



Full wwPDB X-ray Structure Validation Report

Feb 27, 2014 – 06:27 PM GMT

PDB ID : 1PYP
Title : X-RAY DIFFRACTION STUDY OF INORGANIC PYROPHOSPHATASE
FROM BAKER,S YEAST AT THE 3 ANGSTROMS RESOLUTION (RUS-
SIAN)
Authors : Harutyunyan, E.H.; Terzyan, S.S.; Vainshtein, B.K.
Deposited on : 1983-02-03
Resolution : 3.00 Å(reported)

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

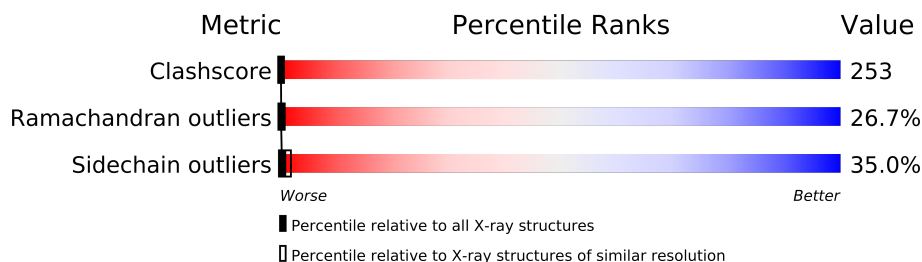
The following versions of software and data (see [references](#)) were used in the production of this report:

MolProbity : 4.02b-467
Mogul : 1.15 2013
Xtriage (Phenix) : **NOT EXECUTED**
EDS : **NOT EXECUTED**
Percentile statistics : 21963
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : stable22683

1 Overall quality at a glance

The reported resolution of this entry is 3.00 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
Clashscore	79885	1594 (3.00-3.00)
Ramachandran outliers	78287	1537 (3.00-3.00)
Sidechain outliers	78261	1540 (3.00-3.00)

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

Note EDS was not executed.

Mol	Chain	Length	Quality of chain
1	A	285	
1	B	285	

2 Entry composition

There is only 1 type of molecule in this entry. The entry contains 4472 atoms, of which 0 are hydrogen and 0 are deuterium.

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

- Molecule 1 is a protein called INORGANIC PYROPHOSPHATASE.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	281	Total	C	N	O	S	0	0	1
			2236	1435	369	429	3			
1	B	281	Total	C	N	O	S	0	0	1
			2236	1435	369	429	3			

There are 18 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	40	ASP	ASN	CONFLICT	UNP P00817
A	71	ASN	ASP	CONFLICT	UNP P00817
A	?	-	LYS	DELETION	UNP P00817
A	116	ASN	ASP	CONFLICT	UNP P00817
A	122	GLN	GLU	CONFLICT	UNP P00817
A	135	GLU	GLN	CONFLICT	UNP P00817
A	185	ASP	ASN	CONFLICT	UNP P00817
A	223	ASN	ASP	CONFLICT	UNP P00817
A	265	PRO	LEU	CONFLICT	UNP P00817
B	40	ASP	ASN	CONFLICT	UNP P00817
B	71	ASN	ASP	CONFLICT	UNP P00817
B	?	-	LYS	DELETION	UNP P00817
B	116	ASN	ASP	CONFLICT	UNP P00817
B	122	GLN	GLU	CONFLICT	UNP P00817
B	135	GLU	GLN	CONFLICT	UNP P00817
B	185	ASP	ASN	CONFLICT	UNP P00817
B	223	ASN	ASP	CONFLICT	UNP P00817
B	265	PRO	LEU	CONFLICT	UNP P00817

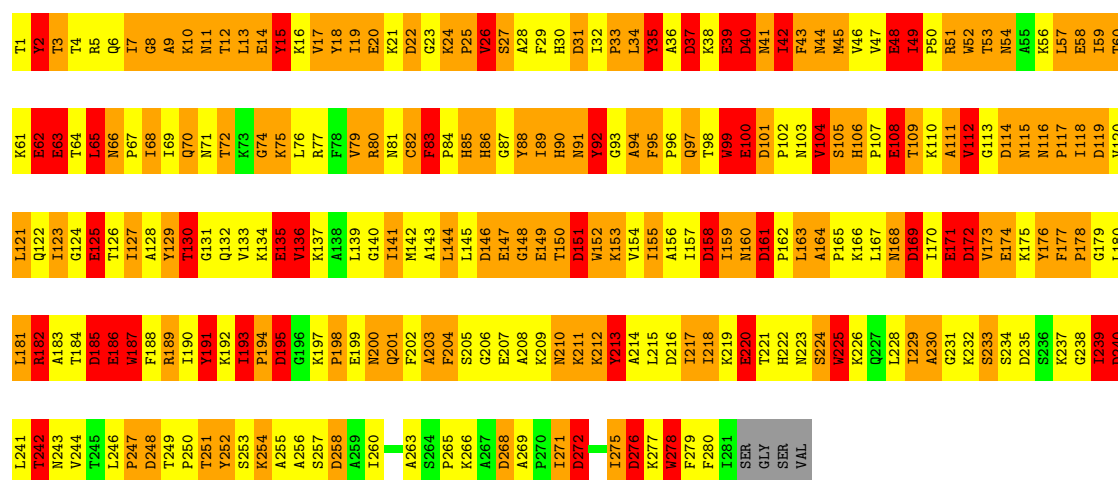
3 Residue-property plots

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

Note EDS was not executed.

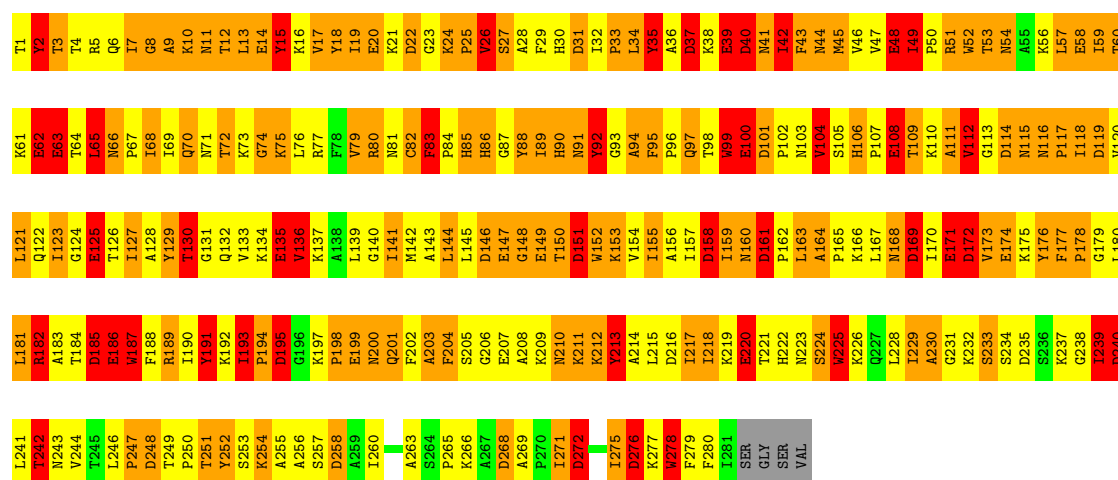
• Molecule 1: INORGANIC PYROPHOSPHATASE

Chain A:



• Molecule 1: INORGANIC PYROPHOSPHATASE

Chain B:



4 Data and refinement statistics

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

Property	Value	Source
Space group	P 1 1 21	Depositor
Cell constants a, b, c, α , β , γ	52.23Å 70.29Å 95.47Å 90.00° 90.00° 99.59°	Depositor
Resolution (Å)	(Not available) – 3.00	Depositor
% Data completeness (in resolution range)	(Not available) ((Not available)-3.00)	Depositor
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
Refinement program	unknown	Depositor
R, R_{free}	(Not available) , (Not available)	Depositor
Estimated twinning fraction	No twinning to report.	Xtriage
Total number of atoms	4472	wwPDB-VP
Average B, all atoms (Å ²)	0.0	wwPDB-VP

5 Model quality ⓘ

5.1 Standard geometry ⓘ

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	A	1.18	25/2295 (1.1%)	1.40	72/3123 (2.3%)
1	B	1.18	25/2295 (1.1%)	1.40	72/3123 (2.3%)
All	All	1.18	50/4590 (1.1%)	1.40	144/6246 (2.3%)

All (50) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	225	TRP	NE1-CE2	-7.35	1.28	1.37
1	A	278	TRP	NE1-CE2	-7.34	1.28	1.37
1	B	278	TRP	NE1-CE2	-7.34	1.28	1.37
1	A	99	TRP	NE1-CE2	-7.34	1.28	1.37
1	B	99	TRP	NE1-CE2	-7.33	1.28	1.37
1	B	225	TRP	NE1-CE2	-7.31	1.28	1.37
1	B	187	TRP	NE1-CE2	-7.30	1.28	1.37
1	A	152	TRP	NE1-CE2	-7.29	1.28	1.37
1	A	187	TRP	NE1-CE2	-7.28	1.28	1.37
1	B	52	TRP	NE1-CE2	-7.28	1.28	1.37
1	A	52	TRP	NE1-CE2	-7.26	1.28	1.37
1	B	152	TRP	NE1-CE2	-7.26	1.28	1.37
1	B	220	GLU	CD-OE1	-5.29	1.19	1.25
1	A	220	GLU	CD-OE1	-5.27	1.19	1.25
1	B	62	GLU	CD-OE1	-5.25	1.19	1.25
1	B	48	GLU	CD-OE1	-5.22	1.20	1.25
1	A	174	GLU	CD-OE1	-5.22	1.20	1.25
1	B	20	GLU	CD-OE1	-5.22	1.20	1.25
1	B	125	GLU	CD-OE1	-5.22	1.20	1.25
1	B	186	GLU	CD-OE1	-5.22	1.20	1.25
1	A	62	GLU	CD-OE1	-5.22	1.20	1.25
1	A	20	GLU	CD-OE1	-5.21	1.20	1.25
1	A	186	GLU	CD-OE1	-5.21	1.20	1.25
1	B	199	GLU	CD-OE1	-5.21	1.20	1.25
1	A	48	GLU	CD-OE1	-5.21	1.20	1.25
1	A	199	GLU	CD-OE1	-5.21	1.20	1.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	174	GLU	CD-OE1	-5.21	1.20	1.25
1	B	147	GLU	CD-OE1	-5.20	1.20	1.25
1	A	149	GLU	CD-OE1	-5.20	1.20	1.25
1	A	125	GLU	CD-OE1	-5.20	1.20	1.25
1	A	207	GLU	CD-OE1	-5.20	1.20	1.25
1	B	149	GLU	CD-OE1	-5.19	1.20	1.25
1	A	100	GLU	CD-OE1	-5.19	1.20	1.25
1	A	147	GLU	CD-OE1	-5.19	1.20	1.25
1	B	63	GLU	CD-OE1	-5.19	1.20	1.25
1	B	14	GLU	CD-OE1	-5.18	1.20	1.25
1	A	39	GLU	CD-OE1	-5.17	1.20	1.25
1	B	100	GLU	CD-OE1	-5.17	1.20	1.25
1	B	108	GLU	CD-OE1	-5.17	1.20	1.25
1	B	135	GLU	CD-OE1	-5.17	1.20	1.25
1	B	39	GLU	CD-OE1	-5.17	1.20	1.25
1	B	207	GLU	CD-OE1	-5.17	1.20	1.25
1	A	63	GLU	CD-OE1	-5.16	1.20	1.25
1	A	108	GLU	CD-OE1	-5.16	1.20	1.25
1	A	14	GLU	CD-OE1	-5.16	1.20	1.25
1	A	58	GLU	CD-OE1	-5.16	1.20	1.25
1	A	135	GLU	CD-OE1	-5.15	1.20	1.25
1	B	171	GLU	CD-OE1	-5.13	1.20	1.25
1	A	171	GLU	CD-OE1	-5.13	1.20	1.25
1	B	58	GLU	CD-OE1	-5.11	1.20	1.25

All (144) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	172	ASP	CB-CG-OD1	7.35	124.92	118.30
1	A	172	ASP	CB-CG-OD1	7.35	124.91	118.30
1	B	169	ASP	CB-CG-OD1	7.34	124.91	118.30
1	A	158	ASP	CB-CG-OD1	7.33	124.90	118.30
1	B	22	ASP	CB-CG-OD1	7.32	124.89	118.30
1	B	101	ASP	CB-CG-OD1	7.32	124.89	118.30
1	B	258	ASP	CB-CG-OD1	7.32	124.89	118.30
1	A	272	ASP	CB-CG-OD1	7.32	124.88	118.30
1	A	258	ASP	CB-CG-OD1	7.31	124.88	118.30
1	B	235	ASP	CB-CG-OD1	7.31	124.88	118.30
1	B	268	ASP	CB-CG-OD1	7.31	124.88	118.30
1	A	169	ASP	CB-CG-OD1	7.31	124.88	118.30
1	B	151	ASP	CB-CG-OD1	7.31	124.88	118.30
1	A	151	ASP	CB-CG-OD1	7.30	124.87	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	146	ASP	CB-CG-OD1	7.30	124.87	118.30
1	A	195	ASP	CB-CG-OD1	7.30	124.87	118.30
1	A	235	ASP	CB-CG-OD1	7.30	124.87	118.30
1	A	22	ASP	CB-CG-OD1	7.30	124.87	118.30
1	A	276	ASP	CB-CG-OD1	7.30	124.87	118.30
1	B	37	ASP	CB-CG-OD1	7.30	124.87	118.30
1	A	40	ASP	CB-CG-OD1	7.30	124.87	118.30
1	A	101	ASP	CB-CG-OD1	7.30	124.87	118.30
1	B	195	ASP	CB-CG-OD1	7.30	124.87	118.30
1	B	119	ASP	CB-CG-OD1	7.29	124.86	118.30
1	A	37	ASP	CB-CG-OD1	7.29	124.86	118.30
1	A	185	ASP	CB-CG-OD1	7.29	124.86	118.30
1	A	216	ASP	CB-CG-OD1	7.29	124.86	118.30
1	A	268	ASP	CB-CG-OD1	7.29	124.86	118.30
1	B	216	ASP	CB-CG-OD1	7.29	124.86	118.30
1	B	158	ASP	CB-CG-OD1	7.29	124.86	118.30
1	B	272	ASP	CB-CG-OD1	7.29	124.86	118.30
1	B	276	ASP	CB-CG-OD1	7.29	124.86	118.30
1	A	248	ASP	CB-CG-OD1	7.29	124.86	118.30
1	A	114	ASP	CB-CG-OD1	7.28	124.85	118.30
1	A	161	ASP	CB-CG-OD1	7.28	124.85	118.30
1	B	161	ASP	CB-CG-OD1	7.28	124.85	118.30
1	B	40	ASP	CB-CG-OD1	7.27	124.85	118.30
1	B	185	ASP	CB-CG-OD1	7.27	124.84	118.30
1	A	146	ASP	CB-CG-OD1	7.27	124.84	118.30
1	B	248	ASP	CB-CG-OD1	7.26	124.84	118.30
1	B	240	ASP	CB-CG-OD1	7.26	124.83	118.30
1	B	114	ASP	CB-CG-OD1	7.25	124.83	118.30
1	A	240	ASP	CB-CG-OD1	7.25	124.83	118.30
1	A	119	ASP	CB-CG-OD1	7.25	124.82	118.30
1	A	31	ASP	CB-CG-OD1	7.24	124.82	118.30
1	B	31	ASP	CB-CG-OD1	7.23	124.80	118.30
1	B	62	GLU	OE1-CD-OE2	5.86	130.34	123.30
1	B	207	GLU	OE1-CD-OE2	5.84	130.31	123.30
1	A	207	GLU	OE1-CD-OE2	5.82	130.29	123.30
1	A	20	GLU	OE1-CD-OE2	5.82	130.28	123.30
1	A	62	GLU	OE1-CD-OE2	5.82	130.28	123.30
1	B	135	GLU	OE1-CD-OE2	5.81	130.27	123.30
1	B	186	GLU	OE1-CD-OE2	5.80	130.27	123.30
1	B	63	GLU	OE1-CD-OE2	5.80	130.26	123.30
1	A	186	GLU	OE1-CD-OE2	5.80	130.26	123.30
1	A	220	GLU	OE1-CD-OE2	5.80	130.26	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	58	GLU	OE1-CD-OE2	5.80	130.26	123.30
1	A	135	GLU	OE1-CD-OE2	5.80	130.26	123.30
1	B	149	GLU	OE1-CD-OE2	5.80	130.26	123.30
1	B	20	GLU	OE1-CD-OE2	5.79	130.25	123.30
1	B	220	GLU	OE1-CD-OE2	5.79	130.25	123.30
1	B	14	GLU	OE1-CD-OE2	5.79	130.25	123.30
1	A	14	GLU	OE1-CD-OE2	5.78	130.24	123.30
1	B	147	GLU	OE1-CD-OE2	5.78	130.24	123.30
1	A	63	GLU	OE1-CD-OE2	5.77	130.23	123.30
1	A	147	GLU	OE1-CD-OE2	5.77	130.23	123.30
1	A	149	GLU	OE1-CD-OE2	5.77	130.22	123.30
1	A	48	GLU	OE1-CD-OE2	5.77	130.22	123.30
1	A	171	GLU	OE1-CD-OE2	5.77	130.22	123.30
1	A	174	GLU	OE1-CD-OE2	5.77	130.22	123.30
1	B	48	GLU	OE1-CD-OE2	5.76	130.22	123.30
1	A	125	GLU	OE1-CD-OE2	5.76	130.21	123.30
1	B	58	GLU	OE1-CD-OE2	5.76	130.21	123.30
1	B	39	GLU	OE1-CD-OE2	5.76	130.21	123.30
1	A	39	GLU	OE1-CD-OE2	5.76	130.21	123.30
1	A	100	GLU	OE1-CD-OE2	5.76	130.21	123.30
1	B	174	GLU	OE1-CD-OE2	5.76	130.21	123.30
1	A	199	GLU	OE1-CD-OE2	5.74	130.18	123.30
1	A	108	GLU	OE1-CD-OE2	5.74	130.18	123.30
1	B	199	GLU	OE1-CD-OE2	5.74	130.18	123.30
1	B	100	GLU	OE1-CD-OE2	5.73	130.18	123.30
1	B	108	GLU	OE1-CD-OE2	5.73	130.17	123.30
1	B	125	GLU	OE1-CD-OE2	5.72	130.16	123.30
1	B	171	GLU	OE1-CD-OE2	5.71	130.15	123.30
1	B	62	GLU	CG-CD-OE2	-5.20	107.91	118.30
1	B	220	GLU	CG-CD-OE2	-5.17	107.95	118.30
1	B	39	GLU	CG-CD-OE2	-5.17	107.95	118.30
1	A	20	GLU	CG-CD-OE2	-5.17	107.96	118.30
1	B	35	TYR	CB-CG-CD1	-5.17	117.90	121.00
1	B	174	GLU	CG-CD-OE2	-5.17	107.96	118.30
1	A	186	GLU	CG-CD-OE2	-5.17	107.96	118.30
1	A	62	GLU	CG-CD-OE2	-5.17	107.96	118.30
1	A	220	GLU	CG-CD-OE2	-5.17	107.96	118.30
1	B	135	GLU	CG-CD-OE2	-5.17	107.97	118.30
1	B	147	GLU	CG-CD-OE2	-5.16	107.97	118.30
1	B	20	GLU	CG-CD-OE2	-5.16	107.98	118.30
1	A	39	GLU	CG-CD-OE2	-5.16	107.98	118.30
1	A	171	GLU	CG-CD-OE2	-5.16	107.98	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	174	GLU	CG-CD-OE2	-5.16	107.98	118.30
1	B	14	GLU	CG-CD-OE2	-5.16	107.98	118.30
1	B	48	GLU	CG-CD-OE2	-5.16	107.98	118.30
1	B	63	GLU	CG-CD-OE2	-5.16	107.98	118.30
1	B	125	GLU	CG-CD-OE2	-5.16	107.98	118.30
1	B	186	GLU	CG-CD-OE2	-5.16	107.98	118.30
1	A	58	GLU	CG-CD-OE2	-5.16	107.98	118.30
1	A	63	GLU	CG-CD-OE2	-5.16	107.98	118.30
1	A	207	GLU	CG-CD-OE2	-5.16	107.99	118.30
1	A	48	GLU	CG-CD-OE2	-5.16	107.99	118.30
1	A	147	GLU	CG-CD-OE2	-5.16	107.99	118.30
1	B	171	GLU	CG-CD-OE2	-5.16	107.99	118.30
1	A	125	GLU	CG-CD-OE2	-5.15	108.00	118.30
1	A	135	GLU	CG-CD-OE2	-5.15	108.00	118.30
1	B	108	GLU	CG-CD-OE2	-5.15	108.00	118.30
1	A	14	GLU	CG-CD-OE2	-5.15	108.01	118.30
1	B	207	GLU	CG-CD-OE2	-5.15	108.01	118.30
1	B	58	GLU	CG-CD-OE2	-5.14	108.01	118.30
1	A	199	GLU	CG-CD-OE2	-5.14	108.02	118.30
1	B	199	GLU	CG-CD-OE2	-5.14	108.03	118.30
1	B	2	TYR	CB-CG-CD1	-5.13	117.92	121.00
1	A	108	GLU	CG-CD-OE2	-5.13	108.04	118.30
1	A	100	GLU	CG-CD-OE2	-5.13	108.04	118.30
1	A	149	GLU	CG-CD-OE2	-5.13	108.04	118.30
1	B	149	GLU	CG-CD-OE2	-5.12	108.05	118.30
1	A	191	TYR	CB-CG-CD1	-5.12	117.93	121.00
1	B	191	TYR	CB-CG-CD1	-5.12	117.93	121.00
1	A	92	TYR	CB-CG-CD1	-5.11	117.93	121.00
1	B	92	TYR	CB-CG-CD1	-5.11	117.94	121.00
1	B	100	GLU	CG-CD-OE2	-5.11	108.08	118.30
1	A	35	TYR	CB-CG-CD1	-5.11	117.94	121.00
1	A	213	TYR	CB-CG-CD1	-5.10	117.94	121.00
1	A	252	TYR	CB-CG-CD1	-5.10	117.94	121.00
1	B	88	TYR	CB-CG-CD1	-5.10	117.94	121.00
1	A	18	TYR	CB-CG-CD1	-5.09	117.94	121.00
1	A	2	TYR	CB-CG-CD1	-5.09	117.94	121.00
1	B	213	TYR	CB-CG-CD1	-5.09	117.95	121.00
1	B	129	TYR	CB-CG-CD1	-5.06	117.97	121.00
1	B	176	TYR	CB-CG-CD1	-5.05	117.97	121.00
1	A	176	TYR	CB-CG-CD1	-5.05	117.97	121.00
1	B	18	TYR	CB-CG-CD1	-5.05	117.97	121.00
1	A	88	TYR	CB-CG-CD1	-5.04	117.98	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	252	TYR	CB-CG-CD1	-5.03	117.98	121.00
1	A	129	TYR	CB-CG-CD1	-5.02	117.99	121.00
1	B	15	TYR	CB-CG-CD1	-5.02	117.99	121.00
1	A	15	TYR	CB-CG-CD1	-5.01	117.99	121.00

There are no chirality outliers.

There are no planarity outliers.

5.2 Close contacts ⓘ

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogens added by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, and the number in parentheses is this value normalized per 1000 atoms of the molecule in the chain. The Symm-Clashes column gives symmetry related clashes, in the same way as for the Clashes column.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	2236	0	2198	1132	10
1	B	2236	0	2198	1138	13
All	All	4472	0	4396	2241	13

Clashscore is defined as the number of clashes calculated for the entry per 1000 atoms (including hydrogens) of the entry. The overall clashscore for this entry is 253.

