Full wwPDB X-ray Structure Validation Report ⓘ

Feb 4, 2024 – 07:39 PM EST

PDB ID	:	1XFW
Title	:	Crystal structure of anthrax edema factor (EF) in complex with calmodulin and 3'5' cyclic AMP (cAMP)
Authors	:	Shen, Y.; Zhukovskaya, N.L.; Guo, Q.; Florian, J.; Tang, W.J.
Deposited on	:	2004-09-15
Resolution	:	3.40 Å(reported)

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

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/XrayValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

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

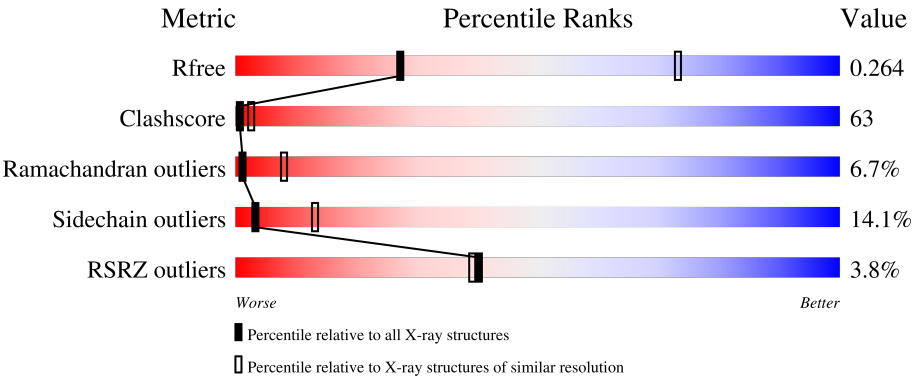
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.36
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 3.40 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}	130704	1026 (3.48-3.32)
Clashscore	141614	1055 (3.48-3.32)
Ramachandran outliers	138981	1038 (3.48-3.32)
Sidechain outliers	138945	1038 (3.48-3.32)
RSRZ outliers	127900	2173 (3.50-3.30)

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 of the lower bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	777	4% 27% 55% 12% • 5%
1	B	777	4% 27% 54% 12% • 5%
1	C	777	4% 27% 54% 12% • 5%
1	D	777	4% 28% 54% 12% • 5%
1	E	777	3% 27% 54% 12% • 5%

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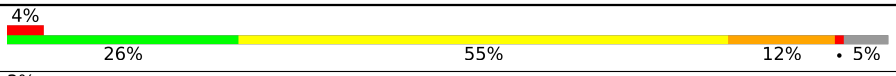
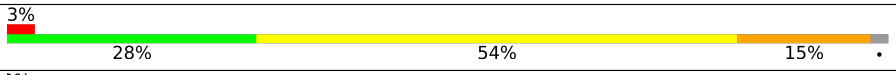
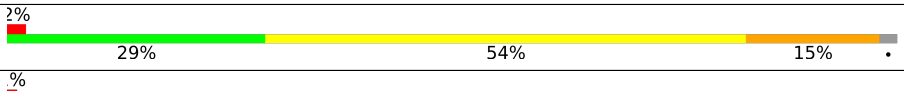
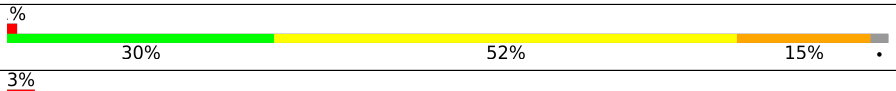
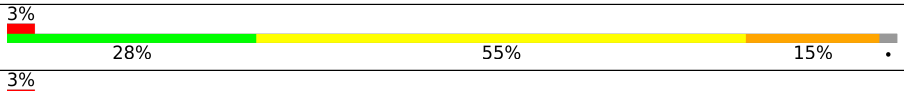
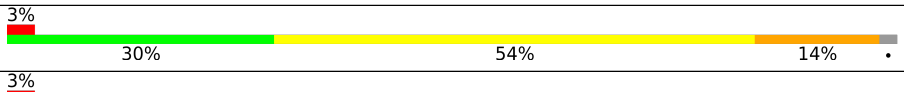
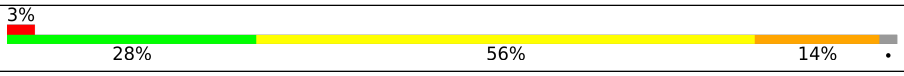
Mol	Chain	Length	Quality of chain
1	F	777	
2	O	149	
2	P	149	
2	Q	149	
2	R	149	
2	S	149	
2	T	149	

2 Entry composition (i)

There are 6 unique types of molecules in this entry. The entry contains 42990 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called 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	S	0	0	0
			1146	702	186	249	9			

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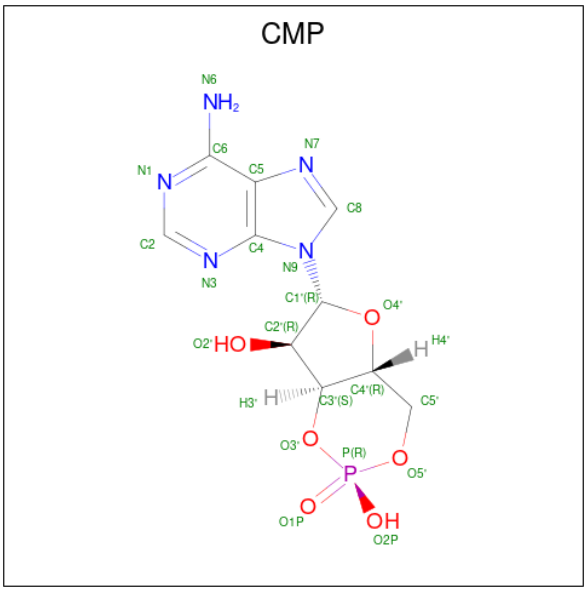
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	P	146	Total	C	N	O	S	0	0	0
			1146	702	186	249	9			
2	Q	146	Total	C	N	O	S	0	0	0
			1146	702	186	249	9			
2	R	146	Total	C	N	O	S	0	0	0
			1146	702	186	249	9			
2	S	146	Total	C	N	O	S	0	0	0
			1146	702	186	249	9			
2	T	146	Total	C	N	O	S	0	0	0
			1146	702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

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

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

- Molecule 4 is ADENOSINE-3',5'-CYCLIC-MONOPHOSPHATE (three-letter code: CMP) (formula: $C_{10}H_{12}N_5O_6P$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	1	Total C N O P 22 10 5 6 1	0	0
4	B	1	Total C N O P 22 10 5 6 1	0	0
4	C	1	Total C N O P 22 10 5 6 1	0	0
4	D	1	Total C N O P 22 10 5 6 1	0	0
4	E	1	Total C N O P 22 10 5 6 1	0	0
4	F	1	Total C N O P 22 10 5 6 1	0	0

- Molecule 5 is CALCIUM ION (three-letter code: CA) (formula: Ca).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	O	3	Total Ca 3 3	0	0
5	P	3	Total Ca 3 3	0	0
5	Q	3	Total Ca 3 3	0	0
5	R	3	Total Ca 3 3	0	0
5	S	3	Total Ca 3 3	0	0
5	T	3	Total Ca 3 3	0	0

- Molecule 6 is water.

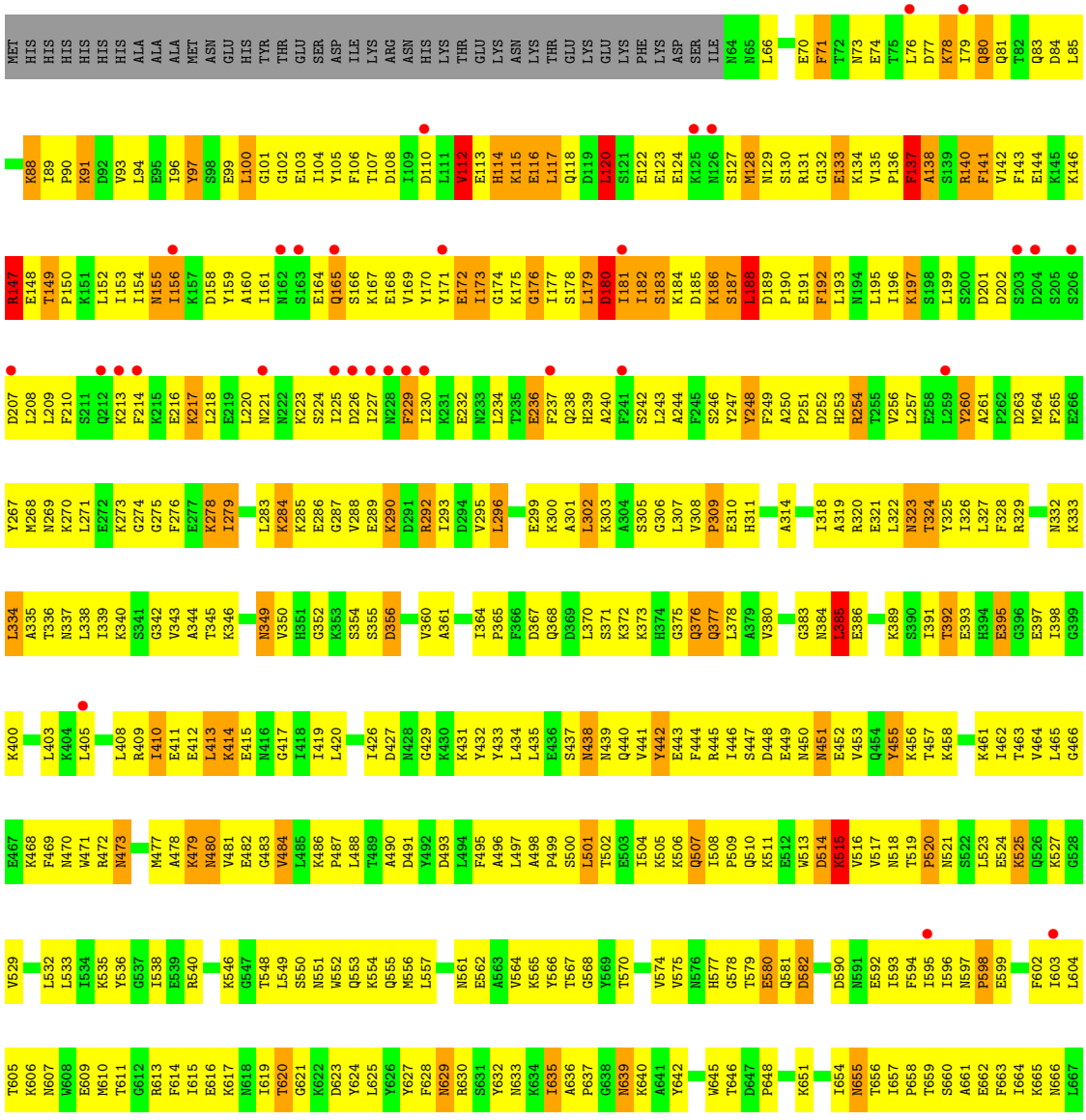
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
6	A	1	Total O 1 1	0	0
6	B	1	Total O 1 1	0	0
6	C	1	Total O 1 1	0	0
6	D	1	Total O 1 1	0	0
6	E	1	Total O 1 1	0	0
6	F	1	Total O 1 1	0	0

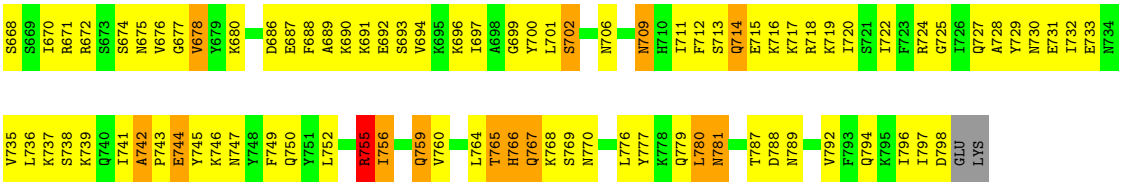
3 Residue-property plots (i)

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

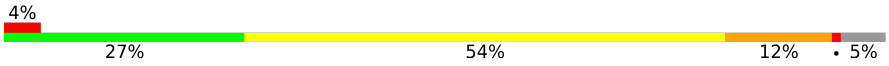
Chain A:

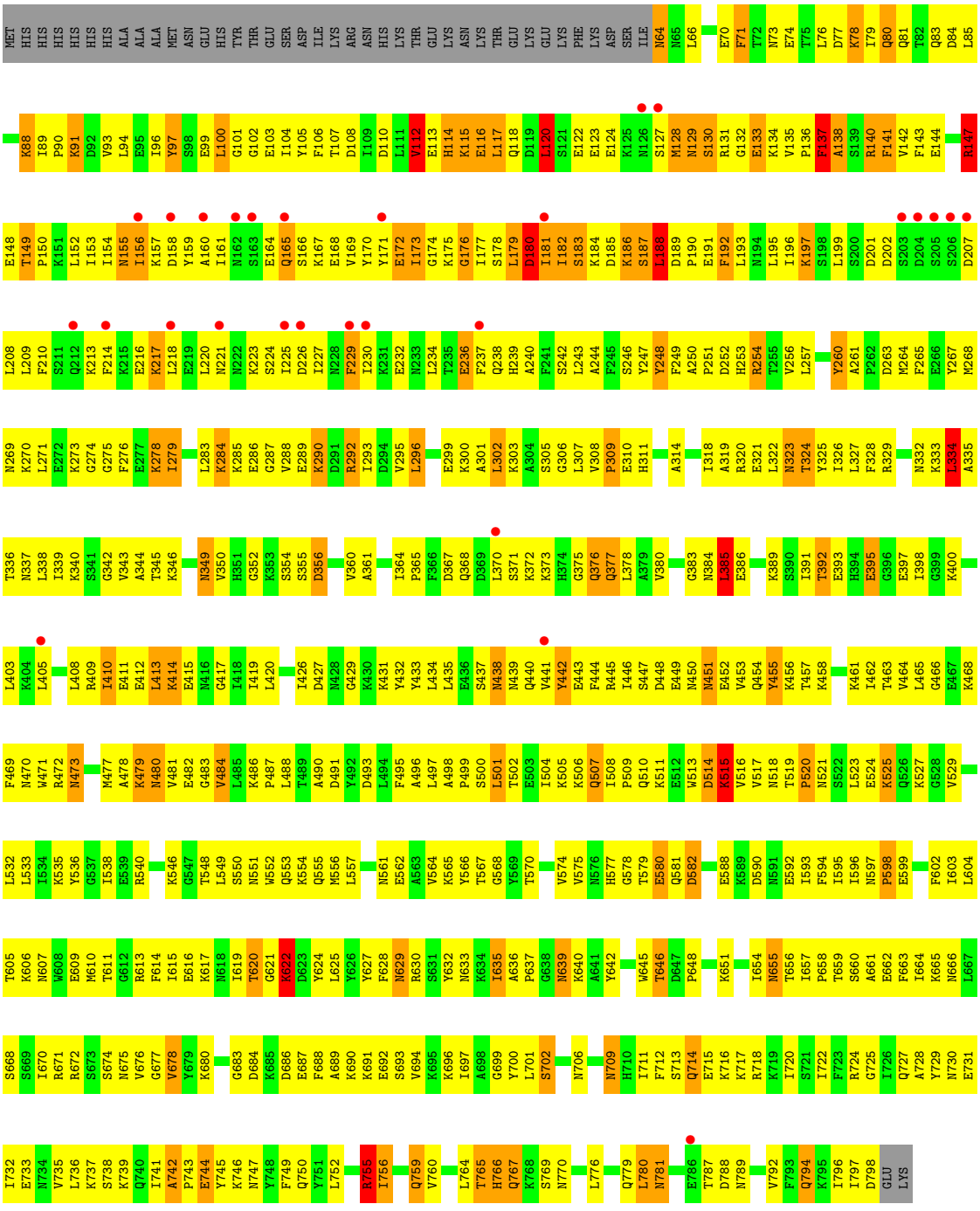




• Molecule 1: Calmodulin-sensitive adenylate cyclase

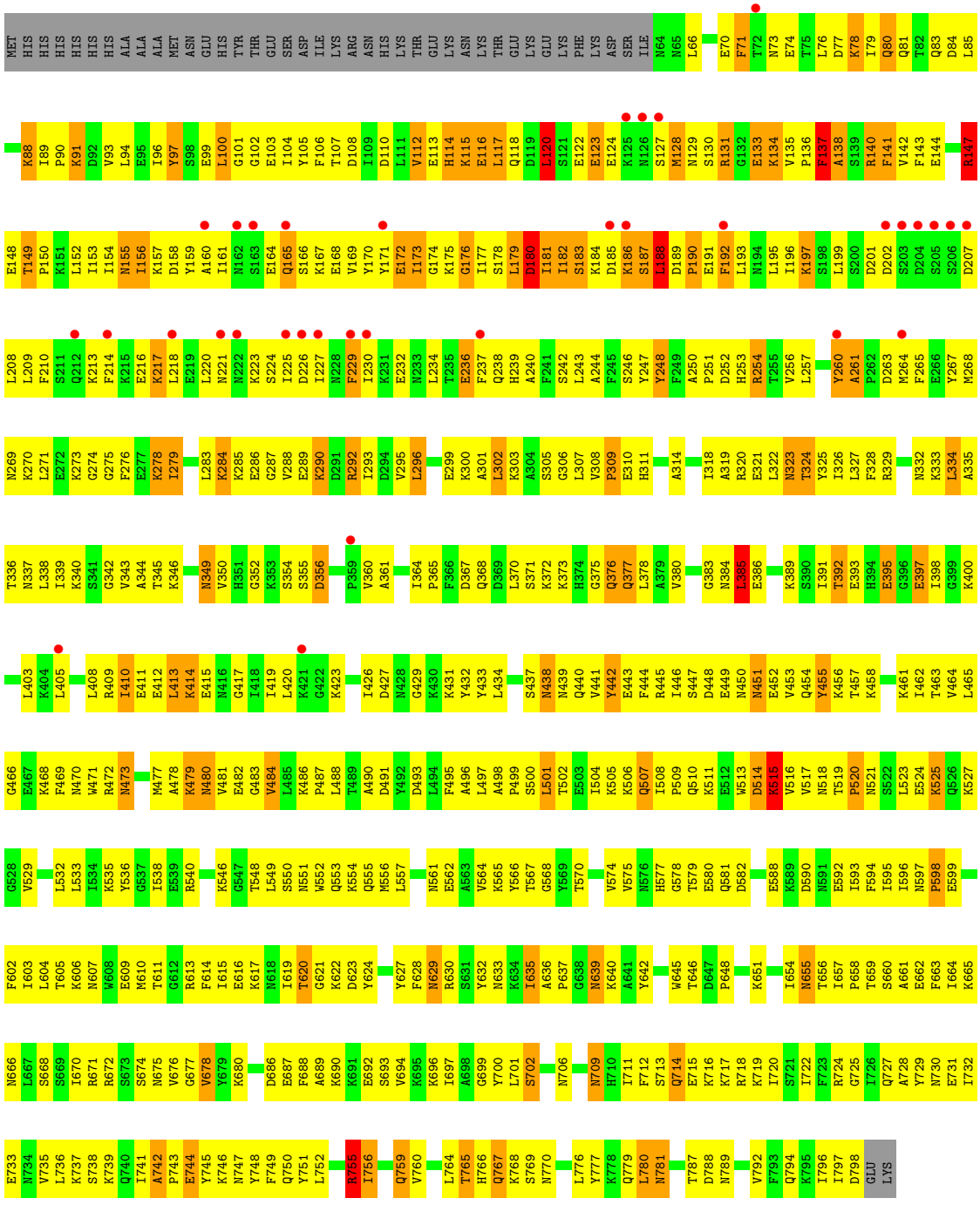
Chain B:





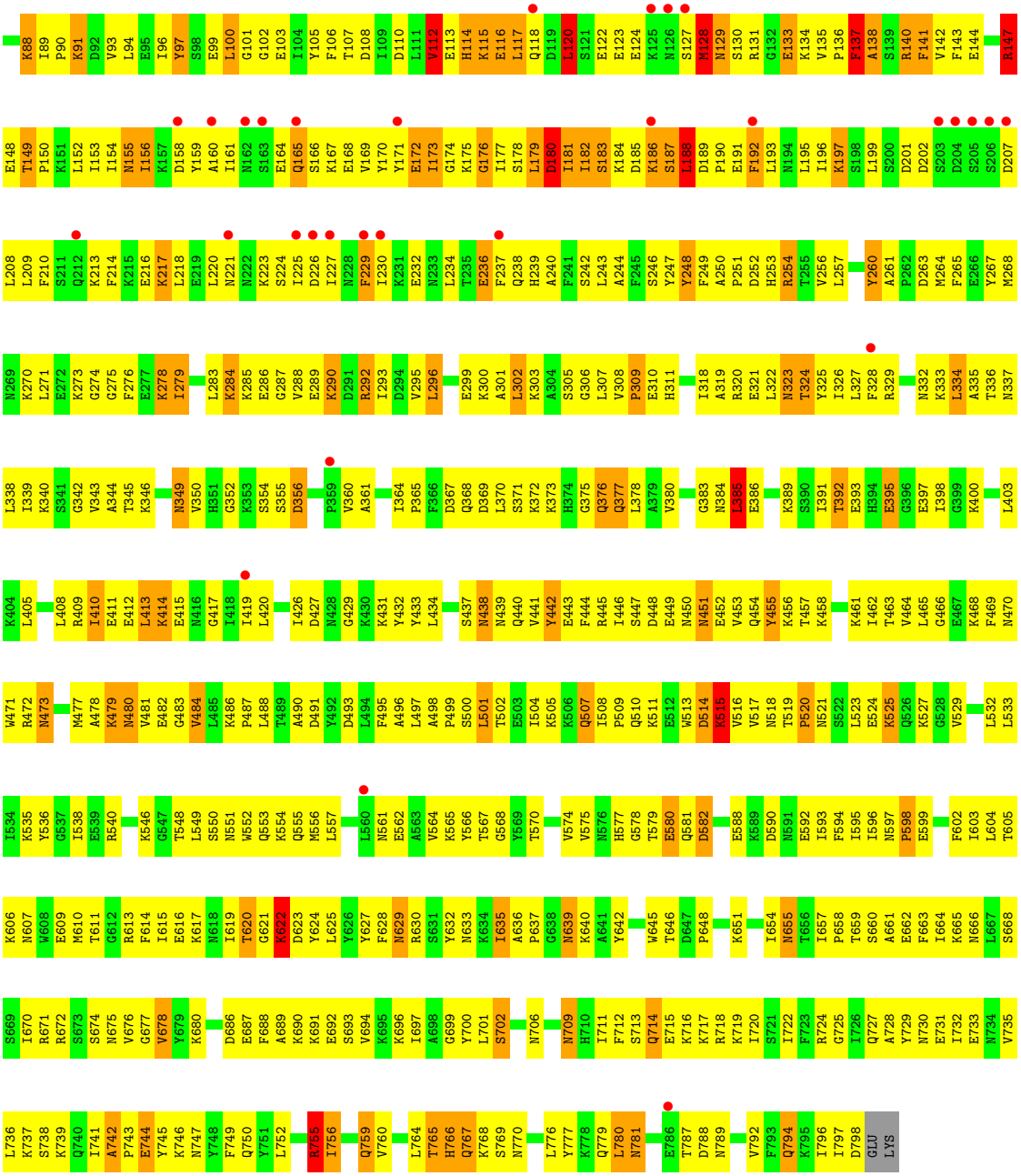
• Molecule 1: Calmodulin-sensitive adenylate cyclase

Chain C:



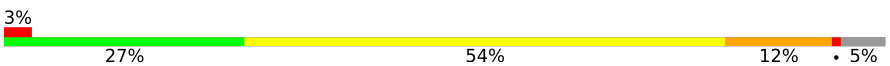
• Molecule 1: Calmodulin-sensitive adenylate cyclase

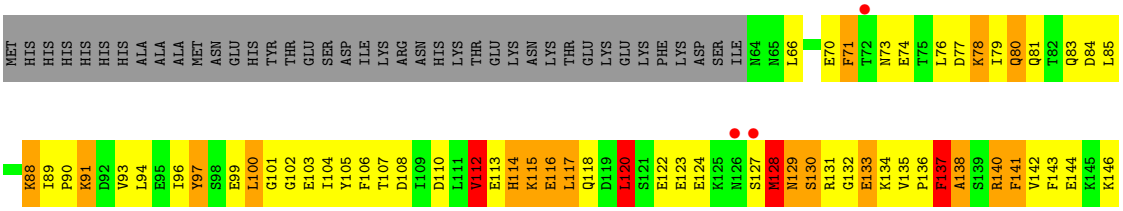
Chain D:

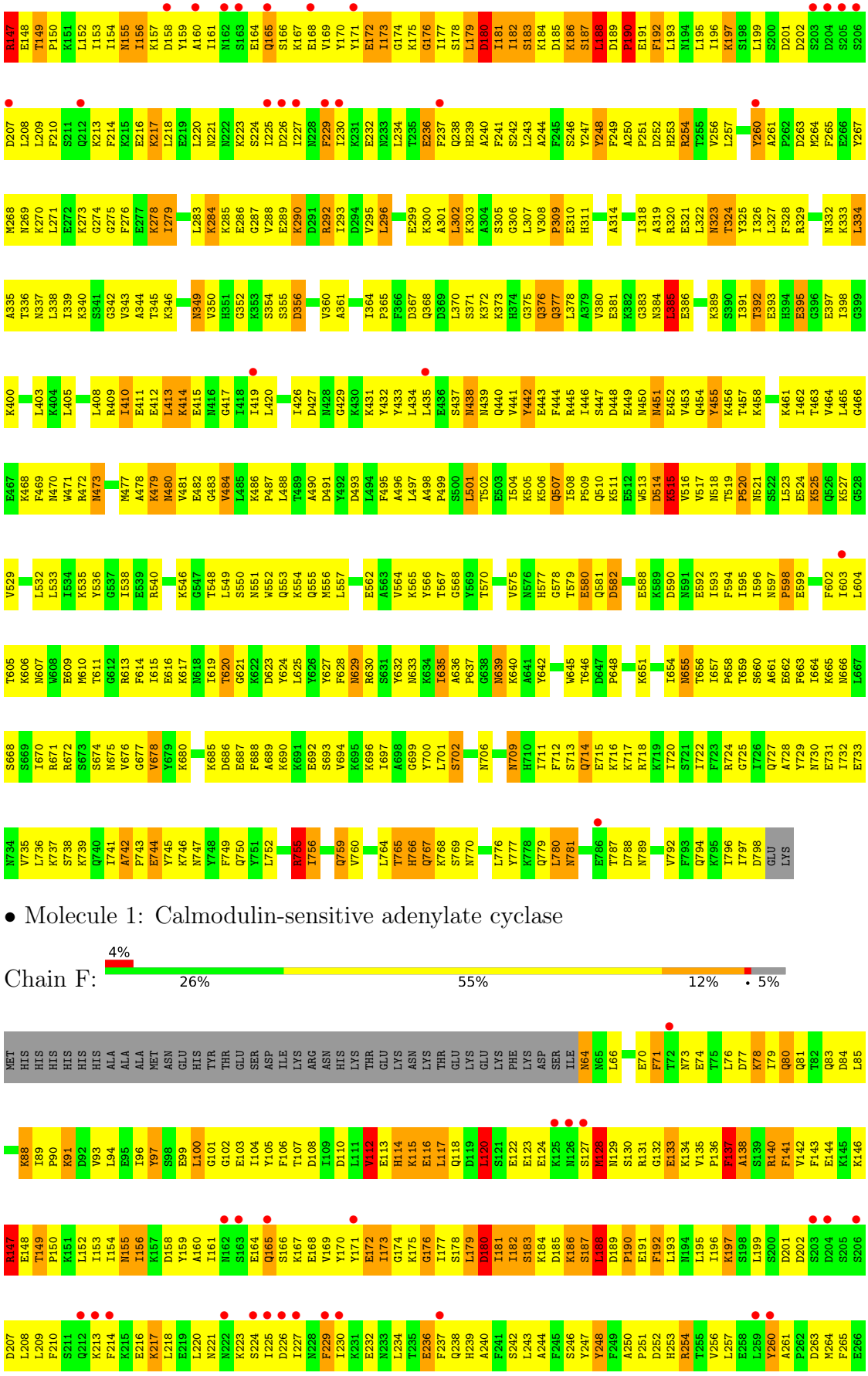


• Molecule 1: Calmodulin-sensitive adenylate cyclase

Chain E:

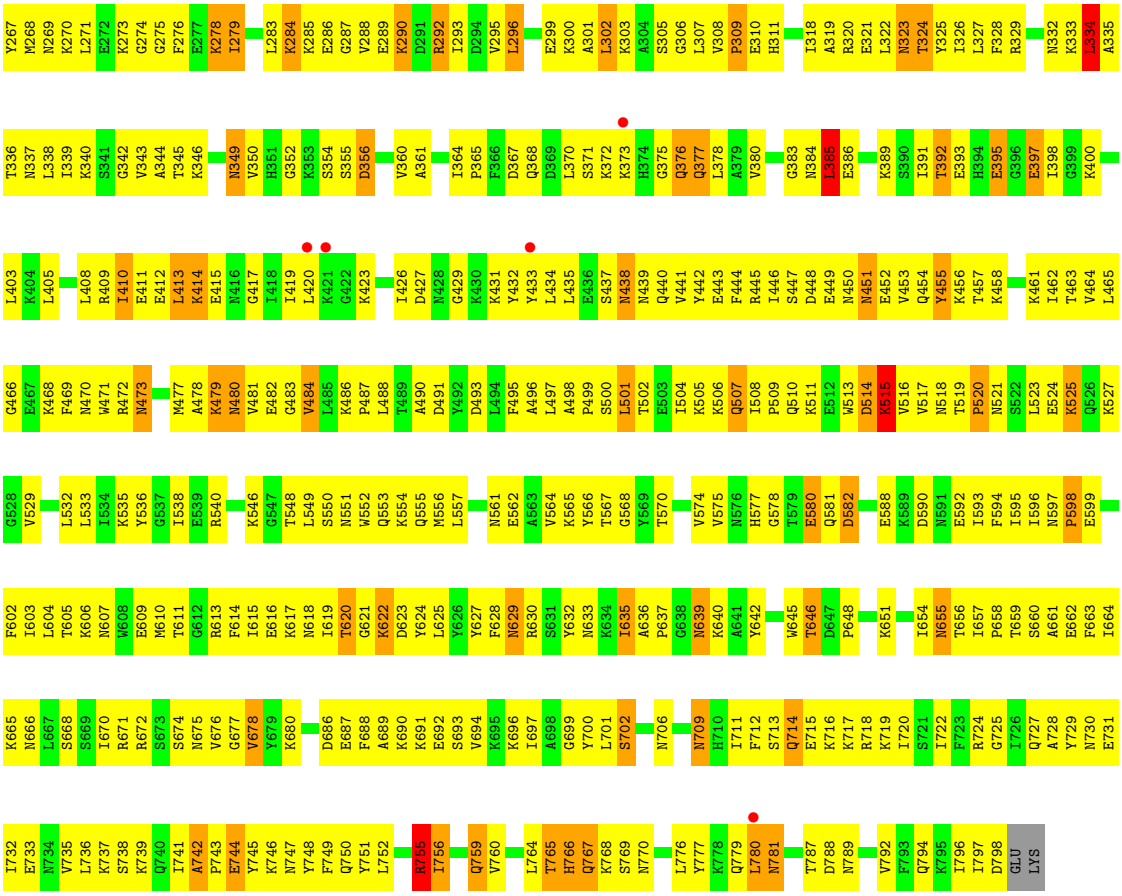






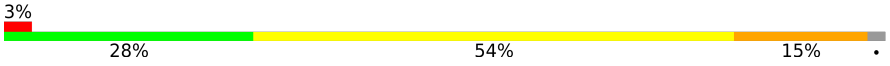
• Molecule 1: Calmodulin-sensitive adenylate cyclase

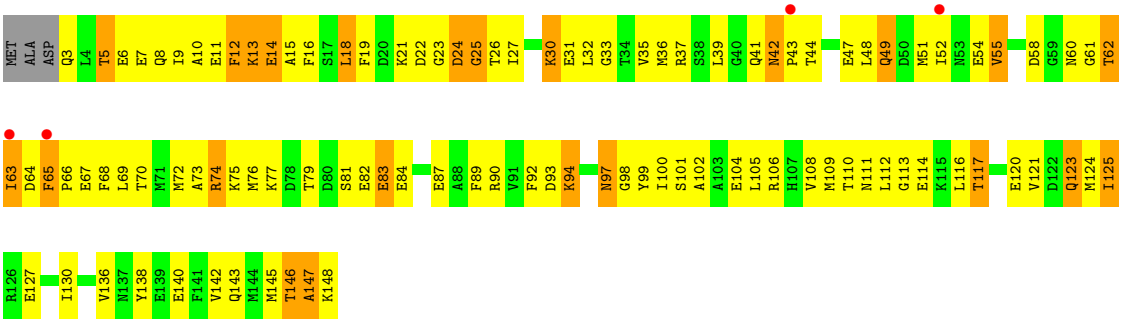
Chain F:



• Molecule 2: Calmodulin 2

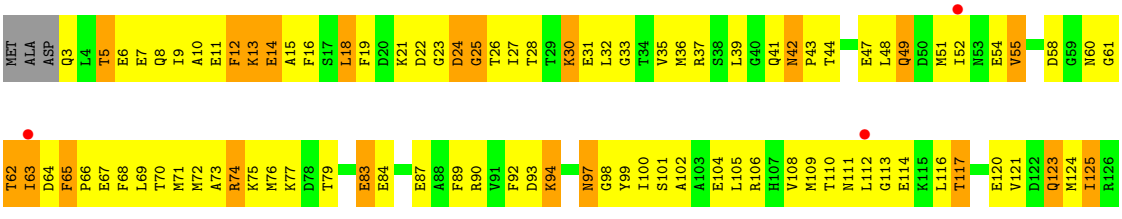
Chain O:





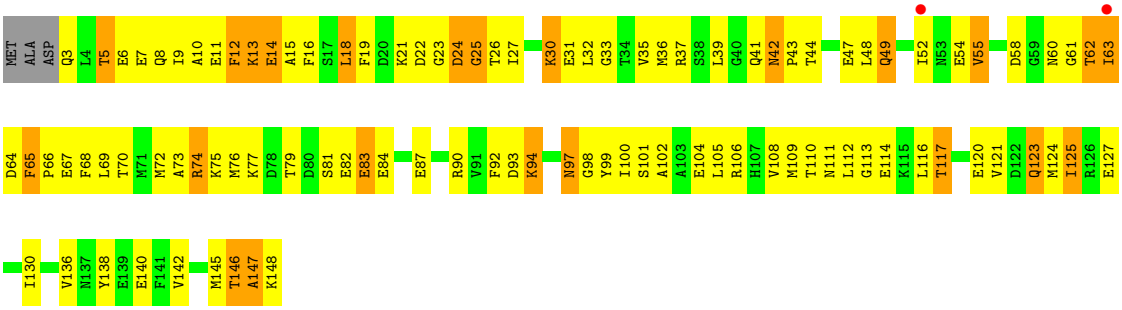
• Molecule 2: Calmodulin 2

Chain P:



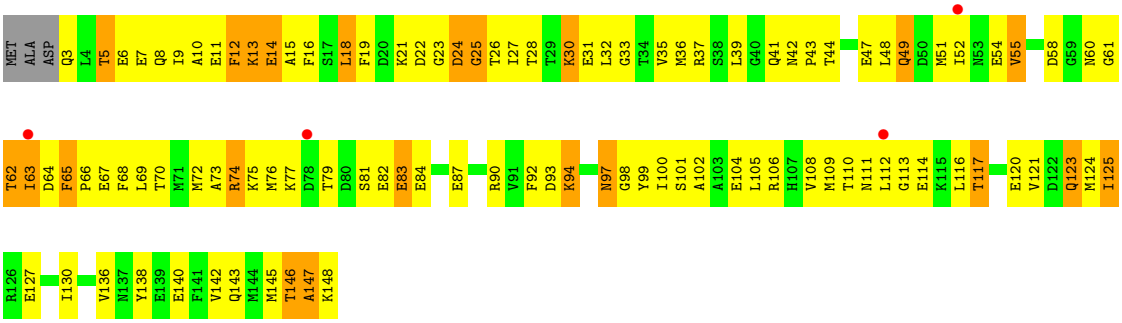
• Molecule 2: Calmodulin 2

Chain Q:



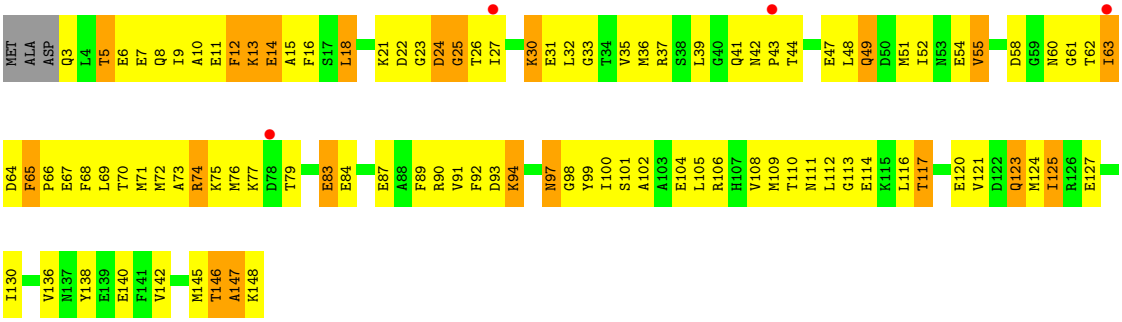
• Molecule 2: Calmodulin 2

Chain R:



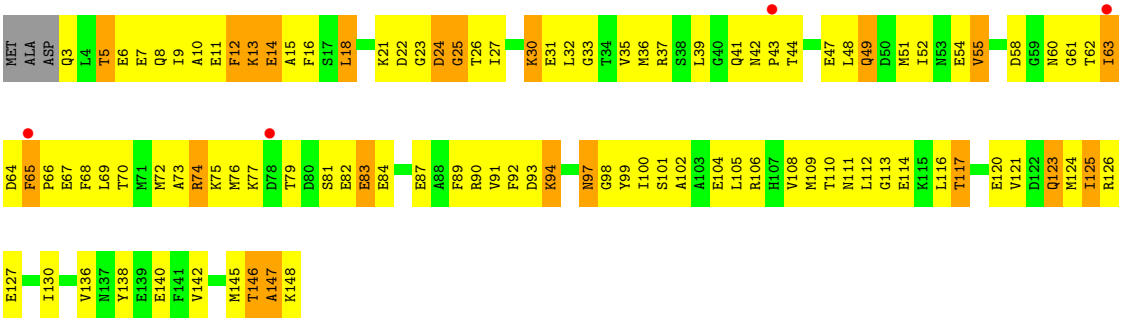
• Molecule 2: Calmodulin 2

Chain S:



• Molecule 2: Calmodulin 2

Chain T:


MET ALA ASP Q3 L4 T5 E6 E7 Q8 I9 A10 E11 F12 K13 E14 A15 F16 S17 L18 K21 D22 G23 D24 G25 T26 I27 K30 E31 L32 G33 T34 V35 M36 R37 S38 L39 G40 Q41 N42 P43 T44 E47 L48 Q49 D50 M51 I52 N53 E54 V55 D58 G59 N60 G61 T62 I63
D64 F65 P66 E67 F68 L69 T70 M71 M72 A73 R74 K75 M76 K77 D78 T79 D80 S81 E82 E83 E84 E87 A88 F89 R90 V91 F92 D93 K94 N97 G98 Y99 I100 S101 A102 A103 E104 L105 R106 H107 V108 M109 T110 N111 L112 G113 E114 K115 L116 T117 E120 V121 D122 Q123 M124 I125 R126
E127 I130 V136 N137 Y138 E139 E140 F141 V142 M145 T146 A147 K148

4 Data and refinement statistics (i)

Property	Value	Source
Space group	C 1 2 1	Depositor
Cell constants a, b, c, α, β, γ	320.50Å 185.04Å 142.45Å 90.00° 90.22° 90.00°	Depositor
Resolution (Å)	29.68 – 3.40 30.56 – 3.28	Depositor EDS
% Data completeness (in resolution range)	93.6 (29.68-3.40) 87.9 (30.56-3.28)	Depositor EDS
R_{merge}	0.09	Depositor
R_{sym}	0.07	Depositor
$< I/\sigma(I) >$ [1]	2.21 (at 3.31Å)	Xtriage
Refinement program	CNS 1.1	Depositor
R, R_{free}	0.266 , 0.283 0.248 , 0.264	Depositor DCC
R_{free} test set	6075 reflections (5.05%)	wwPDB-VP
Wilson B-factor (Å^2)	92.4	Xtriage
Anisotropy	0.143	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.30 , 51.8	EDS
L-test for twinning[2]	$< \|L\| > = 0.49$, $< L^2 > = 0.32$	Xtriage
Estimated twinning fraction	0.448 for -1/2*h-3/2*k,-1/2*h+1/2*k,-l 0.449 for -1/2*h+3/2*k,1/2*h+1/2*k,-l 0.438 for 1/2*h-3/2*k,-1/2*h-1/2*k,-l 0.440 for 1/2*h+3/2*k,1/2*h-1/2*k,-l 0.440 for -h,-k,l	Xtriage
F_o,F_c correlation	0.90	EDS
Total number of atoms	42990	wwPDB-VP
Average B, all atoms (Å^2)	74.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.21% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: CMP, 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	0.54	0/6104	0.80	8/8208 (0.1%)
1	B	0.54	0/6104	0.82	10/8208 (0.1%)
1	C	0.57	3/6104 (0.0%)	0.81	7/8208 (0.1%)
1	D	0.55	0/6104	0.82	9/8208 (0.1%)
1	E	0.54	0/6104	0.81	9/8208 (0.1%)
1	F	0.55	0/6104	0.81	8/8208 (0.1%)
2	O	0.61	1/1158 (0.1%)	0.78	0/1553
2	P	0.61	1/1158 (0.1%)	0.78	0/1553
2	Q	0.61	1/1158 (0.1%)	0.79	0/1553
2	R	0.60	1/1158 (0.1%)	0.78	0/1553
2	S	0.61	1/1158 (0.1%)	0.79	0/1553
2	T	0.61	1/1158 (0.1%)	0.78	0/1553
All	All	0.56	9/43572 (0.0%)	0.81	51/58566 (0.1%)

All (9) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	123	GLU	C-N	-6.32	1.19	1.34
1	C	261	ALA	C-N	5.87	1.45	1.34
2	S	42	ASN	N-CA	-5.57	1.35	1.46
2	T	42	ASN	N-CA	-5.55	1.35	1.46
2	P	42	ASN	N-CA	-5.54	1.35	1.46
2	O	42	ASN	N-CA	-5.50	1.35	1.46
2	Q	42	ASN	N-CA	-5.49	1.35	1.46
2	R	42	ASN	N-CA	-5.49	1.35	1.46
1	C	134	LYS	C-N	5.45	1.46	1.34

All (51) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	F	188	LEU	N-CA-C	-7.80	89.94	111.00
1	D	188	LEU	N-CA-C	-7.80	89.95	111.00
1	A	188	LEU	N-CA-C	-7.79	89.96	111.00
1	C	188	LEU	N-CA-C	-7.79	89.97	111.00
1	E	188	LEU	N-CA-C	-7.79	89.98	111.00
1	B	188	LEU	N-CA-C	-7.78	90.00	111.00
1	D	622	LYS	C-N-CA	-7.58	102.75	121.70
1	C	147	ARG	N-CA-C	7.54	131.37	111.00
1	A	147	ARG	N-CA-C	7.54	131.36	111.00
1	E	147	ARG	N-CA-C	7.54	131.35	111.00
1	F	147	ARG	N-CA-C	7.54	131.34	111.00
1	D	147	ARG	N-CA-C	7.53	131.34	111.00
1	B	147	ARG	N-CA-C	7.53	131.34	111.00
1	F	160	ALA	N-CA-C	7.31	130.75	111.00
1	A	160	ALA	N-CA-C	7.31	130.73	111.00
1	D	160	ALA	N-CA-C	7.31	130.73	111.00
1	E	160	ALA	N-CA-C	7.31	130.73	111.00
1	B	160	ALA	N-CA-C	7.30	130.72	111.00
1	C	160	ALA	N-CA-C	7.30	130.72	111.00
1	C	159	TYR	CA-C-N	7.25	133.14	117.20
1	D	159	TYR	CA-C-N	7.25	133.14	117.20
1	A	159	TYR	CA-C-N	7.24	133.13	117.20
1	F	159	TYR	CA-C-N	7.24	133.12	117.20
1	B	159	TYR	CA-C-N	7.23	133.10	117.20
1	E	159	TYR	CA-C-N	7.23	133.10	117.20
1	B	622	LYS	C-N-CA	-6.66	105.05	121.70
1	E	128	MET	N-CA-C	-6.45	93.59	111.00
1	F	159	TYR	C-N-CA	-6.20	106.21	121.70
1	B	159	TYR	C-N-CA	-6.19	106.22	121.70
1	E	159	TYR	C-N-CA	-6.19	106.22	121.70
1	A	159	TYR	C-N-CA	-6.19	106.23	121.70
1	C	159	TYR	C-N-CA	-6.18	106.24	121.70
1	D	159	TYR	C-N-CA	-6.17	106.27	121.70
1	D	622	LYS	N-CA-C	-6.12	94.46	111.00
1	B	622	LYS	N-CA-C	-5.82	95.29	111.00
1	A	128	MET	N-CA-C	-5.71	95.59	111.00
1	C	128	MET	N-CA-C	-5.61	95.84	111.00
1	D	128	MET	N-CA-C	-5.48	96.21	111.00
1	B	622	LYS	CA-C-N	5.34	128.94	117.20
1	B	128	MET	N-CA-C	-5.25	96.82	111.00
1	F	120	LEU	N-CA-C	5.16	124.94	111.00
1	C	120	LEU	N-CA-C	5.16	124.92	111.00
1	A	120	LEU	N-CA-C	5.16	124.92	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	120	LEU	N-CA-C	5.15	124.91	111.00
1	E	120	LEU	N-CA-C	5.14	124.89	111.00
1	B	120	LEU	N-CA-C	5.14	124.88	111.00
1	E	180	ASP	CA-C-N	-5.10	105.98	117.20
1	F	128	MET	N-CA-C	-5.10	97.24	111.00
1	F	146	LYS	N-CA-C	5.02	124.56	111.00
1	A	146	LYS	N-CA-C	5.01	124.52	111.00
1	E	146	LYS	N-CA-C	5.01	124.52	111.00

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	5992	0	6010	790	0
1	B	5992	0	6010	797	0
1	C	5992	0	6009	781	0
1	D	5992	0	6010	781	0
1	E	5992	0	6010	784	0
1	F	5992	0	6010	782	0
2	O	1146	0	1071	138	0
2	P	1146	0	1071	144	0
2	Q	1146	0	1071	142	0
2	R	1146	0	1071	141	0
2	S	1146	0	1071	140	0
2	T	1146	0	1071	146	0
3	A	1	0	0	0	0
3	B	1	0	0	0	0
3	C	1	0	0	0	0
3	D	1	0	0	0	0
3	E	1	0	0	0	0
3	F	1	0	0	0	0
4	A	22	0	11	4	0
4	B	22	0	11	4	0
4	C	22	0	11	4	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
4	D	22	0	11	4	0
4	E	22	0	11	4	0
4	F	22	0	11	4	0
5	O	3	0	0	0	0
5	P	3	0	0	0	0
5	Q	3	0	0	0	0
5	R	3	0	0	0	0
5	S	3	0	0	0	0
5	T	3	0	0	0	0
6	A	1	0	0	0	0
6	B	1	0	0	0	0
6	C	1	0	0	0	0
6	D	1	0	0	0	0
6	E	1	0	0	0	0
6	F	1	0	0	0	0
All	All	42990	0	42551	5408	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 63.

All (5408) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:A:901:CMP:C2	4:A:901:CMP:H2	0.97	1.49
4:D:904:CMP:H2	4:D:904:CMP:C2	0.97	1.49
4:B:902:CMP:H2	4:B:902:CMP:C2	0.97	1.48
4:C:903:CMP:H2	4:C:903:CMP:C2	0.97	1.48
4:F:906:CMP:H2	4:F:906:CMP:C2	0.97	1.47
4:E:905:CMP:H2	4:E:905:CMP:C2	0.97	1.47
1:A:179:LEU:O	1:A:183:SER:CB	1.67	1.42
1:B:179:LEU:O	1:B:183:SER:CB	1.66	1.40
1:D:179:LEU:O	1:D:183:SER:CB	1.71	1.39
1:E:179:LEU:O	1:E:183:SER:CB	1.69	1.39
1:C:179:LEU:O	1:C:183:SER:CB	1.73	1.35
1:B:179:LEU:O	1:B:183:SER:HB2	1.14	1.30
1:A:179:LEU:O	1:A:183:SER:HB2	1.12	1.30
1:D:179:LEU:O	1:D:183:SER:HB2	1.12	1.29
1:C:179:LEU:O	1:C:183:SER:HB2	1.14	1.28
1:E:179:LEU:O	1:E:183:SER:HB2	1.18	1.28
1:D:186:LYS:HA	1:D:190:PRO:HD3	1.20	1.17
1:A:186:LYS:HA	1:A:190:PRO:HD3	1.21	1.15

