11	1:E:701:LEU:HD23	1.87	0.56
2:P:28:THR:HG21	2:P:30:LYS:HZ1	1.70	0.56
1:D:405:LEU:HD13	1:D:453:VAL:CG2	2.33	0.56
1:C:279:ILE:HD13	1:C:279:ILE:N	2.21	0.56
1:F:282:SER:HA	1:F:285:LYS:HD3	1.87	0.56
1:D:307:LEU:HD12	1:D:331:VAL:CG2	2.35	0.56
1:E:324:THR:CB	1:E:499:PRO:HA	2.34	0.56
1:B:413:LEU:HB2	1:B:419:ILE:HG12	1.87	0.56
1:B:515:LYS:NZ	1:B:516:VAL:HG23	2.20	0.56
1:F:697:ILE:CD1	1:F:732:ILE:HD13	2.36	0.56
1:D:697:ILE:CG2	1:D:732:ILE:HD11	2.35	0.56
1:D:697:ILE:CD1	1:D:732:ILE:HD13	2.36	0.56
1:B:109:ILE:HD13	1:B:157:LYS:HZ3	1.69	0.56
1:E:697:ILE:CG2	1:E:732:ILE:HD11	2.35	0.56
1:E:697:ILE:CD1	1:E:732:ILE:HD13	2.36	0.56
1:E:360:VAL:HG11	1:E:370:LEU:HD22	1.88	0.56
2:P:97:ASN:ND2	2:P:97:ASN:H	2.03	0.56
2:Q:41:GLN:O	2:Q:42:ASN:HB3	2.05	0.56
1:E:711:ILE:HG13	1:E:712:PHE:CD2	2.40	0.56
1:D:176:GLY:C	1:D:178:SER:N	2.57	0.56
1:B:137:PHE:CD2	1:B:137:PHE:C	2.79	0.56
2:Q:13:LYS:HZ3	2:Q:65:PHE:HB3	1.69	0.56
2:S:49:GLN:H	2:S:49:GLN:HE21	1.51	0.56
1:E:501:LEU:HD22	2:S:112:LEU:CD2	2.28	0.56
1:D:480:ASN:ND2	1:D:481:VAL:N	2.53	0.56
1:D:279:ILE:N	1:D:279:ILE:HD13	2.21	0.56
1:F:324:THR:CB	1:F:499:PRO:HA	2.35	0.56
1:D:464:VAL:HG23	1:D:465:LEU:HD12	1.87	0.56
1:D:450:ASN:ND2	1:D:452:GLU:CG	2.69	0.56
1:B:508:ILE:HG23	1:B:536:TYR:CD2	2.41	0.56
1:D:188:LEU:N	1:D:188:LEU:CD2	2.63	0.56
1:F:184:LYS:HE3	1:F:191:GLU:HB2	1.88	0.56
1:E:137:PHE:CD2	1:E:137:PHE:C	2.79	0.56
1:F:301:ALA:O	1:F:303:LYS:N	2.39	0.56
2:R:28:THR:HG21	2:R:30:LYS:HZ1	1.69	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:T:102:ALA:CB	2:T:125:ILE:HG13	2.35	0.56
2:O:97:ASN:H	2:O:97:ASN:ND2	2.02	0.56
2:R:97:ASN:ND2	2:R:97:ASN:H	2.03	0.56
1:D:354:SER:O	1:D:371:SER:HB2	2.04	0.56
1:F:354:SER:O	1:F:371:SER:HB2	2.06	0.56
1:E:184:LYS:HE3	1:E:191:GLU:HB2	1.87	0.56
1:F:234:LEU:HD23	1:F:235:THR:H	1.71	0.56
1:C:252:ASP:CG	1:C:253:HIS:H	2.09	0.56
1:D:296:LEU:CD2	1:D:296:LEU:H	1.91	0.56
2:P:41:GLN:O	2:P:42:ASN:HB3	2.04	0.56
1:A:480:ASN:HD22	1:A:481:VAL:H	1.52	0.56
1:A:480:ASN:HD22	1:A:481:VAL:N	2.03	0.56
1:D:480:ASN:HD22	1:D:481:VAL:N	2.04	0.56
1:D:282:SER:HA	1:D:285:LYS:HD3	1.88	0.56
2:O:102:ALA:CB	2:O:125:ILE:HG13	2.36	0.56
1:D:252:ASP:CG	1:D:253:HIS:H	2.09	0.56
1:C:97:TYR:HE1	1:C:178:SER:HB2	1.70	0.56
2:R:13:LYS:HZ2	2:R:65:PHE:HB3	1.68	0.56
2:P:52:ILE:HG23	2:P:53:ASN:N	2.20	0.56
1:C:630:ARG:HG3	1:C:630:ARG:HH11	1.71	0.56
1:D:470:ASN:O	1:D:472:ARG:HG3	2.06	0.56
1:C:413:LEU:HB2	1:C:419:ILE:HG12	1.87	0.56
2:Q:100:ILE:HB	2:Q:136:VAL:HG22	1.87	0.56
1:C:697:ILE:CG2	1:C:732:ILE:HD11	2.36	0.56
1:F:214:PHE:HB3	1:F:218:LEU:HB3	1.87	0.56
1:B:360:VAL:HG11	1:B:370:LEU:HD22	1.87	0.56
1:D:688:PHE:HD2	1:D:688:PHE:C	2.09	0.56
1:A:667:LEU:HB3	2:O:14:GLU:OE2	2.06	0.56
2:S:13:LYS:HZ2	2:S:65:PHE:HB3	1.67	0.56
1:D:501:LEU:HD22	2:R:112:LEU:CD2	2.27	0.56
1:E:252:ASP:CG	1:E:253:HIS:H	2.09	0.56
1:C:80:GLN:HG3	1:C:80:GLN:O	2.06	0.56
1:A:80:GLN:HG3	1:A:80:GLN:O	2.06	0.56
1:E:446:ILE:HG13	1:E:452:GLU:O	2.06	0.56
1:F:450:ASN:ND2	1:F:452:GLU:CG	2.69	0.56
1:B:697:ILE:CG2	1:B:732:ILE:HD11	2.35	0.56
1:D:678:VAL:HG22	1:D:745:TYR:CE2	2.41	0.56
1:E:666:ASN:O	1:E:670:ILE:HG13	2.06	0.56
1:E:684:ASP:C	1:E:686:ASP:H	2.09	0.56
1:F:684:ASP:C	1:F:686:ASP:H	2.10	0.56
1:A:252:ASP:O	1:A:254:ARG:HD2	2.06	0.56
1:F:252:ASP:O	1:F:254:ARG:HD2	2.06	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:470:ASN:O	1:C:472:ARG:HG3	2.06	0.56
1:E:470:ASN:O	1:E:472:ARG:HG3	2.06	0.56
1:E:464:VAL:HG23	1:E:465:LEU:HD12	1.87	0.56
1:D:508:ILE:HG23	1:D:536:TYR:CD2	2.41	0.56
1:B:214:PHE:HB3	1:B:218:LEU:HB3	1.86	0.56
2:O:121:VAL:C	2:O:123:GLN:N	2.58	0.56
1:B:252:ASP:CG	1:B:253:HIS:H	2.10	0.56
1:C:184:LYS:HE3	1:C:191:GLU:HB2	1.88	0.56
1:F:137:PHE:C	1:F:137:PHE:CD2	2.79	0.56
2:R:49:GLN:HE21	2:R:49:GLN:H	1.51	0.56
1:C:324:THR:CB	1:C:499:PRO:HA	2.34	0.56
1:D:79:ILE:C	1:D:81:GLN:N	2.57	0.56
1:C:464:VAL:HG23	1:C:465:LEU:HD12	1.88	0.56
1:E:413:LEU:HB2	1:E:419:ILE:HG12	1.88	0.56
1:C:515:LYS:NZ	1:C:516:VAL:HG23	2.21	0.56
2:Q:121:VAL:C	2:Q:123:GLN:N	2.57	0.56
1:C:171:TYR:O	1:C:175:LYS:NZ	2.39	0.55
1:A:137:PHE:C	1:A:137:PHE:CD2	2.79	0.55
2:Q:55:VAL:CG2	2:Q:67:GLU:OE1	2.43	0.55
1:F:505:LYS:HD3	2:T:112:LEU:O	2.07	0.55
1:D:480:ASN:HD22	1:D:481:VAL:H	1.53	0.55
1:C:122:GLU:CD	1:C:122:GLU:H	2.09	0.55
1:A:629:ASN:HD22	1:A:630:ARG:N	2.02	0.55
2:S:117:THR:HG23	2:S:120:GLU:CB	2.31	0.55
1:A:450:ASN:ND2	1:A:452:GLU:CG	2.70	0.55
1:E:515:LYS:NZ	1:E:516:VAL:HG23	2.22	0.55
1:E:142:VAL:HG22	1:E:154:ILE:HD12	1.88	0.55
1:D:252:ASP:O	1:D:254:ARG:HD2	2.05	0.55
2:O:55:VAL:HG21	2:O:67:GLU:CD	2.27	0.55
2:O:51:MSE:HB3	2:O:71:MSE:HE2	1.86	0.55
2:Q:13:LYS:HZ1	2:Q:65:PHE:HB3	1.69	0.55
2:T:55:VAL:CG2	2:T:67:GLU:OE1	2.44	0.55
1:B:629:ASN:HD22	1:B:630:ARG:N	2.04	0.55
1:B:736:LEU:HD21	1:B:750:GLN:NE2	2.19	0.55
1:A:184:LYS:HE3	1:A:191:GLU:HB2	1.87	0.55
1:A:464:VAL:HG23	1:A:465:LEU:HD12	1.87	0.55
2:R:100:ILE:HB	2:R:136:VAL:HG23	1.88	0.55
1:D:360:VAL:HG11	1:D:370:LEU:HD22	1.88	0.55
2:S:59:GLY:O	2:S:62:THR:CG2	2.55	0.55
1:A:252:ASP:CG	1:A:253:HIS:H	2.09	0.55
1:C:234:LEU:HD23	1:C:235:THR:H	1.71	0.55
1:E:122:GLU:H	1:E:122:GLU:CD	2.09	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:80:GLN:HG3	1:D:80:GLN:O	2.06	0.55
1:F:80:GLN:HG3	1:F:80:GLN:O	2.06	0.55
1:F:517:VAL:HB	1:F:525:LYS:HZ1	1.70	0.55
2:P:102:ALA:CB	2:P:125:ILE:HG13	2.35	0.55
1:C:678:VAL:HG22	1:C:745:TYR:CE2	2.40	0.55
1:E:688:PHE:HD2	1:E:688:PHE:C	2.08	0.55
2:T:97:ASN:ND2	2:T:97:ASN:H	2.04	0.55
1:F:602:PHE:C	1:F:603:ILE:HG13	2.27	0.55
1:A:171:TYR:O	1:A:175:LYS:NZ	2.39	0.55
1:E:188:LEU:N	1:E:188:LEU:CD2	2.62	0.55
1:A:301:ALA:O	1:A:303:LYS:N	2.39	0.55
1:D:668:SER:CA	2:R:14:GLU:HG3	2.36	0.55
2:S:55:VAL:HG21	2:S:67:GLU:CD	2.26	0.55
1:F:122:GLU:CD	1:F:122:GLU:H	2.09	0.55
1:E:279:ILE:HD13	1:E:279:ILE:N	2.21	0.55
1:E:462:ILE:HG12	1:E:463:THR:H	1.72	0.55
1:D:326:ILE:HG22	1:D:328:PHE:CE1	2.41	0.55
1:F:123:GLU:HG2	1:F:124:GLU:N	2.22	0.55
1:E:234:LEU:HD23	1:E:235:THR:H	1.72	0.55
1:F:131:ARG:HG3	1:F:243:LEU:CD2	2.35	0.55
1:F:252:ASP:CG	1:F:253:HIS:H	2.10	0.55
2:O:13:LYS:HZ2	2:O:65:PHE:HB3	1.67	0.55
2:T:32:LEU:HG	2:T:36:MSE:HE2	1.89	0.55
1:D:112:VAL:O	1:D:114:HIS:N	2.38	0.55
2:Q:59:GLY:O	2:Q:62:THR:HG22	2.05	0.55
1:F:77:ASP:O	1:F:81:GLN:HB2	2.07	0.55
1:D:413:LEU:HB2	1:D:419:ILE:HG12	1.88	0.55
1:E:214:PHE:HB3	1:E:218:LEU:HB3	1.88	0.55
1:F:360:VAL:HG11	1:F:370:LEU:HD22	1.88	0.55
1:F:443:GLU:HG3	1:F:458:LYS:HG2	1.89	0.55
1:D:123:GLU:HG2	1:D:124:GLU:N	2.21	0.55
1:A:234:LEU:HD23	1:A:235:THR:H	1.72	0.55
1:D:137:PHE:CD2	1:D:137:PHE:C	2.80	0.55
2:S:32:LEU:HG	2:S:36:MSE:HE2	1.89	0.55
2:S:41:GLN:O	2:S:42:ASN:HB3	2.05	0.55
1:C:112:VAL:O	1:C:114:HIS:N	2.39	0.55
1:E:629:ASN:HD22	1:E:630:ARG:N	2.04	0.55
2:O:28:THR:CB	2:O:30:LYS:NZ	2.68	0.55
1:E:80:GLN:O	1:E:80:GLN:HG3	2.06	0.55
1:A:413:LEU:HB2	1:A:419:ILE:HG12	1.88	0.55
1:E:697:ILE:HG21	1:E:732:ILE:HD11	1.88	0.55
1:F:639:ASN:ND2	1:F:639:ASN:N	2.52	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:360:VAL:HG11	1:A:370:LEU:HD22	1.89	0.55
1:B:443:GLU:HG3	1:B:458:LYS:HG2	1.88	0.55
1:B:123:GLU:HG2	1:B:124:GLU:N	2.21	0.55
1:B:184:LYS:HE3	1:B:191:GLU:HB2	1.88	0.55
2:R:55:VAL:CG2	2:R:67:GLU:OE1	2.44	0.55
1:F:407:HIS:HB2	1:F:408:LEU:HD12	1.88	0.55
1:A:666:ASN:O	1:A:670:ILE:HG13	2.05	0.55
2:O:28:THR:CG2	2:O:30:LYS:HZ1	2.19	0.55
1:C:405:LEU:HD13	1:C:453:VAL:CG2	2.33	0.55
1:A:515:LYS:NZ	1:A:516:VAL:HG23	2.21	0.55
1:F:508:ILE:HG23	1:F:536:TYR:CD2	2.40	0.55
1:D:109:ILE:HD11	1:D:157:LYS:HZ2	1.72	0.55
1:A:443:GLU:HG3	1:A:458:LYS:HG2	1.89	0.55
1:E:443:GLU:HG3	1:E:458:LYS:HG2	1.88	0.55
1:A:123:GLU:HG2	1:A:124:GLU:N	2.22	0.55
1:B:171:TYR:O	1:B:175:LYS:NZ	2.39	0.55
1:B:252:ASP:O	1:B:254:ARG:HD2	2.06	0.55
1:E:173:ILE:HG13	1:E:242:SER:CB	2.37	0.55
1:F:296:LEU:H	1:F:296:LEU:CD2	1.91	0.55
1:B:666:ASN:O	1:B:670:ILE:HG13	2.06	0.55
1:A:470:ASN:O	1:A:472:ARG:HG3	2.06	0.55
1:D:74:GLU:HB2	1:D:78:LYS:CB	2.37	0.55
1:B:462:ILE:HG12	1:B:463:THR:H	1.72	0.55
2:S:94:LYS:HB3	2:S:94:LYS:HZ2	1.71	0.55
1:A:602:PHE:C	1:A:603:ILE:HG13	2.28	0.55
1:A:175:LYS:HZ2	1:A:175:LYS:HB2	1.72	0.55
1:F:154:ILE:HG13	1:F:171:TYR:HE1	1.62	0.55
1:A:668:SER:CA	2:O:14:GLU:HG3	2.36	0.55
1:A:505:LYS:HD3	2:O:112:LEU:O	2.07	0.55
1:E:668:SER:CA	2:S:14:GLU:HG3	2.36	0.55
2:Q:28:THR:CB	2:Q:30:LYS:NZ	2.70	0.55
1:B:470:ASN:O	1:B:472:ARG:HG3	2.06	0.55
1:D:184:LYS:HE3	1:D:191:GLU:HB2	1.89	0.55
1:D:77:ASP:O	1:D:81:GLN:HB2	2.07	0.55
1:F:462:ILE:HG12	1:F:463:THR:H	1.72	0.55
2:P:12:PHE:CE1	2:P:72:MSE:SE	3.10	0.55
1:B:77:ASP:O	1:B:81:GLN:HB2	2.07	0.55
1:C:446:ILE:HG13	1:C:451:ASN:O	2.07	0.55
1:A:697:ILE:HG21	1:A:732:ILE:HD11	1.89	0.55
1:D:443:GLU:HG3	1:D:458:LYS:HG2	1.88	0.55
1:C:443:GLU:HG3	1:C:458:LYS:HG2	1.88	0.55
1:B:326:ILE:HG22	1:B:328:PHE:CE1	2.42	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:93:VAL:CG2	1:D:179:LEU:HD11	2.35	0.55
1:C:131:ARG:HB3	1:C:170:TYR:OH	2.06	0.55
1:F:678:VAL:HG22	1:F:745:TYR:CE2	2.42	0.55
1:F:597:ASN:HD21	1:F:601:GLU:CB	2.08	0.55
1:A:122:GLU:CD	1:A:122:GLU:H	2.09	0.55
1:D:658:PRO:HD3	1:D:755:ARG:NH1	2.21	0.55
1:F:470:ASN:O	1:F:472:ARG:HG3	2.07	0.55
1:F:278:LYS:HB2	1:F:279:ILE:HD13	1.89	0.55
2:T:117:THR:OG1	2:T:119:GLU:HG2	2.07	0.55
1:E:77:ASP:O	1:E:81:GLN:HB2	2.07	0.55
1:F:697:ILE:CG2	1:F:732:ILE:HD11	2.36	0.55
1:D:515:LYS:NZ	1:D:516:VAL:HG23	2.22	0.55
1:F:326:ILE:HG22	1:F:328:PHE:CE1	2.42	0.55
1:E:123:GLU:HG2	1:E:124:GLU:N	2.22	0.55
1:E:602:PHE:C	1:E:603:ILE:HG13	2.27	0.55
1:A:254:ARG:HD2	1:A:254:ARG:H	1.72	0.54
2:P:49:GLN:H	2:P:49:GLN:HE21	1.52	0.54
1:D:122:GLU:CD	1:D:122:GLU:H	2.09	0.54
2:T:28:THR:CB	2:T:30:LYS:NZ	2.70	0.54
1:E:786:GLU:O	1:E:789:ASN:HB3	2.07	0.54
1:D:324:THR:CB	1:D:499:PRO:HA	2.36	0.54
1:C:77:ASP:O	1:C:81:GLN:HB2	2.07	0.54
1:B:464:VAL:HG23	1:B:465:LEU:HD12	1.88	0.54
1:B:450:ASN:ND2	1:B:452:GLU:CG	2.71	0.54
1:B:697:ILE:HG21	1:B:732:ILE:HD11	1.89	0.54
1:C:329:ARG:HD2	1:C:590:ASP:OD2	2.07	0.54
1:D:234:LEU:HD23	1:D:235:THR:H	1.72	0.54
1:C:137:PHE:CD2	1:C:137:PHE:C	2.79	0.54
1:E:505:LYS:HD3	2:S:112:LEU:O	2.07	0.54
1:D:786:GLU:O	1:D:789:ASN:HB3	2.08	0.54
1:A:462:ILE:HG12	1:A:463:THR:H	1.72	0.54
1:F:413:LEU:HB2	1:F:419:ILE:HG12	1.88	0.54
1:D:446:ILE:HG13	1:D:451:ASN:O	2.07	0.54
1:C:450:ASN:ND2	1:C:452:GLU:CG	2.71	0.54
1:D:697:ILE:HG21	1:D:732:ILE:HD11	1.90	0.54
1:C:684:ASP:C	1:C:686:ASP:H	2.10	0.54
1:B:188:LEU:CD2	1:B:188:LEU:N	2.62	0.54
1:E:407:HIS:HB2	1:E:408:LEU:HD12	1.88	0.54
1:F:629:ASN:HD22	1:F:630:ARG:N	2.04	0.54
1:A:446:ILE:HG13	1:A:451:ASN:O	2.07	0.54
1:F:515:LYS:NZ	1:F:516:VAL:HG23	2.23	0.54
1:B:123:GLU:O	1:B:146:LYS:NZ	2.40	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:131:ARG:HB3	1:F:170:TYR:OH	2.07	0.54
2:P:13:LYS:HZ1	2:P:65:PHE:HB3	1.69	0.54
1:A:678:VAL:HG22	1:A:745:TYR:CE2	2.42	0.54
2:O:32:LEU:HG	2:O:36:MSE:HE2	1.89	0.54
2:T:55:VAL:HG21	2:T:67:GLU:CD	2.27	0.54
1:C:407:HIS:HB2	1:C:408:LEU:HD12	1.89	0.54
1:D:112:VAL:HG12	1:D:113:GLU:N	2.09	0.54
1:F:464:VAL:HG23	1:F:465:LEU:HD12	1.88	0.54
1:C:76:LEU:HD22	1:C:76:LEU:N	2.22	0.54
1:B:80:GLN:O	1:B:80:GLN:HG3	2.07	0.54
1:E:217:LYS:HB3	1:E:217:LYS:NZ	2.23	0.54
1:C:666:ASN:O	1:C:670:ILE:HG13	2.07	0.54
1:E:678:VAL:HG22	1:E:745:TYR:CE2	2.42	0.54
1:D:666:ASN:O	1:D:670:ILE:HG13	2.06	0.54
2:S:97:ASN:HD22	2:S:97:ASN:H	1.56	0.54
1:F:230:ILE:HG13	1:F:237:PHE:CE2	2.43	0.54
1:C:424:LYS:HB3	1:C:424:LYS:HZ2	1.72	0.54
1:A:142:VAL:HG22	1:A:154:ILE:HD12	1.88	0.54
2:P:32:LEU:HG	2:P:36:MSE:HE2	1.90	0.54
1:A:794:GLN:NE2	1:A:795:LYS:N	2.56	0.54
1:F:786:GLU:O	1:F:789:ASN:HB3	2.08	0.54
1:A:335:ALA:O	1:A:339:ILE:HG13	2.07	0.54
1:F:666:ASN:O	1:F:670:ILE:HG13	2.08	0.54
1:F:350:VAL:HG12	1:F:352:GLY:H	1.73	0.54
1:C:123:GLU:HG2	1:C:124:GLU:N	2.21	0.54
2:O:129:ASP:OD2	2:O:140:GLU:OE2	2.26	0.54
1:B:678:VAL:HG22	1:B:745:TYR:CE2	2.42	0.54
2:O:49:GLN:HE21	2:O:49:GLN:H	1.52	0.54
1:A:786:GLU:O	1:A:789:ASN:HB3	2.08	0.54
1:B:786:GLU:O	1:B:789:ASN:HB3	2.08	0.54
1:A:279:ILE:HD13	1:A:279:ILE:N	2.20	0.54
2:R:110:THR:O	2:R:113:GLY:N	2.39	0.54
1:B:446:ILE:HG13	1:B:451:ASN:O	2.08	0.54
1:C:602:PHE:C	1:C:603:ILE:HG13	2.28	0.54
1:A:165:GLN:HE21	1:A:251:PRO:CG	2.20	0.54
1:C:165:GLN:HE21	1:C:251:PRO:CG	2.20	0.54
1:A:407:HIS:HB2	1:A:408:LEU:HD12	1.89	0.54
2:R:65:PHE:HB2	2:R:66:PRO:CD	2.36	0.54
2:O:65:PHE:HB2	2:O:66:PRO:CD	2.35	0.54
1:B:658:PRO:HD3	1:B:755:ARG:NH1	2.23	0.54
1:C:794:GLN:NE2	1:C:795:LYS:N	2.56	0.54
1:E:306:GLY:O	1:E:336:THR:HG23	2.07	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:74:GLU:HB2	1:F:78:LYS:CB	2.37	0.54
1:C:217:LYS:NZ	1:C:217:LYS:HB3	2.22	0.54
2:O:136:VAL:HG23	2:O:136:VAL:O	2.08	0.54
2:R:100:ILE:HB	2:R:136:VAL:HG22	1.87	0.54
2:Q:136:VAL:HG23	2:Q:136:VAL:O	2.08	0.54
1:C:515:LYS:HZ3	1:C:516:VAL:HG23	1.72	0.54
1:D:602:PHE:C	1:D:603:ILE:HG13	2.28	0.54
1:A:131:ARG:HB3	1:A:170:TYR:OH	2.08	0.54
1:C:142:VAL:HG22	1:C:154:ILE:HD12	1.89	0.54
1:B:407:HIS:HB2	1:B:408:LEU:HD12	1.89	0.54
1:C:275:GLY:HA2	1:C:278:LYS:CD	2.38	0.54
2:P:110:THR:O	2:P:113:GLY:N	2.37	0.54
1:A:413:LEU:N	1:A:413:LEU:HD23	2.23	0.54
1:C:697:ILE:HG21	1:C:732:ILE:HD11	1.90	0.54
1:F:196:ILE:HG23	1:F:199:LEU:HD12	1.90	0.54
1:F:254:ARG:HD2	1:F:254:ARG:H	1.73	0.54
1:B:134:LYS:HG2	1:B:136:PRO:HD3	1.90	0.54
2:Q:24:ASP:OD1	2:Q:25:GLY:N	2.40	0.54
2:T:110:THR:O	2:T:113:GLY:N	2.39	0.54
2:O:12:PHE:CE1	2:O:72:MSE:SE	3.11	0.54
1:D:217:LYS:HB3	1:D:217:LYS:NZ	2.23	0.54
1:D:515:LYS:HB3	1:D:515:LYS:HZ2	1.71	0.54
2:O:97:ASN:H	2:O:97:ASN:HD22	1.56	0.54
1:A:713:SER:O	1:A:717:LYS:HG3	2.08	0.54
1:A:350:VAL:HG12	1:A:352:GLY:H	1.73	0.54
1:C:709:ASN:HB2	2:Q:130:ILE:HG23	1.90	0.54
1:B:165:GLN:HE21	1:B:251:PRO:CG	2.20	0.54
1:F:165:GLN:HE21	1:F:251:PRO:CG	2.20	0.54
1:D:407:HIS:HB2	1:D:408:LEU:HD12	1.89	0.54
2:Q:55:VAL:HG21	2:Q:67:GLU:CD	2.26	0.54
2:O:58:ASP:OD2	2:O:58:ASP:N	2.41	0.54
1:D:403:LEU:HG	1:D:405:LEU:HD12	1.90	0.54
1:F:615:ILE:CD1	1:F:645:TRP:HH2	2.16	0.54
1:B:794:GLN:NE2	1:B:795:LYS:N	2.56	0.54
1:C:74:GLU:HB2	1:C:78:LYS:CB	2.37	0.54
2:T:100:ILE:HB	2:T:136:VAL:HG23	1.89	0.54
2:P:58:ASP:N	2:P:58:ASP:OD2	2.41	0.54
1:F:329:ARG:HD2	1:F:590:ASP:OD2	2.08	0.54
1:D:709:ASN:HB2	2:R:130:ILE:HG23	1.90	0.54
1:D:165:GLN:HE21	1:D:251:PRO:CG	2.20	0.53
1:F:180:ASP:O	1:F:183:SER:N	2.33	0.53
1:C:254:ARG:H	1:C:254:ARG:HD2	1.73	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:301:ALA:C	1:C:303:LYS:N	2.62	0.53
1:C:629:ASN:HD22	1:C:630:ARG:N	2.05	0.53
1:A:145:LYS:HB3	1:A:151:LYS:HB2	1.90	0.53
2:O:117:THR:OG1	2:O:119:GLU:HG2	2.08	0.53
1:E:74:GLU:HB2	1:E:78:LYS:CB	2.37	0.53
1:A:74:GLU:HB2	1:A:78:LYS:CB	2.38	0.53
1:A:77:ASP:O	1:A:81:GLN:HB2	2.07	0.53
1:B:109:ILE:HD11	1:B:157:LYS:HZ2	1.72	0.53
1:A:123:GLU:O	1:A:146:LYS:NZ	2.40	0.53
1:B:684:ASP:C	1:B:686:ASP:H	2.10	0.53
1:A:329:ARG:HD2	1:A:590:ASP:OD2	2.09	0.53
1:B:234:LEU:HD23	1:B:235:THR:H	1.71	0.53
1:A:173:ILE:HD12	1:A:243:LEU:CD2	2.38	0.53
1:F:176:GLY:O	1:F:180:ASP:OD1	2.26	0.53
1:C:176:GLY:O	1:C:180:ASP:OD1	2.27	0.53
1:C:137:PHE:O	1:C:139:SER:N	2.42	0.53
1:F:135:VAL:O	1:F:135:VAL:HG22	2.08	0.53
2:P:65:PHE:HB2	2:P:66:PRO:CD	2.35	0.53
2:Q:43:PRO:HG3	2:Q:48:LEU:HD13	1.91	0.53
1:B:112:VAL:HG12	1:B:113:GLU:N	2.10	0.53
2:P:28:THR:CB	2:P:30:LYS:NZ	2.70	0.53
1:E:794:GLN:NE2	1:E:795:LYS:N	2.56	0.53
2:S:117:THR:OG1	2:S:119:GLU:HG2	2.08	0.53
1:A:515:LYS:HZ3	1:A:516:VAL:N	2.06	0.53
1:F:109:ILE:HD11	1:F:157:LYS:HZ2	1.72	0.53
1:D:196:ILE:HG23	1:D:199:LEU:HD12	1.90	0.53
1:E:123:GLU:O	1:E:146:LYS:NZ	2.41	0.53
1:C:230:ILE:HG13	1:C:237:PHE:CE2	2.43	0.53
1:D:350:VAL:HG12	1:D:352:GLY:H	1.73	0.53
2:S:58:ASP:OD2	2:S:58:ASP:N	2.41	0.53
1:D:142:VAL:HG22	1:D:154:ILE:HD12	1.89	0.53
2:T:43:PRO:HG3	2:T:48:LEU:HD13	1.91	0.53
2:R:28:THR:CB	2:R:30:LYS:NZ	2.71	0.53
2:R:58:ASP:N	2:R:58:ASP:OD2	2.41	0.53
1:D:275:GLY:HA2	1:D:278:LYS:CG	2.38	0.53
1:E:275:GLY:HA2	1:E:278:LYS:CD	2.39	0.53
2:S:12:PHE:CE1	2:S:72:MSE:SE	3.11	0.53
2:O:110:THR:O	2:O:113:GLY:N	2.38	0.53
1:E:196:ILE:HG23	1:E:199:LEU:HD12	1.90	0.53
1:F:123:GLU:O	1:F:146:LYS:NZ	2.41	0.53
1:C:350:VAL:HG12	1:C:352:GLY:H	1.74	0.53
1:B:668:SER:CA	2:P:14:GLU:HG3	2.37	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:667:LEU:HB3	2:Q:14:GLU:OE2	2.08	0.53
2:P:28:THR:OG1	2:P:31:GLU:HB2	2.09	0.53
1:C:405:LEU:HD12	1:C:405:LEU:N	2.24	0.53
1:D:279:ILE:H	1:D:279:ILE:CD1	2.06	0.53
1:B:275:GLY:HA2	1:B:278:LYS:CG	2.39	0.53
1:B:275:GLY:HA2	1:B:278:LYS:CD	2.39	0.53
1:A:747:ASN:O	1:A:750:GLN:HB2	2.08	0.53
1:A:217:LYS:HB3	1:A:217:LYS:NZ	2.23	0.53
1:F:674:SER:OG	1:F:674:SER:O	2.16	0.53
1:C:196:ILE:HG23	1:C:199:LEU:HD12	1.89	0.53
2:P:129:ASP:OD2	2:P:140:GLU:OE2	2.27	0.53
1:E:326:ILE:HG22	1:E:328:PHE:CE1	2.43	0.53
1:A:684:ASP:C	1:A:686:ASP:H	2.10	0.53
1:D:176:GLY:O	1:D:180:ASP:OD1	2.25	0.53
1:F:142:VAL:HG22	1:F:154:ILE:HD12	1.91	0.53
1:F:93:VAL:CG2	1:F:179:LEU:HD11	2.35	0.53
1:E:137:PHE:O	1:E:139:SER:N	2.42	0.53
2:R:28:THR:OG1	2:R:31:GLU:HB2	2.08	0.53
1:B:271:LEU:HA	1:B:275:GLY:HA3	1.90	0.53
1:B:279:ILE:N	1:B:279:ILE:HD13	2.21	0.53
1:A:794:GLN:HE22	1:A:795:LYS:HG3	1.74	0.53
1:A:275:GLY:HA2	1:A:278:LYS:CD	2.38	0.53
2:P:9:ILE:CD1	2:P:69:LEU:HD11	2.37	0.53
1:B:413:LEU:HD23	1:B:413:LEU:N	2.24	0.53
1:E:450:ASN:ND2	1:E:452:GLU:CG	2.71	0.53
2:Q:100:ILE:HB	2:Q:136:VAL:HG23	1.90	0.53
1:E:109:ILE:HD13	1:E:157:LYS:HZ3	1.71	0.53
1:D:636:ALA:O	1:D:640:LYS:HA	2.08	0.53
1:D:123:GLU:O	1:D:146:LYS:NZ	2.41	0.53
1:C:123:GLU:O	1:C:146:LYS:NZ	2.42	0.53
1:B:230:ILE:HG13	1:B:237:PHE:CE2	2.43	0.53
1:B:602:PHE:C	1:B:603:ILE:HG13	2.28	0.53
1:A:561:ASN:HA	1:A:564:VAL:HG22	1.91	0.53
1:B:561:ASN:HA	1:B:564:VAL:HG22	1.91	0.53
1:B:254:ARG:HD2	1:B:254:ARG:H	1.73	0.53
1:A:137:PHE:O	1:A:139:SER:N	2.42	0.53
2:R:65:PHE:H	2:R:65:PHE:HD1	1.55	0.53
2:P:65:PHE:H	2:P:65:PHE:HD1	1.54	0.53
2:S:43:PRO:HG3	2:S:48:LEU:HD13	1.90	0.53
1:A:482:GLU:O	1:A:484:VAL:HG23	2.09	0.53
2:S:28:THR:HG21	2:S:30:LYS:HZ1	1.73	0.53
2:S:28:THR:CB	2:S:30:LYS:NZ	2.70	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:629:ASN:HD22	1:F:631:SER:N	1.98	0.53
1:B:306:GLY:O	1:B:336:THR:HG23	2.09	0.53
1:C:324:THR:HB	1:C:499:PRO:CA	2.37	0.53
1:F:794:GLN:NE2	1:F:795:LYS:N	2.57	0.53
1:E:747:ASN:O	1:E:750:GLN:HB2	2.09	0.53
2:Q:117:THR:OG1	2:Q:119:GLU:HG2	2.08	0.53
2:P:136:VAL:HG23	2:P:136:VAL:O	2.08	0.53
1:A:196:ILE:HG23	1:A:199:LEU:HD12	1.91	0.53
1:C:636:ALA:O	1:C:640:LYS:HA	2.08	0.53
2:R:97:ASN:H	2:R:97:ASN:HD22	1.57	0.53
1:D:684:ASP:C	1:D:686:ASP:H	2.11	0.53
1:D:301:ALA:C	1:D:303:LYS:N	2.62	0.53
2:R:43:PRO:HG3	2:R:48:LEU:HD13	1.90	0.53
2:Q:32:LEU:HG	2:Q:36:MSE:HE2	1.91	0.53
2:Q:65:PHE:HB2	2:Q:66:PRO:CD	2.35	0.53
2:Q:65:PHE:H	2:Q:65:PHE:HD1	1.55	0.53
1:C:403:LEU:HG	1:C:405:LEU:HD12	1.90	0.53
2:Q:58:ASP:N	2:Q:58:ASP:OD2	2.41	0.53
1:D:76:LEU:HD22	1:D:76:LEU:N	2.22	0.53
2:S:110:THR:O	2:S:113:GLY:N	2.39	0.53
1:F:747:ASN:O	1:F:750:GLN:HB2	2.09	0.53
1:F:76:LEU:HD22	1:F:76:LEU:N	2.22	0.53
1:B:335:ALA:O	1:B:339:ILE:HG13	2.09	0.53
2:T:58:ASP:OD2	2:T:58:ASP:N	2.41	0.53
2:R:136:VAL:O	2:R:136:VAL:HG23	2.08	0.53
1:F:697:ILE:HG21	1:F:732:ILE:HD11	1.90	0.53
1:D:515:LYS:HZ3	1:D:516:VAL:N	2.07	0.53
1:A:636:ALA:O	1:A:640:LYS:HA	2.09	0.53
1:F:636:ALA:O	1:F:640:LYS:HA	2.08	0.53
2:Q:97:ASN:HD22	2:Q:97:ASN:H	1.57	0.53
1:F:713:SER:O	1:F:717:LYS:HG3	2.08	0.53
1:B:176:GLY:O	1:B:180:ASP:OD1	2.26	0.53
1:A:671:ARG:HH12	1:A:677:GLY:HA3	1.72	0.53
1:E:658:PRO:HD3	1:E:755:ARG:NH1	2.24	0.53
1:E:794:GLN:HE22	1:E:795:LYS:HG3	1.73	0.53
1:C:327:LEU:HD12	1:C:327:LEU:N	2.24	0.53
1:F:499:PRO:HD3	1:F:552:TRP:CH2	2.44	0.53
1:A:403:LEU:HG	1:A:405:LEU:HD12	1.91	0.53
1:A:405:LEU:N	1:A:405:LEU:HD12	2.24	0.53
1:B:405:LEU:HD12	1:B:405:LEU:N	2.24	0.53
1:A:275:GLY:HA2	1:A:278:LYS:CG	2.38	0.53
1:D:306:GLY:O	1:D:336:THR:HG23	2.09	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:Q:9:ILE:HG23	2:Q:69:LEU:HD21	1.91	0.53
1:C:462:ILE:HG12	1:C:463:THR:H	1.72	0.53
1:A:109:ILE:HD11	1:A:157:LYS:HZ2	1.73	0.53
1:C:326:ILE:HG22	1:C:328:PHE:CE1	2.44	0.53
1:E:230:ILE:HG13	1:E:237:PHE:CE2	2.44	0.53
1:C:131:ARG:HG3	1:C:243:LEU:HD22	1.91	0.53
1:D:667:LEU:HB3	2:R:14:GLU:OE2	2.09	0.53
2:R:32:LEU:HG	2:R:36:MSE:HE2	1.90	0.53
1:B:403:LEU:HG	1:B:405:LEU:HD12	1.90	0.53
1:A:197:LYS:HZ3	1:A:197:LYS:C	2.12	0.53
2:O:56:ASP:OD2	2:O:60:ASN:C	2.46	0.53
1:D:335:ALA:O	1:D:339:ILE:HG13	2.08	0.53
1:C:671:ARG:HH12	1:C:677:GLY:HA3	1.73	0.53
1:C:360:VAL:HG11	1:C:370:LEU:HD22	1.89	0.53
1:B:636:ALA:O	1:B:640:LYS:HA	2.08	0.53
1:A:709:ASN:HB2	2:O:130:ILE:HG23	1.90	0.53
2:S:129:ASP:OD2	2:S:140:GLU:OE2	2.27	0.53
1:F:173:ILE:HD12	1:F:243:LEU:CD2	2.39	0.53
1:E:134:LYS:HG2	1:E:136:PRO:HD3	1.91	0.53
2:O:43:PRO:HG3	2:O:48:LEU:HD13	1.90	0.53
2:O:65:PHE:H	2:O:65:PHE:HD1	1.56	0.53