All (2241) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:1:THR:HG21	1:B:19:ILE:CD1	1.22	1.68
1:B:19:ILE:CD1	1:B:26:VAL:HG11	1.27	1.64
1:A:1:THR:HG21	1:A:19:ILE:CD1	1.22	1.62
1:B:9:ALA:CB	1:B:15:TYR:HB2	1.19	1.61
1:B:42:ILE:HD12	1:B:159:ILE:CD1	1.29	1.60
1:A:190:ILE:HA	1:A:193:ILE:CG1	1.25	1.60
1:A:9:ALA:CB	1:A:15:TYR:HB2	1.19	1.59
1:B:190:ILE:HA	1:B:193:ILE:CG1	1.25	1.59
1:A:19:ILE:CD1	1:A:26:VAL:HG11	1.27	1.58
1:A:105:SER:CB	1:A:112:VAL:HA	1.33	1.56
1:A:42:ILE:HD12	1:A:159:ILE:CD1	1.29	1.56
1:B:1:THR:CG2	1:B:19:ILE:HD11	1.09	1.55
1:B:123:ILE:HD11	1:B:177:PHE:CE2	1.05	1.55
1:B:9:ALA:HB3	1:B:15:TYR:CB	1.33	1.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:98:THR:HG23	1:B:221:THR:C	1.22	1.54
1:A:123:ILE:HD11	1:A:177:PHE:CE2	1.05	1.54
1:A:1:THR:CG2	1:A:19:ILE:HD11	1.09	1.53
1:B:105:SER:CB	1:B:112:VAL:HA	1.33	1.53
1:A:95:PHE:CE2	1:A:218:ILE:HD11	1.45	1.52
1:B:222:HIS:NE2	1:B:226:LYS:CE	1.72	1.52
1:A:5:ARG:NH1	1:A:260:ILE:CG2	1.72	1.51
1:A:222:HIS:NE2	1:A:226:LYS:CE	1.72	1.50
1:B:95:PHE:CE2	1:B:218:ILE:HD11	1.45	1.50
1:A:98:THR:HG23	1:A:221:THR:C	1.22	1.50
1:A:9:ALA:HB3	1:A:15:TYR:CB	1.33	1.49
1:A:19:ILE:HD13	1:A:26:VAL:CG1	1.43	1.49
1:B:5:ARG:NH1	1:B:260:ILE:CG2	1.72	1.48
1:B:19:ILE:HD13	1:B:26:VAL:CG1	1.43	1.48
1:B:98:THR:CG2	1:B:221:THR:OG1	1.63	1.46
1:A:5:ARG:HH12	1:A:260:ILE:CG2	1.24	1.46
1:A:123:ILE:CD1	1:A:177:PHE:CE2	1.99	1.45
1:A:98:THR:CG2	1:A:221:THR:OG1	1.63	1.44
1:A:1:THR:CG2	1:A:19:ILE:CD1	1.81	1.44
1:A:139:LEU:HB2	1:A:155:ILE:CG2	1.47	1.44
1:B:139:LEU:HB2	1:B:155:ILE:CG2	1.47	1.44
1:B:123:ILE:CD1	1:B:177:PHE:CE2	1.99	1.42
1:B:49:ILE:CD1	1:B:92:TYR:CD1	2.03	1.42
1:B:5:ARG:HH12	1:B:260:ILE:CG2	1.24	1.42
1:A:123:ILE:CD1	1:A:177:PHE:CD2	2.03	1.40
1:B:123:ILE:CD1	1:B:177:PHE:CD2	2.03	1.40
1:A:49:ILE:CD1	1:A:92:TYR:CD1	2.03	1.40
1:B:123:ILE:HD11	1:B:177:PHE:CD2	1.55	1.39
1:A:7:ILE:CG2	1:A:16:LYS:H	1.37	1.38
1:B:80:ARG:HD2	1:B:279:PHE:CE1	1.59	1.37
1:A:80:ARG:HD2	1:A:279:PHE:CE1	1.59	1.37
1:A:123:ILE:HD11	1:A:177:PHE:CD2	1.55	1.37
1:B:1:THR:CG2	1:B:19:ILE:CD1	1.81	1.36
1:B:23:GLY:O	1:B:24:LYS:CG	1.73	1.36
1:A:174:GLU:O	1:A:178:PRO:CB	1.74	1.35
1:B:5:ARG:NH1	1:B:260:ILE:HG21	1.02	1.35
1:B:83:PHE:CD1	1:B:280:PHE:CE2	2.15	1.35
1:A:105:SER:HB3	1:A:112:VAL:CA	1.58	1.34
1:B:7:ILE:CG2	1:B:16:LYS:H	1.37	1.34
1:A:83:PHE:CD1	1:A:280:PHE:CE2	2.15	1.34
1:A:23:GLY:O	1:A:24:LYS:CG	1.73	1.33
1:B:105:SER:HB3	1:B:112:VAL:CA	1.58	1.33

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:5:ARG:NH1	1:A:260:ILE:HG21	1.02	1.33
1:A:277:LYS:CE	1:B:125:GLU:OE2	1.77	1.32
1:B:49:ILE:HD11	1:B:92:TYR:CD1	1.64	1.32
1:B:112:VAL:O	1:B:150:THR:CB	1.77	1.32
1:A:74:GLY:O	1:A:75:LYS:CG	1.77	1.32
1:B:59:ILE:HG22	1:B:67:PRO:N	1.43	1.32
1:B:98:THR:HG21	1:B:221:THR:CB	1.60	1.32
1:A:59:ILE:HG22	1:A:67:PRO:N	1.43	1.31
1:B:74:GLY:O	1:B:75:LYS:CG	1.77	1.31
1:A:142:MET:CE	1:A:202:PHE:CZ	2.14	1.31
1:B:142:MET:CE	1:B:202:PHE:CZ	2.14	1.31
1:B:174:GLU:O	1:B:178:PRO:CB	1.74	1.31
1:A:52:TRP:N	1:A:88:TYR:O	1.64	1.30
1:A:98:THR:HG21	1:A:221:THR:CB	1.60	1.30
1:A:125:GLU:OE2	1:B:277:LYS:CE	1.77	1.30
1:A:112:VAL:O	1:A:150:THR:CB	1.77	1.29
1:B:52:TRP:N	1:B:88:TYR:O	1.64	1.29
1:B:112:VAL:O	1:B:150:THR:HB	1.11	1.28
1:B:42:ILE:CG1	1:B:43:PHE:H	1.43	1.28
1:A:57:LEU:CA	1:A:68:ILE:O	1.80	1.28
1:A:82:CYS:SG	1:A:190:ILE:HG13	1.73	1.28
1:B:82:CYS:SG	1:B:190:ILE:HG13	1.73	1.28
1:A:53:THR:O	1:A:88:TYR:HB2	1.30	1.28
1:A:27:SER:CA	1:A:64:THR:HG23	1.62	1.28
1:B:53:THR:O	1:B:88:TYR:HB2	1.30	1.28
1:A:42:ILE:CG1	1:A:43:PHE:H	1.44	1.28
1:A:190:ILE:CA	1:A:193:ILE:CG1	2.12	1.27
1:B:27:SER:CA	1:B:64:THR:HG23	1.62	1.27
1:B:83:PHE:CE1	1:B:280:PHE:CE2	2.22	1.27
1:A:58:GLU:HG3	1:A:70:GLN:NE2	1.48	1.27
1:A:49:ILE:HD11	1:A:92:TYR:CD1	1.64	1.27
1:B:57:LEU:CA	1:B:68:ILE:O	1.80	1.26
1:A:112:VAL:O	1:A:150:THR:HB	1.11	1.26
1:A:83:PHE:CE1	1:A:280:PHE:CE2	2.22	1.26
1:B:58:GLU:HG3	1:B:70:GLN:NE2	1.48	1.26
1:B:142:MET:O	1:B:153:LYS:N	1.68	1.25
1:B:190:ILE:CA	1:B:193:ILE:CG1	2.12	1.25
1:A:98:THR:HG23	1:A:221:THR:O	1.14	1.25
1:B:32:ILE:O	1:B:97:GLN:HG3	1.38	1.24
1:B:7:ILE:CG2	1:B:7:ILE:O	1.83	1.24
1:A:142:MET:O	1:A:153:LYS:N	1.68	1.24
1:A:49:ILE:HD12	1:A:92:TYR:CG	1.73	1.24

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:164:ALA:HB3	1:A:165:PRO:CD	1.68	1.23
1:B:98:THR:HG23	1:B:221:THR:O	1.14	1.23
1:B:218:ILE:O	1:B:221:THR:HG22	1.05	1.23
1:A:27:SER:HA	1:A:64:THR:CG2	1.68	1.23
1:B:192:LYS:HB3	1:B:197:LYS:CB	1.67	1.23
1:A:42:ILE:CG2	1:A:137:LYS:HG2	1.69	1.22
1:A:9:ALA:CB	1:A:15:TYR:CB	1.99	1.22
1:B:27:SER:HA	1:B:64:THR:CG2	1.68	1.22
1:A:192:LYS:HB3	1:A:197:LYS:CB	1.67	1.22
1:B:164:ALA:HB3	1:B:165:PRO:CD	1.68	1.22
1:A:163:LEU:CD2	1:A:176:TYR:HD2	1.53	1.22
1:B:49:ILE:HD12	1:B:92:TYR:CG	1.73	1.21
1:B:42:ILE:CG2	1:B:137:LYS:HG2	1.69	1.21
1:A:32:ILE:O	1:A:97:GLN:HG3	1.38	1.21
1:A:100:GLU:O	1:A:114:ASP:O	1.58	1.21
1:A:218:ILE:O	1:A:221:THR:HG22	1.05	1.21
1:A:7:ILE:CG2	1:A:7:ILE:O	1.83	1.21
1:B:9:ALA:CB	1:B:15:TYR:CB	1.99	1.20
1:B:222:HIS:NE2	1:B:226:LYS:HE3	1.37	1.20
1:B:163:LEU:CD2	1:B:176:TYR:HD2	1.53	1.19
1:A:38:LYS:CG	1:A:41:ASN:HB2	1.73	1.19
1:A:193:ILE:HB	1:A:194:PRO:HD3	1.19	1.19
1:B:142:MET:HE3	1:B:202:PHE:CE1	1.77	1.19
1:A:222:HIS:NE2	1:A:226:LYS:HE3	1.37	1.19
1:B:49:ILE:HD12	1:B:92:TYR:CD1	1.73	1.19
1:A:218:ILE:O	1:A:221:THR:CG2	1.91	1.18
1:B:218:ILE:O	1:B:221:THR:CG2	1.91	1.18
1:B:27:SER:CB	1:B:64:THR:HG23	1.73	1.18
1:B:190:ILE:HA	1:B:193:ILE:CD1	1.75	1.17
1:A:27:SER:CB	1:A:64:THR:HG23	1.73	1.17
1:B:100:GLU:O	1:B:114:ASP:O	1.58	1.17
1:B:98:THR:CG2	1:B:221:THR:C	2.12	1.17
1:A:5:ARG:NH2	1:A:25:PRO:HB3	1.59	1.17
1:A:51:ARG:HG2	1:A:89:ILE:HA	1.26	1.17
1:B:9:ALA:HB1	1:B:15:TYR:HB2	1.21	1.17
1:B:10:LYS:HG3	1:B:268:ASP:OD2	1.44	1.17
1:A:7:ILE:HG21	1:A:16:LYS:H	1.02	1.17
1:A:10:LYS:HG3	1:A:268:ASP:OD2	1.44	1.17
1:B:38:LYS:CG	1:B:41:ASN:HB2	1.73	1.17
1:A:98:THR:CG2	1:A:221:THR:C	2.12	1.17
1:B:142:MET:HE3	1:B:202:PHE:CZ	1.77	1.17
1:A:49:ILE:HD12	1:A:92:TYR:CD1	1.73	1.16

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:163:LEU:HD21	1:A:176:TYR:HD2	1.07	1.16
1:A:190:ILE:HA	1:A:193:ILE:CD1	1.75	1.16
1:A:42:ILE:HG13	1:A:136:VAL:O	1.00	1.16
1:A:42:ILE:HG12	1:A:43:PHE:N	1.14	1.16
1:B:74:GLY:O	1:B:75:LYS:HG3	1.00	1.16
1:A:164:ALA:HB3	1:A:165:PRO:HD3	1.26	1.15
1:A:74:GLY:O	1:A:75:LYS:HG3	1.00	1.15
1:A:7:ILE:HB	1:A:16:LYS:O	1.47	1.15
1:B:110:LYS:O	1:B:112:VAL:N	1.80	1.15
1:B:5:ARG:NH2	1:B:25:PRO:HB3	1.59	1.15
1:A:110:LYS:O	1:A:112:VAL:N	1.80	1.15
1:B:193:ILE:HB	1:B:194:PRO:HD3	1.19	1.15
1:A:83:PHE:CD1	1:A:280:PHE:CD2	2.35	1.14
1:B:34:LEU:O	1:B:43:PHE:HB3	1.46	1.14
1:B:97:GLN:OE1	1:B:222:HIS:CE1	2.00	1.14
1:B:174:GLU:O	1:B:178:PRO:HB3	0.96	1.14
1:A:27:SER:HA	1:A:64:THR:HG23	1.14	1.14
1:B:42:ILE:HG13	1:B:136:VAL:O	1.00	1.14
1:A:97:GLN:OE1	1:A:222:HIS:CE1	2.00	1.14
1:A:34:LEU:O	1:A:43:PHE:HB3	1.46	1.14
1:B:190:ILE:CA	1:B:193:ILE:HG13	1.76	1.14
1:B:26:VAL:CG2	1:B:27:SER:H	1.57	1.14
1:A:5:ARG:HB3	1:A:263:ALA:HB2	1.20	1.14
1:A:127:ILE:HG22	1:A:128:ALA:N	1.49	1.14
1:B:83:PHE:CD1	1:B:280:PHE:CD2	2.35	1.14
1:A:26:VAL:CG2	1:A:27:SER:H	1.57	1.14
1:B:163:LEU:HD21	1:B:176:TYR:HD2	1.07	1.14
1:A:142:MET:CB	1:A:153:LYS:HB2	1.78	1.13
1:A:69:ILE:O	1:A:70:GLN:O	1.65	1.13
1:A:42:ILE:CG1	1:A:136:VAL:O	1.95	1.13
1:A:193:ILE:HB	1:A:194:PRO:CD	1.76	1.13
1:B:193:ILE:HB	1:B:194:PRO:CD	1.76	1.13
1:A:139:LEU:CB	1:A:155:ILE:HG21	1.78	1.13
1:B:4:THR:HB	1:B:19:ILE:HA	1.29	1.13
1:A:42:ILE:CD1	1:A:159:ILE:CD1	2.25	1.13
1:A:42:ILE:CG1	1:A:43:PHE:N	2.04	1.13
1:A:190:ILE:CA	1:A:193:ILE:HG13	1.76	1.13
1:B:42:ILE:CG1	1:B:136:VAL:O	1.95	1.13
1:B:7:ILE:O	1:B:8:GLY:O	1.65	1.13
1:A:7:ILE:O	1:A:8:GLY:O	1.65	1.13
1:B:142:MET:CE	1:B:202:PHE:CE1	2.32	1.12
1:B:139:LEU:CB	1:B:155:ILE:HG21	1.78	1.12

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:135:GLU:O	1:A:136:VAL:HB	1.49	1.12
1:A:142:MET:HE3	1:A:202:PHE:CZ	1.80	1.12
1:A:142:MET:CE	1:A:202:PHE:CE1	2.32	1.12
1:B:42:ILE:CD1	1:B:159:ILE:CD1	2.25	1.12
1:A:174:GLU:O	1:A:178:PRO:HB3	0.96	1.12
1:B:95:PHE:CE2	1:B:218:ILE:CD1	2.33	1.12
1:A:225:TRP:CZ3	1:A:226:LYS:HG2	1.85	1.11
1:B:51:ARG:HG2	1:B:89:ILE:HA	1.26	1.11
1:B:142:MET:CB	1:B:153:LYS:HB2	1.78	1.11
1:A:7:ILE:O	1:A:7:ILE:HG22	1.30	1.11
1:B:222:HIS:NE2	1:B:226:LYS:HE2	1.46	1.11
1:A:95:PHE:CE2	1:A:218:ILE:CD1	2.33	1.11
1:B:42:ILE:CG1	1:B:43:PHE:N	2.04	1.11
1:B:5:ARG:HB3	1:B:263:ALA:HB2	1.20	1.11
1:A:42:ILE:CD1	1:A:159:ILE:HD11	1.81	1.11
1:A:26:VAL:O	1:A:64:THR:HG21	1.51	1.11
1:A:4:THR:HB	1:A:19:ILE:HA	1.28	1.11
1:A:190:ILE:HA	1:A:193:ILE:HG13	1.11	1.11
1:A:200:ASN:O	1:A:201:GLN:HG3	1.49	1.11
1:B:275:ILE:O	1:B:277:LYS:N	1.84	1.11
1:B:42:ILE:CD1	1:B:159:ILE:HD11	1.81	1.10
1:A:97:GLN:OE1	1:A:222:HIS:HE1	1.30	1.10
1:A:275:ILE:O	1:A:277:LYS:N	1.84	1.10
1:A:68:ILE:HG22	1:A:69:ILE:H	1.14	1.10
1:B:127:ILE:CG2	1:B:128:ALA:H	1.63	1.10
1:B:57:LEU:HA	1:B:68:ILE:O	0.94	1.10
1:B:144:LEU:CD2	1:B:153:LYS:HD3	1.81	1.10
1:A:127:ILE:CG2	1:A:128:ALA:H	1.64	1.10
1:B:200:ASN:O	1:B:201:GLN:HG3	1.49	1.10
1:B:68:ILE:HG22	1:B:69:ILE:H	1.14	1.10
1:B:7:ILE:HB	1:B:16:LYS:O	1.47	1.10
1:A:13:LEU:HD23	1:A:76:LEU:HD11	1.26	1.10
1:A:57:LEU:HA	1:A:68:ILE:O	0.94	1.10
1:A:9:ALA:HB1	1:A:15:TYR:HB2	1.21	1.10
1:B:103:ASN:O	1:B:104:VAL:HB	1.37	1.10
1:A:222:HIS:NE2	1:A:226:LYS:HE2	1.46	1.10
1:A:103:ASN:O	1:A:104:VAL:HB	1.37	1.09
1:B:38:LYS:HG2	1:B:41:ASN:HB2	1.33	1.09
1:B:26:VAL:O	1:B:64:THR:HG21	1.51	1.09
1:A:19:ILE:CD1	1:A:26:VAL:CG1	2.12	1.09
1:B:69:ILE:O	1:B:70:GLN:O	1.65	1.09
1:B:191:TYR:CE2	1:B:192:LYS:CG	2.36	1.09

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:7:ILE:HG21	1:B:16:LYS:H	1.02	1.09
1:B:97:GLN:OE1	1:B:222:HIS:HE1	1.30	1.09
1:B:225:TRP:CZ3	1:B:226:LYS:HG2	1.85	1.09
1:A:142:MET:HE3	1:A:202:PHE:CE1	1.85	1.09
1:B:127:ILE:HG22	1:B:128:ALA:N	1.49	1.09
1:B:190:ILE:HA	1:B:193:ILE:HG13	1.11	1.09
1:A:45:MET:HE1	1:A:120:VAL:HG12	1.31	1.09
1:A:42:ILE:HD12	1:A:159:ILE:HD12	1.13	1.09
1:B:26:VAL:HG22	1:B:27:SER:N	1.62	1.09
1:B:96:PRO:O	1:B:97:GLN:HB2	1.52	1.09
1:B:13:LEU:HD23	1:B:76:LEU:HD11	1.26	1.08
1:B:49:ILE:HD11	1:B:92:TYR:HD1	0.94	1.08
1:A:144:LEU:CD2	1:A:153:LYS:HD3	1.81	1.08
1:B:13:LEU:HD23	1:B:76:LEU:CD1	1.82	1.08
1:B:98:THR:CG2	1:B:221:THR:O	2.01	1.08
1:B:42:ILE:HG12	1:B:43:PHE:N	1.14	1.08
1:A:13:LEU:HD23	1:A:76:LEU:CD1	1.82	1.08
1:A:191:TYR:CE2	1:A:192:LYS:CG	2.36	1.08
1:A:4:THR:CB	1:A:19:ILE:HA	1.83	1.08
1:A:51:ARG:HH11	1:A:51:ARG:HB3	1.03	1.08
1:A:163:LEU:CD2	1:A:176:TYR:CD2	2.36	1.08
1:B:164:ALA:HB3	1:B:165:PRO:HD3	1.26	1.08
1:A:98:THR:CG2	1:A:221:THR:O	2.01	1.08
1:A:49:ILE:HD11	1:A:92:TYR:HD1	0.95	1.08
1:B:51:ARG:HB3	1:B:51:ARG:HH11	1.03	1.08
1:B:163:LEU:CD2	1:B:176:TYR:CD2	2.36	1.08
1:B:191:TYR:CE2	1:B:192:LYS:HG2	1.88	1.08
1:B:19:ILE:CD1	1:B:26:VAL:CG1	2.12	1.07
1:B:4:THR:CB	1:B:19:ILE:HA	1.83	1.07
1:B:29:PHE:CZ	1:B:99:TRP:HD1	1.73	1.07
1:B:42:ILE:HD12	1:B:159:ILE:HD12	1.14	1.07
1:B:12:THR:O	1:B:13:LEU:HG	1.55	1.07
1:A:91:ASN:O	1:A:92:TYR:HB2	1.51	1.07
1:A:96:PRO:O	1:A:97:GLN:HB2	1.53	1.07
1:B:135:GLU:O	1:B:136:VAL:HB	1.49	1.07
1:B:91:ASN:O	1:B:92:TYR:HB2	1.51	1.07
1:A:26:VAL:HG22	1:A:27:SER:N	1.62	1.06
1:B:1:THR:N	1:B:133:VAL:HG11	1.70	1.06
1:A:191:TYR:CE2	1:A:192:LYS:HG2	1.88	1.06
1:A:9:ALA:O	1:A:10:LYS:HB2	1.50	1.06
1:B:190:ILE:HA	1:B:193:ILE:HG12	1.35	1.06
1:B:7:ILE:HG22	1:B:7:ILE:O	1.30	1.06

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:12:THR:O	1:A:13:LEU:HG	1.55	1.06
1:A:190:ILE:HA	1:A:193:ILE:HG12	1.35	1.06
1:B:42:ILE:HG21	1:B:137:LYS:HG2	1.07	1.06
1:A:125:GLU:OE2	1:B:277:LYS:HE3	1.50	1.06
1:A:1:THR:N	1:A:133:VAL:HG11	1.70	1.05
1:A:136:VAL:HA	1:A:159:ILE:HG13	1.36	1.05
1:B:144:LEU:HD21	1:B:153:LYS:HD3	1.07	1.05
1:A:38:LYS:HG2	1:A:41:ASN:HB2	1.33	1.05
1:A:51:ARG:HH11	1:A:51:ARG:CB	1.70	1.05
1:A:192:LYS:HD3	1:A:197:LYS:HD3	1.37	1.05
1:B:27:SER:HB2	1:B:64:THR:HG23	1.35	1.05
1:A:34:LEU:O	1:A:43:PHE:CB	2.04	1.05
1:B:27:SER:HA	1:B:64:THR:HG23	1.15	1.05
1:B:51:ARG:CB	1:B:51:ARG:HH11	1.70	1.05
1:A:29:PHE:CZ	1:A:99:TRP:HD1	1.73	1.05
1:A:65:LEU:O	1:A:66:ASN:ND2	1.90	1.05
1:A:277:LYS:HE3	1:B:125:GLU:OE2	1.50	1.04
1:B:65:LEU:O	1:B:66:ASN:ND2	1.90	1.04
1:B:45:MET:HE1	1:B:120:VAL:HG12	1.39	1.04
1:B:9:ALA:O	1:B:10:LYS:HB2	1.50	1.04
1:B:51:ARG:HG3	1:B:90:HIS:H	1.21	1.04
1:A:83:PHE:HD1	1:A:280:PHE:CD2	1.74	1.04
1:B:34:LEU:O	1:B:43:PHE:CB	2.04	1.04
1:B:155:ILE:O	1:B:155:ILE:HG22	1.56	1.04
1:A:144:LEU:HD21	1:A:153:LYS:HD3	1.07	1.04
1:B:136:VAL:HA	1:B:159:ILE:HG13	1.36	1.04
1:A:49:ILE:O	1:A:91:ASN:O	1.77	1.03
1:A:95:PHE:CD2	1:A:218:ILE:HD11	1.93	1.03
1:B:129:TYR:HB2	1:B:132:GLN:OE1	1.13	1.03
1:B:192:LYS:HB3	1:B:197:LYS:HB2	1.05	1.03
1:B:56:LYS:NZ	1:B:70:GLN:OE1	1.91	1.03
1:A:191:TYR:CD2	1:A:192:LYS:HG3	1.94	1.03
1:A:192:LYS:HB3	1:A:197:LYS:HB2	1.05	1.03
1:A:1:THR:O	1:A:2:TYR:HB2	1.56	1.03
1:A:26:VAL:HG22	1:A:27:SER:H	0.88	1.03
1:A:56:LYS:NZ	1:A:70:GLN:OE1	1.91	1.03
1:B:1:THR:O	1:B:2:TYR:HB2	1.56	1.03
1:A:42:ILE:HG21	1:A:137:LYS:HG2	1.07	1.03
1:B:123:ILE:O	1:B:123:ILE:CG1	2.07	1.03
1:B:192:LYS:HD3	1:B:197:LYS:HD3	1.37	1.02
1:A:27:SER:HB2	1:A:64:THR:HG23	1.35	1.02
1:B:222:HIS:CD2	1:B:226:LYS:HE3	1.93	1.02

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:222:HIS:CD2	1:A:226:LYS:HE3	1.93	1.02
1:A:13:LEU:CD2	1:A:76:LEU:CD1	2.37	1.02
1:A:50:PRO:HB3	1:A:128:ALA:HB3	1.39	1.02
1:B:7:ILE:CG2	1:B:16:LYS:N	2.22	1.02
1:B:80:ARG:HG3	1:B:194:PRO:HB2	1.42	1.02
1:B:95:PHE:CD2	1:B:218:ILE:HD11	1.93	1.02
1:B:42:ILE:HD12	1:B:159:ILE:HD11	1.03	1.02
1:A:136:VAL:CG1	1:A:156:ALA:HB1	1.90	1.01
1:A:48:GLU:O	1:A:49:ILE:HG12	1.59	1.01
1:B:142:MET:HB3	1:B:153:LYS:HB2	1.42	1.01
1:A:80:ARG:HG3	1:A:194:PRO:HB2	1.42	1.01
1:A:51:ARG:HG3	1:A:90:HIS:H	1.21	1.01
1:A:204:PHE:O	1:A:206:GLY:N	1.93	1.01
1:A:42:ILE:HD12	1:A:159:ILE:HD11	1.03	1.01
1:B:137:LYS:HG3	1:B:159:ILE:HG12	1.40	1.01
1:B:13:LEU:CD2	1:B:76:LEU:CD1	2.37	1.01
1:B:50:PRO:HB3	1:B:128:ALA:HB3	1.39	1.01
1:B:57:LEU:HD13	1:B:57:LEU:N	1.74	1.01
1:B:49:ILE:O	1:B:91:ASN:O	1.76	1.01
1:A:137:LYS:HG3	1:A:159:ILE:HG12	1.40	1.01
1:B:244:VAL:HA	1:B:252:TYR:CD1	1.96	1.01
1:A:200:ASN:O	1:A:201:GLN:CG	2.08	1.01
1:B:191:TYR:CD2	1:B:192:LYS:HG3	1.94	1.01
1:B:26:VAL:HG22	1:B:27:SER:H	0.88	1.01
1:A:125:GLU:OE2	1:B:277:LYS:HE2	1.58	1.01
1:B:48:GLU:O	1:B:49:ILE:HG12	1.59	1.01
1:A:155:ILE:O	1:A:155:ILE:HG22	1.56	1.01
1:B:23:GLY:O	1:B:24:LYS:HG3	0.83	1.01
1:A:244:VAL:HA	1:A:252:TYR:CD1	1.96	1.00
1:A:7:ILE:CG2	1:A:16:LYS:N	2.22	1.00
1:A:71:ASN:O	1:A:72:THR:OG1	1.79	1.00
1:A:62:GLU:O	1:A:63:GLU:HB2	1.60	1.00
1:B:136:VAL:CG1	1:B:156:ALA:HB1	1.90	1.00
1:A:139:LEU:CB	1:A:155:ILE:CG2	2.37	1.00
1:A:23:GLY:O	1:A:24:LYS:HG3	0.83	1.00
1:B:83:PHE:HD1	1:B:280:PHE:CD2	1.74	1.00
1:A:123:ILE:CG1	1:A:123:ILE:O	2.07	1.00
1:A:109:THR:HG23	1:A:150:THR:OG1	1.61	1.00
1:A:84:PRO:O	1:A:85:HIS:CG	2.15	1.00
1:B:9:ALA:CB	1:B:15:TYR:CA	2.39	1.00
1:B:109:THR:HG23	1:B:150:THR:OG1	1.61	1.00
1:A:129:TYR:HB2	1:A:132:GLN:OE1	1.13	1.00

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:158:ASP:O	1:B:161:ASP:N	1.95	1.00
1:B:200:ASN:O	1:B:201:GLN:CG	2.08	1.00
1:B:84:PRO:O	1:B:85:HIS:CG	2.15	1.00
1:B:139:LEU:CB	1:B:155:ILE:CG2	2.37	1.00
1:A:277:LYS:HE2	1:B:125:GLU:OE2	1.58	0.99
1:A:129:TYR:CB	1:A:132:GLN:OE1	2.10	0.99
1:A:142:MET:HB3	1:A:153:LYS:HB2	1.42	0.99
1:A:172:ASP:O	1:A:174:GLU:N	1.95	0.99
1:B:90:HIS:O	1:B:91:ASN:HB2	1.60	0.99
1:B:204:PHE:O	1:B:206:GLY:N	1.93	0.99
1:A:17:VAL:HG21	1:A:67:PRO:HG2	1.43	0.99
1:B:129:TYR:CB	1:B:132:GLN:OE1	2.10	0.99
1:B:5:ARG:HH11	1:B:260:ILE:HG21	1.17	0.99
1:A:9:ALA:CB	1:A:15:TYR:CA	2.39	0.99
1:A:90:HIS:O	1:A:91:ASN:HB2	1.60	0.99
1:B:115:ASN:O	1:B:116:ASN:O	1.81	0.99
1:B:68:ILE:HG22	1:B:69:ILE:N	1.75	0.99
1:A:158:ASP:O	1:A:161:ASP:N	1.95	0.99
1:A:163:LEU:HD23	1:A:176:TYR:CD2	1.98	0.99
1:A:80:ARG:CD	1:A:279:PHE:CE1	2.46	0.99
1:B:62:GLU:O	1:B:63:GLU:HB2	1.60	0.99
1:B:110:LYS:C	1:B:112:VAL:H	1.66	0.99
1:A:29:PHE:HZ	1:A:99:TRP:CD1	1.81	0.98
1:B:71:ASN:O	1:B:72:THR:OG1	1.79	0.98
1:A:69:ILE:HG21	1:A:76:LEU:HB3	1.45	0.98
1:B:29:PHE:HZ	1:B:99:TRP:CD1	1.81	0.98
1:B:172:ASP:O	1:B:174:GLU:N	1.95	0.98
1:A:57:LEU:N	1:A:57:LEU:HD13	1.74	0.98
1:B:98:THR:HG23	1:B:221:THR:CA	1.93	0.98
1:A:115:ASN:O	1:A:116:ASN:O	1.81	0.98
1:B:105:SER:HB2	1:B:109:THR:HG22	1.44	0.98
1:B:42:ILE:HG21	1:B:137:LYS:CG	1.94	0.98
1:B:17:VAL:HG21	1:B:67:PRO:HG2	1.43	0.98
1:A:105:SER:HB2	1:A:109:THR:HG22	1.44	0.97
1:A:146:ASP:HB2	1:A:192:LYS:HZ1	1.27	0.97
1:A:98:THR:HG23	1:A:221:THR:CA	1.93	0.97
1:A:42:ILE:HG21	1:A:137:LYS:CG	1.94	0.97
1:B:80:ARG:CD	1:B:279:PHE:CE1	2.46	0.97
1:B:69:ILE:HG21	1:B:76:LEU:HB3	1.45	0.97
1:A:1:THR:OG1	1:A:32:ILE:CD1	2.13	0.97
1:A:244:VAL:HA	1:A:252:TYR:HD1	1.27	0.97
1:A:36:ALA:O	1:A:37:ASP:HB2	1.64	0.97