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:186:LYS:HA	1:B:190:PRO:HD3	1.20	1.13
1:C:296:LEU:HD23	1:C:296:LEU:N	1.64	1.12
1:E:186:LYS:CA	1:E:190:PRO:HD3	1.80	1.12
1:D:296:LEU:HD23	1:D:296:LEU:N	1.64	1.12
1:E:186:LYS:HA	1:E:190:PRO:HD3	1.11	1.10
1:E:296:LEU:H	1:E:296:LEU:CD2	1.60	1.10
1:F:296:LEU:H	1:F:296:LEU:CD2	1.59	1.10
1:C:296:LEU:H	1:C:296:LEU:CD2	1.59	1.10
1:B:296:LEU:H	1:B:296:LEU:CD2	1.60	1.09
1:E:296:LEU:HD23	1:E:296:LEU:N	1.64	1.09
1:A:296:LEU:H	1:A:296:LEU:CD2	1.60	1.09
1:D:296:LEU:H	1:D:296:LEU:CD2	1.60	1.09
1:A:296:LEU:HD23	1:A:296:LEU:N	1.64	1.09
1:C:186:LYS:HA	1:C:190:PRO:HD3	1.29	1.08
1:B:134:LYS:HG2	1:B:136:PRO:HD3	1.35	1.08
1:B:186:LYS:CA	1:B:190:PRO:HD3	1.83	1.07
1:B:296:LEU:HD23	1:B:296:LEU:N	1.64	1.06
1:B:179:LEU:O	1:B:183:SER:CA	2.04	1.05
1:E:179:LEU:O	1:E:183:SER:CA	2.05	1.05
1:F:296:LEU:HD23	1:F:296:LEU:N	1.64	1.05
1:E:134:LYS:HG2	1:E:136:PRO:HD3	1.38	1.05
1:A:296:LEU:HD22	1:A:606:LYS:HE2	1.35	1.04
1:D:186:LYS:CA	1:D:190:PRO:HD3	1.87	1.04
1:F:161:ILE:HA	1:F:167:LYS:HD2	1.38	1.04
1:A:186:LYS:CA	1:A:190:PRO:HD3	1.88	1.04
1:F:191:GLU:O	1:F:193:LEU:N	1.92	1.03
1:F:186:LYS:HA	1:F:190:PRO:HD3	1.41	1.03
1:C:161:ILE:HA	1:C:167:LYS:HD2	1.40	1.03
1:D:161:ILE:HA	1:D:167:LYS:HD2	1.40	1.02
1:E:180:ASP:OD1	1:E:180:ASP:N	1.91	1.02
1:A:161:ILE:HA	1:A:167:LYS:HD2	1.41	1.02
1:B:746:LYS:O	1:B:750:GLN:HG2	1.59	1.02
1:F:89:ILE:HD13	1:F:175:LYS:HE2	1.39	1.02
1:B:64:ASN:HD22	1:B:64:ASN:N	1.47	1.02
1:B:188:LEU:HD23	1:B:188:LEU:H	1.22	1.02
1:C:89:ILE:HD13	1:C:175:LYS:HE2	1.39	1.02
1:C:188:LEU:HD23	1:C:188:LEU:H	1.22	1.02
1:D:188:LEU:H	1:D:188:LEU:HD23	1.22	1.02
1:A:89:ILE:HD13	1:A:175:LYS:HE2	1.38	1.01
1:A:134:LYS:HG2	1:A:136:PRO:HD3	1.41	1.01
1:B:296:LEU:HD22	1:B:606:LYS:HE2	1.38	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:296:LEU:HD22	1:D:606:LYS:HE2	1.39	1.01
1:E:89:ILE:HD13	1:E:175:LYS:HE2	1.39	1.01
1:B:161:ILE:HA	1:B:167:LYS:HD2	1.40	1.01
1:C:746:LYS:O	1:C:750:GLN:HG2	1.60	1.01
1:E:161:ILE:HA	1:E:167:LYS:HD2	1.38	1.01
1:A:188:LEU:HD23	1:A:188:LEU:H	1.22	1.01
1:E:668:SER:HA	2:S:14:GLU:HG3	1.43	1.01
1:A:179:LEU:O	1:A:183:SER:CA	2.08	1.00
1:E:179:LEU:O	1:E:183:SER:N	1.92	1.00
1:E:188:LEU:HD23	1:E:188:LEU:H	1.22	1.00
1:B:134:LYS:HG2	1:B:136:PRO:CD	1.92	1.00
1:B:180:ASP:OD1	1:B:180:ASP:N	1.91	1.00
1:C:548:THR:H	4:C:903:CMP:HN61	1.09	0.99
1:B:179:LEU:O	1:B:183:SER:N	1.94	0.99
1:F:188:LEU:HD23	1:F:188:LEU:H	1.22	0.99
1:C:180:ASP:N	1:C:180:ASP:OD1	1.91	0.99
1:E:746:LYS:O	1:E:750:GLN:HG2	1.60	0.99
1:F:548:THR:H	4:F:906:CMP:HN61	1.08	0.99
2:P:37:ARG:HA	2:P:41:GLN:O	1.63	0.99
1:A:746:LYS:O	1:A:750:GLN:HG2	1.62	0.99
1:E:296:LEU:HD22	1:E:606:LYS:HE2	1.42	0.99
1:A:180:ASP:OD1	1:A:180:ASP:N	1.91	0.99
1:D:89:ILE:HD13	1:D:175:LYS:HE2	1.42	0.99
1:B:89:ILE:HD13	1:B:175:LYS:HE2	1.41	0.98
1:D:746:LYS:O	1:D:750:GLN:HG2	1.61	0.98
1:C:296:LEU:HD22	1:C:606:LYS:HE2	1.42	0.98
1:F:296:LEU:HD22	1:F:606:LYS:HE2	1.43	0.98
1:F:668:SER:HA	2:T:14:GLU:HG3	1.46	0.97
2:O:37:ARG:HA	2:O:41:GLN:O	1.65	0.97
1:F:746:LYS:O	1:F:750:GLN:HG2	1.62	0.97
1:D:180:ASP:OD1	1:D:180:ASP:N	1.91	0.96
1:D:548:THR:H	4:D:904:CMP:HN61	1.07	0.96
1:C:173:ILE:HG13	1:C:242:SER:HB3	1.44	0.96
1:C:188:LEU:H	1:C:188:LEU:CD2	1.78	0.96
1:D:173:ILE:HG13	1:D:242:SER:HB3	1.45	0.96
1:D:188:LEU:H	1:D:188:LEU:CD2	1.78	0.96
1:B:173:ILE:HG13	1:B:242:SER:HB3	1.46	0.96
1:F:173:ILE:HG13	1:F:242:SER:HB3	1.45	0.96
1:E:329:ARG:HD2	1:E:590:ASP:OD2	1.66	0.96
1:F:188:LEU:H	1:F:188:LEU:CD2	1.78	0.96
1:C:296:LEU:HD23	1:C:296:LEU:H	0.79	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S:37:ARG:HA	2:S:41:GLN:O	1.65	0.95
1:D:296:LEU:HD23	1:D:296:LEU:H	0.79	0.95
1:E:134:LYS:HG2	1:E:136:PRO:CD	1.95	0.95
1:A:188:LEU:H	1:A:188:LEU:CD2	1.78	0.95
1:B:668:SER:HA	2:P:14:GLU:HG3	1.47	0.95
1:B:329:ARG:HD2	1:B:590:ASP:OD2	1.66	0.95
2:R:37:ARG:HA	2:R:41:GLN:O	1.66	0.95
1:F:296:LEU:H	1:F:296:LEU:HD23	0.79	0.95
1:A:173:ILE:HG13	1:A:242:SER:HB3	1.47	0.95
1:A:548:THR:H	4:A:901:CMP:HN61	1.07	0.95
1:C:329:ARG:HD2	1:C:590:ASP:OD2	1.66	0.95
1:F:180:ASP:OD1	1:F:180:ASP:N	1.91	0.95
1:C:179:LEU:O	1:C:183:SER:CA	2.14	0.95
1:E:548:THR:H	4:E:905:CMP:HN61	1.07	0.95
1:D:179:LEU:O	1:D:183:SER:CA	2.13	0.95
1:A:179:LEU:O	1:A:183:SER:N	1.99	0.94
1:B:188:LEU:H	1:B:188:LEU:CD2	1.78	0.94
1:E:188:LEU:H	1:E:188:LEU:CD2	1.78	0.94
1:A:296:LEU:H	1:A:296:LEU:HD23	0.79	0.94
1:E:173:ILE:HG13	1:E:242:SER:HB3	1.46	0.94
1:A:134:LYS:HG2	1:A:136:PRO:CD	1.98	0.94
1:F:697:ILE:HD13	1:F:732:ILE:HD13	1.50	0.94
1:A:329:ARG:HD2	1:A:590:ASP:OD2	1.67	0.94
1:A:697:ILE:HD13	1:A:732:ILE:HD13	1.49	0.94
1:E:697:ILE:HD13	1:E:732:ILE:HD13	1.49	0.94
1:E:296:LEU:H	1:E:296:LEU:HD23	0.79	0.94
1:C:668:SER:HA	2:Q:14:GLU:HG3	1.50	0.94
1:D:668:SER:HA	2:R:14:GLU:HG3	1.50	0.94
1:A:668:SER:HA	2:O:14:GLU:HG3	1.49	0.93
1:C:186:LYS:CA	1:C:190:PRO:HD3	1.96	0.93
1:F:134:LYS:HG2	1:F:136:PRO:HD3	1.47	0.93
2:Q:37:ARG:HA	2:Q:41:GLN:O	1.68	0.93
1:B:697:ILE:HD13	1:B:732:ILE:HD13	1.49	0.93
1:D:697:ILE:HD13	1:D:732:ILE:HD13	1.51	0.93
2:T:37:ARG:HA	2:T:41:GLN:O	1.67	0.93
1:D:308:VAL:HB	1:D:311:HIS:ND1	1.83	0.93
1:F:329:ARG:HD2	1:F:590:ASP:OD2	1.67	0.93
2:O:65:PHE:HB2	2:O:66:PRO:HD3	1.50	0.93
1:C:697:ILE:HD13	1:C:732:ILE:HD13	1.50	0.93
1:E:186:LYS:C	1:E:188:LEU:O	2.07	0.93
1:A:308:VAL:HB	1:A:311:HIS:ND1	1.83	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:329:ARG:HD2	1:D:590:ASP:OD2	1.67	0.92
2:Q:13:LYS:HZ3	2:Q:65:PHE:HB3	1.33	0.92
1:D:134:LYS:HG2	1:D:136:PRO:HD3	1.48	0.92
1:A:186:LYS:C	1:A:188:LEU:O	2.07	0.92
1:C:131:ARG:H	1:C:170:TYR:HE2	1.14	0.92
1:B:296:LEU:H	1:B:296:LEU:HD23	0.79	0.92
1:C:179:LEU:O	1:C:183:SER:N	2.03	0.92
1:F:308:VAL:HB	1:F:311:HIS:ND1	1.84	0.92
2:R:97:ASN:HD22	2:R:97:ASN:H	1.18	0.92
1:B:548:THR:H	4:B:902:CMP:HN61	1.07	0.92
1:C:308:VAL:HB	1:C:311:HIS:ND1	1.85	0.92
1:B:188:LEU:HD23	1:B:188:LEU:N	1.85	0.92
1:F:186:LYS:C	1:F:188:LEU:O	2.07	0.92
2:S:97:ASN:H	2:S:97:ASN:HD22	1.17	0.92
1:E:308:VAL:HB	1:E:311:HIS:ND1	1.83	0.91
1:B:308:VAL:HB	1:B:311:HIS:ND1	1.84	0.91
1:E:186:LYS:HA	1:E:190:PRO:CD	1.99	0.91
1:D:635:ILE:H	1:D:635:ILE:HD12	1.35	0.91
2:P:65:PHE:HB2	2:P:66:PRO:HD3	1.52	0.91
2:Q:65:PHE:HB2	2:Q:66:PRO:HD3	1.51	0.91
1:B:635:ILE:H	1:B:635:ILE:HD12	1.36	0.91
1:C:635:ILE:H	1:C:635:ILE:HD12	1.35	0.91
2:T:97:ASN:H	2:T:97:ASN:HD22	1.18	0.91
1:C:405:LEU:HD13	1:C:453:VAL:HG21	1.52	0.91
2:O:97:ASN:HD22	2:O:97:ASN:H	1.19	0.91
2:P:97:ASN:HD22	2:P:97:ASN:H	1.19	0.91
1:F:405:LEU:HD13	1:F:453:VAL:HG21	1.53	0.91
2:S:65:PHE:HB2	2:S:66:PRO:HD3	1.50	0.91
1:A:131:ARG:H	1:A:170:TYR:HE2	1.16	0.91
1:C:186:LYS:C	1:C:188:LEU:O	2.09	0.91
1:D:405:LEU:HD13	1:D:453:VAL:HG21	1.53	0.91
2:T:65:PHE:HB2	2:T:66:PRO:HD3	1.50	0.90
1:B:131:ARG:H	1:B:170:TYR:HE2	1.17	0.90
1:D:186:LYS:C	1:D:188:LEU:O	2.10	0.90
2:R:65:PHE:HB2	2:R:66:PRO:HD3	1.53	0.90
1:A:635:ILE:H	1:A:635:ILE:HD12	1.34	0.90
1:C:175:LYS:HZ2	1:C:175:LYS:HB2	1.35	0.90
2:T:97:ASN:H	2:T:97:ASN:ND2	1.70	0.90
1:E:405:LEU:HD13	1:E:453:VAL:HG21	1.53	0.90
1:B:186:LYS:C	1:B:188:LEU:O	2.09	0.90
2:P:97:ASN:H	2:P:97:ASN:ND2	1.70	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Q:30:LYS:HD3	2:Q:30:LYS:H	1.37	0.90
2:S:5:THR:HG23	2:S:8:GLN:HB2	1.54	0.90
2:S:30:LYS:HD3	2:S:30:LYS:H	1.37	0.90
1:F:131:ARG:H	1:F:170:TYR:HE2	1.16	0.89
1:A:188:LEU:HD23	1:A:188:LEU:N	1.85	0.89
1:C:188:LEU:HD23	1:C:188:LEU:N	1.85	0.89
1:F:188:LEU:HD23	1:F:188:LEU:N	1.85	0.89
1:F:635:ILE:H	1:F:635:ILE:HD12	1.37	0.89
1:A:405:LEU:HD13	1:A:453:VAL:HG21	1.54	0.89
2:P:5:THR:HG23	2:P:8:GLN:HB2	1.54	0.89
1:D:179:LEU:O	1:D:183:SER:N	2.04	0.89
1:A:275:GLY:HA2	1:A:278:LYS:HG3	1.55	0.89
1:E:175:LYS:HB2	1:E:175:LYS:HZ2	1.36	0.89
2:R:5:THR:HG23	2:R:8:GLN:HB2	1.55	0.89
2:R:13:LYS:HZ3	2:R:65:PHE:HB3	1.35	0.89
2:Q:97:ASN:ND2	2:Q:97:ASN:H	1.71	0.89
2:R:30:LYS:H	2:R:30:LYS:HD3	1.37	0.89
2:T:30:LYS:H	2:T:30:LYS:HD3	1.36	0.89
1:D:131:ARG:H	1:D:170:TYR:HE2	1.13	0.89
2:R:100:ILE:HB	2:R:136:VAL:HG23	1.55	0.89
1:D:275:GLY:HA2	1:D:278:LYS:HG3	1.55	0.88
2:O:5:THR:HG23	2:O:8:GLN:HB2	1.55	0.88
1:B:405:LEU:HD13	1:B:453:VAL:HG21	1.54	0.88
2:P:100:ILE:HB	2:P:136:VAL:HG23	1.55	0.88
2:Q:5:THR:HG23	2:Q:8:GLN:HB2	1.55	0.88
1:D:175:LYS:HB2	1:D:175:LYS:NZ	1.88	0.88
2:O:30:LYS:H	2:O:30:LYS:HD3	1.37	0.88
1:C:759:GLN:HE21	1:C:759:GLN:HA	1.38	0.88
1:F:479:LYS:HG2	1:F:488:LEU:HD21	1.56	0.88
2:P:30:LYS:HD3	2:P:30:LYS:H	1.37	0.88
2:T:5:THR:HG23	2:T:8:GLN:HB2	1.55	0.88
1:B:630:ARG:CZ	2:P:83:GLU:HG2	2.04	0.88
1:D:89:ILE:HG22	1:D:93:VAL:HG11	1.55	0.88
2:O:100:ILE:HB	2:O:136:VAL:HG23	1.56	0.88
2:Q:97:ASN:H	2:Q:97:ASN:HD22	1.20	0.88
1:A:89:ILE:HG22	1:A:93:VAL:HG11	1.55	0.88
1:A:175:LYS:HB2	1:A:175:LYS:NZ	1.89	0.88
1:E:635:ILE:HD12	1:E:635:ILE:H	1.36	0.88
1:F:175:LYS:HB2	1:F:175:LYS:NZ	1.89	0.88
1:B:89:ILE:HG22	1:B:93:VAL:HG11	1.56	0.88
1:C:275:GLY:HA2	1:C:278:LYS:HG3	1.54	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:89:ILE:HG22	1:F:93:VAL:HG11	1.56	0.88
1:E:188:LEU:HD23	1:E:188:LEU:N	1.85	0.87
2:Q:100:ILE:HB	2:Q:136:VAL:HG23	1.55	0.87
2:S:97:ASN:H	2:S:97:ASN:ND2	1.69	0.87
1:B:275:GLY:HA2	1:B:278:LYS:HG3	1.56	0.87
1:C:678:VAL:HG22	1:C:745:TYR:CE2	2.09	0.87
2:R:13:LYS:NZ	2:R:65:PHE:HB3	1.88	0.87
1:B:759:GLN:HA	1:B:759:GLN:HE21	1.39	0.87
1:E:759:GLN:HA	1:E:759:GLN:HE21	1.40	0.87
1:E:187:SER:C	1:E:188:LEU:O	2.04	0.87
1:C:175:LYS:HB2	1:C:175:LYS:NZ	1.90	0.87
1:D:188:LEU:HD23	1:D:188:LEU:N	1.85	0.87
1:E:479:LYS:HG2	1:E:488:LEU:HD21	1.57	0.87
1:F:759:GLN:HE21	1:F:759:GLN:HA	1.40	0.87
1:B:187:SER:C	1:B:188:LEU:O	2.05	0.87
1:C:142:VAL:HG22	1:C:154:ILE:HD12	1.56	0.87
1:C:187:SER:C	1:C:188:LEU:O	2.05	0.87
1:E:89:ILE:HG22	1:E:93:VAL:HG11	1.57	0.87
2:O:97:ASN:H	2:O:97:ASN:ND2	1.70	0.87
1:D:722:ILE:HG23	1:D:760:VAL:HG13	1.57	0.87
1:E:131:ARG:H	1:E:170:TYR:HE2	1.18	0.87
1:F:134:LYS:HG2	1:F:136:PRO:CD	2.04	0.87
2:S:13:LYS:NZ	2:S:65:PHE:HB3	1.90	0.87
2:T:100:ILE:HB	2:T:136:VAL:HG23	1.55	0.86
2:T:13:LYS:NZ	2:T:65:PHE:HB3	1.91	0.86
1:D:464:VAL:HG23	1:D:465:LEU:HD12	1.57	0.86
1:C:479:LYS:HG2	1:C:488:LEU:HD21	1.54	0.86
1:E:275:GLY:HA2	1:E:278:LYS:HG3	1.56	0.86
1:C:89:ILE:HG22	1:C:93:VAL:HG11	1.58	0.86
1:C:769:SER:O	1:C:769:SER:OG	1.90	0.86
1:E:175:LYS:HB2	1:E:175:LYS:NZ	1.88	0.86
1:F:678:VAL:HG22	1:F:745:TYR:CE2	2.10	0.86
1:A:678:VAL:HG22	1:A:745:TYR:CE2	2.09	0.86
1:B:175:LYS:HB2	1:B:175:LYS:NZ	1.89	0.86
1:B:186:LYS:HA	1:B:190:PRO:CD	2.04	0.86
1:C:134:LYS:HG2	1:C:136:PRO:HD3	1.54	0.86
2:Q:13:LYS:NZ	2:Q:65:PHE:HB3	1.90	0.86
1:D:678:VAL:HG22	1:D:745:TYR:CE2	2.10	0.86
1:D:759:GLN:HA	1:D:759:GLN:HE21	1.40	0.86
1:A:479:LYS:HG2	1:A:488:LEU:HD21	1.56	0.86
1:B:479:LYS:HG2	1:B:488:LEU:HD21	1.56	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S:100:ILE:HB	2:S:136:VAL:HG23	1.56	0.85
1:C:722:ILE:HG23	1:C:760:VAL:HG13	1.58	0.85
1:D:134:LYS:HG2	1:D:136:PRO:CD	2.05	0.85
1:A:464:VAL:HG23	1:A:465:LEU:HD12	1.58	0.85
1:B:142:VAL:HG22	1:B:154:ILE:HD12	1.58	0.85
1:B:179:LEU:C	1:B:183:SER:HB2	1.96	0.85
1:B:678:VAL:HG22	1:B:745:TYR:CE2	2.11	0.85
1:C:464:VAL:HG23	1:C:465:LEU:HD12	1.57	0.85
1:D:142:VAL:HG22	1:D:154:ILE:HD12	1.57	0.85
1:E:678:VAL:HG22	1:E:745:TYR:CE2	2.10	0.85
1:F:464:VAL:HG23	1:F:465:LEU:HD12	1.57	0.85
1:F:722:ILE:HG23	1:F:760:VAL:HG13	1.58	0.85
1:A:187:SER:C	1:A:188:LEU:O	2.04	0.85
1:E:630:ARG:CZ	2:S:83:GLU:HG2	2.06	0.85
1:D:479:LYS:HG2	1:D:488:LEU:HD21	1.56	0.85
1:C:628:PHE:HE2	2:Q:90:ARG:HD3	1.41	0.85
1:E:464:VAL:HG23	1:E:465:LEU:HD12	1.57	0.85
2:P:13:LYS:NZ	2:P:65:PHE:HB3	1.91	0.85
1:A:759:GLN:HA	1:A:759:GLN:HE21	1.42	0.85
1:A:769:SER:OG	1:A:769:SER:O	1.89	0.85
1:B:64:ASN:N	1:B:64:ASN:ND2	2.19	0.85
1:D:131:ARG:HG3	1:D:243:LEU:CD2	2.07	0.85
1:E:131:ARG:HG3	1:E:243:LEU:CD2	2.06	0.85
1:B:74:GLU:HB2	1:B:78:LYS:HB3	1.59	0.84
1:D:187:SER:C	1:D:188:LEU:O	2.05	0.84
1:F:630:ARG:CZ	2:T:83:GLU:HG2	2.07	0.84
1:A:142:VAL:HG22	1:A:154:ILE:HD12	1.57	0.84
1:A:179:LEU:C	1:A:183:SER:HB2	1.97	0.84
1:F:275:GLY:HA2	1:F:278:LYS:HG3	1.57	0.84
1:A:186:LYS:HA	1:A:190:PRO:CD	2.07	0.84
2:O:6:GLU:HG3	2:O:7:GLU:N	1.92	0.84
2:S:6:GLU:HG3	2:S:7:GLU:N	1.93	0.84
1:B:722:ILE:HG23	1:B:760:VAL:HG13	1.59	0.84
1:E:722:ILE:HG23	1:E:760:VAL:HG13	1.60	0.84
2:R:97:ASN:H	2:R:97:ASN:ND2	1.69	0.84
2:P:6:GLU:HG3	2:P:7:GLU:N	1.93	0.84
1:A:722:ILE:HG23	1:A:760:VAL:HG13	1.59	0.84
1:F:187:SER:C	1:F:188:LEU:O	2.04	0.84
2:O:13:LYS:NZ	2:O:65:PHE:HB3	1.91	0.84
1:B:464:VAL:HG23	1:B:465:LEU:HD12	1.57	0.84
1:A:630:ARG:CZ	2:O:83:GLU:HG2	2.08	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:6:GLU:HG3	2:R:7:GLU:N	1.92	0.83
1:B:186:LYS:CB	1:B:190:PRO:HD3	2.08	0.83
1:E:74:GLU:HB2	1:E:78:LYS:HB3	1.59	0.83
1:F:142:VAL:HG22	1:F:154:ILE:HD12	1.57	0.83
1:F:186:LYS:CA	1:F:190:PRO:HD3	2.07	0.83
1:E:142:VAL:HG22	1:E:154:ILE:HD12	1.58	0.83
2:T:6:GLU:HG3	2:T:7:GLU:N	1.93	0.83
1:A:90:PRO:O	1:A:93:VAL:HG12	1.78	0.83
1:E:90:PRO:O	1:E:93:VAL:HG12	1.79	0.83
1:E:628:PHE:HE2	2:S:90:ARG:HD3	1.43	0.83
1:B:288:VAL:HG23	1:B:289:GLU:H	1.44	0.82
1:A:550:SER:HB3	1:A:553:GLN:HG3	1.59	0.82
1:D:186:LYS:HA	1:D:190:PRO:CD	2.05	0.82
1:F:90:PRO:O	1:F:93:VAL:HG12	1.78	0.82
1:F:628:PHE:HE2	2:T:90:ARG:HD3	1.44	0.82
1:B:107:THR:HG21	1:B:115:LYS:HD2	1.61	0.82
1:D:90:PRO:O	1:D:93:VAL:HG12	1.78	0.82
1:D:628:PHE:HE2	2:R:90:ARG:HD3	1.43	0.82
1:D:497:LEU:HD13	1:D:556:MET:HG2	1.62	0.82
1:E:781:ASN:H	1:E:789:ASN:HD21	1.27	0.82
2:R:97:ASN:HD22	2:R:97:ASN:N	1.76	0.82
1:D:630:ARG:CZ	2:R:83:GLU:HG2	2.10	0.81
1:F:769:SER:O	1:F:769:SER:OG	1.89	0.81
1:A:74:GLU:HB2	1:A:78:LYS:HB3	1.62	0.81
1:E:107:THR:HG21	1:E:115:LYS:HD2	1.60	0.81
1:F:140:ARG:HA	1:F:140:ARG:HE	1.44	0.81
1:C:90:PRO:O	1:C:93:VAL:HG12	1.79	0.81
1:C:630:ARG:CZ	2:Q:83:GLU:HG2	2.09	0.81
1:F:64:ASN:HD22	1:F:64:ASN:N	1.76	0.81
2:Q:6:GLU:HG3	2:Q:7:GLU:N	1.92	0.81
1:B:718:ARG:O	1:B:722:ILE:HG13	1.80	0.81
1:E:179:LEU:C	1:E:183:SER:HB2	2.00	0.81
1:F:107:THR:HG21	1:F:115:LYS:HD2	1.62	0.81
1:E:288:VAL:HG23	1:E:289:GLU:H	1.45	0.81
1:A:628:PHE:HE2	2:O:90:ARG:HD3	1.43	0.81
1:E:769:SER:O	1:E:769:SER:OG	1.90	0.81
1:D:179:LEU:C	1:D:183:SER:HB2	2.01	0.81
1:D:288:VAL:HG23	1:D:289:GLU:H	1.46	0.81
1:E:131:ARG:HG3	1:E:243:LEU:HD22	1.62	0.81
1:A:165:GLN:CD	1:A:252:ASP:HB3	2.02	0.81
1:B:550:SER:HB3	1:B:553:GLN:HG3	1.62	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:324:THR:HB	1:C:499:PRO:HA	1.63	0.81
1:C:718:ARG:O	1:C:722:ILE:HG13	1.81	0.81
1:B:140:ARG:HA	1:B:140:ARG:HE	1.45	0.80
1:D:175:LYS:HB2	1:D:175:LYS:HZ2	1.41	0.80
1:D:403:LEU:HD21	1:D:405:LEU:HD11	1.63	0.80
1:F:165:GLN:CD	1:F:252:ASP:HB3	2.01	0.80
1:F:324:THR:HB	1:F:499:PRO:HA	1.64	0.80
1:F:781:ASN:H	1:F:789:ASN:HD21	1.28	0.80
1:C:288:VAL:HG23	1:C:289:GLU:H	1.47	0.80
1:A:140:ARG:HA	1:A:140:ARG:HE	1.46	0.80
1:B:628:PHE:HE2	2:P:90:ARG:HD3	1.44	0.80
1:C:457:THR:HG21	1:C:468:LYS:HA	1.64	0.80
2:O:106:ARG:O	2:O:110:THR:HG23	1.81	0.80
1:D:131:ARG:HG3	1:D:243:LEU:HD22	1.64	0.80
1:A:288:VAL:HG23	1:A:289:GLU:H	1.46	0.80
1:D:324:THR:HB	1:D:499:PRO:HA	1.64	0.80
1:F:288:VAL:HG23	1:F:289:GLU:H	1.47	0.80
1:F:718:ARG:O	1:F:722:ILE:HG13	1.81	0.80
1:B:781:ASN:H	1:B:789:ASN:HD21	1.28	0.80
1:C:140:ARG:HA	1:C:140:ARG:HE	1.46	0.80
1:C:550:SER:HB3	1:C:553:GLN:HG3	1.63	0.80
1:A:497:LEU:HD13	1:A:556:MET:HG2	1.64	0.79
1:B:90:PRO:O	1:B:93:VAL:HG12	1.80	0.79
1:B:318:ILE:HG23	1:B:322:LEU:HD12	1.64	0.79
1:B:403:LEU:HD21	1:B:405:LEU:HD11	1.64	0.79
1:D:550:SER:HB3	1:D:553:GLN:HG3	1.63	0.79
1:E:140:ARG:NE	1:E:140:ARG:HA	1.98	0.79
2:P:100:ILE:HB	2:P:136:VAL:CG2	2.12	0.79
2:Q:106:ARG:O	2:Q:110:THR:HG23	1.81	0.79
1:E:140:ARG:HA	1:E:140:ARG:HE	1.45	0.79
2:T:106:ARG:O	2:T:110:THR:HG23	1.82	0.79
1:A:718:ARG:O	1:A:722:ILE:HG13	1.82	0.79
1:C:403:LEU:HD21	1:C:405:LEU:HD11	1.64	0.79
1:F:140:ARG:HA	1:F:140:ARG:NE	1.98	0.79
1:F:457:THR:HG21	1:F:468:LYS:HA	1.64	0.79
1:F:550:SER:HB3	1:F:553:GLN:HG3	1.62	0.79
1:A:318:ILE:HG23	1:A:322:LEU:HD12	1.65	0.79
1:B:165:GLN:CD	1:B:252:ASP:HB3	2.03	0.79
1:C:179:LEU:C	1:C:183:SER:HB2	2.03	0.79
1:E:165:GLN:CD	1:E:252:ASP:HB3	2.03	0.79
1:F:497:LEU:HD13	1:F:556:MET:HG2	1.64	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:106:ARG:O	2:R:110:THR:HG23	1.82	0.79
1:A:107:THR:HG21	1:A:115:LYS:HD2	1.64	0.79
1:A:296:LEU:CD2	1:A:606:LYS:HE2	2.13	0.79
1:D:781:ASN:H	1:D:789:ASN:HD21	1.28	0.79
1:E:318:ILE:HG23	1:E:322:LEU:HD12	1.64	0.79
1:E:550:SER:HB3	1:E:553:GLN:HG3	1.63	0.79
1:B:324:THR:HB	1:B:499:PRO:HA	1.64	0.79
1:E:457:THR:HG21	1:E:468:LYS:HA	1.64	0.79
1:F:501:LEU:HB2	1:F:623:ASP:O	1.82	0.79
1:A:324:THR:HB	1:A:499:PRO:HA	1.65	0.79
1:C:694:VAL:HG23	2:Q:18:LEU:HD11	1.64	0.79
1:D:140:ARG:HA	1:D:140:ARG:HE	1.46	0.79
1:D:457:THR:HG21	1:D:468:LYS:HA	1.64	0.79
1:D:718:ARG:O	1:D:722:ILE:HG13	1.82	0.79
1:D:769:SER:O	1:D:769:SER:OG	1.89	0.79
1:A:540:ARG:NH2	2:O:87:GLU:OE1	2.16	0.79
1:A:781:ASN:H	1:A:789:ASN:HD21	1.28	0.79
1:B:186:LYS:HB2	1:B:190:PRO:HD3	1.65	0.79
1:C:134:LYS:HG2	1:C:136:PRO:CD	2.12	0.79
1:E:324:THR:HB	1:E:499:PRO:HA	1.65	0.79
1:F:403:LEU:HD21	1:F:405:LEU:HD11	1.64	0.79
2:P:106:ARG:O	2:P:110:THR:HG23	1.83	0.79
1:A:457:THR:HG21	1:A:468:LYS:HA	1.63	0.79
2:S:100:ILE:HB	2:S:136:VAL:CG2	2.13	0.79
1:F:191:GLU:O	1:F:192:PHE:C	2.20	0.79
1:D:165:GLN:CD	1:D:252:ASP:HB3	2.02	0.78
2:S:97:ASN:HD22	2:S:97:ASN:N	1.75	0.78
1:A:550:SER:HB3	1:A:553:GLN:CG	2.12	0.78
1:B:497:LEU:HD13	1:B:556:MET:HG2	1.65	0.78
1:C:165:GLN:CD	1:C:252:ASP:HB3	2.03	0.78
1:D:71:PHE:HB3	1:D:108:ASP:HB2	1.65	0.78
1:D:318:ILE:HG23	1:D:322:LEU:HD12	1.65	0.78
1:C:781:ASN:H	1:C:789:ASN:HD21	1.28	0.78
1:E:694:VAL:HG23	2:S:18:LEU:HD11	1.65	0.78
2:Q:100:ILE:HB	2:Q:136:VAL:CG2	2.13	0.78
1:F:318:ILE:HG23	1:F:322:LEU:HD12	1.64	0.78
2:R:6:GLU:HG3	2:R:7:GLU:H	1.48	0.78
1:B:154:ILE:HG13	1:B:171:TYR:CE1	2.19	0.78
1:C:71:PHE:HB3	1:C:108:ASP:HB2	1.65	0.78
1:A:403:LEU:HD21	1:A:405:LEU:HD11	1.66	0.78
1:D:153:ILE:O	1:D:154:ILE:HD13	1.84	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S:106:ARG:O	2:S:110:THR:HG23	1.83	0.78
1:F:550:SER:HB3	1:F:553:GLN:CG	2.14	0.78
2:O:100:ILE:HB	2:O:136:VAL:CG2	2.13	0.78
2:T:49:GLN:HE21	2:T:49:GLN:H	1.32	0.78
1:C:497:LEU:HD13	1:C:556:MET:HG2	1.66	0.78
1:F:74:GLU:HB2	1:F:78:LYS:HB3	1.64	0.78
2:R:100:ILE:HB	2:R:136:VAL:CG2	2.13	0.78
1:F:540:ARG:NH2	2:T:87:GLU:OE1	2.16	0.77
1:B:540:ARG:NH2	2:P:87:GLU:OE1	2.18	0.77
1:D:140:ARG:HA	1:D:140:ARG:NE	1.98	0.77
1:E:286:GLU:O	1:E:290:LYS:HB2	1.85	0.77
2:S:6:GLU:HG3	2:S:7:GLU:H	1.49	0.77
1:A:71:PHE:HB3	1:A:108:ASP:HB2	1.65	0.77
1:C:318:ILE:HG23	1:C:322:LEU:HD12	1.66	0.77
1:B:140:ARG:HA	1:B:140:ARG:NE	1.98	0.77
1:B:286:GLU:O	1:B:290:LYS:HB2	1.84	0.77
1:B:457:THR:HG21	1:B:468:LYS:HA	1.64	0.77
2:Q:49:GLN:HE21	2:Q:49:GLN:H	1.32	0.77
2:Q:6:GLU:HG3	2:Q:7:GLU:H	1.49	0.77
2:T:100:ILE:HB	2:T:136:VAL:CG2	2.13	0.77
1:A:286:GLU:O	1:A:290:LYS:HB2	1.84	0.77
1:B:71:PHE:HB3	1:B:108:ASP:HB2	1.65	0.77
1:C:550:SER:HB3	1:C:553:GLN:CG	2.15	0.77
1:D:694:VAL:HG23	2:R:18:LEU:HD11	1.66	0.77
1:E:71:PHE:HB3	1:E:108:ASP:HB2	1.65	0.77
2:T:6:GLU:HG3	2:T:7:GLU:H	1.50	0.77
1:B:776:LEU:O	1:B:776:LEU:HD23	1.85	0.77
1:C:140:ARG:HA	1:C:140:ARG:NE	1.99	0.77
1:D:715:GLU:HA	1:D:718:ARG:NH1	1.99	0.77
1:E:718:ARG:O	1:E:722:ILE:HG13	1.84	0.77
1:F:153:ILE:O	1:F:154:ILE:HD13	1.85	0.77
1:F:154:ILE:HG13	1:F:171:TYR:CE1	2.20	0.77
1:A:154:ILE:HG13	1:A:171:TYR:CE1	2.19	0.77
1:B:153:ILE:O	1:B:154:ILE:HD13	1.85	0.77
2:R:64:ASP:OD1	2:R:66:PRO:HD2	1.84	0.77
1:A:140:ARG:HA	1:A:140:ARG:NE	1.98	0.77
1:F:71:PHE:HB3	1:F:108:ASP:HB2	1.65	0.77
2:P:64:ASP:OD1	2:P:66:PRO:HD2	1.85	0.77
2:S:13:LYS:HZ3	2:S:65:PHE:HB3	1.49	0.77
1:C:191:GLU:O	1:C:193:LEU:N	2.17	0.77
1:C:678:VAL:HG22	1:C:745:TYR:HE2	1.49	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:497:LEU:HD13	1:E:556:MET:HG2	1.66	0.77
1:A:657:ILE:HG13	1:A:756:ILE:HD13	1.67	0.76
1:B:715:GLU:HA	1:B:718:ARG:NH1	2.00	0.76
1:D:74:GLU:HB2	1:D:78:LYS:HB3	1.66	0.76
1:E:153:ILE:O	1:E:154:ILE:HD13	1.85	0.76
2:Q:64:ASP:OD1	2:Q:66:PRO:HD2	1.85	0.76
1:A:175:LYS:HB2	1:A:175:LYS:HZ2	1.50	0.76
1:B:134:LYS:CG	1:B:136:PRO:HD3	2.14	0.76
1:B:550:SER:HB3	1:B:553:GLN:CG	2.14	0.76
1:E:154:ILE:HG13	1:E:171:TYR:CE1	2.20	0.76
1:E:403:LEU:HD21	1:E:405:LEU:HD11	1.66	0.76
1:F:664:ILE:HG21	2:T:15:ALA:HB2	1.68	0.76
1:F:694:VAL:HG23	2:T:18:LEU:HD11	1.66	0.76
2:O:6:GLU:HG3	2:O:7:GLU:H	1.49	0.76
1:A:153:ILE:O	1:A:154:ILE:HD13	1.85	0.76
1:C:776:LEU:HD23	1:C:776:LEU:O	1.85	0.76
1:B:657:ILE:HG13	1:B:756:ILE:HD13	1.67	0.76
1:C:664:ILE:HG21	2:Q:15:ALA:HB2	1.68	0.76
2:O:3:GLN:N	2:O:77:LYS:HZ2	1.83	0.76
1:E:540:ARG:NH2	2:S:87:GLU:OE1	2.18	0.76
1:F:657:ILE:HG13	1:F:756:ILE:HD13	1.66	0.76
1:B:462:ILE:HD11	1:B:466:GLY:HA2	1.67	0.76
1:C:657:ILE:HG13	1:C:756:ILE:HD13	1.68	0.76
1:D:210:PHE:HD1	1:D:214:PHE:HB2	1.51	0.76
1:E:73:ASN:ND2	1:E:74:GLU:OE2	2.18	0.76
1:E:715:GLU:HA	1:E:718:ARG:NH1	2.01	0.76
1:C:107:THR:HG21	1:C:115:LYS:HD2	1.68	0.76
1:D:286:GLU:O	1:D:290:LYS:HB2	1.85	0.76
1:A:73:ASN:ND2	1:A:74:GLU:OE2	2.18	0.76
1:C:286:GLU:O	1:C:290:LYS:HB2	1.85	0.76
1:F:210:PHE:HD1	1:F:214:PHE:HB2	1.51	0.76
2:P:13:LYS:HZ3	2:P:65:PHE:HB3	1.50	0.76
2:Q:97:ASN:HD22	2:Q:97:ASN:N	1.77	0.76
1:A:776:LEU:O	1:A:776:LEU:HD23	1.86	0.76
1:B:120:LEU:O	1:B:120:LEU:CD1	2.34	0.76
2:S:36:MET:HE3	2:S:43:PRO:HG3	1.68	0.76
1:A:210:PHE:HD1	1:A:214:PHE:HB2	1.51	0.75
1:B:210:PHE:HD1	1:B:214:PHE:HB2	1.51	0.75
1:C:462:ILE:HD11	1:C:466:GLY:HA2	1.68	0.75
1:D:776:LEU:O	1:D:776:LEU:HD23	1.86	0.75
1:F:715:GLU:HA	1:F:718:ARG:NH1	2.00	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:776:LEU:HD23	1:F:776:LEU:O	1.86	0.75
2:O:64:ASP:OD1	2:O:66:PRO:HD2	1.85	0.75
2:S:49:GLN:HE21	2:S:49:GLN:H	1.32	0.75
1:D:462:ILE:HD11	1:D:466:GLY:HA2	1.68	0.75
2:S:117:THR:HG23	2:S:120:GLU:HB2	1.68	0.75
1:A:715:GLU:HA	1:A:718:ARG:NH1	2.01	0.75
1:C:715:GLU:HA	1:C:718:ARG:NH1	2.00	0.75
1:E:120:LEU:O	1:E:120:LEU:CD1	2.34	0.75
1:F:120:LEU:CD1	1:F:120:LEU:O	2.34	0.75
1:F:217:LYS:HB2	1:F:236:GLU:CD	2.07	0.75
1:F:678:VAL:HG22	1:F:745:TYR:HE2	1.50	0.75
1:A:120:LEU:O	1:A:120:LEU:CD1	2.34	0.75
1:A:478:ALA:HB1	1:A:486:LYS:O	1.86	0.75
1:D:120:LEU:O	1:D:120:LEU:CD1	2.34	0.75
1:D:540:ARG:NH2	2:R:87:GLU:OE1	2.19	0.75
2:O:97:ASN:HD22	2:O:97:ASN:N	1.76	0.75
1:A:678:VAL:HG22	1:A:745:TYR:HE2	1.49	0.75
1:C:153:ILE:O	1:C:154:ILE:HD13	1.87	0.75
1:E:550:SER:HB3	1:E:553:GLN:CG	2.15	0.75
2:P:3:GLN:N	2:P:77:LYS:HZ2	1.83	0.75
2:S:64:ASP:OD1	2:S:66:PRO:HD2	1.86	0.75
1:B:478:ALA:HB1	1:B:486:LYS:O	1.86	0.75
1:D:296:LEU:CD2	1:D:606:LYS:HE2	2.17	0.75
1:E:210:PHE:HD1	1:E:214:PHE:HB2	1.51	0.75
1:F:218:LEU:HD11	1:F:225:ILE:HD11	1.68	0.75
2:O:117:THR:HG23	2:O:120:GLU:HB2	1.69	0.75
1:C:540:ARG:NH2	2:Q:87:GLU:OE1	2.20	0.75
1:E:236:GLU:HA	1:E:239:HIS:CD2	2.22	0.75
1:E:462:ILE:HD11	1:E:466:GLY:HA2	1.69	0.75
1:F:462:ILE:HD11	1:F:466:GLY:HA2	1.67	0.75
2:P:6:GLU:HG3	2:P:7:GLU:H	1.50	0.75
1:E:188:LEU:CD2	1:E:188:LEU:N	2.46	0.75
2:R:49:GLN:HE21	2:R:49:GLN:H	1.32	0.75
1:B:217:LYS:HB2	1:B:236:GLU:CD	2.08	0.75
1:D:550:SER:HB3	1:D:553:GLN:CG	2.15	0.75
2:Q:117:THR:HG23	2:Q:120:GLU:HB2	1.69	0.75
1:C:120:LEU:CD1	1:C:120:LEU:O	2.34	0.74
1:C:478:ALA:HB1	1:C:486:LYS:O	1.86	0.74
1:D:186:LYS:CB	1:D:190:PRO:HD3	2.17	0.74
2:T:117:THR:HG23	2:T:120:GLU:HB2	1.69	0.74
1:A:236:GLU:HA	1:A:239:HIS:CD2	2.22	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:694:VAL:HG23	2:O:18:LEU:HD11	1.68	0.74
1:F:175:LYS:HB2	1:F:175:LYS:HZ2	1.49	0.74
2:O:36:MET:CE	2:O:43:PRO:HG3	2.17	0.74
1:A:165:GLN:NE2	1:A:252:ASP:HB3	2.02	0.74
1:B:175:LYS:HB2	1:B:175:LYS:HZ2	1.51	0.74
1:B:236:GLU:HA	1:B:239:HIS:CD2	2.23	0.74
1:C:210:PHE:HD1	1:C:214:PHE:HB2	1.50	0.74
2:R:3:GLN:N	2:R:77:LYS:HZ2	1.84	0.74
2:T:64:ASP:OD1	2:T:66:PRO:HD2	1.87	0.74
2:P:117:THR:HG23	2:P:120:GLU:HB2	1.69	0.74
2:R:117:THR:HG23	2:R:120:GLU:HB2	1.69	0.74
1:D:154:ILE:HG13	1:D:171:TYR:CE1	2.21	0.74
1:D:657:ILE:HG13	1:D:756:ILE:HD13	1.69	0.74
1:E:217:LYS:HB2	1:E:236:GLU:CD	2.07	0.74
1:F:478:ALA:HB1	1:F:486:LYS:O	1.87	0.74
2:O:49:GLN:HE21	2:O:49:GLN:H	1.32	0.74
2:T:36:MET:HE3	2:T:43:PRO:HG3	1.68	0.74
1:A:186:LYS:CB	1:A:190:PRO:HD3	2.17	0.74
1:A:218:LEU:HD11	1:A:225:ILE:HD11	1.69	0.74
1:C:74:GLU:HB2	1:C:78:LYS:HB3	1.67	0.74
1:E:671:ARG:NH1	1:E:677:GLY:HA3	2.03	0.74
1:E:678:VAL:HG22	1:E:745:TYR:HE2	1.51	0.74
2:S:3:GLN:N	2:S:77:LYS:HZ2	1.83	0.74
1:B:678:VAL:HG22	1:B:745:TYR:HE2	1.51	0.74
1:C:123:GLU:HG2	1:C:124:GLU:N	2.02	0.74
1:D:165:GLN:NE2	1:D:252:ASP:HB3	2.02	0.74
1:F:64:ASN:N	1:F:64:ASN:ND2	2.32	0.74
1:F:165:GLN:NE2	1:F:252:ASP:HB3	2.02	0.74
1:F:286:GLU:O	1:F:290:LYS:HB2	1.87	0.74
1:A:671:ARG:NH1	1:A:677:GLY:HA3	2.02	0.74
1:C:671:ARG:NH1	1:C:677:GLY:HA3	2.03	0.74
1:D:218:LEU:HD11	1:D:225:ILE:HD11	1.68	0.74
1:E:185:ASP:O	1:E:190:PRO:HA	1.87	0.74
1:E:478:ALA:HB1	1:E:486:LYS:O	1.87	0.74
1:E:657:ILE:HG13	1:E:756:ILE:HD13	1.68	0.74
2:P:49:GLN:HE21	2:P:49:GLN:H	1.32	0.74
1:B:694:VAL:HG23	2:P:18:LEU:HD11	1.68	0.74
1:C:148:GLU:HG3	1:C:149:THR:N	2.03	0.74
1:C:154:ILE:HG13	1:C:171:TYR:CE1	2.23	0.74
1:E:186:LYS:CB	1:E:190:PRO:HD3	2.17	0.74
1:E:412:GLU:C	1:E:414:LYS:H	1.91	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Q:36:MET:CE	2:Q:43:PRO:HG3	2.18	0.74
1:C:217:LYS:HB2	1:C:236:GLU:CD	2.07	0.74
1:E:664:ILE:HG21	2:S:15:ALA:HB2	1.70	0.74
1:B:165:GLN:NE2	1:B:252:ASP:HB3	2.03	0.73
1:B:769:SER:O	1:B:769:SER:OG	1.89	0.73
1:D:678:VAL:HG22	1:D:745:TYR:HE2	1.51	0.73
1:E:165:GLN:NE2	1:E:252:ASP:HB3	2.03	0.73
1:F:236:GLU:HA	1:F:239:HIS:CD2	2.23	0.73
2:R:31:GLU:O	2:R:35:VAL:HG23	1.89	0.73
1:C:236:GLU:HA	1:C:239:HIS:CD2	2.23	0.73
1:D:73:ASN:ND2	1:D:74:GLU:OE2	2.18	0.73
1:D:478:ALA:HB1	1:D:486:LYS:O	1.87	0.73
1:E:189:ASP:O	1:E:191:GLU:N	2.21	0.73
2:T:36:MET:CE	2:T:43:PRO:HG3	2.18	0.73
1:A:299:GLU:HG2	1:A:299:GLU:O	1.88	0.73
1:C:131:ARG:HG3	1:C:243:LEU:CD2	2.18	0.73
1:C:218:LEU:HD11	1:C:225:ILE:HD11	1.68	0.73
2:Q:3:GLN:N	2:Q:77:LYS:HZ2	1.84	0.73
1:A:412:GLU:C	1:A:414:LYS:H	1.91	0.73
1:A:462:ILE:HD11	1:A:466:GLY:HA2	1.69	0.73
1:B:185:ASP:O	1:B:190:PRO:HA	1.89	0.73
1:B:671:ARG:NH1	1:B:677:GLY:HA3	2.04	0.73
1:E:776:LEU:HD23	1:E:776:LEU:O	1.87	0.73
1:D:462:ILE:HG12	1:D:463:THR:N	2.03	0.73
1:E:218:LEU:HD11	1:E:225:ILE:HD11	1.69	0.73
1:F:73:ASN:ND2	1:F:74:GLU:OE2	2.18	0.73
1:C:197:LYS:HD3	1:C:263:ASP:HB3	1.70	0.73
1:D:236:GLU:HA	1:D:239:HIS:CD2	2.23	0.73
1:E:197:LYS:HD3	1:E:263:ASP:HB3	1.70	0.73
1:F:671:ARG:NH1	1:F:677:GLY:HA3	2.04	0.73
2:P:36:MET:HE3	2:P:43:PRO:HG3	1.70	0.73
1:A:664:ILE:HG21	2:O:15:ALA:HB2	1.69	0.73
1:B:189:ASP:O	1:B:191:GLU:N	2.21	0.73
1:C:462:ILE:HG12	1:C:463:THR:H	1.54	0.73
1:A:217:LYS:HB2	1:A:236:GLU:CD	2.08	0.73
1:B:197:LYS:HD3	1:B:263:ASP:HB3	1.71	0.73
1:D:107:THR:HG21	1:D:115:LYS:HD2	1.70	0.73
1:D:548:THR:N	4:D:904:CMP:HN61	1.86	0.73
1:E:299:GLU:O	1:E:299:GLU:HG2	1.89	0.73
1:B:288:VAL:HG23	1:B:289:GLU:N	2.03	0.73
1:C:178:SER:OG	1:C:179:LEU:HD23	1.88	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:186:LYS:HA	1:C:190:PRO:CD	2.15	0.73
1:C:462:ILE:HG12	1:C:463:THR:N	2.03	0.73
1:E:191:GLU:O	1:E:193:LEU:N	2.20	0.73
1:E:288:VAL:HG23	1:E:289:GLU:N	2.04	0.73
1:B:412:GLU:C	1:B:414:LYS:H	1.92	0.72
1:C:299:GLU:HG2	1:C:299:GLU:O	1.89	0.72
1:C:446:ILE:HD11	1:C:451:ASN:HB3	1.71	0.72
1:D:412:GLU:C	1:D:414:LYS:H	1.91	0.72
1:E:781:ASN:H	1:E:789:ASN:ND2	1.87	0.72
1:F:462:ILE:HG12	1:F:463:THR:N	2.03	0.72
1:A:462:ILE:HG12	1:A:463:THR:H	1.54	0.72
1:B:218:LEU:HD11	1:B:225:ILE:HD11	1.69	0.72
1:C:781:ASN:H	1:C:789:ASN:ND2	1.88	0.72
1:D:197:LYS:HD3	1:D:263:ASP:HB3	1.72	0.72
2:O:13:LYS:HZ1	2:O:65:PHE:HB3	1.53	0.72
1:A:781:ASN:H	1:A:789:ASN:ND2	1.88	0.72
2:P:31:GLU:O	2:P:35:VAL:HG23	1.89	0.72
1:B:697:ILE:HD13	1:B:732:ILE:CD1	2.20	0.72
1:B:715:GLU:HA	1:B:718:ARG:HH12	1.55	0.72
1:D:462:ILE:HG12	1:D:463:THR:H	1.53	0.72
1:B:134:LYS:HG2	1:B:136:PRO:CG	2.20	0.72
1:B:462:ILE:HG12	1:B:463:THR:N	2.03	0.72
1:C:105:TYR:HB2	1:C:153:ILE:HG12	1.69	0.72
1:F:105:TYR:HB2	1:F:153:ILE:HG12	1.71	0.72
2:S:36:MET:CE	2:S:43:PRO:HG3	2.20	0.72
2:T:31:GLU:O	2:T:35:VAL:HG23	1.89	0.72
1:A:105:TYR:HB2	1:A:153:ILE:HG12	1.71	0.72
1:B:105:TYR:HB2	1:B:153:ILE:HG12	1.71	0.72
1:C:776:LEU:O	1:C:780:LEU:HD22	1.90	0.72
1:D:217:LYS:HB2	1:D:236:GLU:CD	2.09	0.72
1:E:105:TYR:HB2	1:E:153:ILE:HG12	1.72	0.72
1:F:131:ARG:HG3	1:F:243:LEU:CD2	2.19	0.72
1:A:462:ILE:HG12	1:A:463:THR:N	2.04	0.72
1:B:296:LEU:CD2	1:B:606:LYS:HE2	2.16	0.72
1:D:123:GLU:HG2	1:D:124:GLU:N	2.05	0.72
1:F:462:ILE:HG12	1:F:463:THR:H	1.54	0.72
1:A:123:GLU:HG2	1:A:124:GLU:N	2.05	0.72
1:A:197:LYS:HD3	1:A:263:ASP:HB3	1.71	0.72
1:D:664:ILE:HG21	2:R:15:ALA:HB2	1.71	0.72
2:O:31:GLU:O	2:O:35:VAL:HG23	1.90	0.72
1:D:148:GLU:HG3	1:D:149:THR:N	2.05	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:134:LYS:HG2	1:E:136:PRO:CG	2.20	0.72
1:D:299:GLU:O	1:D:299:GLU:HG2	1.89	0.71
1:E:697:ILE:HD13	1:E:732:ILE:CD1	2.20	0.71
2:R:36:MET:CE	2:R:43:PRO:HG3	2.20	0.71
2:S:31:GLU:O	2:S:35:VAL:HG23	1.89	0.71
1:E:462:ILE:HG12	1:E:463:THR:H	1.54	0.71
1:A:697:ILE:HD13	1:A:732:ILE:CD1	2.20	0.71
1:E:462:ILE:HG12	1:E:463:THR:N	2.04	0.71
1:E:715:GLU:HA	1:E:718:ARG:HH12	1.55	0.71
1:F:548:THR:N	4:F:906:CMP:HN61	1.87	0.71
2:T:3:GLN:N	2:T:77:LYS:HZ2	1.86	0.71
2:T:97:ASN:HD22	2:T:97:ASN:N	1.76	0.71
1:B:299:GLU:O	1:B:299:GLU:HG2	1.89	0.71
1:C:165:GLN:NE2	1:C:252:ASP:HB3	2.04	0.71
1:D:671:ARG:NH1	1:D:677:GLY:HA3	2.04	0.71
1:E:134:LYS:CG	1:E:136:PRO:HD3	2.17	0.71
1:F:781:ASN:H	1:F:789:ASN:ND2	1.88	0.71
1:A:131:ARG:HG3	1:A:243:LEU:HD22	1.73	0.71
1:B:73:ASN:ND2	1:B:74:GLU:OE2	2.18	0.71
1:F:776:LEU:O	1:F:780:LEU:HD22	1.91	0.71
1:A:131:ARG:HG3	1:A:243:LEU:CD2	2.20	0.71
1:B:70:GLU:HB2	1:B:107:THR:HG22	1.73	0.71
1:C:73:ASN:ND2	1:C:74:GLU:OE2	2.18	0.71
2:P:36:MET:CE	2:P:43:PRO:HG3	2.20	0.71
1:A:120:LEU:HD13	1:A:120:LEU:C	2.11	0.71
1:B:597:ASN:HB2	1:B:598:PRO:HD2	1.73	0.71
1:D:288:VAL:HG23	1:D:289:GLU:N	2.05	0.71
1:A:715:GLU:HA	1:A:718:ARG:HH12	1.56	0.71
1:D:776:LEU:O	1:D:780:LEU:HD22	1.91	0.71
1:F:412:GLU:C	1:F:414:LYS:H	1.92	0.71
1:B:120:LEU:HD13	1:B:120:LEU:C	2.11	0.71
1:B:462:ILE:HG12	1:B:463:THR:H	1.53	0.71
2:P:12:PHE:CE1	2:P:72:MET:HG3	2.26	0.71
2:T:13:LYS:HZ3	2:T:65:PHE:HB3	1.52	0.71
1:A:288:VAL:HG23	1:A:289:GLU:N	2.04	0.71
1:B:776:LEU:O	1:B:780:LEU:HD22	1.90	0.71
1:D:781:ASN:H	1:D:789:ASN:ND2	1.88	0.71
1:F:197:LYS:HD3	1:F:263:ASP:HB3	1.72	0.71
1:F:299:GLU:HG2	1:F:299:GLU:O	1.90	0.71
1:B:199:LEU:C	1:B:201:ASP:H	1.94	0.70
1:E:776:LEU:O	1:E:780:LEU:HD22	1.91	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S:12:PHE:CE1	2:S:72:MET:HG3	2.25	0.70
1:A:70:GLU:HB2	1:A:107:THR:HG22	1.73	0.70
1:B:781:ASN:H	1:B:789:ASN:ND2	1.88	0.70
1:C:412:GLU:C	1:C:414:LYS:H	1.92	0.70
1:D:178:SER:OG	1:D:179:LEU:HD23	1.90	0.70
1:F:89:ILE:HG22	1:F:93:VAL:CG1	2.22	0.70
1:A:134:LYS:CG	1:A:136:PRO:HD3	2.20	0.70
1:B:373:LYS:HD3	1:B:376:GLN:NE2	2.06	0.70
1:D:446:ILE:HD11	1:D:451:ASN:HB3	1.71	0.70
1:E:199:LEU:C	1:E:201:ASP:H	1.92	0.70
1:E:597:ASN:HB2	1:E:598:PRO:HD2	1.73	0.70
1:F:597:ASN:HB2	1:F:598:PRO:HD2	1.72	0.70
1:A:776:LEU:O	1:A:780:LEU:HD22	1.91	0.70
1:C:257:LEU:HD12	1:C:261:ALA:HB3	1.73	0.70
1:C:288:VAL:HG23	1:C:289:GLU:N	2.05	0.70
1:F:120:LEU:C	1:F:120:LEU:HD13	2.11	0.70
1:F:288:VAL:HG23	1:F:289:GLU:N	2.05	0.70
2:Q:31:GLU:O	2:Q:35:VAL:HG23	1.91	0.70
1:A:89:ILE:HG22	1:A:93:VAL:CG1	2.20	0.70
1:E:89:ILE:HG22	1:E:93:VAL:CG1	2.22	0.70
1:E:180:ASP:CG	1:E:181:ILE:H	1.93	0.70
2:P:97:ASN:HD22	2:P:97:ASN:N	1.76	0.70
1:A:597:ASN:HB2	1:A:598:PRO:HD2	1.73	0.70
1:F:123:GLU:HG2	1:F:124:GLU:N	2.05	0.70
2:T:12:PHE:CE1	2:T:72:MET:HG3	2.26	0.70
1:C:333:LYS:H	1:C:333:LYS:HD2	1.57	0.70
2:O:36:MET:HE3	2:O:43:PRO:HG3	1.72	0.70
1:B:89:ILE:HG22	1:B:93:VAL:CG1	2.21	0.70
1:B:664:ILE:HG21	2:P:15:ALA:HB2	1.72	0.70
2:O:12:PHE:CE1	2:O:72:MET:HG3	2.26	0.70
1:B:333:LYS:H	1:B:333:LYS:HD2	1.57	0.70
1:C:715:GLU:HA	1:C:718:ARG:HH12	1.54	0.70
1:D:105:TYR:HB2	1:D:153:ILE:HG12	1.72	0.70
1:D:442:TYR:HD1	1:D:455:TYR:HD1	1.40	0.70
1:E:120:LEU:C	1:E:120:LEU:HD13	2.11	0.70
2:R:12:PHE:CE1	2:R:72:MET:HG3	2.26	0.70
1:B:792:VAL:O	1:B:796:ILE:HG12	1.92	0.70
1:C:442:TYR:HD1	1:C:455:TYR:HD1	1.39	0.70
1:D:659:THR:OG1	1:D:662:GLU:HB2	1.92	0.70
1:F:333:LYS:H	1:F:333:LYS:HD2	1.56	0.70
1:F:792:VAL:O	1:F:796:ILE:HG12	1.92	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:186:LYS:CB	1:C:190:PRO:HD3	2.22	0.69
1:D:597:ASN:HB2	1:D:598:PRO:HD2	1.73	0.69
1:E:373:LYS:HD3	1:E:376:GLN:NE2	2.07	0.69
1:A:442:TYR:HD1	1:A:455:TYR:HD1	1.40	0.69
1:A:446:ILE:HD11	1:A:451:ASN:HB3	1.73	0.69
1:A:548:THR:N	4:A:901:CMP:HN61	1.86	0.69
1:C:120:LEU:C	1:C:120:LEU:HD13	2.11	0.69
1:C:792:VAL:O	1:C:796:ILE:HG12	1.91	0.69
1:D:120:LEU:HD13	1:D:120:LEU:C	2.11	0.69
1:E:333:LYS:H	1:E:333:LYS:HD2	1.57	0.69
1:F:178:SER:OG	1:F:179:LEU:HD23	1.90	0.69
1:F:715:GLU:HA	1:F:718:ARG:HH12	1.56	0.69
2:Q:12:PHE:CE1	2:Q:72:MET:HG3	2.26	0.69
1:A:792:VAL:O	1:A:796:ILE:HG12	1.93	0.69
1:D:715:GLU:HA	1:D:718:ARG:HH12	1.55	0.69
1:B:446:ILE:HD11	1:B:451:ASN:HB3	1.75	0.69
1:E:446:ILE:HD11	1:E:451:ASN:HB3	1.75	0.69
1:E:501:LEU:HB2	1:E:623:ASP:O	1.92	0.69
1:F:697:ILE:HD13	1:F:732:ILE:CD1	2.22	0.69
1:A:134:LYS:HG2	1:A:136:PRO:CG	2.21	0.69
1:A:333:LYS:H	1:A:333:LYS:HD2	1.58	0.69
1:D:792:VAL:O	1:D:796:ILE:HG12	1.92	0.69
1:E:659:THR:OG1	1:E:662:GLU:HB2	1.91	0.69
1:F:180:ASP:C	1:F:182:ILE:H	1.96	0.69
1:B:426:ILE:HD13	1:B:431:LYS:HA	1.74	0.69
1:C:128:MET:O	1:C:128:MET:HG2	1.91	0.69
1:E:792:VAL:O	1:E:796:ILE:HG12	1.92	0.69
1:F:426:ILE:HD13	1:F:431:LYS:HA	1.75	0.69
1:F:659:THR:OG1	1:F:662:GLU:HB2	1.92	0.69
1:A:186:LYS:HB2	1:A:190:PRO:HD3	1.74	0.69
1:D:89:ILE:HG22	1:D:93:VAL:CG1	2.21	0.69
1:D:373:LYS:HD3	1:D:376:GLN:NE2	2.07	0.69
1:F:446:ILE:HD11	1:F:451:ASN:HB3	1.73	0.69
1:B:123:GLU:HG2	1:B:124:GLU:N	2.07	0.69
1:C:278:LYS:HE3	1:C:279:ILE:HD11	1.75	0.69
1:C:597:ASN:HB2	1:C:598:PRO:HD2	1.73	0.69
1:D:389:LYS:HA	1:D:392:THR:HB	1.73	0.69
1:D:697:ILE:HD13	1:D:732:ILE:CD1	2.22	0.69
1:E:426:ILE:HD13	1:E:431:LYS:HA	1.75	0.69
2:T:49:GLN:HE21	2:T:49:GLN:N	1.90	0.69
1:A:128:MET:O	1:A:128:MET:CG	2.40	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:389:LYS:HA	1:A:392:THR:HB	1.74	0.69
1:A:426:ILE:HD13	1:A:431:LYS:HA	1.75	0.69
1:C:373:LYS:HD3	1:C:376:GLN:NE2	2.08	0.69
1:C:426:ILE:HD13	1:C:431:LYS:HA	1.75	0.69
1:A:373:LYS:HD3	1:A:376:GLN:NE2	2.07	0.68
1:A:501:LEU:HB2	1:A:623:ASP:O	1.93	0.68
1:B:389:LYS:HA	1:B:392:THR:HB	1.74	0.68
1:C:389:LYS:HA	1:C:392:THR:HB	1.74	0.68
1:C:501:LEU:HB2	1:C:623:ASP:O	1.92	0.68
1:D:333:LYS:HD2	1:D:333:LYS:H	1.58	0.68
1:E:70:GLU:HB2	1:E:107:THR:HG22	1.75	0.68
1:F:389:LYS:HA	1:F:392:THR:HB	1.74	0.68
2:P:49:GLN:HE21	2:P:49:GLN:N	1.90	0.68
1:B:442:TYR:HD1	1:B:455:TYR:HD1	1.39	0.68
1:F:373:LYS:HD3	1:F:376:GLN:NE2	2.08	0.68
1:B:180:ASP:CG	1:B:181:ILE:H	1.95	0.68
1:F:442:TYR:HD1	1:F:455:TYR:HD1	1.40	0.68
1:F:737:LYS:HE2	1:F:737:LYS:HA	1.75	0.68
2:Q:49:GLN:HE21	2:Q:49:GLN:N	1.91	0.68
1:B:115:LYS:HB3	1:B:115:LYS:NZ	2.09	0.68
1:C:697:ILE:HD13	1:C:732:ILE:CD1	2.23	0.68
1:E:389:LYS:HA	1:E:392:THR:HB	1.74	0.68
1:A:278:LYS:HE3	1:A:279:ILE:HD11	1.76	0.68
1:D:426:ILE:HD13	1:D:431:LYS:HA	1.76	0.68
1:A:548:THR:N	4:A:901:CMP:N6	2.37	0.68
1:B:278:LYS:HE3	1:B:279:ILE:HD11	1.76	0.68
1:E:123:GLU:HG2	1:E:124:GLU:N	2.08	0.68
1:E:186:LYS:O	1:E:188:LEU:O	2.11	0.68
2:R:58:ASP:HB3	2:R:62:THR:HG23	1.75	0.68
2:S:49:GLN:HE21	2:S:49:GLN:N	1.91	0.68
1:A:657:ILE:HG13	1:A:756:ILE:CD1	2.24	0.68
1:C:89:ILE:HG22	1:C:93:VAL:CG1	2.23	0.68
1:F:148:GLU:HG3	1:F:149:THR:N	2.09	0.68
1:A:223:LYS:HD3	1:A:224:SER:N	2.09	0.68
1:D:188:LEU:CD2	1:D:188:LEU:N	2.46	0.68
1:D:278:LYS:HE3	1:D:279:ILE:HD11	1.76	0.68
1:F:257:LEU:HD12	1:F:261:ALA:HB3	1.76	0.68
2:O:58:ASP:HB3	2:O:62:THR:HG23	1.75	0.68
2:T:58:ASP:HB3	2:T:62:THR:HG23	1.75	0.68
1:A:115:LYS:NZ	1:A:115:LYS:HB3	2.09	0.68
1:B:197:LYS:HZ2	1:B:197:LYS:HB3	1.59	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:659:THR:OG1	1:B:662:GLU:HB2	1.93	0.68
1:E:296:LEU:CD2	1:E:606:LYS:HE2	2.19	0.68
1:F:142:VAL:HG13	1:F:154:ILE:CD1	2.24	0.68
1:F:278:LYS:HE3	1:F:279:ILE:HD11	1.76	0.68
1:A:186:LYS:O	1:A:188:LEU:O	2.11	0.68
1:B:368:GLN:HB2	1:B:384:ASN:OD1	1.94	0.68
1:D:724:ARG:HG3	1:D:724:ARG:HH11	1.59	0.68
1:E:115:LYS:NZ	1:E:115:LYS:HB3	2.09	0.68
1:E:278:LYS:HE3	1:E:279:ILE:HD11	1.76	0.68
1:E:548:THR:N	4:E:905:CMP:HN61	1.86	0.68
1:C:188:LEU:CD2	1:C:188:LEU:N	2.46	0.67
1:C:191:GLU:O	1:C:192:PHE:C	2.32	0.67
1:B:144:GLU:HG2	1:B:177:ILE:HD11	1.75	0.67
1:E:223:LYS:HD3	1:E:224:SER:N	2.09	0.67
1:E:442:TYR:HD1	1:E:455:TYR:HD1	1.39	0.67
2:Q:58:ASP:HB3	2:Q:62:THR:HG23	1.74	0.67
1:A:142:VAL:HG13	1:A:154:ILE:HD11	1.76	0.67
1:B:223:LYS:HD3	1:B:224:SER:N	2.09	0.67
1:E:254:ARG:H	1:E:254:ARG:HD2	1.60	0.67
1:F:254:ARG:H	1:F:254:ARG:HD2	1.59	0.67
1:B:254:ARG:H	1:B:254:ARG:HD2	1.59	0.67
1:C:657:ILE:HG13	1:C:756:ILE:CD1	2.24	0.67
1:E:426:ILE:CD1	1:E:431:LYS:HA	2.25	0.67
1:F:525:LYS:HE2	2:T:114:GLU:HG2	1.77	0.67
1:B:737:LYS:HA	1:B:737:LYS:HE2	1.77	0.67
1:C:659:THR:OG1	1:C:662:GLU:HB2	1.94	0.67
1:F:179:LEU:HB2	1:F:183:SER:HB2	1.76	0.67
1:F:450:ASN:ND2	1:F:452:GLU:HG3	2.10	0.67
1:A:178:SER:OG	1:A:179:LEU:HD23	1.94	0.67
1:B:426:ILE:CD1	1:B:431:LYS:HA	2.25	0.67
1:C:446:ILE:HG13	1:C:452:GLU:O	1.94	0.67
1:D:186:LYS:HB2	1:D:190:PRO:HD3	1.74	0.67
2:O:49:GLN:HE21	2:O:49:GLN:N	1.91	0.67
1:C:737:LYS:HE2	1:C:737:LYS:HA	1.76	0.67
1:D:548:THR:N	4:D:904:CMP:N6	2.38	0.67
1:E:737:LYS:HA	1:E:737:LYS:HE2	1.77	0.67
1:F:186:LYS:O	1:F:188:LEU:O	2.11	0.67
1:F:426:ILE:CD1	1:F:431:LYS:HA	2.25	0.67
2:Q:16:PHE:HA	2:Q:35:VAL:HG11	1.77	0.67
2:R:16:PHE:HA	2:R:35:VAL:HG11	1.77	0.67
2:S:16:PHE:HA	2:S:35:VAL:HG11	1.77	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:49:GLN:N	2:T:49:GLN:NE2	2.43	0.67
1:F:223:LYS:HD3	1:F:224:SER:N	2.10	0.67
1:A:142:VAL:HG13	1:A:154:ILE:CD1	2.25	0.67
1:B:657:ILE:HG13	1:B:756:ILE:CD1	2.24	0.67
1:C:368:GLN:HB2	1:C:384:ASN:OD1	1.94	0.67
1:D:595:ILE:HG22	1:D:596:ILE:N	2.10	0.67
2:Q:49:GLN:N	2:Q:49:GLN:NE2	2.43	0.67
2:S:58:ASP:HB3	2:S:62:THR:HG23	1.75	0.67
1:A:134:LYS:HG2	1:A:136:PRO:HG3	1.77	0.67
1:A:737:LYS:HE2	1:A:737:LYS:HA	1.77	0.67
1:B:724:ARG:HH11	1:B:724:ARG:HG3	1.59	0.67
1:C:724:ARG:HH11	1:C:724:ARG:HG3	1.58	0.67
1:D:368:GLN:HB2	1:D:384:ASN:OD1	1.95	0.67
1:D:657:ILE:HG13	1:D:756:ILE:CD1	2.25	0.67
1:E:180:ASP:C	1:E:182:ILE:H	1.97	0.67
1:F:142:VAL:HG13	1:F:154:ILE:HD11	1.76	0.67
1:F:186:LYS:HB2	1:F:190:PRO:HD3	1.77	0.67
2:R:49:GLN:HE21	2:R:49:GLN:N	1.91	0.67
1:B:178:SER:OG	1:B:179:LEU:HD23	1.95	0.66
1:B:630:ARG:NE	2:P:83:GLU:HG2	2.10	0.66
1:C:186:LYS:HB2	1:C:190:PRO:HD3	1.77	0.66
1:F:115:LYS:NZ	1:F:115:LYS:HB3	2.10	0.66
1:F:131:ARG:HG3	1:F:243:LEU:HD22	1.77	0.66
1:A:199:LEU:C	1:A:201:ASP:H	1.97	0.66
1:A:257:LEU:O	1:A:257:LEU:HG	1.95	0.66
1:A:659:THR:OG1	1:A:662:GLU:HB2	1.94	0.66
1:C:426:ILE:CD1	1:C:431:LYS:HA	2.25	0.66
1:D:446:ILE:HG13	1:D:452:GLU:O	1.95	0.66
1:F:368:GLN:HB2	1:F:384:ASN:OD1	1.95	0.66
1:F:657:ILE:HG13	1:F:756:ILE:CD1	2.23	0.66
2:P:16:PHE:HA	2:P:35:VAL:HG11	1.77	0.66
1:A:130:SER:HB2	1:A:170:TYR:CE2	2.30	0.66
1:A:540:ARG:HD3	1:A:627:TYR:OH	1.95	0.66
1:C:186:LYS:O	1:C:188:LEU:O	2.13	0.66
1:E:178:SER:OG	1:E:179:LEU:HD23	1.96	0.66
1:A:191:GLU:O	1:A:193:LEU:N	2.27	0.66
1:A:426:ILE:CD1	1:A:431:LYS:HA	2.25	0.66
1:B:142:VAL:HG13	1:B:154:ILE:HD11	1.78	0.66
1:D:450:ASN:ND2	1:D:452:GLU:HG3	2.10	0.66
1:F:296:LEU:CD2	1:F:606:LYS:HE2	2.20	0.66
2:P:49:GLN:N	2:P:49:GLN:NE2	2.43	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:548:THR:N	4:B:902:CMP:HN61	1.87	0.66
1:C:254:ARG:H	1:C:254:ARG:HD2	1.60	0.66
1:C:345:THR:HG22	1:C:490:ALA:O	1.95	0.66
1:C:607:ASN:HB3	1:C:609:GLU:OE2	1.95	0.66
1:D:223:LYS:HD3	1:D:224:SER:N	2.10	0.66
1:E:368:GLN:HB2	1:E:384:ASN:OD1	1.95	0.66
1:E:525:LYS:HE2	2:S:114:GLU:HG2	1.77	0.66
1:F:581:GLN:NE2	1:F:629:ASN:H	1.94	0.66
2:P:58:ASP:HB3	2:P:62:THR:HG23	1.76	0.66
1:A:191:GLU:O	1:A:192:PHE:C	2.32	0.66
1:B:186:LYS:O	1:B:188:LEU:O	2.13	0.66
1:D:115:LYS:NZ	1:D:115:LYS:HB3	2.11	0.66
1:F:199:LEU:C	1:F:201:ASP:H	1.98	0.66
2:O:49:GLN:N	2:O:49:GLN:NE2	2.43	0.66
1:C:548:THR:N	4:C:903:CMP:HN61	1.87	0.66
1:F:607:ASN:HB3	1:F:609:GLU:OE2	1.96	0.66
1:B:345:THR:HG22	1:B:490:ALA:O	1.96	0.66
1:D:426:ILE:CD1	1:D:431:LYS:HA	2.25	0.66
1:A:148:GLU:HG3	1:A:149:THR:N	2.10	0.66
1:D:607:ASN:HB3	1:D:609:GLU:OE2	1.96	0.66
1:D:658:PRO:HG3	1:D:752:LEU:HD22	1.78	0.66
1:E:131:ARG:HG3	1:E:243:LEU:HD21	1.77	0.66
1:E:142:VAL:HG13	1:E:154:ILE:HD11	1.78	0.66
1:A:658:PRO:HG3	1:A:752:LEU:HD22	1.78	0.66
1:B:112:VAL:O	1:B:114:HIS:N	2.29	0.66
1:C:137:PHE:HD2	1:C:137:PHE:C	2.00	0.66
1:D:254:ARG:H	1:D:254:ARG:HD2	1.60	0.66
1:E:112:VAL:O	1:E:114:HIS:N	2.29	0.66
1:E:191:GLU:O	1:E:192:PHE:C	2.35	0.66
1:F:658:PRO:HG3	1:F:752:LEU:HD22	1.79	0.66
1:A:137:PHE:HD2	1:A:137:PHE:C	1.99	0.65
1:A:173:ILE:HD12	1:A:243:LEU:CD2	2.26	0.65
1:A:185:ASP:O	1:A:190:PRO:HA	1.96	0.65
1:A:345:THR:HG22	1:A:490:ALA:O	1.96	0.65
1:E:142:VAL:HG13	1:E:154:ILE:CD1	2.26	0.65
1:F:332:ASN:OD1	1:F:334:LEU:HD13	1.97	0.65
1:F:655:ASN:HD22	1:F:655:ASN:N	1.93	0.65
2:S:49:GLN:N	2:S:49:GLN:NE2	2.43	0.65
2:S:65:PHE:HB2	2:S:66:PRO:CD	2.25	0.65
1:A:607:ASN:HB3	1:A:609:GLU:OE2	1.96	0.65
1:B:142:VAL:HG13	1:B:154:ILE:CD1	2.26	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:173:ILE:HD12	1:F:243:LEU:CD2	2.26	0.65
2:P:65:PHE:HB2	2:P:66:PRO:CD	2.26	0.65
1:A:581:GLN:NE2	1:A:629:ASN:H	1.93	0.65
1:C:142:VAL:HG13	1:C:154:ILE:CD1	2.26	0.65
1:C:216:GLU:HG3	1:C:217:LYS:HG2	1.78	0.65
1:C:257:LEU:HG	1:C:257:LEU:O	1.95	0.65
1:D:134:LYS:HG2	1:D:136:PRO:CG	2.26	0.65
1:D:257:LEU:HD12	1:D:261:ALA:HB3	1.76	0.65
1:E:173:ILE:HD12	1:E:243:LEU:CD2	2.27	0.65
1:E:257:LEU:HG	1:E:257:LEU:O	1.96	0.65
1:E:630:ARG:NE	2:S:83:GLU:HG2	2.12	0.65
1:F:338:LEU:HD21	1:F:409:ARG:CZ	2.26	0.65
1:F:595:ILE:HG22	1:F:596:ILE:N	2.12	0.65
2:O:16:PHE:HA	2:O:35:VAL:HG11	1.77	0.65
1:A:338:LEU:HD21	1:A:409:ARG:CZ	2.25	0.65
1:B:137:PHE:HD2	1:B:137:PHE:C	1.99	0.65
1:B:581:GLN:NE2	1:B:629:ASN:H	1.94	0.65
1:C:173:ILE:HD12	1:C:243:LEU:CD2	2.26	0.65
1:C:223:LYS:HD3	1:C:224:SER:N	2.10	0.65
1:E:137:PHE:HD2	1:E:137:PHE:C	1.99	0.65
1:E:186:LYS:HB2	1:E:190:PRO:HD3	1.78	0.65
1:F:172:GLU:HB3	1:F:246:SER:HA	1.79	0.65
1:A:172:GLU:HB3	1:A:246:SER:HA	1.78	0.65
1:B:338:LEU:HD21	1:B:409:ARG:CZ	2.26	0.65
1:B:450:ASN:ND2	1:B:452:GLU:HG3	2.11	0.65
1:C:172:GLU:HB3	1:C:246:SER:HA	1.79	0.65
1:C:450:ASN:ND2	1:C:452:GLU:HG3	2.12	0.65
1:C:759:GLN:HE21	1:C:759:GLN:CA	2.09	0.65
1:D:142:VAL:HG13	1:D:154:ILE:HD11	1.78	0.65
1:D:172:GLU:HB3	1:D:246:SER:HA	1.78	0.65
1:D:175:LYS:NZ	1:D:175:LYS:CB	2.60	0.65
1:D:737:LYS:HE2	1:D:737:LYS:HA	1.77	0.65
1:E:657:ILE:HG13	1:E:756:ILE:CD1	2.25	0.65
1:F:137:PHE:HD2	1:F:137:PHE:C	2.00	0.65
2:R:49:GLN:N	2:R:49:GLN:NE2	2.44	0.65
1:A:450:ASN:ND2	1:A:452:GLU:HG3	2.10	0.65
1:A:724:ARG:HG3	1:A:724:ARG:HH11	1.61	0.65
1:C:635:ILE:HD12	1:C:635:ILE:N	2.11	0.65
1:D:655:ASN:HD22	1:D:655:ASN:N	1.94	0.65
1:F:134:LYS:HG2	1:F:136:PRO:CG	2.26	0.65
1:F:216:GLU:HG3	1:F:217:LYS:HG2	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:12:PHE:CD1	2:T:72:MET:HG3	2.32	0.65
1:A:141:PHE:HB2	1:A:155:ASN:OD1	1.97	0.65
1:D:134:LYS:HG2	1:D:136:PRO:HG3	1.79	0.65
1:D:354:SER:O	1:D:371:SER:HB2	1.96	0.65
1:D:747:ASN:O	1:D:750:GLN:HB2	1.97	0.65
1:E:508:ILE:HG23	1:E:536:TYR:CE2	2.32	0.65
2:S:58:ASP:C	2:S:60:ASN:H	2.00	0.65
2:T:16:PHE:HA	2:T:35:VAL:HG11	1.78	0.65
1:C:142:VAL:HG13	1:C:154:ILE:HD11	1.77	0.65
1:D:137:PHE:HD2	1:D:137:PHE:C	2.00	0.65
1:D:191:GLU:O	1:D:193:LEU:N	2.30	0.65
2:P:12:PHE:CD1	2:P:72:MET:HG3	2.32	0.65
2:R:36:MET:HE3	2:R:43:PRO:HG3	1.79	0.65
1:B:141:PHE:HB2	1:B:155:ASN:OD1	1.97	0.65
1:B:173:ILE:HD12	1:B:243:LEU:CD2	2.27	0.65
1:C:115:LYS:NZ	1:C:115:LYS:HB3	2.11	0.65
1:C:540:ARG:HD3	1:C:627:TYR:OH	1.97	0.65
1:C:595:ILE:HG22	1:C:596:ILE:N	2.12	0.65
1:C:658:PRO:HG3	1:C:752:LEU:HD22	1.79	0.65
1:D:257:LEU:O	1:D:257:LEU:HG	1.97	0.65
1:D:338:LEU:HD21	1:D:409:ARG:CZ	2.27	0.65
1:E:450:ASN:ND2	1:E:452:GLU:HG3	2.12	0.65
1:E:635:ILE:HD12	1:E:635:ILE:N	2.12	0.65
1:F:180:ASP:O	1:F:182:ILE:N	2.30	0.65
2:S:5:THR:CG2	2:S:8:GLN:HB2	2.27	0.65
1:A:257:LEU:O	1:A:265:PHE:HB2	1.97	0.65
1:B:172:GLU:HB3	1:B:246:SER:HA	1.79	0.65
1:B:525:LYS:HE2	2:P:114:GLU:HG2	1.77	0.65
1:C:257:LEU:O	1:C:265:PHE:HB2	1.97	0.65
1:C:504:ILE:O	1:C:507:GLN:HB3	1.97	0.65
1:C:655:ASN:HD22	1:C:655:ASN:N	1.93	0.65
1:D:141:PHE:HB2	1:D:155:ASN:OD1	1.97	0.65
1:D:142:VAL:HG13	1:D:154:ILE:CD1	2.26	0.65
1:D:173:ILE:HD12	1:D:243:LEU:CD2	2.26	0.65
1:E:134:LYS:HG2	1:E:136:PRO:HG3	1.78	0.65
1:E:172:GLU:HB3	1:E:246:SER:HA	1.79	0.65
1:E:540:ARG:HD3	1:E:627:TYR:OH	1.96	0.65
1:E:595:ILE:HG22	1:E:596:ILE:N	2.12	0.65
2:Q:5:THR:CG2	2:Q:8:GLN:HB2	2.27	0.65
1:A:595:ILE:HG22	1:A:596:ILE:N	2.12	0.64
1:B:658:PRO:HG3	1:B:752:LEU:HD22	1.79	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:525:LYS:HE2	2:Q:114:GLU:HG2	1.79	0.64
1:D:70:GLU:HB2	1:D:107:THR:HG22	1.79	0.64
1:F:186:LYS:CB	1:F:190:PRO:HD3	2.27	0.64
1:A:112:VAL:O	1:A:114:HIS:N	2.28	0.64
1:B:134:LYS:HG2	1:B:136:PRO:HG3	1.79	0.64
1:C:354:SER:O	1:C:371:SER:HB2	1.96	0.64
1:E:581:GLN:NE2	1:E:629:ASN:H	1.95	0.64
1:E:607:ASN:HB3	1:E:609:GLU:OE2	1.96	0.64
1:E:658:PRO:HG3	1:E:752:LEU:HD22	1.79	0.64
1:E:724:ARG:HH11	1:E:724:ARG:HG3	1.61	0.64
2:R:65:PHE:HB2	2:R:66:PRO:CD	2.27	0.64
2:T:65:PHE:HB2	2:T:66:PRO:CD	2.25	0.64
1:A:127:SER:HB3	1:A:133:GLU:OE2	1.97	0.64
1:A:525:LYS:HE2	2:O:114:GLU:HG2	1.78	0.64
1:B:332:ASN:OD1	1:B:334:LEU:HD13	1.96	0.64
1:D:332:ASN:OD1	1:D:334:LEU:HD13	1.98	0.64
1:E:175:LYS:NZ	1:E:175:LYS:CB	2.61	0.64
1:E:216:GLU:HG3	1:E:217:LYS:HG2	1.78	0.64
1:E:332:ASN:OD1	1:E:334:LEU:HD13	1.97	0.64
1:E:338:LEU:HD21	1:E:409:ARG:CZ	2.26	0.64
1:E:548:THR:N	4:E:905:CMP:N6	2.38	0.64
2:T:69:LEU:HD12	2:T:69:LEU:O	1.97	0.64
1:B:728:ALA:O	1:B:732:ILE:HG12	1.97	0.64
1:B:747:ASN:O	1:B:750:GLN:HB2	1.98	0.64
1:C:120:LEU:O	1:C:120:LEU:HD12	1.97	0.64
1:D:186:LYS:O	1:D:188:LEU:O	2.14	0.64
1:D:345:THR:HG22	1:D:490:ALA:O	1.97	0.64
1:D:504:ILE:O	1:D:507:GLN:HB3	1.97	0.64
1:E:187:SER:N	1:E:188:LEU:O	2.31	0.64
1:E:345:THR:HG22	1:E:490:ALA:O	1.98	0.64
2:R:12:PHE:CD1	2:R:72:MET:HG3	2.32	0.64
2:T:5:THR:CG2	2:T:8:GLN:HB2	2.28	0.64
1:A:332:ASN:OD1	1:A:334:LEU:HD13	1.97	0.64
1:A:504:ILE:O	1:A:507:GLN:HB3	1.98	0.64
1:C:131:ARG:HG3	1:C:243:LEU:HD22	1.78	0.64
1:C:338:LEU:HD21	1:C:409:ARG:CZ	2.27	0.64
1:C:692:GLU:O	1:C:696:LYS:HG3	1.98	0.64
1:D:120:LEU:O	1:D:120:LEU:HD12	1.97	0.64
1:D:525:LYS:HE2	2:R:114:GLU:HG2	1.78	0.64
1:E:257:LEU:O	1:E:265:PHE:HB2	1.97	0.64
1:E:692:GLU:O	1:E:696:LYS:HG3	1.98	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:120:LEU:O	1:F:120:LEU:HD12	1.97	0.64
1:F:134:LYS:HG2	1:F:136:PRO:HG3	1.79	0.64
1:F:724:ARG:HH11	1:F:724:ARG:HG3	1.61	0.64
2:Q:12:PHE:CD1	2:Q:72:MET:HG3	2.32	0.64
2:R:92:PHE:O	2:R:94:LYS:N	2.30	0.64
1:A:216:GLU:HG3	1:A:217:LYS:HG2	1.79	0.64
1:A:254:ARG:H	1:A:254:ARG:HD2	1.61	0.64
1:B:447:SER:HB3	1:B:450:ASN:O	1.98	0.64
1:B:540:ARG:HD3	1:B:627:TYR:OH	1.97	0.64
1:B:595:ILE:HG22	1:B:596:ILE:N	2.12	0.64
1:B:607:ASN:HB3	1:B:609:GLU:OE2	1.98	0.64
1:D:412:GLU:C	1:D:414:LYS:N	2.51	0.64
1:E:504:ILE:O	1:E:507:GLN:HB3	1.97	0.64
1:F:345:THR:HG22	1:F:490:ALA:O	1.98	0.64
2:P:55:VAL:HG21	2:P:67:GLU:OE1	1.98	0.64
2:R:97:ASN:ND2	2:R:97:ASN:N	2.37	0.64
2:S:12:PHE:CD1	2:S:72:MET:HG3	2.32	0.64
1:A:368:GLN:HB2	1:A:384:ASN:OD1	1.97	0.64
1:A:635:ILE:HD12	1:A:635:ILE:N	2.10	0.64
1:B:257:LEU:HG	1:B:257:LEU:O	1.96	0.64
1:B:655:ASN:HD22	1:B:655:ASN:N	1.94	0.64
1:C:508:ILE:HG23	1:C:536:TYR:CE2	2.33	0.64
1:F:257:LEU:O	1:F:265:PHE:HB2	1.97	0.64
1:F:508:ILE:HG23	1:F:536:TYR:CE2	2.33	0.64
2:P:58:ASP:C	2:P:60:ASN:H	2.01	0.64
2:T:58:ASP:C	2:T:60:ASN:H	2.00	0.64
1:A:508:ILE:HG23	1:A:536:TYR:CE2	2.33	0.64
1:D:759:GLN:HE21	1:D:759:GLN:CA	2.10	0.64
1:E:180:ASP:O	1:E:182:ILE:N	2.31	0.64
1:B:120:LEU:O	1:B:120:LEU:HD12	1.97	0.64
1:B:180:ASP:C	1:B:182:ILE:H	2.00	0.64
1:B:257:LEU:O	1:B:265:PHE:HB2	1.97	0.64
1:C:141:PHE:HB2	1:C:155:ASN:OD1	1.98	0.64
1:C:180:ASP:C	1:C:182:ILE:H	2.01	0.64
1:C:405:LEU:HD13	1:C:453:VAL:CG2	2.28	0.64
1:D:692:GLU:O	1:D:696:LYS:HG3	1.98	0.64
1:E:747:ASN:O	1:E:750:GLN:HB2	1.98	0.64
1:F:540:ARG:HD3	1:F:627:TYR:OH	1.97	0.64
2:O:58:ASP:C	2:O:60:ASN:H	2.01	0.64
1:C:332:ASN:OD1	1:C:334:LEU:HD13	1.97	0.64
1:C:457:THR:OG1	1:C:468:LYS:HG3	1.97	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:540:ARG:HD3	1:D:627:TYR:OH	1.98	0.64
1:F:217:LYS:HG3	1:F:236:GLU:HG3	1.80	0.64
1:A:310:GLU:OE2	1:A:340:LYS:HD2	1.98	0.63
1:A:457:THR:OG1	1:A:468:LYS:HG3	1.98	0.63
1:B:66:LEU:HD12	1:B:103:GLU:HA	1.81	0.63
1:B:504:ILE:O	1:B:507:GLN:HB3	1.97	0.63
2:S:55:VAL:HG21	2:S:67:GLU:OE1	1.98	0.63
2:S:69:LEU:HD12	2:S:69:LEU:O	1.98	0.63
1:A:99:GLU:C	1:A:101:GLY:H	2.02	0.63
1:B:216:GLU:HG3	1:B:217:LYS:HG2	1.79	0.63
1:B:426:ILE:HD11	1:B:431:LYS:HG2	1.81	0.63
1:C:296:LEU:CD2	1:C:606:LYS:HE2	2.21	0.63
1:D:131:ARG:HG3	1:D:243:LEU:HD21	1.78	0.63
1:D:216:GLU:HG3	1:D:217:LYS:HG2	1.79	0.63
1:E:310:GLU:OE2	1:E:340:LYS:HD2	1.98	0.63
1:F:66:LEU:HD12	1:F:103:GLU:HA	1.80	0.63
1:F:187:SER:N	1:F:188:LEU:O	2.31	0.63
1:F:412:GLU:C	1:F:414:LYS:N	2.52	0.63
2:T:13:LYS:HZ1	2:T:65:PHE:HB3	1.62	0.63
1:A:187:SER:N	1:A:188:LEU:O	2.31	0.63
1:A:412:GLU:C	1:A:414:LYS:N	2.51	0.63
1:C:747:ASN:O	1:C:750:GLN:HB2	1.97	0.63
1:E:257:LEU:HD12	1:E:261:ALA:HB3	1.81	0.63
1:F:188:LEU:CD2	1:F:188:LEU:N	2.46	0.63
2:R:55:VAL:HG21	2:R:67:GLU:OE1	1.98	0.63
2:R:58:ASP:C	2:R:60:ASN:H	2.00	0.63
1:B:508:ILE:HG23	1:B:536:TYR:CE2	2.33	0.63
1:C:112:VAL:O	1:C:114:HIS:N	2.29	0.63
1:C:581:GLN:NE2	1:C:629:ASN:H	1.96	0.63
1:D:137:PHE:C	1:D:137:PHE:CD2	2.72	0.63
1:D:581:GLN:NE2	1:D:629:ASN:H	1.95	0.63
1:F:310:GLU:OE2	1:F:340:LYS:HD2	1.99	0.63
2:O:65:PHE:HB2	2:O:66:PRO:CD	2.25	0.63
2:Q:58:ASP:C	2:Q:60:ASN:H	2.01	0.63
1:A:137:PHE:C	1:A:137:PHE:CD2	2.72	0.63
1:A:144:GLU:HG2	1:A:177:ILE:HD11	1.79	0.63
1:A:446:ILE:HG12	1:A:447:SER:N	2.13	0.63
1:C:137:PHE:C	1:C:137:PHE:CD2	2.72	0.63
1:C:501:LEU:HD11	2:Q:108:VAL:HG13	1.80	0.63
1:E:120:LEU:O	1:E:120:LEU:HD12	1.97	0.63
1:E:457:THR:OG1	1:E:468:LYS:HG3	1.99	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:182:ILE:O	1:F:187:SER:HB2	1.99	0.63
2:Q:33:GLY:O	2:Q:37:ARG:HG3	1.99	0.63
1:B:191:GLU:O	1:B:193:LEU:N	2.31	0.63
1:D:457:THR:OG1	1:D:468:LYS:HG3	1.99	0.63
1:D:508:ILE:HG23	1:D:536:TYR:CE2	2.34	0.63
1:D:520:PRO:HG2	1:D:521:ASN:H	1.64	0.63
1:E:426:ILE:HD11	1:E:431:LYS:HG2	1.81	0.63
1:F:112:VAL:O	1:F:114:HIS:N	2.30	0.63
1:F:257:LEU:O	1:F:257:LEU:HG	1.96	0.63
1:F:504:ILE:O	1:F:507:GLN:HB3	1.98	0.63
2:O:12:PHE:CD1	2:O:72:MET:HG3	2.33	0.63
2:P:5:THR:CG2	2:P:8:GLN:HB2	2.28	0.63
2:Q:36:MET:HE2	2:Q:43:PRO:HG3	1.79	0.63
2:Q:92:PHE:O	2:Q:94:LYS:N	2.31	0.63
2:T:55:VAL:HG21	2:T:67:GLU:OE1	1.98	0.63
1:B:99:GLU:C	1:B:101:GLY:H	2.01	0.63
1:C:412:GLU:C	1:C:414:LYS:N	2.51	0.63
1:E:144:GLU:HG2	1:E:177:ILE:HD11	1.81	0.63
2:T:121:VAL:C	2:T:123:GLN:H	2.02	0.63
1:A:426:ILE:HD11	1:A:431:LYS:HG2	1.81	0.63
1:C:217:LYS:HG3	1:C:236:GLU:HG3	1.81	0.63
1:C:310:GLU:OE2	1:C:340:LYS:HD2	1.99	0.63
1:C:505:LYS:C	1:C:507:GLN:H	2.02	0.63
1:D:447:SER:HB3	1:D:450:ASN:O	1.99	0.63
1:E:161:ILE:CG2	1:E:168:GLU:HB2	2.28	0.63
1:B:403:LEU:HG	1:B:405:LEU:HD12	1.81	0.63
1:B:548:THR:N	4:B:902:CMP:N6	2.38	0.63
1:C:728:ALA:O	1:C:732:ILE:HG12	1.99	0.63
1:D:635:ILE:HD12	1:D:635:ILE:N	2.11	0.63
1:E:66:LEU:HD12	1:E:103:GLU:HA	1.81	0.63
1:E:141:PHE:HB2	1:E:155:ASN:OD1	1.99	0.63
1:E:360:VAL:HG21	1:E:365:PRO:HB3	1.80	0.63
1:E:447:SER:HB3	1:E:450:ASN:O	1.99	0.63
1:F:70:GLU:HB2	1:F:107:THR:HG22	1.80	0.63
1:F:426:ILE:HD11	1:F:431:LYS:HG2	1.81	0.63
1:F:728:ALA:O	1:F:732:ILE:HG12	1.99	0.63
2:O:55:VAL:HG21	2:O:67:GLU:OE1	1.99	0.63
1:A:594:PHE:HE2	1:A:596:ILE:HD11	1.64	0.62
1:A:692:GLU:O	1:A:696:LYS:HG3	1.99	0.62
1:A:747:ASN:O	1:A:750:GLN:HB2	1.98	0.62
1:B:447:SER:OG	1:B:448:ASP:N	2.32	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:446:ILE:HG12	1:C:447:SER:N	2.13	0.62
1:E:728:ALA:O	1:E:732:ILE:HG12	1.99	0.62
1:B:217:LYS:HG3	1:B:236:GLU:HG3	1.81	0.62
1:B:310:GLU:OE2	1:B:340:LYS:HD2	1.98	0.62
1:D:180:ASP:C	1:D:182:ILE:H	2.01	0.62
1:E:99:GLU:C	1:E:101:GLY:H	2.02	0.62
1:E:137:PHE:C	1:E:137:PHE:CD2	2.72	0.62
1:E:377:GLN:O	1:E:378:LEU:HD12	1.99	0.62
1:F:141:PHE:HB2	1:F:155:ASN:OD1	1.99	0.62
1:F:193:LEU:O	1:F:197:LYS:HB2	1.99	0.62
2:P:69:LEU:HD12	2:P:69:LEU:O	1.99	0.62
1:A:257:LEU:HD12	1:A:261:ALA:HB3	1.80	0.62
1:B:186:LYS:HB2	1:B:190:PRO:CD	2.29	0.62
1:C:426:ILE:HD11	1:C:431:LYS:HG2	1.81	0.62
1:E:152:LEU:HD21	1:E:154:ILE:HD11	1.80	0.62
1:E:184:LYS:HZ1	1:E:191:GLU:HB2	1.65	0.62
1:E:193:LEU:O	1:E:197:LYS:HB2	2.00	0.62
1:E:446:ILE:HG12	1:E:447:SER:N	2.13	0.62
1:F:175:LYS:NZ	1:F:175:LYS:CB	2.62	0.62
1:F:747:ASN:O	1:F:750:GLN:HB2	1.99	0.62
2:R:121:VAL:C	2:R:123:GLN:H	2.02	0.62
1:A:120:LEU:O	1:A:120:LEU:HD12	1.97	0.62
1:A:193:LEU:O	1:A:197:LYS:HB2	1.99	0.62
1:C:700:TYR:CE1	1:C:727:GLN:HB3	2.34	0.62
1:E:505:LYS:C	1:E:507:GLN:H	2.02	0.62
1:E:752:LEU:O	1:E:756:ILE:HG12	1.99	0.62
1:F:446:ILE:HG12	1:F:447:SER:N	2.13	0.62
2:O:121:VAL:C	2:O:123:GLN:H	2.01	0.62
2:S:121:VAL:C	2:S:123:GLN:H	2.02	0.62
1:A:217:LYS:HG3	1:A:236:GLU:HG3	1.81	0.62
1:A:759:GLN:HE21	1:A:759:GLN:CA	2.11	0.62
1:B:137:PHE:C	1:B:137:PHE:CD2	2.72	0.62
1:B:592:GLU:HB3	1:B:604:LEU:HD11	1.81	0.62
1:B:635:ILE:HD12	1:B:635:ILE:N	2.12	0.62
1:C:134:LYS:HG2	1:C:136:PRO:HG3	1.82	0.62
1:D:191:GLU:O	1:D:192:PHE:C	2.37	0.62
1:D:217:LYS:HG3	1:D:236:GLU:HG3	1.81	0.62
1:D:257:LEU:O	1:D:265:PHE:HB2	1.99	0.62
1:D:446:ILE:HG12	1:D:447:SER:N	2.13	0.62
1:E:217:LYS:HG3	1:E:236:GLU:HG3	1.81	0.62
1:F:403:LEU:HG	1:F:405:LEU:HD12	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:505:LYS:C	1:F:507:GLN:H	2.03	0.62
2:R:69:LEU:HD12	2:R:69:LEU:O	1.99	0.62
1:B:161:ILE:CG2	1:B:168:GLU:HB2	2.29	0.62
1:B:360:VAL:HG21	1:B:365:PRO:HB3	1.81	0.62
1:D:112:VAL:O	1:D:114:HIS:N	2.29	0.62
1:D:403:LEU:HG	1:D:405:LEU:HD12	1.81	0.62
1:D:743:PRO:HA	1:D:746:LYS:HB3	1.82	0.62
1:E:107:THR:CG2	1:E:115:LYS:HD2	2.29	0.62
1:A:354:SER:O	1:A:371:SER:HB2	1.99	0.62
1:A:403:LEU:HG	1:A:405:LEU:HD12	1.82	0.62
1:B:457:THR:OG1	1:B:468:LYS:HG3	1.99	0.62
1:C:189:ASP:O	1:C:191:GLU:N	2.32	0.62
1:D:99:GLU:C	1:D:101:GLY:H	2.02	0.62
1:D:185:ASP:O	1:D:190:PRO:HA	1.99	0.62
1:D:426:ILE:HD11	1:D:431:LYS:HG2	1.81	0.62
1:E:592:GLU:HB3	1:E:604:LEU:HD11	1.82	0.62
2:O:33:GLY:O	2:O:37:ARG:HG3	2.00	0.62
1:A:180:ASP:CG	1:A:181:ILE:H	2.02	0.62
1:B:152:LEU:HD21	1:B:154:ILE:HD11	1.81	0.62
1:C:447:SER:HB3	1:C:450:ASN:O	2.00	0.62
1:C:743:PRO:HA	1:C:746:LYS:HB3	1.82	0.62
1:C:752:LEU:O	1:C:756:ILE:HG12	1.99	0.62
1:D:193:LEU:O	1:D:197:LYS:HB2	1.99	0.62
1:D:199:LEU:C	1:D:201:ASP:H	2.03	0.62
1:D:310:GLU:OE2	1:D:340:LYS:HD2	1.99	0.62
1:D:360:VAL:HG21	1:D:365:PRO:HB3	1.80	0.62
1:D:728:ALA:O	1:D:732:ILE:HG12	2.00	0.62
1:E:403:LEU:HG	1:E:405:LEU:HD12	1.82	0.62
1:F:137:PHE:C	1:F:137:PHE:CD2	2.72	0.62
1:F:405:LEU:HD13	1:F:453:VAL:CG2	2.29	0.62
1:A:180:ASP:C	1:A:182:ILE:H	2.01	0.62
1:A:447:SER:HB3	1:A:450:ASN:O	1.98	0.62
1:E:447:SER:OG	1:E:448:ASP:N	2.33	0.62
1:F:186:LYS:HA	1:F:190:PRO:CD	2.25	0.62
2:S:13:LYS:HZ1	2:S:65:PHE:HB3	1.64	0.62
1:A:630:ARG:NE	2:O:83:GLU:HG2	2.15	0.62
1:A:728:ALA:O	1:A:732:ILE:HG12	1.99	0.62
1:B:446:ILE:HG12	1:B:447:SER:N	2.13	0.62
1:C:254:ARG:HB3	1:C:254:ARG:HH11	1.65	0.62
1:D:501:LEU:HD11	2:R:108:VAL:HG13	1.81	0.62
1:E:127:SER:HB3	1:E:133:GLU:OE2	2.00	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:O:69:LEU:HD12	2:O:69:LEU:O	2.00	0.62
2:Q:65:PHE:HB2	2:Q:66:PRO:CD	2.26	0.62
1:B:520:PRO:HG2	1:B:521:ASN:H	1.65	0.61
1:D:187:SER:N	1:D:188:LEU:O	2.33	0.61
1:E:301:ALA:O	1:E:303:LYS:N	2.33	0.61
1:E:520:PRO:HG2	1:E:521:ASN:H	1.65	0.61
1:F:107:THR:CG2	1:F:115:LYS:HD2	2.30	0.61
2:P:121:VAL:C	2:P:123:GLN:H	2.02	0.61
2:Q:55:VAL:HG21	2:Q:67:GLU:OE1	1.98	0.61
2:R:33:GLY:O	2:R:37:ARG:HG3	2.00	0.61
1:A:527:LYS:HD2	2:O:145:MET:O	2.00	0.61
1:A:655:ASN:HD22	1:A:655:ASN:N	1.95	0.61
1:B:115:LYS:HB3	1:B:115:LYS:HZ3	1.66	0.61
1:B:505:LYS:C	1:B:507:GLN:H	2.02	0.61
1:C:66:LEU:HD12	1:C:103:GLU:HA	1.81	0.61
1:C:70:GLU:HB2	1:C:107:THR:HG22	1.82	0.61
1:C:409:ARG:NE	1:C:413:LEU:HD21	2.15	0.61
1:E:185:ASP:O	1:E:190:PRO:CA	2.48	0.61
1:E:668:SER:CA	2:S:14:GLU:HG3	2.26	0.61
1:E:743:PRO:HA	1:E:746:LYS:HB3	1.82	0.61
1:F:127:SER:HB3	1:F:133:GLU:OE2	1.99	0.61
1:F:520:PRO:HG2	1:F:521:ASN:H	1.65	0.61
1:F:548:THR:N	4:F:906:CMP:N6	2.38	0.61
2:P:33:GLY:O	2:P:37:ARG:HG3	2.00	0.61
1:A:520:PRO:HG2	1:A:521:ASN:H	1.64	0.61
1:B:184:LYS:HZ2	1:B:191:GLU:HG3	1.66	0.61
1:C:99:GLU:C	1:C:101:GLY:H	2.02	0.61
1:F:409:ARG:NE	1:F:413:LEU:HD21	2.15	0.61
1:A:377:GLN:O	1:A:378:LEU:HD12	2.01	0.61
1:B:412:GLU:C	1:B:414:LYS:N	2.52	0.61
1:C:128:MET:O	1:C:128:MET:CG	2.48	0.61
1:E:501:LEU:HD11	2:S:108:VAL:HG13	1.82	0.61
1:F:360:VAL:HG21	1:F:365:PRO:HB3	1.81	0.61
1:F:501:LEU:HD11	2:T:108:VAL:HG13	1.82	0.61
2:T:92:PHE:O	2:T:94:LYS:N	2.32	0.61
1:A:343:VAL:HG13	1:A:487:PRO:HG2	1.82	0.61
1:E:412:GLU:C	1:E:414:LYS:N	2.51	0.61
2:O:92:PHE:O	2:O:94:LYS:N	2.32	0.61
2:T:97:ASN:ND2	2:T:97:ASN:N	2.37	0.61
1:A:409:ARG:NE	1:A:413:LEU:HD21	2.15	0.61
1:B:743:PRO:HA	1:B:746:LYS:HB3	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:180:ASP:O	1:C:182:ILE:N	2.33	0.61
1:C:193:LEU:O	1:C:197:LYS:HB2	2.01	0.61
1:F:301:ALA:O	1:F:303:LYS:N	2.34	0.61
1:A:372:LYS:HG3	1:A:373:LYS:HG2	1.82	0.61
1:B:193:LEU:O	1:B:197:LYS:HB2	2.00	0.61
1:B:372:LYS:HG3	1:B:373:LYS:HG2	1.81	0.61
1:E:355:SER:HB3	1:E:361:ALA:HA	1.83	0.61
1:F:99:GLU:C	1:F:101:GLY:H	2.03	0.61
1:F:446:ILE:HG13	1:F:452:GLU:O	2.00	0.61
2:Q:69:LEU:HD12	2:Q:69:LEU:O	2.00	0.61
2:Q:121:VAL:C	2:Q:123:GLN:H	2.02	0.61
1:B:185:ASP:O	1:B:190:PRO:CA	2.49	0.61
1:B:752:LEU:O	1:B:756:ILE:HG12	2.00	0.61
1:B:759:GLN:HE21	1:B:759:GLN:CA	2.09	0.61
1:C:403:LEU:HG	1:C:405:LEU:HD12	1.81	0.61
1:D:409:ARG:NE	1:D:413:LEU:HD21	2.16	0.61
1:D:752:LEU:O	1:D:756:ILE:HG12	1.99	0.61
1:E:134:LYS:C	1:E:136:PRO:HD3	2.21	0.61
1:F:457:THR:OG1	1:F:468:LYS:HG3	1.99	0.61
1:A:66:LEU:HD12	1:A:103:GLU:HA	1.83	0.61
1:A:446:ILE:HG13	1:A:452:GLU:O	2.01	0.61
1:B:83:GLN:O	1:B:85:LEU:N	2.34	0.61
1:B:128:MET:CG	1:B:128:MET:O	2.49	0.61
1:D:372:LYS:HG3	1:D:373:LYS:HG2	1.82	0.61
1:F:403:LEU:CD2	1:F:405:LEU:HD11	2.30	0.61
1:F:700:TYR:CE1	1:F:727:GLN:HB3	2.35	0.61
2:O:5:THR:CG2	2:O:8:GLN:HB2	2.28	0.61
1:A:515:LYS:HG2	1:A:515:LYS:O	2.01	0.61
1:B:257:LEU:HD12	1:B:261:ALA:HB3	1.83	0.61
1:C:360:VAL:HG21	1:C:365:PRO:HB3	1.80	0.61
1:D:189:ASP:O	1:D:191:GLU:N	2.33	0.61
1:D:403:LEU:CD2	1:D:405:LEU:HD11	2.30	0.61
1:F:630:ARG:NE	2:T:83:GLU:HG2	2.16	0.61
2:P:13:LYS:HZ1	2:P:65:PHE:HB3	1.64	0.61
1:A:115:LYS:HB3	1:A:115:LYS:HZ3	1.66	0.60
1:B:368:GLN:HB3	1:B:380:VAL:HG13	1.83	0.60
1:C:187:SER:N	1:C:188:LEU:O	2.34	0.60
1:C:372:LYS:HG3	1:C:373:LYS:HG2	1.82	0.60
1:D:66:LEU:HD12	1:D:103:GLU:HA	1.81	0.60
1:B:131:ARG:HG3	1:B:243:LEU:CD2	2.31	0.60
1:B:187:SER:N	1:B:188:LEU:O	2.34	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:131:ARG:HG3	1:C:243:LEU:HD21	1.83	0.60
1:D:182:ILE:O	1:D:187:SER:HB2	2.00	0.60
1:D:377:GLN:O	1:D:378:LEU:HD12	2.00	0.60
1:D:700:TYR:CE1	1:D:727:GLN:HB3	2.36	0.60
1:E:405:LEU:HD13	1:E:453:VAL:CG2	2.29	0.60
1:E:735:VAL:HG12	1:E:741:ILE:HD13	1.82	0.60
1:F:254:ARG:HB3	1:F:254:ARG:HH11	1.67	0.60
2:O:13:LYS:HZ3	2:O:65:PHE:HB3	1.63	0.60
1:A:189:ASP:O	1:A:191:GLU:N	2.34	0.60
1:B:107:THR:CG2	1:B:115:LYS:HD2	2.31	0.60
1:B:692:GLU:O	1:B:696:LYS:HG3	2.00	0.60
1:C:127:SER:HB3	1:C:133:GLU:OE2	2.01	0.60
1:C:182:ILE:O	1:C:187:SER:HB2	2.02	0.60
1:C:403:LEU:CD2	1:C:405:LEU:HD11	2.30	0.60
1:E:372:LYS:HG3	1:E:373:LYS:HG2	1.81	0.60
1:F:152:LEU:HD21	1:F:154:ILE:HD11	1.82	0.60
1:F:515:LYS:NZ	1:F:515:LYS:HB3	2.15	0.60
1:A:301:ALA:O	1:A:303:LYS:N	2.34	0.60
1:A:505:LYS:C	1:A:507:GLN:H	2.03	0.60
1:A:700:TYR:CE1	1:A:727:GLN:HB3	2.35	0.60
1:B:191:GLU:O	1:B:192:PHE:C	2.40	0.60
1:B:355:SER:HB3	1:B:361:ALA:HA	1.83	0.60
1:B:515:LYS:NZ	1:B:515:LYS:HB3	2.16	0.60
1:B:527:LYS:HD2	2:P:145:MET:O	2.02	0.60
1:C:343:VAL:HG13	1:C:487:PRO:HG2	1.82	0.60
1:D:134:LYS:C	1:D:136:PRO:HD3	2.22	0.60
1:E:655:ASN:HD22	1:E:655:ASN:N	1.98	0.60
1:F:499:PRO:HG2	1:F:504:ILE:HD11	1.83	0.60
1:A:120:LEU:CD1	1:A:120:LEU:C	2.70	0.60
1:A:752:LEU:O	1:A:756:ILE:HG12	2.00	0.60
1:B:180:ASP:O	1:B:182:ILE:N	2.34	0.60
1:B:354:SER:O	1:B:371:SER:HB2	2.01	0.60
1:B:409:ARG:NE	1:B:413:LEU:HD21	2.15	0.60
1:C:337:ASN:ND2	1:C:412:GLU:OE2	2.35	0.60
1:D:527:LYS:HD2	2:R:145:MET:O	2.01	0.60
1:E:368:GLN:HB3	1:E:380:VAL:HG13	1.83	0.60
1:E:409:ARG:NE	1:E:413:LEU:HD21	2.15	0.60
1:F:120:LEU:CD1	1:F:120:LEU:C	2.70	0.60
1:F:635:ILE:HD12	1:F:635:ILE:N	2.12	0.60
1:F:743:PRO:HA	1:F:746:LYS:HB3	1.82	0.60
2:T:33:GLY:O	2:T:37:ARG:HG3	2.01	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:368:GLN:HB3	1:A:380:VAL:HG13	1.83	0.60
1:B:189:ASP:O	1:B:190:PRO:C	2.36	0.60
1:B:337:ASN:ND2	1:B:412:GLU:OE2	2.34	0.60
1:C:122:GLU:O	1:C:122:GLU:HG2	2.02	0.60
1:C:134:LYS:HG2	1:C:136:PRO:CG	2.31	0.60
1:C:499:PRO:HG2	1:C:504:ILE:HD11	1.84	0.60
1:C:735:VAL:HG12	1:C:741:ILE:HD13	1.83	0.60
1:D:76:LEU:O	1:D:80:GLN:N	2.35	0.60
1:D:152:LEU:HD21	1:D:154:ILE:HD11	1.82	0.60
1:D:343:VAL:HG13	1:D:487:PRO:HG2	1.82	0.60
1:E:120:LEU:CD1	1:E:120:LEU:C	2.70	0.60
1:F:550:SER:H	1:F:553:GLN:HE21	1.49	0.60
1:F:692:GLU:O	1:F:696:LYS:HG3	2.01	0.60
1:F:752:LEU:O	1:F:756:ILE:HG12	2.00	0.60
1:C:301:ALA:O	1:C:303:LYS:N	2.35	0.60
1:D:180:ASP:O	1:D:182:ILE:N	2.34	0.60
1:E:148:GLU:HG3	1:E:149:THR:N	2.16	0.60
1:F:122:GLU:O	1:F:122:GLU:HG2	2.02	0.60
1:F:377:GLN:O	1:F:378:LEU:HD12	2.01	0.60
1:F:447:SER:HB3	1:F:450:ASN:O	2.00	0.60
1:F:594:PHE:HE2	1:F:596:ILE:HD11	1.67	0.60
1:A:134:LYS:C	1:A:136:PRO:HD3	2.21	0.60
1:B:175:LYS:NZ	1:B:175:LYS:CB	2.61	0.60
1:B:301:ALA:O	1:B:303:LYS:N	2.35	0.60
1:B:405:LEU:HD13	1:B:453:VAL:CG2	2.29	0.60
1:C:520:PRO:HG2	1:C:521:ASN:H	1.65	0.60
1:D:301:ALA:O	1:D:303:LYS:N	2.34	0.60
1:D:499:PRO:HG2	1:D:504:ILE:HD11	1.84	0.60
1:E:122:GLU:O	1:E:122:GLU:HG2	2.02	0.60
1:E:700:TYR:CE1	1:E:727:GLN:HB3	2.36	0.60
1:F:134:LYS:C	1:F:136:PRO:HD3	2.22	0.60
1:F:268:MET:O	1:F:271:LEU:HB2	2.02	0.60
1:A:743:PRO:HA	1:A:746:LYS:HB3	1.83	0.60
1:B:120:LEU:CD1	1:B:120:LEU:C	2.70	0.60
1:B:188:LEU:CD2	1:B:188:LEU:N	2.46	0.60
1:B:499:PRO:HG2	1:B:504:ILE:HD11	1.83	0.60
1:B:515:LYS:O	1:B:515:LYS:HG2	2.02	0.60
1:C:377:GLN:O	1:C:378:LEU:HD12	2.02	0.60
1:C:594:PHE:HE2	1:C:596:ILE:HD11	1.67	0.60
1:D:120:LEU:CD1	1:D:120:LEU:C	2.70	0.60
1:D:505:LYS:C	1:D:507:GLN:H	2.03	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:354:SER:O	1:F:371:SER:HB2	2.01	0.60
1:A:210:PHE:CD1	1:A:214:PHE:HB2	2.36	0.60
1:A:355:SER:HB3	1:A:361:ALA:HA	1.84	0.60
1:A:499:PRO:HG2	1:A:504:ILE:HD11	1.84	0.60
1:B:76:LEU:O	1:B:80:GLN:N	2.35	0.60
1:B:122:GLU:O	1:B:122:GLU:HG2	2.02	0.60
1:B:594:PHE:HE2	1:B:596:ILE:HD11	1.66	0.60
1:C:515:LYS:NZ	1:C:515:LYS:HB3	2.16	0.60
1:E:83:GLN:O	1:E:85:LEU:N	2.35	0.60
1:E:116:GLU:O	1:E:117:LEU:HD22	2.02	0.60
1:E:210:PHE:CD1	1:E:214:PHE:HB2	2.36	0.60
1:E:403:LEU:CD2	1:E:405:LEU:HD11	2.32	0.60
1:F:372:LYS:HG3	1:F:373:LYS:HG2	1.82	0.60
2:S:33:GLY:O	2:S:37:ARG:HG3	2.02	0.60
1:A:180:ASP:O	1:A:182:ILE:N	2.35	0.59
1:A:254:ARG:HB3	1:A:254:ARG:HH11	1.66	0.59
1:A:360:VAL:HG21	1:A:365:PRO:HB3	1.82	0.59
1:A:501:LEU:HD11	2:O:108:VAL:HG13	1.82	0.59
1:A:735:VAL:HG12	1:A:741:ILE:HD13	1.83	0.59
1:B:156:ILE:HD12	1:B:156:ILE:N	2.17	0.59
1:B:735:VAL:HG12	1:B:741:ILE:HD13	1.82	0.59
1:C:134:LYS:C	1:C:136:PRO:HD3	2.22	0.59
1:D:735:VAL:HG12	1:D:741:ILE:HD13	1.83	0.59
1:E:184:LYS:HZ2	1:E:191:GLU:HG3	1.67	0.59
1:B:700:TYR:CE1	1:B:727:GLN:HB3	2.37	0.59
1:C:116:GLU:O	1:C:117:LEU:HD22	2.02	0.59
1:C:185:ASP:O	1:C:190:PRO:HA	2.01	0.59
1:C:504:ILE:O	1:C:507:GLN:CB	2.50	0.59
1:D:83:GLN:O	1:D:85:LEU:N	2.35	0.59
1:D:122:GLU:HG2	1:D:122:GLU:O	2.02	0.59
1:D:144:GLU:HG2	1:D:177:ILE:HD11	1.83	0.59
1:D:173:ILE:HG13	1:D:242:SER:CB	2.27	0.59
1:D:346:LYS:HG3	1:D:350:VAL:HB	1.84	0.59
1:D:594:PHE:HE2	1:D:596:ILE:HD11	1.67	0.59
1:F:185:ASP:O	1:F:190:PRO:HA	2.02	0.59
1:F:337:ASN:ND2	1:F:412:GLU:OE2	2.34	0.59
2:P:121:VAL:C	2:P:123:GLN:N	2.55	0.59
1:A:152:LEU:HD21	1:A:154:ILE:HD11	1.83	0.59
1:B:134:LYS:C	1:B:136:PRO:HD3	2.23	0.59
1:B:671:ARG:O	1:B:674:SER:O	2.21	0.59
1:C:152:LEU:HD21	1:C:154:ILE:HD11	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:592:GLU:HB3	1:D:604:LEU:HD11	1.82	0.59
1:E:343:VAL:HG13	1:E:487:PRO:HG2	1.82	0.59
1:E:354:SER:O	1:E:371:SER:HB2	2.02	0.59
1:E:527:LYS:HD2	2:S:145:MET:O	2.02	0.59
1:F:735:VAL:HG12	1:F:741:ILE:HD13	1.83	0.59
1:B:504:ILE:O	1:B:507:GLN:CB	2.51	0.59
1:C:515:LYS:O	1:C:515:LYS:HG2	2.02	0.59
1:D:128:MET:HG2	1:D:128:MET:O	2.01	0.59
1:F:71:PHE:CB	1:F:108:ASP:HB2	2.33	0.59
1:F:355:SER:HB3	1:F:361:ALA:HA	1.85	0.59
1:F:368:GLN:HB3	1:F:380:VAL:HG13	1.83	0.59
1:A:83:GLN:C	1:A:85:LEU:H	2.06	0.59
1:B:343:VAL:HG13	1:B:487:PRO:HG2	1.84	0.59
1:C:120:LEU:CD1	1:C:120:LEU:C	2.70	0.59
1:C:355:SER:HB3	1:C:361:ALA:HA	1.84	0.59
1:D:116:GLU:O	1:D:117:LEU:HD22	2.03	0.59
1:D:254:ARG:HB3	1:D:254:ARG:HH11	1.66	0.59
1:A:218:LEU:C	1:A:220:LEU:H	2.05	0.59
1:A:594:PHE:CE1	1:A:602:PHE:HB3	2.38	0.59
1:B:116:GLU:O	1:B:117:LEU:HD22	2.03	0.59
1:C:76:LEU:O	1:C:80:GLN:N	2.34	0.59
1:C:197:LYS:NZ	1:C:197:LYS:HB3	2.18	0.59
2:P:92:PHE:O	2:P:94:LYS:N	2.33	0.59
1:A:671:ARG:O	1:A:674:SER:O	2.21	0.59
1:C:71:PHE:CB	1:C:108:ASP:HB2	2.33	0.59
1:C:199:LEU:C	1:C:201:ASP:H	2.06	0.59
1:C:368:GLN:HB3	1:C:380:VAL:HG13	1.82	0.59
1:C:557:LEU:HD11	1:C:575:VAL:HG12	1.85	0.59
1:D:337:ASN:ND2	1:D:412:GLU:OE2	2.35	0.59
1:F:346:LYS:HG3	1:F:350:VAL:HB	1.85	0.59
1:F:515:LYS:HG2	1:F:515:LYS:O	2.02	0.59
1:F:550:SER:H	1:F:553:GLN:NE2	2.00	0.59
1:A:76:LEU:O	1:A:80:GLN:N	2.36	0.59
1:A:175:LYS:NZ	1:A:175:LYS:CB	2.62	0.59
1:A:515:LYS:NZ	1:A:515:LYS:HB3	2.17	0.59
1:B:134:LYS:O	1:B:135:VAL:HG12	2.02	0.59
1:B:210:PHE:CD1	1:B:214:PHE:HB2	2.36	0.59
1:C:592:GLU:HB3	1:C:604:LEU:HD11	1.84	0.59
1:D:403:LEU:HG	1:D:405:LEU:CD1	2.33	0.59
1:E:76:LEU:O	1:E:80:GLN:N	2.35	0.59
1:E:180:ASP:O	1:E:183:SER:N	2.35	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:210:PHE:CD1	1:F:214:PHE:HB2	2.36	0.59
2:O:121:VAL:C	2:O:123:GLN:N	2.55	0.59
1:A:78:LYS:HD2	1:A:156:ILE:HD13	1.84	0.59
1:A:83:GLN:O	1:A:85:LEU:N	2.36	0.59
1:A:122:GLU:HG2	1:A:122:GLU:O	2.02	0.59
1:A:550:SER:H	1:A:553:GLN:HE21	1.48	0.59
1:B:364:ILE:O	1:B:477:MET:HG2	2.03	0.59
1:C:83:GLN:O	1:C:85:LEU:N	2.36	0.59
1:C:175:LYS:NZ	1:C:175:LYS:CB	2.62	0.59
1:C:184:LYS:NZ	1:C:191:GLU:HB2	2.17	0.59
1:D:180:ASP:O	1:D:183:SER:N	2.35	0.59
1:D:264:MET:O	1:D:267:TYR:HB3	2.03	0.59
1:E:337:ASN:ND2	1:E:412:GLU:OE2	2.35	0.59
1:E:515:LYS:NZ	1:E:515:LYS:HB3	2.17	0.59
2:Q:121:VAL:C	2:Q:123:GLN:N	2.56	0.59
1:A:248:TYR:CD2	1:A:248:TYR:O	2.56	0.59
1:A:346:LYS:HG3	1:A:350:VAL:HB	1.85	0.59
1:A:550:SER:H	1:A:553:GLN:NE2	2.01	0.59
1:B:74:GLU:HB2	1:B:78:LYS:CB	2.33	0.59
1:B:501:LEU:HD11	2:P:108:VAL:HG13	1.84	0.59
1:C:115:LYS:HD3	1:C:153:ILE:HD13	1.84	0.59
1:C:346:LYS:HG3	1:C:350:VAL:HB	1.85	0.59
1:D:368:GLN:HB3	1:D:380:VAL:HG13	1.83	0.59
1:D:504:ILE:O	1:D:507:GLN:CB	2.51	0.59
1:E:180:ASP:C	1:E:182:ILE:N	2.55	0.59
1:E:264:MET:O	1:E:267:TYR:HB3	2.03	0.59
1:E:515:LYS:O	1:E:515:LYS:HG2	2.02	0.59
1:F:161:ILE:CG2	1:F:168:GLU:HB2	2.33	0.59
1:F:403:LEU:HG	1:F:405:LEU:CD1	2.33	0.59
1:A:337:ASN:ND2	1:A:412:GLU:OE2	2.34	0.58
1:B:377:GLN:O	1:B:378:LEU:HD12	2.02	0.58
1:C:186:LYS:HE3	1:C:234:LEU:HB2	1.84	0.58
1:D:127:SER:HB3	1:D:133:GLU:OE2	2.03	0.58
1:E:759:GLN:HE21	1:E:759:GLN:CA	2.10	0.58
1:F:180:ASP:CG	1:F:181:ILE:H	2.05	0.58
1:A:412:GLU:O	1:A:414:LYS:N	2.37	0.58
1:A:598:PRO:HG3	1:A:624:TYR:OH	2.02	0.58
1:B:131:ARG:HG3	1:B:243:LEU:HD22	1.83	0.58
1:B:197:LYS:HB3	1:B:197:LYS:NZ	2.18	0.58
1:B:602:PHE:N	1:B:602:PHE:CD2	2.72	0.58
1:D:210:PHE:CD1	1:D:214:PHE:HB2	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:355:SER:HB3	1:D:361:ALA:HA	1.84	0.58
1:E:248:TYR:CD2	1:E:248:TYR:O	2.56	0.58
1:E:412:GLU:O	1:E:414:LYS:N	2.36	0.58
1:E:598:PRO:HG3	1:E:624:TYR:OH	2.03	0.58
1:F:130:SER:HB2	1:F:170:TYR:CE2	2.38	0.58
1:F:364:ILE:O	1:F:477:MET:HG2	2.03	0.58
1:B:244:ALA:HB3	1:B:268:MET:HE3	1.84	0.58
1:B:412:GLU:O	1:B:414:LYS:N	2.36	0.58
1:B:788:ASP:O	1:B:792:VAL:HG23	2.03	0.58
1:C:550:SER:H	1:C:553:GLN:HE21	1.51	0.58
1:D:199:LEU:HD11	1:D:226:ASP:OD2	2.03	0.58
1:D:550:SER:H	1:D:553:GLN:HE21	1.50	0.58
1:E:184:LYS:NZ	1:E:191:GLU:HB2	2.19	0.58
1:E:185:ASP:O	1:E:190:PRO:CD	2.51	0.58
1:E:197:LYS:HB3	1:E:197:LYS:NZ	2.17	0.58
1:E:594:PHE:HE2	1:E:596:ILE:HD11	1.67	0.58
2:R:5:THR:CG2	2:R:8:GLN:HB2	2.28	0.58
1:A:173:ILE:HG13	1:A:242:SER:CB	2.29	0.58
1:B:192:PHE:O	1:B:196:ILE:HG13	2.03	0.58
1:C:83:GLN:C	1:C:85:LEU:H	2.07	0.58
1:D:71:PHE:CB	1:D:108:ASP:HB2	2.33	0.58
1:D:184:LYS:HZ1	1:D:191:GLU:HB2	1.66	0.58
1:D:318:ILE:CG2	1:D:322:LEU:HD12	2.32	0.58
1:D:515:LYS:HG2	1:D:515:LYS:O	2.02	0.58
1:F:217:LYS:NZ	1:F:217:LYS:HB3	2.19	0.58
1:F:318:ILE:CG2	1:F:322:LEU:HD12	2.32	0.58
1:B:83:GLN:C	1:B:85:LEU:H	2.06	0.58
1:B:346:LYS:HG3	1:B:350:VAL:HB	1.85	0.58
1:D:515:LYS:HB3	1:D:515:LYS:NZ	2.17	0.58
1:D:630:ARG:NE	2:R:83:GLU:HG2	2.18	0.58
1:D:788:ASP:O	1:D:792:VAL:HG23	2.04	0.58
1:E:670:ILE:HG21	1:E:744:GLU:HB2	1.85	0.58
2:S:92:PHE:O	2:S:94:LYS:N	2.33	0.58
1:A:164:GLU:O	1:A:167:LYS:HE3	2.03	0.58
1:A:186:LYS:HE3	1:A:234:LEU:HB2	1.86	0.58
1:A:264:MET:O	1:A:267:TYR:HB3	2.03	0.58
1:A:670:ILE:HG21	1:A:744:GLU:HB2	1.86	0.58
1:B:264:MET:O	1:B:267:TYR:HB3	2.04	0.58
1:B:403:LEU:HG	1:B:405:LEU:CD1	2.34	0.58
1:C:639:ASN:HD22	1:C:639:ASN:C	2.07	0.58
1:C:670:ILE:HG21	1:C:744:GLU:HB2	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:405:LEU:HD13	1:D:453:VAL:CG2	2.29	0.58
1:D:670:ILE:HG21	1:D:744:GLU:HB2	1.86	0.58
1:E:364:ILE:O	1:E:477:MET:HG2	2.04	0.58
1:F:76:LEU:O	1:F:80:GLN:N	2.35	0.58
1:F:83:GLN:O	1:F:85:LEU:N	2.37	0.58
1:F:115:LYS:HB3	1:F:115:LYS:HZ3	1.67	0.58
1:B:71:PHE:CB	1:B:108:ASP:HB2	2.33	0.58
1:C:164:GLU:O	1:C:167:LYS:HE3	2.04	0.58
1:C:199:LEU:HD11	1:C:226:ASP:OD2	2.04	0.58
1:C:210:PHE:CD1	1:C:214:PHE:HB2	2.35	0.58
1:D:412:GLU:O	1:D:414:LYS:N	2.36	0.58
1:E:254:ARG:HB3	1:E:254:ARG:HH11	1.69	0.58
1:E:499:PRO:HG2	1:E:504:ILE:HD11	1.85	0.58
1:F:197:LYS:NZ	1:F:197:LYS:HB3	2.19	0.58
2:R:121:VAL:C	2:R:123:GLN:N	2.56	0.58
1:A:116:GLU:O	1:A:117:LEU:HD22	2.04	0.58
1:A:184:LYS:HZ1	1:A:191:GLU:HB2	1.69	0.58
1:A:403:LEU:CD2	1:A:405:LEU:HD11	2.31	0.58
1:A:504:ILE:O	1:A:507:GLN:CB	2.52	0.58
1:B:128:MET:CE	1:B:239:HIS:NE2	2.67	0.58
1:B:403:LEU:CD2	1:B:405:LEU:HD11	2.30	0.58
1:B:594:PHE:CE1	1:B:602:PHE:HB3	2.39	0.58
1:B:670:ILE:HG21	1:B:744:GLU:HB2	1.86	0.58
1:C:244:ALA:HB3	1:C:268:MET:HE3	1.85	0.58
1:D:268:MET:O	1:D:271:LEU:HB2	2.04	0.58
1:E:199:LEU:HD11	1:E:226:ASP:OD2	2.04	0.58
1:E:218:LEU:C	1:E:220:LEU:H	2.07	0.58
1:F:180:ASP:C	1:F:182:ILE:N	2.57	0.58
1:F:788:ASP:O	1:F:792:VAL:HG23	2.03	0.58
1:A:71:PHE:CB	1:A:108:ASP:HB2	2.33	0.58
1:A:364:ILE:O	1:A:477:MET:HG2	2.04	0.58
1:A:592:GLU:HB3	1:A:604:LEU:HD11	1.84	0.58
1:B:127:SER:HB3	1:B:133:GLU:OE2	2.04	0.58
1:B:186:LYS:HE3	1:B:234:LEU:HB2	1.86	0.58
1:C:83:GLN:C	1:C:85:LEU:N	2.57	0.58
1:C:197:LYS:HB3	1:C:197:LYS:HZ2	1.68	0.58
1:D:602:PHE:N	1:D:602:PHE:CD2	2.72	0.58
1:E:403:LEU:HG	1:E:405:LEU:CD1	2.34	0.58
1:F:116:GLU:O	1:F:117:LEU:HD22	2.03	0.58
1:F:655:ASN:N	1:F:655:ASN:ND2	2.51	0.58
1:F:670:ILE:HG21	1:F:744:GLU:HB2	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:275:GLY:O	1:A:278:LYS:HB2	2.04	0.58
1:A:403:LEU:HG	1:A:405:LEU:CD1	2.34	0.58
1:B:225:ILE:HG12	1:B:229:PHE:HE2	1.69	0.58
1:C:318:ILE:CG2	1:C:322:LEU:HD12	2.34	0.58
1:C:693:SER:O	1:C:696:LYS:HB2	2.04	0.58
1:C:788:ASP:O	1:C:792:VAL:HG23	2.04	0.58
1:D:248:TYR:HD2	1:D:248:TYR:O	1.87	0.58
1:D:594:PHE:CE1	1:D:602:PHE:HB3	2.38	0.58
1:E:346:LYS:HG3	1:E:350:VAL:HB	1.85	0.58
1:E:504:ILE:O	1:E:507:GLN:CB	2.51	0.58
1:A:405:LEU:HD13	1:A:453:VAL:CG2	2.29	0.57
1:B:128:MET:HE3	1:B:239:HIS:NE2	2.19	0.57
1:C:403:LEU:HG	1:C:405:LEU:CD1	2.34	0.57
1:D:134:LYS:CG	1:D:136:PRO:HD3	2.27	0.57
1:D:196:ILE:HA	1:D:199:LEU:HD12	1.86	0.57
1:D:197:LYS:NZ	1:D:197:LYS:HB3	2.18	0.57
1:D:248:TYR:O	1:D:248:TYR:CD2	2.57	0.57
1:D:671:ARG:O	1:D:674:SER:O	2.22	0.57
1:F:592:GLU:HB3	1:F:604:LEU:HD11	1.85	0.57
2:Q:36:MET:HE3	2:Q:43:PRO:HG3	1.84	0.57
1:A:156:ILE:N	1:A:156:ILE:HD12	2.19	0.57
1:A:199:LEU:HD11	1:A:226:ASP:OD2	2.04	0.57
1:A:318:ILE:CG2	1:A:322:LEU:HD12	2.33	0.57
1:C:217:LYS:NZ	1:C:217:LYS:HB3	2.19	0.57
1:C:464:VAL:CG2	1:C:465:LEU:HD12	2.33	0.57
1:C:557:LEU:HD11	1:C:575:VAL:CG1	2.34	0.57
1:D:186:LYS:HE3	1:D:234:LEU:HB2	1.85	0.57
1:E:244:ALA:HB3	1:E:268:MET:HE3	1.85	0.57
1:E:550:SER:H	1:E:553:GLN:HE21	1.50	0.57
1:E:594:PHE:CE1	1:E:602:PHE:HB3	2.39	0.57
1:F:164:GLU:O	1:F:167:LYS:HE3	2.04	0.57
1:A:248:TYR:O	1:A:248:TYR:HD2	1.87	0.57
1:A:788:ASP:O	1:A:792:VAL:HG23	2.04	0.57
1:B:164:GLU:O	1:B:167:LYS:HE3	2.05	0.57
1:B:244:ALA:CB	1:B:268:MET:HE3	2.34	0.57
1:C:364:ILE:O	1:C:477:MET:HG2	2.04	0.57
1:C:412:GLU:O	1:C:414:LYS:N	2.37	0.57
1:C:548:THR:N	4:C:903:CMP:N6	2.38	0.57
1:D:156:ILE:HD12	1:D:156:ILE:N	2.19	0.57
1:D:244:ALA:HB3	1:D:268:MET:HE3	1.87	0.57
1:E:156:ILE:HD12	1:E:156:ILE:N	2.19	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:192:PHE:HA	1:F:195:LEU:HB3	1.86	0.57
1:F:661:ALA:O	1:F:665:LYS:HD3	2.05	0.57
1:A:83:GLN:C	1:A:85:LEU:N	2.57	0.57
1:A:192:PHE:O	1:A:196:ILE:HG13	2.04	0.57
1:B:268:MET:O	1:B:271:LEU:HB2	2.04	0.57
1:C:655:ASN:N	1:C:655:ASN:ND2	2.52	0.57
1:D:83:GLN:C	1:D:85:LEU:H	2.07	0.57
1:D:443:GLU:HG3	1:D:458:LYS:HG2	1.86	0.57
1:E:186:LYS:HB2	1:E:190:PRO:CD	2.34	0.57
1:E:602:PHE:N	1:E:602:PHE:CD2	2.71	0.57
1:F:196:ILE:HA	1:F:199:LEU:HD12	1.87	0.57
1:F:343:VAL:HG13	1:F:487:PRO:HG2	1.86	0.57
1:A:268:MET:O	1:A:271:LEU:HB2	2.04	0.57
1:B:254:ARG:HB3	1:B:254:ARG:HH11	1.68	0.57
1:C:338:LEU:O	1:C:343:VAL:HG23	2.05	0.57
1:C:630:ARG:NE	2:Q:83:GLU:HG2	2.18	0.57
1:D:598:PRO:HG3	1:D:624:TYR:OH	2.03	0.57
1:E:268:MET:O	1:E:271:LEU:HB2	2.04	0.57
1:E:275:GLY:O	1:E:278:LYS:HB2	2.03	0.57
1:E:550:SER:H	1:E:553:GLN:NE2	2.03	0.57
1:F:248:TYR:CD2	1:F:248:TYR:O	2.57	0.57
1:F:504:ILE:O	1:F:507:GLN:CB	2.52	0.57
1:F:508:ILE:HG12	1:F:536:TYR:CD2	2.40	0.57
1:A:180:ASP:O	1:A:183:SER:N	2.36	0.57
1:A:244:ALA:HB3	1:A:268:MET:HE3	1.86	0.57
1:B:78:LYS:HD2	1:B:156:ILE:HD13	1.85	0.57
1:B:192:PHE:HA	1:B:195:LEU:HB3	1.86	0.57
1:B:217:LYS:HB3	1:B:217:LYS:NZ	2.19	0.57
1:C:173:ILE:HG13	1:C:242:SER:CB	2.27	0.57
1:C:264:MET:O	1:C:267:TYR:HB3	2.05	0.57
1:C:527:LYS:HD2	2:Q:145:MET:O	2.04	0.57
1:D:115:LYS:HD3	1:D:153:ILE:HD13	1.86	0.57
1:D:218:LEU:C	1:D:220:LEU:H	2.05	0.57
1:D:275:GLY:O	1:D:278:LYS:HB2	2.04	0.57
1:F:180:ASP:O	1:F:183:SER:N	2.38	0.57
1:F:598:PRO:HG3	1:F:624:TYR:OH	2.04	0.57
2:T:121:VAL:C	2:T:123:GLN:N	2.56	0.57
1:A:196:ILE:HA	1:A:199:LEU:HD12	1.87	0.57
1:A:275:GLY:HA2	1:A:278:LYS:CG	2.32	0.57
1:B:180:ASP:O	1:B:183:SER:N	2.36	0.57
1:B:598:PRO:HG3	1:B:624:TYR:OH	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:632:TYR:O	1:B:633:ASN:HB2	2.05	0.57
1:B:639:ASN:C	1:B:639:ASN:HD22	2.08	0.57
1:C:156:ILE:N	1:C:156:ILE:HD12	2.19	0.57
1:D:128:MET:O	1:D:128:MET:CG	2.49	0.57
1:D:338:LEU:O	1:D:343:VAL:HG23	2.05	0.57
1:E:164:GLU:O	1:E:167:LYS:HE3	2.05	0.57
1:E:550:SER:HB3	1:E:553:GLN:HB2	1.87	0.57
1:F:83:GLN:C	1:F:85:LEU:H	2.08	0.57
1:F:115:LYS:HD3	1:F:153:ILE:HD13	1.86	0.57
1:F:527:LYS:HD2	2:T:145:MET:O	2.03	0.57
1:F:594:PHE:CE1	1:F:602:PHE:HB3	2.40	0.57
2:P:84:GLU:N	2:P:84:GLU:OE2	2.38	0.57
1:A:225:ILE:HG12	1:A:229:PHE:HE2	1.69	0.57
1:A:338:LEU:O	1:A:343:VAL:HG23	2.05	0.57
1:B:148:GLU:HG3	1:B:149:THR:N	2.18	0.57
1:B:217:LYS:HB3	1:B:217:LYS:HZ2	1.68	0.57
1:B:368:GLN:CB	1:B:380:VAL:HG13	2.35	0.57
1:B:550:SER:H	1:B:553:GLN:NE2	2.03	0.57
1:C:248:TYR:O	1:C:248:TYR:CD2	2.57	0.57
1:C:268:MET:O	1:C:271:LEU:HB2	2.04	0.57
1:E:368:GLN:CB	1:E:380:VAL:HG13	2.35	0.57
1:E:639:ASN:C	1:E:639:ASN:HD22	2.07	0.57
1:E:788:ASP:O	1:E:792:VAL:HG23	2.04	0.57
1:F:264:MET:O	1:F:267:TYR:HB3	2.04	0.57
2:S:121:VAL:C	2:S:123:GLN:N	2.56	0.57
1:A:161:ILE:CG2	1:A:168:GLU:HB2	2.34	0.57
1:A:184:LYS:NZ	1:A:191:GLU:HB2	2.20	0.57
1:B:122:GLU:HG3	1:B:147:ARG:HB2	1.87	0.57
1:B:173:ILE:HG13	1:B:242:SER:CB	2.28	0.57
1:B:248:TYR:CD2	1:B:248:TYR:O	2.58	0.57
1:B:275:GLY:O	1:B:278:LYS:HB2	2.05	0.57
1:C:107:THR:CG2	1:C:115:LYS:HD2	2.35	0.57
1:D:123:GLU:HG2	1:D:124:GLU:H	1.70	0.57
1:D:776:LEU:O	1:D:780:LEU:CD2	2.53	0.57
1:E:83:GLN:C	1:E:85:LEU:H	2.07	0.57
1:F:144:GLU:HG2	1:F:177:ILE:HD11	1.87	0.57
1:A:122:GLU:HG3	1:A:147:ARG:HB2	1.87	0.57
1:A:443:GLU:HG3	1:A:458:LYS:HG2	1.87	0.57
1:C:196:ILE:HA	1:C:199:LEU:HD12	1.87	0.57
1:C:594:PHE:CE1	1:C:602:PHE:HB3	2.39	0.57
1:D:83:GLN:C	1:D:85:LEU:N	2.57	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:122:GLU:HG3	1:D:147:ARG:HB2	1.87	0.57
1:D:217:LYS:NZ	1:D:217:LYS:HB3	2.20	0.57
1:D:655:ASN:N	1:D:655:ASN:ND2	2.52	0.57
1:E:71:PHE:CB	1:E:108:ASP:HB2	2.33	0.57
1:E:196:ILE:HA	1:E:199:LEU:HD12	1.87	0.57
1:E:284:LYS:HA	1:E:284:LYS:HE3	1.87	0.57
1:F:83:GLN:C	1:F:85:LEU:N	2.57	0.57
1:F:191:GLU:C	1:F:193:LEU:N	2.59	0.57
1:F:275:GLY:O	1:F:278:LYS:HB2	2.04	0.57
1:F:412:GLU:O	1:F:414:LYS:N	2.37	0.57
2:R:84:GLU:N	2:R:84:GLU:OE2	2.38	0.57
1:B:184:LYS:HZ1	1:B:191:GLU:HB2	1.70	0.56
1:B:252:ASP:CG	1:B:253:HIS:H	2.09	0.56
1:C:78:LYS:HD2	1:C:156:ILE:HD13	1.86	0.56
1:C:275:GLY:O	1:C:278:LYS:HB2	2.05	0.56
1:C:368:GLN:CB	1:C:380:VAL:HG13	2.34	0.56
1:C:776:LEU:O	1:C:780:LEU:CD2	2.53	0.56
1:D:124:GLU:OE2	1:D:129:ASN:ND2	2.38	0.56
1:E:78:LYS:HD2	1:E:156:ILE:HD13	1.86	0.56
