



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 5, 2026 – 12:35 PM UTC

PDB ID : 2R5J / pdb_00002r5j
Title : Pentamer Structure of Major Capsid protein L1 of Human Papilloma Virus Type 35
Authors : Bishop, B.; Dasgupta, J.; Chen, X.S.
Deposited on : 2007-09-03
Resolution : 3.30 Å(reported)

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

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

MolProbity	:	4-5-2 with Phenix2.0
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.49

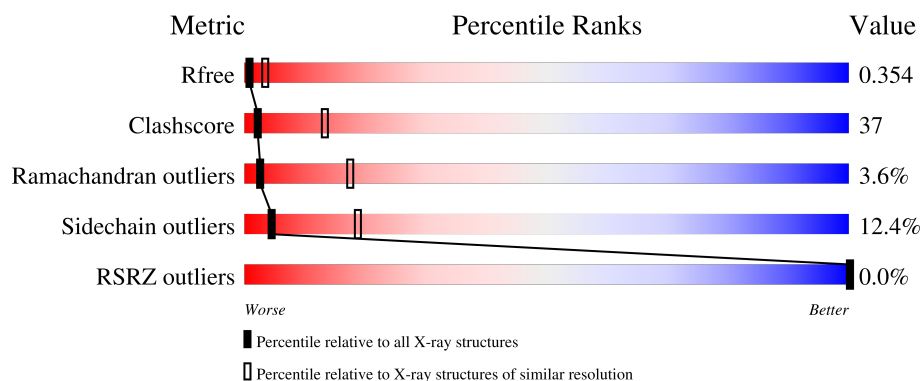
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

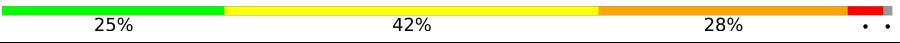
The reported resolution of this entry is 3.30 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	1169 (3.32-3.28)
Clashscore	190562	1209 (3.32-3.28)
Ramachandran outliers	187476	1188 (3.32-3.28)
Sidechain outliers	187428	1187 (3.32-3.28)
RSRZ outliers	180081	1169 (3.32-3.28)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	423	
1	B	423	
1	C	423	
1	D	423	
1	E	423	

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Mol	Chain	Length	Quality of chain
1	F	423	
1	G	423	
1	H	423	
1	I	423	
1	J	423	
1	K	423	
1	L	423	
1	M	423	
1	N	423	
1	O	423	

2 Entry composition

There is only 1 type of molecule in this entry. The entry contains 49350 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called Major capsid protein L1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	417	Total	C	N	O	S	0	0	0
			3290	2089	551	630	20			
1	B	417	Total	C	N	O	S	0	0	0
			3290	2089	551	630	20			
1	C	417	Total	C	N	O	S	0	0	0
			3290	2089	551	630	20			
1	D	417	Total	C	N	O	S	0	0	0
			3290	2089	551	630	20			
1	E	417	Total	C	N	O	S	0	0	0
			3290	2089	551	630	20			
1	F	417	Total	C	N	O	S	0	0	0
			3290	2089	551	630	20			
1	G	417	Total	C	N	O	S	0	0	0
			3290	2089	551	630	20			
1	H	417	Total	C	N	O	S	0	0	0
			3290	2089	551	630	20			
1	I	417	Total	C	N	O	S	0	0	0
			3290	2089	551	630	20			
1	J	417	Total	C	N	O	S	0	0	0
			3290	2089	551	630	20			
1	K	417	Total	C	N	O	S	0	0	0
			3290	2089	551	630	20			
1	L	417	Total	C	N	O	S	0	0	0
			3290	2089	551	630	20			
1	M	417	Total	C	N	O	S	0	0	0
			3290	2089	551	630	20			
1	N	417	Total	C	N	O	S	0	0	0
			3290	2089	551	630	20			
1	O	417	Total	C	N	O	S	0	0	0
			3290	2089	551	630	20			

There are 105 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	20	ALA	-	expression tag	UNP P27232
A	175	SER	CYS	engineered mutation	UNP P27232
A	402	GLY	-	linker	UNP P27232
A	403	GLY	-	linker	UNP P27232
A	404	SER	-	linker	UNP P27232
A	405	GLY	-	linker	UNP P27232
A	406	GLY	-	linker	UNP P27232
B	20	ALA	-	expression tag	UNP P27232
B	175	SER	CYS	engineered mutation	UNP P27232
B	402	GLY	-	linker	UNP P27232
B	403	GLY	-	linker	UNP P27232
B	404	SER	-	linker	UNP P27232
B	405	GLY	-	linker	UNP P27232
B	406	GLY	-	linker	UNP P27232
C	20	ALA	-	expression tag	UNP P27232
C	175	SER	CYS	engineered mutation	UNP P27232
C	402	GLY	-	linker	UNP P27232
C	403	GLY	-	linker	UNP P27232
C	404	SER	-	linker	UNP P27232
C	405	GLY	-	linker	UNP P27232
C	406	GLY	-	linker	UNP P27232
D	20	ALA	-	expression tag	UNP P27232
D	175	SER	CYS	engineered mutation	UNP P27232
D	402	GLY	-	linker	UNP P27232
D	403	GLY	-	linker	UNP P27232
D	404	SER	-	linker	UNP P27232
D	405	GLY	-	linker	UNP P27232
D	406	GLY	-	linker	UNP P27232
E	20	ALA	-	expression tag	UNP P27232
E	175	SER	CYS	engineered mutation	UNP P27232
E	402	GLY	-	linker	UNP P27232
E	403	GLY	-	linker	UNP P27232
E	404	SER	-	linker	UNP P27232
E	405	GLY	-	linker	UNP P27232
E	406	GLY	-	linker	UNP P27232
F	20	ALA	-	expression tag	UNP P27232
F	175	SER	CYS	engineered mutation	UNP P27232
F	402	GLY	-	linker	UNP P27232
F	403	GLY	-	linker	UNP P27232
F	404	SER	-	linker	UNP P27232
F	405	GLY	-	linker	UNP P27232
F	406	GLY	-	linker	UNP P27232
G	20	ALA	-	expression tag	UNP P27232

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Chain	Residue	Modelled	Actual	Comment	Reference
G	175	SER	CYS	engineered mutation	UNP P27232
G	402	GLY	-	linker	UNP P27232
G	403	GLY	-	linker	UNP P27232
G	404	SER	-	linker	UNP P27232
G	405	GLY	-	linker	UNP P27232
G	406	GLY	-	linker	UNP P27232
H	20	ALA	-	expression tag	UNP P27232
H	175	SER	CYS	engineered mutation	UNP P27232
H	402	GLY	-	linker	UNP P27232
H	403	GLY	-	linker	UNP P27232
H	404	SER	-	linker	UNP P27232
H	405	GLY	-	linker	UNP P27232
H	406	GLY	-	linker	UNP P27232
I	20	ALA	-	expression tag	UNP P27232
I	175	SER	CYS	engineered mutation	UNP P27232
I	402	GLY	-	linker	UNP P27232
I	403	GLY	-	linker	UNP P27232
I	404	SER	-	linker	UNP P27232
I	405	GLY	-	linker	UNP P27232
I	406	GLY	-	linker	UNP P27232
J	20	ALA	-	expression tag	UNP P27232
J	175	SER	CYS	engineered mutation	UNP P27232
J	402	GLY	-	linker	UNP P27232
J	403	GLY	-	linker	UNP P27232
J	404	SER	-	linker	UNP P27232
J	405	GLY	-	linker	UNP P27232
J	406	GLY	-	linker	UNP P27232
K	20	ALA	-	expression tag	UNP P27232
K	175	SER	CYS	engineered mutation	UNP P27232
K	402	GLY	-	linker	UNP P27232
K	403	GLY	-	linker	UNP P27232
K	404	SER	-	linker	UNP P27232
K	405	GLY	-	linker	UNP P27232
K	406	GLY	-	linker	UNP P27232
L	20	ALA	-	expression tag	UNP P27232
L	175	SER	CYS	engineered mutation	UNP P27232
L	402	GLY	-	linker	UNP P27232
L	403	GLY	-	linker	UNP P27232
L	404	SER	-	linker	UNP P27232
L	405	GLY	-	linker	UNP P27232
L	406	GLY	-	linker	UNP P27232
M	20	ALA	-	expression tag	UNP P27232

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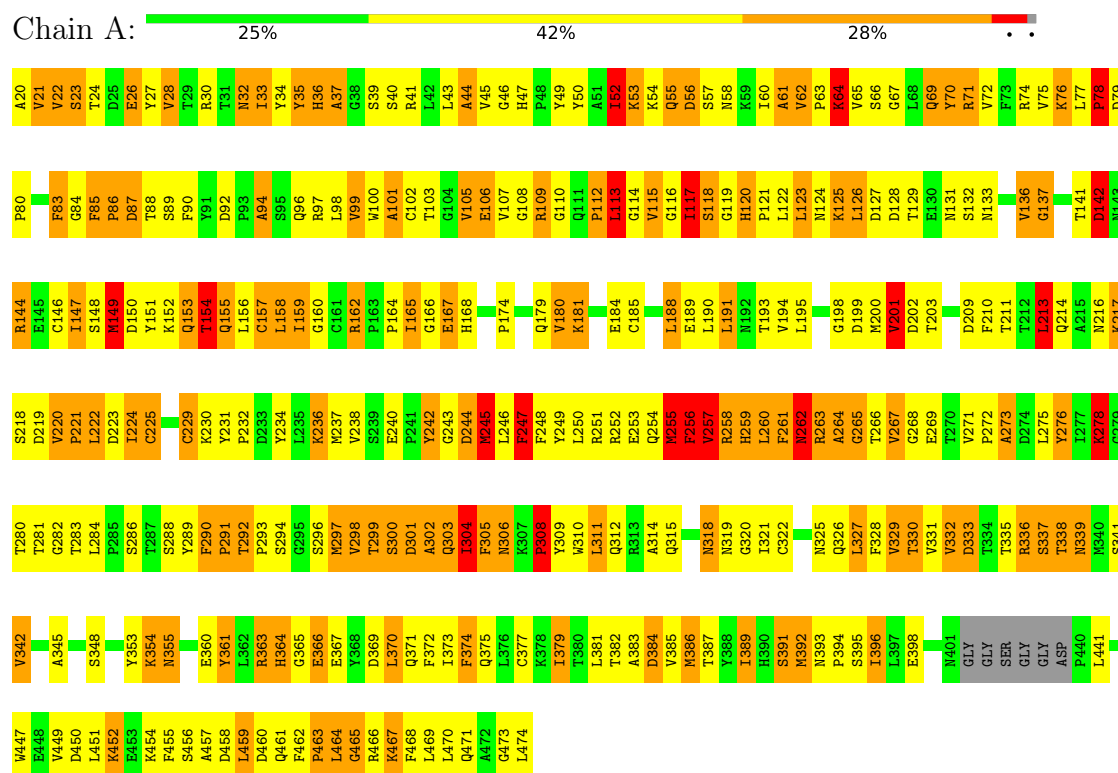
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Chain	Residue	Modelled	Actual	Comment	Reference
M	175	SER	CYS	engineered mutation	UNP P27232
M	402	GLY	-	linker	UNP P27232
M	403	GLY	-	linker	UNP P27232
M	404	SER	-	linker	UNP P27232
M	405	GLY	-	linker	UNP P27232
M	406	GLY	-	linker	UNP P27232
N	20	ALA	-	expression tag	UNP P27232
N	175	SER	CYS	engineered mutation	UNP P27232
N	402	GLY	-	linker	UNP P27232
N	403	GLY	-	linker	UNP P27232
N	404	SER	-	linker	UNP P27232
N	405	GLY	-	linker	UNP P27232
N	406	GLY	-	linker	UNP P27232
O	20	ALA	-	expression tag	UNP P27232
O	175	SER	CYS	engineered mutation	UNP P27232
O	402	GLY	-	linker	UNP P27232
O	403	GLY	-	linker	UNP P27232
O	404	SER	-	linker	UNP P27232
O	405	GLY	-	linker	UNP P27232
O	406	GLY	-	linker	UNP P27232

3 Residue-property plots

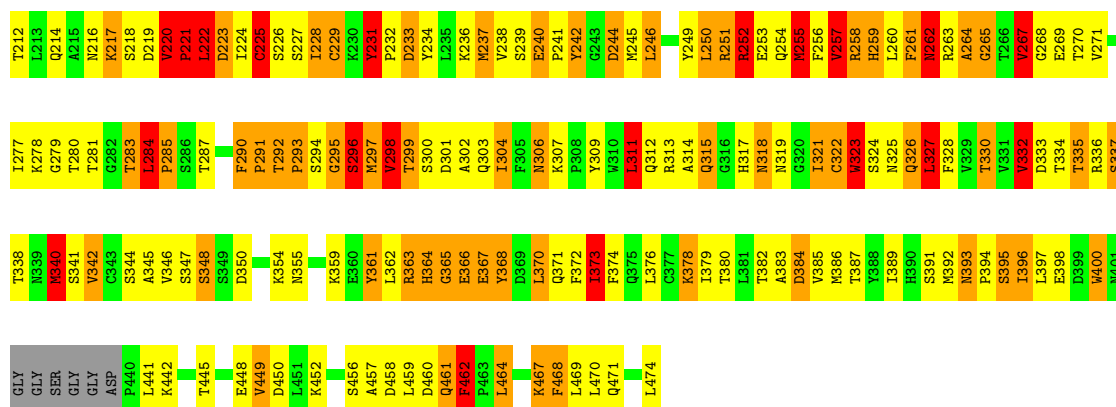
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density.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

• Molecule 1: Major capsid protein L1



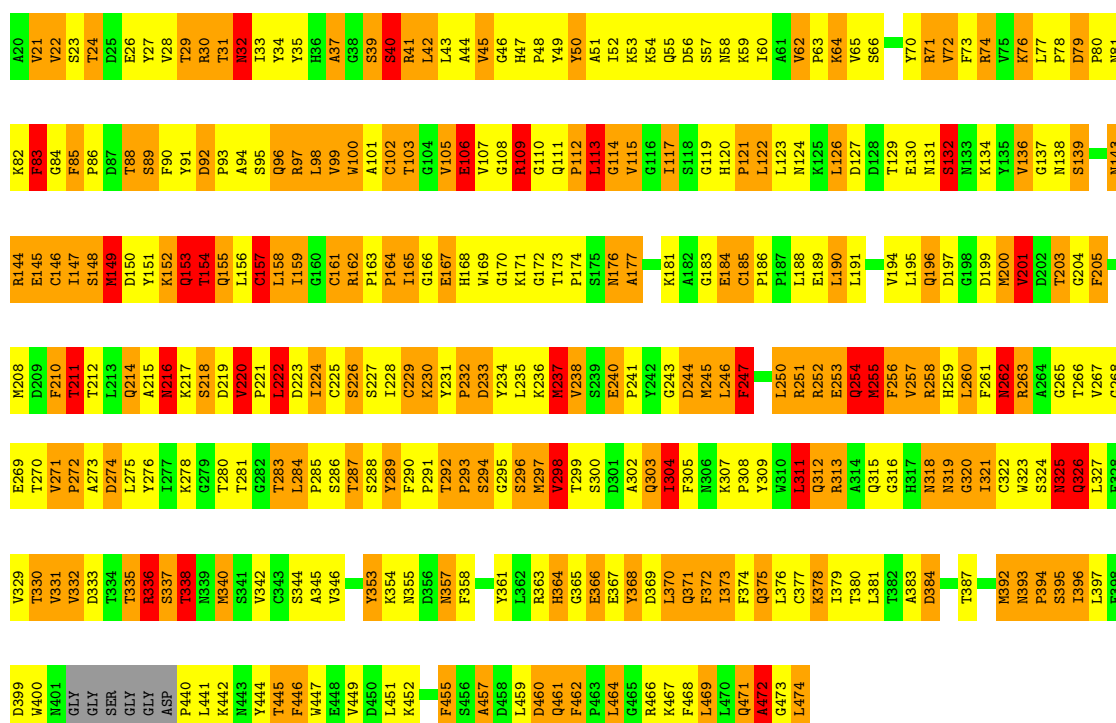
• Molecule 1: Major capsid protein L1





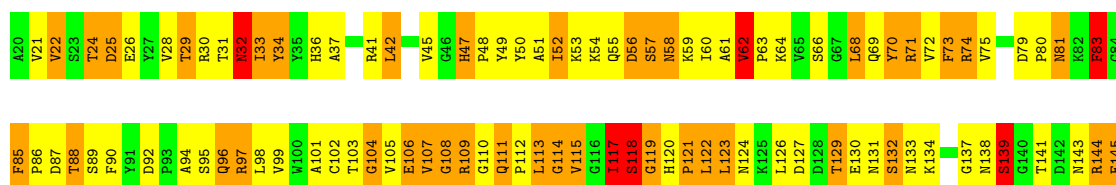
• Molecule 1: Major capsid protein L1

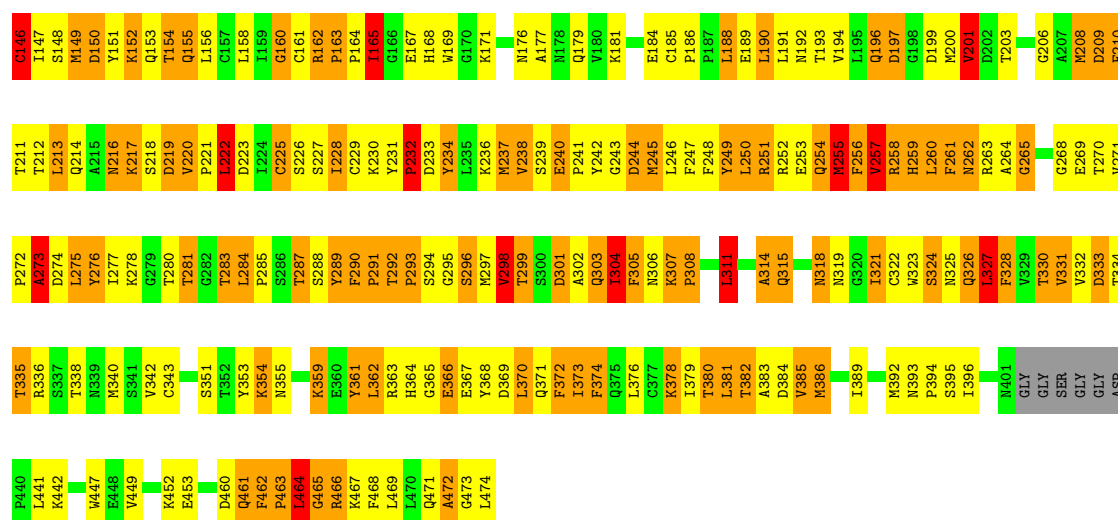
Chain C: 19% 39% 33% 7% .



• Molecule 1: Major capsid protein L1

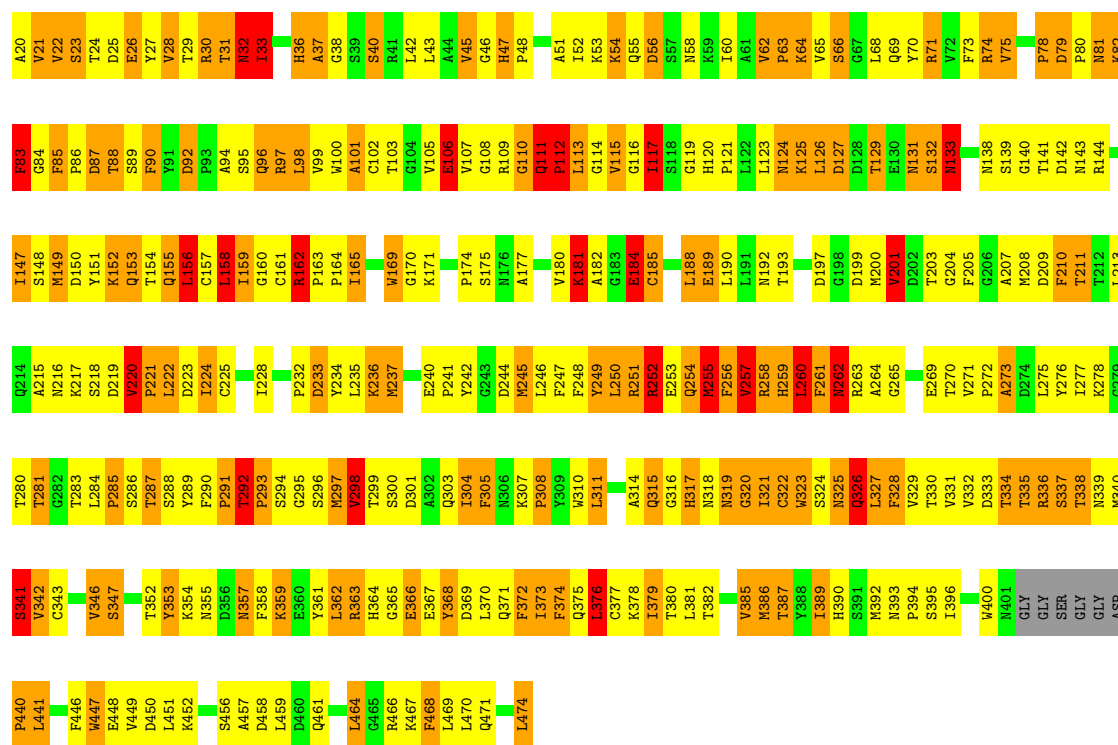
Chain D: 25% 39% 30% .





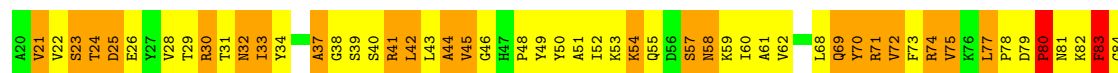
• Molecule 1: Major capsid protein L1

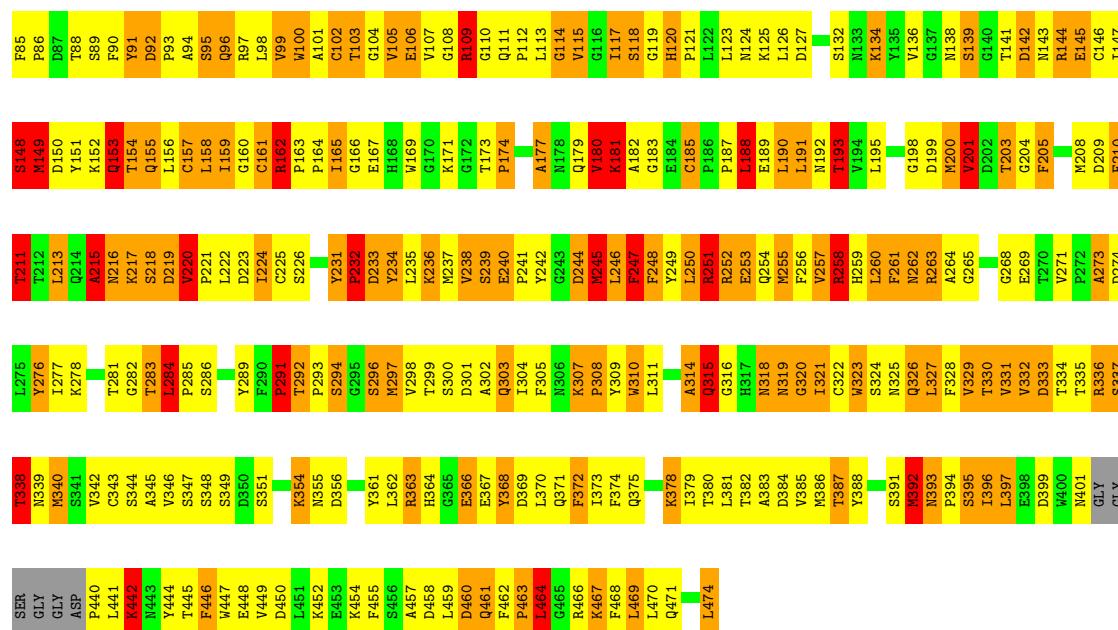
Chain E: 22% 41% 29% 6% .



• Molecule 1: Major capsid protein L1

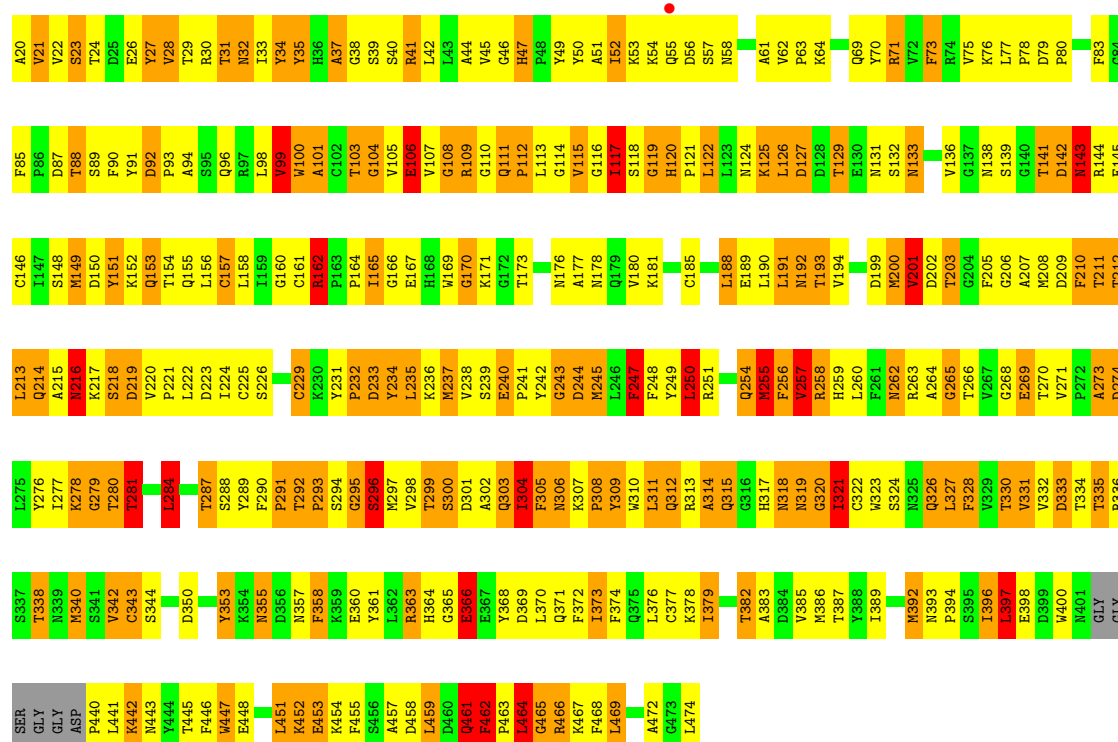
Chain F: 19% 43% 30% 6% .





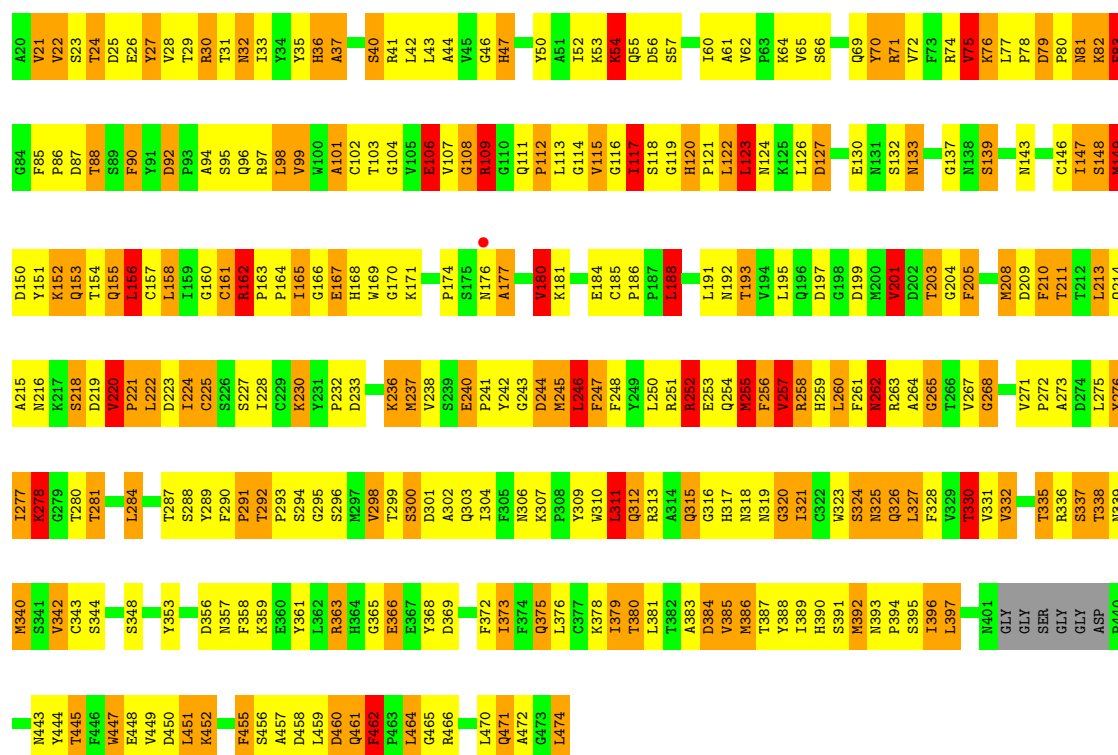
• Molecule 1: Major capsid protein L1

Chain G: 22% 42% 29% 5% .



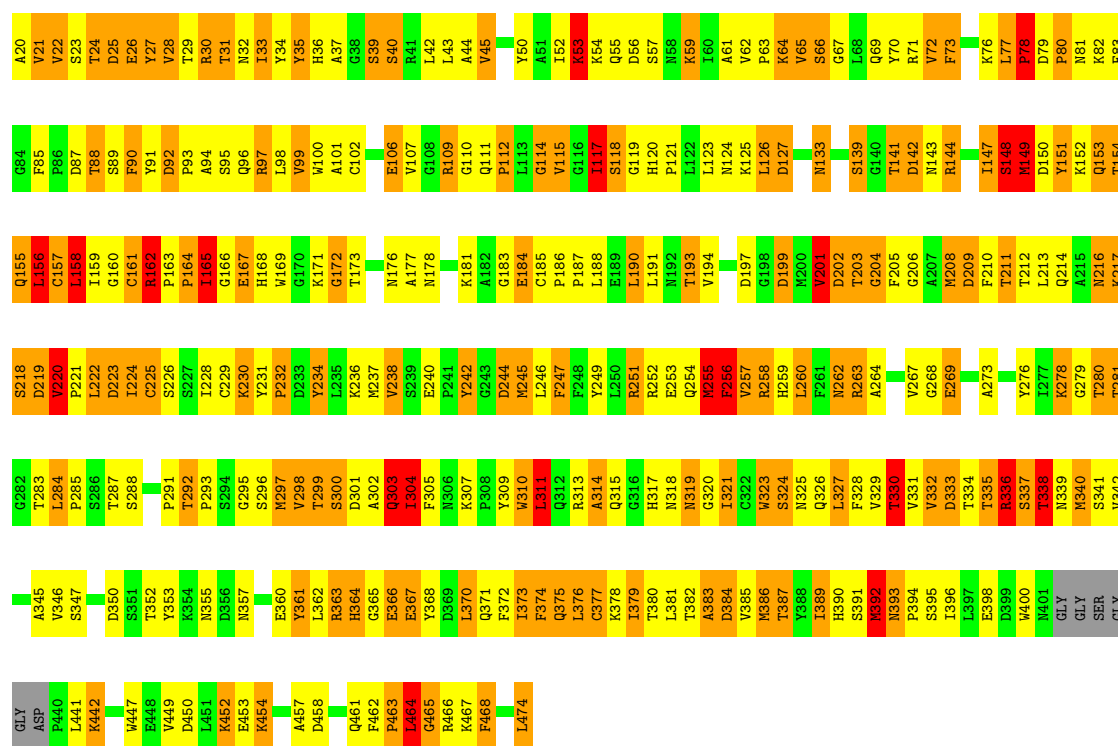
• Molecule 1: Major capsid protein L1

Chain H: 26% 41% 26% 5% .

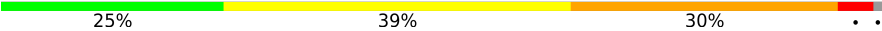


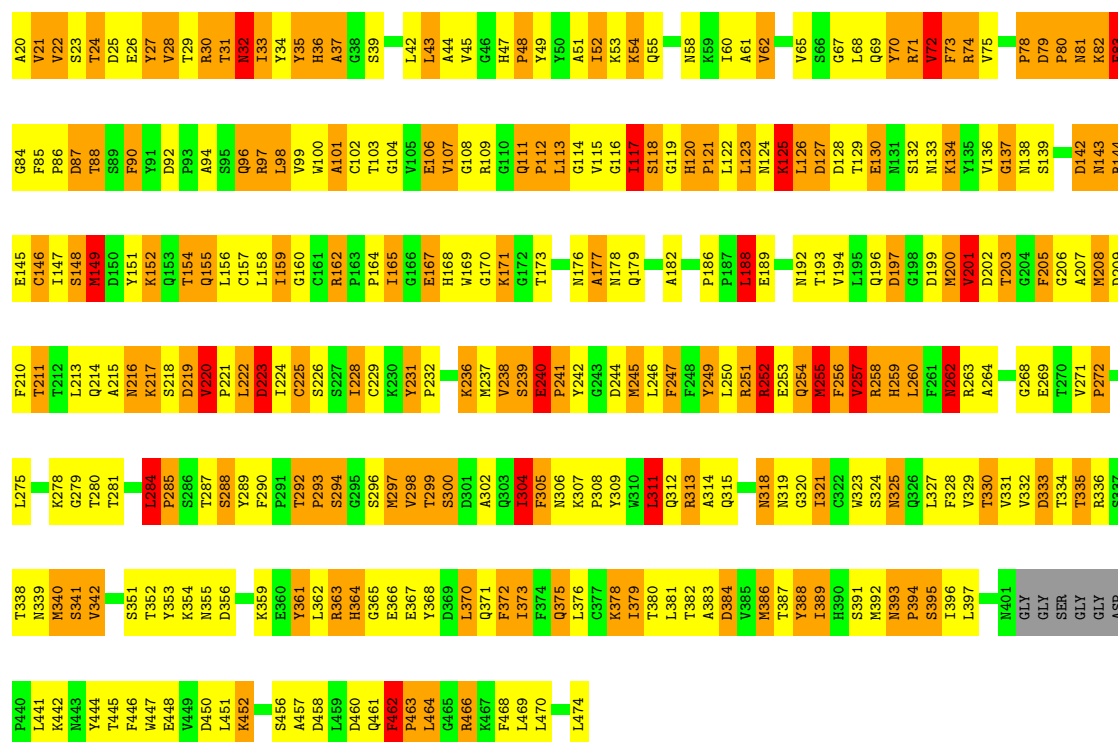
• Molecule 1: Major capsid protein L1

Chain I: 25% 38% 30% 5% •

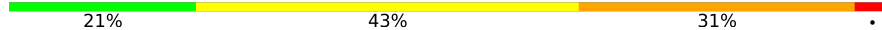


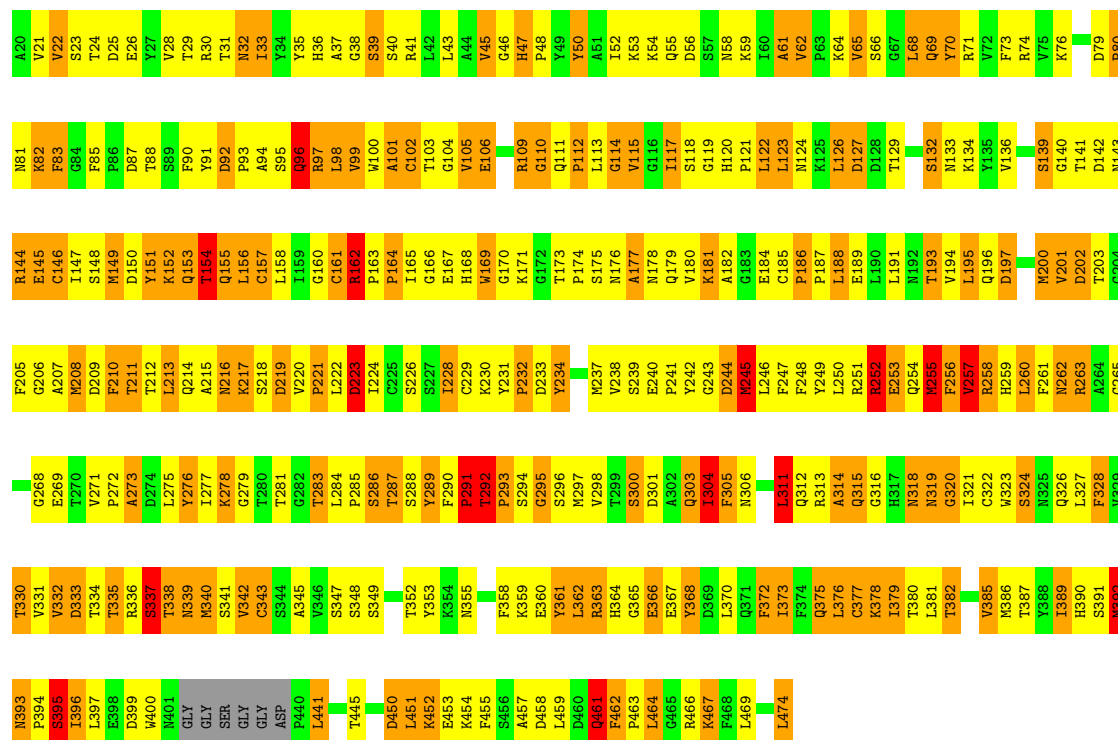
• Molecule 1: Major capsid protein L1

Chain J:  25% 39% 30% . .

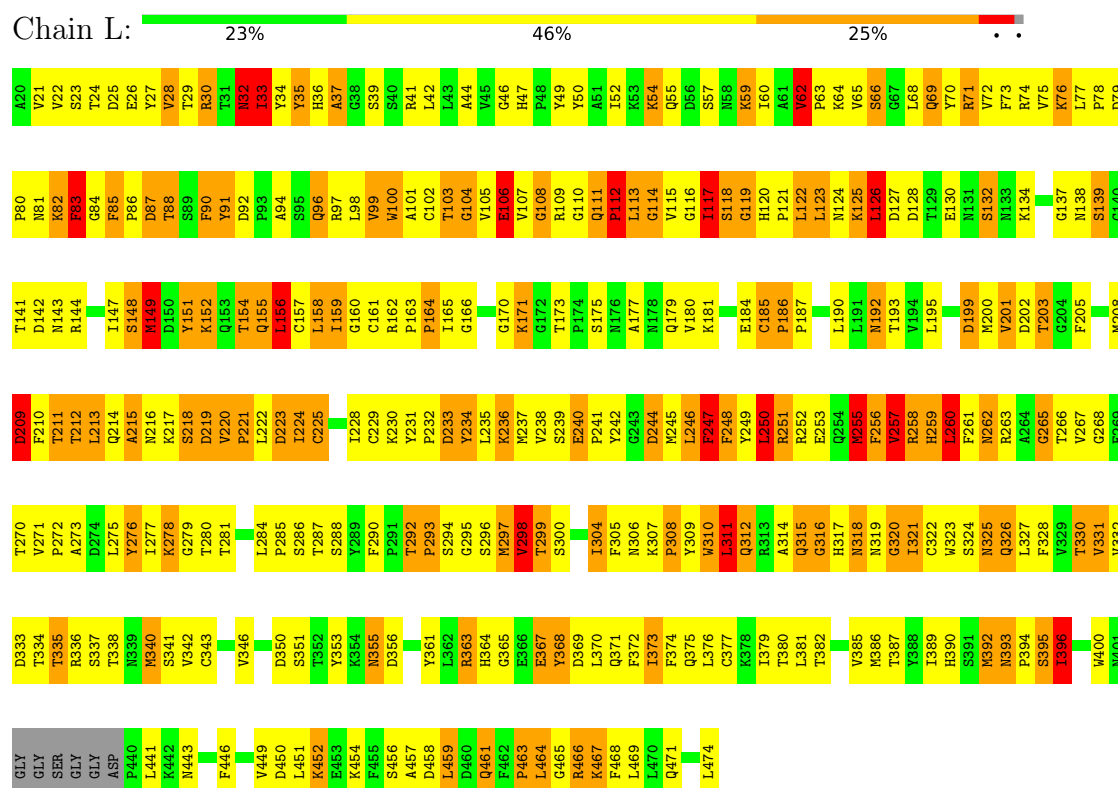


● Molecule 1: Major capsid protein L1

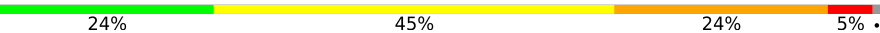
Chain K:  21% 43% 31% . .

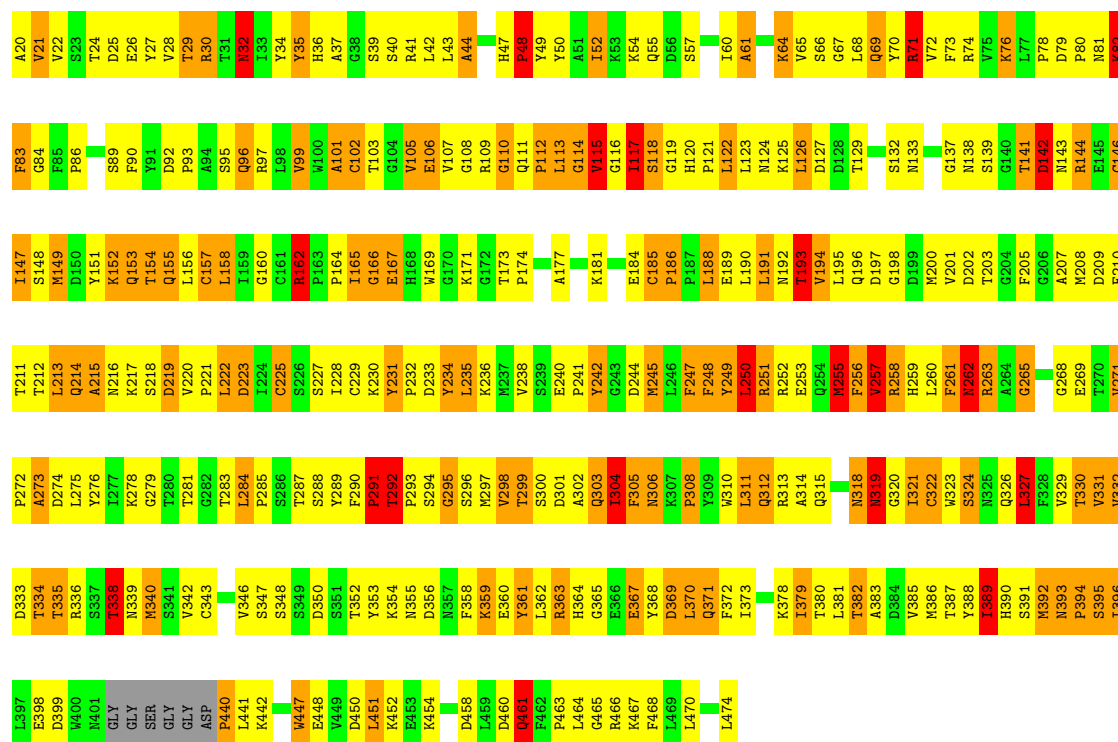


• Molecule 1: Major capsid protein L1



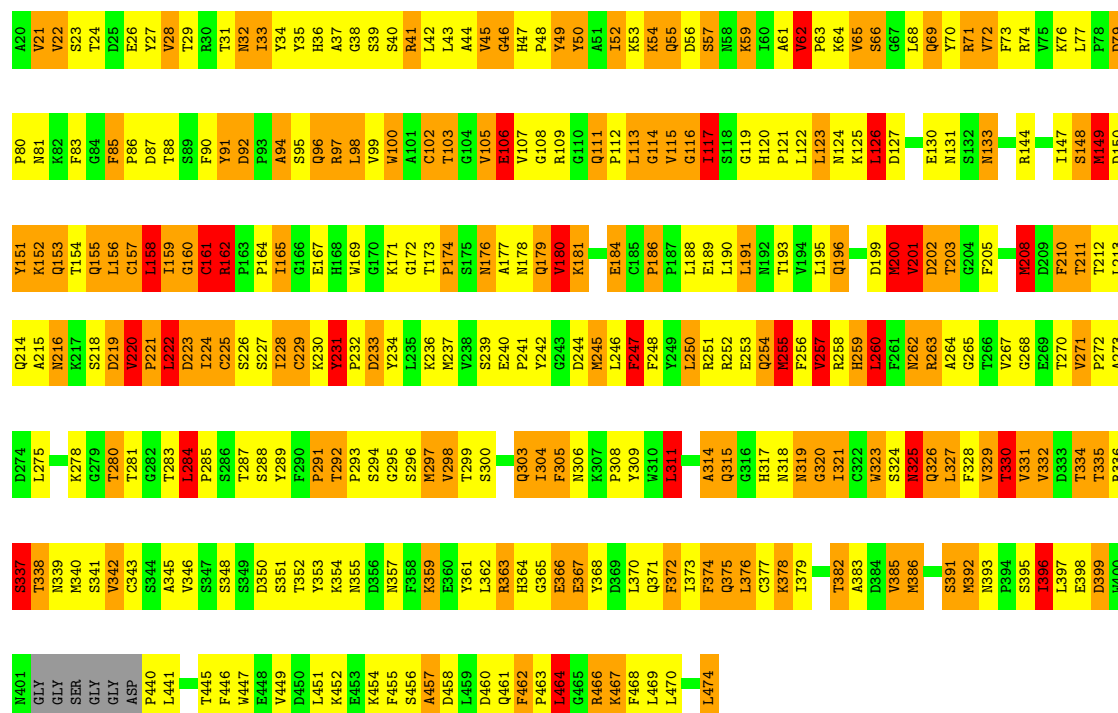
• Molecule 1: Major capsid protein L1

Chain N:  24% 45% 24% 5% .



• Molecule 1: Major capsid protein L1

Chain O:  24% 40% 28% 6% .