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:7:ILE:HG21	1:A:16:LYS:N	1.80	0.97
1:B:127:ILE:HG22	1:B:128:ALA:H	1.08	0.97
1:A:122:GLN:NE2	1:A:124:GLY:HA3	1.79	0.96
1:B:163:LEU:HD21	1:B:176:TYR:CD2	1.99	0.96
1:B:123:ILE:HD12	1:B:177:PHE:CD2	1.94	0.96
1:A:123:ILE:HD12	1:A:177:PHE:CD2	1.94	0.96
1:A:13:LEU:HD21	1:A:76:LEU:HD13	1.46	0.96
1:A:105:SER:HB2	1:A:112:VAL:HA	1.44	0.96
1:A:158:ASP:CG	1:A:160:ASN:HD21	1.68	0.96
1:A:53:THR:H	1:A:88:TYR:H	1.09	0.96
1:B:105:SER:HB2	1:B:112:VAL:HA	1.44	0.96
1:B:244:VAL:HA	1:B:252:TYR:HD1	1.27	0.96
1:A:277:LYS:CG	1:B:125:GLU:OE2	2.13	0.96
1:B:134:LYS:HE3	1:B:158:ASP:OD1	1.65	0.96
1:A:139:LEU:HB2	1:A:155:ILE:HG22	1.48	0.96
1:B:163:LEU:HD23	1:B:176:TYR:CD2	1.98	0.96
1:A:5:ARG:HH12	1:A:260:ILE:CB	1.79	0.96
1:A:142:MET:HE2	1:A:202:PHE:CZ	1.97	0.96
1:A:209:LYS:HG3	1:A:213:TYR:CD2	2.00	0.96
1:A:59:ILE:HG22	1:A:66:ASN:C	1.85	0.96
1:A:68:ILE:HG22	1:A:69:ILE:N	1.75	0.96
1:B:209:LYS:HG3	1:B:213:TYR:CD2	2.00	0.96
1:B:51:ARG:CB	1:B:51:ARG:NH1	2.28	0.96
1:A:125:GLU:OE2	1:B:277:LYS:CG	2.13	0.96
1:B:67:PRO:O	1:B:68:ILE:HG12	1.65	0.96
1:B:142:MET:HE2	1:B:202:PHE:CZ	2.01	0.96
1:B:32:ILE:O	1:B:97:GLN:CG	2.14	0.96
1:A:98:THR:CG2	1:A:221:THR:CA	2.44	0.95
1:A:80:ARG:HH11	1:A:279:PHE:HE1	1.14	0.95
1:B:122:GLN:NE2	1:B:124:GLY:HA3	1.79	0.95
1:B:158:ASP:CG	1:B:160:ASN:HD21	1.68	0.95
1:B:83:PHE:CE1	1:B:280:PHE:HE2	1.81	0.95
1:B:59:ILE:HG22	1:B:66:ASN:C	1.85	0.95
1:B:98:THR:CG2	1:B:221:THR:CA	2.44	0.95
1:A:51:ARG:NH1	1:A:51:ARG:CB	2.28	0.95
1:B:192:LYS:CB	1:B:197:LYS:HB2	1.96	0.95
1:B:80:ARG:HH11	1:B:279:PHE:HE1	1.14	0.95
1:A:163:LEU:HD21	1:A:176:TYR:CD2	1.99	0.95
1:A:9:ALA:HB3	1:A:15:TYR:CA	1.96	0.95
1:B:1:THR:OG1	1:B:32:ILE:CD1	2.13	0.95
1:B:13:LEU:HD21	1:B:76:LEU:HD13	1.46	0.95
1:B:146:ASP:HB2	1:B:192:LYS:HZ1	1.27	0.95

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1:THR:H1	1:A:133:VAL:HG11	1.28	0.95
1:A:8:GLY:HA3	1:A:266:LYS:HG3	1.49	0.95
1:B:5:ARG:HH12	1:B:260:ILE:CB	1.79	0.94
1:A:134:LYS:HE3	1:A:158:ASP:OD1	1.65	0.94
1:A:192:LYS:CB	1:A:197:LYS:HB2	1.97	0.94
1:A:98:THR:HG21	1:A:221:THR:OG1	0.77	0.94
1:B:139:LEU:HB2	1:B:155:ILE:HG22	1.48	0.94
1:B:1:THR:HG21	1:B:19:ILE:HD12	0.95	0.94
1:A:110:LYS:C	1:A:112:VAL:H	1.66	0.94
1:A:144:LEU:HG	1:A:151:ASP:HB3	1.46	0.94
1:B:98:THR:HG21	1:B:221:THR:OG1	0.77	0.94
1:A:25:PRO:CG	1:A:257:SER:HB3	1.98	0.94
1:A:67:PRO:O	1:A:68:ILE:HG12	1.66	0.94
1:B:144:LEU:HG	1:B:151:ASP:HB3	1.46	0.94
1:A:32:ILE:O	1:A:97:GLN:CG	2.14	0.94
1:B:271:ILE:HB	1:B:275:ILE:HD11	1.50	0.94
1:B:30:HIS:NE2	1:B:241:LEU:HA	1.83	0.94
1:B:136:VAL:CA	1:B:159:ILE:HG13	1.96	0.93
1:B:225:TRP:HZ3	1:B:226:LYS:HG2	1.25	0.93
1:B:25:PRO:CG	1:B:257:SER:HB3	1.98	0.93
1:B:36:ALA:O	1:B:37:ASP:HB2	1.64	0.93
1:B:19:ILE:HD12	1:B:26:VAL:HG11	1.49	0.93
1:B:50:PRO:O	1:B:53:THR:OG1	1.86	0.93
1:B:13:LEU:CD2	1:B:76:LEU:HD11	1.97	0.93
1:A:136:VAL:CA	1:A:159:ILE:HG13	1.96	0.93
1:A:271:ILE:HB	1:A:275:ILE:HD11	1.50	0.93
1:A:38:LYS:CB	1:A:41:ASN:HB2	1.99	0.93
1:A:50:PRO:O	1:A:53:THR:OG1	1.86	0.93
1:B:7:ILE:HG21	1:B:16:LYS:N	1.80	0.93
1:B:9:ALA:HB3	1:B:15:TYR:CA	1.96	0.93
1:A:13:LEU:CD2	1:A:76:LEU:HD11	1.97	0.93
1:B:179:GLY:O	1:B:183:ALA:HB2	1.69	0.93
1:B:190:ILE:CA	1:B:193:ILE:HG12	1.90	0.93
1:B:32:ILE:CG2	1:B:96:PRO:HG2	1.99	0.93
1:A:105:SER:CB	1:A:112:VAL:CA	2.29	0.93
1:A:142:MET:HE2	1:A:202:PHE:CE1	2.01	0.92
1:A:30:HIS:NE2	1:A:241:LEU:HA	1.83	0.92
1:A:5:ARG:HH11	1:A:260:ILE:HG21	1.17	0.92
1:B:105:SER:CB	1:B:112:VAL:CA	2.29	0.92
1:B:188:PHE:O	1:B:191:TYR:HB3	1.69	0.92
1:A:1:THR:HG21	1:A:19:ILE:HD12	0.95	0.92
1:A:38:LYS:O	1:A:41:ASN:N	2.02	0.92

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:164:ALA:CB	1:B:165:PRO:CD	2.47	0.92
1:B:38:LYS:O	1:B:41:ASN:N	2.02	0.92
1:A:13:LEU:CD2	1:A:76:LEU:HD13	1.97	0.92
1:A:188:PHE:O	1:A:191:TYR:HB3	1.69	0.92
1:B:82:CYS:SG	1:B:190:ILE:CG1	2.57	0.92
1:A:42:ILE:HB	1:A:137:LYS:HA	1.52	0.92
1:A:89:ILE:O	1:A:90:HIS:HB2	1.69	0.92
1:A:142:MET:CE	1:A:202:PHE:HZ	1.81	0.92
1:B:13:LEU:CD2	1:B:76:LEU:HD13	1.97	0.92
1:B:8:GLY:HA3	1:B:266:LYS:HG3	1.49	0.92
1:B:139:LEU:HB2	1:B:155:ILE:HG21	0.93	0.92
1:A:51:ARG:HB3	1:A:51:ARG:NH1	1.83	0.92
1:A:46:VAL:O	1:A:93:GLY:HA2	1.70	0.92
1:A:97:GLN:HB3	1:A:222:HIS:HD1	1.33	0.92
1:B:42:ILE:HB	1:B:137:LYS:HA	1.52	0.92
1:A:82:CYS:SG	1:A:190:ILE:CG1	2.57	0.92
1:A:83:PHE:CE1	1:A:280:PHE:HE2	1.81	0.92
1:B:29:PHE:HZ	1:B:99:TRP:HD1	1.09	0.92
1:A:225:TRP:HZ3	1:A:226:LYS:HG2	1.25	0.92
1:A:32:ILE:CG2	1:A:96:PRO:HG2	1.99	0.92
1:B:38:LYS:CB	1:B:41:ASN:HB2	1.99	0.92
1:A:190:ILE:O	1:A:194:PRO:HD2	1.70	0.92
1:A:58:GLU:HG3	1:A:70:GLN:HE21	1.29	0.92
1:A:41:ASN:HD21	1:A:137:LYS:HE2	1.36	0.91
1:A:222:HIS:CD2	1:A:226:LYS:HG3	2.05	0.91
1:A:29:PHE:HZ	1:A:99:TRP:HD1	1.09	0.91
1:A:64:THR:C	1:A:65:LEU:HD22	1.91	0.91
1:B:6:GLN:OE1	1:B:265:PRO:HB3	1.70	0.91
1:B:58:GLU:HG3	1:B:70:GLN:HE21	1.29	0.91
1:A:6:GLN:OE1	1:A:265:PRO:HB3	1.70	0.91
1:B:241:LEU:O	1:B:243:ASN:OD1	1.88	0.91
1:B:53:THR:H	1:B:88:TYR:H	1.09	0.91
1:A:171:GLU:O	1:A:172:ASP:O	1.89	0.91
1:B:64:THR:C	1:B:65:LEU:HD22	1.91	0.91
1:A:139:LEU:HB2	1:A:155:ILE:HG21	0.93	0.91
1:A:242:THR:HA	1:A:251:THR:HB	1.53	0.91
1:B:109:THR:HG23	1:B:150:THR:HG1	1.32	0.91
1:B:190:ILE:O	1:B:194:PRO:HD2	1.70	0.91
1:B:41:ASN:HD21	1:B:137:LYS:HE2	1.36	0.91
1:A:6:GLN:OE1	1:A:265:PRO:CB	2.19	0.91
1:A:80:ARG:HD2	1:A:279:PHE:CD1	2.05	0.91
1:B:222:HIS:CD2	1:B:226:LYS:HG3	2.05	0.91

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:242:THR:HA	1:B:251:THR:HB	1.53	0.91
1:A:179:GLY:O	1:A:183:ALA:HB2	1.69	0.91
1:A:42:ILE:HG21	1:A:159:ILE:CD1	2.01	0.91
1:B:46:VAL:O	1:B:93:GLY:HA2	1.69	0.91
1:A:59:ILE:HG22	1:A:67:PRO:CA	2.00	0.91
1:B:123:ILE:HD11	1:B:177:PHE:HE2	1.09	0.91
1:A:164:ALA:CB	1:A:165:PRO:CD	2.47	0.90
1:A:19:ILE:HD12	1:A:26:VAL:HG11	1.49	0.90
1:A:42:ILE:CD1	1:A:159:ILE:HD12	1.96	0.90
1:B:97:GLN:HB3	1:B:222:HIS:HD1	1.33	0.90
1:B:51:ARG:NH1	1:B:51:ARG:HB3	1.82	0.90
1:B:136:VAL:HG11	1:B:156:ALA:HB1	1.53	0.90
1:B:6:GLN:OE1	1:B:265:PRO:CB	2.19	0.90
1:B:80:ARG:HD2	1:B:279:PHE:CD1	2.05	0.90
1:A:123:ILE:HD11	1:A:177:PHE:HE2	1.09	0.90
1:A:190:ILE:CA	1:A:193:ILE:HG12	1.90	0.90
1:B:42:ILE:HG21	1:B:159:ILE:CD1	2.01	0.90
1:A:146:ASP:OD1	1:A:147:GLU:CD	2.10	0.90
1:A:241:LEU:O	1:A:243:ASN:OD1	1.88	0.90
1:B:200:ASN:C	1:B:201:GLN:HG3	1.91	0.90
1:B:163:LEU:HD22	1:B:177:PHE:CZ	2.07	0.90
1:B:25:PRO:HG2	1:B:257:SER:CB	2.02	0.90
1:B:59:ILE:HG22	1:B:67:PRO:CA	2.01	0.90
1:A:56:LYS:C	1:A:57:LEU:HD13	1.92	0.89
1:B:166:LYS:HD3	1:B:176:TYR:HE2	1.37	0.89
1:B:98:THR:CG2	1:B:221:THR:CB	2.39	0.89
1:B:45:MET:HE2	1:B:120:VAL:HG11	1.53	0.89
1:B:171:GLU:O	1:B:172:ASP:O	1.89	0.89
1:B:38:LYS:O	1:B:40:ASP:N	2.05	0.89
1:B:56:LYS:C	1:B:57:LEU:HD13	1.92	0.89
1:B:89:ILE:O	1:B:90:HIS:HB2	1.69	0.89
1:A:204:PHE:C	1:A:206:GLY:H	1.76	0.89
1:A:222:HIS:CE1	1:A:226:LYS:HE2	2.07	0.89
1:B:1:THR:H1	1:B:133:VAL:HG11	1.26	0.89
1:B:191:TYR:CE2	1:B:192:LYS:HG3	2.06	0.89
1:A:244:VAL:HB	1:A:254:LYS:HA	1.52	0.89
1:A:25:PRO:HG2	1:A:257:SER:CB	2.02	0.89
1:B:29:PHE:CZ	1:B:99:TRP:CD1	2.59	0.89
1:A:105:SER:H	1:A:112:VAL:HG12	1.38	0.89
1:A:166:LYS:HD3	1:A:176:TYR:HE2	1.37	0.89
1:A:29:PHE:CE1	1:A:225:TRP:HD1	1.91	0.89
1:A:38:LYS:O	1:A:40:ASP:N	2.05	0.89

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:244:VAL:HB	1:B:254:LYS:HA	1.52	0.89
1:B:42:ILE:CD1	1:B:159:ILE:HD12	1.95	0.89
1:B:146:ASP:OD1	1:B:147:GLU:CD	2.10	0.89
1:B:158:ASP:O	1:B:160:ASN:N	2.06	0.89
1:B:222:HIS:CE1	1:B:226:LYS:HE2	2.07	0.89
1:B:59:ILE:CG2	1:B:67:PRO:N	2.35	0.89
1:A:127:ILE:HG22	1:A:128:ALA:H	1.08	0.89
1:A:136:VAL:HG11	1:A:156:ALA:HB1	1.53	0.89
1:A:271:ILE:HB	1:A:275:ILE:CD1	2.02	0.89
1:A:144:LEU:HD21	1:A:153:LYS:CD	2.02	0.88
1:A:163:LEU:HD22	1:A:177:PHE:CZ	2.07	0.88
1:A:191:TYR:CE2	1:A:192:LYS:HG3	2.06	0.88
1:B:81:ASN:OD1	1:B:87:GLY:HA2	1.73	0.88
1:A:45:MET:HE1	1:A:120:VAL:CG1	2.03	0.88
1:B:238:GLY:O	1:B:239:ILE:HG23	1.74	0.88
1:A:30:HIS:HE2	1:A:241:LEU:HA	1.38	0.88
1:B:193:ILE:CB	1:B:194:PRO:CD	2.52	0.88
1:B:29:PHE:CE1	1:B:225:TRP:HD1	1.91	0.88
1:B:83:PHE:O	1:B:278:TRP:NE1	2.06	0.88
1:B:204:PHE:C	1:B:206:GLY:H	1.76	0.88
1:A:193:ILE:CB	1:A:194:PRO:CD	2.52	0.88
1:A:81:ASN:OD1	1:A:87:GLY:HA2	1.73	0.88
1:B:71:ASN:O	1:B:72:THR:CB	2.22	0.88
1:B:271:ILE:HB	1:B:275:ILE:CD1	2.02	0.88
1:B:80:ARG:CD	1:B:279:PHE:CD1	2.57	0.88
1:A:230:ALA:HB3	1:A:233:SER:OG	1.72	0.88
1:A:10:LYS:H	1:A:15:TYR:HB2	1.33	0.88
1:B:10:LYS:H	1:B:15:TYR:HB2	1.33	0.88
1:A:238:GLY:O	1:A:239:ILE:HG23	1.74	0.88
1:B:95:PHE:HE2	1:B:218:ILE:CD1	1.77	0.88
1:A:51:ARG:CG	1:A:90:HIS:H	1.86	0.87
1:B:30:HIS:HE2	1:B:241:LEU:HA	1.38	0.87
1:A:80:ARG:CD	1:A:279:PHE:CD1	2.57	0.87
1:B:1:THR:OG1	1:B:32:ILE:HD11	1.74	0.87
1:B:54:ASN:O	1:B:79:VAL:N	2.07	0.87
1:B:163:LEU:HD23	1:B:167:LEU:HD11	1.57	0.87
1:B:51:ARG:CG	1:B:90:HIS:H	1.86	0.87
1:A:200:ASN:C	1:A:201:GLN:HG3	1.91	0.87
1:A:54:ASN:O	1:A:79:VAL:N	2.07	0.87
1:B:230:ALA:HB3	1:B:233:SER:OG	1.73	0.87
1:B:29:PHE:HE1	1:B:98:THR:O	1.57	0.87
1:B:51:ARG:HG2	1:B:89:ILE:CA	2.04	0.87

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:12:THR:O	1:A:13:LEU:CG	2.22	0.87
1:A:163:LEU:HD23	1:A:167:LEU:HD11	1.57	0.87
1:A:83:PHE:O	1:A:278:TRP:NE1	2.06	0.87
1:B:105:SER:H	1:B:112:VAL:HG12	1.38	0.87
1:B:12:THR:O	1:B:13:LEU:CG	2.22	0.87
1:A:123:ILE:HG12	1:A:123:ILE:O	1.74	0.87
1:A:59:ILE:CG2	1:A:67:PRO:N	2.35	0.87
1:B:42:ILE:HG21	1:B:159:ILE:HD11	1.57	0.87
1:A:158:ASP:O	1:A:160:ASN:N	2.06	0.87
1:B:182:ARG:HD3	1:B:185:ASP:OD2	1.74	0.87
1:B:32:ILE:HG21	1:B:96:PRO:HG2	1.56	0.87
1:A:51:ARG:HG2	1:A:89:ILE:CA	2.04	0.87
1:A:147:GLU:OE1	1:A:192:LYS:NZ	2.08	0.86
1:A:182:ARG:HD3	1:A:185:ASP:OD2	1.74	0.86
1:A:9:ALA:HB3	1:A:15:TYR:CG	2.09	0.86
1:B:25:PRO:HG2	1:B:257:SER:HB3	1.56	0.86
1:A:10:LYS:O	1:A:11:ASN:CG	2.14	0.86
1:A:23:GLY:C	1:A:24:LYS:HG3	1.96	0.86
1:B:9:ALA:HB3	1:B:15:TYR:CG	2.09	0.86
1:B:109:THR:O	1:B:109:THR:HG22	1.75	0.86
1:B:1:THR:CG2	1:B:26:VAL:HG11	2.06	0.86
1:A:1:THR:CG2	1:A:26:VAL:HG11	2.06	0.86
1:A:33:PRO:O	1:A:34:LEU:HG	1.75	0.86
1:A:218:ILE:C	1:A:221:THR:HG22	1.96	0.86
1:A:25:PRO:HG2	1:A:257:SER:HB3	1.56	0.86
1:B:19:ILE:O	1:B:26:VAL:CG1	2.24	0.86
1:A:109:THR:HG22	1:A:109:THR:O	1.75	0.86
1:A:163:LEU:HA	1:A:166:LYS:HD2	1.58	0.86
1:A:32:ILE:HG21	1:A:96:PRO:HG2	1.56	0.86
1:B:10:LYS:O	1:B:11:ASN:CG	2.14	0.86
1:A:71:ASN:O	1:A:72:THR:CB	2.22	0.86
1:A:10:LYS:H	1:A:15:TYR:CB	1.88	0.85
1:A:192:LYS:HD3	1:A:197:LYS:CD	2.06	0.85
1:A:1:THR:OG1	1:A:32:ILE:HD11	1.74	0.85
1:A:95:PHE:HE2	1:A:218:ILE:CD1	1.77	0.85
1:B:123:ILE:O	1:B:123:ILE:HG12	1.74	0.85
1:B:163:LEU:HA	1:B:166:LYS:HD2	1.57	0.85
1:B:147:GLU:OE1	1:B:192:LYS:NZ	2.08	0.85
1:B:33:PRO:O	1:B:34:LEU:HG	1.76	0.85
1:B:192:LYS:HD3	1:B:197:LYS:CD	2.06	0.85
1:B:23:GLY:C	1:B:24:LYS:HG3	1.96	0.85
1:B:17:VAL:CG2	1:B:67:PRO:HG2	2.07	0.85

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:45:MET:CE	1:A:120:VAL:CG1	2.55	0.85
1:A:17:VAL:CG2	1:A:67:PRO:HG2	2.07	0.85
1:B:56:LYS:HZ3	1:B:70:GLN:HE22	1.23	0.85
1:B:49:ILE:HG13	1:B:92:TYR:HB3	1.58	0.85
1:B:7:ILE:HG23	1:B:7:ILE:O	1.76	0.85
1:B:10:LYS:H	1:B:15:TYR:CB	1.88	0.85
1:A:29:PHE:HE1	1:A:98:THR:O	1.57	0.85
1:B:5:ARG:NH1	1:B:260:ILE:HG22	1.88	0.85
1:B:142:MET:CE	1:B:202:PHE:HZ	1.80	0.84
1:A:19:ILE:O	1:A:26:VAL:CG1	2.24	0.84
1:A:5:ARG:NH1	1:A:260:ILE:HG22	1.88	0.84
1:B:45:MET:CE	1:B:120:VAL:CG1	2.55	0.84
1:B:225:TRP:CE3	1:B:226:LYS:HG2	2.13	0.84
1:B:5:ARG:HB3	1:B:263:ALA:CB	2.05	0.84
1:A:7:ILE:O	1:A:7:ILE:HG23	1.76	0.84
1:B:7:ILE:HG22	1:B:16:LYS:H	1.42	0.84
1:B:19:ILE:HD13	1:B:26:VAL:HG11	0.84	0.84
1:A:94:ALA:HA	1:A:118:ILE:O	1.77	0.84
1:A:57:LEU:HB3	1:A:68:ILE:N	1.93	0.84
1:B:144:LEU:HD21	1:B:153:LYS:CD	2.02	0.84
1:A:214:ALA:O	1:A:217:ILE:HG22	1.77	0.84
1:A:48:GLU:OE2	1:A:93:GLY:O	1.96	0.84
1:B:1:THR:HG22	1:B:19:ILE:HD11	0.84	0.84
1:A:42:ILE:HG21	1:A:159:ILE:HD11	1.57	0.84
1:A:109:THR:HG23	1:A:150:THR:HG1	1.40	0.84
1:B:57:LEU:HB3	1:B:68:ILE:N	1.93	0.84
1:B:94:ALA:HA	1:B:118:ILE:O	1.77	0.84
1:A:10:LYS:CG	1:A:268:ASP:OD2	2.26	0.84
1:A:136:VAL:HG13	1:A:156:ALA:HB1	1.60	0.83
1:A:38:LYS:HB3	1:A:41:ASN:HB2	1.59	0.83
1:A:49:ILE:HG13	1:A:92:TYR:HB3	1.58	0.83
1:A:33:PRO:HA	1:A:97:GLN:CD	1.98	0.83
1:A:29:PHE:CE1	1:A:98:THR:O	2.31	0.83
1:B:29:PHE:CE1	1:B:98:THR:O	2.31	0.83
1:B:38:LYS:HB3	1:B:41:ASN:HB2	1.59	0.83
1:B:81:ASN:O	1:B:82:CYS:O	1.95	0.83
1:A:1:THR:HG22	1:A:19:ILE:HD11	0.84	0.83
1:B:214:ALA:O	1:B:217:ILE:HG22	1.77	0.83
1:B:218:ILE:C	1:B:221:THR:HG22	1.96	0.83
1:B:247:PRO:HA	1:B:252:TYR:CD2	2.13	0.83
1:A:19:ILE:HD13	1:A:26:VAL:HG11	0.84	0.83
1:A:69:ILE:HG22	1:A:69:ILE:O	1.78	0.83