1:F:199:LEU:HD11	1:F:226:ASP:OD2	2.04	0.56
1:F:284:LYS:HA	1:F:284:LYS:HE3	1.87	0.56
1:A:197:LYS:NZ	1:A:197:LYS:HB3	2.19	0.56
1:B:83:GLN:C	1:B:85:LEU:N	2.56	0.56
1:C:180:ASP:O	1:C:183:SER:N	2.36	0.56
1:C:252:ASP:CG	1:C:253:HIS:H	2.09	0.56
1:C:284:LYS:HA	1:C:284:LYS:HE3	1.87	0.56
1:C:598:PRO:HG3	1:C:624:TYR:OH	2.05	0.56
1:D:364:ILE:O	1:D:477:MET:HG2	2.05	0.56
1:E:161:ILE:HG23	1:E:168:GLU:HB2	1.86	0.56
1:F:78:LYS:HD2	1:F:156:ILE:HD13	1.86	0.56
1:F:79:ILE:C	1:F:81:GLN:H	2.09	0.56
1:F:192:PHE:O	1:F:196:ILE:HG13	2.05	0.56
1:F:368:GLN:HG3	1:F:383:GLY:C	2.25	0.56
1:F:557:LEU:HD11	1:F:575:VAL:HG12	1.87	0.56
2:O:13:LYS:HZ1	2:O:65:PHE:CB	2.18	0.56
1:A:326:ILE:HG22	1:A:328:PHE:CE1	2.40	0.56
1:A:776:LEU:O	1:A:780:LEU:CD2	2.53	0.56
1:B:154:ILE:HG13	1:B:171:TYR:CD1	2.41	0.56
1:B:180:ASP:C	1:B:182:ILE:N	2.58	0.56
1:B:318:ILE:CG2	1:B:322:LEU:HD12	2.33	0.56
1:B:655:ASN:N	1:B:655:ASN:ND2	2.53	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:550:SER:H	1:C:553:GLN:NE2	2.02	0.56
1:D:76:LEU:H	1:D:76:LEU:CD2	2.19	0.56
1:E:192:PHE:HA	1:E:195:LEU:HB3	1.87	0.56
1:E:217:LYS:HB3	1:E:217:LYS:NZ	2.20	0.56
1:E:338:LEU:O	1:E:343:VAL:HG23	2.05	0.56
1:E:376:GLN:C	1:E:378:LEU:H	2.08	0.56
1:E:508:ILE:HG12	1:E:536:TYR:CD2	2.40	0.56
1:E:661:ALA:O	1:E:665:LYS:HD3	2.05	0.56
1:F:131:ARG:HG3	1:F:243:LEU:HD21	1.87	0.56
1:F:668:SER:CA	2:T:14:GLU:HG3	2.29	0.56
2:Q:25:GLY:HA3	2:Q:65:PHE:CE1	2.41	0.56
2:T:11:GLU:O	2:T:13:LYS:N	2.38	0.56
1:B:738:SER:OG	1:B:739:LYS:N	2.38	0.56
1:D:180:ASP:CG	1:D:181:ILE:H	2.09	0.56
1:D:550:SER:H	1:D:553:GLN:NE2	2.02	0.56
1:D:661:ALA:O	1:D:665:LYS:HD3	2.04	0.56
1:E:122:GLU:HG3	1:E:147:ARG:HB2	1.87	0.56
1:F:134:LYS:CG	1:F:136:PRO:HD3	2.27	0.56
1:A:217:LYS:NZ	1:A:217:LYS:HB3	2.19	0.56
1:A:334:LEU:H	1:A:334:LEU:HD12	1.70	0.56
1:B:196:ILE:HA	1:B:199:LEU:HD12	1.87	0.56
1:B:338:LEU:O	1:B:343:VAL:HG23	2.06	0.56
1:C:122:GLU:HG3	1:C:147:ARG:HB2	1.87	0.56
1:C:144:GLU:HG2	1:C:177:ILE:HD11	1.88	0.56
1:D:284:LYS:HA	1:D:284:LYS:HE3	1.87	0.56
1:D:639:ASN:C	1:D:639:ASN:HD22	2.09	0.56
1:D:738:SER:OG	1:D:739:LYS:N	2.38	0.56
1:E:252:ASP:O	1:E:254:ARG:HD2	2.05	0.56
1:F:175:LYS:O	1:F:177:ILE:N	2.38	0.56
1:F:175:LYS:O	1:F:178:SER:N	2.38	0.56
1:F:244:ALA:HB3	1:F:268:MET:HE3	1.87	0.56
1:F:602:PHE:CD2	1:F:602:PHE:N	2.71	0.56
1:F:759:GLN:HE21	1:F:759:GLN:CA	2.10	0.56
2:R:25:GLY:HA3	2:R:65:PHE:CE1	2.41	0.56
1:A:333:LYS:HA	1:A:336:THR:OG1	2.06	0.56
1:B:199:LEU:HD11	1:B:226:ASP:OD2	2.04	0.56
1:B:284:LYS:HA	1:B:284:LYS:HE3	1.87	0.56
1:B:550:SER:H	1:B:553:GLN:HE21	1.51	0.56
1:D:275:GLY:HA2	1:D:278:LYS:CG	2.31	0.56
1:D:368:GLN:HG3	1:D:383:GLY:C	2.25	0.56
1:D:470:ASN:O	1:D:472:ARG:HG3	2.06	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:79:ILE:C	1:E:81:GLN:H	2.09	0.56
1:E:186:LYS:HE3	1:E:234:LEU:HB2	1.87	0.56
1:E:217:LYS:HB3	1:E:217:LYS:HZ2	1.70	0.56
1:E:225:ILE:HG12	1:E:229:PHE:HE2	1.71	0.56
1:F:172:GLU:O	1:F:175:LYS:HB3	2.06	0.56
1:F:368:GLN:CB	1:F:380:VAL:HG13	2.35	0.56
1:F:557:LEU:HD11	1:F:575:VAL:CG1	2.36	0.56
2:T:76:MET:HG3	2:T:76:MET:O	2.06	0.56
1:A:192:PHE:HA	1:A:195:LEU:HB3	1.87	0.56
1:A:368:GLN:CB	1:A:380:VAL:HG13	2.34	0.56
1:B:161:ILE:HG23	1:B:168:GLU:HB2	1.87	0.56
1:B:376:GLN:C	1:B:378:LEU:H	2.09	0.56
1:C:184:LYS:HD2	1:C:188:LEU:HG	1.88	0.56
1:C:279:ILE:O	1:C:283:LEU:HD13	2.06	0.56
1:D:192:PHE:O	1:D:196:ILE:HG13	2.05	0.56
1:D:632:TYR:O	1:D:633:ASN:HB2	2.06	0.56
2:S:25:GLY:HA3	2:S:65:PHE:CE1	2.41	0.56
2:S:76:MET:HG3	2:S:76:MET:O	2.06	0.56
1:A:128:MET:O	1:A:128:MET:HG3	2.05	0.56
1:B:115:LYS:HD3	1:B:153:ILE:HD13	1.87	0.56
1:B:275:GLY:HA2	1:B:278:LYS:CG	2.33	0.56
1:B:550:SER:HB3	1:B:553:GLN:HB2	1.88	0.56
1:C:130:SER:HB2	1:C:170:TYR:CE2	2.40	0.56
1:C:180:ASP:CG	1:C:181:ILE:H	2.08	0.56
1:C:709:ASN:HB2	2:Q:130:ILE:HG23	1.87	0.56
1:F:122:GLU:HG3	1:F:147:ARG:HB2	1.87	0.56
1:F:156:ILE:N	1:F:156:ILE:HD12	2.20	0.56
1:F:628:PHE:CD1	1:F:645:TRP:CD1	2.93	0.56
1:F:639:ASN:HD22	1:F:639:ASN:C	2.08	0.56
1:A:447:SER:OG	1:A:448:ASP:N	2.37	0.56
1:B:443:GLU:HG3	1:B:458:LYS:HG2	1.87	0.56
1:B:709:ASN:HB2	2:P:130:ILE:HG23	1.87	0.56
1:C:405:LEU:CD1	1:C:453:VAL:HG21	2.32	0.56
1:D:78:LYS:HD2	1:D:156:ILE:HD13	1.87	0.56
1:D:409:ARG:O	1:D:413:LEU:HG	2.06	0.56
1:D:557:LEU:HD11	1:D:575:VAL:CG1	2.36	0.56
1:E:115:LYS:HD3	1:E:153:ILE:HD13	1.87	0.56
1:E:252:ASP:CG	1:E:253:HIS:H	2.09	0.56
1:F:447:SER:OG	1:F:448:ASP:N	2.39	0.56
2:O:84:GLU:N	2:O:84:GLU:OE2	2.39	0.56
1:A:368:GLN:HG3	1:A:383:GLY:C	2.26	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:136:PRO:O	1:B:137:PHE:C	2.45	0.56
1:B:218:LEU:C	1:B:220:LEU:H	2.05	0.56
1:B:508:ILE:HG12	1:B:536:TYR:CD2	2.41	0.56
1:C:368:GLN:HG3	1:C:383:GLY:C	2.26	0.56
1:C:443:GLU:HG3	1:C:458:LYS:HG2	1.87	0.56
1:D:244:ALA:CB	1:D:268:MET:HE3	2.36	0.56
1:D:333:LYS:HA	1:D:336:THR:OG1	2.06	0.56
1:E:165:GLN:C	1:E:167:LYS:H	2.09	0.56
1:F:128:MET:CG	1:F:128:MET:O	2.50	0.56
1:F:184:LYS:HD2	1:F:188:LEU:HG	1.88	0.56
1:A:244:ALA:CB	1:A:268:MET:HE3	2.37	0.55
1:C:96:ILE:O	1:C:100:LEU:HG	2.06	0.55
1:C:333:LYS:HA	1:C:336:THR:OG1	2.06	0.55
1:C:550:SER:HB3	1:C:553:GLN:HB2	1.89	0.55
1:D:164:GLU:O	1:D:167:LYS:HE3	2.05	0.55
1:D:301:ALA:C	1:D:303:LYS:N	2.60	0.55
1:D:368:GLN:CB	1:D:380:VAL:HG13	2.35	0.55
1:E:628:PHE:CD1	1:E:645:TRP:CD1	2.94	0.55
1:E:671:ARG:O	1:E:674:SER:O	2.24	0.55
1:F:334:LEU:HD12	1:F:334:LEU:H	1.70	0.55
1:F:550:SER:HB3	1:F:553:GLN:HB2	1.88	0.55
2:P:16:PHE:HA	2:P:35:VAL:CG1	2.37	0.55
2:S:16:PHE:HA	2:S:35:VAL:CG1	2.37	0.55
1:A:184:LYS:HZ2	1:A:191:GLU:HG3	1.72	0.55
1:A:217:LYS:HB3	1:A:217:LYS:HZ2	1.70	0.55
1:A:376:GLN:C	1:A:378:LEU:H	2.09	0.55
1:A:550:SER:HB3	1:A:553:GLN:CB	2.37	0.55
1:A:722:ILE:HD13	1:A:764:LEU:CD2	2.37	0.55
1:B:301:ALA:C	1:B:303:LYS:N	2.60	0.55
1:B:628:PHE:CD1	1:B:645:TRP:CD1	2.94	0.55
1:C:184:LYS:HZ1	1:C:191:GLU:HB2	1.71	0.55
1:C:234:LEU:O	1:C:238:GLN:HG3	2.06	0.55
1:D:130:SER:HB2	1:D:170:TYR:CE2	2.41	0.55
1:E:192:PHE:O	1:E:196:ILE:HG13	2.06	0.55
1:F:165:GLN:OE1	1:F:252:ASP:HB3	2.06	0.55
1:F:184:LYS:HZ1	1:F:191:GLU:HB2	1.72	0.55
1:F:699:GLY:O	1:F:702:SER:N	2.40	0.55
2:Q:65:PHE:CB	2:Q:66:PRO:HD3	2.33	0.55
1:B:248:TYR:O	1:B:248:TYR:HD2	1.89	0.55
1:C:172:GLU:O	1:C:175:LYS:HB3	2.06	0.55
1:C:175:LYS:O	1:C:177:ILE:N	2.40	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:244:ALA:CB	1:C:268:MET:HE3	2.36	0.55
1:C:248:TYR:CD2	1:C:248:TYR:C	2.80	0.55
1:D:172:GLU:O	1:D:175:LYS:HB3	2.07	0.55
1:D:323:ASN:C	1:D:323:ASN:HD22	2.10	0.55
1:D:497:LEU:CD1	1:D:556:MET:HG2	2.36	0.55
1:E:115:LYS:HB3	1:E:115:LYS:HZ3	1.71	0.55
1:E:368:GLN:HG3	1:E:383:GLY:C	2.26	0.55
1:E:464:VAL:CG2	1:E:465:LEU:HD12	2.33	0.55
1:E:550:SER:HB3	1:E:553:GLN:CB	2.36	0.55
1:F:136:PRO:O	1:F:137:PHE:C	2.45	0.55
1:F:248:TYR:CD2	1:F:248:TYR:C	2.80	0.55
1:F:409:ARG:O	1:F:413:LEU:HG	2.06	0.55
1:F:654:ILE:C	1:F:655:ASN:HD22	2.09	0.55
1:A:188:LEU:CD2	1:A:188:LEU:N	2.46	0.55
1:A:632:TYR:O	1:A:633:ASN:HB2	2.07	0.55
1:B:79:ILE:C	1:B:81:GLN:H	2.09	0.55
1:B:500:SER:HG	1:B:502:THR:HG1	1.53	0.55
1:E:248:TYR:O	1:E:248:TYR:HD2	1.88	0.55
1:E:671:ARG:HH12	1:E:677:GLY:HA3	1.72	0.55
1:F:301:ALA:C	1:F:303:LYS:N	2.59	0.55
1:F:334:LEU:HD12	1:F:334:LEU:N	2.21	0.55
1:F:432:TYR:HE1	1:F:445:ARG:CZ	2.19	0.55
2:O:16:PHE:HA	2:O:35:VAL:CG1	2.37	0.55
2:R:63:ILE:HG13	2:R:67:GLU:HB3	1.89	0.55
1:A:107:THR:CG2	1:A:115:LYS:HD2	2.33	0.55
1:A:470:ASN:O	1:A:472:ARG:HG3	2.06	0.55
1:A:709:ASN:HB2	2:O:130:ILE:HG23	1.88	0.55
1:B:776:LEU:O	1:B:780:LEU:CD2	2.54	0.55
1:C:376:GLN:C	1:C:378:LEU:H	2.08	0.55
1:C:654:ILE:C	1:C:655:ASN:HD22	2.10	0.55
1:D:136:PRO:O	1:D:137:PHE:C	2.45	0.55
1:D:192:PHE:HA	1:D:195:LEU:HB3	1.87	0.55
1:D:557:LEU:HD11	1:D:575:VAL:HG12	1.88	0.55
1:E:318:ILE:CG2	1:E:322:LEU:HD12	2.32	0.55
1:E:443:GLU:HG3	1:E:458:LYS:HG2	1.87	0.55
1:F:71:PHE:CD1	1:F:73:ASN:HB2	2.42	0.55
1:F:173:ILE:HG13	1:F:242:SER:CB	2.27	0.55
1:F:252:ASP:O	1:F:254:ARG:HD2	2.06	0.55
1:F:338:LEU:O	1:F:343:VAL:HG23	2.06	0.55
1:F:376:GLN:C	1:F:378:LEU:H	2.09	0.55
1:A:279:ILE:O	1:A:283:LEU:HD13	2.07	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:602:PHE:CD2	1:A:602:PHE:N	2.72	0.55
1:C:508:ILE:HG12	1:C:536:TYR:CD2	2.41	0.55
1:C:602:PHE:CD2	1:C:602:PHE:N	2.71	0.55
1:C:738:SER:OG	1:C:739:LYS:N	2.38	0.55
1:D:96:ILE:O	1:D:100:LEU:HG	2.07	0.55
1:D:464:VAL:CG2	1:D:465:LEU:HD12	2.33	0.55
1:E:83:GLN:C	1:E:85:LEU:N	2.57	0.55
1:E:179:LEU:HA	1:E:182:ILE:HG22	1.87	0.55
1:E:481:VAL:O	1:E:484:VAL:HG23	2.06	0.55
1:F:443:GLU:HG3	1:F:458:LYS:HG2	1.88	0.55
2:P:63:ILE:HG13	2:P:67:GLU:HB3	1.89	0.55
1:A:128:MET:HE2	1:A:239:HIS:NE2	2.22	0.55
1:A:248:TYR:CD2	1:A:248:TYR:C	2.80	0.55
1:A:432:TYR:HE1	1:A:445:ARG:CZ	2.20	0.55
1:B:165:GLN:C	1:B:167:LYS:H	2.09	0.55
1:E:248:TYR:CD2	1:E:248:TYR:C	2.80	0.55
1:F:776:LEU:O	1:F:780:LEU:CD2	2.53	0.55
1:A:136:PRO:O	1:A:137:PHE:C	2.45	0.55
1:A:284:LYS:HE3	1:A:284:LYS:HA	1.87	0.55
1:A:628:PHE:CD1	1:A:645:TRP:CD1	2.94	0.55
1:A:671:ARG:HH12	1:A:677:GLY:HA3	1.71	0.55
1:B:172:GLU:O	1:B:175:LYS:HB3	2.06	0.55
1:C:79:ILE:C	1:C:81:GLN:H	2.10	0.55
1:C:165:GLN:C	1:C:167:LYS:H	2.10	0.55
1:C:628:PHE:CE2	2:Q:90:ARG:HD3	2.33	0.55
1:F:186:LYS:HE3	1:F:234:LEU:HB2	1.88	0.55
1:F:333:LYS:HA	1:F:336:THR:OG1	2.06	0.55
1:F:432:TYR:CE1	1:F:445:ARG:CZ	2.90	0.55
2:P:25:GLY:HA3	2:P:65:PHE:CE1	2.42	0.55
2:T:25:GLY:HA3	2:T:65:PHE:CE1	2.42	0.55
1:A:334:LEU:HD12	1:A:334:LEU:N	2.22	0.55
1:A:508:ILE:HG12	1:A:536:TYR:CD2	2.41	0.55
1:A:557:LEU:HD11	1:A:575:VAL:HG12	1.88	0.55
1:A:609:GLU:OE2	1:A:609:GLU:N	2.34	0.55
1:B:97:TYR:CD2	1:B:102:GLY:HA3	2.42	0.55
1:B:248:TYR:CD2	1:B:248:TYR:C	2.80	0.55
1:B:334:LEU:H	1:B:334:LEU:HD12	1.70	0.55
1:B:334:LEU:HD12	1:B:334:LEU:N	2.22	0.55
1:B:550:SER:HB3	1:B:553:GLN:CB	2.37	0.55
1:B:697:ILE:HG21	1:B:732:ILE:HD11	1.89	0.55
1:C:136:PRO:O	1:C:137:PHE:C	2.45	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:248:TYR:O	1:C:248:TYR:HD2	1.89	0.55
1:C:470:ASN:O	1:C:472:ARG:HG3	2.07	0.55
1:D:648:PRO:HA	1:D:651:LYS:HB2	1.89	0.55
1:D:709:ASN:HB2	2:R:130:ILE:HG23	1.87	0.55
1:E:189:ASP:O	1:E:191:GLU:HG2	2.07	0.55
1:E:432:TYR:CE1	1:E:445:ARG:CZ	2.90	0.55
2:O:25:GLY:HA3	2:O:65:PHE:CE1	2.42	0.55
1:A:189:ASP:O	1:A:190:PRO:C	2.39	0.55
1:A:252:ASP:CG	1:A:253:HIS:H	2.10	0.55
1:B:175:LYS:O	1:B:178:SER:N	2.39	0.55
1:B:252:ASP:O	1:B:254:ARG:HD2	2.06	0.55
1:B:368:GLN:HG3	1:B:383:GLY:C	2.26	0.55
1:C:71:PHE:CD1	1:C:73:ASN:HB2	2.42	0.55
1:C:192:PHE:O	1:C:196:ILE:HG13	2.07	0.55
1:C:376:GLN:O	1:C:378:LEU:N	2.40	0.55
1:D:107:THR:CG2	1:D:115:LYS:HD2	2.37	0.55
1:D:376:GLN:C	1:D:378:LEU:H	2.09	0.55
1:D:550:SER:HB3	1:D:553:GLN:HB2	1.89	0.55
1:E:71:PHE:CD1	1:E:73:ASN:HB2	2.42	0.55
1:E:136:PRO:O	1:E:137:PHE:C	2.46	0.55
1:E:184:LYS:HD2	1:E:188:LEU:HG	1.88	0.55
1:E:326:ILE:HG22	1:E:328:PHE:CE1	2.42	0.55
1:E:334:LEU:HD12	1:E:334:LEU:N	2.22	0.55
2:O:63:ILE:HG13	2:O:67:GLU:HB3	1.89	0.55
1:A:74:GLU:HB2	1:A:78:LYS:CB	2.36	0.54
1:A:96:ILE:O	1:A:100:LEU:HG	2.07	0.54
1:A:165:GLN:C	1:A:167:LYS:H	2.10	0.54
1:A:327:LEU:O	1:A:495:PHE:N	2.40	0.54
1:A:405:LEU:HD12	1:A:405:LEU:N	2.22	0.54
1:B:96:ILE:O	1:B:100:LEU:HG	2.07	0.54
1:B:333:LYS:HA	1:B:336:THR:OG1	2.07	0.54
1:D:175:LYS:O	1:D:178:SER:N	2.38	0.54
1:D:184:LYS:HD2	1:D:188:LEU:HG	1.88	0.54
1:D:186:LYS:HB2	1:D:190:PRO:CD	2.36	0.54
1:D:334:LEU:H	1:D:334:LEU:HD12	1.72	0.54
1:D:700:TYR:CD1	1:D:727:GLN:HB3	2.42	0.54
1:E:130:SER:HB2	1:E:170:TYR:CE2	2.43	0.54
1:E:244:ALA:CB	1:E:268:MET:HE3	2.36	0.54
1:E:327:LEU:O	1:E:495:PHE:N	2.40	0.54
1:F:120:LEU:O	1:F:120:LEU:HD13	2.06	0.54
1:F:326:ILE:HG22	1:F:328:PHE:CE1	2.41	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:105:LEU:HD21	2:P:124:MET:SD	2.47	0.54
2:Q:97:ASN:ND2	2:Q:97:ASN:N	2.38	0.54
2:R:36:MET:HE1	2:R:43:PRO:HG3	1.88	0.54
1:A:180:ASP:C	1:A:182:ILE:N	2.61	0.54
1:A:184:LYS:HD2	1:A:188:LEU:HG	1.88	0.54
1:B:410:ILE:HG22	1:B:411:GLU:N	2.22	0.54
1:B:432:TYR:HE1	1:B:445:ARG:CZ	2.20	0.54
1:C:192:PHE:HA	1:C:195:LEU:HB3	1.88	0.54
1:C:334:LEU:HD12	1:C:334:LEU:H	1.72	0.54
1:C:432:TYR:HE1	1:C:445:ARG:CZ	2.20	0.54
1:C:632:TYR:O	1:C:633:ASN:HB2	2.08	0.54
1:C:661:ALA:O	1:C:665:LYS:HD3	2.07	0.54
1:D:135:VAL:O	1:D:135:VAL:HG22	2.08	0.54
1:D:432:TYR:CE1	1:D:445:ARG:CZ	2.90	0.54
1:D:654:ILE:C	1:D:655:ASN:HD22	2.11	0.54
2:Q:6:GLU:O	2:Q:9:ILE:N	2.38	0.54
2:R:64:ASP:OD1	2:R:66:PRO:CD	2.55	0.54
2:T:84:GLU:N	2:T:84:GLU:OE2	2.37	0.54
1:A:115:LYS:HD3	1:A:153:ILE:HD13	1.88	0.54
1:A:246:SER:O	1:A:250:ALA:HB2	2.07	0.54
1:A:550:SER:HB3	1:A:553:GLN:HB2	1.89	0.54
1:A:680:LYS:H	1:A:687:GLU:HG3	1.72	0.54
1:B:80:GLN:O	1:B:80:GLN:HG3	2.08	0.54
1:B:446:ILE:HG13	1:B:452:GLU:O	2.07	0.54
1:C:171:TYR:O	1:C:175:LYS:NZ	2.40	0.54
1:C:252:ASP:O	1:C:254:ARG:HD2	2.06	0.54
1:C:409:ARG:O	1:C:413:LEU:HG	2.06	0.54
1:C:628:PHE:CD1	1:C:645:TRP:CD1	2.95	0.54
1:E:173:ILE:HG13	1:E:242:SER:CB	2.29	0.54
1:E:776:LEU:O	1:E:780:LEU:CD2	2.54	0.54
1:F:165:GLN:C	1:F:167:LYS:H	2.10	0.54
1:F:405:LEU:HD12	1:F:405:LEU:N	2.23	0.54
1:F:410:ILE:HG22	1:F:411:GLU:N	2.23	0.54
1:F:550:SER:HB3	1:F:553:GLN:CB	2.37	0.54
1:F:700:TYR:CD1	1:F:727:GLN:HB3	2.42	0.54
2:P:76:MET:HG3	2:P:76:MET:O	2.06	0.54
1:A:234:LEU:O	1:A:238:GLN:HG3	2.07	0.54
1:A:557:LEU:HD11	1:A:575:VAL:CG1	2.37	0.54
1:A:655:ASN:N	1:A:655:ASN:ND2	2.54	0.54
1:B:171:TYR:O	1:B:175:LYS:NZ	2.41	0.54
1:B:186:LYS:O	1:B:189:ASP:HA	2.08	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:71:PHE:CD1	1:D:73:ASN:HB2	2.42	0.54
1:D:197:LYS:HB3	1:D:197:LYS:HZ2	1.72	0.54
1:F:115:LYS:C	1:F:117:LEU:H	2.11	0.54
1:F:175:LYS:HB2	1:F:175:LYS:HZ3	1.73	0.54
1:F:217:LYS:HB3	1:F:217:LYS:HZ2	1.71	0.54
1:F:680:LYS:H	1:F:687:GLU:HG3	1.72	0.54
2:O:76:MET:HG3	2:O:76:MET:O	2.06	0.54
2:P:26:THR:HA	2:P:64:ASP:HA	1.90	0.54
1:A:97:TYR:CD2	1:A:102:GLY:HA3	2.42	0.54
1:A:154:ILE:HG13	1:A:171:TYR:CD1	2.43	0.54
1:A:172:GLU:O	1:A:175:LYS:HB3	2.07	0.54
1:A:182:ILE:O	1:A:187:SER:HB2	2.06	0.54
1:A:195:LEU:HD21	1:A:227:ILE:HG12	1.90	0.54
1:A:405:LEU:CD1	1:A:453:VAL:HG21	2.34	0.54
1:A:639:ASN:C	1:A:639:ASN:HD22	2.09	0.54
1:B:175:LYS:O	1:B:177:ILE:N	2.41	0.54
1:B:184:LYS:HD2	1:B:188:LEU:HG	1.88	0.54
1:B:409:ARG:O	1:B:413:LEU:HG	2.06	0.54
1:B:661:ALA:O	1:B:665:LYS:HD3	2.07	0.54
1:D:165:GLN:C	1:D:167:LYS:H	2.10	0.54
1:D:171:TYR:O	1:D:175:LYS:NZ	2.41	0.54
1:D:186:LYS:O	1:D:189:ASP:HA	2.08	0.54
1:D:410:ILE:HD13	1:D:419:ILE:CD1	2.37	0.54
1:E:74:GLU:HB2	1:E:78:LYS:CB	2.32	0.54
1:E:88:LYS:NZ	1:E:172:GLU:OE2	2.41	0.54
1:E:96:ILE:O	1:E:100:LEU:HG	2.07	0.54
1:E:432:TYR:HE1	1:E:445:ARG:CZ	2.20	0.54
1:E:446:ILE:HG13	1:E:452:GLU:O	2.07	0.54
1:F:464:VAL:CG2	1:F:465:LEU:HD12	2.33	0.54
2:O:136:VAL:HG23	2:O:136:VAL:O	2.08	0.54
2:Q:63:ILE:HG13	2:Q:67:GLU:HB3	1.89	0.54
2:S:26:THR:HA	2:S:64:ASP:HA	1.90	0.54
2:T:16:PHE:HA	2:T:35:VAL:CG1	2.37	0.54
2:T:105:LEU:HD21	2:T:124:MET:SD	2.47	0.54
1:A:71:PHE:CD1	1:A:73:ASN:HB2	2.42	0.54
1:A:409:ARG:O	1:A:413:LEU:HG	2.07	0.54
1:B:71:PHE:CD1	1:B:73:ASN:HB2	2.42	0.54
1:B:405:LEU:HD12	1:B:405:LEU:N	2.23	0.54
1:B:671:ARG:HH12	1:B:677:GLY:HA3	1.73	0.54
1:B:693:SER:O	1:B:696:LYS:HB2	2.07	0.54
1:C:135:VAL:O	1:C:135:VAL:HG22	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:186:LYS:O	1:C:189:ASP:HA	2.08	0.54
1:C:246:SER:O	1:C:250:ALA:HB2	2.08	0.54
1:C:405:LEU:HD12	1:C:405:LEU:N	2.23	0.54
1:D:481:VAL:O	1:D:484:VAL:HG23	2.07	0.54
1:E:173:ILE:C	1:E:175:LYS:N	2.60	0.54
1:E:175:LYS:O	1:E:177:ILE:N	2.41	0.54
1:E:186:LYS:O	1:E:189:ASP:HA	2.08	0.54
1:E:275:GLY:HA2	1:E:278:LYS:CG	2.33	0.54
1:E:333:LYS:HA	1:E:336:THR:OG1	2.06	0.54
1:E:409:ARG:O	1:E:413:LEU:HG	2.07	0.54
1:F:96:ILE:O	1:F:100:LEU:HG	2.07	0.54
1:F:184:LYS:NZ	1:F:191:GLU:HB2	2.21	0.54
1:F:248:TYR:O	1:F:248:TYR:HD2	1.89	0.54
1:A:481:VAL:O	1:A:484:VAL:HG23	2.07	0.54
1:A:668:SER:CA	2:O:14:GLU:HG3	2.33	0.54
1:A:697:ILE:HG21	1:A:732:ILE:HD11	1.89	0.54
1:C:178:SER:OG	1:C:179:LEU:CD2	2.55	0.54
1:C:275:GLY:HA2	1:C:278:LYS:CG	2.31	0.54
1:D:252:ASP:CG	1:D:253:HIS:H	2.10	0.54
1:D:552:TRP:O	1:D:555:GLN:HG2	2.08	0.54
1:E:172:GLU:O	1:E:175:LYS:HB3	2.07	0.54
1:E:305:SER:OG	1:E:307:LEU:HD13	2.07	0.54
1:E:334:LEU:HD12	1:E:334:LEU:H	1.71	0.54
1:E:697:ILE:HG21	1:E:732:ILE:HD11	1.90	0.54
1:F:410:ILE:HD13	1:F:419:ILE:CD1	2.38	0.54
1:F:632:TYR:O	1:F:633:ASN:HB2	2.08	0.54
2:R:76:MET:HG3	2:R:76:MET:O	2.06	0.54
1:A:135:VAL:O	1:A:135:VAL:HG22	2.08	0.54
1:B:173:ILE:C	1:B:175:LYS:N	2.60	0.54
1:B:305:SER:OG	1:B:307:LEU:HD13	2.08	0.54
1:B:680:LYS:H	1:B:687:GLU:HG3	1.73	0.54
1:C:97:TYR:CD2	1:C:102:GLY:HA3	2.43	0.54
1:C:432:TYR:CE1	1:C:445:ARG:CZ	2.90	0.54
1:C:481:VAL:O	1:C:484:VAL:HG23	2.07	0.54
1:D:165:GLN:OE1	1:D:252:ASP:HB3	2.07	0.54
1:E:197:LYS:HE2	1:E:264:MET:HG2	1.90	0.54
1:E:301:ALA:C	1:E:303:LYS:N	2.59	0.54
1:F:693:SER:O	1:F:696:LYS:HB2	2.08	0.54
2:Q:11:GLU:O	2:Q:13:LYS:N	2.40	0.54
2:R:26:THR:HA	2:R:64:ASP:HA	1.90	0.54
2:R:93:ASP:OD1	2:R:97:ASN:ND2	2.41	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:136:VAL:HG23	2:R:136:VAL:O	2.08	0.54
2:T:65:PHE:CB	2:T:66:PRO:HD3	2.33	0.54
1:A:197:LYS:HB3	1:A:197:LYS:HZ2	1.73	0.54
1:A:301:ALA:C	1:A:303:LYS:N	2.60	0.54
1:B:464:VAL:CG2	1:B:465:LEU:HD12	2.33	0.54
1:C:133:GLU:O	1:C:133:GLU:HG3	2.08	0.54
1:D:234:LEU:O	1:D:238:GLN:HG3	2.08	0.54
1:D:271:LEU:HD23	1:D:275:GLY:HA3	1.90	0.54
1:D:432:TYR:HE1	1:D:445:ARG:CZ	2.20	0.54
1:E:134:LYS:O	1:E:135:VAL:HG12	2.07	0.54
1:E:185:ASP:O	1:E:190:PRO:CG	2.56	0.54
1:F:186:LYS:O	1:F:189:ASP:HA	2.08	0.54
1:F:356:ASP:OD2	1:F:356:ASP:N	2.40	0.54
1:F:481:VAL:O	1:F:484:VAL:HG23	2.08	0.54
1:A:175:LYS:O	1:A:177:ILE:N	2.41	0.54
1:A:323:ASN:C	1:A:323:ASN:HD22	2.12	0.54
1:A:410:ILE:HG22	1:A:411:GLU:N	2.23	0.54
1:A:648:PRO:HA	1:A:651:LYS:HB2	1.90	0.54
1:B:279:ILE:O	1:B:283:LEU:HD13	2.08	0.54
1:B:410:ILE:HD13	1:B:419:ILE:CD1	2.37	0.54
1:B:432:TYR:CE1	1:B:445:ARG:CZ	2.90	0.54
1:C:278:LYS:HE3	1:C:279:ILE:CD1	2.38	0.54
1:C:700:TYR:CD1	1:C:727:GLN:HB3	2.42	0.54
1:D:225:ILE:HG12	1:D:229:PHE:HE2	1.73	0.54
1:D:246:SER:O	1:D:250:ALA:HB2	2.08	0.54
1:D:278:LYS:HE3	1:D:279:ILE:CD1	2.38	0.54
1:D:326:ILE:HG22	1:D:328:PHE:CE1	2.42	0.54
1:E:120:LEU:O	1:E:120:LEU:HD13	2.06	0.54
1:E:230:ILE:HG13	1:E:237:PHE:CE2	2.43	0.54
1:F:230:ILE:HG13	1:F:237:PHE:CE2	2.43	0.54
1:F:271:LEU:HD23	1:F:275:GLY:HA3	1.90	0.54
1:F:671:ARG:O	1:F:674:SER:O	2.26	0.54
2:O:26:THR:HA	2:O:64:ASP:HA	1.90	0.54
2:Q:105:LEU:HD21	2:Q:124:MET:SD	2.48	0.54
2:Q:136:VAL:HG23	2:Q:136:VAL:O	2.08	0.54
2:T:49:GLN:H	2:T:49:GLN:NE2	2.03	0.54
1:A:186:LYS:O	1:A:189:ASP:HA	2.08	0.53
1:A:432:TYR:CE1	1:A:445:ARG:CZ	2.91	0.53
1:A:654:ILE:C	1:A:655:ASN:HD22	2.11	0.53
1:A:738:SER:OG	1:A:739:LYS:N	2.38	0.53
1:B:88:LYS:NZ	1:B:172:GLU:OE2	2.41	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:288:VAL:CG2	1:B:289:GLU:H	2.18	0.53
1:C:80:GLN:HG3	1:C:80:GLN:O	2.08	0.53
1:C:218:LEU:C	1:C:220:LEU:H	2.06	0.53
1:C:230:ILE:HG13	1:C:237:PHE:CE2	2.43	0.53
1:C:550:SER:HB3	1:C:553:GLN:CB	2.38	0.53
1:D:410:ILE:HG22	1:D:411:GLU:N	2.23	0.53
1:D:722:ILE:HD13	1:D:764:LEU:CD2	2.38	0.53
1:E:165:GLN:OE1	1:E:252:ASP:HB3	2.08	0.53
1:E:234:LEU:O	1:E:238:GLN:HG3	2.07	0.53
1:E:246:SER:O	1:E:250:ALA:HB2	2.08	0.53
1:E:410:ILE:HD13	1:E:419:ILE:CD1	2.38	0.53
1:E:410:ILE:HG22	1:E:411:GLU:N	2.24	0.53
1:E:655:ASN:N	1:E:655:ASN:ND2	2.56	0.53
1:F:234:LEU:O	1:F:238:GLN:HG3	2.08	0.53
1:F:252:ASP:CG	1:F:253:HIS:H	2.11	0.53
1:F:279:ILE:O	1:F:283:LEU:HD13	2.08	0.53
2:Q:26:THR:HA	2:Q:64:ASP:HA	1.90	0.53
2:Q:76:MET:HG3	2:Q:76:MET:O	2.06	0.53
2:T:136:VAL:HG23	2:T:136:VAL:O	2.08	0.53
1:A:165:GLN:OE1	1:A:252:ASP:HB3	2.07	0.53
1:A:252:ASP:O	1:A:254:ARG:HD2	2.07	0.53
1:A:410:ILE:HD13	1:A:419:ILE:CD1	2.38	0.53
1:B:175:LYS:HB2	1:B:175:LYS:HZ3	1.71	0.53
1:B:405:LEU:CD1	1:B:453:VAL:HG21	2.34	0.53
1:B:648:PRO:HA	1:B:651:LYS:HB2	1.89	0.53
1:C:180:ASP:C	1:C:182:ILE:N	2.62	0.53
1:C:410:ILE:HG22	1:C:411:GLU:N	2.23	0.53
1:C:552:TRP:O	1:C:555:GLN:HG2	2.09	0.53
1:D:334:LEU:HD12	1:D:334:LEU:N	2.23	0.53
1:D:508:ILE:HG12	1:D:536:TYR:CD2	2.42	0.53
1:D:693:SER:O	1:D:696:LYS:HB2	2.08	0.53
1:E:376:GLN:O	1:E:378:LEU:N	2.41	0.53
1:F:286:GLU:O	1:F:290:LYS:HE3	2.08	0.53
1:F:709:ASN:HB2	2:T:130:ILE:HG23	1.89	0.53
1:F:738:SER:OG	1:F:739:LYS:N	2.38	0.53
2:R:16:PHE:HA	2:R:35:VAL:CG1	2.37	0.53
2:S:84:GLU:OE2	2:S:84:GLU:N	2.39	0.53
2:T:93:ASP:OD1	2:T:97:ASN:ND2	2.41	0.53
1:A:79:ILE:C	1:A:81:GLN:H	2.11	0.53
1:A:271:LEU:HD23	1:A:275:GLY:HA3	1.90	0.53
1:B:130:SER:HB2	1:B:170:TYR:CE2	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:192:PHE:HB3	1:B:196:ILE:HD11	1.90	0.53
1:B:195:LEU:HD21	1:B:227:ILE:HG12	1.91	0.53
1:C:105:TYR:CB	1:C:153:ILE:HG12	2.37	0.53
1:C:295:VAL:HG21	1:C:603:ILE:CG2	2.38	0.53
1:C:671:ARG:O	1:C:674:SER:O	2.27	0.53
1:D:248:TYR:CD2	1:D:248:TYR:C	2.80	0.53
1:D:376:GLN:O	1:D:378:LEU:N	2.42	0.53
1:D:609:GLU:OE2	1:D:609:GLU:N	2.34	0.53
1:D:680:LYS:H	1:D:687:GLU:HG3	1.73	0.53
1:D:730:ASN:O	1:D:733:GLU:N	2.41	0.53
1:D:746:LYS:HD3	1:D:750:GLN:HE21	1.74	0.53
1:E:405:LEU:HD12	1:E:405:LEU:N	2.23	0.53
1:E:557:LEU:HD11	1:E:575:VAL:HG12	1.89	0.53
1:E:680:LYS:H	1:E:687:GLU:HG3	1.72	0.53
1:F:697:ILE:HG21	1:F:732:ILE:HD11	1.90	0.53
1:F:742:ALA:HB1	1:F:743:PRO:HD2	1.90	0.53
2:S:65:PHE:CB	2:S:66:PRO:HD3	2.32	0.53
1:A:123:GLU:HG2	1:A:124:GLU:H	1.74	0.53
1:A:230:ILE:HG13	1:A:237:PHE:CE2	2.43	0.53
1:B:135:VAL:HG22	1:B:135:VAL:O	2.09	0.53
1:C:76:LEU:H	1:C:76:LEU:CD2	2.22	0.53
1:D:97:TYR:CD2	1:D:102:GLY:HA3	2.44	0.53
1:D:252:ASP:O	1:D:254:ARG:HD2	2.07	0.53
1:D:550:SER:HB3	1:D:553:GLN:CB	2.38	0.53
1:F:244:ALA:CB	1:F:268:MET:HE3	2.37	0.53
1:F:246:SER:O	1:F:250:ALA:HB2	2.09	0.53
1:F:722:ILE:HD13	1:F:764:LEU:CD2	2.38	0.53
1:A:173:ILE:C	1:A:175:LYS:N	2.61	0.53
1:A:345:THR:HB	1:A:491:ASP:HB3	1.90	0.53
1:B:179:LEU:HA	1:B:182:ILE:HG22	1.89	0.53
1:B:326:ILE:HG22	1:B:328:PHE:CE1	2.44	0.53
1:B:356:ASP:OD2	1:B:356:ASP:N	2.41	0.53
1:C:120:LEU:O	1:C:120:LEU:HD13	2.06	0.53
1:C:217:LYS:NZ	1:C:236:GLU:HB2	2.24	0.53
1:C:621:GLY:HA2	2:Q:94:LYS:NZ	2.23	0.53
1:D:279:ILE:O	1:D:283:LEU:HD13	2.09	0.53
1:D:699:GLY:O	1:D:702:SER:N	2.42	0.53
1:E:214:PHE:HB3	1:E:218:LEU:HB3	1.90	0.53
1:E:699:GLY:O	1:E:702:SER:N	2.42	0.53
1:F:746:LYS:HD3	1:F:750:GLN:HE21	1.73	0.53
2:Q:64:ASP:OD1	2:Q:66:PRO:CD	2.56	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Q:84:GLU:N	2:Q:84:GLU:OE2	2.39	0.53
1:A:175:LYS:O	1:A:178:SER:N	2.38	0.53
1:A:192:PHE:HB3	1:A:196:ILE:HD11	1.90	0.53
1:A:700:TYR:CD1	1:A:727:GLN:HB3	2.43	0.53
1:B:234:LEU:O	1:B:238:GLN:HG3	2.07	0.53
1:B:722:ILE:HD13	1:B:764:LEU:CD2	2.38	0.53
1:C:301:ALA:C	1:C:303:LYS:N	2.60	0.53
1:C:697:ILE:HG21	1:C:732:ILE:HD11	1.90	0.53
1:C:699:GLY:O	1:C:702:SER:N	2.42	0.53
1:D:79:ILE:C	1:D:81:GLN:H	2.11	0.53
1:D:175:LYS:O	1:D:177:ILE:N	2.42	0.53
1:D:502:THR:HG22	2:R:111:ASN:O	2.08	0.53
1:E:97:TYR:CD2	1:E:102:GLY:HA3	2.43	0.53
1:E:557:LEU:HD11	1:E:575:VAL:CG1	2.38	0.53
1:F:135:VAL:O	1:F:135:VAL:HG22	2.08	0.53
1:F:225:ILE:HG12	1:F:229:PHE:HE2	1.74	0.53
1:A:106:PHE:HA	1:A:154:ILE:O	2.09	0.53
1:A:376:GLN:O	1:A:378:LEU:N	2.42	0.53
1:A:746:LYS:HD3	1:A:750:GLN:HE21	1.73	0.53
1:C:375:GLY:O	1:C:377:GLN:N	2.42	0.53
1:C:410:ILE:HD13	1:C:419:ILE:CD1	2.38	0.53
1:C:722:ILE:HD13	1:C:764:LEU:CD2	2.38	0.53
1:D:217:LYS:NZ	1:D:236:GLU:HB2	2.24	0.53
1:E:709:ASN:HB2	2:S:130:ILE:HG23	1.90	0.53
1:E:742:ALA:HB1	1:E:743:PRO:HD2	1.91	0.53
1:F:118:GLN:OE1	1:F:118:GLN:HA	2.09	0.53
1:F:197:LYS:HE2	1:F:264:MET:HG2	1.91	0.53
2:Q:16:PHE:HA	2:Q:35:VAL:CG1	2.37	0.53
2:S:105:LEU:HD21	2:S:124:MET:SD	2.48	0.53
1:A:175:LYS:HB2	1:A:175:LYS:HZ3	1.72	0.53
1:B:165:GLN:OE1	1:B:252:ASP:HB3	2.08	0.53
1:B:481:VAL:O	1:B:484:VAL:HG23	2.07	0.53
1:B:700:TYR:CD1	1:B:727:GLN:HB3	2.43	0.53
1:C:165:GLN:OE1	1:C:252:ASP:HB3	2.08	0.53
1:C:680:LYS:H	1:C:687:GLU:HG3	1.73	0.53
1:D:195:LEU:HD21	1:D:227:ILE:HG12	1.90	0.53
1:D:495:PHE:O	1:D:496:ALA:HB2	2.09	0.53
1:D:628:PHE:CD1	1:D:645:TRP:CD1	2.97	0.53
1:E:118:GLN:OE1	1:E:118:GLN:HA	2.09	0.53
1:E:135:VAL:HG22	1:E:135:VAL:O	2.09	0.53
1:E:271:LEU:HD23	1:E:275:GLY:HA3	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:133:GLU:O	1:F:133:GLU:HG3	2.08	0.53
1:F:179:LEU:HA	1:F:182:ILE:HG22	1.91	0.53
1:F:278:LYS:HE3	1:F:279:ILE:CD1	2.38	0.53
1:F:595:ILE:HG22	1:F:596:ILE:H	1.74	0.53
2:O:93:ASP:OD1	2:O:97:ASN:ND2	2.41	0.53
1:A:78:LYS:HG3	1:A:79:ILE:N	2.24	0.53
1:A:236:GLU:HA	1:A:239:HIS:HD2	1.74	0.53
1:A:661:ALA:O	1:A:665:LYS:HD3	2.08	0.53
1:B:199:LEU:C	1:B:201:ASP:N	2.62	0.53
1:C:334:LEU:HD12	1:C:334:LEU:N	2.23	0.53
1:C:442:TYR:CD1	1:C:455:TYR:HD1	2.25	0.53
1:D:180:ASP:C	1:D:182:ILE:N	2.63	0.53
1:D:286:GLU:O	1:D:290:LYS:HE3	2.09	0.53
1:D:405:LEU:HD12	1:D:405:LEU:N	2.23	0.53
1:D:442:TYR:CD1	1:D:455:TYR:HD1	2.25	0.53
1:E:195:LEU:HD21	1:E:227:ILE:HG12	1.91	0.53
1:E:632:TYR:O	1:E:633:ASN:HB2	2.08	0.53
1:F:78:LYS:HG3	1:F:79:ILE:N	2.23	0.53
1:F:171:TYR:O	1:F:175:LYS:NZ	2.42	0.53
1:F:742:ALA:HB1	1:F:744:GLU:OE1	2.09	0.53
2:S:62:THR:OG1	2:S:63:ILE:N	2.42	0.53
1:A:186:LYS:HB2	1:A:190:PRO:CD	2.38	0.53
1:A:339:ILE:O	1:A:340:LYS:C	2.47	0.53
1:B:156:ILE:HD12	1:B:156:ILE:H	1.73	0.53
1:B:230:ILE:HG13	1:B:237:PHE:CE2	2.43	0.53
1:B:376:GLN:O	1:B:378:LEU:N	2.42	0.53
1:B:699:GLY:O	1:B:702:SER:N	2.42	0.53
1:C:409:ARG:CD	1:C:413:LEU:HD21	2.39	0.53
1:D:214:PHE:CD1	1:D:218:LEU:HD23	2.44	0.53
1:D:405:LEU:CD1	1:D:453:VAL:HG21	2.34	0.53
1:D:742:ALA:HB1	1:D:743:PRO:HD2	1.91	0.53
1:E:115:LYS:C	1:E:117:LEU:H	2.11	0.53
1:E:199:LEU:C	1:E:201:ASP:N	2.61	0.53
1:E:495:PHE:O	1:E:496:ALA:HB2	2.09	0.53
1:F:165:GLN:HE21	1:F:251:PRO:HG2	1.74	0.53
1:F:178:SER:OG	1:F:179:LEU:CD2	2.56	0.53
1:F:217:LYS:NZ	1:F:236:GLU:HB2	2.24	0.53
1:F:635:ILE:H	1:F:635:ILE:CD1	2.16	0.53
2:P:93:ASP:OD1	2:P:97:ASN:ND2	2.42	0.53
2:T:6:GLU:O	2:T:9:ILE:N	2.38	0.53
1:A:115:LYS:C	1:A:117:LEU:H	2.12	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:185:ASP:O	1:A:190:PRO:CA	2.57	0.52
1:A:278:LYS:HE3	1:A:279:ILE:CD1	2.38	0.52
1:B:118:GLN:OE1	1:B:118:GLN:HA	2.10	0.52
1:B:184:LYS:NZ	1:B:191:GLU:HB2	2.24	0.52
1:B:189:ASP:O	1:B:191:GLU:HG2	2.08	0.52
1:B:409:ARG:CD	1:B:413:LEU:HD21	2.39	0.52
1:B:742:ALA:HB1	1:B:743:PRO:HD2	1.91	0.52
1:C:161:ILE:CG2	1:C:168:GLU:HB2	2.39	0.52
1:C:742:ALA:HB1	1:C:744:GLU:OE1	2.09	0.52
1:D:178:SER:OG	1:D:179:LEU:CD2	2.58	0.52
1:D:595:ILE:HG22	1:D:596:ILE:H	1.73	0.52
1:E:105:TYR:CB	1:E:153:ILE:HG12	2.39	0.52
1:E:217:LYS:NZ	1:E:236:GLU:HB2	2.24	0.52
1:E:595:ILE:HG22	1:E:596:ILE:H	1.74	0.52
1:E:722:ILE:HD13	1:E:764:LEU:CD2	2.38	0.52
1:E:730:ASN:O	1:E:733:GLU:N	2.42	0.52
1:E:746:LYS:HD3	1:E:750:GLN:HE21	1.74	0.52
1:F:105:TYR:CB	1:F:153:ILE:HG12	2.38	0.52
1:F:500:SER:HG	1:F:502:THR:HG1	1.56	0.52
2:Q:63:ILE:HG13	2:Q:67:GLU:CB	2.39	0.52
2:R:105:LEU:HD21	2:R:124:MET:SD	2.48	0.52
2:T:26:THR:HA	2:T:64:ASP:HA	1.91	0.52
1:A:88:LYS:NZ	1:A:172:GLU:OE2	2.42	0.52
1:A:502:THR:HG22	2:O:111:ASN:O	2.10	0.52
1:A:699:GLY:O	1:A:702:SER:N	2.42	0.52
1:B:217:LYS:NZ	1:B:236:GLU:HB2	2.24	0.52
1:B:345:THR:HB	1:B:491:ASP:HB3	1.90	0.52
1:B:470:ASN:O	1:B:472:ARG:HG3	2.08	0.52
1:B:764:LEU:C	1:B:766:HIS:H	2.12	0.52
1:C:118:GLN:OE1	1:C:118:GLN:HA	2.09	0.52
1:C:271:LEU:HD23	1:C:275:GLY:HA3	1.91	0.52
1:D:164:GLU:C	1:D:166:SER:H	2.12	0.52
1:D:184:LYS:NZ	1:D:191:GLU:HB2	2.23	0.52
1:E:165:GLN:HE21	1:E:251:PRO:HG2	1.74	0.52
1:E:171:TYR:O	1:E:175:LYS:NZ	2.42	0.52
1:F:376:GLN:O	1:F:378:LEU:N	2.42	0.52
1:F:671:ARG:HH12	1:F:677:GLY:HA3	1.73	0.52
2:O:63:ILE:HG13	2:O:67:GLU:CB	2.39	0.52
2:P:63:ILE:HG13	2:P:67:GLU:CB	2.39	0.52
1:A:171:TYR:O	1:A:175:LYS:NZ	2.43	0.52
1:B:557:LEU:HD11	1:B:575:VAL:CG1	2.39	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:730:ASN:O	1:B:733:GLU:N	2.42	0.52
1:C:115:LYS:C	1:C:117:LEU:H	2.11	0.52
1:C:164:GLU:C	1:C:166:SER:H	2.13	0.52
1:C:323:ASN:C	1:C:323:ASN:HD22	2.10	0.52
1:C:324:THR:HB	1:C:499:PRO:CA	2.37	0.52
1:C:609:GLU:OE2	1:C:609:GLU:N	2.33	0.52
1:C:671:ARG:HH12	1:C:677:GLY:HA3	1.71	0.52
1:D:115:LYS:HB3	1:D:115:LYS:HZ3	1.73	0.52
1:D:339:ILE:O	1:D:340:LYS:C	2.47	0.52
1:D:354:SER:OG	1:D:355:SER:N	2.42	0.52
1:E:356:ASP:OD2	1:E:356:ASP:N	2.42	0.52
1:F:611:THR:O	1:F:615:ILE:HG13	2.10	0.52
2:O:62:THR:OG1	2:O:63:ILE:N	2.43	0.52
2:Q:62:THR:OG1	2:Q:63:ILE:N	2.43	0.52
2:R:11:GLU:O	2:R:13:LYS:N	2.41	0.52
2:T:63:ILE:HG13	2:T:67:GLU:HB3	1.90	0.52
1:A:478:ALA:CB	1:A:486:LYS:O	2.57	0.52
1:A:501:LEU:HD22	2:O:112:LEU:HD21	1.92	0.52
1:B:78:LYS:HG3	1:B:79:ILE:N	2.24	0.52
1:B:654:ILE:C	1:B:655:ASN:HD22	2.12	0.52
1:C:257:LEU:O	1:C:261:ALA:O	2.28	0.52
1:C:742:ALA:HB1	1:C:743:PRO:HD2	1.91	0.52
1:D:76:LEU:N	1:D:76:LEU:HD22	2.25	0.52
1:D:115:LYS:C	1:D:117:LEU:H	2.11	0.52
1:D:165:GLN:HE21	1:D:251:PRO:HG2	1.74	0.52
1:D:275:GLY:CA	1:D:278:LYS:HG3	2.35	0.52
1:D:697:ILE:HG21	1:D:732:ILE:HD11	1.91	0.52
1:D:742:ALA:HB1	1:D:744:GLU:OE1	2.10	0.52
1:E:385:LEU:O	1:E:385:LEU:HD13	2.10	0.52
1:E:648:PRO:HA	1:E:651:LYS:HB2	1.90	0.52
1:E:693:SER:O	1:E:696:LYS:HB2	2.09	0.52
1:E:700:TYR:CD1	1:E:727:GLN:HB3	2.43	0.52
1:E:781:ASN:N	1:E:789:ASN:HD21	2.02	0.52
1:F:97:TYR:CD2	1:F:102:GLY:HA3	2.44	0.52
1:F:218:LEU:C	1:F:220:LEU:H	2.06	0.52
1:F:470:ASN:O	1:F:472:ARG:HG3	2.09	0.52
2:R:62:THR:OG1	2:R:63:ILE:N	2.42	0.52
2:S:136:VAL:HG23	2:S:136:VAL:O	2.08	0.52
1:B:324:THR:HB	1:B:499:PRO:CA	2.38	0.52
1:B:327:LEU:O	1:B:495:PHE:N	2.42	0.52
1:B:630:ARG:NH1	2:P:83:GLU:HG2	2.25	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:597:ASN:C	1:C:599:GLU:H	2.13	0.52
1:D:133:GLU:HG3	1:D:133:GLU:O	2.08	0.52
1:D:218:LEU:HG	1:D:218:LEU:O	2.10	0.52
1:E:175:LYS:O	1:E:178:SER:N	2.38	0.52
1:F:164:GLU:C	1:F:166:SER:H	2.13	0.52
1:F:217:LYS:HB2	1:F:236:GLU:CG	2.40	0.52
1:F:305:SER:OG	1:F:307:LEU:HD13	2.09	0.52
1:F:405:LEU:CD1	1:F:453:VAL:HG21	2.33	0.52
1:F:781:ASN:N	1:F:789:ASN:HD21	2.03	0.52
2:O:105:LEU:HD21	2:O:124:MET:SD	2.50	0.52
2:S:63:ILE:HG13	2:S:67:GLU:HB3	1.90	0.52
1:A:80:GLN:HG3	1:A:80:GLN:O	2.09	0.52
1:A:120:LEU:O	1:A:120:LEU:HD13	2.06	0.52
1:A:464:VAL:CG2	1:A:465:LEU:HD12	2.33	0.52
1:B:165:GLN:HE21	1:B:251:PRO:HG2	1.73	0.52
1:B:557:LEU:HD11	1:B:575:VAL:HG12	1.90	0.52
1:C:195:LEU:HD21	1:C:227:ILE:HG12	1.90	0.52
1:C:197:LYS:HE2	1:C:264:MET:HG2	1.91	0.52
1:D:324:THR:HB	1:D:499:PRO:CA	2.38	0.52
1:E:279:ILE:O	1:E:283:LEU:HD13	2.08	0.52
1:F:80:GLN:HG3	1:F:80:GLN:O	2.09	0.52
2:P:11:GLU:O	2:P:13:LYS:N	2.42	0.52
2:R:63:ILE:HG13	2:R:67:GLU:CB	2.39	0.52
2:S:21:LYS:C	2:S:21:LYS:HD3	2.30	0.52
1:A:413:LEU:HB2	1:A:419:ILE:HG12	1.92	0.52
1:B:218:LEU:O	1:B:218:LEU:HG	2.10	0.52
1:C:78:LYS:HG3	1:C:79:ILE:N	2.24	0.52
1:C:175:LYS:O	1:C:178:SER:N	2.38	0.52
1:C:217:LYS:HB2	1:C:236:GLU:CG	2.40	0.52
1:C:218:LEU:HG	1:C:218:LEU:O	2.10	0.52
1:C:326:ILE:HG22	1:C:328:PHE:CE1	2.44	0.52
1:C:480:ASN:HD22	1:C:481:VAL:N	2.07	0.52
1:C:781:ASN:N	1:C:789:ASN:HD21	2.03	0.52
1:D:161:ILE:CG2	1:D:168:GLU:HB2	2.39	0.52
1:D:409:ARG:CD	1:D:413:LEU:HD21	2.40	0.52
1:D:480:ASN:HD22	1:D:481:VAL:N	2.08	0.52
1:E:78:LYS:HG3	1:E:79:ILE:N	2.24	0.52
1:E:164:GLU:C	1:E:166:SER:H	2.12	0.52
1:F:271:LEU:HA	1:F:275:GLY:HA3	1.91	0.52
1:F:339:ILE:O	1:F:340:LYS:C	2.46	0.52
1:F:413:LEU:HB2	1:F:419:ILE:HG12	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:161:ILE:HG23	1:A:168:GLU:HB2	1.92	0.52
1:A:165:GLN:HE21	1:A:251:PRO:HG2	1.74	0.52
1:A:301:ALA:C	1:A:303:LYS:H	2.13	0.52
1:B:106:PHE:HA	1:B:154:ILE:O	2.10	0.52
1:C:648:PRO:HA	1:C:651:LYS:HB2	1.91	0.52
1:C:730:ASN:O	1:C:733:GLU:N	2.43	0.52
1:C:746:LYS:HD3	1:C:750:GLN:HE21	1.74	0.52
1:D:230:ILE:HG13	1:D:237:PHE:CE2	2.44	0.52
1:D:375:GLY:O	1:D:377:GLN:N	2.42	0.52
1:E:128:MET:O	1:E:128:MET:HG2	2.09	0.52
1:E:217:LYS:HB2	1:E:236:GLU:CG	2.39	0.52
1:E:288:VAL:CG2	1:E:289:GLU:H	2.19	0.52
1:E:301:ALA:C	1:E:303:LYS:H	2.13	0.52
1:E:470:ASN:O	1:E:472:ARG:HG3	2.10	0.52
1:F:409:ARG:CD	1:F:413:LEU:HD21	2.39	0.52
1:F:597:ASN:C	1:F:599:GLU:H	2.14	0.52
2:P:6:GLU:O	2:P:9:ILE:N	2.37	0.52
2:S:49:GLN:H	2:S:49:GLN:NE2	2.03	0.52
2:S:63:ILE:HG13	2:S:67:GLU:CB	2.40	0.52
1:A:105:TYR:CB	1:A:153:ILE:HG12	2.39	0.52
1:A:134:LYS:O	1:A:135:VAL:HG12	2.09	0.52
1:A:217:LYS:NZ	1:A:236:GLU:HB2	2.24	0.52
1:A:305:SER:OG	1:A:307:LEU:HD13	2.09	0.52
1:A:730:ASN:O	1:A:733:GLU:N	2.43	0.52
1:B:246:SER:O	1:B:250:ALA:HB2	2.09	0.52
1:C:385:LEU:O	1:C:385:LEU:HD13	2.10	0.52
1:D:214:PHE:HB3	1:D:218:LEU:HB3	1.91	0.52
1:D:305:SER:OG	1:D:307:LEU:HD13	2.09	0.52
1:E:409:ARG:CD	1:E:413:LEU:HD21	2.40	0.52
1:E:502:THR:HG22	2:S:111:ASN:O	2.10	0.52
1:E:597:ASN:C	1:E:599:GLU:H	2.13	0.52
1:F:161:ILE:HG23	1:F:168:GLU:HB2	1.90	0.52
1:F:648:PRO:HA	1:F:651:LYS:HB2	1.91	0.52
2:O:11:GLU:O	2:O:13:LYS:N	2.42	0.52
2:O:102:ALA:HB2	2:O:125:ILE:HG13	1.92	0.52
2:P:136:VAL:HG23	2:P:136:VAL:O	2.09	0.52
2:Q:21:LYS:C	2:Q:21:LYS:HD3	2.30	0.52
2:S:64:ASP:OD1	2:S:66:PRO:CD	2.56	0.52
2:S:93:ASP:OD1	2:S:97:ASN:ND2	2.42	0.52
2:T:64:ASP:OD1	2:T:66:PRO:CD	2.57	0.52
1:A:214:PHE:HB3	1:A:218:LEU:HB3	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:120:LEU:O	1:B:120:LEU:HD13	2.06	0.52
1:B:501:LEU:HD22	2:P:112:LEU:HD21	1.92	0.52
1:B:742:ALA:HB1	1:B:744:GLU:OE1	2.09	0.52
1:C:156:ILE:HD12	1:C:156:ILE:H	1.75	0.52
1:C:192:PHE:HB3	1:C:196:ILE:HD11	1.92	0.52
1:D:78:LYS:HG3	1:D:79:ILE:N	2.25	0.52
1:D:106:PHE:HA	1:D:154:ILE:O	2.10	0.52
1:D:413:LEU:HB2	1:D:419:ILE:HG12	1.92	0.52
1:D:463:THR:HG22	1:D:465:LEU:H	1.75	0.52
1:F:301:ALA:C	1:F:303:LYS:H	2.13	0.52
1:F:552:TRP:O	1:F:555:GLN:HG2	2.09	0.52
2:R:102:ALA:HB2	2:R:125:ILE:HG13	1.92	0.52
2:T:62:THR:OG1	2:T:63:ILE:N	2.42	0.52
1:A:156:ILE:HD12	1:A:156:ILE:H	1.75	0.51
1:A:742:ALA:HB1	1:A:743:PRO:HD2	1.91	0.51
1:B:130:SER:O	1:B:132:GLY:O	2.28	0.51
1:B:164:GLU:C	1:B:166:SER:H	2.13	0.51
1:B:197:LYS:HE2	1:B:264:MET:HG2	1.91	0.51
1:B:271:LEU:HD23	1:B:275:GLY:HA3	1.91	0.51
1:C:305:SER:OG	1:C:307:LEU:HD13	2.09	0.51
1:D:189:ASP:O	1:D:190:PRO:C	2.42	0.51
1:D:621:GLY:HA2	2:R:94:LYS:NZ	2.25	0.51
1:D:781:ASN:N	1:D:789:ASN:HD21	2.03	0.51
1:E:124:GLU:OE2	1:E:129:ASN:ND2	2.42	0.51
1:E:197:LYS:HE3	1:E:264:MET:HA	1.92	0.51
1:E:286:GLU:O	1:E:290:LYS:HE3	2.10	0.51
1:F:275:GLY:HA2	1:F:278:LYS:CG	2.33	0.51
1:F:375:GLY:O	1:F:377:GLN:N	2.43	0.51
2:O:36:MET:HE1	2:O:43:PRO:HG3	1.91	0.51
1:A:118:GLN:OE1	1:A:118:GLN:HA	2.09	0.51
1:A:302:LEU:HA	1:A:305:SER:HB3	1.92	0.51
1:A:308:VAL:O	1:A:311:HIS:HB2	2.10	0.51
1:A:764:LEU:C	1:A:766:HIS:H	2.13	0.51
1:B:271:LEU:HA	1:B:275:GLY:HA3	1.92	0.51
1:B:301:ALA:C	1:B:303:LYS:H	2.14	0.51
1:B:521:ASN:HB3	1:B:524:GLU:HB3	1.92	0.51
1:C:214:PHE:CD1	1:C:218:LEU:HD23	2.46	0.51
1:C:413:LEU:HB2	1:C:419:ILE:HG12	1.93	0.51
1:D:76:LEU:H	1:D:76:LEU:HD22	1.75	0.51
1:F:308:VAL:O	1:F:311:HIS:HB2	2.10	0.51
2:P:64:ASP:OD1	2:P:66:PRO:CD	2.56	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:21:LYS:HD3	2:R:21:LYS:C	2.30	0.51
1:A:552:TRP:O	1:A:555:GLN:HG2	2.10	0.51
1:B:173:ILE:O	1:B:175:LYS:N	2.43	0.51
1:B:385:LEU:O	1:B:385:LEU:HD13	2.11	0.51
1:B:724:ARG:HG3	1:B:724:ARG:NH1	2.26	0.51
1:B:746:LYS:HD3	1:B:750:GLN:HE21	1.74	0.51
1:C:308:VAL:O	1:C:311:HIS:HB2	2.11	0.51
1:C:356:ASP:OD2	1:C:356:ASP:N	2.42	0.51
1:C:724:ARG:HG3	1:C:724:ARG:NH1	2.25	0.51
1:D:197:LYS:HE2	1:D:264:MET:HG2	1.91	0.51
1:D:257:LEU:O	1:D:261:ALA:O	2.28	0.51
1:D:320:ARG:O	1:D:321:GLU:C	2.49	0.51
1:E:130:SER:O	1:E:132:GLY:O	2.28	0.51
1:E:229:PHE:O	1:E:229:PHE:CD1	2.64	0.51
1:E:414:LYS:O	1:E:417:GLY:N	2.40	0.51
1:F:218:LEU:HG	1:F:218:LEU:O	2.11	0.51
1:F:229:PHE:O	1:F:229:PHE:CD1	2.64	0.51
1:F:405:LEU:HD12	1:F:405:LEU:H	1.75	0.51
1:F:741:ILE:O	1:F:741:ILE:HG13	2.11	0.51
2:P:21:LYS:C	2:P:21:LYS:HD3	2.30	0.51
2:Q:93:ASP:OD1	2:Q:97:ASN:ND2	2.43	0.51
1:A:375:GLY:O	1:A:377:GLN:N	2.43	0.51
1:A:597:ASN:C	1:A:599:GLU:H	2.14	0.51
1:A:693:SER:O	1:A:696:LYS:HB2	2.09	0.51
1:A:781:ASN:N	1:A:789:ASN:HD21	2.03	0.51
1:B:115:LYS:C	1:B:117:LEU:H	2.13	0.51
1:B:323:ASN:HD22	1:B:323:ASN:C	2.12	0.51
1:C:131:ARG:HB2	1:C:170:TYR:CE2	2.45	0.51
1:C:668:SER:CA	2:Q:14:GLU:HG3	2.32	0.51
1:D:385:LEU:O	1:D:385:LEU:HD13	2.11	0.51
1:E:128:MET:O	1:E:128:MET:CG	2.58	0.51
1:E:345:THR:HB	1:E:491:ASP:HB3	1.92	0.51
1:E:405:LEU:CD1	1:E:453:VAL:HG21	2.33	0.51
1:E:413:LEU:HB2	1:E:419:ILE:HG12	1.92	0.51
1:E:611:THR:O	1:E:615:ILE:HG13	2.10	0.51
1:F:74:GLU:HB2	1:F:78:LYS:CB	2.37	0.51
1:F:88:LYS:NZ	1:F:172:GLU:OE2	2.43	0.51
1:F:442:TYR:CD1	1:F:455:TYR:HD1	2.26	0.51
1:A:308:VAL:HG22	1:A:336:THR:O	2.11	0.51
1:A:442:TYR:CD1	1:A:455:TYR:HD1	2.26	0.51
1:A:521:ASN:HB3	1:A:524:GLU:HB3	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:229:PHE:O	1:B:229:PHE:CD1	2.64	0.51
1:B:234:LEU:N	1:B:234:LEU:HD23	2.26	0.51
1:B:278:LYS:HE3	1:B:279:ILE:CD1	2.38	0.51
1:B:375:GLY:O	1:B:377:GLN:N	2.43	0.51
1:B:495:PHE:O	1:B:496:ALA:HB2	2.10	0.51
1:C:115:LYS:HZ1	1:C:117:LEU:HB2	1.76	0.51
1:D:105:TYR:CB	1:D:153:ILE:HG12	2.39	0.51
1:D:217:LYS:HB2	1:D:236:GLU:CG	2.41	0.51
1:D:308:VAL:O	1:D:311:HIS:HB2	2.11	0.51
1:D:345:THR:HB	1:D:491:ASP:HB3	1.91	0.51
1:D:564:VAL:O	1:D:567:THR:HG22	2.10	0.51
1:E:90:PRO:HG2	1:E:93:VAL:CG1	2.40	0.51
1:E:154:ILE:HG13	1:E:171:TYR:CD1	2.44	0.51
1:E:173:ILE:O	1:E:175:LYS:N	2.44	0.51
1:E:218:LEU:O	1:E:218:LEU:HG	2.11	0.51
1:E:375:GLY:O	1:E:377:GLN:N	2.43	0.51
1:E:501:LEU:CD2	2:S:112:LEU:HD21	2.41	0.51
1:E:501:LEU:HD22	2:S:112:LEU:HD21	1.92	0.51
1:E:552:TRP:O	1:E:555:GLN:HG2	2.10	0.51
1:F:123:GLU:HG2	1:F:124:GLU:H	1.74	0.51
1:F:257:LEU:O	1:F:261:ALA:O	2.29	0.51
1:F:324:THR:HB	1:F:499:PRO:CA	2.37	0.51
1:F:463:THR:HG22	1:F:465:LEU:H	1.76	0.51
1:F:525:LYS:O	1:F:529:VAL:HG23	2.11	0.51
1:F:730:ASN:O	1:F:733:GLU:N	2.43	0.51
1:A:164:GLU:C	1:A:166:SER:H	2.13	0.51
1:A:286:GLU:O	1:A:290:LYS:HE3	2.10	0.51
1:B:478:ALA:CB	1:B:486:LYS:O	2.57	0.51
1:B:552:TRP:O	1:B:555:GLN:HG2	2.10	0.51
1:C:165:GLN:HE21	1:C:251:PRO:HG2	1.75	0.51
1:C:229:PHE:O	1:C:229:PHE:CD1	2.64	0.51
1:C:354:SER:OG	1:C:355:SER:N	2.43	0.51
1:D:118:GLN:HA	1:D:118:GLN:OE1	2.09	0.51
1:D:120:LEU:O	1:D:120:LEU:HD13	2.06	0.51
1:D:456:LYS:HA	1:D:469:PHE:CD1	2.46	0.51
1:E:156:ILE:HD12	1:E:156:ILE:H	1.75	0.51
1:E:234:LEU:N	1:E:234:LEU:HD23	2.26	0.51
1:F:189:ASP:O	1:F:191:GLU:N	2.44	0.51
1:F:323:ASN:C	1:F:323:ASN:HD22	2.11	0.51
2:P:62:THR:OG1	2:P:63:ILE:N	2.43	0.51
1:B:105:TYR:CB	1:B:153:ILE:HG12	2.39	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:197:LYS:HE3	1:C:264:MET:HA	1.93	0.51
1:C:214:PHE:HB3	1:C:218:LEU:HB3	1.92	0.51
1:C:217:LYS:HZ2	1:C:236:GLU:HB2	1.76	0.51
1:C:339:ILE:O	1:C:340:LYS:C	2.47	0.51
1:C:478:ALA:CB	1:C:486:LYS:O	2.58	0.51
1:D:333:LYS:C	1:D:335:ALA:H	2.14	0.51
1:D:597:ASN:C	1:D:599:GLU:H	2.14	0.51
1:E:214:PHE:CD1	1:E:218:LEU:HD23	2.46	0.51
1:E:680:LYS:H	1:E:687:GLU:CG	2.24	0.51
1:F:184:LYS:HE2	1:F:193:LEU:HD12	1.93	0.51
1:F:288:VAL:CG2	1:F:289:GLU:H	2.20	0.51
1:F:308:VAL:HG22	1:F:336:THR:O	2.11	0.51
1:F:495:PHE:O	1:F:496:ALA:HB2	2.11	0.51
2:R:76:MET:HA	2:R:79:THR:HG22	1.93	0.51
1:A:76:LEU:H	1:A:76:LEU:CD2	2.24	0.51
1:A:229:PHE:CD1	1:A:229:PHE:O	2.64	0.51
1:A:456:LYS:HA	1:A:469:PHE:CD1	2.46	0.51
1:B:197:LYS:HE3	1:B:264:MET:HA	1.92	0.51
1:B:413:LEU:HB2	1:B:419:ILE:HG12	1.92	0.51
1:B:564:VAL:O	1:B:567:THR:HG22	2.10	0.51
1:B:668:SER:CA	2:P:14:GLU:HG3	2.30	0.51
1:B:781:ASN:N	1:B:789:ASN:HD21	2.03	0.51
1:C:106:PHE:HA	1:C:154:ILE:O	2.09	0.51
1:C:173:ILE:C	1:C:175:LYS:N	2.60	0.51
1:C:301:ALA:HB1	1:C:604:LEU:HB2	1.92	0.51
1:C:405:LEU:HD12	1:C:405:LEU:H	1.75	0.51
1:D:217:LYS:HB3	1:D:217:LYS:HZ2	1.74	0.51
1:D:229:PHE:CD1	1:D:229:PHE:O	2.64	0.51
1:D:301:ALA:C	1:D:303:LYS:H	2.13	0.51
1:D:741:ILE:HG13	1:D:741:ILE:O	2.11	0.51
1:E:106:PHE:HA	1:E:154:ILE:O	2.11	0.51
1:E:308:VAL:HG22	1:E:336:THR:O	2.11	0.51
1:E:636:ALA:O	1:E:640:LYS:HA	2.11	0.51
1:E:654:ILE:C	1:E:655:ASN:HD22	2.14	0.51
1:E:742:ALA:HB1	1:E:744:GLU:OE1	2.11	0.51
1:F:106:PHE:HA	1:F:154:ILE:O	2.10	0.51
1:F:195:LEU:HD21	1:F:227:ILE:HG12	1.91	0.51
1:F:197:LYS:HB3	1:F:197:LYS:HZ2	1.76	0.51
1:F:217:LYS:CB	1:F:236:GLU:HG3	2.41	0.51
2:Q:76:MET:HA	2:Q:79:THR:HG22	1.92	0.51
2:T:63:ILE:HG13	2:T:67:GLU:CB	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:324:THR:HB	1:A:499:PRO:CA	2.38	0.51
1:B:217:LYS:HB2	1:B:236:GLU:CG	2.40	0.51
1:B:764:LEU:O	1:B:766:HIS:N	2.44	0.51
1:C:134:LYS:CG	1:C:136:PRO:HD3	2.34	0.51
1:C:184:LYS:HZ2	1:C:191:GLU:HG3	1.74	0.51
1:C:293:ILE:HD11	1:C:617:LYS:HD3	1.92	0.51
1:C:463:THR:HG22	1:C:465:LEU:H	1.76	0.51
1:D:173:ILE:O	1:D:175:LYS:N	2.44	0.51
1:D:456:LYS:HA	1:D:469:PHE:CE1	2.46	0.51
1:D:668:SER:CA	2:R:14:GLU:HG3	2.33	0.51
1:E:80:GLN:HG3	1:E:80:GLN:O	2.09	0.51
1:E:564:VAL:O	1:E:567:THR:HG22	2.11	0.51
1:F:137:PHE:O	1:F:138:ALA:C	2.50	0.51
1:F:154:ILE:HG13	1:F:171:TYR:CD1	2.46	0.51
1:F:385:LEU:HD13	1:F:385:LEU:O	2.11	0.51
1:F:609:GLU:OE2	1:F:609:GLU:N	2.35	0.51
1:F:657:ILE:HD11	1:F:701:LEU:HD23	1.93	0.51
2:T:21:LYS:C	2:T:21:LYS:HD3	2.31	0.51
1:A:131:ARG:HG3	1:A:243:LEU:HD21	1.92	0.51
1:A:214:PHE:CD1	1:A:218:LEU:HD23	2.46	0.51
1:A:271:LEU:HA	1:A:275:GLY:HA3	1.92	0.51
1:A:405:LEU:HD12	1:A:405:LEU:H	1.75	0.51
1:A:611:THR:O	1:A:615:ILE:HG13	2.11	0.51
1:A:742:ALA:HB1	1:A:744:GLU:OE1	2.10	0.51
1:B:118:GLN:HE22	1:B:143:PHE:HD2	1.59	0.51
1:B:302:LEU:HA	1:B:305:SER:HB3	1.93	0.51
1:B:339:ILE:O	1:B:340:LYS:C	2.47	0.51
1:B:741:ILE:HG13	1:B:741:ILE:O	2.11	0.51
1:C:217:LYS:HB3	1:C:217:LYS:HZ2	1.75	0.51
1:D:178:SER:OG	1:D:179:LEU:N	2.44	0.51
1:D:185:ASP:O	1:D:190:PRO:CA	2.59	0.51
1:E:302:LEU:HA	1:E:305:SER:HB3	1.93	0.51
1:E:339:ILE:O	1:E:340:LYS:C	2.48	0.51
1:F:214:PHE:HB3	1:F:218:LEU:HB3	1.92	0.51
2:O:21:LYS:HD3	2:O:21:LYS:C	2.31	0.51
2:S:11:GLU:O	2:S:13:LYS:N	2.44	0.51
2:T:65:PHE:O	2:T:68:PHE:HB3	2.11	0.51
1:A:137:PHE:O	1:A:138:ALA:C	2.49	0.50
1:A:275:GLY:CA	1:A:278:LYS:HG3	2.36	0.50
1:A:409:ARG:CD	1:A:413:LEU:HD21	2.40	0.50
1:A:495:PHE:O	1:A:496:ALA:HB2	2.10	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:409:ARG:HD2	1:B:413:LEU:HD21	1.93	0.50
1:C:74:GLU:HB2	1:C:78:LYS:CB	2.39	0.50
1:C:170:TYR:O	1:C:174:GLY:HA3	2.11	0.50
1:C:173:ILE:O	1:C:175:LYS:N	2.43	0.50
1:C:217:LYS:CB	1:C:236:GLU:HG3	2.41	0.50
1:C:288:VAL:CG2	1:C:289:GLU:H	2.20	0.50
1:C:502:THR:HG22	2:Q:111:ASN:O	2.10	0.50
1:C:602:PHE:N	1:C:602:PHE:HD2	2.09	0.50
1:C:657:ILE:HD11	1:C:701:LEU:HD23	1.93	0.50
1:D:80:GLN:HG3	1:D:80:GLN:O	2.10	0.50
1:D:118:GLN:HE22	1:D:143:PHE:HD2	1.59	0.50
1:D:192:PHE:HB3	1:D:196:ILE:HD11	1.92	0.50
1:D:197:LYS:HE3	1:D:264:MET:HA	1.93	0.50
1:D:356:ASP:OD2	1:D:356:ASP:N	2.41	0.50
1:E:324:THR:HB	1:E:499:PRO:CA	2.38	0.50
1:E:405:LEU:HD12	1:E:405:LEU:H	1.76	0.50
1:F:192:PHE:HB3	1:F:196:ILE:HD11	1.92	0.50
1:F:234:LEU:N	1:F:234:LEU:HD23	2.26	0.50
1:F:345:THR:HB	1:F:491:ASP:HB3	1.93	0.50
1:F:499:PRO:CG	1:F:504:ILE:HD11	2.41	0.50
1:A:179:LEU:HA	1:A:182:ILE:HG22	1.93	0.50
1:A:197:LYS:HE2	1:A:264:MET:HG2	1.92	0.50
1:A:217:LYS:HB2	1:A:236:GLU:CG	2.41	0.50
1:A:218:LEU:HG	1:A:218:LEU:O	2.10	0.50
1:A:354:SER:OG	1:A:355:SER:N	2.44	0.50
1:B:170:TYR:O	1:B:174:GLY:HA3	2.11	0.50
1:B:286:GLU:O	1:B:290:LYS:HE3	2.12	0.50
1:B:301:ALA:HB1	1:B:604:LEU:HB2	1.94	0.50
1:B:308:VAL:HG22	1:B:336:THR:O	2.12	0.50
1:B:456:LYS:HA	1:B:469:PHE:CD1	2.46	0.50
1:B:463:THR:HG22	1:B:465:LEU:H	1.76	0.50
1:C:118:GLN:HE22	1:C:143:PHE:HD2	1.60	0.50
1:C:271:LEU:HA	1:C:275:GLY:HA3	1.92	0.50
1:C:275:GLY:CA	1:C:278:LYS:HG3	2.35	0.50
1:C:308:VAL:HG22	1:C:336:THR:O	2.10	0.50
1:C:345:THR:HB	1:C:491:ASP:HB3	1.92	0.50
1:D:308:VAL:HG22	1:D:336:THR:O	2.11	0.50
1:D:499:PRO:CG	1:D:504:ILE:HD11	2.41	0.50
1:E:197:LYS:HB3	1:E:197:LYS:HZ2	1.77	0.50
1:E:217:LYS:CB	1:E:236:GLU:HG3	2.40	0.50
1:E:271:LEU:HA	1:E:275:GLY:HA3	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:442:TYR:CD1	1:E:455:TYR:HD1	2.25	0.50
1:E:463:THR:HG22	1:E:465:LEU:H	1.76	0.50
1:E:480:ASN:HD22	1:E:481:VAL:N	2.09	0.50
1:F:156:ILE:HD12	1:F:156:ILE:H	1.76	0.50
1:F:478:ALA:CB	1:F:486:LYS:O	2.58	0.50
2:Q:65:PHE:O	2:Q:68:PHE:HB3	2.12	0.50
1:A:173:ILE:O	1:A:175:LYS:N	2.44	0.50
1:B:308:VAL:O	1:B:311:HIS:HB2	2.11	0.50
1:B:480:ASN:HD22	1:B:481:VAL:N	2.10	0.50
1:B:657:ILE:HD11	1:B:701:LEU:HD23	1.93	0.50
1:C:301:ALA:C	1:C:303:LYS:H	2.14	0.50
1:C:456:LYS:HA	1:C:469:PHE:CD1	2.47	0.50
1:D:154:ILE:HG13	1:D:171:TYR:CD1	2.46	0.50
1:E:333:LYS:C	1:E:335:ALA:H	2.15	0.50
1:E:409:ARG:HD2	1:E:413:LEU:HD21	1.94	0.50
1:F:173:ILE:O	1:F:175:LYS:N	2.44	0.50
1:F:197:LYS:HE3	1:F:264:MET:HA	1.93	0.50
1:F:497:LEU:CD1	1:F:556:MET:HG2	2.37	0.50
1:A:197:LYS:HE3	1:A:264:MET:HA	1.92	0.50
1:A:333:LYS:C	1:A:335:ALA:H	2.15	0.50
1:A:384:ASN:O	1:A:386:GLU:N	2.45	0.50
1:A:519:THR:OG1	1:A:520:PRO:HD2	2.12	0.50
1:A:525:LYS:O	1:A:529:VAL:HG23	2.11	0.50
1:B:755:ARG:O	1:B:756:ILE:C	2.50	0.50
1:C:322:LEU:HD13	1:C:556:MET:CE	2.41	0.50
1:C:409:ARG:HD2	1:C:413:LEU:HD21	1.93	0.50
1:C:797:ILE:O	1:C:797:ILE:HG13	2.11	0.50
1:D:288:VAL:CG2	1:D:289:GLU:H	2.20	0.50
1:E:657:ILE:HD11	1:E:701:LEU:HD23	1.94	0.50
1:F:217:LYS:HB2	1:F:236:GLU:HG3	1.93	0.50
1:F:301:ALA:HB1	1:F:604:LEU:HB2	1.94	0.50
1:F:755:ARG:O	1:F:756:ILE:C	2.49	0.50
1:A:480:ASN:HD22	1:A:481:VAL:N	2.09	0.50
1:A:690:LYS:HD2	1:A:741:ILE:CG2	2.42	0.50
1:B:252:ASP:CG	1:B:253:HIS:N	2.65	0.50
1:B:501:LEU:CD2	2:P:112:LEU:HD21	2.41	0.50
1:C:225:ILE:HG12	1:C:229:PHE:HE2	1.76	0.50
1:C:286:GLU:O	1:C:290:LYS:HE3	2.11	0.50
1:C:499:PRO:CG	1:C:504:ILE:HD11	2.42	0.50
1:C:540:ARG:CZ	1:C:627:TYR:CE1	2.95	0.50
1:D:173:ILE:C	1:D:175:LYS:N	2.61	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:271:LEU:HA	1:D:275:GLY:HA3	1.92	0.50
1:E:738:SER:OG	1:E:739:LYS:N	2.38	0.50
1:F:115:LYS:HZ1	1:F:117:LEU:HB2	1.77	0.50
1:F:118:GLN:HE22	1:F:143:PHE:HD2	1.60	0.50
1:F:327:LEU:O	1:F:495:PHE:N	2.40	0.50
1:F:797:ILE:O	1:F:797:ILE:HG13	2.12	0.50
2:O:65:PHE:O	2:O:68:PHE:HB3	2.11	0.50
2:R:65:PHE:O	2:R:68:PHE:HB3	2.12	0.50
1:B:133:GLU:O	1:B:133:GLU:HG3	2.08	0.50
1:B:271:LEU:HB3	1:B:276:PHE:CE2	2.47	0.50
1:B:333:LYS:C	1:B:335:ALA:H	2.15	0.50
1:B:690:LYS:HD2	1:B:741:ILE:CG2	2.42	0.50
1:C:234:LEU:N	1:C:234:LEU:HD23	2.26	0.50
1:C:254:ARG:HD2	1:C:254:ARG:N	2.26	0.50
1:C:279:ILE:HD13	1:C:279:ILE:N	2.26	0.50
1:C:414:LYS:O	1:C:417:GLY:N	2.40	0.50
1:C:446:ILE:HA	1:C:453:VAL:HA	1.94	0.50
1:C:521:ASN:HB3	1:C:524:GLU:HB3	1.92	0.50
1:C:630:ARG:NH1	2:Q:83:GLU:HG2	2.26	0.50
1:D:384:ASN:O	1:D:386:GLU:N	2.44	0.50
1:E:192:PHE:HB3	1:E:196:ILE:HD11	1.92	0.50
1:E:323:ASN:HD22	1:E:323:ASN:C	2.13	0.50
1:E:473:ASN:N	1:E:473:ASN:OD1	2.45	0.50
1:E:521:ASN:HB3	1:E:524:GLU:HB3	1.93	0.50
1:E:797:ILE:O	1:E:797:ILE:HG13	2.12	0.50
1:F:271:LEU:HD13	1:F:276:PHE:HE2	1.77	0.50
1:F:295:VAL:HG21	1:F:603:ILE:CG2	2.42	0.50
1:F:502:THR:HG22	2:T:111:ASN:O	2.11	0.50
2:P:102:ALA:HB2	2:P:125:ILE:HG13	1.93	0.50
2:T:102:ALA:HB2	2:T:125:ILE:HG13	1.93	0.50
1:B:137:PHE:O	1:B:138:ALA:C	2.50	0.50
1:B:214:PHE:HB3	1:B:218:LEU:HB3	1.92	0.50
1:B:288:VAL:CG2	1:B:289:GLU:N	2.74	0.50
1:B:595:ILE:HG22	1:B:596:ILE:H	1.75	0.50
1:B:633:ASN:O	1:B:642:TYR:HE1	1.95	0.50
1:B:636:ALA:O	1:B:640:LYS:HA	2.12	0.50
1:B:680:LYS:H	1:B:687:GLU:CG	2.25	0.50
1:C:137:PHE:O	1:C:138:ALA:C	2.50	0.50
1:C:178:SER:OG	1:C:179:LEU:N	2.44	0.50
1:C:217:LYS:HB2	1:C:236:GLU:HG3	1.93	0.50
1:C:302:LEU:HA	1:C:305:SER:HB3	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:497:LEU:CD1	1:C:556:MET:HG2	2.40	0.50
1:D:521:ASN:HB3	1:D:524:GLU:HB3	1.93	0.50
1:D:629:ASN:HB3	1:D:632:TYR:CD1	2.46	0.50
1:E:115:LYS:HZ1	1:E:117:LEU:HB2	1.77	0.50
1:E:185:ASP:O	1:E:190:PRO:HD3	2.11	0.50
1:E:301:ALA:HB1	1:E:604:LEU:HB2	1.93	0.50
1:E:666:ASN:O	1:E:670:ILE:HG13	2.12	0.50
1:F:271:LEU:HB3	1:F:276:PHE:CE2	2.46	0.50
1:F:302:LEU:HA	1:F:305:SER:HB3	1.92	0.50
1:F:409:ARG:HD2	1:F:413:LEU:HD21	1.94	0.50
1:F:680:LYS:H	1:F:687:GLU:CG	2.25	0.50
1:A:385:LEU:O	1:A:385:LEU:HD13	2.11	0.50
1:A:456:LYS:HA	1:A:469:PHE:CE1	2.47	0.50
1:A:564:VAL:O	1:A:567:THR:HG22	2.12	0.50
1:A:680:LYS:H	1:A:687:GLU:CG	2.25	0.50
1:A:741:ILE:HG13	1:A:741:ILE:O	2.11	0.50
1:B:525:LYS:O	1:B:529:VAL:HG23	2.11	0.50
1:B:597:ASN:C	1:B:599:GLU:H	2.14	0.50
1:D:196:ILE:O	1:D:199:LEU:HB2	2.12	0.50
1:D:217:LYS:CB	1:D:236:GLU:HG3	2.41	0.50
1:D:519:THR:OG1	1:D:520:PRO:HD2	2.11	0.50
1:D:724:ARG:HG3	1:D:724:ARG:NH1	2.26	0.50
1:E:288:VAL:CG2	1:E:289:GLU:N	2.74	0.50
1:E:308:VAL:O	1:E:311:HIS:HB2	2.12	0.50
1:E:384:ASN:O	1:E:386:GLU:N	2.45	0.50
1:F:199:LEU:C	1:F:201:ASP:N	2.65	0.50
1:F:333:LYS:C	1:F:335:ALA:H	2.15	0.50
1:F:456:LYS:HA	1:F:469:PHE:CD1	2.47	0.50
2:O:9:ILE:HD12	2:O:69:LEU:CD2	2.41	0.50
2:T:9:ILE:HD12	2:T:69:LEU:CD2	2.42	0.50
1:A:118:GLN:HE22	1:A:143:PHE:HD2	1.59	0.50
1:A:234:LEU:HD23	1:A:234:LEU:N	2.27	0.50
1:A:288:VAL:CG2	1:A:289:GLU:H	2.19	0.50
1:A:501:LEU:CD2	2:O:112:LEU:HD21	2.42	0.50
1:A:595:ILE:HG22	1:A:596:ILE:H	1.75	0.50
1:A:755:ARG:O	1:A:756:ILE:C	2.50	0.50
1:B:234:LEU:HD23	1:B:234:LEU:H	1.77	0.50
1:B:293:ILE:HD11	1:B:617:LYS:HD3	1.94	0.50
1:C:688:PHE:O	1:C:689:ALA:C	2.51	0.50
1:D:302:LEU:HA	1:D:305:SER:HB3	1.93	0.50
1:E:278:LYS:HE3	1:E:279:ILE:CD1	2.39	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:173:ILE:C	1:F:175:LYS:N	2.61	0.50
1:F:214:PHE:CD1	1:F:218:LEU:HD23	2.47	0.50
1:F:354:SER:OG	1:F:355:SER:N	2.45	0.50
2:O:65:PHE:CB	2:O:66:PRO:HD3	2.32	0.50
2:R:12:PHE:HE1	2:R:72:MET:CE	2.25	0.50
2:T:12:PHE:HE1	2:T:72:MET:CE	2.25	0.50
1:A:90:PRO:HG2	1:A:93:VAL:CG1	2.42	0.49
1:A:463:THR:HG22	1:A:465:LEU:H	1.76	0.49
1:A:797:ILE:HG13	1:A:797:ILE:O	2.12	0.49
1:B:405:LEU:HD12	1:B:405:LEU:H	1.76	0.49
1:B:414:LYS:O	1:B:417:GLY:N	2.41	0.49
1:B:442:TYR:HD1	1:B:455:TYR:CD1	2.26	0.49
1:B:502:THR:HG22	2:P:111:ASN:O	2.12	0.49
1:C:456:LYS:HA	1:C:469:PHE:CE1	2.47	0.49
1:C:564:VAL:O	1:C:567:THR:HG22	2.11	0.49
1:D:115:LYS:HZ1	1:D:117:LEU:HB2	1.77	0.49
1:D:156:ILE:HD12	1:D:156:ILE:H	1.75	0.49
1:F:248:TYR:C	1:F:248:TYR:HD2	2.16	0.49
1:F:629:ASN:HB3	1:F:632:TYR:CD1	2.47	0.49
1:A:76:LEU:HD22	1:A:76:LEU:N	2.27	0.49
1:A:301:ALA:HB1	1:A:604:LEU:HB2	1.93	0.49
1:A:621:GLY:HA2	2:O:94:LYS:NZ	2.27	0.49
1:A:630:ARG:NH1	2:O:83:GLU:HG2	2.28	0.49
1:B:214:PHE:CD1	1:B:218:LEU:HD23	2.46	0.49
1:B:279:ILE:HD13	1:B:279:ILE:N	2.27	0.49
1:B:320:ARG:O	1:B:321:GLU:C	2.49	0.49
1:B:797:ILE:HG13	1:B:797:ILE:O	2.12	0.49
1:C:76:LEU:HD22	1:C:76:LEU:N	2.28	0.49
1:C:271:LEU:HB3	1:C:276:PHE:CE2	2.48	0.49
1:C:384:ASN:O	1:C:386:GLU:N	2.44	0.49
1:C:495:PHE:O	1:C:496:ALA:HB2	2.12	0.49
1:E:217:LYS:HB2	1:E:236:GLU:HG3	1.92	0.49
1:E:252:ASP:CG	1:E:253:HIS:N	2.65	0.49
1:E:442:TYR:HD1	1:E:455:TYR:CD1	2.26	0.49
1:F:254:ARG:HD2	1:F:254:ARG:N	2.26	0.49
1:F:323:ASN:HD22	1:F:598:PRO:HB3	1.78	0.49
1:F:384:ASN:O	1:F:386:GLU:N	2.45	0.49
2:P:49:GLN:H	2:P:49:GLN:NE2	2.03	0.49
2:S:6:GLU:O	2:S:9:ILE:N	2.38	0.49
1:B:248:TYR:HD2	1:B:248:TYR:C	2.16	0.49
1:B:666:ASN:O	1:B:670:ILE:HG13	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:736:LEU:HD11	1:B:750:GLN:NE2	2.26	0.49
1:C:223:LYS:HD3	1:C:224:SER:H	1.77	0.49
1:C:320:ARG:O	1:C:321:GLU:C	2.49	0.49
1:C:735:VAL:O	1:C:738:SER:HB3	2.11	0.49
1:D:234:LEU:HD23	1:D:234:LEU:N	2.26	0.49
1:D:755:ARG:O	1:D:756:ILE:C	2.51	0.49
1:E:271:LEU:HB3	1:E:276:PHE:CE2	2.47	0.49
1:E:320:ARG:O	1:E:321:GLU:C	2.50	0.49
1:F:618:ASN:O	1:F:622:LYS:HB2	2.11	0.49
1:A:223:LYS:HD3	1:A:224:SER:H	1.76	0.49
1:B:128:MET:O	1:B:128:MET:HG2	2.12	0.49
1:C:252:ASP:CG	1:C:253:HIS:N	2.65	0.49
1:C:680:LYS:H	1:C:687:GLU:CG	2.26	0.49
1:C:755:ARG:O	1:C:756:ILE:C	2.50	0.49
1:D:170:TYR:O	1:D:174:GLY:HA3	2.12	0.49
1:D:540:ARG:CZ	1:D:627:TYR:CE1	2.95	0.49
1:D:680:LYS:H	1:D:687:GLU:CG	2.26	0.49
1:D:688:PHE:O	1:D:689:ALA:C	2.51	0.49
1:E:170:TYR:O	1:E:174:GLY:HA3	2.12	0.49
1:E:609:GLU:OE2	1:E:609:GLU:N	2.37	0.49
1:E:688:PHE:O	1:E:689:ALA:C	2.51	0.49
1:E:724:ARG:HG3	1:E:724:ARG:NH1	2.27	0.49
1:E:741:ILE:HG13	1:E:741:ILE:O	2.12	0.49
1:F:296:LEU:CD2	1:F:296:LEU:N	2.38	0.49
1:F:320:ARG:O	1:F:321:GLU:C	2.49	0.49
1:F:442:TYR:HD1	1:F:455:TYR:CD1	2.26	0.49
2:P:65:PHE:O	2:P:68:PHE:HB3	2.12	0.49
2:T:101:SER:OG	2:T:104:GLU:HG2	2.13	0.49
1:A:133:GLU:O	1:A:133:GLU:HG3	2.08	0.49
1:A:173:ILE:O	1:A:174:GLY:C	2.51	0.49
1:A:184:LYS:O	1:A:185:ASP:C	2.51	0.49
1:A:473:ASN:OD1	1:A:473:ASN:N	2.44	0.49
1:B:616:GLU:HA	1:B:620:THR:HB	1.94	0.49
1:C:234:LEU:HD23	1:C:234:LEU:H	1.77	0.49
1:D:74:GLU:HB2	1:D:78:LYS:CB	2.39	0.49
1:D:234:LEU:HD23	1:D:234:LEU:H	1.77	0.49
1:D:322:LEU:HD13	1:D:556:MET:CE	2.42	0.49
1:D:473:ASN:N	1:D:473:ASN:OD1	2.45	0.49
1:D:686:ASP:O	1:D:689:ALA:HB3	2.12	0.49
1:E:76:LEU:HD22	1:E:76:LEU:N	2.27	0.49
1:E:248:TYR:HD2	1:E:248:TYR:C	2.16	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:456:LYS:HA	1:E:469:PHE:CD1	2.47	0.49
1:E:690:LYS:HD2	1:E:741:ILE:CG2	2.42	0.49
1:F:76:LEU:HD22	1:F:76:LEU:N	2.27	0.49
1:F:76:LEU:H	1:F:76:LEU:CD2	2.25	0.49
1:F:134:LYS:O	1:F:135:VAL:HG12	2.13	0.49
1:F:210:PHE:HZ	1:F:221:ASN:OD1	1.95	0.49
1:F:217:LYS:CG	1:F:236:GLU:HG3	2.43	0.49
1:F:602:PHE:N	1:F:602:PHE:HD2	2.10	0.49
2:R:6:GLU:O	2:R:9:ILE:N	2.38	0.49
2:S:65:PHE:O	2:S:68:PHE:HB3	2.12	0.49
1:B:184:LYS:O	1:B:185:ASP:C	2.51	0.49
1:B:217:LYS:CB	1:B:236:GLU:HG3	2.42	0.49
1:B:275:GLY:CA	1:B:278:LYS:HG3	2.37	0.49
1:B:442:TYR:CD1	1:B:455:TYR:HD1	2.25	0.49
1:B:473:ASN:N	1:B:473:ASN:OD1	2.45	0.49
1:B:611:THR:O	1:B:615:ILE:HG13	2.12	0.49
1:C:131:ARG:HB2	1:C:170:TYR:CZ	2.48	0.49
1:C:327:LEU:HG	1:C:595:ILE:HG23	1.93	0.49
1:C:333:LYS:C	1:C:335:ALA:H	2.15	0.49
1:C:595:ILE:HG22	1:C:596:ILE:H	1.75	0.49
1:D:252:ASP:CG	1:D:253:HIS:N	2.65	0.49
1:D:295:VAL:HG21	1:D:603:ILE:CG2	2.42	0.49
1:D:405:LEU:HD12	1:D:405:LEU:H	1.77	0.49
1:D:765:THR:HG22	1:D:769:SER:HB2	1.95	0.49
1:E:499:PRO:CG	1:E:504:ILE:HD11	2.42	0.49
1:E:540:ARG:CZ	1:E:627:TYR:CE1	2.96	0.49
1:F:90:PRO:HG2	1:F:93:VAL:CG1	2.42	0.49
1:F:521:ASN:HB3	1:F:524:GLU:HB3	1.93	0.49
1:F:552:TRP:HA	1:F:555:GLN:HG2	1.95	0.49
1:F:633:ASN:O	1:F:642:TYR:HE1	1.96	0.49
2:O:64:ASP:OD1	2:O:66:PRO:CD	2.56	0.49
2:Q:102:ALA:HB2	2:Q:125:ILE:HG13	1.93	0.49
1:A:252:ASP:CG	1:A:253:HIS:N	2.66	0.49
1:A:320:ARG:O	1:A:321:GLU:C	2.49	0.49
1:B:76:LEU:HD22	1:B:76:LEU:N	2.27	0.49
1:C:327:LEU:O	1:C:495:PHE:N	2.41	0.49
1:C:629:ASN:HB3	1:C:632:TYR:CD1	2.48	0.49
1:D:134:LYS:O	1:D:135:VAL:HG12	2.13	0.49
1:D:248:TYR:HD2	1:D:248:TYR:C	2.16	0.49
1:D:254:ARG:HD2	1:D:254:ARG:N	2.27	0.49
1:D:666:ASN:O	1:D:670:ILE:HG13	2.11	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:797:ILE:HG13	1:D:797:ILE:O	2.13	0.49
1:E:184:LYS:NZ	1:E:191:GLU:HG3	2.27	0.49
1:E:322:LEU:HD13	1:E:556:MET:CE	2.43	0.49
1:E:764:LEU:O	1:E:766:HIS:N	2.46	0.49
1:F:736:LEU:HD11	1:F:750:GLN:NE2	2.27	0.49
2:Q:12:PHE:HE1	2:Q:72:MET:CE	2.25	0.49
1:A:210:PHE:HZ	1:A:221:ASN:OD1	1.96	0.49
1:A:271:LEU:HB3	1:A:276:PHE:CE2	2.47	0.49
1:A:356:ASP:OD2	1:A:356:ASP:N	2.42	0.49
1:A:629:ASN:HB3	1:A:632:TYR:CD1	2.47	0.49
1:B:529:VAL:O	1:B:532:LEU:HB2	2.13	0.49
1:C:88:LYS:NZ	1:C:172:GLU:OE2	2.46	0.49
1:C:308:VAL:O	1:C:311:HIS:N	2.42	0.49
1:C:323:ASN:HD22	1:C:598:PRO:HB3	1.78	0.49
1:C:736:LEU:HD11	1:C:750:GLN:NE2	2.27	0.49
1:D:137:PHE:O	1:D:138:ALA:C	2.50	0.49
1:D:184:LYS:O	1:D:185:ASP:C	2.51	0.49
1:D:197:LYS:O	1:D:197:LYS:HD2	2.13	0.49
1:D:279:ILE:HD13	1:D:279:ILE:N	2.28	0.49
1:E:182:ILE:O	1:E:187:SER:HB2	2.13	0.49
1:F:189:ASP:O	1:F:191:GLU:HG2	2.12	0.49
1:F:293:ILE:HD11	1:F:617:LYS:HD3	1.94	0.49
1:F:473:ASN:OD1	1:F:473:ASN:N	2.45	0.49
1:F:688:PHE:O	1:F:689:ALA:C	2.51	0.49
2:R:73:ALA:O	2:R:75:LYS:N	2.46	0.49
1:A:122:GLU:CG	1:A:147:ARG:HB2	2.43	0.49
1:A:217:LYS:CB	1:A:236:GLU:HG3	2.42	0.49
1:A:500:SER:HG	1:A:502:THR:HG1	1.60	0.49
1:A:657:ILE:HD11	1:A:701:LEU:HD23	1.94	0.49
1:B:178:SER:OG	1:B:179:LEU:CD2	2.60	0.49
1:B:210:PHE:HZ	1:B:221:ASN:OD1	1.96	0.49
1:B:561:ASN:OD1	1:B:574:VAL:N	2.41	0.49
1:B:706:ASN:O	2:P:130:ILE:HG23	2.13	0.49
1:C:122:GLU:CG	1:C:147:ARG:HB2	2.43	0.49
1:C:128:MET:CE	1:C:239:HIS:NE2	2.76	0.49
1:C:173:ILE:O	1:C:174:GLY:C	2.52	0.49
1:C:184:LYS:O	1:C:185:ASP:C	2.51	0.49
1:C:433:TYR:HE1	1:C:448:ASP:OD2	1.96	0.49
1:C:666:ASN:O	1:C:670:ILE:HG13	2.13	0.49
1:D:164:GLU:O	1:D:166:SER:N	2.46	0.49
1:D:525:LYS:O	1:D:529:VAL:HG23	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:628:PHE:CE2	2:R:90:ARG:HD3	2.35	0.49
1:D:636:ALA:O	1:D:640:LYS:HA	2.12	0.49
1:E:519:THR:OG1	1:E:520:PRO:HD2	2.13	0.49
1:E:525:LYS:O	1:E:529:VAL:HG23	2.13	0.49
1:E:602:PHE:N	1:E:602:PHE:HD2	2.11	0.49
1:E:736:LEU:HD11	1:E:750:GLN:NE2	2.27	0.49
1:F:456:LYS:HA	1:F:469:PHE:CE1	2.48	0.49
1:F:480:ASN:HD22	1:F:481:VAL:N	2.10	0.49
2:P:120:GLU:HA	2:P:123:GLN:HB2	1.95	0.49
2:Q:73:ALA:O	2:Q:75:LYS:N	2.46	0.49
2:T:11:GLU:C	2:T:13:LYS:H	2.16	0.49
1:A:552:TRP:HA	1:A:555:GLN:HG2	1.94	0.49
1:B:384:ASN:O	1:B:386:GLU:N	2.46	0.49
1:B:456:LYS:HA	1:B:469:PHE:CE1	2.47	0.49
1:B:499:PRO:CG	1:B:504:ILE:HD11	2.42	0.49
1:C:616:GLU:HA	1:C:620:THR:HB	1.95	0.49
1:C:735:VAL:HA	1:C:738:SER:HB2	1.95	0.49
1:D:217:LYS:HB2	1:D:236:GLU:HG3	1.93	0.49
1:D:217:LYS:HZ2	1:D:236:GLU:HB2	1.77	0.49
1:D:223:LYS:HD3	1:D:224:SER:H	1.78	0.49
1:D:327:LEU:O	1:D:495:PHE:N	2.42	0.49
1:D:611:THR:O	1:D:615:ILE:HG13	2.12	0.49
1:D:630:ARG:NH1	2:R:83:GLU:HG2	2.28	0.49
1:E:133:GLU:HG3	1:E:133:GLU:O	2.08	0.49
1:E:137:PHE:O	1:E:138:ALA:C	2.51	0.49
1:E:184:LYS:O	1:E:185:ASP:C	2.51	0.49
1:E:433:TYR:HE1	1:E:448:ASP:OD2	1.96	0.49
1:F:234:LEU:HD23	1:F:234:LEU:H	1.77	0.49
1:F:716:LYS:O	1:F:720:ILE:HG22	2.13	0.49
2:P:65:PHE:CB	2:P:66:PRO:HD3	2.34	0.49
2:Q:9:ILE:HD12	2:Q:69:LEU:CD2	2.43	0.49
2:Q:120:GLU:HA	2:Q:123:GLN:HB2	1.95	0.49
1:A:189:ASP:O	1:A:191:GLU:HG2	2.13	0.48
1:A:445:ARG:HG2	1:A:471:TRP:CZ3	2.48	0.48
1:B:122:GLU:CG	1:B:147:ARG:HB2	2.43	0.48
1:B:184:LYS:NZ	1:B:191:GLU:HG3	2.27	0.48
1:C:271:LEU:HD13	1:C:276:PHE:HE2	1.78	0.48
1:C:621:GLY:HA2	2:Q:94:LYS:HZ3	1.78	0.48
1:C:735:VAL:O	1:C:738:SER:CB	2.61	0.48
1:D:271:LEU:HB3	1:D:276:PHE:CE2	2.48	0.48
1:D:301:ALA:HB1	1:D:604:LEU:HB2	1.93	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:368:GLN:OE1	1:D:368:GLN:HA	2.13	0.48
1:D:391:ILE:HG23	1:D:398:ILE:O	2.13	0.48
1:D:409:ARG:HD2	1:D:413:LEU:HD21	1.94	0.48
1:D:445:ARG:HG2	1:D:471:TRP:CZ3	2.48	0.48
1:D:446:ILE:HA	1:D:453:VAL:HA	1.95	0.48
1:D:690:LYS:HD3	1:D:741:ILE:HG23	1.95	0.48
1:E:118:GLN:HE22	1:E:143:PHE:HD2	1.61	0.48
1:E:199:LEU:HG	1:E:225:ILE:O	2.13	0.48
1:E:630:ARG:NH1	2:S:83:GLU:HG2	2.25	0.48
1:F:122:GLU:CG	1:F:147:ARG:HB2	2.43	0.48
1:F:564:VAL:O	1:F:567:THR:HG22	2.13	0.48
1:F:735:VAL:O	1:F:738:SER:HB3	2.12	0.48
2:R:13:LYS:HZ1	2:R:65:PHE:HB3	1.76	0.48
2:R:65:PHE:CB	2:R:66:PRO:HD3	2.34	0.48
2:S:12:PHE:HE1	2:S:72:MET:CE	2.25	0.48
1:A:170:TYR:O	1:A:174:GLY:HA3	2.12	0.48
1:A:178:SER:OG	1:A:179:LEU:CD2	2.61	0.48
1:A:196:ILE:O	1:A:199:LEU:HB2	2.14	0.48
1:B:144:GLU:CG	1:B:177:ILE:HD11	2.41	0.48
1:B:445:ARG:HG2	1:B:471:TRP:CZ3	2.48	0.48
1:C:173:ILE:HG23	1:C:174:GLY:H	1.77	0.48
1:C:473:ASN:OD1	1:C:473:ASN:N	2.45	0.48
1:D:199:LEU:HG	1:D:225:ILE:O	2.13	0.48
1:D:433:TYR:HE1	1:D:448:ASP:OD2	1.95	0.48
1:D:501:LEU:HD22	2:R:112:LEU:HD21	1.96	0.48
1:D:671:ARG:HH12	1:D:677:GLY:HA3	1.74	0.48
1:D:736:LEU:HD11	1:D:750:GLN:NE2	2.27	0.48
1:E:89:ILE:HG22	1:E:90:PRO:HD2	1.95	0.48
1:E:164:GLU:HG2	1:E:166:SER:HB3	1.95	0.48
1:E:178:SER:OG	1:E:179:LEU:CD2	2.60	0.48
1:E:497:LEU:CD1	1:E:556:MET:HG2	2.40	0.48
1:F:437:SER:O	1:F:439:ASN:N	2.43	0.48
2:P:117:THR:CG2	2:P:120:GLU:HB2	2.43	0.48
1:A:173:ILE:HG23	1:A:174:GLY:H	1.78	0.48
1:A:234:LEU:HD23	1:A:234:LEU:H	1.78	0.48
1:A:322:LEU:HD13	1:A:556:MET:CE	2.44	0.48
1:A:540:ARG:CZ	1:A:627:TYR:CE1	2.96	0.48
1:A:629:ASN:HD22	1:A:630:ARG:N	2.11	0.48
1:B:182:ILE:O	1:B:187:SER:HB2	2.12	0.48
1:B:665:LYS:HE2	2:P:11:GLU:OE2	2.14	0.48
1:C:102:GLY:C	1:C:103:GLU:HG3	2.34	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:501:LEU:CD2	2:Q:112:LEU:HD21	2.44	0.48
1:C:565:LYS:C	1:C:567:THR:H	2.17	0.48
1:C:665:LYS:HE2	2:Q:11:GLU:OE2	2.14	0.48
1:C:741:ILE:O	1:C:741:ILE:HG13	2.12	0.48
1:D:88:LYS:NZ	1:D:172:GLU:OE2	2.46	0.48
1:D:293:ILE:HD11	1:D:617:LYS:HD3	1.95	0.48
1:E:173:ILE:O	1:E:174:GLY:C	2.51	0.48
1:E:391:ILE:HG23	1:E:398:ILE:O	2.13	0.48
1:E:456:LYS:HA	1:E:469:PHE:CE1	2.48	0.48
1:F:170:TYR:O	1:F:174:GLY:HA3	2.13	0.48
1:F:322:LEU:HD13	1:F:556:MET:CE	2.43	0.48
1:F:472:ARG:HB3	1:F:472:ARG:NH1	2.29	0.48
2:P:9:ILE:HD12	2:P:69:LEU:CD2	2.43	0.48
2:Q:13:LYS:HA	2:Q:16:PHE:HB3	1.95	0.48
2:S:102:ALA:HB2	2:S:125:ILE:HG13	1.94	0.48
1:A:199:LEU:C	1:A:201:ASP:N	2.65	0.48
1:A:279:ILE:N	1:A:279:ILE:HD13	2.28	0.48
1:B:173:ILE:O	1:B:174:GLY:C	2.52	0.48
1:B:486:LYS:HE3	1:B:570:THR:O	2.13	0.48
1:B:581:GLN:HE21	1:B:629:ASN:H	1.61	0.48
1:C:169:VAL:O	1:C:172:GLU:HB2	2.14	0.48
1:C:686:ASP:O	1:C:689:ALA:HB3	2.14	0.48
1:D:495:PHE:O	1:D:581:GLN:HG2	2.13	0.48
1:D:602:PHE:N	1:D:602:PHE:HD2	2.11	0.48
1:E:217:LYS:CG	1:E:236:GLU:HG3	2.44	0.48
1:E:254:ARG:HD2	1:E:254:ARG:N	2.26	0.48
1:E:296:LEU:CD2	1:E:296:LEU:N	2.38	0.48
1:E:323:ASN:HD22	1:E:598:PRO:HB3	1.79	0.48
1:E:368:GLN:HA	1:E:368:GLN:OE1	2.14	0.48
1:F:334:LEU:H	1:F:334:LEU:CD1	2.26	0.48
1:F:581:GLN:HE21	1:F:629:ASN:H	1.61	0.48
2:O:6:GLU:O	2:O:9:ILE:N	2.39	0.48
2:O:146:THR:O	2:O:147:ALA:C	2.52	0.48
2:S:120:GLU:HA	2:S:123:GLN:HB2	1.95	0.48
1:A:504:ILE:N	1:A:504:ILE:HD12	2.29	0.48
1:A:736:LEU:HD11	1:A:750:GLN:NE2	2.27	0.48
1:B:115:LYS:HZ1	1:B:117:LEU:HB2	1.78	0.48
1:B:325:TYR:CD1	1:B:598:PRO:HD3	2.49	0.48
1:B:334:LEU:H	1:B:334:LEU:CD1	2.27	0.48
1:B:409:ARG:CZ	1:B:413:LEU:HD21	2.44	0.48
1:C:525:LYS:O	1:C:529:VAL:HG23	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:765:THR:HG22	1:C:769:SER:HB2	1.96	0.48
1:D:478:ALA:CB	1:D:486:LYS:O	2.58	0.48
1:E:107:THR:HG21	1:E:115:LYS:CD	2.36	0.48
1:E:325:TYR:CD1	1:E:598:PRO:HD3	2.49	0.48
1:E:597:ASN:O	1:E:599:GLU:N	2.46	0.48
1:E:690:LYS:HD3	1:E:741:ILE:HG23	1.94	0.48
1:F:199:LEU:HG	1:F:225:ILE:O	2.13	0.48
1:F:630:ARG:NH1	2:T:83:GLU:HG2	2.26	0.48
1:F:735:VAL:HA	1:F:738:SER:HB2	1.96	0.48
2:P:101:SER:OG	2:P:104:GLU:HG2	2.14	0.48
2:Q:146:THR:O	2:Q:147:ALA:C	2.52	0.48
1:A:636:ALA:O	1:A:640:LYS:HA	2.12	0.48
1:B:164:GLU:O	1:B:166:SER:N	2.47	0.48
1:B:184:LYS:HE2	1:B:193:LEU:HD12	1.96	0.48
1:B:196:ILE:O	1:B:199:LEU:HB2	2.14	0.48
1:B:354:SER:OG	1:B:355:SER:N	2.47	0.48
1:B:433:TYR:HE1	1:B:448:ASP:OD2	1.96	0.48
1:C:128:MET:HE3	1:C:239:HIS:NE2	2.29	0.48
1:D:339:ILE:O	1:D:342:GLY:N	2.47	0.48
1:E:173:ILE:HG23	1:E:174:GLY:H	1.78	0.48
1:E:234:LEU:HD23	1:E:234:LEU:H	1.77	0.48
1:E:279:ILE:HD13	1:E:279:ILE:N	2.28	0.48
1:E:552:TRP:HA	1:E:555:GLN:HG2	1.94	0.48
1:F:184:LYS:HE2	1:F:193:LEU:CD1	2.43	0.48
2:T:58:ASP:HB3	2:T:62:THR:CG2	2.44	0.48
1:A:326:ILE:CG2	1:A:328:PHE:CE1	2.97	0.48
1:A:334:LEU:H	1:A:334:LEU:CD1	2.26	0.48
1:B:223:LYS:HD3	1:B:224:SER:H	1.76	0.48
1:B:540:ARG:CZ	1:B:627:TYR:CE1	2.97	0.48
1:B:629:ASN:HB3	1:B:632:TYR:CD1	2.49	0.48
1:B:686:ASP:O	1:B:689:ALA:HB3	2.13	0.48
1:C:611:THR:O	1:C:615:ILE:HG13	2.13	0.48
1:D:210:PHE:HZ	1:D:221:ASN:OD1	1.97	0.48
1:D:217:LYS:CG	1:D:236:GLU:HG3	2.44	0.48
1:E:122:GLU:CG	1:E:147:ARG:HB2	2.43	0.48
1:E:275:GLY:CA	1:E:278:LYS:HG3	2.37	0.48
1:E:293:ILE:HD11	1:E:617:LYS:HD3	1.94	0.48
1:E:755:ARG:O	1:E:756:ILE:C	2.51	0.48
1:F:414:LYS:O	1:F:417:GLY:N	2.39	0.48
1:F:540:ARG:CZ	1:F:627:TYR:CE1	2.97	0.48
1:F:636:ALA:O	1:F:640:LYS:HA	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:117:THR:CG2	2:T:120:GLU:HB2	2.42	0.48
1:A:319:ALA:O	1:A:323:ASN:HA	2.14	0.48
1:A:338:LEU:HD21	1:A:409:ARG:NE	2.29	0.48
1:A:409:ARG:HD2	1:A:413:LEU:HD21	1.95	0.48
1:A:414:LYS:O	1:A:417:GLY:N	2.40	0.48
1:A:602:PHE:N	1:A:602:PHE:HD2	2.11	0.48
1:A:764:LEU:O	1:A:766:HIS:N	2.46	0.48
1:B:217:LYS:HB2	1:B:236:GLU:HG3	1.93	0.48
1:B:322:LEU:HD13	1:B:556:MET:CE	2.44	0.48
1:B:688:PHE:O	1:B:689:ALA:C	2.52	0.48
1:C:208:LEU:H	1:C:208:LEU:HD12	1.79	0.48
1:C:519:THR:OG1	1:C:520:PRO:HD2	2.13	0.48
1:C:636:ALA:O	1:C:640:LYS:HA	2.13	0.48
1:D:300:LYS:O	1:D:303:LYS:HB2	2.14	0.48
1:D:338:LEU:HD21	1:D:409:ARG:NE	2.29	0.48
1:D:472:ARG:HB3	1:D:472:ARG:NH1	2.29	0.48
1:D:486:LYS:HE3	1:D:570:THR:O	2.14	0.48
1:D:501:LEU:CD2	2:R:112:LEU:HD21	2.43	0.48
1:F:324:THR:CB	1:F:499:PRO:HA	2.41	0.48
1:F:391:ILE:HG23	1:F:398:ILE:O	2.14	0.48
1:F:565:LYS:C	1:F:567:THR:H	2.17	0.48
1:F:666:ASN:O	1:F:670:ILE:HG13	2.13	0.48
1:F:715:GLU:OE1	1:F:767:GLN:NE2	2.47	0.48
2:O:101:SER:OG	2:O:104:GLU:HG2	2.13	0.48
1:A:293:ILE:HD11	1:A:617:LYS:HD3	1.95	0.48
1:A:300:LYS:O	1:A:303:LYS:HB2	2.14	0.48
1:A:306:GLY:O	1:A:336:THR:HG23	2.14	0.48
1:A:472:ARG:HB3	1:A:472:ARG:NH1	2.28	0.48
1:A:688:PHE:O	1:A:689:ALA:C	2.51	0.48
1:A:690:LYS:HD3	1:A:741:ILE:HG23	1.96	0.48
1:A:716:LYS:O	1:A:717:LYS:C	2.52	0.48
1:A:797:ILE:O	1:A:798:ASP:OD1	2.32	0.48
1:B:271:LEU:HD13	1:B:276:PHE:HE2	1.79	0.48
1:B:495:PHE:O	1:B:581:GLN:HG2	2.14	0.48
1:B:730:ASN:O	1:B:732:ILE:N	2.46	0.48
1:D:271:LEU:HD13	1:D:276:PHE:HE2	1.79	0.48
1:D:552:TRP:HA	1:D:555:GLN:HG2	1.94	0.48
1:D:635:ILE:H	1:D:635:ILE:CD1	2.15	0.48
1:E:257:LEU:O	1:E:261:ALA:O	2.32	0.48
1:E:327:LEU:HG	1:E:595:ILE:HG12	1.96	0.48
1:E:431:LYS:O	1:E:432:TYR:HD2	1.97	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:616:GLU:HA	1:E:620:THR:HB	1.95	0.48
1:F:279:ILE:HD13	1:F:279:ILE:N	2.28	0.48
1:F:338:LEU:HD21	1:F:409:ARG:NE	2.29	0.48
2:P:12:PHE:HE1	2:P:72:MET:CE	2.26	0.48
2:S:146:THR:O	2:S:147:ALA:C	2.51	0.48
2:T:13:LYS:HZ1	2:T:65:PHE:CB	2.26	0.48
2:T:120:GLU:HA	2:T:123:GLN:HB2	1.95	0.48
1:A:128:MET:CE	1:A:239:HIS:NE2	2.77	0.48
1:A:217:LYS:HB2	1:A:236:GLU:HG3	1.94	0.48
1:A:248:TYR:HD2	1:A:248:TYR:C	2.16	0.48
1:A:271:LEU:HD13	1:A:276:PHE:HE2	1.78	0.48
1:B:323:ASN:HD22	1:B:598:PRO:HB3	1.79	0.48
1:B:437:SER:O	1:B:439:ASN:N	2.43	0.48
1:B:519:THR:OG1	1:B:520:PRO:HD2	2.14	0.48
1:C:256:VAL:O	1:C:260:TYR:HB2	2.14	0.48
1:D:131:ARG:HB2	1:D:170:TYR:CE2	2.49	0.48
1:D:323:ASN:HD22	1:D:598:PRO:HB3	1.79	0.48
1:D:616:GLU:HA	1:D:620:THR:HB	1.95	0.48
1:E:210:PHE:HZ	1:E:221:ASN:OD1	1.97	0.48
1:E:495:PHE:O	1:E:581:GLN:HG2	2.14	0.48
1:E:743:PRO:O	1:E:746:LYS:N	2.47	0.48
1:F:593:ILE:C	1:F:604:LEU:HD12	2.34	0.48
1:F:616:GLU:HA	1:F:620:THR:HB	1.95	0.48
2:Q:11:GLU:C	2:Q:13:LYS:H	2.17	0.48
2:R:11:GLU:C	2:R:13:LYS:H	2.17	0.48
2:R:120:GLU:HA	2:R:123:GLN:HB2	1.96	0.48
1:A:164:GLU:O	1:A:166:SER:N	2.47	0.47
1:A:529:VAL:O	1:A:532:LEU:HB2	2.13	0.47
1:B:254:ARG:HD2	1:B:254:ARG:N	2.26	0.47
1:B:391:ILE:HG23	1:B:398:ILE:O	2.14	0.47
1:B:593:ILE:C	1:B:604:LEU:HD12	2.34	0.47
1:C:90:PRO:HG2	1:C:93:VAL:CG1	2.44	0.47
1:C:148:GLU:HG3	1:C:149:THR:H	1.78	0.47
1:C:197:LYS:HD2	1:C:197:LYS:O	2.14	0.47
1:C:431:LYS:O	1:C:432:TYR:HD2	1.97	0.47
1:C:472:ARG:HB3	1:C:472:ARG:NH1	2.29	0.47
1:C:495:PHE:O	1:C:581:GLN:HG2	2.13	0.47
1:C:552:TRP:HA	1:C:555:GLN:HG2	1.95	0.47
1:D:122:GLU:CG	1:D:147:ARG:HB2	2.43	0.47
1:D:743:PRO:O	1:D:746:LYS:N	2.47	0.47
1:E:164:GLU:O	1:E:166:SER:N	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:529:VAL:O	1:E:532:LEU:HB2	2.14	0.47
1:F:208:LEU:H	1:F:208:LEU:HD12	1.79	0.47
1:F:252:ASP:CG	1:F:253:HIS:N	2.67	0.47
1:F:495:PHE:O	1:F:581:GLN:HG2	2.14	0.47
1:F:619:ILE:O	1:F:620:THR:C	2.53	0.47
2:O:8:GLN:O	2:O:12:PHE:HD2	1.97	0.47
2:P:109:MET:HG3	2:P:116:LEU:CD1	2.44	0.47
2:R:9:ILE:HD12	2:R:69:LEU:CD2	2.43	0.47
2:S:101:SER:OG	2:S:104:GLU:HG2	2.13	0.47
1:A:169:VAL:O	1:A:172:GLU:HB2	2.14	0.47
1:A:472:ARG:HB3	1:A:472:ARG:HH11	1.79	0.47
1:B:99:GLU:C	1:B:101:GLY:N	2.67	0.47
1:B:199:LEU:HG	1:B:225:ILE:O	2.14	0.47
1:C:432:TYR:CD2	1:C:447:SER:HA	2.49	0.47
1:D:90:PRO:HG2	1:D:93:VAL:CG1	2.44	0.47
1:D:169:VAL:O	1:D:172:GLU:HB2	2.15	0.47
1:E:99:GLU:C	1:E:101:GLY:N	2.68	0.47
1:E:409:ARG:CZ	1:E:413:LEU:HD21	2.44	0.47
1:E:431:LYS:O	1:E:432:TYR:CD2	2.67	0.47
1:E:437:SER:O	1:E:439:ASN:N	2.43	0.47
1:E:486:LYS:HE3	1:E:570:THR:O	2.13	0.47
1:E:565:LYS:C	1:E:567:THR:H	2.17	0.47
1:F:79:ILE:O	1:F:81:GLN:N	2.47	0.47
1:F:184:LYS:O	1:F:185:ASP:C	2.51	0.47
1:F:433:TYR:HE1	1:F:448:ASP:OD2	1.97	0.47
1:F:665:LYS:HE2	2:T:11:GLU:OE2	2.14	0.47
2:O:12:PHE:HE1	2:O:72:MET:CE	2.26	0.47
2:O:120:GLU:HA	2:O:123:GLN:HB2	1.95	0.47
2:P:13:LYS:HA	2:P:16:PHE:HB3	1.95	0.47
2:R:146:THR:O	2:R:147:ALA:C	2.51	0.47
2:S:58:ASP:HB3	2:S:62:THR:CG2	2.44	0.47
2:S:117:THR:CG2	2:S:120:GLU:HB2	2.42	0.47
2:T:13:LYS:HA	2:T:16:PHE:HB3	1.96	0.47
1:A:197:LYS:O	1:A:197:LYS:HD2	2.14	0.47
1:A:431:LYS:O	1:A:432:TYR:HD2	1.98	0.47
1:A:499:PRO:CG	1:A:504:ILE:HD11	2.43	0.47
1:A:565:LYS:C	1:A:567:THR:H	2.16	0.47
1:B:565:LYS:C	1:B:567:THR:H	2.17	0.47
1:B:690:LYS:HD3	1:B:741:ILE:HG23	1.96	0.47
1:C:325:TYR:CD1	1:C:598:PRO:HD3	2.50	0.47
1:D:173:ILE:O	1:D:174:GLY:C	2.52	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:184:LYS:HZ2	1:D:191:GLU:HG3	1.79	0.47
1:D:437:SER:O	1:D:439:ASN:N	2.42	0.47
1:D:565:LYS:C	1:D:567:THR:H	2.17	0.47
1:E:300:LYS:O	1:E:303:LYS:HB2	2.14	0.47
1:E:306:GLY:O	1:E:336:THR:HG23	2.14	0.47
1:E:338:LEU:HD21	1:E:409:ARG:NE	2.29	0.47
1:E:665:LYS:HE2	2:S:11:GLU:OE2	2.14	0.47
1:E:706:ASN:O	2:S:130:ILE:HG23	2.14	0.47
1:F:197:LYS:HD2	1:F:197:LYS:O	2.15	0.47
1:F:431:LYS:O	1:F:432:TYR:CD2	2.67	0.47
1:F:690:LYS:HD2	1:F:741:ILE:CG2	2.43	0.47
2:T:76:MET:HA	2:T:79:THR:HG22	1.95	0.47
1:A:254:ARG:HD2	1:A:254:ARG:N	2.27	0.47
1:A:391:ILE:HG23	1:A:398:ILE:O	2.14	0.47
1:A:433:TYR:HE1	1:A:448:ASP:OD2	1.97	0.47
1:B:339:ILE:O	1:B:342:GLY:N	2.48	0.47
1:C:76:LEU:H	1:C:76:LEU:HD22	1.79	0.47
1:C:154:ILE:HG13	1:C:171:TYR:CD1	2.49	0.47
1:C:173:ILE:HD12	1:C:243:LEU:HD21	1.96	0.47
1:D:173:ILE:HG23	1:D:174:GLY:H	1.79	0.47
1:D:238:GLN:C	1:D:240:ALA:N	2.68	0.47
1:D:431:LYS:O	1:D:432:TYR:HD2	1.97	0.47
1:D:472:ARG:HB3	1:D:472:ARG:HH11	1.79	0.47
1:D:504:ILE:N	1:D:504:ILE:HD12	2.29	0.47
1:D:690:LYS:HD2	1:D:741:ILE:CG2	2.44	0.47
1:E:88:LYS:NZ	1:E:172:GLU:OE1	2.48	0.47
1:E:354:SER:OG	1:E:355:SER:N	2.47	0.47
1:E:730:ASN:O	1:E:732:ILE:N	2.47	0.47
1:E:764:LEU:C	1:E:766:HIS:H	2.18	0.47
1:F:729:TYR:HB2	1:F:756:ILE:HG21	1.96	0.47
2:O:76:MET:HA	2:O:79:THR:HG22	1.96	0.47
2:Q:30:LYS:H	2:Q:30:LYS:CD	2.13	0.47
2:Q:101:SER:OG	2:Q:104:GLU:HG2	2.14	0.47
2:S:109:MET:HG3	2:S:116:LEU:CD1	2.44	0.47
2:T:27:ILE:HD12	2:T:32:LEU:HA	1.96	0.47
1:A:102:GLY:C	1:A:103:GLU:HG3	2.35	0.47
1:A:339:ILE:O	1:A:342:GLY:N	2.48	0.47
1:A:486:LYS:HE3	1:A:570:THR:O	2.15	0.47
1:A:555:GLN:HG3	1:A:556:MET:N	2.29	0.47
1:A:633:ASN:O	1:A:642:TYR:HE1	1.96	0.47
1:B:173:ILE:HG23	1:B:174:GLY:H	1.78	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:610:MET:O	1:B:614:PHE:N	2.43	0.47
1:C:115:LYS:HB3	1:C:115:LYS:HZ3	1.78	0.47
1:C:210:PHE:HZ	1:C:221:ASN:OD1	1.97	0.47
1:C:295:VAL:HG12	1:C:605:THR:HA	1.95	0.47
1:D:102:GLY:C	1:D:103:GLU:HG3	2.34	0.47
1:D:295:VAL:HG12	1:D:605:THR:HA	1.96	0.47
1:D:555:GLN:HG3	1:D:556:MET:N	2.29	0.47
1:E:311:HIS:CD2	1:E:564:VAL:HB	2.49	0.47
1:E:686:ASP:O	1:E:689:ALA:HB3	2.14	0.47
1:F:409:ARG:CZ	1:F:413:LEU:HD21	2.44	0.47
1:F:431:LYS:O	1:F:432:TYR:HD2	1.97	0.47
1:F:519:THR:OG1	1:F:520:PRO:HD2	2.14	0.47
2:O:117:THR:CG2	2:O:120:GLU:HB2	2.42	0.47
2:T:138:TYR:O	2:T:142:VAL:HG23	2.14	0.47
1:A:173:ILE:HD12	1:A:243:LEU:HD21	1.97	0.47
1:A:181:ILE:O	1:A:181:ILE:HG12	2.15	0.47
1:A:561:ASN:OD1	1:A:574:VAL:N	2.41	0.47
1:B:311:HIS:CD2	1:B:564:VAL:HB	2.49	0.47
1:D:447:SER:OG	1:D:448:ASP:N	2.45	0.47
1:D:797:ILE:O	1:D:798:ASP:OD1	2.32	0.47
1:E:220:LEU:HG	1:E:223:LYS:HB2	1.96	0.47
1:E:445:ARG:HG2	1:E:471:TRP:CZ3	2.49	0.47
1:E:629:ASN:HB3	1:E:632:TYR:CD1	2.50	0.47
1:F:88:LYS:NZ	1:F:172:GLU:OE1	2.47	0.47
1:F:178:SER:OG	1:F:179:LEU:N	2.48	0.47
1:F:325:TYR:CD1	1:F:598:PRO:HD3	2.49	0.47
1:F:472:ARG:HB3	1:F:472:ARG:HH11	1.80	0.47
1:F:501:LEU:HD22	2:T:112:LEU:HD21	1.96	0.47
2:O:109:MET:HG3	2:O:116:LEU:CD1	2.45	0.47
2:Q:117:THR:CG2	2:Q:120:GLU:HB2	2.42	0.47
2:R:49:GLN:HA	2:R:52:ILE:HG22	1.96	0.47
2:T:30:LYS:H	2:T:30:LYS:CD	2.12	0.47
2:T:109:MET:HG3	2:T:116:LEU:CD1	2.45	0.47
1:A:208:LEU:H	1:A:208:LEU:HD12	1.80	0.47
1:A:225:ILE:HG12	1:A:229:PHE:CE2	2.48	0.47
1:A:442:TYR:HD1	1:A:455:TYR:CD1	2.26	0.47
1:A:495:PHE:O	1:A:581:GLN:HG2	2.15	0.47
1:A:497:LEU:CD1	1:A:556:MET:HG2	2.38	0.47
1:A:743:PRO:O	1:A:746:LYS:N	2.48	0.47
1:B:90:PRO:HG2	1:B:93:VAL:CG1	2.44	0.47
1:B:306:GLY:O	1:B:336:THR:HG23	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:327:LEU:HG	1:B:595:ILE:HG12	1.96	0.47
1:B:431:LYS:O	1:B:432:TYR:HD2	1.97	0.47
1:B:472:ARG:NH1	1:B:472:ARG:HB3	2.29	0.47
1:B:621:GLY:HA2	2:P:94:LYS:NZ	2.29	0.47
1:B:636:ALA:O	1:B:640:LYS:N	2.47	0.47
1:B:756:ILE:O	1:B:760:VAL:HG23	2.15	0.47
1:C:181:ILE:O	1:C:181:ILE:HG12	2.15	0.47
1:C:220:LEU:HG	1:C:223:LYS:HB2	1.96	0.47
1:C:472:ARG:HB3	1:C:472:ARG:HH11	1.79	0.47
1:C:597:ASN:O	1:C:599:GLU:N	2.47	0.47
1:C:716:LYS:O	1:C:717:LYS:C	2.52	0.47
1:D:164:GLU:HG2	1:D:166:SER:HB3	1.97	0.47
1:D:189:ASP:O	1:D:191:GLU:HG2	2.15	0.47
1:D:409:ARG:CZ	1:D:413:LEU:HD21	2.44	0.47
1:D:636:ALA:O	1:D:640:LYS:N	2.47	0.47
1:D:729:TYR:HB2	1:D:756:ILE:HG21	1.96	0.47
1:E:79:ILE:O	1:E:81:GLN:N	2.48	0.47
1:E:102:GLY:C	1:E:103:GLU:HG3	2.35	0.47
1:E:169:VAL:O	1:E:172:GLU:HB2	2.14	0.47
1:E:225:ILE:HG23	1:E:229:PHE:CE2	2.49	0.47
1:E:334:LEU:H	1:E:334:LEU:CD1	2.27	0.47
1:E:677:GLY:HA2	1:E:745:TYR:OH	2.15	0.47
1:E:797:ILE:O	1:E:798:ASP:OD1	2.33	0.47
1:F:164:GLU:O	1:F:166:SER:N	2.47	0.47
1:F:173:ILE:O	1:F:174:GLY:C	2.52	0.47
1:F:196:ILE:O	1:F:199:LEU:HB2	2.14	0.47
1:F:220:LEU:HG	1:F:223:LYS:HB2	1.97	0.47
1:F:597:ASN:O	1:F:599:GLU:N	2.46	0.47
1:F:636:ALA:O	1:F:640:LYS:N	2.48	0.47
1:F:686:ASP:O	1:F:689:ALA:HB3	2.14	0.47
1:F:724:ARG:HG3	1:F:724:ARG:NH1	2.27	0.47
2:O:13:LYS:HA	2:O:16:PHE:HB3	1.96	0.47
2:P:13:LYS:HZ1	2:P:65:PHE:CB	2.27	0.47
2:Q:3:GLN:N	2:Q:77:LYS:HD3	2.30	0.47
2:Q:49:GLN:HA	2:Q:52:ILE:HG22	1.96	0.47
2:Q:138:TYR:CZ	2:Q:142:VAL:HG21	2.50	0.47
2:R:138:TYR:CZ	2:R:142:VAL:HG21	2.50	0.47
2:S:27:ILE:HD12	2:S:32:LEU:HA	1.97	0.47
1:A:130:SER:O	1:A:132:GLY:O	2.33	0.47
1:A:409:ARG:CZ	1:A:413:LEU:HD21	2.43	0.47
1:B:152:LEU:CD2	1:B:154:ILE:HG12	2.45	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:208:LEU:H	1:B:208:LEU:HD12	1.80	0.47
1:B:523:LEU:HD22	2:P:127:GLU:HG2	1.97	0.47
1:B:743:PRO:O	1:B:746:LYS:N	2.48	0.47
1:C:199:LEU:HG	1:C:225:ILE:O	2.14	0.47
1:D:181:ILE:O	1:D:181:ILE:HG12	2.14	0.47
1:D:432:TYR:CD2	1:D:447:SER:HA	2.50	0.47
1:D:529:VAL:O	1:D:532:LEU:HB2	2.14	0.47
1:E:223:LYS:HD3	1:E:224:SER:H	1.77	0.47
1:E:327:LEU:HG	1:E:595:ILE:HG23	1.97	0.47
1:F:102:GLY:HA2	1:F:150:PRO:O	2.15	0.47
1:F:275:GLY:CA	1:F:278:LYS:HG3	2.37	0.47
2:O:11:GLU:C	2:O:13:LYS:H	2.18	0.47
2:P:11:GLU:C	2:P:13:LYS:H	2.18	0.47
2:P:27:ILE:HD12	2:P:32:LEU:HA	1.97	0.47
2:Q:25:GLY:HA3	2:Q:65:PHE:CZ	2.50	0.47
1:A:184:LYS:HE2	1:A:193:LEU:HD12	1.97	0.47
1:A:217:LYS:CG	1:A:236:GLU:HG3	2.44	0.47
1:A:332:ASN:OD1	1:A:334:LEU:N	2.46	0.47
1:A:666:ASN:O	1:A:670:ILE:HG13	2.13	0.47
1:B:181:ILE:O	1:B:181:ILE:HG12	2.14	0.47
1:B:238:GLN:C	1:B:240:ALA:N	2.68	0.47
1:B:368:GLN:OE1	1:B:368:GLN:HA	2.15	0.47
1:C:196:ILE:O	1:C:199:LEU:HB2	2.14	0.47
1:C:501:LEU:HD22	2:Q:112:LEU:HD21	1.97	0.47
1:C:514:ASP:O	1:C:516:VAL:N	2.48	0.47
1:C:636:ALA:O	1:C:640:LYS:N	2.48	0.47
1:D:173:ILE:HD12	1:D:243:LEU:HD21	1.96	0.47
1:D:325:TYR:CD1	1:D:598:PRO:HD3	2.50	0.47
1:D:442:TYR:HD1	1:D:455:TYR:CD1	2.26	0.47
1:E:181:ILE:O	1:E:181:ILE:HG12	2.15	0.47
1:E:238:GLN:C	1:E:240:ALA:N	2.68	0.47
1:F:327:LEU:HG	1:F:595:ILE:HG23	1.97	0.47
1:F:501:LEU:CD2	2:T:112:LEU:HD21	2.45	0.47
1:F:735:VAL:O	1:F:738:SER:CB	2.63	0.47
2:P:114:GLU:HA	2:P:114:GLU:OE2	2.15	0.47
2:Q:111:ASN:C	2:Q:113:GLY:H	2.18	0.47
2:R:109:MET:HG3	2:R:116:LEU:CD1	2.44	0.47
2:S:13:LYS:HA	2:S:16:PHE:HB3	1.95	0.47
2:S:114:GLU:HA	2:S:114:GLU:OE2	2.15	0.47
1:A:686:ASP:O	1:A:689:ALA:HB3	2.14	0.47
1:A:730:ASN:O	1:A:732:ILE:N	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:197:LYS:HD2	1:B:197:LYS:O	2.14	0.47
1:B:327:LEU:HG	1:B:595:ILE:HG23	1.97	0.47
1:C:217:LYS:CG	1:C:236:GLU:HG3	2.44	0.47
1:C:248:TYR:C	1:C:248:TYR:HD2	2.16	0.47
1:C:619:ILE:O	1:C:620:THR:C	2.52	0.47
1:D:176:GLY:O	1:D:180:ASP:OD1	2.32	0.47
1:D:431:LYS:O	1:D:432:TYR:CD2	2.68	0.47
1:D:619:ILE:O	1:D:620:THR:C	2.53	0.47
1:D:633:ASN:O	1:D:642:TYR:HE1	1.98	0.47
1:D:657:ILE:HD11	1:D:701:LEU:HD23	1.97	0.47
1:E:208:LEU:HD12	1:E:208:LEU:H	1.79	0.47
1:E:504:ILE:HD12	1:E:504:ILE:N	2.30	0.47
1:F:256:VAL:O	1:F:260:TYR:HB2	2.15	0.47
1:F:629:ASN:HD22	1:F:630:ARG:N	2.13	0.47
2:Q:109:MET:HG3	2:Q:116:LEU:CD1	2.45	0.47
2:Q:114:GLU:HA	2:Q:114:GLU:OE2	2.15	0.47
2:R:58:ASP:C	2:R:60:ASN:N	2.68	0.47
2:S:8:GLN:O	2:S:12:PHE:HD2	1.98	0.47
2:S:9:ILE:HD12	2:S:69:LEU:CD2	2.45	0.47
2:T:146:THR:O	2:T:147:ALA:C	2.53	0.47
1:A:323:ASN:HD22	1:A:598:PRO:HB3	1.79	0.46
1:B:225:ILE:HG12	1:B:229:PHE:CE2	2.49	0.46
1:B:285:LYS:C	1:B:287:GLY:H	2.18	0.46
1:B:319:ALA:O	1:B:323:ASN:HA	2.15	0.46
1:B:504:ILE:HD12	1:B:504:ILE:N	2.30	0.46
1:C:164:GLU:O	1:C:166:SER:N	2.48	0.46
1:C:409:ARG:CZ	1:C:413:LEU:HD21	2.44	0.46
1:C:529:VAL:O	1:C:532:LEU:HB2	2.14	0.46
1:E:478:ALA:CB	1:E:486:LYS:O	2.59	0.46
1:E:635:ILE:H	1:E:635:ILE:CD1	2.16	0.46
1:F:173:ILE:HG23	1:F:174:GLY:H	1.79	0.46
1:F:263:ASP:O	1:F:264:MET:C	2.54	0.46
1:F:327:LEU:HG	1:F:595:ILE:HG12	1.96	0.46
1:F:529:VAL:O	1:F:532:LEU:HB2	2.15	0.46
2:O:27:ILE:HD12	2:O:32:LEU:HA	1.97	0.46
2:P:138:TYR:CZ	2:P:142:VAL:HG21	2.50	0.46
2:R:13:LYS:HA	2:R:16:PHE:HB3	1.95	0.46
2:R:114:GLU:OE2	2:R:114:GLU:HA	2.15	0.46
2:S:49:GLN:HA	2:S:52:ILE:HG22	1.96	0.46
1:A:88:LYS:NZ	1:A:172:GLU:OE1	2.48	0.46
1:A:152:LEU:CD2	1:A:154:ILE:HG12	2.45	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:199:LEU:HG	1:A:225:ILE:O	2.14	0.46
1:A:225:ILE:HG23	1:A:229:PHE:CE2	2.50	0.46
1:A:368:GLN:OE1	1:A:368:GLN:HA	2.14	0.46
1:A:636:ALA:O	1:A:640:LYS:N	2.47	0.46
1:B:300:LYS:O	1:B:303:LYS:HB2	2.15	0.46
1:B:497:LEU:CD1	1:B:556:MET:HG2	2.40	0.46
1:C:300:LYS:O	1:C:303:LYS:HB2	2.15	0.46
1:C:338:LEU:HD21	1:C:409:ARG:NE	2.31	0.46
1:C:442:TYR:HD1	1:C:455:TYR:CD1	2.26	0.46
1:C:445:ARG:HG2	1:C:471:TRP:CZ3	2.50	0.46
1:C:555:GLN:HG3	1:C:556:MET:N	2.30	0.46
1:D:327:LEU:HG	1:D:595:ILE:HG12	1.97	0.46
1:E:197:LYS:HD2	1:E:197:LYS:O	2.14	0.46
1:E:472:ARG:NH1	1:E:472:ARG:HB3	2.30	0.46