4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	150.41Å 176.61Å 197.07Å 90.00° 92.11° 90.00°	Depositor
Resolution (Å)	15.00 – 3.30 15.00 – 3.30	Depositor EDS
% Data completeness (in resolution range)	95.6 (15.00-3.30) 85.6 (15.00-3.30)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	18.90	Depositor
$\langle I/\sigma(I) \rangle$ ¹	3.08 (at 3.33Å)	Xtriage
Refinement program	REFMAC 5.2.0019	Depositor
R, R_{free}	0.315 , 0.348 0.319 , 0.354	Depositor DCC
R_{free} test set	7364 reflections (4.82%)	wwPDB-VP
Wilson B-factor (Å ²)	59.0	Xtriage
Anisotropy	0.608	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.19 , 26.2	EDS
L-test for twinning ²	$\langle L \rangle = 0.46$, $\langle L^2 \rangle = 0.29$	Xtriage
Estimated twinning fraction	0.048 for h,-k,-l	Xtriage
F_o, F_c correlation	0.86	EDS
Total number of atoms	49350	wwPDB-VP
Average B, all atoms (Å ²)	61.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 3.62% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality

5.1 Standard geometry

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	2.65	227/3373 (6.7%)	2.08	122/4580 (2.7%)
1	B	2.63	188/3373 (5.6%)	2.08	133/4580 (2.9%)
1	C	2.72	239/3373 (7.1%)	2.13	158/4580 (3.4%)
1	D	2.62	215/3373 (6.4%)	2.14	144/4580 (3.1%)
1	E	2.63	212/3373 (6.3%)	2.06	126/4580 (2.8%)
1	F	2.76	260/3373 (7.7%)	2.13	131/4580 (2.9%)
1	G	2.59	217/3373 (6.4%)	2.14	142/4580 (3.1%)
1	H	2.59	186/3373 (5.5%)	2.05	117/4580 (2.6%)
1	I	2.67	212/3373 (6.3%)	2.13	122/4580 (2.7%)
1	J	2.71	225/3373 (6.7%)	2.14	142/4580 (3.1%)
1	K	2.55	196/3373 (5.8%)	2.05	115/4580 (2.5%)
1	L	2.54	192/3373 (5.7%)	2.01	108/4580 (2.4%)
1	M	2.60	192/3373 (5.7%)	2.00	115/4580 (2.5%)
1	N	2.57	198/3373 (5.9%)	2.03	110/4580 (2.4%)
1	O	2.68	220/3373 (6.5%)	1.99	95/4580 (2.1%)
All	All	2.63	3179/50595 (6.3%)	2.08	1880/68700 (2.7%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	3
1	B	0	2
1	D	0	1
1	F	0	1
1	I	0	3
1	J	0	1
1	O	0	1
All	All	0	12