1:A:501:LEU:HD22	2:O:112:LEU:CD2	2.26	0.53
1:C:505:LYS:HD3	2:Q:112:LEU:O	2.09	0.53
1:C:629:ASN:HD22	1:C:631:SER:N	1.98	0.53
1:F:275:GLY:HA2	1:F:278:LYS:CG	2.39	0.53
1:A:795:LYS:HA	1:A:798:ASP:OD2	2.09	0.53
1:B:794:GLN:HE22	1:B:795:LYS:HG3	1.74	0.53
2:Q:12:PHE:CE1	2:Q:72:MSE:SE	3.12	0.53
2:T:12:PHE:CE1	2:T:72:MSE:SE	3.12	0.53
1:E:76:LEU:HD22	1:E:76:LEU:N	2.21	0.53
1:C:79:ILE:C	1:C:81:GLN:N	2.57	0.53
1:C:413:LEU:HD23	1:C:413:LEU:N	2.24	0.53
1:F:446:ILE:HG13	1:F:451:ASN:O	2.07	0.53
1:D:218:LEU:HD21	1:D:225:ILE:CD1	2.39	0.53
1:A:230:ILE:HG13	1:A:237:PHE:CE2	2.43	0.53
1:D:230:ILE:HG13	1:D:237:PHE:CE2	2.43	0.53
2:P:70:THR:HG22	2:P:70:THR:O	2.08	0.53
1:E:176:GLY:O	1:E:180:ASP:OD1	2.26	0.52
1:C:173:ILE:HG23	1:C:174:GLY:H	1.74	0.52
2:O:28:THR:OG1	2:O:31:GLU:HB2	2.08	0.52
1:D:629:ASN:HD22	1:D:630:ARG:N	2.06	0.52
1:A:630:ARG:HG3	1:A:630:ARG:NH1	2.24	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:279:ILE:C	1:D:281:GLU:H	2.12	0.52
1:E:308:VAL:O	1:E:311:HIS:HB2	2.10	0.52
2:S:136:VAL:HG23	2:S:136:VAL:O	2.08	0.52
2:O:100:ILE:HB	2:O:136:VAL:HG23	1.91	0.52
1:B:515:LYS:HZ3	1:B:516:VAL:N	2.07	0.52
2:T:94:LYS:HB3	2:T:94:LYS:HZ2	1.74	0.52
1:D:561:ASN:HA	1:D:564:VAL:HG22	1.91	0.52
1:B:350:VAL:HG12	1:B:352:GLY:H	1.73	0.52
1:A:558:ASP:O	1:A:560:LEU:N	2.43	0.52
1:B:558:ASP:O	1:B:560:LEU:N	2.42	0.52
1:E:131:ARG:HG3	1:E:243:LEU:HD22	1.90	0.52
1:D:172:GLU:CB	1:D:246:SER:HA	2.39	0.52
1:B:137:PHE:O	1:B:139:SER:N	2.42	0.52
2:T:52:ILE:HG23	2:T:53:ASN:H	1.74	0.52
2:T:65:PHE:H	2:T:65:PHE:HD1	1.55	0.52
2:T:64:ASP:OD2	2:T:67:GLU:HG3	2.09	0.52
1:F:482:GLU:O	1:F:484:VAL:HG23	2.09	0.52
2:S:28:THR:OG1	2:S:31:GLU:HB2	2.08	0.52
1:D:629:ASN:HD22	1:D:631:SER:N	1.96	0.52
1:E:254:ARG:HD2	1:E:254:ARG:H	1.73	0.52
1:B:499:PRO:HD3	1:B:552:TRP:CH2	2.44	0.52
1:A:306:GLY:O	1:A:336:THR:HG23	2.09	0.52
1:E:279:ILE:C	1:E:281:GLU:H	2.12	0.52
1:C:275:GLY:HA2	1:C:278:LYS:CG	2.39	0.52
1:B:279:ILE:C	1:B:281:GLU:H	2.12	0.52
1:C:786:GLU:O	1:C:789:ASN:HB3	2.08	0.52
2:P:117:THR:OG1	2:P:119:GLU:HG2	2.08	0.52
2:O:9:ILE:CD1	2:O:69:LEU:HD11	2.38	0.52
1:A:76:LEU:N	1:A:76:LEU:HD22	2.22	0.52
2:P:56:ASP:OD2	2:P:60:ASN:C	2.48	0.52
2:T:121:VAL:C	2:T:123:GLN:N	2.58	0.52
1:B:329:ARG:HD2	1:B:590:ASP:OD2	2.09	0.52
2:T:70:THR:O	2:T:70:THR:HG22	2.08	0.52
1:C:558:ASP:O	1:C:560:LEU:N	2.42	0.52
1:E:131:ARG:HB3	1:E:170:TYR:OH	2.09	0.52
1:D:254:ARG:HD2	1:D:254:ARG:H	1.74	0.52
1:F:173:ILE:HG23	1:F:174:GLY:H	1.75	0.52
1:A:134:LYS:HG2	1:A:136:PRO:HD3	1.91	0.52
1:B:671:ARG:HH12	1:B:677:GLY:HA3	1.73	0.52
1:D:597:ASN:HD21	1:D:601:GLU:CB	2.08	0.52
2:T:28:THR:OG1	2:T:31:GLU:HB2	2.09	0.52
1:F:405:LEU:HD12	1:F:405:LEU:N	2.24	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:278:LYS:HB2	1:D:279:ILE:HD13	1.92	0.52
1:E:271:LEU:HA	1:E:275:GLY:HA3	1.90	0.52
1:F:279:ILE:C	1:F:281:GLU:H	2.12	0.52
1:A:278:LYS:HB2	1:A:279:ILE:HD13	1.91	0.52
1:B:74:GLU:HB2	1:B:78:LYS:CB	2.38	0.52
1:F:335:ALA:O	1:F:339:ILE:HG13	2.08	0.52
2:Q:94:LYS:HB3	2:Q:94:LYS:HZ2	1.74	0.52
1:D:678:VAL:HG22	1:D:745:TYR:HE2	1.74	0.52
1:D:329:ARG:HD2	1:D:590:ASP:OD2	2.10	0.52
2:R:129:ASP:OD2	2:R:140:GLU:OE2	2.28	0.52
1:D:137:PHE:O	1:D:139:SER:N	2.42	0.52
1:D:482:GLU:O	1:D:484:VAL:HG23	2.10	0.52
1:C:658:PRO:HD3	1:C:755:ARG:NH1	2.24	0.52
1:E:165:GLN:HE21	1:E:251:PRO:CG	2.21	0.52
1:F:403:LEU:HG	1:F:405:LEU:HD12	1.90	0.52
1:B:504:ILE:HD12	1:B:504:ILE:N	2.25	0.52
1:C:278:LYS:HB2	1:C:279:ILE:HD13	1.92	0.52
1:C:499:PRO:HD3	1:C:552:TRP:CH2	2.44	0.52
1:D:794:GLN:NE2	1:D:795:LYS:N	2.57	0.52
1:C:795:LYS:HA	1:C:798:ASP:OD2	2.09	0.52
1:D:324:THR:HB	1:D:499:PRO:CA	2.39	0.52
1:D:747:ASN:O	1:D:750:GLN:HB2	2.09	0.52
1:E:446:ILE:HG13	1:E:451:ASN:O	2.08	0.52
1:B:515:LYS:NZ	1:B:516:VAL:CG2	2.72	0.52
2:T:129:ASP:OD2	2:T:140:GLU:OE2	2.27	0.52
1:E:561:ASN:HA	1:E:564:VAL:HG22	1.91	0.52
1:A:176:GLY:O	1:A:180:ASP:OD1	2.27	0.52
1:D:165:GLN:NE2	1:D:251:PRO:HG2	2.23	0.52
1:C:93:VAL:CG2	1:C:179:LEU:HD11	2.37	0.52
1:D:505:LYS:HD3	2:R:112:LEU:O	2.08	0.52
2:P:31:GLU:O	2:P:35:VAL:HG23	2.10	0.52
1:D:271:LEU:HA	1:D:275:GLY:HA3	1.91	0.52
1:D:275:GLY:HA2	1:D:278:LYS:CD	2.38	0.52
1:F:275:GLY:HA2	1:F:278:LYS:CD	2.39	0.52
1:F:795:LYS:HA	1:F:798:ASP:OD2	2.10	0.52
1:D:794:GLN:HE22	1:D:795:LYS:HG3	1.75	0.52
2:R:9:ILE:HG23	2:R:69:LEU:HD21	1.91	0.52
1:D:462:ILE:HG12	1:D:463:THR:H	1.72	0.52
1:B:217:LYS:HB3	1:B:217:LYS:NZ	2.24	0.52
1:C:335:ALA:O	1:C:339:ILE:HG13	2.08	0.52
1:F:217:LYS:NZ	1:F:217:LYS:HB3	2.23	0.52
1:E:413:LEU:N	1:E:413:LEU:HD23	2.24	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:S:100:ILE:HB	2:S:136:VAL:HG23	1.90	0.52
1:A:529:VAL:HG21	2:O:109:MSE:HE1	1.91	0.52
1:F:515:LYS:HZ3	1:F:516:VAL:N	2.08	0.52
1:E:121:SER:O	1:E:123:GLU:OE2	2.28	0.52
2:Q:70:THR:HG22	2:Q:70:THR:O	2.09	0.52
2:R:70:THR:HG22	2:R:70:THR:O	2.08	0.52
1:E:180:ASP:O	1:E:183:SER:N	2.33	0.52
1:E:173:ILE:HD12	1:E:243:LEU:CD2	2.40	0.52
2:S:24:ASP:OD1	2:S:25:GLY:N	2.41	0.52
1:E:112:VAL:O	1:E:114:HIS:N	2.37	0.52
2:R:31:GLU:O	2:R:35:VAL:HG23	2.10	0.52
1:E:278:LYS:HB2	1:E:279:ILE:HD13	1.91	0.52
1:F:306:GLY:O	1:F:336:THR:HG23	2.09	0.52
1:D:499:PRO:HD3	1:D:552:TRP:CH2	2.44	0.52
1:C:747:ASN:O	1:C:750:GLN:HB2	2.09	0.52
1:E:515:LYS:HZ3	1:E:516:VAL:N	2.08	0.52
1:B:121:SER:O	1:B:123:GLU:OE2	2.28	0.52
1:F:709:ASN:HB2	2:T:130:ILE:HG23	1.91	0.52
1:B:709:ASN:HB2	2:P:130:ILE:HG23	1.90	0.52
1:E:713:SER:O	1:E:717:LYS:HG3	2.09	0.52
1:D:145:LYS:HB3	1:D:151:LYS:HB2	1.91	0.52
2:O:70:THR:O	2:O:70:THR:HG22	2.08	0.52
1:B:142:VAL:HG22	1:B:154:ILE:HD12	1.90	0.52
1:D:173:ILE:HD12	1:D:243:LEU:CD2	2.39	0.52
1:F:301:ALA:C	1:F:303:LYS:N	2.62	0.52
2:O:13:LYS:HZ1	2:O:65:PHE:HB3	1.68	0.52
1:E:597:ASN:OD1	1:E:599:GLU:HB2	2.10	0.52
2:S:64:ASP:OD2	2:S:67:GLU:HG3	2.10	0.52
1:F:667:LEU:HB3	2:T:14:GLU:OE2	2.09	0.52
1:D:615:ILE:CD1	1:D:645:TRP:HH2	2.16	0.52
1:A:499:PRO:HD3	1:A:552:TRP:CH2	2.44	0.52
1:B:795:LYS:HA	1:B:798:ASP:OD2	2.10	0.52
2:R:12:PHE:CE1	2:R:72:MSE:SE	3.13	0.52
2:R:9:ILE:CD1	2:R:69:LEU:HD11	2.38	0.52
2:T:9:ILE:HG23	2:T:69:LEU:HD21	1.92	0.52
1:B:747:ASN:O	1:B:750:GLN:HB2	2.09	0.52
2:O:9:ILE:HG23	2:O:69:LEU:HD21	1.92	0.52
1:C:109:ILE:CD1	1:C:157:LYS:HZ2	2.23	0.52
1:C:218:LEU:HD21	1:C:225:ILE:CD1	2.40	0.52
1:B:517:VAL:O	1:B:525:LYS:NZ	2.43	0.52
1:F:531:ASN:HA	1:F:534:ILE:HD12	1.92	0.52
1:E:671:ARG:HH12	1:E:677:GLY:HA3	1.72	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:558:ASP:O	1:D:560:LEU:N	2.42	0.52
1:E:558:ASP:O	1:E:560:LEU:N	2.43	0.52
1:B:238:GLN:C	1:B:240:ALA:N	2.63	0.52
1:E:175:LYS:HZ3	1:E:175:LYS:CB	2.22	0.52
1:E:172:GLU:CB	1:E:246:SER:HA	2.40	0.52
1:C:197:LYS:HD3	1:C:263:ASP:OD1	2.10	0.52
1:E:301:ALA:C	1:E:303:LYS:H	2.14	0.52
1:A:301:ALA:C	1:A:303:LYS:N	2.62	0.52
2:O:24:ASP:OD1	2:O:25:GLY:N	2.42	0.52
2:S:65:PHE:HB2	2:S:66:PRO:CD	2.35	0.52
1:A:658:PRO:HD3	1:A:755:ARG:NH1	2.25	0.52
1:D:405:LEU:N	1:D:405:LEU:HD12	2.24	0.52
1:C:306:GLY:O	1:C:336:THR:HG23	2.09	0.52
1:D:795:LYS:HA	1:D:798:ASP:OD2	2.09	0.52
1:E:504:ILE:HD12	1:E:504:ILE:N	2.25	0.52
1:D:197:LYS:HD3	1:D:263:ASP:OD1	2.10	0.52
2:S:110:THR:HG22	2:S:114:GLU:O	2.10	0.52
1:E:218:LEU:HD21	1:E:225:ILE:CD1	2.40	0.52
1:E:517:VAL:O	1:E:525:LYS:NZ	2.43	0.52
1:B:713:SER:O	1:B:717:LYS:HG3	2.09	0.52
1:E:350:VAL:HG12	1:E:352:GLY:H	1.74	0.52
1:F:558:ASP:O	1:F:560:LEU:N	2.43	0.52
1:B:131:ARG:HB3	1:B:170:TYR:OH	2.09	0.52
1:B:180:ASP:C	1:B:182:ILE:H	2.13	0.52
1:A:131:ARG:HG3	1:A:243:LEU:HD22	1.92	0.52
1:A:169:VAL:CG2	1:A:246:SER:HB2	2.40	0.52
1:D:131:ARG:HG3	1:D:243:LEU:HD22	1.92	0.52
1:F:197:LYS:NZ	1:F:197:LYS:HB3	2.25	0.52
1:F:197:LYS:HD3	1:F:263:ASP:OD1	2.09	0.52
1:F:165:GLN:NE2	1:F:251:PRO:HG2	2.23	0.52
2:O:64:ASP:OD2	2:O:67:GLU:HG3	2.09	0.52
2:Q:64:ASP:OD2	2:Q:67:GLU:HG3	2.09	0.52
1:E:795:LYS:HA	1:E:798:ASP:OD2	2.09	0.52
1:B:405:LEU:HD13	1:B:453:VAL:CG2	2.34	0.52
1:E:499:PRO:HD3	1:E:552:TRP:CH2	2.45	0.52
1:E:109:ILE:HD11	1:E:157:LYS:HZ2	1.73	0.52
1:B:531:ASN:HA	1:B:534:ILE:HD12	1.92	0.52
1:C:678:VAL:HG22	1:C:745:TYR:HE2	1.74	0.52
1:E:709:ASN:HB2	2:S:130:ILE:HG23	1.91	0.52
1:B:424:LYS:HB3	1:B:424:LYS:HZ2	1.75	0.52
1:B:173:ILE:HG23	1:B:174:GLY:H	1.74	0.52
1:B:169:VAL:CG2	1:B:246:SER:HB2	2.40	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:173:ILE:HG23	1:A:174:GLY:H	1.74	0.52
1:C:165:GLN:NE2	1:C:251:PRO:HG2	2.24	0.52
1:A:135:VAL:O	1:A:135:VAL:HG22	2.10	0.52
1:D:301:ALA:C	1:D:303:LYS:H	2.14	0.52
2:S:52:ILE:HG23	2:S:53:ASN:H	1.74	0.52
2:Q:31:GLU:O	2:Q:35:VAL:HG23	2.09	0.52
1:E:629:ASN:HD22	1:E:631:SER:N	1.98	0.52
1:A:504:ILE:N	1:A:504:ILE:HD12	2.25	0.52
1:E:288:VAL:CG2	1:E:289:GLU:H	2.20	0.52
1:F:288:VAL:CG2	1:F:289:GLU:H	2.20	0.52
1:A:271:LEU:HA	1:A:275:GLY:HA3	1.91	0.52
2:S:9:ILE:HG23	2:S:69:LEU:HD21	1.92	0.52
2:R:117:THR:OG1	2:R:119:GLU:HG2	2.10	0.52
1:B:76:LEU:HD22	1:B:76:LEU:N	2.21	0.52
1:C:217:LYS:HB2	1:C:236:GLU:HG3	1.92	0.52
1:A:218:LEU:HD21	1:A:225:ILE:CD1	2.40	0.52
1:F:121:SER:O	1:F:123:GLU:OE2	2.28	0.52
1:E:180:ASP:C	1:E:182:ILE:H	2.14	0.51
1:D:173:ILE:HG13	1:D:242:SER:CB	2.37	0.51
1:F:170:TYR:HA	1:F:173:ILE:HG22	1.92	0.51
1:C:238:GLN:C	1:C:240:ALA:N	2.63	0.51
1:F:137:PHE:O	1:F:139:SER:N	2.42	0.51
2:O:52:ILE:HG23	2:O:53:ASN:H	1.74	0.51
2:Q:66:PRO:C	2:Q:68:PHE:N	2.63	0.51
2:T:66:PRO:C	2:T:68:PHE:N	2.64	0.51
2:Q:28:THR:OG1	2:Q:31:GLU:HB2	2.09	0.51
1:F:658:PRO:HD3	1:F:755:ARG:NH1	2.24	0.51
2:O:31:GLU:O	2:O:35:VAL:HG23	2.10	0.51
1:E:403:LEU:HG	1:E:405:LEU:HD12	1.91	0.51
1:F:405:LEU:HD13	1:F:453:VAL:CG2	2.34	0.51
1:C:271:LEU:HA	1:C:275:GLY:HA3	1.91	0.51
1:D:413:LEU:HD23	1:D:413:LEU:N	2.24	0.51
1:C:561:ASN:HA	1:C:564:VAL:HG22	1.91	0.51
1:A:170:TYR:HA	1:A:173:ILE:HG22	1.92	0.51
1:A:173:ILE:HG13	1:A:242:SER:CB	2.37	0.51
1:E:170:TYR:HA	1:E:173:ILE:HG22	1.93	0.51
1:E:187:SER:C	1:E:188:LEU:O	2.44	0.51
1:C:172:GLU:CB	1:C:246:SER:HA	2.40	0.51
2:R:52:ILE:HG23	2:R:53:ASN:H	1.74	0.51
1:A:597:ASN:OD1	1:A:599:GLU:HB2	2.10	0.51
1:B:667:LEU:HB3	2:P:14:GLU:OE2	2.10	0.51
1:E:112:VAL:CG1	1:E:113:GLU:H	2.07	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:T:31:GLU:O	2:T:35:VAL:HG23	2.10	0.51
1:A:279:ILE:C	1:A:281:GLU:H	2.12	0.51
1:F:78:LYS:HG3	1:F:79:ILE:N	2.26	0.51
1:F:413:LEU:HD23	1:F:413:LEU:N	2.24	0.51
1:C:95:GLU:O	1:C:99:GLU:HB2	2.10	0.51
2:Q:129:ASP:OD2	2:Q:140:GLU:OE2	2.28	0.51
1:B:170:TYR:HA	1:B:173:ILE:HG22	1.92	0.51
1:B:173:ILE:HG23	1:B:174:GLY:N	2.25	0.51
1:B:165:GLN:NE2	1:B:252:ASP:HB3	2.26	0.51
1:B:197:LYS:HD3	1:B:263:ASP:OD1	2.09	0.51
1:C:134:LYS:HG2	1:C:136:PRO:HD3	1.91	0.51
2:P:64:ASP:OD2	2:P:67:GLU:HG3	2.09	0.51
2:S:37:ARG:HA	2:S:41:GLN:O	2.10	0.51
2:T:65:PHE:HB2	2:T:66:PRO:CD	2.35	0.51
2:S:31:GLU:O	2:S:35:VAL:HG23	2.10	0.51
1:E:405:LEU:HD12	1:E:405:LEU:N	2.24	0.51
1:F:308:VAL:O	1:F:311:HIS:HB2	2.11	0.51
1:B:288:VAL:CG2	1:B:289:GLU:H	2.20	0.51
1:C:794:GLN:HE22	1:C:795:LYS:HG3	1.75	0.51
1:A:515:LYS:NZ	1:A:516:VAL:CG2	2.74	0.51
1:C:515:LYS:HZ3	1:C:516:VAL:N	2.09	0.51
1:B:513:TRP:CZ3	1:B:517:VAL:HG11	2.46	0.51
1:B:218:LEU:HD21	1:B:225:ILE:CD1	2.41	0.51
1:E:636:ALA:O	1:E:640:LYS:HA	2.09	0.51
2:P:97:ASN:HD22	2:P:97:ASN:H	1.58	0.51
1:F:145:LYS:HB3	1:F:151:LYS:HB2	1.92	0.51
1:D:238:GLN:C	1:D:240:ALA:N	2.63	0.51
1:E:135:VAL:HG22	1:E:135:VAL:O	2.11	0.51
1:D:135:VAL:HG22	1:D:135:VAL:O	2.11	0.51
1:F:671:ARG:HH12	1:F:677:GLY:HA3	1.74	0.51
1:B:483:GLY:O	1:B:484:VAL:HG22	2.10	0.51
1:D:630:ARG:CZ	2:R:83:GLU:CG	2.87	0.51
1:E:165:GLN:NE2	1:E:252:ASP:HB3	2.25	0.51
1:B:308:VAL:O	1:B:311:HIS:HB2	2.10	0.51
1:A:197:LYS:HD3	1:A:263:ASP:OD1	2.10	0.51
2:P:9:ILE:HG23	2:P:69:LEU:HD21	1.92	0.51
1:F:71:PHE:O	1:F:78:LYS:NZ	2.43	0.51
1:C:515:LYS:NZ	1:C:516:VAL:CG2	2.74	0.51
1:C:724:ARG:O	1:C:727:GLN:HB2	2.10	0.51
1:A:517:VAL:O	1:A:525:LYS:NZ	2.44	0.51
1:B:196:ILE:HG23	1:B:199:LEU:HD12	1.91	0.51
1:B:145:LYS:HB3	1:B:151:LYS:HB2	1.92	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:145:LYS:HB3	1:C:151:LYS:HB2	1.91	0.51
1:E:329:ARG:HD2	1:E:590:ASP:OD2	2.10	0.51
2:S:70:THR:O	2:S:70:THR:HG22	2.09	0.51
1:C:173:ILE:HD12	1:C:243:LEU:CD2	2.40	0.51
2:P:43:PRO:HG3	2:P:48:LEU:HD13	1.91	0.51
1:D:597:ASN:OD1	1:D:599:GLU:HB2	2.10	0.51
1:F:597:ASN:OD1	1:F:599:GLU:HB2	2.11	0.51
1:E:165:GLN:NE2	1:E:251:PRO:HG2	2.24	0.51
1:C:308:VAL:O	1:C:311:HIS:HB2	2.10	0.51
1:F:324:THR:HB	1:F:499:PRO:CA	2.39	0.51
1:D:107:THR:HG21	1:D:115:LYS:CD	2.37	0.51
2:S:9:ILE:CD1	2:S:69:LEU:HD11	2.38	0.51
1:B:387:ASN:O	1:B:390:SER:HB2	2.10	0.51
2:O:110:THR:HG22	2:O:114:GLU:O	2.11	0.51
1:C:121:SER:O	1:C:123:GLU:OE2	2.28	0.51
2:S:56:ASP:OD2	2:S:60:ASN:C	2.49	0.51
1:A:165:GLN:NE2	1:A:252:ASP:HB3	2.26	0.51
1:E:173:ILE:HG23	1:E:174:GLY:H	1.75	0.51
1:E:169:VAL:CG2	1:E:246:SER:HB2	2.40	0.51
1:D:170:TYR:HA	1:D:173:ILE:HG22	1.93	0.51
1:F:173:ILE:HG23	1:F:174:GLY:N	2.26	0.51
1:C:135:VAL:HG22	1:C:135:VAL:O	2.10	0.51
2:S:65:PHE:HD1	2:S:65:PHE:H	1.56	0.51
1:F:483:GLY:O	1:F:484:VAL:HG22	2.11	0.51
1:C:482:GLU:O	1:C:484:VAL:HG23	2.11	0.51
1:D:662:GLU:OE2	1:D:755:ARG:NH2	2.38	0.51
1:E:165:GLN:C	1:E:167:LYS:H	2.14	0.51
1:A:629:ASN:C	1:A:629:ASN:ND2	2.62	0.51
1:E:275:GLY:HA2	1:E:278:LYS:CG	2.39	0.51
1:E:156:ILE:N	1:E:156:ILE:HD12	2.26	0.51
1:F:497:LEU:CD1	1:F:556:MET:HG2	2.40	0.51
1:C:531:ASN:HA	1:C:534:ILE:HD12	1.92	0.51
1:D:214:PHE:CD1	1:D:218:LEU:HD23	2.46	0.51
1:F:517:VAL:O	1:F:525:LYS:NZ	2.44	0.51
1:E:513:TRP:CZ3	1:E:517:VAL:HG11	2.46	0.51
1:D:713:SER:O	1:D:717:LYS:HG3	2.10	0.51
1:C:189:ASP:C	1:C:191:GLU:N	2.64	0.51
1:F:134:LYS:HG2	1:F:136:PRO:HD3	1.92	0.51
1:B:301:ALA:C	1:B:303:LYS:N	2.63	0.51
2:R:64:ASP:OD2	2:R:67:GLU:HG3	2.09	0.51
2:S:13:LYS:HZ1	2:S:65:PHE:HB3	1.69	0.51
1:B:629:ASN:ND2	1:B:629:ASN:C	2.63	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:630:ARG:HG3	1:B:630:ARG:NH1	2.26	0.51
1:B:324:THR:HB	1:B:499:PRO:CA	2.37	0.51
1:C:244:ALA:HB3	1:C:268:MET:HE3	1.93	0.51
1:C:279:ILE:C	1:C:281:GLU:H	2.13	0.51
1:B:278:LYS:HB2	1:B:279:ILE:HD13	1.92	0.51
1:E:324:THR:HB	1:E:499:PRO:CA	2.39	0.51
1:D:197:LYS:NZ	1:D:197:LYS:HB3	2.25	0.51
2:Q:110:THR:HG22	2:Q:114:GLU:O	2.11	0.51
1:F:338:LEU:HD21	1:F:409:ARG:CZ	2.41	0.51
1:F:529:VAL:HG21	2:T:109:MSE:HE1	1.92	0.51
1:F:131:ARG:HG3	1:F:243:LEU:HD22	1.93	0.51
1:E:667:LEU:HB3	2:S:14:GLU:OE2	2.10	0.51
2:S:66:PRO:C	2:S:68:PHE:N	2.64	0.51
1:C:288:VAL:CG2	1:C:289:GLU:H	2.20	0.51
1:A:797:ILE:HG13	1:A:797:ILE:O	2.11	0.51
1:D:504:ILE:HD12	1:D:504:ILE:N	2.25	0.51
1:E:387:ASN:O	1:E:390:SER:HB2	2.10	0.51
1:D:387:ASN:O	1:D:390:SER:HB2	2.11	0.51
1:D:741:ILE:O	1:D:742:ALA:C	2.49	0.51
1:B:95:GLU:O	1:B:99:GLU:HB2	2.11	0.51
1:B:197:LYS:HZ3	1:B:197:LYS:C	2.14	0.51
1:A:173:ILE:HG23	1:A:174:GLY:N	2.25	0.51
1:A:238:GLN:C	1:A:240:ALA:N	2.63	0.51
1:D:165:GLN:NE2	1:D:252:ASP:HB3	2.26	0.51
1:F:180:ASP:C	1:F:182:ILE:H	2.14	0.51
2:R:55:VAL:HG21	2:R:67:GLU:CD	2.27	0.51
1:E:482:GLU:O	1:E:484:VAL:HG23	2.10	0.51
1:C:408:LEU:HD12	1:C:408:LEU:N	2.03	0.51
1:F:715:GLU:OE1	1:F:767:GLN:NE2	2.44	0.51
1:F:327:LEU:N	1:F:327:LEU:HD12	2.26	0.51
1:E:615:ILE:CD1	1:E:645:TRP:HH2	2.17	0.51
1:A:318:ILE:N	1:A:318:ILE:HD12	2.24	0.51
1:F:271:LEU:HA	1:F:275:GLY:HA3	1.92	0.51
1:C:797:ILE:HG13	1:C:797:ILE:O	2.11	0.51
1:C:107:THR:HG21	1:C:115:LYS:CD	2.37	0.51
2:T:136:VAL:HG23	2:T:136:VAL:O	2.10	0.51
1:F:513:TRP:CZ3	1:F:517:VAL:HG11	2.46	0.51
1:F:214:PHE:CD1	1:F:218:LEU:HD23	2.46	0.51
1:A:710:HIS:C	1:A:712:PHE:H	2.13	0.51
1:D:710:HIS:C	1:D:712:PHE:H	2.14	0.51
2:Q:37:ARG:HA	2:Q:41:GLN:O	2.11	0.51
1:F:561:ASN:HA	1:F:564:VAL:HG22	1.92	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:173:ILE:HG23	1:E:174:GLY:N	2.26	0.51
1:D:97:TYR:HE1	1:D:178:SER:CB	2.24	0.51
1:C:170:TYR:HA	1:C:173:ILE:HG22	1.93	0.51
1:B:482:GLU:O	1:B:484:VAL:HG23	2.10	0.51
1:B:630:ARG:CZ	2:P:83:GLU:CG	2.87	0.51
1:E:376:GLN:HB3	1:E:379:ALA:HB3	1.94	0.51
1:F:794:GLN:HE22	1:F:795:LYS:HG3	1.75	0.51
2:T:110:THR:HG22	2:T:114:GLU:O	2.11	0.51
1:E:78:LYS:HG3	1:E:79:ILE:N	2.26	0.51
1:F:217:LYS:HB2	1:F:236:GLU:HG3	1.93	0.51
1:E:515:LYS:NZ	1:E:516:VAL:CG2	2.74	0.51
1:B:497:LEU:CD1	1:B:556:MET:HG2	2.40	0.51
1:C:517:VAL:O	1:C:525:LYS:NZ	2.44	0.51
1:A:531:ASN:HA	1:A:534:ILE:HD12	1.93	0.51
1:D:121:SER:O	1:D:123:GLU:OE2	2.28	0.51
1:A:121:SER:O	1:A:123:GLU:OE2	2.28	0.51
1:D:664:ILE:HG21	2:R:15:ALA:HB2	1.93	0.51
1:E:692:GLU:OE1	2:S:21:LYS:NZ	2.43	0.51
1:A:741:ILE:O	1:A:742:ALA:C	2.50	0.51
1:F:424:LYS:HB3	1:F:424:LYS:HZ2	1.76	0.51
2:S:62:THR:N	2:S:62:THR:HG22	2.26	0.50
1:B:180:ASP:O	1:B:182:ILE:N	2.44	0.50
1:E:153:ILE:C	1:E:154:ILE:HD13	2.31	0.50
1:D:169:VAL:CG2	1:D:246:SER:HB2	2.40	0.50
1:C:173:ILE:HG23	1:C:174:GLY:N	2.25	0.50
2:R:66:PRO:C	2:R:68:PHE:N	2.63	0.50
1:F:662:GLU:OE2	1:F:755:ARG:NH2	2.38	0.50
1:F:504:ILE:HD12	1:F:504:ILE:N	2.25	0.50
1:D:71:PHE:O	1:D:78:LYS:NZ	2.42	0.50
1:A:197:LYS:NZ	1:A:197:LYS:HB3	2.25	0.50
1:F:635:ILE:CD1	1:F:635:ILE:N	2.72	0.50
1:A:71:PHE:O	1:A:78:LYS:NZ	2.43	0.50
1:E:335:ALA:O	1:E:339:ILE:HG13	2.10	0.50
1:E:508:ILE:HG23	1:E:536:TYR:CE2	2.47	0.50
1:C:387:ASN:O	1:C:390:SER:HB2	2.11	0.50
1:C:148:GLU:HG3	1:C:149:THR:H	1.76	0.50
1:C:513:TRP:CZ3	1:C:517:VAL:HG11	2.47	0.50
1:F:218:LEU:HD21	1:F:225:ILE:CD1	2.41	0.50
1:A:214:PHE:CD1	1:A:218:LEU:HD23	2.46	0.50
1:F:95:GLU:O	1:F:99:GLU:HB2	2.12	0.50
1:B:197:LYS:NZ	1:B:197:LYS:HB3	2.26	0.50
1:E:180:ASP:O	1:E:182:ILE:N	2.45	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:189:ASP:C	1:E:191:GLU:N	2.64	0.50
1:F:189:ASP:C	1:F:191:GLU:N	2.65	0.50
1:C:165:GLN:C	1:C:167:LYS:H	2.14	0.50
1:C:175:LYS:HB2	1:C:175:LYS:HZ3	1.74	0.50
1:C:169:VAL:CG2	1:C:246:SER:HB2	2.40	0.50
1:C:301:ALA:C	1:C:303:LYS:H	2.14	0.50
1:A:301:ALA:C	1:A:303:LYS:H	2.14	0.50
1:F:408:LEU:N	1:F:408:LEU:HD12	2.04	0.50
1:B:501:LEU:HD22	2:P:112:LEU:CD2	2.26	0.50
1:A:629:ASN:HD22	1:A:631:SER:N	1.99	0.50
1:C:504:ILE:HD12	1:C:504:ILE:N	2.25	0.50
1:D:797:ILE:HG13	1:D:797:ILE:O	2.12	0.50
1:A:275:GLY:CA	1:A:278:LYS:HE3	2.37	0.50
1:A:107:THR:HG21	1:A:115:LYS:CD	2.37	0.50
1:F:79:ILE:C	1:F:81:GLN:N	2.57	0.50
2:T:58:ASP:HB2	2:T:62:THR:O	2.11	0.50
1:D:515:LYS:NZ	1:D:516:VAL:CG2	2.74	0.50
1:A:513:TRP:CZ3	1:A:517:VAL:HG11	2.46	0.50
1:D:349:ASN:HD22	1:D:350:VAL:N	2.08	0.50
1:B:356:ASP:OD2	1:B:356:ASP:N	2.44	0.50
2:S:44:THR:OG1	2:S:47:GLU:HB2	2.12	0.50
1:D:424:LYS:HZ2	1:D:424:LYS:HB3	1.76	0.50
1:B:173:ILE:HD12	1:B:243:LEU:CD2	2.41	0.50
1:C:180:ASP:C	1:C:182:ILE:H	2.14	0.50
1:B:301:ALA:C	1:B:303:LYS:H	2.14	0.50
2:T:37:ARG:HA	2:T:41:GLN:O	2.12	0.50
1:A:327:LEU:HD12	1:A:327:LEU:N	2.25	0.50
1:D:189:ASP:HB3	1:D:190:PRO:HD2	1.94	0.50
1:A:189:ASP:C	1:A:191:GLU:N	2.64	0.50
1:B:217:LYS:HB2	1:B:236:GLU:HG3	1.93	0.50
1:B:515:LYS:HZ3	1:B:516:VAL:HG23	1.76	0.50
1:C:700:TYR:HD1	1:C:728:ALA:CA	2.25	0.50
1:A:497:LEU:CD1	1:A:556:MET:HG2	2.40	0.50
1:E:214:PHE:CD1	1:E:218:LEU:HD23	2.47	0.50
1:E:431:LYS:O	1:E:432:TYR:HD2	1.94	0.50
1:E:710:HIS:C	1:E:712:PHE:H	2.14	0.50
1:C:349:ASN:HD22	1:C:350:VAL:N	2.08	0.50
1:B:741:ILE:O	1:B:742:ALA:C	2.50	0.50
1:B:189:ASP:C	1:B:191:GLU:N	2.65	0.50
1:A:180:ASP:C	1:A:182:ILE:H	2.14	0.50
1:A:97:TYR:HE1	1:A:178:SER:CB	2.25	0.50
1:E:93:VAL:CG2	1:E:179:LEU:HD11	2.37	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:238:GLN:C	1:E:240:ALA:N	2.63	0.50
1:F:165:GLN:NE2	1:F:252:ASP:HB3	2.26	0.50
1:C:154:ILE:CG1	1:C:171:TYR:CE1	2.87	0.50
1:C:597:ASN:OD1	1:C:599:GLU:HB2	2.11	0.50
2:Q:52:ILE:HG23	2:Q:53:ASN:H	1.74	0.50
1:F:397:GLU:HA	1:F:480:ASN:CB	2.42	0.50
1:D:715:GLU:OE1	1:D:767:GLN:NE2	2.44	0.50
1:B:327:LEU:HD12	1:B:327:LEU:N	2.25	0.50
1:D:288:VAL:CG2	1:D:289:GLU:H	2.20	0.50
1:C:78:LYS:HG3	1:C:79:ILE:N	2.26	0.50
1:E:531:ASN:HA	1:E:534:ILE:HD12	1.94	0.50
1:D:513:TRP:CZ3	1:D:517:VAL:HG11	2.46	0.50
1:F:776:LEU:HD23	1:F:776:LEU:C	2.32	0.50
1:F:431:LYS:O	1:F:432:TYR:HD2	1.94	0.50
1:A:302:LEU:HD22	1:A:602:PHE:HE1	1.77	0.50
1:C:713:SER:O	1:C:717:LYS:HG3	2.11	0.50
1:F:356:ASP:OD2	1:F:356:ASP:N	2.44	0.50
2:P:101:SER:OG	2:P:104:GLU:HG2	2.12	0.50
1:F:351:HIS:HB2	1:F:386:GLU:HG2	1.94	0.50
1:D:95:GLU:O	1:D:99:GLU:HB2	2.10	0.50
1:B:131:ARG:HG3	1:B:243:LEU:HD22	1.92	0.50
1:A:165:GLN:C	1:A:167:LYS:H	2.14	0.50
1:E:197:LYS:HD3	1:E:263:ASP:OD1	2.10	0.50
1:C:187:SER:C	1:C:188:LEU:O	2.44	0.50
1:C:165:GLN:NE2	1:C:252:ASP:HB3	2.26	0.50
1:B:135:VAL:O	1:B:135:VAL:HG22	2.12	0.50
1:D:134:LYS:HG2	1:D:136:PRO:HD3	1.92	0.50
1:E:301:ALA:C	1:E:303:LYS:N	2.62	0.50
1:B:678:VAL:HG22	1:B:745:TYR:HE2	1.76	0.50
1:B:505:LYS:HD3	2:P:112:LEU:O	2.11	0.50
1:A:483:GLY:O	1:A:484:VAL:HG22	2.11	0.50
1:E:630:ARG:CZ	2:S:83:GLU:CG	2.85	0.50
1:E:630:ARG:NH1	1:E:630:ARG:HG3	2.26	0.50
1:A:630:ARG:CZ	2:O:83:GLU:CG	2.84	0.50
1:E:403:LEU:HD22	1:E:474:ILE:HG21	1.94	0.50
1:D:327:LEU:HD12	1:D:327:LEU:N	2.26	0.50
1:A:376:GLN:HB3	1:A:379:ALA:HB3	1.94	0.50