1:F:102:GLY:C	1:F:103:GLU:HG3	2.35	0.46
2:P:58:ASP:C	2:P:60:ASN:N	2.69	0.46
2:T:49:GLN:HA	2:T:52:ILE:HG22	1.97	0.46
2:T:58:ASP:C	2:T:60:ASN:N	2.68	0.46
1:A:431:LYS:O	1:A:432:TYR:CD2	2.68	0.46
1:A:581:GLN:HE21	1:A:629:ASN:H	1.61	0.46
1:A:620:THR:HG22	1:A:621:GLY:N	2.31	0.46
1:B:505:LYS:C	1:B:507:GLN:N	2.69	0.46
1:B:797:ILE:O	1:B:798:ASP:OD1	2.32	0.46
1:C:186:LYS:HB2	1:C:190:PRO:CD	2.44	0.46
1:C:243:LEU:HA	1:C:246:SER:OG	2.16	0.46
1:C:368:GLN:OE1	1:C:368:GLN:HA	2.14	0.46
1:C:593:ILE:C	1:C:604:LEU:HD12	2.36	0.46
1:D:185:ASP:O	1:D:190:PRO:CD	2.63	0.46
1:D:256:VAL:O	1:D:260:TYR:HB2	2.15	0.46
1:D:319:ALA:O	1:D:323:ASN:HA	2.15	0.46
1:D:324:THR:CB	1:D:499:PRO:HA	2.41	0.46
1:D:514:ASP:O	1:D:516:VAL:N	2.48	0.46
1:E:90:PRO:O	1:E:91:LYS:C	2.54	0.46
1:E:271:LEU:HD13	1:E:276:PHE:HE2	1.79	0.46
1:F:90:PRO:O	1:F:91:LYS:C	2.54	0.46
1:F:339:ILE:O	1:F:342:GLY:N	2.48	0.46
1:F:446:ILE:HA	1:F:453:VAL:HA	1.97	0.46
1:F:759:GLN:HA	1:F:759:GLN:NE2	2.21	0.46
2:R:6:GLU:O	2:R:9:ILE:HB	2.15	0.46
2:R:101:SER:OG	2:R:104:GLU:HG2	2.15	0.46
2:T:111:ASN:C	2:T:113:GLY:H	2.18	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:115:LYS:HZ1	1:A:117:LEU:HB2	1.80	0.46
1:A:616:GLU:HA	1:A:620:THR:HB	1.96	0.46
1:B:173:ILE:HD12	1:B:243:LEU:HD21	1.98	0.46
1:B:431:LYS:O	1:B:432:TYR:CD2	2.68	0.46
1:B:597:ASN:O	1:B:599:GLU:N	2.48	0.46
1:B:602:PHE:N	1:B:602:PHE:HD2	2.11	0.46
1:C:743:PRO:O	1:C:746:LYS:N	2.48	0.46
1:D:131:ARG:HB2	1:D:170:TYR:CZ	2.51	0.46
1:D:308:VAL:O	1:D:311:HIS:N	2.42	0.46
1:E:196:ILE:O	1:E:199:LEU:HB2	2.14	0.46
1:F:514:ASP:O	1:F:516:VAL:N	2.48	0.46
1:F:797:ILE:O	1:F:798:ASP:OD1	2.32	0.46
2:Q:13:LYS:C	2:Q:15:ALA:N	2.68	0.46
2:R:117:THR:CG2	2:R:120:GLU:HB2	2.42	0.46
2:S:138:TYR:O	2:S:142:VAL:HG23	2.16	0.46
1:A:164:GLU:HG2	1:A:166:SER:HB3	1.98	0.46
1:A:443:GLU:HG3	1:A:458:LYS:HE3	1.98	0.46
1:A:567:THR:HG23	1:A:568:GLY:N	2.30	0.46
1:A:621:GLY:HA2	2:O:94:LYS:HZ3	1.80	0.46
1:A:756:ILE:O	1:A:760:VAL:HG23	2.16	0.46
1:B:79:ILE:O	1:B:81:GLN:N	2.48	0.46
1:B:144:GLU:HG2	1:B:177:ILE:CD1	2.44	0.46
1:B:169:VAL:O	1:B:172:GLU:HB2	2.16	0.46
1:B:220:LEU:HG	1:B:223:LYS:HB2	1.97	0.46
1:B:338:LEU:HD21	1:B:409:ARG:NE	2.30	0.46
1:D:326:ILE:CG2	1:D:328:PHE:CE1	2.99	0.46
1:D:730:ASN:O	1:D:732:ILE:N	2.48	0.46
1:E:161:ILE:HG21	1:E:168:GLU:HB2	1.96	0.46
1:E:505:LYS:C	1:E:507:GLN:N	2.69	0.46
1:E:555:GLN:HG3	1:E:556:MET:N	2.30	0.46
1:E:593:ILE:C	1:E:604:LEU:HD12	2.35	0.46
1:F:107:THR:HG21	1:F:115:LYS:CD	2.38	0.46
1:F:164:GLU:HG2	1:F:166:SER:HB3	1.98	0.46
1:F:445:ARG:HG2	1:F:471:TRP:CZ3	2.50	0.46
1:F:523:LEU:HD22	2:T:127:GLU:HG2	1.97	0.46
2:O:6:GLU:O	2:O:9:ILE:HB	2.16	0.46
2:R:8:GLN:O	2:R:12:PHE:HD2	1.98	0.46
2:R:55:VAL:CG2	2:R:67:GLU:OE1	2.63	0.46
2:S:58:ASP:O	2:S:60:ASN:N	2.47	0.46
1:A:296:LEU:CD2	1:A:296:LEU:N	2.38	0.46
1:A:311:HIS:CD2	1:A:564:VAL:HB	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:628:PHE:CE2	2:O:90:ARG:HD3	2.34	0.46
1:B:161:ILE:HG21	1:B:168:GLU:HB2	1.96	0.46
1:B:414:LYS:C	1:B:414:LYS:HD3	2.36	0.46
1:B:443:GLU:HG3	1:B:458:LYS:HE3	1.97	0.46
1:B:609:GLU:O	1:B:613:ARG:N	2.46	0.46
1:C:140:ARG:NH1	1:C:141:PHE:HE1	2.14	0.46
1:C:384:ASN:C	1:C:386:GLU:N	2.69	0.46
1:C:391:ILE:HG23	1:C:398:ILE:O	2.15	0.46
1:C:690:LYS:HD2	1:C:741:ILE:CG2	2.45	0.46
1:C:729:TYR:HB2	1:C:756:ILE:HG21	1.96	0.46
1:D:620:THR:HG22	1:D:621:GLY:N	2.31	0.46
1:D:665:LYS:HE2	2:R:11:GLU:OE2	2.16	0.46
1:E:308:VAL:O	1:E:311:HIS:N	2.43	0.46
1:E:326:ILE:CG2	1:E:328:PHE:CE1	2.99	0.46
1:E:339:ILE:O	1:E:342:GLY:N	2.48	0.46
1:E:636:ALA:O	1:E:640:LYS:N	2.47	0.46
1:E:715:GLU:OE1	1:E:767:GLN:NE2	2.47	0.46
1:F:140:ARG:NH1	1:F:141:PHE:HE1	2.14	0.46
1:F:173:ILE:HD12	1:F:243:LEU:HD21	1.97	0.46
1:F:285:LYS:C	1:F:287:GLY:H	2.19	0.46
1:F:300:LYS:O	1:F:303:LYS:HB2	2.15	0.46
1:F:730:ASN:O	1:F:732:ILE:N	2.49	0.46
2:S:11:GLU:C	2:S:13:LYS:H	2.19	0.46
2:S:13:LYS:HZ1	2:S:65:PHE:CB	2.27	0.46
2:T:13:LYS:C	2:T:15:ALA:N	2.68	0.46
1:B:123:GLU:HG2	1:B:124:GLU:H	1.80	0.46
1:B:552:TRP:HA	1:B:555:GLN:HG2	1.96	0.46
1:B:619:ILE:O	1:B:620:THR:C	2.54	0.46
1:C:437:SER:O	1:C:439:ASN:N	2.42	0.46
1:C:443:GLU:HG3	1:C:458:LYS:HE3	1.97	0.46
1:C:505:LYS:C	1:C:507:GLN:N	2.68	0.46
1:D:133:GLU:OE1	1:D:134:LYS:N	2.49	0.46
1:D:208:LEU:H	1:D:208:LEU:HD12	1.80	0.46
1:D:334:LEU:H	1:D:334:LEU:CD1	2.28	0.46
1:D:501:LEU:HB2	1:D:623:ASP:O	2.16	0.46
1:E:140:ARG:NH1	1:E:141:PHE:HE1	2.14	0.46
1:E:185:ASP:O	1:E:190:PRO:HG3	2.16	0.46
1:E:319:ALA:O	1:E:323:ASN:HA	2.15	0.46
1:F:169:VAL:O	1:F:172:GLU:HB2	2.15	0.46
1:F:311:HIS:CD2	1:F:564:VAL:HB	2.51	0.46
2:P:49:GLN:HA	2:P:52:ILE:HG22	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:257:LEU:O	1:A:261:ALA:O	2.33	0.46
1:A:716:LYS:O	1:A:720:ILE:HG22	2.16	0.46
1:A:724:ARG:HG3	1:A:724:ARG:NH1	2.27	0.46
1:B:100:LEU:CD1	1:B:182:ILE:HG21	2.45	0.46
1:B:505:LYS:HE3	1:B:513:TRP:CD2	2.51	0.46
1:B:609:GLU:OE2	1:B:609:GLU:N	2.36	0.46
1:C:89:ILE:HG22	1:C:90:PRO:HD2	1.97	0.46
1:C:133:GLU:OE1	1:C:134:LYS:N	2.49	0.46
1:C:161:ILE:HG23	1:C:168:GLU:HB2	1.97	0.46
1:C:431:LYS:O	1:C:432:TYR:CD2	2.68	0.46
1:C:504:ILE:HD12	1:C:504:ILE:N	2.30	0.46
1:D:140:ARG:NH1	1:D:141:PHE:HE1	2.14	0.46
1:E:263:ASP:O	1:E:264:MET:C	2.54	0.46
1:E:729:TYR:HB2	1:E:756:ILE:HG21	1.97	0.46
1:E:743:PRO:HA	1:E:746:LYS:CB	2.46	0.46
1:F:306:GLY:O	1:F:336:THR:HG23	2.14	0.46
1:F:546:LYS:NZ	1:F:554:LYS:HE2	2.30	0.46
1:F:555:GLN:HG3	1:F:556:MET:N	2.30	0.46
1:F:743:PRO:O	1:F:746:LYS:N	2.48	0.46
1:F:744:GLU:CD	1:F:744:GLU:H	2.19	0.46
2:O:39:LEU:HD23	2:O:39:LEU:HA	1.84	0.46
2:O:49:GLN:HA	2:O:52:ILE:HG22	1.96	0.46
2:O:138:TYR:CZ	2:O:142:VAL:HG21	2.51	0.46
2:P:58:ASP:HB3	2:P:62:THR:CG2	2.44	0.46
2:Q:97:ASN:HD22	2:Q:98:GLY:N	2.13	0.46
1:A:609:GLU:H	1:A:609:GLU:CD	2.19	0.46
1:B:76:LEU:H	1:B:76:LEU:CD2	2.27	0.46
1:B:102:GLY:C	1:B:103:GLU:HG3	2.36	0.46
1:B:140:ARG:NH1	1:B:141:PHE:HE1	2.13	0.46
1:B:185:ASP:O	1:B:190:PRO:CD	2.64	0.46
1:B:730:ASN:C	1:B:732:ILE:N	2.70	0.46
1:C:148:GLU:CG	1:C:149:THR:N	2.73	0.46
1:C:189:ASP:O	1:C:190:PRO:C	2.50	0.46
1:C:323:ASN:ND2	1:C:598:PRO:CB	2.79	0.46
1:C:690:LYS:HD3	1:C:741:ILE:HG23	1.97	0.46
1:D:152:LEU:CD2	1:D:154:ILE:HG12	2.46	0.46
1:D:743:PRO:HA	1:D:746:LYS:CB	2.45	0.46
1:E:133:GLU:OE1	1:E:134:LYS:N	2.49	0.46
1:E:173:ILE:HD12	1:E:243:LEU:HD21	1.97	0.46
1:E:236:GLU:HA	1:E:239:HIS:HD2	1.74	0.46
1:F:99:GLU:C	1:F:101:GLY:N	2.69	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:236:GLU:HA	1:F:239:HIS:HD2	1.75	0.46
1:F:323:ASN:ND2	1:F:598:PRO:CB	2.79	0.46
2:O:3:GLN:N	2:O:77:LYS:NZ	2.59	0.46
2:O:73:ALA:O	2:O:75:LYS:N	2.48	0.46
2:R:25:GLY:HA3	2:R:65:PHE:CZ	2.51	0.46
1:A:238:GLN:C	1:A:240:ALA:N	2.69	0.46
1:A:567:THR:CG2	1:A:568:GLY:N	2.79	0.46
1:A:746:LYS:CD	1:A:750:GLN:HE21	2.29	0.46
1:A:765:THR:HG22	1:A:769:SER:HB2	1.97	0.46
1:B:133:GLU:OE1	1:B:134:LYS:N	2.49	0.46
1:B:716:LYS:O	1:B:717:LYS:C	2.54	0.46
1:C:165:GLN:C	1:C:167:LYS:N	2.70	0.46
1:C:319:ALA:O	1:C:323:ASN:HA	2.15	0.46
1:C:339:ILE:O	1:C:342:GLY:N	2.48	0.46
1:C:797:ILE:O	1:C:798:ASP:OD1	2.32	0.46
1:D:220:LEU:HG	1:D:223:LYS:HB2	1.97	0.46
1:D:735:VAL:O	1:D:738:SER:HB3	2.16	0.46
1:E:102:GLY:HA2	1:E:150:PRO:O	2.16	0.46
1:E:472:ARG:HB3	1:E:472:ARG:HH11	1.81	0.46
1:F:716:LYS:O	1:F:717:LYS:C	2.54	0.46
2:R:39:LEU:HD23	2:R:39:LEU:HA	1.86	0.46
2:T:3:GLN:N	2:T:77:LYS:HD3	2.31	0.46
1:A:220:LEU:HG	1:A:223:LYS:HB2	1.97	0.45
1:A:256:VAL:O	1:A:260:TYR:HB2	2.16	0.45
1:A:327:LEU:HG	1:A:595:ILE:HG23	1.98	0.45
1:A:609:GLU:O	1:A:613:ARG:N	2.48	0.45
1:B:185:ASP:O	1:B:190:PRO:CG	2.64	0.45
1:B:509:PRO:O	1:B:511:LYS:N	2.49	0.45
1:C:79:ILE:O	1:C:81:GLN:N	2.50	0.45
1:C:99:GLU:C	1:C:101:GLY:N	2.68	0.45
1:C:285:LYS:C	1:C:287:GLY:H	2.19	0.45
1:D:90:PRO:O	1:D:91:LYS:C	2.53	0.45
1:D:288:VAL:CG2	1:D:289:GLU:N	2.75	0.45
1:D:500:SER:HG	1:D:502:THR:HG1	1.60	0.45
1:D:505:LYS:C	1:D:507:GLN:N	2.69	0.45
1:D:756:ILE:O	1:D:760:VAL:HG23	2.16	0.45
1:E:137:PHE:O	1:E:140:ARG:HB2	2.16	0.45
1:E:152:LEU:CD2	1:E:154:ILE:HG12	2.46	0.45
1:E:256:VAL:O	1:E:260:TYR:HB2	2.16	0.45
1:E:633:ASN:O	1:E:642:TYR:HE1	1.99	0.45
1:F:326:ILE:CG2	1:F:328:PHE:CE1	2.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:368:GLN:OE1	1:F:368:GLN:HA	2.15	0.45
1:F:443:GLU:HG3	1:F:458:LYS:HE3	1.97	0.45
2:P:109:MET:HG3	2:P:116:LEU:HD11	1.97	0.45
2:Q:138:TYR:CZ	2:Q:142:VAL:CG2	2.99	0.45
2:S:25:GLY:HA3	2:S:65:PHE:CZ	2.51	0.45
2:T:114:GLU:HA	2:T:114:GLU:OE2	2.16	0.45
1:A:77:ASP:O	1:A:81:GLN:HB2	2.16	0.45
1:A:197:LYS:HD3	1:A:263:ASP:CB	2.44	0.45
1:A:285:LYS:C	1:A:287:GLY:H	2.19	0.45
1:A:619:ILE:O	1:A:620:THR:C	2.53	0.45
1:B:161:ILE:O	1:B:165:GLN:HA	2.17	0.45
1:C:90:PRO:O	1:C:91:LYS:C	2.54	0.45
1:C:185:ASP:O	1:C:190:PRO:CA	2.64	0.45
1:C:500:SER:HG	1:C:502:THR:HG1	1.60	0.45
1:C:730:ASN:O	1:C:732:ILE:N	2.49	0.45
1:D:443:GLU:HG3	1:D:458:LYS:HE3	1.98	0.45
1:D:735:VAL:HA	1:D:738:SER:HB2	1.98	0.45
1:E:184:LYS:HE2	1:E:193:LEU:HD12	1.98	0.45
1:E:501:LEU:HD22	2:S:112:LEU:CD2	2.46	0.45
1:E:505:LYS:HE3	1:E:513:TRP:CD2	2.51	0.45
1:E:621:GLY:HA2	2:S:94:LYS:NZ	2.30	0.45
1:F:217:LYS:HZ2	1:F:236:GLU:HB2	1.80	0.45
2:O:13:LYS:C	2:O:15:ALA:N	2.69	0.45
2:O:102:ALA:CB	2:O:125:ILE:HG13	2.47	0.45
2:P:6:GLU:O	2:P:9:ILE:HB	2.16	0.45
2:T:25:GLY:HA3	2:T:65:PHE:CZ	2.51	0.45
2:T:138:TYR:CZ	2:T:142:VAL:HG21	2.51	0.45
1:A:148:GLU:CG	1:A:149:THR:N	2.77	0.45
1:A:325:TYR:CD1	1:A:598:PRO:HD3	2.51	0.45
1:A:678:VAL:HG13	1:A:745:TYR:CD2	2.52	0.45
1:B:90:PRO:O	1:B:91:LYS:C	2.54	0.45
1:B:137:PHE:O	1:B:140:ARG:HB2	2.17	0.45
1:B:164:GLU:HG2	1:B:166:SER:HB3	1.97	0.45
1:B:192:PHE:HB3	1:B:196:ILE:CD1	2.46	0.45
1:B:567:THR:CG2	1:B:568:GLY:N	2.80	0.45
1:B:629:ASN:HD22	1:B:630:ARG:N	2.14	0.45
1:C:176:GLY:O	1:C:180:ASP:OD1	2.34	0.45
1:C:334:LEU:H	1:C:334:LEU:CD1	2.28	0.45
1:C:523:LEU:HD22	2:Q:127:GLU:HG2	1.99	0.45
1:C:633:ASN:O	1:C:642:TYR:HE1	1.98	0.45
1:C:670:ILE:CG2	1:C:744:GLU:HB2	2.46	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:706:ASN:O	2:Q:130:ILE:HG23	2.17	0.45
1:C:756:ILE:O	1:C:760:VAL:HG23	2.16	0.45
1:D:197:LYS:HD3	1:D:263:ASP:CB	2.45	0.45
1:D:384:ASN:C	1:D:386:GLU:N	2.69	0.45
1:D:509:PRO:O	1:D:511:LYS:N	2.49	0.45
1:D:566:TYR:N	1:D:566:TYR:CD2	2.84	0.45
1:E:609:GLU:H	1:E:609:GLU:CD	2.17	0.45
1:E:716:LYS:O	1:E:717:LYS:C	2.54	0.45
1:E:744:GLU:CD	1:E:744:GLU:H	2.20	0.45
1:F:384:ASN:C	1:F:386:GLU:N	2.69	0.45
1:F:462:ILE:CG1	1:F:463:THR:N	2.78	0.45
2:O:65:PHE:H	2:O:65:PHE:HD1	1.65	0.45
2:Q:6:GLU:O	2:Q:9:ILE:HB	2.16	0.45
2:Q:27:ILE:HD12	2:Q:32:LEU:HA	1.97	0.45
2:R:102:ALA:CB	2:R:125:ILE:HG13	2.46	0.45
2:R:138:TYR:O	2:R:142:VAL:HG23	2.17	0.45
1:A:505:LYS:C	1:A:507:GLN:N	2.69	0.45
1:A:593:ILE:C	1:A:604:LEU:HD12	2.36	0.45
1:A:597:ASN:O	1:A:599:GLU:N	2.48	0.45
1:B:90:PRO:HD3	1:B:249:PHE:CE2	2.51	0.45
1:B:197:LYS:HD3	1:B:263:ASP:CB	2.44	0.45
1:B:217:LYS:CG	1:B:236:GLU:HG3	2.44	0.45
1:B:243:LEU:HA	1:B:246:SER:OG	2.16	0.45
1:C:81:GLN:CD	1:C:156:ILE:HG21	2.37	0.45
1:C:102:GLY:HA2	1:C:150:PRO:O	2.17	0.45
1:C:173:ILE:HG23	1:C:174:GLY:N	2.32	0.45
1:C:620:THR:HG22	1:C:621:GLY:N	2.31	0.45
1:E:243:LEU:HA	1:E:246:SER:OG	2.16	0.45
1:E:285:LYS:C	1:E:287:GLY:H	2.19	0.45
1:E:384:ASN:C	1:E:386:GLU:N	2.69	0.45
1:E:619:ILE:O	1:E:620:THR:C	2.54	0.45
1:F:89:ILE:HG22	1:F:90:PRO:HD2	1.98	0.45
1:F:223:LYS:HD3	1:F:224:SER:H	1.77	0.45
1:F:243:LEU:HA	1:F:246:SER:OG	2.16	0.45
2:P:25:GLY:HA3	2:P:65:PHE:CZ	2.51	0.45
2:P:138:TYR:CZ	2:P:142:VAL:CG2	2.99	0.45
2:Q:55:VAL:CG2	2:Q:67:GLU:OE1	2.64	0.45
2:T:65:PHE:H	2:T:65:PHE:HD1	1.65	0.45
1:A:165:GLN:C	1:A:167:LYS:N	2.70	0.45
1:B:225:ILE:HG23	1:B:229:PHE:CE2	2.51	0.45
1:B:472:ARG:HB3	1:B:472:ARG:HH11	1.80	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:743:PRO:HA	1:B:746:LYS:CB	2.46	0.45
1:C:130:SER:O	1:C:131:ARG:C	2.55	0.45
1:C:179:LEU:HA	1:C:182:ILE:HG22	1.98	0.45
1:C:275:GLY:CA	1:C:278:LYS:HE2	2.47	0.45
1:C:324:THR:CB	1:C:499:PRO:HA	2.40	0.45
1:C:581:GLN:HE21	1:C:629:ASN:H	1.63	0.45
1:C:746:LYS:CD	1:C:750:GLN:HE21	2.30	0.45
1:D:79:ILE:O	1:D:81:GLN:N	2.50	0.45
1:D:243:LEU:HA	1:D:246:SER:OG	2.16	0.45
1:D:461:LYS:HD2	1:D:461:LYS:HA	1.79	0.45
1:D:670:ILE:CG2	1:D:744:GLU:HB2	2.47	0.45
1:D:730:ASN:C	1:D:732:ILE:N	2.70	0.45
1:E:165:GLN:C	1:E:167:LYS:N	2.70	0.45
1:E:275:GLY:CA	1:E:278:LYS:HE2	2.47	0.45
1:E:756:ILE:O	1:E:760:VAL:HG23	2.16	0.45
1:F:81:GLN:CD	1:F:156:ILE:HG21	2.37	0.45
1:F:238:GLN:C	1:F:240:ALA:N	2.69	0.45
1:F:678:VAL:HG13	1:F:745:TYR:CD2	2.51	0.45
2:P:111:ASN:C	2:P:113:GLY:H	2.18	0.45
2:P:138:TYR:O	2:P:142:VAL:HG23	2.17	0.45
2:S:39:LEU:HD23	2:S:39:LEU:HA	1.84	0.45
2:T:73:ALA:O	2:T:75:LYS:N	2.50	0.45
1:A:85:LEU:HD12	1:A:168:GLU:OE1	2.17	0.45
1:A:133:GLU:OE1	1:A:134:LYS:N	2.49	0.45
1:A:501:LEU:HD22	2:O:112:LEU:CD2	2.46	0.45
1:A:514:ASP:O	1:A:516:VAL:N	2.50	0.45
1:A:743:PRO:HA	1:A:746:LYS:CB	2.47	0.45
1:B:88:LYS:NZ	1:B:172:GLU:OE1	2.49	0.45
1:B:263:ASP:O	1:B:264:MET:C	2.53	0.45
1:B:604:LEU:HG	1:B:605:THR:O	2.17	0.45
1:C:88:LYS:NZ	1:C:172:GLU:OE1	2.50	0.45
1:C:164:GLU:HG2	1:C:166:SER:HB3	1.98	0.45
1:C:195:LEU:CD1	1:C:230:ILE:HG21	2.46	0.45
1:D:148:GLU:CG	1:D:149:THR:N	2.73	0.45
1:D:263:ASP:O	1:D:264:MET:C	2.55	0.45
1:D:365:PRO:HB2	1:D:367:ASP:O	2.17	0.45
1:D:593:ILE:C	1:D:604:LEU:HD12	2.36	0.45
1:D:735:VAL:O	1:D:738:SER:CB	2.65	0.45
1:E:81:GLN:CD	1:E:156:ILE:HG21	2.37	0.45
1:E:192:PHE:HB3	1:E:196:ILE:CD1	2.47	0.45
1:E:372:LYS:HG3	1:E:373:LYS:N	2.32	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:115:LYS:NZ	1:F:117:LEU:HB2	2.32	0.45
1:F:133:GLU:OE1	1:F:134:LYS:N	2.49	0.45
1:F:192:PHE:H	1:F:192:PHE:HD1	1.65	0.45
1:F:349:ASN:HD22	1:F:350:VAL:N	2.15	0.45
1:F:609:GLU:O	1:F:613:ARG:N	2.48	0.45
1:F:690:LYS:HD3	1:F:741:ILE:HG23	1.97	0.45
2:O:25:GLY:HA3	2:O:65:PHE:CZ	2.51	0.45
2:O:58:ASP:HB3	2:O:62:THR:CG2	2.43	0.45
2:O:58:ASP:O	2:O:60:ASN:N	2.49	0.45
2:P:8:GLN:O	2:P:12:PHE:HD2	2.00	0.45
2:P:146:THR:O	2:P:147:ALA:C	2.52	0.45
2:R:3:GLN:N	2:R:77:LYS:HD3	2.31	0.45
2:R:27:ILE:HD12	2:R:32:LEU:HA	1.98	0.45
1:A:81:GLN:CD	1:A:156:ILE:HG21	2.37	0.45
1:A:102:GLY:HA2	1:A:150:PRO:O	2.17	0.45
1:A:175:LYS:CB	1:A:175:LYS:HZ3	2.30	0.45
1:A:263:ASP:O	1:A:264:MET:C	2.54	0.45
1:A:365:PRO:HB2	1:A:367:ASP:O	2.17	0.45
1:A:493:ASP:OD2	1:A:577:HIS:CE1	2.70	0.45
1:A:729:TYR:HB2	1:A:756:ILE:HG21	1.97	0.45
1:B:77:ASP:O	1:B:81:GLN:HB2	2.17	0.45
1:B:332:ASN:OD1	1:B:334:LEU:N	2.47	0.45
1:B:555:GLN:HG3	1:B:556:MET:N	2.31	0.45
1:B:597:ASN:CB	1:B:598:PRO:HD2	2.46	0.45
1:B:620:THR:HG22	1:B:621:GLY:N	2.31	0.45
1:B:776:LEU:HD23	1:B:776:LEU:C	2.37	0.45
1:C:152:LEU:CD2	1:C:154:ILE:HG12	2.46	0.45
1:C:443:GLU:O	1:C:455:TYR:HA	2.16	0.45
1:D:99:GLU:C	1:D:101:GLY:N	2.68	0.45
1:D:238:GLN:C	1:D:240:ALA:H	2.20	0.45
1:D:595:ILE:CG2	1:D:596:ILE:N	2.79	0.45
1:E:671:ARG:HD2	2:S:14:GLU:HG2	1.99	0.45
1:F:319:ALA:O	1:F:323:ASN:HA	2.15	0.45
1:F:567:THR:HG23	1:F:568:GLY:N	2.30	0.45
1:F:756:ILE:O	1:F:760:VAL:HG23	2.16	0.45
2:P:65:PHE:H	2:P:65:PHE:HD1	1.65	0.45
2:Q:58:ASP:HB3	2:Q:62:THR:CG2	2.43	0.45
2:S:138:TYR:CZ	2:S:142:VAL:HG21	2.52	0.45
2:T:109:MET:HG3	2:T:116:LEU:HD11	1.98	0.45
1:A:100:LEU:CD1	1:A:182:ILE:HG21	2.47	0.45
1:A:243:LEU:HA	1:A:246:SER:OG	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:372:LYS:HG3	1:A:373:LYS:N	2.32	0.45
1:A:549:LEU:HB3	1:A:578:GLY:HA3	1.99	0.45
1:A:722:ILE:HD13	1:A:764:LEU:HD21	1.99	0.45
1:A:730:ASN:C	1:A:732:ILE:N	2.70	0.45
1:B:88:LYS:NZ	1:B:172:GLU:CD	2.70	0.45
1:B:501:LEU:HD22	2:P:112:LEU:CD2	2.47	0.45
1:B:566:TYR:N	1:B:566:TYR:CD2	2.85	0.45
1:B:764:LEU:C	1:B:766:HIS:N	2.70	0.45
1:C:238:GLN:C	1:C:240:ALA:N	2.68	0.45
1:C:279:ILE:CD1	1:C:279:ILE:H	2.28	0.45
1:C:327:LEU:HG	1:C:595:ILE:HG12	1.98	0.45
1:C:414:LYS:HD3	1:C:414:LYS:C	2.37	0.45
1:C:486:LYS:HE3	1:C:570:THR:O	2.17	0.45
1:C:609:GLU:N	1:C:609:GLU:CD	2.70	0.45
1:D:165:GLN:C	1:D:167:LYS:N	2.70	0.45
1:D:187:SER:O	1:D:188:LEU:C	2.50	0.45
1:D:195:LEU:CD1	1:D:230:ILE:HG21	2.47	0.45
1:D:372:LYS:HG3	1:D:373:LYS:N	2.32	0.45
1:E:77:ASP:O	1:E:81:GLN:HB2	2.17	0.45
1:E:197:LYS:HD3	1:E:263:ASP:CB	2.44	0.45
1:E:567:THR:HG23	1:E:568:GLY:N	2.31	0.45
1:E:671:ARG:NH1	1:E:671:ARG:HG3	2.32	0.45
1:F:131:ARG:HB2	1:F:170:TYR:CE2	2.52	0.45
1:F:152:LEU:CD2	1:F:154:ILE:HG12	2.46	0.45
1:F:270:LYS:O	1:F:273:LYS:HB2	2.16	0.45
1:F:325:TYR:HB2	1:F:498:ALA:HB3	1.99	0.45
1:F:706:ASN:O	2:T:130:ILE:HG23	2.17	0.45
2:O:111:ASN:C	2:O:113:GLY:H	2.18	0.45
2:T:6:GLU:O	2:T:9:ILE:HB	2.16	0.45
1:A:76:LEU:H	1:A:76:LEU:HD22	1.82	0.45
1:A:192:PHE:HB3	1:A:196:ILE:CD1	2.46	0.45
1:A:443:GLU:O	1:A:455:TYR:HA	2.17	0.45
1:A:446:ILE:HA	1:A:453:VAL:HA	1.98	0.45
1:A:523:LEU:HD22	2:O:127:GLU:HG2	1.99	0.45
1:B:81:GLN:CD	1:B:156:ILE:HG21	2.37	0.45
1:B:179:LEU:HB2	1:B:183:SER:HB2	1.98	0.45
1:B:324:THR:CB	1:B:499:PRO:HA	2.41	0.45
1:B:725:GLY:O	1:B:728:ALA:HB3	2.17	0.45
1:B:759:GLN:HA	1:B:759:GLN:NE2	2.20	0.45
1:C:288:VAL:CG2	1:C:289:GLU:N	2.75	0.45
1:C:567:THR:CG2	1:C:568:GLY:N	2.80	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:102:GLY:HA2	1:D:150:PRO:O	2.16	0.45
1:D:414:LYS:O	1:D:417:GLY:N	2.40	0.45
1:D:604:LEU:HG	1:D:605:THR:O	2.17	0.45
1:D:716:LYS:O	1:D:720:ILE:HG22	2.17	0.45
1:E:405:LEU:CD1	1:E:405:LEU:H	2.30	0.45
1:E:493:ASP:OD2	1:E:577:HIS:CE1	2.70	0.45
1:E:609:GLU:N	1:E:609:GLU:CD	2.71	0.45
1:E:630:ARG:CD	2:S:83:GLU:HG2	2.47	0.45
1:E:670:ILE:CG2	1:E:744:GLU:HB2	2.46	0.45
1:F:372:LYS:HG3	1:F:373:LYS:N	2.32	0.45
1:F:505:LYS:HE3	1:F:513:TRP:CD2	2.52	0.45
2:Q:39:LEU:HD23	2:Q:39:LEU:HA	1.85	0.45
2:R:94:LYS:NZ	2:R:94:LYS:HB3	2.31	0.45
2:S:3:GLN:N	2:S:77:LYS:HD3	2.31	0.45
1:A:384:ASN:C	1:A:386:GLU:N	2.69	0.45
1:A:665:LYS:HE2	2:O:11:GLU:OE2	2.17	0.45
1:B:368:GLN:HG3	1:B:384:ASN:N	2.32	0.45
1:B:372:LYS:HG3	1:B:373:LYS:N	2.32	0.45
1:B:480:ASN:HD21	1:B:483:GLY:CA	2.29	0.45
1:B:678:VAL:HG13	1:B:745:TYR:CD2	2.52	0.45
1:C:236:GLU:HA	1:C:239:HIS:HD2	1.75	0.45
1:D:164:GLU:C	1:D:166:SER:N	2.70	0.45
1:D:368:GLN:HG3	1:D:384:ASN:N	2.32	0.45
1:D:529:VAL:O	1:D:532:LEU:N	2.49	0.45
1:E:88:LYS:NZ	1:E:172:GLU:CD	2.69	0.45
1:E:567:THR:CG2	1:E:568:GLY:N	2.80	0.45
1:F:165:GLN:C	1:F:167:LYS:N	2.70	0.45
1:F:405:LEU:CD1	1:F:405:LEU:H	2.30	0.45
1:F:567:THR:CG2	1:F:568:GLY:N	2.79	0.45
1:F:610:MET:O	1:F:614:PHE:N	2.43	0.45
1:F:620:THR:HG22	1:F:621:GLY:N	2.32	0.45
2:P:3:GLN:N	2:P:77:LYS:HD3	2.32	0.45
2:Q:58:ASP:O	2:Q:60:ASN:N	2.49	0.45
2:Q:65:PHE:H	2:Q:65:PHE:HD1	1.65	0.45
2:S:6:GLU:O	2:S:9:ILE:HB	2.17	0.45
2:S:13:LYS:C	2:S:15:ALA:N	2.69	0.45
1:A:187:SER:O	1:A:188:LEU:C	2.50	0.44
1:A:509:PRO:O	1:A:511:LYS:N	2.50	0.44
1:A:566:TYR:N	1:A:566:TYR:CD2	2.84	0.44
1:A:604:LEU:HG	1:A:605:THR:O	2.17	0.44
1:A:722:ILE:HD13	1:A:764:LEU:HD23	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:567:THR:HG23	1:B:568:GLY:N	2.31	0.44
1:C:137:PHE:O	1:C:140:ARG:HB2	2.16	0.44
1:C:509:PRO:O	1:C:511:LYS:N	2.50	0.44
1:C:629:ASN:HD22	1:C:630:ARG:N	2.15	0.44
1:C:759:GLN:HA	1:C:759:GLN:NE2	2.19	0.44
1:D:135:VAL:N	1:D:136:PRO:CD	2.81	0.44
1:D:285:LYS:C	1:D:287:GLY:H	2.19	0.44
1:D:323:ASN:C	1:D:323:ASN:ND2	2.70	0.44
1:E:76:LEU:CD2	1:E:76:LEU:H	2.29	0.44
1:E:349:ASN:HD22	1:E:350:VAL:N	2.15	0.44
1:E:443:GLU:HG3	1:E:458:LYS:HE3	1.97	0.44
1:E:509:PRO:O	1:E:511:LYS:N	2.50	0.44
1:E:566:TYR:CD2	1:E:566:TYR:N	2.84	0.44
1:E:610:MET:O	1:E:614:PHE:N	2.44	0.44
1:F:137:PHE:O	1:F:140:ARG:HB2	2.17	0.44
1:F:192:PHE:HB3	1:F:196:ILE:CD1	2.47	0.44
1:F:504:ILE:HD12	1:F:504:ILE:N	2.32	0.44
1:F:529:VAL:O	1:F:532:LEU:N	2.50	0.44
2:O:3:GLN:N	2:O:77:LYS:HD3	2.32	0.44
2:R:109:MET:HG3	2:R:116:LEU:HD11	1.99	0.44
1:A:88:LYS:NZ	1:A:172:GLU:CD	2.71	0.44
1:A:349:ASN:HD22	1:A:350:VAL:N	2.15	0.44
1:A:609:GLU:N	1:A:609:GLU:CD	2.71	0.44
1:A:677:GLY:HA2	1:A:745:TYR:OH	2.16	0.44
1:B:128:MET:HE2	1:B:239:HIS:NE2	2.32	0.44
1:B:135:VAL:N	1:B:136:PRO:CD	2.81	0.44
1:B:690:LYS:CD	1:B:741:ILE:HG23	2.47	0.44
1:B:744:GLU:H	1:B:744:GLU:CD	2.19	0.44
1:C:192:PHE:HB3	1:C:196:ILE:CD1	2.47	0.44
1:C:306:GLY:O	1:C:336:THR:HG23	2.17	0.44
1:C:457:THR:CG2	1:C:468:LYS:HA	2.42	0.44
1:D:81:GLN:CD	1:D:156:ILE:HG21	2.38	0.44
1:D:161:ILE:HG23	1:D:168:GLU:HB2	1.98	0.44
1:D:349:ASN:HD22	1:D:350:VAL:N	2.15	0.44
1:D:610:MET:O	1:D:614:PHE:N	2.44	0.44
1:D:716:LYS:O	1:D:717:LYS:C	2.54	0.44
1:E:295:VAL:HG21	1:E:603:ILE:CG2	2.47	0.44
1:E:368:GLN:HG3	1:E:384:ASN:N	2.32	0.44
1:F:164:GLU:C	1:F:166:SER:N	2.70	0.44
1:F:457:THR:CG2	1:F:468:LYS:HA	2.43	0.44
1:F:505:LYS:C	1:F:507:GLN:N	2.69	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:677:GLY:HA2	1:F:745:TYR:OH	2.17	0.44
2:R:65:PHE:H	2:R:65:PHE:HD1	1.65	0.44
1:A:99:GLU:C	1:A:101:GLY:N	2.68	0.44
1:A:137:PHE:O	1:A:140:ARG:HB2	2.17	0.44
1:A:450:ASN:O	1:A:452:GLU:N	2.48	0.44
1:A:690:LYS:CD	1:A:741:ILE:HG23	2.47	0.44
1:B:102:GLY:HA2	1:B:150:PRO:O	2.17	0.44
1:B:187:SER:O	1:B:188:LEU:C	2.50	0.44
1:B:192:PHE:HD1	1:B:192:PHE:H	1.65	0.44
1:B:729:TYR:HB2	1:B:756:ILE:HG21	1.99	0.44
1:C:372:LYS:HG3	1:C:373:LYS:N	2.32	0.44
1:C:447:SER:OG	1:C:448:ASP:N	2.46	0.44
1:C:610:MET:O	1:C:614:PHE:N	2.44	0.44
1:C:716:LYS:O	1:C:720:ILE:HG22	2.17	0.44
1:D:185:ASP:O	1:D:190:PRO:HD3	2.16	0.44
1:D:270:LYS:O	1:D:273:LYS:HB2	2.18	0.44
1:D:581:GLN:HE21	1:D:629:ASN:H	1.64	0.44
1:E:443:GLU:CG	1:E:458:LYS:HE3	2.47	0.44
1:E:480:ASN:HD21	1:E:483:GLY:CA	2.30	0.44
1:E:659:THR:O	1:E:660:SER:C	2.55	0.44
1:F:88:LYS:NZ	1:F:172:GLU:CD	2.71	0.44
1:F:622:LYS:HA	1:F:622:LYS:HD3	1.20	0.44
1:F:725:GLY:O	1:F:728:ALA:HB3	2.17	0.44
2:O:114:GLU:OE2	2:O:114:GLU:HA	2.17	0.44
2:O:146:THR:O	2:O:148:LYS:N	2.51	0.44
2:P:58:ASP:O	2:P:60:ASN:N	2.50	0.44
2:R:110:THR:O	2:R:113:GLY:N	2.47	0.44
1:A:71:PHE:HD1	1:A:108:ASP:OD1	2.00	0.44
1:A:414:LYS:HD3	1:A:414:LYS:C	2.38	0.44
1:A:480:ASN:HD21	1:A:483:GLY:CA	2.30	0.44
1:B:85:LEU:HD12	1:B:168:GLU:OE1	2.17	0.44
1:B:89:ILE:HG22	1:B:90:PRO:HD2	1.99	0.44
1:B:322:LEU:HD13	1:B:556:MET:HE2	2.00	0.44
1:B:609:GLU:H	1:B:609:GLU:CD	2.19	0.44
1:C:140:ARG:NE	1:C:140:ARG:CA	2.78	0.44
1:C:391:ILE:O	1:C:393:GLU:N	2.51	0.44
1:C:579:THR:O	1:C:581:GLN:N	2.51	0.44
1:C:604:LEU:HG	1:C:605:THR:O	2.17	0.44
1:D:323:ASN:ND2	1:D:598:PRO:CB	2.81	0.44
1:D:443:GLU:O	1:D:455:TYR:HA	2.18	0.44
1:D:567:THR:HG23	1:D:568:GLY:N	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:629:ASN:HD22	1:D:630:ARG:N	2.15	0.44
1:D:746:LYS:CD	1:D:750:GLN:HE21	2.30	0.44
1:E:79:ILE:C	1:E:81:GLN:N	2.70	0.44
1:E:234:LEU:H	1:E:234:LEU:CD2	2.31	0.44
1:E:443:GLU:O	1:E:455:TYR:HA	2.18	0.44
1:E:730:ASN:C	1:E:732:ILE:N	2.70	0.44
1:F:414:LYS:HD3	1:F:414:LYS:C	2.38	0.44
1:F:549:LEU:HB3	1:F:578:GLY:HA3	1.99	0.44
2:O:26:THR:HB	2:O:62:THR:OG1	2.18	0.44
2:O:138:TYR:CZ	2:O:142:VAL:CG2	3.00	0.44
2:R:111:ASN:C	2:R:113:GLY:H	2.19	0.44
2:S:65:PHE:H	2:S:65:PHE:HD1	1.66	0.44
2:S:111:ASN:C	2:S:113:GLY:H	2.18	0.44
2:T:12:PHE:HE1	2:T:72:MET:HE2	1.82	0.44
1:A:178:SER:OG	1:A:179:LEU:N	2.50	0.44
1:A:546:LYS:NZ	1:A:554:LYS:HE2	2.33	0.44
1:A:579:THR:O	1:A:581:GLN:N	2.51	0.44
1:A:744:GLU:H	1:A:744:GLU:CD	2.20	0.44
1:B:195:LEU:CD1	1:B:230:ILE:HG21	2.48	0.44
1:B:443:GLU:CG	1:B:458:LYS:HE3	2.48	0.44
1:B:514:ASP:O	1:B:516:VAL:N	2.51	0.44
1:B:549:LEU:HB3	1:B:578:GLY:HA3	2.00	0.44
1:B:746:LYS:CD	1:B:750:GLN:HE21	2.30	0.44
1:C:115:LYS:NZ	1:C:117:LEU:HB2	2.33	0.44
1:C:270:LYS:O	1:C:273:LYS:HB2	2.18	0.44
1:C:325:TYR:HB2	1:C:498:ALA:HB3	1.99	0.44
1:C:439:ASN:OD1	1:C:440:GLN:N	2.51	0.44
1:C:567:THR:HG23	1:C:568:GLY:N	2.30	0.44
1:D:275:GLY:CA	1:D:278:LYS:HE2	2.47	0.44
1:D:327:LEU:HG	1:D:595:ILE:HG23	1.99	0.44
1:D:764:LEU:C	1:D:766:HIS:H	2.21	0.44
1:E:71:PHE:HD1	1:E:108:ASP:OD1	2.00	0.44
1:E:323:ASN:ND2	1:E:598:PRO:CB	2.80	0.44
1:E:461:LYS:HA	1:E:461:LYS:HD2	1.79	0.44
1:E:514:ASP:O	1:E:516:VAL:N	2.50	0.44
1:F:169:VAL:CG2	1:F:246:SER:HB2	2.48	0.44
1:F:195:LEU:CD1	1:F:230:ILE:HG21	2.48	0.44
1:F:368:GLN:HG3	1:F:384:ASN:N	2.31	0.44
1:F:609:GLU:N	1:F:609:GLU:CD	2.71	0.44
2:P:36:MET:HE1	2:P:43:PRO:HG3	1.97	0.44
2:P:102:ALA:CB	2:P:125:ILE:HG13	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Q:26:THR:HB	2:Q:62:THR:OG1	2.17	0.44
2:Q:58:ASP:C	2:Q:60:ASN:N	2.68	0.44
2:R:3:GLN:N	2:R:77:LYS:NZ	2.60	0.44
2:R:138:TYR:CZ	2:R:142:VAL:CG2	3.00	0.44
2:T:94:LYS:HB3	2:T:94:LYS:NZ	2.31	0.44
2:T:138:TYR:CZ	2:T:142:VAL:CG2	3.01	0.44
1:A:135:VAL:N	1:A:136:PRO:CD	2.81	0.44
1:A:164:GLU:C	1:A:166:SER:N	2.71	0.44
1:A:195:LEU:CD1	1:A:230:ILE:HG21	2.48	0.44
1:A:270:LYS:O	1:A:273:LYS:HB2	2.18	0.44
1:B:256:VAL:O	1:B:260:TYR:HB2	2.18	0.44
1:B:257:LEU:O	1:B:261:ALA:O	2.36	0.44
1:B:279:ILE:HD13	1:B:279:ILE:H	1.83	0.44
1:B:323:ASN:C	1:B:324:THR:CG2	2.86	0.44
1:B:405:LEU:CD1	1:B:405:LEU:H	2.31	0.44
1:B:538:ILE:HG21	2:P:87:GLU:HB2	1.99	0.44
1:C:323:ASN:C	1:C:323:ASN:ND2	2.71	0.44
1:C:349:ASN:HD22	1:C:350:VAL:N	2.16	0.44
1:C:368:GLN:HG3	1:C:384:ASN:N	2.32	0.44
1:C:744:GLU:CD	1:C:744:GLU:H	2.20	0.44
1:D:71:PHE:HD1	1:D:108:ASP:OD1	2.00	0.44
1:D:311:HIS:CD2	1:D:564:VAL:HB	2.53	0.44
1:D:706:ASN:O	2:R:130:ILE:HG23	2.18	0.44
1:D:725:GLY:O	1:D:728:ALA:HB3	2.17	0.44
1:E:135:VAL:N	1:E:136:PRO:CD	2.81	0.44
1:E:217:LYS:HZ2	1:E:236:GLU:HB2	1.81	0.44
1:E:414:LYS:C	1:E:414:LYS:HD3	2.38	0.44
1:E:579:THR:O	1:E:581:GLN:N	2.51	0.44
1:E:735:VAL:HA	1:E:738:SER:HB2	2.00	0.44
1:F:97:TYR:O	1:F:100:LEU:N	2.50	0.44
1:F:130:SER:O	1:F:131:ARG:C	2.56	0.44
1:F:332:ASN:OD1	1:F:334:LEU:N	2.47	0.44
2:P:146:THR:O	2:P:148:LYS:N	2.51	0.44
2:Q:44:THR:HG23	2:Q:47:GLU:OE2	2.18	0.44
2:Q:109:MET:HG3	2:Q:116:LEU:HD11	2.00	0.44
2:R:13:LYS:C	2:R:15:ALA:N	2.68	0.44
2:R:26:THR:HB	2:R:62:THR:OG1	2.17	0.44
2:R:97:ASN:HD22	2:R:98:GLY:N	2.15	0.44
2:T:26:THR:HB	2:T:62:THR:OG1	2.18	0.44
2:T:102:ALA:CB	2:T:125:ILE:HG13	2.48	0.44
1:A:184:LYS:NZ	1:A:191:GLU:HG3	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:327:LEU:HG	1:A:595:ILE:HG12	1.98	0.44
1:A:462:ILE:CG1	1:A:463:THR:N	2.79	0.44
1:A:609:GLU:O	1:A:610:MET:C	2.56	0.44
1:A:635:ILE:N	1:A:635:ILE:CD1	2.78	0.44
1:B:115:LYS:NZ	1:B:117:LEU:HB2	2.32	0.44
1:B:332:ASN:OD1	1:B:334:LEU:CD1	2.65	0.44
1:B:435:LEU:HG	1:B:446:ILE:HG22	1.99	0.44
1:B:443:GLU:O	1:B:455:TYR:HA	2.18	0.44
1:B:622:LYS:HA	1:B:622:LYS:HD3	1.34	0.44
1:C:135:VAL:N	1:C:136:PRO:CD	2.81	0.44
1:C:278:LYS:HB2	1:C:279:ILE:HD13	2.00	0.44
1:C:311:HIS:CD2	1:C:564:VAL:HB	2.52	0.44
1:C:322:LEU:HD13	1:C:556:MET:HE2	1.99	0.44
1:C:462:ILE:CG1	1:C:463:THR:N	2.79	0.44
1:C:715:GLU:OE1	1:C:767:GLN:NE2	2.51	0.44
1:C:725:GLY:O	1:C:728:ALA:HB3	2.17	0.44
1:C:730:ASN:C	1:C:732:ILE:N	2.70	0.44
1:D:225:ILE:HG12	1:D:229:PHE:CE2	2.51	0.44
1:D:505:LYS:HE3	1:D:513:TRP:CD2	2.51	0.44
1:D:567:THR:CG2	1:D:568:GLY:N	2.81	0.44
1:D:609:GLU:N	1:D:609:GLU:CD	2.71	0.44
1:E:164:GLU:C	1:E:166:SER:N	2.70	0.44
1:E:173:ILE:HG23	1:E:174:GLY:N	2.33	0.44
1:E:195:LEU:CD1	1:E:230:ILE:HG21	2.48	0.44
1:E:327:LEU:N	1:E:327:LEU:HD12	2.32	0.44
1:E:549:LEU:HB3	1:E:578:GLY:HA3	2.00	0.44
1:E:620:THR:HG22	1:E:621:GLY:N	2.31	0.44
1:F:509:PRO:O	1:F:511:LYS:N	2.50	0.44
1:F:743:PRO:HA	1:F:746:LYS:CB	2.46	0.44
1:F:746:LYS:CD	1:F:750:GLN:HE21	2.30	0.44
1:A:90:PRO:O	1:A:91:LYS:C	2.55	0.44
1:A:169:VAL:CG2	1:A:246:SER:HB2	2.47	0.44
1:B:97:TYR:HD2	1:B:102:GLY:HA3	1.83	0.44
1:B:124:GLU:OE2	1:B:129:ASN:ND2	2.51	0.44
1:B:165:GLN:C	1:B:167:LYS:N	2.69	0.44
1:B:323:ASN:ND2	1:B:598:PRO:CB	2.81	0.44
1:B:326:ILE:CG2	1:B:328:PHE:CE1	3.00	0.44
1:C:164:GLU:C	1:C:166:SER:N	2.71	0.44
1:C:187:SER:O	1:C:188:LEU:C	2.51	0.44
1:C:238:GLN:C	1:C:240:ALA:H	2.21	0.44
1:C:292:ARG:NE	1:C:617:LYS:NZ	2.66	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:549:LEU:HB3	1:C:578:GLY:HA3	1.99	0.44
1:D:137:PHE:O	1:D:140:ARG:HB2	2.17	0.44
1:D:179:LEU:HA	1:D:182:ILE:HG22	1.99	0.44
1:D:225:ILE:HG23	1:D:229:PHE:CD2	2.53	0.44
1:D:225:ILE:HG23	1:D:229:PHE:CE2	2.53	0.44
1:D:292:ARG:NE	1:D:617:LYS:NZ	2.66	0.44
1:D:306:GLY:O	1:D:336:THR:HG23	2.17	0.44
1:D:514:ASP:C	1:D:516:VAL:N	2.71	0.44
1:D:663:PHE:CE1	1:D:752:LEU:HD11	2.53	0.44
1:E:91:LYS:O	1:E:94:LEU:HB2	2.17	0.44
1:E:130:SER:O	1:E:131:ARG:C	2.54	0.44
1:E:725:GLY:O	1:E:728:ALA:HB3	2.17	0.44
1:F:79:ILE:C	1:F:81:GLN:N	2.70	0.44
1:F:411:GLU:O	1:F:414:LYS:HB3	2.18	0.44
1:F:462:ILE:CD1	1:F:466:GLY:HA2	2.44	0.44
1:F:480:ASN:HD21	1:F:483:GLY:CA	2.30	0.44
2:O:44:THR:HG23	2:O:47:GLU:OE2	2.18	0.44
2:Q:8:GLN:O	2:Q:12:PHE:HD2	1.99	0.44
2:Q:13:LYS:NZ	2:Q:65:PHE:CB	2.74	0.44
2:R:58:ASP:O	2:R:60:ASN:N	2.48	0.44
2:S:30:LYS:H	2:S:30:LYS:CD	2.13	0.44
2:T:8:GLN:O	2:T:12:PHE:HD2	2.00	0.44
2:T:11:GLU:C	2:T:13:LYS:N	2.71	0.44
2:T:55:VAL:CG2	2:T:67:GLU:OE1	2.65	0.44
2:T:97:ASN:HD22	2:T:98:GLY:N	2.16	0.44
1:A:115:LYS:NZ	1:A:117:LEU:HB2	2.33	0.44
1:A:144:GLU:CG	1:A:177:ILE:HD11	2.45	0.44
1:A:391:ILE:O	1:A:393:GLU:N	2.51	0.44
1:A:706:ASN:O	2:O:130:ILE:HG23	2.18	0.44
1:B:173:ILE:HG23	1:B:174:GLY:N	2.33	0.44
1:B:344:ALA:HB3	1:B:488:LEU:HD23	2.00	0.44
1:B:482:GLU:O	1:B:484:VAL:HG23	2.17	0.44
1:B:663:PHE:O	1:B:664:ILE:C	2.57	0.44
1:C:131:ARG:CB	1:C:170:TYR:OH	2.65	0.44
1:C:169:VAL:CG2	1:C:246:SER:HB2	2.48	0.44
1:C:263:ASP:O	1:C:264:MET:C	2.54	0.44
1:C:326:ILE:CG2	1:C:328:PHE:CE1	3.01	0.44
1:C:517:VAL:HG23	1:C:518:ASN:ND2	2.33	0.44
1:C:776:LEU:HD23	1:C:776:LEU:C	2.37	0.44
1:D:501:LEU:HD22	2:R:112:LEU:CD2	2.48	0.44
1:D:549:LEU:HB3	1:D:578:GLY:HA3	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:551:ASN:HD22	1:D:551:ASN:HA	1.58	0.44
1:D:607:ASN:HB2	1:D:610:MET:H	1.83	0.44
1:D:713:SER:O	1:D:714:GLN:C	2.55	0.44
1:D:776:LEU:HD23	1:D:776:LEU:C	2.37	0.44
1:E:71:PHE:CG	1:E:73:ASN:HB2	2.53	0.44
1:E:746:LYS:CD	1:E:750:GLN:HE21	2.31	0.44
1:F:135:VAL:N	1:F:136:PRO:CD	2.81	0.44
1:F:323:ASN:C	1:F:323:ASN:ND2	2.71	0.44
1:F:432:TYR:CD2	1:F:447:SER:HA	2.53	0.44
1:F:443:GLU:O	1:F:455:TYR:HA	2.18	0.44
1:F:517:VAL:C	1:F:519:THR:H	2.21	0.44
1:F:614:PHE:CD2	1:F:614:PHE:O	2.71	0.44
1:F:670:ILE:CG2	1:F:744:GLU:HB2	2.47	0.44
2:P:94:LYS:NZ	2:P:94:LYS:HB3	2.32	0.44
2:Q:11:GLU:C	2:Q:13:LYS:N	2.71	0.44
2:S:26:THR:HB	2:S:62:THR:OG1	2.18	0.44
2:S:102:ALA:CB	2:S:125:ILE:HG13	2.48	0.44
1:A:173:ILE:HG23	1:A:174:GLY:N	2.33	0.43
1:A:275:GLY:CA	1:A:278:LYS:HE2	2.48	0.43
1:A:343:VAL:HG12	1:A:344:ALA:N	2.33	0.43
1:B:79:ILE:C	1:B:81:GLN:N	2.71	0.43
1:B:164:GLU:C	1:B:166:SER:N	2.71	0.43
1:B:169:VAL:CG2	1:B:246:SER:HB2	2.48	0.43
1:B:234:LEU:H	1:B:234:LEU:CD2	2.31	0.43
1:B:270:LYS:O	1:B:273:LYS:HB2	2.17	0.43
1:B:322:LEU:O	1:B:323:ASN:HB3	2.18	0.43
1:B:384:ASN:C	1:B:386:GLU:N	2.70	0.43
1:B:391:ILE:O	1:B:393:GLU:N	2.51	0.43
1:B:461:LYS:HD2	1:B:461:LYS:HA	1.79	0.43
1:B:656:THR:O	1:B:755:ARG:NH1	2.51	0.43
1:C:327:LEU:HD12	1:C:327:LEU:N	2.33	0.43
1:C:480:ASN:HD22	1:C:480:ASN:C	2.21	0.43
1:C:482:GLU:O	1:C:484:VAL:HG23	2.18	0.43
1:E:85:LEU:HD12	1:E:168:GLU:OE1	2.18	0.43
1:E:411:GLU:O	1:E:414:LYS:HB3	2.18	0.43
1:E:517:VAL:HG23	1:E:518:ASN:ND2	2.33	0.43
1:F:71:PHE:CG	1:F:73:ASN:HB2	2.53	0.43
1:F:275:GLY:CA	1:F:278:LYS:HE2	2.47	0.43
2:S:44:THR:HG23	2:S:47:GLU:OE2	2.18	0.43
2:S:109:MET:HG3	2:S:116:LEU:HD11	1.99	0.43
1:A:344:ALA:HB3	1:A:488:LEU:HD23	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:671:ARG:NH1	1:A:671:ARG:HG3	2.33	0.43
1:B:517:VAL:HG23	1:B:518:ASN:ND2	2.33	0.43
1:B:609:GLU:O	1:B:610:MET:C	2.56	0.43
1:B:677:GLY:HA2	1:B:745:TYR:OH	2.18	0.43
1:C:71:PHE:HD1	1:C:108:ASP:OD1	2.00	0.43
1:C:243:LEU:O	1:C:247:TYR:HB2	2.18	0.43
1:C:463:THR:O	1:C:466:GLY:N	2.50	0.43
1:D:71:PHE:CG	1:D:73:ASN:HB2	2.53	0.43
1:D:79:ILE:C	1:D:81:GLN:N	2.71	0.43
1:D:97:TYR:O	1:D:100:LEU:N	2.52	0.43
1:D:173:ILE:HG23	1:D:174:GLY:N	2.33	0.43
1:D:234:LEU:H	1:D:234:LEU:CD2	2.31	0.43
1:D:279:ILE:CD1	1:D:279:ILE:H	2.30	0.43
1:D:446:ILE:CG1	1:D:447:SER:N	2.81	0.43
1:D:480:ASN:HD22	1:D:480:ASN:C	2.22	0.43
1:D:744:GLU:H	1:D:744:GLU:CD	2.21	0.43
1:E:97:TYR:HD2	1:E:102:GLY:HA3	1.84	0.43
1:E:207:ASP:C	1:E:209:LEU:H	2.22	0.43
1:E:218:LEU:C	1:E:220:LEU:N	2.70	0.43
1:E:225:ILE:HG12	1:E:229:PHE:CE2	2.51	0.43
1:E:324:THR:CB	1:E:499:PRO:HA	2.41	0.43
1:E:457:THR:CG2	1:E:468:LYS:HA	2.42	0.43
1:E:517:VAL:C	1:E:519:THR:H	2.21	0.43
1:E:629:ASN:HD22	1:E:630:ARG:N	2.16	0.43
1:E:635:ILE:N	1:E:635:ILE:CD1	2.79	0.43
1:F:161:ILE:HG21	1:F:168:GLU:HB2	2.00	0.43
1:F:173:ILE:HG23	1:F:174:GLY:N	2.33	0.43
1:F:184:LYS:HZ2	1:F:191:GLU:HG3	1.82	0.43
1:F:486:LYS:HE3	1:F:570:THR:O	2.17	0.43
1:F:765:THR:HG22	1:F:769:SER:HB2	2.00	0.43
2:O:109:MET:HG3	2:O:116:LEU:HD11	1.99	0.43
2:O:138:TYR:O	2:O:142:VAL:HG23	2.18	0.43
2:Q:94:LYS:NZ	2:Q:94:LYS:HB3	2.32	0.43
1:A:90:PRO:HG2	1:A:93:VAL:HB	2.00	0.43
1:A:252:ASP:OD2	1:A:253:HIS:CD2	2.72	0.43
1:A:295:VAL:HG21	1:A:603:ILE:CG2	2.47	0.43
1:A:323:ASN:C	1:A:323:ASN:ND2	2.72	0.43
1:A:323:ASN:ND2	1:A:598:PRO:CB	2.81	0.43
1:A:376:GLN:C	1:A:378:LEU:N	2.72	0.43
1:A:443:GLU:CG	1:A:458:LYS:HE3	2.48	0.43
1:A:595:ILE:CG2	1:A:596:ILE:N	2.81	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:776:LEU:HD23	1:A:776:LEU:C	2.38	0.43
1:B:71:PHE:HD1	1:B:108:ASP:OD1	2.00	0.43
1:B:88:LYS:HE3	1:B:88:LYS:HB3	1.88	0.43
1:B:107:THR:HG21	1:B:115:LYS:CD	2.38	0.43
1:B:184:LYS:HZ2	1:B:191:GLU:CG	2.31	0.43
1:B:411:GLU:O	1:B:414:LYS:HB3	2.18	0.43
1:B:439:ASN:OD1	1:B:440:GLN:N	2.51	0.43
1:B:450:ASN:O	1:B:452:GLU:N	2.49	0.43
1:B:595:ILE:CG2	1:B:596:ILE:N	2.81	0.43
1:B:609:GLU:N	1:B:609:GLU:CD	2.72	0.43
1:B:614:PHE:O	1:B:614:PHE:CD2	2.71	0.43
1:C:71:PHE:CG	1:C:73:ASN:HB2	2.53	0.43
1:C:77:ASP:O	1:C:81:GLN:HB2	2.19	0.43
1:C:443:GLU:CG	1:C:458:LYS:HE3	2.48	0.43
1:C:505:LYS:HE3	1:C:513:TRP:CD2	2.53	0.43
1:C:743:PRO:HA	1:C:746:LYS:CB	2.46	0.43
1:D:307:LEU:HD12	1:D:307:LEU:N	2.34	0.43
1:D:376:GLN:C	1:D:378:LEU:N	2.72	0.43
1:D:523:LEU:HD22	2:R:127:GLU:HG2	2.01	0.43
1:D:609:GLU:O	1:D:610:MET:C	2.56	0.43
1:D:690:LYS:CD	1:D:741:ILE:HG23	2.48	0.43
1:E:186:LYS:HB2	1:E:186:LYS:HE2	1.85	0.43
1:E:322:LEU:HD13	1:E:556:MET:HE1	2.00	0.43
1:F:71:PHE:HD1	1:F:108:ASP:OD1	2.00	0.43
1:F:104:ILE:HG23	1:F:152:LEU:HD22	1.99	0.43
1:F:207:ASP:C	1:F:209:LEU:H	2.22	0.43
1:F:234:LEU:H	1:F:234:LEU:CD2	2.31	0.43
1:F:439:ASN:OD1	1:F:440:GLN:N	2.51	0.43
2:O:94:LYS:NZ	2:O:94:LYS:HB3	2.33	0.43
2:Q:102:ALA:CB	2:Q:125:ILE:HG13	2.48	0.43
2:R:58:ASP:HB3	2:R:62:THR:CG2	2.44	0.43
1:A:89:ILE:HG22	1:A:90:PRO:HD2	1.99	0.43
1:A:140:ARG:NH1	1:A:141:PHE:HE1	2.16	0.43
1:A:271:LEU:HD13	1:A:276:PHE:CE2	2.54	0.43
1:A:325:TYR:HB2	1:A:498:ALA:HB3	1.99	0.43
1:A:437:SER:O	1:A:439:ASN:N	2.43	0.43
1:B:252:ASP:OD2	1:B:253:HIS:CD2	2.72	0.43
1:B:349:ASN:HD22	1:B:350:VAL:N	2.16	0.43
1:B:794:GLN:HE21	1:B:794:GLN:HB3	1.66	0.43
1:C:91:LYS:O	1:C:94:LEU:HB2	2.18	0.43
1:C:135:VAL:N	1:C:136:PRO:HD3	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:365:PRO:HB2	1:C:367:ASP:O	2.18	0.43
1:C:376:GLN:C	1:C:378:LEU:N	2.71	0.43
1:C:501:LEU:HD22	2:Q:112:LEU:CD2	2.49	0.43
1:D:91:LYS:O	1:D:94:LEU:HB2	2.19	0.43
1:D:135:VAL:N	1:D:136:PRO:HD3	2.33	0.43
1:D:169:VAL:CG2	1:D:246:SER:HB2	2.48	0.43
1:D:192:PHE:HB3	1:D:196:ILE:CD1	2.47	0.43
1:D:325:TYR:HB2	1:D:498:ALA:HB3	2.00	0.43
1:D:391:ILE:O	1:D:393:GLU:N	2.51	0.43
1:E:90:PRO:HG2	1:E:93:VAL:HB	2.00	0.43
1:E:325:TYR:HB2	1:E:498:ALA:HB3	1.99	0.43
1:E:391:ILE:O	1:E:393:GLU:N	2.52	0.43
1:E:446:ILE:CG1	1:E:447:SER:N	2.81	0.43
1:E:529:VAL:O	1:E:532:LEU:N	2.51	0.43
1:F:90:PRO:O	1:F:93:VAL:N	2.51	0.43
1:F:225:ILE:HG23	1:F:229:PHE:CE2	2.52	0.43
1:F:713:SER:O	1:F:714:GLN:C	2.56	0.43
1:F:730:ASN:C	1:F:732:ILE:N	2.71	0.43
2:P:76:MET:HA	2:P:79:THR:HG22	2.00	0.43
2:Q:97:ASN:ND2	2:Q:99:TYR:H	2.16	0.43
2:Q:138:TYR:O	2:Q:142:VAL:HG23	2.18	0.43
2:T:44:THR:HG23	2:T:47:GLU:OE2	2.19	0.43
1:A:225:ILE:HG23	1:A:229:PHE:CD2	2.53	0.43
1:B:722:ILE:HD13	1:B:764:LEU:HD23	2.01	0.43
1:C:279:ILE:HD13	1:C:279:ILE:H	1.82	0.43
1:C:405:LEU:CD1	1:C:405:LEU:H	2.30	0.43
1:C:609:GLU:O	1:C:613:ARG:N	2.48	0.43
1:C:677:GLY:HA2	1:C:745:TYR:OH	2.17	0.43
1:C:722:ILE:HD13	1:C:764:LEU:HD21	2.00	0.43
1:D:278:LYS:HB2	1:D:279:ILE:HD13	2.01	0.43
1:D:443:GLU:CG	1:D:458:LYS:HE3	2.48	0.43
1:E:523:LEU:HD22	2:S:127:GLU:HG2	2.01	0.43
1:E:660:SER:O	1:E:663:PHE:HB3	2.18	0.43
1:F:135:VAL:N	1:F:136:PRO:HD3	2.34	0.43
1:F:391:ILE:O	1:F:393:GLU:N	2.52	0.43
1:F:482:GLU:O	1:F:484:VAL:HG23	2.18	0.43
1:F:566:TYR:CD2	1:F:566:TYR:N	2.84	0.43
1:F:776:LEU:HD23	1:F:776:LEU:C	2.38	0.43
2:P:73:ALA:O	2:P:75:LYS:N	2.51	0.43
2:P:97:ASN:HD22	2:P:98:GLY:N	2.16	0.43
2:Q:110:THR:O	2:Q:113:GLY:N	2.47	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:3:GLN:N	2:T:77:LYS:NZ	2.62	0.43
1:A:176:GLY:O	1:A:180:ASP:OD1	2.37	0.43
1:A:238:GLN:C	1:A:240:ALA:H	2.22	0.43
1:A:295:VAL:HG12	1:A:605:THR:HA	2.00	0.43
1:A:538:ILE:HG21	2:O:87:GLU:HB2	2.01	0.43
1:A:692:GLU:OE2	1:A:692:GLU:HA	2.19	0.43
1:B:179:LEU:O	1:B:183:SER:HB3	1.95	0.43
1:C:566:TYR:CD2	1:C:566:TYR:N	2.85	0.43
1:C:609:GLU:CD	1:C:609:GLU:H	2.18	0.43
1:D:77:ASP:O	1:D:81:GLN:HB2	2.17	0.43
1:D:344:ALA:HB3	1:D:488:LEU:HD23	2.01	0.43
1:D:463:THR:O	1:D:466:GLY:N	2.50	0.43
1:D:482:GLU:O	1:D:484:VAL:HG23	2.18	0.43
1:D:514:ASP:C	1:D:516:VAL:H	2.22	0.43
1:D:538:ILE:HG21	2:R:87:GLU:HB2	2.01	0.43
1:D:564:VAL:C	1:D:567:THR:HG22	2.39	0.43
1:E:238:GLN:C	1:E:240:ALA:H	2.21	0.43
1:E:270:LYS:O	1:E:273:LYS:HB2	2.18	0.43
1:E:678:VAL:HG13	1:E:745:TYR:CD2	2.52	0.43
1:F:322:LEU:HD13	1:F:556:MET:HE1	1.99	0.43
1:F:514:ASP:C	1:F:516:VAL:N	2.71	0.43
1:F:517:VAL:HG23	1:F:518:ASN:ND2	2.33	0.43
2:S:94:LYS:NZ	2:S:94:LYS:HB3	2.32	0.43
2:T:58:ASP:O	2:T:60:ASN:N	2.48	0.43
1:A:234:LEU:H	1:A:234:LEU:CD2	2.31	0.43
1:A:279:ILE:HD13	1:A:279:ILE:H	1.84	0.43
1:A:307:LEU:HD12	1:A:307:LEU:N	2.34	0.43
1:A:332:ASN:OD1	1:A:334:LEU:CD1	2.66	0.43
1:A:517:VAL:HG23	1:A:518:ASN:ND2	2.33	0.43
1:B:100:LEU:HD11	1:B:182:ILE:HG21	2.01	0.43
1:B:238:GLN:C	1:B:240:ALA:H	2.21	0.43
1:B:579:THR:O	1:B:581:GLN:N	2.51	0.43
1:C:614:PHE:CD2	1:C:614:PHE:O	2.71	0.43
1:D:173:ILE:O	1:D:176:GLY:N	2.52	0.43
1:D:199:LEU:C	1:D:201:ASP:N	2.70	0.43
1:D:332:ASN:OD1	1:D:334:LEU:N	2.46	0.43
1:D:517:VAL:HG23	1:D:518:ASN:ND2	2.33	0.43
1:E:690:LYS:CD	1:E:741:ILE:HG23	2.47	0.43
1:E:713:SER:O	1:E:714:GLN:C	2.57	0.43
1:F:77:ASP:O	1:F:81:GLN:HB2	2.19	0.43
1:F:130:SER:O	1:F:132:GLY:O	2.36	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:243:LEU:O	1:F:247:TYR:HB2	2.18	0.43
1:F:288:VAL:CG2	1:F:289:GLU:N	2.75	0.43
1:F:443:GLU:CG	1:F:458:LYS:HE3	2.48	0.43
2:O:9:ILE:O	2:O:10:ALA:C	2.55	0.43
2:O:42:ASN:HA	2:O:43:PRO:HD2	1.90	0.43
2:P:26:THR:HB	2:P:62:THR:OG1	2.18	0.43
2:Q:43:PRO:HG3	2:Q:48:LEU:HD13	2.00	0.43
2:R:9:ILE:O	2:R:10:ALA:C	2.57	0.43
1:A:207:ASP:C	1:A:209:LEU:H	2.21	0.43
1:A:368:GLN:HG3	1:A:384:ASN:N	2.33	0.43
1:A:432:TYR:CD2	1:A:447:SER:HA	2.54	0.43
1:A:439:ASN:OD1	1:A:440:GLN:N	2.52	0.43
1:A:614:PHE:CD2	1:A:614:PHE:O	2.72	0.43
1:A:713:SER:O	1:A:714:GLN:C	2.56	0.43
1:B:71:PHE:CG	1:B:73:ASN:HB2	2.53	0.43
1:B:621:GLY:HA2	2:P:94:LYS:HZ3	1.84	0.43
1:B:663:PHE:CE1	1:B:752:LEU:HD11	2.53	0.43
1:B:759:GLN:CA	1:B:759:GLN:NE2	2.80	0.43
1:C:344:ALA:HB3	1:C:488:LEU:HD23	2.01	0.43
1:C:678:VAL:HG13	1:C:745:TYR:CD2	2.53	0.43
1:C:749:PHE:O	1:C:750:GLN:C	2.57	0.43
1:D:88:LYS:NZ	1:D:172:GLU:OE1	2.51	0.43
1:D:517:VAL:C	1:D:519:THR:H	2.22	0.43
1:D:722:ILE:HD13	1:D:764:LEU:HD21	2.01	0.43
1:E:144:GLU:CG	1:E:177:ILE:HD11	2.47	0.43
1:E:446:ILE:HA	1:E:453:VAL:HA	2.01	0.43
1:E:482:GLU:O	1:E:484:VAL:HG23	2.18	0.43
1:E:716:LYS:O	1:E:720:ILE:HG22	2.19	0.43
1:F:257:LEU:CD1	1:F:261:ALA:HB3	2.47	0.43
1:F:514:ASP:C	1:F:516:VAL:H	2.22	0.43
1:F:523:LEU:HD22	2:T:127:GLU:CD	2.39	0.43
1:F:551:ASN:HD22	1:F:551:ASN:HA	1.55	0.43
2:O:55:VAL:CG2	2:O:67:GLU:OE1	2.66	0.43
2:O:97:ASN:HD22	2:O:98:GLY:N	2.17	0.43
2:R:44:THR:HG23	2:R:47:GLU:OE2	2.18	0.43
1:A:411:GLU:O	1:A:414:LYS:HB3	2.19	0.43
1:A:435:LEU:HG	1:A:446:ILE:HG22	2.01	0.43
1:A:517:VAL:C	1:A:519:THR:H	2.21	0.43
1:A:663:PHE:CE1	1:A:752:LEU:HD11	2.54	0.43
1:B:207:ASP:C	1:B:209:LEU:H	2.22	0.43
1:B:275:GLY:CA	1:B:278:LYS:HE2	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:692:GLU:HA	1:B:692:GLU:OE2	2.18	0.43
1:B:765:THR:HG22	1:B:769:SER:HB2	2.00	0.43
1:C:191:GLU:C	1:C:193:LEU:N	2.72	0.43
1:C:338:LEU:O	1:C:343:VAL:CG2	2.67	0.43
1:C:529:VAL:O	1:C:532:LEU:N	2.52	0.43
1:C:690:LYS:CD	1:C:741:ILE:HG23	2.49	0.43
1:C:713:SER:O	1:C:714:GLN:C	2.56	0.43
1:D:327:LEU:HD12	1:D:327:LEU:N	2.33	0.43
1:D:546:LYS:NZ	1:D:554:LYS:HE2	2.34	0.43
1:D:579:THR:O	1:D:581:GLN:N	2.52	0.43
1:D:609:GLU:CD	1:D:609:GLU:H	2.19	0.43
1:E:115:LYS:NZ	1:E:117:LEU:HB2	2.33	0.43
1:F:271:LEU:HD13	1:F:276:PHE:CE2	2.53	0.43
1:F:278:LYS:HB2	1:F:279:ILE:HD13	2.01	0.43
1:F:343:VAL:HG12	1:F:344:ALA:N	2.34	0.43
1:F:493:ASP:OD2	1:F:577:HIS:CE1	2.71	0.43
1:F:595:ILE:CG2	1:F:596:ILE:N	2.81	0.43
1:F:628:PHE:CE2	2:T:90:ARG:HD3	2.36	0.43
1:F:749:PHE:O	1:F:750:GLN:C	2.57	0.43
2:Q:73:ALA:O	2:Q:74:ARG:C	2.57	0.43
2:S:138:TYR:CZ	2:S:142:VAL:CG2	3.01	0.43
2:S:146:THR:O	2:S:148:LYS:N	2.51	0.43
2:T:94:LYS:HB3	2:T:94:LYS:HZ2	1.84	0.43
1:A:169:VAL:HG23	1:A:246:SER:HB2	2.01	0.43
1:A:327:LEU:HD12	1:A:327:LEU:N	2.34	0.43
1:A:384:ASN:C	1:A:386:GLU:H	2.23	0.43
1:A:405:LEU:CD1	1:A:405:LEU:H	2.30	0.43
1:A:581:GLN:HE22	1:A:632:TYR:HE1	1.67	0.43
1:B:236:GLU:HA	1:B:239:HIS:HD2	1.75	0.43
1:B:376:GLN:C	1:B:378:LEU:N	2.72	0.43
1:B:413:LEU:N	1:B:413:LEU:HD23	2.34	0.43
1:B:462:ILE:CD1	1:B:466:GLY:HA2	2.44	0.43
1:B:630:ARG:CD	2:P:83:GLU:HG2	2.48	0.43
1:B:671:ARG:NH1	1:B:671:ARG:HG3	2.34	0.43
1:C:607:ASN:HB2	1:C:610:MET:H	1.84	0.43
1:C:711:ILE:C	1:C:712:PHE:HD2	2.22	0.43
1:D:107:THR:HG21	1:D:115:LYS:CD	2.46	0.43
1:D:184:LYS:HE2	1:D:193:LEU:HD12	2.01	0.43
1:D:243:LEU:O	1:D:247:TYR:HB2	2.19	0.43
1:D:368:GLN:C	1:D:370:LEU:H	2.22	0.43
1:D:414:LYS:C	1:D:414:LYS:HD3	2.38	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:678:VAL:HG13	1:D:745:TYR:CD2	2.54	0.43
1:D:692:GLU:OE2	1:D:692:GLU:HA	2.19	0.43
1:D:732:ILE:HG23	1:D:749:PHE:HD1	1.84	0.43
1:E:89:ILE:CG2	1:E:90:PRO:HD2	2.49	0.43
1:E:135:VAL:N	1:E:136:PRO:HD3	2.34	0.43
1:E:663:PHE:O	1:E:664:ILE:C	2.57	0.43
1:E:776:LEU:HD23	1:E:776:LEU:C	2.39	0.43
1:F:115:LYS:O	1:F:117:LEU:N	2.52	0.43
1:F:225:ILE:HG12	1:F:229:PHE:CE2	2.53	0.43
1:F:671:ARG:NH1	1:F:671:ARG:HG3	2.34	0.43
2:P:9:ILE:O	2:P:10:ALA:C	2.57	0.43
2:P:39:LEU:HD23	2:P:39:LEU:HA	1.86	0.43
2:Q:146:THR:O	2:Q:148:LYS:N	2.52	0.43
2:T:43:PRO:HG3	2:T:48:LEU:HD13	2.01	0.43
1:A:78:LYS:CD	1:A:156:ILE:HD13	2.49	0.42
1:A:97:TYR:HD2	1:A:102:GLY:HA3	1.83	0.42
1:A:100:LEU:HD11	1:A:182:ILE:HG21	2.01	0.42
1:A:179:LEU:O	1:A:183:SER:HB3	1.97	0.42
1:A:217:LYS:HZ2	1:A:236:GLU:HB2	1.81	0.42
1:A:278:LYS:HB2	1:A:279:ILE:HD13	2.01	0.42
1:A:288:VAL:C	1:A:290:LYS:N	2.72	0.42
1:A:292:ARG:NE	1:A:617:LYS:NZ	2.67	0.42
1:A:324:THR:CB	1:A:499:PRO:HA	2.41	0.42
1:A:478:ALA:HA	1:A:488:LEU:HG	2.01	0.42
1:B:523:LEU:HD22	2:P:127:GLU:CD	2.40	0.42
1:B:549:LEU:HB2	1:B:553:GLN:HE21	1.84	0.42
1:B:716:LYS:O	1:B:720:ILE:HG22	2.18	0.42
1:C:192:PHE:H	1:C:192:PHE:HD1	1.67	0.42
1:C:288:VAL:C	1:C:290:LYS:N	2.72	0.42
1:C:411:GLU:O	1:C:414:LYS:HB3	2.19	0.42
1:C:660:SER:O	1:C:663:PHE:HB3	2.18	0.42
1:C:663:PHE:O	1:C:664:ILE:C	2.57	0.42
1:C:671:ARG:NH1	1:C:671:ARG:HG3	2.34	0.42
1:D:668:SER:OG	2:R:10:ALA:HB1	2.19	0.42
1:E:350:VAL:HG12	1:E:352:GLY:H	1.84	0.42
1:E:439:ASN:OD1	1:E:440:GLN:N	2.51	0.42
1:E:462:ILE:CD1	1:E:466:GLY:HA2	2.45	0.42
1:E:478:ALA:HA	1:E:488:LEU:HG	2.01	0.42
1:E:595:ILE:CG2	1:E:596:ILE:N	2.81	0.42
1:E:722:ILE:HD13	1:E:764:LEU:HD23	2.01	0.42
1:F:295:VAL:HG12	1:F:605:THR:HA	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:690:LYS:CD	1:F:741:ILE:HG23	2.48	0.42
2:P:3:GLN:N	2:P:77:LYS:NZ	2.61	0.42
2:P:13:LYS:C	2:P:15:ALA:N	2.69	0.42
2:P:97:ASN:ND2	2:P:99:TYR:H	2.17	0.42
2:R:11:GLU:C	2:R:13:LYS:N	2.72	0.42
2:S:76:MET:HA	2:S:79:THR:HG22	2.00	0.42
2:S:89:PHE:O	2:S:91:VAL:N	2.52	0.42
2:T:89:PHE:O	2:T:90:ARG:C	2.55	0.42
1:A:90:PRO:HD3	1:A:249:PHE:CE2	2.54	0.42
1:A:144:GLU:HG2	1:A:177:ILE:CD1	2.47	0.42
1:B:343:VAL:HG12	1:B:344:ALA:N	2.35	0.42
1:B:365:PRO:HB2	1:B:367:ASP:O	2.19	0.42
1:B:502:THR:HG1	1:B:502:THR:H	1.61	0.42
1:B:564:VAL:C	1:B:567:THR:HG22	2.40	0.42
1:B:715:GLU:OE1	1:B:767:GLN:NE2	2.51	0.42
1:C:122:GLU:HG3	1:C:147:ARG:H	1.84	0.42
1:C:134:LYS:O	1:C:135:VAL:HG12	2.19	0.42
1:C:462:ILE:CD1	1:C:466:GLY:HA2	2.45	0.42
1:D:279:ILE:HD13	1:D:279:ILE:H	1.84	0.42
1:D:427:ASP:C	1:D:429:GLY:H	2.23	0.42
1:D:439:ASN:OD1	1:D:440:GLN:N	2.52	0.42
1:D:462:ILE:CG1	1:D:463:THR:N	2.78	0.42
1:D:597:ASN:O	1:D:599:GLU:N	2.49	0.42
1:E:184:LYS:HZ2	1:E:191:GLU:CG	2.32	0.42
1:E:609:GLU:O	1:E:613:ARG:N	2.47	0.42
1:E:711:ILE:C	1:E:712:PHE:HD2	2.22	0.42
1:E:759:GLN:HA	1:E:759:GLN:NE2	2.20	0.42
1:F:197:LYS:HD3	1:F:263:ASP:CB	2.44	0.42
1:F:327:LEU:HD12	1:F:327:LEU:N	2.34	0.42
1:F:365:PRO:HB2	1:F:367:ASP:O	2.18	0.42
1:F:607:ASN:HB2	1:F:610:MET:H	1.84	0.42
1:F:609:GLU:O	1:F:610:MET:C	2.56	0.42
1:F:671:ARG:HD2	2:T:14:GLU:HG2	2.01	0.42
2:S:58:ASP:C	2:S:60:ASN:N	2.68	0.42
1:A:123:GLU:OE2	1:A:123:GLU:N	2.44	0.42
1:A:130:SER:HB2	1:A:170:TYR:HE2	1.80	0.42
1:A:161:ILE:HG21	1:A:168:GLU:HB2	2.00	0.42
1:A:413:LEU:N	1:A:413:LEU:HD23	2.34	0.42
1:A:607:ASN:HB2	1:A:610:MET:H	1.85	0.42
1:B:217:LYS:HZ2	1:B:236:GLU:HB2	1.83	0.42
1:B:517:VAL:C	1:B:519:THR:H	2.22	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:722:ILE:HD13	1:B:764:LEU:HD21	2.01	0.42
1:C:173:ILE:O	1:C:176:GLY:N	2.52	0.42
1:C:234:LEU:H	1:C:234:LEU:CD2	2.31	0.42
1:C:514:ASP:C	1:C:516:VAL:H	2.22	0.42
1:C:595:ILE:CG2	1:C:596:ILE:N	2.82	0.42
1:C:654:ILE:HG22	1:C:655:ASN:HD22	1.85	0.42
1:C:722:ILE:HD13	1:C:764:LEU:HD23	2.01	0.42
1:D:207:ASP:C	1:D:209:LEU:H	2.22	0.42
1:D:218:LEU:O	1:D:218:LEU:CG	2.67	0.42
1:D:462:ILE:CD1	1:D:466:GLY:HA2	2.45	0.42
1:D:499:PRO:HD2	1:D:625:LEU:O	2.19	0.42
1:D:635:ILE:N	1:D:635:ILE:CD1	2.78	0.42
1:E:81:GLN:NE2	1:E:156:ILE:HG21	2.34	0.42
1:E:169:VAL:CG2	1:E:246:SER:HB2	2.49	0.42
1:E:179:LEU:HB2	1:E:183:SER:HB2	1.99	0.42
1:E:323:ASN:C	1:E:324:THR:CG2	2.88	0.42
1:E:376:GLN:C	1:E:378:LEU:N	2.72	0.42
1:F:279:ILE:HD13	1:F:279:ILE:H	1.84	0.42
1:F:370:LEU:HD23	1:F:370:LEU:HA	1.89	0.42
1:F:604:LEU:HG	1:F:605:THR:O	2.19	0.42
1:F:691:LYS:O	1:F:692:GLU:C	2.55	0.42
2:R:102:ALA:HA	2:R:125:ILE:HG13	2.00	0.42
2:S:97:ASN:HD22	2:S:98:GLY:N	2.17	0.42
1:A:79:ILE:O	1:A:81:GLN:N	2.52	0.42
1:A:505:LYS:HE3	1:A:513:TRP:CD2	2.53	0.42
1:B:144:GLU:HB3	1:B:177:ILE:HD11	2.01	0.42
1:B:186:LYS:HB2	1:B:186:LYS:HE2	1.85	0.42
1:B:188:LEU:H	1:B:188:LEU:HD22	1.75	0.42
1:B:269:ASN:O	1:B:273:LYS:HG3	2.20	0.42
1:B:368:GLN:C	1:B:370:LEU:H	2.23	0.42
1:B:687:GLU:OE2	1:B:687:GLU:HA	2.20	0.42
1:C:94:LEU:O	1:C:97:TYR:N	2.51	0.42
1:C:207:ASP:C	1:C:209:LEU:H	2.22	0.42
1:C:225:ILE:HG12	1:C:229:PHE:CE2	2.54	0.42
1:C:252:ASP:OD2	1:C:253:HIS:CD2	2.72	0.42
1:C:335:ALA:O	1:C:339:ILE:HG13	2.20	0.42
1:C:446:ILE:CG1	1:C:447:SER:N	2.81	0.42
1:C:493:ASP:OD2	1:C:577:HIS:CE1	2.72	0.42
1:C:517:VAL:C	1:C:519:THR:H	2.22	0.42
1:C:609:GLU:O	1:C:610:MET:C	2.57	0.42
1:D:457:THR:CG2	1:D:468:LYS:HA	2.42	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:764:LEU:O	1:D:766:HIS:N	2.52	0.42
1:E:115:LYS:O	1:E:117:LEU:N	2.52	0.42
1:E:161:ILE:O	1:E:165:GLN:HA	2.19	0.42
1:E:292:ARG:NE	1:E:617:LYS:NZ	2.67	0.42
1:E:307:LEU:N	1:E:307:LEU:HD12	2.34	0.42
1:E:343:VAL:HG12	1:E:344:ALA:N	2.35	0.42
1:E:435:LEU:HG	1:E:446:ILE:HG22	2.00	0.42
1:E:581:GLN:HE21	1:E:629:ASN:H	1.65	0.42
1:E:614:PHE:O	1:E:614:PHE:CD2	2.72	0.42
1:E:671:ARG:HG3	1:E:671:ARG:HH11	1.84	0.42
1:E:759:GLN:CA	1:E:759:GLN:NE2	2.81	0.42
1:F:182:ILE:C	1:F:183:SER:O	2.57	0.42
1:F:335:ALA:O	1:F:339:ILE:HG13	2.20	0.42
2:O:24:ASP:OD1	2:O:25:GLY:N	2.52	0.42
2:T:146:THR:O	2:T:148:LYS:N	2.52	0.42
1:A:97:TYR:O	1:A:100:LEU:N	2.52	0.42
1:A:135:VAL:N	1:A:136:PRO:HD3	2.34	0.42
1:A:239:HIS:O	1:A:243:LEU:HD12	2.19	0.42
1:A:323:ASN:C	1:A:324:THR:CG2	2.88	0.42
1:A:389:LYS:HD2	1:A:393:GLU:OE1	2.20	0.42
1:A:691:LYS:O	1:A:692:GLU:C	2.57	0.42
1:B:323:ASN:C	1:B:323:ASN:ND2	2.72	0.42
1:B:493:ASP:OD2	1:B:577:HIS:CE1	2.72	0.42
1:C:88:LYS:HE2	1:C:168:GLU:OE1	2.20	0.42
1:C:157:LYS:HA	1:C:157:LYS:HD2	1.85	0.42
1:D:115:LYS:NZ	1:D:117:LEU:HB2	2.33	0.42
1:D:335:ALA:O	1:D:339:ILE:HG13	2.19	0.42
1:D:450:ASN:O	1:D:452:GLU:N	2.51	0.42
1:D:478:ALA:HA	1:D:488:LEU:HG	2.02	0.42
1:E:131:ARG:HB2	1:E:170:TYR:CE2	2.54	0.42
1:E:131:ARG:HB2	1:E:170:TYR:CZ	2.55	0.42
1:E:480:ASN:HD22	1:E:480:ASN:C	2.23	0.42
1:F:218:LEU:C	1:F:220:LEU:N	2.69	0.42
1:F:218:LEU:O	1:F:218:LEU:CG	2.67	0.42
1:F:288:VAL:C	1:F:290:LYS:N	2.72	0.42
1:F:722:ILE:HD13	1:F:764:LEU:HD23	2.01	0.42
1:F:767:GLN:HG2	1:F:768:LYS:HG2	2.02	0.42
2:O:11:GLU:C	2:O:13:LYS:N	2.73	0.42
2:P:44:THR:HG23	2:P:47:GLU:OE2	2.18	0.42
2:S:89:PHE:O	2:S:90:ARG:C	2.55	0.42
2:T:10:ALA:O	2:T:14:GLU:HB2	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:102:ALA:HA	2:T:125:ILE:HG13	2.01	0.42
1:A:104:ILE:HG23	1:A:152:LEU:HD22	2.01	0.42
1:A:161:ILE:O	1:A:165:GLN:HA	2.19	0.42
1:A:218:LEU:O	1:A:218:LEU:CG	2.67	0.42
1:A:596:ILE:O	1:A:596:ILE:HG22	2.19	0.42
1:A:656:THR:O	1:A:755:ARG:NH1	2.53	0.42
1:A:663:PHE:O	1:A:664:ILE:C	2.58	0.42
1:A:670:ILE:CG2	1:A:744:GLU:HB2	2.47	0.42
1:A:735:VAL:HA	1:A:738:SER:HB2	2.02	0.42
1:A:749:PHE:O	1:A:750:GLN:C	2.56	0.42
1:B:91:LYS:O	1:B:94:LEU:HB2	2.19	0.42
1:B:135:VAL:N	1:B:136:PRO:HD3	2.33	0.42
1:B:323:ASN:O	1:B:324:THR:HG22	2.19	0.42
1:B:457:THR:CG2	1:B:468:LYS:HA	2.42	0.42
1:B:670:ILE:CG2	1:B:744:GLU:HB2	2.47	0.42
1:C:104:ILE:HG23	1:C:152:LEU:HD22	2.01	0.42
1:C:225:ILE:HG23	1:C:229:PHE:CD2	2.55	0.42
1:C:254:ARG:HB3	1:C:254:ARG:NH1	2.34	0.42
1:C:395:GLU:OE1	1:C:395:GLU:N	2.53	0.42
1:C:748:TYR:O	1:C:751:TYR:HB3	2.20	0.42
1:D:90:PRO:HD3	1:D:249:PHE:CE2	2.54	0.42
1:D:218:LEU:C	1:D:220:LEU:N	2.68	0.42
1:E:100:LEU:CD1	1:E:182:ILE:HG21	2.49	0.42
1:E:514:ASP:C	1:E:516:VAL:N	2.73	0.42
1:E:692:GLU:HA	1:E:692:GLU:OE2	2.18	0.42
1:F:76:LEU:N	1:F:76:LEU:CD2	2.83	0.42
1:F:122:GLU:HG3	1:F:147:ARG:H	1.84	0.42
1:F:238:GLN:C	1:F:240:ALA:H	2.22	0.42
1:F:338:LEU:O	1:F:343:VAL:CG2	2.68	0.42
1:F:656:THR:O	1:F:755:ARG:NH1	2.52	0.42
1:F:711:ILE:C	1:F:712:PHE:HD2	2.23	0.42
2:O:18:LEU:HD23	2:O:18:LEU:HA	1.83	0.42
2:O:73:ALA:O	2:O:74:ARG:C	2.58	0.42
2:P:73:ALA:O	2:P:74:ARG:C	2.57	0.42
2:R:146:THR:O	2:R:148:LYS:N	2.52	0.42
2:S:73:ALA:O	2:S:74:ARG:C	2.58	0.42
2:T:9:ILE:O	2:T:10:ALA:C	2.57	0.42
1:A:71:PHE:CG	1:A:73:ASN:HB2	2.53	0.42
1:A:90:PRO:O	1:A:93:VAL:N	2.51	0.42
1:A:115:LYS:O	1:A:117:LEU:N	2.53	0.42
1:A:368:GLN:C	1:A:370:LEU:H	2.23	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:427:ASP:C	1:A:429:GLY:H	2.23	0.42
1:A:529:VAL:O	1:A:532:LEU:N	2.53	0.42
1:A:764:LEU:C	1:A:766:HIS:N	2.72	0.42
1:B:90:PRO:HG2	1:B:93:VAL:HB	2.02	0.42
1:B:141:PHE:CD1	1:B:141:PHE:N	2.87	0.42
1:B:218:LEU:O	1:B:218:LEU:CG	2.67	0.42
1:B:325:TYR:HB2	1:B:498:ALA:HB3	2.00	0.42
1:C:343:VAL:HG12	1:C:344:ALA:N	2.34	0.42
1:D:71:PHE:O	1:D:78:LYS:NZ	2.52	0.42
1:D:141:PHE:N	1:D:141:PHE:CD1	2.88	0.42
1:D:549:LEU:HB2	1:D:553:GLN:HE21	1.85	0.42
1:D:687:GLU:HA	1:D:687:GLU:OE2	2.18	0.42
1:E:76:LEU:N	1:E:76:LEU:CD2	2.83	0.42
1:E:144:GLU:HG2	1:E:177:ILE:CD1	2.49	0.42
1:E:173:ILE:O	1:E:176:GLY:N	2.53	0.42
1:E:188:LEU:H	1:E:188:LEU:HD22	1.75	0.42
1:E:370:LEU:HD23	1:E:370:LEU:HA	1.90	0.42
1:E:427:ASP:C	1:E:429:GLY:H	2.23	0.42
1:E:580:GLU:C	1:E:582:ASP:H	2.23	0.42
1:F:175:LYS:CB	1:F:175:LYS:HZ3	2.31	0.42
1:F:217:LYS:HB2	1:F:236:GLU:OE1	2.19	0.42
1:F:308:VAL:O	1:F:311:HIS:N	2.42	0.42
1:F:501:LEU:HD22	2:T:112:LEU:CD2	2.49	0.42
1:F:609:GLU:CD	1:F:609:GLU:H	2.19	0.42
1:F:660:SER:O	1:F:663:PHE:HB3	2.19	0.42
2:O:89:PHE:O	2:O:90:ARG:C	2.58	0.42
2:P:100:ILE:O	2:P:136:VAL:HG22	2.20	0.42
2:P:111:ASN:C	2:P:113:GLY:N	2.73	0.42
2:Q:9:ILE:O	2:Q:10:ALA:C	2.58	0.42
2:S:10:ALA:O	2:S:14:GLU:HB2	2.20	0.42
2:S:111:ASN:C	2:S:113:GLY:N	2.73	0.42
2:T:97:ASN:ND2	2:T:99:TYR:H	2.17	0.42
1:A:81:GLN:NE2	1:A:156:ILE:HG21	2.35	0.42
1:A:107:THR:HG21	1:A:115:LYS:CD	2.41	0.42
1:A:185:ASP:O	1:A:190:PRO:CD	2.67	0.42
1:A:350:VAL:HG12	1:A:352:GLY:H	1.84	0.42
1:A:461:LYS:HD2	1:A:461:LYS:HA	1.79	0.42
1:A:671:ARG:HG3	1:A:671:ARG:HH11	1.85	0.42
1:B:76:LEU:N	1:B:76:LEU:CD2	2.83	0.42
1:B:104:ILE:HG23	1:B:152:LEU:HD22	2.01	0.42
1:B:278:LYS:HB2	1:B:279:ILE:HD13	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:350:VAL:HG12	1:B:352:GLY:H	1.84	0.42
1:B:446:ILE:HA	1:B:453:VAL:HA	2.00	0.42
1:B:529:VAL:O	1:B:532:LEU:N	2.53	0.42
1:B:660:SER:O	1:B:663:PHE:HB3	2.20	0.42
1:C:71:PHE:O	1:C:78:LYS:NZ	2.53	0.42
1:C:107:THR:HG21	1:C:115:LYS:CD	2.44	0.42
1:C:271:LEU:HD13	1:C:276:PHE:CE2	2.54	0.42
1:C:295:VAL:CG2	1:C:603:ILE:CG2	2.97	0.42
1:C:322:LEU:O	1:C:323:ASN:HB3	2.20	0.42
1:C:480:ASN:HD21	1:C:483:GLY:CA	2.31	0.42
1:C:523:LEU:HD22	2:Q:127:GLU:CD	2.40	0.42
1:C:639:ASN:HD22	1:C:640:LYS:N	2.18	0.42
1:C:663:PHE:CE1	1:C:752:LEU:HD11	2.55	0.42
1:D:115:LYS:O	1:D:117:LEU:N	2.53	0.42
1:D:413:LEU:HD23	1:D:413:LEU:N	2.35	0.42
1:D:659:THR:O	1:D:660:SER:C	2.57	0.42
1:D:711:ILE:C	1:D:712:PHE:HD2	2.23	0.42
1:E:243:LEU:O	1:E:247:TYR:HB2	2.19	0.42
1:E:368:GLN:C	1:E:370:LEU:H	2.23	0.42
1:E:674:SER:C	1:E:676:VAL:H	2.23	0.42
1:E:767:GLN:HG2	1:E:768:LYS:HG2	2.02	0.42
1:F:141:PHE:N	1:F:141:PHE:CD1	2.88	0.42
1:F:186:LYS:HB2	1:F:186:LYS:HE2	1.85	0.42
1:F:368:GLN:C	1:F:370:LEU:H	2.23	0.42
1:F:538:ILE:HG21	2:T:87:GLU:HB2	2.01	0.42
1:F:654:ILE:HG22	1:F:655:ASN:HD22	1.85	0.42
1:F:668:SER:OG	2:T:10:ALA:HB1	2.20	0.42
2:P:102:ALA:HA	2:P:125:ILE:HG13	2.01	0.42
2:S:43:PRO:HG3	2:S:48:LEU:HD13	2.01	0.42
1:A:76:LEU:CD2	1:A:76:LEU:N	2.83	0.42
1:A:243:LEU:O	1:A:247:TYR:HB2	2.19	0.42
1:B:130:SER:O	1:B:131:ARG:C	2.57	0.42
1:B:173:ILE:O	1:B:176:GLY:N	2.53	0.42
1:B:732:ILE:HG23	1:B:749:PHE:HD1	1.85	0.42
1:C:141:PHE:N	1:C:141:PHE:CD1	2.88	0.42
1:C:546:LYS:NZ	1:C:554:LYS:HE2	2.35	0.42
1:D:271:LEU:HD13	1:D:276:PHE:CE2	2.55	0.42
1:D:480:ASN:HD21	1:D:483:GLY:CA	2.32	0.42
1:D:561:ASN:OD1	1:D:574:VAL:N	2.40	0.42
1:D:654:ILE:HG22	1:D:655:ASN:HD22	1.85	0.42
1:D:722:ILE:HD13	1:D:764:LEU:HD23	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:218:LEU:HD21	1:F:225:ILE:CD1	2.50	0.42
1:F:225:ILE:HG23	1:F:229:PHE:CD2	2.55	0.42
1:F:344:ALA:HB3	1:F:488:LEU:HD23	2.01	0.42
1:F:376:GLN:C	1:F:378:LEU:N	2.72	0.42
1:F:427:ASP:C	1:F:429:GLY:H	2.23	0.42
1:F:699:GLY:O	1:F:700:TYR:C	2.58	0.42
2:O:19:PHE:N	2:O:19:PHE:CD1	2.88	0.42
2:O:43:PRO:CG	2:O:48:LEU:HD13	2.50	0.42
2:O:102:ALA:HA	2:O:125:ILE:HG13	2.01	0.42
2:R:43:PRO:HG3	2:R:48:LEU:HD13	2.01	0.42
2:S:24:ASP:OD1	2:S:25:GLY:N	2.53	0.42
2:T:18:LEU:HD23	2:T:18:LEU:HA	1.83	0.42
1:A:192:PHE:HD1	1:A:192:PHE:H	1.68	0.42
1:A:629:ASN:ND2	1:A:630:ARG:N	2.68	0.42
1:A:636:ALA:O	1:A:640:LYS:CA	2.68	0.42
1:A:687:GLU:HA	1:A:687:GLU:OE2	2.20	0.42
1:A:711:ILE:C	1:A:712:PHE:HD2	2.23	0.42
1:B:78:LYS:CD	1:B:156:ILE:HD13	2.50	0.42
1:B:81:GLN:NE2	1:B:156:ILE:HG21	2.34	0.42
1:B:157:LYS:HA	1:B:157:LYS:HD2	1.86	0.42
1:B:243:LEU:O	1:B:247:TYR:HB2	2.19	0.42
1:B:271:LEU:HD13	1:B:276:PHE:CE2	2.55	0.42
1:B:581:GLN:HE22	1:B:632:TYR:HE1	1.68	0.42
1:B:674:SER:C	1:B:676:VAL:H	2.24	0.42
1:B:711:ILE:C	1:B:712:PHE:HD2	2.22	0.42
1:C:79:ILE:C	1:C:81:GLN:N	2.72	0.42
1:C:197:LYS:HD3	1:C:263:ASP:CB	2.44	0.42
1:D:236:GLU:HA	1:D:239:HIS:HD2	1.76	0.42
1:D:288:VAL:C	1:D:290:LYS:N	2.72	0.42
1:D:350:VAL:HG12	1:D:352:GLY:H	1.84	0.42
1:D:384:ASN:C	1:D:386:GLU:H	2.23	0.42
1:D:411:GLU:O	1:D:414:LYS:HB3	2.19	0.42
1:D:614:PHE:CD2	1:D:614:PHE:O	2.72	0.42
1:D:660:SER:O	1:D:663:PHE:HB3	2.20	0.42
1:E:71:PHE:O	1:E:78:LYS:NZ	2.53	0.42
1:E:288:VAL:C	1:E:290:LYS:N	2.72	0.42
1:E:338:LEU:O	1:E:343:VAL:CG2	2.68	0.42
1:E:395:GLU:OE1	1:E:395:GLU:N	2.53	0.42
1:E:604:LEU:HG	1:E:605:THR:O	2.19	0.42
1:E:630:ARG:HD2	2:S:83:GLU:HG2	2.02	0.42
1:E:636:ALA:O	1:E:640:LYS:CA	2.67	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:656:THR:O	1:E:755:ARG:NH1	2.52	0.42
1:F:123:GLU:OE2	1:F:123:GLU:N	2.44	0.42
1:F:307:LEU:N	1:F:307:LEU:HD12	2.35	0.42
1:F:332:ASN:OD1	1:F:334:LEU:CD1	2.66	0.42
1:F:446:ILE:CG1	1:F:447:SER:N	2.81	0.42
1:F:654:ILE:HG22	1:F:655:ASN:ND2	2.35	0.42
1:F:661:ALA:O	1:F:665:LYS:HB2	2.20	0.42
1:F:760:VAL:O	1:F:764:LEU:HG	2.20	0.42
2:T:43:PRO:CG	2:T:48:LEU:HD13	2.50	0.42
1:A:191:GLU:C	1:A:193:LEU:N	2.73	0.41
1:A:564:VAL:C	1:A:567:THR:HG22	2.41	0.41
1:A:674:SER:C	1:A:676:VAL:H	2.24	0.41
1:A:760:VAL:O	1:A:764:LEU:HG	2.20	0.41
1:B:136:PRO:O	1:B:138:ALA:N	2.53	0.41
1:B:395:GLU:OE1	1:B:395:GLU:N	2.53	0.41
1:C:97:TYR:O	1:C:100:LEU:N	2.52	0.41
1:C:115:LYS:O	1:C:117:LEU:N	2.53	0.41
1:C:269:ASN:O	1:C:273:LYS:HG3	2.20	0.41
1:C:288:VAL:O	1:C:290:LYS:N	2.53	0.41
1:C:564:VAL:C	1:C:567:THR:HG22	2.40	0.41
1:C:674:SER:C	1:C:676:VAL:H	2.23	0.41
1:C:711:ILE:H	1:C:711:ILE:HG12	1.68	0.41
1:D:169:VAL:HG23	1:D:246:SER:HB2	2.02	0.41
1:E:157:LYS:HD2	1:E:157:LYS:HA	1.84	0.41
1:E:179:LEU:O	1:E:183:SER:HB3	1.98	0.41
1:E:184:LYS:HZ1	1:E:191:GLU:CB	2.32	0.41
1:E:252:ASP:OD2	1:E:253:HIS:CD2	2.72	0.41
1:E:384:ASN:C	1:E:386:GLU:H	2.23	0.41
1:F:292:ARG:NE	1:F:617:LYS:NZ	2.68	0.41
1:F:550:SER:OG	1:F:551:ASN:N	2.53	0.41
2:O:58:ASP:CB	2:O:62:THR:HG23	2.46	0.41
2:O:97:ASN:ND2	2:O:99:TYR:H	2.18	0.41
2:R:19:PHE:N	2:R:19:PHE:CD1	2.88	0.41
2:T:24:ASP:OD1	2:T:25:GLY:N	2.52	0.41
2:T:73:ALA:O	2:T:74:ARG:C	2.58	0.41
1:A:79:ILE:C	1:A:81:GLN:N	2.72	0.41
1:A:141:PHE:N	1:A:141:PHE:CD1	2.88	0.41
1:A:482:GLU:O	1:A:484:VAL:HG23	2.20	0.41
1:A:514:ASP:C	1:A:516:VAL:H	2.24	0.41
1:A:654:ILE:HG22	1:A:655:ASN:HD22	1.86	0.41
1:B:295:VAL:HG12	1:B:605:THR:HA	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:97:TYR:HD2	1:C:102:GLY:HA3	1.84	0.41
1:C:323:ASN:O	1:C:324:THR:HG22	2.20	0.41
1:C:550:SER:OG	1:C:551:ASN:N	2.53	0.41
1:C:630:ARG:HH11	1:C:630:ARG:HG3	1.85	0.41
1:C:719:LYS:HD2	1:C:797:ILE:HD11	2.02	0.41
1:D:85:LEU:HD12	1:D:168:GLU:OE1	2.21	0.41
1:D:89:ILE:HG22	1:D:90:PRO:HD2	2.00	0.41
1:D:305:SER:O	1:D:307:LEU:HD12	2.20	0.41
1:D:671:ARG:NH1	1:D:671:ARG:HG3	2.35	0.41
1:E:123:GLU:HG2	1:E:124:GLU:H	1.80	0.41
1:E:141:PHE:N	1:E:141:PHE:CD1	2.88	0.41
1:E:191:GLU:C	1:E:193:LEU:N	2.73	0.41
1:E:323:ASN:C	1:E:323:ASN:ND2	2.73	0.41
1:E:335:ALA:O	1:E:339:ILE:HG13	2.20	0.41
1:E:344:ALA:HB3	1:E:488:LEU:HD23	2.01	0.41
1:E:365:PRO:HB2	1:E:367:ASP:O	2.20	0.41
1:E:514:ASP:C	1:E:516:VAL:H	2.24	0.41
1:E:628:PHE:CE2	2:S:90:ARG:HD3	2.35	0.41
1:E:687:GLU:OE2	1:E:687:GLU:HA	2.20	0.41
1:E:735:VAL:O	1:E:738:SER:HB3	2.20	0.41
1:F:174:GLY:O	1:F:177:ILE:HG12	2.20	0.41
1:F:181:ILE:HG12	1:F:181:ILE:O	2.20	0.41
1:F:395:GLU:OE1	1:F:395:GLU:N	2.53	0.41
1:F:478:ALA:HA	1:F:488:LEU:HG	2.02	0.41
1:F:663:PHE:O	1:F:664:ILE:C	2.58	0.41
1:F:694:VAL:CG2	2:T:18:LEU:HD21	2.50	0.41
2:O:110:THR:O	2:O:113:GLY:N	2.47	0.41
2:O:111:ASN:C	2:O:113:GLY:N	2.73	0.41
2:Q:111:ASN:C	2:Q:113:GLY:N	2.73	0.41
2:R:43:PRO:CG	2:R:48:LEU:HD13	2.50	0.41
2:R:97:ASN:ND2	2:R:99:TYR:H	2.17	0.41
2:S:9:ILE:O	2:S:10:ALA:C	2.57	0.41
2:T:111:ASN:C	2:T:113:GLY:N	2.73	0.41
1:A:308:VAL:O	1:A:311:HIS:N	2.42	0.41
1:A:323:ASN:O	1:A:324:THR:HG22	2.20	0.41
1:A:499:PRO:HD2	1:A:625:LEU:O	2.20	0.41
1:B:514:ASP:C	1:B:516:VAL:H	2.24	0.41
1:C:90:PRO:O	1:C:93:VAL:N	2.53	0.41
1:C:427:ASP:C	1:C:429:GLY:H	2.23	0.41
1:C:478:ALA:HA	1:C:488:LEU:HG	2.01	0.41
1:D:288:VAL:O	1:D:290:LYS:N	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:338:LEU:O	1:D:343:VAL:CG2	2.68	0.41
1:D:405:LEU:CD1	1:D:405:LEU:H	2.31	0.41
1:D:621:GLY:HA2	2:R:94:LYS:HZ3	1.84	0.41
1:D:674:SER:C	1:D:676:VAL:H	2.24	0.41
1:E:218:LEU:O	1:E:218:LEU:CG	2.67	0.41
1:E:389:LYS:HD2	1:E:393:GLU:OE1	2.20	0.41
1:E:413:LEU:N	1:E:413:LEU:HD23	2.35	0.41
1:E:538:ILE:HG21	2:S:87:GLU:HB2	2.01	0.41
1:E:722:ILE:HD13	1:E:764:LEU:HD21	2.01	0.41
1:F:185:ASP:O	1:F:190:PRO:CA	2.67	0.41
1:F:796:ILE:O	1:F:796:ILE:HG22	2.21	0.41
2:Q:3:GLN:N	2:Q:77:LYS:NZ	2.60	0.41
2:Q:43:PRO:CG	2:Q:48:LEU:HD13	2.50	0.41
2:R:73:ALA:O	2:R:74:ARG:C	2.58	0.41
2:S:97:ASN:ND2	2:S:99:TYR:H	2.18	0.41
1:A:136:PRO:O	1:A:138:ALA:N	2.53	0.41
1:A:218:LEU:HD21	1:A:225:ILE:CD1	2.51	0.41
1:A:549:LEU:HB2	1:A:553:GLN:HE21	1.86	0.41
1:A:725:GLY:O	1:A:728:ALA:HB3	2.20	0.41
1:B:71:PHE:O	1:B:78:LYS:NZ	2.53	0.41
1:B:99:GLU:HG2	1:B:283:LEU:HB3	2.02	0.41
1:B:149:THR:HA	1:B:150:PRO:HD2	1.95	0.41
1:B:292:ARG:NE	1:B:617:LYS:NZ	2.68	0.41
1:B:307:LEU:HD12	1:B:307:LEU:N	2.35	0.41
1:B:628:PHE:CE2	2:P:90:ARG:HD3	2.36	0.41
1:B:630:ARG:CZ	2:P:83:GLU:CG	2.89	0.41
1:B:659:THR:O	1:B:660:SER:C	2.56	0.41
1:C:311:HIS:O	1:C:314:ALA:HB3	2.19	0.41
1:C:444:PHE:CD1	1:C:444:PHE:N	2.88	0.41
1:C:551:ASN:HD22	1:C:551:ASN:HA	1.56	0.41
1:C:767:GLN:HG2	1:C:768:LYS:HG2	2.02	0.41
1:D:550:SER:OG	1:D:551:ASN:N	2.53	0.41
1:D:580:GLU:C	1:D:582:ASP:H	2.23	0.41
1:D:636:ALA:O	1:D:640:LYS:CA	2.68	0.41
1:D:663:PHE:O	1:D:664:ILE:C	2.58	0.41
1:D:794:GLN:HE21	1:D:794:GLN:HB3	1.67	0.41
1:E:192:PHE:HD1	1:E:192:PHE:H	1.69	0.41
1:E:225:ILE:HG23	1:E:229:PHE:CD2	2.55	0.41
1:E:278:LYS:HB2	1:E:279:ILE:HD13	2.02	0.41
1:E:279:ILE:HD13	1:E:279:ILE:H	1.84	0.41
1:E:323:ASN:O	1:E:324:THR:HG22	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:502:THR:H	1:E:502:THR:HG1	1.64	0.41
1:E:732:ILE:HG23	1:E:749:PHE:HD1	1.85	0.41
1:E:749:PHE:O	1:E:750:GLN:C	2.56	0.41
1:F:97:TYR:HD2	1:F:102:GLY:HA3	1.86	0.41
1:F:687:GLU:OE2	1:F:687:GLU:HA	2.20	0.41
1:F:722:ILE:HD13	1:F:764:LEU:HD21	2.01	0.41
1:F:764:LEU:O	1:F:766:HIS:N	2.53	0.41
2:P:11:GLU:C	2:P:13:LYS:N	2.73	0.41
2:P:42:ASN:HA	2:P:43:PRO:HD2	1.89	0.41
2:P:89:PHE:O	2:P:90:ARG:C	2.58	0.41
2:R:58:ASP:CB	2:R:62:THR:HG23	2.47	0.41
2:R:100:ILE:O	2:R:136:VAL:HG22	2.20	0.41
2:R:111:ASN:C	2:R:113:GLY:N	2.73	0.41
2:S:43:PRO:CG	2:S:48:LEU:HD13	2.51	0.41
2:S:104:GLU:HG2	2:S:104:GLU:H	1.65	0.41
1:A:322:LEU:HD13	1:A:556:MET:HE2	2.02	0.41
1:A:395:GLU:N	1:A:395:GLU:OE1	2.53	0.41
1:A:457:THR:CG2	1:A:468:LYS:HA	2.42	0.41
1:A:659:THR:O	1:A:660:SER:C	2.58	0.41
1:B:327:LEU:N	1:B:327:LEU:HD12	2.35	0.41
1:B:370:LEU:HD23	1:B:370:LEU:HA	1.90	0.41
1:B:427:ASP:C	1:B:429:GLY:H	2.24	0.41
1:B:607:ASN:HB2	1:B:610:MET:H	1.86	0.41
1:C:199:LEU:C	1:C:201:ASP:N	2.72	0.41
1:C:307:LEU:N	1:C:307:LEU:HD12	2.35	0.41
1:C:514:ASP:C	1:C:516:VAL:N	2.72	0.41
1:C:661:ALA:O	1:C:665:LYS:HB2	2.21	0.41
1:D:76:LEU:CD2	1:D:76:LEU:N	2.81	0.41
1:D:90:PRO:O	1:D:93:VAL:N	2.52	0.41
1:D:105:TYR:N	1:D:152:LEU:O	2.40	0.41
1:D:654:ILE:HG22	1:D:655:ASN:ND2	2.35	0.41
1:D:777:TYR:HA	1:D:780:LEU:HD23	2.02	0.41
1:E:322:LEU:O	1:E:323:ASN:HB3	2.21	0.41
1:E:513:TRP:CD1	1:E:532:LEU:HD13	2.56	0.41
1:E:607:ASN:HB2	1:E:610:MET:H	1.86	0.41
1:E:765:THR:HG22	1:E:769:SER:HB2	2.02	0.41
1:F:90:PRO:HG2	1:F:93:VAL:HB	2.01	0.41
1:F:123:GLU:CG	1:F:124:GLU:H	2.32	0.41
1:F:254:ARG:H	1:F:254:ARG:CD	2.32	0.41
1:F:513:TRP:CD1	1:F:532:LEU:HD13	2.56	0.41
2:Q:100:ILE:O	2:Q:136:VAL:HG22	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:28:THR:HB	2:R:30:LYS:HZ3	1.85	0.41
2:R:83:GLU:O	2:R:87:GLU:HG3	2.21	0.41
2:S:102:ALA:HA	2:S:125:ILE:HG13	2.01	0.41
2:T:81:SER:O	2:T:82:GLU:C	2.59	0.41
2:T:104:GLU:HG2	2:T:104:GLU:H	1.65	0.41
2:T:110:THR:O	2:T:113:GLY:N	2.47	0.41
1:B:97:TYR:O	1:B:100:LEU:N	2.54	0.41
1:B:199:LEU:O	1:B:201:ASP:N	2.54	0.41
1:B:218:LEU:HD21	1:B:225:ILE:CD1	2.51	0.41
1:B:288:VAL:C	1:B:290:LYS:N	2.72	0.41
1:B:295:VAL:HG21	1:B:603:ILE:CG2	2.50	0.41
1:B:636:ALA:O	1:B:640:LYS:CA	2.68	0.41
1:C:123:GLU:OE2	1:C:123:GLU:N	2.44	0.41
1:C:295:VAL:CG2	1:C:603:ILE:HG23	2.50	0.41
1:C:323:ASN:C	1:C:324:THR:CG2	2.88	0.41
1:C:454:GLN:CB	1:C:472:ARG:O	2.69	0.41
1:C:561:ASN:OD1	1:C:574:VAL:N	2.42	0.41
1:C:694:VAL:CG2	2:Q:18:LEU:HD21	2.50	0.41
1:C:760:VAL:O	1:C:764:LEU:HG	2.20	0.41
1:D:493:ASP:OD2	1:D:577:HIS:CE1	2.72	0.41
1:E:122:GLU:HG3	1:E:147:ARG:H	1.85	0.41
1:E:305:SER:O	1:E:307:LEU:HD12	2.21	0.41
1:E:546:LYS:NZ	1:E:554:LYS:HE2	2.34	0.41
1:E:699:GLY:O	1:E:700:TYR:C	2.58	0.41
1:F:85:LEU:HD12	1:F:168:GLU:OE1	2.21	0.41
1:F:169:VAL:HG23	1:F:246:SER:HB2	2.01	0.41
1:F:173:ILE:O	1:F:176:GLY:N	2.54	0.41
1:F:692:GLU:HA	1:F:692:GLU:OE2	2.19	0.41
2:O:81:SER:O	2:O:82:GLU:C	2.59	0.41
2:O:143:GLN:O	2:O:147:ALA:CB	2.69	0.41
2:P:117:THR:HG23	2:P:120:GLU:CB	2.46	0.41
1:A:217:LYS:HB2	1:A:236:GLU:OE1	2.21	0.41
1:A:254:ARG:HB3	1:A:254:ARG:NH1	2.34	0.41
1:A:480:ASN:HD22	1:A:480:ASN:C	2.23	0.41
1:A:516:VAL:O	1:A:519:THR:HG22	2.21	0.41
1:A:732:ILE:HG23	1:A:749:PHE:HD1	1.85	0.41
1:A:745:TYR:O	1:A:749:PHE:HD2	2.03	0.41
1:B:254:ARG:H	1:B:254:ARG:CD	2.32	0.41
1:B:373:LYS:O	1:B:380:VAL:CG2	2.69	0.41
1:B:514:ASP:C	1:B:516:VAL:N	2.73	0.41
1:B:515:LYS:HB3	1:B:515:LYS:HZ3	1.84	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:546:LYS:NZ	1:B:554:LYS:HE2	2.35	0.41
1:B:691:LYS:O	1:B:692:GLU:C	2.59	0.41
1:B:796:ILE:O	1:B:796:ILE:HG22	2.21	0.41
1:C:350:VAL:HG12	1:C:352:GLY:H	1.85	0.41
1:C:630:ARG:NH1	1:C:630:ARG:HG3	2.34	0.41
1:C:671:ARG:HG3	1:C:671:ARG:HH11	1.85	0.41
1:C:732:ILE:HG23	1:C:749:PHE:HD1	1.86	0.41
1:D:252:ASP:OD2	1:D:253:HIS:CD2	2.73	0.41
1:D:454:GLN:CB	1:D:472:ARG:O	2.69	0.41
1:D:639:ASN:HD22	1:D:640:LYS:N	2.19	0.41
1:E:444:PHE:CD1	1:E:444:PHE:N	2.88	0.41
1:E:564:VAL:C	1:E:567:THR:HG22	2.40	0.41
1:E:777:TYR:HA	1:E:780:LEU:HD23	2.02	0.41
1:F:131:ARG:HB2	1:F:170:TYR:CZ	2.56	0.41
1:F:322:LEU:O	1:F:323:ASN:HB3	2.21	0.41
1:F:323:ASN:C	1:F:324:THR:CG2	2.88	0.41
1:F:384:ASN:C	1:F:386:GLU:H	2.23	0.41
1:F:549:LEU:HB2	1:F:553:GLN:HE21	1.86	0.41
1:F:581:GLN:HE22	1:F:632:TYR:HE1	1.69	0.41
2:S:73:ALA:O	2:S:75:LYS:N	2.52	0.41
1:A:144:GLU:HB3	1:A:177:ILE:HD11	2.03	0.41
1:A:161:ILE:CG2	1:A:161:ILE:O	2.69	0.41
1:A:338:LEU:O	1:A:343:VAL:CG2	2.68	0.41
1:A:472:ARG:HH11	1:A:472:ARG:CB	2.34	0.41
1:A:551:ASN:HD22	1:A:551:ASN:HA	1.56	0.41
1:B:169:VAL:HG23	1:B:246:SER:HB2	2.03	0.41
1:B:178:SER:OG	1:B:179:LEU:N	2.53	0.41
1:B:296:LEU:CD2	1:B:296:LEU:N	2.38	0.41
1:B:338:LEU:O	1:B:343:VAL:CG2	2.68	0.41
1:B:384:ASN:C	1:B:386:GLU:H	2.24	0.41
1:B:454:GLN:CB	1:B:472:ARG:O	2.69	0.41
1:B:478:ALA:HA	1:B:488:LEU:HG	2.02	0.41
1:B:550:SER:OG	1:B:551:ASN:N	2.54	0.41
1:B:654:ILE:HG22	1:B:655:ASN:HD22	1.86	0.41
1:B:699:GLY:O	1:B:700:TYR:C	2.58	0.41
1:C:257:LEU:CD1	1:C:261:ALA:HB3	2.46	0.41
1:C:332:ASN:OD1	1:C:334:LEU:CD1	2.67	0.41
1:C:659:THR:O	1:C:660:SER:C	2.57	0.41
1:C:668:SER:OG	2:Q:10:ALA:HB1	2.20	0.41
1:D:81:GLN:NE2	1:D:156:ILE:HG21	2.35	0.41
1:D:191:GLU:C	1:D:193:LEU:N	2.74	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:343:VAL:HG12	1:D:344:ALA:N	2.35	0.41
1:D:581:GLN:HE22	1:D:632:TYR:HE1	1.67	0.41
1:D:715:GLU:OE1	1:D:767:GLN:NE2	2.54	0.41
1:D:743:PRO:O	1:D:744:GLU:C	2.59	0.41
1:D:749:PHE:O	1:D:750:GLN:C	2.57	0.41
1:D:760:VAL:O	1:D:764:LEU:HG	2.20	0.41
1:E:648:PRO:O	1:E:651:LYS:CB	2.69	0.41
1:E:760:VAL:O	1:E:764:LEU:HG	2.21	0.41
1:F:81:GLN:NE2	1:F:156:ILE:HG21	2.35	0.41
1:F:323:ASN:O	1:F:324:THR:HG22	2.21	0.41
1:F:389:LYS:HD2	1:F:393:GLU:OE1	2.20	0.41
1:F:435:LEU:HG	1:F:446:ILE:HG22	2.02	0.41
1:F:444:PHE:N	1:F:444:PHE:CD1	2.89	0.41
1:F:461:LYS:HA	1:F:461:LYS:HD2	1.79	0.41
1:F:472:ARG:HH11	1:F:472:ARG:CB	2.34	0.41
1:F:777:TYR:HA	1:F:780:LEU:HD23	2.02	0.41
2:P:24:ASP:OD1	2:P:25:GLY:N	2.54	0.41
2:Q:102:ALA:HA	2:Q:125:ILE:HG13	2.01	0.41
2:R:24:ASP:OD1	2:R:25:GLY:N	2.53	0.41
2:R:81:SER:O	2:R:82:GLU:C	2.59	0.41
2:S:110:THR:O	2:S:113:GLY:N	2.48	0.41
1:A:173:ILE:O	1:A:176:GLY:N	2.54	0.41
1:A:174:GLY:O	1:A:177:ILE:HG12	2.20	0.41
1:A:288:VAL:CG2	1:A:289:GLU:N	2.75	0.41
1:A:463:THR:O	1:A:466:GLY:N	2.50	0.41
1:A:660:SER:O	1:A:663:PHE:HB3	2.21	0.41
1:A:719:LYS:HD2	1:A:797:ILE:HD11	2.03	0.41
1:B:175:LYS:CB	1:B:175:LYS:HZ3	2.28	0.41
1:B:217:LYS:HB2	1:B:236:GLU:OE1	2.20	0.41
1:B:389:LYS:HD2	1:B:393:GLU:OE1	2.20	0.41
1:B:480:ASN:HD22	1:B:480:ASN:C	2.24	0.41
1:B:671:ARG:HD2	2:P:14:GLU:HG2	2.02	0.41
1:C:81:GLN:NE2	1:C:156:ILE:HG21	2.35	0.41
1:C:88:LYS:NZ	1:C:172:GLU:CD	2.74	0.41
1:C:169:VAL:HG23	1:C:246:SER:HB2	2.02	0.41
1:C:217:LYS:HB2	1:C:236:GLU:OE1	2.21	0.41
1:C:413:LEU:N	1:C:413:LEU:HD23	2.35	0.41
1:C:549:LEU:HB2	1:C:553:GLN:HE21	1.86	0.41
1:C:654:ILE:HG22	1:C:655:ASN:ND2	2.35	0.41
1:C:743:PRO:O	1:C:744:GLU:C	2.59	0.41
1:C:759:GLN:CA	1:C:759:GLN:NE2	2.81	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:90:PRO:HG2	1:D:93:VAL:HB	2.02	0.41
1:D:131:ARG:CB	1:D:170:TYR:OH	2.69	0.41
1:D:136:PRO:O	1:D:138:ALA:N	2.54	0.41
1:D:148:GLU:HG3	1:D:149:THR:H	1.83	0.41
1:D:161:ILE:CG2	1:D:161:ILE:O	2.69	0.41
1:D:218:LEU:HD21	1:D:225:ILE:CD1	2.50	0.41
1:D:239:HIS:O	1:D:243:LEU:HD12	2.21	0.41
1:D:322:LEU:O	1:D:323:ASN:HB3	2.21	0.41
1:D:323:ASN:C	1:D:324:THR:CG2	2.89	0.41
1:D:389:LYS:HD2	1:D:393:GLU:OE1	2.21	0.41
1:D:395:GLU:OE1	1:D:395:GLU:N	2.54	0.41
1:D:622:LYS:HA	1:D:622:LYS:HD3	1.30	0.41
1:D:648:PRO:O	1:D:651:LYS:CB	2.69	0.41
1:D:668:SER:OG	2:R:10:ALA:CB	2.69	0.41
1:D:759:GLN:HA	1:D:759:GLN:NE2	2.21	0.41
1:E:90:PRO:O	1:E:93:VAL:N	2.53	0.41
1:E:97:TYR:O	1:E:100:LEU:N	2.54	0.41
1:E:180:ASP:CG	1:E:181:ILE:N	2.67	0.41
1:E:218:LEU:HD21	1:E:225:ILE:CD1	2.51	0.41
1:E:279:ILE:CD1	1:E:279:ILE:H	2.29	0.41
1:E:551:ASN:HD22	1:E:551:ASN:HA	1.56	0.41
1:E:609:GLU:O	1:E:610:MET:C	2.58	0.41
1:E:639:ASN:C	1:E:639:ASN:ND2	2.74	0.41
1:E:639:ASN:HD22	1:E:640:LYS:N	2.19	0.41
1:E:668:SER:OG	2:S:10:ALA:HB1	2.21	0.41
1:F:136:PRO:O	1:F:138:ALA:N	2.54	0.41
1:F:149:THR:HA	1:F:150:PRO:HD2	1.94	0.41
1:F:252:ASP:OD2	1:F:253:HIS:CD2	2.73	0.41
1:F:269:ASN:O	1:F:273:LYS:HG3	2.21	0.41
1:F:305:SER:O	1:F:307:LEU:HD12	2.21	0.41
1:F:350:VAL:HG12	1:F:352:GLY:H	1.85	0.41
1:F:454:GLN:CB	1:F:472:ARG:O	2.69	0.41
1:F:561:ASN:OD1	1:F:574:VAL:N	2.41	0.41
1:F:621:GLY:HA2	2:T:94:LYS:NZ	2.36	0.41
1:F:635:ILE:N	1:F:635:ILE:CD1	2.79	0.41
1:F:659:THR:O	1:F:660:SER:C	2.58	0.41
1:F:674:SER:C	1:F:676:VAL:H	2.23	0.41
1:F:759:GLN:CA	1:F:759:GLN:NE2	2.82	0.41
2:O:43:PRO:HG3	2:O:48:LEU:HD13	2.01	0.41
2:P:12:PHE:HZ	2:P:76:MET:CE	2.34	0.41
2:P:28:THR:HB	2:P:30:LYS:HZ3	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:43:PRO:HG3	2:P:48:LEU:HD13	2.01	0.41
2:P:43:PRO:CG	2:P:48:LEU:HD13	2.50	0.41
2:Q:19:PHE:CD1	2:Q:19:PHE:N	2.88	0.41
2:Q:24:ASP:OD1	2:Q:25:GLY:N	2.54	0.41
2:Q:42:ASN:HA	2:Q:43:PRO:HD2	1.93	0.41
2:Q:58:ASP:CB	2:Q:62:THR:HG23	2.46	0.41
2:S:3:GLN:N	2:S:77:LYS:NZ	2.61	0.41
2:S:18:LEU:HD23	2:S:18:LEU:HA	1.83	0.41
2:T:89:PHE:O	2:T:91:VAL:N	2.54	0.41
1:A:130:SER:O	1:A:131:ARG:C	2.60	0.41
1:A:322:LEU:O	1:A:323:ASN:HB3	2.21	0.41
1:A:639:ASN:HD22	1:A:640:LYS:N	2.19	0.41
1:B:184:LYS:HE2	1:B:193:LEU:CD1	2.51	0.41
1:B:444:PHE:CD1	1:B:444:PHE:N	2.88	0.41
1:B:499:PRO:HD2	1:B:625:LEU:O	2.21	0.41
1:B:713:SER:O	1:B:714:GLN:C	2.58	0.41
1:B:741:ILE:O	1:B:742:ALA:O	2.39	0.41
1:C:131:ARG:HB2	1:C:170:TYR:OH	2.21	0.41
1:C:184:LYS:HE2	1:C:193:LEU:HD12	2.03	0.41
1:C:218:LEU:O	1:C:218:LEU:CG	2.67	0.41
1:C:444:PHE:HA	1:C:454:GLN:O	2.21	0.41
1:C:581:GLN:HE22	1:C:632:TYR:HE1	1.68	0.41
1:C:656:THR:O	1:C:755:ARG:NH1	2.54	0.41
1:D:88:LYS:NZ	1:D:172:GLU:CD	2.74	0.41
1:D:373:LYS:O	1:D:380:VAL:CG2	2.69	0.41
1:E:104:ILE:HG23	1:E:152:LEU:HD22	2.01	0.41
1:E:136:PRO:O	1:E:138:ALA:N	2.54	0.41
1:E:254:ARG:H	1:E:254:ARG:CD	2.32	0.41
1:E:523:LEU:HD22	2:S:127:GLU:CD	2.41	0.41
1:E:735:VAL:O	1:E:738:SER:CB	2.69	0.41
1:E:743:PRO:O	1:E:744:GLU:C	2.59	0.41
1:F:413:LEU:N	1:F:413:LEU:HD23	2.35	0.41
1:F:639:ASN:HD22	1:F:640:LYS:N	2.19	0.41
2:P:55:VAL:CG2	2:P:67:GLU:OE1	2.67	0.41
2:R:13:LYS:NZ	2:R:65:PHE:CB	2.73	0.41
2:S:48:LEU:HA	2:S:51:MET:CE	2.51	0.41
1:A:89:ILE:CG2	1:A:93:VAL:HG11	2.40	0.40
1:A:777:TYR:HA	1:A:780:LEU:HD23	2.03	0.40
1:B:345:THR:CG2	1:B:491:ASP:HA	2.51	0.40
1:B:665:LYS:O	1:B:668:SER:HB3	2.21	0.40
1:C:461:LYS:HA	1:C:461:LYS:HD2	1.79	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:501:LEU:CD1	2:Q:108:VAL:HG13	2.50	0.40
1:C:777:TYR:HA	1:C:780:LEU:HD23	2.01	0.40
1:D:122:GLU:HG3	1:D:147:ARG:H	1.85	0.40
1:D:296:LEU:N	1:D:296:LEU:CD2	2.38	0.40
1:D:323:ASN:O	1:D:324:THR:HG22	2.21	0.40
1:D:403:LEU:CG	1:D:405:LEU:CD1	2.99	0.40
1:E:90:PRO:HD3	1:E:249:PHE:CE2	2.56	0.40
1:E:240:ALA:O	1:E:241:PHE:C	2.60	0.40
1:E:596:ILE:O	1:E:596:ILE:HG22	2.20	0.40
1:E:630:ARG:NH1	1:E:630:ARG:HG3	2.37	0.40
1:F:499:PRO:HD2	1:F:625:LEU:O	2.21	0.40
1:F:636:ALA:O	1:F:640:LYS:CA	2.69	0.40
2:Q:10:ALA:O	2:Q:14:GLU:HB2	2.21	0.40
2:Q:18:LEU:HD23	2:Q:18:LEU:HA	1.83	0.40
2:S:71:MET:HG2	2:S:71:MET:O	2.21	0.40
1:A:91:LYS:O	1:A:94:LEU:HB2	2.21	0.40
1:A:184:LYS:HE2	1:A:193:LEU:CD1	2.51	0.40
1:A:335:ALA:O	1:A:339:ILE:HG13	2.21	0.40
1:A:514:ASP:C	1:A:516:VAL:N	2.73	0.40
1:A:580:GLU:C	1:A:582:ASP:H	2.23	0.40
1:A:767:GLN:HG2	1:A:768:LYS:HG2	2.02	0.40
1:B:513:TRP:CD1	1:B:532:LEU:HD13	2.56	0.40
1:B:580:GLU:C	1:B:582:ASP:H	2.23	0.40
1:B:632:TYR:O	1:B:633:ASN:CB	2.69	0.40
1:B:683:GLY:O	1:B:684:ASP:C	2.60	0.40
1:B:760:VAL:O	1:B:764:LEU:HG	2.21	0.40
1:C:310:GLU:O	1:C:314:ALA:HB2	2.21	0.40
1:C:397:GLU:O	1:C:480:ASN:N	2.55	0.40
1:C:538:ILE:HG21	2:Q:87:GLU:HB2	2.03	0.40
1:C:636:ALA:O	1:C:640:LYS:CA	2.69	0.40
1:C:668:SER:OG	2:Q:10:ALA:CB	2.69	0.40
1:D:239:HIS:O	1:D:243:LEU:HG	2.22	0.40
1:D:444:PHE:CD1	1:D:444:PHE:N	2.88	0.40
1:D:513:TRP:CD1	1:D:532:LEU:HD13	2.57	0.40
1:D:661:ALA:O	1:D:665:LYS:HB2	2.22	0.40
1:E:144:GLU:HB3	1:E:177:ILE:HD11	2.04	0.40
1:E:269:ASN:O	1:E:273:LYS:HG3	2.21	0.40
1:E:454:GLN:CB	1:E:472:ARG:O	2.69	0.40
1:F:187:SER:O	1:F:188:LEU:C	2.51	0.40
1:F:580:GLU:C	1:F:582:ASP:H	2.23	0.40
2:P:71:MET:HG2	2:P:71:MET:O	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Q:81:SER:O	2:Q:82:GLU:C	2.59	0.40
2:R:10:ALA:O	2:R:14:GLU:HB2	2.20	0.40
2:R:102:ALA:CA	2:R:125:ILE:HG13	2.52	0.40
2:T:48:LEU:HA	2:T:51:MET:CE	2.51	0.40
2:T:100:ILE:O	2:T:136:VAL:HG22	2.21	0.40
1:A:269:ASN:O	1:A:273:LYS:HG3	2.21	0.40
1:A:310:GLU:O	1:A:314:ALA:HB2	2.22	0.40
1:A:391:ILE:O	1:A:392:THR:C	2.60	0.40
1:A:444:PHE:CD1	1:A:444:PHE:N	2.89	0.40
1:A:630:ARG:HG3	1:A:630:ARG:HH11	1.87	0.40
1:A:632:TYR:O	1:A:633:ASN:CB	2.70	0.40
1:A:665:LYS:O	1:A:668:SER:HB3	2.21	0.40
1:A:715:GLU:OE1	1:A:767:GLN:NE2	2.54	0.40
1:A:759:GLN:HA	1:A:759:GLN:NE2	2.22	0.40
1:B:115:LYS:O	1:B:117:LEU:N	2.54	0.40
1:B:288:VAL:O	1:B:290:LYS:N	2.54	0.40
1:B:308:VAL:O	1:B:311:HIS:N	2.42	0.40
1:B:472:ARG:HH11	1:B:472:ARG:CB	2.35	0.40
1:B:635:ILE:H	1:B:635:ILE:CD1	2.16	0.40
1:B:639:ASN:C	1:B:639:ASN:ND2	2.74	0.40
1:C:85:LEU:HD12	1:C:85:LEU:HA	1.81	0.40
1:C:136:PRO:O	1:C:138:ALA:N	2.55	0.40
1:C:373:LYS:O	1:C:380:VAL:CG2	2.69	0.40
1:C:472:ARG:HH11	1:C:472:ARG:CB	2.34	0.40
1:D:99:GLU:OE2	1:D:284:LYS:HE3	2.21	0.40
1:D:472:ARG:HH11	1:D:472:ARG:CB	2.34	0.40
1:D:609:GLU:O	1:D:613:ARG:N	2.49	0.40
1:D:677:GLY:HA2	1:D:745:TYR:OH	2.20	0.40
1:E:239:HIS:O	1:E:243:LEU:HG	2.22	0.40
1:E:332:ASN:OD1	1:E:334:LEU:N	2.47	0.40
1:F:71:PHE:O	1:F:78:LYS:NZ	2.54	0.40
1:F:373:LYS:O	1:F:380:VAL:CG2	2.69	0.40
1:F:719:LYS:HD2	1:F:797:ILE:HD11	2.03	0.40
1:F:732:ILE:HG23	1:F:749:PHE:HD1	1.86	0.40
1:F:743:PRO:O	1:F:744:GLU:C	2.59	0.40
2:O:5:THR:O	2:O:6:GLU:C	2.60	0.40
2:P:19:PHE:CD1	2:P:19:PHE:N	2.89	0.40
2:P:48:LEU:HA	2:P:51:MET:CE	2.50	0.40
1:A:305:SER:O	1:A:307:LEU:HD12	2.21	0.40
1:A:337:ASN:C	1:A:339:ILE:N	2.75	0.40
1:B:239:HIS:O	1:B:243:LEU:HD12	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:305:SER:O	1:B:307:LEU:HD12	2.21	0.40
1:C:239:HIS:O	1:C:243:LEU:HG	2.22	0.40
1:C:368:GLN:C	1:C:370:LEU:H	2.24	0.40
1:C:513:TRP:CD1	1:C:532:LEU:HD13	2.57	0.40
1:C:622:LYS:HD3	1:C:622:LYS:HA	1.93	0.40
1:C:671:ARG:HD2	2:Q:14:GLU:HG2	2.04	0.40
1:D:254:ARG:HB3	1:D:254:ARG:NH1	2.34	0.40
1:D:332:ASN:OD1	1:D:334:LEU:CD1	2.67	0.40
1:D:719:LYS:O	1:D:720:ILE:C	2.60	0.40
1:D:767:GLN:HG2	1:D:768:LYS:HG2	2.02	0.40
1:D:796:ILE:O	1:D:796:ILE:HG22	2.21	0.40
1:E:189:ASP:O	1:E:190:PRO:C	2.59	0.40
1:E:378:LEU:HA	1:E:381:GLU:HB3	2.03	0.40
1:F:88:LYS:HB3	1:F:88:LYS:HE3	1.89	0.40
1:F:91:LYS:O	1:F:94:LEU:HB2	2.21	0.40
1:F:663:PHE:CE1	1:F:752:LEU:HD11	2.56	0.40
1:F:671:ARG:HG3	1:F:671:ARG:HH11	1.85	0.40
1:F:690:LYS:O	1:F:693:SER:HB3	2.21	0.40
1:F:748:TYR:O	1:F:751:TYR:HB3	2.22	0.40
2:O:108:VAL:HG12	2:O:112:LEU:HD12	2.04	0.40
2:P:18:LEU:HA	2:P:18:LEU:HD23	1.83	0.40
2:P:30:LYS:H	2:P:30:LYS:CD	2.13	0.40
2:R:143:GLN:O	2:R:147:ALA:CB	2.70	0.40
2:S:36:MET:HE1	2:S:43:PRO:HG3	2.00	0.40
2:T:30:LYS:HE2	2:T:30:LYS:HB2	1.95	0.40
2:T:39:LEU:HD23	2:T:39:LEU:HA	1.84	0.40
1:A:71:PHE:O	1:A:78:LYS:NZ	2.54	0.40
1:A:426:ILE:HD13	1:A:426:ILE:HA	1.92	0.40
1:A:654:ILE:HG22	1:A:655:ASN:ND2	2.36	0.40
1:A:719:LYS:O	1:A:720:ILE:C	2.60	0.40
1:A:796:ILE:O	1:A:796:ILE:HG22	2.22	0.40
1:B:311:HIS:O	1:B:314:ALA:HB3	2.22	0.40
1:B:516:VAL:O	1:B:519:THR:HG22	2.22	0.40
1:B:596:ILE:O	1:B:596:ILE:HG22	2.20	0.40
1:B:671:ARG:HG3	1:B:671:ARG:HH11	1.86	0.40
1:B:743:PRO:O	1:B:744:GLU:C	2.60	0.40
1:B:749:PHE:O	1:B:750:GLN:C	2.57	0.40
1:C:384:ASN:C	1:C:386:GLU:H	2.23	0.40
1:C:389:LYS:HD2	1:C:393:GLU:OE1	2.21	0.40
1:C:687:GLU:OE2	1:C:687:GLU:HA	2.21	0.40
1:C:699:GLY:O	1:C:700:TYR:C	2.59	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:85:LEU:HD12	1:D:85:LEU:HA	1.82	0.40
1:D:161:ILE:HG21	1:D:168:GLU:HB2	2.03	0.40
1:D:691:LYS:O	1:D:692:GLU:C	2.58	0.40
1:D:789:ASN:O	1:D:792:VAL:HB	2.22	0.40
1:E:311:HIS:O	1:E:314:ALA:HB3	2.21	0.40
1:E:479:LYS:CG	1:E:488:LEU:HD21	2.41	0.40
1:E:499:PRO:HD2	1:E:625:LEU:O	2.22	0.40
1:E:525:LYS:HE2	2:S:114:GLU:CG	2.50	0.40
1:E:685:LYS:HD3	1:E:685:LYS:HA	1.91	0.40
1:F:188:LEU:H	1:F:188:LEU:HD22	1.75	0.40
1:F:288:VAL:O	1:F:290:LYS:N	2.54	0.40
1:F:397:GLU:HA	1:F:480:ASN:HB2	2.04	0.40
1:F:629:ASN:ND2	1:F:630:ARG:N	2.69	0.40
2:O:9:ILE:HD12	2:O:69:LEU:HD22	2.04	0.40
2:O:48:LEU:HA	2:O:51:MET:CE	2.51	0.40
2:P:10:ALA:O	2:P:14:GLU:HB2	2.20	0.40
2:R:48:LEU:HA	2:R:51:MET:CE	2.52	0.40
2:T:5:THR:O	2:T:6:GLU:C	2.60	0.40
2:T:124:MET:O	2:T:126:ARG:N	2.54	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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%)	512 (70%)	172 (24%)	49 (7%)	1 8
1	B	733/777 (94%)	512 (70%)	172 (24%)	49 (7%)	1 8
1	C	733/777 (94%)	510 (70%)	172 (24%)	51 (7%)	1 7
1	D	733/777 (94%)	516 (70%)	168 (23%)	49 (7%)	1 8
1	E	733/777 (94%)	512 (70%)	171 (23%)	50 (7%)	1 8