All (3179) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	H	277	ILE	CA-CB	15.80	1.72	1.53
1	I	375	GLN	CA-C	14.90	1.70	1.52
1	C	378	LYS	N-CA	-14.83	1.28	1.46
1	B	72	VAL	CA-CB	14.39	1.71	1.53
1	G	383	ALA	CA-CB	-14.24	1.30	1.53
1	I	338	THR	CA-CB	14.08	1.73	1.53
1	D	56	ASP	CA-C	-13.91	1.43	1.52
1	F	157	CYS	N-CA	-13.80	1.28	1.46
1	J	117	ILE	CA-CB	-13.71	1.35	1.54
1	B	112	PRO	CA-C	13.70	1.69	1.52
1	J	321	ILE	CA-CB	-13.50	1.38	1.54
1	A	301	ASP	C-O	-13.38	1.08	1.24
1	A	265	GLY	C-O	-13.24	1.08	1.24
1	E	322	CYS	C-O	-13.08	1.09	1.23
1	N	152	LYS	CE-NZ	13.04	1.88	1.49
1	J	468	PHE	C-O	-13.02	1.09	1.24
1	M	305	PHE	N-CA	12.85	1.60	1.46
1	M	152	LYS	CE-NZ	12.78	1.87	1.49
1	L	467	LYS	CD-CE	12.75	1.90	1.52
1	J	309	TYR	N-CA	12.54	1.61	1.46
1	H	79	ASP	C-O	-12.47	1.09	1.24
1	F	161	CYS	C-O	-12.41	1.07	1.24
1	D	281	THR	CA-CB	12.40	1.74	1.53
1	O	331	VAL	CA-CB	-12.36	1.41	1.55
1	I	224	ILE	C-O	12.34	1.38	1.24
1	J	373	ILE	C-O	12.33	1.38	1.24
1	L	467	LYS	CG-CD	12.32	1.89	1.52
1	F	73	PHE	N-CA	-12.25	1.31	1.46
1	I	449	VAL	CA-CB	12.24	1.70	1.53
1	G	35	TYR	C-O	12.23	1.38	1.23
1	O	28	VAL	C-O	-12.22	1.10	1.24
1	C	254	GLN	CB-CG	-12.21	1.15	1.52
1	O	148	SER	CA-C	12.18	1.71	1.53
1	A	112	PRO	C-O	-12.15	1.12	1.23
1	F	28	VAL	CA-CB	-12.08	1.39	1.54
1	B	119	GLY	C-O	12.04	1.35	1.23
1	G	21	VAL	C-O	-11.99	1.09	1.24
1	I	95	SER	C-O	11.94	1.39	1.24
1	B	298	VAL	N-CA	11.82	1.61	1.46
1	L	452	LYS	CG-CD	11.82	1.88	1.52
1	K	451	LEU	N-CA	11.73	1.59	1.46
1	J	44	ALA	CA-CB	11.71	1.73	1.53
1	N	235	LEU	N-CA	11.69	1.59	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	258	ARG	C-O	-11.65	1.10	1.24
1	C	98	LEU	N-CA	-11.64	1.32	1.46
1	L	298	VAL	N-CA	11.61	1.59	1.46
1	O	103	THR	C-O	11.56	1.39	1.24
1	N	359	LYS	CG-CD	11.54	1.87	1.52
1	A	264	ALA	CA-CB	-11.53	1.35	1.53
1	C	272	PRO	CA-C	-11.52	1.41	1.52
1	N	115	VAL	C-O	11.51	1.35	1.23
1	A	109	ARG	C-O	-11.45	1.10	1.24
1	E	88	THR	CA-C	11.45	1.66	1.53
1	F	201	VAL	CA-C	-11.43	1.40	1.52
1	O	383	ALA	N-CA	-11.42	1.32	1.46
1	K	278	LYS	C-O	11.40	1.38	1.24
1	J	333	ASP	C-O	-11.38	1.10	1.23
1	F	336	ARG	CZ-NH1	11.36	1.48	1.32
1	D	359	LYS	CD-CE	11.30	1.86	1.52
1	H	366	GLU	C-O	-11.29	1.09	1.23
1	O	38	GLY	C-O	-11.27	1.08	1.23
1	E	40	SER	CA-C	11.26	1.67	1.52
1	F	354	LYS	CE-NZ	11.26	1.83	1.49
1	H	320	GLY	CA-C	11.24	1.63	1.51
1	B	259	HIS	N-CA	11.22	1.60	1.46
1	C	31	THR	CA-CB	11.19	1.77	1.54
1	F	331	VAL	CA-CB	-11.19	1.39	1.54
1	A	304	ILE	CG1-CD1	11.14	1.95	1.51
1	D	186	PRO	CA-C	11.13	1.59	1.52
1	J	170	GLY	C-O	-11.12	1.14	1.24
1	C	466	ARG	CZ-NH2	11.11	1.47	1.33
1	M	34	TYR	C-O	11.10	1.36	1.23
1	D	209	ASP	C-O	-11.01	1.11	1.24
1	G	314	ALA	CA-C	-11.00	1.37	1.53
1	L	307	LYS	C-O	10.99	1.35	1.24
1	N	113	LEU	C-O	-10.98	1.10	1.23
1	B	322	CYS	CA-CB	10.96	1.65	1.53
1	N	105	VAL	CA-CB	-10.95	1.39	1.54
1	M	115	VAL	C-O	10.90	1.35	1.23
1	H	90	PHE	N-CA	10.87	1.60	1.46
1	F	232	PRO	CA-C	-10.86	1.39	1.52
1	C	272	PRO	C-O	-10.85	1.11	1.23
1	O	69	GLN	N-CA	10.84	1.59	1.45
1	H	95	SER	N-CA	10.81	1.59	1.45
1	J	298	VAL	CA-CB	-10.76	1.40	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	297	MET	N-CA	-10.73	1.32	1.46
1	J	308	PRO	CA-C	-10.72	1.41	1.52
1	A	62	VAL	CA-CB	10.72	1.63	1.54
1	C	336	ARG	N-CA	10.71	1.60	1.46
1	N	383	ALA	CA-CB	-10.67	1.36	1.53
1	H	278	LYS	C-N	-10.67	1.28	1.33
1	C	254	GLN	N-CA	-10.62	1.32	1.46
1	M	339	ASN	C-O	-10.60	1.11	1.23
1	F	224	ILE	CA-CB	10.56	1.68	1.54
1	J	111	GLN	CA-C	-10.56	1.39	1.52
1	D	137	GLY	C-O	10.55	1.38	1.23
1	K	178	ASN	CA-C	10.55	1.66	1.52
1	B	330	THR	CA-CB	-10.52	1.39	1.53
1	E	260	LEU	CG-CD1	-10.45	1.18	1.52
1	D	90	PHE	N-CA	10.44	1.59	1.46
1	G	90	PHE	N-CA	10.42	1.58	1.46
1	M	173	THR	CA-C	10.39	1.65	1.52
1	L	467	LYS	CE-NZ	10.38	1.80	1.49
1	B	467	LYS	CD-CE	10.36	1.83	1.52
1	C	392	MET	SD-CE	10.33	2.05	1.79
1	D	167	GLU	C-O	-10.31	1.11	1.24
1	I	147	ILE	C-O	-10.31	1.13	1.23
1	C	319	ASN	CA-C	-10.29	1.40	1.53
1	D	449	VAL	CA-CB	10.28	1.67	1.54
1	N	214	GLN	N-CA	10.27	1.60	1.46
1	B	101	ALA	CA-CB	10.25	1.66	1.53
1	B	222	LEU	N-CA	10.25	1.58	1.46
1	D	299	THR	C-O	-10.21	1.11	1.23
1	B	336	ARG	CZ-NH1	10.20	1.47	1.32
1	G	166	GLY	CA-C	10.20	1.60	1.52
1	E	296	SER	CA-C	10.20	1.66	1.52
1	O	273	ALA	CA-CB	10.20	1.72	1.53
1	E	390	HIS	C-O	10.15	1.35	1.24
1	H	259	HIS	CA-C	10.15	1.65	1.52
1	O	114	GLY	C-O	10.12	1.38	1.23
1	I	101	ALA	CA-CB	-10.11	1.40	1.53
1	A	117	ILE	C-O	10.11	1.36	1.24
1	A	302	ALA	CA-CB	10.08	1.69	1.53
1	O	254	GLN	C-O	-10.04	1.11	1.24
1	M	316	GLY	N-CA	10.03	1.55	1.45
1	J	83	PHE	CA-C	10.00	1.66	1.52
1	A	306	ASN	CA-CB	-9.99	1.36	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	H	115	VAL	C-O	9.97	1.34	1.23
1	H	257	VAL	CA-CB	-9.97	1.41	1.54
1	O	338	THR	CA-C	9.95	1.66	1.52
1	M	303	GLN	C-O	9.93	1.36	1.24
1	I	173	THR	CA-CB	9.90	1.68	1.53
1	I	107	VAL	CA-C	9.89	1.61	1.53
1	E	359	LYS	CE-NZ	9.88	1.78	1.49
1	D	68	LEU	C-O	-9.87	1.11	1.24
1	N	219	ASP	N-CA	9.87	1.58	1.46
1	H	75	VAL	CA-CB	-9.85	1.42	1.53
1	F	110	GLY	N-CA	9.84	1.52	1.44
1	N	165	ILE	CA-CB	9.84	1.70	1.54
1	H	291	PRO	CA-C	9.84	1.62	1.52
1	E	264	ALA	CA-CB	-9.78	1.38	1.53
1	O	383	ALA	CA-CB	-9.77	1.38	1.53
1	E	327	LEU	N-CA	-9.74	1.34	1.46
1	G	291	PRO	N-CA	-9.73	1.37	1.46
1	F	369	ASP	C-O	-9.71	1.11	1.23
1	C	233	ASP	C-O	9.70	1.36	1.23
1	H	255	MET	C-O	9.66	1.35	1.23
1	F	149	MET	C-O	-9.65	1.14	1.23
1	H	383	ALA	CA-CB	-9.64	1.38	1.53
1	N	212	THR	C-O	-9.63	1.11	1.24
1	H	338	THR	C-O	9.59	1.35	1.23
1	J	335	THR	CA-C	9.58	1.66	1.52
1	O	160	GLY	N-CA	9.57	1.54	1.45
1	A	44	ALA	CA-CB	-9.56	1.37	1.53
1	I	53	LYS	CE-NZ	9.56	1.78	1.49
1	C	298	VAL	C-O	9.56	1.35	1.24
1	E	161	CYS	C-O	9.56	1.37	1.23
1	K	224	ILE	C-O	9.54	1.35	1.24
1	G	115	VAL	C-O	9.54	1.34	1.24
1	A	125	LYS	CD-CE	9.52	1.81	1.52
1	K	175	SER	CA-C	9.52	1.65	1.53
1	O	229	CYS	CA-C	-9.51	1.41	1.52
1	D	146	CYS	N-CA	9.51	1.58	1.46
1	M	163	PRO	CA-C	9.49	1.60	1.52
1	N	450	ASP	C-O	9.49	1.35	1.24
1	J	116	GLY	C-O	-9.47	1.14	1.23
1	A	309	TYR	C-O	-9.47	1.12	1.23
1	A	166	GLY	C-O	-9.46	1.11	1.23
1	K	389	ILE	C-O	9.46	1.34	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	308	PRO	C-O	-9.46	1.14	1.23
1	O	338	THR	C-O	9.45	1.35	1.24
1	I	65	VAL	C-O	-9.44	1.13	1.24
1	M	336	ARG	CZ-NH2	9.44	1.45	1.33
1	M	396	ILE	CA-CB	9.44	1.66	1.54
1	B	332	VAL	CA-CB	-9.41	1.41	1.54
1	H	291	PRO	CA-CB	-9.40	1.41	1.54
1	J	224	ILE	N-CA	9.40	1.54	1.46
1	K	390	HIS	C-O	9.40	1.35	1.24
1	M	21	VAL	C-O	-9.40	1.12	1.24
1	H	458	ASP	CA-C	-9.39	1.41	1.53
1	E	252	ARG	C-O	-9.38	1.14	1.23
1	H	224	ILE	C-O	9.38	1.35	1.24
1	E	278	LYS	C-N	-9.36	1.28	1.33
1	O	224	ILE	CG1-CD1	9.37	1.88	1.51
1	A	292	THR	CA-C	-9.36	1.41	1.52
1	C	304	ILE	C-O	-9.35	1.14	1.24
1	A	391	SER	CB-OG	9.34	1.60	1.42
1	B	134	LYS	CE-NZ	9.34	1.77	1.49
1	F	331	VAL	N-CA	-9.33	1.34	1.46
1	J	107	VAL	C-N	9.31	1.41	1.33
1	I	320	GLY	C-O	9.31	1.36	1.23
1	M	260	LEU	C-O	9.30	1.35	1.23
1	C	222	LEU	N-CA	9.29	1.57	1.46
1	H	88	THR	CA-C	9.29	1.65	1.53
1	I	27	TYR	C-O	9.29	1.34	1.24
1	A	64	LYS	CG-CD	9.29	1.80	1.52
1	J	37	ALA	CA-CB	-9.29	1.38	1.53
1	L	286	SER	C-O	9.28	1.35	1.23
1	F	62	VAL	CA-C	-9.27	1.46	1.52
1	K	338	THR	C-O	9.27	1.35	1.23
1	N	152	LYS	CD-CE	9.27	1.80	1.52
1	A	258	ARG	N-CA	-9.27	1.35	1.46
1	B	336	ARG	N-CA	-9.27	1.35	1.46
1	D	302	ALA	CA-CB	9.26	1.68	1.53
1	F	283	THR	CA-CB	9.26	1.68	1.53
1	B	284	LEU	C-O	-9.26	1.12	1.24
1	B	336	ARG	CZ-NH2	9.25	1.45	1.33
1	H	373	ILE	CA-CB	-9.24	1.41	1.54
1	G	71	ARG	CA-CB	9.23	1.67	1.53
1	E	79	ASP	C-O	-9.21	1.13	1.24
1	J	62	VAL	CA-CB	-9.19	1.43	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	L	110	GLY	C-O	-9.19	1.12	1.23
1	D	88	THR	CA-C	9.19	1.65	1.52
1	C	109	ARG	CZ-NH1	9.18	1.45	1.32
1	J	271	VAL	CA-C	9.17	1.62	1.52
1	A	101	ALA	CA-CB	-9.17	1.40	1.53
1	I	252	ARG	C-O	9.15	1.35	1.23
1	L	35	TYR	C-O	9.15	1.34	1.23
1	C	245	MET	N-CA	-9.15	1.34	1.46
1	C	157	CYS	N-CA	-9.14	1.34	1.46
1	E	250	LEU	C-O	9.14	1.34	1.23
1	I	63	PRO	C-O	-9.13	1.12	1.24
1	C	372	PHE	CA-C	-9.12	1.41	1.52
1	C	89	SER	C-O	9.11	1.36	1.23
1	M	466	ARG	C-O	9.10	1.34	1.24
1	O	382	THR	CA-CB	9.10	1.67	1.53
1	D	144	ARG	CZ-NH1	9.09	1.45	1.32
1	N	332	VAL	CA-CB	-9.05	1.43	1.54
1	O	98	LEU	C-O	9.06	1.34	1.23
1	F	102	CYS	C-O	9.05	1.34	1.24
1	C	297	MET	CB-CG	9.04	1.79	1.52
1	A	110	GLY	N-CA	-9.04	1.36	1.44
1	A	304	ILE	CA-CB	-9.02	1.42	1.54
1	K	375	GLN	CA-C	9.02	1.63	1.52
1	E	40	SER	C-O	9.02	1.35	1.24
1	O	65	VAL	CA-C	9.01	1.62	1.53
1	I	77	LEU	C-O	9.00	1.36	1.23
1	L	392	MET	SD-CE	9.00	2.02	1.79
1	H	309	TYR	C-O	-8.99	1.13	1.24
1	F	246	LEU	N-CA	8.98	1.57	1.46
1	B	30	ARG	CZ-NH2	8.96	1.45	1.33
1	E	252	ARG	CA-C	-8.96	1.45	1.53
1	J	364	HIS	C-O	8.96	1.34	1.23
1	D	217	LYS	CE-NZ	8.94	1.76	1.49
1	C	228	ILE	CA-CB	-8.93	1.43	1.54
1	E	373	ILE	CA-CB	-8.93	1.42	1.54
1	F	45	VAL	CA-CB	-8.93	1.42	1.55
1	C	336	ARG	CZ-NH1	8.92	1.45	1.32
1	B	191	LEU	C-O	-8.90	1.13	1.24
1	M	173	THR	C-N	8.90	1.44	1.33
1	I	392	MET	SD-CE	8.88	2.01	1.79
1	E	319	ASN	CA-C	8.86	1.61	1.53
1	G	340	MET	N-CA	8.86	1.56	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	342	VAL	CA-CB	-8.86	1.43	1.54
1	H	373	ILE	C-O	-8.86	1.13	1.24
1	I	190	LEU	C-O	-8.85	1.13	1.24
1	C	60	ILE	CA-CB	8.85	1.64	1.54
1	J	373	ILE	CA-CB	-8.85	1.42	1.54
1	C	396	ILE	CA-CB	8.84	1.65	1.54
1	K	191	LEU	C-O	-8.84	1.13	1.24
1	O	59	LYS	CE-NZ	8.84	1.75	1.49
1	J	188	LEU	C-O	-8.82	1.12	1.23
1	E	359	LYS	C-O	8.81	1.34	1.24
1	N	153	GLN	CA-CB	8.81	1.65	1.53
1	N	231	TYR	C-O	-8.81	1.12	1.24
1	O	147	ILE	CA-CB	8.81	1.66	1.54
1	F	102	CYS	N-CA	-8.80	1.35	1.46
1	M	371	GLN	C-O	8.80	1.35	1.24
1	N	382	THR	CA-CB	-8.79	1.40	1.53
1	B	374	PHE	C-O	8.79	1.35	1.23
1	F	70	TYR	C-O	8.76	1.34	1.23
1	B	79	ASP	C-O	-8.75	1.13	1.24
1	E	90	PHE	N-CA	8.75	1.57	1.46
1	L	334	THR	CA-CB	8.74	1.67	1.53
1	O	95	SER	N-CA	8.73	1.57	1.45
1	L	369	ASP	CA-C	8.73	1.62	1.52
1	E	325	ASN	CA-C	8.72	1.64	1.52
1	F	308	PRO	N-CA	-8.72	1.37	1.47
1	O	260	LEU	CG-CD1	-8.72	1.23	1.52
1	D	177	ALA	CA-CB	8.72	1.68	1.53
1	G	103	THR	C-O	8.71	1.35	1.24
1	F	336	ARG	CZ-NH2	8.71	1.44	1.33
1	N	284	LEU	C-O	8.70	1.35	1.24
1	L	336	ARG	CZ-NH2	8.70	1.44	1.33
1	H	157	CYS	N-CA	-8.69	1.35	1.47
1	E	376	LEU	C-O	-8.68	1.13	1.24
1	O	33	ILE	CA-CB	8.66	1.64	1.53
1	N	302	ALA	CA-CB	8.65	1.66	1.53
1	D	160	GLY	C-O	8.64	1.32	1.23
1	J	88	THR	CA-C	8.63	1.66	1.52
1	C	79	ASP	C-O	-8.63	1.13	1.24
1	J	67	GLY	C-O	8.63	1.34	1.24
1	I	465	GLY	C-O	8.62	1.35	1.23
1	H	95	SER	C-O	-8.62	1.13	1.23
1	N	29	THR	N-CA	-8.62	1.34	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	33	ILE	N-CA	-8.62	1.35	1.46
1	C	191	LEU	N-CA	8.62	1.56	1.46
1	F	101	ALA	N-CA	8.62	1.56	1.46
1	L	325	ASN	C-O	8.61	1.34	1.24
1	J	336	ARG	CZ-NH1	8.61	1.44	1.32
1	C	371	GLN	C-O	8.61	1.34	1.23
1	E	233	ASP	C-O	8.60	1.34	1.24
1	G	107	VAL	C-O	8.60	1.34	1.24
1	J	202	ASP	C-O	8.60	1.34	1.23
1	D	331	VAL	N-CA	8.60	1.56	1.46
1	M	232	PRO	CA-C	-8.60	1.40	1.52
1	G	218	SER	N-CA	-8.59	1.38	1.46
1	M	378	LYS	N-CA	-8.58	1.35	1.45
1	I	97	ARG	C-O	8.58	1.33	1.24
1	N	90	PHE	N-CA	8.57	1.57	1.46
1	K	290	PHE	CA-C	8.56	1.62	1.52
1	C	37	ALA	C-O	8.55	1.34	1.23
1	I	279	GLY	N-CA	-8.55	1.33	1.45
1	O	391	SER	N-CA	8.55	1.56	1.46
1	A	159	ILE	CA-CB	-8.54	1.43	1.54
1	H	21	VAL	C-O	-8.55	1.13	1.24
1	L	255	MET	C-O	8.54	1.34	1.24
1	N	250	LEU	N-CA	8.55	1.56	1.46
1	B	456	SER	C-O	-8.54	1.13	1.23
1	O	257	VAL	C-O	8.53	1.34	1.24
1	M	336	ARG	CZ-NH1	8.53	1.44	1.32
1	H	246	LEU	N-CA	8.52	1.56	1.46
1	C	92	ASP	C-O	8.52	1.32	1.25
1	N	138	ASN	CG-ND2	8.52	1.51	1.33
1	F	107	VAL	C-O	-8.51	1.12	1.23
1	L	320	GLY	N-CA	8.51	1.57	1.45
1	L	380	THR	C-O	8.51	1.33	1.24
1	N	235	LEU	CA-C	-8.51	1.42	1.52
1	A	202	ASP	C-O	8.51	1.34	1.23
1	O	220	VAL	CA-C	-8.50	1.44	1.52
1	K	99	VAL	CA-CB	-8.50	1.42	1.54
1	G	371	GLN	CA-C	-8.50	1.42	1.52
1	A	283	THR	C-O	8.49	1.35	1.23
1	A	26	GLU	CD-OE1	8.49	1.41	1.25
1	G	216	ASN	C-O	-8.48	1.13	1.24
1	I	62	VAL	CA-CB	8.48	1.60	1.54
1	F	95	SER	N-CA	8.47	1.56	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	449	VAL	CA-CB	8.47	1.65	1.54
1	J	342	VAL	CA-CB	-8.46	1.44	1.54
1	J	48	PRO	N-CA	-8.46	1.37	1.47
1	J	21	VAL	CA-CB	8.46	1.63	1.54
1	H	33	ILE	CA-CB	8.46	1.64	1.53
1	I	278	LYS	C-N	-8.45	1.27	1.33
1	E	215	ALA	CA-CB	-8.45	1.39	1.53
1	C	89	SER	CA-C	8.44	1.62	1.52
1	B	296	SER	CA-C	8.44	1.64	1.52
1	M	389	ILE	C-O	8.43	1.34	1.24
1	H	368	TYR	C-O	-8.43	1.12	1.23
1	L	281	THR	CA-CB	8.43	1.67	1.53
1	O	176	ASN	CA-C	8.42	1.64	1.52
1	N	61	ALA	N-CA	8.41	1.56	1.46
1	M	393	ASN	C-O	8.40	1.34	1.24
1	E	60	ILE	CA-CB	8.40	1.63	1.54
1	M	215	ALA	CA-CB	-8.40	1.40	1.53
1	K	187	PRO	C-O	8.39	1.33	1.23
1	J	378	LYS	CA-C	8.39	1.62	1.52
1	K	320	GLY	N-CA	8.39	1.57	1.45
1	A	336	ARG	N-CA	8.38	1.56	1.46
1	B	224	ILE	C-O	-8.38	1.13	1.25
1	J	22	VAL	C-O	8.38	1.32	1.24
1	O	103	THR	N-CA	-8.38	1.36	1.46
1	F	320	GLY	C-O	8.37	1.35	1.23
1	G	331	VAL	C-O	8.37	1.32	1.24
1	D	62	VAL	CA-CB	8.35	1.61	1.54
1	O	202	ASP	CG-OD1	8.35	1.41	1.25
1	G	292	THR	CA-C	-8.35	1.42	1.52
1	I	208	MET	CA-C	8.34	1.62	1.53
1	L	59	LYS	CE-NZ	8.34	1.74	1.49
1	O	233	ASP	C-O	8.34	1.32	1.23
1	A	451	LEU	CA-CB	8.32	1.65	1.53
1	K	158	LEU	N-CA	8.32	1.56	1.46
1	D	197	ASP	C-O	-8.31	1.14	1.23
1	L	369	ASP	C-O	8.30	1.33	1.23
1	N	84	GLY	N-CA	8.30	1.53	1.44
1	G	85	PHE	N-CA	8.29	1.55	1.45
1	C	152	LYS	C-O	8.29	1.33	1.23
1	D	291	PRO	N-CA	-8.29	1.36	1.47
1	F	136	VAL	CA-CB	8.28	1.65	1.54
1	E	291	PRO	CA-CB	-8.28	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	40	SER	CA-C	8.27	1.64	1.53
1	L	186	PRO	CA-C	8.27	1.56	1.51
1	K	254	GLN	C-O	8.26	1.33	1.23
1	H	147	ILE	C-O	8.26	1.32	1.23
1	J	228	ILE	C-O	8.25	1.32	1.24
1	L	331	VAL	CA-CB	8.25	1.67	1.55
1	M	320	GLY	C-O	8.25	1.35	1.23
1	D	169	TRP	N-CA	-8.24	1.36	1.46
1	I	208	MET	C-O	8.24	1.31	1.24
1	J	52	ILE	CA-CB	-8.24	1.43	1.53
1	E	64	LYS	CA-CB	-8.24	1.42	1.53
1	J	231	TYR	C-O	-8.23	1.14	1.24
1	O	283	THR	CA-CB	8.23	1.64	1.53
1	J	169	TRP	C-O	-8.23	1.13	1.23
1	G	258	ARG	C-O	-8.22	1.14	1.24
1	E	155	GLN	C-O	-8.21	1.14	1.23
1	G	171	LYS	C-O	-8.20	1.14	1.24
1	E	287	THR	CA-CB	8.20	1.66	1.54
1	K	234	TYR	C-O	8.20	1.33	1.24
1	G	31	THR	CA-C	-8.19	1.42	1.52
1	C	107	VAL	C-O	-8.19	1.14	1.24
1	F	90	PHE	N-CA	8.18	1.57	1.46
1	G	154	THR	C-O	8.18	1.33	1.23
1	O	62	VAL	CA-CB	-8.18	1.48	1.54
1	A	460	ASP	C-O	-8.18	1.13	1.24
1	D	45	VAL	CA-CB	8.18	1.65	1.54
1	I	376	LEU	CB-CG	8.18	1.69	1.53
1	O	21	VAL	C-O	-8.18	1.15	1.24
1	L	321	ILE	N-CA	-8.17	1.35	1.46
1	O	116	GLY	N-CA	8.17	1.50	1.44
1	I	106	GLU	N-CA	-8.16	1.36	1.46
1	E	115	VAL	CA-CB	8.15	1.66	1.54
1	B	285	PRO	C-O	8.14	1.34	1.24
1	I	371	GLN	CA-C	-8.14	1.42	1.52
1	M	323	TRP	C-O	8.14	1.33	1.23
1	O	189	GLU	C-O	-8.14	1.14	1.23
1	F	258	ARG	CG-CD	-8.13	1.28	1.52
1	I	375	GLN	C-O	8.12	1.33	1.24
1	G	122	LEU	CA-C	-8.12	1.43	1.53
1	G	342	VAL	CA-CB	-8.12	1.44	1.54
1	F	84	GLY	C-O	8.12	1.35	1.23
1	F	245	MET	N-CA	-8.11	1.36	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	D	196	GLN	CA-C	8.10	1.62	1.52
1	I	197	ASP	N-CA	-8.09	1.35	1.46
1	M	187	PRO	CA-C	8.09	1.63	1.52
1	N	223	ASP	CA-C	8.08	1.63	1.52
1	B	35	TYR	N-CA	-8.08	1.36	1.46
1	H	328	PHE	C-O	-8.08	1.15	1.24
1	A	449	VAL	CA-CB	8.08	1.65	1.54
1	C	158	LEU	N-CA	8.08	1.55	1.45
1	E	310	TRP	C-O	-8.07	1.14	1.23
1	N	115	VAL	N-CA	-8.07	1.36	1.46
1	B	283	THR	CA-CB	8.07	1.64	1.53
1	L	156	LEU	C-O	8.06	1.34	1.23
1	I	158	LEU	CA-CB	-8.06	1.41	1.53
1	O	208	MET	CA-C	8.06	1.64	1.53
1	O	230	LYS	C-O	8.05	1.34	1.24
1	O	323	TRP	C-O	8.05	1.33	1.23
1	A	76	LYS	CG-CD	8.05	1.76	1.52
1	G	310	TRP	CA-C	-8.05	1.42	1.53
1	I	267	VAL	C-O	-8.04	1.15	1.24
1	C	395	SER	C-O	-8.04	1.14	1.24
1	L	112	PRO	CA-C	8.04	1.62	1.52
1	E	51	ALA	CA-CB	-8.03	1.40	1.53
1	J	241	PRO	C-O	-8.03	1.14	1.24
1	M	115	VAL	N-CA	8.03	1.55	1.46
1	C	95	SER	N-CA	8.03	1.56	1.45
1	H	158	LEU	N-CA	8.03	1.55	1.46
1	E	368	TYR	C-O	-8.01	1.13	1.23
1	N	70	TYR	CA-C	8.01	1.62	1.52
1	K	361	TYR	C-O	8.01	1.33	1.23
1	A	290	PHE	C-O	8.01	1.33	1.24
1	M	368	TYR	CA-CB	-8.01	1.41	1.53
1	A	165	ILE	CA-CB	8.00	1.66	1.54
1	M	354	LYS	CE-NZ	8.00	1.73	1.49
1	G	457	ALA	CA-CB	-8.00	1.39	1.53
1	N	102	CYS	C-O	8.00	1.33	1.23
1	G	243	GLY	C-O	7.99	1.34	1.23
1	F	321	ILE	N-CA	-7.99	1.36	1.46
1	J	224	ILE	C-O	-7.98	1.13	1.25
1	F	73	PHE	CD2-CE2	7.97	1.62	1.38
1	B	231	TYR	CA-C	-7.97	1.46	1.52
1	E	36	HIS	C-O	-7.97	1.13	1.23
1	A	27	TYR	C-O	7.96	1.35	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	157	CYS	CA-CB	-7.96	1.40	1.53
1	A	385	VAL	N-CA	-7.96	1.37	1.46
1	N	288	SER	CA-C	7.96	1.63	1.52
1	K	39	SER	C-O	-7.96	1.13	1.23
1	F	239	SER	C-O	-7.96	1.13	1.24
1	L	336	ARG	CZ-NH1	7.96	1.43	1.32
1	H	336	ARG	C-O	-7.95	1.13	1.24
1	A	301	ASP	CA-C	-7.95	1.42	1.52
1	F	159	ILE	N-CA	-7.95	1.36	1.46
1	A	375	GLN	CA-CB	-7.94	1.42	1.53
1	F	445	THR	C-O	-7.94	1.14	1.24
1	J	88	THR	CA-CB	7.94	1.64	1.53
1	G	150	ASP	CA-CB	7.94	1.65	1.53
1	A	32	ASN	C-O	-7.93	1.14	1.24
1	C	171	LYS	C-O	-7.93	1.14	1.24
1	D	327	LEU	C-O	7.93	1.33	1.23
1	J	87	ASP	C-O	7.93	1.34	1.24
1	L	201	VAL	CA-CB	-7.93	1.44	1.54
1	I	441	LEU	N-CA	7.92	1.56	1.46
1	B	28	VAL	CA-CB	-7.92	1.43	1.54
1	F	215	ALA	CA-CB	-7.92	1.40	1.53
1	G	321	ILE	CA-CB	-7.92	1.44	1.53
1	C	65	VAL	C-O	7.92	1.33	1.24
1	G	333	ASP	N-CA	-7.92	1.36	1.46
1	G	214	GLN	C-O	7.91	1.32	1.24
1	F	339	ASN	C-O	-7.91	1.14	1.24
1	F	203	THR	CA-C	7.91	1.63	1.52
1	J	30	ARG	CA-C	7.90	1.62	1.52
1	C	338	THR	C-O	7.90	1.33	1.23
1	E	169	TRP	N-CA	-7.90	1.36	1.46
1	D	311	LEU	CA-C	-7.89	1.45	1.53
1	E	149	MET	C-O	-7.89	1.15	1.23
1	H	98	LEU	C-O	7.89	1.33	1.23
1	K	340	MET	SD-CE	7.89	1.99	1.79
1	N	335	THR	CA-C	7.89	1.63	1.52
1	M	318	ASN	CA-C	-7.88	1.43	1.52
1	D	101	ALA	CA-C	7.88	1.62	1.52
1	F	147	ILE	CA-CB	7.88	1.65	1.54
1	F	258	ARG	C-O	7.86	1.33	1.24
1	O	200	MET	SD-CE	7.86	1.99	1.79
1	F	83	PHE	CG-CD2	7.86	1.55	1.38
1	G	141	THR	CA-CB	-7.86	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	200	MET	N-CA	-7.86	1.35	1.46
1	N	126	LEU	CA-C	7.85	1.63	1.52
1	G	340	MET	C-O	7.85	1.33	1.23
1	D	28	VAL	C-O	-7.84	1.15	1.24
1	F	71	ARG	N-CA	-7.84	1.37	1.46
1	M	37	ALA	C-O	7.84	1.32	1.23
1	F	50	TYR	N-CA	7.84	1.55	1.45
1	C	237	MET	SD-CE	7.83	1.99	1.79
1	M	103	THR	CA-C	7.83	1.61	1.52
1	B	341	SER	C-O	7.83	1.33	1.24
1	A	32	ASN	N-CA	7.83	1.56	1.46
1	C	289	TYR	CA-CB	7.82	1.66	1.53
1	B	334	THR	CA-CB	7.82	1.66	1.53
1	B	238	VAL	N-CA	-7.81	1.36	1.46
1	O	379	ILE	CA-CB	-7.81	1.44	1.54
1	N	82	LYS	CA-C	7.81	1.62	1.52
1	C	34	TYR	CA-CB	7.81	1.72	1.53
1	J	447	TRP	CA-C	-7.81	1.42	1.52
1	G	472	ALA	CA-CB	-7.81	1.39	1.53
1	L	234	TYR	C-O	7.80	1.33	1.24
1	I	64	LYS	CE-NZ	7.80	1.72	1.49
1	J	297	MET	C-O	7.80	1.33	1.23
1	O	79	ASP	C-O	-7.80	1.14	1.24
1	F	235	LEU	CA-C	-7.79	1.43	1.52
1	A	288	SER	CA-CB	7.79	1.64	1.52
1	J	329	VAL	C-O	-7.79	1.14	1.24
1	L	467	LYS	N-CA	7.79	1.55	1.46
1	N	191	LEU	C-O	-7.78	1.14	1.23
1	F	245	MET	C-O	7.78	1.33	1.24
1	A	375	GLN	CA-C	7.78	1.62	1.52
1	M	146	CYS	CA-C	7.76	1.63	1.52
1	C	64	LYS	C-O	-7.76	1.14	1.23
1	F	378	LYS	N-CA	-7.75	1.36	1.46
1	K	182	ALA	CA-C	7.75	1.62	1.52
1	I	150	ASP	CA-CB	7.75	1.65	1.53
1	G	463	PRO	N-CA	-7.74	1.37	1.47
1	J	215	ALA	CA-C	7.74	1.62	1.52
1	I	245	MET	N-CA	-7.74	1.37	1.46
1	J	182	ALA	CA-CB	-7.73	1.41	1.53
1	G	23	SER	N-CA	7.72	1.55	1.46
1	J	239	SER	CB-OG	7.72	1.57	1.42
1	B	75	VAL	N-CA	-7.72	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	329	VAL	CA-CB	-7.72	1.45	1.53
1	E	165	ILE	CA-CB	-7.72	1.40	1.55
1	C	331	VAL	N-CA	-7.71	1.36	1.46
1	I	389	ILE	CA-CB	-7.71	1.45	1.54
1	O	458	ASP	CA-C	-7.71	1.43	1.53
1	I	376	LEU	CA-C	-7.71	1.43	1.52
1	C	108	GLY	C-O	7.70	1.31	1.23
1	M	59	LYS	CD-CE	7.70	1.75	1.52
1	G	254	GLN	CB-CG	7.69	1.75	1.52
1	E	81	ASN	C-O	-7.69	1.14	1.24
1	O	466	ARG	N-CA	-7.68	1.36	1.46
1	I	197	ASP	C-O	-7.68	1.14	1.23
1	E	278	LYS	CA-C	-7.68	1.42	1.52
1	E	105	VAL	C-O	-7.67	1.16	1.24
1	M	304	ILE	CA-C	-7.67	1.44	1.53
1	E	114	GLY	N-CA	7.67	1.53	1.45
1	C	173	THR	CA-CB	7.67	1.66	1.52
1	L	259	HIS	N-CA	7.67	1.56	1.45
1	G	231	TYR	C-O	-7.67	1.14	1.24
1	L	307	LYS	N-CA	-7.66	1.38	1.45
1	O	345	ALA	CA-CB	7.66	1.64	1.53
1	M	248	PHE	N-CA	-7.66	1.36	1.46
1	M	33	ILE	CA-CB	7.66	1.63	1.54
1	F	44	ALA	CA-C	-7.66	1.42	1.52
1	H	311	LEU	N-CA	7.66	1.56	1.46
1	O	40	SER	C-O	7.66	1.32	1.23
1	E	155	GLN	CD-NE2	7.65	1.49	1.33
1	E	296	SER	C-O	7.65	1.33	1.24
1	F	161	CYS	N-CA	7.65	1.55	1.46
1	N	166	GLY	CA-C	7.65	1.59	1.52
1	L	113	LEU	C-O	7.64	1.35	1.23
1	A	158	LEU	N-CA	7.64	1.55	1.46
1	H	204	GLY	N-CA	-7.64	1.34	1.45
1	N	298	VAL	CA-CB	-7.64	1.44	1.54
1	D	264	ALA	CA-C	7.64	1.63	1.53
1	F	166	GLY	CA-C	7.64	1.59	1.51
1	G	112	PRO	CA-C	7.63	1.61	1.52
1	J	299	THR	CA-CB	-7.63	1.41	1.53
1	B	74	ARG	C-N	-7.63	1.26	1.33
1	A	308	PRO	N-CA	-7.62	1.37	1.47
1	J	470	LEU	CA-C	-7.62	1.44	1.53
1	E	204	GLY	C-O	7.62	1.34	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	327	LEU	C-O	7.62	1.33	1.23
1	H	348	SER	CA-C	7.62	1.62	1.52
1	D	189	GLU	CA-C	7.61	1.61	1.52
1	C	316	GLY	N-CA	7.61	1.51	1.44
1	J	462	PHE	CA-CB	-7.61	1.43	1.53
1	M	173	THR	CA-CB	7.61	1.68	1.53
1	D	169	TRP	CA-CB	-7.61	1.43	1.53
1	J	209	ASP	N-CA	-7.60	1.36	1.46
1	E	222	LEU	CA-CB	-7.60	1.41	1.53
1	M	78	PRO	N-CA	-7.60	1.38	1.47
1	N	76	LYS	CG-CD	7.60	1.75	1.52
1	G	379	ILE	N-CA	7.60	1.56	1.46
1	C	190	LEU	CA-C	-7.59	1.43	1.52
1	J	395	SER	N-CA	-7.59	1.36	1.46
1	O	196	GLN	CA-C	-7.59	1.43	1.52
1	C	98	LEU	CA-C	7.58	1.61	1.52
1	L	319	ASN	N-CA	-7.58	1.37	1.46
1	K	389	ILE	C-N	7.58	1.43	1.33
1	M	396	ILE	CG1-CD1	7.57	1.81	1.51
1	L	395	SER	CA-C	-7.57	1.43	1.52
1	C	308	PRO	C-O	-7.57	1.15	1.23
1	F	264	ALA	CA-CB	-7.56	1.41	1.53
1	A	372	PHE	CA-C	-7.56	1.43	1.52
1	G	314	ALA	CA-CB	-7.56	1.40	1.53
1	B	166	GLY	N-CA	-7.55	1.37	1.44
1	C	200	MET	N-CA	-7.55	1.36	1.46
1	O	378	LYS	N-CA	-7.55	1.36	1.46
1	O	151	TYR	CA-CB	7.54	1.64	1.53
1	B	470	LEU	N-CA	-7.54	1.37	1.46
1	J	165	ILE	N-CA	7.54	1.55	1.46
1	O	165	ILE	CA-CB	-7.54	1.44	1.54
1	J	363	ARG	CZ-NH1	7.53	1.43	1.32
1	C	305	PHE	N-CA	7.52	1.55	1.45
1	C	261	PHE	CA-CB	-7.51	1.41	1.53
1	O	314	ALA	C-O	7.51	1.33	1.23
1	A	278	LYS	C-N	-7.51	1.28	1.33
1	A	238	VAL	CA-C	-7.51	1.42	1.52
1	D	374	PHE	CE2-CZ	7.51	1.61	1.38
1	C	311	LEU	N-CA	7.51	1.56	1.46
1	E	62	VAL	CA-CB	7.51	1.63	1.54
1	B	223	ASP	C-O	-7.50	1.14	1.24
1	I	327	LEU	N-CA	7.50	1.55	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	99	VAL	C-O	7.50	1.31	1.23
1	A	348	SER	C-O	7.49	1.33	1.24
1	K	200	MET	C-O	7.49	1.32	1.23
1	K	457	ALA	CA-CB	-7.48	1.40	1.53
1	G	457	ALA	N-CA	-7.48	1.36	1.46
1	D	290	PHE	CA-C	-7.48	1.43	1.52
1	J	284	LEU	C-O	-7.48	1.14	1.24
1	N	86	PRO	C-O	7.47	1.33	1.24
1	B	48	PRO	N-CA	-7.47	1.38	1.47
1	G	321	ILE	N-CA	7.47	1.54	1.46
1	D	113	LEU	CA-CB	-7.46	1.41	1.53
1	H	208	MET	CA-C	7.46	1.62	1.53
1	O	173	THR	CA-CB	7.46	1.67	1.53
1	L	341	SER	CA-C	7.46	1.61	1.52
1	N	363	ARG	CZ-NH1	7.46	1.43	1.32
1	C	29	THR	CA-CB	-7.46	1.41	1.53
1	J	299	THR	N-CA	-7.46	1.37	1.46
1	E	31	THR	N-CA	7.45	1.54	1.46
1	J	388	TYR	N-CA	-7.45	1.37	1.46
1	C	204	GLY	N-CA	-7.45	1.34	1.45
1	J	334	THR	CA-CB	7.45	1.66	1.53
1	H	166	GLY	C-O	7.44	1.33	1.23
1	A	72	VAL	CA-CB	-7.44	1.45	1.53
1	H	288	SER	N-CA	7.43	1.55	1.46
1	M	329	VAL	CA-CB	-7.43	1.45	1.53
1	A	107	VAL	CA-C	7.42	1.62	1.52
1	C	286	SER	CA-CB	7.42	1.65	1.53
1	F	44	ALA	C-O	-7.42	1.14	1.23
1	M	129	THR	C-O	7.42	1.33	1.24
1	G	192	ASN	N-CA	-7.42	1.37	1.45
1	L	37	ALA	CA-CB	7.42	1.66	1.53
1	A	67	GLY	C-O	7.42	1.32	1.23
1	D	114	GLY	CA-C	7.42	1.59	1.51
1	I	361	TYR	N-CA	7.42	1.55	1.45
1	K	342	VAL	CA-CB	7.42	1.63	1.54
1	I	371	GLN	C-O	7.42	1.33	1.23
1	K	56	ASP	CA-C	-7.42	1.45	1.52
1	K	110	GLY	N-CA	-7.42	1.38	1.44
1	K	70	TYR	CA-CB	-7.41	1.41	1.53
1	D	111	GLN	CA-C	-7.41	1.43	1.52
1	N	112	PRO	CA-C	7.41	1.60	1.52
1	D	277	ILE	CA-CB	-7.39	1.45	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	257	VAL	CA-C	7.39	1.60	1.53
1	B	192	ASN	N-CA	-7.39	1.36	1.46
1	A	267	VAL	CB-CG2	7.39	1.76	1.52
1	I	22	VAL	C-O	7.39	1.31	1.23
1	J	216	ASN	C-O	7.39	1.33	1.24
1	A	392	MET	SD-CE	7.38	1.98	1.79
1	B	88	THR	CA-C	7.38	1.63	1.53
1	F	250	LEU	CA-C	-7.38	1.44	1.52
1	A	66	SER	C-O	-7.38	1.14	1.23
1	I	157	CYS	C-O	7.38	1.33	1.24
1	I	337	SER	N-CA	-7.38	1.36	1.46
1	D	214	GLN	CA-C	7.37	1.62	1.53
1	M	116	GLY	C-O	-7.37	1.17	1.24
1	M	32	ASN	N-CA	-7.37	1.36	1.46
1	C	74	ARG	CA-CB	-7.36	1.43	1.53
1	B	90	PHE	N-CA	7.36	1.55	1.46
1	F	286	SER	C-O	-7.36	1.14	1.23
1	J	155	GLN	CA-C	7.36	1.61	1.52
1	L	83	PHE	CA-C	7.36	1.62	1.52
1	F	248	PHE	C-O	-7.36	1.14	1.24
1	G	188	LEU	C-O	-7.35	1.14	1.23
1	J	61	ALA	C-O	-7.34	1.15	1.24
1	G	191	LEU	C-O	-7.34	1.15	1.23
1	B	281	THR	CA-CB	7.34	1.65	1.53
1	I	281	THR	CA-CB	7.34	1.65	1.53
1	K	216	ASN	CG-ND2	7.34	1.48	1.33
1	D	463	PRO	C-N	7.34	1.43	1.33
1	I	452	LYS	N-CA	7.33	1.55	1.46
1	C	224	ILE	N-CA	-7.33	1.37	1.46
1	B	32	ASN	N-CA	7.32	1.55	1.46
1	B	134	LYS	CD-CE	7.32	1.74	1.52
1	J	466	ARG	CZ-NH2	7.32	1.43	1.33
1	D	150	ASP	C-O	7.32	1.32	1.24
1	D	210	PHE	CA-CB	7.32	1.64	1.53
1	L	173	THR	CA-C	7.32	1.61	1.52
1	E	71	ARG	C-O	7.32	1.32	1.24
1	A	125	LYS	CE-NZ	7.32	1.71	1.49
1	M	133	ASN	C-O	7.32	1.32	1.24
1	O	92	ASP	C-N	7.32	1.42	1.33
1	L	60	ILE	CA-CB	7.31	1.62	1.54
1	F	379	ILE	N-CA	7.31	1.55	1.46
1	F	391	SER	CA-C	-7.31	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	D	466	ARG	CB-CG	7.31	1.74	1.52
1	C	170	GLY	N-CA	-7.31	1.38	1.44
1	F	100	TRP	N-CA	-7.31	1.37	1.46
1	N	367	GLU	N-CA	7.31	1.54	1.46
1	B	153	GLN	CA-CB	7.31	1.63	1.53
1	C	82	LYS	C-O	-7.31	1.15	1.24
1	K	252	ARG	CA-C	7.31	1.60	1.53
1	K	256	PHE	C-O	7.30	1.32	1.23
1	I	393	ASN	C-O	7.30	1.31	1.25
1	J	197	ASP	C-O	-7.30	1.15	1.23
1	I	360	GLU	C-O	7.29	1.32	1.24
1	M	245	MET	N-CA	-7.29	1.37	1.46
1	J	149	MET	CA-CB	7.29	1.65	1.53
1	H	30	ARG	N-CA	7.29	1.54	1.45
1	D	217	LYS	CA-C	7.28	1.62	1.52
1	F	120	HIS	C-O	-7.28	1.14	1.24
1	H	288	SER	C-O	-7.28	1.14	1.24
1	G	291	PRO	CA-C	7.27	1.60	1.52
1	I	453	GLU	N-CA	-7.27	1.36	1.46
1	M	390	HIS	C-O	7.27	1.32	1.24
1	K	289	TYR	C-O	-7.27	1.15	1.23
1	L	163	PRO	CA-C	7.27	1.58	1.52
1	E	236	LYS	N-CA	7.27	1.54	1.46
1	C	159	ILE	CA-CB	-7.27	1.45	1.54
1	C	466	ARG	N-CA	7.27	1.55	1.46
1	K	91	TYR	C-O	7.27	1.31	1.23
1	D	155	GLN	N-CA	-7.26	1.37	1.46
1	F	396	ILE	CA-C	-7.26	1.44	1.52
1	K	450	ASP	C-O	7.26	1.32	1.24
1	N	327	LEU	CA-C	-7.26	1.43	1.52
1	A	174	PRO	CA-C	7.25	1.61	1.52
1	E	372	PHE	C-O	-7.25	1.14	1.23
1	J	314	ALA	C-O	7.25	1.33	1.23
1	E	101	ALA	N-CA	7.25	1.55	1.46
1	E	261	PHE	CA-CB	7.25	1.66	1.53
1	H	379	ILE	CA-CB	-7.24	1.45	1.54
1	B	458	ASP	CA-C	-7.24	1.45	1.53
1	A	45	VAL	CA-CB	7.24	1.64	1.54
1	D	336	ARG	N-CA	-7.24	1.37	1.46
1	M	191	LEU	N-CA	7.24	1.54	1.45
1	B	189	GLU	CA-C	7.24	1.61	1.52
1	L	259	HIS	CA-C	7.24	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	85	PHE	N-CA	7.24	1.53	1.45
1	L	318	ASN	CA-CB	7.24	1.62	1.53
1	K	101	ALA	N-CA	7.23	1.55	1.46
1	I	64	LYS	CD-CE	7.23	1.74	1.52
1	O	267	VAL	CA-CB	-7.23	1.45	1.54
1	F	83	PHE	CE1-CZ	7.23	1.60	1.38
1	J	35	TYR	N-CA	-7.23	1.36	1.45
1	G	116	GLY	C-O	-7.23	1.17	1.23
1	M	329	VAL	N-CA	-7.22	1.37	1.46
1	E	369	ASP	N-CA	-7.22	1.37	1.46
1	L	297	MET	C-N	7.22	1.42	1.33
1	G	256	PHE	CB-CG	7.22	1.67	1.50
1	G	28	VAL	CA-CB	-7.21	1.45	1.54
1	F	28	VAL	C-O	-7.21	1.16	1.24
1	M	221	PRO	C-O	7.21	1.33	1.24
1	O	319	ASN	C-O	7.21	1.32	1.23
1	J	214	GLN	C-O	-7.20	1.15	1.24
1	I	374	PHE	N-CA	7.20	1.54	1.45
1	K	379	ILE	CA-CB	-7.20	1.45	1.54
1	G	125	LYS	C-O	7.20	1.31	1.23
1	H	321	ILE	C-O	7.20	1.31	1.24
1	A	60	ILE	CA-CB	7.19	1.62	1.54
1	A	229	CYS	C-O	7.19	1.32	1.24
1	B	182	ALA	CA-CB	-7.19	1.41	1.53
1	F	299	THR	CA-CB	7.19	1.65	1.53
1	B	224	ILE	N-CA	7.19	1.52	1.46
1	G	265	GLY	N-CA	7.19	1.52	1.45
1	J	102	CYS	CA-C	7.18	1.61	1.52
1	E	27	TYR	C-O	7.18	1.32	1.24
1	E	21	VAL	C-O	-7.18	1.14	1.24
1	M	103	THR	CB-CG2	7.17	1.76	1.52
1	N	271	VAL	CA-C	-7.17	1.47	1.53
1	D	206	GLY	N-CA	-7.17	1.37	1.45
1	D	380	THR	CA-CB	7.16	1.61	1.52
1	I	218	SER	CA-C	-7.16	1.43	1.52
1	D	366	GLU	N-CA	7.16	1.54	1.45
1	D	199	ASP	C-O	-7.16	1.13	1.23
1	E	98	LEU	C-O	7.16	1.32	1.23
1	A	457	ALA	CA-CB	-7.16	1.40	1.53
1	K	395	SER	N-CA	7.14	1.55	1.46
1	O	337	SER	CB-OG	7.14	1.56	1.42
1	D	118	SER	C-O	7.14	1.33	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	186	PRO	CA-C	-7.14	1.47	1.52
1	F	461	GLN	CB-CG	-7.14	1.31	1.52
1	A	89	SER	CA-C	7.13	1.61	1.52
1	C	457	ALA	CA-CB	7.13	1.65	1.53
1	E	277	ILE	CA-C	7.13	1.61	1.52
1	J	394	PRO	C-O	-7.13	1.15	1.24
1	L	287	THR	CA-CB	7.13	1.64	1.53
1	B	55	GLN	N-CA	7.13	1.55	1.46
1	C	262	ASN	CA-C	7.13	1.61	1.52
1	N	265	GLY	C-O	7.13	1.32	1.23
1	B	365	GLY	C-O	7.12	1.33	1.23
1	E	247	PHE	CA-C	-7.12	1.44	1.52
1	N	193	THR	C-O	7.12	1.33	1.23
1	N	389	ILE	CG1-CD1	7.12	1.79	1.51
1	C	163	PRO	C-O	-7.12	1.16	1.24
1	C	112	PRO	C-O	7.12	1.31	1.23
1	I	280	THR	CB-CG2	7.12	1.76	1.52
1	N	238	VAL	CA-CB	-7.12	1.45	1.54
1	G	281	THR	CA-CB	7.11	1.65	1.53
1	O	94	ALA	CA-C	-7.11	1.43	1.52
1	C	48	PRO	C-O	-7.11	1.14	1.24
1	M	308	PRO	N-CA	-7.11	1.38	1.47
1	A	131	ASN	N-CA	-7.10	1.37	1.46
1	C	346	VAL	C-O	7.10	1.32	1.24
1	H	236	LYS	N-CA	7.10	1.55	1.46
1	O	150	ASP	N-CA	7.10	1.54	1.46
1	C	114	GLY	C-O	7.10	1.32	1.23
1	D	24	THR	C-O	7.10	1.33	1.24
1	H	75	VAL	N-CA	-7.10	1.38	1.46
1	N	255	MET	CG-SD	7.10	1.98	1.80
1	A	168	HIS	C-O	-7.10	1.15	1.23
1	A	180	VAL	CA-CB	7.09	1.64	1.54
1	C	383	ALA	CA-CB	-7.09	1.41	1.53
1	D	467	LYS	CD-CE	7.09	1.73	1.52
1	F	294	SER	N-CA	7.09	1.54	1.46
1	O	332	VAL	CA-C	-7.09	1.44	1.52
1	J	33	ILE	C-O	7.09	1.31	1.24
1	G	131	ASN	CA-C	7.09	1.60	1.53
1	M	256	PHE	C-O	7.09	1.32	1.23
1	C	224	ILE	CA-CB	7.08	1.64	1.54
1	O	469	LEU	CA-C	-7.08	1.43	1.52
1	B	363	ARG	CA-CB	7.08	1.66	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	260	LEU	N-CA	-7.08	1.37	1.46
1	L	256	PHE	CD2-CE2	7.08	1.59	1.38
1	C	90	PHE	N-CA	7.07	1.55	1.46
1	B	350	ASP	N-CA	7.07	1.55	1.45
1	C	304	ILE	CA-C	-7.07	1.43	1.53
1	D	155	GLN	CD-NE2	7.07	1.48	1.33
1	F	72	VAL	C-O	-7.07	1.16	1.24
1	F	368	TYR	C-O	-7.07	1.14	1.23
1	F	253	GLU	CA-C	7.07	1.61	1.52
1	D	139	SER	CA-C	7.06	1.62	1.52
1	K	112	PRO	CA-C	7.06	1.61	1.52
1	H	153	GLN	N-CA	7.06	1.54	1.46
1	O	321	ILE	CA-C	7.06	1.61	1.52
1	E	38	GLY	CA-C	7.06	1.57	1.51
1	J	325	ASN	C-O	-7.06	1.14	1.23
1	F	54	LYS	CA-C	7.05	1.61	1.52
1	F	231	TYR	C-O	7.05	1.33	1.24
1	F	104	GLY	N-CA	-7.05	1.35	1.45
1	I	37	ALA	CA-CB	-7.05	1.41	1.53
1	I	336	ARG	CZ-NH2	7.05	1.42	1.33
1	A	341	SER	CA-C	7.05	1.61	1.52
1	F	112	PRO	N-CA	-7.04	1.38	1.47
1	A	166	GLY	CA-C	-7.04	1.45	1.52
1	F	281	THR	CA-CB	7.04	1.65	1.53
1	G	271	VAL	C-O	-7.04	1.15	1.24
1	H	338	THR	CA-CB	-7.04	1.42	1.53
1	K	375	GLN	C-O	7.04	1.32	1.24
1	K	281	THR	C-O	7.04	1.32	1.24
1	F	310	TRP	CA-C	-7.04	1.45	1.53
1	G	109	ARG	CA-C	-7.04	1.44	1.52
1	H	327	LEU	N-CA	-7.04	1.37	1.46
1	A	136	VAL	CA-CB	7.03	1.63	1.54
1	A	37	ALA	CA-CB	7.03	1.65	1.53
1	O	320	GLY	N-CA	7.03	1.55	1.45
1	N	312	GLN	C-O	-7.02	1.15	1.24
1	G	317	HIS	CA-C	7.02	1.61	1.52
1	L	325	ASN	CA-C	7.02	1.62	1.52
1	G	240	GLU	C-O	-7.02	1.15	1.24
1	L	386	MET	C-O	7.02	1.32	1.24
1	C	247	PHE	CA-C	-7.01	1.44	1.52
1	D	299	THR	N-CA	-7.01	1.37	1.46
1	M	240	GLU	CD-OE1	7.01	1.38	1.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	76	LYS	CD-CE	7.01	1.73	1.52
1	D	361	TYR	C-O	-7.01	1.15	1.23
1	L	42	LEU	CA-CB	7.01	1.62	1.53
1	D	464	LEU	CA-CB	-7.01	1.42	1.53
1	E	88	THR	CA-CB	7.01	1.61	1.52
1	O	299	THR	CA-C	-7.01	1.43	1.52
1	G	322	CYS	C-O	-7.00	1.14	1.23
1	M	375	GLN	CG-CD	7.00	1.69	1.52
1	A	150	ASP	N-CA	7.00	1.54	1.46
1	I	72	VAL	CA-CB	-7.00	1.45	1.53
1	N	331	VAL	N-CA	7.00	1.55	1.46
1	O	117	ILE	C-O	-7.00	1.15	1.24
1	K	245	MET	N-CA	-7.00	1.37	1.46
1	G	120	HIS	C-N	-7.00	1.24	1.34
1	I	380	THR	C-O	7.00	1.32	1.24
1	J	340	MET	SD-CE	-7.00	1.62	1.79
1	H	224	ILE	CA-CB	7.00	1.64	1.54
1	I	173	THR	N-CA	7.00	1.55	1.46
1	A	319	ASN	CA-C	6.99	1.61	1.53
1	G	264	ALA	CA-CB	-6.99	1.41	1.53
1	N	21	VAL	CA-CB	6.99	1.62	1.54
1	J	341	SER	C-O	6.99	1.32	1.23
1	N	358	PHE	N-CA	6.99	1.54	1.45
1	I	217	LYS	C-O	6.98	1.32	1.23
1	A	156	LEU	C-O	6.98	1.32	1.23
1	E	262	ASN	C-O	-6.98	1.15	1.24
1	O	372	PHE	CA-C	-6.97	1.44	1.52
1	L	308	PRO	C-O	-6.97	1.16	1.23
1	D	103	THR	C-O	6.97	1.33	1.23
1	F	75	VAL	CA-CB	6.97	1.62	1.54
1	N	261	PHE	C-O	-6.97	1.14	1.23
1	I	246	LEU	N-CA	6.97	1.54	1.46
1	O	385	VAL	CA-CB	-6.97	1.45	1.54
1	C	66	SER	N-CA	6.97	1.53	1.45
1	L	250	LEU	C-O	6.96	1.32	1.24
1	K	101	ALA	C-O	-6.96	1.15	1.24
1	F	37	ALA	N-CA	-6.96	1.37	1.46
1	I	372	PHE	CA-C	-6.96	1.44	1.52
1	H	106	GLU	C-O	6.95	1.32	1.24
1	O	161	CYS	CA-C	6.95	1.62	1.52
1	N	202	ASP	C-O	6.95	1.32	1.23
1	O	220	VAL	C-O	6.95	1.33	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	162	ARG	CA-CB	-6.94	1.45	1.54
1	M	444	TYR	N-CA	-6.94	1.37	1.46
1	M	210	PHE	C-O	6.94	1.32	1.24
1	C	165	ILE	CA-C	6.93	1.60	1.52
1	N	330	THR	CA-CB	6.92	1.62	1.53
1	D	115	VAL	C-O	6.92	1.30	1.24
1	I	186	PRO	C-O	-6.92	1.16	1.24
1	O	38	GLY	N-CA	6.92	1.55	1.45
1	G	105	VAL	CA-C	-6.91	1.44	1.52
1	I	279	GLY	CA-C	-6.91	1.47	1.52
1	K	195	LEU	N-CA	6.91	1.54	1.46
1	F	34	TYR	C-O	6.91	1.32	1.23
1	N	256	PHE	C-O	6.91	1.31	1.23
1	O	45	VAL	CA-C	-6.91	1.44	1.52
1	G	330	THR	CA-C	-6.91	1.44	1.52
1	A	276	TYR	CG-CD2	6.91	1.53	1.39
1	F	336	ARG	NE-CZ	6.91	1.40	1.33
1	J	284	LEU	CA-C	-6.90	1.44	1.52
1	D	307	LYS	CB-CG	6.90	1.73	1.52
1	E	162	ARG	C-O	-6.90	1.15	1.24
1	G	336	ARG	N-CA	-6.90	1.38	1.46
1	I	313	ARG	CZ-NH1	6.90	1.42	1.32
1	F	338	THR	C-O	6.90	1.32	1.24
1	M	449	VAL	CA-CB	6.89	1.62	1.53
1	E	220	VAL	CA-C	-6.89	1.45	1.52
1	F	336	ARG	C-O	-6.89	1.14	1.24
1	I	76	LYS	CD-CE	6.89	1.73	1.52
1	M	153	GLN	CD-OE1	6.89	1.36	1.23
1	O	352	THR	C-O	6.88	1.32	1.23
1	J	389	ILE	N-CA	6.88	1.54	1.46
1	O	55	GLN	CA-C	6.88	1.62	1.52
1	A	69	GLN	C-N	6.87	1.43	1.33
1	M	233	ASP	C-O	6.87	1.31	1.23
1	L	260	LEU	CA-CB	6.87	1.62	1.53
1	D	69	GLN	C-O	-6.87	1.15	1.23
1	B	179	GLN	C-O	6.87	1.32	1.24
1	O	50	TYR	C-O	6.87	1.32	1.23
1	J	42	LEU	C-O	6.86	1.32	1.24
1	J	288	SER	N-CA	6.86	1.55	1.46
1	O	254	GLN	N-CA	-6.86	1.37	1.46
1	G	162	ARG	CZ-NH1	6.86	1.42	1.32
1	I	379	ILE	CA-C	-6.85	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	255	MET	CG-SD	6.85	1.97	1.80
1	D	122	LEU	C-O	-6.85	1.10	1.23
1	E	326	GLN	N-CA	6.85	1.54	1.45
1	C	183	GLY	C-O	-6.84	1.14	1.23
1	A	245	MET	N-CA	-6.84	1.38	1.46
1	F	40	SER	C-O	6.84	1.33	1.23
1	H	445	THR	C-O	-6.84	1.16	1.24
1	C	254	GLN	C-O	-6.84	1.15	1.24
1	D	467	LYS	N-CA	6.84	1.54	1.46
1	D	90	PHE	CA-C	6.84	1.61	1.52
1	E	377	CYS	C-O	6.84	1.32	1.23
1	H	300	SER	CA-C	-6.84	1.43	1.52
1	N	166	GLY	C-O	-6.84	1.13	1.23
1	B	53	LYS	CA-C	6.84	1.62	1.53
1	H	162	ARG	C-O	-6.84	1.15	1.24
1	H	191	LEU	N-CA	-6.84	1.37	1.45
1	E	110	GLY	CA-C	-6.83	1.45	1.52
1	L	62	VAL	CA-CB	6.83	1.60	1.53
1	G	331	VAL	CA-CB	6.83	1.63	1.54
1	J	43	LEU	CG-CD1	6.83	1.75	1.52
1	A	117	ILE	CA-C	6.83	1.61	1.52
1	J	125	LYS	CE-NZ	6.83	1.69	1.49
1	H	369	ASP	CA-C	6.83	1.60	1.52
1	M	245	MET	C-O	6.83	1.32	1.24
1	C	88	THR	CA-CB	6.82	1.61	1.52
1	L	456	SER	C-O	-6.82	1.15	1.23
1	F	99	VAL	CA-CB	-6.82	1.43	1.55
1	A	105	VAL	CA-CB	-6.82	1.42	1.55
1	N	308	PRO	C-O	-6.82	1.16	1.23
1	G	302	ALA	C-O	-6.81	1.16	1.24
1	O	154	THR	C-O	-6.81	1.15	1.23
1	F	134	LYS	CE-NZ	6.81	1.69	1.49
1	K	393	ASN	C-O	6.81	1.31	1.25
1	O	179	GLN	C-O	6.81	1.32	1.23
1	I	161	CYS	N-CA	6.81	1.54	1.46
1	K	102	CYS	N-CA	-6.81	1.37	1.46
1	C	73	PHE	C-O	6.81	1.32	1.24
1	G	73	PHE	CA-CB	6.81	1.63	1.53
1	G	152	LYS	CA-CB	6.80	1.65	1.53
1	N	379	ILE	N-CA	6.80	1.55	1.46
1	B	382	THR	CA-C	-6.79	1.44	1.52
1	K	105	VAL	CA-CB	-6.79	1.45	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	K	83	PHE	C-O	6.79	1.31	1.23
1	D	132	SER	CA-C	-6.79	1.44	1.52
1	E	29	THR	C-O	6.78	1.32	1.23
1	I	338	THR	C-O	6.78	1.32	1.24
1	K	372	PHE	CA-C	-6.78	1.43	1.52
1	M	281	THR	CA-CB	6.78	1.65	1.53
1	A	454	LYS	CD-CE	6.78	1.72	1.52
1	F	91	TYR	CA-C	-6.78	1.44	1.52
1	M	170	GLY	N-CA	-6.77	1.38	1.45
1	A	254	GLN	N-CA	6.77	1.53	1.46
1	H	31	THR	C-O	6.77	1.32	1.23
1	C	469	LEU	CA-C	-6.77	1.44	1.52
1	I	160	GLY	CA-C	-6.77	1.44	1.51
1	D	117	ILE	CA-C	6.77	1.61	1.52
1	K	377	CYS	N-CA	6.77	1.54	1.46
1	H	65	VAL	C-O	6.77	1.31	1.24
1	L	103	THR	C-O	-6.76	1.15	1.24
1	I	53	LYS	CD-CE	6.76	1.72	1.52
1	O	111	GLN	C-O	6.76	1.32	1.24
1	O	330	THR	CA-CB	-6.76	1.43	1.53
1	A	222	LEU	N-CA	-6.76	1.38	1.46
1	D	245	MET	CA-C	6.76	1.61	1.52
1	L	249	TYR	CB-CG	6.76	1.66	1.51
1	M	278	LYS	N-CA	6.76	1.54	1.46
1	M	308	PRO	C-O	-6.76	1.16	1.23
1	B	302	ALA	N-CA	-6.75	1.37	1.46
1	I	171	LYS	C-O	6.75	1.32	1.24
1	C	325	ASN	CA-C	6.75	1.61	1.52
1	H	326	GLN	CA-C	6.75	1.60	1.52
1	M	145	GLU	CA-C	-6.75	1.44	1.52
1	C	51	ALA	CA-CB	-6.74	1.43	1.53
1	C	72	VAL	C-O	-6.74	1.16	1.23
1	L	392	MET	N-CA	6.74	1.54	1.46
1	E	365	GLY	N-CA	-6.74	1.35	1.45
1	O	159	ILE	N-CA	-6.74	1.37	1.46
1	E	190	LEU	CA-CB	-6.73	1.44	1.53
1	F	236	LYS	CG-CD	6.73	1.72	1.52
1	I	78	PRO	CA-C	6.73	1.61	1.52
1	N	334	THR	C-O	6.73	1.32	1.24
1	H	336	ARG	CD-NE	6.72	1.55	1.46
1	D	24	THR	N-CA	-6.72	1.37	1.46
1	N	101	ALA	C-O	6.72	1.32	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	343	CYS	CA-C	-6.72	1.44	1.52
1	L	396	ILE	CA-C	6.72	1.61	1.52
1	B	333	ASP	CG-OD2	6.71	1.38	1.25
1	L	311	LEU	N-CA	6.71	1.55	1.46
1	O	466	ARG	CA-C	6.71	1.61	1.52
1	G	310	TRP	CA-CB	-6.71	1.41	1.53
1	G	107	VAL	CA-C	6.71	1.61	1.52
1	A	147	ILE	C-O	-6.71	1.16	1.23
1	A	174	PRO	C-O	6.71	1.32	1.23
1	I	42	LEU	CA-CB	6.70	1.62	1.53
1	O	230	LYS	CA-C	6.70	1.60	1.52
1	G	104	GLY	N-CA	6.70	1.52	1.45
1	G	92	ASP	C-N	6.70	1.40	1.33
1	D	154	THR	C-O	6.70	1.31	1.23
1	G	234	TYR	CA-C	-6.70	1.43	1.52
1	G	99	VAL	CA-CB	-6.69	1.43	1.54
1	J	90	PHE	CA-C	6.69	1.62	1.52
1	A	78	PRO	CA-C	6.69	1.61	1.52
1	A	459	LEU	CA-C	6.69	1.61	1.52
1	M	117	ILE	CB-CG1	6.69	1.66	1.53
1	N	463	PRO	C-N	6.69	1.42	1.33
1	A	46	GLY	C-O	-6.69	1.17	1.23
1	A	286	SER	N-CA	-6.69	1.37	1.46
1	L	149	MET	SD-CE	6.69	1.96	1.79
1	E	48	PRO	N-CA	-6.69	1.39	1.47
1	N	248	PHE	C-O	6.69	1.32	1.24
1	J	367	GLU	C-O	6.69	1.31	1.24
1	G	73	PHE	N-CA	6.69	1.54	1.46
1	K	217	LYS	C-O	6.69	1.32	1.24
1	L	201	VAL	C-O	6.69	1.33	1.24
1	F	187	PRO	C-O	-6.68	1.16	1.23
1	J	229	CYS	C-O	-6.68	1.16	1.24
1	C	291	PRO	C-O	-6.68	1.15	1.24
1	B	471	GLN	C-O	-6.68	1.16	1.24
1	C	472	ALA	C-O	6.68	1.32	1.24
1	C	74	ARG	C-O	-6.67	1.16	1.24
1	F	467	LYS	CA-CB	-6.67	1.43	1.53
1	K	311	LEU	C-O	6.67	1.32	1.24
1	J	231	TYR	CA-C	-6.67	1.45	1.52
1	M	109	ARG	N-CA	6.67	1.54	1.46
1	D	278	LYS	CA-C	-6.67	1.43	1.52
1	H	143	ASN	C-O	6.67	1.32	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	160	GLY	N-CA	6.66	1.51	1.45
1	H	461	GLN	CA-CB	6.66	1.64	1.53
1	N	142	ASP	N-CA	6.66	1.54	1.46
1	F	369	ASP	N-CA	-6.66	1.38	1.46
1	O	375	GLN	CA-C	-6.66	1.44	1.52
1	I	367	GLU	CG-CD	6.66	1.68	1.52
1	J	31	THR	C-O	6.65	1.32	1.23
1	A	338	THR	CA-CB	6.65	1.63	1.53
1	E	54	LYS	CA-C	6.65	1.61	1.52
1	L	336	ARG	CG-CD	-6.65	1.32	1.52
1	L	393	ASN	C-O	6.65	1.32	1.24
1	G	80	PRO	C-O	-6.65	1.14	1.24
1	D	258	ARG	CG-CD	6.64	1.72	1.52
1	K	219	ASP	C-O	6.64	1.32	1.23
1	D	179	GLN	CA-C	6.64	1.61	1.52
1	N	301	ASP	CA-C	-6.64	1.44	1.52
1	C	260	LEU	C-O	6.64	1.31	1.24
1	D	225	CYS	C-O	6.64	1.32	1.24
1	K	208	MET	C-O	6.64	1.32	1.24
1	J	152	LYS	C-O	-6.64	1.16	1.24
1	E	281	THR	CA-C	6.63	1.61	1.52
1	N	387	THR	CA-C	6.63	1.61	1.52
1	J	361	TYR	CA-C	6.63	1.60	1.52
1	H	32	ASN	C-O	-6.63	1.15	1.24
1	J	257	VAL	CB-CG1	-6.63	1.30	1.52
1	K	455	PHE	N-CA	6.63	1.54	1.46
1	O	178	ASN	C-O	6.63	1.32	1.23
1	A	256	PHE	C-O	6.62	1.31	1.23
1	G	396	ILE	CA-C	6.62	1.61	1.52
1	K	277	ILE	CA-CB	-6.62	1.46	1.54
1	E	155	GLN	N-CA	-6.62	1.38	1.47
1	O	336	ARG	C-O	-6.62	1.15	1.24
1	O	346	VAL	CA-CB	-6.62	1.45	1.54
1	A	147	ILE	N-CA	6.62	1.54	1.46
1	F	105	VAL	C-O	-6.62	1.16	1.23
1	F	458	ASP	CA-C	-6.62	1.45	1.53
1	H	290	PHE	N-CA	6.62	1.55	1.46
1	D	30	ARG	CA-CB	-6.61	1.43	1.53
1	M	328	PHE	CA-C	-6.61	1.44	1.52
1	A	338	THR	CA-C	-6.61	1.44	1.52
1	J	365	GLY	CA-C	-6.61	1.46	1.51
1	M	260	LEU	CA-C	6.60	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	93	PRO	C-O	-6.60	1.16	1.24
1	J	279	GLY	C-O	6.60	1.32	1.23
1	O	221	PRO	N-CA	6.60	1.55	1.47
1	D	197	ASP	N-CA	-6.60	1.37	1.46
1	F	220	VAL	CA-C	-6.60	1.46	1.52
1	G	299	THR	N-CA	-6.60	1.38	1.46
1	J	75	VAL	CA-CB	-6.59	1.46	1.53
1	O	59	LYS	CD-CE	6.59	1.72	1.52
1	G	238	VAL	CA-CB	-6.59	1.46	1.54
1	N	289	TYR	N-CA	-6.59	1.38	1.45
1	L	117	ILE	C-O	6.59	1.31	1.24
1	C	44	ALA	C-O	-6.58	1.15	1.23
1	B	348	SER	CA-C	6.58	1.61	1.52
1	G	154	THR	N-CA	6.58	1.54	1.45
1	B	90	PHE	CA-CB	6.58	1.62	1.53
1	N	306	ASN	N-CA	6.58	1.55	1.46
1	K	392	MET	C-O	6.57	1.32	1.24
1	N	393	ASN	C-O	6.57	1.32	1.24
1	N	336	ARG	N-CA	-6.57	1.37	1.46
1	F	57	SER	CA-C	6.57	1.61	1.52
1	L	255	MET	CB-CG	6.57	1.72	1.52
1	M	288	SER	C-O	6.57	1.32	1.23
1	F	77	LEU	CG-CD1	-6.57	1.30	1.52
1	K	466	ARG	CZ-NH1	6.57	1.42	1.32
1	N	388	TYR	N-CA	-6.57	1.38	1.46
1	H	320	GLY	C-O	6.57	1.31	1.24
1	I	20	ALA	N-CA	6.56	1.58	1.46
1	O	105	VAL	CA-C	-6.56	1.44	1.52
1	J	100	TRP	CA-CB	6.56	1.63	1.53
1	O	359	LYS	C-O	6.56	1.31	1.24
1	A	321	ILE	CA-CB	-6.56	1.46	1.53
1	B	133	ASN	C-O	6.56	1.32	1.24
1	H	122	LEU	C-O	6.55	1.32	1.24
1	B	192	ASN	CA-C	6.55	1.60	1.52
1	B	324	SER	CA-C	6.55	1.62	1.53
1	C	98	LEU	CG-CD1	6.55	1.74	1.52
1	D	155	GLN	CA-C	-6.55	1.45	1.52
1	F	445	THR	CB-CG2	6.55	1.74	1.52
1	K	376	LEU	N-CA	-6.55	1.37	1.46
1	F	193	THR	C-O	-6.55	1.15	1.23
1	N	74	ARG	CA-C	-6.55	1.45	1.53
1	O	160	GLY	C-O	6.55	1.33	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	90	PHE	N-CA	6.55	1.53	1.46
1	L	298	VAL	CA-CB	-6.54	1.46	1.54
1	B	341	SER	CA-C	6.54	1.60	1.52
1	E	28	VAL	C-O	-6.54	1.16	1.24
1	G	167	GLU	C-O	-6.54	1.15	1.24
1	O	374	PHE	C-O	6.54	1.33	1.23
1	O	351	SER	CA-C	6.53	1.61	1.52
1	E	222	LEU	C-O	6.53	1.31	1.24
1	I	144	ARG	CB-CG	6.53	1.72	1.52
1	B	252	ARG	CA-C	-6.53	1.45	1.53
1	C	212	THR	CA-C	6.53	1.61	1.52
1	F	111	GLN	CA-C	6.53	1.61	1.52
1	K	466	ARG	C-O	6.53	1.31	1.24
1	M	108	GLY	C-O	-6.53	1.17	1.23
1	A	289	TYR	C-O	-6.53	1.16	1.23
1	E	92	ASP	C-O	-6.53	1.19	1.25
1	I	330	THR	C-O	6.52	1.31	1.24
1	G	328	PHE	CA-C	-6.52	1.44	1.52
1	H	165	ILE	CA-CB	-6.52	1.44	1.55
1	C	203	THR	CA-C	6.52	1.61	1.52
1	D	257	VAL	CA-C	6.52	1.60	1.53
1	F	51	ALA	N-CA	6.52	1.54	1.46
1	F	204	GLY	N-CA	-6.52	1.36	1.45
1	H	276	TYR	CA-CB	6.52	1.65	1.53
1	A	364	HIS	C-O	-6.52	1.15	1.24
1	L	390	HIS	C-O	6.52	1.31	1.24
1	M	224	ILE	CA-CB	6.52	1.63	1.55
1	I	27	TYR	CA-C	6.51	1.60	1.53
1	M	261	PHE	CA-CB	-6.51	1.43	1.53
1	B	149	MET	CA-CB	6.50	1.64	1.53
1	B	246	LEU	C-O	-6.50	1.15	1.23
1	B	467	LYS	CE-NZ	6.50	1.68	1.49
1	H	233	ASP	N-CA	-6.50	1.37	1.46
1	N	194	VAL	CA-CB	-6.50	1.46	1.54
1	F	177	ALA	CA-CB	6.50	1.64	1.53
1	M	441	LEU	C-O	6.50	1.33	1.23
1	A	386	MET	C-O	6.50	1.31	1.24
1	J	32	ASN	N-CA	-6.50	1.38	1.46
1	J	103	THR	CA-CB	-6.50	1.43	1.54
1	L	235	LEU	CA-CB	-6.50	1.43	1.53
1	K	382	THR	C-O	6.50	1.32	1.23
1	B	169	TRP	N-CA	-6.50	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	122	LEU	C-O	-6.49	1.15	1.24
1	I	194	VAL	CA-C	6.49	1.60	1.52
1	J	308	PRO	C-O	-6.49	1.17	1.23
1	I	340	MET	SD-CE	6.49	1.95	1.79
1	B	28	VAL	CA-C	-6.49	1.44	1.52
1	D	254	GLN	CB-CG	6.49	1.72	1.52
1	F	38	GLY	N-CA	6.49	1.54	1.45
1	H	397	LEU	N-CA	6.48	1.54	1.46
1	L	335	THR	N-CA	6.48	1.54	1.46
1	A	304	ILE	N-CA	6.48	1.54	1.46
1	I	209	ASP	CA-C	-6.48	1.45	1.52
1	O	455	PHE	C-O	-6.48	1.16	1.23
1	I	141	THR	CA-CB	-6.48	1.43	1.53
1	H	163	PRO	C-O	6.47	1.31	1.24
1	J	298	VAL	N-CA	6.47	1.54	1.46
1	N	89	SER	C-O	6.47	1.32	1.24
1	F	366	GLU	CD-OE2	6.47	1.37	1.25
1	M	365	GLY	C-O	6.47	1.32	1.23
1	J	309	TYR	CE2-CZ	6.46	1.53	1.38
1	D	366	GLU	CA-CB	6.46	1.65	1.53
1	C	196	GLN	N-CA	6.46	1.54	1.46
1	K	230	LYS	CB-CG	6.46	1.71	1.52
1	M	460	ASP	N-CA	-6.46	1.38	1.46
1	E	220	VAL	N-CA	6.46	1.54	1.46
1	L	234	TYR	C-N	6.46	1.42	1.33
1	N	340	MET	CB-CG	-6.45	1.33	1.52
1	L	152	LYS	CB-CG	6.45	1.71	1.52
1	I	338	THR	CA-C	-6.45	1.44	1.52
1	A	292	THR	CA-CB	-6.45	1.42	1.52
1	D	330	THR	CA-CB	6.45	1.62	1.53
1	G	304	ILE	N-CA	-6.45	1.38	1.46
1	K	283	THR	CA-CB	6.45	1.62	1.53
1	N	27	TYR	N-CA	-6.45	1.40	1.46
1	N	69	GLN	C-O	-6.45	1.16	1.24
1	L	162	ARG	CG-CD	6.44	1.71	1.52
1	I	28	VAL	CB-CG2	-6.44	1.31	1.52
1	D	190	LEU	CA-C	-6.44	1.44	1.52
1	E	129	THR	N-CA	-6.44	1.39	1.46
1	E	140	GLY	C-O	6.44	1.30	1.24
1	J	201	VAL	CA-CB	-6.44	1.46	1.54
1	O	248	PHE	CA-CB	-6.44	1.43	1.53
1	D	343	CYS	C-O	-6.43	1.16	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	364	HIS	N-CA	6.43	1.53	1.45
1	L	319	ASN	C-O	6.43	1.31	1.23
1	E	251	ARG	C-O	-6.43	1.15	1.23
1	J	71	ARG	N-CA	-6.43	1.38	1.46
1	K	126	LEU	C-O	-6.43	1.15	1.24
1	E	323	TRP	C-O	6.43	1.31	1.23
1	N	24	THR	CB-CG2	-6.43	1.31	1.52
1	D	255	MET	C-O	6.43	1.30	1.23
1	A	377	CYS	CA-C	-6.42	1.44	1.52
1	C	326	GLN	CA-C	6.42	1.60	1.52
1	F	399	ASP	N-CA	-6.42	1.37	1.46
1	L	321	ILE	CA-CB	-6.42	1.46	1.54
1	M	152	LYS	CD-CE	6.42	1.71	1.52
1	F	309	TYR	CE2-CZ	6.42	1.53	1.38
1	M	184	GLU	CG-CD	6.42	1.68	1.52
1	N	86	PRO	CA-C	6.42	1.61	1.52
1	J	39	SER	CB-OG	6.42	1.54	1.42
1	I	91	TYR	CA-C	6.42	1.60	1.52
1	J	223	ASP	CA-C	-6.42	1.43	1.52
1	D	134	LYS	CD-CE	6.42	1.71	1.52
1	I	309	TYR	N-CA	6.42	1.53	1.46
1	I	392	MET	CB-CG	6.41	1.71	1.52
1	K	41	ARG	CA-C	6.41	1.60	1.52
1	K	291	PRO	N-CA	-6.41	1.39	1.47
1	O	159	ILE	CA-CB	-6.41	1.46	1.54
1	N	122	LEU	N-CA	6.40	1.54	1.46
1	A	201	VAL	CA-CB	-6.40	1.45	1.54
1	M	160	GLY	CA-C	-6.40	1.46	1.52
1	A	90	PHE	N-CA	6.40	1.55	1.46
1	M	338	THR	C-O	6.40	1.31	1.23
1	F	113	LEU	CA-CB	-6.39	1.43	1.53
1	N	381	LEU	CA-C	6.39	1.61	1.52
1	N	395	SER	N-CA	6.39	1.53	1.46
1	B	366	GLU	CD-OE1	6.38	1.37	1.25
1	H	108	GLY	C-O	6.38	1.30	1.23
1	I	89	SER	CA-C	6.38	1.60	1.52
1	J	327	LEU	C-O	6.38	1.32	1.23
1	L	251	ARG	C-O	-6.38	1.16	1.23
1	C	368	TYR	CZ-OH	6.38	1.51	1.38
1	G	38	GLY	C-O	-6.38	1.17	1.24
1	D	177	ALA	C-O	6.38	1.32	1.24
1	K	115	VAL	C-O	6.38	1.30	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	284	LEU	CA-C	-6.38	1.44	1.52
1	C	384	ASP	CA-CB	-6.38	1.43	1.53
1	F	92	ASP	N-CA	6.38	1.53	1.46
1	H	465	GLY	C-O	6.38	1.31	1.23
1	M	335	THR	C-O	6.38	1.32	1.24
1	N	101	ALA	CA-C	6.38	1.60	1.52
1	E	378	LYS	C-O	-6.37	1.15	1.24
1	N	301	ASP	C-O	-6.37	1.16	1.24
1	A	115	VAL	CA-C	-6.37	1.44	1.52
1	I	332	VAL	CB-CG2	-6.37	1.31	1.52
1	B	364	HIS	C-O	6.37	1.31	1.23
1	I	465	GLY	C-N	6.37	1.42	1.33
1	K	287	THR	CA-C	-6.37	1.44	1.53
1	F	49	TYR	CA-C	-6.37	1.46	1.52
1	M	251	ARG	CG-CD	6.37	1.71	1.52
1	N	138	ASN	CG-OD1	6.37	1.35	1.23
1	O	160	GLY	CA-C	6.37	1.57	1.52
1	K	336	ARG	C-O	6.37	1.32	1.24
1	O	376	LEU	C-O	-6.37	1.16	1.24
1	C	64	LYS	CD-CE	6.36	1.71	1.52
1	I	242	TYR	CA-C	6.36	1.61	1.52
1	E	45	VAL	CA-CB	-6.36	1.45	1.54
1	K	286	SER	C-O	-6.36	1.16	1.24
1	C	76	LYS	CG-CD	6.36	1.71	1.52
1	I	171	LYS	CA-C	6.36	1.60	1.52
1	I	230	LYS	C-O	6.36	1.31	1.23
1	E	78	PRO	C-O	6.35	1.31	1.23
1	G	146	CYS	N-CA	6.35	1.54	1.46
1	E	114	GLY	C-O	6.35	1.32	1.24
1	K	154	THR	CA-CB	6.35	1.67	1.54
1	M	393	ASN	C-N	6.35	1.43	1.33
1	O	158	LEU	CA-C	6.35	1.61	1.52
1	L	162	ARG	CD-NE	6.35	1.55	1.46
1	F	327	LEU	C-O	6.34	1.31	1.23
1	I	214	GLN	CG-CD	-6.34	1.36	1.52
1	I	304	ILE	CG1-CD1	6.34	1.76	1.51
1	A	167	GLU	C-O	-6.34	1.15	1.24
1	H	262	ASN	C-O	6.34	1.31	1.23
1	O	31	THR	N-CA	6.34	1.53	1.45
1	A	236	LYS	C-O	-6.34	1.16	1.24
1	G	37	ALA	N-CA	-6.34	1.38	1.46
1	I	115	VAL	C-O	6.34	1.31	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	267	VAL	CA-CB	-6.33	1.46	1.53
1	D	216	ASN	CA-C	-6.33	1.43	1.52
1	F	82	LYS	C-O	-6.33	1.16	1.24
1	A	298	VAL	CA-C	6.33	1.60	1.52
1	K	38	GLY	CA-C	-6.33	1.45	1.51
1	A	281	THR	C-O	6.33	1.31	1.24
1	H	358	PHE	C-O	6.33	1.31	1.23
1	K	36	HIS	CA-CB	6.33	1.63	1.53
1	B	307	LYS	C-O	6.33	1.30	1.24
1	E	144	ARG	CA-C	-6.33	1.44	1.52
1	B	165	ILE	CA-CB	6.32	1.64	1.54
1	D	75	VAL	CA-CB	6.32	1.61	1.53
1	G	189	GLU	CA-C	6.32	1.60	1.52
1	J	336	ARG	N-CA	-6.32	1.38	1.46
1	K	368	TYR	N-CA	6.32	1.53	1.45
1	N	262	ASN	C-O	6.32	1.31	1.23
1	O	65	VAL	C-O	6.32	1.33	1.23
1	A	103	THR	C-O	-6.32	1.14	1.23
1	O	455	PHE	CA-C	-6.32	1.44	1.52
1	C	218	SER	C-O	6.32	1.31	1.24
1	H	99	VAL	CA-CB	-6.32	1.44	1.55
1	H	385	VAL	C-O	6.31	1.31	1.24
1	G	101	ALA	CA-CB	-6.31	1.44	1.53
1	J	34	TYR	C-O	-6.31	1.16	1.24
1	M	153	GLN	N-CA	6.31	1.53	1.46
1	A	35	TYR	C-O	6.31	1.31	1.23
1	N	64	LYS	C-O	6.31	1.31	1.24
1	D	216	ASN	N-CA	6.31	1.54	1.46
1	G	458	ASP	N-CA	6.31	1.55	1.46
1	O	28	VAL	CA-CB	-6.31	1.45	1.54
1	J	194	VAL	CA-CB	6.31	1.62	1.54
1	O	359	LYS	CE-NZ	6.31	1.68	1.49
1	A	103	THR	CA-C	-6.30	1.44	1.52
1	J	339	ASN	C-O	6.30	1.31	1.24
1	M	115	VAL	CB-CG2	6.30	1.73	1.52
1	I	31	THR	N-CA	6.30	1.53	1.45
1	J	460	ASP	CG-OD2	6.30	1.37	1.25
1	D	73	PHE	C-O	6.30	1.31	1.24
1	F	345	ALA	CA-CB	-6.30	1.43	1.53
1	A	447	TRP	CA-C	-6.30	1.44	1.52
1	C	455	PHE	CA-CB	-6.30	1.44	1.53
1	F	95	SER	CA-C	6.30	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	K	113	LEU	CG-CD1	6.30	1.73	1.52
1	F	191	LEU	CG-CD2	-6.29	1.31	1.52
1	F	463	PRO	C-O	6.29	1.32	1.24
1	M	63	PRO	CA-C	6.29	1.60	1.53
1	E	322	CYS	CA-C	-6.29	1.46	1.53
1	C	260	LEU	C-N	6.29	1.41	1.33
1	H	22	VAL	CA-CB	-6.29	1.45	1.54
1	A	342	VAL	CB-CG2	-6.29	1.31	1.52
1	H	348	SER	C-O	6.29	1.31	1.24
1	K	327	LEU	C-O	6.29	1.31	1.23
1	N	299	THR	N-CA	-6.29	1.38	1.46
1	H	211	THR	CA-CB	6.28	1.63	1.53
1	I	313	ARG	C-O	-6.28	1.16	1.24
1	H	292	THR	CA-CB	-6.28	1.43	1.52
1	A	157	CYS	CA-C	-6.28	1.44	1.52
1	G	463	PRO	C-N	6.28	1.41	1.33
1	I	386	MET	N-CA	6.28	1.53	1.46
1	J	52	ILE	C-O	-6.28	1.17	1.24
1	D	63	PRO	C-O	-6.28	1.16	1.23
1	A	70	TYR	CA-CB	-6.27	1.43	1.53
1	D	251	ARG	C-O	6.27	1.31	1.23
1	F	332	VAL	CA-C	-6.27	1.45	1.52
1	F	92	ASP	C-O	6.27	1.31	1.24
1	A	369	ASP	CA-CB	-6.27	1.43	1.53
1	E	163	PRO	CA-C	6.27	1.57	1.52
1	A	27	TYR	C-N	6.27	1.41	1.33
1	I	373	ILE	CA-CB	-6.27	1.46	1.54
1	M	200	MET	CA-C	-6.27	1.45	1.52
1	N	242	TYR	CZ-OH	6.27	1.51	1.38
1	C	96	GLN	C-O	-6.26	1.16	1.23
1	I	334	THR	N-CA	-6.26	1.38	1.46
1	J	294	SER	N-CA	-6.26	1.38	1.46
1	E	199	ASP	CA-C	-6.26	1.44	1.53
1	G	216	ASN	N-CA	6.26	1.54	1.46
1	A	318	ASN	CA-C	-6.26	1.45	1.52
1	F	60	ILE	CA-CB	6.26	1.61	1.53
1	F	346	VAL	CA-CB	-6.25	1.47	1.54
1	L	239	SER	C-O	-6.25	1.15	1.24
1	A	44	ALA	C-O	-6.25	1.16	1.24
1	D	109	ARG	N-CA	6.25	1.53	1.46
1	M	86	PRO	C-O	6.25	1.32	1.24
1	B	468	PHE	CA-CB	-6.25	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	D	192	ASN	C-O	6.25	1.31	1.23
1	D	334	THR	CA-C	6.25	1.61	1.52
1	F	199	ASP	CA-C	6.25	1.61	1.53
1	F	384	ASP	N-CA	6.25	1.53	1.46
1	N	334	THR	CA-C	6.25	1.62	1.52
1	A	129	THR	CA-CB	6.25	1.64	1.53
1	C	102	CYS	C-O	6.25	1.31	1.23
1	I	127	ASP	CA-C	6.25	1.60	1.52
1	C	298	VAL	N-CA	6.25	1.53	1.46
1	D	372	PHE	C-O	6.25	1.31	1.23
1	D	374	PHE	CG-CD2	6.25	1.51	1.38
1	E	254	GLN	N-CA	-6.25	1.39	1.46
1	O	228	ILE	CG1-CD1	6.25	1.76	1.51
1	G	466	ARG	CZ-NH1	6.24	1.41	1.32
1	J	159	ILE	C-O	-6.24	1.17	1.24
1	O	69	GLN	C-O	6.24	1.31	1.23
1	B	449	VAL	CA-CB	-6.24	1.45	1.54
1	C	318	ASN	CA-C	6.24	1.61	1.52
1	E	323	TRP	CA-C	-6.24	1.45	1.52
1	M	72	VAL	C-O	-6.24	1.15	1.23
1	D	109	ARG	C-O	-6.24	1.17	1.24
1	L	340	MET	N-CA	6.24	1.53	1.46
1	E	112	PRO	CA-C	6.24	1.60	1.52
1	H	471	GLN	N-CA	-6.24	1.38	1.46
1	I	194	VAL	CA-CB	-6.24	1.46	1.54
1	N	114	GLY	CA-C	6.24	1.58	1.51
1	D	219	ASP	N-CA	6.24	1.54	1.46
1	C	250	LEU	N-CA	-6.24	1.38	1.46
1	E	65	VAL	CA-C	6.24	1.59	1.52
1	N	195	LEU	N-CA	6.23	1.53	1.46
1	C	85	PHE	N-CA	6.23	1.50	1.45
1	K	149	MET	CA-CB	-6.23	1.43	1.53
1	C	98	LEU	C-N	6.23	1.42	1.33
1	G	308	PRO	C-O	-6.23	1.17	1.23
1	I	199	ASP	C-O	-6.23	1.15	1.23
1	I	311	LEU	C-O	6.23	1.31	1.23
1	J	84	GLY	C-O	6.23	1.32	1.23
1	A	318	ASN	C-O	-6.23	1.16	1.24
1	C	307	LYS	C-N	-6.23	1.25	1.33
1	E	64	LYS	CG-CD	6.23	1.71	1.52
1	K	257	VAL	CA-CB	-6.23	1.47	1.53
1	D	463	PRO	N-CA	-6.23	1.39	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	462	PHE	CA-CB	6.23	1.63	1.54
1	B	262	ASN	N-CA	-6.22	1.38	1.45
1	L	335	THR	C-O	6.22	1.32	1.24
1	C	466	ARG	CA-C	6.22	1.60	1.52
1	H	221	PRO	C-O	6.22	1.32	1.24
1	D	32	ASN	N-CA	6.22	1.54	1.46
1	L	85	PHE	C-N	6.22	1.41	1.34
1	M	83	PHE	CA-C	6.22	1.60	1.52
1	I	219	ASP	CG-OD1	6.22	1.37	1.25
1	A	297	MET	CA-C	-6.22	1.45	1.52
1	C	308	PRO	N-CA	-6.22	1.39	1.47
1	F	61	ALA	CA-CB	-6.22	1.43	1.53
1	G	51	ALA	C-O	-6.22	1.15	1.23
1	G	331	VAL	N-CA	6.22	1.53	1.46
1	K	65	VAL	CA-CB	6.21	1.61	1.53
1	D	354	LYS	CA-C	-6.21	1.45	1.52
1	H	262	ASN	N-CA	-6.21	1.38	1.46
1	L	219	ASP	CA-CB	6.21	1.61	1.53
1	J	242	TYR	N-CA	6.21	1.54	1.46
1	C	93	PRO	CA-CB	-6.21	1.45	1.53
1	C	211	THR	CA-CB	-6.21	1.43	1.53
1	H	330	THR	CA-CB	-6.21	1.43	1.53
1	K	50	TYR	C-O	-6.21	1.16	1.23
1	I	310	TRP	N-CA	-6.21	1.38	1.46
1	G	75	VAL	CA-C	6.20	1.59	1.53
1	A	142	ASP	N-CA	6.20	1.54	1.46
1	K	245	MET	C-O	6.20	1.31	1.24
1	N	313	ARG	CA-C	-6.20	1.45	1.52
1	L	215	ALA	CA-CB	6.20	1.62	1.53
1	C	440	PRO	N-CD	6.20	1.56	1.47
1	G	466	ARG	CB-CG	6.20	1.71	1.52
1	M	275	LEU	C-O	-6.19	1.15	1.24
1	B	130	GLU	C-O	-6.19	1.16	1.24
1	E	343	CYS	C-O	6.19	1.31	1.24
1	L	86	PRO	C-O	6.19	1.31	1.24
1	L	203	THR	CA-CB	-6.19	1.44	1.53
1	L	248	PHE	CD1-CE1	6.19	1.57	1.38
1	J	393	ASN	CA-C	-6.19	1.45	1.52
1	C	138	ASN	CA-C	6.19	1.61	1.52
1	E	75	VAL	CA-CB	-6.19	1.46	1.53
1	K	83	PHE	CA-C	6.19	1.60	1.52
1	B	112	PRO	C-O	6.19	1.30	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	H	155	GLN	C-O	-6.19	1.16	1.23
1	E	337	SER	N-CA	-6.18	1.38	1.46
1	K	217	LYS	CA-C	6.18	1.61	1.52
1	A	83	PHE	CG-CD2	6.18	1.51	1.38
1	A	339	ASN	CA-CB	-6.18	1.44	1.53
1	B	218	SER	N-CA	-6.18	1.40	1.46
1	H	213	LEU	C-O	-6.18	1.16	1.24
1	J	83	PHE	C-O	6.18	1.31	1.24
1	A	98	LEU	CA-C	6.18	1.60	1.52
1	F	109	ARG	C-O	6.18	1.31	1.24
1	I	39	SER	CA-C	-6.17	1.44	1.52
1	G	451	LEU	N-CA	-6.17	1.39	1.46
1	K	104	GLY	C-O	6.17	1.32	1.23
1	N	332	VAL	CA-C	6.17	1.59	1.52
1	I	380	THR	CA-C	-6.17	1.45	1.52
1	K	194	VAL	CA-C	6.17	1.60	1.52
1	M	231	TYR	C-O	6.17	1.32	1.24
1	N	284	LEU	C-N	6.17	1.41	1.33
1	I	112	PRO	C-O	-6.17	1.16	1.23
1	N	227	SER	C-O	6.17	1.31	1.24
1	I	115	VAL	CA-C	-6.16	1.45	1.52
1	N	447	TRP	CE3-CZ3	6.16	1.57	1.38
1	O	367	GLU	N-CA	6.16	1.53	1.46
1	B	30	ARG	CB-CG	-6.16	1.33	1.52
1	C	168	HIS	C-O	6.16	1.31	1.23
1	D	60	ILE	CA-C	6.16	1.60	1.52
1	F	307	LYS	C-N	-6.16	1.26	1.33
1	G	235	LEU	CA-C	-6.16	1.45	1.52
1	L	209	ASP	C-O	6.16	1.30	1.23
1	O	165	ILE	N-CA	6.16	1.53	1.46
1	H	447	TRP	CA-CB	-6.16	1.45	1.53
1	G	90	PHE	CA-CB	6.15	1.61	1.53
1	E	22	VAL	C-O	6.15	1.31	1.23
1	G	224	ILE	CB-CG2	-6.15	1.32	1.52
1	F	218	SER	CA-C	-6.15	1.46	1.52
1	I	335	THR	C-O	6.15	1.32	1.24
1	O	461	GLN	CA-CB	6.15	1.63	1.53
1	B	252	ARG	CA-CB	-6.14	1.46	1.53
1	J	79	ASP	C-O	-6.14	1.16	1.24
1	A	398	GLU	N-CA	-6.14	1.38	1.46
1	O	359	LYS	CD-CE	6.14	1.70	1.52
1	B	211	THR	CA-C	-6.14	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	H	392	MET	SD-CE	6.14	1.94	1.79
1	O	297	MET	C-O	-6.14	1.16	1.24
1	F	114	GLY	N-CA	6.13	1.52	1.45
1	G	170	GLY	N-CA	6.13	1.50	1.44
1	H	336	ARG	CG-CD	-6.13	1.34	1.52
1	I	247	PHE	CE2-CZ	-6.13	1.20	1.38
1	N	154	THR	C-O	6.13	1.31	1.23
1	C	74	ARG	N-CA	-6.13	1.38	1.46
1	B	44	ALA	CA-CB	6.13	1.64	1.53
1	I	156	LEU	CA-C	-6.13	1.45	1.52
1	L	163	PRO	C-O	6.13	1.31	1.24
1	C	380	THR	CA-CB	6.13	1.61	1.53
1	C	144	ARG	CZ-NH2	-6.12	1.25	1.33
1	N	230	LYS	N-CA	6.12	1.53	1.45
1	N	398	GLU	C-O	-6.12	1.17	1.24
1	C	379	ILE	N-CA	6.12	1.53	1.46
1	I	149	MET	SD-CE	6.12	1.94	1.79
1	N	50	TYR	C-O	-6.12	1.16	1.23
1	H	113	LEU	CG-CD2	6.11	1.72	1.52
1	H	201	VAL	N-CA	6.11	1.53	1.46
1	A	43	LEU	C-O	-6.11	1.15	1.23
1	F	162	ARG	CZ-NH1	6.11	1.41	1.32
1	G	88	THR	CA-C	6.11	1.59	1.53
1	G	146	CYS	C-O	-6.11	1.16	1.24
1	G	467	LYS	N-CA	6.11	1.53	1.46
1	K	254	GLN	CG-CD	-6.11	1.36	1.52
1	L	199	ASP	CA-CB	-6.11	1.43	1.53
1	O	22	VAL	CA-C	6.11	1.60	1.52
1	C	167	GLU	C-O	-6.11	1.16	1.24
1	F	470	LEU	CA-C	-6.11	1.44	1.52
1	I	21	VAL	C-O	-6.11	1.16	1.24
1	A	234	TYR	C-O	-6.10	1.16	1.24
1	A	460	ASP	N-CA	-6.10	1.38	1.46
1	G	394	PRO	CA-C	-6.10	1.43	1.52