1:B:107:THR:HG21	1:B:115:LYS:CD	2.37	0.50
1:D:308:VAL:O	1:D:311:HIS:HB2	2.11	0.50
1:C:376:GLN:HB3	1:C:379:ALA:HB3	1.93	0.50
1:D:217:LYS:HB2	1:D:236:GLU:HG3	1.94	0.50
1:E:678:VAL:HG22	1:E:745:TYR:HE2	1.77	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:O:73:ALA:O	2:O:74:ARG:C	2.50	0.50
1:B:710:HIS:C	1:B:712:PHE:H	2.14	0.50
1:D:351:HIS:HB2	1:D:386:GLU:HG2	1.94	0.50
1:B:97:TYR:HE1	1:B:178:SER:CB	2.24	0.50
1:A:165:GLN:NE2	1:A:251:PRO:HG2	2.24	0.50
1:C:180:ASP:O	1:C:182:ILE:N	2.45	0.50
2:R:24:ASP:OD1	2:R:25:GLY:N	2.40	0.50
1:F:678:VAL:HG22	1:F:745:TYR:HE2	1.76	0.50
1:A:112:VAL:HG12	1:A:113:GLU:HG3	1.94	0.50
1:F:376:GLN:HB3	1:F:379:ALA:HB3	1.94	0.50
1:B:115:LYS:HZ1	1:B:117:LEU:HB2	1.76	0.50
1:C:156:ILE:HD12	1:C:156:ILE:N	2.26	0.50
1:B:376:GLN:HB3	1:B:379:ALA:HB3	1.94	0.50
1:A:431:LYS:O	1:A:432:TYR:HD2	1.94	0.50
1:F:443:GLU:HG3	1:F:458:LYS:CG	2.42	0.50
1:F:349:ASN:HD22	1:F:350:VAL:N	2.09	0.50
1:A:735:VAL:O	1:A:741:ILE:HD13	2.12	0.50
1:E:351:HIS:HB2	1:E:386:GLU:HG2	1.94	0.50
1:E:741:ILE:O	1:E:742:ALA:C	2.49	0.50
1:A:356:ASP:N	1:A:356:ASP:OD2	2.44	0.50
1:B:165:GLN:C	1:B:167:LYS:H	2.15	0.50
1:B:165:GLN:NE2	1:B:251:PRO:HG2	2.23	0.50
1:D:187:SER:C	1:D:188:LEU:O	2.44	0.50
1:F:153:ILE:C	1:F:154:ILE:HD13	2.32	0.50
1:C:173:ILE:HG13	1:C:242:SER:CB	2.38	0.50
1:C:197:LYS:HB3	1:C:197:LYS:NZ	2.26	0.50
1:F:301:ALA:C	1:F:303:LYS:H	2.14	0.50
2:O:37:ARG:HA	2:O:41:GLN:O	2.11	0.50
2:Q:49:GLN:O	2:Q:51:MSE:N	2.45	0.50
1:C:715:GLU:OE1	1:C:767:GLN:NE2	2.45	0.50
1:D:189:ASP:C	1:D:191:GLU:N	2.65	0.50
1:D:78:LYS:HG3	1:D:79:ILE:N	2.26	0.50
2:T:5:THR:HG23	2:T:8:GLN:H	1.77	0.50
1:E:462:ILE:CD1	1:E:466:GLY:HA2	2.42	0.50
1:E:145:LYS:HB3	1:E:151:LYS:HB2	1.93	0.50
1:B:78:LYS:HG3	1:B:79:ILE:N	2.26	0.50
1:C:109:ILE:HD11	1:C:157:LYS:HZ2	1.76	0.50
1:E:217:LYS:HB2	1:E:236:GLU:HG3	1.94	0.50
1:C:529:VAL:HG21	2:Q:109:MSE:HE1	1.93	0.50
1:C:214:PHE:CD1	1:C:218:LEU:HD23	2.46	0.50
1:B:214:PHE:CD1	1:B:218:LEU:HD23	2.47	0.50
1:F:710:HIS:C	1:F:712:PHE:H	2.14	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:349:ASN:HD22	1:A:350:VAL:N	2.09	0.50
1:A:351:HIS:HB2	1:A:386:GLU:HG2	1.94	0.50
1:B:153:ILE:C	1:B:154:ILE:HD13	2.31	0.50
1:B:173:ILE:HG13	1:B:242:SER:CB	2.37	0.50
1:C:189:ASP:HB3	1:C:190:PRO:HD2	1.94	0.50
2:T:64:ASP:H	2:T:67:GLU:HB2	1.77	0.50
1:F:112:VAL:CG1	1:F:113:GLU:H	2.07	0.50
1:C:630:ARG:CZ	2:Q:83:GLU:CG	2.87	0.50
1:D:244:ALA:HB3	1:D:268:MET:HE3	1.94	0.50
1:E:71:PHE:O	1:E:78:LYS:NZ	2.45	0.50
1:F:156:ILE:HD12	1:F:156:ILE:N	2.27	0.50
1:D:529:VAL:HG21	2:R:109:MSE:HE1	1.93	0.50
1:C:218:LEU:HG	1:C:218:LEU:O	2.12	0.50
2:Q:44:THR:OG1	2:Q:47:GLU:HB2	2.12	0.50
1:F:180:ASP:O	1:F:182:ILE:N	2.45	0.50
2:P:37:ARG:HA	2:P:41:GLN:O	2.12	0.50
2:P:66:PRO:C	2:P:68:PHE:N	2.64	0.50
1:B:112:VAL:O	1:B:114:HIS:N	2.38	0.50
1:E:244:ALA:HB3	1:E:268:MET:HE3	1.94	0.50
1:B:281:GLU:O	1:B:285:LYS:HG2	2.12	0.50
1:A:288:VAL:CG2	1:A:289:GLU:H	2.21	0.50
1:D:156:ILE:HD12	1:D:156:ILE:N	2.26	0.50
2:O:5:THR:HG23	2:O:8:GLN:H	1.76	0.50
1:A:217:LYS:HB2	1:A:236:GLU:HG3	1.94	0.50
1:A:78:LYS:HG3	1:A:79:ILE:N	2.26	0.50
1:E:529:VAL:HG21	2:S:109:MSE:HE1	1.92	0.50
1:B:724:ARG:NH1	1:B:724:ARG:HG3	2.27	0.50
2:T:97:ASN:HD22	2:T:97:ASN:H	1.60	0.50
2:S:73:ALA:O	2:S:74:ARG:C	2.51	0.50
1:F:716:LYS:O	1:F:720:ILE:HG22	2.12	0.50
1:E:95:GLU:O	1:E:99:GLU:HB2	2.12	0.50
1:A:664:ILE:HG21	2:O:15:ALA:HB2	1.94	0.50
1:A:692:GLU:HA	1:A:692:GLU:OE2	2.12	0.50
1:C:741:ILE:O	1:C:742:ALA:C	2.50	0.50
1:B:172:GLU:CB	1:B:246:SER:HA	2.40	0.49
1:A:180:ASP:O	1:A:183:SER:N	2.33	0.49
1:A:180:ASP:O	1:A:182:ILE:N	2.45	0.49
2:R:37:ARG:HA	2:R:41:GLN:O	2.12	0.49
2:T:49:GLN:O	2:T:51:MSE:N	2.45	0.49
1:B:397:GLU:HA	1:B:480:ASN:CB	2.42	0.49
1:C:318:ILE:HD12	1:C:318:ILE:N	2.25	0.49
2:P:110:THR:HG22	2:P:114:GLU:O	2.12	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:462:ILE:CD1	1:F:466:GLY:HA2	2.42	0.49
1:B:338:LEU:HD21	1:B:409:ARG:CZ	2.41	0.49
1:D:446:ILE:HD11	1:D:451:ASN:CB	2.40	0.49
1:A:387:ASN:O	1:A:390:SER:HB2	2.11	0.49
1:D:671:ARG:HH12	1:D:677:GLY:HA3	1.73	0.49
2:Q:73:ALA:O	2:Q:74:ARG:C	2.50	0.49
1:B:443:GLU:HG3	1:B:458:LYS:CG	2.42	0.49
1:F:664:ILE:HG21	2:T:15:ALA:HB2	1.94	0.49
1:C:356:ASP:N	1:C:356:ASP:OD2	2.45	0.49
1:A:106:PHE:HA	1:A:154:ILE:O	2.11	0.49
1:F:165:GLN:C	1:F:167:LYS:H	2.15	0.49
1:F:169:VAL:CG2	1:F:246:SER:HB2	2.42	0.49
1:C:106:PHE:HA	1:C:154:ILE:O	2.12	0.49
1:C:483:GLY:O	1:C:484:VAL:HG22	2.11	0.49
1:D:581:GLN:HB3	1:D:627:TYR:CE1	2.47	0.49
1:A:323:ASN:O	1:A:324:THR:HG22	2.13	0.49
1:A:189:ASP:HB3	1:A:190:PRO:HD2	1.94	0.49
1:C:71:PHE:O	1:C:78:LYS:NZ	2.44	0.49
1:B:156:ILE:HD12	1:B:156:ILE:N	2.27	0.49
1:E:338:LEU:HD21	1:E:409:ARG:CZ	2.42	0.49
1:A:338:LEU:HD21	1:A:409:ARG:CZ	2.42	0.49
1:A:508:ILE:HG23	1:A:536:TYR:CE2	2.47	0.49
1:D:517:VAL:O	1:D:525:LYS:NZ	2.45	0.49
1:A:776:LEU:C	1:A:776:LEU:HD23	2.33	0.49
1:C:431:LYS:O	1:C:432:TYR:HD2	1.94	0.49
1:D:431:LYS:O	1:D:432:TYR:HD2	1.94	0.49
1:B:431:LYS:O	1:B:432:TYR:HD2	1.94	0.49
1:A:706:ASN:O	2:O:130:ILE:HG23	2.13	0.49
1:B:735:VAL:O	1:B:741:ILE:HD13	2.13	0.49
1:E:735:VAL:O	1:E:741:ILE:HD13	2.12	0.49
1:E:742:ALA:HB1	1:E:744:GLU:OE1	2.12	0.49
1:F:437:SER:O	1:F:439:ASN:N	2.45	0.49
2:T:101:SER:OG	2:T:104:GLU:HG2	2.12	0.49
1:F:164:GLU:HG2	1:F:166:SER:HB3	1.94	0.49
1:F:238:GLN:C	1:F:240:ALA:N	2.63	0.49
1:C:164:GLU:HG2	1:C:166:SER:HB3	1.94	0.49
2:P:24:ASP:OD1	2:P:25:GLY:N	2.42	0.49
1:A:678:VAL:HG22	1:A:745:TYR:HE2	1.76	0.49
1:E:397:GLU:HA	1:E:480:ASN:CB	2.42	0.49
2:Q:64:ASP:H	2:Q:67:GLU:HB2	1.77	0.49
2:S:64:ASP:H	2:S:67:GLU:HB2	1.77	0.49
1:D:483:GLY:O	1:D:484:VAL:HG22	2.11	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:327:LEU:HD12	1:E:327:LEU:N	2.27	0.49
1:E:797:ILE:HG13	1:E:797:ILE:O	2.11	0.49
1:B:244:ALA:HB3	1:B:268:MET:HE3	1.93	0.49
1:F:797:ILE:O	1:F:797:ILE:HG13	2.11	0.49
1:B:797:ILE:HG13	1:B:797:ILE:O	2.12	0.49
1:B:148:GLU:HG3	1:B:149:THR:H	1.77	0.49
1:F:148:GLU:HG3	1:F:149:THR:H	1.77	0.49
2:R:76:MSE:C	2:R:78:ASP:H	2.16	0.49
2:R:44:THR:OG1	2:R:47:GLU:HB2	2.12	0.49
1:C:351:HIS:HB2	1:C:386:GLU:HG2	1.94	0.49
1:B:351:HIS:HB2	1:B:386:GLU:HG2	1.94	0.49
2:S:126:ARG:HH21	2:S:126:ARG:HG3	1.77	0.49
1:D:173:ILE:HG23	1:D:174:GLY:H	1.76	0.49
2:R:64:ASP:H	2:R:67:GLU:HB2	1.77	0.49
2:O:64:ASP:H	2:O:67:GLU:HB2	1.77	0.49
1:F:630:ARG:NH1	1:F:630:ARG:HG3	2.26	0.49
1:E:405:LEU:HD13	1:E:453:VAL:CG2	2.33	0.49
1:A:403:LEU:HD22	1:A:474:ILE:HG21	1.95	0.49
1:F:515:LYS:NZ	1:F:516:VAL:CG2	2.75	0.49
1:F:700:TYR:HD1	1:F:728:ALA:CA	2.26	0.49
1:C:776:LEU:HD23	1:C:776:LEU:C	2.32	0.49
2:P:73:ALA:O	2:P:74:ARG:C	2.50	0.49
1:A:355:SER:HB2	1:A:371:SER:HA	1.94	0.49
1:F:686:ASP:O	1:F:689:ALA:HB3	2.13	0.49
1:E:716:LYS:O	1:E:720:ILE:HG22	2.12	0.49
1:E:349:ASN:HD22	1:E:350:VAL:N	2.09	0.49
1:D:356:ASP:N	1:D:356:ASP:OD2	2.45	0.49
1:C:664:ILE:HG21	2:Q:15:ALA:HB2	1.95	0.49
2:T:146:THR:O	2:T:147:ALA:C	2.49	0.49
1:E:437:SER:O	1:E:439:ASN:N	2.45	0.49
2:Q:126:ARG:HG3	2:Q:126:ARG:HH21	1.76	0.49
1:D:106:PHE:HA	1:D:154:ILE:O	2.13	0.49
1:D:165:GLN:C	1:D:167:LYS:H	2.14	0.49
1:D:154:ILE:CG1	1:D:171:TYR:CE1	2.87	0.49
2:S:49:GLN:O	2:S:51:MSE:N	2.46	0.49
1:A:397:GLU:O	1:A:479:LYS:HA	2.13	0.49
1:E:581:GLN:HB3	1:E:627:TYR:CE1	2.48	0.49
1:A:308:VAL:O	1:A:311:HIS:HB2	2.12	0.49
1:D:462:ILE:CD1	1:D:466:GLY:HA2	2.42	0.49
1:D:635:ILE:N	1:D:635:ILE:CD1	2.72	0.49
1:C:338:LEU:HD21	1:C:409:ARG:CZ	2.43	0.49
1:B:776:LEU:HD23	1:B:776:LEU:C	2.33	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:716:LYS:O	1:C:720:ILE:HG22	2.13	0.49
1:B:706:ASN:O	2:P:130:ILE:HG23	2.13	0.49
2:T:126:ARG:HG3	2:T:126:ARG:HH21	1.77	0.49
1:E:106:PHE:HA	1:E:154:ILE:O	2.12	0.49
1:D:180:ASP:O	1:D:182:ILE:N	2.46	0.49
2:P:25:GLY:HA3	2:P:65:PHE:CZ	2.48	0.49
1:E:597:ASN:HB2	1:E:598:PRO:CD	2.37	0.49
2:Q:65:PHE:CD1	2:Q:65:PHE:N	2.81	0.49
1:E:662:GLU:OE2	1:E:755:ARG:NH2	2.37	0.49
1:D:403:LEU:HD22	1:D:474:ILE:HG21	1.94	0.49
1:D:192:PHE:HD1	1:D:192:PHE:H	1.61	0.49
2:T:9:ILE:CD1	2:T:69:LEU:HD11	2.38	0.49
1:D:216:GLU:HG3	1:D:217:LYS:HG2	1.95	0.49
2:S:5:THR:HG23	2:S:8:GLN:H	1.77	0.49
1:A:156:ILE:N	1:A:156:ILE:HD12	2.26	0.49
1:D:338:LEU:HD21	1:D:409:ARG:CZ	2.43	0.49
2:P:100:ILE:HB	2:P:136:VAL:HG23	1.91	0.49
1:F:387:ASN:O	1:F:390:SER:HB2	2.12	0.49
1:B:724:ARG:O	1:B:727:GLN:HB2	2.12	0.49
1:B:567:THR:HG22	1:B:568:GLY:N	2.28	0.49
1:D:686:ASP:O	1:D:689:ALA:HB3	2.13	0.49
2:P:44:THR:OG1	2:P:47:GLU:HB2	2.12	0.49
2:S:146:THR:O	2:S:147:ALA:C	2.50	0.49
1:F:741:ILE:O	1:F:742:ALA:C	2.50	0.49
2:O:44:THR:OG1	2:O:47:GLU:HB2	2.13	0.49
2:O:101:SER:OG	2:O:104:GLU:HG2	2.13	0.49
1:D:180:ASP:C	1:D:182:ILE:H	2.15	0.49
1:F:172:GLU:CB	1:F:246:SER:HA	2.39	0.49
1:B:671:ARG:HG3	1:B:671:ARG:HH11	1.77	0.49
2:P:13:LYS:NZ	2:P:65:PHE:CB	2.61	0.49
1:E:397:GLU:O	1:E:479:LYS:HA	2.13	0.49
1:B:397:GLU:O	1:B:479:LYS:HA	2.13	0.49
1:C:311:HIS:O	1:C:312:ALA:C	2.51	0.49
2:R:110:THR:HG22	2:R:114:GLU:O	2.12	0.49
1:C:412:GLU:C	1:C:414:LYS:H	2.16	0.49
1:E:700:TYR:HD1	1:E:728:ALA:CA	2.25	0.49
1:E:567:THR:HG22	1:E:568:GLY:N	2.28	0.49
2:R:73:ALA:O	2:R:74:ARG:C	2.50	0.49
2:T:73:ALA:O	2:T:74:ARG:C	2.50	0.49
1:D:716:LYS:O	1:D:720:ILE:HG22	2.12	0.49
1:D:717:LYS:O	1:D:720:ILE:HG22	2.13	0.49
1:D:706:ASN:O	2:R:130:ILE:HG23	2.13	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:437:SER:O	1:D:439:ASN:N	2.46	0.49
1:D:153:ILE:C	1:D:154:ILE:HD13	2.33	0.49
1:F:97:TYR:HE1	1:F:178:SER:CB	2.25	0.49
2:O:49:GLN:O	2:O:51:MSE:N	2.46	0.49
2:T:24:ASP:OD1	2:T:25:GLY:N	2.42	0.49
1:C:397:GLU:O	1:C:479:LYS:HA	2.12	0.49
2:P:16:PHE:CE1	2:P:27:ILE:CD1	2.96	0.49
1:D:630:ARG:HG3	1:D:630:ARG:NH1	2.25	0.49
1:B:629:ASN:HD22	1:B:631:SER:N	1.99	0.49
1:A:715:GLU:OE1	1:A:767:GLN:NE2	2.45	0.49
1:C:281:GLU:O	1:C:285:LYS:HG2	2.13	0.49
1:E:311:HIS:O	1:E:312:ALA:C	2.51	0.49
1:E:115:LYS:HZ1	1:E:117:LEU:HB2	1.78	0.49
1:E:216:GLU:HG3	1:E:217:LYS:HG2	1.95	0.49
1:D:508:ILE:HG23	1:D:536:TYR:CE2	2.48	0.49
1:B:218:LEU:O	1:B:218:LEU:HG	2.13	0.49
1:A:218:LEU:O	1:A:218:LEU:HG	2.13	0.49
2:R:94:LYS:HB3	2:R:94:LYS:HZ2	1.76	0.49
1:C:443:GLU:HG3	1:C:458:LYS:HZ2	1.77	0.49
1:B:189:ASP:HB3	1:B:190:PRO:HD2	1.94	0.49
1:E:106:PHE:CZ	1:E:171:TYR:OH	2.62	0.49
1:F:397:GLU:O	1:F:479:LYS:HA	2.13	0.49
1:E:722:ILE:O	1:E:726:ILE:HG13	2.13	0.49
1:B:308:VAL:CG2	1:B:336:THR:O	2.61	0.49
1:D:376:GLN:HB3	1:D:379:ALA:HB3	1.94	0.49
1:E:446:ILE:HD11	1:E:451:ASN:CB	2.40	0.49
1:C:697:ILE:C	1:C:699:GLY:N	2.65	0.49
2:Q:19:PHE:CD1	2:Q:19:PHE:N	2.81	0.49
1:D:724:ARG:O	1:D:727:GLN:HB2	2.13	0.49
1:F:218:LEU:HG	1:F:218:LEU:O	2.12	0.49
1:E:443:GLU:HG3	1:E:458:LYS:CG	2.42	0.49
1:B:355:SER:HB2	1:B:371:SER:HA	1.95	0.49
1:B:742:ALA:HB1	1:B:744:GLU:OE1	2.13	0.49
1:A:141:PHE:N	1:A:141:PHE:CD1	2.81	0.49
1:A:424:LYS:HZ2	1:A:424:LYS:HB3	1.78	0.49
1:B:192:PHE:HD1	1:B:192:PHE:H	1.61	0.49
1:F:189:ASP:HB3	1:F:190:PRO:HD2	1.94	0.49
2:R:25:GLY:HA3	2:R:65:PHE:CZ	2.48	0.49
2:P:49:GLN:O	2:P:51:MSE:N	2.45	0.49
1:E:483:GLY:O	1:E:484:VAL:HG22	2.13	0.49
1:D:397:GLU:HA	1:D:480:ASN:CB	2.42	0.49
1:C:112:VAL:HG12	1:C:113:GLU:HG3	1.94	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:629:ASN:ND2	1:E:629:ASN:C	2.64	0.49
1:E:715:GLU:OE1	1:E:767:GLN:NE2	2.45	0.49
1:F:403:LEU:HD22	1:F:474:ILE:HG21	1.94	0.49
1:A:308:VAL:CG2	1:A:336:THR:O	2.61	0.49
1:C:308:VAL:CG2	1:C:336:THR:O	2.61	0.49
1:B:405:LEU:CD1	1:B:405:LEU:H	2.26	0.49
1:F:107:THR:HG21	1:F:115:LYS:CD	2.37	0.49
1:E:81:GLN:CD	1:E:156:ILE:HG21	2.33	0.49
2:P:56:ASP:OD2	2:P:61:GLY:N	2.46	0.49
1:A:148:GLU:HG3	1:A:149:THR:H	1.76	0.49
1:D:671:ARG:HH11	1:D:671:ARG:HG3	1.77	0.49
2:T:76:MSE:C	2:T:78:ASP:H	2.16	0.49
1:D:742:ALA:HB1	1:D:744:GLU:OE1	2.13	0.49
1:F:742:ALA:HB1	1:F:744:GLU:OE1	2.13	0.49
1:E:192:PHE:HD1	1:E:192:PHE:H	1.61	0.48
1:E:88:LYS:HD2	1:E:89:ILE:HG13	1.94	0.48
1:D:173:ILE:HG23	1:D:174:GLY:N	2.27	0.48
1:D:180:ASP:O	1:D:183:SER:N	2.33	0.48
1:F:173:ILE:HG13	1:F:242:SER:CB	2.38	0.48
1:B:134:LYS:NZ	1:B:136:PRO:HG3	2.28	0.48
1:C:597:ASN:HD21	1:C:601:GLU:CB	2.08	0.48
2:P:64:ASP:H	2:P:67:GLU:HB2	1.78	0.48
2:S:13:LYS:NZ	2:S:65:PHE:CB	2.61	0.48
1:D:397:GLU:O	1:D:479:LYS:HA	2.13	0.48
1:B:112:VAL:CG1	1:B:113:GLU:H	2.08	0.48
1:B:112:VAL:HG12	1:B:113:GLU:HG3	1.95	0.48
1:C:404:LYS:O	1:C:405:LEU:C	2.52	0.48
1:F:308:VAL:CG2	1:F:336:THR:O	2.61	0.48
1:B:615:ILE:CD1	1:B:645:TRP:HH2	2.19	0.48
1:D:322:LEU:O	1:D:323:ASN:HB3	2.13	0.48
1:B:216:GLU:HG3	1:B:217:LYS:HG2	1.95	0.48
1:D:218:LEU:HG	1:D:218:LEU:O	2.13	0.48
1:B:225:ILE:HG23	1:B:229:PHE:CD2	2.48	0.48
1:D:776:LEU:C	1:D:776:LEU:HD23	2.33	0.48
1:E:365:PRO:HB2	1:E:367:ASP:O	2.13	0.48
1:D:443:GLU:HG3	1:D:458:LYS:CG	2.42	0.48
1:F:583:ASN:O	1:F:587:PRO:HD3	2.13	0.48
1:F:355:SER:HB2	1:F:371:SER:HA	1.95	0.48
1:C:717:LYS:O	1:C:720:ILE:HG22	2.13	0.48
1:B:664:ILE:HG21	2:P:15:ALA:HB2	1.95	0.48
2:P:126:ARG:HH21	2:P:126:ARG:HG3	1.77	0.48
2:R:126:ARG:HH21	2:R:126:ARG:HG3	1.77	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:S:58:ASP:HB2	2:S:62:THR:O	2.12	0.48
1:B:106:PHE:HA	1:B:154:ILE:O	2.12	0.48
1:D:164:GLU:HG2	1:D:166:SER:HB3	1.94	0.48
1:F:192:PHE:HD1	1:F:192:PHE:H	1.61	0.48
2:R:49:GLN:O	2:R:51:MSE:N	2.46	0.48
1:E:112:VAL:HG12	1:E:113:GLU:HG3	1.95	0.48
1:D:112:VAL:HG12	1:D:113:GLU:HG3	1.95	0.48
1:B:581:GLN:HB3	1:B:627:TYR:CE1	2.48	0.48
1:E:164:GLU:HG2	1:E:166:SER:HB3	1.94	0.48
1:B:323:ASN:O	1:B:324:THR:HG22	2.13	0.48
1:F:322:LEU:O	1:F:323:ASN:HB3	2.13	0.48
1:B:403:LEU:HD22	1:B:474:ILE:HG21	1.94	0.48
2:P:5:THR:HG23	2:P:8:GLN:H	1.78	0.48
1:A:75:THR:O	1:A:76:LEU:C	2.52	0.48
1:F:724:ARG:O	1:F:727:GLN:HB2	2.13	0.48
1:D:199:LEU:C	1:D:201:ASP:N	2.67	0.48
1:E:776:LEU:HD23	1:E:776:LEU:C	2.33	0.48
1:F:365:PRO:HB2	1:F:367:ASP:O	2.13	0.48
1:E:445:ARG:HG2	1:E:471:TRP:CZ3	2.49	0.48
1:A:443:GLU:HG3	1:A:458:LYS:CG	2.42	0.48
1:C:445:ARG:HG2	1:C:471:TRP:CZ3	2.48	0.48
2:O:93:ASP:OD1	2:O:97:ASN:ND2	2.46	0.48
1:A:742:ALA:HB1	1:A:744:GLU:OE1	2.13	0.48
1:D:205:SER:C	1:D:207:ASP:H	2.17	0.48
2:Q:101:SER:OG	2:Q:104:GLU:HG2	2.13	0.48
2:R:101:SER:OG	2:R:104:GLU:HG2	2.13	0.48
1:C:437:SER:O	1:C:439:ASN:N	2.46	0.48
1:B:141:PHE:N	1:B:141:PHE:CD1	2.81	0.48
1:D:622:LYS:HA	1:D:622:LYS:HD3	1.50	0.48
1:B:169:VAL:HG22	1:B:246:SER:HB2	1.96	0.48
1:A:154:ILE:CG1	1:A:171:TYR:CE1	2.87	0.48
1:C:192:PHE:H	1:C:192:PHE:HD1	1.61	0.48
1:C:97:TYR:HE1	1:C:178:SER:CB	2.26	0.48
2:P:52:ILE:HG23	2:P:53:ASN:H	1.75	0.48
2:T:25:GLY:HA3	2:T:65:PHE:CZ	2.48	0.48
1:B:597:ASN:OD1	1:B:599:GLU:HB2	2.12	0.48
1:C:581:GLN:HB3	1:C:627:TYR:CE1	2.49	0.48
1:F:722:ILE:O	1:F:726:ILE:HG13	2.13	0.48
1:C:615:ILE:CD1	1:C:645:TRP:HH2	2.17	0.48
1:F:404:LYS:O	1:F:405:LEU:C	2.52	0.48
1:F:281:GLU:O	1:F:285:LYS:HG2	2.13	0.48
1:A:281:GLU:O	1:A:285:LYS:HG2	2.13	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:312:ALA:O	1:E:315:PHE:HB2	2.14	0.48
1:C:462:ILE:CD1	1:C:466:GLY:HA2	2.43	0.48
1:A:192:PHE:HD1	1:A:192:PHE:H	1.61	0.48
1:B:71:PHE:O	1:B:78:LYS:NZ	2.46	0.48
1:B:199:LEU:C	1:B:201:ASP:N	2.66	0.48
1:E:671:ARG:HG3	1:E:671:ARG:HH11	1.77	0.48
1:F:567:THR:HG22	1:F:568:GLY:N	2.28	0.48
1:C:355:SER:HB2	1:C:371:SER:HA	1.95	0.48
1:F:735:VAL:O	1:F:741:ILE:HD13	2.12	0.48
1:D:437:SER:C	1:D:439:ASN:H	2.17	0.48
2:R:146:THR:O	2:R:147:ALA:C	2.51	0.48
2:O:138:TYR:CZ	2:O:142:VAL:CG2	2.97	0.48
1:E:205:SER:C	1:E:207:ASP:H	2.17	0.48
1:E:141:PHE:N	1:E:141:PHE:CD1	2.81	0.48
1:B:172:GLU:O	1:B:176:GLY:N	2.34	0.48
1:B:187:SER:C	1:B:188:LEU:O	2.44	0.48
2:R:65:PHE:N	2:R:65:PHE:CD1	2.81	0.48
2:S:25:GLY:HA3	2:S:65:PHE:CZ	2.49	0.48
1:C:397:GLU:HA	1:C:480:ASN:CB	2.42	0.48
1:A:397:GLU:HA	1:A:480:ASN:CB	2.42	0.48
1:D:404:LYS:O	1:D:405:LEU:C	2.52	0.48
1:A:324:THR:HB	1:A:499:PRO:CA	2.38	0.48
1:C:781:ASN:O	1:C:789:ASN:ND2	2.46	0.48
2:O:117:THR:O	2:O:119:GLU:N	2.46	0.48
1:C:508:ILE:HG23	1:C:536:TYR:CE2	2.48	0.48
2:O:19:PHE:CD1	2:O:19:PHE:N	2.82	0.48
1:D:700:TYR:HD1	1:D:728:ALA:CA	2.26	0.48
2:R:19:PHE:CD1	2:R:19:PHE:N	2.82	0.48
1:E:724:ARG:O	1:E:727:GLN:HB2	2.13	0.48
2:S:19:PHE:N	2:S:19:PHE:CD1	2.81	0.48
1:C:497:LEU:CD1	1:C:556:MET:HG2	2.40	0.48
1:D:218:LEU:C	1:D:220:LEU:H	2.16	0.48
1:C:671:ARG:HG3	1:C:671:ARG:HH11	1.77	0.48
1:C:443:GLU:HG3	1:C:458:LYS:CG	2.42	0.48
1:E:355:SER:HB2	1:E:371:SER:HA	1.95	0.48
1:C:205:SER:C	1:C:207:ASP:H	2.17	0.48
2:S:101:SER:OG	2:S:104:GLU:HG2	2.14	0.48
1:A:205:SER:C	1:A:207:ASP:H	2.17	0.48
1:B:175:LYS:NZ	1:B:175:LYS:CB	2.76	0.48
1:E:97:TYR:HE1	1:E:178:SER:CB	2.26	0.48
1:F:88:LYS:HD2	1:F:89:ILE:HG13	1.95	0.48
2:O:25:GLY:HA3	2:O:65:PHE:CZ	2.49	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:533:LEU:HD23	1:A:533:LEU:C	2.33	0.48
1:C:482:GLU:HA	1:C:482:GLU:OE2	2.13	0.48
1:D:482:GLU:OE2	1:D:482:GLU:HA	2.14	0.48
2:T:28:THR:CG2	2:T:30:LYS:HZ1	2.26	0.48
1:C:630:ARG:HG3	1:C:630:ARG:NH1	2.27	0.48
2:P:16:PHE:CE1	2:P:27:ILE:HD13	2.48	0.48
1:C:662:GLU:OE2	1:C:755:ARG:NH2	2.39	0.48
1:C:323:ASN:O	1:C:324:THR:HG22	2.13	0.48
1:A:404:LYS:O	1:A:405:LEU:C	2.52	0.48
1:E:323:ASN:O	1:E:324:THR:HG22	2.13	0.48
1:B:75:THR:O	1:B:76:LEU:C	2.51	0.48
1:F:216:GLU:HG3	1:F:217:LYS:HG2	1.95	0.48
1:B:508:ILE:HG23	1:B:536:TYR:CE2	2.48	0.48
1:E:724:ARG:HG3	1:E:724:ARG:NH1	2.29	0.48
1:D:225:ILE:HG23	1:D:229:PHE:CD2	2.48	0.48
1:A:225:ILE:HG23	1:A:229:PHE:CD2	2.48	0.48
1:A:199:LEU:C	1:A:201:ASP:N	2.67	0.48
2:P:76:MSE:C	2:P:78:ASP:H	2.17	0.48
2:Q:76:MSE:C	2:Q:78:ASP:H	2.16	0.48
1:B:349:ASN:HD22	1:B:350:VAL:N	2.11	0.48
1:E:706:ASN:O	2:S:130:ILE:HG23	2.14	0.48
1:A:95:GLU:O	1:A:99:GLU:HB2	2.12	0.48
1:A:437:SER:O	1:A:439:ASN:N	2.46	0.48
1:B:205:SER:C	1:B:207:ASP:H	2.17	0.48
1:A:172:GLU:O	1:A:176:GLY:N	2.34	0.48
2:Q:16:PHE:CE1	2:Q:27:ILE:CD1	2.97	0.48
1:B:715:GLU:OE1	1:B:767:GLN:NE2	2.46	0.48
1:C:405:LEU:H	1:C:405:LEU:CD1	2.26	0.48
1:A:405:LEU:H	1:A:405:LEU:CD1	2.27	0.48
1:D:412:GLU:C	1:D:414:LYS:H	2.16	0.48
2:P:19:PHE:N	2:P:19:PHE:CD1	2.82	0.48
1:D:148:GLU:HG3	1:D:149:THR:H	1.77	0.48
1:D:531:ASN:HA	1:D:534:ILE:HD12	1.95	0.48
1:C:365:PRO:HB2	1:C:367:ASP:O	2.14	0.48
1:B:445:ARG:HG2	1:B:471:TRP:CZ3	2.49	0.48
1:D:302:LEU:HD22	1:D:602:PHE:HE1	1.79	0.48
1:F:437:SER:C	1:F:439:ASN:H	2.17	0.48
1:E:356:ASP:N	1:E:356:ASP:OD2	2.46	0.48
1:A:671:ARG:HH11	1:A:671:ARG:HG3	1.78	0.48
2:O:66:PRO:C	2:O:68:PHE:N	2.64	0.48
2:T:65:PHE:CD1	2:T:65:PHE:N	2.81	0.48
1:F:323:ASN:O	1:F:324:THR:HG22	2.13	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:P:117:THR:O	2:P:119:GLU:N	2.47	0.48
2:R:5:THR:HG23	2:R:8:GLN:H	1.77	0.48
2:Q:5:THR:HG23	2:Q:8:GLN:H	1.77	0.48
1:C:115:LYS:HZ1	1:C:117:LEU:HB2	1.78	0.48
1:F:508:ILE:HG23	1:F:536:TYR:CE2	2.49	0.48
1:B:529:VAL:HG21	2:P:109:MSE:HE1	1.94	0.48
1:C:697:ILE:O	1:C:699:GLY:N	2.47	0.48
1:E:218:LEU:C	1:E:220:LEU:H	2.15	0.48
1:A:445:ARG:HG2	1:A:471:TRP:CZ3	2.48	0.48
1:D:355:SER:HB2	1:D:371:SER:HA	1.96	0.48
1:B:717:LYS:O	1:B:720:ILE:HG22	2.13	0.48
2:Q:129:ASP:OD1	2:Q:134:GLY:N	2.47	0.48
1:C:742:ALA:HB1	1:C:744:GLU:OE1	2.13	0.48
1:E:664:ILE:HG21	2:S:15:ALA:HB2	1.95	0.48
2:T:44:THR:OG1	2:T:47:GLU:HB2	2.13	0.48
1:D:141:PHE:CD1	1:D:141:PHE:N	2.81	0.48
1:B:154:ILE:CG1	1:B:171:TYR:CE1	2.88	0.48
1:C:478:ALA:CB	1:C:486:LYS:O	2.62	0.48
1:A:482:GLU:HA	1:A:482:GLU:OE2	2.14	0.48
1:F:112:VAL:O	1:F:114:HIS:N	2.39	0.48
1:D:781:ASN:O	1:D:789:ASN:ND2	2.46	0.48
2:R:117:THR:O	2:R:119:GLU:N	2.47	0.48
1:E:412:GLU:C	1:E:414:LYS:H	2.16	0.48
1:E:497:LEU:CD1	1:E:556:MET:HG2	2.41	0.48
1:D:497:LEU:CD1	1:D:556:MET:HG2	2.41	0.48
1:B:365:PRO:HB2	1:B:367:ASP:O	2.14	0.48
2:O:97:ASN:ND2	2:O:97:ASN:N	2.60	0.48
1:C:710:HIS:C	1:C:712:PHE:H	2.16	0.48
1:D:735:VAL:O	1:D:741:ILE:HD13	2.13	0.48
1:C:437:SER:C	1:C:439:ASN:H	2.17	0.48
1:F:141:PHE:CD1	1:F:141:PHE:N	2.80	0.48
2:Q:39:LEU:HD23	2:Q:39:LEU:HA	1.75	0.48
1:A:169:VAL:HG22	1:A:246:SER:HB2	1.96	0.48
1:E:154:ILE:CG1	1:E:171:TYR:CE1	2.86	0.48
1:E:189:ASP:HB3	1:E:190:PRO:HD2	1.94	0.48
1:E:482:GLU:OE2	1:E:482:GLU:HA	2.14	0.48
1:F:671:ARG:HG3	1:F:671:ARG:HH11	1.78	0.48
2:T:13:LYS:NZ	2:T:65:PHE:CB	2.62	0.48
1:F:482:GLU:HA	1:F:482:GLU:OE2	2.14	0.48
1:C:403:LEU:HD22	1:C:474:ILE:HG21	1.95	0.48
1:B:620:THR:HG22	1:B:621:GLY:N	2.29	0.48
1:D:311:HIS:O	1:D:312:ALA:C	2.52	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:308:VAL:CG2	1:E:336:THR:O	2.62	0.48
2:R:9:ILE:HG23	2:R:69:LEU:CD2	2.43	0.48
1:A:216:GLU:HG3	1:A:217:LYS:HG2	1.96	0.48
2:O:76:MSE:C	2:O:78:ASP:H	2.16	0.48
1:F:302:LEU:HD22	1:F:602:PHE:HE1	1.78	0.48
1:C:706:ASN:O	2:Q:130:ILE:HG23	2.13	0.48
1:E:717:LYS:O	1:E:720:ILE:HG22	2.14	0.48
1:A:437:SER:C	1:A:439:ASN:H	2.18	0.48
2:O:88:ALA:O	2:O:91:VAL:HB	2.14	0.48
1:C:141:PHE:CD1	1:C:141:PHE:N	2.81	0.48
1:A:153:ILE:C	1:A:154:ILE:HD13	2.33	0.48
1:A:164:GLU:HG2	1:A:166:SER:HB3	1.95	0.48
1:A:175:LYS:O	1:A:176:GLY:C	2.52	0.48
1:E:175:LYS:O	1:E:176:GLY:C	2.53	0.48