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	F	733/777 (94%)	513 (70%)	169 (23%)	51 (7%)	1 7
2	O	144/149 (97%)	100 (69%)	35 (24%)	9 (6%)	1 9
2	P	144/149 (97%)	102 (71%)	33 (23%)	9 (6%)	1 9
2	Q	144/149 (97%)	102 (71%)	33 (23%)	9 (6%)	1 9
2	R	144/149 (97%)	102 (71%)	33 (23%)	9 (6%)	1 9
2	S	144/149 (97%)	102 (71%)	33 (23%)	9 (6%)	1 9
2	T	144/149 (97%)	100 (69%)	35 (24%)	9 (6%)	1 9
All	All	5262/5556 (95%)	3683 (70%)	1226 (23%)	353 (7%)	1 8

All (353) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	137	PHE
1	A	183	SER
1	A	377	GLN
1	A	510	GLN
1	A	787	THR
1	B	137	PHE
1	B	183	SER
1	B	192	PHE
1	B	377	GLN
1	B	510	GLN
1	B	787	THR
1	C	137	PHE
1	C	181	ILE
1	C	183	SER
1	C	192	PHE
1	C	377	GLN
1	C	510	GLN
1	C	787	THR
1	D	137	PHE
1	D	183	SER
1	D	377	GLN
1	D	510	GLN
1	D	787	THR
1	E	137	PHE
1	E	183	SER
1	E	192	PHE
1	E	377	GLN
1	E	510	GLN