1	F	251	ARG	CZ-NH2	6.10	1.41	1.33
1	C	201	VAL	CA-C	-6.10	1.45	1.53
1	E	108	GLY	C-O	6.10	1.32	1.23
1	I	88	THR	CA-C	6.10	1.60	1.53
1	K	239	SER	C-O	-6.10	1.15	1.24
1	N	165	ILE	CA-C	-6.10	1.45	1.53
1	A	467	LYS	CE-NZ	6.10	1.67	1.49
1	F	368	TYR	CA-CB	-6.10	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	237	MET	C-O	6.10	1.31	1.24
1	O	367	GLU	CD-OE2	6.09	1.36	1.25
1	J	210	PHE	CE1-CZ	-6.09	1.20	1.38
1	B	364	HIS	N-CA	-6.09	1.38	1.45
1	C	358	PHE	C-O	6.09	1.31	1.23
1	L	28	VAL	C-O	6.09	1.30	1.24
1	E	367	GLU	CA-C	6.09	1.59	1.52
1	F	162	ARG	NE-CZ	6.09	1.39	1.33
1	J	70	TYR	CB-CG	-6.09	1.38	1.51
1	O	203	THR	C-O	6.09	1.32	1.24
1	M	101	ALA	CA-C	-6.08	1.45	1.52
1	G	249	TYR	N-CA	6.08	1.53	1.46
1	O	71	ARG	C-O	6.08	1.31	1.23
1	D	51	ALA	CA-CB	-6.08	1.43	1.53
1	F	201	VAL	CA-CB	-6.08	1.44	1.54
1	G	248	PHE	C-O	6.08	1.31	1.23
1	K	188	LEU	N-CA	6.08	1.53	1.45
1	K	248	PHE	CE1-CZ	6.08	1.56	1.38
1	N	169	TRP	C-O	-6.08	1.16	1.24
1	F	155	GLN	CD-NE2	6.08	1.46	1.33
1	G	109	ARG	C-O	-6.08	1.16	1.24
1	B	269	GLU	C-O	-6.07	1.16	1.23
1	F	147	ILE	C-O	-6.07	1.16	1.24
1	G	247	PHE	CA-C	-6.07	1.45	1.52
1	K	194	VAL	C-O	6.07	1.32	1.24
1	C	370	LEU	CA-C	-6.07	1.45	1.52
1	H	177	ALA	CA-CB	6.07	1.63	1.53
1	A	392	MET	CA-CB	-6.07	1.43	1.53
1	D	69	GLN	N-CA	-6.07	1.38	1.45
1	A	328	PHE	CA-CB	-6.07	1.44	1.53
1	L	68	LEU	CG-CD1	6.07	1.72	1.52
1	A	298	VAL	CB-CG1	-6.06	1.32	1.52
1	B	385	VAL	CA-CB	-6.06	1.46	1.54
1	C	296	SER	N-CA	-6.06	1.38	1.46
1	M	321	ILE	C-O	6.06	1.30	1.24
1	H	299	THR	CA-CB	6.06	1.64	1.53
1	D	97	ARG	CA-C	6.06	1.60	1.52
1	B	323	TRP	CA-CB	6.06	1.63	1.53
1	O	105	VAL	N-CA	-6.06	1.39	1.46
1	G	317	HIS	C-O	6.06	1.31	1.24
1	N	354	LYS	CD-CE	6.05	1.70	1.52
1	O	157	CYS	N-CA	-6.05	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	461	GLN	N-CA	6.05	1.53	1.46
1	J	217	LYS	N-CA	6.05	1.55	1.46
1	A	55	GLN	N-CA	6.05	1.53	1.46
1	O	55	GLN	C-O	6.05	1.31	1.24
1	D	29	THR	C-O	6.05	1.31	1.23
1	E	328	PHE	C-O	-6.05	1.16	1.24
1	F	70	TYR	CA-C	6.05	1.60	1.52
1	G	360	GLU	CD-OE2	6.05	1.36	1.25
1	N	340	MET	C-O	6.05	1.31	1.23
1	K	98	LEU	CA-C	6.04	1.59	1.52
1	I	357	ASN	CA-C	6.04	1.61	1.52
1	K	90	PHE	N-CA	6.04	1.54	1.46
1	L	364	HIS	C-O	6.04	1.31	1.23
1	D	104	GLY	N-CA	-6.04	1.39	1.45
1	F	339	ASN	CA-C	-6.04	1.45	1.52
1	G	326	GLN	CA-CB	-6.04	1.43	1.54
1	K	170	GLY	C-O	6.04	1.31	1.23
1	A	189	GLU	N-CA	-6.04	1.38	1.46
1	O	106	GLU	C-O	-6.04	1.17	1.23
1	I	40	SER	C-O	6.03	1.31	1.23
1	A	387	THR	C-O	6.03	1.31	1.24
1	M	247	PHE	CG-CD2	6.03	1.51	1.38
1	N	380	THR	C-O	6.03	1.31	1.24
1	L	100	TRP	CD2-CE2	-6.03	1.31	1.41
1	D	311	LEU	N-CA	-6.03	1.38	1.46
1	H	37	ALA	CA-C	-6.03	1.45	1.52
1	K	223	ASP	C-O	6.03	1.31	1.24
1	F	70	TYR	N-CA	6.02	1.52	1.45
1	N	263	ARG	N-CA	6.02	1.52	1.45
1	O	222	LEU	N-CA	6.02	1.53	1.46
1	F	117	ILE	CG1-CD1	6.02	1.75	1.51
1	M	132	SER	N-CA	6.02	1.53	1.46
1	J	254	GLN	CD-OE1	6.02	1.34	1.23
1	A	373	ILE	CA-CB	-6.02	1.46	1.54
1	B	81	ASN	C-O	-6.02	1.16	1.24
1	E	456	SER	C-O	-6.02	1.16	1.23
1	O	321	ILE	N-CA	-6.02	1.39	1.46
1	D	130	GLU	CD-OE2	6.02	1.36	1.25
1	I	396	ILE	N-CA	6.02	1.53	1.46
1	L	123	LEU	CA-CB	-6.02	1.43	1.53
1	C	444	TYR	C-O	6.01	1.31	1.24
1	I	256	PHE	CA-CB	6.01	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	294	SER	C-O	-6.01	1.16	1.23
1	D	155	GLN	CG-CD	-6.01	1.37	1.52
1	J	72	VAL	C-O	-6.01	1.17	1.24
1	M	56	ASP	N-CA	6.01	1.52	1.46
1	M	255	MET	C-O	6.01	1.31	1.23
1	O	102	CYS	CA-C	6.01	1.60	1.52
1	A	258	ARG	CA-CB	-6.00	1.44	1.53
1	L	94	ALA	CA-C	6.00	1.60	1.52
1	B	198	GLY	C-O	6.00	1.33	1.24
1	C	59	LYS	CA-C	6.00	1.60	1.52
1	B	379	ILE	CA-CB	-6.00	1.45	1.54
1	F	155	GLN	CA-CB	-6.00	1.43	1.53
1	K	397	LEU	CA-CB	-6.00	1.43	1.53
1	N	279	GLY	C-O	6.00	1.31	1.23
1	O	456	SER	CA-C	-6.00	1.45	1.52
1	E	237	MET	N-CA	-6.00	1.39	1.46
1	J	388	TYR	C-O	6.00	1.30	1.24
1	A	61	ALA	CA-C	-6.00	1.46	1.53
1	F	261	PHE	CA-CB	-6.00	1.44	1.53
1	I	383	ALA	CA-CB	-6.00	1.43	1.53
1	J	354	LYS	CE-NZ	6.00	1.67	1.49
1	M	311	LEU	CA-C	-6.00	1.46	1.53
1	I	474	LEU	CG-CD2	6.00	1.72	1.52
1	C	445	THR	C-O	-5.99	1.16	1.23
1	N	359	LYS	CD-CE	5.99	1.70	1.52
1	O	396	ILE	CA-C	5.99	1.60	1.52
1	D	461	GLN	N-CA	5.99	1.53	1.46
1	G	273	ALA	C-O	5.99	1.31	1.24
1	E	260	LEU	CA-CB	5.99	1.62	1.53
1	J	177	ALA	C-O	5.99	1.31	1.24
1	C	232	PRO	CA-C	-5.99	1.45	1.52
1	E	366	GLU	C-O	-5.99	1.16	1.23
1	J	94	ALA	CA-CB	5.99	1.62	1.53
1	J	255	MET	C-O	-5.98	1.18	1.23
1	J	188	LEU	N-CA	-5.98	1.38	1.45
1	I	307	LYS	C-O	-5.98	1.18	1.24
1	J	60	ILE	CA-CB	5.98	1.62	1.53
1	K	221	PRO	C-O	5.98	1.31	1.23
1	O	174	PRO	C-O	5.98	1.31	1.23
1	B	468	PHE	C-O	-5.98	1.17	1.24
1	M	221	PRO	N-CA	5.97	1.54	1.47
1	O	155	GLN	CD-NE2	5.97	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	260	LEU	C-N	5.97	1.41	1.33
1	D	213	LEU	C-O	5.97	1.31	1.24
1	J	28	VAL	C-O	5.97	1.30	1.24
1	K	453	GLU	CA-C	5.97	1.61	1.52
1	D	382	THR	CA-CB	-5.97	1.44	1.53
1	I	216	ASN	C-O	-5.97	1.16	1.24
1	K	162	ARG	N-CA	-5.97	1.38	1.45
1	K	359	LYS	CE-NZ	5.97	1.67	1.49
1	C	357	ASN	C-O	5.97	1.32	1.24
1	J	388	TYR	C-N	5.97	1.41	1.34
1	C	29	THR	CA-C	-5.97	1.45	1.52
1	M	168	HIS	C-O	5.97	1.31	1.23
1	B	174	PRO	CA-C	5.96	1.59	1.52
1	H	336	ARG	CZ-NH1	5.96	1.41	1.32
1	D	191	LEU	C-O	-5.96	1.16	1.23
1	K	255	MET	N-CA	5.96	1.53	1.46
1	B	44	ALA	C-O	5.96	1.31	1.23
1	D	328	PHE	C-O	5.96	1.30	1.24
1	M	110	GLY	CA-C	-5.96	1.46	1.52
1	O	267	VAL	C-O	-5.96	1.17	1.24
1	D	252	ARG	C-O	-5.96	1.17	1.23
1	D	259	HIS	N-CA	5.96	1.54	1.46
1	G	238	VAL	C-O	-5.96	1.17	1.24
1	J	128	ASP	CA-CB	5.96	1.60	1.52
1	M	117	ILE	CB-CG2	5.96	1.72	1.52
1	A	150	ASP	CA-CB	5.96	1.63	1.53
1	D	61	ALA	CA-C	-5.96	1.46	1.52
1	F	165	ILE	CA-C	5.95	1.58	1.52
1	J	458	ASP	N-CA	5.95	1.54	1.46
1	M	373	ILE	C-O	5.95	1.31	1.24
1	E	156	LEU	CA-C	5.95	1.60	1.52
1	M	75	VAL	CA-CB	-5.95	1.47	1.53
1	B	306	ASN	N-CA	5.95	1.54	1.46
1	F	321	ILE	CA-CB	-5.95	1.47	1.54
1	N	470	LEU	CA-C	5.95	1.60	1.52
1	A	78	PRO	N-CA	-5.95	1.40	1.47
1	F	71	ARG	CA-CB	-5.95	1.43	1.53
1	N	72	VAL	CA-CB	5.95	1.61	1.54
1	F	157	CYS	C-O	5.94	1.31	1.24
1	N	474	LEU	C-OXT	5.94	1.35	1.23
1	A	282	GLY	C-O	-5.94	1.15	1.23
1	B	76	LYS	CG-CD	5.94	1.70	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	454	LYS	CE-NZ	5.94	1.67	1.49
1	H	101	ALA	N-CA	5.94	1.53	1.46
1	H	452	LYS	CA-CB	-5.94	1.44	1.53
1	J	307	LYS	CD-CE	5.94	1.70	1.52
1	C	176	ASN	CA-C	5.94	1.60	1.52
1	D	308	PRO	CA-CB	5.94	1.61	1.53
1	E	73	PHE	C-O	5.94	1.31	1.24
1	F	234	TYR	CA-CB	5.94	1.62	1.53
1	N	250	LEU	CG-CD1	-5.94	1.32	1.52
1	D	59	LYS	CE-NZ	5.94	1.67	1.49
1	B	35	TYR	CA-C	-5.94	1.45	1.52
1	I	94	ALA	CA-CB	-5.94	1.43	1.53
1	E	379	ILE	CA-CB	-5.93	1.46	1.54
1	A	259	HIS	N-CA	5.93	1.53	1.45
1	B	283	THR	C-O	-5.93	1.16	1.24
1	G	165	ILE	CA-CB	5.93	1.64	1.54
1	K	109	ARG	N-CA	5.93	1.53	1.46
1	O	155	GLN	N-CA	-5.93	1.36	1.46
1	H	320	GLY	N-CA	5.93	1.54	1.46
1	F	315	GLN	CA-C	-5.93	1.45	1.52
1	M	99	VAL	C-O	5.93	1.29	1.23
1	N	363	ARG	N-CA	5.93	1.53	1.46
1	A	354	LYS	CE-NZ	5.93	1.67	1.49
1	E	53	LYS	CD-CE	5.93	1.70	1.52
1	O	196	GLN	C-O	-5.93	1.16	1.24
1	B	225	CYS	N-CA	-5.92	1.38	1.46
1	A	455	PHE	N-CA	5.92	1.53	1.46
1	D	462	PHE	CA-C	5.92	1.58	1.52
1	H	317	HIS	CA-C	5.92	1.60	1.52
1	M	112	PRO	C-O	5.92	1.30	1.23
1	D	149	MET	CB-CG	5.92	1.70	1.52
1	I	61	ALA	CA-CB	-5.92	1.44	1.53
1	J	208	MET	CA-C	5.92	1.60	1.52
1	D	96	GLN	CB-CG	5.91	1.70	1.52
1	E	156	LEU	C-O	5.91	1.31	1.23
1	G	219	ASP	CB-CG	5.91	1.66	1.52
1	G	296	SER	C-O	5.91	1.31	1.24
1	O	149	MET	N-CA	-5.91	1.38	1.46
1	A	335	THR	N-CA	-5.91	1.38	1.46
1	C	50	TYR	C-O	-5.91	1.16	1.23
1	C	275	LEU	CA-C	-5.91	1.44	1.52
1	L	200	MET	C-O	-5.91	1.16	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	79	ASP	C-O	5.91	1.31	1.24
1	F	181	LYS	CE-NZ	5.90	1.67	1.49
1	H	461	GLN	N-CA	5.90	1.53	1.46
1	I	320	GLY	CA-C	5.90	1.60	1.51
1	E	343	CYS	CA-CB	-5.90	1.44	1.53
1	N	380	THR	N-CA	5.90	1.53	1.46
1	N	398	GLU	CA-C	-5.90	1.45	1.52
1	G	357	ASN	C-O	5.90	1.31	1.24
1	F	386	MET	SD-CE	5.90	1.94	1.79
1	B	293	PRO	C-O	5.90	1.32	1.23
1	E	252	ARG	N-CA	-5.90	1.39	1.47
1	J	20	ALA	N-CA	5.90	1.57	1.46
1	O	226	SER	N-CA	5.90	1.53	1.46
1	G	442	LYS	CG-CD	5.89	1.70	1.52
1	C	155	GLN	N-CA	-5.89	1.39	1.46
1	D	378	LYS	C-O	-5.89	1.17	1.23
1	O	362	LEU	CA-C	5.89	1.59	1.52
1	A	56	ASP	CA-C	-5.89	1.46	1.52
1	C	63	PRO	C-O	5.89	1.31	1.24
1	D	56	ASP	C-O	5.89	1.31	1.23
1	D	234	TYR	CA-CB	5.89	1.62	1.53
1	D	374	PHE	CG-CD1	5.89	1.51	1.38
1	F	173	THR	C-N	5.89	1.40	1.33
1	G	193	THR	N-CA	-5.89	1.38	1.46
1	A	327	LEU	N-CA	5.88	1.52	1.46
1	A	335	THR	CA-C	5.88	1.60	1.52
1	I	377	CYS	N-CA	5.88	1.53	1.45
1	E	369	ASP	CG-OD2	5.88	1.36	1.25
1	G	113	LEU	N-CA	-5.88	1.38	1.46
1	K	379	ILE	CG1-CD1	5.88	1.74	1.51
1	B	344	SER	N-CA	-5.88	1.38	1.46
1	E	85	PHE	CA-CB	5.88	1.62	1.54
1	G	194	VAL	CA-C	-5.88	1.46	1.52
1	C	184	GLU	N-CA	-5.88	1.38	1.46
1	A	144	ARG	NE-CZ	5.87	1.39	1.33
1	I	25	ASP	CA-C	-5.87	1.44	1.52
1	I	345	ALA	N-CA	5.87	1.53	1.46
1	K	441	LEU	CA-CB	5.87	1.62	1.53
1	F	300	SER	C-O	-5.87	1.16	1.24
1	B	293	PRO	CA-CB	-5.87	1.43	1.53
1	G	343	CYS	C-O	-5.87	1.17	1.24
1	L	371	GLN	CA-CB	-5.87	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	89	SER	C-N	5.86	1.39	1.33
1	I	387	THR	CA-C	5.86	1.60	1.52
1	E	224	ILE	CG1-CD1	5.86	1.74	1.51
1	L	221	PRO	C-O	5.86	1.31	1.24
1	N	48	PRO	C-O	5.86	1.32	1.24
1	C	93	PRO	CG-CD	-5.86	1.30	1.50
1	F	74	ARG	CZ-NH2	5.86	1.41	1.33
1	E	181	LYS	CA-C	5.86	1.60	1.52
1	J	117	ILE	C-N	5.86	1.41	1.33
1	J	155	GLN	CB-CG	-5.86	1.34	1.52
1	K	156	LEU	C-O	5.86	1.31	1.23
1	K	242	TYR	CE2-CZ	5.86	1.52	1.38
1	F	107	VAL	CA-CB	5.85	1.60	1.53
1	L	211	THR	CB-CG2	-5.85	1.33	1.52
1	H	448	GLU	CA-C	-5.85	1.45	1.52
1	I	335	THR	CA-C	5.85	1.60	1.52
1	J	117	ILE	CA-C	5.85	1.60	1.52
1	J	249	TYR	CA-C	-5.85	1.45	1.52
1	A	190	LEU	CA-CB	5.85	1.60	1.53
1	B	468	PHE	N-CA	-5.85	1.39	1.46
1	F	232	PRO	N-CD	-5.85	1.39	1.47
1	O	467	LYS	CD-CE	5.85	1.70	1.52
1	L	225	CYS	C-O	5.85	1.31	1.24
1	N	32	ASN	CB-CG	5.85	1.66	1.52
1	A	40	SER	C-O	5.84	1.32	1.23
1	D	179	GLN	C-O	5.84	1.31	1.24
1	E	133	ASN	C-O	5.84	1.31	1.24
1	F	153	GLN	N-CA	5.84	1.53	1.46
1	J	289	TYR	N-CA	-5.84	1.38	1.46
1	A	221	PRO	N-CA	5.84	1.54	1.47
1	A	39	SER	CA-C	-5.84	1.45	1.52
1	E	248	PHE	CA-C	5.84	1.59	1.52
1	H	88	THR	CA-CB	5.84	1.60	1.52
1	F	179	GLN	C-O	5.84	1.31	1.24
1	G	41	ARG	CD-NE	5.84	1.54	1.46
1	N	356	ASP	C-O	5.84	1.30	1.24
1	F	247	PHE	CG-CD2	5.84	1.51	1.38
1	G	305	PHE	N-CA	5.84	1.52	1.45
1	K	39	SER	CA-C	-5.84	1.45	1.52
1	K	271	VAL	N-CA	5.84	1.54	1.47
1	B	449	VAL	N-CA	-5.83	1.38	1.46
1	N	60	ILE	CA-CB	5.83	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	311	LEU	N-CA	5.83	1.54	1.46
1	C	272	PRO	C-N	-5.83	1.26	1.33
1	H	337	SER	CA-CB	5.83	1.63	1.53
1	K	174	PRO	CA-C	5.83	1.59	1.52
1	K	335	THR	N-CA	-5.83	1.38	1.46
1	O	462	PHE	C-O	5.83	1.30	1.24
1	B	129	THR	CA-C	-5.83	1.44	1.52
1	D	466	ARG	C-O	5.83	1.30	1.24
1	A	87	ASP	CG-OD1	5.83	1.36	1.25
1	G	335	THR	CA-C	5.83	1.60	1.52
1	C	230	LYS	CB-CG	5.82	1.70	1.52
1	J	144	ARG	CB-CG	-5.82	1.34	1.52
1	G	255	MET	N-CA	5.82	1.53	1.46
1	J	278	LYS	CA-C	-5.82	1.45	1.52
1	F	273	ALA	C-O	5.82	1.32	1.24
1	I	71	ARG	CA-C	-5.82	1.45	1.53
1	N	50	TYR	CA-C	-5.82	1.45	1.52
1	C	291	PRO	CA-CB	-5.82	1.45	1.53
1	I	382	THR	CA-C	5.82	1.59	1.52
1	L	328	PHE	CE1-CZ	5.82	1.56	1.38
1	J	217	LYS	CE-NZ	5.81	1.66	1.49
1	O	64	LYS	CA-C	5.81	1.60	1.52
1	C	344	SER	C-O	5.81	1.31	1.24
1	F	354	LYS	CD-CE	5.81	1.69	1.52
1	B	44	ALA	N-CA	-5.81	1.39	1.46
1	C	472	ALA	CA-C	5.81	1.60	1.52
1	F	294	SER	CA-C	-5.81	1.45	1.52
1	G	353	TYR	C-O	5.81	1.30	1.24
1	F	173	THR	N-CA	5.81	1.55	1.46
1	F	50	TYR	CA-C	-5.81	1.45	1.52
1	C	166	GLY	CA-C	5.80	1.57	1.51
1	B	29	THR	C-O	5.80	1.30	1.23
1	I	96	GLN	N-CA	5.80	1.52	1.45
1	L	265	GLY	C-O	5.80	1.30	1.23
1	M	60	ILE	C-O	-5.80	1.18	1.24
1	A	329	VAL	CA-CB	-5.80	1.46	1.53
1	F	336	ARG	CA-CB	-5.80	1.44	1.53
1	J	148	SER	CA-C	5.80	1.59	1.52
1	J	382	THR	CA-C	-5.80	1.45	1.53
1	I	34	TYR	N-CA	5.80	1.53	1.46
1	G	358	PHE	CA-C	-5.80	1.45	1.52
1	K	289	TYR	CG-CD2	-5.80	1.27	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	154	THR	CA-CB	5.79	1.68	1.54
1	C	321	ILE	C-O	5.79	1.30	1.24
1	L	230	LYS	N-CA	5.79	1.52	1.45
1	D	89	SER	N-CA	5.79	1.53	1.46
1	O	186	PRO	CA-C	5.79	1.57	1.52
1	O	208	MET	C-O	5.79	1.32	1.24
1	G	143	ASN	C-O	5.79	1.31	1.24
1	L	94	ALA	N-CA	-5.79	1.39	1.46
1	H	130	GLU	C-O	5.79	1.31	1.24
1	J	321	ILE	N-CA	-5.79	1.39	1.46
1	K	387	THR	C-O	5.79	1.30	1.24
1	A	348	SER	N-CA	5.79	1.53	1.46
1	F	62	VAL	C-O	-5.79	1.18	1.23
1	E	362	LEU	CG-CD2	5.78	1.71	1.52
1	I	40	SER	CA-C	5.78	1.61	1.53
1	J	302	ALA	CA-CB	5.78	1.62	1.53
1	L	271	VAL	CA-C	5.78	1.59	1.52
1	F	201	VAL	N-CA	5.78	1.53	1.46
1	K	304	ILE	C-O	-5.78	1.17	1.24
1	L	171	LYS	N-CA	5.78	1.53	1.46
1	N	234	TYR	N-CA	-5.78	1.39	1.46
1	K	292	THR	CA-C	-5.78	1.45	1.52
1	E	147	ILE	C-O	5.78	1.30	1.23
1	G	392	MET	CA-CB	-5.78	1.44	1.53
1	N	113	LEU	N-CA	-5.78	1.39	1.46
1	C	238	VAL	CA-CB	-5.78	1.46	1.54
1	G	108	GLY	N-CA	-5.78	1.38	1.45
1	L	128	ASP	CA-CB	5.78	1.60	1.53
1	F	21	VAL	C-O	-5.77	1.16	1.24
1	M	289	TYR	C-N	-5.77	1.26	1.33
1	N	153	GLN	CB-CG	5.77	1.69	1.52
1	A	367	GLU	CG-CD	5.77	1.66	1.52
1	B	457	ALA	CA-CB	-5.77	1.44	1.53
1	G	338	THR	C-O	5.77	1.30	1.23
1	H	258	ARG	CZ-NH2	5.77	1.41	1.33
1	D	373	ILE	CA-C	-5.77	1.45	1.52
1	J	101	ALA	CA-CB	5.77	1.63	1.53
1	O	334	THR	N-CA	-5.77	1.38	1.46
1	G	104	GLY	C-O	5.77	1.31	1.24
1	O	245	MET	N-CA	-5.77	1.39	1.46
1	E	106	GLU	C-O	-5.76	1.17	1.23
1	I	172	GLY	C-O	5.76	1.31	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	391	SER	CA-C	-5.76	1.45	1.52
1	D	194	VAL	CA-C	-5.76	1.46	1.52
1	E	33	ILE	CB-CG2	-5.76	1.33	1.52
1	F	291	PRO	CA-CB	-5.76	1.45	1.53
1	H	336	ARG	N-CA	5.76	1.53	1.46
1	L	396	ILE	CG1-CD1	5.76	1.74	1.51
1	O	171	LYS	CA-C	-5.76	1.45	1.52
1	I	173	THR	CA-C	5.75	1.59	1.53
1	H	281	THR	CA-CB	5.75	1.63	1.53
1	H	342	VAL	CA-CB	-5.75	1.47	1.54
1	J	83	PHE	CG-CD2	5.75	1.50	1.38
1	J	130	GLU	CD-OE2	5.75	1.36	1.25
1	B	290	PHE	C-O	-5.75	1.16	1.24
1	N	347	SER	CA-C	5.75	1.60	1.52
1	N	389	ILE	C-O	5.75	1.31	1.24
1	A	41	ARG	N-CA	5.75	1.53	1.46
1	E	56	ASP	CG-OD1	5.75	1.36	1.25
1	G	216	ASN	CA-C	-5.75	1.45	1.52
1	I	163	PRO	C-O	-5.75	1.18	1.24
1	K	166	GLY	C-O	-5.75	1.17	1.23
1	C	134	LYS	CA-C	5.75	1.60	1.52
1	B	258	ARG	CA-C	-5.75	1.45	1.52
1	H	386	MET	SD-CE	5.75	1.94	1.79
1	F	283	THR	N-CA	5.74	1.53	1.46
1	G	392	MET	CA-C	-5.74	1.45	1.52
1	L	311	LEU	C-O	5.74	1.31	1.23
1	M	71	ARG	C-O	5.74	1.30	1.24
1	C	297	MET	SD-CE	5.74	1.94	1.79
1	D	60	ILE	N-CA	5.74	1.53	1.46
1	H	253	GLU	N-CA	5.74	1.52	1.45
1	M	79	ASP	CA-C	5.74	1.59	1.52
1	F	185	CYS	C-O	-5.74	1.17	1.24
1	G	87	ASP	CA-C	5.74	1.60	1.52
1	L	265	GLY	N-CA	5.74	1.50	1.45
1	N	193	THR	CA-C	5.74	1.59	1.52
1	N	234	TYR	C-N	5.73	1.40	1.33
1	C	395	SER	C-N	-5.73	1.26	1.33
1	D	31	THR	CA-C	-5.73	1.45	1.52
1	E	30	ARG	N-CA	5.73	1.52	1.45
1	K	281	THR	CA-CB	5.73	1.63	1.53
1	E	251	ARG	CG-CD	5.73	1.69	1.52
1	D	113	LEU	N-CA	-5.72	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	L	113	LEU	C-N	5.72	1.39	1.32
1	J	179	GLN	C-O	5.72	1.30	1.23
1	K	59	LYS	CA-C	5.72	1.60	1.52
1	L	247	PHE	CA-C	5.72	1.60	1.52
1	G	207	ALA	CA-CB	-5.72	1.45	1.53
1	I	340	MET	CA-C	5.72	1.60	1.52
1	D	452	LYS	CA-C	-5.72	1.45	1.52
1	O	61	ALA	C-O	-5.72	1.17	1.24
1	O	191	LEU	CA-C	5.72	1.59	1.52
1	H	113	LEU	CA-CB	-5.71	1.43	1.53
1	I	321	ILE	C-O	5.71	1.30	1.24
1	M	293	PRO	C-O	5.71	1.31	1.24
1	C	149	MET	C-O	-5.71	1.16	1.24
1	G	321	ILE	CA-C	-5.71	1.46	1.52
1	M	226	SER	C-O	-5.71	1.16	1.24
1	J	325	ASN	CA-CB	-5.71	1.44	1.53
1	G	149	MET	CB-CG	5.71	1.69	1.52
1	H	215	ALA	C-O	5.71	1.30	1.24
1	L	256	PHE	CE1-CZ	5.71	1.55	1.38
1	A	35	TYR	CA-CB	5.71	1.65	1.53
1	G	238	VAL	N-CA	-5.70	1.39	1.46
1	O	255	MET	CA-C	5.70	1.59	1.52
1	D	220	VAL	C-O	-5.70	1.17	1.24
1	F	454	LYS	CD-CE	5.70	1.69	1.52
1	F	86	PRO	C-O	5.70	1.31	1.24
1	O	39	SER	C-O	-5.70	1.16	1.23
1	O	291	PRO	C-O	5.70	1.31	1.24
1	A	275	LEU	C-O	-5.69	1.16	1.24
1	K	115	VAL	CA-CB	-5.69	1.45	1.55
1	K	178	ASN	N-CA	5.69	1.53	1.46
1	B	150	ASP	CA-C	5.69	1.59	1.52
1	B	221	PRO	N-CA	-5.69	1.40	1.47
1	C	290	PHE	CA-CB	5.69	1.62	1.54
1	N	291	PRO	CA-C	5.69	1.60	1.52
1	O	222	LEU	CA-C	5.69	1.60	1.52
1	I	464	LEU	N-CA	5.69	1.52	1.46
1	A	40	SER	C-N	5.69	1.41	1.33
1	E	124	ASN	N-CA	-5.68	1.39	1.46
1	K	191	LEU	CA-C	-5.68	1.46	1.52
1	L	100	TRP	N-CA	-5.68	1.39	1.46
1	M	164	PRO	N-CA	-5.68	1.40	1.47
1	B	246	LEU	N-CA	-5.68	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	60	ILE	CA-C	5.68	1.58	1.52
1	I	288	SER	CA-CB	5.68	1.60	1.53
1	K	319	ASN	CA-C	5.68	1.59	1.52
1	A	314	ALA	C-O	-5.68	1.16	1.23
1	A	360	GLU	CB-CG	5.68	1.69	1.52
1	C	256	PHE	CA-C	5.68	1.59	1.52
1	I	63	PRO	N-CA	-5.68	1.40	1.47
1	C	122	LEU	C-O	5.68	1.31	1.23
1	H	301	ASP	CA-C	-5.68	1.44	1.52
1	I	90	PHE	CB-CG	5.68	1.63	1.50
1	K	252	ARG	C-O	5.68	1.30	1.23
1	G	372	PHE	CA-C	-5.67	1.45	1.52
1	H	326	GLN	N-CA	5.67	1.53	1.46
1	O	48	PRO	CA-C	5.67	1.58	1.52
1	A	64	LYS	CD-CE	5.67	1.69	1.52
1	E	247	PHE	N-CA	-5.67	1.40	1.46
1	J	49	TYR	CZ-OH	5.67	1.50	1.38
1	C	320	GLY	C-O	5.67	1.31	1.23
1	D	88	THR	C-O	5.67	1.31	1.24
1	H	366	GLU	CA-C	-5.67	1.45	1.52
1	C	283	THR	CA-CB	5.67	1.61	1.53
1	K	92	ASP	C-N	5.67	1.41	1.34
1	N	394	PRO	C-O	5.67	1.31	1.24
1	O	169	TRP	N-CA	-5.67	1.39	1.46
1	N	193	THR	CA-CB	5.67	1.63	1.53
1	E	112	PRO	N-CA	-5.66	1.40	1.47
1	O	39	SER	CA-C	-5.66	1.45	1.52
1	D	467	LYS	CE-NZ	5.66	1.66	1.49
1	E	252	ARG	CG-CD	5.66	1.69	1.52
1	C	263	ARG	CZ-NH1	5.66	1.40	1.32
1	F	59	LYS	CA-C	5.66	1.60	1.52
1	C	472	ALA	N-CA	5.66	1.53	1.46
1	M	141	THR	CA-C	5.66	1.59	1.52
1	A	94	ALA	C-O	-5.66	1.16	1.24
1	B	55	GLN	CA-C	5.66	1.60	1.52
1	G	34	TYR	C-O	-5.66	1.16	1.23
1	D	129	THR	N-CA	5.65	1.54	1.46
1	D	229	CYS	C-O	-5.65	1.17	1.23
1	D	239	SER	C-O	-5.65	1.15	1.24
1	E	294	SER	N-CA	-5.65	1.38	1.46
1	L	266	THR	C-O	5.65	1.31	1.23
1	B	387	THR	CA-CB	-5.65	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	D	328	PHE	CA-CB	5.65	1.64	1.53
1	G	382	THR	CA-C	-5.65	1.45	1.52
1	B	396	ILE	CA-C	5.65	1.59	1.52
1	D	386	MET	SD-CE	5.65	1.93	1.79
1	F	42	LEU	CG-CD2	5.65	1.71	1.52
1	G	20	ALA	N-CA	5.65	1.56	1.46
1	J	302	ALA	C-O	-5.65	1.17	1.24
1	N	101	ALA	N-CA	5.65	1.53	1.46
1	N	284	LEU	CA-C	5.65	1.59	1.52
1	N	336	ARG	CZ-NH1	5.65	1.40	1.32
1	A	271	VAL	CA-CB	5.65	1.63	1.53
1	F	50	TYR	C-O	-5.65	1.17	1.23
1	H	205	PHE	CA-CB	-5.65	1.45	1.53
1	N	155	GLN	CD-NE2	5.65	1.45	1.33
1	O	220	VAL	CA-CB	-5.65	1.46	1.54
1	O	359	LYS	CG-CD	5.65	1.69	1.52
1	O	203	THR	CA-C	5.65	1.59	1.52
1	C	65	VAL	CA-CB	5.64	1.60	1.53
1	H	60	ILE	C-O	-5.64	1.18	1.24
1	N	346	VAL	N-CA	5.64	1.54	1.46
1	N	448	GLU	N-CA	5.64	1.53	1.46
1	B	208	MET	C-O	-5.64	1.18	1.24
1	B	146	CYS	CA-C	5.64	1.60	1.52
1	D	365	GLY	N-CA	5.64	1.53	1.45
1	E	293	PRO	C-O	-5.64	1.14	1.23
1	F	84	GLY	CA-C	5.64	1.57	1.52
1	H	75	VAL	CA-C	-5.64	1.46	1.52
1	E	157	CYS	N-CA	-5.64	1.39	1.47
1	G	234	TYR	CG-CD2	-5.64	1.27	1.39
1	O	250	LEU	C-O	5.64	1.30	1.24
1	H	256	PHE	C-O	5.64	1.30	1.23
1	M	336	ARG	C-O	-5.64	1.16	1.24
1	B	449	VAL	C-O	-5.63	1.17	1.24
1	G	200	MET	CA-CB	-5.63	1.45	1.53
1	G	254	GLN	CA-CB	-5.63	1.44	1.53
1	M	34	TYR	CZ-OH	5.63	1.49	1.38
1	L	87	ASP	CG-OD2	5.63	1.36	1.25
1	L	173	THR	C-N	5.63	1.40	1.33
1	N	113	LEU	C-N	-5.63	1.27	1.33
1	D	271	VAL	CA-CB	5.63	1.61	1.54
1	I	292	THR	CA-CB	-5.63	1.44	1.52
1	K	136	VAL	CA-CB	5.63	1.62	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	87	ASP	CB-CG	-5.63	1.38	1.52
1	C	373	ILE	C-O	-5.63	1.17	1.24
1	I	454	LYS	CD-CE	5.63	1.69	1.52
1	L	312	GLN	CA-C	-5.63	1.45	1.52
1	L	330	THR	C-O	5.63	1.30	1.23
1	A	125	LYS	N-CA	-5.63	1.39	1.46
1	H	40	SER	CA-C	5.63	1.60	1.52
1	H	316	GLY	N-CA	5.63	1.51	1.45
1	C	121	PRO	CB-CG	5.62	1.77	1.49
1	C	336	ARG	CD-NE	5.62	1.54	1.46
1	G	225	CYS	C-O	5.62	1.31	1.24
1	L	137	GLY	C-O	5.62	1.31	1.23
1	M	40	SER	C-O	5.62	1.31	1.23
1	O	467	LYS	CG-CD	5.62	1.69	1.52
1	G	455	PHE	CE2-CZ	5.62	1.55	1.38
1	C	226	SER	C-O	-5.62	1.16	1.23
1	D	304	ILE	C-O	-5.62	1.18	1.24
1	A	181	LYS	CA-C	5.62	1.60	1.52
1	E	258	ARG	N-CA	5.62	1.53	1.46
1	H	307	LYS	CA-CB	5.62	1.62	1.54
1	N	39	SER	C-O	5.62	1.30	1.23
1	N	52	ILE	CA-C	5.62	1.59	1.52
1	C	471	GLN	C-O	-5.61	1.17	1.24
1	I	164	PRO	CA-CB	5.61	1.61	1.53
1	B	236	LYS	CA-CB	-5.61	1.44	1.53
1	H	70	TYR	CZ-OH	5.61	1.49	1.38
1	K	157	CYS	CA-CB	-5.61	1.44	1.53
1	A	88	THR	CA-C	5.61	1.59	1.53
1	B	65	VAL	C-O	5.61	1.30	1.24
1	G	442	LYS	CA-C	5.61	1.60	1.52
1	H	460	ASP	C-O	-5.61	1.17	1.24
1	I	323	TRP	C-O	5.61	1.30	1.23
1	K	396	ILE	CA-C	5.61	1.59	1.52
1	M	349	SER	CA-C	5.61	1.60	1.52
1	L	296	SER	CA-C	5.61	1.60	1.52
1	A	308	PRO	CB-CG	-5.61	1.21	1.49
1	C	50	TYR	CA-C	-5.61	1.45	1.52
1	C	21	VAL	CA-CB	5.60	1.60	1.54
1	J	75	VAL	CA-C	-5.60	1.46	1.52
1	H	170	GLY	CA-C	-5.60	1.47	1.52
1	A	327	LEU	CG-CD1	-5.60	1.34	1.52
1	E	374	PHE	C-O	5.60	1.31	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	457	ALA	CA-CB	-5.60	1.45	1.54
1	C	41	ARG	CB-CG	5.60	1.69	1.52
1	D	134	LYS	CE-NZ	5.60	1.66	1.49
1	E	357	ASN	C-O	5.60	1.31	1.24
1	D	283	THR	CA-C	-5.60	1.45	1.53
1	G	299	THR	C-O	-5.60	1.17	1.23
1	G	373	ILE	CG1-CD1	-5.60	1.29	1.51
1	H	148	SER	CA-C	5.59	1.60	1.53
1	A	191	LEU	C-O	-5.59	1.17	1.23
1	D	273	ALA	CA-CB	5.59	1.62	1.53
1	G	322	CYS	CA-C	-5.59	1.47	1.53
1	I	31	THR	C-O	5.59	1.31	1.23
1	I	376	LEU	C-O	-5.59	1.17	1.23
1	L	119	GLY	CA-C	5.59	1.58	1.51
1	L	293	PRO	N-CA	5.59	1.54	1.47
1	C	312	GLN	N-CA	-5.59	1.39	1.46
1	G	205	PHE	CE2-CZ	5.59	1.55	1.38
1	H	166	GLY	CA-C	5.59	1.59	1.51
1	D	258	ARG	N-CA	5.59	1.53	1.46
1	L	74	ARG	C-O	5.59	1.30	1.24
1	F	231	TYR	C-N	-5.59	1.26	1.33
1	N	466	ARG	CZ-NH2	5.58	1.40	1.33
1	O	66	SER	N-CA	5.58	1.52	1.45
1	A	108	GLY	N-CA	-5.58	1.37	1.45
1	J	103	THR	N-CA	5.58	1.53	1.46
1	C	309	TYR	C-O	5.58	1.30	1.24
1	F	370	LEU	C-O	5.58	1.30	1.24
1	F	401	ASN	C-O	5.58	1.34	1.23
1	J	372	PHE	N-CA	5.58	1.52	1.46
1	L	76	LYS	CE-NZ	5.58	1.66	1.49
1	G	318	ASN	CA-C	-5.58	1.46	1.52
1	C	89	SER	C-N	5.58	1.41	1.33
1	C	218	SER	CB-OG	5.58	1.53	1.42
1	D	389	ILE	CB-CG2	-5.58	1.34	1.52
1	F	188	LEU	CA-CB	5.58	1.62	1.53
1	F	388	TYR	C-O	5.57	1.30	1.24
1	H	122	LEU	N-CA	5.57	1.53	1.46
1	N	192	ASN	N-CA	-5.57	1.39	1.45
1	N	327	LEU	CG-CD2	5.57	1.71	1.52
1	B	101	ALA	N-CA	5.57	1.53	1.46
1	C	263	ARG	C-O	5.57	1.30	1.23
1	F	231	TYR	CA-CB	5.57	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	292	THR	C-O	-5.57	1.17	1.24
1	J	339	ASN	CA-CB	-5.57	1.46	1.53
1	B	211	THR	CB-CG2	5.57	1.71	1.52
1	E	291	PRO	CA-C	5.57	1.60	1.52
1	I	37	ALA	C-O	5.57	1.30	1.23
1	L	466	ARG	CA-C	5.57	1.60	1.52
1	A	132	SER	N-CA	5.56	1.52	1.46
1	O	123	LEU	CA-C	-5.56	1.45	1.52
1	F	351	SER	C-O	-5.56	1.17	1.24
1	I	64	LYS	N-CA	-5.56	1.38	1.46
1	I	309	TYR	C-O	-5.56	1.17	1.24
1	A	374	PHE	C-O	5.56	1.30	1.24
1	D	466	ARG	NE-CZ	5.56	1.39	1.33
1	F	393	ASN	CG-OD1	-5.56	1.12	1.23
1	H	152	LYS	CG-CD	5.56	1.69	1.52
1	N	20	ALA	C-O	5.56	1.34	1.23
1	J	74	ARG	N-CA	5.56	1.53	1.46
1	J	228	ILE	CA-CB	-5.56	1.47	1.54
1	H	32	ASN	CG-ND2	5.56	1.45	1.33
1	O	329	VAL	CA-CB	-5.56	1.47	1.53
1	L	395	SER	CA-CB	-5.56	1.44	1.53
1	B	50	TYR	C-O	-5.55	1.17	1.23
1	E	159	ILE	CA-CB	-5.55	1.47	1.53
1	G	229	CYS	C-O	-5.55	1.17	1.24
1	A	281	THR	CA-CB	5.55	1.62	1.53
1	D	189	GLU	C-O	5.55	1.30	1.23
1	F	301	ASP	CA-C	-5.55	1.45	1.52
1	I	386	MET	SD-CE	5.55	1.93	1.79
1	B	71	ARG	N-CA	-5.55	1.38	1.46
1	D	255	MET	N-CA	5.55	1.52	1.46
1	M	93	PRO	CA-C	-5.55	1.43	1.52
1	M	223	ASP	N-CA	5.55	1.53	1.46
1	D	291	PRO	CA-C	5.55	1.60	1.52
1	F	103	THR	N-CA	5.55	1.53	1.46
1	E	182	ALA	N-CA	5.54	1.53	1.46
1	G	244	ASP	C-O	-5.54	1.16	1.24
1	H	336	ARG	CZ-NH2	5.54	1.40	1.33
1	E	87	ASP	C-O	5.54	1.31	1.24
1	L	82	LYS	CB-CG	5.54	1.69	1.52
1	C	446	PHE	C-O	-5.54	1.16	1.23
1	L	62	VAL	N-CA	5.54	1.50	1.46
1	M	299	THR	CA-C	5.54	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	44	ALA	CA-CB	5.54	1.64	1.53
1	G	320	GLY	N-CA	5.54	1.53	1.45
1	K	377	CYS	CB-SG	5.54	1.99	1.81
1	M	63	PRO	CB-CG	5.54	1.77	1.49
1	N	212	THR	CA-CB	-5.54	1.45	1.53
1	F	333	ASP	C-O	-5.53	1.18	1.23
1	J	168	HIS	C-O	5.53	1.30	1.23
1	N	52	ILE	C-O	5.53	1.31	1.23
1	N	312	GLN	CA-C	-5.53	1.45	1.52
1	B	229	CYS	C-O	-5.53	1.17	1.24
1	H	96	GLN	C-O	-5.53	1.16	1.23
1	L	179	GLN	CA-C	5.53	1.60	1.52
1	M	369	ASP	CA-C	5.53	1.58	1.52
1	E	245	MET	C-O	-5.53	1.17	1.24
1	F	380	THR	CA-CB	5.53	1.60	1.53
1	N	99	VAL	N-CA	5.53	1.52	1.46
1	B	378	LYS	CD-CE	5.53	1.69	1.52
1	E	221	PRO	CA-C	5.53	1.60	1.52
1	H	444	TYR	N-CA	5.53	1.52	1.45
1	J	73	PHE	N-CA	-5.53	1.39	1.46
1	K	336	ARG	CZ-NH2	5.53	1.40	1.33
1	B	335	THR	C-O	5.53	1.31	1.24
1	L	42	LEU	C-O	5.53	1.30	1.24
1	F	155	GLN	CD-OE1	5.52	1.34	1.23
1	F	174	PRO	CA-C	5.52	1.59	1.52
1	G	173	THR	CA-CB	5.52	1.61	1.52
1	H	195	LEU	CA-C	5.52	1.60	1.52
1	J	448	GLU	C-O	5.52	1.30	1.23
1	N	390	HIS	N-CA	5.52	1.53	1.46
1	A	69	GLN	C-O	5.52	1.30	1.23
1	A	276	TYR	N-CA	-5.52	1.39	1.45
1	C	109	ARG	N-CA	5.52	1.52	1.45
1	O	463	PRO	N-CA	5.52	1.54	1.47
1	F	356	ASP	CA-C	-5.52	1.44	1.52
1	M	454	LYS	CD-CE	5.52	1.69	1.52
1	A	310	TRP	N-CA	-5.52	1.40	1.46
1	C	185	CYS	CA-CB	5.51	1.61	1.53
1	G	374	PHE	CG-CD2	5.51	1.50	1.38
1	I	376	LEU	N-CA	-5.51	1.39	1.46
1	E	96	GLN	C-O	-5.51	1.16	1.23
1	K	152	LYS	CA-C	5.51	1.59	1.52
1	L	170	GLY	CA-C	-5.51	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	53	LYS	CE-NZ	5.51	1.65	1.49
1	A	128	ASP	C-O	-5.51	1.16	1.23
1	A	224	ILE	C-O	5.51	1.30	1.24
1	D	119	GLY	C-O	-5.51	1.18	1.23
1	D	275	LEU	C-O	-5.51	1.16	1.24
1	K	215	ALA	CA-CB	5.51	1.62	1.53
1	N	74	ARG	CD-NE	5.51	1.53	1.46
1	C	121	PRO	N-CD	5.51	1.55	1.47
1	C	177	ALA	CA-CB	5.51	1.62	1.53
1	E	131	ASN	N-CA	-5.51	1.39	1.46
1	F	239	SER	N-CA	-5.51	1.38	1.46
1	L	356	ASP	N-CA	5.51	1.53	1.46
1	O	156	LEU	CA-C	5.51	1.60	1.53
1	C	113	LEU	CG-CD2	5.50	1.70	1.52
1	D	298	VAL	CB-CG1	-5.50	1.34	1.52
1	D	311	LEU	CA-CB	-5.50	1.44	1.53
1	G	360	GLU	CA-C	5.50	1.59	1.52
1	J	27	TYR	CA-C	5.50	1.59	1.52
1	A	286	SER	C-O	-5.50	1.17	1.23
1	F	242	TYR	CA-C	5.50	1.60	1.52
1	K	207	ALA	CA-C	-5.50	1.45	1.53
1	A	366	GLU	CB-CG	5.50	1.69	1.52
1	G	232	PRO	C-O	5.50	1.31	1.23
1	C	99	VAL	CA-C	-5.50	1.45	1.52
1	F	198	GLY	N-CA	5.50	1.52	1.45
1	E	26	GLU	CA-C	5.49	1.60	1.52
1	E	158	LEU	C-O	5.49	1.30	1.24
1	E	362	LEU	C-O	-5.49	1.17	1.24
1	F	54	LYS	C-O	5.49	1.30	1.23
1	H	209	ASP	C-O	5.49	1.30	1.23
1	L	441	LEU	CG-CD1	-5.49	1.34	1.52
1	J	259	HIS	N-CA	5.49	1.53	1.46
1	C	64	LYS	CA-C	-5.49	1.45	1.53
1	E	169	TRP	C-O	-5.49	1.17	1.24
1	L	201	VAL	C-N	5.49	1.41	1.33
1	M	36	HIS	C-O	-5.49	1.17	1.23
1	G	300	SER	CA-CB	5.49	1.62	1.53
1	J	452	LYS	CE-NZ	5.49	1.65	1.49
1	K	399	ASP	N-CA	5.49	1.53	1.46
1	L	387	THR	CB-CG2	5.49	1.70	1.52
1	H	197	ASP	CA-CB	-5.49	1.44	1.53
1	N	230	LYS	CA-CB	5.49	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	326	GLN	CD-OE1	5.49	1.33	1.23
1	B	345	ALA	CA-CB	-5.48	1.44	1.53
1	G	98	LEU	C-O	5.48	1.30	1.23
1	L	155	GLN	CD-OE1	5.48	1.33	1.23
1	M	89	SER	C-O	5.48	1.31	1.24
1	D	252	ARG	CA-CB	-5.48	1.45	1.52
1	O	305	PHE	CA-CB	-5.48	1.45	1.53
1	O	280	THR	CA-C	5.48	1.59	1.52
1	B	162	ARG	N-CA	5.48	1.50	1.45
1	F	108	GLY	C-O	-5.48	1.16	1.23
1	O	336	ARG	CZ-NH1	5.48	1.40	1.32
1	D	276	TYR	CD2-CE2	5.48	1.55	1.38
1	F	309	TYR	C-O	-5.48	1.17	1.23
1	I	168	HIS	N-CA	5.48	1.52	1.45
1	I	331	VAL	N-CA	-5.48	1.39	1.46
1	D	36	HIS	C-O	5.47	1.30	1.23
1	F	146	CYS	CA-C	-5.47	1.45	1.52
1	F	252	ARG	CA-CB	-5.47	1.44	1.53
1	N	228	ILE	CG1-CD1	5.47	1.73	1.51
1	J	169	TRP	N-CA	-5.47	1.39	1.46
1	J	363	ARG	CB-CG	-5.47	1.36	1.52
1	L	224	ILE	CA-CB	-5.47	1.48	1.54
1	M	231	TYR	CA-C	5.47	1.59	1.52
1	A	310	TRP	CG-CD1	5.47	1.50	1.36
1	H	384	ASP	CA-CB	-5.47	1.44	1.53
1	M	34	TYR	CA-CB	5.47	1.63	1.53
1	E	389	ILE	CA-C	-5.47	1.45	1.52
1	F	448	GLU	C-N	-5.47	1.26	1.33
1	G	32	ASN	CA-C	-5.47	1.44	1.52
1	O	154	THR	N-CA	5.47	1.52	1.45
1	G	167	GLU	CB-CG	-5.47	1.36	1.52
1	E	75	VAL	N-CA	-5.47	1.39	1.46
1	F	239	SER	CA-C	-5.47	1.44	1.52
1	G	191	LEU	N-CA	5.47	1.52	1.46
1	K	230	LYS	C-O	5.47	1.30	1.23
1	O	348	SER	N-CA	5.47	1.53	1.46
1	A	144	ARG	CZ-NH1	5.46	1.40	1.32
1	A	335	THR	C-O	5.46	1.31	1.24
1	L	310	TRP	CA-C	-5.46	1.46	1.53
1	G	293	PRO	C-O	5.46	1.30	1.23
1	J	167	GLU	C-O	5.46	1.30	1.23
1	M	174	PRO	N-CA	5.46	1.53	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	337	SER	N-CA	-5.46	1.39	1.46
1	L	104	GLY	C-O	5.46	1.31	1.23
1	O	176	ASN	N-CA	5.46	1.53	1.46
1	G	101	ALA	CA-C	5.46	1.59	1.52
1	O	335	THR	CA-C	5.46	1.60	1.52
1	A	455	PHE	CA-C	-5.46	1.46	1.52
1	M	213	LEU	C-O	-5.46	1.16	1.24
1	M	301	ASP	CB-CG	5.46	1.65	1.52
1	B	24	THR	CA-CB	-5.46	1.43	1.53
1	C	210	PHE	C-O	5.46	1.30	1.24
1	A	160	GLY	N-CA	-5.45	1.39	1.45
1	C	136	VAL	CA-CB	-5.45	1.47	1.54
1	E	363	ARG	CA-CB	5.45	1.64	1.53
1	I	383	ALA	N-CA	-5.45	1.39	1.46
1	E	450	ASP	C-O	-5.45	1.17	1.24
1	K	150	ASP	C-O	5.45	1.30	1.24
1	K	208	MET	N-CA	-5.45	1.38	1.46
1	M	392	MET	SD-CE	5.45	1.93	1.79
1	O	161	CYS	CB-SG	5.45	1.99	1.81
1	F	337	SER	CA-C	-5.45	1.45	1.52
1	K	132	SER	N-CA	5.45	1.53	1.46
1	H	248	PHE	CE2-CZ	5.45	1.54	1.38
1	I	148	SER	CA-CB	5.45	1.61	1.53
1	B	254	GLN	CD-NE2	5.44	1.44	1.33
1	K	122	LEU	N-CA	5.44	1.53	1.46
1	N	346	VAL	CA-CB	5.44	1.62	1.54
1	C	235	LEU	C-O	5.44	1.30	1.24
1	F	52	ILE	CA-C	-5.44	1.45	1.52
1	F	193	THR	N-CA	-5.44	1.39	1.46
1	O	324	SER	C-O	-5.44	1.17	1.24
1	E	468	PHE	C-O	-5.44	1.17	1.24
1	F	392	MET	SD-CE	5.43	1.93	1.79
1	H	396	ILE	CG1-CD1	5.43	1.73	1.51
1	C	469	LEU	C-O	-5.43	1.17	1.24
1	D	121	PRO	C-N	5.43	1.40	1.33
1	L	33	ILE	CA-CB	5.43	1.60	1.54
1	B	30	ARG	NE-CZ	5.43	1.39	1.33
1	E	37	ALA	CA-C	-5.43	1.46	1.52
1	A	153	GLN	CG-CD	-5.43	1.38	1.52
1	K	110	GLY	C-O	5.43	1.30	1.23
1	C	144	ARG	CA-C	5.43	1.60	1.53
1	E	387	THR	N-CA	5.43	1.52	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	K	304	ILE	CG1-CD1	5.42	1.73	1.51
1	A	116	GLY	C-O	-5.42	1.17	1.23
1	G	49	TYR	CA-C	5.42	1.58	1.52
1	J	364	HIS	CA-CB	5.42	1.64	1.53
1	A	224	ILE	CA-C	5.42	1.59	1.52
1	A	242	TYR	CZ-OH	5.42	1.49	1.38
1	D	24	THR	CA-C	5.42	1.60	1.52
1	A	369	ASP	C-O	5.42	1.30	1.23
1	C	186	PRO	C-O	-5.42	1.18	1.24
1	H	54	LYS	CA-C	5.42	1.60	1.52
1	C	449	VAL	CA-C	-5.42	1.45	1.52
1	I	153	GLN	CB-CG	5.42	1.68	1.52
1	J	51	ALA	N-CA	5.42	1.52	1.46
1	K	206	GLY	C-O	5.42	1.30	1.23
1	M	372	PHE	C-O	5.42	1.30	1.23
1	N	392	MET	N-CA	5.42	1.52	1.46
1	A	458	ASP	CA-C	-5.42	1.46	1.53
1	B	307	LYS	CB-CG	5.42	1.68	1.52
1	J	189	GLU	CA-C	5.42	1.58	1.52
1	M	399	ASP	N-CA	5.42	1.53	1.46
1	I	139	SER	CA-C	5.42	1.60	1.52
1	O	264	ALA	CA-CB	-5.41	1.45	1.53
1	G	293	PRO	N-CA	-5.41	1.41	1.47
1	D	369	ASP	CA-C	5.41	1.58	1.52
1	G	277	ILE	CA-CB	-5.41	1.47	1.54
1	I	370	LEU	CG-CD1	-5.41	1.34	1.52
1	J	65	VAL	CA-CB	5.41	1.60	1.53
1	A	20	ALA	N-CA	5.41	1.56	1.46
1	H	366	GLU	CB-CG	5.41	1.68	1.52
1	J	247	PHE	C-O	5.41	1.31	1.24
1	L	310	TRP	CE2-CZ2	5.41	1.51	1.39
1	N	330	THR	CB-OG1	5.41	1.52	1.43
1	H	103	THR	C-O	-5.40	1.17	1.24
1	H	209	ASP	CB-CG	5.40	1.65	1.52
1	I	224	ILE	N-CA	-5.40	1.39	1.46
1	E	66	SER	CA-C	-5.40	1.46	1.52
1	J	203	THR	CA-C	-5.40	1.45	1.52
1	M	322	CYS	CB-SG	-5.40	1.63	1.81
1	C	79	ASP	CG-OD2	5.40	1.35	1.25
1	C	399	ASP	CG-OD2	5.40	1.35	1.25
1	E	341	SER	CA-C	-5.40	1.46	1.52
1	L	107	VAL	CA-C	-5.40	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	467	LYS	CE-NZ	5.40	1.65	1.49
1	B	54	LYS	C-O	5.40	1.30	1.23
1	B	393	ASN	C-O	5.40	1.31	1.24
1	C	205	PHE	CA-CB	-5.39	1.45	1.53
1	D	168	HIS	CA-C	5.39	1.59	1.52
1	E	21	VAL	CA-CB	-5.39	1.48	1.54
1	G	250	LEU	CG-CD1	-5.39	1.34	1.52
1	K	362	LEU	C-O	-5.39	1.17	1.24
1	I	178	ASN	N-CA	5.39	1.52	1.45
1	J	280	THR	C-O	5.39	1.30	1.23
1	M	375	GLN	C-O	5.39	1.30	1.24
1	O	342	VAL	C-O	5.39	1.30	1.24
1	A	188	LEU	CA-CB	5.39	1.62	1.53
1	D	115	VAL	N-CA	-5.39	1.40	1.46
1	L	367	GLU	C-O	5.39	1.30	1.23
1	C	45	VAL	C-O	-5.39	1.18	1.23
1	D	24	THR	CB-OG1	5.39	1.52	1.43
1	K	462	PHE	C-O	5.39	1.29	1.24
1	M	169	TRP	CD2-CE3	-5.38	1.31	1.40
1	H	220	VAL	CA-CB	-5.38	1.47	1.54
1	K	31	THR	C-O	5.38	1.30	1.23
1	N	49	TYR	C-O	5.38	1.32	1.23
1	B	462	PHE	CA-C	-5.38	1.47	1.52
1	H	288	SER	CA-C	-5.38	1.45	1.52
1	H	336	ARG	NE-CZ	5.38	1.39	1.33
1	I	157	CYS	CA-CB	-5.38	1.41	1.53
1	J	264	ALA	C-O	5.38	1.30	1.23
1	L	328	PHE	N-CA	-5.38	1.39	1.46
1	K	73	PHE	CA-CB	5.38	1.61	1.53
1	D	154	THR	CA-CB	5.37	1.64	1.53
1	E	84	GLY	CA-C	5.37	1.56	1.52
1	M	35	TYR	CZ-OH	-5.37	1.26	1.38
1	N	82	LYS	CB-CG	5.37	1.68	1.52
1	O	231	TYR	C-O	5.37	1.30	1.24
1	B	328	PHE	C-O	5.37	1.30	1.24
1	G	39	SER	CB-OG	5.37	1.52	1.42
1	D	259	HIS	C-O	5.37	1.31	1.23
1	K	164	PRO	C-O	5.37	1.30	1.23
1	O	341	SER	CA-CB	5.37	1.60	1.53
1	J	251	ARG	N-CA	5.37	1.52	1.46
1	J	325	ASN	N-CA	-5.37	1.38	1.46
1	O	43	LEU	CA-CB	-5.37	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	190	LEU	CA-CB	5.37	1.59	1.53
1	C	39	SER	CA-CB	-5.37	1.44	1.53
1	C	146	CYS	CA-C	-5.36	1.45	1.52
1	E	298	VAL	N-CA	5.36	1.52	1.46
1	H	301	ASP	N-CA	5.36	1.53	1.46
1	N	358	PHE	CA-C	-5.36	1.46	1.52
1	G	106	GLU	C-O	-5.36	1.17	1.23
1	J	67	GLY	CA-C	5.36	1.59	1.51
1	N	321	ILE	CA-CB	-5.36	1.47	1.53
1	N	350	ASP	C-O	5.36	1.30	1.23
1	I	326	GLN	CA-C	-5.36	1.46	1.52
1	K	169	TRP	C-O	5.36	1.30	1.24
1	H	342	VAL	C-O	5.36	1.29	1.24
1	J	293	PRO	CA-C	5.36	1.59	1.53
1	N	146	CYS	CB-SG	5.36	1.99	1.81
1	G	218	SER	CA-C	-5.36	1.46	1.53
1	N	184	GLU	C-O	5.36	1.30	1.24
1	C	332	VAL	N-CA	5.36	1.52	1.46
1	E	319	ASN	C-O	5.36	1.32	1.23
1	I	232	PRO	N-CA	5.36	1.53	1.47
1	J	280	THR	CA-C	5.36	1.59	1.52
1	L	276	TYR	N-CA	5.36	1.52	1.45
1	B	70	TYR	CD1-CE1	5.35	1.54	1.38
1	E	271	VAL	CB-CG2	-5.35	1.34	1.52
1	L	125	LYS	C-O	5.35	1.30	1.24
1	O	242	TYR	CA-C	5.35	1.59	1.52
1	B	295	GLY	C-O	-5.35	1.18	1.24
1	G	350	ASP	N-CA	5.35	1.52	1.45
1	C	253	GLU	CA-C	5.35	1.59	1.52
1	I	463	PRO	CA-C	5.35	1.59	1.52
1	M	309	TYR	CA-C	-5.35	1.46	1.52
1	M	441	LEU	N-CA	5.35	1.53	1.46
1	B	31	THR	CA-C	-5.35	1.46	1.52
1	E	43	LEU	N-CA	-5.35	1.39	1.45
1	F	344	SER	N-CA	-5.35	1.39	1.45
1	G	39	SER	C-O	5.35	1.31	1.23
1	N	399	ASP	C-O	-5.35	1.17	1.24
1	A	101	ALA	CA-C	-5.35	1.46	1.52
1	K	333	ASP	CA-C	5.35	1.58	1.53
1	H	117	ILE	CG1-CD1	5.34	1.72	1.51
1	M	125	LYS	N-CA	-5.34	1.40	1.46
1	C	313	ARG	CG-CD	5.34	1.68	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	107	VAL	CA-C	5.34	1.59	1.52
1	A	213	LEU	CA-CB	-5.34	1.45	1.53
1	L	350	ASP	C-O	-5.34	1.17	1.23
1	E	209	ASP	C-O	5.34	1.30	1.24
1	M	321	ILE	CB-CG2	5.34	1.70	1.52
1	F	30	ARG	CG-CD	5.34	1.68	1.52
1	G	398	GLU	CA-C	-5.34	1.46	1.52
1	I	317	HIS	N-CA	-5.34	1.39	1.46
1	J	81	ASN	N-CA	-5.34	1.39	1.45
1	L	155	GLN	CD-NE2	5.34	1.44	1.33
1	L	355	ASN	CB-CG	5.34	1.65	1.52
1	M	255	MET	SD-CE	5.34	1.92	1.79
1	N	354	LYS	CE-NZ	5.34	1.65	1.49
1	D	223	ASP	CA-C	5.33	1.60	1.52
1	J	132	SER	N-CA	5.33	1.52	1.46
1	E	207	ALA	CA-C	-5.33	1.46	1.53
1	K	175	SER	C-O	5.33	1.30	1.23
1	N	162	ARG	CZ-NH1	5.33	1.40	1.32
1	H	472	ALA	N-CA	5.33	1.53	1.46
1	J	359	LYS	CE-NZ	5.33	1.65	1.49
1	L	187	PRO	C-O	5.33	1.29	1.23
1	M	280	THR	CB-CG2	5.33	1.70	1.52
1	N	225	CYS	C-O	5.33	1.30	1.24
1	C	149	MET	SD-CE	-5.33	1.66	1.79
1	F	86	PRO	CA-C	5.33	1.59	1.52
1	I	341	SER	C-O	-5.33	1.17	1.24
1	B	81	ASN	CA-C	-5.33	1.45	1.52
1	F	33	ILE	CA-CB	5.33	1.60	1.54
1	F	258	ARG	N-CA	5.33	1.53	1.46
1	H	132	SER	CA-C	-5.33	1.46	1.53
1	O	291	PRO	CA-CB	-5.33	1.46	1.53
1	E	390	HIS	C-N	5.33	1.41	1.34
1	G	447	TRP	N-CA	-5.33	1.39	1.46
1	N	371	GLN	CA-C	-5.33	1.46	1.52
1	O	210	PHE	C-O	5.33	1.30	1.24
1	C	153	GLN	CD-OE1	5.33	1.33	1.23
1	G	299	THR	CB-CG2	5.33	1.70	1.52
1	K	466	ARG	CA-C	5.33	1.59	1.52
1	J	106	GLU	C-O	-5.32	1.18	1.24
1	L	258	ARG	CA-CB	5.32	1.61	1.53
1	O	376	LEU	CA-CB	5.32	1.60	1.53
1	G	306	ASN	N-CA	5.32	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	J	123	LEU	C-O	-5.32	1.17	1.23
1	J	173	THR	N-CA	5.32	1.54	1.46
1	K	396	ILE	CA-CB	5.32	1.60	1.54
1	L	141	THR	CA-C	-5.32	1.46	1.52
1	N	89	SER	CA-C	5.32	1.59	1.52
1	B	67	GLY	CA-C	5.32	1.58	1.51
1	E	184	GLU	C-O	5.32	1.30	1.24
1	H	139	SER	C-O	5.32	1.30	1.24
1	I	225	CYS	N-CA	5.32	1.52	1.46
1	K	76	LYS	C-O	5.32	1.30	1.24
1	H	261	PHE	C-O	5.32	1.30	1.23
1	J	466	ARG	NE-CZ	5.32	1.38	1.33
1	K	232	PRO	CG-CD	5.32	1.68	1.50
1	N	281	THR	CA-CB	5.32	1.62	1.53
1	C	92	ASP	C-N	5.31	1.40	1.33
1	C	98	LEU	C-O	5.31	1.30	1.24
1	E	242	TYR	CE2-CZ	5.31	1.50	1.38
1	G	208	MET	CA-C	5.31	1.59	1.52
1	K	244	ASP	CG-OD1	5.31	1.35	1.25
1	N	458	ASP	N-CA	5.31	1.53	1.46
1	O	336	ARG	N-CA	5.31	1.53	1.45
1	D	256	PHE	CB-CG	5.31	1.62	1.50
1	G	171	LYS	CB-CG	-5.31	1.36	1.52
1	H	76	LYS	CA-C	-5.31	1.45	1.52
1	N	165	ILE	N-CA	5.31	1.52	1.45
1	B	260	LEU	N-CA	5.31	1.52	1.46
1	E	88	THR	C-O	5.31	1.30	1.23
1	L	107	VAL	C-O	5.31	1.31	1.23
1	O	148	SER	C-O	5.31	1.31	1.24
1	C	164	PRO	CA-CB	5.31	1.61	1.53
1	B	55	GLN	CG-CD	5.31	1.65	1.52
1	A	247	PHE	CE2-CZ	-5.30	1.22	1.38
1	L	88	THR	CA-C	5.30	1.59	1.53
1	L	148	SER	CB-OG	5.30	1.52	1.42
1	D	288	SER	C-O	5.30	1.30	1.23
1	B	362	LEU	N-CA	-5.30	1.39	1.46
1	K	258	ARG	C-O	5.30	1.30	1.24
1	J	463	PRO	CA-C	5.30	1.59	1.52
1	D	465	GLY	N-CA	5.30	1.52	1.45
1	L	159	ILE	C-O	-5.30	1.18	1.24
1	L	281	THR	CA-C	5.30	1.59	1.52
1	E	155	GLN	CA-CB	-5.29	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	145	GLU	C-N	5.29	1.41	1.33
1	F	180	VAL	CA-CB	5.29	1.61	1.54
1	M	323	TRP	CA-CB	-5.29	1.44	1.53
1	B	398	GLU	CA-CB	-5.29	1.45	1.53
1	H	375	GLN	C-O	5.29	1.29	1.23
1	I	66	SER	CB-OG	5.29	1.52	1.42
1	L	164	PRO	CA-CB	5.29	1.61	1.53
1	M	119	GLY	C-O	5.29	1.31	1.23
1	O	464	LEU	C-O	5.29	1.30	1.24
1	E	127	ASP	CA-C	-5.29	1.45	1.52
1	E	200	MET	N-CA	5.29	1.52	1.46
1	K	97	ARG	NE-CZ	5.29	1.38	1.33
1	D	354	LYS	CE-NZ	5.29	1.65	1.49
1	J	372	PHE	CD1-CE1	5.29	1.54	1.38
1	I	345	ALA	C-O	5.29	1.30	1.23
1	F	251	ARG	CA-C	5.28	1.59	1.52
1	F	323	TRP	C-O	5.28	1.30	1.23
1	B	317	HIS	CA-C	-5.28	1.45	1.52
1	C	168	HIS	N-CA	5.28	1.52	1.46
1	H	448	GLU	CG-CD	5.28	1.65	1.52
1	K	96	GLN	N-CA	5.28	1.52	1.45
1	M	144	ARG	CA-CB	5.28	1.62	1.53
1	B	117	ILE	C-N	5.28	1.40	1.33
1	B	107	VAL	C-N	5.28	1.38	1.33
1	L	233	ASP	N-CA	5.28	1.53	1.46
1	B	317	HIS	N-CA	-5.28	1.39	1.46
1	I	230	LYS	CD-CE	5.28	1.68	1.52
1	K	144	ARG	N-CA	5.28	1.52	1.45
1	A	84	GLY	C-O	5.27	1.30	1.23
1	C	232	PRO	C-O	-5.27	1.16	1.23
1	K	171	LYS	N-CA	5.27	1.52	1.46
1	C	472	ALA	C-N	5.27	1.41	1.33
1	F	380	THR	N-CA	-5.27	1.39	1.46
1	O	357	ASN	C-O	5.27	1.31	1.24
1	O	224	ILE	C-O	5.27	1.32	1.25
1	A	160	GLY	CA-C	-5.27	1.47	1.52
1	E	96	GLN	CA-C	5.27	1.59	1.52
1	F	239	SER	CB-OG	5.27	1.52	1.42
1	M	101	ALA	N-CA	5.27	1.52	1.46
1	M	179	GLN	CA-C	5.27	1.59	1.52
1	F	148	SER	N-CA	5.27	1.52	1.45
1	G	61	ALA	C-O	-5.27	1.17	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	198	GLY	N-CA	5.27	1.53	1.45
1	O	191	LEU	C-O	5.27	1.30	1.24
1	C	40	SER	C-O	5.27	1.29	1.23
1	J	450	ASP	C-O	-5.27	1.17	1.24
1	D	72	VAL	CA-CB	5.26	1.60	1.53
1	H	466	ARG	CA-C	5.26	1.59	1.52
1	M	216	ASN	N-CA	5.26	1.53	1.46
1	O	46	GLY	N-CA	5.26	1.51	1.45
1	B	265	GLY	N-CA	5.26	1.50	1.45
1	F	314	ALA	C-O	-5.26	1.17	1.23
1	F	127	ASP	CA-C	-5.26	1.46	1.52
1	F	448	GLU	C-O	-5.26	1.17	1.24
1	L	463	PRO	C-N	5.26	1.40	1.33
1	L	257	VAL	CB-CG1	-5.26	1.35	1.52
1	E	97	ARG	CG-CD	5.26	1.68	1.52
1	E	245	MET	SD-CE	5.26	1.92	1.79
1	I	304	ILE	N-CA	5.26	1.53	1.46
1	L	318	ASN	CA-C	5.26	1.59	1.52
1	B	441	LEU	CA-C	5.26	1.60	1.52
1	D	228	ILE	CG1-CD1	5.26	1.72	1.51
1	J	112	PRO	CA-C	5.26	1.58	1.52
1	D	301	ASP	N-CA	-5.25	1.39	1.46
1	F	372	PHE	CA-C	-5.25	1.46	1.52
1	K	97	ARG	CA-C	5.25	1.60	1.53
1	N	147	ILE	CA-CB	5.25	1.61	1.54
1	N	249	TYR	CD2-CE2	-5.25	1.22	1.38
1	D	336	ARG	CA-CB	-5.25	1.46	1.53
1	D	380	THR	CB-OG1	5.25	1.52	1.43
1	M	80	PRO	CA-C	5.25	1.61	1.52
1	H	92	ASP	N-CA	-5.25	1.39	1.46
1	D	155	GLN	CA-CB	-5.25	1.44	1.53
1	D	260	LEU	N-CA	-5.25	1.40	1.46
1	L	105	VAL	CA-CB	-5.25	1.47	1.54
1	B	383	ALA	CA-CB	-5.25	1.45	1.53
1	D	30	ARG	CZ-NH1	-5.25	1.25	1.32
1	E	250	LEU	C-N	5.25	1.41	1.33
1	I	45	VAL	N-CA	5.25	1.52	1.46
1	O	376	LEU	N-CA	5.25	1.52	1.46
1	H	70	TYR	CA-C	5.25	1.59	1.52
1	A	221	PRO	C-O	5.24	1.30	1.24
1	F	364	HIS	C-O	-5.24	1.17	1.23
1	L	84	GLY	C-O	5.24	1.30	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	201	VAL	N-CA	5.24	1.52	1.46
1	G	448	GLU	C-O	5.24	1.30	1.23
1	O	94	ALA	CA-CB	-5.24	1.45	1.53
1	C	250	LEU	CG-CD1	5.24	1.69	1.52
1	D	167	GLU	N-CA	-5.24	1.39	1.46
1	D	321	ILE	C-N	-5.24	1.27	1.33
1	F	379	ILE	C-O	-5.24	1.18	1.24
1	J	202	ASP	CA-CB	-5.24	1.44	1.53
1	M	290	PHE	C-O	5.24	1.29	1.24
1	B	23	SER	CA-C	-5.24	1.46	1.52
1	G	133	ASN	C-O	5.24	1.30	1.24
1	J	146	CYS	N-CA	-5.24	1.39	1.46
1	M	275	LEU	CA-C	-5.24	1.45	1.52
1	M	466	ARG	CA-C	5.24	1.59	1.52
1	D	314	ALA	CA-C	-5.24	1.46	1.52
1	F	449	VAL	N-CA	-5.24	1.39	1.46
1	H	47	HIS	C-N	5.24	1.39	1.34
1	N	329	VAL	CA-CB	-5.24	1.47	1.53
1	D	272	PRO	CA-C	5.23	1.59	1.52
1	G	201	VAL	CB-CG2	5.23	1.69	1.52
1	A	341	SER	C-N	5.23	1.40	1.33
1	J	83	PHE	CE1-CZ	5.23	1.54	1.38
1	A	314	ALA	CA-C	-5.23	1.46	1.53
1	B	119	GLY	CA-C	5.23	1.57	1.51
1	C	237	MET	C-O	-5.23	1.17	1.24
1	K	179	GLN	C-O	5.23	1.30	1.24
1	L	111	GLN	C-O	-5.23	1.17	1.24
1	O	105	VAL	C-O	-5.23	1.18	1.24
1	B	400	TRP	CD2-CE3	5.23	1.48	1.40
1	C	367	GLU	CD-OE1	5.23	1.35	1.25
1	F	442	LYS	CG-CD	5.23	1.68	1.52
1	I	73	PHE	CE1-CZ	-5.23	1.23	1.38
1	J	386	MET	CA-CB	-5.23	1.45	1.53
1	K	96	GLN	C-O	5.23	1.30	1.23
1	M	104	GLY	N-CA	-5.23	1.37	1.45
1	C	325	ASN	CA-CB	-5.23	1.44	1.53
1	B	62	VAL	CA-CB	-5.22	1.47	1.54
1	F	283	THR	CA-C	5.22	1.60	1.52
1	F	466	ARG	CZ-NH2	5.22	1.40	1.33
1	G	203	THR	N-CA	5.22	1.52	1.46
1	D	55	GLN	CA-C	5.22	1.59	1.52
1	L	246	LEU	CG-CD2	5.22	1.69	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	468	PHE	CA-CB	5.22	1.61	1.53
1	F	368	TYR	CA-C	-5.22	1.45	1.53
1	L	122	LEU	CG-CD1	-5.22	1.35	1.52
1	B	137	GLY	C-O	5.22	1.28	1.23
1	D	90	PHE	C-O	5.22	1.30	1.24
1	E	336	ARG	C-O	-5.22	1.17	1.24
1	G	397	LEU	CA-C	-5.22	1.45	1.52
1	I	442	LYS	CE-NZ	5.22	1.65	1.49
1	L	379	ILE	CG1-CD1	5.22	1.72	1.51
1	M	109	ARG	C-O	5.22	1.29	1.24
1	H	221	PRO	N-CA	5.22	1.53	1.47
1	E	380	THR	N-CA	-5.22	1.40	1.46
1	J	375	GLN	C-O	5.22	1.30	1.23
1	O	365	GLY	C-O	5.22	1.30	1.23
1	O	449	VAL	CA-CB	-5.22	1.47	1.54
1	C	296	SER	CB-OG	5.21	1.52	1.42
1	D	161	CYS	C-O	-5.21	1.17	1.24
1	F	329	VAL	N-CA	-5.21	1.40	1.46
1	L	212	THR	C-O	5.21	1.30	1.24
1	O	350	ASP	CA-C	-5.21	1.45	1.53
1	A	338	THR	C-O	5.21	1.30	1.23
1	B	345	ALA	CA-C	-5.21	1.45	1.53
1	E	456	SER	CA-C	-5.21	1.46	1.52
1	H	387	THR	N-CA	-5.21	1.40	1.46
1	L	110	GLY	CA-C	-5.21	1.47	1.52
1	M	443	ASN	CG-OD1	5.21	1.33	1.23
1	B	271	VAL	CA-CB	-5.21	1.44	1.53
1	F	111	GLN	CB-CG	-5.21	1.36	1.52
1	K	363	ARG	CA-C	-5.21	1.46	1.52
1	D	351	SER	C-O	-5.21	1.17	1.24
1	F	99	VAL	CB-CG2	-5.21	1.35	1.52
1	F	217	LYS	CE-NZ	-5.21	1.33	1.49
1	H	83	PHE	CG-CD2	5.21	1.49	1.38
1	K	228	ILE	CG1-CD1	5.21	1.72	1.51
1	D	29	THR	CA-C	-5.21	1.46	1.52
1	I	339	ASN	N-CA	5.21	1.52	1.46
1	H	41	ARG	C-O	-5.20	1.17	1.23
1	H	167	GLU	N-CA	5.20	1.52	1.46
1	I	157	CYS	CA-C	-5.20	1.46	1.52
1	O	225	CYS	N-CA	5.20	1.52	1.46
1	E	58	ASN	C-O	5.20	1.30	1.24
1	E	228	ILE	N-CA	-5.20	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	K	188	LEU	CA-CB	5.20	1.61	1.53
1	D	154	THR	N-CA	5.20	1.52	1.46
1	J	258	ARG	CA-CB	5.20	1.61	1.53
1	J	444	TYR	CA-C	-5.20	1.46	1.52
1	K	275	LEU	N-CA	5.20	1.52	1.46
1	E	158	LEU	CA-C	5.20	1.59	1.52
1	A	452	LYS	CE-NZ	5.20	1.65	1.49
1	B	368	TYR	CB-CG	-5.20	1.40	1.51
1	C	155	GLN	CD-OE1	5.20	1.33	1.23
1	H	112	PRO	C-O	5.20	1.29	1.23
1	L	128	ASP	C-O	-5.20	1.17	1.23
1	F	347	SER	CA-C	5.19	1.58	1.52
1	O	363	ARG	CA-CB	5.19	1.62	1.53
1	E	363	ARG	C-O	5.19	1.29	1.24
1	G	315	GLN	CA-C	5.19	1.59	1.52
1	I	117	ILE	CA-C	5.19	1.59	1.52
1	I	324	SER	CA-CB	5.19	1.61	1.53
1	J	445	THR	CA-C	5.19	1.59	1.52
1	K	314	ALA	CA-CB	-5.19	1.45	1.53
1	L	389	ILE	C-O	5.19	1.30	1.24
1	D	45	VAL	N-CA	5.19	1.52	1.46
1	J	178	ASN	C-O	5.19	1.30	1.23
1	D	89	SER	CA-C	5.19	1.59	1.53
1	K	210	PHE	CA-CB	5.19	1.61	1.53
1	L	467	LYS	CB-CG	5.19	1.68	1.52
1	M	129	THR	CA-C	5.19	1.60	1.52
1	F	132	SER	CA-C	-5.18	1.46	1.52
1	I	141	THR	C-O	5.18	1.30	1.23
1	J	256	PHE	C-O	5.18	1.29	1.23
1	K	161	CYS	C-O	-5.18	1.16	1.23
1	M	68	LEU	CG-CD2	5.18	1.69	1.52
1	M	204	GLY	C-O	5.18	1.31	1.24
1	C	185	CYS	C-N	-5.18	1.27	1.33
1	H	455	PHE	CA-C	-5.18	1.46	1.52
1	O	41	ARG	C-O	-5.18	1.17	1.24
1	B	321	ILE	N-CA	-5.18	1.40	1.46
1	B	460	ASP	N-CA	5.18	1.52	1.46
1	H	332	VAL	CA-CB	-5.18	1.47	1.55
1	B	123	LEU	CA-CB	-5.18	1.44	1.53
1	J	372	PHE	CE1-CZ	-5.18	1.23	1.38
1	M	147	ILE	CG1-CD1	5.18	1.72	1.51
1	C	214	GLN	C-N	5.17	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	372	PHE	CD1-CE1	5.17	1.54	1.38
1	F	75	VAL	CA-C	-5.17	1.46	1.52
1	H	72	VAL	N-CA	-5.17	1.40	1.46
1	H	109	ARG	CA-C	-5.17	1.46	1.52
1	D	383	ALA	CA-CB	-5.17	1.45	1.53
1	G	265	GLY	CA-C	-5.17	1.46	1.52
1	K	260	LEU	CA-C	5.17	1.59	1.53
1	K	318	ASN	CA-C	-5.17	1.46	1.52
1	D	199	ASP	N-CA	5.17	1.52	1.45
1	H	104	GLY	C-O	-5.17	1.17	1.23
1	B	197	ASP	C-O	-5.17	1.17	1.23
1	F	218	SER	CB-OG	5.17	1.52	1.42
1	J	468	PHE	C-N	-5.17	1.27	1.33
1	K	219	ASP	N-CA	5.17	1.52	1.46
1	K	445	THR	CA-CB	-5.17	1.46	1.53
1	N	169	TRP	CA-C	-5.17	1.46	1.52
1	M	247	PHE	CE1-CZ	5.17	1.54	1.38
1	C	152	LYS	CD-CE	5.17	1.68	1.52
1	C	173	THR	CB-CG2	5.17	1.69	1.52
1	F	460	ASP	N-CA	-5.17	1.39	1.46
1	J	206	GLY	C-O	-5.17	1.17	1.23
1	L	65	VAL	C-O	5.17	1.29	1.24
1	J	86	PRO	CA-C	5.16	1.59	1.52
1	O	158	LEU	C-O	5.16	1.30	1.23
1	E	321	ILE	CA-CB	-5.16	1.48	1.53
1	I	57	SER	C-O	-5.16	1.17	1.24
1	O	216	ASN	CG-ND2	5.16	1.44	1.33
1	C	323	TRP	CA-C	-5.16	1.46	1.52
1	L	130	GLU	CG-CD	5.16	1.65	1.52
1	M	400	TRP	CB-CG	5.16	1.66	1.50
1	A	65	VAL	C-O	-5.16	1.17	1.23
1	F	171	LYS	CA-C	-5.16	1.46	1.52
1	O	111	GLN	C-N	5.16	1.39	1.33
1	O	332	VAL	CA-CB	-5.16	1.46	1.55
1	O	461	GLN	C-O	-5.16	1.16	1.24
1	B	299	THR	N-CA	-5.16	1.39	1.45
1	G	119	GLY	CA-C	5.16	1.57	1.51
1	H	188	LEU	C-O	5.16	1.29	1.23
1	I	150	ASP	N-CA	5.16	1.52	1.46
1	H	123	LEU	C-O	-5.15	1.17	1.23
1	E	353	TYR	C-O	-5.15	1.18	1.24
1	H	46	GLY	N-CA	5.15	1.50	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	K	332	VAL	CB-CG2	-5.15	1.35	1.52
1	F	165	ILE	CA-CB	-5.15	1.45	1.55
1	G	340	MET	CA-C	5.15	1.59	1.52
1	M	385	VAL	CA-C	5.15	1.59	1.52
1	B	221	PRO	CA-CB	-5.15	1.46	1.53
1	O	215	ALA	C-O	5.15	1.30	1.24
1	D	354	LYS	CA-CB	-5.15	1.45	1.53
1	E	189	GLU	CA-C	-5.15	1.46	1.52
1	G	342	VAL	C-O	5.15	1.29	1.24
1	J	458	ASP	CA-C	-5.15	1.47	1.53
1	E	82	LYS	C-O	-5.15	1.18	1.24
1	E	111	GLN	CA-C	5.15	1.59	1.52
1	K	271	VAL	CA-CB	5.14	1.62	1.54
1	J	463	PRO	C-N	5.14	1.40	1.33
1	M	289	TYR	CA-C	-5.14	1.46	1.52
1	C	97	ARG	CA-C	5.14	1.59	1.52
1	F	48	PRO	C-N	5.14	1.40	1.33
1	H	43	LEU	CA-CB	-5.14	1.45	1.53
1	K	397	LEU	CG-CD1	5.14	1.69	1.52
1	L	99	VAL	C-O	5.14	1.29	1.24
1	N	276	TYR	C-O	-5.14	1.17	1.23
1	E	371	GLN	C-O	5.14	1.30	1.23
1	I	162	ARG	N-CA	-5.14	1.41	1.45
1	L	458	ASP	CA-C	-5.14	1.47	1.53
1	F	346	VAL	CB-CG1	-5.14	1.35	1.52
1	H	448	GLU	CD-OE2	5.14	1.35	1.25
1	M	289	TYR	C-O	-5.14	1.17	1.23
1	A	184	GLU	CA-C	-5.13	1.46	1.53
1	L	69	GLN	N-CA	5.13	1.52	1.45
1	N	302	ALA	C-O	5.13	1.29	1.24
1	O	392	MET	SD-CE	5.13	1.92	1.79
1	B	110	GLY	N-CA	-5.13	1.40	1.44
1	G	396	ILE	CB-CG2	-5.13	1.35	1.52
1	J	100	TRP	CD2-CE2	-5.13	1.32	1.41
1	J	307	LYS	CB-CG	5.13	1.67	1.52
1	J	469	LEU	CA-CB	5.13	1.61	1.53
1	O	91	TYR	C-O	-5.13	1.17	1.24
1	E	25	ASP	C-O	-5.13	1.17	1.24
1	L	317	HIS	N-CA	-5.13	1.39	1.46
1	C	24	THR	C-O	-5.13	1.17	1.24
1	G	162	ARG	CD-NE	5.13	1.53	1.46
1	L	201	VAL	N-CA	-5.13	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	380	THR	CA-CB	5.13	1.59	1.53
1	O	352	THR	CB-CG2	5.13	1.69	1.52
1	B	378	LYS	C-O	5.13	1.30	1.23
1	E	97	ARG	C-O	-5.13	1.17	1.23
1	H	357	ASN	N-CA	-5.13	1.39	1.46
1	N	157	CYS	CA-C	5.12	1.58	1.52
1	O	202	ASP	CA-CB	-5.12	1.44	1.53
1	D	386	MET	C-O	5.12	1.30	1.24
1	J	242	TYR	C-O	5.12	1.30	1.24
1	N	258	ARG	NE-CZ	5.12	1.38	1.33
1	B	462	PHE	CA-CB	-5.12	1.44	1.54
1	E	32	ASN	CG-ND2	5.12	1.44	1.33
1	A	71	ARG	CZ-NH1	5.12	1.40	1.32
1	F	42	LEU	C-O	-5.12	1.18	1.24
1	F	80	PRO	C-O	-5.12	1.17	1.24
1	G	312	GLN	CA-C	-5.12	1.46	1.52
1	J	307	LYS	C-O	5.12	1.30	1.24
1	N	162	ARG	CA-CB	-5.12	1.47	1.53
1	A	23	SER	CA-C	5.11	1.59	1.52
1	C	255	MET	SD-CE	5.11	1.92	1.79
1	C	462	PHE	CD1-CE1	5.11	1.53	1.38
1	J	281	THR	CA-CB	5.11	1.62	1.53
1	F	173	THR	CA-C	5.11	1.58	1.52
1	M	381	LEU	CG-CD1	5.11	1.69	1.52
1	E	152	LYS	CD-CE	5.11	1.67	1.52
1	I	299	THR	CA-CB	5.11	1.62	1.53
1	I	352	THR	C-O	5.11	1.30	1.24
1	L	454	LYS	N-CA	5.11	1.52	1.46
1	E	116	GLY	C-O	-5.11	1.18	1.24
1	K	146	CYS	C-O	5.11	1.30	1.23
1	K	177	ALA	CA-CB	5.11	1.62	1.53
1	C	220	VAL	CA-C	-5.11	1.47	1.52
1	E	125	LYS	CD-CE	5.11	1.67	1.52
1	G	247	PHE	N-CA	-5.11	1.40	1.46
1	G	440	PRO	N-CA	5.11	1.54	1.47
1	L	288	SER	CA-C	-5.11	1.46	1.52
1	E	201	VAL	CA-CB	-5.11	1.47	1.54
1	F	336	ARG	N-CA	5.11	1.52	1.46
1	I	350	ASP	CA-C	-5.11	1.45	1.53
1	K	341	SER	CA-C	5.11	1.59	1.52
1	N	102	CYS	N-CA	-5.11	1.39	1.46
1	B	368	TYR	CA-C	-5.10	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	191	LEU	CA-CB	5.10	1.61	1.53
1	C	216	ASN	CG-ND2	5.10	1.44	1.33
1	F	323	TRP	CA-C	-5.10	1.46	1.52
1	J	208	MET	C-O	-5.10	1.17	1.24
1	L	336	ARG	N-CA	-5.10	1.39	1.46
1	O	219	ASP	CA-C	5.10	1.60	1.52
1	C	174	PRO	CA-C	5.10	1.58	1.52
1	C	377	CYS	N-CA	5.10	1.52	1.45
1	H	130	GLU	CD-OE2	5.10	1.35	1.25
1	K	452	LYS	C-O	-5.10	1.18	1.24
1	L	91	TYR	C-O	-5.10	1.18	1.23
1	A	280	THR	C-O	5.09	1.30	1.23
1	D	249	TYR	CA-CB	5.09	1.62	1.53
1	E	320	GLY	N-CA	5.09	1.52	1.45
1	L	85	PHE	C-O	5.09	1.30	1.24
1	N	20	ALA	N-CA	5.09	1.55	1.46
1	O	244	ASP	N-CA	5.09	1.52	1.46
1	D	122	LEU	N-CA	5.09	1.53	1.46
1	D	381	LEU	CG-CD2	-5.09	1.35	1.52
1	H	267	VAL	CA-C	5.09	1.58	1.53
1	J	359	LYS	N-CA	-5.09	1.40	1.46
1	N	379	ILE	C-O	5.09	1.29	1.24
1	A	105	VAL	C-O	5.09	1.28	1.23
1	I	35	TYR	CD2-CE2	5.09	1.53	1.38
1	I	202	ASP	C-O	5.09	1.30	1.23
1	K	234	TYR	CA-C	5.09	1.59	1.52
1	M	366	GLU	CB-CG	5.09	1.67	1.52
1	A	28	VAL	CB-CG2	-5.09	1.35	1.52
1	C	290	PHE	CE2-CZ	5.09	1.53	1.38
1	H	443	ASN	N-CA	-5.09	1.39	1.46
1	L	62	VAL	C-O	5.09	1.30	1.24
1	O	222	LEU	C-O	5.09	1.30	1.24
1	I	384	ASP	CA-CB	-5.08	1.45	1.53
1	J	364	HIS	CG-ND1	-5.08	1.32	1.38
1	A	370	LEU	CG-CD1	-5.08	1.35	1.52
1	D	51	ALA	C-O	-5.08	1.17	1.23
1	G	363	ARG	C-O	5.08	1.30	1.23
1	L	117	ILE	C-N	5.08	1.40	1.33
1	B	217	LYS	CA-C	5.08	1.59	1.52
1	C	22	VAL	CA-CB	-5.08	1.47	1.54
1	C	115	VAL	CA-C	-5.08	1.46	1.52
1	E	448	GLU	CD-OE2	5.08	1.35	1.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	147	ILE	C-O	5.08	1.29	1.24
1	O	321	ILE	C-O	5.08	1.29	1.23
1	C	466	ARG	C-O	5.08	1.29	1.24
1	G	266	THR	N-CA	5.08	1.52	1.46
1	L	223	ASP	CG-OD1	5.08	1.34	1.25
1	A	332	VAL	N-CA	5.08	1.51	1.46
1	K	83	PHE	CG-CD2	5.08	1.49	1.38
1	D	83	PHE	CE1-CZ	5.08	1.53	1.38
1	G	363	ARG	CZ-NH1	5.08	1.39	1.32
1	H	326	GLN	CD-OE1	5.08	1.33	1.23
1	K	252	ARG	CB-CG	5.08	1.67	1.52
1	K	328	PHE	CD2-CE2	5.08	1.53	1.38
1	K	474	LEU	C-OXT	5.08	1.33	1.23
1	N	90	PHE	CA-CB	5.08	1.59	1.52
1	O	350	ASP	CG-OD2	5.08	1.34	1.25
1	F	332	VAL	CA-CB	-5.07	1.47	1.54
1	H	88	THR	C-O	5.07	1.31	1.23
1	K	273	ALA	CA-C	5.07	1.59	1.52
1	E	314	ALA	C-O	5.07	1.30	1.23
1	H	460	ASP	CA-C	5.07	1.59	1.52
1	M	374	PHE	C-O	5.07	1.30	1.23
1	E	258	ARG	CA-CB	5.07	1.61	1.53
1	E	392	MET	C-O	-5.07	1.17	1.24
1	D	277	ILE	CG1-CD1	5.07	1.71	1.51
1	J	340	MET	C-O	-5.07	1.17	1.24
1	B	37	ALA	C-O	-5.07	1.17	1.23
1	I	157	CYS	C-N	5.07	1.40	1.33
1	K	80	PRO	C-O	5.07	1.30	1.24
1	M	49	TYR	CZ-OH	-5.07	1.27	1.38
1	M	447	TRP	CA-C	-5.07	1.46	1.52
1	A	194	VAL	CB-CG2	-5.07	1.35	1.52
1	C	394	PRO	N-CA	-5.07	1.41	1.47
1	E	466	ARG	CZ-NH2	5.07	1.40	1.33
1	H	257	VAL	CB-CG1	-5.07	1.35	1.52
1	J	142	ASP	N-CA	5.07	1.52	1.46
1	D	382	THR	C-O	5.06	1.30	1.23
1	K	375	GLN	CA-CB	-5.06	1.45	1.53
1	I	327	LEU	C-O	5.06	1.29	1.23
1	J	229	CYS	CA-C	-5.06	1.46	1.52
1	J	448	GLU	CA-C	5.06	1.59	1.52
1	O	291	PRO	CA-C	5.06	1.59	1.52
1	F	49	TYR	C-O	5.06	1.31	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	K	197	ASP	N-CA	-5.06	1.39	1.46
1	B	115	VAL	C-O	5.06	1.29	1.24
1	K	232	PRO	CA-C	-5.06	1.46	1.52
1	N	321	ILE	N-CA	-5.06	1.40	1.46
1	L	54	LYS	C-O	5.06	1.30	1.24
1	F	190	LEU	CA-CB	5.06	1.60	1.53
1	M	171	LYS	C-O	-5.06	1.17	1.23
1	A	162	ARG	N-CA	-5.05	1.41	1.45
1	F	318	ASN	C-O	-5.05	1.17	1.23
1	C	345	ALA	N-CA	5.05	1.52	1.46
1	F	96	GLN	N-CA	-5.05	1.39	1.45
1	M	383	ALA	CA-C	5.05	1.59	1.52
1	M	263	ARG	CZ-NH1	5.05	1.39	1.32
1	M	280	THR	C-O	5.05	1.29	1.23
1	N	304	ILE	CG1-CD1	5.05	1.71	1.51
1	A	125	LYS	CA-C	-5.05	1.47	1.53
1	B	72	VAL	C-O	-5.05	1.18	1.24
1	C	367	GLU	CA-CB	-5.05	1.45	1.53
1	L	70	TYR	CZ-OH	-5.05	1.27	1.38
1	D	302	ALA	C-O	-5.05	1.18	1.24
1	G	360	GLU	C-O	5.05	1.30	1.23
1	F	162	ARG	CA-C	5.05	1.58	1.52
1	F	282	GLY	C-O	5.05	1.31	1.23
1	M	122	LEU	C-O	5.05	1.30	1.24
1	H	321	ILE	CA-C	5.04	1.59	1.52
1	K	291	PRO	C-O	5.04	1.30	1.24
1	O	398	GLU	CD-OE2	5.04	1.34	1.25
1	M	92	ASP	CG-OD1	5.04	1.34	1.25
1	O	327	LEU	CB-CG	5.04	1.63	1.53
1	B	397	LEU	CG-CD1	-5.04	1.35	1.52
1	D	112	PRO	C-O	5.04	1.29	1.23
1	A	272	PRO	CG-CD	5.04	1.67	1.50
1	C	274	ASP	C-O	-5.04	1.17	1.24
1	E	209	ASP	CB-CG	5.04	1.64	1.52
1	I	30	ARG	CZ-NH1	-5.04	1.25	1.32
1	I	219	ASP	C-O	5.04	1.30	1.23
1	B	467	LYS	CA-C	5.04	1.59	1.52
1	F	115	VAL	C-O	5.04	1.29	1.23
1	J	368	TYR	CA-C	-5.04	1.46	1.52
1	M	300	SER	C-O	-5.04	1.17	1.24
1	A	113	LEU	CG-CD2	-5.03	1.35	1.52
1	D	466	ARG	CZ-NH1	5.03	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	26	GLU	N-CA	-5.03	1.39	1.46
1	J	219	ASP	C-O	-5.03	1.16	1.23
1	J	468	PHE	N-CA	-5.03	1.40	1.46
1	K	173	THR	C-N	5.03	1.39	1.33
1	M	445	THR	CA-C	5.03	1.59	1.52
1	K	324	SER	CA-C	-5.03	1.46	1.52
1	M	199	ASP	C-O	5.03	1.30	1.23
1	E	38	GLY	C-O	5.03	1.30	1.23
1	H	94	ALA	CA-C	-5.03	1.46	1.52
1	F	89	SER	CA-C	5.03	1.58	1.52
1	I	373	ILE	CG1-CD1	-5.03	1.32	1.51
1	J	90	PHE	N-CA	5.03	1.52	1.46
1	C	298	VAL	CB-CG1	-5.03	1.35	1.52
1	G	319	ASN	CA-CB	-5.03	1.46	1.52
1	I	117	ILE	N-CA	-5.03	1.40	1.46
1	O	97	ARG	N-CA	5.02	1.53	1.46
1	D	108	GLY	C-O	5.02	1.28	1.23
1	G	88	THR	C-O	5.02	1.30	1.23
1	I	263	ARG	N-CA	5.02	1.52	1.45
1	L	63	PRO	C-O	5.02	1.30	1.24
1	N	186	PRO	CA-C	5.02	1.56	1.52
1	A	109	ARG	N-CA	5.02	1.52	1.46
1	A	112	PRO	N-CA	-5.02	1.41	1.47
1	M	117	ILE	CA-C	5.02	1.59	1.52
1	D	86	PRO	C-O	5.02	1.30	1.24
1	E	126	LEU	CG-CD2	5.02	1.69	1.52
1	E	224	ILE	CA-CB	-5.02	1.48	1.54
1	E	248	PHE	C-O	5.02	1.30	1.23
1	I	329	VAL	CA-C	5.02	1.57	1.52
1	L	380	THR	CA-C	5.02	1.59	1.52
1	L	446	PHE	CA-C	-5.02	1.46	1.52
1	M	40	SER	CA-CB	5.02	1.61	1.53
1	O	49	TYR	C-O	-5.02	1.16	1.23
1	C	88	THR	CA-C	5.02	1.59	1.53
1	C	153	GLN	CG-CD	5.02	1.64	1.52
1	G	366	GLU	CA-CB	5.02	1.61	1.53
1	M	469	LEU	N-CA	-5.02	1.40	1.46
1	B	70	TYR	CZ-OH	-5.01	1.27	1.38
1	I	62	VAL	C-O	-5.01	1.18	1.23
1	J	39	SER	CA-C	-5.01	1.46	1.52
1	E	115	VAL	CA-C	-5.01	1.46	1.52
1	A	217	LYS	C-O	5.01	1.30	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	28	VAL	CA-CB	-5.01	1.47	1.54
1	E	84	GLY	N-CA	5.01	1.52	1.45
1	F	263	ARG	N-CA	5.01	1.51	1.45
1	G	33	ILE	C-O	5.01	1.29	1.24
1	I	232	PRO	C-O	5.01	1.30	1.23
1	M	159	ILE	CA-CB	-5.01	1.47	1.54
1	O	376	LEU	CA-C	-5.01	1.46	1.52
1	B	208	MET	CA-C	5.01	1.58	1.53
1	D	37	ALA	CA-C	-5.01	1.46	1.52
1	D	90	PHE	CA-CB	5.01	1.61	1.53
1	F	159	ILE	CA-CB	-5.01	1.47	1.54
1	J	202	ASP	CA-C	5.01	1.59	1.52
1	K	65	VAL	C-O	-5.01	1.18	1.24
1	M	318	ASN	CA-CB	-5.01	1.46	1.53
1	O	117	ILE	CA-C	-5.01	1.46	1.52
1	C	64	LYS	CE-NZ	5.01	1.64	1.49
1	K	390	HIS	CA-C	5.01	1.59	1.52
1	O	325	ASN	CA-C	5.01	1.59	1.52
1	K	64	LYS	CE-NZ	5.00	1.64	1.49
1	N	95	SER	N-CA	-5.00	1.39	1.46
1	A	79	ASP	CG-OD2	5.00	1.34	1.25
1	A	451	LEU	N-CA	5.00	1.51	1.46
1	B	264	ALA	N-CA	5.00	1.52	1.45
1	K	365	GLY	CA-C	5.00	1.58	1.51
1	K	69	GLN	N-CA	-5.00	1.39	1.45
1	K	441	LEU	CG-CD2	5.00	1.69	1.52
1	N	273	ALA	CA-CB	-5.00	1.45	1.53
1	O	260	LEU	C-O	5.00	1.29	1.23