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:56:LYS:HZ3	1:A:70:GLN:HE22	1.24	0.83
1:B:26:VAL:O	1:B:64:THR:CG2	2.26	0.83
1:A:129:TYR:O	1:A:132:GLN:N	2.11	0.83
1:B:122:GLN:HA	1:B:156:ALA:O	1.79	0.83
1:B:48:GLU:OE2	1:B:93:GLY:O	1.96	0.83
1:A:1:THR:O	1:A:2:TYR:CB	2.27	0.83
1:B:200:ASN:O	1:B:201:GLN:CB	2.27	0.83
1:A:3:THR:O	1:A:20:GLU:N	2.11	0.83
1:A:5:ARG:HB3	1:A:263:ALA:CB	2.05	0.83
1:B:109:THR:O	1:B:109:THR:CG2	2.27	0.83
1:A:225:TRP:CE3	1:A:226:LYS:HG2	2.13	0.82
1:A:247:PRO:HA	1:A:252:TYR:CD2	2.13	0.82
1:B:33:PRO:HA	1:B:97:GLN:CD	1.98	0.82
1:B:7:ILE:HG22	1:B:15:TYR:HA	1.59	0.82
1:B:1:THR:O	1:B:2:TYR:CB	2.27	0.82
1:B:3:THR:O	1:B:20:GLU:N	2.11	0.82
1:B:129:TYR:O	1:B:132:GLN:N	2.11	0.82
1:B:53:THR:N	1:B:88:TYR:H	1.77	0.82
1:A:130:THR:O	1:A:130:THR:CG2	2.27	0.82
1:A:7:ILE:HG22	1:A:15:TYR:HA	1.59	0.82
1:A:29:PHE:CZ	1:A:99:TRP:CD1	2.59	0.82
1:A:81:ASN:OD1	1:A:87:GLY:CA	2.27	0.82
1:B:130:THR:CG2	1:B:130:THR:O	2.27	0.82
1:B:136:VAL:HG13	1:B:156:ALA:HB1	1.60	0.82
1:B:190:ILE:HA	1:B:193:ILE:HD11	1.61	0.82
1:B:12:THR:HG23	1:B:269:ALA:HB2	1.61	0.82
1:A:1:THR:OG1	1:A:32:ILE:HD12	1.78	0.82
1:A:57:LEU:N	1:A:57:LEU:CD1	2.43	0.82
1:A:53:THR:N	1:A:88:TYR:H	1.76	0.82
1:A:81:ASN:O	1:A:82:CYS:O	1.95	0.82
1:B:1:THR:OG1	1:B:32:ILE:HD12	1.78	0.82
1:A:12:THR:HG23	1:A:269:ALA:HB2	1.61	0.82
1:B:96:PRO:O	1:B:97:GLN:CB	2.28	0.82
1:A:96:PRO:O	1:A:97:GLN:CB	2.28	0.82
1:A:129:TYR:CD2	1:A:132:GLN:HG3	2.15	0.81
1:A:122:GLN:HA	1:A:156:ALA:O	1.79	0.81
1:B:123:ILE:HG13	1:B:123:ILE:O	1.79	0.81
1:B:81:ASN:OD1	1:B:87:GLY:CA	2.27	0.81
1:A:25:PRO:CD	1:A:257:SER:HB3	2.10	0.81
1:B:10:LYS:CG	1:B:268:ASP:OD2	2.26	0.81
1:B:69:ILE:HG22	1:B:77:ARG:H	1.45	0.81
1:A:182:ARG:HH11	1:A:185:ASP:CB	1.93	0.81

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:157:ILE:CG2	1:B:158:ASP:N	2.43	0.81
1:A:109:THR:CG2	1:A:109:THR:O	2.27	0.81
1:B:142:MET:HE2	1:B:202:PHE:CE1	2.09	0.81
1:B:69:ILE:O	1:B:69:ILE:HG22	1.78	0.81
1:A:103:ASN:HA	1:A:112:VAL:HG11	1.63	0.81
1:B:182:ARG:HH11	1:B:185:ASP:CB	1.93	0.81
1:A:125:GLU:OE2	1:B:277:LYS:HG3	1.81	0.81
1:B:5:ARG:NH2	1:B:25:PRO:CB	2.43	0.81
1:A:74:GLY:C	1:A:75:LYS:HG3	2.00	0.81
1:B:45:MET:CE	1:B:120:VAL:HG12	2.11	0.81
1:B:57:LEU:CD1	1:B:57:LEU:N	2.43	0.81
1:A:190:ILE:HA	1:A:193:ILE:HD11	1.61	0.81
1:B:27:SER:CA	1:B:64:THR:CG2	2.42	0.81
1:A:26:VAL:O	1:A:64:THR:CG2	2.26	0.81
1:B:25:PRO:CD	1:B:257:SER:HB3	2.10	0.81
1:A:157:ILE:CG2	1:A:158:ASP:N	2.43	0.81
1:A:7:ILE:HG22	1:A:16:LYS:H	1.42	0.81
1:A:4:THR:HG22	1:A:19:ILE:HG12	1.61	0.81
1:A:31:ASP:O	1:A:32:ILE:HD13	1.81	0.81
1:B:190:ILE:C	1:B:193:ILE:HG12	2.01	0.81
1:B:192:LYS:CB	1:B:197:LYS:CB	2.56	0.80
1:B:4:THR:HG22	1:B:19:ILE:HG12	1.61	0.80
1:B:67:PRO:C	1:B:68:ILE:HG12	2.01	0.80
1:A:166:LYS:HD3	1:A:176:TYR:CE2	2.15	0.80
1:A:200:ASN:O	1:A:201:GLN:CB	2.27	0.80
1:B:129:TYR:CD2	1:B:132:GLN:HG3	2.15	0.80
1:B:74:GLY:C	1:B:75:LYS:HG3	2.00	0.80
1:A:59:ILE:HA	1:A:66:ASN:O	1.81	0.80
1:B:166:LYS:HD3	1:B:176:TYR:CE2	2.15	0.80
1:B:59:ILE:HA	1:B:66:ASN:O	1.81	0.80
1:B:49:ILE:HD12	1:B:92:TYR:CB	2.11	0.80
1:B:164:ALA:HB3	1:B:165:PRO:HD2	1.64	0.80
1:A:167:LEU:HD21	1:A:177:PHE:CE1	2.17	0.80
1:B:173:VAL:O	1:B:177:PHE:N	2.15	0.80
1:A:173:VAL:O	1:A:177:PHE:N	2.15	0.80
1:A:69:ILE:HG22	1:A:77:ARG:H	1.45	0.80
1:B:130:THR:HG22	1:B:130:THR:O	1.82	0.80
1:B:25:PRO:HD2	1:B:257:SER:HB3	1.62	0.80
1:A:164:ALA:HB3	1:A:165:PRO:HD2	1.64	0.80
1:A:19:ILE:HD11	1:A:26:VAL:HG11	1.60	0.80
1:B:103:ASN:HA	1:B:112:VAL:HG11	1.63	0.80
1:B:182:ARG:HH11	1:B:185:ASP:HB3	1.46	0.80

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:26:VAL:CG2	1:B:27:SER:N	2.30	0.80
1:A:182:ARG:NH1	1:A:185:ASP:HB3	1.97	0.80
1:A:190:ILE:C	1:A:193:ILE:HG12	2.01	0.80
1:A:8:GLY:HA2	1:A:266:LYS:H	1.47	0.80
1:B:31:ASP:O	1:B:32:ILE:HD13	1.81	0.80
1:A:155:ILE:O	1:A:155:ILE:CG2	2.31	0.80
1:A:249:THR:O	1:A:251:THR:N	2.14	0.79
1:A:25:PRO:HD2	1:A:257:SER:HB3	1.63	0.79
1:A:45:MET:HE2	1:A:120:VAL:HG11	1.62	0.79
1:A:51:ARG:NH1	1:A:51:ARG:HB2	1.98	0.79
1:A:123:ILE:O	1:A:123:ILE:HG13	1.79	0.79
1:A:49:ILE:HD12	1:A:92:TYR:CB	2.11	0.79
1:A:5:ARG:NH2	1:A:25:PRO:CB	2.43	0.79
1:A:93:GLY:O	1:A:94:ALA:HB2	1.82	0.79
1:A:130:THR:HG22	1:A:130:THR:O	1.82	0.79
1:A:277:LYS:HG3	1:B:125:GLU:OE2	1.81	0.79
1:B:167:LEU:HD21	1:B:177:PHE:CE1	2.17	0.79
1:B:182:ARG:NH1	1:B:185:ASP:HB3	1.97	0.79
1:A:217:ILE:O	1:A:220:GLU:OE1	2.01	0.79
1:B:56:LYS:HZ3	1:B:70:GLN:NE2	1.80	0.79
1:B:27:SER:HB2	1:B:64:THR:CG2	2.13	0.79
1:A:152:TRP:O	1:A:153:LYS:HD2	1.82	0.79
1:A:67:PRO:C	1:A:68:ILE:HG12	2.01	0.79
1:A:89:ILE:O	1:A:90:HIS:CB	2.29	0.79
1:B:8:GLY:HA2	1:B:266:LYS:H	1.47	0.79
1:A:98:THR:CG2	1:A:221:THR:CB	2.39	0.79
1:B:191:TYR:HE2	1:B:192:LYS:CG	1.95	0.79
1:B:217:ILE:O	1:B:220:GLU:OE1	2.01	0.79
1:B:155:ILE:CG2	1:B:155:ILE:O	2.30	0.79
1:B:152:TRP:O	1:B:153:LYS:HD2	1.82	0.78
1:B:166:LYS:CD	1:B:176:TYR:HE2	1.96	0.78
1:A:164:ALA:CB	1:A:165:PRO:HD3	2.09	0.78
1:B:225:TRP:CZ3	1:B:229:ILE:HD11	2.18	0.78
1:B:249:THR:O	1:B:251:THR:N	2.14	0.78
1:B:68:ILE:CG2	1:B:69:ILE:H	1.95	0.78
1:A:83:PHE:C	1:A:83:PHE:HD2	1.87	0.78
1:B:9:ALA:HB3	1:B:15:TYR:HB2	0.81	0.78
1:B:1:THR:HG23	1:B:26:VAL:HG21	1.65	0.78
1:A:174:GLU:O	1:A:178:PRO:CG	2.32	0.78
1:A:166:LYS:CD	1:A:176:TYR:HE2	1.96	0.78
1:A:225:TRP:CZ3	1:A:229:ILE:HD11	2.18	0.78
1:B:174:GLU:O	1:B:178:PRO:CG	2.32	0.78

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:51:ARG:HB2	1:B:51:ARG:NH1	1.98	0.78
1:B:89:ILE:O	1:B:90:HIS:CB	2.29	0.78
1:A:83:PHE:CD2	1:A:83:PHE:C	2.55	0.78
1:B:83:PHE:HD2	1:B:83:PHE:C	1.87	0.78
1:B:102:PRO:O	1:B:112:VAL:HB	1.84	0.78
1:A:28:ALA:HB3	1:A:59:ILE:HD12	1.64	0.78
1:B:191:TYR:CD2	1:B:192:LYS:CG	2.65	0.77
1:A:192:LYS:CB	1:A:197:LYS:CB	2.56	0.77
1:A:7:ILE:HG21	1:A:14:GLU:O	1.85	0.77
1:A:1:THR:HG23	1:A:26:VAL:HG21	1.65	0.77
1:B:142:MET:CB	1:B:153:LYS:CB	2.62	0.77
1:B:1:THR:HG22	1:B:19:ILE:CD1	1.75	0.77
1:A:45:MET:CE	1:A:120:VAL:HG12	2.11	0.77
1:A:146:ASP:HB2	1:A:192:LYS:NZ	1.99	0.77
1:A:191:TYR:CD2	1:A:192:LYS:CG	2.66	0.77
1:A:91:ASN:O	1:A:92:TYR:CB	2.32	0.77
1:A:8:GLY:O	1:A:9:ALA:HB2	1.84	0.77
1:B:161:ASP:OD1	1:B:162:PRO:HD2	1.84	0.77
1:B:35:TYR:H	1:B:35:TYR:HD2	1.32	0.77
1:A:191:TYR:HE2	1:A:192:LYS:CG	1.95	0.77
1:B:83:PHE:CD2	1:B:83:PHE:C	2.55	0.77
1:A:102:PRO:O	1:A:112:VAL:HB	1.84	0.77
1:A:122:GLN:NE2	1:A:124:GLY:CA	2.48	0.77
1:B:7:ILE:HG21	1:B:14:GLU:O	1.85	0.77
1:B:244:VAL:HB	1:B:254:LYS:CA	2.15	0.77
1:B:54:ASN:HB3	1:B:79:VAL:O	1.84	0.77
1:B:93:GLY:O	1:B:94:ALA:HB2	1.82	0.77
1:A:161:ASP:OD1	1:A:162:PRO:HD2	1.84	0.77
1:B:122:GLN:NE2	1:B:124:GLY:CA	2.48	0.77
1:B:246:LEU:C	1:B:248:ASP:H	1.88	0.77
1:A:56:LYS:HZ3	1:A:70:GLN:NE2	1.82	0.77
1:B:192:LYS:HB3	1:B:197:LYS:HB3	1.65	0.76
1:A:83:PHE:CD1	1:A:280:PHE:CZ	2.74	0.76
1:B:48:GLU:C	1:B:49:ILE:HG12	2.06	0.76
1:B:53:THR:H	1:B:88:TYR:N	1.83	0.76
1:A:94:ALA:O	1:A:96:PRO:N	2.18	0.76
1:B:83:PHE:CD1	1:B:280:PHE:CZ	2.74	0.76
1:B:2:TYR:HB2	1:B:21:LYS:HA	1.68	0.76
1:A:35:TYR:H	1:A:35:TYR:HD2	1.32	0.76
1:A:27:SER:CA	1:A:64:THR:CG2	2.42	0.76
1:B:114:ASP:HB3	1:B:149:GLU:OE1	1.85	0.76
1:B:193:ILE:N	1:B:197:LYS:O	2.19	0.76

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:28:ALA:HB3	1:B:59:ILE:HD12	1.64	0.76
1:A:193:ILE:N	1:A:197:LYS:O	2.19	0.76
1:A:95:PHE:CD2	1:A:218:ILE:CD1	2.65	0.76
1:A:68:ILE:CG2	1:A:69:ILE:H	1.95	0.76
1:A:83:PHE:HA	1:A:278:TRP:CD1	2.20	0.76
1:B:122:GLN:CB	1:B:156:ALA:O	2.34	0.76
1:B:83:PHE:HA	1:B:278:TRP:CD1	2.20	0.76
1:A:48:GLU:C	1:A:49:ILE:HG12	2.06	0.76
1:A:114:ASP:HB3	1:A:149:GLU:OE1	1.85	0.76
1:A:54:ASN:HB3	1:A:79:VAL:O	1.84	0.76
1:A:97:GLN:O	1:A:225:TRP:CD2	2.39	0.76
1:B:146:ASP:HB2	1:B:192:LYS:NZ	1.99	0.76
1:B:118:ILE:HD12	1:B:221:THR:OG1	1.86	0.76
1:B:44:ASN:OD1	1:B:44:ASN:N	2.18	0.76
1:A:182:ARG:HH11	1:A:185:ASP:HB3	1.46	0.76
1:B:19:ILE:HD11	1:B:26:VAL:HG11	1.60	0.76
1:B:94:ALA:O	1:B:96:PRO:N	2.18	0.76
1:B:147:GLU:CD	1:B:192:LYS:HZ3	1.89	0.75
1:B:98:THR:HA	1:B:225:TRP:HB3	1.68	0.75
1:A:1:THR:HG22	1:A:19:ILE:CD1	1.75	0.75
1:B:80:ARG:HD2	1:B:279:PHE:HE1	1.47	0.75
1:A:142:MET:CB	1:A:153:LYS:CB	2.62	0.75
1:A:1:THR:CB	1:A:19:ILE:HD11	2.12	0.75
1:A:53:THR:H	1:A:88:TYR:N	1.83	0.75
1:B:32:ILE:HG21	1:B:96:PRO:CG	2.17	0.75
1:A:9:ALA:HB3	1:A:15:TYR:HB2	0.81	0.75
1:B:24:LYS:HB3	1:B:25:PRO:HD2	1.68	0.75
1:A:44:ASN:N	1:A:44:ASN:OD1	2.18	0.75
1:A:244:VAL:HB	1:A:254:LYS:CA	2.15	0.75
1:A:32:ILE:HG21	1:A:96:PRO:CG	2.17	0.75
1:B:137:LYS:HG3	1:B:159:ILE:CG1	2.16	0.75
1:B:8:GLY:O	1:B:9:ALA:HB2	1.84	0.75
1:A:192:LYS:HB3	1:A:197:LYS:HB3	1.65	0.75
1:B:1:THR:HG21	1:B:26:VAL:HG11	1.67	0.75
1:B:97:GLN:O	1:B:225:TRP:CD2	2.39	0.75
1:A:139:LEU:HD12	1:A:155:ILE:CG2	2.17	0.75
1:B:19:ILE:O	1:B:26:VAL:HG13	1.86	0.75
1:A:277:LYS:CD	1:B:125:GLU:OE2	2.35	0.74
1:B:142:MET:HB3	1:B:153:LYS:CB	2.17	0.74
1:B:38:LYS:HB3	1:B:41:ASN:CB	2.17	0.74
1:B:6:GLN:HG2	1:B:15:TYR:HE1	1.51	0.74
1:A:137:LYS:HG3	1:A:159:ILE:CG1	2.16	0.74

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:122:GLN:CB	1:A:156:ALA:O	2.34	0.74
1:A:98:THR:HA	1:A:225:TRP:HB3	1.68	0.74
1:A:36:ALA:O	1:A:37:ASP:CB	2.34	0.74
1:B:101:ASP:OD1	1:B:102:PRO:HD2	1.87	0.74
1:A:27:SER:HB2	1:A:64:THR:CG2	2.13	0.74
1:A:45:MET:CE	1:A:120:VAL:HG11	2.17	0.74
1:B:164:ALA:CB	1:B:165:PRO:HD3	2.09	0.74
1:B:1:THR:O	1:B:21:LYS:HA	1.87	0.74
1:B:80:ARG:HG3	1:B:194:PRO:CB	2.18	0.74
1:A:177:PHE:N	1:A:177:PHE:CD1	2.56	0.74
1:A:38:LYS:HB3	1:A:41:ASN:CB	2.17	0.74
1:A:28:ALA:O	1:A:65:LEU:HD23	1.87	0.74
1:B:28:ALA:O	1:B:65:LEU:HD23	1.87	0.74
1:A:24:LYS:HB3	1:A:25:PRO:HD2	1.68	0.74
1:B:95:PHE:CD2	1:B:218:ILE:CD1	2.65	0.74
1:B:84:PRO:O	1:B:85:HIS:CB	2.35	0.74
1:A:157:ILE:HG22	1:A:158:ASP:N	2.02	0.74
1:A:5:ARG:HH22	1:A:25:PRO:HB3	1.52	0.74
1:A:6:GLN:HG2	1:A:15:TYR:HE1	1.51	0.74
1:A:69:ILE:HB	1:A:76:LEU:HD12	1.70	0.74
1:A:125:GLU:OE2	1:B:277:LYS:CD	2.35	0.73
1:B:176:TYR:HB3	1:B:177:PHE:CE1	2.23	0.73
1:A:1:THR:O	1:A:21:LYS:HA	1.88	0.73
1:A:118:ILE:HD12	1:A:221:THR:OG1	1.86	0.73
1:A:101:ASP:OD1	1:A:102:PRO:HD2	1.87	0.73
1:A:147:GLU:CD	1:A:192:LYS:HZ3	1.91	0.73
1:A:95:PHE:HE2	1:A:218:ILE:HD11	0.92	0.73
1:A:97:GLN:HB3	1:A:222:HIS:ND1	2.04	0.73
1:B:146:ASP:CB	1:B:192:LYS:HZ1	2.01	0.73
1:B:57:LEU:CB	1:B:68:ILE:O	2.35	0.73
1:A:144:LEU:N	1:A:144:LEU:HD23	2.03	0.73
1:A:2:TYR:HB2	1:A:21:LYS:HA	1.68	0.73
1:A:80:ARG:HG3	1:A:194:PRO:CB	2.18	0.73
1:B:38:LYS:HG2	1:B:41:ASN:CB	2.17	0.73
1:A:19:ILE:O	1:A:26:VAL:HG13	1.86	0.73
1:B:84:PRO:C	1:B:85:HIS:CG	2.61	0.73
1:B:93:GLY:O	1:B:94:ALA:CB	2.37	0.73
1:B:45:MET:CE	1:B:120:VAL:HG11	2.17	0.73
1:B:139:LEU:HD12	1:B:155:ILE:CG2	2.17	0.73
1:A:176:TYR:HB3	1:A:177:PHE:CE1	2.23	0.73
1:A:57:LEU:CB	1:A:68:ILE:O	2.35	0.73
1:A:84:PRO:O	1:A:85:HIS:CB	2.35	0.73

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:244:VAL:CB	1:B:254:LYS:HA	2.18	0.73
1:B:91:ASN:O	1:B:92:TYR:CB	2.32	0.73
1:A:47:VAL:HG21	1:A:129:TYR:H	1.53	0.72
1:A:93:GLY:O	1:A:94:ALA:CB	2.37	0.72
1:B:144:LEU:N	1:B:144:LEU:HD23	2.03	0.72
1:B:157:ILE:HG22	1:B:158:ASP:N	2.02	0.72
1:A:10:LYS:N	1:A:15:TYR:HB2	2.04	0.72
1:A:60:THR:HA	1:A:65:LEU:HD12	1.71	0.72
1:B:177:PHE:N	1:B:177:PHE:CD1	2.56	0.72
1:B:69:ILE:HB	1:B:76:LEU:HD12	1.69	0.72
1:A:38:LYS:HG2	1:A:41:ASN:CB	2.16	0.72
1:A:1:THR:HG21	1:A:26:VAL:HG11	1.67	0.72
1:A:84:PRO:C	1:A:85:HIS:CG	2.61	0.72
1:B:1:THR:HB	1:B:133:VAL:HG21	1.71	0.72
1:A:129:TYR:CD2	1:A:132:GLN:CG	2.72	0.72
1:A:246:LEU:C	1:A:248:ASP:H	1.89	0.72
1:B:47:VAL:HG21	1:B:129:TYR:H	1.53	0.72
1:B:1:THR:CB	1:B:19:ILE:HD11	2.12	0.72
1:A:105:SER:HB3	1:A:112:VAL:HA	0.72	0.72
1:A:1:THR:HB	1:A:133:VAL:HG21	1.71	0.72
1:A:82:CYS:HG	1:A:190:ILE:HG13	1.52	0.72
1:A:4:THR:HB	1:A:19:ILE:CA	2.13	0.72
1:B:129:TYR:O	1:B:130:THR:C	2.28	0.72
1:A:191:TYR:HD2	1:A:192:LYS:HG3	1.55	0.72
1:B:19:ILE:O	1:B:26:VAL:HG12	1.90	0.72
1:B:4:THR:HB	1:B:19:ILE:CA	2.13	0.72
1:B:51:ARG:C	1:B:88:TYR:O	2.28	0.72
1:A:253:SER:C	1:A:255:ALA:H	1.92	0.72
1:A:69:ILE:O	1:A:70:GLN:C	2.28	0.71
1:B:60:THR:HA	1:B:65:LEU:HD12	1.71	0.71
1:B:253:SER:C	1:B:255:ALA:H	1.92	0.71
1:B:97:GLN:HB3	1:B:222:HIS:ND1	2.04	0.71
1:A:25:PRO:CG	1:A:257:SER:CB	2.65	0.71
1:A:49:ILE:CD1	1:A:92:TYR:CG	2.50	0.71
1:A:41:ASN:ND2	1:A:137:LYS:HE2	2.05	0.71
1:B:29:PHE:H	1:B:96:PRO:HB2	1.56	0.71
1:A:272:ASP:O	1:A:275:ILE:HG13	1.91	0.71
1:B:5:ARG:HH22	1:B:25:PRO:HB3	1.52	0.71
1:A:142:MET:HB3	1:A:153:LYS:CB	2.17	0.71
1:A:56:LYS:C	1:A:57:LEU:CD1	2.59	0.71
1:B:69:ILE:O	1:B:70:GLN:C	2.28	0.71
1:A:158:ASP:CB	1:A:160:ASN:HD21	2.04	0.71