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Mol	Chain	Res	Type
1	E	787	THR
1	F	137	PHE
1	F	181	ILE
1	F	192	PHE
1	F	377	GLN
1	F	510	GLN
1	F	787	THR
1	A	80	GLN
1	A	113	GLU
1	A	116	GLU
1	A	138	ALA
1	A	165	GLN
1	A	176	GLY
1	A	181	ILE
1	A	187	SER
1	A	192	PHE
1	A	302	LEU
1	A	376	GLN
1	A	385	LEU
1	A	438	ASN
1	A	580	GLU
1	A	756	ILE
1	A	765	THR
1	B	80	GLN
1	B	113	GLU
1	B	116	GLU
1	B	138	ALA
1	B	165	GLN
1	B	176	GLY
1	B	181	ILE
1	B	187	SER
1	B	302	LEU
1	B	376	GLN
1	B	385	LEU
1	B	438	ASN
1	B	580	GLU
1	B	620	THR
1	B	756	ILE
1	B	765	THR
1	C	80	GLN
1	C	113	GLU
1	C	116	GLU

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Mol	Chain	Res	Type
1	C	138	ALA
1	C	165	GLN
1	C	176	GLY
1	C	187	SER
1	C	302	LEU
1	C	376	GLN
1	C	385	LEU
1	C	438	ASN
1	C	580	GLU
1	C	620	THR
1	C	765	THR
1	D	80	GLN
1	D	113	GLU
1	D	116	GLU
1	D	138	ALA
1	D	165	GLN
1	D	176	GLY
1	D	181	ILE
1	D	187	SER
1	D	192	PHE
1	D	302	LEU
1	D	376	GLN
1	D	385	LEU
1	D	438	ASN
1	D	580	GLU
1	D	756	ILE
1	D	765	THR
1	E	80	GLN
1	E	113	GLU
1	E	116	GLU
1	E	138	ALA
1	E	165	GLN
1	E	176	GLY
1	E	181	ILE
1	E	187	SER
1	E	302	LEU
1	E	376	GLN
1	E	385	LEU
1	E	438	ASN
1	E	580	GLU
1	E	765	THR
1	F	80	GLN