2:Q:25:GLY:HA3	2:Q:65:PHE:CZ	2.49	0.48
1:C:722:ILE:O	1:C:726:ILE:HG13	2.13	0.48
1:D:722:ILE:O	1:D:726:ILE:HG13	2.14	0.48
1:B:322:LEU:O	1:B:323:ASN:HB3	2.14	0.48
1:D:281:GLU:O	1:D:285:LYS:HG2	2.13	0.48
1:F:275:GLY:CA	1:F:278:LYS:HE3	2.35	0.48
1:A:115:LYS:HB3	1:A:115:LYS:HZ3	1.77	0.48
1:A:462:ILE:CD1	1:A:466:GLY:HA2	2.42	0.48
1:E:225:ILE:HG23	1:E:229:PHE:CD2	2.49	0.48
1:F:199:LEU:C	1:F:201:ASP:N	2.67	0.48
1:A:567:THR:HG22	1:A:568:GLY:N	2.29	0.48
2:S:93:ASP:OD1	2:S:97:ASN:ND2	2.47	0.48
1:E:437:SER:C	1:E:439:ASN:H	2.17	0.48
1:F:141:PHE:H	1:F:141:PHE:HD1	1.62	0.48
1:D:210:PHE:HZ	1:D:221:ASN:OD1	1.97	0.48
1:B:437:SER:O	1:B:439:ASN:N	2.47	0.48
1:D:692:GLU:OE2	1:D:692:GLU:HA	2.14	0.48
1:A:175:LYS:CB	1:A:175:LYS:NZ	2.76	0.47
1:A:176:GLY:O	1:A:178:SER:N	2.47	0.47
1:C:153:ILE:C	1:C:154:ILE:HD13	2.34	0.47
1:C:127:SER:O	1:C:133:GLU:CD	2.47	0.47
2:R:49:GLN:O	2:R:53:ASN:N	2.43	0.47
1:A:397:GLU:HA	1:A:480:ASN:HB2	1.96	0.47
1:A:620:THR:HG22	1:A:621:GLY:N	2.28	0.47
1:E:281:GLU:O	1:E:285:LYS:HG2	2.13	0.47
1:D:115:LYS:HB3	1:D:115:LYS:HZ3	1.76	0.47
1:D:724:ARG:HG3	1:D:724:ARG:NH1	2.29	0.47
1:B:700:TYR:HD1	1:B:728:ALA:CA	2.25	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:P:58:ASP:HB2	2:P:62:THR:O	2.13	0.47
1:E:218:LEU:O	1:E:218:LEU:HG	2.13	0.47
1:C:567:THR:HG22	1:C:568:GLY:N	2.28	0.47
2:R:93:ASP:OD1	2:R:97:ASN:ND2	2.46	0.47
1:E:686:ASP:O	1:E:689:ALA:HB3	2.13	0.47
2:R:88:ALA:O	2:R:91:VAL:HB	2.14	0.47
1:B:164:GLU:HG2	1:B:166:SER:HB3	1.95	0.47
1:E:169:VAL:HG22	1:E:246:SER:HB2	1.96	0.47
1:F:106:PHE:HA	1:F:154:ILE:O	2.14	0.47
2:T:42:ASN:O	2:T:42:ASN:CG	2.53	0.47
1:B:482:GLU:OE2	1:B:482:GLU:HA	2.14	0.47
1:C:501:LEU:HD22	2:Q:112:LEU:CD2	2.28	0.47
1:F:112:VAL:HG12	1:F:113:GLU:HG3	1.95	0.47
1:B:311:HIS:O	1:B:312:ALA:C	2.52	0.47
1:B:315:PHE:HA	1:B:318:ILE:HD13	1.96	0.47
1:C:322:LEU:O	1:C:323:ASN:HB3	2.15	0.47
1:F:282:SER:HA	1:F:285:LYS:CD	2.44	0.47
1:D:191:GLU:O	1:D:193:LEU:N	2.48	0.47
2:T:117:THR:O	2:T:119:GLU:N	2.47	0.47
1:A:81:GLN:CD	1:A:156:ILE:HG21	2.35	0.47
2:Q:121:VAL:C	2:Q:123:GLN:H	2.17	0.47
2:T:121:VAL:C	2:T:123:GLN:H	2.17	0.47
1:E:148:GLU:HG3	1:E:149:THR:H	1.77	0.47
2:Q:76:MSE:HE3	2:Q:76:MSE:HB2	1.64	0.47
1:D:88:LYS:HD2	1:D:89:ILE:HG13	1.95	0.47
1:F:191:GLU:O	1:F:193:LEU:N	2.48	0.47
1:C:191:GLU:O	1:C:193:LEU:N	2.47	0.47
2:R:55:VAL:CB	2:R:67:GLU:OE2	2.60	0.47
1:F:581:GLN:HB3	1:F:627:TYR:CE1	2.48	0.47
1:F:629:ASN:C	1:F:629:ASN:ND2	2.64	0.47
2:Q:56:ASP:OD2	2:Q:60:ASN:C	2.52	0.47
1:D:275:GLY:CA	1:D:278:LYS:HG3	2.43	0.47
1:E:282:SER:HA	1:E:285:LYS:CD	2.44	0.47
1:C:620:THR:HG22	1:C:621:GLY:N	2.30	0.47
1:F:115:LYS:HZ1	1:F:117:LEU:HB2	1.78	0.47
1:F:115:LYS:NZ	1:F:117:LEU:HB2	2.30	0.47
1:D:75:THR:O	1:D:76:LEU:C	2.52	0.47
1:C:75:THR:O	1:C:76:LEU:C	2.52	0.47
1:F:412:GLU:C	1:F:414:LYS:H	2.16	0.47
1:D:337:ASN:C	1:D:339:ILE:N	2.67	0.47
1:A:412:GLU:C	1:A:414:LYS:H	2.16	0.47
1:B:697:ILE:C	1:B:699:GLY:N	2.66	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:445:ARG:HG2	1:F:471:TRP:CZ3	2.49	0.47
1:F:717:LYS:O	1:F:720:ILE:HG22	2.14	0.47
1:A:173:ILE:C	1:A:175:LYS:N	2.67	0.47
1:F:175:LYS:CB	1:F:175:LYS:NZ	2.76	0.47
1:E:134:LYS:NZ	1:E:136:PRO:HG3	2.30	0.47
2:O:65:PHE:CD1	2:O:65:PHE:N	2.82	0.47
1:B:481:VAL:O	1:B:482:GLU:HB2	2.14	0.47
2:T:16:PHE:CE1	2:T:27:ILE:CD1	2.97	0.47
1:D:629:ASN:C	1:D:629:ASN:ND2	2.65	0.47
1:D:405:LEU:H	1:D:405:LEU:CD1	2.27	0.47
1:F:318:ILE:N	1:F:318:ILE:HD12	2.25	0.47
1:F:315:PHE:HA	1:F:318:ILE:HD13	1.96	0.47
1:B:275:GLY:CA	1:B:278:LYS:HG3	2.43	0.47
1:D:197:LYS:C	1:D:197:LYS:HZ3	2.17	0.47
2:Q:117:THR:O	2:Q:119:GLU:N	2.48	0.47
2:S:109:MSE:HG3	2:S:116:LEU:CD1	2.41	0.47
1:A:700:TYR:HD1	1:A:728:ALA:CA	2.26	0.47
1:A:724:ARG:HG3	1:A:724:ARG:NH1	2.28	0.47
1:D:445:ARG:HG2	1:D:471:TRP:CZ3	2.49	0.47
1:A:583:ASN:O	1:A:587:PRO:HD3	2.14	0.47
2:P:129:ASP:OD1	2:P:134:GLY:N	2.47	0.47
1:B:437:SER:C	1:B:439:ASN:H	2.18	0.47
1:A:102:GLY:HA3	1:A:150:PRO:HG2	1.96	0.47
1:F:102:GLY:HA3	1:F:150:PRO:HG2	1.96	0.47
1:C:169:VAL:HG22	1:C:246:SER:HB2	1.97	0.47
1:C:175:LYS:O	1:C:176:GLY:C	2.53	0.47
2:O:49:GLN:O	2:O:53:ASN:N	2.43	0.47
2:S:42:ASN:O	2:S:42:ASN:CG	2.52	0.47
1:F:397:GLU:HA	1:F:480:ASN:HB2	1.95	0.47
1:B:597:ASN:HB2	1:B:598:PRO:CD	2.37	0.47
1:A:662:GLU:OE2	1:A:755:ARG:NH2	2.38	0.47
1:A:581:GLN:HB3	1:A:627:TYR:CE1	2.49	0.47
1:C:282:SER:HA	1:C:285:LYS:CD	2.44	0.47
1:D:323:ASN:O	1:D:324:THR:HG22	2.15	0.47
2:Q:9:ILE:HG23	2:Q:69:LEU:CD2	2.44	0.47
2:S:117:THR:O	2:S:119:GLU:N	2.47	0.47
1:A:191:GLU:O	1:A:193:LEU:N	2.47	0.47
1:C:115:LYS:NZ	1:C:117:LEU:HB2	2.30	0.47
2:P:9:ILE:HG23	2:P:69:LEU:CD2	2.44	0.47
1:C:216:GLU:HG3	1:C:217:LYS:HG2	1.95	0.47
1:E:515:LYS:HZ3	1:E:516:VAL:HG23	1.79	0.47
1:F:697:ILE:C	1:F:699:GLY:N	2.67	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:T:19:PHE:N	2:T:19:PHE:CD1	2.81	0.47
1:A:700:TYR:CD1	1:A:727:GLN:HB3	2.50	0.47
1:C:225:ILE:HG23	1:C:229:PHE:CD2	2.48	0.47
2:O:126:ARG:HG3	2:O:126:ARG:HH21	1.78	0.47
1:B:180:ASP:O	1:B:183:SER:N	2.33	0.47
1:B:191:GLU:O	1:B:193:LEU:N	2.48	0.47
1:A:165:GLN:OE1	1:A:252:ASP:HB3	2.15	0.47
1:E:173:ILE:O	1:E:174:GLY:C	2.53	0.47
1:E:191:GLU:O	1:E:193:LEU:N	2.48	0.47
1:A:134:LYS:NZ	1:A:136:PRO:HG3	2.29	0.47
1:E:397:GLU:HA	1:E:480:ASN:HB2	1.96	0.47
1:C:540:ARG:NH1	1:C:627:TYR:CE1	2.83	0.47
1:D:581:GLN:HB3	1:D:627:TYR:HE1	1.80	0.47
1:E:781:ASN:O	1:E:789:ASN:ND2	2.46	0.47
2:Q:58:ASP:HB2	2:Q:62:THR:O	2.15	0.47
1:A:312:ALA:O	1:A:315:PHE:HB2	2.14	0.47
1:A:322:LEU:O	1:A:323:ASN:HB3	2.14	0.47
1:A:275:GLY:CA	1:A:278:LYS:HG3	2.43	0.47
1:D:312:ALA:O	1:D:315:PHE:HB2	2.14	0.47
1:E:318:ILE:N	1:E:318:ILE:HD12	2.25	0.47
2:T:9:ILE:HG23	2:T:69:LEU:CD2	2.44	0.47
1:E:115:LYS:NZ	1:E:117:LEU:HB2	2.29	0.47
1:B:412:GLU:C	1:B:414:LYS:H	2.16	0.47
1:F:217:LYS:HB2	1:F:236:GLU:CD	2.35	0.47
2:Q:102:ALA:HB1	2:Q:121:VAL:CG1	2.45	0.47
1:E:697:ILE:C	1:E:699:GLY:N	2.67	0.47
1:A:365:PRO:HB2	1:A:367:ASP:O	2.14	0.47
1:D:432:TYR:CD1	1:D:445:ARG:NE	2.82	0.47
1:D:583:ASN:O	1:D:587:PRO:HD3	2.14	0.47
2:Q:42:ASN:CG	2:Q:42:ASN:O	2.53	0.47
1:E:302:LEU:HD22	1:E:602:PHE:HE1	1.79	0.47
1:C:686:ASP:O	1:C:689:ALA:HB3	2.14	0.47
1:D:523:LEU:HD22	2:R:127:GLU:HG2	1.97	0.47
1:E:424:LYS:HB3	1:E:424:LYS:HZ2	1.80	0.47
1:A:172:GLU:CB	1:A:246:SER:HA	2.40	0.47
1:D:165:GLN:OE1	1:D:252:ASP:HB3	2.15	0.47
1:F:175:LYS:O	1:F:176:GLY:C	2.52	0.47
1:F:175:LYS:HB2	1:F:175:LYS:HZ3	1.77	0.47
1:B:533:LEU:C	1:B:533:LEU:HD23	2.34	0.47
1:E:597:ASN:HD21	1:E:601:GLU:CB	2.09	0.47
2:Q:55:VAL:CB	2:Q:67:GLU:OE2	2.59	0.47
1:B:597:ASN:CB	1:B:598:PRO:HD2	2.36	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:533:LEU:HD23	1:D:533:LEU:C	2.35	0.47
1:F:630:ARG:CZ	2:T:83:GLU:CG	2.88	0.47
1:A:722:ILE:O	1:A:726:ILE:HG13	2.15	0.47
1:E:404:LYS:O	1:E:405:LEU:C	2.51	0.47
1:A:311:HIS:O	1:A:312:ALA:C	2.51	0.47
1:B:115:LYS:NZ	1:B:117:LEU:HB2	2.29	0.47
1:E:322:LEU:O	1:E:323:ASN:HB3	2.15	0.47
1:A:115:LYS:NZ	1:A:117:LEU:HB2	2.29	0.47
2:O:9:ILE:HG23	2:O:69:LEU:CD2	2.44	0.47
1:E:107:THR:HG21	1:E:115:LYS:CD	2.38	0.47
1:D:217:LYS:HB2	1:D:236:GLU:CD	2.35	0.47
1:F:75:THR:O	1:F:76:LEU:C	2.52	0.47
2:S:9:ILE:HG23	2:S:69:LEU:CD2	2.44	0.47
1:B:217:LYS:HB2	1:B:236:GLU:CD	2.35	0.47
1:E:217:LYS:HB2	1:E:236:GLU:CD	2.34	0.47
1:F:509:PRO:HG2	1:F:512:GLU:HG3	1.96	0.47
1:A:724:ARG:O	1:A:727:GLN:HB2	2.15	0.47
1:D:509:PRO:HG2	1:D:512:GLU:HG3	1.96	0.47
1:B:218:LEU:C	1:B:220:LEU:H	2.15	0.47
2:P:102:ALA:HB1	2:P:121:VAL:CG1	2.45	0.47
1:F:225:ILE:HG23	1:F:229:PHE:CD2	2.48	0.47
1:D:666:ASN:HB2	1:D:748:TYR:OH	2.15	0.47
1:E:432:TYR:CD1	1:E:445:ARG:NE	2.83	0.47
2:P:97:ASN:ND2	2:P:97:ASN:N	2.61	0.47
2:P:93:ASP:OD1	2:P:97:ASN:ND2	2.48	0.47
1:C:302:LEU:HD22	1:C:602:PHE:HE1	1.79	0.47
1:B:302:LEU:HD22	1:B:602:PHE:HE1	1.79	0.47
1:F:706:ASN:O	2:T:130:ILE:HG23	2.14	0.47
2:R:129:ASP:OD1	2:R:134:GLY:N	2.47	0.47
1:B:716:LYS:O	1:B:720:ILE:HG22	2.15	0.47
2:T:88:ALA:O	2:T:91:VAL:HB	2.14	0.47
1:F:527:LYS:HG2	2:T:145:MSE:SE	2.65	0.47
2:P:138:TYR:CZ	2:P:142:VAL:CG2	2.98	0.47
2:S:138:TYR:CZ	2:S:142:VAL:CG2	2.98	0.47
1:F:692:GLU:OE1	2:T:21:LYS:NZ	2.47	0.47
1:C:692:GLU:HA	1:C:692:GLU:OE2	2.15	0.47
1:B:165:GLN:OE1	1:B:252:ASP:HB3	2.14	0.47
1:B:175:LYS:HB2	1:B:175:LYS:HZ1	1.77	0.47
1:D:175:LYS:O	1:D:176:GLY:C	2.53	0.47
1:D:169:VAL:HG22	1:D:246:SER:HB2	1.96	0.47
2:O:42:ASN:O	2:O:42:ASN:CG	2.52	0.47
2:O:55:VAL:CB	2:O:67:GLU:OE2	2.59	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:S:65:PHE:CD1	2:S:65:PHE:N	2.82	0.47
1:C:481:VAL:O	1:C:482:GLU:HB2	2.15	0.47
1:C:112:VAL:CG1	1:C:113:GLU:H	2.07	0.47
2:R:16:PHE:CE1	2:R:27:ILE:CD1	2.97	0.47
1:E:620:THR:HG22	1:E:621:GLY:N	2.29	0.47
1:F:620:THR:HG22	1:F:621:GLY:N	2.30	0.47
1:D:115:LYS:NZ	1:D:117:LEU:HB2	2.30	0.47
1:A:217:LYS:HB2	1:A:236:GLU:CD	2.35	0.47
1:C:78:LYS:HD2	1:C:156:ILE:HD13	1.97	0.47
1:F:81:GLN:CD	1:F:156:ILE:HG21	2.35	0.47
1:C:724:ARG:NH1	1:C:724:ARG:HG3	2.27	0.47
1:D:365:PRO:HB2	1:D:367:ASP:O	2.14	0.47
1:B:583:ASN:O	1:B:587:PRO:HD3	2.14	0.47
2:S:76:MSE:C	2:S:78:ASP:H	2.17	0.47
1:F:692:GLU:HA	1:F:692:GLU:OE2	2.15	0.47
2:P:146:THR:O	2:P:147:ALA:C	2.51	0.47
2:R:141:PHE:CZ	2:R:145:MSE:HE3	2.50	0.47
1:B:175:LYS:O	1:B:176:GLY:C	2.53	0.47
1:A:88:LYS:HD2	1:A:89:ILE:HG13	1.95	0.47
1:D:127:SER:O	1:D:133:GLU:CD	2.48	0.47
1:F:597:ASN:HB2	1:F:598:PRO:CD	2.37	0.47
2:R:16:PHE:CE1	2:R:27:ILE:HD13	2.50	0.47
1:E:252:ASP:OD2	1:E:253:HIS:CD2	2.68	0.47
2:O:81:SER:O	2:O:83:GLU:N	2.47	0.47
2:O:58:ASP:HB2	2:O:62:THR:O	2.15	0.47
1:C:318:ILE:HG23	1:C:322:LEU:HD12	1.96	0.47
1:A:781:ASN:O	1:A:789:ASN:ND2	2.47	0.47
1:A:515:LYS:HZ3	1:A:516:VAL:HG23	1.79	0.47
1:A:509:PRO:HD2	1:A:536:TYR:CE2	2.50	0.47
2:T:109:MSE:HG3	2:T:116:LEU:CD1	2.43	0.47
1:D:515:LYS:HZ1	1:D:516:VAL:CG2	2.27	0.47
1:A:565:LYS:C	1:A:567:THR:N	2.68	0.47
1:B:432:TYR:CD1	1:B:445:ARG:NE	2.83	0.47
1:D:567:THR:HG22	1:D:568:GLY:N	2.30	0.47
1:B:686:ASP:O	1:B:689:ALA:HB3	2.14	0.47
2:S:88:ALA:O	2:S:91:VAL:HB	2.15	0.47
1:F:205:SER:C	1:F:207:ASP:H	2.17	0.47
1:B:692:GLU:HA	1:B:692:GLU:OE2	2.15	0.47
1:D:173:ILE:C	1:D:175:LYS:N	2.66	0.47
1:C:176:GLY:O	1:C:178:SER:N	2.48	0.47
1:A:127:SER:O	1:A:133:GLU:CD	2.48	0.47
1:B:296:LEU:HD22	1:B:606:LYS:HE2	1.97	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:345:THR:O	1:B:479:LYS:HE2	2.15	0.47
1:C:533:LEU:HD23	1:C:533:LEU:C	2.36	0.47
1:A:315:PHE:HA	1:A:318:ILE:HD13	1.97	0.47
1:C:312:ALA:O	1:C:315:PHE:HB2	2.15	0.47
1:D:414:LYS:HZ3	1:D:414:LYS:HA	1.79	0.47
1:C:509:PRO:HG2	1:C:512:GLU:HG3	1.97	0.47
1:D:697:ILE:C	1:D:699:GLY:N	2.67	0.47
1:E:684:ASP:C	1:E:686:ASP:N	2.68	0.47
1:A:716:LYS:O	1:A:720:ILE:HG22	2.14	0.47
2:T:129:ASP:OD1	2:T:134:GLY:N	2.48	0.47
1:A:141:PHE:H	1:A:141:PHE:HD1	1.63	0.47
1:B:102:GLY:HA3	1:B:150:PRO:HG2	1.97	0.46
1:E:175:LYS:NZ	1:E:175:LYS:CB	2.76	0.46
1:D:102:GLY:HA3	1:D:150:PRO:HG2	1.97	0.46
1:F:176:GLY:O	1:F:178:SER:N	2.48	0.46
1:C:175:LYS:HZ3	1:C:175:LYS:CB	2.28	0.46
2:O:16:PHE:CE1	2:O:27:ILE:CD1	2.98	0.46
1:C:275:GLY:CA	1:C:278:LYS:HE3	2.35	0.46
1:C:285:LYS:O	1:C:288:VAL:HG22	2.14	0.46
1:A:282:SER:HA	1:A:285:LYS:CD	2.44	0.46
1:E:75:THR:O	1:E:76:LEU:C	2.52	0.46
1:A:509:PRO:HG2	1:A:512:GLU:HG3	1.96	0.46
2:T:97:ASN:ND2	2:T:99:TYR:H	2.13	0.46
1:E:329:ARG:HB3	1:E:330:PRO:CD	2.46	0.46
1:E:141:PHE:H	1:E:141:PHE:HD1	1.64	0.46
1:E:527:LYS:HG2	2:S:145:MSE:SE	2.65	0.46
1:E:523:LEU:HD22	2:S:127:GLU:HG2	1.98	0.46
1:B:173:ILE:O	1:B:174:GLY:C	2.53	0.46
1:C:88:LYS:HD2	1:C:89:ILE:HG13	1.97	0.46
1:E:296:LEU:HD22	1:E:606:LYS:HE2	1.97	0.46
1:A:481:VAL:O	1:A:482:GLU:HB2	2.15	0.46
1:D:481:VAL:O	1:D:482:GLU:HB2	2.16	0.46
1:C:629:ASN:C	1:C:629:ASN:ND2	2.65	0.46
2:Q:81:SER:O	2:Q:83:GLU:N	2.47	0.46
2:P:81:SER:O	2:P:83:GLU:N	2.48	0.46
1:E:275:GLY:CA	1:E:278:LYS:HE3	2.36	0.46
1:E:285:LYS:O	1:E:288:VAL:HG22	2.16	0.46
1:F:311:HIS:O	1:F:312:ALA:C	2.54	0.46
1:D:308:VAL:CG2	1:D:336:THR:O	2.63	0.46
1:E:315:PHE:HA	1:E:318:ILE:HD13	1.98	0.46
2:Q:110:THR:O	2:Q:113:GLY:N	2.39	0.46
1:C:217:LYS:HB2	1:C:236:GLU:CD	2.35	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:462:ILE:CD1	1:B:466:GLY:HA2	2.42	0.46
1:A:697:ILE:O	1:A:699:GLY:N	2.47	0.46
2:P:121:VAL:C	2:P:123:GLN:H	2.17	0.46
2:P:94:LYS:HB3	2:P:94:LYS:HZ2	1.79	0.46
1:A:432:TYR:CD1	1:A:445:ARG:NE	2.84	0.46
2:Q:93:ASP:OD1	2:Q:97:ASN:ND2	2.48	0.46
1:E:583:ASN:O	1:E:587:PRO:HD3	2.15	0.46
2:O:129:ASP:OD1	2:O:134:GLY:N	2.48	0.46
1:E:357:TRP:CZ3	1:E:439:ASN:ND2	2.84	0.46
1:A:527:LYS:HG2	2:O:145:MSE:SE	2.65	0.46
1:A:357:TRP:CZ3	1:A:439:ASN:ND2	2.84	0.46
1:C:210:PHE:HZ	1:C:221:ASN:OD1	1.99	0.46
1:B:176:GLY:O	1:B:178:SER:N	2.48	0.46
1:E:172:GLU:O	1:E:176:GLY:N	2.34	0.46
1:D:106:PHE:CZ	1:D:171:TYR:OH	2.64	0.46
1:F:169:VAL:HG22	1:F:246:SER:HB2	1.97	0.46
1:C:175:LYS:NZ	1:C:175:LYS:CB	2.76	0.46
1:C:180:ASP:CG	1:C:181:ILE:H	2.18	0.46
1:B:127:SER:O	1:B:133:GLU:CD	2.48	0.46
1:A:597:ASN:CB	1:A:598:PRO:HD2	2.36	0.46
2:R:58:ASP:HB2	2:R:62:THR:O	2.16	0.46
2:Q:59:GLY:O	2:Q:62:THR:HG23	2.12	0.46
1:F:244:ALA:HB3	1:F:268:MET:HE3	1.97	0.46
1:A:244:ALA:HB3	1:A:268:MET:HE3	1.96	0.46
1:A:285:LYS:O	1:A:288:VAL:HG22	2.15	0.46
2:O:109:MSE:HG3	2:O:116:LEU:CD1	2.42	0.46
1:B:700:TYR:CD1	1:B:727:GLN:HB3	2.51	0.46
1:C:639:ASN:N	1:C:639:ASN:ND2	2.52	0.46
1:C:583:ASN:O	1:C:587:PRO:HD3	2.15	0.46
2:T:93:ASP:OD1	2:T:97:ASN:ND2	2.48	0.46
1:F:329:ARG:HB3	1:F:330:PRO:CD	2.46	0.46
1:A:329:ARG:HB3	1:A:330:PRO:CD	2.46	0.46
1:C:735:VAL:O	1:C:741:ILE:HD13	2.14	0.46
2:O:146:THR:O	2:O:147:ALA:C	2.52	0.46
1:A:187:SER:C	1:A:188:LEU:O	2.44	0.46
1:F:296:LEU:HD22	1:F:606:LYS:HE2	1.98	0.46
1:C:597:ASN:HB2	1:C:598:PRO:CD	2.38	0.46
2:P:65:PHE:CD1	2:P:65:PHE:N	2.81	0.46
1:A:666:ASN:HB2	1:A:748:TYR:OH	2.15	0.46
1:F:481:VAL:O	1:F:482:GLU:HB2	2.15	0.46
1:E:540:ARG:NH1	1:E:627:TYR:CE1	2.83	0.46
2:O:28:THR:CB	2:O:30:LYS:HZ1	2.29	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:165:GLN:OE1	1:E:252:ASP:HB3	2.15	0.46
1:B:718:ARG:O	1:B:722:ILE:HG13	2.15	0.46
1:D:81:GLN:CD	1:D:156:ILE:HG21	2.35	0.46
1:A:337:ASN:C	1:A:339:ILE:N	2.67	0.46
1:B:446:ILE:HD11	1:B:451:ASN:CB	2.41	0.46
2:R:121:VAL:C	2:R:123:GLN:H	2.16	0.46
2:S:121:VAL:C	2:S:123:GLN:H	2.17	0.46
1:A:602:PHE:N	1:A:602:PHE:CD2	2.83	0.46
1:E:602:PHE:N	1:E:602:PHE:CD2	2.84	0.46
2:Q:88:ALA:O	2:Q:91:VAL:HB	2.15	0.46
1:C:447:SER:OG	1:C:448:ASP:N	2.48	0.46
2:Q:146:THR:O	2:Q:147:ALA:C	2.51	0.46
1:F:210:PHE:HZ	1:F:221:ASN:OD1	1.98	0.46
2:T:39:LEU:HD23	2:T:39:LEU:HA	1.75	0.46
1:D:175:LYS:CB	1:D:175:LYS:NZ	2.76	0.46
1:D:176:GLY:O	1:D:178:SER:N	2.48	0.46
1:F:173:ILE:O	1:F:174:GLY:C	2.54	0.46
1:F:180:ASP:CG	1:F:181:ILE:H	2.19	0.46
1:F:187:SER:C	1:F:188:LEU:O	2.44	0.46
1:C:165:GLN:C	1:C:167:LYS:N	2.69	0.46
2:R:66:PRO:O	2:R:67:GLU:C	2.54	0.46
2:P:66:PRO:O	2:P:67:GLU:C	2.54	0.46
2:S:13:LYS:O	2:S:14:GLU:C	2.54	0.46
2:T:66:PRO:O	2:T:67:GLU:C	2.54	0.46
1:D:397:GLU:HA	1:D:480:ASN:HB2	1.96	0.46
1:F:540:ARG:NH1	1:F:627:TYR:CE1	2.83	0.46
2:T:81:SER:O	2:T:83:GLU:N	2.48	0.46
1:B:722:ILE:O	1:B:726:ILE:HG13	2.16	0.46
1:F:323:ASN:C	1:F:324:THR:CG2	2.84	0.46
1:B:282:SER:HA	1:B:285:LYS:CD	2.44	0.46
1:B:115:LYS:HB3	1:B:115:LYS:HZ3	1.80	0.46
1:F:746:LYS:HG2	1:F:750:GLN:HE21	1.81	0.46
1:C:81:GLN:CD	1:C:156:ILE:HG21	2.36	0.46
1:F:529:VAL:O	1:F:532:LEU:HB2	2.16	0.46
1:F:697:ILE:HG12	1:F:732:ILE:HD13	1.98	0.46
1:C:666:ASN:HB2	1:C:748:TYR:OH	2.16	0.46
1:F:432:TYR:CD1	1:F:445:ARG:NE	2.84	0.46
1:C:565:LYS:C	1:C:567:THR:N	2.69	0.46
1:D:565:LYS:C	1:D:567:THR:N	2.68	0.46
1:F:602:PHE:CD2	1:F:602:PHE:N	2.83	0.46
1:C:329:ARG:HB3	1:C:330:PRO:CD	2.45	0.46
1:A:717:LYS:O	1:A:720:ILE:HG22	2.15	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:329:ARG:HB3	1:B:330:PRO:CD	2.46	0.46
1:E:709:ASN:O	1:E:717:LYS:HE3	2.16	0.46
1:E:692:GLU:OE2	1:E:692:GLU:HA	2.15	0.46
1:B:141:PHE:HD1	1:B:141:PHE:H	1.64	0.46
1:C:227:ILE:HG22	1:C:227:ILE:O	2.15	0.46
1:E:227:ILE:HG22	1:E:227:ILE:O	2.15	0.46
1:E:180:ASP:CG	1:E:181:ILE:H	2.19	0.46
1:F:183:SER:HB3	1:F:184:LYS:H	1.51	0.46
1:C:134:LYS:NZ	1:C:136:PRO:HG3	2.30	0.46
1:D:134:LYS:NZ	1:D:136:PRO:HG3	2.31	0.46
1:B:533:LEU:HD12	2:P:112:LEU:HD11	1.97	0.46
1:C:397:GLU:HA	1:C:480:ASN:HB2	1.97	0.46
1:A:112:VAL:CG1	1:A:113:GLU:H	2.07	0.46
2:R:28:THR:OG1	2:R:30:LYS:HE2	2.16	0.46
1:D:282:SER:HA	1:D:285:LYS:CD	2.45	0.46
1:B:285:LYS:O	1:B:288:VAL:HG22	2.16	0.46
1:B:81:GLN:CD	1:B:156:ILE:HG21	2.35	0.46
1:C:515:LYS:HZ3	1:C:516:VAL:CG2	2.29	0.46
1:B:529:VAL:O	1:B:532:LEU:HB2	2.16	0.46
1:F:218:LEU:C	1:F:220:LEU:H	2.15	0.46
1:C:527:LYS:HG2	2:Q:145:MSE:SE	2.66	0.46
2:Q:141:PHE:CZ	2:Q:145:MSE:HE3	2.51	0.46
1:A:238:GLN:O	1:A:240:ALA:N	2.49	0.46
1:A:93:VAL:HG23	1:A:179:LEU:CD1	2.40	0.46
1:E:102:GLY:HA3	1:E:150:PRO:HG2	1.96	0.46
1:C:102:GLY:HA3	1:C:150:PRO:HG2	1.97	0.46
1:C:172:GLU:O	1:C:176:GLY:N	2.34	0.46
1:C:173:ILE:O	1:C:174:GLY:C	2.54	0.46
1:F:134:LYS:NZ	1:F:136:PRO:HG3	2.31	0.46
2:P:55:VAL:CB	2:P:67:GLU:OE2	2.57	0.46
2:Q:49:GLN:O	2:Q:53:ASN:N	2.43	0.46
2:Q:66:PRO:O	2:Q:67:GLU:C	2.54	0.46
1:B:662:GLU:OE2	1:B:755:ARG:NH2	2.39	0.46
1:E:718:ARG:O	1:E:722:ILE:HG13	2.15	0.46
1:C:315:PHE:HA	1:C:318:ILE:HD13	1.97	0.46
1:F:312:ALA:O	1:F:315:PHE:HB2	2.16	0.46
1:F:552:TRP:O	1:F:553:GLN:C	2.54	0.46
1:D:315:PHE:HA	1:D:318:ILE:HD13	1.97	0.46
1:B:337:ASN:C	1:B:339:ILE:N	2.67	0.46
1:C:446:ILE:HD11	1:C:451:ASN:CB	2.41	0.46
1:E:509:PRO:HD2	1:E:536:TYR:CE2	2.51	0.46
1:B:509:PRO:HD2	1:B:536:TYR:CE2	2.51	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:700:TYR:CD1	1:F:727:GLN:HB3	2.50	0.46
1:A:218:LEU:C	1:A:220:LEU:H	2.16	0.46
1:B:602:PHE:N	1:B:602:PHE:CD2	2.84	0.46
1:E:357:TRP:CH2	1:E:439:ASN:ND2	2.84	0.46
1:C:141:PHE:HD1	1:C:141:PHE:H	1.63	0.46
2:R:138:TYR:CZ	2:R:142:VAL:CG2	2.99	0.46
1:A:210:PHE:HZ	1:A:221:ASN:OD1	1.98	0.46
1:B:210:PHE:HZ	1:B:221:ASN:OD1	1.98	0.46
2:R:105:LEU:HD21	2:R:124:MSE:SE	2.66	0.46
1:B:88:LYS:HD2	1:B:89:ILE:HG13	1.97	0.46
1:A:597:ASN:HB2	1:A:598:PRO:CD	2.37	0.46
1:E:533:LEU:C	1:E:533:LEU:HD23	2.36	0.46
2:R:81:SER:O	2:R:83:GLU:N	2.48	0.46
1:F:405:LEU:H	1:F:405:LEU:CD1	2.27	0.46
1:D:620:THR:HG22	1:D:621:GLY:N	2.30	0.46
1:A:323:ASN:C	1:A:324:THR:CG2	2.84	0.46
1:B:403:LEU:CD2	1:B:474:ILE:HG21	2.46	0.46
1:F:285:LYS:O	1:F:288:VAL:HG22	2.16	0.46
1:F:781:ASN:O	1:F:789:ASN:ND2	2.47	0.46
1:A:281:GLU:C	1:A:283:LEU:N	2.69	0.46
1:D:115:LYS:HZ1	1:D:117:LEU:HB2	1.81	0.46
2:Q:9:ILE:CD1	2:Q:69:LEU:HD11	2.38	0.46
1:B:78:LYS:HD2	1:B:156:ILE:HD13	1.98	0.46
1:A:529:VAL:O	1:A:532:LEU:HB2	2.16	0.46
1:F:724:ARG:HG3	1:F:724:ARG:NH1	2.30	0.46
1:B:684:ASP:C	1:B:686:ASP:N	2.69	0.46
1:A:684:ASP:C	1:A:686:ASP:N	2.69	0.46
1:E:357:TRP:CZ3	1:E:439:ASN:HB2	2.51	0.46
1:E:357:TRP:HZ3	1:E:439:ASN:HB2	1.81	0.46
1:D:141:PHE:HD1	1:D:141:PHE:N	2.14	0.46
1:A:492:TYR:CE2	1:A:574:VAL:HG21	2.51	0.46
1:B:173:ILE:C	1:B:175:LYS:N	2.66	0.46
1:A:165:GLN:C	1:A:167:LYS:N	2.69	0.46
1:E:176:GLY:O	1:E:178:SER:N	2.48	0.46
1:E:197:LYS:HB3	1:E:197:LYS:NZ	2.26	0.46
2:R:24:ASP:CG	2:R:25:GLY:H	2.19	0.46
2:P:13:LYS:O	2:P:14:GLU:C	2.54	0.46
2:P:42:ASN:O	2:P:42:ASN:CG	2.53	0.46
2:S:66:PRO:O	2:S:67:GLU:C	2.54	0.46
1:E:533:LEU:HD12	2:S:112:LEU:HD11	1.97	0.46
1:E:403:LEU:CD2	1:E:474:ILE:HG21	2.46	0.46
1:B:312:ALA:O	1:B:315:PHE:HB2	2.16	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:Q:56:ASP:CG	2:Q:60:ASN:HA	2.34	0.46
1:C:323:ASN:C	1:C:324:THR:CG2	2.84	0.46
1:F:552:TRP:HA	1:F:555:GLN:HG2	1.98	0.46
1:B:404:LYS:O	1:B:405:LEU:C	2.52	0.46
1:B:781:ASN:O	1:B:789:ASN:ND2	2.46	0.46
1:D:318:ILE:N	1:D:318:ILE:HD12	2.25	0.46
1:A:115:LYS:HZ1	1:A:117:LEU:HB2	1.80	0.46
1:E:635:ILE:N	1:E:635:ILE:CD1	2.72	0.46
1:E:746:LYS:HG2	1:E:750:GLN:HE21	1.81	0.46
1:A:697:ILE:HG12	1:A:732:ILE:HD13	1.98	0.46
1:E:565:LYS:C	1:E:567:THR:N	2.69	0.46
1:A:123:GLU:CG	1:A:124:GLU:N	2.79	0.46
1:E:299:GLU:HA	1:E:302:LEU:HB3	1.98	0.46
1:D:602:PHE:N	1:D:602:PHE:CD2	2.84	0.46
1:C:357:TRP:HZ3	1:C:439:ASN:HB2	1.81	0.46
1:A:99:GLU:C	1:A:101:GLY:H	2.19	0.46
1:D:492:TYR:CE2	1:D:574:VAL:HG21	2.51	0.46
1:A:180:ASP:CG	1:A:181:ILE:H	2.18	0.46
1:F:165:GLN:OE1	1:F:252:ASP:HB3	2.15	0.46
1:C:173:ILE:C	1:C:175:LYS:N	2.67	0.46
1:F:533:LEU:HD23	1:F:533:LEU:C	2.36	0.46
1:B:478:ALA:CB	1:B:486:LYS:O	2.61	0.46
2:Q:16:PHE:CE1	2:Q:27:ILE:HD13	2.50	0.46
2:Q:28:THR:OG1	2:Q:30:LYS:HE2	2.16	0.46
2:T:28:THR:OG1	2:T:30:LYS:HE2	2.16	0.46
1:D:629:ASN:HB3	1:D:632:TYR:CE1	2.51	0.46
1:B:581:GLN:HB3	1:B:627:TYR:HE1	1.81	0.46
1:B:318:ILE:HG23	1:B:322:LEU:HD12	1.98	0.46
1:A:552:TRP:O	1:A:553:GLN:C	2.53	0.46
1:D:281:GLU:C	1:D:283:LEU:N	2.69	0.46
1:A:405:LEU:HD13	1:A:453:VAL:CG2	2.33	0.46
1:D:552:TRP:O	1:D:553:GLN:C	2.53	0.46
1:C:414:LYS:HA	1:C:414:LYS:HZ3	1.81	0.46
2:T:59:GLY:O	2:T:62:THR:CG2	2.64	0.46
1:F:515:LYS:HZ3	1:F:516:VAL:HG23	1.81	0.46