All (1880) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	212	THR	N-CA-C	14.46	127.12	111.36
1	A	245	MET	N-CA-C	-13.69	96.44	111.36
1	J	364	HIS	CA-C-N	-13.46	111.25	121.61
1	J	364	HIS	C-N-CA	-13.46	111.25	121.61
1	H	211	THR	N-CA-C	-13.31	93.95	112.45
1	H	244	ASP	N-CA-C	-13.27	96.99	113.97
1	K	333	ASP	N-CA-C	12.59	128.26	107.23
1	I	244	ASP	N-CA-C	-11.82	98.99	113.41
1	I	278	LYS	CA-C-N	-11.78	111.01	122.20
1	I	278	LYS	C-N-CA	-11.78	111.01	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	244	ASP	N-CA-C	-11.70	98.81	113.55
1	G	89	SER	N-CA-C	-11.58	99.85	114.56
1	J	305	PHE	N-CA-C	11.28	125.08	110.53
1	M	457	ALA	N-CA-C	-11.01	97.42	112.94
1	K	212	THR	N-CA-C	10.94	123.20	111.28
1	O	161	CYS	N-CA-C	-10.94	99.25	112.59
1	B	364	HIS	CA-C-N	-10.78	110.25	121.35
1	B	364	HIS	C-N-CA	-10.78	110.25	121.35
1	B	283	THR	N-CA-C	-10.71	99.53	112.59
1	B	114	GLY	N-CA-C	-10.70	98.23	110.96
1	D	244	ASP	N-CA-C	-10.67	100.75	113.88
1	E	201	VAL	CB-CA-C	-10.59	99.94	111.59
1	G	278	LYS	CA-C-N	-10.50	112.96	122.73
1	G	278	LYS	C-N-CA	-10.50	112.96	122.73
1	D	283	THR	N-CA-C	-10.41	98.51	112.26
1	C	336	ARG	NE-CZ-NH2	-10.35	109.88	119.20
1	G	284	LEU	CA-C-N	10.29	130.93	119.92
1	G	284	LEU	C-N-CA	10.29	130.93	119.92
1	G	99	VAL	CB-CA-C	-10.27	94.94	110.55
1	L	259	HIS	N-CA-C	10.26	125.00	109.41
1	I	337	SER	N-CA-C	10.09	132.30	110.80
1	A	258	ARG	N-CA-C	-10.05	99.87	111.03
1	J	94	ALA	N-CA-C	10.00	123.44	111.33
1	H	210	PHE	N-CA-C	9.98	125.32	112.34
1	A	64	LYS	CG-CD-CE	-9.95	88.42	111.30
1	N	165	ILE	CA-C-N	-9.92	113.48	121.82
1	N	165	ILE	C-N-CA	-9.92	113.48	121.82
1	F	83	PHE	CA-C-N	-9.89	111.70	122.38
1	F	83	PHE	C-N-CA	-9.89	111.70	122.38
1	H	267	VAL	N-CA-C	9.87	121.35	108.12
1	J	165	ILE	CA-C-N	-9.79	113.46	122.17
1	J	165	ILE	C-N-CA	-9.79	113.46	122.17
1	I	203	THR	CA-C-N	-9.76	112.96	123.30
1	I	203	THR	C-N-CA	-9.76	112.96	123.30
1	N	271	VAL	CB-CA-C	-9.72	101.90	110.94
1	G	453	GLU	N-CA-C	9.71	124.71	113.15
1	G	33	ILE	N-CA-C	9.68	121.69	107.37
1	A	305	PHE	N-CA-C	9.64	124.36	109.60
1	E	271	VAL	CB-CA-C	-9.62	100.50	110.89
1	N	234	TYR	CA-C-N	9.61	134.15	120.79
1	N	234	TYR	C-N-CA	9.61	134.15	120.79
1	G	224	ILE	CB-CA-C	-9.55	101.65	110.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	71	ARG	CA-C-N	-9.48	110.77	122.90
1	N	71	ARG	C-N-CA	-9.48	110.77	122.90
1	O	162	ARG	CA-C-N	-9.47	110.62	120.38
1	O	162	ARG	C-N-CA	-9.47	110.62	120.38
1	L	467	LYS	CD-CE-NZ	-9.47	81.60	111.90
1	I	333	ASP	N-CA-C	9.43	123.24	107.20
1	B	159	ILE	CA-C-N	9.42	128.68	122.18
1	B	159	ILE	C-N-CA	9.42	128.68	122.18
1	E	210	PHE	N-CA-C	9.41	123.86	112.38
1	C	98	LEU	N-CA-C	9.39	124.21	108.90
1	N	166	GLY	CA-C-O	-9.33	111.59	121.57
1	F	183	GLY	N-CA-C	-9.29	102.93	113.79
1	C	244	ASP	N-CA-C	-9.28	102.34	114.31
1	L	30	ARG	NE-CZ-NH1	-9.27	112.23	121.50
1	O	201	VAL	CA-C-O	-9.20	109.28	120.78
1	E	457	ALA	N-CA-C	-9.19	99.82	113.61
1	O	239	SER	N-CA-C	9.18	124.07	113.15
1	E	370	LEU	N-CA-C	9.12	123.60	108.73
1	K	389	ILE	O-C-N	9.12	131.39	121.90
1	G	464	LEU	CA-C-N	-9.11	109.82	120.03
1	G	464	LEU	C-N-CA	-9.11	109.82	120.03
1	I	295	GLY	N-CA-C	-9.10	100.14	115.34
1	B	244	ASP	N-CA-C	-9.08	102.11	113.55
1	I	25	ASP	N-CA-C	-9.05	102.23	113.18
1	O	295	GLY	N-CA-C	-9.03	100.09	115.80
1	H	287	THR	N-CA-C	-9.03	99.63	113.89
1	E	244	ASP	N-CA-C	-8.99	102.09	113.23
1	C	258	ARG	NE-CZ-NH1	-8.98	112.52	121.50
1	F	210	PHE	N-CA-C	8.94	121.99	111.71
1	L	467	LYS	CG-CD-CE	-8.91	90.80	111.30
1	G	208	MET	N-CA-C	8.90	119.67	108.45
1	M	113	LEU	N-CA-C	-8.88	97.98	110.50
1	E	317	HIS	N-CA-C	8.88	122.07	111.33
1	C	84	GLY	N-CA-C	-8.84	95.98	111.46
1	F	278	LYS	CA-C-N	-8.84	114.42	122.29
1	F	278	LYS	C-N-CA	-8.84	114.42	122.29
1	B	134	LYS	CD-CE-NZ	-8.83	83.64	111.90
1	F	296	SER	CB-CA-C	-8.83	105.22	117.23
1	O	114	GLY	N-CA-C	-8.80	97.86	110.88
1	L	205	PHE	N-CA-C	-8.78	100.56	112.94
1	N	236	LYS	N-CA-C	8.78	120.54	110.97
1	C	238	VAL	N-CA-C	-8.78	101.43	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	114	GLY	CA-C-N	-8.78	109.59	122.58
1	H	114	GLY	C-N-CA	-8.78	109.59	122.58
1	J	81	ASN	N-CA-C	-8.77	102.75	113.97
1	A	65	VAL	CB-CA-C	-8.73	100.16	111.25
1	B	321	ILE	N-CA-C	-8.72	95.90	108.11
1	F	369	ASP	O-C-N	-8.72	113.48	123.42
1	A	463	PRO	N-CD-CG	-8.69	90.16	103.20
1	L	201	VAL	CB-CA-C	-8.66	98.78	111.68
1	E	287	THR	N-CA-C	-8.65	101.85	114.39
1	N	36	HIS	N-CA-C	-8.65	97.02	110.42
1	F	21	VAL	CA-C-O	-8.56	112.62	122.13
1	K	261	PHE	N-CA-C	8.55	123.12	110.46
1	N	95	SER	N-CA-C	8.55	123.84	113.23
1	L	102	CYS	N-CA-C	8.51	122.56	110.23
1	A	301	ASP	CA-C-N	8.50	132.03	120.38
1	A	301	ASP	C-N-CA	8.50	132.03	120.38
1	K	99	VAL	CB-CA-C	-8.50	99.03	111.19
1	N	329	VAL	CA-CB-CG1	-8.49	95.96	110.40
1	J	205	PHE	N-CA-C	-8.49	101.37	112.41
1	J	466	ARG	NE-CZ-NH2	8.47	126.83	119.20
1	C	94	ALA	N-CA-C	8.46	120.13	111.07
1	M	441	LEU	N-CA-C	-8.43	100.09	110.88
1	E	336	ARG	CG-CD-NE	8.41	130.51	112.00
1	J	287	THR	N-CA-C	-8.41	100.48	113.02
1	G	71	ARG	CA-C-N	-8.41	111.33	123.10
1	G	71	ARG	C-N-CA	-8.41	111.33	123.10
1	L	295	GLY	N-CA-C	-8.39	102.38	115.73
1	K	287	THR	CA-C-N	-8.38	110.74	123.14
1	K	287	THR	C-N-CA	-8.38	110.74	123.14
1	F	336	ARG	NE-CZ-NH2	-8.38	111.66	119.20
1	L	210	PHE	N-CA-C	8.36	121.32	111.71
1	A	191	LEU	N-CA-C	8.34	123.43	109.76
1	F	271	VAL	CB-CA-C	-8.31	102.85	111.00
1	M	274	ASP	N-CA-C	-8.31	103.62	112.93
1	D	379	ILE	N-CA-C	8.28	119.70	108.11
1	F	346	VAL	N-CA-C	-8.27	104.70	111.81
1	L	244	ASP	N-CA-C	-8.26	103.34	113.50
1	L	298	VAL	N-CA-C	-8.26	96.55	108.11
1	D	103	THR	CA-C-N	-8.24	111.32	121.38
1	D	103	THR	C-N-CA	-8.24	111.32	121.38
1	J	384	ASP	N-CA-C	8.22	121.05	111.02
1	C	201	VAL	CB-CA-C	-8.21	102.25	111.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	120	HIS	CA-C-N	8.21	128.68	119.32
1	H	120	HIS	C-N-CA	8.21	128.68	119.32
1	D	81	ASN	N-CA-C	-8.21	102.15	112.90
1	G	287	THR	N-CA-C	-8.21	100.15	112.54
1	G	305	PHE	N-CA-C	8.21	123.08	110.36
1	J	224	ILE	N-CA-C	-8.20	105.92	113.71
1	H	320	GLY	N-CA-C	8.19	125.43	113.48
1	D	129	THR	N-CA-C	8.18	122.88	113.15
1	A	244	ASP	N-CA-C	-8.16	103.84	113.88
1	B	298	VAL	CA-C-O	-8.16	111.84	120.57
1	J	143	ASN	N-CA-C	-8.16	102.64	112.59
1	D	87	ASP	N-CA-C	-8.15	103.36	113.38
1	E	389	ILE	N-CA-C	-8.15	101.17	112.50
1	N	331	VAL	CA-C-N	-8.15	112.59	123.10
1	N	331	VAL	C-N-CA	-8.15	112.59	123.10
1	I	109	ARG	CA-C-N	8.13	129.70	122.47
1	I	109	ARG	C-N-CA	8.13	129.70	122.47
1	L	321	ILE	CB-CG1-CD1	8.13	130.87	113.80
1	B	238	VAL	N-CA-C	-8.12	102.95	110.82
1	E	113	LEU	N-CA-C	-8.12	99.82	110.53
1	E	256	PHE	N-CA-C	8.11	120.30	108.86
1	I	52	ILE	CB-CG1-CD1	-8.11	96.77	113.80
1	L	271	VAL	N-CA-C	8.09	117.78	108.96
1	G	457	ALA	N-CA-C	-8.06	103.45	113.28
1	G	465	GLY	N-CA-C	8.05	122.65	112.83
1	C	110	GLY	N-CA-C	-8.05	94.11	113.18
1	J	113	LEU	N-CA-C	-8.04	99.91	110.53
1	D	305	PHE	N-CA-C	8.04	122.81	110.36
1	H	336	ARG	CG-CD-NE	8.01	129.62	112.00
1	N	367	GLU	N-CA-C	8.01	121.46	108.41
1	E	295	GLY	N-CA-C	-8.01	103.00	115.73
1	N	113	LEU	N-CA-C	-8.00	98.44	110.28
1	D	30	ARG	NE-CZ-NH2	7.99	126.39	119.20
1	D	61	ALA	N-CA-C	-7.99	102.31	112.93
1	D	232	PRO	CA-C-N	-7.98	111.75	122.85
1	D	232	PRO	C-N-CA	-7.98	111.75	122.85
1	C	109	ARG	NE-CZ-NH2	-7.98	112.02	119.20
1	G	292	THR	CB-CA-C	-7.97	100.99	110.15
1	B	287	THR	N-CA-C	-7.95	101.76	114.09
1	G	151	TYR	N-CA-C	7.95	120.58	110.33
1	N	392	MET	N-CA-C	7.89	120.65	111.02
1	A	257	VAL	CB-CA-C	-7.89	102.66	112.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	30	ARG	NE-CZ-NH2	7.89	126.30	119.20
1	F	386	MET	N-CA-C	7.88	120.57	111.11
1	E	65	VAL	CB-CA-C	-7.86	101.31	111.53
1	C	337	SER	N-CA-C	7.83	127.48	110.80
1	D	41	ARG	CA-C-N	-7.82	111.00	122.65
1	D	41	ARG	C-N-CA	-7.82	111.00	122.65
1	O	467	LYS	N-CA-C	-7.82	102.75	111.82
1	I	191	LEU	N-CA-C	7.82	122.58	109.76
1	J	321	ILE	N-CA-C	-7.81	97.23	108.17
1	A	259	HIS	N-CA-C	7.80	121.74	109.81
1	J	284	LEU	CA-C-N	7.80	129.59	119.84
1	J	284	LEU	C-N-CA	7.80	129.59	119.84
1	A	337	SER	N-CA-C	7.79	127.40	110.80
1	G	331	VAL	N-CA-C	7.78	119.53	108.17
1	M	169	TRP	CA-C-N	-7.78	115.25	122.17
1	M	169	TRP	C-N-CA	-7.78	115.25	122.17
1	B	239	SER	CA-CB-OG	-7.77	95.56	111.10
1	L	211	THR	N-CA-C	-7.76	102.14	111.69
1	C	114	GLY	CA-C-N	-7.76	111.09	122.58
1	C	114	GLY	C-N-CA	-7.76	111.09	122.58
1	F	383	ALA	CA-C-N	7.75	130.88	120.65
1	F	383	ALA	C-N-CA	7.75	130.88	120.65
1	J	114	GLY	N-CA-C	-7.75	100.79	111.09
1	G	98	LEU	N-CA-C	7.74	122.16	109.24
1	A	379	ILE	N-CA-C	7.71	118.96	108.17
1	J	62	VAL	CA-C-O	7.71	124.62	119.38
1	A	328	PHE	N-CA-C	7.70	120.96	108.41
1	I	107	VAL	N-CA-CB	-7.69	104.60	112.06
1	O	466	ARG	N-CA-C	-7.67	103.00	111.36
1	J	70	TYR	CA-C-N	-7.67	111.88	123.07
1	J	70	TYR	C-N-CA	-7.67	111.88	123.07
1	B	298	VAL	O-C-N	7.66	131.53	123.03
1	J	30	ARG	NE-CZ-NH2	7.66	126.09	119.20
1	G	108	GLY	N-CA-C	7.65	121.74	111.03
1	M	276	TYR	CA-C-N	-7.65	112.79	122.43
1	M	276	TYR	C-N-CA	-7.65	112.79	122.43
1	F	164	PRO	CA-C-N	-7.65	114.09	122.27
1	F	164	PRO	C-N-CA	-7.65	114.09	122.27
1	E	342	VAL	CA-C-N	-7.61	112.50	123.00
1	E	342	VAL	C-N-CA	-7.61	112.50	123.00
1	A	114	GLY	CA-C-N	-7.61	111.75	122.71
1	A	114	GLY	C-N-CA	-7.61	111.75	122.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	208	MET	CB-CG-SD	7.59	135.46	112.70
1	H	365	GLY	N-CA-C	7.58	131.15	113.18
1	O	229	CYS	N-CA-C	-7.58	97.33	109.76
1	D	359	LYS	CG-CD-CE	-7.55	93.93	111.30
1	E	236	LYS	N-CA-C	7.52	119.17	110.97
1	K	33	ILE	N-CA-C	7.51	118.70	107.51
1	A	71	ARG	NE-CZ-NH2	-7.51	112.44	119.20
1	K	348	SER	N-CA-C	-7.51	105.01	112.97
1	J	102	CYS	N-CA-C	7.50	121.27	110.24
1	F	261	PHE	N-CA-C	7.50	121.29	109.81
1	B	265	GLY	N-CA-C	-7.50	104.83	111.95
1	I	190	LEU	CA-C-O	-7.50	112.13	120.60
1	G	379	ILE	N-CA-C	7.49	118.69	107.75
1	M	376	LEU	CA-C-N	-7.49	110.02	121.86
1	M	376	LEU	C-N-CA	-7.49	110.02	121.86
1	H	225	CYS	N-CA-C	7.48	121.50	112.38
1	N	152	LYS	CG-CD-CE	-7.48	94.10	111.30
1	H	82	LYS	N-CA-C	-7.48	101.59	111.24
1	M	61	ALA	CA-C-N	-7.47	116.83	123.33
1	M	61	ALA	C-N-CA	-7.47	116.83	123.33
1	G	374	PHE	O-C-N	-7.46	114.52	123.10
1	B	30	ARG	NE-CZ-NH2	7.45	125.91	119.20
1	M	152	LYS	CD-CE-NZ	-7.45	88.05	111.90
1	H	47	HIS	N-CA-C	-7.44	100.03	110.29
1	D	24	THR	N-CA-C	-7.42	104.11	113.01
1	N	340	MET	CG-SD-CE	-7.41	84.59	100.90
1	H	325	ASN	N-CA-C	7.40	121.36	111.30
1	I	204	GLY	N-CA-C	-7.39	105.67	113.58
1	L	185	CYS	CA-C-N	7.39	125.06	119.66
1	L	185	CYS	C-N-CA	7.39	125.06	119.66
1	F	30	ARG	NE-CZ-NH1	-7.39	114.11	121.50
1	C	274	ASP	N-CA-C	-7.39	104.66	112.93
1	K	287	THR	N-CA-C	-7.39	101.39	112.54
1	F	321	ILE	N-CA-CB	-7.38	102.58	111.21
1	M	469	LEU	CA-C-O	-7.38	113.08	120.82
1	N	110	GLY	N-CA-C	-7.37	98.74	111.57
1	A	465	GLY	O-C-N	7.36	129.31	122.17
1	M	301	ASP	N-CA-C	-7.36	104.10	113.23
1	M	472	ALA	N-CA-C	-7.36	104.43	113.19
1	L	96	GLN	N-CA-C	7.35	120.95	110.14
1	L	30	ARG	NE-CZ-NH2	7.35	125.81	119.20
1	N	99	VAL	CB-CA-C	-7.35	99.38	110.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	295	GLY	N-CA-C	-7.34	103.08	115.34
1	B	295	GLY	N-CA-C	-7.34	106.60	114.67
1	D	287	THR	N-CA-C	-7.33	102.09	113.02
1	J	448	GLU	N-CA-C	7.33	121.03	110.10
1	K	82	LYS	N-CA-C	-7.31	103.24	111.14
1	D	186	PRO	O-C-N	-7.31	117.71	121.15
1	K	47	HIS	N-CA-C	-7.31	100.89	110.39
1	D	222	LEU	N-CA-C	7.30	120.17	111.33
1	N	194	VAL	N-CA-C	-7.30	97.77	108.87
1	K	305	PHE	N-CA-C	7.29	121.16	109.79
1	D	208	MET	N-CA-C	7.29	117.59	108.19
1	E	252	ARG	O-C-N	-7.28	116.80	123.50
1	L	236	LYS	O-C-N	7.28	129.90	122.03
1	O	46	GLY	N-CA-C	7.28	121.06	110.80
1	L	192	ASN	N-CA-C	-7.28	99.14	110.42
1	J	173	THR	N-CA-C	7.27	120.18	109.42
1	C	100	TRP	CA-C-O	7.26	128.12	120.36
1	B	218	SER	CA-C-N	-7.24	110.30	123.34
1	B	218	SER	C-N-CA	-7.24	110.30	123.34
1	D	121	PRO	CA-C-N	7.24	132.81	122.24
1	D	121	PRO	C-N-CA	7.24	132.81	122.24
1	J	244	ASP	N-CA-C	-7.24	104.42	113.55
1	N	245	MET	N-CA-C	-7.24	103.32	111.07
1	E	323	TRP	O-C-N	7.24	131.80	122.97
1	C	466	ARG	CD-NE-CZ	7.23	134.53	124.40
1	J	160	GLY	N-CA-C	7.23	124.07	112.06
1	J	456	SER	CA-C-O	-7.23	112.68	121.06
1	O	283	THR	N-CA-C	-7.23	102.72	112.26
1	K	178	ASN	N-CA-C	7.21	120.15	110.35
1	H	230	LYS	CB-CG-CD	-7.20	94.73	111.30
1	N	450	ASP	CA-C-N	-7.20	111.84	122.86
1	N	450	ASP	C-N-CA	-7.20	111.84	122.86
1	C	393	ASN	CA-C-N	7.19	127.03	119.05
1	C	393	ASN	C-N-CA	7.19	127.03	119.05
1	A	30	ARG	NE-CZ-NH2	7.18	125.66	119.20
1	O	376	LEU	CA-C-N	-7.18	111.42	122.62
1	O	376	LEU	C-N-CA	-7.18	111.42	122.62
1	O	62	VAL	CB-CA-C	-7.17	103.17	110.13
1	L	368	TYR	N-CA-C	7.16	121.53	110.42
1	D	303	GLN	N-CA-C	7.16	126.05	110.80
1	G	107	VAL	CA-C-N	-7.15	112.85	120.43
1	G	107	VAL	C-N-CA	-7.15	112.85	120.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	370	LEU	N-CA-C	7.15	120.42	108.20
1	E	286	SER	N-CA-C	7.15	119.53	110.24
1	D	265	GLY	N-CA-C	-7.14	102.36	111.72
1	E	307	LYS	N-CA-C	-7.13	97.42	108.55
1	L	158	LEU	CA-C-N	-7.13	113.61	123.10
1	L	158	LEU	C-N-CA	-7.13	113.61	123.10
1	M	108	GLY	CA-C-O	7.12	127.67	121.41
1	F	114	GLY	N-CA-C	-7.12	98.75	110.56
1	B	224	ILE	CB-CA-C	-7.12	103.94	110.63
1	O	457	ALA	CA-C-N	-7.12	112.06	123.23
1	O	457	ALA	C-N-CA	-7.12	112.06	123.23
1	B	165	ILE	CA-C-N	-7.11	115.84	121.82
1	B	165	ILE	C-N-CA	-7.11	115.84	121.82
1	D	328	PHE	CA-C-N	-7.11	114.07	123.17
1	D	328	PHE	C-N-CA	-7.11	114.07	123.17
1	B	336	ARG	NE-CZ-NH1	-7.11	114.39	121.50
1	F	77	LEU	N-CA-C	7.10	120.56	110.40
1	B	30	ARG	NE-CZ-NH1	-7.10	114.40	121.50
1	M	298	VAL	N-CA-C	-7.10	98.24	108.53
1	I	33	ILE	CB-CA-C	-7.10	101.38	111.31
1	F	349	SER	N-CA-C	-7.09	104.65	113.38
1	J	383	ALA	N-CA-C	7.09	119.67	111.02
1	M	304	ILE	N-CA-C	-7.09	105.87	112.96
1	H	278	LYS	CA-C-N	-7.08	115.99	122.29
1	H	278	LYS	C-N-CA	-7.08	115.99	122.29
1	A	321	ILE	CA-CB-CG2	-7.08	98.47	110.50
1	L	312	GLN	N-CA-C	-7.08	102.99	111.69
1	C	258	ARG	NH1-CZ-NH2	7.08	128.50	119.30
1	L	452	LYS	CB-CG-CD	-7.08	95.03	111.30
1	H	208	MET	CG-SD-CE	7.06	116.44	100.90
1	G	109	ARG	CA-C-N	7.05	127.64	121.58
1	G	109	ARG	C-N-CA	7.05	127.64	121.58
1	L	355	ASN	N-CA-C	7.05	119.57	111.11
1	C	37	ALA	N-CA-C	-7.05	96.76	108.32
1	E	252	ARG	CA-C-O	7.05	128.03	120.63
1	G	461	GLN	N-CA-C	7.04	125.81	110.80
1	D	47	HIS	N-CA-C	-7.04	99.96	110.24
1	G	200	MET	N-CA-C	7.04	121.15	109.46
1	H	41	ARG	NE-CZ-NH2	7.03	125.53	119.20
1	H	79	ASP	CB-CA-C	7.03	121.17	109.85
1	D	307	LYS	CA-C-O	7.03	128.40	120.46
1	G	202	ASP	CA-C-N	-7.02	111.61	122.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	202	ASP	C-N-CA	-7.02	111.61	122.49
1	D	155	GLN	CB-CA-C	-7.02	100.00	110.24
1	D	452	LYS	N-CA-C	-7.00	103.07	111.69
1	K	109	ARG	NE-CZ-NH1	-6.99	114.51	121.50
1	K	175	SER	N-CA-C	6.99	120.00	110.35
1	A	30	ARG	NE-CZ-NH1	-6.99	114.51	121.50
1	B	113	LEU	N-CA-C	-6.97	101.33	110.33
1	B	384	ASP	N-CA-C	6.97	118.88	111.28
1	C	455	PHE	N-CA-C	6.97	120.85	109.76
1	E	338	THR	N-CA-C	6.97	120.42	109.96
1	D	63	PRO	N-CA-C	6.97	121.30	111.33
1	C	296	SER	CA-C-N	-6.97	111.45	122.73
1	C	296	SER	C-N-CA	-6.97	111.45	122.73
1	M	94	ALA	N-CA-C	6.96	120.25	111.69
1	C	251	ARG	NE-CZ-NH1	6.94	128.44	121.50
1	L	151	TYR	N-CA-C	6.94	119.28	110.33
1	D	165	ILE	CA-C-N	-6.94	115.20	122.69
1	D	165	ILE	C-N-CA	-6.94	115.20	122.69
1	A	303	GLN	N-CA-C	6.94	120.91	110.64
1	B	386	MET	N-CA-C	6.92	119.42	111.11
1	J	201	VAL	CB-CA-C	-6.92	102.08	111.63
1	J	98	LEU	CD1-CG-CD2	-6.91	95.59	110.80
1	B	389	ILE	N-CA-C	-6.91	103.57	110.62
1	C	22	VAL	CA-C-O	-6.91	114.87	121.64
1	C	191	LEU	CD1-CG-CD2	6.91	125.99	110.80
1	F	77	LEU	CB-CG-CD1	-6.91	89.98	110.70
1	B	370	LEU	N-CA-C	6.90	119.77	108.52
1	D	37	ALA	CA-C-N	-6.89	114.91	121.46
1	D	37	ALA	C-N-CA	-6.89	114.91	121.46
1	O	210	PHE	N-CA-C	6.89	119.63	111.71
1	A	37	ALA	CA-C-N	-6.88	111.05	121.09
1	A	37	ALA	C-N-CA	-6.88	111.05	121.09
1	G	178	ASN	N-CA-C	6.87	119.43	110.43
1	A	156	LEU	N-CA-C	6.87	119.85	109.41
1	A	105	VAL	CB-CA-C	-6.86	101.39	112.03
1	E	441	LEU	N-CA-C	-6.86	102.04	110.61
1	K	223	ASP	CA-C-N	-6.85	113.49	121.71
1	K	223	ASP	C-N-CA	-6.85	113.49	121.71
1	D	274	ASP	N-CA-C	-6.85	104.54	113.17
1	J	252	ARG	NE-CZ-NH1	-6.85	114.65	121.50
1	C	45	VAL	CA-C-O	-6.84	114.02	121.28
1	C	96	GLN	N-CA-C	6.84	121.03	110.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	397	LEU	N-CA-C	6.84	118.53	111.14
1	F	189	GLU	CA-C-N	-6.84	113.06	122.30
1	F	189	GLU	C-N-CA	-6.84	113.06	122.30
1	E	30	ARG	NE-CZ-NH1	-6.84	114.66	121.50
1	L	446	PHE	CA-C-N	-6.84	113.07	122.30
1	L	446	PHE	C-N-CA	-6.84	113.07	122.30
1	A	333	ASP	N-CA-C	6.83	119.50	107.61
1	J	71	ARG	CA-C-N	-6.83	113.98	122.93
1	J	71	ARG	C-N-CA	-6.83	113.98	122.93
1	J	240	GLU	N-CA-C	-6.83	101.46	110.07
1	F	25	ASP	N-CA-C	-6.83	104.21	112.54
1	A	261	PHE	N-CA-C	6.82	120.16	110.14
1	I	370	LEU	CA-C-N	-6.82	111.89	122.59
1	I	370	LEU	C-N-CA	-6.82	111.89	122.59
1	M	21	VAL	N-CA-C	6.82	123.52	109.34
1	J	134	LYS	CD-CE-NZ	-6.81	90.10	111.90
1	J	120	HIS	CA-C-N	6.79	127.06	119.32
1	J	120	HIS	C-N-CA	6.79	127.06	119.32
1	M	212	THR	N-CA-C	6.79	120.79	112.23
1	H	295	GLY	N-CA-C	-6.76	97.17	113.18
1	G	136	VAL	N-CA-C	-6.75	100.06	109.45
1	B	30	ARG	CB-CG-CD	6.75	126.83	111.30
1	I	36	HIS	N-CA-C	-6.75	99.96	110.42
1	M	303	GLN	O-C-N	6.75	131.56	122.59
1	M	336	ARG	N-CA-C	-6.75	104.18	112.88
1	J	149	MET	CA-C-O	-6.74	113.47	120.89
1	M	65	VAL	CB-CA-C	-6.74	103.16	111.32
1	K	40	SER	N-CA-C	-6.74	102.12	110.41
1	D	292	THR	CA-C-N	-6.74	111.42	119.84
1	D	292	THR	C-N-CA	-6.74	111.42	119.84
1	G	27	TYR	CA-C-N	-6.74	113.63	122.99
1	G	27	TYR	C-N-CA	-6.74	113.63	122.99
1	G	379	ILE	CA-C-N	-6.73	113.21	122.30
1	G	379	ILE	C-N-CA	-6.73	113.21	122.30
1	I	64	LYS	CG-CD-CE	-6.73	95.82	111.30
1	K	114	GLY	CA-C-N	-6.72	112.63	122.58
1	K	114	GLY	C-N-CA	-6.72	112.63	122.58
1	C	71	ARG	CA-C-N	-6.72	113.97	122.43
1	C	71	ARG	C-N-CA	-6.72	113.97	122.43
1	M	98	LEU	N-CA-C	6.72	120.48	109.06
1	G	256	PHE	CA-C-N	-6.71	112.48	122.01
1	G	256	PHE	C-N-CA	-6.71	112.48	122.01