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:244:VAL:CB	1:A:254:LYS:HA	2.18	0.71
1:B:129:TYR:CD2	1:B:132:GLN:CG	2.72	0.71
1:A:105:SER:HB3	1:A:112:VAL:CG1	2.21	0.71
1:A:29:PHE:CE1	1:A:225:TRP:CD1	2.78	0.71
1:A:51:ARG:C	1:A:88:TYR:O	2.28	0.71
1:B:4:THR:HG22	1:B:19:ILE:CG1	2.21	0.71
1:B:232:LYS:O	1:B:233:SER:C	2.29	0.71
1:A:11:ASN:O	1:A:12:THR:C	2.29	0.71
1:A:1:THR:H3	1:A:133:VAL:HG11	1.54	0.71
1:B:27:SER:HA	1:B:64:THR:HG22	1.71	0.71
1:B:7:ILE:O	1:B:8:GLY:C	2.29	0.71
1:A:105:SER:HB3	1:A:112:VAL:CB	2.21	0.70
1:B:158:ASP:CB	1:B:160:ASN:HD21	2.04	0.70
1:B:56:LYS:C	1:B:57:LEU:CD1	2.59	0.70
1:A:129:TYR:O	1:A:130:THR:C	2.28	0.70
1:A:28:ALA:CB	1:A:59:ILE:HD12	2.21	0.70
1:B:41:ASN:ND2	1:B:137:LYS:HE2	2.05	0.70
1:B:42:ILE:CG2	1:B:159:ILE:HD11	2.21	0.70
1:B:158:ASP:HB3	1:B:161:ASP:HB3	1.74	0.70
1:B:191:TYR:HD2	1:B:192:LYS:HG3	1.55	0.70
1:A:146:ASP:CB	1:A:192:LYS:HZ1	2.02	0.70
1:A:174:GLU:C	1:A:178:PRO:HB3	2.05	0.70
1:B:249:THR:C	1:B:251:THR:H	1.94	0.70
1:B:25:PRO:CG	1:B:257:SER:CB	2.65	0.70
1:B:49:ILE:CD1	1:B:92:TYR:CB	2.69	0.70
1:A:192:LYS:NZ	1:A:200:ASN:HD21	1.90	0.70
1:B:242:THR:O	1:B:243:ASN:OD1	2.09	0.70
1:B:36:ALA:O	1:B:37:ASP:CB	2.34	0.70
1:A:122:GLN:CA	1:A:156:ALA:O	2.40	0.70
1:A:49:ILE:CD1	1:A:92:TYR:CB	2.69	0.70
1:A:42:ILE:CG2	1:A:159:ILE:HD11	2.21	0.70
1:A:158:ASP:HB3	1:A:161:ASP:HB3	1.74	0.70
1:A:45:MET:SD	1:A:93:GLY:HA3	2.31	0.70
1:A:7:ILE:O	1:A:8:GLY:C	2.29	0.70
1:A:29:PHE:H	1:A:96:PRO:HB2	1.56	0.70
1:B:122:GLN:CA	1:B:156:ALA:O	2.40	0.70
1:A:81:ASN:O	1:A:82:CYS:C	2.30	0.70
1:A:242:THR:O	1:A:243:ASN:OD1	2.09	0.70
1:A:28:ALA:O	1:A:29:PHE:HB3	1.91	0.70
1:B:45:MET:SD	1:B:93:GLY:HA3	2.31	0.70
1:A:112:VAL:O	1:A:150:THR:OG1	2.10	0.69
1:A:4:THR:HG22	1:A:19:ILE:CG1	2.21	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:28:ALA:CB	1:B:59:ILE:HD12	2.21	0.69
1:B:94:ALA:O	1:B:96:PRO:HD3	1.92	0.69
1:A:47:VAL:HG22	1:A:131:GLY:H	1.57	0.69
1:A:232:LYS:O	1:A:233:SER:C	2.29	0.69
1:B:105:SER:HB3	1:B:112:VAL:CG1	2.21	0.69
1:B:105:SER:HB3	1:B:112:VAL:HA	0.72	0.69
1:B:11:ASN:O	1:B:12:THR:C	2.29	0.69
1:B:95:PHE:HE2	1:B:218:ILE:HD11	0.93	0.69
1:B:105:SER:HB3	1:B:112:VAL:CB	2.21	0.69
1:B:84:PRO:O	1:B:85:HIS:CD2	2.45	0.69
1:A:141:ILE:HA	1:A:153:LYS:O	1.92	0.69
1:B:192:LYS:NZ	1:B:200:ASN:HD21	1.90	0.69
1:B:272:ASP:O	1:B:275:ILE:HG13	1.91	0.69
1:B:49:ILE:CD1	1:B:92:TYR:CG	2.50	0.69
1:B:1:THR:H3	1:B:133:VAL:HG11	1.56	0.69
1:A:84:PRO:O	1:A:85:HIS:CD2	2.46	0.69
1:B:4:THR:CG2	1:B:19:ILE:HA	2.22	0.69
1:B:141:ILE:HA	1:B:153:LYS:O	1.92	0.69
1:B:28:ALA:O	1:B:29:PHE:HB3	1.91	0.69
1:A:249:THR:C	1:A:251:THR:H	1.95	0.69
1:B:29:PHE:CE1	1:B:225:TRP:CD1	2.78	0.69
1:B:209:LYS:HG3	1:B:213:TYR:CG	2.28	0.69
1:B:158:ASP:CB	1:B:160:ASN:ND2	2.56	0.69
1:B:58:GLU:O	1:B:59:ILE:HG22	1.93	0.69
1:B:56:LYS:NZ	1:B:70:GLN:CD	2.46	0.69
1:A:105:SER:HB2	1:A:109:THR:CG2	2.20	0.69
1:A:158:ASP:CB	1:A:160:ASN:ND2	2.56	0.69
1:B:112:VAL:O	1:B:150:THR:OG1	2.10	0.69
1:A:102:PRO:HA	1:A:113:GLY:O	1.93	0.68
1:A:19:ILE:O	1:A:26:VAL:HG12	1.90	0.68
1:A:278:TRP:HH2	1:B:89:ILE:HG13	1.56	0.68
1:B:10:LYS:N	1:B:15:TYR:HB2	2.04	0.68
1:B:81:ASN:O	1:B:82:CYS:C	2.30	0.68
1:A:42:ILE:HG22	1:A:137:LYS:HG2	1.72	0.68
1:A:56:LYS:NZ	1:A:70:GLN:CD	2.46	0.68
1:B:47:VAL:HG22	1:B:131:GLY:H	1.57	0.68
1:B:150:THR:HG22	1:B:150:THR:O	1.94	0.68
1:B:8:GLY:CA	1:B:266:LYS:H	2.05	0.68
1:A:4:THR:CG2	1:A:19:ILE:HA	2.22	0.68
1:A:59:ILE:CG1	1:A:59:ILE:O	2.41	0.68
1:B:102:PRO:HA	1:B:113:GLY:O	1.93	0.68
1:B:105:SER:HB2	1:B:109:THR:CG2	2.20	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:143:ALA:O	1:B:202:PHE:CD1	2.47	0.68
1:B:217:ILE:CG2	1:B:218:ILE:N	2.56	0.68
1:A:209:LYS:HG3	1:A:213:TYR:CG	2.28	0.68
1:B:162:PRO:O	1:B:163:LEU:HB2	1.93	0.68
1:B:59:ILE:O	1:B:59:ILE:CG1	2.41	0.68
1:B:49:ILE:CG1	1:B:92:TYR:HB3	2.24	0.68
1:B:97:GLN:O	1:B:225:TRP:CG	2.47	0.68
1:B:103:ASN:O	1:B:104:VAL:CB	2.28	0.68
1:B:174:GLU:C	1:B:178:PRO:HB3	2.05	0.68
1:B:275:ILE:O	1:B:277:LYS:HB2	1.93	0.68
1:A:58:GLU:O	1:A:59:ILE:HG22	1.93	0.68
1:B:23:GLY:O	1:B:24:LYS:CB	2.42	0.68
1:A:162:PRO:O	1:A:163:LEU:HB2	1.93	0.68
1:A:83:PHE:HB3	1:A:84:PRO:HD3	1.75	0.68
1:A:8:GLY:CA	1:A:266:LYS:H	2.05	0.68
1:B:83:PHE:HB3	1:B:84:PRO:HD3	1.75	0.68
1:A:115:ASN:O	1:A:116:ASN:C	2.32	0.68
1:A:191:TYR:HE2	1:A:192:LYS:CE	2.07	0.68
1:A:49:ILE:CG1	1:A:92:TYR:HB3	2.24	0.68
1:A:94:ALA:O	1:A:96:PRO:HD3	1.92	0.68
1:B:92:TYR:CE2	1:B:121:LEU:HD21	2.29	0.68
1:A:122:GLN:HE22	1:A:124:GLY:HA3	1.58	0.68
1:A:12:THR:O	1:A:13:LEU:CB	2.42	0.68
1:A:146:ASP:OD1	1:A:147:GLU:OE2	2.12	0.68
1:A:97:GLN:O	1:A:225:TRP:CG	2.47	0.68
1:B:92:TYR:HD2	1:B:121:LEU:HD23	1.58	0.68
1:B:12:THR:O	1:B:13:LEU:CB	2.42	0.68
1:B:90:HIS:O	1:B:91:ASN:CB	2.41	0.68
1:A:92:TYR:CE2	1:A:121:LEU:HD21	2.29	0.67
1:A:89:ILE:HG13	1:B:278:TRP:HH2	1.57	0.67
1:B:81:ASN:HD22	1:B:276:ASP:HA	1.59	0.67
1:A:241:LEU:O	1:A:242:THR:C	2.32	0.67
1:A:168:ASN:C	1:A:168:ASN:ND2	2.48	0.67
1:A:7:ILE:HG22	1:A:16:LYS:N	2.04	0.67
1:B:42:ILE:HG21	1:B:159:ILE:HD13	1.75	0.67
1:B:241:LEU:O	1:B:242:THR:C	2.32	0.67
1:A:139:LEU:HD12	1:A:155:ILE:HG23	1.76	0.67
1:B:191:TYR:HE2	1:B:192:LYS:CE	2.07	0.67
1:B:247:PRO:HB3	1:B:252:TYR:CE2	2.30	0.67
1:A:143:ALA:O	1:A:202:PHE:CD1	2.47	0.67
1:B:3:THR:O	1:B:20:GLU:O	2.12	0.67
1:A:217:ILE:CG2	1:A:218:ILE:N	2.56	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:23:GLY:O	1:A:24:LYS:CB	2.42	0.67
1:A:247:PRO:HB3	1:A:252:TYR:CE2	2.30	0.67
1:B:123:ILE:HD12	1:B:177:PHE:HD2	1.57	0.67
1:B:168:ASN:ND2	1:B:168:ASN:C	2.48	0.67
1:A:147:GLU:CD	1:A:192:LYS:NZ	2.48	0.67
1:A:28:ALA:HA	1:A:32:ILE:HG12	1.75	0.67
1:B:115:ASN:O	1:B:116:ASN:C	2.32	0.67
1:B:94:ALA:O	1:B:96:PRO:CD	2.42	0.67
1:A:150:THR:HG22	1:A:150:THR:O	1.94	0.67
1:A:42:ILE:HG21	1:A:159:ILE:HD13	1.75	0.67
1:A:275:ILE:O	1:A:277:LYS:HB2	1.93	0.67
1:B:229:ILE:O	1:B:230:ALA:C	2.31	0.67
1:B:83:PHE:HB3	1:B:84:PRO:CD	2.25	0.67
1:A:229:ILE:O	1:A:230:ALA:C	2.31	0.67
1:A:48:GLU:C	1:A:49:ILE:CG1	2.62	0.67
1:B:28:ALA:HA	1:B:32:ILE:HG12	1.75	0.67
1:A:246:LEU:O	1:A:248:ASP:N	2.28	0.67
1:A:25:PRO:CG	1:A:257:SER:CA	2.73	0.66
1:A:83:PHE:HB3	1:A:84:PRO:CD	2.25	0.66
1:A:92:TYR:HD2	1:A:121:LEU:HD23	1.58	0.66
1:B:34:LEU:O	1:B:36:ALA:N	2.24	0.66
1:B:50:PRO:HA	1:B:128:ALA:HB2	1.77	0.66
1:A:56:LYS:HZ2	1:A:70:GLN:CD	1.97	0.66
1:B:146:ASP:OD1	1:B:147:GLU:OE2	2.12	0.66
1:B:93:GLY:N	1:B:120:VAL:O	2.28	0.66
1:A:80:ARG:HD2	1:A:279:PHE:HE1	1.47	0.66
1:B:139:LEU:HD12	1:B:155:ILE:HG23	1.76	0.66
1:A:152:TRP:C	1:A:153:LYS:HD2	2.15	0.66
1:A:94:ALA:O	1:A:96:PRO:CD	2.42	0.66
1:B:141:ILE:CG2	1:B:141:ILE:O	2.43	0.66
1:B:152:TRP:C	1:B:153:LYS:HD2	2.15	0.66
1:B:163:LEU:HD22	1:B:177:PHE:HZ	1.60	0.66
1:A:123:ILE:HD12	1:A:177:PHE:HD2	1.57	0.66
1:A:3:THR:O	1:A:20:GLU:O	2.12	0.66
1:B:25:PRO:HG2	1:B:257:SER:CA	2.25	0.66
1:B:48:GLU:C	1:B:49:ILE:CG1	2.62	0.66
1:B:59:ILE:HB	1:B:66:ASN:N	2.10	0.66
1:A:105:SER:HB2	1:A:109:THR:O	1.95	0.66
1:B:42:ILE:HG22	1:B:137:LYS:HG2	1.72	0.66
1:A:142:MET:CA	1:A:153:LYS:HB2	2.25	0.66
1:B:30:HIS:CD2	1:B:241:LEU:HA	2.31	0.66
1:A:163:LEU:HD23	1:A:167:LEU:CD1	2.25	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:59:ILE:HB	1:A:66:ASN:N	2.10	0.66
1:B:25:PRO:CG	1:B:257:SER:CA	2.73	0.66
1:B:246:LEU:O	1:B:248:ASP:N	2.28	0.66
1:A:93:GLY:N	1:A:120:VAL:O	2.28	0.66
1:A:50:PRO:HA	1:A:128:ALA:HB2	1.78	0.66
1:A:141:ILE:O	1:A:141:ILE:HG22	1.95	0.66
1:A:42:ILE:CG1	1:A:159:ILE:HD11	2.25	0.66
1:B:142:MET:CA	1:B:153:LYS:HB2	2.25	0.66
1:B:163:LEU:HD23	1:B:167:LEU:CD1	2.25	0.66
1:A:25:PRO:HG2	1:A:257:SER:CA	2.25	0.65
1:A:81:ASN:HD22	1:A:276:ASP:HA	1.59	0.65
1:A:27:SER:HA	1:A:64:THR:HG22	1.72	0.65
1:B:141:ILE:HG22	1:B:141:ILE:O	1.95	0.65
1:B:244:VAL:O	1:B:244:VAL:HG23	1.96	0.65
1:B:42:ILE:CG1	1:B:159:ILE:HD11	2.25	0.65
1:B:158:ASP:HB3	1:B:160:ASN:ND2	2.12	0.65
1:B:147:GLU:CD	1:B:192:LYS:NZ	2.48	0.65
1:B:190:ILE:CB	1:B:193:ILE:HG13	2.26	0.65
1:A:34:LEU:O	1:A:36:ALA:N	2.24	0.65
1:B:105:SER:HB2	1:B:109:THR:O	1.96	0.65
1:B:1:THR:O	1:B:2:TYR:CD1	2.50	0.65
1:A:158:ASP:HB3	1:A:160:ASN:ND2	2.12	0.65
1:A:1:THR:O	1:A:2:TYR:CD1	2.50	0.65
1:B:58:GLU:C	1:B:59:ILE:HG23	2.16	0.65
1:A:143:ALA:HA	1:A:152:TRP:HA	1.78	0.65
1:A:163:LEU:CD2	1:A:167:LEU:HD11	2.27	0.65
1:B:114:ASP:CB	1:B:149:GLU:OE1	2.45	0.65
1:B:166:LYS:HB3	1:B:176:TYR:CE2	2.32	0.65
1:B:7:ILE:HG22	1:B:16:LYS:N	2.04	0.65
1:B:7:ILE:O	1:B:15:TYR:HA	1.96	0.65
1:B:190:ILE:CA	1:B:193:ILE:HD11	2.27	0.65
1:B:220:GLU:HG2	1:B:220:GLU:O	1.96	0.65
1:B:46:VAL:O	1:B:93:GLY:CA	2.44	0.65
1:B:53:THR:O	1:B:88:TYR:CB	2.26	0.65
1:B:253:SER:O	1:B:255:ALA:N	2.30	0.65
1:A:106:HIS:CB	1:A:107:PRO:HD2	2.27	0.65
1:A:190:ILE:CB	1:A:193:ILE:HG13	2.26	0.64
1:A:80:ARG:CG	1:A:194:PRO:HB2	2.25	0.64
1:A:1:THR:CG2	1:A:26:VAL:HG21	2.27	0.64
1:A:30:HIS:CD2	1:A:241:LEU:HA	2.31	0.64
1:B:243:ASN:O	1:B:252:TYR:HA	1.97	0.64
1:B:45:MET:HE1	1:B:120:VAL:CG1	2.12	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:139:LEU:O	1:B:211:LYS:CA	2.45	0.64
1:B:106:HIS:CB	1:B:107:PRO:HD2	2.27	0.64
1:A:163:LEU:HA	1:A:166:LYS:CD	2.28	0.64
1:A:17:VAL:O	1:A:66:ASN:HB3	1.97	0.64
1:A:193:ILE:O	1:A:195:ASP:N	2.30	0.64
1:A:7:ILE:O	1:A:15:TYR:HA	1.96	0.64
1:A:173:VAL:HG13	1:A:177:PHE:HB2	1.79	0.64
1:B:17:VAL:O	1:B:66:ASN:HB3	1.97	0.64
1:A:166:LYS:HB3	1:A:176:TYR:CE2	2.32	0.64
1:B:140:GLY:HA3	1:B:170:ILE:CD1	2.28	0.64
1:A:244:VAL:O	1:A:244:VAL:HG23	1.96	0.64
1:A:58:GLU:C	1:A:59:ILE:HG23	2.16	0.64
1:B:163:LEU:CD2	1:B:167:LEU:HD11	2.27	0.64
1:A:200:ASN:O	1:A:201:GLN:HB2	1.98	0.64
1:B:122:GLN:HE22	1:B:124:GLY:HA3	1.58	0.64
1:B:127:ILE:CG2	1:B:128:ALA:N	2.21	0.64
1:B:174:GLU:HA	1:B:178:PRO:HA	1.80	0.64
1:A:253:SER:O	1:A:255:ALA:N	2.30	0.64
1:A:12:THR:HG23	1:A:269:ALA:CB	2.28	0.64
1:A:226:LYS:O	1:A:229:ILE:HG13	1.98	0.64
1:B:50:PRO:CB	1:B:128:ALA:HB3	2.23	0.64
1:B:143:ALA:HA	1:B:152:TRP:HA	1.78	0.64
1:B:83:PHE:O	1:B:278:TRP:CD1	2.51	0.64
1:A:277:LYS:CG	1:B:125:GLU:CD	2.67	0.64
1:B:112:VAL:C	1:B:150:THR:HB	2.11	0.64
1:B:173:VAL:HG13	1:B:177:PHE:HB2	1.79	0.64
1:A:47:VAL:CG2	1:A:131:GLY:H	2.11	0.64
1:A:42:ILE:CG2	1:A:159:ILE:CD1	2.76	0.64
1:A:174:GLU:HA	1:A:178:PRO:HA	1.80	0.64
1:B:12:THR:CG2	1:B:269:ALA:HB2	2.28	0.64
1:B:12:THR:HG23	1:B:269:ALA:CB	2.28	0.64
1:B:29:PHE:O	1:B:225:TRP:NE1	2.31	0.64
1:B:226:LYS:O	1:B:229:ILE:HG13	1.98	0.64
1:B:32:ILE:HG22	1:B:96:PRO:HG2	1.80	0.64
1:A:46:VAL:O	1:A:93:GLY:CA	2.44	0.63
1:B:252:TYR:CE1	1:B:254:LYS:HB2	2.33	0.63
1:A:177:PHE:HA	1:B:280:PHE:CE2	2.33	0.63
1:A:252:TYR:CE1	1:A:254:LYS:HB2	2.33	0.63
1:B:193:ILE:O	1:B:195:ASP:N	2.30	0.63
1:A:10:LYS:O	1:A:11:ASN:OD1	2.15	0.63
1:A:140:GLY:HA3	1:A:170:ILE:CD1	2.28	0.63
1:B:170:ILE:O	1:B:171:GLU:C	2.37	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:8:GLY:O	1:B:9:ALA:CB	2.46	0.63
1:A:25:PRO:HG2	1:A:257:SER:HA	1.81	0.63
1:A:8:GLY:O	1:A:9:ALA:CB	2.46	0.63
1:B:10:LYS:O	1:B:11:ASN:OD1	2.15	0.63
1:B:82:CYS:SG	1:B:190:ILE:CD1	2.87	0.63
1:B:200:ASN:O	1:B:201:GLN:HB2	1.98	0.63
1:A:139:LEU:O	1:A:211:LYS:HA	1.98	0.63
1:A:50:PRO:CB	1:A:128:ALA:HB3	2.23	0.63
1:A:163:LEU:HD22	1:A:177:PHE:HZ	1.60	0.63
1:A:190:ILE:CA	1:A:193:ILE:HD11	2.27	0.63
1:A:243:ASN:O	1:A:252:TYR:HA	1.97	0.63
1:A:83:PHE:O	1:A:278:TRP:CD1	2.51	0.63
1:A:280:PHE:CE2	1:B:177:PHE:HA	2.33	0.63
1:B:58:GLU:C	1:B:59:ILE:CG2	2.66	0.63
1:B:11:ASN:HA	1:B:69:ILE:CD1	2.28	0.63
1:B:98:THR:HG21	1:B:221:THR:CG2	2.29	0.63
1:A:114:ASP:CB	1:A:149:GLU:OE1	2.45	0.63
1:B:9:ALA:HB1	1:B:15:TYR:CB	2.00	0.63
1:B:1:THR:CG2	1:B:26:VAL:HG21	2.27	0.63
1:B:25:PRO:HG2	1:B:257:SER:HA	1.81	0.63
1:A:220:GLU:HG2	1:A:220:GLU:O	1.96	0.63
1:B:158:ASP:C	1:B:160:ASN:N	2.49	0.63
1:B:163:LEU:HA	1:B:166:LYS:CD	2.28	0.63
1:B:54:ASN:H	1:B:54:ASN:HD22	1.46	0.63
1:B:9:ALA:HB2	1:B:15:TYR:CA	2.25	0.63
1:A:139:LEU:O	1:A:211:LYS:CA	2.45	0.63
1:B:139:LEU:CB	1:B:155:ILE:HG22	2.17	0.63
1:A:170:ILE:O	1:A:171:GLU:C	2.37	0.63
1:A:19:ILE:HD13	1:A:26:VAL:HG12	1.71	0.63
1:A:142:MET:N	1:A:153:LYS:O	2.31	0.63
1:A:26:VAL:CG2	1:A:27:SER:N	2.30	0.63
1:A:58:GLU:C	1:A:59:ILE:CG2	2.66	0.63
1:A:32:ILE:HG22	1:A:96:PRO:HG2	1.80	0.63
1:A:29:PHE:O	1:A:225:TRP:NE1	2.31	0.62
1:A:34:LEU:O	1:A:43:PHE:HB2	1.97	0.62
1:A:9:ALA:O	1:A:10:LYS:CB	2.36	0.62
1:A:125:GLU:CD	1:B:277:LYS:CG	2.66	0.62
1:A:158:ASP:C	1:A:160:ASN:N	2.49	0.62
1:A:25:PRO:CG	1:A:257:SER:HA	2.29	0.62
1:A:11:ASN:HA	1:A:69:ILE:CD1	2.29	0.62
1:B:163:LEU:HG	1:B:166:LYS:HD2	1.81	0.62
1:B:1:THR:O	1:B:2:TYR:HD1	1.81	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:249:THR:HG22	1:B:251:THR:OG1	1.99	0.62
1:A:9:ALA:HB1	1:A:15:TYR:CB	2.00	0.62
1:B:122:GLN:CG	1:B:157:ILE:HA	2.29	0.62
1:B:25:PRO:CG	1:B:257:SER:HA	2.29	0.62
1:A:222:HIS:NE2	1:A:226:LYS:CG	2.62	0.62
1:A:229:ILE:HG22	1:A:249:THR:HG21	1.81	0.62
1:A:12:THR:CG2	1:A:269:ALA:HB2	2.28	0.62
1:B:140:GLY:HA3	1:B:170:ILE:HD11	1.82	0.62
1:B:222:HIS:NE2	1:B:226:LYS:CG	2.62	0.62
1:A:163:LEU:HG	1:A:166:LYS:HD2	1.81	0.62
1:A:222:HIS:CD2	1:A:226:LYS:CG	2.82	0.62
1:A:98:THR:HG21	1:A:221:THR:CG2	2.29	0.62
1:B:47:VAL:CG2	1:B:131:GLY:H	2.11	0.62
1:B:142:MET:HB2	1:B:153:LYS:HB2	1.78	0.62
1:A:1:THR:O	1:A:2:TYR:HD1	1.81	0.62
1:B:172:ASP:O	1:B:173:VAL:C	2.37	0.62
1:B:13:LEU:HG	1:B:76:LEU:HD21	1.82	0.62
1:B:86:HIS:CG	1:B:87:GLY:H	2.18	0.62
1:A:82:CYS:SG	1:A:190:ILE:CD1	2.87	0.62
1:B:42:ILE:CG2	1:B:159:ILE:CD1	2.76	0.62
1:B:229:ILE:HG22	1:B:249:THR:HG21	1.81	0.62
1:A:203:ALA:O	1:A:206:GLY:N	2.33	0.62
1:A:9:ALA:HB2	1:A:15:TYR:CA	2.25	0.62
1:A:99:TRP:O	1:A:224:SER:OG	2.18	0.62
1:A:90:HIS:CE1	1:A:184:THR:OG1	2.52	0.62
1:B:69:ILE:HG21	1:B:76:LEU:CB	2.26	0.62
1:A:106:HIS:HB2	1:A:107:PRO:HD2	1.82	0.62
1:A:105:SER:CB	1:A:109:THR:HG22	2.25	0.62
1:A:230:ALA:CB	1:A:233:SER:OG	2.48	0.62
1:B:158:ASP:CG	1:B:160:ASN:ND2	2.49	0.62
1:B:90:HIS:CE1	1:B:184:THR:OG1	2.53	0.62
1:A:13:LEU:HG	1:A:76:LEU:HD21	1.82	0.61
1:A:53:THR:O	1:A:88:TYR:CB	2.26	0.61
1:B:122:GLN:HE21	1:B:124:GLY:HA3	1.65	0.61
1:B:139:LEU:O	1:B:211:LYS:HA	1.98	0.61
1:A:48:GLU:O	1:A:49:ILE:CG1	2.43	0.61
1:B:275:ILE:O	1:B:276:ASP:C	2.38	0.61
1:A:122:GLN:CG	1:A:157:ILE:HA	2.29	0.61
1:A:141:ILE:CG2	1:A:141:ILE:O	2.43	0.61
1:A:172:ASP:O	1:A:173:VAL:C	2.37	0.61
1:A:97:GLN:HA	1:A:225:TRP:CE2	2.36	0.61
1:B:34:LEU:C	1:B:43:PHE:HB3	2.19	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:249:THR:HG22	1:A:251:THR:OG1	1.99	0.61
1:A:42:ILE:HG12	1:A:43:PHE:H	0.63	0.61
1:B:166:LYS:HB3	1:B:176:TYR:CZ	2.36	0.61
1:B:190:ILE:C	1:B:193:ILE:CG1	2.64	0.61
1:B:7:ILE:HB	1:B:16:LYS:C	2.19	0.61
1:B:203:ALA:O	1:B:206:GLY:N	2.33	0.61
1:A:209:LYS:HB3	1:A:213:TYR:HB2	1.82	0.61
1:A:275:ILE:O	1:A:276:ASP:C	2.38	0.61
1:B:97:GLN:HA	1:B:225:TRP:CE2	2.36	0.61
1:A:166:LYS:HB3	1:A:176:TYR:CZ	2.36	0.61
1:A:203:ALA:O	1:A:204:PHE:C	2.39	0.61
1:B:203:ALA:O	1:B:204:PHE:C	2.39	0.61
1:A:190:ILE:C	1:A:193:ILE:CG1	2.64	0.61
1:A:191:TYR:HE2	1:A:192:LYS:HE2	1.66	0.61
1:A:193:ILE:HA	1:A:197:LYS:O	2.01	0.61
1:A:7:ILE:HB	1:A:16:LYS:C	2.19	0.61
1:B:193:ILE:HA	1:B:197:LYS:O	2.01	0.61
1:A:86:HIS:CG	1:A:87:GLY:H	2.18	0.61
1:B:209:LYS:HB3	1:B:213:TYR:HB2	1.82	0.61
1:B:67:PRO:O	1:B:68:ILE:CG1	2.45	0.61
1:A:141:ILE:HD13	1:A:153:LYS:O	2.01	0.61
1:A:9:ALA:CB	1:A:15:TYR:N	2.63	0.61
1:B:142:MET:N	1:B:153:LYS:O	2.31	0.61
1:B:38:LYS:O	1:B:39:GLU:C	2.38	0.61
1:A:111:ALA:HB2	1:A:145:LEU:HD22	1.83	0.60
1:B:5:ARG:CZ	1:B:25:PRO:HB3	2.29	0.60
1:B:38:LYS:CD	1:B:41:ASN:HB2	2.31	0.60
1:B:99:TRP:O	1:B:224:SER:OG	2.18	0.60
1:A:101:ASP:O	1:A:113:GLY:HA3	2.02	0.60
1:A:4:THR:HG22	1:A:19:ILE:CB	2.31	0.60
1:A:6:GLN:OE1	1:A:265:PRO:HB2	2.01	0.60
1:A:38:LYS:O	1:A:39:GLU:C	2.38	0.60
1:B:34:LEU:O	1:B:43:PHE:HB2	1.97	0.60
1:A:139:LEU:CB	1:A:155:ILE:HG22	2.17	0.60
1:A:253:SER:C	1:A:255:ALA:N	2.55	0.60
1:A:122:GLN:HE21	1:A:124:GLY:CA	2.14	0.60
1:A:140:GLY:HA3	1:A:170:ILE:HD11	1.82	0.60
1:B:6:GLN:OE1	1:B:265:PRO:HB2	2.01	0.60
1:A:98:THR:HA	1:A:225:TRP:CB	2.31	0.60
1:A:56:LYS:NZ	1:A:70:GLN:NE2	2.50	0.60
1:A:92:TYR:CD2	1:A:121:LEU:HD23	2.37	0.60
1:B:122:GLN:HE21	1:B:124:GLY:CA	2.14	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:9:ALA:CB	1:B:15:TYR:N	2.63	0.60
1:B:106:HIS:HB2	1:B:107:PRO:HD2	1.82	0.60
1:A:104:VAL:O	1:A:105:SER:C	2.40	0.60
1:A:8:GLY:HA3	1:A:266:LYS:CG	2.29	0.60
1:A:125:GLU:CD	1:B:277:LYS:HG3	2.22	0.60
1:A:54:ASN:H	1:A:54:ASN:HD22	1.46	0.60
1:B:80:ARG:CG	1:B:194:PRO:HB2	2.25	0.60
1:B:4:THR:HG22	1:B:19:ILE:CB	2.31	0.60
1:A:158:ASP:CG	1:A:160:ASN:ND2	2.49	0.60
1:A:179:GLY:O	1:A:183:ALA:CB	2.47	0.60
1:A:27:SER:O	1:A:31:ASP:N	2.35	0.60
1:B:179:GLY:O	1:B:183:ALA:CB	2.47	0.60
1:A:92:TYR:CD2	1:A:121:LEU:CD2	2.85	0.60
1:A:188:PHE:O	1:A:191:TYR:CB	2.48	0.60
1:A:19:ILE:HD12	1:A:26:VAL:CG1	2.16	0.60
1:B:141:ILE:HD13	1:B:153:LYS:O	2.01	0.60
1:B:9:ALA:O	1:B:10:LYS:CB	2.36	0.60
1:B:35:TYR:N	1:B:35:TYR:CD2	2.70	0.60
1:A:129:TYR:HD1	1:A:129:TYR:O	1.85	0.60
1:A:5:ARG:CZ	1:A:25:PRO:HB3	2.29	0.60
1:B:222:HIS:NE2	1:B:226:LYS:CD	2.62	0.60
1:A:157:ILE:HG23	1:A:158:ASP:N	2.17	0.59
1:A:222:HIS:CD2	1:A:226:LYS:CE	2.66	0.59
1:B:222:HIS:CD2	1:B:226:LYS:CG	2.82	0.59
1:B:56:LYS:NZ	1:B:70:GLN:NE2	2.50	0.59
1:B:29:PHE:H	1:B:96:PRO:CB	2.15	0.59
1:A:69:ILE:HG21	1:A:76:LEU:CB	2.26	0.59
1:B:92:TYR:CD2	1:B:121:LEU:HD23	2.36	0.59
1:B:27:SER:O	1:B:31:ASP:N	2.35	0.59
1:B:92:TYR:CD2	1:B:121:LEU:CD2	2.85	0.59
1:A:163:LEU:HB3	1:A:167:LEU:HD13	1.85	0.59
1:A:241:LEU:N	1:A:241:LEU:HD12	2.17	0.59
1:A:38:LYS:C	1:A:40:ASP:N	2.53	0.59
1:A:34:LEU:C	1:A:43:PHE:HB3	2.19	0.59
1:A:83:PHE:CB	1:A:84:PRO:CD	2.80	0.59
1:B:101:ASP:O	1:B:113:GLY:HA3	2.02	0.59
1:B:271:ILE:HB	1:B:275:ILE:HD12	1.84	0.59
1:B:38:LYS:C	1:B:40:ASP:N	2.53	0.59
1:B:253:SER:C	1:B:255:ALA:N	2.55	0.59
1:A:158:ASP:C	1:A:160:ASN:H	2.06	0.59
1:A:160:ASN:HD22	1:A:161:ASP:N	2.01	0.59
1:A:166:LYS:CD	1:A:176:TYR:CE2	2.81	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:29:PHE:H	1:A:96:PRO:CB	2.15	0.59
1:B:111:ALA:HB2	1:B:145:LEU:HD22	1.83	0.59
1:B:127:ILE:HG23	1:B:128:ALA:H	1.61	0.59
1:B:181:LEU:O	1:B:184:THR:N	2.28	0.59
1:B:19:ILE:HD12	1:B:26:VAL:CG1	2.16	0.59
1:B:59:ILE:O	1:B:59:ILE:HG13	2.02	0.59
1:B:49:ILE:CD1	1:B:92:TYR:HB3	2.32	0.59
1:A:38:LYS:CD	1:A:41:ASN:HB2	2.31	0.59
1:B:158:ASP:C	1:B:160:ASN:H	2.06	0.59
1:B:42:ILE:HG12	1:B:43:PHE:CA	2.23	0.59
1:B:160:ASN:HD22	1:B:161:ASP:N	2.01	0.59
1:A:59:ILE:HG13	1:A:59:ILE:O	2.02	0.59
1:A:59:ILE:CG2	1:A:66:ASN:C	2.66	0.59
1:B:192:LYS:C	1:B:197:LYS:O	2.40	0.59
1:B:241:LEU:HD12	1:B:241:LEU:N	2.17	0.59
1:A:204:PHE:C	1:A:206:GLY:N	2.45	0.59
1:B:204:PHE:C	1:B:206:GLY:N	2.45	0.59
1:A:150:THR:CG2	1:A:150:THR:O	2.51	0.59
1:B:191:TYR:HE2	1:B:192:LYS:HE2	1.66	0.59
1:B:244:VAL:O	1:B:244:VAL:CG2	2.51	0.59
1:B:69:ILE:HD12	1:B:76:LEU:HG	1.85	0.59
1:B:83:PHE:CB	1:B:84:PRO:CD	2.80	0.59
1:A:192:LYS:CB	1:A:197:LYS:HB3	2.30	0.59
1:A:67:PRO:O	1:A:68:ILE:CG1	2.45	0.59
1:B:122:GLN:CG	1:B:156:ALA:O	2.51	0.59
1:B:157:ILE:HG23	1:B:158:ASP:N	2.17	0.59
1:B:141:ILE:HG13	1:B:217:ILE:HG21	1.85	0.59
1:B:65:LEU:C	1:B:66:ASN:CG	2.62	0.59
1:B:246:LEU:C	1:B:248:ASP:N	2.56	0.59
1:A:146:ASP:HB2	1:A:147:GLU:OE1	2.03	0.58
1:A:7:ILE:CG2	1:A:14:GLU:O	2.51	0.58
1:A:277:LYS:HG3	1:B:125:GLU:CD	2.22	0.58
1:B:129:TYR:O	1:B:129:TYR:HD1	1.85	0.58
1:B:41:ASN:HD21	1:B:137:LYS:CE	2.10	0.58
1:B:58:GLU:O	1:B:59:ILE:CG2	2.52	0.58
1:A:51:ARG:CG	1:A:90:HIS:N	2.64	0.58
1:B:7:ILE:CG2	1:B:14:GLU:O	2.51	0.58
1:B:19:ILE:HD13	1:B:19:ILE:C	2.24	0.58
1:A:192:LYS:C	1:A:197:LYS:O	2.40	0.58
1:A:122:GLN:CG	1:A:156:ALA:O	2.51	0.58
1:A:69:ILE:HD12	1:A:76:LEU:HG	1.85	0.58
1:B:150:THR:CG2	1:B:150:THR:O	2.51	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:141:ILE:HG13	1:A:217:ILE:HG21	1.85	0.58
1:A:244:VAL:CG2	1:A:244:VAL:O	2.51	0.58
1:B:104:VAL:O	1:B:105:SER:C	2.40	0.58
1:B:163:LEU:HB3	1:B:167:LEU:HD13	1.85	0.58
1:B:98:THR:HA	1:B:225:TRP:CB	2.31	0.58
1:A:217:ILE:HG23	1:A:218:ILE:N	2.18	0.58
1:A:110:LYS:C	1:A:112:VAL:N	2.37	0.58
1:A:63:GLU:OE2	1:A:256:ALA:HB1	2.04	0.58
1:A:49:ILE:CD1	1:A:92:TYR:HB3	2.32	0.58
1:B:122:GLN:HG2	1:B:157:ILE:HA	1.86	0.58
1:B:164:ALA:C	1:B:166:LYS:H	2.07	0.58
1:B:80:ARG:NE	1:B:80:ARG:HA	2.19	0.58
1:B:98:THR:OG1	1:B:221:THR:HG23	2.04	0.58
1:A:127:ILE:HG23	1:A:128:ALA:H	1.61	0.58
1:A:80:ARG:HD3	1:A:279:PHE:CD1	2.37	0.58
1:A:34:LEU:C	1:A:36:ALA:H	2.06	0.58
1:A:41:ASN:HD21	1:A:137:LYS:CE	2.10	0.58
1:A:18:TYR:CE1	1:A:260:ILE:HD12	2.39	0.58
1:A:65:LEU:C	1:A:66:ASN:CG	2.62	0.58
1:B:103:ASN:HA	1:B:112:VAL:CG1	2.33	0.58
1:B:99:TRP:CZ2	1:B:115:ASN:OD1	2.57	0.58
1:B:97:GLN:C	1:B:225:TRP:CG	2.78	0.58
1:B:48:GLU:O	1:B:49:ILE:CG1	2.43	0.58
1:A:74:GLY:O	1:A:75:LYS:HG2	1.96	0.58
1:B:71:ASN:C	1:B:72:THR:OG1	2.43	0.58
1:A:193:ILE:CA	1:A:197:LYS:O	2.52	0.57
1:A:19:ILE:HD13	1:A:19:ILE:C	2.24	0.57
1:B:63:GLU:OE2	1:B:256:ALA:HB1	2.04	0.57
1:A:99:TRP:CZ2	1:A:115:ASN:OD1	2.57	0.57
1:A:157:ILE:HG23	1:A:158:ASP:H	1.69	0.57
1:A:141:ILE:HG13	1:A:214:ALA:HA	1.86	0.57
1:A:246:LEU:C	1:A:248:ASP:N	2.56	0.57
1:B:110:LYS:C	1:B:112:VAL:N	2.37	0.57
1:A:142:MET:HB2	1:A:153:LYS:HB2	1.78	0.57
1:A:225:TRP:CE3	1:A:226:LYS:N	2.73	0.57
1:A:225:TRP:CH2	1:A:229:ILE:HD11	2.39	0.57
1:A:271:ILE:HB	1:A:275:ILE:HD12	1.84	0.57
1:B:225:TRP:CH2	1:B:229:ILE:HD11	2.39	0.57
1:B:80:ARG:HD3	1:B:279:PHE:CD1	2.37	0.57
1:A:54:ASN:HB2	1:A:275:ILE:HG21	1.86	0.57
1:B:90:HIS:CE1	1:B:184:THR:HG23	2.40	0.57
1:B:54:ASN:OD1	1:B:81:ASN:CG	2.43	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:122:GLN:HE21	1:A:124:GLY:HA3	1.65	0.57
1:A:187:TRP:O	1:A:187:TRP:CE3	2.57	0.57
1:A:98:THR:OG1	1:A:221:THR:HG23	2.04	0.57
1:A:228:LEU:CD1	1:A:234:SER:OG	2.53	0.57
1:A:86:HIS:CG	1:A:87:GLY:N	2.71	0.57
1:A:97:GLN:C	1:A:225:TRP:CG	2.78	0.57
1:A:9:ALA:HB3	1:A:15:TYR:CD1	2.39	0.57
1:A:107:PRO:O	1:A:108:GLU:CB	2.52	0.57
1:B:107:PRO:O	1:B:108:GLU:CB	2.52	0.57
1:A:158:ASP:OD2	1:A:160:ASN:ND2	2.38	0.57
1:A:58:GLU:O	1:A:59:ILE:CG2	2.52	0.57
1:B:9:ALA:HB3	1:B:15:TYR:CD1	2.39	0.57
1:B:146:ASP:HB2	1:B:147:GLU:OE1	2.03	0.57
1:A:57:LEU:HB3	1:A:68:ILE:H	1.69	0.57
1:B:228:LEU:CD1	1:B:234:SER:OG	2.53	0.57
1:B:158:ASP:CB	1:B:161:ASP:HB3	2.35	0.57
1:B:187:TRP:O	1:B:187:TRP:CE3	2.57	0.57
1:B:193:ILE:CA	1:B:197:LYS:O	2.52	0.57
1:B:230:ALA:CB	1:B:233:SER:OG	2.48	0.57
1:B:18:TYR:CE1	1:B:260:ILE:HD12	2.39	0.57
1:B:86:HIS:CG	1:B:87:GLY:N	2.71	0.57
1:A:222:HIS:NE2	1:A:226:LYS:CD	2.62	0.56
1:B:58:GLU:CD	1:B:116:ASN:OD1	2.43	0.56
1:B:158:ASP:OD2	1:B:160:ASN:ND2	2.38	0.56
1:B:19:ILE:HD13	1:B:26:VAL:HG12	1.71	0.56
1:B:225:TRP:CE3	1:B:226:LYS:N	2.73	0.56
1:B:5:ARG:HH12	1:B:260:ILE:HG21	0.72	0.56
1:B:8:GLY:H	1:B:265:PRO:HA	1.69	0.56
1:A:242:THR:CA	1:A:251:THR:HB	2.32	0.56
1:B:98:THR:HG22	1:B:221:THR:OG1	1.93	0.56
1:B:137:LYS:HE3	1:B:159:ILE:HG23	1.88	0.56
1:B:141:ILE:HG13	1:B:214:ALA:HA	1.86	0.56
1:B:54:ASN:HB2	1:B:275:ILE:HG21	1.86	0.56
1:A:137:LYS:HE3	1:A:159:ILE:HG23	1.88	0.56
1:A:112:VAL:C	1:A:150:THR:HB	2.11	0.56
1:A:229:ILE:O	1:A:231:GLY:N	2.38	0.56
1:A:54:ASN:OD1	1:A:81:ASN:CG	2.43	0.56
1:B:157:ILE:HG23	1:B:158:ASP:H	1.69	0.56
1:A:122:GLN:HG2	1:A:157:ILE:HA	1.86	0.56
1:A:164:ALA:C	1:A:166:LYS:H	2.07	0.56
1:A:90:HIS:CE1	1:A:184:THR:HG23	2.40	0.56
1:B:33:PRO:HA	1:B:97:GLN:NE2	2.20	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:218:ILE:HG22	1:A:219:LYS:N	2.19	0.56
1:B:229:ILE:O	1:B:231:GLY:N	2.38	0.56
1:B:64:THR:C	1:B:65:LEU:CD2	2.72	0.56
1:A:42:ILE:HG12	1:A:43:PHE:CA	2.23	0.56
1:A:58:GLU:CD	1:A:116:ASN:OD1	2.43	0.56
1:A:9:ALA:CB	1:A:15:TYR:HA	2.31	0.56
1:A:90:HIS:O	1:A:91:ASN:CB	2.41	0.56
1:B:82:CYS:HG	1:B:190:ILE:HG13	1.66	0.56
1:B:217:ILE:HG23	1:B:218:ILE:N	2.18	0.56
1:A:8:GLY:H	1:A:265:PRO:HA	1.70	0.56
1:A:80:ARG:NE	1:A:80:ARG:HA	2.19	0.56
1:A:12:THR:OG1	1:A:13:LEU:N	2.39	0.56
1:B:158:ASP:O	1:B:159:ILE:C	2.44	0.56
1:B:218:ILE:HG22	1:B:219:LYS:N	2.19	0.56
1:B:45:MET:HE2	1:B:120:VAL:CG1	2.21	0.56
1:A:139:LEU:HD12	1:A:155:ILE:HG21	1.89	0.56
1:B:192:LYS:CB	1:B:197:LYS:HB3	2.30	0.55
1:B:20:GLU:HA	1:B:26:VAL:HG12	1.88	0.55
1:B:59:ILE:CG2	1:B:66:ASN:C	2.66	0.55
1:A:103:ASN:O	1:A:104:VAL:CB	2.28	0.55
1:A:32:ILE:O	1:A:32:ILE:HG22	2.06	0.55
1:A:33:PRO:HA	1:A:97:GLN:NE2	2.20	0.55
1:B:105:SER:CB	1:B:109:THR:HG22	2.25	0.55
1:A:35:TYR:N	1:A:35:TYR:CD2	2.70	0.55
1:A:103:ASN:HA	1:A:112:VAL:CG1	2.33	0.55
1:A:4:THR:CA	1:A:19:ILE:HA	2.37	0.55
1:B:12:THR:OG1	1:B:13:LEU:N	2.39	0.55
1:B:225:TRP:HE3	1:B:226:LYS:N	2.04	0.55
1:B:107:PRO:O	1:B:108:GLU:HB2	2.07	0.55
1:B:34:LEU:C	1:B:36:ALA:H	2.06	0.55
1:B:59:ILE:HG22	1:B:67:PRO:CD	2.34	0.55
1:A:158:ASP:CB	1:A:161:ASP:HB3	2.35	0.55
1:A:232:LYS:O	1:A:234:SER:O	2.25	0.55
1:A:30:HIS:HB3	1:A:243:ASN:OD1	2.06	0.55
1:A:25:PRO:HG3	1:A:257:SER:CA	2.37	0.55
1:A:241:LEU:O	1:A:243:ASN:CG	2.44	0.55
1:B:4:THR:CA	1:B:19:ILE:HA	2.37	0.55
1:A:211:LYS:HD3	1:A:212:LYS:NZ	2.22	0.55
1:A:225:TRP:HE3	1:A:226:LYS:N	2.04	0.55
1:A:7:ILE:HG22	1:A:15:TYR:CA	2.35	0.55
1:B:181:LEU:O	1:B:183:ALA:N	2.40	0.55
1:B:30:HIS:HB3	1:B:243:ASN:OD1	2.06	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:6:GLN:HB3	1:B:265:PRO:HB3	1.88	0.55
1:B:8:GLY:HA3	1:B:266:LYS:CG	2.29	0.55
1:A:61:LYS:HG3	1:A:239:ILE:HG22	1.88	0.55
1:A:95:PHE:CE2	1:A:154:VAL:HG11	2.42	0.55
1:B:232:LYS:O	1:B:234:SER:O	2.25	0.55
1:B:57:LEU:HB3	1:B:68:ILE:H	1.69	0.55
1:A:139:LEU:CD1	1:A:155:ILE:HG21	2.37	0.55
1:B:139:LEU:HD12	1:B:155:ILE:HG21	1.89	0.55
1:A:158:ASP:O	1:A:159:ILE:C	2.44	0.55
1:A:6:GLN:HB3	1:A:265:PRO:HB3	1.88	0.55
1:B:166:LYS:CD	1:B:176:TYR:CE2	2.81	0.55
1:B:95:PHE:CE2	1:B:154:VAL:HG11	2.42	0.55
1:A:107:PRO:O	1:A:108:GLU:HB2	2.07	0.55
1:A:226:LYS:C	1:A:228:LEU:H	2.11	0.54
1:A:25:PRO:HG3	1:A:257:SER:O	2.07	0.54
1:A:58:GLU:N	1:A:68:ILE:H	2.05	0.54
1:B:11:ASN:O	1:B:13:LEU:N	2.40	0.54
1:B:25:PRO:HG3	1:B:257:SER:CA	2.37	0.54
1:B:58:GLU:N	1:B:68:ILE:H	2.05	0.54
1:A:139:LEU:CG	1:A:155:ILE:CG2	2.86	0.54
1:B:241:LEU:O	1:B:243:ASN:CG	2.44	0.54
1:B:211:LYS:HD3	1:B:212:LYS:NZ	2.22	0.54
1:A:71:ASN:C	1:A:72:THR:OG1	2.43	0.54
1:B:147:GLU:O	1:B:148:GLY:C	2.45	0.54
1:A:142:MET:HE2	1:A:202:PHE:HE1	1.64	0.54
1:B:9:ALA:CB	1:B:15:TYR:HA	2.31	0.54
1:B:173:VAL:HA	1:B:177:PHE:HD1	1.73	0.54
1:B:139:LEU:CD1	1:B:155:ILE:HG21	2.37	0.54
1:A:181:LEU:O	1:A:183:ALA:N	2.40	0.54
1:A:11:ASN:O	1:A:13:LEU:N	2.40	0.54
1:B:11:ASN:HA	1:B:69:ILE:HD11	1.89	0.54
1:B:184:THR:O	1:B:185:ASP:C	2.46	0.54
1:B:153:LYS:HE2	1:B:188:PHE:CZ	2.43	0.54
1:B:40:ASP:OD2	1:B:40:ASP:N	2.41	0.54
1:B:61:LYS:HG3	1:B:239:ILE:HG22	1.88	0.54
1:A:147:GLU:O	1:A:148:GLY:C	2.45	0.54
1:A:153:LYS:HE2	1:A:188:PHE:CZ	2.43	0.54
1:B:54:ASN:N	1:B:54:ASN:ND2	2.56	0.54
1:A:228:LEU:HD12	1:A:234:SER:OG	2.08	0.54
1:B:173:VAL:O	1:B:176:TYR:N	2.41	0.54
1:A:92:TYR:HA	1:A:120:VAL:O	2.08	0.54