1:D:700:TYR:CD1	1:D:727:GLN:HB3	2.51	0.46
1:B:739:LYS:CG	1:B:740:GLN:H	2.26	0.46
1:C:432:TYR:CD1	1:C:445:ARG:NE	2.84	0.46
1:F:565:LYS:C	1:F:567:THR:N	2.68	0.46
1:A:357:TRP:CZ3	1:A:439:ASN:HB2	2.52	0.46
1:A:357:TRP:HZ3	1:A:439:ASN:HB2	1.81	0.46
1:E:492:TYR:CE2	1:E:574:VAL:HG21	2.51	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:227:ILE:O	1:F:227:ILE:HG22	2.16	0.46
1:E:296:LEU:O	1:E:301:ALA:HB2	2.17	0.45
2:S:16:PHE:CE1	2:S:27:ILE:HD13	2.52	0.45
1:B:756:ILE:HG12	1:B:756:ILE:H	1.64	0.45
1:B:323:ASN:C	1:B:324:THR:CG2	2.84	0.45
1:B:278:LYS:O	1:B:281:GLU:N	2.49	0.45
1:E:323:ASN:C	1:E:324:THR:CG2	2.84	0.45
1:E:337:ASN:C	1:E:339:ILE:N	2.69	0.45
1:E:700:TYR:CD1	1:E:727:GLN:HB3	2.52	0.45
1:C:580:GLU:O	1:C:583:ASN:HB2	2.16	0.45
1:A:299:GLU:HA	1:A:302:LEU:HB3	1.99	0.45
2:S:129:ASP:OD1	2:S:134:GLY:N	2.48	0.45
2:O:138:TYR:CZ	2:O:142:VAL:HG21	2.51	0.45
1:E:141:PHE:N	1:E:141:PHE:HD1	2.14	0.45
2:T:138:TYR:CZ	2:T:142:VAL:CG2	2.99	0.45
1:B:527:LYS:HG2	2:P:145:MSE:SE	2.65	0.45
1:C:492:TYR:CE2	1:C:574:VAL:HG21	2.51	0.45
1:E:210:PHE:HZ	1:E:221:ASN:OD1	1.98	0.45
1:C:778:LYS:HB3	1:C:778:LYS:HE3	1.76	0.45
1:A:395:GLU:O	1:A:395:GLU:OE1	2.34	0.45
1:D:180:ASP:CG	1:D:181:ILE:H	2.19	0.45
1:F:152:LEU:HD21	1:F:154:ILE:HD11	1.99	0.45
1:C:234:LEU:HD23	1:C:234:LEU:N	2.32	0.45
1:C:252:ASP:OD2	1:C:253:HIS:CD2	2.70	0.45
2:O:13:LYS:O	2:O:14:GLU:C	2.53	0.45
1:A:345:THR:O	1:A:479:LYS:HE2	2.17	0.45
1:A:478:ALA:CB	1:A:486:LYS:O	2.62	0.45
1:C:533:LEU:HD12	2:Q:112:LEU:HD11	1.98	0.45
2:S:16:PHE:CE1	2:S:27:ILE:CD1	2.98	0.45
2:O:16:PHE:CE1	2:O:27:ILE:HD13	2.52	0.45
2:P:28:THR:OG1	2:P:30:LYS:HE2	2.16	0.45
1:B:318:ILE:N	1:B:318:ILE:HD12	2.24	0.45
1:F:279:ILE:HG22	1:F:283:LEU:HD13	1.99	0.45
1:A:391:ILE:CG1	1:A:399:GLY:HA2	2.43	0.45
2:S:102:ALA:HB1	2:S:121:VAL:CG1	2.46	0.45
2:O:94:LYS:HB3	2:O:94:LYS:HZ2	1.80	0.45
1:A:443:GLU:HG3	1:A:458:LYS:HZ2	1.82	0.45
1:F:443:GLU:HG3	1:F:458:LYS:HZ2	1.79	0.45
1:A:686:ASP:O	1:A:689:ALA:HB3	2.15	0.45
1:D:684:ASP:C	1:D:686:ASP:N	2.70	0.45
1:B:175:LYS:HB2	1:B:175:LYS:HZ2	1.82	0.45
1:C:104:ILE:HG23	1:C:152:LEU:CD2	2.47	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:296:LEU:O	1:A:301:ALA:HB2	2.16	0.45
2:P:24:ASP:CG	2:P:25:GLY:H	2.20	0.45
2:T:16:PHE:CE1	2:T:27:ILE:HD13	2.51	0.45
1:A:581:GLN:HB3	1:A:627:TYR:HE1	1.82	0.45
1:A:629:ASN:HB3	1:A:632:TYR:CE1	2.51	0.45
1:E:611:THR:HG22	1:E:615:ILE:HD11	1.98	0.45
1:A:552:TRP:HA	1:A:555:GLN:HG2	1.97	0.45
1:C:307:LEU:H	1:C:307:LEU:CD1	2.29	0.45
1:F:333:LYS:HA	1:F:336:THR:OG1	2.17	0.45
1:F:550:SER:HB3	1:F:553:GLN:CG	2.38	0.45
1:E:311:HIS:O	1:E:314:ALA:N	2.49	0.45
1:D:529:VAL:O	1:D:532:LEU:HB2	2.16	0.45
1:D:697:ILE:O	1:D:699:GLY:N	2.50	0.45
1:F:357:TRP:CH2	1:F:439:ASN:ND2	2.85	0.45
1:F:141:PHE:N	1:F:141:PHE:HD1	2.14	0.45
1:C:141:PHE:N	1:C:141:PHE:HD1	2.14	0.45
1:B:357:TRP:CZ3	1:B:439:ASN:HB2	2.52	0.45
2:Q:138:TYR:CZ	2:Q:142:VAL:CG2	2.99	0.45
1:F:778:LYS:HE3	1:F:778:LYS:HB3	1.76	0.45
1:B:238:GLN:O	1:B:240:ALA:N	2.50	0.45
1:A:597:ASN:HD21	1:A:601:GLU:CB	2.09	0.45
2:O:66:PRO:O	2:O:67:GLU:C	2.54	0.45
1:E:345:THR:O	1:E:479:LYS:HE2	2.16	0.45
1:E:481:VAL:O	1:E:482:GLU:HB2	2.15	0.45
1:E:629:ASN:HB3	1:E:632:TYR:CE1	2.52	0.45
1:E:552:TRP:O	1:E:553:GLN:C	2.54	0.45
1:E:115:LYS:HB3	1:E:115:LYS:HZ3	1.81	0.45
1:E:78:LYS:HD2	1:E:156:ILE:HD13	1.99	0.45
1:A:515:LYS:HZ1	1:A:516:VAL:CG2	2.30	0.45
1:B:509:PRO:HG2	1:B:512:GLU:HG3	1.98	0.45
1:F:739:LYS:HG2	1:F:740:GLN:N	2.30	0.45
2:P:97:ASN:ND2	2:P:99:TYR:H	2.14	0.45
1:F:684:ASP:C	1:F:686:ASP:N	2.69	0.45
1:C:684:ASP:C	1:C:686:ASP:N	2.69	0.45
1:D:299:GLU:HA	1:D:302:LEU:HB3	1.98	0.45
1:B:299:GLU:HA	1:B:302:LEU:HB3	1.99	0.45
1:A:357:TRP:CH2	1:A:439:ASN:ND2	2.84	0.45
1:D:141:PHE:H	1:D:141:PHE:HD1	1.63	0.45
1:B:492:TYR:CE2	1:B:574:VAL:HG21	2.52	0.45
1:B:660:SER:O	1:B:663:PHE:HB3	2.17	0.45
1:A:227:ILE:HG22	1:A:227:ILE:O	2.16	0.45
1:D:104:ILE:HG23	1:D:152:LEU:CD2	2.47	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:165:GLN:C	1:D:167:LYS:N	2.70	0.45
1:C:165:GLN:OE1	1:C:252:ASP:HB3	2.16	0.45
2:R:42:ASN:O	2:R:42:ASN:CG	2.53	0.45
1:E:325:TYR:CD1	1:E:598:PRO:HD3	2.52	0.45
1:E:478:ALA:CB	1:E:486:LYS:O	2.63	0.45
2:O:28:THR:OG1	2:O:30:LYS:HE2	2.17	0.45
1:A:611:THR:HG22	1:A:615:ILE:HD11	1.97	0.45
1:E:281:GLU:C	1:E:283:LEU:N	2.70	0.45
1:E:278:LYS:O	1:E:281:GLU:N	2.49	0.45
1:F:278:LYS:CB	1:F:279:ILE:HD13	2.47	0.45
2:P:69:LEU:O	2:P:69:LEU:HD12	2.17	0.45
1:C:700:TYR:CD1	1:C:727:GLN:HB3	2.51	0.45
2:O:102:ALA:HB1	2:O:121:VAL:CG1	2.46	0.45
1:A:375:GLY:O	1:A:377:GLN:N	2.49	0.45
1:D:709:ASN:O	1:D:717:LYS:HE3	2.16	0.45
1:D:527:LYS:HG2	2:R:145:MSE:SE	2.66	0.45
1:F:523:LEU:HD22	2:T:127:GLU:HG2	1.99	0.45
2:S:105:LEU:HD21	2:S:124:MSE:SE	2.67	0.45
1:E:297:LYS:NZ	1:E:297:LYS:HB3	2.32	0.45
2:S:56:ASP:CG	2:S:60:ASN:HA	2.36	0.45
1:F:238:GLN:C	1:F:240:ALA:H	2.20	0.45
1:F:238:GLN:O	1:F:240:ALA:N	2.50	0.45
1:F:296:LEU:O	1:F:301:ALA:HB2	2.17	0.45
2:Q:24:ASP:CG	2:Q:25:GLY:H	2.20	0.45
2:Q:46:ALA:HA	2:Q:49:GLN:NE2	2.32	0.45
2:T:13:LYS:O	2:T:14:GLU:C	2.55	0.45
2:S:81:SER:O	2:S:83:GLU:N	2.50	0.45
1:D:611:THR:HG22	1:D:615:ILE:HD11	1.98	0.45
1:D:278:LYS:O	1:D:281:GLU:N	2.49	0.45
1:A:403:LEU:CD2	1:A:474:ILE:HG21	2.47	0.45
1:D:318:ILE:HG23	1:D:322:LEU:HD12	1.97	0.45
1:D:697:ILE:HG12	1:D:732:ILE:HD13	1.99	0.45
2:O:121:VAL:C	2:O:123:GLN:H	2.18	0.45
1:C:602:PHE:N	1:C:602:PHE:CD2	2.84	0.45
2:S:3:GLN:N	2:S:77:LYS:HD3	2.32	0.45
1:B:100:LEU:HD13	1:B:182:ILE:HG21	1.99	0.45
1:E:183:SER:HB3	1:E:184:LYS:H	1.51	0.45
1:D:238:GLN:O	1:D:240:ALA:N	2.49	0.45
1:F:165:GLN:C	1:F:167:LYS:N	2.69	0.45
2:S:24:ASP:CG	2:S:25:GLY:H	2.19	0.45
1:D:112:VAL:CG1	1:D:113:GLU:H	2.07	0.45
2:R:61:GLY:C	2:R:62:THR:HG22	2.36	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:307:LEU:CD1	1:A:307:LEU:H	2.29	0.45
1:E:275:GLY:CA	1:E:278:LYS:HG3	2.44	0.45
1:C:275:GLY:CA	1:C:278:LYS:HG3	2.43	0.45
1:C:278:LYS:O	1:C:281:GLU:N	2.49	0.45
1:C:279:ILE:HG22	1:C:283:LEU:HD13	1.98	0.45
1:F:318:ILE:HG23	1:F:322:LEU:HD12	1.98	0.45
1:F:278:LYS:HB2	1:F:279:ILE:CD1	2.47	0.45
1:D:307:LEU:CD1	1:D:307:LEU:H	2.30	0.45
1:E:552:TRP:HA	1:E:555:GLN:HG2	1.99	0.45
2:S:69:LEU:HD12	2:S:69:LEU:O	2.17	0.45
1:C:337:ASN:C	1:C:339:ILE:N	2.67	0.45
2:Q:109:MSE:HG3	2:Q:116:LEU:CD1	2.44	0.45
1:B:565:LYS:C	1:B:567:THR:N	2.68	0.45
1:F:123:GLU:CG	1:F:124:GLU:N	2.80	0.45
1:C:709:ASN:O	1:C:717:LYS:HE3	2.16	0.45
1:D:357:TRP:CZ3	1:D:439:ASN:HB2	2.51	0.45
1:D:357:TRP:CH2	1:D:439:ASN:ND2	2.85	0.45
1:C:357:TRP:CH2	1:C:439:ASN:ND2	2.85	0.45
1:B:447:SER:OG	1:B:448:ASP:N	2.49	0.45
1:A:759:GLN:NE2	1:A:762:LEU:HD23	2.32	0.45
1:C:238:GLN:C	1:C:240:ALA:H	2.20	0.45
2:T:49:GLN:O	2:T:53:ASN:N	2.44	0.45
1:F:398:ILE:HD13	1:F:479:LYS:HA	1.99	0.45
1:D:533:LEU:HD12	2:R:112:LEU:HD11	1.99	0.45
1:B:397:GLU:HA	1:B:480:ASN:HB2	1.98	0.45
1:B:122:GLU:HG3	1:B:147:ARG:H	1.81	0.45
1:D:579:THR:O	1:D:581:GLN:N	2.49	0.45
1:A:718:ARG:O	1:A:722:ILE:HG13	2.17	0.45
1:C:403:LEU:CD2	1:C:474:ILE:HG21	2.46	0.45
1:D:403:LEU:CD2	1:D:474:ILE:HG21	2.46	0.45
1:D:285:LYS:O	1:D:288:VAL:HG22	2.16	0.45
1:E:279:ILE:HG22	1:E:283:LEU:HD13	1.99	0.45
1:C:281:GLU:C	1:C:283:LEU:N	2.70	0.45
1:C:305:SER:O	1:C:331:VAL:HG23	2.17	0.45
1:F:275:GLY:O	1:F:278:LYS:HB2	2.17	0.45
1:B:746:LYS:HG2	1:B:750:GLN:HE21	1.82	0.45
1:F:78:LYS:HD2	1:F:156:ILE:HD13	1.98	0.45
1:C:529:VAL:O	1:C:532:LEU:HB2	2.17	0.45
1:D:515:LYS:HZ3	1:D:516:VAL:HG23	1.82	0.45
1:E:199:LEU:C	1:E:201:ASP:N	2.67	0.45
1:F:666:ASN:HB2	1:F:748:TYR:OH	2.16	0.45
1:E:666:ASN:HB2	1:E:748:TYR:OH	2.16	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:299:GLU:HA	1:C:302:LEU:HB3	1.98	0.45
1:A:141:PHE:N	1:A:141:PHE:HD1	2.14	0.45
2:O:141:PHE:CZ	2:O:145:MSE:HE3	2.52	0.45
1:F:447:SER:OG	1:F:448:ASP:N	2.50	0.45
1:F:297:LYS:NZ	1:F:297:LYS:HB3	2.32	0.45
1:B:759:GLN:NE2	1:B:762:LEU:HD23	2.32	0.45
1:A:104:ILE:HG23	1:A:152:LEU:CD2	2.47	0.45
1:E:238:GLN:C	1:E:240:ALA:H	2.20	0.45
1:E:90:PRO:O	1:E:93:VAL:N	2.50	0.45
1:F:175:LYS:CB	1:F:175:LYS:HZ3	2.30	0.45
1:F:581:GLN:HB3	1:F:627:TYR:HE1	1.82	0.45
1:E:165:GLN:C	1:E:167:LYS:N	2.69	0.45
1:E:376:GLN:O	1:E:380:VAL:HG23	2.17	0.45
1:B:552:TRP:HA	1:B:555:GLN:HG2	1.98	0.45
1:F:275:GLY:CA	1:F:278:LYS:HG3	2.43	0.45
1:A:275:GLY:O	1:A:278:LYS:HB2	2.17	0.45
1:E:307:LEU:H	1:E:307:LEU:CD1	2.29	0.45
1:F:337:ASN:C	1:F:339:ILE:N	2.69	0.45
1:C:697:ILE:HD13	1:C:732:ILE:HD13	1.99	0.45
1:F:375:GLY:O	1:F:377:GLN:N	2.50	0.45
2:Q:97:ASN:ND2	2:Q:99:TYR:H	2.14	0.45
2:S:97:ASN:ND2	2:S:97:ASN:N	2.60	0.45
1:D:123:GLU:CG	1:D:124:GLU:N	2.79	0.45
1:A:709:ASN:O	1:A:717:LYS:HE3	2.16	0.45
1:D:329:ARG:HB3	1:D:330:PRO:CD	2.46	0.45
1:F:357:TRP:CZ3	1:F:439:ASN:ND2	2.85	0.45
1:F:492:TYR:CE2	1:F:574:VAL:HG21	2.52	0.45
1:F:444:PHE:N	1:F:444:PHE:CD1	2.85	0.45
1:E:238:GLN:O	1:E:240:ALA:N	2.50	0.45
1:D:186:LYS:O	1:D:186:LYS:HG2	2.17	0.45
1:A:136:PRO:HG2	1:A:139:SER:OG	2.17	0.45
1:B:296:LEU:O	1:B:301:ALA:HB2	2.17	0.45
2:P:49:GLN:O	2:P:53:ASN:N	2.43	0.45
2:O:65:PHE:CB	2:O:66:PRO:HD3	2.38	0.45
1:F:403:LEU:CD2	1:F:474:ILE:HG21	2.46	0.45
1:A:376:GLN:O	1:A:380:VAL:HG23	2.17	0.45
1:B:552:TRP:O	1:B:553:GLN:C	2.53	0.45
1:D:279:ILE:HG22	1:D:283:LEU:HD13	1.98	0.45
1:B:611:THR:HG22	1:B:615:ILE:HD11	1.99	0.45
1:A:278:LYS:O	1:A:281:GLU:N	2.50	0.45
2:Q:69:LEU:O	2:Q:69:LEU:HD12	2.17	0.45
1:C:746:LYS:HG2	1:C:750:GLN:HE21	1.82	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:391:ILE:CG1	1:D:399:GLY:HA2	2.40	0.45
1:B:697:ILE:O	1:B:699:GLY:N	2.47	0.45
1:C:636:ALA:HA	1:C:637:PRO:HD3	1.85	0.45
1:A:580:GLU:O	1:A:583:ASN:HB2	2.17	0.45
2:R:97:ASN:ND2	2:R:99:TYR:H	2.15	0.45
1:D:357:TRP:HZ3	1:D:439:ASN:HB2	1.82	0.45
1:B:141:PHE:HD1	1:B:141:PHE:N	2.14	0.45
1:D:759:GLN:NE2	1:D:762:LEU:HD23	2.32	0.45
2:P:3:GLN:N	2:P:77:LYS:HD3	2.32	0.45
1:F:660:SER:O	1:F:663:PHE:HB3	2.16	0.45
1:B:395:GLU:OE1	1:B:395:GLU:O	2.35	0.45
2:R:39:LEU:HA	2:R:39:LEU:HD23	1.74	0.45
1:B:622:LYS:HD3	1:B:622:LYS:HA	1.51	0.45
1:B:165:GLN:C	1:B:167:LYS:N	2.70	0.44
1:B:234:LEU:N	1:B:234:LEU:HD23	2.31	0.44
1:B:93:VAL:HG23	1:B:179:LEU:CD1	2.40	0.44
1:D:182:ILE:HD13	1:D:182:ILE:O	2.17	0.44
1:F:154:ILE:CG1	1:F:171:TYR:CE1	2.88	0.44
1:F:186:LYS:O	1:F:186:LYS:HG2	2.17	0.44
1:C:90:PRO:O	1:C:93:VAL:N	2.50	0.44
1:C:296:LEU:O	1:C:301:ALA:HB2	2.16	0.44
1:F:629:ASN:HB3	1:F:632:TYR:CE1	2.52	0.44
1:C:76:LEU:N	1:C:76:LEU:CD2	2.80	0.44
1:E:509:PRO:HG2	1:E:512:GLU:HG3	1.99	0.44
1:A:697:ILE:C	1:A:699:GLY:N	2.67	0.44
1:B:376:GLN:O	1:B:378:LEU:N	2.50	0.44
1:D:443:GLU:HG3	1:D:458:LYS:HZ2	1.83	0.44
1:D:375:GLY:O	1:D:377:GLN:N	2.50	0.44
1:D:772:GLU:O	1:D:773:PHE:C	2.55	0.44
1:E:772:GLU:O	1:E:773:PHE:C	2.56	0.44
1:F:622:LYS:HD3	1:F:622:LYS:HA	1.51	0.44
1:B:227:ILE:HG22	1:B:227:ILE:O	2.16	0.44
1:D:227:ILE:O	1:D:227:ILE:HG22	2.15	0.44
1:D:172:GLU:O	1:D:176:GLY:N	2.34	0.44
1:D:252:ASP:OD2	1:D:253:HIS:CD2	2.70	0.44
1:F:234:LEU:HD23	1:F:234:LEU:N	2.32	0.44
1:F:90:PRO:O	1:F:93:VAL:N	2.51	0.44
1:A:135:VAL:N	1:A:136:PRO:CD	2.81	0.44
1:C:345:THR:O	1:C:479:LYS:HE2	2.16	0.44
1:D:325:TYR:CD1	1:D:598:PRO:HD3	2.52	0.44
2:S:28:THR:OG1	2:S:30:LYS:HE2	2.17	0.44
1:E:376:GLN:O	1:E:378:LEU:N	2.50	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:307:LEU:CD1	1:B:307:LEU:H	2.29	0.44
1:C:552:TRP:HA	1:C:555:GLN:HG2	1.99	0.44
1:F:307:LEU:CD1	1:F:307:LEU:H	2.30	0.44
1:F:318:ILE:H	1:F:318:ILE:CD1	2.27	0.44
1:E:318:ILE:HG23	1:E:322:LEU:HD12	1.98	0.44
1:E:529:VAL:O	1:E:532:LEU:HB2	2.17	0.44
1:F:509:PRO:HD2	1:F:536:TYR:CE2	2.52	0.44
2:R:102:ALA:HB1	2:R:121:VAL:CG1	2.44	0.44
1:E:148:GLU:CG	1:E:149:THR:N	2.75	0.44
1:F:709:ASN:O	1:F:717:LYS:HE3	2.17	0.44
1:B:424:LYS:HB3	1:B:424:LYS:NZ	2.32	0.44
2:S:138:TYR:CZ	2:S:142:VAL:HG21	2.53	0.44
1:B:772:GLU:O	1:B:773:PHE:C	2.56	0.44
2:Q:3:GLN:N	2:Q:77:LYS:HD3	2.32	0.44
2:Q:105:LEU:HD21	2:Q:124:MSE:SE	2.67	0.44
1:A:447:SER:OG	1:A:448:ASP:N	2.49	0.44
1:E:785:ASN:OD1	1:E:785:ASN:O	2.35	0.44
1:D:444:PHE:CD1	1:D:444:PHE:N	2.85	0.44
1:A:297:LYS:NZ	1:A:297:LYS:HB3	2.32	0.44
1:A:234:LEU:HD23	1:A:234:LEU:N	2.32	0.44
1:A:90:PRO:O	1:A:93:VAL:N	2.49	0.44
1:F:135:VAL:N	1:F:136:PRO:CD	2.80	0.44
1:C:296:LEU:HD22	1:C:606:LYS:HE2	1.99	0.44
1:F:345:THR:O	1:F:479:LYS:HE2	2.17	0.44
1:F:478:ALA:CB	1:F:486:LYS:O	2.61	0.44
1:C:333:LYS:HA	1:C:336:THR:OG1	2.17	0.44
1:C:552:TRP:O	1:C:553:GLN:C	2.53	0.44
1:C:794:GLN:O	1:C:797:ILE:HG12	2.18	0.44
1:D:376:GLN:O	1:D:380:VAL:HG23	2.17	0.44
1:D:323:ASN:C	1:D:324:THR:CG2	2.85	0.44
1:A:635:ILE:CD1	1:A:635:ILE:N	2.71	0.44
2:O:69:LEU:O	2:O:69:LEU:HD12	2.17	0.44
1:D:509:PRO:HD2	1:D:536:TYR:CE2	2.52	0.44
2:R:109:MSE:HG3	2:R:116:LEU:CD1	2.45	0.44
1:B:697:ILE:HG12	1:B:732:ILE:HD13	1.98	0.44
1:E:697:ILE:O	1:E:699:GLY:N	2.48	0.44
2:S:141:PHE:CZ	2:S:145:MSE:HE3	2.51	0.44
2:P:88:ALA:O	2:P:91:VAL:HB	2.17	0.44
1:C:444:PHE:N	1:C:444:PHE:CD1	2.86	0.44
1:A:97:TYR:OH	1:A:150:PRO:HB2	2.17	0.44
1:E:127:SER:O	1:E:133:GLU:CD	2.48	0.44
1:D:296:LEU:O	1:D:301:ALA:HB2	2.17	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:408:LEU:HD12	1:A:408:LEU:N	2.04	0.44
2:R:46:ALA:HA	2:R:49:GLN:NE2	2.33	0.44
1:A:533:LEU:HD12	2:O:112:LEU:HD11	1.99	0.44
1:F:325:TYR:CD1	1:F:598:PRO:HD3	2.52	0.44
1:D:345:THR:O	1:D:479:LYS:HE2	2.17	0.44
1:C:629:ASN:HB3	1:C:632:TYR:CE1	2.52	0.44
1:B:629:ASN:HB3	1:B:632:TYR:CE1	2.53	0.44
1:F:794:GLN:O	1:F:797:ILE:HG12	2.17	0.44
1:D:794:GLN:O	1:D:797:ILE:HG12	2.18	0.44
1:D:216:GLU:HA	1:D:219:GLU:OE2	2.17	0.44
1:E:76:LEU:O	1:E:77:ASP:C	2.56	0.44
1:A:78:LYS:HD2	1:A:156:ILE:HD13	1.99	0.44
1:F:697:ILE:O	1:F:699:GLY:N	2.49	0.44
1:A:700:TYR:HD1	1:A:728:ALA:N	2.16	0.44
2:R:76:MSE:HA	2:R:79:THR:HG22	2.00	0.44
1:F:580:GLU:O	1:F:583:ASN:HB2	2.17	0.44
1:F:357:TRP:CZ3	1:F:439:ASN:HB2	2.52	0.44
1:C:357:TRP:CZ3	1:C:439:ASN:ND2	2.84	0.44
1:C:357:TRP:CZ3	1:C:439:ASN:HB2	2.51	0.44
1:E:424:LYS:NZ	1:E:424:LYS:HB3	2.32	0.44
2:T:141:PHE:CZ	2:T:145:MSE:HE3	2.52	0.44
2:P:105:LEU:HD21	2:P:124:MSE:SE	2.68	0.44
2:S:62:THR:HB	2:S:62:THR:CG2	2.19	0.44
1:A:100:LEU:HD13	1:A:182:ILE:HG21	1.99	0.44
1:A:238:GLN:C	1:A:240:ALA:H	2.20	0.44
1:C:93:VAL:HG23	1:C:179:LEU:CD1	2.43	0.44
1:F:136:PRO:HG2	1:F:139:SER:OG	2.18	0.44
1:D:136:PRO:HG2	1:D:139:SER:OG	2.17	0.44
2:Q:13:LYS:O	2:Q:14:GLU:C	2.55	0.44
2:T:42:ASN:HA	2:T:43:PRO:HD2	1.89	0.44
1:F:581:GLN:O	1:F:629:ASN:HA	2.17	0.44
1:D:540:ARG:NH1	1:D:627:TYR:CE1	2.86	0.44
1:D:718:ARG:O	1:D:722:ILE:HG13	2.17	0.44
1:A:376:GLN:O	1:A:378:LEU:N	2.51	0.44
1:E:794:GLN:O	1:E:797:ILE:HG12	2.18	0.44
2:P:117:THR:C	2:P:119:GLU:N	2.71	0.44
1:A:746:LYS:HG2	1:A:750:GLN:HE21	1.82	0.44
1:C:736:LEU:HD11	1:C:750:GLN:HE21	1.80	0.44
1:C:697:ILE:HG12	1:C:732:ILE:HD13	2.00	0.44
2:T:102:ALA:HB1	2:T:121:VAL:CG1	2.46	0.44
2:O:97:ASN:ND2	2:O:99:TYR:H	2.16	0.44
1:C:375:GLY:O	1:C:377:GLN:N	2.50	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:375:GLY:O	1:E:377:GLN:N	2.51	0.44
1:B:357:TRP:CH2	1:B:439:ASN:ND2	2.85	0.44
1:E:447:SER:OG	1:E:448:ASP:N	2.49	0.44
2:O:105:LEU:HD21	2:O:124:MSE:SE	2.67	0.44
1:B:523:LEU:HD22	2:P:127:GLU:HG2	2.00	0.44
1:E:444:PHE:N	1:E:444:PHE:CD1	2.86	0.44
1:A:622:LYS:HA	1:A:622:LYS:HD3	1.51	0.44
1:C:238:GLN:O	1:C:240:ALA:N	2.50	0.44
1:D:135:VAL:N	1:D:136:PRO:CD	2.81	0.44
2:P:46:ALA:HA	2:P:49:GLN:NE2	2.33	0.44
2:O:24:ASP:CG	2:O:25:GLY:H	2.20	0.44
1:E:398:ILE:HD13	1:E:479:LYS:HA	2.00	0.44
2:T:55:VAL:CB	2:T:67:GLU:OE2	2.60	0.44
1:A:540:ARG:NH1	1:A:627:TYR:CE1	2.85	0.44
1:A:318:ILE:HG23	1:A:322:LEU:HD12	1.98	0.44
1:D:285:LYS:C	1:D:287:GLY:H	2.21	0.44
1:C:275:GLY:O	1:C:278:LYS:HB2	2.18	0.44
1:D:793:PHE:O	1:D:794:GLN:C	2.56	0.44
1:D:792:VAL:O	1:D:795:LYS:HB2	2.18	0.44
1:D:78:LYS:HD2	1:D:156:ILE:HD13	1.99	0.44
1:C:115:LYS:HB3	1:C:115:LYS:HZ3	1.80	0.44
1:F:299:GLU:HA	1:F:302:LEU:HB3	1.99	0.44
2:R:138:TYR:CZ	2:R:142:VAL:HG21	2.53	0.44
1:C:759:GLN:NE2	1:C:762:LEU:HD23	2.32	0.44
1:C:772:GLU:O	1:C:773:PHE:C	2.55	0.44
1:E:660:SER:O	1:E:663:PHE:HB3	2.18	0.44
1:B:444:PHE:CD1	1:B:444:PHE:N	2.86	0.44
1:C:622:LYS:HA	1:C:622:LYS:HD3	1.52	0.44
1:D:447:SER:OG	1:D:448:ASP:N	2.49	0.44
1:B:252:ASP:OD2	1:B:253:HIS:CD2	2.70	0.44
1:E:182:ILE:O	1:E:182:ILE:HD13	2.18	0.44
1:E:234:LEU:N	1:E:234:LEU:HD23	2.32	0.44
1:D:238:GLN:C	1:D:240:ALA:H	2.20	0.44
1:C:97:TYR:OH	1:C:150:PRO:HB2	2.18	0.44
1:C:135:VAL:N	1:C:136:PRO:CD	2.80	0.44
1:B:135:VAL:N	1:B:136:PRO:CD	2.80	0.44
1:A:325:TYR:CD1	1:A:598:PRO:HD3	2.53	0.44
1:F:533:LEU:HD12	2:T:112:LEU:HD11	1.99	0.44
2:T:24:ASP:CG	2:T:25:GLY:H	2.21	0.44
1:D:403:LEU:CG	1:D:405:LEU:CD1	2.95	0.44
1:D:275:GLY:O	1:D:278:LYS:HB2	2.18	0.44
1:D:288:VAL:CG2	1:D:289:GLU:N	2.78	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:311:HIS:O	1:C:314:ALA:N	2.50	0.44
1:F:281:GLU:C	1:F:283:LEU:N	2.69	0.44
1:D:746:LYS:HG2	1:D:750:GLN:HE21	1.82	0.44
2:T:69:LEU:HD12	2:T:69:LEU:O	2.18	0.44
1:E:700:TYR:HD1	1:E:728:ALA:N	2.16	0.44
1:D:636:ALA:HA	1:D:637:PRO:HD3	1.86	0.44
1:B:99:GLU:C	1:B:101:GLY:H	2.19	0.44
1:F:357:TRP:HZ3	1:F:439:ASN:HB2	1.83	0.44
2:P:138:TYR:CZ	2:P:142:VAL:HG21	2.52	0.44
1:F:772:GLU:O	1:F:773:PHE:C	2.55	0.44
1:D:297:LYS:NZ	1:D:297:LYS:HB3	2.32	0.44
1:A:444:PHE:N	1:A:444:PHE:CD1	2.85	0.44
2:T:3:GLN:N	2:T:77:LYS:HD3	2.32	0.44
1:B:297:LYS:HB3	1:B:297:LYS:NZ	2.33	0.44
1:B:104:ILE:HG23	1:B:152:LEU:CD2	2.48	0.44
1:B:180:ASP:CG	1:B:181:ILE:H	2.18	0.44
1:A:165:GLN:HG2	1:A:251:PRO:HG2	2.00	0.44
1:D:173:ILE:O	1:D:174:GLY:C	2.54	0.44
1:D:234:LEU:HD23	1:D:234:LEU:N	2.33	0.44
1:F:173:ILE:C	1:F:175:LYS:N	2.67	0.44
1:F:252:ASP:OD2	1:F:253:HIS:CD2	2.70	0.44
1:C:152:LEU:HD21	1:C:154:ILE:HD11	1.99	0.44
1:C:165:GLN:HG2	1:C:251:PRO:HG2	1.99	0.44
2:R:13:LYS:NZ	2:R:65:PHE:CB	2.61	0.44
1:B:666:ASN:HB2	1:B:748:TYR:OH	2.17	0.44
1:E:756:ILE:H	1:E:756:ILE:HG12	1.63	0.44
1:D:579:THR:C	1:D:581:GLN:N	2.71	0.44
1:E:122:GLU:HG3	1:E:147:ARG:H	1.83	0.44
1:E:405:LEU:CD1	1:E:405:LEU:H	2.27	0.44
1:B:333:LYS:HA	1:B:336:THR:OG1	2.18	0.44
1:F:376:GLN:O	1:F:380:VAL:HG23	2.18	0.44
2:R:69:LEU:O	2:R:69:LEU:HD12	2.18	0.44
1:D:736:LEU:HD11	1:D:750:GLN:HE21	1.80	0.44
2:Q:117:THR:C	2:Q:119:GLU:N	2.71	0.44
1:B:373:LYS:O	1:B:380:VAL:CG2	2.66	0.44
2:R:75:LYS:O	2:R:79:THR:HG22	2.18	0.44
2:T:138:TYR:CZ	2:T:142:VAL:HG21	2.53	0.44
2:Q:138:TYR:CZ	2:Q:142:VAL:HG21	2.53	0.44
1:A:660:SER:O	1:A:663:PHE:HB3	2.18	0.44
1:C:297:LYS:NZ	1:C:297:LYS:HB3	2.32	0.44
1:B:152:LEU:HD21	1:B:154:ILE:HD11	1.99	0.44
1:A:173:ILE:O	1:A:174:GLY:C	2.54	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:135:VAL:N	1:E:136:PRO:CD	2.80	0.44
2:R:65:PHE:CB	2:R:66:PRO:HD3	2.38	0.44
2:T:46:ALA:HA	2:T:49:GLN:NE2	2.33	0.44
1:B:325:TYR:CD1	1:B:598:PRO:HD3	2.52	0.44
1:D:579:THR:C	1:D:581:GLN:H	2.20	0.44
1:A:333:LYS:HA	1:A:336:THR:OG1	2.18	0.44
1:F:305:SER:O	1:F:331:VAL:HG23	2.18	0.44
1:F:376:GLN:O	1:F:378:LEU:N	2.50	0.44
1:B:275:GLY:CA	1:B:278:LYS:HE3	2.36	0.44
1:F:697:ILE:HG12	1:F:732:ILE:CD1	2.48	0.44
1:B:148:GLU:CG	1:B:149:THR:N	2.75	0.44
1:E:580:GLU:O	1:E:583:ASN:HB2	2.18	0.44
1:E:123:GLU:CG	1:E:124:GLU:N	2.80	0.44
1:C:123:GLU:CG	1:C:124:GLU:N	2.79	0.44
1:C:99:GLU:C	1:C:101:GLY:H	2.21	0.44
1:D:208:LEU:HD12	1:D:208:LEU:N	2.33	0.44
1:E:395:GLU:O	1:E:395:GLU:OE1	2.36	0.44
1:A:764:LEU:HA	1:A:764:LEU:HD23	1.86	0.44
1:B:186:LYS:HG2	1:B:186:LYS:O	2.18	0.43
1:B:238:GLN:C	1:B:240:ALA:H	2.20	0.43
1:B:165:GLN:HG2	1:B:251:PRO:HG2	1.99	0.43
1:A:186:LYS:HG2	1:A:186:LYS:O	2.17	0.43
1:E:197:LYS:HZ3	1:E:197:LYS:C	2.20	0.43
1:F:165:GLN:HG2	1:F:251:PRO:HG2	1.99	0.43
1:C:136:PRO:HG2	1:C:139:SER:OG	2.17	0.43
1:B:136:PRO:HG2	1:B:139:SER:OG	2.18	0.43
1:A:296:LEU:HD22	1:A:606:LYS:HE2	1.99	0.43
1:C:325:TYR:CD1	1:C:598:PRO:HD3	2.53	0.43
2:O:65:PHE:O	2:O:68:PHE:HB3	2.18	0.43
1:F:122:GLU:HG3	1:F:147:ARG:H	1.83	0.43
1:A:122:GLU:HG3	1:A:147:ARG:H	1.82	0.43
1:D:756:ILE:HG12	1:D:756:ILE:H	1.62	0.43
1:E:285:LYS:C	1:E:287:GLY:H	2.21	0.43
1:B:279:ILE:HG22	1:B:283:LEU:HD13	1.99	0.43
1:F:278:LYS:O	1:F:281:GLU:N	2.49	0.43
1:F:793:PHE:O	1:F:794:GLN:C	2.56	0.43
1:A:278:LYS:HB2	1:A:279:ILE:CD1	2.48	0.43
1:A:278:LYS:CB	1:A:279:ILE:HD13	2.48	0.43
1:E:318:ILE:H	1:E:318:ILE:CD1	2.28	0.43
1:E:333:LYS:HA	1:E:336:THR:OG1	2.18	0.43
1:E:333:LYS:HA	1:E:336:THR:HG1	1.83	0.43
2:P:109:MSE:HG3	2:P:116:LEU:CD1	2.44	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:697:ILE:HD13	1:A:732:ILE:HD13	2.00	0.43
1:C:677:GLY:HA2	1:C:745:TYR:OH	2.18	0.43
1:D:671:ARG:NH1	1:D:671:ARG:HG3	2.33	0.43
1:B:580:GLU:O	1:B:583:ASN:HB2	2.18	0.43
1:B:375:GLY:O	1:B:377:GLN:N	2.50	0.43
2:S:97:ASN:ND2	2:S:99:TYR:H	2.16	0.43
1:D:357:TRP:CZ3	1:D:439:ASN:ND2	2.85	0.43
1:B:357:TRP:CZ3	1:B:439:ASN:ND2	2.85	0.43
1:B:357:TRP:HZ3	1:B:439:ASN:HB2	1.83	0.43
2:Q:133:ASP:OD2	2:Q:135:GLN:HG3	2.18	0.43