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	J	107	VAL	CA-C-O	-6.71	112.39	120.78
1	B	373	ILE	CA-CB-CG1	-6.71	99.00	110.40
1	H	240	GLU	CA-C-N	6.70	126.21	119.24
1	H	240	GLU	C-N-CA	6.70	126.21	119.24
1	C	270	THR	N-CA-C	6.70	119.46	110.35
1	D	270	THR	N-CA-C	6.69	118.94	110.24
1	G	441	LEU	N-CA-C	-6.69	103.05	113.02
1	M	96	GLN	N-CA-C	6.69	120.79	110.42
1	B	149	MET	CG-SD-CE	-6.69	86.19	100.90
1	B	106	GLU	CA-C-O	-6.68	113.11	120.33
1	D	289	TYR	CA-C-O	6.68	129.16	121.28
1	H	366	GLU	CA-C-O	-6.68	113.79	121.47
1	M	77	LEU	N-CA-C	6.68	119.53	110.31
1	K	283	THR	N-CA-C	-6.68	104.44	112.59
1	E	105	VAL	CG1-CB-CG2	-6.68	96.11	110.80
1	D	30	ARG	NE-CZ-NH1	-6.67	114.83	121.50
1	C	159	ILE	CB-CA-C	-6.67	101.05	110.12
1	A	64	LYS	CB-CG-CD	-6.66	95.97	111.30
1	F	114	GLY	CA-C-N	-6.66	112.72	122.58
1	F	114	GLY	C-N-CA	-6.66	112.72	122.58
1	G	314	ALA	N-CA-C	-6.66	100.93	110.59
1	C	147	ILE	CB-CG1-CD1	-6.66	99.81	113.80
1	L	218	SER	CA-C-N	-6.66	112.00	123.25
1	L	218	SER	C-N-CA	-6.66	112.00	123.25
1	N	141	THR	CB-CA-C	-6.65	98.83	109.80
1	L	39	SER	N-CA-C	-6.65	99.75	110.32
1	F	457	ALA	N-CA-C	-6.65	105.08	113.72
1	C	345	ALA	CA-C-N	6.64	129.06	120.56
1	C	345	ALA	C-N-CA	6.64	129.06	120.56
1	A	195	LEU	CD1-CG-CD2	6.64	125.40	110.80
1	O	64	LYS	CD-CE-NZ	-6.64	90.66	111.90
1	I	386	MET	N-CA-C	6.63	118.17	111.07
1	M	287	THR	N-CA-C	-6.63	103.41	113.89
1	K	155	GLN	CB-CA-C	-6.63	102.74	111.42
1	J	292	THR	CA-C-N	-6.62	113.89	120.98
1	J	292	THR	C-N-CA	-6.62	113.89	120.98
1	M	85	PHE	N-CA-C	6.62	120.23	110.10
1	F	321	ILE	N-CA-C	-6.62	98.33	107.99
1	L	267	VAL	CB-CA-C	-6.61	102.86	111.25
1	D	121	PRO	O-C-N	6.61	129.32	122.18
1	I	338	THR	N-CA-CB	6.61	121.20	110.43
1	I	447	TRP	CA-C-N	-6.61	113.61	122.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	447	TRP	C-N-CA	-6.61	113.61	122.72
1	J	71	ARG	CG-CD-NE	-6.60	97.47	112.00
1	D	220	VAL	CA-C-N	-6.60	113.16	119.89
1	D	220	VAL	C-N-CA	-6.60	113.16	119.89
1	O	338	THR	N-CA-C	6.60	124.86	110.80
1	C	256	PHE	N-CA-C	6.60	118.79	108.96
1	A	328	PHE	CA-C-N	-6.59	114.77	122.95
1	A	328	PHE	C-N-CA	-6.59	114.77	122.95
1	B	258	ARG	NE-CZ-NH1	-6.59	114.91	121.50
1	E	255	MET	CA-C-O	-6.59	114.18	121.23
1	M	210	PHE	N-CA-C	6.59	119.47	111.82
1	B	318	ASN	N-CA-C	6.59	119.84	109.96
1	O	220	VAL	CB-CA-C	-6.58	99.38	111.36
1	L	113	LEU	N-CA-C	-6.58	101.85	110.33
1	F	165	ILE	N-CA-C	6.57	118.53	109.46
1	F	446	PHE	N-CA-C	6.57	120.32	110.14
1	K	224	ILE	N-CA-C	6.57	119.97	113.53
1	G	462	PHE	CA-C-O	6.57	126.61	119.91
1	N	371	GLN	CB-CG-CD	-6.57	101.44	112.60
1	J	379	ILE	CB-CA-C	-6.56	102.93	110.41
1	F	274	ASP	N-CA-C	-6.56	104.85	112.92
1	I	208	MET	N-CA-C	6.56	116.65	108.19
1	E	257	VAL	N-CA-C	6.56	117.18	107.15
1	J	104	GLY	CA-C-N	-6.56	113.24	122.75
1	J	104	GLY	C-N-CA	-6.56	113.24	122.75
1	K	61	ALA	CA-C-N	-6.56	117.15	122.85
1	K	61	ALA	C-N-CA	-6.56	117.15	122.85
1	C	400	TRP	N-CA-C	-6.55	105.17	112.57
1	E	223	ASP	N-CA-C	6.55	120.86	112.34
1	G	296	SER	CA-C-N	-6.55	112.41	122.62
1	G	296	SER	C-N-CA	-6.55	112.41	122.62
1	K	453	GLU	N-CA-C	6.54	120.97	112.92
1	C	33	ILE	CA-C-N	-6.54	112.54	122.81
1	C	33	ILE	C-N-CA	-6.54	112.54	122.81
1	H	335	THR	CA-C-O	6.54	127.42	119.38
1	F	233	ASP	CA-C-N	6.53	129.04	120.28
1	F	233	ASP	C-N-CA	6.53	129.04	120.28
1	L	113	LEU	N-CA-CB	6.53	119.17	110.29
1	N	122	LEU	CA-C-N	6.52	129.97	120.71
1	N	122	LEU	C-N-CA	6.52	129.97	120.71
1	F	391	SER	N-CA-C	-6.52	103.67	111.69
1	O	90	PHE	N-CA-C	-6.52	105.20	112.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	276	TYR	CA-C-N	-6.52	114.56	122.90
1	K	276	TYR	C-N-CA	-6.52	114.56	122.90
1	N	312	GLN	N-CA-C	-6.52	103.45	111.40
1	O	284	LEU	CB-CG-CD1	-6.51	91.16	110.70
1	C	154	THR	N-CA-C	6.51	119.61	109.52
1	K	219	ASP	N-CA-C	6.51	121.83	111.81
1	K	98	LEU	N-CA-C	6.50	119.01	108.34
1	F	190	LEU	CD1-CG-CD2	6.50	125.11	110.80
1	D	441	LEU	N-CA-C	-6.49	102.01	111.30
1	E	109	ARG	CD-NE-CZ	6.49	133.49	124.40
1	H	62	VAL	CB-CA-C	-6.49	99.55	111.36
1	J	359	LYS	CD-CE-NZ	-6.49	91.13	111.90
1	F	96	GLN	N-CA-C	6.49	120.19	110.14
1	N	460	ASP	N-CA-C	6.49	122.01	111.37
1	F	69	GLN	N-CA-C	6.48	119.67	110.14
1	K	257	VAL	N-CA-C	6.48	116.57	107.37
1	A	301	ASP	O-C-N	6.48	129.53	122.15
1	B	367	GLU	CB-CA-C	-6.48	100.84	110.62
1	N	244	ASP	N-CA-C	-6.48	105.53	113.50
1	O	335	THR	CA-C-O	6.47	127.34	119.31
1	C	302	ALA	N-CA-C	-6.47	104.86	112.89
1	H	390	HIS	CA-C-O	-6.47	114.02	120.82
1	J	325	ASN	N-CA-CB	-6.47	102.20	111.84
1	D	467	LYS	CG-CD-CE	-6.47	96.42	111.30
1	J	342	VAL	CA-C-O	6.46	127.18	120.39
1	A	150	ASP	N-CA-C	-6.46	97.75	108.34
1	I	151	TYR	N-CA-C	6.46	119.27	110.55
1	I	107	VAL	N-CA-C	6.46	115.91	106.55
1	A	155	GLN	CA-C-N	-6.45	111.98	122.82
1	A	155	GLN	C-N-CA	-6.45	111.98	122.82
1	G	210	PHE	N-CA-C	6.45	118.31	111.28
1	G	294	SER	CA-CB-OG	-6.45	98.20	111.10
1	C	397	LEU	CA-C-N	6.45	129.16	120.65
1	C	397	LEU	C-N-CA	6.45	129.16	120.65
1	J	240	GLU	CA-C-N	6.45	126.21	119.05
1	J	240	GLU	C-N-CA	6.45	126.21	119.05
1	K	253	GLU	CB-CG-CD	-6.45	101.64	112.60
1	F	239	SER	CA-CB-OG	-6.45	98.21	111.10
1	C	283	THR	N-CA-C	-6.44	104.74	112.59
1	F	258	ARG	CA-C-N	-6.44	111.36	123.27
1	F	258	ARG	C-N-CA	-6.44	111.36	123.27
1	O	234	TYR	N-CA-C	-6.44	104.26	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	337	SER	N-CA-C	6.43	124.51	110.80
1	G	452	LYS	N-CA-C	-6.43	103.55	111.40
1	D	165	ILE	N-CA-C	6.43	118.29	108.71
1	H	465	GLY	N-CA-C	-6.43	105.04	112.50
1	N	152	LYS	CD-CE-NZ	-6.43	91.32	111.90
1	E	317	HIS	CA-C-N	-6.42	112.32	121.50
1	E	317	HIS	C-N-CA	-6.42	112.32	121.50
1	M	469	LEU	O-C-N	6.42	128.68	122.07
1	N	292	THR	CA-C-N	-6.42	111.82	119.84
1	N	292	THR	C-N-CA	-6.42	111.82	119.84
1	M	215	ALA	N-CA-C	6.42	117.96	110.97
1	D	107	VAL	N-CA-CB	-6.41	105.22	111.89
1	D	261	PHE	N-CA-C	6.41	118.93	109.69
1	H	296	SER	CA-C-N	-6.41	112.61	122.62
1	H	296	SER	C-N-CA	-6.41	112.61	122.62
1	I	194	VAL	CA-C-N	-6.41	112.33	121.50
1	I	194	VAL	C-N-CA	-6.41	112.33	121.50
1	K	36	HIS	N-CA-C	-6.41	100.48	110.42
1	G	77	LEU	CA-C-N	-6.41	113.18	119.78
1	G	77	LEU	C-N-CA	-6.41	113.18	119.78
1	K	292	THR	CA-C-N	-6.41	113.93	120.85
1	K	292	THR	C-N-CA	-6.41	113.93	120.85
1	L	271	VAL	CB-CA-C	-6.40	103.32	110.68
1	C	263	ARG	N-CA-C	-6.40	101.05	110.52
1	H	466	ARG	N-CA-C	6.40	117.92	111.07
1	J	242	TYR	O-C-N	6.40	129.91	122.17
1	C	271	VAL	CB-CA-C	-6.40	104.73	111.00
1	G	120	HIS	CA-C-O	6.40	125.54	119.72
1	L	336	ARG	NE-CZ-NH1	-6.39	115.11	121.50
1	A	461	GLN	N-CA-C	6.39	120.80	113.19
1	A	263	ARG	NE-CZ-NH2	-6.39	113.45	119.20
1	E	259	HIS	N-CA-C	6.39	119.42	109.52
1	B	251	ARG	NE-CZ-NH2	6.39	124.95	119.20
1	K	244	ASP	N-CA-C	-6.38	97.20	110.80
1	D	217	LYS	CD-CE-NZ	-6.37	91.50	111.90
1	K	303	GLN	N-CA-C	6.37	119.72	110.42
1	C	329	VAL	N-CA-C	6.37	115.78	106.55
1	E	95	SER	N-CA-CB	-6.36	101.79	110.95
1	D	369	ASP	CA-C-N	-6.36	114.23	123.00
1	D	369	ASP	C-N-CA	-6.36	114.23	123.00
1	E	155	GLN	O-C-N	-6.36	115.91	123.28
1	H	203	THR	N-CA-C	6.36	121.20	113.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	382	THR	OG1-CB-CG2	6.36	122.01	109.30
1	A	120	HIS	CA-C-N	6.35	126.56	119.32
1	A	120	HIS	C-N-CA	6.35	126.56	119.32
1	I	209	ASP	N-CA-C	-6.35	96.72	108.02
1	J	162	ARG	CA-C-N	-6.35	113.84	120.38
1	J	162	ARG	C-N-CA	-6.35	113.84	120.38
1	F	448	GLU	CA-C-N	-6.34	113.98	122.98
1	F	448	GLU	C-N-CA	-6.34	113.98	122.98
1	I	76	LYS	CD-CE-NZ	-6.34	91.61	111.90
1	C	304	ILE	N-CA-C	-6.34	104.07	113.39
1	F	292	THR	CA-C-O	6.33	124.01	119.32
1	M	322	CYS	N-CA-C	6.33	120.52	110.70
1	H	292	THR	CA-C-O	6.33	126.41	119.32
1	O	100	TRP	CA-C-O	6.33	127.33	120.43
1	E	228	ILE	CA-C-O	6.32	126.65	120.27
1	L	82	LYS	N-CA-C	-6.32	101.25	111.04
1	A	112	PRO	CA-C-O	-6.31	113.02	120.85
1	L	257	VAL	CA-CB-CG1	-6.31	99.67	110.40
1	O	247	PHE	N-CA-C	-6.31	104.38	113.21
1	G	446	PHE	CA-C-O	-6.31	113.93	121.56
1	H	53	LYS	CA-C-O	-6.31	113.84	121.28
1	F	154	THR	N-CA-C	6.31	119.81	109.85
1	A	297	MET	N-CA-C	6.30	119.83	108.48
1	J	366	GLU	N-CA-C	-6.30	98.71	109.24
1	B	143	ASN	N-CA-C	-6.30	104.91	112.59
1	I	255	MET	CA-C-N	-6.29	111.04	121.80
1	I	255	MET	C-N-CA	-6.29	111.04	121.80
1	M	337	SER	N-CA-C	6.29	124.20	110.80
1	E	248	PHE	CA-C-N	-6.29	111.56	121.87
1	E	248	PHE	C-N-CA	-6.29	111.56	121.87
1	J	239	SER	N-CA-C	6.28	120.80	113.20
1	K	328	PHE	CA-C-N	-6.28	114.56	123.11
1	K	328	PHE	C-N-CA	-6.28	114.56	123.11
1	N	144	ARG	NE-CZ-NH1	-6.28	115.22	121.50
1	B	257	VAL	CB-CA-C	-6.28	103.20	111.81
1	D	123	LEU	CA-C-N	-6.28	114.19	123.11
1	D	123	LEU	C-N-CA	-6.28	114.19	123.11
1	D	465	GLY	N-CA-C	6.28	120.26	112.73
1	E	258	ARG	N-CA-C	-6.28	104.36	111.14
1	F	29	THR	CA-CB-CG2	6.28	121.17	110.50
1	G	201	VAL	CG1-CB-CG2	6.28	124.61	110.80
1	H	387	THR	N-CA-C	-6.28	104.36	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	363	ARG	NE-CZ-NH1	-6.28	115.22	121.50
1	C	166	GLY	N-CA-C	-6.27	101.31	110.90
1	E	245	MET	N-CA-C	-6.27	104.55	111.82
1	A	336	ARG	NE-CZ-NH2	6.27	124.84	119.20
1	E	222	LEU	N-CA-C	6.27	118.91	111.33
1	N	295	GLY	N-CA-C	-6.27	107.78	114.67
1	J	258	ARG	CA-C-O	-6.26	114.25	120.82
1	B	449	VAL	CB-CA-C	-6.26	103.29	110.73
1	C	158	LEU	CA-C-O	-6.26	113.90	121.28
1	G	374	PHE	N-CA-C	6.25	120.24	110.17
1	J	272	PRO	CB-CA-C	-6.25	103.58	111.71
1	E	305	PHE	CA-C-O	-6.25	113.75	121.88
1	N	116	GLY	N-CA-C	6.25	120.62	112.25
1	A	361	TYR	N-CA-C	-6.24	99.84	109.14
1	G	303	GLN	N-CA-C	6.24	124.09	110.80
1	F	339	ASN	CA-C-O	-6.24	113.79	120.46
1	H	449	VAL	CA-C-O	6.24	127.34	120.48
1	A	396	ILE	N-CA-C	-6.23	104.43	110.72
1	I	42	LEU	CD1-CG-CD2	6.23	124.51	110.80
1	C	66	SER	CA-C-O	-6.23	114.06	121.66
1	A	166	GLY	O-C-N	-6.23	117.64	123.25
1	E	303	GLN	CA-C-O	6.23	127.18	120.95
1	K	65	VAL	CG1-CB-CG2	-6.23	97.10	110.80
1	H	312	GLN	N-CA-C	-6.22	104.12	111.03
1	F	297	MET	N-CA-C	6.22	119.54	109.40
1	N	298	VAL	CB-CA-C	-6.22	102.41	111.68
1	I	465	GLY	CA-C-N	6.22	128.61	120.28
1	I	465	GLY	C-N-CA	6.22	128.61	120.28
1	J	107	VAL	CA-C-N	6.22	125.89	119.92
1	J	107	VAL	C-N-CA	6.22	125.89	119.92
1	H	149	MET	CG-SD-CE	-6.22	87.22	100.90
1	E	114	GLY	CA-C-N	-6.21	114.30	122.94
1	E	114	GLY	C-N-CA	-6.21	114.30	122.94
1	N	265	GLY	N-CA-C	-6.21	105.33	112.29
1	G	33	ILE	CB-CA-C	-6.21	102.56	111.19
1	A	454	LYS	CG-CD-CE	-6.20	97.03	111.30
1	J	71	ARG	NE-CZ-NH1	-6.20	115.30	121.50
1	K	149	MET	CA-C-N	-6.20	114.25	122.99
1	K	149	MET	C-N-CA	-6.20	114.25	122.99
1	C	457	ALA	N-CA-C	-6.20	103.79	113.02
1	F	158	LEU	CD1-CG-CD2	-6.20	97.17	110.80
1	A	309	TYR	CA-C-O	-6.19	113.92	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	378	LYS	CA-C-O	6.18	127.12	120.38
1	N	382	THR	N-CA-C	-6.18	101.05	110.14
1	O	105	VAL	CB-CA-C	-6.18	100.98	110.50
1	A	386	MET	N-CA-C	6.18	118.01	111.28
1	B	127	ASP	CA-C-N	6.18	130.87	122.84
1	B	127	ASP	C-N-CA	6.18	130.87	122.84
1	H	338	THR	N-CA-C	6.18	119.32	110.24
1	C	336	ARG	CG-CD-NE	6.17	125.58	112.00
1	C	466	ARG	NE-CZ-NH2	-6.17	113.64	119.20
1	O	22	VAL	N-CA-C	6.17	117.81	108.80
1	D	366	GLU	N-CA-C	-6.17	100.14	109.95
1	I	106	GLU	CA-C-N	-6.17	115.12	122.22
1	I	106	GLU	C-N-CA	-6.17	115.12	122.22
1	B	258	ARG	CA-CB-CG	6.17	126.44	114.10
1	C	21	VAL	N-CA-C	6.16	118.33	109.51
1	M	193	THR	CA-C-O	6.16	127.88	121.10
1	C	469	LEU	N-CA-C	-6.16	104.65	111.36
1	H	258	ARG	NE-CZ-NH1	-6.16	115.34	121.50
1	M	223	ASP	N-CA-C	6.16	123.91	110.80
1	I	389	ILE	CA-C-N	6.15	129.34	120.79
1	I	389	ILE	C-N-CA	6.15	129.34	120.79
1	H	277	ILE	N-CA-C	6.15	116.67	107.51
1	M	45	VAL	CA-C-O	-6.15	113.94	120.39
1	H	130	GLU	CA-C-O	6.14	127.06	120.24
1	J	298	VAL	CA-C-O	-6.14	113.80	121.11
1	J	318	ASN	N-CA-C	6.14	118.62	109.59
1	O	96	GLN	N-CA-C	6.14	119.71	109.95
1	M	195	LEU	N-CA-C	6.14	119.11	109.96
1	A	336	ARG	NE-CZ-NH1	-6.14	115.36	121.50
1	C	267	VAL	N-CA-C	6.13	117.24	107.98
1	M	62	VAL	CA-C-N	-6.13	114.42	120.98
1	M	62	VAL	C-N-CA	-6.13	114.42	120.98
1	E	458	ASP	CA-C-O	-6.13	115.32	122.37
1	I	297	MET	N-CA-C	6.13	119.49	109.06
1	I	283	THR	N-CA-C	-6.13	105.11	112.59
1	B	228	ILE	CA-C-N	-6.13	114.62	122.77
1	B	228	ILE	C-N-CA	-6.13	114.62	122.77
1	E	251	ARG	CA-C-O	-6.13	114.18	121.11
1	N	265	GLY	O-C-N	6.13	129.75	122.64
1	E	27	TYR	CA-C-O	6.13	125.21	118.65
1	L	152	LYS	N-CA-C	-6.13	100.77	109.96
1	F	315	GLN	O-C-N	6.12	128.70	122.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	65	VAL	CB-CA-C	-6.12	103.03	110.99
1	H	109	ARG	NE-CZ-NH2	-6.12	113.69	119.20
1	I	361	TYR	N-CA-C	-6.12	100.03	109.52
1	F	323	TRP	O-C-N	6.12	130.44	122.97
1	L	461	GLN	N-CA-C	6.12	123.83	110.80
1	C	373	ILE	CB-CG1-CD1	6.12	126.65	113.80
1	L	87	ASP	N-CA-C	-6.12	105.82	113.28
1	N	283	THR	N-CA-C	-6.12	104.19	112.26
1	F	74	ARG	NE-CZ-NH1	-6.11	115.39	121.50
1	H	338	THR	CA-CB-CG2	-6.11	100.12	110.50
1	K	95	SER	N-CA-C	6.10	121.65	113.72
1	B	196	GLN	CA-C-O	-6.10	113.98	121.11
1	F	251	ARG	CB-CG-CD	-6.10	97.28	111.30
1	M	309	TYR	CA-C-O	-6.10	113.73	120.38
1	O	309	TYR	CA-C-N	-6.10	114.45	123.11
1	O	309	TYR	C-N-CA	-6.10	114.45	123.11
1	H	62	VAL	CA-C-N	6.09	126.06	120.03
1	H	62	VAL	C-N-CA	6.09	126.06	120.03
1	K	328	PHE	N-CA-C	6.09	118.34	108.41
1	N	331	VAL	N-CA-C	6.09	116.79	107.77
1	D	380	THR	N-CA-C	6.09	118.71	107.99
1	E	125	LYS	CD-CE-NZ	-6.09	92.41	111.90
1	C	194	VAL	CA-CB-CG2	-6.08	100.06	110.40
1	N	251	ARG	N-CA-C	-6.08	99.99	109.72
1	A	225	CYS	CA-C-N	-6.08	112.00	122.14
1	A	225	CYS	C-N-CA	-6.08	112.00	122.14
1	M	315	GLN	CA-C-N	6.07	128.28	122.27
1	M	315	GLN	C-N-CA	6.07	128.28	122.27
1	D	374	PHE	N-CA-C	6.07	119.60	109.95
1	K	38	GLY	N-CA-C	6.07	122.07	111.14
1	C	114	GLY	N-CA-C	-6.07	102.24	110.80
1	H	317	HIS	N-CA-C	6.07	118.68	111.33
1	L	236	LYS	CA-C-N	6.07	128.70	120.38
1	L	236	LYS	C-N-CA	6.07	128.70	120.38
1	B	376	LEU	N-CA-C	-6.07	98.84	108.73
1	N	370	LEU	CA-C-N	-6.07	113.06	122.59
1	N	370	LEU	C-N-CA	-6.07	113.06	122.59
1	D	162	ARG	CA-C-N	-6.06	114.13	120.38
1	D	162	ARG	C-N-CA	-6.06	114.13	120.38
1	C	189	GLU	CA-C-N	-6.06	114.71	122.77
1	C	189	GLU	C-N-CA	-6.06	114.71	122.77
1	H	41	ARG	NE-CZ-NH1	-6.06	115.44	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	376	LEU	CA-C-O	-6.06	113.78	120.69
1	M	454	LYS	CG-CD-CE	-6.06	97.36	111.30
1	O	200	MET	N-CA-C	6.06	119.51	109.46
1	F	31	THR	N-CA-C	-6.06	100.12	109.14
1	C	45	VAL	CA-C-N	-6.05	110.64	120.51
1	C	45	VAL	C-N-CA	-6.05	110.64	120.51
1	I	166	GLY	O-C-N	-6.05	118.03	123.29
1	N	261	PHE	N-CA-C	6.05	119.04	110.14
1	H	79	ASP	O-C-N	-6.05	115.76	121.20
1	G	157	CYS	CA-C-N	-6.04	113.19	122.62
1	G	157	CYS	C-N-CA	-6.04	113.19	122.62
1	I	65	VAL	CA-C-O	-6.04	114.00	120.59
1	J	325	ASN	O-C-N	-6.04	114.49	122.40
1	E	63	PRO	CB-CA-C	-6.04	101.59	111.56
1	I	263	ARG	NE-CZ-NH1	-6.04	115.46	121.50
1	D	212	THR	N-CA-C	6.04	120.38	112.89
1	E	385	VAL	CB-CA-C	-6.04	101.39	111.29
1	G	257	VAL	N-CA-C	6.04	117.10	107.98
1	O	222	LEU	N-CA-C	6.04	118.63	111.33
1	I	92	ASP	CA-C-N	6.03	125.71	119.56
1	I	92	ASP	C-N-CA	6.03	125.71	119.56
1	J	387	THR	CB-CA-C	-6.03	101.38	110.90
1	A	22	VAL	O-C-N	6.03	130.08	123.09
1	E	387	THR	N-CA-CB	6.02	119.60	109.78
1	J	386	MET	N-CA-C	6.02	117.84	111.28
1	N	215	ALA	N-CA-C	-6.02	104.64	111.14
1	M	389	ILE	O-C-N	6.02	127.95	121.87
1	E	336	ARG	N-CA-C	-6.01	104.59	113.61
1	A	465	GLY	CA-C-N	6.01	130.75	120.71
1	A	465	GLY	C-N-CA	6.01	130.75	120.71
1	B	461	GLN	N-CA-C	6.01	123.60	110.80
1	G	447	TRP	N-CA-C	-6.01	100.05	109.25
1	I	214	GLN	CG-CD-NE2	-6.01	107.39	116.40
1	J	148	SER	N-CA-C	-6.01	100.36	109.85
1	C	95	SER	CA-CB-OG	-6.01	99.09	111.10
1	B	326	GLN	N-CA-C	6.00	119.34	109.85
1	E	292	THR	N-CA-C	-6.00	100.27	109.64
1	O	201	VAL	O-C-N	6.00	130.07	122.57
1	C	384	ASP	CB-CA-C	-6.00	101.38	110.92
1	O	133	ASN	N-CA-C	-6.00	103.50	111.24
1	F	144	ARG	NE-CZ-NH1	6.00	127.50	121.50
1	G	212	THR	N-CA-C	6.00	119.79	112.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	83	PHE	CA-C-N	-6.00	115.13	122.15
1	N	83	PHE	C-N-CA	-6.00	115.13	122.15
1	B	33	ILE	N-CA-C	6.00	116.50	107.80
1	G	136	VAL	CB-CA-C	6.00	119.77	111.49
1	J	24	THR	N-CA-C	-6.00	105.06	112.38
1	M	71	ARG	CA-C-N	-6.00	115.52	122.95
1	M	71	ARG	C-N-CA	-6.00	115.52	122.95
1	H	363	ARG	NE-CZ-NH2	-6.00	113.81	119.20
1	B	50	TYR	CA-C-N	5.99	129.38	120.87
1	B	50	TYR	C-N-CA	5.99	129.38	120.87
1	H	27	TYR	CA-C-N	-5.99	114.47	122.98
1	H	27	TYR	C-N-CA	-5.99	114.47	122.98
1	K	39	SER	N-CA-C	5.99	118.95	110.50
1	L	307	LYS	CA-C-O	5.99	125.85	120.34
1	B	201	VAL	N-CA-C	-5.99	101.13	109.45
1	I	155	GLN	CA-C-N	-5.99	112.32	123.03
1	I	155	GLN	C-N-CA	-5.99	112.32	123.03
1	O	115	VAL	CA-C-N	-5.98	116.47	122.69
1	O	115	VAL	C-N-CA	-5.98	116.47	122.69
1	H	336	ARG	NE-CZ-NH1	-5.98	115.52	121.50
1	J	258	ARG	CA-CB-CG	5.98	126.06	114.10
1	D	364	HIS	CA-C-N	-5.98	116.56	122.36
1	D	364	HIS	C-N-CA	-5.98	116.56	122.36
1	F	201	VAL	CB-CA-C	-5.97	103.25	111.49
1	E	211	THR	N-CA-C	-5.97	104.34	111.69
1	J	238	VAL	N-CA-C	-5.97	104.49	111.00
1	B	298	VAL	N-CA-C	-5.97	99.83	108.36
1	N	25	ASP	N-CA-C	-5.97	105.26	112.54
1	N	319	ASN	N-CA-C	5.96	118.87	109.39
1	C	199	ASP	N-CA-C	5.96	118.02	110.33
1	J	372	PHE	O-C-N	-5.96	117.04	123.42
1	K	123	LEU	CA-C-N	-5.96	113.95	122.77
1	K	123	LEU	C-N-CA	-5.96	113.95	122.77
1	A	387	THR	N-CA-C	-5.96	104.86	111.36
1	N	299	THR	N-CA-C	5.96	118.94	108.75
1	G	79	ASP	CA-C-O	5.96	124.05	119.46
1	G	370	LEU	CA-C-N	-5.96	113.46	122.81
1	G	370	LEU	C-N-CA	-5.96	113.46	122.81
1	I	201	VAL	N-CA-C	-5.96	96.95	109.34
1	J	62	VAL	CB-CA-C	-5.96	104.00	110.37
1	D	152	LYS	CA-C-O	-5.95	114.64	121.07
1	M	332	VAL	CA-C-N	-5.95	113.81	122.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	332	VAL	C-N-CA	-5.95	113.81	122.44
1	C	21	VAL	CA-C-N	-5.95	114.94	123.03
1	C	21	VAL	C-N-CA	-5.95	114.94	123.03
1	C	353	TYR	N-CA-C	5.95	118.33	109.59
1	N	356	ASP	N-CA-C	5.95	118.53	111.33
1	F	74	ARG	NE-CZ-NH2	5.95	124.55	119.20
1	G	326	GLN	N-CA-C	5.94	118.44	109.41
1	G	318	ASN	CB-CA-C	-5.94	100.30	110.22
1	O	467	LYS	CA-C-N	-5.94	112.72	120.44
1	O	467	LYS	C-N-CA	-5.94	112.72	120.44
1	B	321	ILE	CA-C-O	5.94	126.62	120.39
1	E	308	PRO	CA-C-O	-5.94	114.68	121.98
1	B	337	SER	N-CA-C	5.93	123.44	110.80
1	D	70	TYR	CA-C-N	-5.93	114.40	122.95
1	D	70	TYR	C-N-CA	-5.93	114.40	122.95
1	J	331	VAL	N-CA-C	5.93	117.22	108.45
1	C	319	ASN	N-CA-C	5.93	118.88	108.56
1	L	317	HIS	CA-C-N	-5.92	114.54	122.42
1	L	317	HIS	C-N-CA	-5.92	114.54	122.42
1	B	292	THR	CA-C-N	-5.91	114.65	120.98
1	B	292	THR	C-N-CA	-5.91	114.65	120.98
1	O	331	VAL	N-CA-C	5.91	115.63	108.06
1	C	325	ASN	N-CA-C	5.91	123.39	110.80
1	M	228	ILE	CA-C-N	-5.91	114.85	123.00
1	M	228	ILE	C-N-CA	-5.91	114.85	123.00
1	E	343	CYS	CA-C-N	-5.91	114.66	122.99
1	E	343	CYS	C-N-CA	-5.91	114.66	122.99
1	F	250	LEU	CB-CA-C	-5.91	102.58	110.79
1	K	40	SER	CA-C-O	-5.91	115.26	121.99
1	H	447	TRP	N-CA-C	-5.90	98.10	108.20
1	I	90	PHE	O-C-N	5.90	130.44	122.59
1	F	58	ASN	N-CA-C	-5.90	104.62	112.94
1	I	279	GLY	N-CA-C	-5.90	100.68	110.95
1	J	257	VAL	CA-CB-CG1	-5.90	100.37	110.40
1	C	336	ARG	NE-CZ-NH1	5.90	127.40	121.50
1	B	113	LEU	N-CA-CB	5.90	118.31	110.29
1	I	164	PRO	CB-CA-C	5.89	118.67	110.95
1	O	297	MET	N-CA-C	5.89	118.51	108.90
1	A	63	PRO	CA-C-N	5.89	132.48	123.23
1	A	63	PRO	C-N-CA	5.89	132.48	123.23
1	F	213	LEU	CA-C-N	-5.89	114.74	123.11
1	F	213	LEU	C-N-CA	-5.89	114.74	123.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	292	THR	CA-C-N	-5.89	112.48	119.84
1	A	292	THR	C-N-CA	-5.89	112.48	119.84
1	C	42	LEU	CD1-CG-CD2	-5.89	97.85	110.80
1	L	164	PRO	CA-C-O	-5.89	114.59	121.95
1	H	271	VAL	CB-CA-C	-5.88	105.47	110.94
1	I	255	MET	N-CA-C	5.88	116.17	107.88
1	D	196	GLN	O-C-N	-5.88	115.75	123.16
1	B	150	ASP	N-CA-C	5.88	119.21	109.46
1	N	166	GLY	CA-C-N	5.88	131.79	122.74
1	N	166	GLY	C-N-CA	5.88	131.79	122.74
1	E	466	ARG	O-C-N	5.87	128.43	122.09
1	D	289	TYR	N-CA-C	5.87	119.62	110.17
1	O	199	ASP	N-CA-C	5.87	118.28	110.53
1	F	396	ILE	CA-C-O	-5.87	115.17	121.27
1	G	333	ASP	N-CA-C	5.87	117.03	107.23
1	I	336	ARG	CB-CG-CD	-5.87	97.80	111.30
1	K	105	VAL	N-CA-C	5.87	118.07	108.97
1	C	121	PRO	N-CA-C	-5.87	106.53	113.86
1	F	263	ARG	CA-CB-CG	5.86	125.83	114.10
1	L	108	GLY	O-C-N	-5.86	117.95	122.99
1	O	399	ASP	CA-C-N	-5.86	113.80	122.83
1	O	399	ASP	C-N-CA	-5.86	113.80	122.83
1	N	369	ASP	CA-C-O	-5.86	112.86	120.25
1	J	58	ASN	N-CA-C	-5.86	104.79	112.41
1	N	99	VAL	CA-C-N	-5.86	114.97	122.77
1	N	99	VAL	C-N-CA	-5.86	114.97	122.77
1	A	27	TYR	N-CA-C	5.86	122.44	113.19
1	H	259	HIS	N-CA-C	5.86	118.31	109.41
1	I	375	GLN	CB-CG-CD	-5.86	102.64	112.60
1	J	218	SER	CA-C-N	-5.86	113.35	123.25
1	J	218	SER	C-N-CA	-5.86	113.35	123.25
1	N	171	LYS	CG-CD-CE	-5.86	97.83	111.30
1	O	202	ASP	CA-C-N	-5.85	113.36	122.37
1	O	202	ASP	C-N-CA	-5.85	113.36	122.37
1	G	105	VAL	CB-CA-C	-5.85	100.59	110.71
1	G	145	GLU	O-C-N	5.85	129.40	123.26
1	M	68	LEU	N-CA-C	5.85	119.17	112.97
1	C	298	VAL	N-CA-C	-5.84	100.01	108.89
1	E	251	ARG	CB-CA-C	5.84	120.84	109.33
1	N	74	ARG	CB-CG-CD	-5.84	97.87	111.30
1	N	461	GLN	N-CA-C	5.84	123.24	110.80
1	K	205	PHE	N-CA-C	-5.84	104.71	112.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	232	PRO	CA-CB-CG	-5.84	93.41	104.50
1	M	366	GLU	CA-C-O	-5.84	115.23	121.94
1	C	369	ASP	CA-C-N	-5.83	114.88	123.05
1	C	369	ASP	C-N-CA	-5.83	114.88	123.05
1	O	228	ILE	CB-CA-C	-5.83	102.49	110.77
1	N	115	VAL	N-CA-C	5.83	116.26	108.27
1	D	296	SER	CA-C-N	-5.83	113.66	122.81
1	D	296	SER	C-N-CA	-5.83	113.66	122.81
1	M	165	ILE	N-CA-C	5.83	118.15	109.17
1	M	201	VAL	CA-C-N	-5.83	111.79	120.94
1	M	201	VAL	C-N-CA	-5.83	111.79	120.94
1	N	371	GLN	CA-C-O	-5.83	114.62	121.44
1	D	386	MET	N-CA-C	5.83	118.38	111.33
1	A	77	LEU	N-CA-C	5.83	117.96	110.39
1	M	445	THR	N-CA-C	5.83	117.79	108.41
1	B	220	VAL	CA-C-N	-5.82	113.69	119.92
1	B	220	VAL	C-N-CA	-5.82	113.69	119.92
1	G	93	PRO	N-CA-C	-5.82	107.07	114.35
1	G	47	HIS	CA-C-N	5.82	125.52	119.64
1	G	47	HIS	C-N-CA	5.82	125.52	119.64
1	H	325	ASN	N-CA-CB	-5.82	103.30	111.62
1	I	234	TYR	N-CA-C	-5.82	104.94	111.28
1	F	162	ARG	CA-C-N	-5.82	114.39	120.38
1	F	162	ARG	C-N-CA	-5.82	114.39	120.38
1	K	207	ALA	O-C-N	5.82	130.02	122.87
1	I	127	ASP	N-CA-C	5.81	118.25	109.41
1	M	326	GLN	N-CA-C	5.81	118.70	109.81
1	B	31	THR	N-CA-C	-5.81	100.47	109.24
1	L	64	LYS	CA-C-N	-5.81	115.34	123.13
1	L	64	LYS	C-N-CA	-5.81	115.34	123.13
1	C	266	THR	CA-CB-OG1	-5.81	100.89	109.60
1	F	48	PRO	CA-C-O	-5.81	111.32	118.99
1	M	163	PRO	CA-C-N	-5.81	114.63	120.21
1	M	163	PRO	C-N-CA	-5.81	114.63	120.21
1	O	165	ILE	N-CA-C	5.81	116.84	108.48
1	E	362	LEU	O-C-N	-5.81	116.52	123.31
1	M	114	GLY	CA-C-N	-5.80	113.99	122.58
1	M	114	GLY	C-N-CA	-5.80	113.99	122.58
1	I	114	GLY	CA-C-N	-5.79	113.89	122.23
1	I	114	GLY	C-N-CA	-5.79	113.89	122.23
1	O	159	ILE	O-C-N	-5.79	117.06	123.20
1	M	363	ARG	CA-C-O	-5.79	113.14	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	303	GLN	CB-CA-C	-5.79	98.90	110.42
1	I	355	ASN	N-CA-C	5.79	123.13	110.80
1	K	452	LYS	N-CA-C	-5.79	104.97	111.28
1	B	162	ARG	CA-C-N	-5.79	114.42	120.38
1	B	162	ARG	C-N-CA	-5.79	114.42	120.38
1	D	41	ARG	NE-CZ-NH1	-5.79	115.72	121.50
1	D	62	VAL	CB-CA-C	-5.79	104.10	110.52
1	I	389	ILE	N-CA-C	5.79	116.44	110.36
1	F	62	VAL	CA-C-O	-5.78	115.92	119.51
1	A	61	ALA	N-CA-C	-5.78	103.81	111.96
1	C	396	ILE	CA-C-O	-5.78	114.94	120.95
1	A	364	HIS	CA-C-O	-5.78	114.46	120.70
1	I	115	VAL	N-CA-CB	5.78	122.59	111.62
1	J	82	LYS	N-CA-C	-5.78	104.35	111.40
1	E	338	THR	CB-CA-C	-5.77	100.65	109.89
1	K	150	ASP	N-CA-C	-5.77	99.49	108.90
1	M	156	LEU	N-CA-C	5.77	118.62	110.14
1	L	260	LEU	N-CA-C	5.77	117.92	108.52
1	A	97	ARG	N-CA-C	5.76	116.99	108.86
1	F	276	TYR	CA-C-N	-5.76	115.67	122.93
1	F	276	TYR	C-N-CA	-5.76	115.67	122.93
1	O	219	ASP	N-CA-C	5.76	120.56	112.72
1	F	110	GLY	N-CA-C	-5.76	104.86	112.81
1	F	105	VAL	CA-C-O	-5.76	117.13	121.68
1	F	145	GLU	N-CA-C	5.76	117.29	108.42
1	I	258	ARG	NE-CZ-NH1	-5.76	115.74	121.50
1	H	150	ASP	N-CA-C	-5.76	99.80	109.07
1	C	145	GLU	N-CA-C	5.76	117.85	108.76
1	C	172	GLY	O-C-N	5.76	130.18	122.70
1	E	363	ARG	CA-C-N	-5.75	113.88	122.74
1	E	363	ARG	C-N-CA	-5.75	113.88	122.74
1	D	463	PRO	CA-C-N	5.75	127.92	120.44
1	D	463	PRO	C-N-CA	5.75	127.92	120.44
1	I	150	ASP	CB-CA-C	5.75	119.67	109.72
1	I	392	MET	CA-C-N	-5.75	115.45	122.64
1	I	392	MET	C-N-CA	-5.75	115.45	122.64
1	K	25	ASP	N-CA-C	-5.75	105.36	112.38
1	A	355	ASN	N-CA-C	5.75	119.11	111.75
1	C	83	PHE	CA-C-N	-5.75	117.74	121.65
1	C	83	PHE	C-N-CA	-5.75	117.74	121.65
1	N	155	GLN	CA-C-O	-5.75	114.28	120.09
1	J	370	LEU	N-CA-C	5.75	118.03	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	158	LEU	CA-C-O	-5.75	114.12	120.38
1	L	454	LYS	N-CA-C	5.75	119.37	112.93
1	M	125	LYS	N-CA-C	-5.75	98.91	108.34
1	N	442	LYS	N-CA-C	5.75	119.11	111.75
1	K	97	ARG	N-CA-C	5.75	118.22	109.95
1	K	279	GLY	N-CA-C	-5.75	99.56	113.18
1	I	220	VAL	N-CA-CB	5.74	119.25	111.21
1	K	295	GLY	N-CA-C	-5.74	105.81	115.62
1	C	370	LEU	CA-C-N	-5.74	112.83	122.92
1	C	370	LEU	C-N-CA	-5.74	112.83	122.92
1	D	240	GLU	CA-C-N	5.73	125.42	119.05
1	D	240	GLU	C-N-CA	5.73	125.42	119.05
1	B	127	ASP	CA-C-O	-5.73	115.28	121.36
1	F	225	CYS	N-CA-C	5.73	119.89	113.01
1	H	74	ARG	NE-CZ-NH1	-5.73	115.77	121.50
1	I	304	ILE	CB-CG1-CD1	-5.73	101.77	113.80
1	A	384	ASP	CB-CA-C	-5.73	101.17	110.79
1	C	394	PRO	CB-CG-CD	-5.73	87.78	106.10
1	M	83	PHE	CA-C-N	-5.73	117.25	122.80
1	M	83	PHE	C-N-CA	-5.73	117.25	122.80
1	M	78	PRO	CB-CG-CD	-5.72	87.80	106.10
1	D	33	ILE	CB-CA-C	-5.71	102.62	110.96
1	E	247	PHE	N-CA-C	-5.71	104.16	113.19
1	H	161	CYS	N-CA-C	-5.71	105.97	113.17
1	L	449	VAL	N-CA-CB	-5.71	105.55	112.35
1	C	74	ARG	CD-NE-CZ	-5.71	116.40	124.40
1	E	337	SER	N-CA-C	5.71	122.97	110.80
1	C	251	ARG	CA-CB-CG	5.71	125.52	114.10
1	D	69	GLN	O-C-N	-5.71	115.74	123.10
1	G	31	THR	CA-C-O	-5.71	115.12	121.51
1	H	391	SER	N-CA-C	-5.70	105.20	111.82
1	A	99	VAL	CB-CA-C	-5.70	100.66	110.30
1	H	60	ILE	N-CA-C	5.70	116.63	108.93
1	A	262	ASN	CA-C-O	-5.70	114.17	120.38
1	J	114	GLY	CA-C-O	-5.70	116.15	121.96
1	L	114	GLY	CA-C-N	-5.70	113.63	122.69
1	L	114	GLY	C-N-CA	-5.70	113.63	122.69
1	M	71	ARG	NH1-CZ-NH2	5.70	126.71	119.30
1	C	157	CYS	CB-CA-C	5.70	121.76	110.42
1	O	337	SER	N-CA-C	5.70	122.93	110.80
1	H	258	ARG	NE-CZ-NH2	5.70	124.33	119.20
1	E	260	LEU	CA-C-N	-5.69	113.25	122.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	260	LEU	C-N-CA	-5.69	113.25	122.36
1	O	130	GLU	N-CA-C	-5.69	106.46	113.41
1	K	206	GLY	CA-C-N	-5.69	114.94	122.85
1	K	206	GLY	C-N-CA	-5.69	114.94	122.85
1	N	35	TYR	CA-C-O	5.69	127.66	121.06
1	G	301	ASP	CA-C-O	-5.69	114.82	120.90
1	J	252	ARG	NE-CZ-NH2	5.68	124.31	119.20
1	K	258	ARG	N-CA-C	-5.68	104.73	111.03
1	K	115	VAL	CA-C-N	-5.67	115.97	122.83
1	K	115	VAL	C-N-CA	-5.67	115.97	122.83
1	D	227	SER	CA-C-N	-5.67	115.78	122.93
1	D	227	SER	C-N-CA	-5.67	115.78	122.93
1	D	299	THR	N-CA-C	5.67	117.72	108.76
1	D	56	ASP	O-C-N	5.67	128.28	121.76
1	E	155	GLN	CB-CG-CD	-5.67	102.97	112.60
1	F	99	VAL	CA-C-N	-5.67	115.23	122.77
1	F	99	VAL	C-N-CA	-5.67	115.23	122.77
1	E	249	TYR	N-CA-C	5.67	117.40	108.96
1	K	441	LEU	N-CA-C	-5.67	104.60	112.30
1	F	327	LEU	N-CA-C	5.66	117.88	108.99
1	I	292	THR	CA-C-N	-5.66	112.76	119.84
1	I	292	THR	C-N-CA	-5.66	112.76	119.84
1	K	255	MET	CB-CG-SD	5.66	129.69	112.70
1	N	302	ALA	O-C-N	5.66	127.98	122.09
1	J	165	ILE	CB-CG1-CD1	-5.66	101.91	113.80
1	H	215	ALA	N-CA-C	5.66	117.92	111.02
1	C	298	VAL	CA-CB-CG1	-5.66	100.78	110.40
1	N	348	SER	N-CA-C	-5.66	106.97	112.97
1	F	303	GLN	CA-C-O	5.65	126.60	120.95
1	I	238	VAL	O-C-N	5.65	128.19	121.80
1	J	469	LEU	O-C-N	5.65	128.11	122.12
1	I	331	VAL	CA-C-O	5.65	126.35	120.36
1	N	117	ILE	N-CA-C	-5.65	97.59	109.34
1	D	239	SER	CA-CB-OG	-5.65	99.81	111.10
1	I	366	GLU	N-CA-C	-5.65	101.08	110.17
1	D	373	ILE	O-C-N	5.64	128.84	123.03
1	K	64	LYS	CA-C-N	5.64	130.32	122.93
1	K	64	LYS	C-N-CA	5.64	130.32	122.93
1	B	197	ASP	CA-C-N	-5.64	115.47	123.08
1	B	197	ASP	C-N-CA	-5.64	115.47	123.08
1	J	88	THR	CB-CA-C	5.64	119.80	111.17
1	B	460	ASP	N-CA-C	5.64	120.67	111.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	109	ARG	CB-CG-CD	-5.64	98.34	111.30
1	G	355	ASN	N-CA-C	5.64	118.15	111.33
1	L	122	LEU	N-CA-C	-5.64	103.66	110.88
1	F	201	VAL	N-CA-C	-5.63	101.62	109.45
1	K	166	GLY	O-C-N	-5.63	119.61	123.95
1	B	117	ILE	CA-CB-CG2	-5.63	100.93	110.50
1	E	449	VAL	CA-C-O	5.63	125.83	120.31
1	D	171	LYS	CD-CE-NZ	-5.63	93.89	111.90
1	H	311	LEU	CA-CB-CG	-5.63	96.61	116.30
1	N	93	PRO	N-CA-C	-5.63	107.32	114.35
1	A	258	ARG	CG-CD-NE	5.62	124.37	112.00
1	B	103	THR	CB-CA-C	-5.62	99.23	110.42
1	F	463	PRO	N-CD-CG	-5.62	94.77	103.20
1	G	334	THR	N-CA-C	5.62	119.88	113.19
1	G	394	PRO	O-C-N	5.62	128.97	122.23
1	I	202	ASP	CA-C-N	-5.62	113.73	122.67
1	I	202	ASP	C-N-CA	-5.62	113.73	122.67
1	D	72	VAL	CB-CA-C	5.62	118.84	111.53
1	G	142	ASP	CA-C-N	-5.62	113.69	122.73
1	G	142	ASP	C-N-CA	-5.62	113.69	122.73
1	E	101	ALA	N-CA-C	-5.62	100.09	109.24
1	H	218	SER	CA-C-N	-5.62	114.80	123.17
1	H	218	SER	C-N-CA	-5.62	114.80	123.17
1	I	251	ARG	N-CA-C	-5.62	100.98	109.85
1	M	368	TYR	N-CA-C	5.61	118.03	109.95
1	N	303	GLN	N-CA-C	5.61	122.76	110.80
1	N	470	LEU	CA-C-N	5.61	127.80	120.28
1	N	470	LEU	C-N-CA	5.61	127.80	120.28
1	G	279	GLY	N-CA-C	-5.61	102.12	110.71
1	H	319	ASN	CA-C-N	-5.61	111.64	120.11
1	H	319	ASN	C-N-CA	-5.61	111.64	120.11
1	I	52	ILE	CG1-CB-CG2	-5.61	93.87	110.70
1	G	443	ASN	OD1-CG-ND2	5.60	128.20	122.60
1	A	21	VAL	CB-CA-C	-5.60	103.55	111.28
1	A	198	GLY	CA-C-N	-5.60	110.81	122.07
1	A	198	GLY	C-N-CA	-5.60	110.81	122.07
1	B	366	GLU	N-CA-C	-5.60	99.88	109.24
1	I	246	LEU	CA-C-N	-5.60	112.30	122.50
1	I	246	LEU	C-N-CA	-5.60	112.30	122.50
1	C	303	GLN	N-CA-C	5.60	118.60	110.42
1	L	107	VAL	CA-C-O	-5.60	114.86	121.64
1	A	27	TYR	O-C-N	5.60	129.59	122.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	387	THR	N-CA-C	-5.60	105.18	111.28
1	G	109	ARG	N-CA-C	-5.60	100.28	109.40
1	C	370	LEU	CB-CG-CD1	5.59	127.48	110.70
1	D	171	LYS	CA-C-N	-5.59	116.54	122.30
1	D	171	LYS	C-N-CA	-5.59	116.54	122.30
1	O	172	GLY	N-CA-C	5.59	120.20	112.37
1	B	73	PHE	CA-C-N	-5.59	114.87	123.14
1	B	73	PHE	C-N-CA	-5.59	114.87	123.14
1	D	385	VAL	N-CA-C	-5.59	104.88	110.30
1	M	449	VAL	CG1-CB-CG2	-5.59	98.50	110.80
1	C	218	SER	CA-C-N	-5.59	114.84	123.17
1	C	218	SER	C-N-CA	-5.59	114.84	123.17
1	H	320	GLY	CA-C-O	5.59	127.55	120.29
1	L	324	SER	N-CA-C	-5.59	98.90	110.80
1	E	74	ARG	CB-CG-CD	-5.58	98.46	111.30
1	N	386	MET	N-CA-C	5.58	117.83	111.02
1	G	274	ASP	N-CA-C	-5.58	106.32	113.02
1	L	225	CYS	N-CA-C	5.58	119.19	112.38
1	G	114	GLY	N-CA-C	-5.58	101.47	110.18
1	O	21	VAL	N-CA-C	5.57	116.89	109.37
1	B	198	GLY	N-CA-C	5.57	121.39	114.37
1	B	298	VAL	CA-CB-CG2	-5.57	100.94	110.40
1	C	152	LYS	CB-CG-CD	-5.57	98.50	111.30
1	D	335	THR	O-C-N	5.56	128.49	122.15
1	C	399	ASP	CA-C-N	-5.56	114.27	122.83
1	C	399	ASP	C-N-CA	-5.56	114.27	122.83
1	E	386	MET	CA-CB-CG	-5.56	102.98	114.10
1	M	151	TYR	N-CA-C	5.56	117.25	110.41
1	A	331	VAL	N-CA-C	5.56	116.29	108.17
1	H	252	ARG	CB-CG-CD	5.55	124.07	111.30
1	H	380	THR	CA-C-O	5.55	126.88	120.60
1	L	363	ARG	N-CA-C	5.55	118.61	109.72
1	A	22	VAL	CA-C-O	-5.55	114.96	120.90
1	A	147	ILE	CA-C-O	-5.55	114.96	120.90
1	F	333	ASP	N-CA-C	5.55	117.00	107.28
1	N	468	PHE	N-CA-C	5.55	120.53	111.37
1	G	165	ILE	CA-C-N	-5.55	116.81	121.58
1	G	165	ILE	C-N-CA	-5.55	116.81	121.58
1	B	284	LEU	CA-C-N	5.55	126.78	119.84
1	B	284	LEU	C-N-CA	5.55	126.78	119.84
1	K	97	ARG	NE-CZ-NH1	5.54	127.05	121.50
1	B	293	PRO	CB-CA-C	-5.54	101.76	110.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	213	LEU	CA-C-N	-5.54	114.97	122.95
1	E	213	LEU	C-N-CA	-5.54	114.97	122.95
1	J	356	ASP	CA-C-O	-5.54	112.58	120.51
1	C	383	ALA	CA-C-N	5.54	128.49	120.79
1	C	383	ALA	C-N-CA	5.54	128.49	120.79
1	D	71	ARG	CA-C-N	-5.54	115.35	123.10
1	D	71	ARG	C-N-CA	-5.54	115.35	123.10
1	L	126	LEU	CA-C-N	-5.54	113.62	122.53
1	L	126	LEU	C-N-CA	-5.54	113.62	122.53
1	I	26	GLU	CA-C-O	5.54	125.77	119.18
1	K	22	VAL	CB-CA-C	-5.54	101.13	110.71
1	M	447	TRP	N-CA-C	-5.54	99.50	108.41
1	N	318	ASN	CA-C-N	-5.54	113.70	122.23
1	N	318	ASN	C-N-CA	-5.54	113.70	122.23
1	F	41	ARG	CA-C-O	-5.53	114.61	120.92
1	E	237	MET	N-CA-C	5.53	118.02	111.33
1	A	395	SER	CA-CB-OG	5.53	122.16	111.10
1	N	162	ARG	NE-CZ-NH2	-5.53	114.22	119.20
1	O	250	LEU	CA-C-N	-5.53	114.13	122.81
1	O	250	LEU	C-N-CA	-5.53	114.13	122.81
1	C	312	GLN	N-CA-C	-5.53	104.65	111.40
1	C	379	ILE	O-C-N	5.53	129.01	123.10
1	O	317	HIS	CA-C-N	-5.53	114.84	122.30
1	O	317	HIS	C-N-CA	-5.53	114.84	122.30
1	C	60	ILE	N-CA-CB	5.53	117.11	110.31
1	J	202	ASP	N-CA-C	-5.53	102.83	110.35
1	C	229	CYS	N-CA-C	-5.52	100.29	109.46
1	K	263	ARG	NE-CZ-NH2	5.52	124.17	119.20
1	L	195	LEU	CA-C-N	-5.52	113.92	122.59
1	L	195	LEU	C-N-CA	-5.52	113.92	122.59
1	F	251	ARG	CG-CD-NE	5.52	124.14	112.00
1	G	469	LEU	N-CA-C	-5.52	105.28	112.23
1	L	106	GLU	CA-C-N	-5.52	116.52	122.59
1	L	106	GLU	C-N-CA	-5.52	116.52	122.59
1	M	108	GLY	O-C-N	-5.52	117.47	122.93
1	C	262	ASN	O-C-N	-5.52	116.73	123.19
1	F	105	VAL	N-CA-CB	-5.52	105.78	112.07
1	G	245	MET	CG-SD-CE	5.52	113.04	100.90
1	O	113	LEU	CB-CG-CD2	-5.52	94.15	110.70
1	E	286	SER	CA-C-N	-5.51	113.55	121.98
1	E	286	SER	C-N-CA	-5.51	113.55	121.98
1	J	335	THR	CA-C-O	5.51	126.14	119.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	365	GLY	N-CA-C	5.50	120.51	110.71
1	J	121	PRO	CB-CA-C	-5.50	103.06	112.64
1	J	165	ILE	CG1-CB-CG2	-5.50	94.19	110.70
1	M	252	ARG	CA-C-N	-5.50	114.04	122.62
1	M	252	ARG	C-N-CA	-5.50	114.04	122.62
1	O	297	MET	O-C-N	-5.50	116.75	123.30
1	C	323	TRP	O-C-N	5.50	129.68	122.97
1	E	466	ARG	CA-C-O	-5.50	115.03	120.70
1	G	369	ASP	CA-C-N	-5.50	115.69	122.84
1	G	369	ASP	C-N-CA	-5.50	115.69	122.84
1	N	256	PHE	CA-C-O	-5.50	115.42	121.31
1	G	201	VAL	CB-CA-C	-5.50	102.27	111.29
1	L	103	THR	CB-CA-C	-5.50	99.48	110.42
1	B	251	ARG	N-CA-C	-5.50	100.81	109.50
1	E	297	MET	CG-SD-CE	-5.50	88.81	100.90
1	J	236	LYS	CA-C-O	5.50	126.36	120.70
1	K	45	VAL	CA-CB-CG1	-5.49	101.06	110.40
1	K	337	SER	N-CA-C	5.49	122.50	110.80
1	D	22	VAL	CA-CB-CG1	5.49	119.74	110.40
1	B	239	SER	N-CA-C	5.49	120.95	113.37
1	F	444	TYR	CA-C-N	-5.49	115.70	122.84
1	F	444	TYR	C-N-CA	-5.49	115.70	122.84
1	F	315	GLN	N-CA-C	-5.49	105.21	111.14
1	J	78	PRO	CA-CB-CG	-5.49	94.07	104.50
1	I	379	ILE	CB-CA-C	-5.49	102.51	110.63
1	F	387	THR	CB-CA-C	-5.48	101.69	110.79
1	G	237	MET	N-CA-C	5.48	117.96	111.33
1	B	189	GLU	CB-CA-C	5.48	119.15	109.89
1	E	155	GLN	CB-CA-C	-5.48	104.52	111.70
1	G	304	ILE	N-CA-C	-5.48	105.33	113.39
1	B	66	SER	N-CA-C	5.48	118.66	109.95
1	C	112	PRO	O-C-N	5.48	129.80	123.06
1	E	33	ILE	CA-C-N	-5.48	114.21	122.81
1	E	33	ILE	C-N-CA	-5.48	114.21	122.81
1	N	69	GLN	N-CA-C	5.48	117.83	108.90
1	A	452	LYS	N-CA-C	-5.47	105.31	111.28
1	F	238	VAL	CB-CA-C	-5.47	103.68	112.16
1	G	49	TYR	N-CA-C	5.47	120.44	113.55
1	G	271	VAL	CA-C-N	5.47	126.33	119.98
1	G	271	VAL	C-N-CA	5.47	126.33	119.98
1	C	250	LEU	CB-CA-C	-5.47	104.65	111.43
1	H	465	GLY	CA-C-O	5.47	126.91	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	151	TYR	N-CA-C	5.47	117.59	110.53
1	I	107	VAL	O-C-N	-5.47	116.29	122.36
1	I	337	SER	CA-C-N	-5.47	115.17	122.72
1	I	337	SER	C-N-CA	-5.47	115.17	122.72
1	D	50	TYR	CA-C-O	-5.47	115.22	121.40
1	J	470	LEU	N-CA-C	-5.47	103.19	111.56
1	J	356	ASP	N-CA-C	5.46	122.44	110.80
1	M	390	HIS	O-C-N	5.46	128.38	122.15
1	D	324	SER	N-CA-C	-5.46	105.92	112.58
1	J	229	CYS	N-CA-C	-5.46	99.62	108.52
1	M	219	ASP	N-CA-C	5.46	120.22	111.81
1	M	359	LYS	N-CA-C	5.46	117.42	108.52
1	K	145	GLU	CA-C-N	5.46	128.51	120.82
1	K	145	GLU	C-N-CA	5.46	128.51	120.82
1	O	246	LEU	N-CA-C	-5.46	100.83	108.96
1	O	362	LEU	N-CA-C	5.46	117.86	109.07
1	D	74	ARG	N-CA-C	-5.45	99.63	108.52
1	J	220	VAL	CG1-CB-CG2	-5.45	98.80	110.80
1	L	466	ARG	CA-C-N	5.45	128.37	120.79
1	L	466	ARG	C-N-CA	5.45	128.37	120.79
1	N	340	MET	CA-C-N	-5.45	114.52	122.65
1	N	340	MET	C-N-CA	-5.45	114.52	122.65
1	I	380	THR	O-C-N	5.45	129.54	123.05
1	B	467	LYS	N-CA-CB	-5.45	102.11	110.01
1	D	210	PHE	CA-C-O	-5.45	114.77	120.55
1	F	220	VAL	CB-CA-C	-5.45	101.44	111.36
1	A	456	SER	CA-CB-OG	-5.45	100.20	111.10
1	L	457	ALA	CA-C-O	5.45	125.80	119.32
1	B	327	LEU	CA-C-N	-5.44	115.09	122.77
1	B	327	LEU	C-N-CA	-5.44	115.09	122.77
1	D	453	GLU	N-CA-C	5.44	119.91	113.16
1	H	64	LYS	CA-C-N	-5.44	115.84	123.13
1	H	64	LYS	C-N-CA	-5.44	115.84	123.13
1	J	339	ASN	CA-C-N	-5.44	114.52	122.19
1	J	339	ASN	C-N-CA	-5.44	114.52	122.19
1	J	354	LYS	CD-CE-NZ	-5.44	94.50	111.90
1	G	295	GLY	N-CA-C	-5.43	107.18	115.66
1	M	178	ASN	OD1-CG-ND2	5.43	128.03	122.60
1	G	309	TYR	CA-C-N	-5.43	114.93	123.13
1	G	309	TYR	C-N-CA	-5.43	114.93	123.13
1	G	455	PHE	O-C-N	-5.43	116.86	123.16
1	D	201	VAL	N-CA-C	-5.43	98.04	109.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	66	SER	CA-C-O	-5.43	114.99	121.56
1	E	48	PRO	N-CA-CB	-5.43	98.04	103.20
1	L	299	THR	N-CA-C	5.43	118.29	109.06
1	E	152	LYS	CA-C-N	-5.43	114.54	122.19
1	E	152	LYS	C-N-CA	-5.43	114.54	122.19
1	K	62	VAL	CB-CA-C	-5.43	104.68	110.16
1	F	242	TYR	N-CA-C	-5.42	105.80	112.90
1	D	58	ASN	N-CA-C	-5.42	105.30	112.94
1	N	395	SER	N-CA-C	5.42	117.63	111.02
1	B	196	GLN	CB-CG-CD	-5.42	103.39	112.60
1	M	277	ILE	CA-C-O	-5.42	114.14	120.75
1	O	64	LYS	CA-CB-CG	-5.42	103.26	114.10
1	B	335	THR	CA-C-O	5.42	126.04	119.38
1	C	441	LEU	N-CA-CB	-5.42	104.07	111.65
1	C	327	LEU	CA-C-N	-5.42	115.17	123.07
1	C	327	LEU	C-N-CA	-5.42	115.17	123.07
1	A	255	MET	CA-C-N	-5.41	113.50	122.11
1	A	255	MET	C-N-CA	-5.41	113.50	122.11
1	D	333	ASP	N-CA-C	5.41	118.58	107.37
1	H	168	HIS	CA-C-N	-5.41	115.25	122.72
1	H	168	HIS	C-N-CA	-5.41	115.25	122.72
1	O	59	LYS	CD-CE-NZ	-5.41	94.58	111.90
1	O	154	THR	N-CA-C	5.41	118.05	109.50
1	D	298	VAL	CB-CA-C	-5.41	102.24	110.95
1	F	464	LEU	N-CA-C	-5.41	105.04	111.69
1	G	459	LEU	CD1-CG-CD2	5.41	122.70	110.80
1	J	258	ARG	CG-CD-NE	-5.41	100.10	112.00
1	D	464	LEU	O-C-N	-5.41	116.50	122.07
1	F	105	VAL	CB-CA-C	-5.41	103.65	112.03
1	G	165	ILE	CA-C-O	-5.41	115.37	121.75
1	J	290	PHE	O-C-N	5.41	125.72	121.88
1	L	175	SER	N-CA-C	5.41	116.89	110.19
1	N	30	ARG	NE-CZ-NH1	-5.41	116.09	121.50
1	N	284	LEU	CA-C-N	5.41	125.70	119.92
1	N	284	LEU	C-N-CA	5.41	125.70	119.92
1	C	445	THR	N-CA-C	5.40	117.80	107.75
1	M	28	VAL	O-C-N	-5.40	117.46	123.03
1	H	36	HIS	CA-C-O	-5.40	115.35	121.72
1	J	304	ILE	CB-CG1-CD1	-5.40	102.46	113.80
1	O	211	THR	N-CA-C	-5.40	105.31	111.14
1	D	281	THR	CA-C-N	-5.40	112.55	122.27
1	D	281	THR	C-N-CA	-5.40	112.55	122.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	212	THR	N-CA-C	5.40	119.58	112.89
1	E	235	LEU	CB-CG-CD1	-5.40	94.50	110.70
1	C	377	CYS	O-C-N	5.40	129.88	123.24
1	J	376	LEU	CB-CA-C	5.40	118.65	109.80
1	K	265	GLY	CA-C-O	-5.39	118.51	122.23
1	B	267	VAL	CB-CA-C	-5.39	104.77	111.08
1	D	30	ARG	N-CA-CB	-5.39	102.15	110.56
1	J	97	ARG	CB-CG-CD	5.39	123.70	111.30
1	C	105	VAL	CB-CA-C	-5.39	102.62	110.81
1	F	211	THR	N-CA-C	-5.39	104.83	111.40
1	H	81	ASN	N-CA-C	5.39	119.02	112.23
1	J	259	HIS	N-CA-C	5.39	116.45	108.86
1	J	336	ARG	CG-CD-NE	-5.38	100.16	112.00
1	K	219	ASP	O-C-N	5.38	129.24	121.97
1	L	259	HIS	CA-C-N	-5.38	115.52	123.05
1	L	259	HIS	C-N-CA	-5.38	115.52	123.05
1	L	316	GLY	N-CA-C	5.38	125.93	113.18
1	D	460	ASP	N-CA-C	5.38	122.25	110.80
1	J	298	VAL	CA-CB-CG2	-5.38	101.25	110.40
1	L	234	TYR	CA-C-O	-5.38	114.73	121.02
1	K	87	ASP	N-CA-C	-5.38	106.49	113.16
1	A	266	THR	N-CA-C	5.38	117.23	110.24
1	B	395	SER	N-CA-C	-5.38	105.50	111.36
1	A	33	ILE	CB-CA-C	-5.37	103.14	110.77
1	H	33	ILE	CA-C-N	-5.37	113.46	122.92
1	H	33	ILE	C-N-CA	-5.37	113.46	122.92
1	M	319	ASN	N-CA-C	5.37	119.03	110.70
1	C	309	TYR	N-CA-C	5.37	117.28	108.52
1	K	336	ARG	NE-CZ-NH1	-5.37	116.13	121.50
1	K	93	PRO	N-CA-C	-5.37	106.53	113.57
1	A	194	VAL	CA-C-N	-5.37	113.25	120.82
1	A	194	VAL	C-N-CA	-5.37	113.25	120.82
1	E	449	VAL	CG1-CB-CG2	-5.37	98.99	110.80
1	H	447	TRP	CA-C-N	5.37	128.97	121.24
1	H	447	TRP	C-N-CA	5.37	128.97	121.24
1	I	52	ILE	CA-CB-CG2	5.37	119.62	110.50
1	I	326	GLN	CB-CG-CD	-5.37	103.47	112.60
1	K	103	THR	CB-CA-C	-5.36	100.64	109.65
1	M	75	VAL	CA-CB-CG2	-5.36	101.28	110.40
1	G	239	SER	N-CA-C	5.36	119.69	113.20
1	C	292	THR	N-CA-C	-5.36	100.89	109.04
1	E	336	ARG	NE-CZ-NH1	-5.36	116.14	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	466	ARG	CG-CD-NE	-5.36	100.21	112.00
1	M	292	THR	CA-C-N	-5.36	113.14	119.84
1	M	292	THR	C-N-CA	-5.36	113.14	119.84
1	A	36	HIS	N-CA-C	-5.35	102.27	110.14
1	E	303	GLN	N-CA-C	5.35	118.24	110.42
1	J	365	GLY	CA-C-N	-5.35	114.06	122.73
1	J	365	GLY	C-N-CA	-5.35	114.06	122.73
1	H	299	THR	OG1-CB-CG2	-5.35	98.59	109.30
1	F	218	SER	CA-C-N	-5.35	114.21	123.25
1	F	218	SER	C-N-CA	-5.35	114.21	123.25
1	H	30	ARG	NE-CZ-NH2	5.35	124.01	119.20
1	I	232	PRO	N-CD-CG	-5.35	95.18	103.20
1	K	213	LEU	CA-C-N	-5.35	115.26	122.86
1	K	213	LEU	C-N-CA	-5.35	115.26	122.86
1	B	77	LEU	CB-CG-CD1	-5.35	94.66	110.70
1	B	91	TYR	CA-C-O	-5.35	114.18	120.60
1	C	335	THR	CA-C-O	5.35	126.10	119.79
1	D	277	ILE	N-CA-C	5.35	117.00	108.87
1	D	200	MET	CB-CA-C	-5.34	100.37	109.51
1	A	201	VAL	CB-CA-C	-5.34	102.53	111.29
1	B	260	LEU	O-C-N	-5.34	116.44	123.28
1	C	161	CYS	N-CA-C	-5.34	106.07	112.59
1	E	277	ILE	N-CA-C	5.34	116.40	108.23
1	I	454	LYS	O-C-N	-5.34	115.69	122.26
1	B	201	VAL	CA-C-O	-5.34	115.23	121.80
1	F	205	PHE	N-CA-C	-5.34	105.47	112.41
1	J	300	SER	N-CA-C	-5.34	105.57	111.71
1	L	73	PHE	CA-C-N	-5.34	115.53	123.11
1	L	73	PHE	C-N-CA	-5.34	115.53	123.11
1	M	387	THR	CB-CA-C	-5.34	102.27	110.81
1	A	258	ARG	CA-C-N	-5.34	113.47	123.03
1	A	258	ARG	C-N-CA	-5.34	113.47	123.03
1	A	303	GLN	CA-C-N	5.34	129.09	120.55
1	A	303	GLN	C-N-CA	5.34	129.09	120.55
1	B	260	LEU	CA-C-O	5.34	126.71	120.20
1	E	171	LYS	CA-C-N	-5.34	115.91	122.15
1	E	171	LYS	C-N-CA	-5.34	115.91	122.15
1	L	328	PHE	CA-C-N	-5.34	116.18	123.12
1	L	328	PHE	C-N-CA	-5.34	116.18	123.12
1	H	201	VAL	CB-CA-C	-5.33	102.54	111.29
1	O	259	HIS	N-CA-C	5.33	117.09	109.14
1	B	228	ILE	N-CA-C	5.33	115.78	107.99