1:A:129:TYR:O	1:A:131:GLY:N	2.41	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:92:TYR:HA	1:B:120:VAL:O	2.08	0.54
1:B:92:TYR:HE2	1:B:121:LEU:HD21	1.73	0.54
1:B:139:LEU:CG	1:B:155:ILE:CG2	2.86	0.54
1:A:7:ILE:CB	1:A:16:LYS:H	2.15	0.54
1:A:173:VAL:O	1:A:176:TYR:N	2.41	0.54
1:A:173:VAL:HA	1:A:177:PHE:HD1	1.73	0.54
1:A:98:THR:C	1:A:225:TRP:HB2	2.29	0.54
1:A:64:THR:C	1:A:65:LEU:CD2	2.72	0.54
1:A:11:ASN:HA	1:A:69:ILE:HD11	1.89	0.54
1:A:139:LEU:CD1	1:A:155:ILE:CG2	2.85	0.54
1:A:176:TYR:HB3	1:A:177:PHE:CD1	2.43	0.53
1:A:20:GLU:HA	1:A:26:VAL:HG12	1.88	0.53
1:B:176:TYR:HB3	1:B:177:PHE:CD1	2.43	0.53
1:A:229:ILE:HG22	1:A:249:THR:CG2	2.38	0.53
1:A:244:VAL:HG21	1:A:254:LYS:HG3	1.90	0.53
1:A:98:THR:HG22	1:A:221:THR:OG1	1.93	0.53
1:A:5:ARG:HH12	1:A:260:ILE:HG21	0.72	0.53
1:B:25:PRO:HG3	1:B:257:SER:O	2.07	0.53
1:B:49:ILE:CG1	1:B:92:TYR:CB	2.86	0.53
1:A:1:THR:CB	1:A:133:VAL:HG21	2.38	0.53
1:B:228:LEU:HD12	1:B:234:SER:OG	2.08	0.53
1:B:89:ILE:O	1:B:90:HIS:CG	2.61	0.53
1:A:122:GLN:HB2	1:A:156:ALA:O	2.07	0.53
1:A:184:THR:HA	1:A:187:TRP:HD1	1.74	0.53
1:A:54:ASN:ND2	1:A:54:ASN:N	2.56	0.53
1:B:188:PHE:O	1:B:191:TYR:CB	2.48	0.53
1:B:229:ILE:HG22	1:B:249:THR:CG2	2.38	0.53
1:B:254:LYS:HG2	1:B:254:LYS:O	2.08	0.53
1:B:32:ILE:O	1:B:32:ILE:HG22	2.06	0.53
1:A:182:ARG:HH11	1:A:185:ASP:HB2	1.72	0.53
1:B:129:TYR:O	1:B:131:GLY:N	2.41	0.53
1:B:1:THR:CB	1:B:133:VAL:HG21	2.38	0.53
1:B:222:HIS:CD2	1:B:226:LYS:CE	2.66	0.53
1:A:9:ALA:HB2	1:A:15:TYR:N	2.24	0.53
1:A:184:THR:O	1:A:185:ASP:C	2.46	0.53
1:A:40:ASP:N	1:A:40:ASP:OD2	2.41	0.53
1:B:184:THR:HA	1:B:187:TRP:HD1	1.74	0.53
1:B:32:ILE:O	1:B:33:PRO:O	2.27	0.53
1:B:29:PHE:N	1:B:96:PRO:HB2	2.24	0.53
1:A:159:ILE:O	1:A:159:ILE:HG22	2.09	0.53
1:A:89:ILE:O	1:A:90:HIS:CG	2.61	0.53
1:B:226:LYS:C	1:B:228:LEU:H	2.11	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:90:HIS:CE1	1:B:184:THR:HG1	2.26	0.53
1:B:81:ASN:ND2	1:B:276:ASP:HA	2.24	0.53
1:B:54:ASN:OD1	1:B:81:ASN:OD1	2.27	0.53
1:A:254:LYS:O	1:A:254:LYS:HG2	2.09	0.52
1:A:81:ASN:ND2	1:A:276:ASP:HA	2.24	0.52
1:A:181:LEU:O	1:A:184:THR:N	2.28	0.52
1:A:142:MET:HG3	1:A:208:ALA:HB2	1.91	0.52
1:A:49:ILE:CG1	1:A:92:TYR:CB	2.86	0.52
1:B:7:ILE:HG22	1:B:15:TYR:CA	2.35	0.52
1:A:2:TYR:CB	1:A:22:ASP:H	2.22	0.52
1:A:54:ASN:OD1	1:A:81:ASN:OD1	2.27	0.52
1:A:59:ILE:HG22	1:A:67:PRO:CD	2.34	0.52
1:B:29:PHE:HE1	1:B:225:TRP:HD1	1.53	0.52
1:B:32:ILE:CG2	1:B:96:PRO:CG	2.79	0.52
1:B:48:GLU:HB3	1:B:67:PRO:HB3	1.91	0.52
1:B:51:ARG:CB	1:B:51:ARG:CZ	2.87	0.52
1:A:32:ILE:O	1:A:33:PRO:O	2.27	0.52
1:B:118:ILE:HG23	1:B:119:ASP:N	2.23	0.52
1:B:122:GLN:HG3	1:B:157:ILE:HA	1.91	0.52
1:B:7:ILE:CB	1:B:16:LYS:H	2.15	0.52
1:A:27:SER:OG	1:A:30:HIS:HB2	2.10	0.52
1:B:50:PRO:HA	1:B:128:ALA:CB	2.39	0.52
1:B:98:THR:C	1:B:225:TRP:HB2	2.29	0.52
1:B:106:HIS:CG	1:B:107:PRO:HD2	2.45	0.52
1:A:122:GLN:HG3	1:A:157:ILE:HA	1.91	0.52
1:B:159:ILE:HG22	1:B:159:ILE:O	2.09	0.52
1:B:209:LYS:CB	1:B:213:TYR:HB2	2.39	0.52
1:B:27:SER:OG	1:B:30:HIS:HB2	2.10	0.52
1:B:244:VAL:HG21	1:B:254:LYS:HG3	1.90	0.52
1:B:64:THR:O	1:B:64:THR:HG22	2.09	0.52
1:A:238:GLY:O	1:A:239:ILE:HD13	2.10	0.52
1:B:122:GLN:HB2	1:B:156:ALA:O	2.07	0.52
1:B:190:ILE:O	1:B:193:ILE:HG12	2.10	0.52
1:B:21:LYS:HB3	1:B:26:VAL:HB	1.92	0.52
1:A:116:ASN:O	1:A:117:PRO:O	2.28	0.52
1:A:171:GLU:O	1:A:172:ASP:C	2.48	0.52
1:A:21:LYS:HB3	1:A:26:VAL:HB	1.92	0.52
1:A:48:GLU:HB3	1:A:67:PRO:HB3	1.91	0.52
1:B:142:MET:HG3	1:B:208:ALA:HB2	1.91	0.52
1:B:249:THR:C	1:B:251:THR:N	2.59	0.52
1:B:69:ILE:HG22	1:B:77:ARG:N	2.20	0.52
1:B:139:LEU:CD1	1:B:155:ILE:CG2	2.85	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:16:LYS:CE	1:A:62:GLU:OE2	2.58	0.51
1:A:59:ILE:CG2	1:A:67:PRO:CA	2.83	0.51
1:A:92:TYR:HE2	1:A:121:LEU:HD21	1.73	0.51
1:A:54:ASN:N	1:A:54:ASN:HD22	2.08	0.51
1:B:54:ASN:N	1:B:54:ASN:HD22	2.08	0.51
1:B:51:ARG:HA	1:B:88:TYR:O	2.10	0.51
1:B:2:TYR:CB	1:B:22:ASP:H	2.22	0.51
1:B:16:LYS:CE	1:B:62:GLU:OE2	2.58	0.51
1:B:74:GLY:O	1:B:75:LYS:HG2	1.96	0.51
1:A:105:SER:CB	1:A:109:THR:O	2.57	0.51
1:A:209:LYS:CB	1:A:213:TYR:HB2	2.39	0.51
1:A:29:PHE:N	1:A:96:PRO:HB2	2.24	0.51
1:B:161:ASP:CG	1:B:162:PRO:HD2	2.31	0.51
1:B:238:GLY:O	1:B:239:ILE:HD13	2.10	0.51
1:A:50:PRO:HA	1:A:128:ALA:CB	2.39	0.51
1:A:51:ARG:HA	1:A:88:TYR:O	2.10	0.51
1:B:171:GLU:O	1:B:172:ASP:C	2.48	0.51
1:B:46:VAL:HG13	1:B:96:PRO:HG3	1.92	0.51
1:B:51:ARG:CG	1:B:90:HIS:N	2.64	0.51
1:B:58:GLU:O	1:B:66:ASN:O	2.29	0.51
1:A:65:LEU:C	1:A:66:ASN:ND2	2.63	0.51
1:B:9:ALA:HB2	1:B:15:TYR:N	2.24	0.51
1:A:106:HIS:CG	1:A:107:PRO:HD2	2.45	0.51
1:A:51:ARG:CZ	1:A:51:ARG:HB2	2.40	0.51
1:B:192:LYS:HE3	1:B:200:ASN:OD1	2.11	0.51
1:B:242:THR:CA	1:B:251:THR:HB	2.32	0.51
1:B:38:LYS:HG2	1:B:41:ASN:N	2.26	0.51
1:B:51:ARG:HB2	1:B:51:ARG:CZ	2.40	0.51
1:A:89:ILE:O	1:A:90:HIS:ND1	2.44	0.51
1:B:111:ALA:HB1	1:B:149:GLU:N	2.26	0.51
1:A:46:VAL:HG13	1:A:96:PRO:HG3	1.93	0.51
1:A:64:THR:O	1:A:64:THR:CG2	2.59	0.51
1:B:105:SER:CB	1:B:109:THR:O	2.57	0.51
1:B:115:ASN:C	1:B:116:ASN:O	2.49	0.51
1:B:5:ARG:HH11	1:B:260:ILE:CG2	1.87	0.51
1:A:192:LYS:O	1:A:193:ILE:C	2.49	0.51
1:A:47:VAL:O	1:A:131:GLY:N	2.44	0.51
1:A:90:HIS:CE1	1:A:184:THR:HG1	2.27	0.51
1:A:1:THR:H3	1:A:133:VAL:CG1	2.23	0.50
1:A:64:THR:HG22	1:A:64:THR:O	2.09	0.50
1:A:86:HIS:ND1	1:A:87:GLY:N	2.59	0.50
1:B:173:VAL:O	1:B:174:GLU:C	2.49	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:192:LYS:O	1:B:193:ILE:C	2.50	0.50
1:B:47:VAL:O	1:B:131:GLY:N	2.43	0.50
1:A:129:TYR:CD2	1:A:132:GLN:CD	2.85	0.50
1:A:38:LYS:HG2	1:A:41:ASN:N	2.26	0.50
1:B:142:MET:HE1	1:B:202:PHE:CZ	2.34	0.50
1:B:38:LYS:HG2	1:B:38:LYS:O	2.11	0.50
1:A:190:ILE:O	1:A:193:ILE:HG12	2.10	0.50
1:A:38:LYS:HG2	1:A:38:LYS:O	2.11	0.50
1:B:89:ILE:O	1:B:90:HIS:ND1	2.44	0.50
1:A:161:ASP:CG	1:A:162:PRO:HD2	2.31	0.50
1:A:173:VAL:O	1:A:174:GLU:C	2.49	0.50
1:B:116:ASN:O	1:B:117:PRO:O	2.28	0.50
1:B:11:ASN:HA	1:B:69:ILE:HD12	1.94	0.50
1:A:62:GLU:O	1:A:63:GLU:CB	2.44	0.50
1:B:129:TYR:CD2	1:B:132:GLN:CD	2.85	0.50
1:B:69:ILE:C	1:B:70:GLN:O	2.45	0.50
1:A:192:LYS:HE3	1:A:200:ASN:OD1	2.11	0.50
1:A:252:TYR:HE1	1:A:254:LYS:HB2	1.76	0.50
1:B:241:LEU:O	1:B:242:THR:O	2.30	0.50
1:B:8:GLY:CA	1:B:266:LYS:N	2.73	0.50
1:A:115:ASN:C	1:A:116:ASN:O	2.49	0.50
1:A:58:GLU:O	1:A:66:ASN:O	2.29	0.50
1:A:8:GLY:CA	1:A:266:LYS:N	2.73	0.50
1:A:65:LEU:O	1:A:66:ASN:CG	2.50	0.49
1:B:164:ALA:C	1:B:166:LYS:N	2.65	0.49
1:B:197:LYS:O	1:B:198:PRO:O	2.30	0.49
1:B:42:ILE:HG13	1:B:136:VAL:C	2.10	0.49
1:B:51:ARG:CA	1:B:88:TYR:O	2.59	0.49
1:A:142:MET:HB2	1:A:153:LYS:CB	2.38	0.49
1:A:142:MET:HE2	1:A:202:PHE:HZ	1.56	0.49
1:A:3:THR:O	1:A:20:GLU:CA	2.60	0.49
1:B:142:MET:CE	1:B:202:PHE:HE1	2.16	0.49
1:B:142:MET:HE2	1:B:202:PHE:HE1	1.73	0.49
1:B:86:HIS:ND1	1:B:87:GLY:N	2.59	0.49
1:A:111:ALA:HB1	1:A:149:GLU:N	2.26	0.49
1:A:127:ILE:CG2	1:A:128:ALA:N	2.21	0.49
1:A:4:THR:HG22	1:A:19:ILE:HA	1.93	0.49
1:A:97:GLN:O	1:A:225:TRP:CE3	2.65	0.49
1:A:51:ARG:CA	1:A:88:TYR:O	2.59	0.49
1:B:141:ILE:O	1:B:208:ALA:HB1	2.12	0.49
1:B:147:GLU:O	1:B:149:GLU:HG2	2.12	0.49
1:B:244:VAL:CG1	1:B:254:LYS:HA	2.42	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:64:THR:O	1:B:64:THR:CG2	2.59	0.49
1:A:125:GLU:CD	1:B:277:LYS:HG2	2.33	0.49
1:A:241:LEU:O	1:A:242:THR:O	2.30	0.49
1:B:43:PHE:CZ	1:B:218:ILE:HD13	2.47	0.49
1:B:34:LEU:HG	1:B:96:PRO:O	2.12	0.49
1:A:213:TYR:O	1:A:217:ILE:HB	2.13	0.49
1:B:47:VAL:C	1:B:48:GLU:HG3	2.32	0.49
1:A:69:ILE:C	1:A:70:GLN:O	2.45	0.49
1:A:94:ALA:O	1:A:95:PHE:C	2.51	0.49
1:A:34:LEU:HG	1:A:96:PRO:O	2.12	0.49
1:B:226:LYS:C	1:B:228:LEU:N	2.65	0.49
1:A:111:ALA:HB3	1:A:145:LEU:CD2	2.43	0.49
1:B:97:GLN:O	1:B:225:TRP:CE3	2.65	0.49
1:A:147:GLU:O	1:A:149:GLU:HG2	2.12	0.49
1:A:164:ALA:C	1:A:166:LYS:N	2.65	0.49
1:A:70:GLN:O	1:A:77:ARG:HB2	2.13	0.49
1:B:111:ALA:HB3	1:B:145:LEU:CD2	2.43	0.49
1:B:177:PHE:HD1	1:B:177:PHE:N	2.08	0.49
1:B:217:ILE:HG22	1:B:218:ILE:N	2.27	0.49
1:B:5:ARG:HH22	1:B:25:PRO:CB	2.20	0.49
1:B:59:ILE:CG2	1:B:67:PRO:CA	2.83	0.49
1:A:109:THR:CG2	1:A:150:THR:OG1	2.49	0.49
1:A:181:LEU:C	1:A:183:ALA:N	2.66	0.49
1:B:213:TYR:O	1:B:217:ILE:HB	2.13	0.49
1:A:118:ILE:HG23	1:A:119:ASP:N	2.23	0.49
1:B:182:ARG:HH11	1:B:185:ASP:HB2	1.72	0.49
1:B:3:THR:O	1:B:20:GLU:CA	2.60	0.49
1:B:27:SER:HB3	1:B:31:ASP:OD2	2.13	0.49
1:B:49:ILE:HG13	1:B:92:TYR:CB	2.35	0.49
1:A:158:ASP:HB3	1:A:160:ASN:HD22	1.78	0.48
1:A:177:PHE:N	1:A:177:PHE:HD1	2.07	0.48
1:A:43:PHE:CZ	1:A:218:ILE:HD13	2.47	0.48
1:A:188:PHE:O	1:A:191:TYR:CD2	2.67	0.48
1:A:83:PHE:CD2	1:A:84:PRO:N	2.81	0.48
1:B:99:TRP:HZ2	1:B:115:ASN:OD1	1.96	0.48
1:B:142:MET:HB2	1:B:153:LYS:CB	2.38	0.48
1:B:190:ILE:N	1:B:193:ILE:HD11	2.28	0.48
1:B:63:GLU:O	1:B:240:ASP:HB3	2.13	0.48
1:A:137:LYS:HG3	1:A:159:ILE:CD1	2.44	0.48
1:A:226:LYS:C	1:A:228:LEU:N	2.65	0.48
1:A:47:VAL:C	1:A:48:GLU:HG3	2.32	0.48
1:B:160:ASN:H	1:B:160:ASN:ND2	2.10	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:225:TRP:C	1:B:225:TRP:CE3	2.87	0.48
1:A:141:ILE:O	1:A:208:ALA:HB1	2.12	0.48
1:A:225:TRP:CE3	1:A:225:TRP:C	2.87	0.48
1:B:177:PHE:N	1:B:178:PRO:CD	2.76	0.48
1:B:190:ILE:O	1:B:193:ILE:CG1	2.61	0.48
1:A:177:PHE:N	1:A:178:PRO:CD	2.76	0.48
1:A:190:ILE:N	1:A:193:ILE:HD11	2.29	0.48
1:A:1:THR:N	1:A:133:VAL:CG1	2.60	0.48
1:B:105:SER:HB2	1:B:112:VAL:CA	2.24	0.48
1:B:209:LYS:CB	1:B:213:TYR:CB	2.92	0.48
1:B:94:ALA:O	1:B:95:PHE:C	2.51	0.48
1:A:209:LYS:CB	1:A:213:TYR:CB	2.92	0.48
1:A:37:ASP:O	1:A:38:LYS:HB3	2.12	0.48
1:A:83:PHE:CA	1:A:278:TRP:CD1	2.94	0.48
1:B:70:GLN:O	1:B:77:ARG:HB2	2.13	0.48
1:A:5:ARG:HH11	1:A:260:ILE:CG2	1.87	0.48
1:B:158:ASP:HB3	1:B:160:ASN:HD22	1.78	0.48
1:B:41:ASN:C	1:B:42:ILE:HG22	2.33	0.48
1:B:83:PHE:CD2	1:B:84:PRO:N	2.81	0.48
1:B:84:PRO:O	1:B:85:HIS:HB2	2.12	0.48
1:A:11:ASN:HA	1:A:69:ILE:HD12	1.94	0.48
1:A:122:GLN:HG3	1:A:136:VAL:HG21	1.96	0.48
1:A:217:ILE:HG22	1:A:218:ILE:N	2.27	0.48
1:A:63:GLU:O	1:A:240:ASP:HB3	2.13	0.48
1:B:1:THR:HG22	1:B:26:VAL:HG11	1.91	0.48
1:A:4:THR:HG22	1:A:19:ILE:CA	2.44	0.48
1:A:244:VAL:CG1	1:A:254:LYS:HA	2.43	0.48
1:A:27:SER:HB3	1:A:31:ASP:OD2	2.13	0.48
1:A:69:ILE:HG22	1:A:77:ARG:N	2.20	0.48
1:B:4:THR:HG22	1:B:19:ILE:HA	1.93	0.48
1:B:37:ASP:O	1:B:38:LYS:HB3	2.12	0.48
1:A:190:ILE:O	1:A:193:ILE:CG1	2.61	0.48
1:A:41:ASN:C	1:A:42:ILE:HG22	2.33	0.48
1:B:129:TYR:O	1:B:129:TYR:CD1	2.67	0.48
1:B:111:ALA:CB	1:B:145:LEU:HD22	2.44	0.48
1:B:136:VAL:HA	1:B:159:ILE:H	1.79	0.48
1:B:163:LEU:HD22	1:B:177:PHE:CE1	2.48	0.48
1:A:136:VAL:HA	1:A:159:ILE:H	1.79	0.47
1:A:277:LYS:HG2	1:B:125:GLU:CD	2.33	0.47
1:A:168:ASN:ND2	1:A:169:ASP:HB2	2.29	0.47
1:A:116:ASN:H	1:A:116:ASN:HD22	1.62	0.47
1:A:160:ASN:H	1:A:160:ASN:ND2	2.10	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:176:TYR:CB	1:A:177:PHE:CD1	2.97	0.47
1:A:176:TYR:CB	1:A:177:PHE:CE1	2.94	0.47
1:A:49:ILE:HG13	1:A:92:TYR:CB	2.35	0.47
1:A:197:LYS:O	1:A:198:PRO:O	2.30	0.47
1:A:1:THR:HG22	1:A:26:VAL:HG11	1.91	0.47
1:A:38:LYS:C	1:A:40:ASP:H	2.17	0.47
1:B:137:LYS:HG3	1:B:159:ILE:CD1	2.44	0.47
1:B:252:TYR:HE1	1:B:254:LYS:HB2	1.76	0.47
1:B:176:TYR:CB	1:B:177:PHE:CD1	2.97	0.47
1:B:188:PHE:O	1:B:191:TYR:CD2	2.67	0.47
1:B:168:ASN:ND2	1:B:169:ASP:HB2	2.29	0.47
1:A:83:PHE:CB	1:A:84:PRO:HD3	2.42	0.47
1:B:122:GLN:HG3	1:B:136:VAL:HG21	1.96	0.47
1:B:186:GLU:HA	1:B:189:ARG:HG3	1.96	0.47
1:B:222:HIS:CE1	1:B:225:TRP:CZ3	3.02	0.47
1:A:59:ILE:HA	1:A:66:ASN:C	2.34	0.47
1:B:118:ILE:HG22	1:B:118:ILE:O	2.14	0.47
1:B:34:LEU:C	1:B:36:ALA:N	2.67	0.47
1:B:4:THR:HG22	1:B:19:ILE:CA	2.44	0.47
1:B:51:ARG:HG3	1:B:90:HIS:N	2.06	0.47
1:A:129:TYR:CD1	1:A:129:TYR:O	2.67	0.47
1:A:25:PRO:HG3	1:A:257:SER:HA	1.97	0.47
1:B:176:TYR:C	1:B:178:PRO:HD3	2.35	0.47
1:A:176:TYR:C	1:A:178:PRO:HD3	2.35	0.47
1:B:83:PHE:CA	1:B:278:TRP:CD1	2.94	0.47
1:B:89:ILE:O	1:B:89:ILE:HD13	2.14	0.47
1:B:211:LYS:HD3	1:B:212:LYS:HZ3	1.80	0.47
1:A:137:LYS:HE3	1:A:159:ILE:CG2	2.45	0.47
1:A:58:GLU:OE2	1:A:116:ASN:OD1	2.33	0.47
1:B:19:ILE:CD1	1:B:26:VAL:HG13	2.33	0.47
1:A:122:GLN:NE2	1:A:124:GLY:N	2.63	0.47
1:A:144:LEU:O	1:A:151:ASP:HB2	2.14	0.47
1:A:222:HIS:CE1	1:A:225:TRP:CZ3	3.02	0.47
1:B:144:LEU:O	1:B:151:ASP:HB2	2.14	0.47
1:B:176:TYR:CB	1:B:177:PHE:CE1	2.94	0.47
1:B:4:THR:HA	1:B:20:GLU:H	1.80	0.47
1:A:34:LEU:C	1:A:36:ALA:N	2.67	0.47
1:B:137:LYS:HE3	1:B:159:ILE:CG2	2.45	0.47
1:B:247:PRO:CA	1:B:252:TYR:CD2	2.93	0.47
1:B:58:GLU:HG3	1:B:70:GLN:HE22	1.61	0.47
1:A:111:ALA:CB	1:A:145:LEU:HD22	2.44	0.46
1:A:20:GLU:CA	1:A:26:VAL:HG12	2.45	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:116:ASN:HD22	1:B:116:ASN:H	1.62	0.46
1:B:12:THR:CG2	1:B:269:ALA:CB	2.91	0.46
1:B:219:LYS:C	1:B:221:THR:H	2.18	0.46
1:A:186:GLU:HA	1:A:189:ARG:HG3	1.96	0.46
1:A:99:TRP:HZ2	1:A:115:ASN:OD1	1.96	0.46
1:A:247:PRO:CA	1:A:252:TYR:CD2	2.93	0.46
1:A:4:THR:HA	1:A:20:GLU:H	1.80	0.46
1:B:142:MET:HE2	1:B:202:PHE:HZ	1.55	0.46
1:B:59:ILE:HA	1:B:66:ASN:C	2.34	0.46
1:B:57:LEU:HB3	1:B:68:ILE:CA	2.46	0.46
1:A:139:LEU:H	1:A:155:ILE:HG22	1.81	0.46
1:A:161:ASP:OD1	1:A:162:PRO:CD	2.60	0.46
1:A:89:ILE:O	1:A:89:ILE:HD13	2.14	0.46
1:B:122:GLN:NE2	1:B:124:GLY:N	2.63	0.46
1:A:168:ASN:HD22	1:A:168:ASN:C	2.18	0.46
1:A:19:ILE:CD1	1:A:26:VAL:HG13	2.33	0.46
1:B:142:MET:O	1:B:152:TRP:C	2.48	0.46
1:B:20:GLU:CA	1:B:26:VAL:HG12	2.45	0.46
1:A:188:PHE:C	1:A:191:TYR:HB3	2.35	0.46
1:A:4:THR:CG2	1:A:19:ILE:CB	2.94	0.46
1:A:142:MET:HE1	1:A:202:PHE:CZ	2.35	0.46
1:A:29:PHE:HE1	1:A:225:TRP:HD1	1.54	0.46
1:B:106:HIS:CD2	1:B:107:PRO:HD2	2.51	0.46
1:B:71:ASN:O	1:B:72:THR:HB	2.09	0.46
1:A:12:THR:CG2	1:A:269:ALA:CB	2.91	0.46
1:A:54:ASN:CB	1:A:275:ILE:HG21	2.46	0.46
1:B:136:VAL:HG11	1:B:156:ALA:CB	2.36	0.46
1:B:54:ASN:CB	1:B:275:ILE:HG21	2.46	0.46
1:A:10:LYS:N	1:A:15:TYR:CG	2.84	0.46
1:A:54:ASN:CB	1:A:275:ILE:CG2	2.94	0.46
1:B:174:GLU:OE2	1:B:181:LEU:HD12	2.16	0.46
1:B:22:ASP:HB3	1:B:23:GLY:H	1.58	0.46
1:B:38:LYS:C	1:B:40:ASP:H	2.17	0.46
1:B:54:ASN:CB	1:B:275:ILE:CG2	2.94	0.46
1:A:106:HIS:CD2	1:A:107:PRO:HD2	2.51	0.46
1:A:91:ASN:OD1	1:A:128:ALA:HB2	2.16	0.46
1:B:4:THR:CG2	1:B:19:ILE:CB	2.94	0.46
1:B:83:PHE:CB	1:B:84:PRO:HD3	2.42	0.46
1:A:118:ILE:O	1:A:118:ILE:HG22	2.14	0.46
1:A:167:LEU:HD11	1:A:177:PHE:HE1	1.81	0.45
1:A:182:ARG:CD	1:A:185:ASP:OD2	2.58	0.45
1:A:219:LYS:C	1:A:221:THR:H	2.18	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:19:ILE:HG23	1:A:26:VAL:HG13	1.99	0.45
1:A:29:PHE:HA	1:A:96:PRO:CB	2.46	0.45
1:B:181:LEU:C	1:B:183:ALA:N	2.66	0.45
1:B:58:GLU:OE2	1:B:116:ASN:OD1	2.33	0.45
1:A:225:TRP:HZ3	1:A:226:LYS:CG	2.13	0.45
1:B:10:LYS:N	1:B:15:TYR:CG	2.84	0.45
1:B:19:ILE:HD13	1:B:26:VAL:HG13	1.75	0.45
1:B:63:GLU:HA	1:B:240:ASP:CG	2.36	0.45
1:A:163:LEU:HD22	1:A:177:PHE:CE1	2.48	0.45
1:B:222:HIS:O	1:B:226:LYS:N	2.47	0.45
1:B:61:LYS:HG3	1:B:239:ILE:CG2	2.47	0.45
1:B:106:HIS:CB	1:B:107:PRO:CD	2.94	0.45
1:A:174:GLU:OE2	1:A:181:LEU:HD12	2.16	0.45
1:A:63:GLU:HA	1:A:240:ASP:CG	2.36	0.45
1:B:25:PRO:HG3	1:B:257:SER:C	2.37	0.45
1:A:10:LYS:CD	1:A:268:ASP:OD2	2.64	0.45
1:A:180:LEU:O	1:A:184:THR:OG1	2.34	0.45
1:A:57:LEU:HB3	1:A:68:ILE:CA	2.46	0.45
1:B:19:ILE:HG23	1:B:26:VAL:HG13	1.99	0.45
1:B:27:SER:O	1:B:31:ASP:HB2	2.16	0.45
1:B:91:ASN:OD1	1:B:128:ALA:HB2	2.16	0.45
1:B:139:LEU:H	1:B:155:ILE:HG22	1.81	0.45
1:A:100:GLU:CG	1:A:117:PRO:O	2.64	0.45
1:A:130:THR:O	1:A:130:THR:HG23	2.15	0.45
1:A:27:SER:O	1:A:31:ASP:HB2	2.16	0.45
1:A:28:ALA:O	1:A:29:PHE:CB	2.63	0.45
1:B:181:LEU:O	1:B:182:ARG:C	2.55	0.45
1:B:9:ALA:HB3	1:B:15:TYR:HA	1.88	0.45
1:A:106:HIS:CB	1:A:107:PRO:CD	2.94	0.45
1:A:146:ASP:O	1:A:147:GLU:C	2.54	0.45
1:B:111:ALA:CB	1:B:145:LEU:CD2	2.94	0.45
1:B:167:LEU:HD11	1:B:177:PHE:HE1	1.81	0.45
1:B:180:LEU:O	1:B:184:THR:OG1	2.34	0.45
1:B:10:LYS:CD	1:B:268:ASP:OD2	2.64	0.45
1:B:19:ILE:C	1:B:26:VAL:CG1	2.85	0.45
1:A:111:ALA:CB	1:A:145:LEU:CD2	2.94	0.45
1:A:174:GLU:CD	1:A:181:LEU:HD12	2.36	0.45
1:A:25:PRO:HG3	1:A:257:SER:C	2.37	0.45
1:A:4:THR:HA	1:A:20:GLU:N	2.31	0.45
1:B:42:ILE:HG12	1:B:43:PHE:H	0.63	0.45
1:B:65:LEU:O	1:B:66:ASN:CG	2.50	0.45
1:A:225:TRP:CE3	1:A:226:LYS:CA	3.00	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:100:GLU:CG	1:B:117:PRO:O	2.64	0.45
1:B:161:ASP:OD1	1:B:162:PRO:CD	2.60	0.45
1:B:217:ILE:O	1:B:221:THR:HB	2.17	0.45
1:A:177:PHE:O	1:A:179:GLY:N	2.50	0.45
1:A:181:LEU:O	1:A:182:ARG:C	2.55	0.45
1:B:237:LYS:HD3	1:B:241:LEU:HD21	1.99	0.45
1:B:29:PHE:HA	1:B:96:PRO:CB	2.47	0.45
1:A:9:ALA:HB2	1:A:15:TYR:HA	1.98	0.44
1:B:92:TYR:CD2	1:B:121:LEU:HD21	2.51	0.44
1:B:174:GLU:CD	1:B:181:LEU:HD12	2.36	0.44
1:B:190:ILE:HG23	1:B:190:ILE:H	1.56	0.44
1:A:139:LEU:CG	1:A:155:ILE:HG21	2.43	0.44
1:B:168:ASN:HD22	1:B:168:ASN:C	2.18	0.44
1:A:237:LYS:HD3	1:A:241:LEU:HD21	1.99	0.44
1:B:146:ASP:O	1:B:147:GLU:C	2.54	0.44
1:B:47:VAL:HG22	1:B:131:GLY:N	2.26	0.44
1:B:4:THR:HA	1:B:20:GLU:N	2.31	0.44
1:A:12:THR:O	1:A:76:LEU:HD21	2.17	0.44
1:A:84:PRO:O	1:A:85:HIS:HB2	2.12	0.44
1:B:225:TRP:CE3	1:B:226:LYS:CA	3.00	0.44
1:A:71:ASN:O	1:A:72:THR:HB	2.09	0.44
1:A:83:PHE:HA	1:A:278:TRP:CG	2.52	0.44
1:B:134:LYS:CE	1:B:158:ASP:OD1	2.52	0.44
1:B:60:THR:O	1:B:61:LYS:HB2	2.17	0.44
1:A:95:PHE:HD2	1:A:218:ILE:HG12	1.83	0.44
1:A:222:HIS:O	1:A:226:LYS:N	2.47	0.44
1:A:98:THR:CA	1:A:225:TRP:CB	2.96	0.44
1:A:60:THR:O	1:A:61:LYS:HB2	2.17	0.44
1:A:65:LEU:N	1:A:65:LEU:HD22	2.32	0.44
1:B:12:THR:O	1:B:76:LEU:HD21	2.17	0.44
1:A:217:ILE:O	1:A:221:THR:HB	2.17	0.44
1:B:146:ASP:CB	1:B:147:GLU:OE1	2.65	0.44
1:B:42:ILE:HD11	1:B:136:VAL:H	1.83	0.44
1:A:168:ASN:O	1:A:168:ASN:CG	2.56	0.44
1:A:102:PRO:HA	1:A:113:GLY:C	2.38	0.44
1:A:136:VAL:HG11	1:A:156:ALA:CB	2.36	0.44
1:A:146:ASP:CB	1:A:147:GLU:OE1	2.65	0.44
1:A:142:MET:O	1:A:152:TRP:HA	2.18	0.44
1:A:174:GLU:O	1:A:178:PRO:CA	2.57	0.44
1:A:47:VAL:HG22	1:A:131:GLY:N	2.26	0.44
1:A:61:LYS:HG3	1:A:239:ILE:CG2	2.47	0.44
1:B:102:PRO:HA	1:B:113:GLY:C	2.38	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:182:ARG:HA	1:B:182:ARG:HD3	1.72	0.44
1:B:95:PHE:HD2	1:B:218:ILE:HG12	1.83	0.44
1:B:9:ALA:HB2	1:B:15:TYR:HA	1.98	0.44
1:A:6:GLN:O	1:A:265:PRO:N	2.51	0.44
1:A:19:ILE:C	1:A:26:VAL:CG1	2.85	0.44
1:A:27:SER:HB3	1:A:31:ASP:CG	2.39	0.44
1:A:38:LYS:CG	1:A:38:LYS:O	2.66	0.44
1:B:142:MET:O	1:B:152:TRP:HA	2.18	0.44
1:B:177:PHE:O	1:B:179:GLY:N	2.50	0.44
1:B:192:LYS:CE	1:B:200:ASN:HD21	2.29	0.44
1:B:65:LEU:N	1:B:65:LEU:HD22	2.32	0.44
1:B:29:PHE:N	1:B:96:PRO:CB	2.81	0.44
1:A:192:LYS:CE	1:A:200:ASN:HD21	2.29	0.43
1:B:135:GLU:O	1:B:136:VAL:CB	2.38	0.43
1:B:1:THR:H3	1:B:133:VAL:CG1	2.25	0.43
1:B:6:GLN:O	1:B:265:PRO:N	2.51	0.43
1:A:143:ALA:O	1:A:202:PHE:HD1	1.99	0.43
1:A:58:GLU:HG3	1:A:70:GLN:HE22	1.62	0.43
1:A:52:TRP:HB3	1:A:86:HIS:CD2	2.53	0.43
1:B:80:ARG:HG3	1:B:194:PRO:CG	2.48	0.43
1:B:193:ILE:H	1:B:193:ILE:HG12	1.55	0.43
1:A:98:THR:HG22	1:A:99:TRP:N	2.33	0.43
1:B:188:PHE:C	1:B:191:TYR:HB3	2.35	0.43
1:B:98:THR:CA	1:B:225:TRP:CB	2.96	0.43
1:B:27:SER:HB3	1:B:31:ASP:CG	2.38	0.43
1:B:62:GLU:O	1:B:63:GLU:CB	2.44	0.43
1:B:57:LEU:CB	1:B:68:ILE:H	2.31	0.43
1:A:163:LEU:HB3	1:A:167:LEU:CD1	2.49	0.43
1:A:182:ARG:HD3	1:A:182:ARG:HA	1.72	0.43
1:A:42:ILE:HD11	1:A:136:VAL:H	1.83	0.43
1:A:83:PHE:CZ	1:B:179:GLY:HA3	2.53	0.43
1:B:52:TRP:HB3	1:B:86:HIS:CD2	2.53	0.43
1:B:209:LYS:HB2	1:B:213:TYR:CB	2.49	0.43
1:B:232:LYS:O	1:B:234:SER:N	2.51	0.43
1:A:142:MET:O	1:A:152:TRP:C	2.48	0.43
1:A:170:ILE:CG1	1:A:210:ASN:HA	2.48	0.43
1:A:179:GLY:HA3	1:B:83:PHE:CZ	2.53	0.43
1:A:209:LYS:HB2	1:A:213:TYR:CB	2.49	0.43
1:A:51:ARG:HG3	1:A:90:HIS:N	2.06	0.43
1:A:95:PHE:HD2	1:A:218:ILE:CG1	2.32	0.43
1:B:81:ASN:OD1	1:B:87:GLY:N	2.51	0.43
1:A:83:PHE:CE1	1:A:280:PHE:CZ	2.98	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:81:ASN:OD1	1:A:87:GLY:N	2.51	0.43
1:A:8:GLY:HA3	1:A:266:LYS:N	2.34	0.43
1:B:238:GLY:O	1:B:239:ILE:CG2	2.56	0.43
1:B:168:ASN:O	1:B:168:ASN:CG	2.56	0.43
1:A:105:SER:HB2	1:A:112:VAL:CA	2.24	0.43
1:A:215:LEU:O	1:A:219:LYS:HB2	2.19	0.43
1:B:176:TYR:C	1:B:178:PRO:CD	2.88	0.43
1:B:215:LEU:O	1:B:219:LYS:HB2	2.19	0.43
1:A:176:TYR:C	1:A:178:PRO:CD	2.87	0.42
1:A:232:LYS:O	1:A:234:SER:N	2.51	0.42
1:B:111:ALA:O	1:B:112:VAL:C	2.57	0.42
1:B:170:ILE:CG1	1:B:210:ASN:HA	2.48	0.42
1:B:174:GLU:O	1:B:178:PRO:CA	2.57	0.42
1:B:34:LEU:HD21	1:B:95:PHE:CA	2.49	0.42
1:B:95:PHE:HD2	1:B:218:ILE:CG1	2.32	0.42
1:B:98:THR:HG22	1:B:99:TRP:N	2.33	0.42
1:A:238:GLY:O	1:A:239:ILE:CG2	2.56	0.42
1:A:29:PHE:N	1:A:96:PRO:CB	2.81	0.42
1:A:34:LEU:HD21	1:A:95:PHE:CA	2.49	0.42
1:A:36:ALA:O	1:A:43:PHE:HA	2.19	0.42
1:A:57:LEU:CB	1:A:68:ILE:H	2.31	0.42
1:B:142:MET:HB3	1:B:153:LYS:CG	2.50	0.42
1:B:182:ARG:CD	1:B:185:ASP:OD2	2.58	0.42
1:B:244:VAL:CG2	1:B:254:LYS:HG3	2.49	0.42
1:A:117:PRO:HB2	1:A:118:ILE:H	1.67	0.42
1:A:179:GLY:C	1:B:83:PHE:HZ	2.22	0.42
1:A:30:HIS:CD2	1:A:241:LEU:O	2.72	0.42
1:A:83:PHE:HZ	1:B:179:GLY:C	2.22	0.42
1:B:30:HIS:CD2	1:B:241:LEU:O	2.72	0.42
1:B:95:PHE:CD2	1:B:218:ILE:CG1	3.02	0.42
1:A:111:ALA:O	1:A:112:VAL:C	2.57	0.42
1:A:226:LYS:O	1:A:228:LEU:N	2.53	0.42
1:A:69:ILE:CG2	1:A:77:ARG:H	2.24	0.42
1:A:80:ARG:HG3	1:A:194:PRO:CG	2.48	0.42
1:B:142:MET:HB3	1:B:153:LYS:HG2	2.01	0.42
1:B:8:GLY:HA3	1:B:266:LYS:N	2.34	0.42
1:A:142:MET:HB3	1:A:153:LYS:CG	2.50	0.42
1:B:105:SER:H	1:B:112:VAL:CG1	2.20	0.42
1:A:277:LYS:HG2	1:B:125:GLU:OE2	2.10	0.42
1:B:215:LEU:HD23	1:B:215:LEU:HA	1.84	0.42
1:B:226:LYS:O	1:B:228:LEU:N	2.53	0.42
1:A:118:ILE:HD12	1:A:221:THR:CB	2.49	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:125:GLU:OE2	1:B:277:LYS:HG2	2.10	0.42
1:A:164:ALA:O	1:A:166:LYS:N	2.53	0.42
1:A:19:ILE:HD13	1:A:26:VAL:HG13	1.75	0.42
1:B:36:ALA:O	1:B:43:PHE:HA	2.19	0.42
1:B:83:PHE:HA	1:B:278:TRP:CG	2.52	0.42
1:A:134:LYS:CE	1:A:158:ASP:OD1	2.52	0.42
1:A:95:PHE:CD2	1:A:218:ILE:CG1	3.02	0.42
1:B:252:TYR:C	1:B:252:TYR:CD1	2.92	0.42
1:A:42:ILE:CB	1:A:159:ILE:HD11	2.50	0.42
1:A:136:VAL:C	1:A:159:ILE:HG13	2.40	0.42
1:A:244:VAL:CG2	1:A:254:LYS:HG3	2.49	0.42
1:A:9:ALA:HB3	1:A:15:TYR:HA	1.88	0.42
1:B:136:VAL:HG22	1:B:157:ILE:H	1.14	0.42
1:B:41:ASN:HB3	1:B:42:ILE:H	1.72	0.42
1:A:177:PHE:HD1	1:A:177:PHE:H	1.68	0.42
1:A:59:ILE:HG13	1:A:65:LEU:HB3	2.02	0.42
1:B:10:LYS:O	1:B:11:ASN:ND2	2.53	0.42
1:B:118:ILE:HD12	1:B:221:THR:CB	2.49	0.42
1:B:214:ALA:O	1:B:218:ILE:N	2.41	0.42
1:B:59:ILE:HB	1:B:66:ASN:CA	2.49	0.42
1:A:241:LEU:N	1:A:241:LEU:CD1	2.83	0.42
1:A:252:TYR:C	1:A:252:TYR:CD1	2.92	0.42
1:A:275:ILE:O	1:A:277:LYS:CB	2.66	0.42
1:A:59:ILE:HB	1:A:66:ASN:CA	2.49	0.42
1:A:10:LYS:C	1:A:11:ASN:CG	2.77	0.41
1:A:7:ILE:C	1:A:8:GLY:O	2.50	0.41
1:B:136:VAL:C	1:B:159:ILE:HG13	2.40	0.41
1:B:25:PRO:HG3	1:B:257:SER:HA	1.97	0.41
1:B:38:LYS:CG	1:B:38:LYS:O	2.66	0.41
1:A:16:LYS:HE2	1:A:62:GLU:OE2	2.20	0.41
1:A:45:MET:HB3	1:A:95:PHE:HE1	1.86	0.41
1:B:122:GLN:HG2	1:B:156:ALA:O	2.20	0.41
1:B:16:LYS:HE2	1:B:62:GLU:OE2	2.20	0.41
1:B:200:ASN:HA	1:B:200:ASN:HD22	1.60	0.41
1:B:32:ILE:HG21	1:B:96:PRO:HG3	2.00	0.41
1:A:10:LYS:O	1:A:11:ASN:ND2	2.53	0.41
1:A:122:GLN:HG2	1:A:156:ALA:O	2.20	0.41
1:A:42:ILE:CD1	1:A:136:VAL:H	2.33	0.41
1:A:148:GLY:O	1:A:149:GLU:HG2	2.20	0.41
1:A:41:ASN:HB3	1:A:42:ILE:H	1.72	0.41
1:B:42:ILE:CB	1:B:159:ILE:HD11	2.50	0.41
1:B:218:ILE:O	1:B:218:ILE:HG23	2.17	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:34:LEU:C	1:B:43:PHE:CB	2.82	0.41
1:A:139:LEU:N	1:A:155:ILE:HG22	2.36	0.41
1:A:142:MET:HB3	1:A:153:LYS:HG2	2.01	0.41
1:A:175:LYS:C	1:A:178:PRO:HD3	2.41	0.41
1:A:193:ILE:HG12	1:A:193:ILE:H	1.55	0.41
1:B:112:VAL:HB	1:B:113:GLY:H	1.51	0.41
1:B:42:ILE:CD1	1:B:136:VAL:H	2.33	0.41
1:B:113:GLY:HA2	1:B:150:THR:HB	2.02	0.41
1:B:160:ASN:HD22	1:B:161:ASP:H	1.67	0.41
1:B:164:ALA:O	1:B:166:LYS:N	2.53	0.41
1:B:225:TRP:CE3	1:B:226:LYS:HA	2.55	0.41
1:B:275:ILE:O	1:B:277:LYS:CB	2.66	0.41
1:B:64:THR:O	1:B:65:LEU:HD22	2.20	0.41
1:B:139:LEU:N	1:B:155:ILE:HG22	2.36	0.41
1:A:113:GLY:HA2	1:A:150:THR:HB	2.03	0.41
1:A:242:THR:HA	1:A:251:THR:O	2.20	0.41
1:A:28:ALA:HA	1:A:32:ILE:CG1	2.48	0.41
1:B:147:GLU:N	1:B:147:GLU:OE1	2.54	0.41
1:B:163:LEU:HB3	1:B:167:LEU:CD1	2.49	0.41
1:B:189:ARG:C	1:B:191:TYR:N	2.74	0.41
1:B:191:TYR:CD2	1:B:192:LYS:N	2.89	0.41
1:A:177:PHE:CA	1:B:280:PHE:CE2	3.03	0.41
1:A:225:TRP:CE3	1:A:226:LYS:HA	2.55	0.41
1:A:249:THR:C	1:A:251:THR:N	2.59	0.41
1:A:81:ASN:O	1:A:278:TRP:HD1	2.04	0.41
1:B:134:LYS:HE3	1:B:158:ASP:CG	2.37	0.41
1:A:92:TYR:CD2	1:A:121:LEU:HD21	2.51	0.41
1:A:142:MET:CE	1:A:202:PHE:HE1	2.16	0.41
1:A:228:LEU:O	1:A:229:ILE:C	2.59	0.41
1:B:242:THR:HA	1:B:251:THR:O	2.20	0.41
1:A:200:ASN:C	1:A:201:GLN:CG	2.63	0.41
1:A:218:ILE:O	1:A:218:ILE:HG23	2.17	0.41
1:B:148:GLY:O	1:B:149:GLU:HG2	2.20	0.41
1:B:182:ARG:NH1	1:B:185:ASP:CB	2.66	0.41
1:B:139:LEU:O	1:B:211:LYS:HB2	2.21	0.41
1:A:112:VAL:O	1:A:150:THR:CG2	2.61	0.41
1:A:147:GLU:N	1:A:147:GLU:OE1	2.54	0.41
1:A:191:TYR:CD2	1:A:192:LYS:N	2.89	0.41
1:B:65:LEU:C	1:B:66:ASN:ND2	2.63	0.41
1:A:4:THR:HA	1:A:19:ILE:HA	2.03	0.41
1:A:59:ILE:CG2	1:A:67:PRO:CD	2.96	0.41
1:B:192:LYS:O	1:B:193:ILE:O	2.39	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:64:THR:O	1:B:65:LEU:CD2	2.69	0.41
1:A:193:ILE:CB	1:A:194:PRO:HD2	2.46	0.41
1:A:214:ALA:O	1:A:218:ILE:N	2.41	0.41
1:A:34:LEU:C	1:A:43:PHE:CB	2.82	0.41
1:A:51:ARG:CG	1:A:89:ILE:HA	2.19	0.41
1:A:92:TYR:HD2	1:A:121:LEU:CD2	2.25	0.41
1:A:33:PRO:O	1:A:97:GLN:HG3	2.21	0.41
1:B:141:ILE:CA	1:B:153:LYS:O	2.67	0.41
1:B:175:LYS:C	1:B:178:PRO:HD3	2.41	0.41
1:B:193:ILE:CB	1:B:194:PRO:HD2	2.46	0.41
1:B:59:ILE:HG22	1:B:67:PRO:HA	1.93	0.41
1:B:59:ILE:HG13	1:B:65:LEU:HB3	2.02	0.41
1:A:50:PRO:HB3	1:A:128:ALA:CB	2.29	0.40
1:A:64:THR:O	1:A:65:LEU:CD2	2.69	0.40
1:B:130:THR:HG23	1:B:130:THR:O	2.15	0.40
1:B:129:TYR:HD2	1:B:132:GLN:CD	2.25	0.40
1:B:137:LYS:CG	1:B:159:ILE:CD1	3.00	0.40
1:B:5:ARG:HH22	1:B:25:PRO:CG	2.35	0.40
1:B:81:ASN:HD21	1:B:86:HIS:CE1	2.39	0.40
1:A:170:ILE:HG13	1:A:210:ASN:HA	2.03	0.40
1:A:234:SER:HB2	1:A:237:LYS:HG3	2.03	0.40
1:B:173:VAL:HA	1:B:177:PHE:CD1	2.55	0.40
1:B:4:THR:HA	1:B:19:ILE:HA	2.03	0.40
1:B:217:ILE:HD12	1:B:220:GLU:CD	2.42	0.40
1:A:139:LEU:O	1:A:211:LYS:HB2	2.21	0.40
1:A:80:ARG:HD3	1:A:279:PHE:HD1	1.84	0.40
1:A:83:PHE:N	1:A:84:PRO:HD2	2.37	0.40
1:B:102:PRO:O	1:B:112:VAL:CB	2.63	0.40
1:B:177:PHE:HD1	1:B:177:PHE:H	1.68	0.40
1:B:83:PHE:N	1:B:84:PRO:HD2	2.37	0.40
1:B:33:PRO:O	1:B:97:GLN:HG3	2.21	0.40
1:A:190:ILE:HG23	1:A:190:ILE:H	1.56	0.40
1:A:22:ASP:HB3	1:A:23:GLY:H	1.58	0.40
1:A:32:ILE:HG21	1:A:96:PRO:HG3	2.00	0.40
1:B:80:ARG:HG2	1:B:194:PRO:O	2.21	0.40
1:B:51:ARG:CG	1:B:89:ILE:HA	2.19	0.40
1:A:111:ALA:C	1:A:112:VAL:HG23	2.42	0.40
1:A:219:LYS:C	1:A:221:THR:N	2.75	0.40
1:B:82:CYS:HB3	1:B:190:ILE:CD1	2.52	0.40
1:B:234:SER:HB2	1:B:237:LYS:HG3	2.04	0.40
1:B:59:ILE:CG2	1:B:67:PRO:CD	2.96	0.40
1:B:81:ASN:O	1:B:278:TRP:HD1	2.04	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:45:MET:HB3	1:B:95:PHE:HE1	1.86	0.40