1:A:772:GLU:O	1:A:773:PHE:C	2.55	0.43
1:A:182:ILE:O	1:A:182:ILE:HD13	2.18	0.43
1:F:173:ILE:HD12	1:F:243:LEU:HD21	2.00	0.43
1:D:296:LEU:HD22	1:D:606:LYS:HE2	1.99	0.43
2:R:13:LYS:O	2:R:14:GLU:C	2.55	0.43
2:P:36:MSE:HE3	2:P:43:PRO:CG	2.38	0.43
2:P:65:PHE:CB	2:P:66:PRO:HD3	2.38	0.43
1:E:345:THR:OG1	1:E:573:ASP:O	2.36	0.43
2:Q:13:LYS:NZ	2:Q:65:PHE:CB	2.62	0.43
1:D:122:GLU:HG3	1:D:147:ARG:H	1.82	0.43
1:E:581:GLN:HB3	1:E:627:TYR:HE1	1.81	0.43
1:C:718:ARG:O	1:C:722:ILE:HG13	2.18	0.43
1:C:611:THR:HG22	1:C:615:ILE:HD11	1.99	0.43
1:F:285:LYS:C	1:F:287:GLY:H	2.21	0.43
1:A:736:LEU:HD11	1:A:750:GLN:HE21	1.79	0.43
2:S:6:GLU:O	2:S:9:ILE:N	2.47	0.43
1:F:414:LYS:HZ3	1:F:414:LYS:HA	1.83	0.43
1:D:700:TYR:HD1	1:D:728:ALA:N	2.16	0.43
1:D:697:ILE:HD13	1:D:732:ILE:HD13	2.01	0.43
1:E:694:VAL:CG2	2:S:18:LEU:HD21	2.48	0.43
1:E:697:ILE:HD13	1:E:732:ILE:HD13	2.00	0.43
1:A:148:GLU:CG	1:A:149:THR:N	2.75	0.43
2:Q:75:LYS:O	2:Q:79:THR:HG22	2.18	0.43
1:A:443:GLU:O	1:A:455:TYR:HA	2.18	0.43
1:B:123:GLU:CG	1:B:124:GLU:N	2.79	0.43
1:C:523:LEU:HD22	2:Q:127:GLU:HG2	2.00	0.43
2:R:3:GLN:N	2:R:77:LYS:HD3	2.33	0.43
1:B:85:LEU:HD12	1:B:168:GLU:OE1	2.18	0.43
1:E:97:TYR:OH	1:E:150:PRO:HB2	2.18	0.43
2:O:46:ALA:HA	2:O:49:GLN:NE2	2.33	0.43
2:S:65:PHE:CB	2:S:66:PRO:HD3	2.38	0.43
1:F:792:VAL:O	1:F:795:LYS:HB2	2.18	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:376:GLN:CB	1:D:379:ALA:HB3	2.48	0.43
1:C:376:GLN:O	1:C:380:VAL:HG23	2.18	0.43
1:E:216:GLU:HA	1:E:219:GLU:OE2	2.19	0.43
1:A:446:ILE:HD11	1:A:451:ASN:CB	2.41	0.43
1:D:512:GLU:O	1:D:516:VAL:HG23	2.19	0.43
2:O:76:MSE:HA	2:O:79:THR:HG22	2.01	0.43
1:F:424:LYS:HB3	1:F:424:LYS:NZ	2.31	0.43
2:T:105:LEU:HD21	2:T:124:MSE:SE	2.68	0.43
1:A:523:LEU:HD22	2:O:127:GLU:HG2	2.00	0.43
1:C:457:THR:HG21	1:C:468:LYS:HA	2.01	0.43
1:C:395:GLU:OE1	1:C:395:GLU:O	2.36	0.43
1:A:252:ASP:OD2	1:A:253:HIS:CD2	2.72	0.43
1:E:170:TYR:HA	1:E:173:ILE:CG2	2.49	0.43
1:E:173:ILE:HD12	1:E:243:LEU:HD21	2.01	0.43
1:E:173:ILE:C	1:E:175:LYS:N	2.66	0.43
1:C:88:LYS:HZ3	1:C:172:GLU:CD	2.21	0.43
1:B:133:GLU:OE1	1:B:134:LYS:N	2.52	0.43
1:A:133:GLU:OE1	1:A:134:LYS:N	2.52	0.43
1:B:677:GLY:HA2	1:B:745:TYR:OH	2.18	0.43
1:C:398:ILE:HD13	1:C:479:LYS:HA	2.00	0.43
1:E:165:GLN:HG2	1:E:251:PRO:HG2	1.99	0.43
2:O:81:SER:C	2:O:83:GLU:N	2.72	0.43
1:F:611:THR:HG22	1:F:615:ILE:HD11	2.00	0.43
1:B:311:HIS:O	1:B:314:ALA:N	2.52	0.43
1:A:311:HIS:O	1:A:314:ALA:N	2.51	0.43
1:C:792:VAL:O	1:C:795:LYS:HB2	2.19	0.43
1:B:794:GLN:O	1:B:797:ILE:HG12	2.17	0.43
1:A:288:VAL:CG2	1:A:289:GLU:N	2.79	0.43
1:D:376:GLN:O	1:D:378:LEU:N	2.51	0.43
1:F:76:LEU:O	1:F:77:ASP:C	2.57	0.43
1:B:71:PHE:CD2	1:B:73:ASN:HB2	2.53	0.43
1:C:509:PRO:HD2	1:C:536:TYR:CE2	2.53	0.43
1:B:532:LEU:HD23	1:B:532:LEU:HA	1.76	0.43
1:F:700:TYR:HD1	1:F:728:ALA:N	2.16	0.43
1:E:697:ILE:HG12	1:E:732:ILE:HD13	2.00	0.43
1:B:199:LEU:O	1:B:201:ASP:N	2.51	0.43
1:D:199:LEU:O	1:D:201:ASP:N	2.51	0.43
1:A:521:ASN:HB3	1:A:524:GLU:HB3	2.01	0.43
1:A:208:LEU:N	1:A:208:LEU:HD12	2.33	0.43
1:B:182:ILE:O	1:B:182:ILE:HD13	2.18	0.43
1:F:254:ARG:HD2	1:F:254:ARG:N	2.34	0.43
1:E:137:PHE:O	1:E:140:ARG:N	2.51	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:P:55:VAL:CG2	2:P:67:GLU:CD	2.87	0.43
1:D:478:ALA:CB	1:D:486:LYS:O	2.63	0.43
1:C:581:GLN:HB3	1:C:627:TYR:HE1	1.82	0.43
1:C:755:ARG:O	1:C:756:ILE:C	2.57	0.43
1:A:373:LYS:O	1:A:380:VAL:CG2	2.67	0.43
1:C:285:LYS:C	1:C:287:GLY:H	2.21	0.43
1:B:285:LYS:C	1:B:287:GLY:H	2.21	0.43
1:A:281:GLU:C	1:A:283:LEU:H	2.22	0.43
1:D:552:TRP:HA	1:D:555:GLN:HG2	1.99	0.43
1:C:376:GLN:O	1:C:378:LEU:N	2.51	0.43
1:C:376:GLN:CB	1:C:379:ALA:HB3	2.48	0.43
2:T:117:THR:C	2:T:119:GLU:N	2.71	0.43
2:S:106:ARG:NH2	2:S:118:ASP:OD2	2.52	0.43
1:A:184:LYS:CE	1:A:191:GLU:HB2	2.49	0.43
1:D:462:ILE:CG1	1:D:463:THR:N	2.80	0.43
1:F:71:PHE:CD2	1:F:73:ASN:HB2	2.53	0.43
1:A:76:LEU:O	1:A:77:ASP:C	2.57	0.43
1:F:515:LYS:HZ1	1:F:516:VAL:CG2	2.30	0.43
1:B:697:ILE:HD13	1:B:732:ILE:HD13	2.00	0.43
1:F:527:LYS:HB3	1:F:527:LYS:HE2	1.87	0.43
1:D:785:ASN:O	1:D:785:ASN:OD1	2.36	0.43
1:F:785:ASN:OD1	1:F:785:ASN:O	2.36	0.43
1:D:543:ASP:OD1	1:D:544:SER:N	2.52	0.43
2:O:39:LEU:HA	2:O:39:LEU:HD23	1.75	0.43
1:A:254:ARG:HD2	1:A:254:ARG:N	2.34	0.43
1:E:104:ILE:HG23	1:E:152:LEU:CD2	2.48	0.43
1:E:152:LEU:HD21	1:E:154:ILE:HD11	2.01	0.43
1:D:165:GLN:HG2	1:D:251:PRO:HG2	2.00	0.43
1:F:182:ILE:O	1:F:182:ILE:HD13	2.18	0.43
1:D:398:ILE:HD13	1:D:479:LYS:HA	1.99	0.43
1:C:122:GLU:HG3	1:C:147:ARG:H	1.82	0.43
1:E:792:VAL:O	1:E:795:LYS:HB2	2.18	0.43
1:C:278:LYS:HB2	1:C:279:ILE:CD1	2.49	0.43
2:O:117:THR:C	2:O:119:GLU:N	2.70	0.43
1:B:216:GLU:HA	1:B:219:GLU:OE2	2.19	0.43
1:B:512:GLU:O	1:B:516:VAL:HG23	2.19	0.43
1:A:697:ILE:HG12	1:A:732:ILE:CD1	2.49	0.43
2:P:75:LYS:O	2:P:79:THR:HG22	2.19	0.43
2:O:75:LYS:O	2:O:79:THR:HG22	2.19	0.43
2:T:76:MSE:HA	2:T:79:THR:HG22	2.01	0.43
1:A:424:LYS:NZ	1:A:424:LYS:HB3	2.32	0.43
2:P:141:PHE:CZ	2:P:145:MSE:HE3	2.53	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:660:SER:O	1:C:663:PHE:HB3	2.18	0.43
1:C:785:ASN:O	1:C:785:ASN:OD1	2.36	0.43
1:F:395:GLU:O	1:F:395:GLU:OE1	2.36	0.43
1:E:186:LYS:HG2	1:E:186:LYS:O	2.18	0.43
1:F:104:ILE:HG23	1:F:152:LEU:CD2	2.49	0.43
1:C:182:ILE:HD13	1:C:182:ILE:O	2.18	0.43
1:C:186:LYS:HG2	1:C:186:LYS:O	2.18	0.43
1:E:133:GLU:OE1	1:E:134:LYS:N	2.52	0.43
1:E:136:PRO:HG2	1:E:139:SER:OG	2.18	0.43
1:C:598:PRO:HG3	1:C:624:TYR:OH	2.18	0.43
2:S:46:ALA:HA	2:S:49:GLN:NE2	2.33	0.43
2:S:55:VAL:CB	2:S:67:GLU:OE2	2.59	0.43
2:S:65:PHE:O	2:S:68:PHE:HB3	2.19	0.43
1:F:671:ARG:HG3	1:F:671:ARG:NH1	2.34	0.43
1:B:598:PRO:HG3	1:B:624:TYR:OH	2.18	0.43
1:B:403:LEU:CG	1:B:405:LEU:CD1	2.96	0.43
1:D:71:PHE:CD2	1:D:73:ASN:HB2	2.53	0.43
1:C:700:TYR:HD1	1:C:728:ALA:N	2.15	0.43
1:B:700:TYR:HD1	1:B:728:ALA:N	2.16	0.43
1:B:697:ILE:HG12	1:B:732:ILE:CD1	2.49	0.43
1:B:739:LYS:HG2	1:B:740:GLN:N	2.30	0.43
1:A:199:LEU:O	1:A:201:ASP:N	2.52	0.43
2:Q:76:MSE:HA	2:Q:79:THR:HG22	2.01	0.43
1:C:443:GLU:O	1:C:455:TYR:HA	2.19	0.43
2:S:76:MSE:HA	2:S:79:THR:HG22	2.00	0.43
2:S:76:MSE:HE3	2:S:76:MSE:HB2	1.65	0.43
2:T:77:LYS:HG3	2:T:77:LYS:O	2.19	0.43
1:B:521:ASN:HB3	1:B:524:GLU:HB3	2.01	0.43
1:D:457:THR:HG21	1:D:468:LYS:HA	2.01	0.43
1:D:181:ILE:HD12	1:D:238:GLN:OE1	2.19	0.43
1:D:173:ILE:HD12	1:D:243:LEU:HD21	2.00	0.43
1:C:183:SER:HB3	1:C:184:LYS:H	1.51	0.43
1:D:133:GLU:OE1	1:D:134:LYS:N	2.52	0.43
1:D:137:PHE:O	1:D:140:ARG:N	2.52	0.43
1:D:408:LEU:N	1:D:408:LEU:HD12	2.05	0.43
1:D:755:ARG:O	1:D:756:ILE:C	2.57	0.43
1:A:794:GLN:O	1:A:797:ILE:HG12	2.18	0.43
1:A:279:ILE:HG22	1:A:283:LEU:HD13	1.99	0.43
1:D:311:HIS:O	1:D:314:ALA:N	2.52	0.43
1:D:333:LYS:HA	1:D:336:THR:OG1	2.18	0.43
1:A:216:GLU:HA	1:A:219:GLU:OE2	2.18	0.43
1:A:71:PHE:CD2	1:A:73:ASN:HB2	2.54	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:671:ARG:NH1	1:E:671:ARG:HG3	2.34	0.43
1:F:199:LEU:O	1:F:201:ASP:N	2.51	0.43
1:D:637:PRO:O	1:D:638:GLY:C	2.57	0.43
1:B:709:ASN:O	1:B:717:LYS:HE3	2.18	0.43
1:F:99:GLU:C	1:F:101:GLY:H	2.21	0.43
1:E:759:GLN:NE2	1:E:762:LEU:HD23	2.34	0.43
2:S:133:ASP:OD2	2:S:135:GLN:HG3	2.19	0.43
2:O:3:GLN:N	2:O:77:LYS:HD3	2.33	0.43
1:D:395:GLU:O	1:D:395:GLU:OE1	2.36	0.43
1:D:778:LYS:HE3	1:D:778:LYS:HB3	1.74	0.43
1:A:286:GLU:HG2	1:A:286:GLU:O	2.18	0.43
1:C:133:GLU:OE1	1:C:134:LYS:N	2.52	0.43
1:F:133:GLU:OE1	1:F:134:LYS:N	2.52	0.43
2:R:42:ASN:HA	2:R:43:PRO:HD2	1.88	0.43
1:C:397:GLU:O	1:C:480:ASN:N	2.50	0.43
1:A:398:ILE:HD13	1:A:479:LYS:HA	2.00	0.43
1:B:398:ILE:HD13	1:B:479:LYS:HA	2.00	0.43
1:A:112:VAL:CG1	1:A:113:GLU:N	2.77	0.43
1:F:755:ARG:O	1:F:756:ILE:C	2.57	0.43
2:Q:81:SER:C	2:Q:83:GLU:N	2.72	0.43
1:D:278:LYS:HB2	1:D:279:ILE:CD1	2.49	0.43
1:D:281:GLU:C	1:D:283:LEU:H	2.21	0.43
1:E:278:LYS:CB	1:E:279:ILE:HD13	2.49	0.43
1:B:281:GLU:C	1:B:283:LEU:N	2.70	0.43
1:F:271:LEU:HA	1:F:271:LEU:HD23	1.86	0.43
1:A:794:GLN:HE22	1:A:795:LYS:CG	2.31	0.43
1:C:793:PHE:O	1:C:794:GLN:C	2.56	0.43
1:D:373:LYS:O	1:D:380:VAL:CG2	2.67	0.43
1:E:305:SER:O	1:E:331:VAL:HG23	2.19	0.43
1:E:81:GLN:OE1	1:E:156:ILE:HG21	2.18	0.43
1:D:338:LEU:O	1:D:343:VAL:CG2	2.66	0.43
1:C:512:GLU:O	1:C:516:VAL:HG23	2.18	0.43
2:T:76:MSE:HE3	2:T:76:MSE:HB2	1.64	0.43
1:B:292:ARG:NE	1:B:617:LYS:HE3	2.34	0.43
1:B:286:GLU:HG2	1:B:286:GLU:O	2.19	0.43
1:E:181:ILE:HD12	1:E:238:GLN:OE1	2.19	0.43
1:F:170:TYR:HA	1:F:173:ILE:CG2	2.49	0.43
2:R:54:GLU:O	2:R:55:VAL:HG22	2.19	0.43
2:T:65:PHE:O	2:T:68:PHE:HB3	2.19	0.43
1:B:597:ASN:HD21	1:B:601:GLU:CB	2.10	0.43
1:D:345:THR:OG1	1:D:573:ASP:O	2.37	0.43
1:D:581:GLN:O	1:D:629:ASN:HA	2.19	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:373:LYS:O	1:E:380:VAL:CG2	2.67	0.43
1:A:376:GLN:CB	1:A:379:ALA:HB3	2.49	0.43
1:E:794:GLN:HE22	1:E:795:LYS:CG	2.31	0.43
1:B:318:ILE:H	1:B:318:ILE:CD1	2.26	0.43
1:F:373:LYS:O	1:F:380:VAL:CG2	2.67	0.43
1:D:305:SER:O	1:D:331:VAL:HG23	2.19	0.43
1:D:74:GLU:C	1:D:75:THR:O	2.57	0.43
1:C:71:PHE:CD2	1:C:73:ASN:HB2	2.53	0.43
1:F:391:ILE:CG1	1:F:399:GLY:HA2	2.41	0.43
1:D:99:GLU:C	1:D:101:GLY:H	2.21	0.43
1:C:334:LEU:HD23	1:C:356:ASP:HA	2.01	0.43
2:O:138:TYR:O	2:O:141:PHE:HB3	2.19	0.43
2:R:77:LYS:HG3	2:R:77:LYS:O	2.19	0.43
1:B:208:LEU:N	1:B:208:LEU:HD12	2.34	0.43
1:B:170:TYR:HA	1:B:173:ILE:CG2	2.49	0.42
1:D:161:ILE:CG2	1:D:161:ILE:O	2.67	0.42
1:C:100:LEU:HD13	1:C:182:ILE:HG21	2.01	0.42
2:P:42:ASN:HA	2:P:43:PRO:HD2	1.88	0.42
1:A:671:ARG:NH1	1:A:671:ARG:HG3	2.34	0.42
1:A:671:ARG:O	1:A:675:ASN:HA	2.19	0.42
2:O:13:LYS:NZ	2:O:65:PHE:CB	2.62	0.42
1:F:677:GLY:HA2	1:F:745:TYR:OH	2.19	0.42
1:A:307:LEU:HD12	1:A:307:LEU:N	2.34	0.42
1:A:285:LYS:C	1:A:287:GLY:H	2.22	0.42
1:C:373:LYS:O	1:C:380:VAL:CG2	2.67	0.42
1:E:71:PHE:CD2	1:E:73:ASN:HB2	2.53	0.42
1:B:76:LEU:O	1:B:77:ASP:C	2.57	0.42
1:F:128:MET:HE3	1:F:239:HIS:NE2	2.34	0.42
1:C:671:ARG:HG3	1:C:671:ARG:NH1	2.34	0.42
1:C:671:ARG:O	1:C:675:ASN:HA	2.19	0.42
1:E:443:GLU:O	1:E:455:TYR:HA	2.19	0.42
1:B:443:GLU:O	1:B:455:TYR:HA	2.19	0.42
2:P:44:THR:H	2:P:47:GLU:HB3	1.84	0.42
1:F:759:GLN:NE2	1:F:762:LEU:HD23	2.33	0.42
1:C:286:GLU:HG2	1:C:286:GLU:O	2.19	0.42
1:E:208:LEU:N	1:E:208:LEU:HD12	2.33	0.42
1:F:764:LEU:HD23	1:F:764:LEU:HA	1.85	0.42
1:B:184:LYS:CE	1:B:191:GLU:HB2	2.49	0.42
1:A:173:ILE:HD12	1:A:243:LEU:HD21	2.00	0.42
1:D:186:LYS:CE	1:D:234:LEU:HB2	2.49	0.42
2:O:42:ASN:HA	2:O:43:PRO:HD2	1.88	0.42
2:S:49:GLN:O	2:S:53:ASN:N	2.44	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:579:THR:O	1:B:581:GLN:N	2.52	0.42
1:E:85:LEU:HD12	1:E:168:GLU:OE1	2.19	0.42
1:D:275:GLY:CA	1:D:278:LYS:HE3	2.36	0.42
1:E:275:GLY:O	1:E:278:LYS:HB2	2.18	0.42
1:C:318:ILE:H	1:C:318:ILE:CD1	2.28	0.42
1:F:333:LYS:HA	1:F:336:THR:HG1	1.83	0.42
1:B:275:GLY:O	1:B:278:LYS:HB2	2.19	0.42
2:P:106:ARG:NH2	2:P:118:ASP:OD2	2.52	0.42
1:D:463:THR:HG22	1:D:465:LEU:H	1.84	0.42
1:A:532:LEU:HA	1:A:532:LEU:HD23	1.78	0.42
1:E:515:LYS:HZ1	1:E:516:VAL:CG2	2.30	0.42
1:B:376:GLN:O	1:B:380:VAL:HG23	2.19	0.42
1:D:580:GLU:O	1:D:583:ASN:HB2	2.19	0.42
2:S:44:THR:H	2:S:47:GLU:HB3	1.84	0.42
1:B:785:ASN:OD1	1:B:785:ASN:O	2.36	0.42
1:B:90:PRO:O	1:B:93:VAL:N	2.51	0.42
1:A:85:LEU:HD12	1:A:168:GLU:OE1	2.19	0.42
1:E:88:LYS:HZ3	1:E:172:GLU:CD	2.21	0.42
1:D:97:TYR:OH	1:D:150:PRO:HB2	2.19	0.42
1:F:85:LEU:O	1:F:88:LYS:HE3	2.20	0.42
1:C:137:PHE:O	1:C:140:ARG:N	2.53	0.42
2:T:54:GLU:O	2:T:55:VAL:HG22	2.19	0.42
1:C:581:GLN:O	1:C:629:ASN:HA	2.19	0.42
1:B:540:ARG:NH1	1:B:627:TYR:CE1	2.87	0.42
1:A:794:GLN:HB3	1:A:794:GLN:HE21	1.66	0.42
1:B:792:VAL:O	1:B:795:LYS:HB2	2.18	0.42
1:B:794:GLN:HB3	1:B:794:GLN:HE21	1.66	0.42
1:B:794:GLN:HE22	1:B:795:LYS:CG	2.31	0.42
1:F:736:LEU:HD11	1:F:750:GLN:HE21	1.81	0.42
2:R:106:ARG:NH2	2:R:118:ASP:OD2	2.53	0.42
1:C:216:GLU:HA	1:C:219:GLU:OE2	2.19	0.42
1:C:532:LEU:HD23	1:C:532:LEU:HA	1.78	0.42
1:C:637:PRO:O	1:C:638:GLY:C	2.58	0.42
2:R:133:ASP:OD2	2:R:135:GLN:HG3	2.18	0.42
1:E:99:GLU:C	1:E:101:GLY:H	2.22	0.42
1:D:334:LEU:HD23	1:D:356:ASP:HA	2.02	0.42
2:P:77:LYS:HG3	2:P:77:LYS:O	2.19	0.42
2:O:77:LYS:O	2:O:77:LYS:HG3	2.19	0.42
1:F:457:THR:HG21	1:F:468:LYS:HA	2.02	0.42
1:C:208:LEU:HD12	1:C:208:LEU:N	2.34	0.42
1:F:286:GLU:HG2	1:F:286:GLU:O	2.19	0.42
1:B:186:LYS:HE3	1:B:234:LEU:HB2	2.02	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:100:LEU:CD1	1:A:182:ILE:HG21	2.49	0.42
1:F:97:TYR:OH	1:F:150:PRO:HB2	2.19	0.42
1:C:85:LEU:O	1:C:88:LYS:HE3	2.20	0.42
1:A:137:PHE:O	1:A:140:ARG:N	2.52	0.42
1:B:671:ARG:NH1	1:B:671:ARG:HG3	2.34	0.42
1:E:598:PRO:HG3	1:E:624:TYR:OH	2.20	0.42
2:S:42:ASN:HA	2:S:43:PRO:HD2	1.88	0.42
2:T:81:SER:C	2:T:83:GLU:N	2.72	0.42
1:B:579:THR:C	1:B:581:GLN:N	2.72	0.42
1:E:376:GLN:CB	1:E:379:ALA:HB3	2.49	0.42
1:A:305:SER:O	1:A:331:VAL:HG23	2.19	0.42
1:A:403:LEU:CG	1:A:405:LEU:CD1	2.96	0.42
1:B:278:LYS:HB2	1:B:279:ILE:CD1	2.48	0.42
1:A:792:VAL:O	1:A:795:LYS:HB2	2.19	0.42
1:E:306:GLY:O	1:E:307:LEU:C	2.58	0.42
1:F:115:LYS:HB3	1:F:115:LYS:HZ3	1.83	0.42
1:D:76:LEU:O	1:D:77:ASP:C	2.57	0.42
2:P:5:THR:O	2:P:8:GLN:HB3	2.20	0.42
1:F:512:GLU:O	1:F:516:VAL:HG23	2.19	0.42
1:F:694:VAL:CG2	2:T:18:LEU:HD21	2.50	0.42
2:Q:18:LEU:HB3	2:Q:19:PHE:CE1	2.54	0.42
1:D:697:ILE:HG12	1:D:732:ILE:CD1	2.49	0.42
2:R:18:LEU:HB3	2:R:19:PHE:CE1	2.54	0.42
2:O:106:ARG:NH2	2:O:118:ASP:OD2	2.52	0.42
1:D:677:GLY:HA2	1:D:745:TYR:OH	2.19	0.42
2:P:138:TYR:O	2:P:141:PHE:HB3	2.19	0.42
1:D:527:LYS:HE2	1:D:527:LYS:HB3	1.86	0.42
1:A:170:TYR:HA	1:A:173:ILE:CG2	2.49	0.42
1:A:85:LEU:O	1:A:88:LYS:HE3	2.19	0.42
1:A:90:PRO:O	1:A:92:ASP:N	2.52	0.42
1:D:254:ARG:N	1:D:254:ARG:HD2	2.35	0.42
1:D:90:PRO:O	1:D:93:VAL:N	2.52	0.42
1:C:181:ILE:HD12	1:C:238:GLN:OE1	2.20	0.42
1:A:667:LEU:O	1:A:668:SER:C	2.57	0.42
1:F:345:THR:OG1	1:F:573:ASP:O	2.36	0.42
1:A:333:LYS:H	1:A:333:LYS:HD2	1.85	0.42
1:F:281:GLU:C	1:F:283:LEU:H	2.22	0.42
1:D:81:GLN:OE1	1:D:156:ILE:HG21	2.19	0.42
2:S:117:THR:C	2:S:119:GLU:N	2.71	0.42
1:C:391:ILE:CG1	1:C:399:GLY:HA2	2.40	0.42
1:F:216:GLU:HA	1:F:219:GLU:OE2	2.19	0.42
1:F:446:ILE:HD11	1:F:451:ASN:CB	2.41	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:218:LEU:C	1:C:220:LEU:H	2.15	0.42
1:D:671:ARG:O	1:D:675:ASN:HA	2.20	0.42
2:Q:44:THR:H	2:Q:47:GLU:HB3	1.84	0.42
1:A:785:ASN:OD1	1:A:785:ASN:O	2.36	0.42
1:F:521:ASN:HB3	1:F:524:GLU:HB3	2.01	0.42
1:E:521:ASN:HB3	1:E:524:GLU:HB3	2.02	0.42
1:B:543:ASP:OD1	1:B:544:SER:N	2.53	0.42
1:E:286:GLU:HG2	1:E:286:GLU:O	2.19	0.42
1:F:208:LEU:N	1:F:208:LEU:HD12	2.33	0.42
1:B:88:LYS:HZ3	1:B:172:GLU:CD	2.23	0.42
1:E:184:LYS:CE	1:E:191:GLU:HB2	2.48	0.42
1:D:186:LYS:HE3	1:D:234:LEU:HB2	2.01	0.42
1:C:170:TYR:HA	1:C:173:ILE:CG2	2.50	0.42
1:D:278:LYS:CB	1:D:279:ILE:HD13	2.49	0.42
2:Q:106:ARG:NH2	2:Q:118:ASP:OD2	2.53	0.42
1:C:462:ILE:CG1	1:C:463:THR:N	2.80	0.42
1:E:462:ILE:CG1	1:E:463:THR:N	2.80	0.42
1:C:76:LEU:O	1:C:77:ASP:C	2.58	0.42
1:A:81:GLN:OE1	1:A:156:ILE:HG21	2.19	0.42
1:C:414:LYS:C	1:C:416:ASN:H	2.23	0.42
1:D:412:GLU:O	1:D:416:ASN:HB2	2.20	0.42
2:P:18:LEU:HA	2:P:18:LEU:HD23	1.83	0.42
1:B:376:GLN:CB	1:B:379:ALA:HB3	2.49	0.42
1:F:443:GLU:O	1:F:455:TYR:HA	2.19	0.42
1:A:334:LEU:HD23	1:A:356:ASP:HA	2.01	0.42
2:Q:77:LYS:HG3	2:Q:77:LYS:O	2.19	0.42
1:B:585:GLU:HA	1:B:585:GLU:OE1	2.18	0.42
1:F:292:ARG:NE	1:F:617:LYS:HE3	2.35	0.42
1:C:680:LYS:O	1:C:687:GLU:HG2	2.19	0.42
1:C:521:ASN:HB3	1:C:524:GLU:HB3	2.01	0.42
1:D:286:GLU:HG2	1:D:286:GLU:O	2.19	0.42
1:B:172:GLU:O	1:B:175:LYS:HB3	2.20	0.42
1:A:186:LYS:HE3	1:A:234:LEU:HB2	2.02	0.42
1:A:186:LYS:CE	1:A:234:LEU:HB2	2.50	0.42
1:D:170:TYR:HA	1:D:173:ILE:CG2	2.49	0.42
1:C:254:ARG:N	1:C:254:ARG:HD2	2.34	0.42
1:F:137:PHE:O	1:F:140:ARG:N	2.53	0.42
1:A:598:PRO:HG3	1:A:624:TYR:OH	2.20	0.42
2:S:54:GLU:O	2:S:55:VAL:HG13	2.20	0.42
1:E:579:THR:C	1:E:581:GLN:N	2.72	0.42
1:E:579:THR:C	1:E:581:GLN:H	2.23	0.42
2:T:16:PHE:CE1	2:T:27:ILE:HG12	2.55	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:579:THR:C	1:F:581:GLN:N	2.73	0.42
1:E:254:ARG:N	1:E:254:ARG:HD2	2.35	0.42
1:F:718:ARG:O	1:F:722:ILE:HG13	2.19	0.42
1:A:333:LYS:HA	1:A:336:THR:HG1	1.84	0.42
1:C:550:SER:HB2	1:C:553:GLN:HG3	1.98	0.42
1:D:115:LYS:N	1:D:118:GLN:HB2	2.34	0.42
1:E:463:THR:HG22	1:E:465:LEU:H	1.85	0.42
1:B:81:GLN:OE1	1:B:156:ILE:HG21	2.19	0.42
1:A:739:LYS:CG	1:A:740:GLN:H	2.26	0.42
1:F:776:LEU:C	1:F:776:LEU:CD2	2.88	0.42
1:D:636:ALA:O	1:D:640:LYS:CA	2.68	0.42
2:S:75:LYS:O	2:S:79:THR:HG22	2.20	0.42
2:T:138:TYR:O	2:T:141:PHE:HB3	2.19	0.42
2:T:133:ASP:OD2	2:T:135:GLN:HG3	2.19	0.42
1:E:543:ASP:OD1	1:E:544:SER:N	2.53	0.42
1:D:680:LYS:O	1:D:687:GLU:HG2	2.19	0.42
1:A:457:THR:HG21	1:A:468:LYS:HA	2.01	0.42
1:D:521:ASN:HB3	1:D:524:GLU:HB3	2.02	0.42
1:B:106:PHE:CZ	1:B:171:TYR:OH	2.64	0.42
1:A:152:LEU:HD21	1:A:154:ILE:HD11	2.01	0.42
1:E:186:LYS:CE	1:E:234:LEU:HB2	2.49	0.42
1:D:136:PRO:O	1:D:137:PHE:C	2.58	0.42
2:R:54:GLU:O	2:R:55:VAL:HG13	2.20	0.42
2:P:65:PHE:O	2:P:68:PHE:HB3	2.20	0.42
1:A:483:GLY:C	1:A:484:VAL:CG2	2.88	0.42
2:Q:28:THR:CG2	2:Q:30:LYS:HZ1	2.33	0.42
2:P:81:SER:C	2:P:83:GLU:N	2.73	0.42
1:B:333:LYS:HA	1:B:336:THR:HG1	1.84	0.42
1:E:278:LYS:HB2	1:E:279:ILE:CD1	2.49	0.42
1:B:635:ILE:CD1	1:B:635:ILE:N	2.71	0.42
2:R:5:THR:O	2:R:8:GLN:HB3	2.20	0.42
1:F:462:ILE:CG1	1:F:463:THR:N	2.80	0.42
1:C:463:THR:HG22	1:C:465:LEU:H	1.85	0.42
2:O:5:THR:O	2:O:8:GLN:HB3	2.20	0.42
2:T:61:GLY:C	2:T:62:THR:HG22	2.40	0.42
1:C:697:ILE:HG12	1:C:732:ILE:CD1	2.50	0.42
1:D:443:GLU:O	1:D:455:TYR:HA	2.19	0.42
1:D:557:LEU:HD11	1:D:575:VAL:CG1	2.50	0.42
2:S:39:LEU:HA	2:S:39:LEU:HD23	1.74	0.42
2:Q:21:LYS:O	2:Q:23:GLY:N	2.49	0.42
1:A:181:ILE:HD12	1:A:238:GLN:OE1	2.20	0.42
1:E:100:LEU:HD13	1:E:182:ILE:HG21	2.02	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:90:PRO:O	1:E:92:ASP:N	2.53	0.42
1:C:172:GLU:O	1:C:175:LYS:HB3	2.19	0.42
1:E:136:PRO:O	1:E:137:PHE:C	2.59	0.42
1:F:671:ARG:O	1:F:675:ASN:HA	2.19	0.42
1:B:483:GLY:C	1:B:484:VAL:CG2	2.89	0.42
2:R:27:ILE:HA	2:R:31:GLU:OE2	2.20	0.42
1:A:579:THR:C	1:A:581:GLN:N	2.73	0.42
2:R:56:ASP:CG	2:R:60:ASN:HA	2.38	0.42
1:B:306:GLY:O	1:B:307:LEU:C	2.58	0.42
1:A:318:ILE:H	1:A:318:ILE:CD1	2.26	0.42
1:D:279:ILE:HG22	1:D:283:LEU:CD1	2.50	0.42
1:C:333:LYS:H	1:C:333:LYS:HD2	1.85	0.42
1:F:333:LYS:H	1:F:333:LYS:HD2	1.85	0.42
1:F:376:GLN:CB	1:F:379:ALA:HB3	2.49	0.42
1:A:793:PHE:O	1:A:794:GLN:C	2.57	0.42
1:C:794:GLN:HE22	1:C:795:LYS:CG	2.31	0.42
1:D:73:ASN:HB3	1:D:74:GLU:OE2	2.20	0.42
2:Q:6:GLU:O	2:Q:9:ILE:HB	2.20	0.42
2:S:5:THR:O	2:S:8:GLN:HB3	2.20	0.42
1:A:73:ASN:HB3	1:A:74:GLU:OE2	2.20	0.42
1:B:462:ILE:CG1	1:B:463:THR:N	2.81	0.42
1:A:338:LEU:HD21	1:A:409:ARG:HD3	2.02	0.42
1:B:515:LYS:HZ1	1:B:516:VAL:CG2	2.31	0.42
1:F:697:ILE:HD13	1:F:732:ILE:HD13	2.02	0.42
2:Q:44:THR:OG1	2:Q:47:GLU:CB	2.68	0.42
2:R:44:THR:H	2:R:47:GLU:HB3	1.85	0.42
2:T:44:THR:OG1	2:T:47:GLU:CB	2.68	0.42
1:C:527:LYS:HB3	1:C:527:LYS:HE2	1.87	0.42
1:F:543:ASP:OD1	1:F:544:SER:N	2.52	0.42
1:D:292:ARG:NE	1:D:617:LYS:HE3	2.34	0.42
1:F:693:SER:OG	1:F:731:GLU:OE1	2.38	0.42
1:E:191:GLU:O	1:E:192:PHE:C	2.59	0.42
1:C:161:ILE:CG2	1:C:161:ILE:O	2.68	0.42
1:C:173:ILE:HD12	1:C:243:LEU:HD21	2.01	0.42
1:E:134:LYS:C	1:E:136:PRO:HD3	2.40	0.42
1:B:136:PRO:O	1:B:137:PHE:C	2.59	0.42
2:Q:65:PHE:CB	2:Q:66:PRO:HD3	2.38	0.42
1:E:755:ARG:O	1:E:756:ILE:C	2.59	0.42
1:C:579:THR:O	1:C:581:GLN:N	2.53	0.42
1:E:281:GLU:C	1:E:283:LEU:H	2.22	0.42
1:F:311:HIS:O	1:F:314:ALA:N	2.53	0.42
1:D:794:GLN:HB3	1:D:794:GLN:HE21	1.66	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:793:PHE:O	1:B:794:GLN:C	2.56	0.42
1:B:115:LYS:N	1:B:118:GLN:HB2	2.35	0.42
2:T:106:ARG:NH2	2:T:118:ASP:OD2	2.53	0.42
1:B:338:LEU:O	1:B:343:VAL:CG2	2.68	0.42
2:P:18:LEU:HB3	2:P:19:PHE:CE1	2.55	0.42
2:S:18:LEU:HB3	2:S:19:PHE:CE1	2.55	0.42
1:A:739:LYS:HG2	1:A:740:GLN:N	2.30	0.42
1:D:776:LEU:C	1:D:776:LEU:CD2	2.88	0.42
1:C:776:LEU:CD2	1:C:776:LEU:C	2.88	0.42
1:C:636:ALA:O	1:C:640:LYS:CA	2.68	0.42
1:F:334:LEU:HD23	1:F:356:ASP:HA	2.01	0.42
1:E:210:PHE:CD1	1:E:210:PHE:C	2.94	0.42
1:B:522:SER:O	2:P:124:MSE:HE2	2.20	0.42
1:B:83:GLN:O	1:B:84:ASP:C	2.58	0.42
2:P:133:ASP:OD2	2:P:135:GLN:HG3	2.20	0.42
1:E:680:LYS:O	1:E:687:GLU:HG2	2.19	0.42
1:A:503:GLU:HA	1:A:503:GLU:OE1	2.20	0.42
1:D:503:GLU:HA	1:D:503:GLU:OE1	2.20	0.42
1:C:292:ARG:NE	1:C:617:LYS:HE3	2.35	0.42
1:B:97:TYR:OH	1:B:150:PRO:HB2	2.19	0.41
1:E:186:LYS:HE3	1:E:234:LEU:HB2	2.02	0.41
1:A:755:ARG:O	1:A:756:ILE:C	2.57	0.41
1:C:579:THR:C	1:C:581:GLN:H	2.23	0.41
1:C:656:THR:HG22	1:C:657:ILE:O	2.20	0.41
1:A:550:SER:HB3	1:A:553:GLN:CG	2.39	0.41
1:C:281:GLU:C	1:C:283:LEU:H	2.23	0.41
1:C:306:GLY:O	1:C:307:LEU:C	2.57	0.41
1:F:318:ILE:O	1:F:319:ALA:C	2.59	0.41
1:B:278:LYS:CB	1:B:279:ILE:HD13	2.49	0.41
2:P:117:THR:O	2:P:118:ASP:C	2.58	0.41
1:B:736:LEU:HD11	1:B:750:GLN:HE21	1.80	0.41