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Mol	Chain	Res	Type
1	F	113	GLU
1	F	116	GLU
1	F	138	ALA
1	F	165	GLN
1	F	176	GLY
1	F	187	SER
1	F	302	LEU
1	F	376	GLN
1	F	385	LEU
1	F	438	ASN
1	F	580	GLU
1	F	756	ILE
1	F	765	THR
2	O	12	PHE
2	O	22	ASP
2	O	23	GLY
2	P	12	PHE
2	P	22	ASP
2	P	23	GLY
2	Q	12	PHE
2	Q	22	ASP
2	Q	23	GLY
2	R	12	PHE
2	R	22	ASP
2	R	23	GLY
2	S	12	PHE
2	S	22	ASP
2	S	23	GLY
2	T	12	PHE
2	T	22	ASP
2	T	23	GLY
1	A	84	ASP
1	A	180	ASP
1	A	290	LYS
1	A	392	THR
1	A	413	LEU
1	A	451	ASN
1	A	620	THR
1	A	646	THR
1	B	84	ASP
1	B	180	ASP
1	B	290	LYS

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Mol	Chain	Res	Type
1	B	392	THR
1	B	413	LEU
1	B	451	ASN
1	B	646	THR
1	C	84	ASP
1	C	180	ASP
1	C	290	LYS
1	C	392	THR
1	C	413	LEU
1	C	451	ASN
1	C	646	THR
1	C	756	ILE
1	D	84	ASP
1	D	180	ASP
1	D	290	LYS
1	D	392	THR
1	D	413	LEU
1	D	451	ASN
1	D	620	THR
1	D	646	THR
1	E	84	ASP
1	E	180	ASP
1	E	290	LYS
1	E	392	THR
1	E	413	LEU
1	E	451	ASN
1	E	620	THR
1	E	646	THR
1	E	756	ILE
1	F	84	ASP
1	F	180	ASP
1	F	183	SER
1	F	290	LYS
1	F	392	THR
1	F	413	LEU
1	F	451	ASN
1	F	620	THR
1	F	646	THR
2	O	74	ARG
2	Q	74	ARG
2	R	74	ARG
2	T	74	ARG

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Mol	Chain	Res	Type
1	A	91	LYS
1	A	274	GLY
1	A	515	LYS
1	A	598	PRO
1	A	675	ASN
1	A	731	GLU
1	A	755	ARG
1	B	91	LYS
1	B	112	VAL
1	B	274	GLY
1	B	515	LYS
1	B	598	PRO
1	B	675	ASN
1	B	731	GLU
1	B	755	ARG
1	C	131	ARG
1	C	274	GLY
1	C	515	LYS
1	C	598	PRO
1	C	675	ASN
1	C	755	ARG
1	D	274	GLY
1	D	515	LYS
1	D	598	PRO
1	D	675	ASN
1	D	755	ARG
1	E	190	PRO
1	E	274	GLY
1	E	515	LYS
1	E	598	PRO
1	E	675	ASN
1	E	755	ARG
1	F	91	LYS
1	F	274	GLY
1	F	334	LEU
1	F	515	LYS
1	F	598	PRO
1	F	675	ASN
1	F	755	ARG
2	O	147	ALA
2	P	74	ARG
2	S	74	ARG

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Mol	Chain	Res	Type
1	A	100	LEU
1	A	232	GLU
1	A	278	LYS
1	A	334	LEU
1	A	449	GLU
1	A	506	LYS
1	A	520	PRO
1	B	100	LEU
1	B	232	GLU
1	B	278	LYS
1	B	334	LEU
1	B	449	GLU
1	B	520	PRO
1	B	779	GLN
1	C	91	LYS
1	C	100	LEU
1	C	232	GLU
1	C	278	LYS
1	C	334	LEU
1	C	506	LYS
1	C	520	PRO
1	C	779	GLN
1	D	91	LYS
1	D	100	LEU
1	D	232	GLU
1	D	334	LEU
1	D	520	PRO
1	D	731	GLU
1	D	779	GLN
1	E	91	LYS
1	E	100	LEU
1	E	112	VAL
1	E	232	GLU
1	E	278	LYS
1	E	334	LEU
1	E	449	GLU
1	E	506	LYS
1	E	520	PRO
1	E	731	GLU
1	E	779	GLN
1	F	100	LEU
1	F	190	PRO

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Mol	Chain	Res	Type
1	F	232	GLU
1	F	449	GLU
1	F	506	LYS
1	F	520	PRO
1	F	731	GLU
1	F	779	GLN
2	O	24	ASP
2	P	24	ASP
2	P	147	ALA
2	Q	24	ASP
2	Q	147	ALA
2	R	24	ASP
2	R	147	ALA
2	S	24	ASP
2	S	147	ALA
2	T	24	ASP
2	T	147	ALA
1	A	779	GLN
1	B	506	LYS
1	B	742	ALA
1	C	423	LYS
1	C	449	GLU
1	C	731	GLU
1	D	278	LYS
1	D	369	ASP
1	D	449	GLU
1	F	278	LYS
1	F	423	LYS
1	F	742	ALA
2	P	61	GLY
2	Q	61	GLY
2	R	61	GLY
2	S	61	GLY
2	T	61	GLY
1	A	112	VAL
1	A	742	ALA
1	C	742	ALA
1	D	742	ALA
1	E	742	ALA
2	O	61	GLY
1	A	309	PRO
1	B	309	PRO

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Mol	Chain	Res	Type
1	C	190	PRO
1	D	309	PRO
1	E	309	PRO
2	O	25	GLY
2	P	25	GLY
2	Q	25	GLY
2	R	25	GLY
2	S	25	GLY
2	T	25	GLY
1	A	441	VAL
1	B	441	VAL
1	C	309	PRO
1	C	441	VAL
1	D	441	VAL
1	E	441	VAL
1	F	112	VAL
1	F	309	PRO
1	F	441	VAL
2	T	125	ILE
1	A	637	PRO
1	B	637	PRO
1	C	637	PRO
2	P	125	ILE
2	Q	125	ILE
2	S	125	ILE
1	D	112	VAL
1	D	637	PRO
1	E	637	PRO
1	F	637	PRO
2	O	125	ILE
2	R	125	ILE

5.3.2 Protein sidechains (i)

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.