All (13) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:247:PRO:CG	1:B:108:GLU:OE2[1_445]	1.56	0.64
1:A:115:ASN:ND2	1:B:75:LYS:NZ[1_455]	1.71	0.49
1:A:174:GLU:OE1	1:B:248:ASP:CG[2_775]	1.72	0.48
1:B:2:TYR:OH	1:B:199:GLU:OE2[2_774]	1.82	0.38
1:A:247:PRO:CG	1:B:108:GLU:CG[1_445]	1.84	0.36
1:A:147:GLU:O	1:B:73:LYS:NZ[1_455]	1.85	0.35
1:A:174:GLU:OE1	1:B:248:ASP:OD1[2_775]	1.85	0.35
1:B:24:LYS:NZ	1:B:182:ARG:NE[2_774]	1.92	0.28
1:B:24:LYS:CE	1:B:182:ARG:NH2[2_774]	1.95	0.25
1:A:247:PRO:CG	1:B:108:GLU:CD[1_445]	2.05	0.15
1:A:252:TYR:OH	1:B:106:HIS:CD2[1_445]	2.07	0.13
1:A:174:GLU:OE1	1:B:248:ASP:OD2[2_775]	2.15	0.05
1:A:149:GLU:CG	1:B:73:LYS:NZ[1_455]	2.18	0.02