1:E:462:ILE:HD11	1:E:466:GLY:CA	2.49	0.41
1:E:117:LEU:HD12	1:E:145:LYS:HZ3	1.85	0.41
1:F:74:GLU:C	1:F:75:THR:O	2.57	0.41
1:F:81:GLN:OE1	1:F:156:ILE:HG21	2.20	0.41
1:F:338:LEU:O	1:F:343:VAL:CG2	2.67	0.41
1:F:414:LYS:C	1:F:416:ASN:H	2.23	0.41
1:D:414:LYS:C	1:D:416:ASN:H	2.23	0.41
1:E:128:MET:HE3	1:E:239:HIS:NE2	2.35	0.41
1:A:512:GLU:O	1:A:516:VAL:HG23	2.20	0.41
2:O:18:LEU:HB3	2:O:19:PHE:CE1	2.54	0.41
1:C:694:VAL:CG2	2:Q:18:LEU:HD21	2.50	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:671:ARG:O	1:E:675:ASN:HA	2.19	0.41
1:D:739:LYS:HG2	1:D:740:GLN:N	2.30	0.41
1:E:637:PRO:O	1:E:638:GLY:C	2.58	0.41
2:S:21:LYS:O	2:S:23:GLY:N	2.49	0.41
2:P:44:THR:OG1	2:P:47:GLU:CB	2.68	0.41
2:O:44:THR:H	2:O:47:GLU:HB3	1.85	0.41
2:T:44:THR:H	2:T:47:GLU:HB3	1.85	0.41
1:E:457:THR:HG21	1:E:468:LYS:HA	2.01	0.41
1:C:557:LEU:HD11	1:C:575:VAL:CG1	2.50	0.41
1:A:585:GLU:OE1	1:A:585:GLU:HA	2.20	0.41
1:B:191:GLU:O	1:B:192:PHE:C	2.59	0.41
1:D:100:LEU:HD13	1:D:182:ILE:HG21	2.01	0.41
1:D:66:LEU:HD11	1:D:97:TYR:HD2	1.85	0.41
1:F:175:LYS:HB2	1:F:175:LYS:HZ2	1.83	0.41
1:C:136:PRO:O	1:C:137:PHE:C	2.58	0.41
1:F:134:LYS:C	1:F:136:PRO:HD3	2.41	0.41
2:R:65:PHE:O	2:R:68:PHE:HB3	2.20	0.41
1:B:671:ARG:O	1:B:675:ASN:HA	2.20	0.41
2:Q:54:GLU:O	2:Q:55:VAL:HG22	2.20	0.41
1:C:345:THR:OG1	1:C:573:ASP:O	2.37	0.41
2:Q:16:PHE:CE1	2:Q:27:ILE:HG12	2.55	0.41
1:E:581:GLN:O	1:E:629:ASN:HA	2.19	0.41
2:T:27:ILE:HA	2:T:31:GLU:OE2	2.20	0.41
1:D:629:ASN:HB3	1:D:632:TYR:CZ	2.55	0.41
1:A:581:GLN:O	1:A:629:ASN:HA	2.20	0.41
1:B:318:ILE:O	1:B:319:ALA:C	2.58	0.41
1:C:318:ILE:CG2	1:C:322:LEU:HD12	2.50	0.41
1:D:307:LEU:HD12	1:D:307:LEU:N	2.34	0.41
1:C:368:GLN:HG3	1:C:383:GLY:C	2.41	0.41
1:E:333:LYS:HD2	1:E:333:LYS:H	1.85	0.41
2:R:6:GLU:O	2:R:9:ILE:HB	2.21	0.41
1:E:736:LEU:HD11	1:E:750:GLN:HE21	1.80	0.41
1:D:515:LYS:O	1:D:515:LYS:HG2	2.20	0.41
1:A:776:LEU:C	1:A:776:LEU:CD2	2.88	0.41
1:B:776:LEU:CD2	1:B:776:LEU:C	2.88	0.41
2:P:76:MSE:HA	2:P:79:THR:HG22	2.02	0.41
1:D:210:PHE:C	1:D:210:PHE:CD1	2.93	0.41
2:S:138:TYR:O	2:S:141:PHE:HB3	2.19	0.41
1:D:660:SER:O	1:D:663:PHE:HB3	2.20	0.41
1:B:423:LYS:HE2	1:B:425:GLU:OE1	2.20	0.41
1:A:543:ASP:OD1	1:A:544:SER:N	2.53	0.41
1:B:90:PRO:O	1:B:92:ASP:N	2.53	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:93:VAL:HG23	1:D:179:LEU:CD1	2.41	0.41
1:F:181:ILE:HD12	1:F:238:GLN:OE1	2.20	0.41
1:F:184:LYS:CE	1:F:191:GLU:HB2	2.49	0.41
1:C:106:PHE:CZ	1:C:171:TYR:OH	2.65	0.41
1:C:186:LYS:CE	1:C:234:LEU:HB2	2.49	0.41
2:O:36:MSE:O	2:O:37:ARG:C	2.59	0.41
1:B:755:ARG:O	1:B:756:ILE:C	2.58	0.41
1:E:579:THR:O	1:E:581:GLN:N	2.53	0.41
1:F:579:THR:C	1:F:581:GLN:H	2.24	0.41
1:F:579:THR:O	1:F:581:GLN:N	2.53	0.41
1:E:793:PHE:O	1:E:794:GLN:C	2.56	0.41
1:B:333:LYS:HD2	1:B:333:LYS:H	1.85	0.41
1:C:275:GLY:O	1:C:278:LYS:HD2	2.20	0.41
1:C:278:LYS:CB	1:C:279:ILE:HD13	2.50	0.41
1:D:318:ILE:CD1	1:D:318:ILE:H	2.28	0.41
2:R:6:GLU:O	2:R:9:ILE:N	2.48	0.41
1:C:70:GLU:CB	1:C:107:THR:HG22	2.44	0.41
1:C:115:LYS:N	1:C:118:GLN:HB2	2.34	0.41
2:P:4:LEU:CB	2:P:8:GLN:HE21	2.33	0.41
1:E:70:GLU:HB3	1:E:71:PHE:H	1.75	0.41
1:C:74:GLU:C	1:C:75:THR:O	2.58	0.41
2:R:117:THR:C	2:R:119:GLU:N	2.71	0.41
1:C:217:LYS:HB2	1:C:236:GLU:CG	2.50	0.41
1:F:338:LEU:HD21	1:F:409:ARG:HD3	2.01	0.41
1:F:412:GLU:O	1:F:416:ASN:HB2	2.20	0.41
1:E:217:LYS:HB2	1:E:236:GLU:CG	2.51	0.41
1:F:210:PHE:CD1	1:F:210:PHE:C	2.94	0.41
1:A:522:SER:O	2:O:124:MSE:HE2	2.20	0.41
2:O:133:ASP:OD2	2:O:135:GLN:HG3	2.20	0.41
1:A:257:LEU:O	1:A:261:ALA:O	2.38	0.41
1:B:457:THR:HG21	1:B:468:LYS:HA	2.02	0.41
1:D:423:LYS:HE2	1:D:425:GLU:OE1	2.21	0.41
1:E:693:SER:OG	1:E:731:GLU:OE1	2.38	0.41
1:C:764:LEU:HA	1:C:764:LEU:HD23	1.84	0.41
1:B:231:LYS:HB2	1:B:231:LYS:HE3	1.85	0.41
1:B:186:LYS:CE	1:B:234:LEU:HB2	2.49	0.41
1:B:254:ARG:HG2	1:B:255:THR:N	2.35	0.41
1:A:106:PHE:CZ	1:A:171:TYR:OH	2.63	0.41
1:D:85:LEU:HD12	1:D:168:GLU:OE1	2.20	0.41
1:F:106:PHE:CZ	1:F:171:TYR:OH	2.65	0.41
1:F:172:GLU:O	1:F:176:GLY:N	2.35	0.41
1:F:85:LEU:HD12	1:F:168:GLU:OE1	2.20	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:90:PRO:O	1:F:92:ASP:N	2.54	0.41
1:A:407:HIS:N	1:A:407:HIS:ND1	2.69	0.41
2:T:65:PHE:CB	2:T:66:PRO:HD3	2.38	0.41
1:E:161:ILE:O	1:E:161:ILE:CG2	2.68	0.41
1:C:333:LYS:HA	1:C:336:THR:HG1	1.84	0.41
1:F:794:GLN:HE22	1:F:795:LYS:CG	2.32	0.41
1:E:318:ILE:O	1:E:319:ALA:C	2.59	0.41
1:E:324:THR:CG2	1:E:499:PRO:HA	2.51	0.41
2:T:6:GLU:O	2:T:9:ILE:HB	2.20	0.41
2:O:6:GLU:O	2:O:9:ILE:HB	2.20	0.41
1:B:73:ASN:HB3	1:B:74:GLU:OE2	2.20	0.41
1:A:462:ILE:CG1	1:A:463:THR:N	2.80	0.41
1:A:463:THR:HG22	1:A:465:LEU:H	1.85	0.41
1:A:338:LEU:O	1:A:343:VAL:CG2	2.68	0.41
2:T:18:LEU:HB3	2:T:19:PHE:HD1	1.83	0.41
1:E:697:ILE:HG12	1:E:732:ILE:CD1	2.50	0.41
1:C:424:LYS:HB3	1:C:424:LYS:NZ	2.31	0.41
1:C:349:ASN:HD22	1:C:350:VAL:HG23	1.86	0.41
1:B:210:PHE:C	1:B:210:PHE:CD1	2.94	0.41
1:C:522:SER:O	2:Q:124:MSE:HE2	2.20	0.41
1:E:292:ARG:NE	1:E:617:LYS:HE3	2.35	0.41
1:C:543:ASP:OD1	1:C:544:SER:N	2.53	0.41
1:E:655:ASN:ND2	1:E:655:ASN:N	2.68	0.41
1:B:181:ILE:HD12	1:B:238:GLN:OE1	2.20	0.41
1:B:66:LEU:HD11	1:B:97:TYR:CD2	2.55	0.41
1:A:66:LEU:HD11	1:A:97:TYR:HD2	1.86	0.41
1:E:172:GLU:O	1:E:175:LYS:HB3	2.21	0.41
1:F:161:ILE:O	1:F:161:ILE:CG2	2.68	0.41
1:C:131:ARG:CB	1:C:170:TYR:OH	2.69	0.41
1:C:191:GLU:O	1:C:192:PHE:C	2.59	0.41
1:F:136:PRO:O	1:F:137:PHE:C	2.59	0.41
1:B:137:PHE:O	1:B:140:ARG:N	2.52	0.41
2:P:54:GLU:O	2:P:55:VAL:HG22	2.21	0.41
1:F:667:LEU:HD13	1:F:678:VAL:HG21	2.01	0.41
2:S:81:SER:C	2:S:83:GLU:N	2.73	0.41
1:A:324:THR:CG2	1:A:499:PRO:HA	2.51	0.41
2:P:117:THR:HG23	2:P:120:GLU:CG	2.50	0.41
1:D:333:LYS:HA	1:D:336:THR:HG1	1.85	0.41
1:F:70:GLU:CB	1:F:107:THR:HG22	2.44	0.41
1:F:463:THR:HG22	1:F:465:LEU:H	1.85	0.41
1:D:217:LYS:HB2	1:D:236:GLU:CG	2.51	0.41
1:D:217:LYS:HG3	1:D:236:GLU:HG3	2.03	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:115:LYS:N	1:E:118:GLN:HB2	2.35	0.41
1:C:73:ASN:HB3	1:C:74:GLU:OE2	2.21	0.41
2:S:4:LEU:CB	2:S:8:GLN:HE21	2.34	0.41
1:B:217:LYS:HB2	1:B:236:GLU:CG	2.50	0.41
1:C:412:GLU:O	1:C:416:ASN:HB2	2.21	0.41
1:E:414:LYS:C	1:E:416:ASN:H	2.23	0.41
1:B:694:VAL:CG2	2:P:18:LEU:HD21	2.50	0.41
1:B:607:ASN:HB3	1:B:609:GLU:OE2	2.20	0.41
1:D:666:ASN:HB2	1:D:748:TYR:CZ	2.56	0.41
1:C:199:LEU:O	1:C:201:ASP:N	2.52	0.41
1:E:199:LEU:O	1:E:201:ASP:N	2.52	0.41
1:B:637:PRO:O	1:B:638:GLY:C	2.59	0.41
2:S:44:THR:OG1	2:S:47:GLU:CB	2.68	0.41
2:Q:138:TYR:O	2:Q:141:PHE:HB3	2.20	0.41
1:A:680:LYS:O	1:A:687:GLU:HG2	2.21	0.41
1:B:655:ASN:ND2	1:B:655:ASN:N	2.68	0.41
1:B:183:SER:HB3	1:B:184:LYS:H	1.50	0.41
1:B:173:ILE:HD12	1:B:243:LEU:HD21	2.02	0.41
1:E:66:LEU:HD11	1:E:97:TYR:HD2	1.86	0.41
1:D:131:ARG:CB	1:D:170:TYR:OH	2.67	0.41
1:F:66:LEU:HD11	1:F:97:TYR:CD2	2.55	0.41
1:D:134:LYS:HZ2	1:D:136:PRO:HG3	1.85	0.41
1:E:667:LEU:O	1:E:668:SER:C	2.59	0.41
2:T:54:GLU:O	2:T:55:VAL:HG13	2.20	0.41
2:S:16:PHE:CE1	2:S:27:ILE:HG12	2.56	0.41
1:C:540:ARG:HD3	1:C:627:TYR:OH	2.20	0.41
1:B:281:GLU:C	1:B:283:LEU:H	2.23	0.41
1:F:279:ILE:HG22	1:F:283:LEU:CD1	2.51	0.41
1:D:368:GLN:HG3	1:D:383:GLY:C	2.41	0.41
1:D:306:GLY:O	1:D:307:LEU:C	2.58	0.41
1:D:74:GLU:O	1:D:75:THR:O	2.39	0.41
2:S:117:THR:HG23	2:S:120:GLU:CG	2.51	0.41
2:Q:117:THR:O	2:Q:118:ASP:C	2.59	0.41
1:F:743:PRO:HA	1:F:746:LYS:HE3	2.03	0.41
1:E:73:ASN:HB3	1:E:74:GLU:OE2	2.20	0.41
1:B:463:THR:HG22	1:B:465:LEU:H	1.85	0.41
1:E:508:ILE:HG12	1:E:536:TYR:CD2	2.55	0.41
1:C:515:LYS:O	1:C:515:LYS:HG2	2.21	0.41
1:E:776:LEU:CD2	1:E:776:LEU:C	2.89	0.41
1:A:637:PRO:O	1:A:638:GLY:C	2.59	0.41
2:O:44:THR:OG1	2:O:47:GLU:CB	2.68	0.41
1:B:527:LYS:HB3	1:B:527:LYS:HE2	1.88	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:S:77:LYS:O	2:S:77:LYS:HG3	2.20	0.41
1:E:585:GLU:HA	1:E:585:GLU:OE1	2.18	0.41
1:A:557:LEU:HD11	1:A:575:VAL:CG1	2.51	0.41
1:E:231:LYS:HE3	1:E:231:LYS:HB2	1.86	0.41
1:B:254:ARG:HD2	1:B:254:ARG:N	2.34	0.41
1:B:85:LEU:O	1:B:88:LYS:HE3	2.20	0.41
1:B:66:LEU:HD11	1:B:97:TYR:HD2	1.85	0.41
1:C:161:ILE:HG21	1:C:168:GLU:OE2	2.21	0.41
1:D:407:HIS:ND1	1:D:407:HIS:N	2.69	0.41
2:S:55:VAL:CG2	2:S:67:GLU:CD	2.88	0.41
1:F:483:GLY:C	1:F:484:VAL:CG2	2.89	0.41
2:S:27:ILE:HA	2:S:31:GLU:OE2	2.21	0.41
1:C:579:THR:C	1:C:581:GLN:N	2.73	0.41
1:B:579:THR:C	1:B:581:GLN:H	2.24	0.41
1:D:403:LEU:CG	1:D:405:LEU:HD11	2.51	0.41
1:B:305:SER:O	1:B:331:VAL:HG23	2.20	0.41
1:D:70:GLU:HB3	1:D:71:PHE:H	1.74	0.41
2:T:5:THR:O	2:T:8:GLN:HB3	2.20	0.41
2:T:4:LEU:CB	2:T:8:GLN:HE21	2.33	0.41
2:S:117:THR:O	2:S:118:ASP:C	2.59	0.41
1:A:217:LYS:HB2	1:A:236:GLU:CG	2.51	0.41
2:P:6:GLU:O	2:P:9:ILE:HB	2.20	0.41
2:S:6:GLU:O	2:S:9:ILE:HB	2.19	0.41
1:B:414:LYS:C	1:B:416:ASN:H	2.23	0.41
2:T:58:ASP:C	2:T:59:GLY:O	2.54	0.41
1:B:636:ALA:O	1:B:640:LYS:CA	2.68	0.41
2:R:140:GLU:O	2:R:143:GLN:HB2	2.21	0.41
1:D:522:SER:O	2:R:124:MSE:HE2	2.21	0.41
1:B:779:GLN:OE1	1:B:796:ILE:HD12	2.21	0.41
1:A:423:LYS:HE2	1:A:425:GLU:OE1	2.20	0.41
1:A:559:ARG:O	1:A:563:ALA:HB2	2.21	0.41
1:F:83:GLN:O	1:F:84:ASP:C	2.59	0.41
1:E:622:LYS:HA	1:E:622:LYS:HD3	1.52	0.41
1:A:231:LYS:HB2	1:A:231:LYS:HE3	1.85	0.41
1:D:655:ASN:N	1:D:655:ASN:ND2	2.69	0.41
1:C:503:GLU:OE1	1:C:503:GLU:HA	2.21	0.41
1:F:131:ARG:CB	1:F:170:TYR:OH	2.69	0.41
1:F:186:LYS:CE	1:F:234:LEU:HB2	2.50	0.41
1:C:85:LEU:HD12	1:C:168:GLU:OE1	2.21	0.41
1:C:90:PRO:O	1:C:92:ASP:N	2.53	0.41
1:B:134:LYS:C	1:B:136:PRO:HD3	2.41	0.41
1:A:136:PRO:O	1:A:137:PHE:C	2.59	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:407:HIS:ND1	1:B:407:HIS:N	2.68	0.41
1:D:667:LEU:O	1:D:668:SER:C	2.59	0.41
1:B:670:ILE:O	1:B:671:ARG:C	2.59	0.41
1:A:667:LEU:HD13	1:A:678:VAL:HG21	2.02	0.41
2:Q:65:PHE:O	2:Q:68:PHE:HB3	2.20	0.41
2:T:52:ILE:CG2	2:T:53:ASN:H	2.34	0.41
1:F:275:GLY:O	1:F:278:LYS:HD2	2.21	0.41
1:D:333:LYS:HD2	1:D:333:LYS:H	1.86	0.41
1:A:115:LYS:N	1:A:118:GLN:HB2	2.35	0.41
1:E:338:LEU:HD21	1:E:409:ARG:HD3	2.02	0.41
1:A:412:GLU:O	1:A:416:ASN:HB2	2.20	0.41
2:T:18:LEU:HB3	2:T:19:PHE:CE1	2.54	0.41
1:D:694:VAL:CG2	2:R:18:LEU:HD21	2.50	0.41
2:P:59:GLY:O	2:P:62:THR:HG22	2.19	0.41
1:D:148:GLU:CG	1:D:149:THR:N	2.75	0.41
1:A:607:ASN:HB3	1:A:609:GLU:OE2	2.21	0.41
1:F:431:LYS:O	1:F:432:TYR:CD2	2.74	0.41
1:F:636:ALA:O	1:F:640:LYS:CA	2.69	0.41
2:T:75:LYS:O	2:T:79:THR:HG22	2.20	0.41
1:E:334:LEU:HD23	1:E:356:ASP:HA	2.02	0.41
2:R:138:TYR:O	2:R:141:PHE:HB3	2.21	0.41
1:A:210:PHE:CD1	1:A:210:PHE:C	2.94	0.41
1:C:585:GLU:HA	1:C:585:GLU:OE1	2.20	0.41
1:D:585:GLU:OE1	1:D:585:GLU:HA	2.21	0.41
1:F:585:GLU:HA	1:F:585:GLU:OE1	2.20	0.41
1:F:503:GLU:OE1	1:F:503:GLU:HA	2.21	0.41
2:S:61:GLY:C	2:S:62:THR:HG22	2.41	0.41
2:S:59:GLY:O	2:S:62:THR:HG22	2.19	0.41
1:B:100:LEU:CD1	1:B:182:ILE:HG21	2.51	0.41
1:A:172:GLU:O	1:A:175:LYS:HB3	2.21	0.41
1:E:184:LYS:NZ	1:E:191:GLU:HB2	2.36	0.41
1:E:93:VAL:HG23	1:E:179:LEU:CD1	2.42	0.41
1:D:85:LEU:O	1:D:88:LYS:HE3	2.21	0.41
1:F:100:LEU:HD13	1:F:182:ILE:HG21	2.01	0.41
1:F:66:LEU:HD11	1:F:97:TYR:HD2	1.86	0.41
1:C:186:LYS:HE3	1:C:234:LEU:HB2	2.02	0.41
1:C:134:LYS:C	1:C:136:PRO:HD3	2.41	0.41
1:F:127:SER:O	1:F:133:GLU:CD	2.48	0.41
1:A:670:ILE:O	1:A:671:ARG:C	2.59	0.41
2:Q:52:ILE:CG2	2:Q:53:ASN:N	2.84	0.41
2:Q:55:VAL:CG2	2:Q:67:GLU:CD	2.88	0.41
2:S:36:MSE:O	2:S:37:ARG:C	2.59	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:S:54:GLU:O	2:S:55:VAL:HG22	2.21	0.41
1:D:483:GLY:C	1:D:484:VAL:CG2	2.89	0.41
2:R:16:PHE:CE1	2:R:27:ILE:HG12	2.56	0.41
1:C:629:ASN:HB3	1:C:632:TYR:CZ	2.56	0.41
1:B:581:GLN:O	1:B:629:ASN:HA	2.20	0.41
1:C:403:LEU:CG	1:C:405:LEU:HD11	2.51	0.41
1:E:767:GLN:HB3	1:E:768:LYS:H	1.55	0.41
1:A:306:GLY:O	1:A:307:LEU:C	2.57	0.41
1:E:279:ILE:HG22	1:E:283:LEU:CD1	2.51	0.41
1:C:279:ILE:HG22	1:C:283:LEU:CD1	2.51	0.41
1:C:307:LEU:N	1:C:307:LEU:HD12	2.34	0.41
1:F:278:LYS:O	1:F:281:GLU:HB2	2.21	0.41
1:A:117:LEU:HD12	1:A:145:LYS:HZ3	1.86	0.41
1:F:115:LYS:N	1:F:118:GLN:HB2	2.35	0.41
1:D:184:LYS:CE	1:D:191:GLU:HB2	2.50	0.41
2:Q:4:LEU:CB	2:Q:8:GLN:HE21	2.33	0.41
2:T:111:ASN:C	2:T:113:GLY:H	2.25	0.41
2:T:117:THR:HG23	2:T:120:GLU:CG	2.50	0.41
2:Q:117:THR:HG23	2:Q:120:GLU:CG	2.51	0.41
1:A:191:GLU:O	1:A:192:PHE:C	2.59	0.41
1:D:462:ILE:HD11	1:D:466:GLY:CA	2.48	0.41
1:C:743:PRO:HA	1:C:746:LYS:HE3	2.03	0.41
1:C:74:GLU:O	1:C:75:THR:O	2.39	0.41
1:B:338:LEU:HD21	1:B:409:ARG:HD3	2.02	0.41
1:B:412:GLU:O	1:B:416:ASN:HB2	2.21	0.41
1:C:338:LEU:O	1:C:343:VAL:CG2	2.67	0.41
1:D:338:LEU:HD21	1:D:409:ARG:HD3	2.02	0.41
1:F:217:LYS:HB2	1:F:236:GLU:CG	2.51	0.41
1:E:412:GLU:O	1:E:416:ASN:HB2	2.21	0.41
1:A:508:ILE:HG12	1:A:536:TYR:CD2	2.56	0.41
1:A:694:VAL:CG2	2:O:18:LEU:HD21	2.50	0.41
1:B:270:LYS:HA	1:B:273:LYS:CG	2.51	0.41
2:O:111:ASN:C	2:O:113:GLY:H	2.24	0.41
1:A:431:LYS:O	1:A:432:TYR:CD2	2.74	0.41
1:C:431:LYS:O	1:C:432:TYR:CD2	2.74	0.41
1:E:636:ALA:O	1:E:640:LYS:CA	2.69	0.41
1:F:637:PRO:O	1:F:638:GLY:C	2.59	0.41
1:B:558:ASP:O	1:B:559:ARG:C	2.60	0.41
2:T:140:GLU:O	2:T:143:GLN:HB2	2.20	0.41
1:C:741:ILE:O	1:C:741:ILE:HG13	2.21	0.41
1:C:210:PHE:C	1:C:210:PHE:CD1	2.94	0.41
1:B:574:VAL:HG13	1:B:575:VAL:HG23	2.03	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:557:LEU:HD11	1:F:575:VAL:CG1	2.51	0.41
1:A:521:ASN:HB3	1:A:524:GLU:CB	2.51	0.41
1:D:784:GLU:HG3	1:D:785:ASN:N	2.36	0.41
1:A:292:ARG:NE	1:A:617:LYS:HE3	2.35	0.41
1:C:83:GLN:O	1:C:84:ASP:C	2.58	0.41
1:F:559:ARG:O	1:F:563:ALA:HB2	2.21	0.41
1:E:778:LYS:HE3	1:E:778:LYS:HB3	1.75	0.41
1:E:685:LYS:HA	1:E:685:LYS:HD3	1.90	0.41
1:C:423:LYS:HE2	1:C:425:GLU:OE1	2.21	0.41
1:D:779:GLN:OE1	1:D:796:ILE:HD12	2.21	0.41
1:C:257:LEU:O	1:C:261:ALA:O	2.38	0.41
1:F:680:LYS:O	1:F:687:GLU:HG2	2.20	0.41
2:S:148:LYS:HE3	2:S:148:LYS:HB3	1.96	0.41
1:B:161:ILE:HG21	1:B:168:GLU:OE2	2.21	0.41
1:D:161:ILE:HG21	1:D:168:GLU:OE2	2.20	0.41
1:D:66:LEU:HD11	1:D:97:TYR:CD2	2.55	0.41
1:C:184:LYS:CE	1:C:191:GLU:HB2	2.49	0.41
2:R:36:MSE:O	2:R:37:ARG:C	2.59	0.41
2:P:54:GLU:O	2:P:55:VAL:HG13	2.21	0.41
1:A:677:GLY:HA2	1:A:745:TYR:OH	2.20	0.41
1:E:483:GLY:C	1:E:484:VAL:CG2	2.90	0.41
2:O:27:ILE:HA	2:O:31:GLU:OE2	2.21	0.41
1:F:306:GLY:O	1:F:307:LEU:C	2.57	0.41
1:D:794:GLN:HE22	1:D:795:LYS:CG	2.32	0.41
2:R:117:THR:O	2:R:118:ASP:C	2.59	0.41
2:R:117:THR:HG23	2:R:120:GLU:CG	2.51	0.41
1:B:74:GLU:C	1:B:75:THR:O	2.57	0.41
2:T:56:ASP:CG	2:T:60:ASN:CG	2.80	0.41
1:B:515:LYS:O	1:B:515:LYS:HG2	2.21	0.41
1:D:670:ILE:O	1:D:671:ARG:C	2.59	0.41
2:R:44:THR:OG1	2:R:47:GLU:CB	2.68	0.41
1:D:492:TYR:HB2	1:D:575:VAL:HG22	2.03	0.41
1:F:257:LEU:O	1:F:261:ALA:O	2.39	0.41
1:A:172:GLU:HB3	1:A:246:SER:CA	2.46	0.40
2:P:52:ILE:CG2	2:P:53:ASN:N	2.84	0.40
2:Q:54:GLU:O	2:Q:55:VAL:HG13	2.21	0.40
2:Q:27:ILE:HA	2:Q:31:GLU:OE2	2.21	0.40
2:O:16:PHE:CE1	2:O:27:ILE:HG12	2.55	0.40
2:Q:61:GLY:C	2:Q:62:THR:HG22	2.40	0.40
1:A:128:MET:HE3	1:A:239:HIS:NE2	2.36	0.40
1:C:338:LEU:HD21	1:C:409:ARG:HD3	2.02	0.40
1:E:338:LEU:O	1:E:343:VAL:CG2	2.67	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:515:LYS:O	1:E:515:LYS:HG2	2.21	0.40
1:E:512:GLU:O	1:E:516:VAL:HG23	2.20	0.40
1:C:270:LYS:HA	1:C:273:LYS:CG	2.51	0.40
1:A:700:TYR:CD1	1:A:727:GLN:C	2.94	0.40
1:D:700:TYR:CD1	1:D:727:GLN:C	2.95	0.40
1:A:349:ASN:HD22	1:A:350:VAL:HG23	1.85	0.40
1:B:334:LEU:HD23	1:B:356:ASP:HA	2.02	0.40
1:E:527:LYS:HE2	1:E:527:LYS:HB3	1.86	0.40
1:F:521:ASN:HB3	1:F:524:GLU:CB	2.51	0.40
1:A:585:GLU:HB3	1:A:586:PHE:CD1	2.56	0.40
1:E:693:SER:O	1:E:696:LYS:HB2	2.21	0.40
1:D:257:LEU:O	1:D:261:ALA:O	2.39	0.40
1:D:693:SER:OG	1:D:731:GLU:OE1	2.39	0.40
1:B:680:LYS:O	1:B:687:GLU:HG2	2.20	0.40
1:A:779:GLN:OE1	1:A:796:ILE:HD12	2.21	0.40
1:B:175:LYS:HZ2	1:B:175:LYS:CB	2.34	0.40
1:B:184:LYS:NZ	1:B:191:GLU:HB2	2.37	0.40
1:F:197:LYS:HE3	1:F:264:MET:SD	2.61	0.40
1:E:407:HIS:N	1:E:407:HIS:ND1	2.69	0.40
2:R:66:PRO:C	2:R:68:PHE:H	2.24	0.40
1:A:345:THR:OG1	1:A:573:ASP:O	2.37	0.40
1:F:629:ASN:HB3	1:F:632:TYR:CZ	2.56	0.40
2:P:27:ILE:HA	2:P:31:GLU:OE2	2.20	0.40
1:A:632:TYR:O	1:A:633:ASN:HB2	2.20	0.40
1:E:368:GLN:HG3	1:E:383:GLY:C	2.41	0.40
1:A:368:GLN:HG3	1:A:383:GLY:C	2.42	0.40
1:F:318:ILE:CG2	1:F:322:LEU:HD12	2.51	0.40
1:B:403:LEU:CG	1:B:405:LEU:HD11	2.52	0.40
1:B:275:GLY:O	1:B:278:LYS:HD2	2.21	0.40
1:D:191:GLU:O	1:D:192:PHE:C	2.58	0.40
1:D:743:PRO:HA	1:D:746:LYS:HB3	2.03	0.40
2:T:117:THR:O	2:T:118:ASP:C	2.59	0.40
1:B:338:LEU:HD21	1:B:409:ARG:NE	2.37	0.40
1:A:338:LEU:HD21	1:A:409:ARG:NE	2.37	0.40
1:C:666:ASN:HB2	1:C:748:TYR:CZ	2.57	0.40
1:C:670:ILE:O	1:C:671:ARG:C	2.58	0.40
1:E:574:VAL:HG13	1:E:575:VAL:HG23	2.03	0.40
1:A:784:GLU:HG3	1:A:785:ASN:N	2.36	0.40
1:D:585:GLU:HB3	1:D:586:PHE:CD1	2.56	0.40
1:E:257:LEU:O	1:E:261:ALA:O	2.38	0.40
1:D:764:LEU:HA	1:D:764:LEU:HD23	1.85	0.40
1:E:503:GLU:HA	1:E:503:GLU:OE1	2.21	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:423:LYS:HE2	1:F:425:GLU:OE1	2.20	0.40
1:A:66:LEU:HD11	1:A:97:TYR:CD2	2.56	0.40
1:D:152:LEU:HD21	1:D:154:ILE:HD11	2.02	0.40
1:D:88:LYS:HZ3	1:D:172:GLU:CD	2.25	0.40
1:F:191:GLU:O	1:F:192:PHE:C	2.59	0.40
1:C:165:GLN:HG2	1:C:251:PRO:CG	2.51	0.40
2:R:52:ILE:CG2	2:R:53:ASN:N	2.84	0.40
2:P:66:PRO:C	2:P:68:PHE:H	2.25	0.40
1:A:666:ASN:HB2	1:A:748:TYR:CZ	2.57	0.40
2:O:55:VAL:CG2	2:O:67:GLU:CD	2.89	0.40
1:F:598:PRO:HG3	1:F:624:TYR:OH	2.20	0.40
1:D:658:PRO:HD3	1:D:755:ARG:HH11	1.86	0.40
1:D:278:LYS:HB2	1:D:279:ILE:H	1.64	0.40
1:C:504:ILE:H	1:C:504:ILE:CD1	2.32	0.40
1:F:368:GLN:HG3	1:F:383:GLY:C	2.42	0.40
1:A:271:LEU:HD23	1:A:271:LEU:HA	1.87	0.40
1:A:278:LYS:O	1:A:281:GLU:HB2	2.21	0.40
2:O:117:THR:HG23	2:O:120:GLU:CG	2.51	0.40
1:C:81:GLN:OE1	1:C:156:ILE:HG21	2.21	0.40
1:A:74:GLU:C	1:A:75:THR:O	2.58	0.40
2:R:111:ASN:C	2:R:113:GLY:H	2.24	0.40
1:C:217:LYS:HG3	1:C:236:GLU:HG3	2.03	0.40
1:A:414:LYS:C	1:A:416:ASN:H	2.23	0.40
1:F:508:ILE:HG12	1:F:536:TYR:CD2	2.56	0.40
1:B:515:LYS:HZ3	1:B:516:VAL:CG2	2.34	0.40
1:B:636:ALA:HA	1:B:637:PRO:HD3	1.86	0.40
1:E:607:ASN:HB3	1:E:609:GLU:OE2	2.22	0.40
1:F:492:TYR:HB2	1:F:575:VAL:HG22	2.04	0.40
1:C:779:GLN:OE1	1:C:796:ILE:HD12	2.21	0.40
1:E:423:LYS:HE2	1:E:425:GLU:OE1	2.21	0.40
1:B:128:MET:HG2	1:B:128:MET:H	1.77	0.40
1:C:159:TYR:CD1	1:C:159:TYR:N	2.90	0.40
1:C:559:ARG:O	1:C:563:ALA:HB2	2.21	0.40
1:B:88:LYS:NZ	1:B:172:GLU:CD	2.75	0.40
1:C:66:LEU:HD11	1:C:97:TYR:HD2	1.86	0.40
1:D:134:LYS:C	1:D:136:PRO:HD3	2.41	0.40
1:B:667:LEU:HD13	1:B:678:VAL:HG21	2.03	0.40
2:S:66:PRO:C	2:S:68:PHE:H	2.25	0.40
1:F:756:ILE:HG12	1:F:756:ILE:H	1.63	0.40
1:B:540:ARG:HD3	1:B:627:TYR:OH	2.21	0.40
2:R:56:ASP:OD2	2:R:60:ASN:C	2.59	0.40
1:D:767:GLN:HB3	1:D:768:LYS:H	1.55	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:285:LYS:C	1:B:287:GLY:N	2.75	0.40
1:E:504:ILE:CD1	1:E:504:ILE:H	2.32	0.40
1:A:743:PRO:HA	1:A:746:LYS:HE3	2.03	0.40
1:F:73:ASN:HB3	1:F:74:GLU:OE2	2.21	0.40
1:B:217:LYS:HG3	1:B:236:GLU:HG3	2.03	0.40
1:F:338:LEU:HD21	1:F:409:ARG:NE	2.36	0.40
1:B:412:GLU:C	1:B:414:LYS:N	2.75	0.40
1:C:700:TYR:CD1	1:C:727:GLN:C	2.95	0.40
2:P:61:GLY:C	2:P:62:THR:HG22	2.41	0.40
1:C:199:LEU:C	1:C:201:ASP:N	2.67	0.40
1:B:431:LYS:O	1:B:432:TYR:CD2	2.74	0.40
1:B:741:ILE:HG13	1:B:741:ILE:O	2.21	0.40
1:E:522:SER:O	2:S:124:MSE:HE2	2.22	0.40
1:E:784:GLU:HG3	1:E:785:ASN:N	2.36	0.40
1:C:784:GLU:HG3	1:C:785:ASN:N	2.36	0.40
1:B:784:GLU:HG3	1:B:785:ASN:H	1.87	0.40
1:B:784:GLU:HG3	1:B:785:ASN:N	2.36	0.40
1:B:585:GLU:HB3	1:B:586:PHE:CD1	2.56	0.40
1:F:172:GLU:O	1:F:175:LYS:HB3	2.21	0.40
1:F:88:LYS:NZ	1:F:172:GLU:CD	2.75	0.40
1:C:66:LEU:HD11	1:C:97:TYR:CD2	2.56	0.40
2:O:66:PRO:C	2:O:68:PHE:H	2.25	0.40
1:C:483:GLY:C	1:C:484:VAL:CG2	2.89	0.40
2:P:30:LYS:HD3	2:P:30:LYS:N	2.11	0.40
1:C:656:THR:O	1:C:755:ARG:NH1	2.55	0.40
1:A:579:THR:C	1:A:581:GLN:H	2.24	0.40
1:B:318:ILE:CG2	1:B:322:LEU:HD12	2.51	0.40
1:A:318:ILE:CG2	1:A:322:LEU:HD12	2.52	0.40
1:D:275:GLY:O	1:D:278:LYS:HD2	2.21	0.40
1:E:275:GLY:O	1:E:278:LYS:HD2	2.21	0.40
1:A:403:LEU:CG	1:A:405:LEU:HD11	2.52	0.40
1:E:743:PRO:HA	1:E:746:LYS:HE3	2.04	0.40
1:E:70:GLU:CB	1:E:107:THR:HG22	2.43	0.40
1:A:74:GLU:O	1:A:75:THR:O	2.39	0.40
2:Q:102:ALA:CA	2:Q:125:ILE:HG13	2.51	0.40
2:O:18:LEU:HB3	2:O:19:PHE:HD1	1.83	0.40
2:Q:18:LEU:HB3	2:Q:19:PHE:HD1	1.82	0.40
1:D:532:LEU:HD23	1:D:532:LEU:HA	1.77	0.40
2:R:18:LEU:HB3	2:R:19:PHE:HD1	1.83	0.40
1:E:677:GLY:HA2	1:E:745:TYR:OH	2.22	0.40
1:A:636:ALA:O	1:A:640:LYS:CA	2.68	0.40
2:R:76:MSE:HB2	2:R:76:MSE:HE3	1.65	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:558:ASP:O	1:D:559:ARG:C	2.60	0.40
1:B:690:LYS:HD3	1:B:741:ILE:HG23	2.04	0.40
1:F:784:GLU:HG3	1:F:785:ASN:N	2.36	0.40
1:E:585:GLU:HB3	1:E:586:PHE:CD1	2.57	0.40
1:C:585:GLU:HB3	1:C:586:PHE:CD1	2.56	0.40
1:F:585:GLU:HB3	1:F:586:PHE:CD1	2.56	0.40
1:A:264:MET:SD	1:A:267:TYR:HD2	2.45	0.40
1:F:231:LYS:HB2	1:F:231:LYS:HE3	1.85	0.40
1:B:764:LEU:HD23	1:B:764:LEU:HA	1.85	0.40