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	237	MET	N-CA-C	5.33	122.16	110.80
1	D	52	ILE	CG1-CB-CG2	-5.33	94.70	110.70
1	H	115	VAL	CA-C-O	-5.33	115.63	121.28
1	K	333	ASP	O-C-N	-5.33	117.38	123.40
1	E	466	ARG	N-CA-C	-5.33	105.39	111.14
1	O	126	LEU	CA-C-N	-5.33	113.95	122.53
1	O	126	LEU	C-N-CA	-5.33	113.95	122.53
1	A	283	THR	CB-CA-C	-5.33	102.18	111.23
1	E	371	GLN	N-CA-C	5.33	118.42	109.95
1	J	257	VAL	N-CA-C	5.33	114.27	106.55
1	K	292	THR	N-CA-C	-5.33	100.94	109.04
1	E	335	THR	N-CA-C	5.32	119.04	112.54
1	D	165	ILE	CB-CA-C	-5.32	103.48	110.98
1	I	327	LEU	N-CA-C	5.32	118.06	108.48
1	J	171	LYS	CG-CD-CE	-5.32	99.06	111.30
1	J	363	ARG	NE-CZ-NH2	-5.32	114.41	119.20
1	J	451	LEU	CB-CA-C	-5.32	102.40	111.02
1	O	354	LYS	N-CA-C	5.32	117.09	108.26
1	I	313	ARG	NE-CZ-NH2	-5.32	114.41	119.20
1	G	23	SER	CA-C-O	-5.32	115.91	121.55
1	L	41	ARG	N-CA-C	-5.32	102.52	110.23
1	B	340	MET	CB-CG-SD	-5.32	96.75	112.70
1	O	200	MET	CA-C-N	-5.31	112.41	121.97
1	O	200	MET	C-N-CA	-5.31	112.41	121.97
1	C	98	LEU	CA-C-O	5.31	126.10	120.36
1	B	261	PHE	N-CA-C	5.31	117.34	109.69
1	E	159	ILE	CB-CA-C	-5.31	103.81	111.19
1	L	214	GLN	N-CA-C	5.31	118.13	107.41
1	M	152	LYS	CA-C-O	-5.31	115.31	121.15
1	F	68	LEU	CA-CB-CG	-5.30	97.73	116.30
1	J	388	TYR	CA-C-O	-5.30	115.24	121.07
1	K	189	GLU	CA-C-N	-5.30	114.03	121.72
1	K	189	GLU	C-N-CA	-5.30	114.03	121.72
1	N	225	CYS	CA-C-N	-5.30	114.14	122.79
1	N	225	CYS	C-N-CA	-5.30	114.14	122.79
1	I	464	LEU	CB-CA-C	-5.30	102.49	110.92
1	A	52	ILE	CB-CA-C	-5.30	104.55	111.81
1	A	319	ASN	N-CA-C	5.30	117.81	109.39
1	C	62	VAL	N-CA-CB	5.30	118.63	111.21
1	C	227	SER	CA-C-N	-5.30	116.20	123.14
1	C	227	SER	C-N-CA	-5.30	116.20	123.14
1	H	257	VAL	N-CA-C	5.29	120.35	109.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	98	LEU	N-CA-C	5.29	117.86	109.50
1	N	305	PHE	N-CA-C	5.29	117.57	109.95
1	B	76	LYS	N-CA-C	5.29	117.55	110.35
1	D	163	PRO	N-CA-C	5.29	117.16	110.70
1	E	236	LYS	CB-CA-C	-5.29	102.81	110.96
1	I	323	TRP	CA-C-O	5.29	126.24	120.95
1	E	185	CYS	O-C-N	5.29	126.16	121.19
1	E	447	TRP	N-CA-C	-5.29	101.16	109.25
1	L	228	ILE	CA-C-N	-5.29	115.16	122.30
1	L	228	ILE	C-N-CA	-5.29	115.16	122.30
1	O	263	ARG	NE-CZ-NH2	-5.29	114.44	119.20
1	D	462	PHE	CA-C-O	5.29	125.74	120.03
1	F	277	ILE	CB-CG1-CD1	-5.29	102.70	113.80
1	D	370	LEU	CA-C-N	-5.28	114.38	122.62
1	D	370	LEU	C-N-CA	-5.28	114.38	122.62
1	H	42	LEU	CD1-CG-CD2	-5.28	99.18	110.80
1	M	305	PHE	N-CA-C	5.28	116.81	109.31
1	D	237	MET	N-CA-C	5.28	118.51	111.75
1	G	100	TRP	O-C-N	-5.28	117.30	123.27
1	D	223	ASP	CA-C-N	-5.28	115.37	121.71
1	D	223	ASP	C-N-CA	-5.28	115.37	121.71
1	F	447	TRP	N-CA-C	-5.28	101.17	109.25
1	L	258	ARG	CG-CD-NE	-5.28	100.38	112.00
1	I	30	ARG	NE-CZ-NH1	-5.28	116.22	121.50
1	M	360	GLU	N-CA-C	-5.28	101.10	109.76
1	G	40	SER	N-CA-C	-5.28	102.18	110.36
1	M	147	ILE	N-CA-C	5.28	115.64	107.78
1	F	319	ASN	N-CA-C	5.27	122.03	110.80
1	A	258	ARG	N-CA-CB	-5.27	102.34	109.98
1	A	115	VAL	O-C-N	5.27	128.90	123.05
1	F	30	ARG	NH1-CZ-NH2	5.27	126.15	119.30
1	F	244	ASP	N-CA-C	-5.27	106.91	113.55
1	G	233	ASP	CA-C-N	-5.27	111.73	120.68
1	G	233	ASP	C-N-CA	-5.27	111.73	120.68
1	J	262	ASN	CA-C-O	-5.27	115.13	120.71
1	L	279	GLY	N-CA-C	-5.27	100.70	113.18
1	C	106	GLU	CB-CG-CD	5.26	121.55	112.60
1	I	64	LYS	CA-C-O	5.26	126.70	120.70
1	I	172	GLY	CA-C-N	5.26	127.81	120.65
1	I	172	GLY	C-N-CA	5.26	127.81	120.65
1	A	318	ASN	CB-CA-C	-5.26	102.13	110.81
1	D	95	SER	N-CA-C	5.26	119.85	113.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	106	GLU	N-CA-C	-5.26	99.53	108.26
1	J	159	ILE	CB-CA-C	-5.26	104.15	110.99
1	M	190	LEU	CA-C-N	-5.26	113.66	122.92
1	M	190	LEU	C-N-CA	-5.26	113.66	122.92
1	F	263	ARG	CB-CA-C	-5.26	100.62	109.83
1	I	255	MET	CA-C-O	-5.26	115.52	121.25
1	H	24	THR	N-CA-C	-5.26	105.51	112.34
1	K	467	LYS	CG-CD-CE	5.26	123.39	111.30
1	A	345	ALA	N-CA-C	5.25	118.26	110.48
1	H	143	ASN	O-C-N	5.25	128.93	122.20
1	H	336	ARG	N-CA-C	-5.25	106.10	112.88
1	J	391	SER	CA-CB-OG	-5.25	100.59	111.10
1	D	330	THR	CA-C-O	-5.25	114.61	120.54
1	H	71	ARG	CA-C-N	-5.25	115.82	122.43
1	H	71	ARG	C-N-CA	-5.25	115.82	122.43
1	A	224	ILE	CB-CA-C	-5.25	102.69	111.29
1	J	98	LEU	CA-C-N	-5.25	114.39	122.68
1	J	98	LEU	C-N-CA	-5.25	114.39	122.68
1	O	271	VAL	CB-CA-C	-5.25	101.81	111.36
1	H	460	ASP	O-C-N	-5.24	115.62	122.59
1	O	337	SER	CA-C-O	-5.24	113.01	120.51
1	A	87	ASP	OD1-CG-OD2	5.24	135.48	122.90
1	E	278	LYS	CA-C-N	-5.24	117.62	122.29
1	E	278	LYS	C-N-CA	-5.24	117.62	122.29
1	G	189	GLU	CB-CA-C	5.24	118.82	109.65
1	I	99	VAL	CB-CA-C	-5.24	102.58	110.55
1	C	149	MET	CA-C-O	-5.24	113.02	120.51
1	C	172	GLY	CA-C-N	5.24	128.53	121.20
1	C	172	GLY	C-N-CA	5.24	128.53	121.20
1	G	245	MET	O-C-N	-5.24	116.67	122.07
1	L	386	MET	O-C-N	5.24	128.12	122.15
1	M	163	PRO	CB-CG-CD	-5.24	89.34	106.10
1	C	97	ARG	CA-C-N	5.24	130.37	122.99
1	C	97	ARG	C-N-CA	5.24	130.37	122.99
1	C	166	GLY	O-C-N	-5.24	118.70	123.36
1	B	23	SER	O-C-N	5.23	129.36	122.97
1	B	191	LEU	N-CA-C	5.23	118.02	109.59
1	I	332	VAL	CA-C-N	-5.23	114.01	121.33
1	I	332	VAL	C-N-CA	-5.23	114.01	121.33
1	K	466	ARG	CG-CD-NE	5.23	123.51	112.00
1	B	40	SER	N-CA-C	-5.23	103.70	110.19
1	J	83	PHE	CA-C-O	5.23	127.99	120.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	114	GLY	CA-C-O	-5.23	116.50	121.62
1	B	361	TYR	N-CA-C	-5.23	101.35	109.24
1	A	299	THR	CA-CB-CG2	-5.22	101.62	110.50
1	B	391	SER	N-CA-C	-5.22	105.27	111.69
1	B	267	VAL	N-CA-C	5.22	116.26	108.54
1	C	294	SER	N-CA-C	-5.22	99.68	110.80
1	D	464	LEU	CD1-CG-CD2	-5.22	99.32	110.80
1	F	219	ASP	N-CA-C	5.22	118.76	111.30
1	J	207	ALA	N-CA-C	5.22	117.79	107.98
1	L	223	ASP	CA-C-N	-5.22	115.45	121.71
1	L	223	ASP	C-N-CA	-5.22	115.45	121.71
1	O	85	PHE	N-CA-C	5.22	117.86	110.40
1	E	376	LEU	CA-C-N	-5.22	114.05	122.81
1	E	376	LEU	C-N-CA	-5.22	114.05	122.81
1	K	194	VAL	CA-C-N	-5.22	113.65	120.95
1	K	194	VAL	C-N-CA	-5.22	113.65	120.95
1	K	258	ARG	NE-CZ-NH1	-5.22	116.28	121.50
1	C	102	CYS	CB-CA-C	-5.21	100.72	109.53
1	I	314	ALA	N-CA-CB	-5.21	102.99	110.44
1	A	123	LEU	CA-C-N	-5.21	115.06	122.77
1	A	123	LEU	C-N-CA	-5.21	115.06	122.77
1	B	199	ASP	N-CA-C	5.21	117.25	110.43
1	G	218	SER	CA-C-N	-5.21	113.29	123.13
1	G	218	SER	C-N-CA	-5.21	113.29	123.13
1	J	39	SER	N-CA-C	-5.21	102.77	110.48
1	L	66	SER	CA-CB-OG	-5.21	100.69	111.10
1	E	182	ALA	N-CA-C	5.21	117.58	110.24
1	G	219	ASP	CA-C-O	-5.21	115.28	121.32
1	E	23	SER	N-CA-C	5.20	117.78	110.23
1	G	31	THR	O-C-N	5.20	129.52	122.96
1	D	259	HIS	N-CA-C	5.20	117.18	109.69
1	F	379	ILE	CB-CA-C	-5.20	103.36	110.96
1	I	251	ARG	NE-CZ-NH2	5.20	123.88	119.20
1	J	311	LEU	CA-C-N	5.20	128.02	120.79
1	J	311	LEU	C-N-CA	5.20	128.02	120.79
1	E	73	PHE	CA-C-N	-5.20	116.08	122.84
1	E	73	PHE	C-N-CA	-5.20	116.08	122.84
1	F	104	GLY	CA-C-N	-5.20	116.70	122.27
1	F	104	GLY	C-N-CA	-5.20	116.70	122.27
1	F	327	LEU	CA-C-N	-5.20	115.48	123.07
1	F	327	LEU	C-N-CA	-5.20	115.48	123.07
1	G	265	GLY	CA-C-O	-5.20	118.64	122.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	302	ALA	CA-C-O	-5.20	113.99	119.97
1	N	244	ASP	CB-CG-OD1	5.20	130.36	118.40
1	B	448	GLU	CA-C-O	-5.20	114.99	120.92
1	N	74	ARG	NE-CZ-NH2	5.20	123.88	119.20
1	D	36	HIS	N-CA-C	-5.20	101.24	109.76
1	D	362	LEU	CD1-CG-CD2	-5.20	99.37	110.80
1	F	201	VAL	O-C-N	5.20	129.28	122.47
1	O	64	LYS	CG-CD-CE	5.20	123.25	111.30
1	A	103	THR	CA-CB-OG1	-5.19	101.81	109.60
1	B	292	THR	CB-CA-C	-5.19	103.93	109.85
1	C	30	ARG	N-CA-C	-5.19	102.09	110.14
1	M	106	GLU	N-CA-CB	-5.19	102.31	110.77
1	N	361	TYR	CA-C-N	-5.19	115.16	122.94
1	N	361	TYR	C-N-CA	-5.19	115.16	122.94
1	D	304	ILE	N-CA-C	-5.19	107.35	113.42
1	M	117	ILE	CB-CG1-CD1	-5.19	102.91	113.80
1	B	76	LYS	CA-C-N	-5.18	112.17	122.90
1	B	76	LYS	C-N-CA	-5.18	112.17	122.90
1	D	36	HIS	CA-C-N	-5.18	113.45	122.37
1	D	36	HIS	C-N-CA	-5.18	113.45	122.37
1	A	452	LYS	CA-C-N	-5.18	114.05	122.65
1	A	452	LYS	C-N-CA	-5.18	114.05	122.65
1	C	74	ARG	NE-CZ-NH1	-5.18	116.32	121.50
1	E	83	PHE	N-CA-C	-5.18	103.50	110.24
1	N	301	ASP	O-C-N	5.18	128.06	122.15
1	H	223	ASP	N-CA-C	5.18	121.83	110.80
1	I	165	ILE	CB-CG1-CD1	5.18	124.68	113.80
1	L	465	GLY	CA-C-N	-5.18	113.55	120.54
1	L	465	GLY	C-N-CA	-5.18	113.55	120.54
1	D	85	PHE	O-C-N	5.17	126.25	121.80
1	O	65	VAL	N-CA-C	5.17	114.65	106.32
1	G	52	ILE	N-CA-C	-5.17	98.55	107.24
1	N	383	ALA	N-CA-C	5.17	119.85	111.37
1	D	25	ASP	N-CA-C	-5.17	106.07	112.38
1	K	193	THR	CA-C-N	-5.17	114.23	122.50
1	K	193	THR	C-N-CA	-5.17	114.23	122.50
1	C	199	ASP	CA-C-N	-5.17	115.59	122.72
1	C	199	ASP	C-N-CA	-5.17	115.59	122.72
1	I	303	GLN	CA-C-N	5.17	129.12	120.64
1	I	303	GLN	C-N-CA	5.17	129.12	120.64
1	N	308	PRO	CB-CA-C	5.17	118.14	110.85
1	B	47	HIS	CA-C-N	5.17	126.00	120.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	47	HIS	C-N-CA	5.17	126.00	120.47
1	E	115	VAL	CA-C-N	-5.17	116.14	122.75
1	E	115	VAL	C-N-CA	-5.17	116.14	122.75
1	C	364	HIS	CA-C-N	-5.17	117.79	122.80
1	C	364	HIS	C-N-CA	-5.17	117.79	122.80
1	A	298	VAL	CA-C-N	5.16	130.02	121.86
1	A	298	VAL	C-N-CA	5.16	130.02	121.86
1	B	264	ALA	N-CA-C	-5.16	101.46	109.72
1	E	386	MET	O-C-N	5.16	127.39	122.07
1	L	395	SER	CA-CB-OG	-5.16	100.77	111.10
1	M	217	LYS	CB-CG-CD	-5.16	99.42	111.30
1	O	292	THR	N-CA-C	-5.16	102.13	109.62
1	I	331	VAL	N-CA-C	5.16	115.55	108.12
1	M	72	VAL	CA-C-O	-5.16	114.83	120.97
1	B	257	VAL	CA-C-O	-5.16	114.83	120.97
1	F	101	ALA	N-CA-C	5.16	118.22	109.76
1	G	454	LYS	N-CA-CB	-5.16	102.71	111.17
1	N	465	GLY	CA-C-O	-5.16	115.74	121.05
1	K	134	LYS	CD-CE-NZ	-5.16	95.40	111.90
1	M	319	ASN	CA-C-O	-5.16	115.53	122.44
1	A	144	ARG	NE-CZ-NH1	5.16	126.66	121.50
1	F	469	LEU	O-C-N	5.15	127.58	122.12
1	B	189	GLU	CA-CB-CG	-5.15	103.79	114.10
1	J	290	PHE	CA-C-N	5.15	126.28	119.84
1	J	290	PHE	C-N-CA	5.15	126.28	119.84
1	O	102	CYS	N-CA-C	5.15	117.69	109.96
1	B	192	ASN	CA-C-O	5.15	126.52	120.80
1	F	109	ARG	CA-C-N	-5.15	117.33	122.69
1	F	109	ARG	C-N-CA	-5.15	117.33	122.69
1	H	157	CYS	CA-CB-SG	-5.15	102.55	114.40
1	H	462	PHE	CA-C-N	5.15	124.33	118.97
1	H	462	PHE	C-N-CA	5.15	124.33	118.97
1	A	299	THR	CA-CB-OG1	5.15	117.32	109.60
1	D	245	MET	N-CA-CB	-5.15	102.00	109.82
1	F	102	CYS	CA-C-O	5.15	126.46	120.49
1	L	85	PHE	O-C-N	5.15	126.50	121.66
1	M	262	ASN	CA-C-N	-5.15	113.89	122.64
1	M	262	ASN	C-N-CA	-5.15	113.89	122.64
1	B	40	SER	CA-C-O	-5.14	116.61	122.01
1	N	250	LEU	N-CA-CB	5.14	119.08	110.59
1	D	318	ASN	CB-CA-C	-5.14	102.18	110.77
1	J	28	VAL	O-C-N	5.14	128.65	123.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	J	336	ARG	N-CA-C	-5.14	106.31	112.59
1	C	148	SER	N-CA-C	5.14	117.93	110.17
1	H	379	ILE	CB-CG1-CD1	-5.14	103.00	113.80
1	H	22	VAL	CB-CA-C	-5.14	102.45	110.52
1	N	299	THR	OG1-CB-CG2	5.14	119.58	109.30
1	G	206	GLY	CA-C-N	-5.14	116.16	122.84
1	G	206	GLY	C-N-CA	-5.14	116.16	122.84
1	G	302	ALA	CA-C-O	-5.14	115.42	121.07
1	N	330	THR	N-CA-C	-5.14	100.36	108.73
1	F	296	SER	CA-C-N	-5.13	115.24	122.94
1	F	296	SER	C-N-CA	-5.13	115.24	122.94
1	K	263	ARG	CA-CB-CG	5.13	124.37	114.10
1	O	22	VAL	N-CA-CB	-5.13	105.33	112.52
1	E	47	HIS	CA-C-N	5.13	125.58	120.04
1	E	47	HIS	C-N-CA	5.13	125.58	120.04
1	F	284	LEU	CA-C-N	5.13	125.11	120.03
1	F	284	LEU	C-N-CA	5.13	125.11	120.03
1	B	25	ASP	CA-C-O	5.13	125.72	119.05
1	N	256	PHE	CA-C-N	-5.13	116.07	122.48
1	N	256	PHE	C-N-CA	-5.13	116.07	122.48
1	G	457	ALA	CA-C-N	-5.13	115.18	122.77
1	G	457	ALA	C-N-CA	-5.13	115.18	122.77
1	J	388	TYR	O-C-N	5.13	127.57	122.08
1	M	396	ILE	N-CA-C	-5.13	105.54	110.72
1	O	152	LYS	O-C-N	-5.13	116.50	122.81
1	O	464	LEU	N-CA-C	5.13	117.54	111.33
1	C	132	SER	CA-CB-OG	5.13	121.35	111.10
1	E	466	ARG	CA-C-N	5.13	127.92	120.79
1	E	466	ARG	C-N-CA	5.13	127.92	120.79
1	K	186	PRO	CB-CA-C	-5.13	104.67	110.92
1	C	379	ILE	CA-C-N	5.12	130.22	123.05
1	C	379	ILE	C-N-CA	5.12	130.22	123.05
1	E	64	LYS	CD-CE-NZ	-5.12	95.50	111.90
1	J	22	VAL	CB-CA-C	-5.12	101.85	110.71
1	G	344	SER	N-CA-C	-5.12	101.53	109.72
1	I	212	THR	N-CA-CB	-5.12	102.58	110.16
1	K	140	GLY	CA-C-N	-5.12	115.26	122.94
1	K	140	GLY	C-N-CA	-5.12	115.26	122.94
1	L	100	TRP	CA-C-N	5.12	130.72	123.14
1	L	100	TRP	C-N-CA	5.12	130.72	123.14
1	M	189	GLU	N-CA-C	5.12	117.42	108.76
1	B	70	TYR	N-CA-C	-5.12	102.18	110.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	367	GLU	CA-C-O	5.12	126.44	120.20
1	I	214	GLN	N-CA-C	5.12	117.98	107.69
1	O	321	ILE	CA-C-O	5.12	127.00	120.75
1	K	202	ASP	N-CA-C	-5.12	102.71	110.28
1	B	60	ILE	CB-CA-C	-5.11	103.71	111.33
1	C	24	THR	N-CA-C	-5.11	106.14	112.38
1	H	324	SER	CB-CA-C	-5.11	104.68	111.63
1	L	32	ASN	N-CA-CB	-5.11	101.89	110.22
1	E	33	ILE	CB-CA-C	-5.11	104.35	110.99
1	J	123	LEU	CB-CA-C	-5.11	101.47	109.70
1	J	395	SER	CB-CA-C	-5.11	102.26	110.74
1	A	40	SER	CA-CB-OG	-5.10	100.89	111.10
1	C	163	PRO	CB-CG-CD	-5.10	89.77	106.10
1	I	171	LYS	CG-CD-CE	-5.10	99.56	111.30
1	A	238	VAL	N-CA-C	-5.10	105.44	111.00
1	G	38	GLY	N-CA-C	5.10	119.52	110.80
1	B	22	VAL	CB-CA-C	-5.10	102.00	111.18
1	H	265	GLY	CA-C-O	-5.10	117.90	121.88
1	K	467	LYS	N-CA-C	-5.10	105.90	111.82
1	C	31	THR	N-CA-C	-5.10	101.33	109.23
1	C	333	ASP	CB-CG-OD2	5.10	130.12	118.40
1	M	469	LEU	N-CA-C	-5.10	105.62	111.07
1	L	258	ARG	CA-C-O	-5.10	115.65	121.00
1	J	313	ARG	CA-C-N	-5.09	113.93	123.05
1	J	313	ARG	C-N-CA	-5.09	113.93	123.05
1	M	338	THR	N-CA-C	5.09	118.25	110.20
1	N	338	THR	N-CA-CB	5.09	117.48	109.69
1	G	320	GLY	N-CA-C	5.09	125.25	113.18
1	M	152	LYS	CA-C-N	-5.09	115.69	122.72
1	M	152	LYS	C-N-CA	-5.09	115.69	122.72
1	J	341	SER	CA-C-N	-5.09	116.47	123.14
1	J	341	SER	C-N-CA	-5.09	116.47	123.14
1	L	318	ASN	CB-CA-C	5.09	119.21	110.81
1	D	101	ALA	O-C-N	-5.09	117.42	123.22
1	G	225	CYS	CA-C-N	-5.09	114.65	123.25
1	G	225	CYS	C-N-CA	-5.09	114.65	123.25
1	J	62	VAL	N-CA-CB	-5.09	106.17	111.61
1	H	380	THR	CA-C-N	-5.09	113.93	122.17
1	H	380	THR	C-N-CA	-5.09	113.93	122.17
1	F	182	ALA	CA-C-N	-5.08	117.39	123.44
1	F	182	ALA	C-N-CA	-5.08	117.39	123.44
1	H	330	THR	CA-C-O	-5.08	115.25	121.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	242	TYR	N-CA-C	-5.08	105.38	112.45
1	B	445	THR	N-CA-C	5.08	116.99	107.99
1	C	103	THR	OG1-CB-CG2	-5.08	99.14	109.30
1	D	85	PHE	CA-C-N	5.08	126.19	119.84
1	D	85	PHE	C-N-CA	5.08	126.19	119.84
1	L	271	VAL	CA-C-O	5.08	124.70	119.82
1	M	393	ASN	O-C-N	5.08	127.16	121.32
1	K	345	ALA	CA-C-N	5.08	127.63	120.42
1	K	345	ALA	C-N-CA	5.08	127.63	120.42
1	M	103	THR	N-CA-C	5.08	119.95	113.55
1	B	336	ARG	CG-CD-NE	-5.08	100.83	112.00
1	K	188	LEU	CA-C-N	-5.07	111.89	121.63
1	K	188	LEU	C-N-CA	-5.07	111.89	121.63
1	C	378	LYS	O-C-N	-5.07	117.31	123.29
1	N	258	ARG	N-CA-C	-5.07	105.44	110.97
1	E	45	VAL	CB-CA-C	-5.07	101.94	110.71
1	E	237	MET	CG-SD-CE	5.07	112.05	100.90
1	K	385	VAL	N-CA-CB	5.07	116.81	110.47
1	E	60	ILE	CA-CB-CG1	5.07	119.01	110.40
1	G	215	ALA	CA-C-O	-5.07	115.68	120.90
1	H	156	LEU	CD1-CG-CD2	-5.07	99.66	110.80
1	I	258	ARG	CA-C-O	-5.07	115.50	120.82
1	F	83	PHE	O-C-N	-5.06	116.79	122.97
1	N	114	GLY	N-CA-C	-5.06	103.66	110.80
1	F	30	ARG	N-CA-CB	-5.06	103.06	110.85
1	F	112	PRO	CB-CG-CD	-5.06	89.90	106.10
1	H	42	LEU	N-CA-C	-5.06	100.92	109.07
1	O	28	VAL	O-C-N	-5.06	118.12	123.03
1	G	103	THR	CA-C-N	-5.06	114.08	121.26
1	G	103	THR	C-N-CA	-5.06	114.08	121.26
1	M	134	LYS	CD-CE-NZ	-5.06	95.72	111.90
1	N	185	CYS	CA-C-O	5.06	123.61	119.36
1	A	154	THR	CA-CB-OG1	5.05	117.18	109.60
1	B	254	GLN	CA-C-O	-5.05	116.04	121.45
1	H	386	MET	O-C-N	5.05	127.91	122.15
1	B	210	PHE	N-CA-C	5.05	117.52	111.71
1	B	225	CYS	N-CA-C	5.05	118.22	111.75
1	D	70	TYR	N-CA-C	-5.05	102.98	110.46
1	H	356	ASP	N-CA-C	5.05	118.22	111.75
1	I	206	GLY	CA-C-N	-5.05	115.67	123.14
1	I	206	GLY	C-N-CA	-5.05	115.67	123.14
1	B	79	ASP	CB-CG-OD1	5.05	130.01	118.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	395	SER	O-C-N	-5.05	116.44	122.20
1	O	454	LYS	CG-CD-CE	-5.05	99.69	111.30
1	H	237	MET	CG-SD-CE	5.05	112.00	100.90
1	E	20	ALA	CA-C-N	5.04	128.12	120.75
1	E	20	ALA	C-N-CA	5.04	128.12	120.75
1	A	64	LYS	CA-C-O	5.04	127.31	121.11
1	J	83	PHE	CA-C-N	-5.04	118.65	122.33
1	J	83	PHE	C-N-CA	-5.04	118.65	122.33
1	J	188	LEU	CB-CG-CD2	-5.04	95.57	110.70
1	O	74	ARG	CA-C-N	-5.04	116.58	122.93
1	O	74	ARG	C-N-CA	-5.04	116.58	122.93
1	I	371	GLN	N-CA-C	-5.04	101.71	109.52
1	K	450	ASP	CA-C-N	-5.04	114.66	122.67
1	K	450	ASP	C-N-CA	-5.04	114.66	122.67
1	G	256	PHE	CB-CA-C	-5.04	101.88	110.95
1	A	245	MET	CB-CA-C	-5.03	102.29	110.85
1	C	102	CYS	CA-CB-SG	-5.03	102.82	114.40
1	J	239	SER	CA-CB-OG	-5.03	101.03	111.10
1	A	382	THR	OG1-CB-CG2	5.03	119.36	109.30
1	B	99	VAL	CA-C-N	-5.03	116.06	123.00
1	B	99	VAL	C-N-CA	-5.03	116.06	123.00
1	G	273	ALA	N-CA-C	5.03	118.91	112.87
1	K	173	THR	CB-CA-C	-5.03	101.53	109.82
1	G	79	ASP	N-CA-C	5.03	116.86	109.42
1	K	339	ASN	CA-C-O	-5.03	115.08	120.46
1	C	288	SER	CA-CB-OG	-5.02	101.06	111.10
1	D	219	ASP	N-CA-C	5.02	118.48	111.30
1	O	292	THR	CA-C-O	5.02	125.23	119.61
1	G	100	TRP	CA-C-N	-5.02	116.07	123.00
1	G	100	TRP	C-N-CA	-5.02	116.07	123.00
1	J	329	VAL	CA-CB-CG1	-5.02	101.86	110.40
1	D	155	GLN	OE1-CD-NE2	5.02	127.62	122.60
1	G	129	THR	N-CA-C	5.02	118.44	112.72
1	C	379	ILE	N-CA-C	-5.02	100.98	108.46
1	F	246	LEU	CD1-CG-CD2	-5.02	99.76	110.80
1	H	278	LYS	CA-C-O	5.02	127.68	120.51
1	K	461	GLN	N-CA-C	5.02	121.48	110.80
1	M	321	ILE	CA-C-O	5.02	126.56	120.74
1	O	46	GLY	CA-C-O	-5.02	116.11	121.38
1	O	464	LEU	CB-CG-CD1	-5.02	95.65	110.70
1	L	234	TYR	O-C-N	5.02	128.27	122.20
1	O	386	MET	N-CA-C	5.02	117.40	111.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	292	THR	CB-CA-C	-5.01	104.13	109.85
1	L	318	ASN	CA-C-N	-5.01	114.79	122.21
1	L	318	ASN	C-N-CA	-5.01	114.79	122.21
1	L	452	LYS	CG-CD-CE	-5.01	99.77	111.30
1	N	324	SER	N-CA-C	-5.01	106.47	112.58
1	A	273	ALA	N-CA-C	5.01	118.49	112.38
1	A	152	LYS	CA-C-N	-5.01	116.09	123.00
1	A	152	LYS	C-N-CA	-5.01	116.09	123.00
1	C	240	GLU	CA-C-N	5.01	124.18	118.97
1	C	240	GLU	C-N-CA	5.01	124.18	118.97
1	C	375	GLN	CB-CG-CD	-5.01	104.08	112.60
1	D	271	VAL	CA-C-N	5.01	126.10	119.84
1	D	271	VAL	C-N-CA	5.01	126.10	119.84
1	D	74	ARG	CA-C-O	5.01	125.83	120.32
1	B	204	GLY	N-CA-C	-5.01	101.32	113.18
1	C	143	ASN	N-CA-C	-5.01	106.91	112.57
1	M	454	LYS	O-C-N	-5.00	115.79	122.20
1	B	102	CYS	CA-C-O	-5.00	115.69	121.19
1	D	48	PRO	N-CA-C	5.00	121.13	114.18
1	F	109	ARG	NE-CZ-NH1	5.00	126.50	121.50
1	G	45	VAL	CA-C-N	-5.00	115.88	121.83
1	G	45	VAL	C-N-CA	-5.00	115.88	121.83