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	664/705 (94%)	575 (87%)	89 (13%)	4	15
1	B	664/705 (94%)	569 (86%)	95 (14%)	3	13
1	C	664/705 (94%)	574 (86%)	90 (14%)	3	14
1	D	664/705 (94%)	572 (86%)	92 (14%)	3	13
1	E	664/705 (94%)	571 (86%)	93 (14%)	3	13
1	F	664/705 (94%)	570 (86%)	94 (14%)	3	13
2	O	123/127 (97%)	104 (85%)	19 (15%)	2	11
2	P	123/127 (97%)	104 (85%)	19 (15%)	2	11
2	Q	123/127 (97%)	104 (85%)	19 (15%)	2	11
2	R	123/127 (97%)	104 (85%)	19 (15%)	2	11
2	S	123/127 (97%)	105 (85%)	18 (15%)	3	12
2	T	123/127 (97%)	105 (85%)	18 (15%)	3	12
All	All	4722/4992 (95%)	4057 (86%)	665 (14%)	3	13

All (665) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	71	PHE
1	A	78	LYS
1	A	88	LYS
1	A	97	TYR
1	A	110	ASP
1	A	112	VAL
1	A	114	HIS
1	A	115	LYS
1	A	117	LEU
1	A	120	LEU
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	155	ASN
1	A	156	ILE

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Mol	Chain	Res	Type
1	A	158	ASP
1	A	172	GLU
1	A	173	ILE
1	A	179	LEU
1	A	180	ASP
1	A	182	ILE
1	A	186	LYS
1	A	188	LEU
1	A	197	LYS
1	A	202	ASP
1	A	213	LYS
1	A	217	LYS
1	A	229	PHE
1	A	236	GLU
1	A	248	TYR
1	A	254	ARG
1	A	260	TYR
1	A	279	ILE
1	A	284	LYS
1	A	292	ARG
1	A	296	LEU
1	A	309	PRO
1	A	323	ASN
1	A	324	THR
1	A	349	ASN
1	A	356	ASP
1	A	385	LEU
1	A	395	GLU
1	A	397	GLU
1	A	400	LYS
1	A	408	LEU
1	A	410	ILE
1	A	414	LYS
1	A	415	GLU
1	A	420	LEU
1	A	434	LEU
1	A	438	ASN
1	A	442	TYR
1	A	455	TYR
1	A	473	ASN
1	A	479	LYS
1	A	480	ASN

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Mol	Chain	Res	Type
1	A	484	VAL
1	A	501	LEU
1	A	507	GLN
1	A	514	ASP
1	A	515	LYS
1	A	525	LYS
1	A	533	LEU
1	A	535	LYS
1	A	562	GLU
1	A	582	ASP
1	A	629	ASN
1	A	635	ILE
1	A	639	ASN
1	A	655	ASN
1	A	672	ARG
1	A	678	VAL
1	A	702	SER
1	A	709	ASN
1	A	714	GLN
1	A	744	GLU
1	A	755	ARG
1	A	759	GLN
1	A	766	HIS
1	A	767	GLN
1	A	770	ASN
1	A	780	LEU
1	A	781	ASN
1	A	794	GLN
1	B	64	ASN
1	B	71	PHE
1	B	78	LYS
1	B	88	LYS
1	B	97	TYR
1	B	110	ASP
1	B	112	VAL
1	B	114	HIS
1	B	115	LYS
1	B	117	LEU
1	B	120	LEU
1	B	129	ASN
1	B	130	SER
1	B	133	GLU

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Mol	Chain	Res	Type
1	B	137	PHE
1	B	140	ARG
1	B	141	PHE
1	B	147	ARG
1	B	149	THR
1	B	155	ASN
1	B	156	ILE
1	B	158	ASP
1	B	172	GLU
1	B	173	ILE
1	B	179	LEU
1	B	180	ASP
1	B	182	ILE
1	B	186	LYS
1	B	188	LEU
1	B	197	LYS
1	B	202	ASP
1	B	213	LYS
1	B	217	LYS
1	B	229	PHE
1	B	236	GLU
1	B	248	TYR
1	B	254	ARG
1	B	260	TYR
1	B	279	ILE
1	B	284	LYS
1	B	292	ARG
1	B	296	LEU
1	B	309	PRO
1	B	323	ASN
1	B	324	THR
1	B	334	LEU
1	B	349	ASN
1	B	356	ASP
1	B	385	LEU
1	B	395	GLU
1	B	397	GLU
1	B	400	LYS
1	B	408	LEU
1	B	410	ILE
1	B	414	LYS
1	B	415	GLU

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Mol	Chain	Res	Type
1	B	420	LEU
1	B	434	LEU
1	B	438	ASN
1	B	442	TYR
1	B	455	TYR
1	B	473	ASN
1	B	479	LYS
1	B	480	ASN
1	B	484	VAL
1	B	501	LEU
1	B	507	GLN
1	B	514	ASP
1	B	515	LYS
1	B	525	LYS
1	B	533	LEU
1	B	535	LYS
1	B	562	GLU
1	B	582	ASP
1	B	588	GLU
1	B	622	LYS
1	B	629	ASN
1	B	635	ILE
1	B	639	ASN
1	B	646	THR
1	B	655	ASN
1	B	672	ARG
1	B	678	VAL
1	B	702	SER
1	B	709	ASN
1	B	714	GLN
1	B	744	GLU
1	B	755	ARG
1	B	759	GLN
1	B	766	HIS
1	B	767	GLN
1	B	770	ASN
1	B	780	LEU
1	B	781	ASN
1	B	794	GLN
1	C	71	PHE
1	C	78	LYS
1	C	88	LYS

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Mol	Chain	Res	Type
1	C	97	TYR
1	C	110	ASP
1	C	112	VAL
1	C	114	HIS
1	C	115	LYS
1	C	117	LEU
1	C	120	LEU
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	155	ASN
1	C	156	ILE
1	C	158	ASP
1	C	172	GLU
1	C	173	ILE
1	C	179	LEU
1	C	180	ASP
1	C	182	ILE
1	C	186	LYS
1	C	188	LEU
1	C	197	LYS
1	C	202	ASP
1	C	213	LYS
1	C	217	LYS
1	C	229	PHE
1	C	236	GLU
1	C	248	TYR
1	C	254	ARG
1	C	260	TYR
1	C	279	ILE
1	C	284	LYS
1	C	292	ARG
1	C	296	LEU
1	C	309	PRO
1	C	323	ASN
1	C	324	THR
1	C	349	ASN
1	C	356	ASP

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Mol	Chain	Res	Type
1	C	385	LEU
1	C	395	GLU
1	C	397	GLU
1	C	400	LYS
1	C	408	LEU
1	C	410	ILE
1	C	414	LYS
1	C	415	GLU
1	C	420	LEU
1	C	434	LEU
1	C	438	ASN
1	C	442	TYR
1	C	455	TYR
1	C	473	ASN
1	C	479	LYS
1	C	480	ASN
1	C	484	VAL
1	C	501	LEU
1	C	507	GLN
1	C	514	ASP
1	C	515	LYS
1	C	525	LYS
1	C	533	LEU
1	C	535	LYS
1	C	562	GLU
1	C	582	ASP
1	C	588	GLU
1	C	629	ASN
1	C	635	ILE
1	C	639	ASN
1	C	655	ASN
1	C	672	ARG
1	C	678	VAL
1	C	702	SER
1	C	709	ASN
1	C	714	GLN
1	C	744	GLU
1	C	755	ARG
1	C	759	GLN
1	C	766	HIS
1	C	767	GLN
1	C	770	ASN

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Mol	Chain	Res	Type
1	C	780	LEU
1	C	781	ASN
1	C	794	GLN
1	D	71	PHE
1	D	78	LYS
1	D	88	LYS
1	D	97	TYR
1	D	110	ASP
1	D	112	VAL
1	D	114	HIS
1	D	115	LYS
1	D	117	LEU
1	D	120	LEU
1	D	128	MET
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	155	ASN
1	D	156	ILE
1	D	158	ASP
1	D	172	GLU
1	D	173	ILE
1	D	179	LEU
1	D	180	ASP
1	D	182	ILE
1	D	186	LYS
1	D	188	LEU
1	D	197	LYS
1	D	202	ASP
1	D	213	LYS
1	D	217	LYS
1	D	229	PHE
1	D	236	GLU
1	D	248	TYR
1	D	254	ARG
1	D	260	TYR
1	D	279	ILE
1	D	284	LYS

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Mol	Chain	Res	Type
1	D	292	ARG
1	D	296	LEU
1	D	309	PRO
1	D	323	ASN
1	D	324	THR
1	D	349	ASN
1	D	356	ASP
1	D	385	LEU
1	D	395	GLU
1	D	397	GLU
1	D	400	LYS
1	D	408	LEU
1	D	410	ILE
1	D	414	LYS
1	D	415	GLU
1	D	420	LEU
1	D	434	LEU
1	D	438	ASN
1	D	442	TYR
1	D	455	TYR
1	D	473	ASN
1	D	479	LYS
1	D	480	ASN
1	D	484	VAL
1	D	501	LEU
1	D	507	GLN
1	D	514	ASP
1	D	515	LYS
1	D	525	LYS
1	D	533	LEU
1	D	535	LYS
1	D	562	GLU
1	D	582	ASP
1	D	588	GLU
1	D	622	LYS
1	D	629	ASN
1	D	635	ILE
1	D	639	ASN
1	D	655	ASN
1	D	672	ARG
1	D	678	VAL
1	D	702	SER

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Mol	Chain	Res	Type
1	D	709	ASN
1	D	714	GLN
1	D	744	GLU
1	D	755	ARG
1	D	759	GLN
1	D	766	HIS
1	D	767	GLN
1	D	770	ASN
1	D	780	LEU
1	D	781	ASN
1	D	794	GLN
1	E	71	PHE
1	E	78	LYS
1	E	88	LYS
1	E	97	TYR
1	E	110	ASP
1	E	112	VAL
1	E	114	HIS
1	E	115	LYS
1	E	117	LEU
1	E	120	LEU
1	E	128	MET
1	E	129	ASN
1	E	130	SER
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	155	ASN
1	E	156	ILE
1	E	158	ASP
1	E	172	GLU
1	E	173	ILE
1	E	179	LEU
1	E	180	ASP
1	E	182	ILE
1	E	186	LYS
1	E	188	LEU
1	E	190	PRO
1	E	197	LYS

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Mol	Chain	Res	Type
1	E	202	ASP
1	E	213	LYS
1	E	217	LYS
1	E	229	PHE
1	E	236	GLU
1	E	248	TYR
1	E	254	ARG
1	E	260	TYR
1	E	279	ILE
1	E	284	LYS
1	E	292	ARG
1	E	296	LEU
1	E	309	PRO
1	E	323	ASN
1	E	324	THR
1	E	349	ASN
1	E	356	ASP
1	E	385	LEU
1	E	395	GLU
1	E	397	GLU
1	E	400	LYS
1	E	408	LEU
1	E	410	ILE
1	E	414	LYS
1	E	415	GLU
1	E	420	LEU
1	E	434	LEU
1	E	438	ASN
1	E	442	TYR
1	E	455	TYR
1	E	473	ASN
1	E	479	LYS
1	E	480	ASN
1	E	484	VAL
1	E	501	LEU
1	E	507	GLN
1	E	514	ASP
1	E	515	LYS
1	E	525	LYS
1	E	533	LEU
1	E	535	LYS
1	E	562	GLU

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Mol	Chain	Res	Type
1	E	582	ASP
1	E	588	GLU
1	E	629	ASN
1	E	635	ILE
1	E	639	ASN
1	E	655	ASN
1	E	672	ARG
1	E	678	VAL
1	E	702	SER
1	E	709	ASN
1	E	714	GLN
1	E	744	GLU
1	E	755	ARG
1	E	759	GLN
1	E	766	HIS
1	E	767	GLN
1	E	770	ASN
1	E	780	LEU
1	E	781	ASN
1	E	794	GLN
1	F	64	ASN
1	F	71	PHE
1	F	78	LYS
1	F	88	LYS
1	F	97	TYR
1	F	110	ASP
1	F	112	VAL
1	F	114	HIS
1	F	115	LYS
1	F	117	LEU
1	F	120	LEU
1	F	128	MET
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	155	ASN
1	F	156	ILE
1	F	158	ASP

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Mol	Chain	Res	Type
1	F	172	GLU
1	F	173	ILE
1	F	179	LEU
1	F	180	ASP
1	F	182	ILE
1	F	186	LYS
1	F	188	LEU
1	F	197	LYS
1	F	202	ASP
1	F	213	LYS
1	F	217	LYS
1	F	229	PHE
1	F	236	GLU
1	F	248	TYR
1	F	254	ARG
1	F	260	TYR
1	F	279	ILE
1	F	284	LYS
1	F	292	ARG
1	F	296	LEU
1	F	309	PRO
1	F	323	ASN
1	F	324	THR
1	F	334	LEU
1	F	349	ASN
1	F	356	ASP
1	F	385	LEU
1	F	395	GLU
1	F	397	GLU
1	F	400	LYS
1	F	408	LEU
1	F	410	ILE
1	F	414	LYS
1	F	415	GLU
1	F	420	LEU
1	F	434	LEU
1	F	438	ASN
1	F	455	TYR
1	F	473	ASN
1	F	479	LYS
1	F	480	ASN
1	F	484	VAL

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Mol	Chain	Res	Type
1	F	501	LEU
1	F	507	GLN
1	F	514	ASP
1	F	515	LYS
1	F	525	LYS
1	F	533	LEU
1	F	535	LYS
1	F	562	GLU
1	F	582	ASP
1	F	588	GLU
1	F	622	LYS
1	F	629	ASN
1	F	635	ILE
1	F	639	ASN
1	F	646	THR
1	F	655	ASN
1	F	672	ARG
1	F	678	VAL
1	F	702	SER
1	F	709	ASN
1	F	714	GLN
1	F	744	GLU
1	F	755	ARG
1	F	759	GLN
1	F	766	HIS
1	F	767	GLN
1	F	770	ASN
1	F	780	LEU
1	F	781	ASN
1	F	794	GLN
2	O	5	THR
2	O	13	LYS
2	O	14	GLU
2	O	18	LEU
2	O	30	LYS
2	O	49	GLN
2	O	54	GLU
2	O	55	VAL
2	O	62	THR
2	O	63	ILE
2	O	65	PHE
2	O	70	THR

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Mol	Chain	Res	Type
2	O	83	GLU
2	O	94	LYS
2	O	97	ASN
2	O	117	THR
2	O	123	GLN
2	O	140	GLU
2	O	146	THR
2	P	5	THR
2	P	13	LYS
2	P	14	GLU
2	P	18	LEU
2	P	30	LYS
2	P	49	GLN
2	P	54	GLU
2	P	55	VAL
2	P	62	THR
2	P	63	ILE
2	P	65	PHE
2	P	70	THR
2	P	83	GLU
2	P	94	LYS
2	P	97	ASN
2	P	117	THR
2	P	123	GLN
2	P	140	GLU
2	P	146	THR
2	Q	5	THR
2	Q	13	LYS
2	Q	14	GLU
2	Q	18	LEU
2	Q	30	LYS
2	Q	49	GLN
2	Q	54	GLU
2	Q	55	VAL
2	Q	62	THR
2	Q	63	ILE
2	Q	65	PHE
2	Q	70	THR
2	Q	83	GLU
2	Q	94	LYS
2	Q	97	ASN
2	Q	117	THR

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Mol	Chain	Res	Type
2	Q	123	GLN
2	Q	140	GLU
2	Q	146	THR
2	R	5	THR
2	R	13	LYS
2	R	14	GLU
2	R	18	LEU
2	R	30	LYS
2	R	49	GLN
2	R	54	GLU
2	R	55	VAL
2	R	62	THR
2	R	63	ILE
2	R	65	PHE
2	R	70	THR
2	R	83	GLU
2	R	94	LYS
2	R	97	ASN
2	R	117	THR
2	R	123	GLN
2	R	140	GLU
2	R	146	THR
2	S	5	THR
2	S	13	LYS
2	S	14	GLU
2	S	18	LEU
2	S	30	LYS
2	S	49	GLN
2	S	54	GLU
2	S	55	VAL
2	S	63	ILE
2	S	65	PHE
2	S	70	THR
2	S	83	GLU
2	S	94	LYS
2	S	97	ASN
2	S	117	THR
2	S	123	GLN
2	S	140	GLU
2	S	146	THR
2	T	5	THR
2	T	13	LYS

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Mol	Chain	Res	Type
2	T	14	GLU
2	T	18	LEU
2	T	30	LYS
2	T	49	GLN
2	T	54	GLU
2	T	55	VAL
2	T	63	ILE
2	T	65	PHE
2	T	70	THR
2	T	83	GLU
2	T	94	LYS
2	T	97	ASN
2	T	117	THR
2	T	123	GLN
2	T	140	GLU
2	T	146	THR

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (199) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	80	GLN
1	A	81	GLN
1	A	83	GLN
1	A	129	ASN
1	A	165	GLN
1	A	212	GLN
1	A	238	GLN
1	A	323	ASN
1	A	337	ASN
1	A	349	ASN
1	A	387	ASN
1	A	438	ASN
1	A	480	ASN
1	A	507	GLN
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	629	ASN
1	A	639	ASN

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Mol	Chain	Res	Type
1	A	655	ASN
1	A	666	ASN
1	A	709	ASN
1	A	730	ASN
1	A	750	GLN
1	A	770	ASN
1	A	781	ASN
1	A	785	ASN
1	A	789	ASN
1	A	794	GLN
1	B	80	GLN
1	B	81	GLN
1	B	83	GLN
1	B	165	GLN
1	B	212	GLN
1	B	238	GLN
1	B	323	ASN
1	B	337	ASN
1	B	349	ASN
1	B	387	ASN
1	B	438	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
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	750	GLN
1	B	770	ASN
1	B	781	ASN
1	B	785	ASN
1	B	789	ASN
1	B	794	GLN
1	C	80	GLN

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Mol	Chain	Res	Type
1	C	81	GLN
1	C	83	GLN
1	C	165	GLN
1	C	212	GLN
1	C	238	GLN
1	C	323	ASN
1	C	337	ASN
1	C	349	ASN
1	C	387	ASN
1	C	438	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	581	GLN
1	C	629	ASN
1	C	639	ASN
1	C	655	ASN
1	C	666	ASN
1	C	709	ASN
1	C	730	ASN
1	C	750	GLN
1	C	770	ASN
1	C	781	ASN
1	C	785	ASN
1	C	789	ASN
1	C	794	GLN
1	D	64	ASN
1	D	80	GLN
1	D	81	GLN
1	D	83	GLN
1	D	165	GLN
1	D	212	GLN
1	D	238	GLN
1	D	323	ASN
1	D	337	ASN
1	D	349	ASN
1	D	387	ASN
1	D	438	ASN
1	D	480	ASN

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Mol	Chain	Res	Type
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	629	ASN
1	D	639	ASN
1	D	655	ASN
1	D	666	ASN
1	D	709	ASN
1	D	730	ASN
1	D	750	GLN
1	D	770	ASN
1	D	781	ASN
1	D	785	ASN
1	D	789	ASN
1	D	794	GLN
1	E	80	GLN
1	E	81	GLN
1	E	83	GLN
1	E	165	GLN
1	E	212	GLN
1	E	238	GLN
1	E	323	ASN
1	E	337	ASN
1	E	349	ASN
1	E	387	ASN
1	E	438	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	629	ASN
1	E	639	ASN
1	E	655	ASN
1	E	666	ASN

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Mol	Chain	Res	Type
1	E	709	ASN
1	E	730	ASN
1	E	750	GLN
1	E	770	ASN
1	E	781	ASN
1	E	785	ASN
1	E	789	ASN
1	E	794	GLN
1	F	80	GLN
1	F	81	GLN
1	F	83	GLN
1	F	129	ASN
1	F	165	GLN
1	F	212	GLN
1	F	238	GLN
1	F	323	ASN
1	F	337	ASN
1	F	349	ASN
1	F	387	ASN
1	F	438	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	581	GLN
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	750	GLN
1	F	770	ASN
1	F	781	ASN
1	F	785	ASN
1	F	789	ASN
1	F	794	GLN
2	O	49	GLN
2	O	111	ASN
2	P	49	GLN

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Mol	Chain	Res	Type
2	P	111	ASN
2	Q	49	GLN
2	Q	111	ASN
2	R	49	GLN
2	R	111	ASN
2	S	49	GLN
2	S	111	ASN
2	T	49	GLN
2	T	111	ASN

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 30 ligands modelled in this entry, 24 are monoatomic - leaving 6 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
4	CMP	F	906	3	22,25,25	3.03	6 (27%)	24,39,39	1.96	6 (25%)
4	CMP	B	902	3	22,25,25	3.06	7 (31%)	24,39,39	1.90	7 (29%)
4	CMP	E	905	3	22,25,25	3.09	7 (31%)	24,39,39	1.94	5 (20%)
4	CMP	C	903	3	22,25,25	3.06	6 (27%)	24,39,39	1.90	5 (20%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
4	CMP	A	901	-	22,25,25	3.02	6 (27%)	24,39,39	1.99	7 (29%)
4	CMP	D	904	3	22,25,25	3.06	7 (31%)	24,39,39	1.90	5 (20%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
4	CMP	F	906	3	-	0/0/31/31	0/4/4/4
4	CMP	B	902	3	-	0/0/31/31	0/4/4/4
4	CMP	E	905	3	-	0/0/31/31	0/4/4/4
4	CMP	C	903	3	-	0/0/31/31	0/4/4/4
4	CMP	A	901	-	-	0/0/31/31	0/4/4/4
4	CMP	D	904	3	-	0/0/31/31	0/4/4/4

All (39) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	E	905	CMP	P-O5'	11.97	1.71	1.57
4	D	904	CMP	P-O5'	11.95	1.71	1.57
4	C	903	CMP	P-O5'	11.89	1.71	1.57
4	B	902	CMP	P-O5'	11.82	1.71	1.57
4	A	901	CMP	P-O5'	11.63	1.70	1.57
4	F	906	CMP	P-O5'	11.54	1.70	1.57
4	C	903	CMP	C2'-C3'	-4.31	1.43	1.52
4	A	901	CMP	C2'-C3'	-4.22	1.43	1.52
4	D	904	CMP	C2'-C3'	-4.19	1.43	1.52
4	F	906	CMP	C2'-C3'	-4.10	1.43	1.52
4	E	905	CMP	C2'-C3'	-4.10	1.43	1.52
4	B	902	CMP	C2'-C3'	-3.97	1.44	1.52
4	E	905	CMP	C5'-C4'	2.90	1.56	1.51
4	E	905	CMP	O4'-C1'	2.84	1.45	1.41
4	B	902	CMP	O4'-C1'	2.81	1.45	1.41
4	F	906	CMP	O4'-C1'	2.79	1.45	1.41
4	C	903	CMP	O4'-C1'	2.78	1.45	1.41
4	F	906	CMP	C5'-C4'	2.77	1.56	1.51
4	C	903	CMP	C5'-C4'	2.76	1.56	1.51
4	A	901	CMP	O4'-C1'	2.75	1.44	1.41
4	D	904	CMP	C5'-C4'	2.71	1.56	1.51
4	F	906	CMP	P-O3'	2.64	1.62	1.57
4	A	901	CMP	C5'-C4'	2.64	1.55	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	B	902	CMP	C5'-C4'	2.64	1.55	1.51
4	D	904	CMP	O4'-C1'	2.62	1.44	1.41
4	B	902	CMP	C8-N7	-2.54	1.30	1.34
4	C	903	CMP	C8-N7	-2.54	1.30	1.34
4	B	902	CMP	P-O3'	2.48	1.61	1.57
4	E	905	CMP	C8-N7	-2.46	1.30	1.34
4	F	906	CMP	C8-N7	-2.41	1.30	1.34
4	D	904	CMP	C8-N7	-2.39	1.30	1.34
4	A	901	CMP	C8-N7	-2.39	1.30	1.34
4	E	905	CMP	P-O3'	2.29	1.61	1.57
4	A	901	CMP	P-O3'	2.15	1.61	1.57
4	D	904	CMP	P-O3'	2.15	1.61	1.57
4	E	905	CMP	O4'-C4'	-2.05	1.40	1.45
4	C	903	CMP	O4'-C4'	-2.02	1.40	1.45
4	D	904	CMP	O4'-C4'	-2.01	1.40	1.45
4	B	902	CMP	O4'-C4'	-2.01	1.40	1.45

All (35) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	A	901	CMP	O3'-C3'-C4'	5.59	114.93	110.71
4	F	906	CMP	O3'-C3'-C4'	5.48	114.84	110.71
4	E	905	CMP	O3'-C3'-C4'	5.40	114.78	110.71
4	C	903	CMP	O3'-C3'-C4'	5.27	114.69	110.71
4	D	904	CMP	O3'-C3'-C4'	5.24	114.67	110.71
4	B	902	CMP	O3'-C3'-C4'	5.09	114.55	110.71
4	F	906	CMP	O5'-C5'-C4'	4.83	116.97	105.71
4	A	901	CMP	O5'-C5'-C4'	4.79	116.88	105.71
4	B	902	CMP	O5'-C5'-C4'	4.76	116.81	105.71
4	E	905	CMP	O5'-C5'-C4'	4.73	116.74	105.71
4	D	904	CMP	O5'-C5'-C4'	4.68	116.61	105.71
4	C	903	CMP	O5'-C5'-C4'	4.67	116.59	105.71
4	E	905	CMP	O5'-P-O1P	-2.82	103.93	110.44
4	A	901	CMP	O5'-P-O1P	-2.76	104.07	110.44
4	F	906	CMP	O5'-P-O1P	-2.72	104.16	110.44
4	C	903	CMP	O2P-P-O1P	2.71	117.20	108.73
4	A	901	CMP	O2P-P-O1P	2.67	117.08	108.73
4	D	904	CMP	O2P-P-O1P	2.64	117.00	108.73
4	E	905	CMP	O2P-P-O1P	2.63	116.97	108.73
4	D	904	CMP	O5'-P-O1P	-2.63	104.38	110.44
4	B	902	CMP	O2P-P-O1P	2.61	116.91	108.73
4	F	906	CMP	O2P-P-O1P	2.59	116.84	108.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	B	902	CMP	O5'-P-O1P	-2.58	104.48	110.44
4	C	903	CMP	O5'-P-O1P	-2.56	104.54	110.44
4	C	903	CMP	C4-C5-N7	2.25	111.75	109.40
4	B	902	CMP	C4-C5-N7	2.25	111.75	109.40
4	E	905	CMP	C4-C5-N7	2.23	111.72	109.40
4	A	901	CMP	C4-C5-N7	2.22	111.72	109.40
4	D	904	CMP	C4-C5-N7	2.20	111.69	109.40
4	F	906	CMP	C4-C5-N7	2.20	111.69	109.40
4	B	902	CMP	C1'-N9-C4	2.07	130.28	126.64
4	A	901	CMP	C1'-N9-C4	2.07	130.27	126.64
4	B	902	CMP	O2P-P-O3'	2.03	111.77	107.04
4	A	901	CMP	O2P-P-O3'	2.02	111.74	107.04
4	F	906	CMP	O2P-P-O3'	2.01	111.72	107.04

There are no chirality outliers.

There are no torsion outliers.

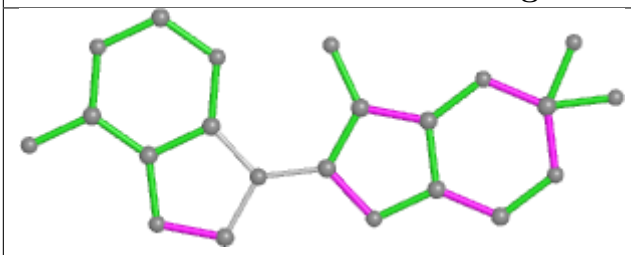
There are no ring outliers.

6 monomers are involved in 24 short contacts:

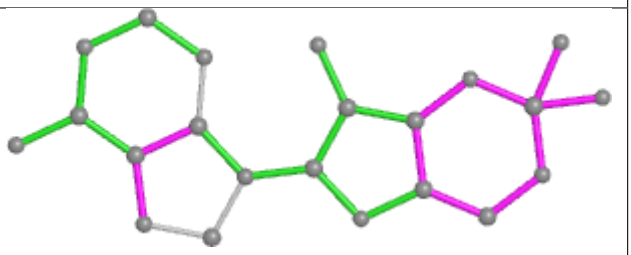
Mol	Chain	Res	Type	Clashes	Symm-Clashes
4	F	906	CMP	4	0
4	B	902	CMP	4	0
4	E	905	CMP	4	0
4	C	903	CMP	4	0
4	A	901	CMP	4	0
4	D	904	CMP	4	0

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

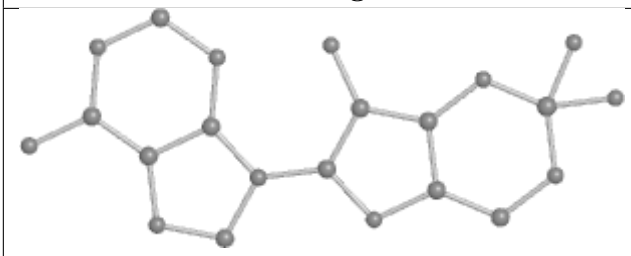
Ligand CMP F 906



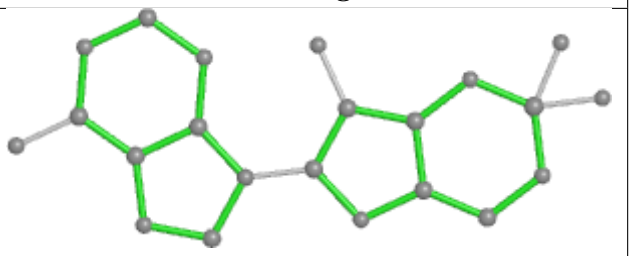
Bond lengths



Bond angles

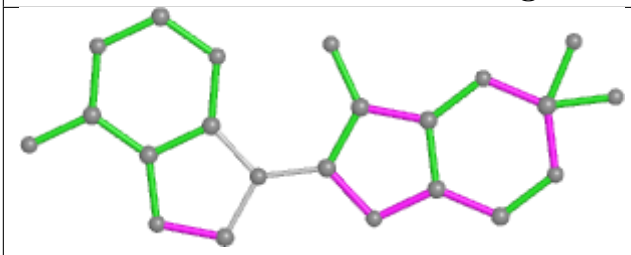


Torsions

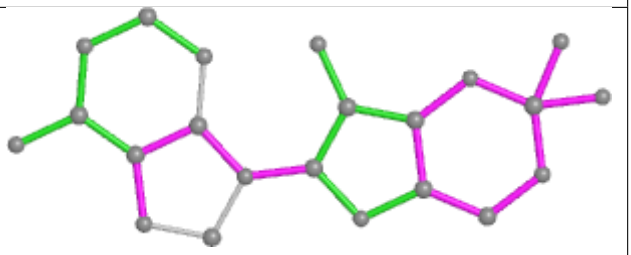


Rings

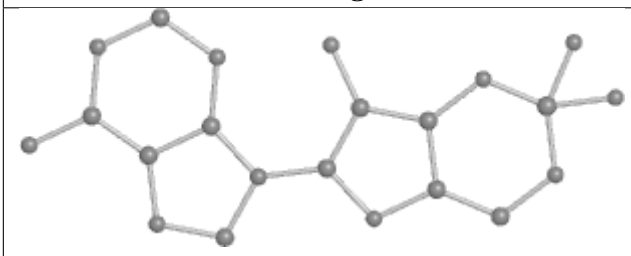
Ligand CMP B 902



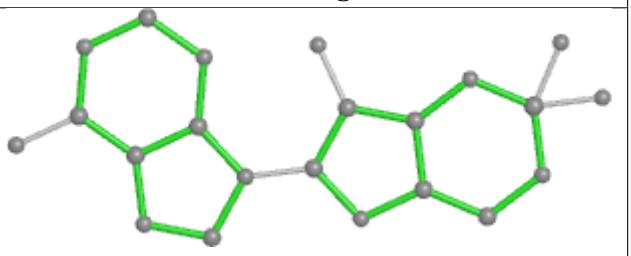
Bond lengths



Bond angles

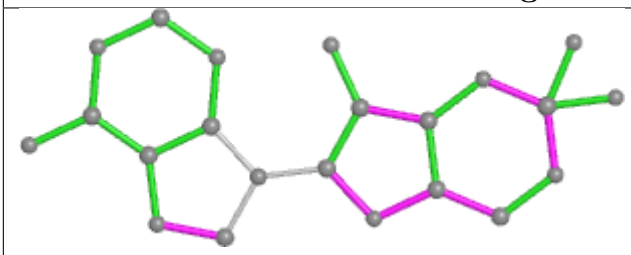


Torsions

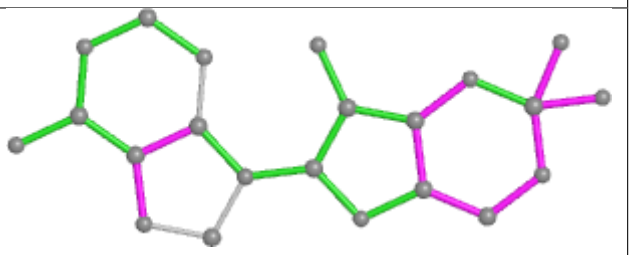


Rings

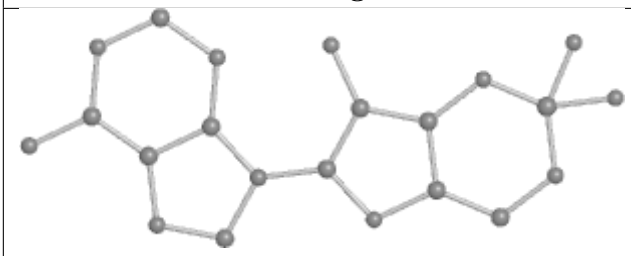
Ligand CMP E 905



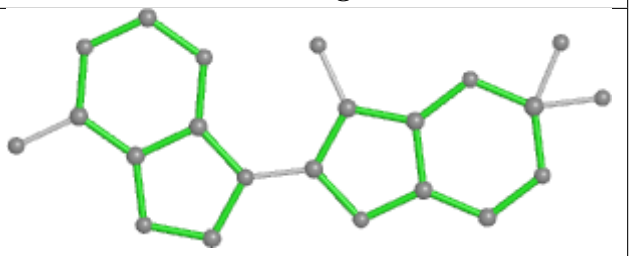
Bond lengths



Bond angles

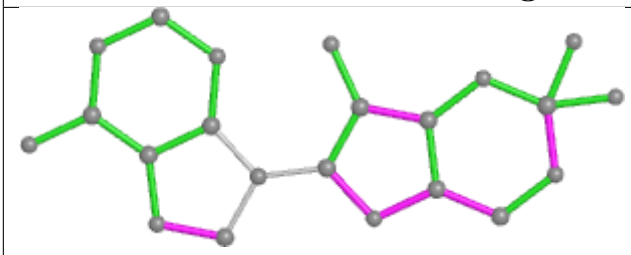


Torsions

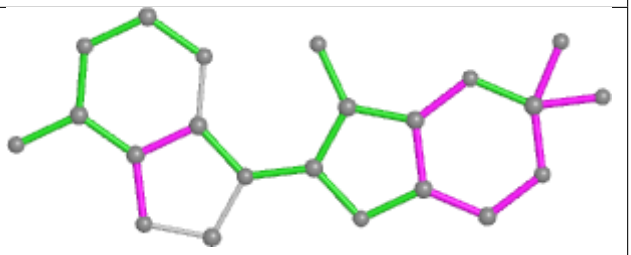


Rings

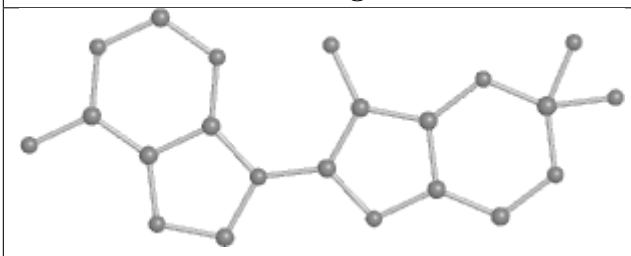
Ligand CMP C 903



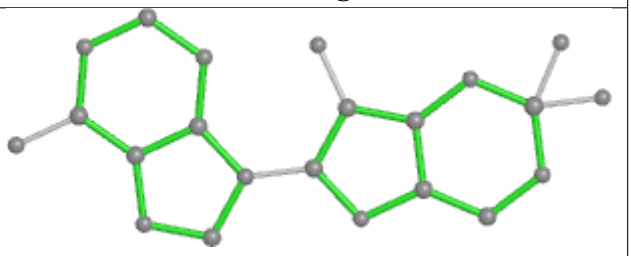
Bond lengths



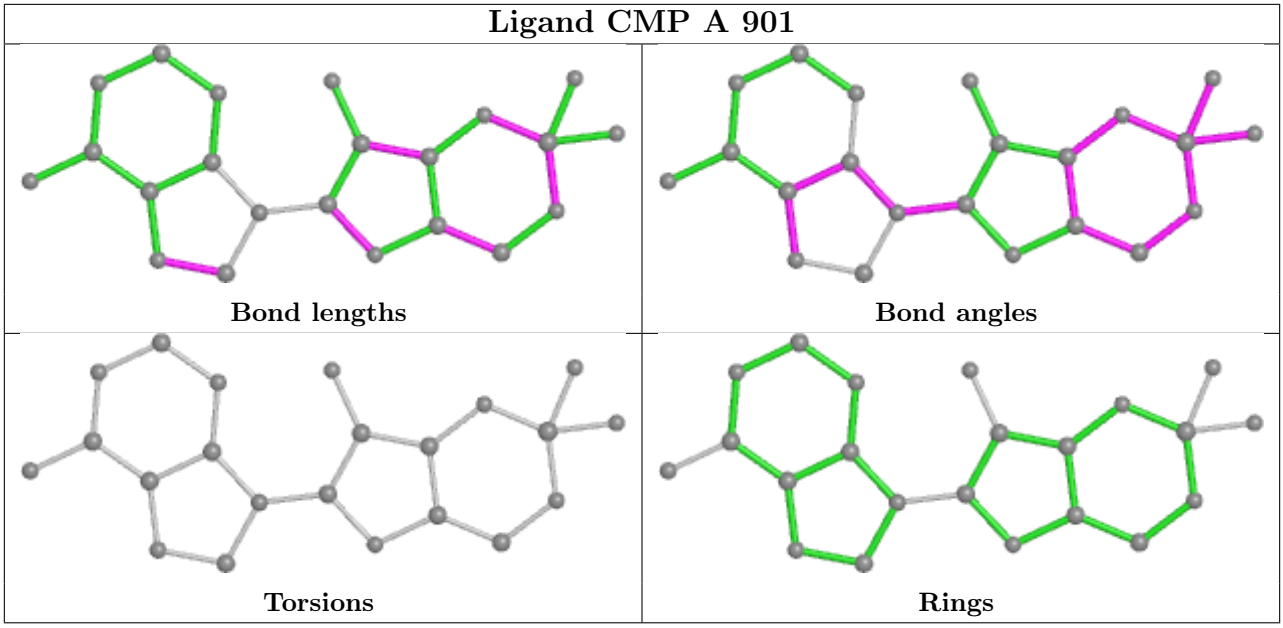
Bond angles

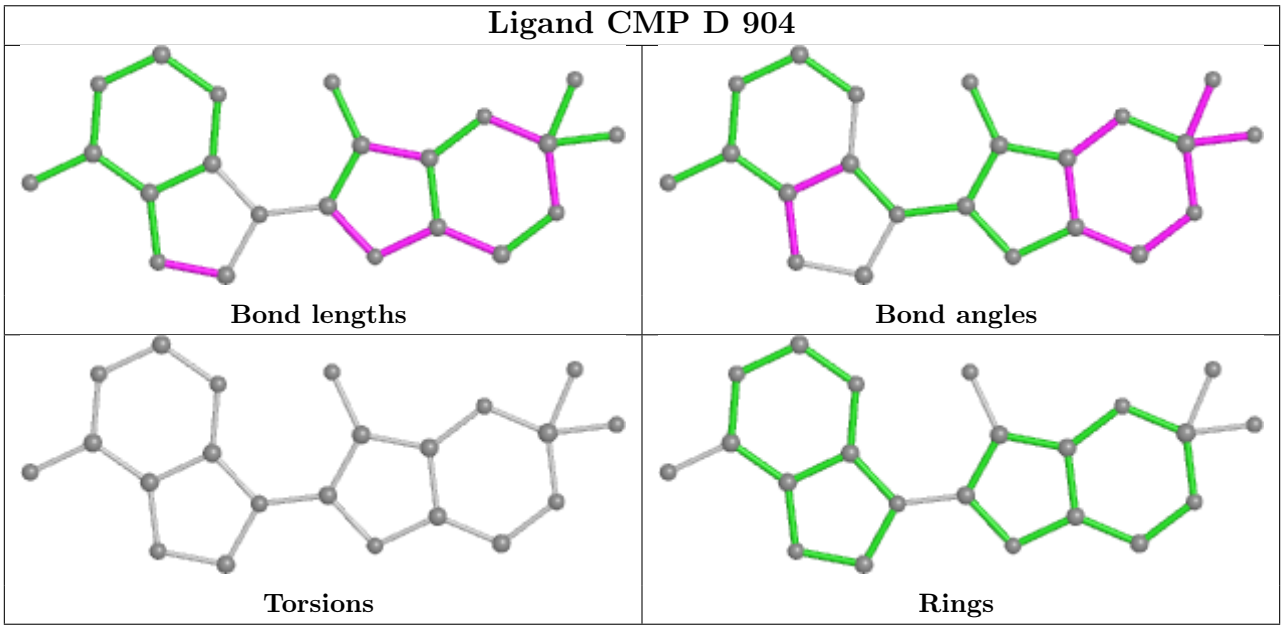


Torsions



Rings





5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

The following chains have linkage breaks:

Mol	Chain	Number of breaks
1	C	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	C	123:GLU	C	124:GLU	N	1.19

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^{th} 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^2)	Q<0.9
1	A	735/777 (94%)	0.23	31 (4%)	36	35	18, 73, 128, 137	0
1	B	735/777 (94%)	0.23	28 (3%)	40	39	18, 73, 128, 138	0
1	C	735/777 (94%)	0.26	34 (4%)	32	32	17, 73, 128, 138	0
1	D	735/777 (94%)	0.24	30 (4%)	37	36	17, 73, 127, 137	0
1	E	735/777 (94%)	0.23	27 (3%)	41	40	17, 72, 127, 137	0
1	F	735/777 (94%)	0.22	29 (3%)	39	38	18, 73, 127, 138	0
2	O	146/149 (97%)	0.08	4 (2%)	54	53	17, 60, 119, 124	0
2	P	146/149 (97%)	0.09	3 (2%)	63	62	17, 60, 119, 124	0
2	Q	146/149 (97%)	0.08	2 (1%)	75	74	17, 60, 119, 123	0
2	R	146/149 (97%)	0.07	4 (2%)	54	53	16, 60, 119, 123	0
2	S	146/149 (97%)	0.14	4 (2%)	54	53	17, 60, 119, 123	0
2	T	146/149 (97%)	0.10	4 (2%)	54	53	16, 60, 119, 124	0
All	All	5286/5556 (95%)	0.21	200 (3%)	40	39	16, 70, 126, 138	0

All (200) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	162	ASN	17.4
1	D	162	ASN	9.9
1	A	163	SER	9.5
1	B	204	ASP	8.8
1	F	230	ILE	8.6
1	E	225	ILE	8.3
1	D	229	PHE	7.8
1	E	230	ILE	7.8
1	E	204	ASP	7.6
1	B	230	ILE	7.2
1	D	204	ASP	7.1

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Mol	Chain	Res	Type	RSRZ
1	E	229	PHE	7.0
1	B	162	ASN	7.0
1	A	230	ILE	7.0
1	C	230	ILE	7.0
1	B	203	SER	6.6
1	E	206	SER	6.5
1	F	225	ILE	6.5
1	A	204	ASP	6.5
1	F	162	ASN	6.4
1	C	162	ASN	6.3
1	D	230	ILE	6.1
1	D	126	ASN	5.9
1	C	206	SER	5.8
1	A	229	PHE	5.7
1	F	226	ASP	5.7
1	F	204	ASP	5.6
1	D	203	SER	5.6
1	D	163	SER	5.6
1	C	229	PHE	5.5
1	B	212	GLN	5.5
1	C	212	GLN	5.4
1	E	171	TYR	5.4
1	E	162	ASN	5.4
1	C	226	ASP	5.4
1	C	225	ILE	5.3
1	A	226	ASP	5.2
1	F	206	SER	5.2
1	C	171	TYR	5.1
1	B	171	TYR	5.1
1	F	229	PHE	5.1
1	B	163	SER	5.1
1	E	205	SER	5.1
1	F	171	TYR	5.0
1	A	227	ILE	5.0
1	F	72	THR	4.9
1	D	206	SER	4.8
1	D	171	TYR	4.8
1	A	225	ILE	4.7
1	F	212	GLN	4.7
1	B	229	PHE	4.7
1	C	125	LYS	4.6
1	A	171	TYR	4.6

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Mol	Chain	Res	Type	RSRZ
1	E	212	GLN	4.6
1	B	205	SER	4.5
1	E	72	THR	4.5
1	A	203	SER	4.4
1	D	226	ASP	4.3
1	A	212	GLN	4.3
1	B	237	PHE	4.3
1	C	204	ASP	4.2
1	F	163	SER	4.2
1	B	206	SER	4.2
1	C	203	SER	4.1
1	A	126	ASN	4.1
1	D	225	ILE	4.1
1	A	221	ASN	4.1
1	A	206	SER	4.0
1	E	226	ASP	4.0
1	F	126	ASN	4.0
1	E	160	ALA	3.9
1	B	126	ASN	3.9
1	D	212	GLN	3.9
1	C	163	SER	3.9
2	Q	52	ILE	3.9
1	E	126	ASN	3.8
2	R	52	ILE	3.8
1	C	237	PHE	3.7
1	B	226	ASP	3.7
1	E	203	SER	3.7
1	B	225	ILE	3.6
1	C	221	ASN	3.6
1	E	227	ILE	3.6
1	D	186	LYS	3.5
1	F	421	LYS	3.5
1	F	125	LYS	3.4
1	F	227	ILE	3.4
1	E	163	SER	3.4
1	B	218	LEU	3.3
1	D	125	LYS	3.3
1	A	110	ASP	3.3
1	F	260	TYR	3.3
1	C	205	SER	3.3
1	B	181	ILE	3.2
1	F	203	SER	3.2

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Mol	Chain	Res	Type	RSRZ
1	D	359	PRO	3.2
1	C	207	ASP	3.1
1	D	221	ASN	3.1
1	B	221	ASN	3.1
1	D	205	SER	3.1
1	D	207	ASP	3.1
1	D	560	LEU	3.1
2	T	43	PRO	3.0
2	T	78	ASP	3.0
1	A	213	LYS	3.0
1	B	441	VAL	2.9
1	A	181	ILE	2.9
1	D	237	PHE	2.9
1	A	214	PHE	2.9
2	R	63	ILE	2.8
1	B	127	SER	2.8
1	A	405	LEU	2.8
1	F	373	LYS	2.8
1	F	259	LEU	2.8
1	B	214	PHE	2.8
1	F	214	PHE	2.8
2	P	52	ILE	2.8
1	E	786	GLU	2.8
1	A	237	PHE	2.7
1	F	165	GLN	2.7
1	A	165	GLN	2.7
1	F	222	ASN	2.7
1	C	185	ASP	2.7
1	D	227	ILE	2.7
1	B	160	ALA	2.7
1	C	186	LYS	2.7
1	F	127	SER	2.6
1	B	207	ASP	2.6
2	O	52	ILE	2.6
1	A	228	ASN	2.6
1	C	421	LYS	2.6
1	C	227	ILE	2.6
1	C	160	ALA	2.5
2	R	112	LEU	2.5
1	D	165	GLN	2.5
2	O	63	ILE	2.5
1	A	76	LEU	2.5

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Mol	Chain	Res	Type	RSRZ
1	C	127	SER	2.5
1	D	786	GLU	2.5
1	C	359	PRO	2.5
1	F	237	PHE	2.4
1	E	168	GLU	2.4
2	P	63	ILE	2.4
1	E	435	LEU	2.4
1	D	328	PHE	2.4
1	F	224	SER	2.4
2	O	43	PRO	2.4
1	E	127	SER	2.4
1	B	165	GLN	2.4
1	E	158	ASP	2.4
1	C	405	LEU	2.4
2	S	63	ILE	2.4
1	A	125	LYS	2.4
1	B	405	LEU	2.4
2	S	78	ASP	2.3
1	D	127	SER	2.3
1	D	192	PHE	2.3
1	D	160	ALA	2.3
1	A	207	ASP	2.3
1	F	433	TYR	2.3
2	P	112	LEU	2.3
1	E	207	ASP	2.3
1	F	420	LEU	2.3
1	C	126	ASN	2.3
1	A	595	ILE	2.2
1	C	165	GLN	2.2
1	D	419	ILE	2.2
1	F	213	LYS	2.2
1	A	603	ILE	2.2
2	Q	63	ILE	2.2
1	E	237	PHE	2.2
2	S	43	PRO	2.2
1	E	603	ILE	2.2
1	E	260	TYR	2.2
1	C	192	PHE	2.2
1	B	156	ILE	2.2
1	B	786	GLU	2.2
1	A	79	ILE	2.1
2	S	27	ILE	2.1

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Mol	Chain	Res	Type	RSRZ
1	C	72	THR	2.1
2	T	63	ILE	2.1
2	R	78	ASP	2.1
1	B	158	ASP	2.1
1	C	222	ASN	2.1
1	A	156	ILE	2.1
1	B	370	LEU	2.1
1	F	780	LEU	2.1
1	A	259	LEU	2.1
1	C	214	PHE	2.1
1	C	218	LEU	2.1
1	C	264	MET	2.1
2	O	65	PHE	2.1
1	C	260	TYR	2.1
1	E	419	ILE	2.0
1	A	241	PHE	2.0
2	T	65	PHE	2.0
1	C	202	ASP	2.0
1	D	158	ASP	2.0
1	E	165	GLN	2.0
1	D	118	GLN	2.0

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

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

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

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. The B-factors column lists the minimum, median, 95^{th} 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	RSCC	RSR	B-factors(Å^2)	Q<0.9
5	CA	Q	705	1/1	0.82	0.15	76,76,76,76	0
4	CMP	F	906	22/22	0.86	0.39	48,63,84,93	0

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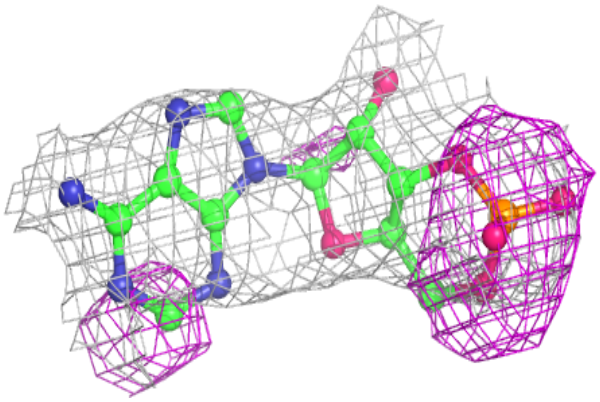
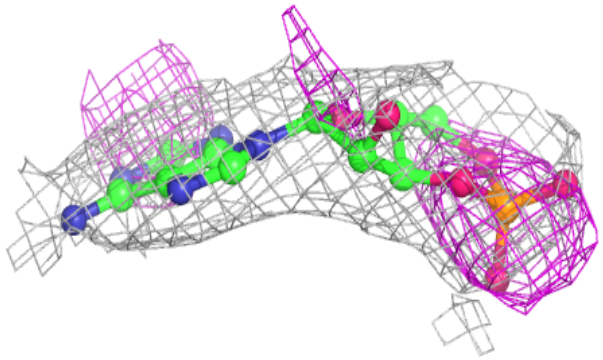
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
4	CMP	B	902	22/22	0.88	0.42	49,63,81,89	0
4	CMP	A	901	22/22	0.89	0.36	48,65,85,93	0
4	CMP	E	905	22/22	0.89	0.39	47,63,84,91	0
4	CMP	D	904	22/22	0.90	0.33	48,62,81,86	0
4	CMP	C	903	22/22	0.90	0.51	48,63,81,92	0
5	CA	T	711	1/1	0.90	0.11	79,79,79,79	0
5	CA	S	709	1/1	0.91	0.08	78,78,78,78	0
5	CA	O	701	1/1	0.91	0.12	81,81,81,81	0
5	CA	P	703	1/1	0.94	0.13	76,76,76,76	0
5	CA	O	802	1/1	0.96	0.18	47,47,47,47	0
5	CA	Q	806	1/1	0.97	0.19	51,51,51,51	0
5	CA	R	707	1/1	0.97	0.11	69,69,69,69	0
5	CA	R	807	1/1	0.97	0.13	29,29,29,29	0
3	MG	E	904	1/1	0.97	0.16	17,17,17,17	0
5	CA	S	809	1/1	0.97	0.14	26,26,26,26	0
3	MG	F	905	1/1	0.97	0.21	15,15,15,15	0
5	CA	T	811	1/1	0.97	0.14	26,26,26,26	0
5	CA	R	808	1/1	0.98	0.16	47,47,47,47	0
5	CA	O	801	1/1	0.98	0.14	27,27,27,27	0
3	MG	D	903	1/1	0.98	0.14	14,14,14,14	0
3	MG	C	902	1/1	0.98	0.14	17,17,17,17	0
5	CA	P	803	1/1	0.98	0.17	30,30,30,30	0
5	CA	T	812	1/1	0.98	0.18	54,54,54,54	0
5	CA	P	804	1/1	0.99	0.18	47,47,47,47	0
5	CA	S	810	1/1	0.99	0.17	51,51,51,51	0
3	MG	B	901	1/1	0.99	0.12	27,27,27,27	0
5	CA	Q	805	1/1	0.99	0.19	29,29,29,29	0
3	MG	A	900	1/1	0.99	0.18	13,13,13,13	0

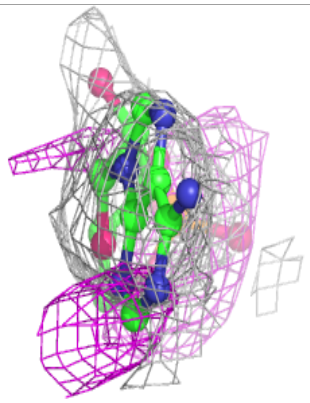
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

Electron density around CMP F 906:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

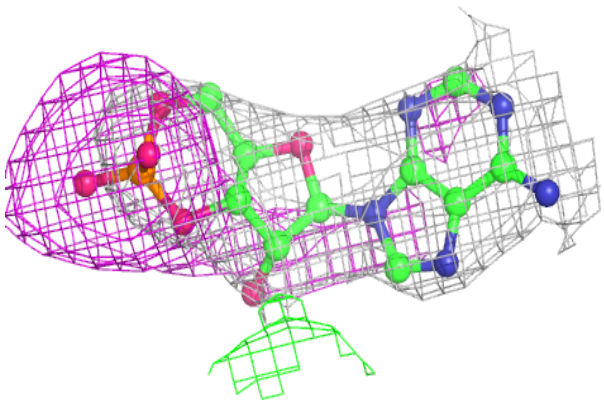


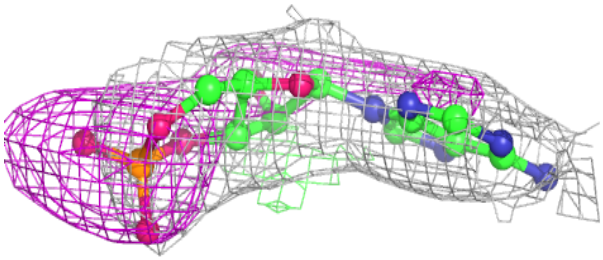


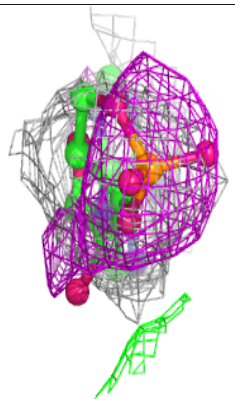


Electron density around CMP B 902:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

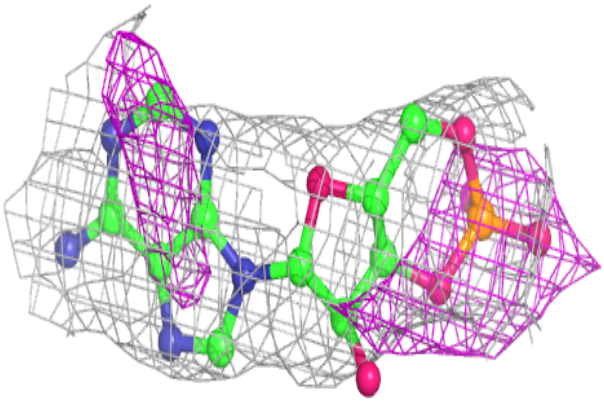


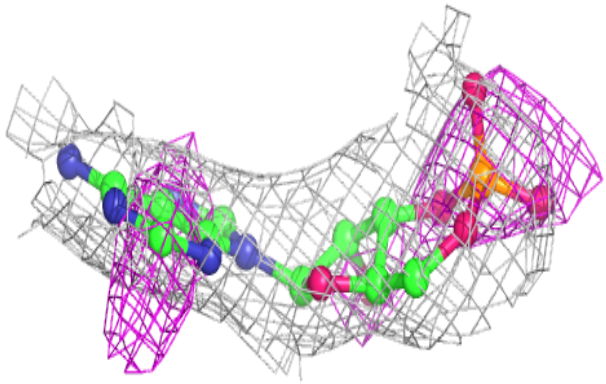


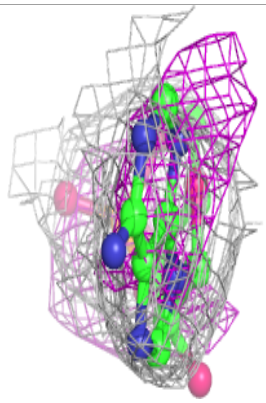


Electron density around CMP A 901:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

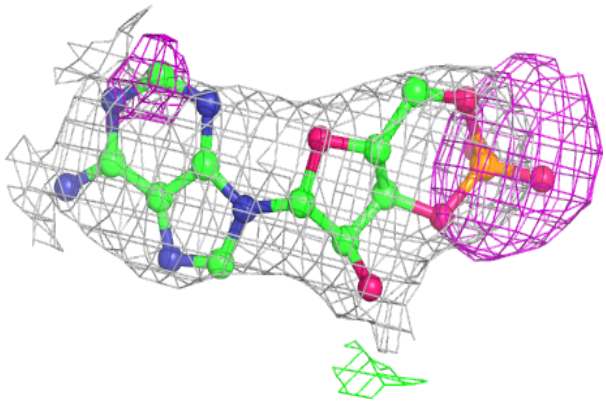


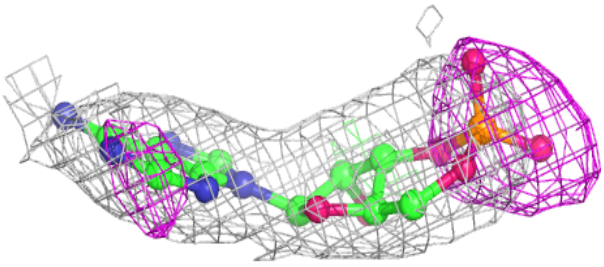


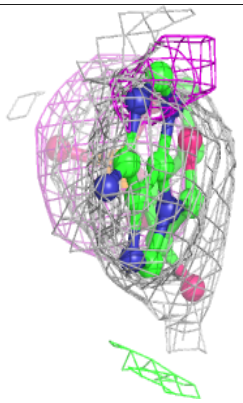


Electron density around CMP E 905:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

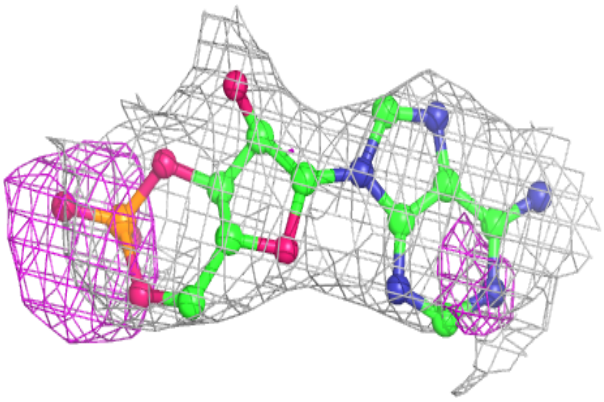


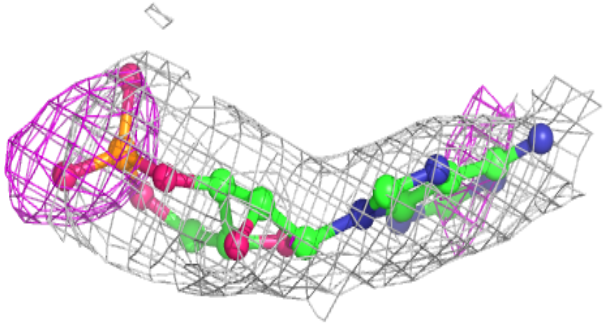


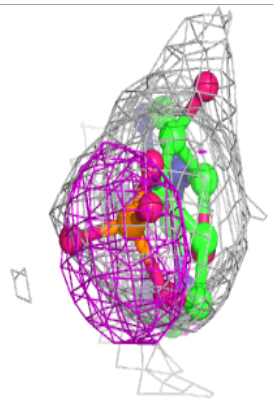


Electron density around CMP D 904:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

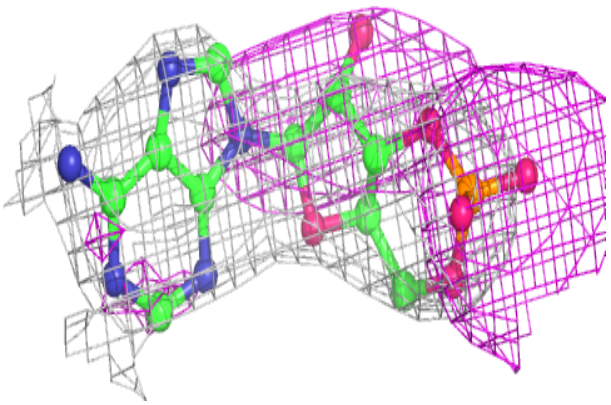


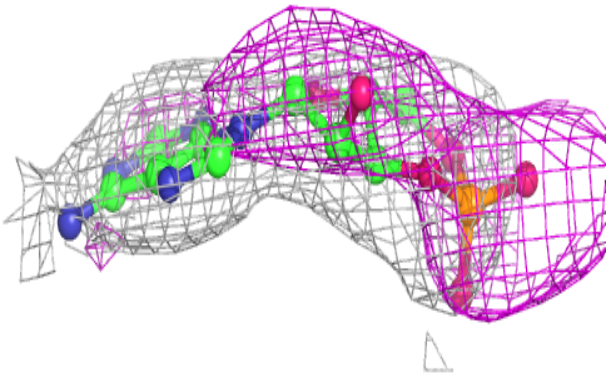


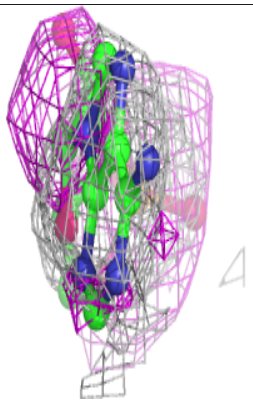


Electron density around CMP C 903:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)







6.5 Other polymers (i)

There are no such residues in this entry.