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

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:682:SER:O	1:B:682:SER:O[2_555]	2.16	0.04
1:C:682:SER:O	1:F:682:SER:O[4_556]	2.18	0.02

## 5.3 Torsion angles

### 5.3.1 Protein backbone ⓘ

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution. The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	733/777 (94%)	526 (72%)	161 (22%)	46 (6%)	2	18
1	B	733/777 (94%)	525 (72%)	159 (22%)	49 (7%)	2	16
1	C	733/777 (94%)	526 (72%)	159 (22%)	48 (6%)	2	17
1	D	733/777 (94%)	523 (71%)	162 (22%)	48 (6%)	2	17
1	E	733/777 (94%)	522 (71%)	164 (22%)	47 (6%)	2	17
1	F	733/777 (94%)	526 (72%)	158 (22%)	49 (7%)	2	16
2	O	144/149 (97%)	110 (76%)	21 (15%)	13 (9%)	1	8
2	P	144/149 (97%)	108 (75%)	22 (15%)	14 (10%)	1	7
2	Q	144/149 (97%)	109 (76%)	23 (16%)	12 (8%)	1	9
2	R	144/149 (97%)	108 (75%)	24 (17%)	12 (8%)	1	9
2	S	144/149 (97%)	109 (76%)	23 (16%)	12 (8%)	1	9

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	T	144/149 (97%)	110 (76%)	22 (15%)	12 (8%)	1	9
All	All	5262/5556 (95%)	3802 (72%)	1098 (21%)	362 (7%)	2	14

All (362) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	75	THR
1	A	80	GLN
1	A	135	VAL
1	A	137	PHE
1	A	180	ASP
1	A	181	ILE
1	A	278	LYS
1	A	438	ASN
1	A	510	GLN
1	A	675	ASN
1	A	787	THR
1	B	75	THR
1	B	80	GLN
1	B	135	VAL
1	B	137	PHE
1	B	180	ASP
1	B	181	ILE
1	B	278	LYS
1	B	438	ASN
1	B	510	GLN
1	B	675	ASN
1	B	787	THR
1	C	75	THR
1	C	80	GLN
1	C	135	VAL
1	C	137	PHE
1	C	180	ASP
1	C	181	ILE
1	C	278	LYS
1	C	438	ASN
1	C	510	GLN
1	C	675	ASN
1	C	787	THR
1	D	75	THR
1	D	80	GLN
1	D	135	VAL

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Mol	Chain	Res	Type
1	D	137	PHE
1	D	180	ASP
1	D	181	ILE
1	D	278	LYS
1	D	438	ASN
1	D	510	GLN
1	D	675	ASN
1	D	787	THR
1	E	75	THR
1	E	80	GLN
1	E	135	VAL
1	E	137	PHE
1	E	180	ASP
1	E	181	ILE
1	E	278	LYS
1	E	438	ASN
1	E	510	GLN
1	E	675	ASN
1	E	787	THR
1	F	75	THR
1	F	80	GLN
1	F	135	VAL
1	F	137	PHE
1	F	180	ASP
1	F	181	ILE
1	F	278	LYS
1	F	438	ASN
1	F	510	GLN
1	F	675	ASN
1	F	787	THR
2	O	23	GLY
2	O	60	ASN
2	P	23	GLY
2	Q	23	GLY
2	R	23	GLY
2	S	23	GLY
2	T	23	GLY
1	A	109	ILE
1	A	120	LEU
1	A	138	ALA
1	A	176	GLY
1	A	192	PHE

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Mol	Chain	Res	Type
1	A	290	LYS
1	A	302	LEU
1	A	559	ARG
1	B	109	ILE
1	B	120	LEU
1	B	138	ALA
1	B	176	GLY
1	B	192	PHE
1	B	290	LYS
1	B	302	LEU
1	B	559	ARG
1	C	109	ILE
1	C	120	LEU
1	C	138	ALA
1	C	176	GLY
1	C	192	PHE
1	C	290	LYS
1	C	302	LEU
1	C	559	ARG
1	D	109	ILE
1	D	120	LEU
1	D	138	ALA
1	D	176	GLY
1	D	192	PHE
1	D	290	LYS
1	D	302	LEU
1	D	559	ARG
1	E	109	ILE
1	E	120	LEU
1	E	138	ALA
1	E	176	GLY
1	E	192	PHE
1	E	290	LYS
1	E	302	LEU
1	E	559	ARG
1	F	109	ILE
1	F	120	LEU
1	F	138	ALA
1	F	176	GLY
1	F	192	PHE
1	F	290	LYS
1	F	302	LEU

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Mol	Chain	Res	Type
1	F	559	ARG
2	O	24	ASP
2	O	50	ASP
2	O	67	GLU
2	P	24	ASP
2	P	50	ASP
2	P	67	GLU
2	Q	24	ASP
2	Q	50	ASP
2	Q	67	GLU
2	R	24	ASP
2	R	50	ASP
2	R	67	GLU
2	S	24	ASP
2	S	50	ASP
2	S	67	GLU
2	T	24	ASP
2	T	50	ASP
2	T	67	GLU
1	A	70	GLU
1	A	91	LYS
1	A	113	GLU
1	A	200	SER
1	A	232	GLU
1	A	377	GLN
1	A	638	GLY
1	A	698	ALA
1	A	779	GLN
1	B	70	GLU
1	B	91	LYS
1	B	113	GLU
1	B	200	SER
1	B	232	GLU
1	B	376	GLN
1	B	377	GLN
1	B	638	GLY
1	B	698	ALA
1	B	779	GLN
1	C	70	GLU
1	C	91	LYS
1	C	113	GLU
1	C	200	SER

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Mol	Chain	Res	Type
1	C	232	GLU
1	C	376	GLN
1	C	377	GLN
1	C	638	GLY
1	C	698	ALA
1	C	779	GLN
1	D	70	GLU
1	D	113	GLU
1	D	200	SER
1	D	232	GLU
1	D	376	GLN
1	D	638	GLY
1	D	698	ALA
1	D	779	GLN
1	E	70	GLU
1	E	91	LYS
1	E	113	GLU
1	E	200	SER
1	E	232	GLU
1	E	376	GLN
1	E	638	GLY
1	E	698	ALA
1	E	779	GLN
1	F	70	GLU
1	F	91	LYS
1	F	113	GLU
1	F	200	SER
1	F	232	GLU
1	F	376	GLN
1	F	638	GLY
1	F	698	ALA
1	F	779	GLN
2	O	25	GLY
2	O	74	ARG
2	O	82	GLU
2	O	118	ASP
2	O	120	GLU
2	P	60	ASN
2	P	74	ARG
2	P	82	GLU
2	P	118	ASP
2	P	120	GLU

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Mol	Chain	Res	Type
2	Q	74	ARG
2	Q	82	GLU
2	Q	118	ASP
2	Q	120	GLU
2	R	74	ARG
2	R	82	GLU
2	R	118	ASP
2	R	120	GLU
2	S	74	ARG
2	S	118	ASP
2	S	120	GLU
2	T	25	GLY
2	T	74	ARG
2	T	82	GLU
2	T	118	ASP
2	T	120	GLU
1	A	108	ASP
1	A	307	LEU
1	A	376	GLN
1	A	452	GLU
1	A	471	TRP
1	B	108	ASP
1	B	471	TRP
1	B	537	GLY
1	C	108	ASP
1	C	307	LEU
1	C	471	TRP
1	C	672	ARG
1	D	91	LYS
1	D	108	ASP
1	D	307	LEU
1	D	377	GLN
1	D	452	GLU
1	D	471	TRP
1	D	672	ARG
1	E	108	ASP
1	E	294	ASP
1	E	307	LEU
1	E	377	GLN
1	E	471	TRP
1	E	672	ARG
1	F	108	ASP

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Mol	Chain	Res	Type
1	F	307	LEU
1	F	377	GLN
1	F	471	TRP
2	O	12	PHE
2	P	12	PHE
2	P	25	GLY
2	Q	12	PHE
2	Q	22	ASP
2	Q	25	GLY
2	R	12	PHE
2	R	25	GLY
2	S	12	PHE
2	S	25	GLY
2	S	82	GLU
2	T	12	PHE
1	A	177	ILE
1	A	274	GLY
1	A	294	ASP
1	A	334	LEU
1	A	537	GLY
1	A	672	ARG
1	B	274	GLY
1	B	294	ASP
1	B	307	LEU
1	B	334	LEU
1	B	452	GLU
1	B	672	ARG
1	B	775	LEU
1	C	274	GLY
1	C	294	ASP
1	C	334	LEU
1	C	452	GLU
1	C	537	GLY
1	D	274	GLY
1	D	294	ASP
1	D	334	LEU
1	D	537	GLY
1	D	580	GLU
1	D	775	LEU
1	E	274	GLY
1	E	334	LEU
1	E	452	GLU

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Mol	Chain	Res	Type
1	E	537	GLY
1	E	775	LEU
1	F	274	GLY
1	F	294	ASP
1	F	334	LEU
1	F	452	GLU
1	F	537	GLY
1	F	580	GLU
1	F	672	ARG
1	F	775	LEU
2	O	21	LYS
2	O	22	ASP
2	P	21	LYS
2	P	22	ASP
2	Q	21	LYS
2	R	21	LYS
2	R	22	ASP
2	S	21	LYS
2	S	22	ASP
2	T	21	LYS
2	T	22	ASP
1	A	775	LEU
1	B	65	ASN
1	B	177	ILE
1	B	580	GLU
1	B	585	GLU
1	C	177	ILE
1	C	580	GLU
1	C	669	SER
1	C	775	LEU
1	D	177	ILE
1	D	669	SER
1	E	177	ILE
1	E	580	GLU
1	F	177	ILE
1	F	423	LYS
1	F	669	SER
2	P	61	GLY
1	A	112	VAL
1	A	711	ILE
1	B	112	VAL
1	B	711	ILE

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Mol	Chain	Res	Type
1	C	112	VAL
1	D	112	VAL
1	E	112	VAL
1	E	711	ILE
1	F	112	VAL
1	F	711	ILE
1	A	484	VAL
1	B	484	VAL
1	C	484	VAL
1	C	711	ILE
1	D	484	VAL
1	D	711	ILE
1	F	481	VAL
1	F	484	VAL
1	A	182	ILE
1	A	441	VAL
1	A	481	VAL
1	B	182	ILE
1	B	441	VAL
1	B	481	VAL
1	C	182	ILE
1	C	441	VAL
1	C	481	VAL
1	D	182	ILE
1	D	441	VAL
1	D	481	VAL
1	E	182	ILE
1	E	441	VAL
1	E	481	VAL
1	E	484	VAL
1	F	182	ILE
1	F	441	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 X-ray entries followed by that with respect to entries of similar resolution. The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	A	664/705 (94%)	585 (88%)	79 (12%)	8 33

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	B	664/705 (94%)	585 (88%)	79 (12%)	8	33
1	C	664/705 (94%)	585 (88%)	79 (12%)	8	33
1	D	664/705 (94%)	584 (88%)	80 (12%)	7	32
1	E	664/705 (94%)	585 (88%)	79 (12%)	8	33
1	F	664/705 (94%)	585 (88%)	79 (12%)	8	33
2	O	123/117 (105%)	103 (84%)	20 (16%)	3	15
2	P	123/117 (105%)	104 (85%)	19 (15%)	4	18
2	Q	123/117 (105%)	103 (84%)	20 (16%)	3	15
2	R	123/117 (105%)	104 (85%)	19 (15%)	4	18
2	S	123/117 (105%)	103 (84%)	20 (16%)	3	15
2	T	123/117 (105%)	103 (84%)	20 (16%)	3	15
All	All	4722/4932 (96%)	4129 (87%)	593 (13%)	7	30

All (593) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	67	VAL
1	A	69	THR
1	A	71	PHE
1	A	78	LYS
1	A	88	LYS
1	A	114	HIS
1	A	115	LYS
1	A	118	GLN
1	A	120	LEU
1	A	122	GLU
1	A	129	ASN
1	A	133	GLU
1	A	137	PHE
1	A	140	ARG
1	A	141	PHE
1	A	147	ARG
1	A	149	THR
1	A	156	ILE
1	A	158	ASP
1	A	172	GLU
1	A	179	LEU
1	A	180	ASP

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Mol	Chain	Res	Type
1	A	182	ILE
1	A	188	LEU
1	A	197	LYS
1	A	210	PHE
1	A	212	GLN
1	A	213	LYS
1	A	229	PHE
1	A	236	GLU
1	A	254	ARG
1	A	255	THR
1	A	260	TYR
1	A	279	ILE
1	A	284	LYS
1	A	292	ARG
1	A	296	LEU
1	A	320	ARG
1	A	323	ASN
1	A	324	THR
1	A	349	ASN
1	A	376	GLN
1	A	377	GLN
1	A	395	GLU
1	A	397	GLU
1	A	400	LYS
1	A	408	LEU
1	A	414	LYS
1	A	415	GLU
1	A	427	ASP
1	A	434	LEU
1	A	438	ASN
1	A	455	TYR
1	A	469	PHE
1	A	473	ASN
1	A	479	LYS
1	A	480	ASN
1	A	484	VAL
1	A	515	LYS
1	A	562	GLU
1	A	567	THR
1	A	581	GLN
1	A	583	ASN
1	A	629	ASN

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Mol	Chain	Res	Type
1	A	635	ILE
1	A	639	ASN
1	A	644	GLU
1	A	646	THR
1	A	665	LYS
1	A	669	SER
1	A	672	ARG
1	A	678	VAL
1	A	688	PHE
1	A	709	ASN
1	A	714	GLN
1	A	744	GLU
1	A	755	ARG
1	A	766	HIS
1	A	794	GLN
1	B	67	VAL
1	B	69	THR
1	B	71	PHE
1	B	78	LYS
1	B	88	LYS
1	B	114	HIS
1	B	115	LYS
1	B	118	GLN
1	B	120	LEU
1	B	122	GLU
1	B	129	ASN
1	B	133	GLU
1	B	137	PHE
1	B	140	ARG
1	B	141	PHE
1	B	147	ARG
1	B	149	THR
1	B	156	ILE
1	B	158	ASP
1	B	172	GLU
1	B	179	LEU
1	B	180	ASP
1	B	182	ILE
1	B	188	LEU
1	B	197	LYS
1	B	210	PHE
1	B	212	GLN

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Mol	Chain	Res	Type
1	B	213	LYS
1	B	229	PHE
1	B	236	GLU
1	B	254	ARG
1	B	255	THR
1	B	260	TYR
1	B	279	ILE
1	B	284	LYS
1	B	292	ARG
1	B	296	LEU
1	B	320	ARG
1	B	323	ASN
1	B	324	THR
1	B	349	ASN
1	B	376	GLN
1	B	377	GLN
1	B	395	GLU
1	B	397	GLU
1	B	400	LYS
1	B	408	LEU
1	B	414	LYS
1	B	415	GLU
1	B	427	ASP
1	B	434	LEU
1	B	438	ASN
1	B	455	TYR
1	B	469	PHE
1	B	473	ASN
1	B	479	LYS
1	B	480	ASN
1	B	484	VAL
1	B	515	LYS
1	B	562	GLU
1	B	567	THR
1	B	581	GLN
1	B	583	ASN
1	B	629	ASN
1	B	635	ILE
1	B	639	ASN
1	B	644	GLU
1	B	646	THR
1	B	665	LYS

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Mol	Chain	Res	Type
1	B	669	SER
1	B	672	ARG
1	B	678	VAL
1	B	688	PHE
1	B	709	ASN
1	B	714	GLN
1	B	744	GLU
1	B	755	ARG
1	B	766	HIS
1	B	794	GLN
1	C	67	VAL
1	C	69	THR
1	C	71	PHE
1	C	78	LYS
1	C	88	LYS
1	C	114	HIS
1	C	115	LYS
1	C	118	GLN
1	C	120	LEU
1	C	122	GLU
1	C	129	ASN
1	C	133	GLU
1	C	137	PHE
1	C	140	ARG
1	C	141	PHE
1	C	147	ARG
1	C	149	THR
1	C	156	ILE
1	C	158	ASP
1	C	172	GLU
1	C	179	LEU
1	C	180	ASP
1	C	182	ILE
1	C	188	LEU
1	C	197	LYS
1	C	210	PHE
1	C	212	GLN
1	C	213	LYS
1	C	229	PHE
1	C	236	GLU
1	C	254	ARG
1	C	255	THR

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Mol	Chain	Res	Type
1	C	260	TYR
1	C	279	ILE
1	C	284	LYS
1	C	292	ARG
1	C	296	LEU
1	C	320	ARG
1	C	323	ASN
1	C	324	THR
1	C	349	ASN
1	C	376	GLN
1	C	377	GLN
1	C	395	GLU
1	C	397	GLU
1	C	400	LYS
1	C	408	LEU
1	C	414	LYS
1	C	415	GLU
1	C	427	ASP
1	C	434	LEU
1	C	438	ASN
1	C	455	TYR
1	C	469	PHE
1	C	473	ASN
1	C	479	LYS
1	C	480	ASN
1	C	484	VAL
1	C	515	LYS
1	C	562	GLU
1	C	567	THR
1	C	581	GLN
1	C	583	ASN
1	C	629	ASN
1	C	635	ILE
1	C	639	ASN
1	C	644	GLU
1	C	646	THR
1	C	665	LYS
1	C	669	SER
1	C	672	ARG
1	C	678	VAL
1	C	688	PHE
1	C	709	ASN

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Mol	Chain	Res	Type
1	C	714	GLN
1	C	744	GLU
1	C	755	ARG
1	C	766	HIS
1	C	794	GLN
1	D	67	VAL
1	D	69	THR
1	D	71	PHE
1	D	78	LYS
1	D	88	LYS
1	D	114	HIS
1	D	115	LYS
1	D	118	GLN
1	D	120	LEU
1	D	122	GLU
1	D	129	ASN
1	D	133	GLU
1	D	137	PHE
1	D	140	ARG
1	D	141	PHE
1	D	147	ARG
1	D	149	THR
1	D	156	ILE
1	D	158	ASP
1	D	172	GLU
1	D	179	LEU
1	D	180	ASP
1	D	182	ILE
1	D	188	LEU
1	D	197	LYS
1	D	210	PHE
1	D	212	GLN
1	D	213	LYS
1	D	229	PHE
1	D	236	GLU
1	D	254	ARG
1	D	255	THR
1	D	260	TYR
1	D	279	ILE
1	D	284	LYS
1	D	292	ARG
1	D	296	LEU

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Mol	Chain	Res	Type
1	D	320	ARG
1	D	323	ASN
1	D	324	THR
1	D	349	ASN
1	D	376	GLN
1	D	377	GLN
1	D	395	GLU
1	D	397	GLU
1	D	400	LYS
1	D	408	LEU
1	D	414	LYS
1	D	415	GLU
1	D	427	ASP
1	D	434	LEU
1	D	438	ASN
1	D	455	TYR
1	D	469	PHE
1	D	473	ASN
1	D	479	LYS
1	D	480	ASN
1	D	484	VAL
1	D	515	LYS
1	D	562	GLU
1	D	567	THR
1	D	581	GLN
1	D	583	ASN
1	D	622	LYS
1	D	629	ASN
1	D	635	ILE
1	D	639	ASN
1	D	644	GLU
1	D	646	THR
1	D	665	LYS
1	D	669	SER
1	D	672	ARG
1	D	678	VAL
1	D	688	PHE
1	D	709	ASN
1	D	714	GLN
1	D	744	GLU
1	D	755	ARG
1	D	766	HIS

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Mol	Chain	Res	Type
1	D	794	GLN
1	E	67	VAL
1	E	69	THR
1	E	71	PHE
1	E	78	LYS
1	E	88	LYS
1	E	114	HIS
1	E	115	LYS
1	E	118	GLN
1	E	120	LEU
1	E	122	GLU
1	E	129	ASN
1	E	133	GLU
1	E	137	PHE
1	E	140	ARG
1	E	141	PHE
1	E	147	ARG
1	E	149	THR
1	E	156	ILE
1	E	158	ASP
1	E	172	GLU
1	E	179	LEU
1	E	180	ASP
1	E	182	ILE
1	E	188	LEU
1	E	197	LYS
1	E	210	PHE
1	E	212	GLN
1	E	213	LYS
1	E	229	PHE
1	E	236	GLU
1	E	254	ARG
1	E	255	THR
1	E	260	TYR
1	E	279	ILE
1	E	284	LYS
1	E	292	ARG
1	E	296	LEU
1	E	320	ARG
1	E	323	ASN
1	E	324	THR
1	E	349	ASN

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Mol	Chain	Res	Type
1	E	376	GLN
1	E	377	GLN
1	E	395	GLU
1	E	397	GLU
1	E	400	LYS
1	E	408	LEU
1	E	414	LYS
1	E	415	GLU
1	E	427	ASP
1	E	434	LEU
1	E	438	ASN
1	E	455	TYR
1	E	469	PHE
1	E	473	ASN
1	E	479	LYS
1	E	480	ASN
1	E	484	VAL
1	E	515	LYS
1	E	562	GLU
1	E	567	THR
1	E	581	GLN
1	E	583	ASN
1	E	629	ASN
1	E	635	ILE
1	E	639	ASN
1	E	644	GLU
1	E	646	THR
1	E	665	LYS
1	E	669	SER
1	E	672	ARG
1	E	678	VAL
1	E	688	PHE
1	E	709	ASN
1	E	714	GLN
1	E	744	GLU
1	E	755	ARG
1	E	766	HIS
1	E	794	GLN
1	F	67	VAL
1	F	69	THR
1	F	71	PHE
1	F	78	LYS

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Mol	Chain	Res	Type
1	F	88	LYS
1	F	114	HIS
1	F	115	LYS
1	F	118	GLN
1	F	120	LEU
1	F	122	GLU
1	F	129	ASN
1	F	133	GLU
1	F	137	PHE
1	F	140	ARG
1	F	141	PHE
1	F	147	ARG
1	F	149	THR
1	F	156	ILE
1	F	158	ASP
1	F	172	GLU
1	F	179	LEU
1	F	180	ASP
1	F	182	ILE
1	F	188	LEU
1	F	197	LYS
1	F	210	PHE
1	F	212	GLN
1	F	213	LYS
1	F	229	PHE
1	F	236	GLU
1	F	254	ARG
1	F	255	THR
1	F	260	TYR
1	F	279	ILE
1	F	284	LYS
1	F	292	ARG
1	F	296	LEU
1	F	320	ARG
1	F	323	ASN
1	F	324	THR
1	F	349	ASN
1	F	376	GLN
1	F	377	GLN
1	F	395	GLU
1	F	397	GLU
1	F	400	LYS

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Mol	Chain	Res	Type
1	F	408	LEU
1	F	414	LYS
1	F	415	GLU
1	F	427	ASP
1	F	434	LEU
1	F	438	ASN
1	F	455	TYR
1	F	469	PHE
1	F	473	ASN
1	F	479	LYS
1	F	480	ASN
1	F	484	VAL
1	F	515	LYS
1	F	562	GLU
1	F	567	THR
1	F	581	GLN
1	F	583	ASN
1	F	629	ASN
1	F	635	ILE
1	F	639	ASN
1	F	644	GLU
1	F	646	THR
1	F	665	LYS
1	F	669	SER
1	F	672	ARG
1	F	678	VAL
1	F	688	PHE
1	F	709	ASN
1	F	714	GLN
1	F	744	GLU
1	F	755	ARG
1	F	766	HIS
1	F	794	GLN
2	O	5	THR
2	O	13	LYS
2	O	14	GLU
2	O	18	LEU
2	O	21	LYS
2	O	30	LYS
2	O	49	GLN
2	O	50	ASP
2	O	54	GLU

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Mol	Chain	Res	Type
2	O	55	VAL
2	O	56	ASP
2	O	58	ASP
2	O	62	THR
2	O	64	ASP
2	O	65	PHE
2	O	69	LEU
2	O	76	MSE
2	O	97	ASN
2	O	117	THR
2	O	123	GLN
2	P	5	THR
2	P	13	LYS
2	P	14	GLU
2	P	18	LEU
2	P	21	LYS
2	P	30	LYS
2	P	49	GLN
2	P	50	ASP
2	P	54	GLU
2	P	55	VAL
2	P	56	ASP
2	P	58	ASP
2	P	64	ASP
2	P	65	PHE
2	P	69	LEU
2	P	76	MSE
2	P	97	ASN
2	P	117	THR
2	P	123	GLN
2	Q	5	THR
2	Q	13	LYS
2	Q	14	GLU
2	Q	18	LEU
2	Q	21	LYS
2	Q	30	LYS
2	Q	49	GLN
2	Q	50	ASP
2	Q	54	GLU
2	Q	55	VAL
2	Q	56	ASP
2	Q	58	ASP

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Mol	Chain	Res	Type
2	Q	62	THR
2	Q	64	ASP
2	Q	65	PHE
2	Q	69	LEU
2	Q	76	MSE
2	Q	97	ASN
2	Q	117	THR
2	Q	123	GLN
2	R	5	THR
2	R	13	LYS
2	R	14	GLU
2	R	18	LEU
2	R	21	LYS
2	R	30	LYS
2	R	49	GLN
2	R	50	ASP
2	R	54	GLU
2	R	55	VAL
2	R	56	ASP
2	R	58	ASP
2	R	64	ASP
2	R	65	PHE
2	R	69	LEU
2	R	76	MSE
2	R	97	ASN
2	R	117	THR
2	R	123	GLN
2	S	5	THR
2	S	13	LYS
2	S	14	GLU
2	S	18	LEU
2	S	21	LYS
2	S	30	LYS
2	S	49	GLN
2	S	50	ASP
2	S	54	GLU
2	S	55	VAL
2	S	56	ASP
2	S	58	ASP
2	S	62	THR
2	S	64	ASP
2	S	65	PHE

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Mol	Chain	Res	Type
2	S	69	LEU
2	S	76	MSE
2	S	97	ASN
2	S	117	THR
2	S	123	GLN
2	T	5	THR
2	T	13	LYS
2	T	14	GLU
2	T	18	LEU
2	T	21	LYS
2	T	30	LYS
2	T	49	GLN
2	T	50	ASP
2	T	54	GLU
2	T	55	VAL
2	T	56	ASP
2	T	58	ASP
2	T	62	THR
2	T	64	ASP
2	T	65	PHE
2	T	69	LEU
2	T	76	MSE
2	T	97	ASN
2	T	117	THR
2	T	123	GLN

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (229) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	80	GLN
1	A	129	ASN
1	A	165	GLN
1	A	212	GLN
1	A	323	ASN
1	A	349	ASN
1	A	368	GLN
1	A	377	GLN
1	A	387	ASN
1	A	438	ASN
1	A	451	ASN
1	A	480	ASN
1	A	507	GLN

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Mol	Chain	Res	Type
1	A	510	GLN
1	A	518	ASN
1	A	551	ASN
1	A	553	GLN
1	A	576	ASN
1	A	581	GLN
1	A	618	ASN
1	A	629	ASN
1	A	639	ASN
1	A	655	ASN
1	A	666	ASN
1	A	709	ASN
1	A	730	ASN
1	A	747	ASN
1	A	750	GLN
1	A	758	ASN
1	A	767	GLN
1	A	770	ASN
1	A	781	ASN
1	A	785	ASN
1	A	794	GLN
1	B	64	ASN
1	B	80	GLN
1	B	81	GLN
1	B	129	ASN
1	B	165	GLN
1	B	212	GLN
1	B	323	ASN
1	B	349	ASN
1	B	368	GLN
1	B	377	GLN
1	B	387	ASN
1	B	438	ASN
1	B	451	ASN
1	B	480	ASN
1	B	507	GLN
1	B	510	GLN
1	B	518	ASN
1	B	551	ASN
1	B	553	GLN
1	B	576	ASN
1	B	581	GLN

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Mol	Chain	Res	Type
1	B	618	ASN
1	B	629	ASN
1	B	639	ASN
1	B	655	ASN
1	B	666	ASN
1	B	709	ASN
1	B	730	ASN
1	B	747	ASN
1	B	750	GLN
1	B	758	ASN
1	B	767	GLN
1	B	770	ASN
1	B	781	ASN
1	B	785	ASN
1	B	794	GLN
1	C	80	GLN
1	C	81	GLN
1	C	129	ASN
1	C	165	GLN
1	C	212	GLN
1	C	323	ASN
1	C	349	ASN
1	C	368	GLN
1	C	377	GLN
1	C	387	ASN
1	C	438	ASN
1	C	451	ASN
1	C	480	ASN
1	C	507	GLN
1	C	510	GLN
1	C	518	ASN
1	C	551	ASN
1	C	553	GLN
1	C	576	ASN
1	C	581	GLN
1	C	618	ASN
1	C	629	ASN
1	C	639	ASN
1	C	655	ASN
1	C	666	ASN
1	C	709	ASN
1	C	730	ASN

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Mol	Chain	Res	Type
1	C	747	ASN
1	C	750	GLN
1	C	758	ASN
1	C	767	GLN
1	C	770	ASN
1	C	781	ASN
1	C	785	ASN
1	C	794	GLN
1	D	64	ASN
1	D	80	GLN
1	D	81	GLN
1	D	129	ASN
1	D	165	GLN
1	D	212	GLN
1	D	323	ASN
1	D	349	ASN
1	D	368	GLN
1	D	377	GLN
1	D	387	ASN
1	D	438	ASN
1	D	451	ASN
1	D	480	ASN
1	D	507	GLN
1	D	510	GLN
1	D	518	ASN
1	D	551	ASN
1	D	553	GLN
1	D	576	ASN
1	D	581	GLN
1	D	618	ASN
1	D	629	ASN
1	D	639	ASN
1	D	655	ASN
1	D	666	ASN
1	D	709	ASN
1	D	730	ASN
1	D	747	ASN
1	D	750	GLN
1	D	758	ASN
1	D	767	GLN
1	D	770	ASN
1	D	781	ASN

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Mol	Chain	Res	Type
1	D	785	ASN
1	D	794	GLN
1	E	80	GLN
1	E	129	ASN
1	E	165	GLN
1	E	212	GLN
1	E	323	ASN
1	E	349	ASN
1	E	368	GLN
1	E	377	GLN
1	E	387	ASN
1	E	438	ASN
1	E	451	ASN
1	E	480	ASN
1	E	507	GLN
1	E	510	GLN
1	E	518	ASN
1	E	551	ASN
1	E	553	GLN
1	E	576	ASN
1	E	581	GLN
1	E	618	ASN
1	E	629	ASN
1	E	639	ASN
1	E	655	ASN
1	E	666	ASN
1	E	709	ASN
1	E	730	ASN
1	E	747	ASN
1	E	750	GLN
1	E	758	ASN
1	E	767	GLN
1	E	770	ASN
1	E	781	ASN
1	E	785	ASN
1	E	794	GLN
1	F	64	ASN
1	F	80	GLN
1	F	81	GLN
1	F	129	ASN
1	F	165	GLN
1	F	212	GLN

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Mol	Chain	Res	Type
1	F	323	ASN
1	F	349	ASN
1	F	368	GLN
1	F	377	GLN
1	F	387	ASN
1	F	438	ASN
1	F	451	ASN
1	F	480	ASN
1	F	507	GLN
1	F	510	GLN
1	F	518	ASN
1	F	551	ASN
1	F	553	GLN
1	F	576	ASN
1	F	581	GLN
1	F	618	ASN
1	F	629	ASN
1	F	639	ASN
1	F	655	ASN
1	F	666	ASN
1	F	709	ASN
1	F	730	ASN
1	F	747	ASN
1	F	750	GLN
1	F	758	ASN
1	F	767	GLN
1	F	770	ASN
1	F	781	ASN
1	F	785	ASN
1	F	794	GLN
2	O	8	GLN
2	O	49	GLN
2	O	111	ASN
2	P	8	GLN
2	P	49	GLN
2	P	111	ASN
2	Q	8	GLN
2	Q	49	GLN
2	Q	111	ASN
2	R	8	GLN
2	R	49	GLN
2	R	111	ASN

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Mol	Chain	Res	Type
2	S	8	GLN
2	S	49	GLN
2	S	111	ASN
2	T	8	GLN
2	T	49	GLN
2	T	111	ASN

### 5.3.3 RNA ⓘ

There are no RNA chains in this entry.

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

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

### 5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

### 5.6 Ligand geometry ⓘ

Of 30 ligands modelled in this entry, 30 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

### 5.7 Other polymers ⓘ

There are no such residues in this entry.

### 5.8 Polymer linkage issues

There are no chain breaks in this entry.

## 6 Fit of model and data ⓘ

### 6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ > 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95<sup>th</sup> percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q < 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
1	A	735/777 (94%)	-0.03	10 (1%) 72 22	34, 87, 140, 151	0
1	B	735/777 (94%)	-0.04	11 (1%) 70 21	35, 87, 141, 153	0
1	C	735/777 (94%)	-0.04	10 (1%) 72 22	34, 87, 141, 153	0
1	D	735/777 (94%)	-0.03	10 (1%) 72 22	35, 87, 140, 152	0
1	E	735/777 (94%)	-0.04	11 (1%) 70 21	34, 87, 140, 153	0
1	F	735/777 (94%)	-0.03	7 (0%) 79 29	34, 87, 140, 153	0
2	O	146/149 (97%)	-0.18	0 100 100	27, 74, 127, 141	0
2	P	146/149 (97%)	-0.16	0 100 100	28, 74, 127, 141	0
2	Q	146/149 (97%)	-0.18	0 100 100	29, 74, 127, 141	0
2	R	146/149 (97%)	-0.17	0 100 100	28, 74, 127, 141	0
2	S	146/149 (97%)	-0.18	0 100 100	29, 74, 127, 141	0
2	T	146/149 (97%)	-0.16	0 100 100	29, 74, 127, 141	0
All	All	5286/5556 (95%)	-0.06	59 (1%) 77 27	27, 83, 140, 153	0

All (59) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	D	225	ILE	3.6
1	B	225	ILE	3.6
1	B	126	ASN	3.5
1	D	230	ILE	3.5
1	B	204	ASP	3.5
1	E	204	ASP	3.4
1	C	212	GLN	3.3
1	C	260	TYR	3.3
1	A	204	ASP	3.2
1	B	260	TYR	3.2
1	E	225	ILE	3.1

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Mol	Chain	Res	Type	RSRZ
1	E	212	GLN	3.1
1	E	260	TYR	3.1
1	C	230	ILE	3.1
1	C	225	ILE	3.1
1	F	260	TYR	3.0
1	C	226	ASP	2.9
1	D	260	TYR	2.9
1	D	126	ASN	2.9
1	A	260	TYR	2.9
1	F	171	TYR	2.8
1	E	230	ILE	2.8
1	B	162	ASN	2.8
1	C	162	ASN	2.8
1	D	204	ASP	2.8
1	A	420	LEU	2.7
1	D	212	GLN	2.7
1	A	230	ILE	2.7
1	C	204	ASP	2.7
1	C	420	LEU	2.7
1	A	225	ILE	2.6
1	B	226	ASP	2.6
1	F	204	ASP	2.6
1	F	225	ILE	2.6
1	C	126	ASN	2.6
1	E	205	SER	2.5
1	F	126	ASN	2.5
1	F	212	GLN	2.5
1	E	126	ASN	2.5
1	B	230	ILE	2.4
1	B	171	TYR	2.4
1	A	171	TYR	2.4
1	A	131	ARG	2.4
1	E	171	TYR	2.4
1	D	229	PHE	2.4
1	E	226	ASP	2.3
1	D	171	TYR	2.3
1	D	206	SER	2.3
1	D	162	ASN	2.2
1	B	421	LYS	2.2
1	C	131	ARG	2.2
1	B	206	SER	2.2
1	A	162	ASN	2.1

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Mol	Chain	Res	Type	RSRZ
1	A	229	PHE	2.1
1	A	421	LYS	2.1
1	F	131	ARG	2.1
1	E	131	ARG	2.1
1	B	212	GLN	2.1
1	E	162	ASN	2.1

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

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

## 6.3 Carbohydrates ⓘ

There are no carbohydrates in this entry.

## 6.4 Ligands ⓘ

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. The B-factors column lists the minimum, median, 95<sup>th</sup> percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å <sup>2</sup> )	Q<0.9
4	CA	T	711	1/1	0.20	0.92	84,84,84,84	0
3	MG	F	905	1/1	0.24	0.78	22,22,22,22	0
3	MG	A	900	1/1	0.26	0.75	28,28,28,28	0
4	CA	P	703	1/1	0.19	0.66	88,88,88,88	0
4	CA	R	807	1/1	0.19	0.53	38,38,38,38	0
3	MG	B	901	1/1	0.23	0.41	28,28,28,28	0
4	CA	R	808	1/1	0.24	0.40	44,44,44,44	0
4	CA	R	707	1/1	0.18	0.34	85,85,85,85	0
3	MG	E	904	1/1	0.22	0.01	23,23,23,23	0
4	CA	O	801	1/1	0.18	-0.03	36,36,36,36	0
4	CA	S	709	1/1	0.17	-0.09	83,83,83,83	0
4	CA	T	812	1/1	0.20	-0.14	48,48,48,48	0
4	CA	P	803	1/1	0.17	-0.31	36,36,36,36	0
3	MG	C	902	1/1	0.17	-0.35	23,23,23,23	0
4	CA	S	810	1/1	0.17	-0.38	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors( $\text{\AA}^2$ )	Q<0.9
4	CA	O	701	1/1	0.13	-0.43	83,83,83,83	0
4	CA	Q	806	1/1	0.18	-0.44	46,46,46,46	0
4	CA	O	802	1/1	0.17	-0.49	44,44,44,44	0
4	CA	P	804	1/1	0.17	-0.51	46,46,46,46	0
3	MG	D	903	1/1	0.17	-0.53	27,27,27,27	0
4	CA	S	809	1/1	0.15	-0.64	37,37,37,37	0
4	CA	Q	805	1/1	0.15	-0.66	38,38,38,38	0
4	CA	T	811	1/1	0.14	-0.92	43,43,43,43	0
4	CA	Q	705	1/1	0.09	-1.12	86,86,86,86	0
4	CA	O	702	1/1	0.10	-1.21	84,84,84,84	0
4	CA	Q	706	1/1	0.09	-1.25	84,84,84,84	0
4	CA	R	708	1/1	0.09	-1.38	85,85,85,85	0
4	CA	P	704	1/1	0.08	-1.39	82,82,82,82	0
4	CA	T	712	1/1	0.10	-1.73	85,85,85,85	0
4	CA	S	710	1/1	0.11	-2.85	87,87,87,87	0

## 6.5 Other polymers ⓘ

There are no such residues in this entry.