5.3 Torsion angles

5.3.1 Protein backbone ⓘ

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	279/285 (98%)	151 (54%)	53 (19%)	75 (27%)	0	0
1	B	279/285 (98%)	152 (54%)	53 (19%)	74 (26%)	0	0
All	All	558/570 (98%)	303 (54%)	106 (19%)	149 (27%)	0	0

All (149) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	2	TYR
1	A	8	GLY
1	A	9	ALA

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Mol	Chain	Res	Type
1	A	12	THR
1	A	13	LEU
1	A	24	LYS
1	A	33	PRO
1	A	37	ASP
1	A	39	GLU
1	A	63	GLU
1	A	70	GLN
1	A	82	CYS
1	A	85	HIS
1	A	91	ASN
1	A	94	ALA
1	A	104	VAL
1	A	111	ALA
1	A	116	ASN
1	A	117	PRO
1	A	130	THR
1	A	136	VAL
1	A	159	ILE
1	A	172	ASP
1	A	173	VAL
1	A	181	LEU
1	A	185	ASP
1	A	186	GLU
1	A	187	TRP
1	A	193	ILE
1	A	195	ASP
1	A	198	PRO
1	A	201	GLN
1	A	205	SER
1	A	233	SER
1	A	275	ILE
1	A	276	ASP
1	B	2	TYR
1	B	8	GLY
1	B	9	ALA
1	B	12	THR
1	B	13	LEU
1	B	24	LYS
1	B	33	PRO
1	B	37	ASP
1	B	39	GLU

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Mol	Chain	Res	Type
1	B	63	GLU
1	B	70	GLN
1	B	82	CYS
1	B	85	HIS
1	B	91	ASN
1	B	94	ALA
1	B	104	VAL
1	B	111	ALA
1	B	116	ASN
1	B	117	PRO
1	B	130	THR
1	B	136	VAL
1	B	159	ILE
1	B	172	ASP
1	B	173	VAL
1	B	181	LEU
1	B	185	ASP
1	B	186	GLU
1	B	187	TRP
1	B	193	ILE
1	B	195	ASP
1	B	198	PRO
1	B	201	GLN
1	B	205	SER
1	B	233	SER
1	B	275	ILE
1	B	276	ASP
1	A	10	LYS
1	A	11	ASN
1	A	26	VAL
1	A	34	LEU
1	A	35	TYR
1	A	62	GLU
1	A	72	THR
1	A	75	LYS
1	A	90	HIS
1	A	92	TYR
1	A	97	GLN
1	A	108	GLU
1	A	182	ARG
1	A	230	ALA
1	A	239	ILE

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Mol	Chain	Res	Type
1	A	242	THR
1	A	254	LYS
1	B	10	LYS
1	B	11	ASN
1	B	26	VAL
1	B	34	LEU
1	B	35	TYR
1	B	62	GLU
1	B	72	THR
1	B	75	LYS
1	B	90	HIS
1	B	92	TYR
1	B	97	GLN
1	B	108	GLU
1	B	182	ARG
1	B	230	ALA
1	B	239	ILE
1	B	242	THR
1	B	254	LYS
1	A	42	ILE
1	A	112	VAL
1	A	171	GLU
1	B	42	ILE
1	B	112	VAL
1	B	171	GLU
1	A	25	PRO
1	A	74	GLY
1	A	95	PHE
1	A	148	GLY
1	A	164	ALA
1	A	204	PHE
1	A	247	PRO
1	B	25	PRO
1	B	74	GLY
1	B	95	PHE
1	B	148	GLY
1	B	164	ALA
1	B	204	PHE
1	B	247	PRO
1	A	65	LEU
1	A	194	PRO
1	A	203	ALA

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Mol	Chain	Res	Type
1	A	250	PRO
1	B	65	LEU
1	B	194	PRO
1	B	203	ALA
1	B	250	PRO
1	A	15	TYR
1	A	49	ILE
1	A	68	ILE
1	A	105	SER
1	A	178	PRO
1	B	15	TYR
1	B	49	ILE
1	B	68	ILE
1	B	178	PRO
1	A	127	ILE
1	B	127	ILE
1	A	59	ILE
1	B	59	ILE
1	A	83	PHE
1	B	83	PHE

5.3.2 Protein sidechains ⓘ

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	243/247 (98%)	158 (65%)	85 (35%)	0	1
1	B	243/247 (98%)	158 (65%)	85 (35%)	0	1
All	All	486/494 (98%)	316 (65%)	170 (35%)	0	1

All (170) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	3	THR
1	A	7	ILE
1	A	17	VAL
1	A	19	ILE
1	A	26	VAL

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Mol	Chain	Res	Type
1	A	27	SER
1	A	35	TYR
1	A	40	ASP
1	A	41	ASN
1	A	42	ILE
1	A	43	PHE
1	A	44	ASN
1	A	45	MET
1	A	48	GLU
1	A	49	ILE
1	A	51	ARG
1	A	53	THR
1	A	54	ASN
1	A	57	LEU
1	A	60	THR
1	A	62	GLU
1	A	63	GLU
1	A	65	LEU
1	A	66	ASN
1	A	79	VAL
1	A	80	ARG
1	A	83	PHE
1	A	86	HIS
1	A	89	ILE
1	A	92	TYR
1	A	99	TRP
1	A	100	GLU
1	A	104	VAL
1	A	106	HIS
1	A	109	THR
1	A	112	VAL
1	A	115	ASN
1	A	118	ILE
1	A	121	LEU
1	A	123	ILE
1	A	125	GLU
1	A	126	THR
1	A	130	THR
1	A	135	GLU
1	A	136	VAL
1	A	141	ILE
1	A	144	LEU

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Mol	Chain	Res	Type
1	A	150	THR
1	A	151	ASP
1	A	153	LYS
1	A	155	ILE
1	A	158	ASP
1	A	160	ASN
1	A	161	ASP
1	A	163	LEU
1	A	168	ASN
1	A	169	ASP
1	A	171	GLU
1	A	177	PHE
1	A	182	ARG
1	A	187	TRP
1	A	189	ARG
1	A	191	TYR
1	A	193	ILE
1	A	200	ASN
1	A	210	ASN
1	A	211	LYS
1	A	212	LYS
1	A	213	TYR
1	A	217	ILE
1	A	218	ILE
1	A	220	GLU
1	A	223	ASN
1	A	224	SER
1	A	225	TRP
1	A	229	ILE
1	A	239	ILE
1	A	240	ASP
1	A	242	THR
1	A	251	THR
1	A	258	ASP
1	A	271	ILE
1	A	272	ASP
1	A	276	ASP
1	A	278	TRP
1	B	3	THR
1	B	7	ILE
1	B	17	VAL
1	B	19	ILE

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Mol	Chain	Res	Type
1	B	26	VAL
1	B	27	SER
1	B	35	TYR
1	B	40	ASP
1	B	41	ASN
1	B	42	ILE
1	B	43	PHE
1	B	44	ASN
1	B	45	MET
1	B	48	GLU
1	B	49	ILE
1	B	51	ARG
1	B	53	THR
1	B	54	ASN
1	B	57	LEU
1	B	60	THR
1	B	62	GLU
1	B	63	GLU
1	B	65	LEU
1	B	66	ASN
1	B	79	VAL
1	B	80	ARG
1	B	83	PHE
1	B	86	HIS
1	B	89	ILE
1	B	92	TYR
1	B	99	TRP
1	B	100	GLU
1	B	104	VAL
1	B	106	HIS
1	B	109	THR
1	B	112	VAL
1	B	115	ASN
1	B	118	ILE
1	B	121	LEU
1	B	123	ILE
1	B	125	GLU
1	B	126	THR
1	B	130	THR
1	B	135	GLU
1	B	136	VAL
1	B	141	ILE

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Mol	Chain	Res	Type
1	B	144	LEU
1	B	150	THR
1	B	151	ASP
1	B	153	LYS
1	B	155	ILE
1	B	158	ASP
1	B	160	ASN
1	B	161	ASP
1	B	163	LEU
1	B	168	ASN
1	B	169	ASP
1	B	171	GLU
1	B	177	PHE
1	B	182	ARG
1	B	187	TRP
1	B	189	ARG
1	B	191	TYR
1	B	193	ILE
1	B	200	ASN
1	B	210	ASN
1	B	211	LYS
1	B	212	LYS
1	B	213	TYR
1	B	217	ILE
1	B	218	ILE
1	B	220	GLU
1	B	223	ASN
1	B	224	SER
1	B	225	TRP
1	B	229	ILE
1	B	239	ILE
1	B	240	ASP
1	B	242	THR
1	B	251	THR
1	B	258	ASP
1	B	271	ILE
1	B	272	ASP
1	B	276	ASP
1	B	278	TRP

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (12) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	41	ASN
1	A	66	ASN
1	A	122	GLN
1	A	160	ASN
1	A	168	ASN
1	A	200	ASN
1	B	41	ASN
1	B	66	ASN
1	B	122	GLN
1	B	160	ASN
1	B	168	ASN
1	B	200	ASN

5.3.3 RNA ⓘ

There are no RNA chains in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

5.6 Ligand geometry ⓘ

There are no ligands in this entry.

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

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

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

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

6.3 Carbohydrates ⓘ

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

6.4 Ligands ⓘ

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

6.5 Other polymers ⓘ

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