There are no chirality outliers.

All (12) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	256	PHE	Sidechain
1	A	35	TYR	Sidechain
1	A	468	PHE	Sidechain
1	B	231	TYR	Sidechain
1	B	462	PHE	Sidechain
1	D	34	TYR	Sidechain
1	F	258	ARG	Sidechain
1	I	256	PHE	Sidechain
1	I	27	TYR	Sidechain
1	I	468	PHE	Sidechain
1	J	70	TYR	Sidechain
1	O	231	TYR	Sidechain

5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	3290	0	3191	242	0
1	B	3290	0	3191	256	0
1	C	3290	0	3191	296	0
1	D	3290	0	3191	260	0
1	E	3290	0	3191	267	0
1	F	3290	0	3191	298	0
1	G	3290	0	3191	229	0
1	H	3290	0	3191	232	0
1	I	3290	0	3191	262	0
1	J	3290	0	3191	236	0
1	K	3290	0	3191	264	0
1	L	3290	0	3191	298	0
1	M	3290	0	3191	295	0
1	N	3290	0	3191	256	0
1	O	3290	0	3191	273	0
All	All	49350	0	47865	3575	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 37.

All (3575) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:379:ILE:CG1	1:K:379:ILE:CD1	1.74	1.65
1:F:117:ILE:CG1	1:F:117:ILE:CD1	1.75	1.65
1:G:254:GLN:CB	1:G:254:GLN:CG	1.75	1.63
1:N:76:LYS:CD	1:N:76:LYS:CG	1.75	1.62
1:O:228:ILE:CD1	1:O:228:ILE:CG1	1.76	1.62
1:A:64:LYS:CG	1:A:64:LYS:CD	1.80	1.60
1:E:224:ILE:CG1	1:E:224:ILE:CD1	1.74	1.60
1:A:267:VAL:CB	1:A:267:VAL:CG2	1.76	1.58
1:M:59:LYS:CE	1:M:59:LYS:CD	1.75	1.58
1:I:304:ILE:CD1	1:I:304:ILE:CG1	1.76	1.58
1:N:152:LYS:CD	1:N:152:LYS:CE	1.80	1.58
1:A:76:LYS:CG	1:A:76:LYS:CD	1.76	1.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:297:MET:CG	1:C:297:MET:CB	1.79	1.58
1:I:280:THR:CB	1:I:280:THR:CG2	1.76	1.58
1:A:125:LYS:CD	1:A:125:LYS:CE	1.81	1.57
1:J:43:LEU:CG	1:J:43:LEU:CD1	1.75	1.56
1:O:359:LYS:NZ	1:O:359:LYS:CE	1.68	1.56
1:M:103:THR:CB	1:M:103:THR:CG2	1.76	1.55
1:C:31:THR:CA	1:C:31:THR:CB	1.77	1.55
1:B:467:LYS:CE	1:B:467:LYS:CD	1.83	1.55
1:M:396:ILE:CG1	1:M:396:ILE:CD1	1.81	1.53
1:N:389:ILE:CG1	1:N:389:ILE:CD1	1.79	1.53
1:F:134:LYS:NZ	1:F:134:LYS:CE	1.69	1.52
1:D:359:LYS:CD	1:D:359:LYS:CE	1.86	1.52
1:M:354:LYS:NZ	1:M:354:LYS:CE	1.73	1.52
1:A:125:LYS:CE	1:A:125:LYS:NZ	1.71	1.51
1:N:359:LYS:CG	1:N:359:LYS:CD	1.87	1.51
1:A:467:LYS:NZ	1:A:467:LYS:CE	1.67	1.51
1:I:64:LYS:NZ	1:I:64:LYS:CE	1.72	1.51
1:B:467:LYS:CE	1:B:467:LYS:NZ	1.68	1.50
1:J:125:LYS:NZ	1:J:125:LYS:CE	1.69	1.49
1:L:59:LYS:NZ	1:L:59:LYS:CE	1.74	1.49
1:L:452:LYS:CD	1:L:452:LYS:CG	1.87	1.49
1:O:224:ILE:CG1	1:O:224:ILE:CD1	1.88	1.49
1:L:467:LYS:CD	1:L:467:LYS:CE	1.90	1.48
1:L:392:MET:CE	1:L:392:MET:SD	2.02	1.48
1:O:59:LYS:NZ	1:O:59:LYS:CE	1.75	1.48
1:D:217:LYS:NZ	1:D:217:LYS:CE	1.76	1.48
1:I:392:MET:CE	1:I:392:MET:SD	2.01	1.47
1:B:134:LYS:NZ	1:B:134:LYS:CE	1.77	1.46
1:L:467:LYS:CD	1:L:467:LYS:CG	1.89	1.46
1:E:359:LYS:NZ	1:E:359:LYS:CE	1.79	1.45
1:L:467:LYS:CE	1:L:467:LYS:NZ	1.80	1.45
1:I:53:LYS:NZ	1:I:53:LYS:CE	1.78	1.44
1:C:392:MET:CE	1:C:392:MET:SD	2.05	1.43
1:A:304:ILE:CD1	1:A:304:ILE:CG1	1.95	1.43
1:C:121:PRO:CB	1:C:121:PRO:CG	1.77	1.41
1:F:354:LYS:NZ	1:F:354:LYS:CE	1.83	1.39
1:M:152:LYS:NZ	1:M:152:LYS:CE	1.87	1.38
1:N:152:LYS:CE	1:N:152:LYS:NZ	1.88	1.34
1:M:63:PRO:CG	1:M:63:PRO:CB	1.77	1.26
1:N:255:MET:HG2	1:N:256:PHE:N	1.57	1.19
1:M:311:LEU:N	1:M:311:LEU:HD23	1.58	1.14

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:219:ASP:HB2	1:O:263:ARG:NH1	1.59	1.14
1:B:311:LEU:HD23	1:B:311:LEU:H	1.16	1.10
1:H:386:MET:HG2	1:H:397:LEU:HD21	1.32	1.09
1:M:219:ASP:HB2	1:M:263:ARG:NH1	1.70	1.06
1:M:311:LEU:H	1:M:311:LEU:CD2	1.70	1.05
1:A:257:VAL:HG22	1:E:115:VAL:HG21	1.34	1.03
1:M:311:LEU:HD23	1:M:311:LEU:H	0.85	1.02
1:C:311:LEU:HD23	1:C:311:LEU:H	1.23	1.02
1:J:78:PRO:HD3	1:J:452:LYS:HA	1.39	1.01
1:C:211:THR:HG23	1:C:226:SER:HA	1.38	1.00
1:J:250:LEU:HB2	1:J:304:ILE:HD11	1.43	1.00
1:I:304:ILE:CD1	1:I:304:ILE:CG2	2.40	0.99
1:I:115:VAL:HG21	1:J:257:VAL:HG22	1.46	0.98
1:M:373:ILE:HD12	1:M:464:LEU:HD22	1.45	0.98
1:G:393:ASN:HB3	1:G:396:ILE:HD12	1.45	0.97
1:F:109:ARG:NH1	1:F:109:ARG:HB3	1.80	0.97
1:M:154:THR:HG23	1:M:253:GLU:HB3	1.43	0.97
1:C:219:ASP:HB2	1:C:263:ARG:NH1	1.80	0.97
1:G:124:ASN:HB3	1:G:219:ASP:HB3	1.47	0.96
1:A:64:LYS:CG	1:A:64:LYS:CE	2.43	0.96
1:I:242:TYR:CE2	1:I:392:MET:HG3	2.01	0.96
1:I:201:VAL:HG11	1:I:332:VAL:HG11	1.43	0.96
1:K:52:ILE:HD12	1:K:62:VAL:HB	1.44	0.95
1:C:109:ARG:HB3	1:C:109:ARG:HH11	1.32	0.94
1:D:188:LEU:HD22	1:D:188:LEU:N	1.80	0.94
1:F:78:PRO:HD3	1:F:452:LYS:HA	1.47	0.94
1:B:115:VAL:HG21	1:C:257:VAL:HG22	1.50	0.94
1:N:242:TYR:CD2	1:N:392:MET:HG3	2.03	0.94
1:F:174:PRO:HG3	1:F:180:VAL:CG2	1.98	0.94
1:O:97:ARG:O	1:O:98:LEU:HD23	1.66	0.93
1:O:165:ILE:O	1:O:165:ILE:HG13	1.66	0.93
1:C:78:PRO:HD3	1:C:452:LYS:HA	1.50	0.93
1:B:255:MET:HG2	1:B:256:PHE:N	1.84	0.93
1:K:201:VAL:HG11	1:K:332:VAL:HG11	1.50	0.93
1:O:255:MET:HG2	1:O:256:PHE:N	1.84	0.93
1:N:373:ILE:HD12	1:N:464:LEU:HD22	1.50	0.92
1:K:333:ASP:OD1	1:K:335:THR:HG23	1.70	0.92
1:E:263:ARG:HB2	1:E:288:SER:OG	1.68	0.92
1:J:255:MET:HG2	1:J:256:PHE:N	1.82	0.91
1:O:181:LYS:H	1:O:181:LYS:HD3	1.34	0.91
1:F:121:PRO:HD3	1:F:222:LEU:HD21	1.53	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:149:MET:CE	1:F:293:PRO:HD2	2.01	0.90
1:N:219:ASP:O	1:N:220:VAL:HG13	1.71	0.90
1:C:109:ARG:HB3	1:C:109:ARG:NH1	1.85	0.90
1:E:79:ASP:OD1	1:E:81:ASN:HB2	1.72	0.90
1:E:255:MET:HG2	1:E:256:PHE:N	1.86	0.90
1:K:146:CYS:O	1:K:147:ILE:HG13	1.71	0.89
1:B:134:LYS:NZ	1:B:134:LYS:CD	2.34	0.89
1:L:52:ILE:HD13	1:M:269:GLU:CD	1.97	0.89
1:F:188:LEU:HD22	1:F:188:LEU:N	1.86	0.89
1:M:461:GLN:HE22	1:N:21:VAL:HB	1.33	0.89
1:I:242:TYR:CD2	1:I:392:MET:HG3	2.07	0.88
1:F:174:PRO:HG3	1:F:180:VAL:HG21	1.56	0.88
1:J:201:VAL:HG11	1:J:332:VAL:HG11	1.53	0.88
1:M:393:ASN:HB3	1:M:396:ILE:HD12	1.55	0.88
1:N:162:ARG:HB3	1:N:162:ARG:HH11	1.39	0.88
1:K:43:LEU:CD2	1:K:367:GLU:HG3	2.04	0.88
1:O:124:ASN:HB3	1:O:219:ASP:HB3	1.55	0.88
1:C:156:LEU:HG	1:C:332:VAL:HB	1.54	0.88
1:M:98:LEU:HD13	1:M:376:LEU:HD11	1.55	0.88
1:I:381:LEU:HB3	1:I:386:MET:HE2	1.53	0.88
1:F:318:ASN:OD1	1:F:321:ILE:HB	1.73	0.87
1:L:54:LYS:HD2	1:L:55:GLN:H	1.39	0.87
1:A:105:VAL:HG12	1:A:106:GLU:N	1.87	0.87
1:J:154:THR:HG23	1:J:253:GLU:HB3	1.55	0.87
1:E:272:PRO:HD2	1:E:275:LEU:HD12	1.56	0.87
1:I:219:ASP:HB2	1:I:263:ARG:NH1	1.89	0.87
1:A:64:LYS:CD	1:A:64:LYS:CB	2.52	0.87
1:L:115:VAL:HG21	1:M:257:VAL:HG22	1.56	0.87
1:G:117:ILE:HG21	1:H:291:PRO:HD3	1.55	0.87
1:K:167:GLU:O	1:K:167:GLU:HG3	1.75	0.87
1:D:149:MET:HE2	1:D:293:PRO:HD2	1.56	0.86
1:L:393:ASN:HB3	1:L:396:ILE:HG13	1.57	0.86
1:L:452:LYS:CD	1:L:452:LYS:CB	2.54	0.86
1:C:311:LEU:HD23	1:C:311:LEU:N	1.90	0.86
1:N:92:ASP:O	1:N:96:GLN:HG3	1.76	0.86
1:D:52:ILE:HD12	1:D:62:VAL:HB	1.57	0.86
1:F:124:ASN:HB3	1:F:219:ASP:HB3	1.56	0.86
1:I:255:MET:HE3	1:I:293:PRO:HB3	1.54	0.86
1:F:393:ASN:HB3	1:F:396:ILE:HG13	1.58	0.86
1:M:139:SER:HB2	1:M:143:ASN:HD21	1.41	0.86
1:C:254:GLN:HG3	1:C:254:GLN:O	1.74	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:149:MET:HE3	1:D:292:THR:HG23	1.58	0.86
1:A:311:LEU:HD23	1:A:311:LEU:H	1.39	0.85
1:E:219:ASP:HB2	1:E:263:ARG:NH1	1.90	0.85
1:F:165:ILE:CD1	1:F:236:LYS:HD3	2.06	0.85
1:G:305:PHE:HE1	1:G:333:ASP:HB2	1.42	0.85
1:K:474:LEU:HD23	1:K:474:LEU:H	1.40	0.85
1:M:284:LEU:HD12	1:M:285:PRO:HD2	1.56	0.85
1:J:305:PHE:HE1	1:J:333:ASP:HB2	1.42	0.85
1:N:152:LYS:CE	1:N:152:LYS:CG	2.54	0.85
1:E:311:LEU:HD23	1:E:311:LEU:H	1.42	0.85
1:L:121:PRO:HD3	1:L:222:LEU:HD21	1.59	0.85
1:F:109:ARG:HB3	1:F:109:ARG:HH11	1.42	0.85
1:J:311:LEU:HD23	1:J:311:LEU:H	1.40	0.85
1:C:284:LEU:HD12	1:C:285:PRO:HD2	1.57	0.85
1:I:304:ILE:CD1	1:I:304:ILE:HG21	2.07	0.85
1:F:211:THR:HG23	1:F:226:SER:HA	1.57	0.84
1:L:151:TYR:CE1	1:L:203:THR:HG21	2.12	0.84
1:B:340:MET:HE1	1:C:169:TRP:CD1	2.12	0.84
1:B:77:LEU:HB2	1:B:325:ASN:O	1.77	0.84
1:F:149:MET:HE2	1:F:293:PRO:HD2	1.59	0.84
1:I:304:ILE:CD1	1:I:304:ILE:CB	2.55	0.84
1:N:258:ARG:HB3	1:N:292:THR:HG22	1.58	0.84
1:O:247:PHE:CE2	1:O:320:GLY:HA2	2.13	0.84
1:D:242:TYR:CE2	1:D:392:MET:HG3	2.12	0.84
1:I:364:HIS:HD2	1:I:365:GLY:H	1.22	0.84
1:O:155:GLN:HB3	1:O:304:ILE:HG21	1.58	0.84
1:E:126:LEU:HB3	1:E:262:ASN:HB3	1.58	0.84
1:E:149:MET:CE	1:E:293:PRO:HD2	2.07	0.83
1:H:35:TYR:CE2	1:H:457:ALA:HB2	2.13	0.83
1:A:126:LEU:HB3	1:A:262:ASN:HB3	1.59	0.83
1:J:43:LEU:CD1	1:J:43:LEU:HG	2.03	0.83
1:I:149:MET:HE2	1:I:293:PRO:HD2	1.59	0.83
1:B:109:ARG:H	1:B:306:ASN:HD21	1.24	0.82
1:D:121:PRO:HB3	1:E:285:PRO:HG2	1.60	0.82
1:G:115:VAL:HG21	1:H:257:VAL:HG22	1.61	0.82
1:C:30:ARG:HB3	1:C:375:GLN:HE22	1.41	0.82
1:L:467:LYS:CD	1:L:467:LYS:NZ	2.42	0.82
1:A:371:GLN:HB3	1:A:464:LEU:HD12	1.61	0.82
1:C:297:MET:HE2	1:D:256:PHE:HD2	1.42	0.82
1:K:121:PRO:HB3	1:L:285:PRO:HG2	1.62	0.82
1:K:219:ASP:HB2	1:K:263:ARG:NH1	1.93	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:78:PRO:HD3	1:G:452:LYS:HA	1.59	0.82
1:D:359:LYS:CE	1:D:359:LYS:CG	2.58	0.82
1:K:181:LYS:HD3	1:K:181:LYS:H	1.42	0.82
1:O:111:GLN:NE2	1:O:367:GLU:OE1	2.12	0.82
1:O:159:ILE:HD12	1:O:329:VAL:HG22	1.59	0.82
1:D:155:GLN:OE1	1:D:304:ILE:HG22	1.79	0.82
1:C:246:LEU:HD12	1:C:246:LEU:O	1.79	0.82
1:N:250:LEU:HB2	1:N:304:ILE:HD11	1.62	0.82
1:F:134:LYS:NZ	1:F:134:LYS:CD	2.43	0.81
1:C:149:MET:HE2	1:C:293:PRO:HD2	1.60	0.81
1:O:34:TYR:CE2	1:O:375:GLN:HG3	2.15	0.81
1:F:291:PRO:HD3	1:J:117:ILE:HG21	1.61	0.81
1:J:85:PHE:HB2	1:J:88:THR:OG1	1.80	0.81
1:K:343:CYS:HB2	1:K:360:GLU:OE2	1.80	0.81
1:M:77:LEU:HD22	1:M:455:PHE:HZ	1.46	0.81
1:E:54:LYS:HZ3	1:E:55:GLN:HB3	1.45	0.81
1:H:111:GLN:HB3	1:H:112:PRO:HD2	1.62	0.81
1:M:258:ARG:HG3	1:M:259:HIS:ND1	1.95	0.81
1:N:115:VAL:HG21	1:O:257:VAL:HG22	1.62	0.81
1:C:117:ILE:HG13	1:D:260:LEU:HD22	1.61	0.81
1:G:149:MET:HE2	1:G:293:PRO:HD2	1.62	0.81
1:I:112:PRO:HB3	1:J:231:TYR:CD1	2.15	0.81
1:O:42:LEU:HD22	1:O:447:TRP:NE1	1.94	0.81
1:C:156:LEU:C	1:C:156:LEU:HD12	2.05	0.81
1:L:373:ILE:CD1	1:L:464:LEU:HD22	2.11	0.81
1:B:149:MET:HE3	1:B:292:THR:HG23	1.63	0.80
1:I:133:ASN:HD22	1:I:133:ASN:N	1.78	0.80
1:K:43:LEU:HD23	1:K:367:GLU:HG3	1.62	0.80
1:K:74:ARG:NH2	1:K:441:LEU:HD12	1.96	0.80
1:J:83:PHE:HD2	1:J:85:PHE:CZ	1.99	0.80
1:N:47:HIS:HB2	1:N:52:ILE:HD11	1.62	0.80
1:F:208:MET:HE2	1:F:210:PHE:CE2	2.17	0.80
1:H:115:VAL:HG21	1:I:257:VAL:HG22	1.62	0.80
1:L:382:THR:OG1	1:L:385:VAL:HG23	1.81	0.80
1:L:154:THR:HG23	1:L:253:GLU:HB3	1.64	0.80
1:E:246:LEU:HD12	1:E:246:LEU:O	1.80	0.80
1:G:393:ASN:HB3	1:G:396:ILE:CD1	2.10	0.80
1:I:201:VAL:CG1	1:I:332:VAL:HG11	2.11	0.80
1:A:70:TYR:OH	1:A:232:PRO:HD3	1.82	0.80
1:C:29:THR:HB	1:C:378:LYS:HG2	1.62	0.80
1:J:393:ASN:HD22	1:J:394:PRO:HD2	1.46	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:68:LEU:HD23	1:N:334:THR:HG21	1.64	0.80
1:H:124:ASN:HB3	1:H:219:ASP:HB3	1.64	0.80
1:L:246:LEU:HD12	1:L:246:LEU:O	1.82	0.80
1:O:22:VAL:CG1	1:O:26:GLU:HG3	2.13	0.80
1:O:24:THR:HG23	1:O:318:ASN:HA	1.61	0.79
1:D:217:LYS:NZ	1:D:217:LYS:CD	2.44	0.79
1:B:121:PRO:HB3	1:C:285:PRO:HG2	1.63	0.79
1:M:77:LEU:HD22	1:M:455:PHE:CZ	2.16	0.79
1:H:372:PHE:O	1:H:373:ILE:HG13	1.82	0.79
1:C:200:MET:HE2	1:C:223:ASP:O	1.83	0.79
1:N:373:ILE:CD1	1:N:464:LEU:HD22	2.12	0.79
1:C:297:MET:HB2	1:C:297:MET:HE3	1.63	0.79
1:G:161:CYS:SG	1:G:244:ASP:HB3	2.22	0.79
1:N:141:THR:HG22	1:N:142:ASP:N	1.98	0.79
1:H:386:MET:HG2	1:H:397:LEU:CD2	2.12	0.79
1:I:156:LEU:HG	1:I:332:VAL:HB	1.64	0.79
1:H:108:GLY:HA2	1:H:306:ASN:ND2	1.98	0.78
1:N:232:PRO:HB2	1:N:234:TYR:CE1	2.18	0.78
1:A:149:MET:HE2	1:A:293:PRO:HD2	1.64	0.78
1:B:258:ARG:HG3	1:B:259:HIS:ND1	1.98	0.78
1:H:98:LEU:HD13	1:H:376:LEU:HD11	1.65	0.78
1:G:99:VAL:HG11	1:G:321:ILE:HG22	1.66	0.78
1:N:359:LYS:HD3	1:O:268:GLY:HA2	1.65	0.78
1:O:42:LEU:HD22	1:O:447:TRP:HE1	1.47	0.78
1:I:237:MET:HG2	1:I:245:MET:HG2	1.65	0.78
1:B:355:ASN:HB3	1:C:265:GLY:HA2	1.64	0.78
1:K:234:TYR:O	1:K:238:VAL:HG23	1.84	0.78
1:C:22:VAL:HG12	1:C:23:SER:N	1.97	0.78
1:C:149:MET:CE	1:C:293:PRO:HD2	2.13	0.78
1:K:161:CYS:SG	1:K:244:ASP:HB3	2.23	0.78
1:B:372:PHE:O	1:B:373:ILE:HG13	1.83	0.78
1:F:156:LEU:HG	1:F:332:VAL:HB	1.65	0.78
1:M:24:THR:HG21	1:M:321:ILE:HG13	1.65	0.77
1:F:155:GLN:OE1	1:F:304:ILE:HG22	1.84	0.77
1:J:216:ASN:O	1:J:217:LYS:HG2	1.83	0.77
1:D:373:ILE:HD12	1:D:464:LEU:HD22	1.67	0.77
1:I:193:THR:CG2	1:I:230:LYS:HE2	2.15	0.77
1:H:54:LYS:NZ	1:H:55:GLN:HB3	1.99	0.77
1:I:304:ILE:CG2	1:I:304:ILE:HD13	2.15	0.77
1:O:162:ARG:HB3	1:O:162:ARG:HH11	1.48	0.77
1:L:82:LYS:O	1:L:83:PHE:O	2.03	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:151:TYR:CG	1:D:203:THR:HB	2.20	0.77
1:G:96:GLN:NE2	1:G:378:LYS:HD3	1.98	0.77
1:I:193:THR:HG21	1:I:230:LYS:HE2	1.65	0.77
1:K:162:ARG:NH1	1:K:162:ARG:HB3	2.00	0.77
1:K:459:LEU:HD12	1:K:469:LEU:HD21	1.66	0.77
1:O:158:LEU:O	1:O:159:ILE:HD13	1.85	0.77
1:K:208:MET:HE2	1:K:210:PHE:CE2	2.20	0.76
1:L:234:TYR:O	1:L:238:VAL:HG23	1.84	0.76
1:D:188:LEU:HD22	1:D:188:LEU:H	1.49	0.76
1:M:70:TYR:OH	1:M:232:PRO:HD3	1.85	0.76
1:N:242:TYR:CE2	1:N:392:MET:HG3	2.20	0.76
1:A:463:PRO:O	1:A:467:LYS:HG3	1.85	0.76
1:D:373:ILE:CD1	1:D:464:LEU:HD22	2.15	0.76
1:K:300:SER:OG	1:L:253:GLU:HG2	1.85	0.76
1:A:393:ASN:HD22	1:A:394:PRO:HD2	1.50	0.76
1:B:121:PRO:HG3	1:C:287:THR:HG23	1.66	0.76
1:K:149:MET:HE2	1:K:293:PRO:HD2	1.66	0.76
1:F:154:THR:HG22	1:F:155:GLN:N	1.99	0.76
1:G:99:VAL:HG11	1:G:321:ILE:CG2	2.16	0.76
1:K:162:ARG:HB3	1:K:162:ARG:HH11	1.50	0.76
1:K:394:PRO:HG2	1:K:395:SER:H	1.51	0.76
1:C:311:LEU:H	1:C:311:LEU:CD2	1.93	0.76
1:D:49:TYR:O	1:D:64:LYS:HE3	1.85	0.76
1:M:97:ARG:O	1:M:98:LEU:HD23	1.86	0.76
1:O:156:LEU:HD12	1:O:157:CYS:N	2.00	0.76
1:K:323:TRP:O	1:K:324:SER:HB2	1.86	0.76
1:K:85:PHE:HB2	1:K:88:THR:OG1	1.85	0.76
1:L:373:ILE:HG13	1:L:464:LEU:HD13	1.68	0.76
1:F:231:TYR:CD1	1:J:112:PRO:HB3	2.21	0.75
1:K:258:ARG:HG3	1:K:259:HIS:ND1	2.01	0.75
1:I:121:PRO:HD3	1:I:222:LEU:HD21	1.67	0.75
1:L:331:VAL:HG11	1:L:368:TYR:HE2	1.51	0.75
1:A:155:GLN:HB3	1:A:304:ILE:HG21	1.68	0.75
1:C:255:MET:HG2	1:C:256:PHE:N	2.00	0.75
1:H:312:GLN:HG3	1:H:313:ARG:H	1.51	0.75
1:L:250:LEU:HB2	1:L:304:ILE:HD11	1.68	0.75
1:M:69:GLN:HA	1:M:199:ASP:O	1.86	0.75
1:K:97:ARG:O	1:K:98:LEU:HD23	1.87	0.75
1:M:59:LYS:CE	1:M:59:LYS:CG	2.64	0.75
1:M:333:ASP:OD1	1:M:335:THR:HG23	1.86	0.75
1:O:219:ASP:HB2	1:O:263:ARG:HH11	1.51	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:237:MET:HG2	1:B:245:MET:HG2	1.68	0.75
1:I:255:MET:HG2	1:I:256:PHE:N	2.01	0.75
1:J:124:ASN:HB3	1:J:219:ASP:HB3	1.68	0.75
1:J:305:PHE:CE1	1:J:333:ASP:HB2	2.22	0.75
1:O:158:LEU:C	1:O:159:ILE:HD13	2.12	0.75
1:H:109:ARG:H	1:H:306:ASN:HD21	1.34	0.75
1:K:451:LEU:HB3	1:K:454:LYS:HB2	1.69	0.75
1:M:152:LYS:NZ	1:M:152:LYS:CD	2.49	0.75
1:A:158:LEU:O	1:A:159:ILE:HD13	1.87	0.74
1:E:124:ASN:HB3	1:E:219:ASP:HB3	1.69	0.74
1:L:33:ILE:HD13	1:L:33:ILE:N	2.01	0.74
1:M:159:ILE:HG22	1:M:247:PHE:HE1	1.52	0.74
1:G:240:GLU:HG2	1:G:243:GLY:H	1.52	0.74
1:N:54:LYS:HB3	1:N:57:SER:HB3	1.68	0.74
1:D:232:PRO:HB2	1:D:234:TYR:CE1	2.22	0.74
1:E:164:PRO:HA	1:E:245:MET:HG3	1.70	0.74
1:E:78:PRO:HD3	1:E:452:LYS:HA	1.69	0.74
1:I:154:THR:HG23	1:I:253:GLU:HB3	1.68	0.74
1:K:151:TYR:CG	1:K:203:THR:HB	2.23	0.74
1:N:22:VAL:CG1	1:N:26:GLU:HG3	2.18	0.74
1:A:255:MET:HE3	1:A:293:PRO:HB3	1.69	0.74
1:M:200:MET:HE2	1:M:223:ASP:O	1.87	0.74
1:O:155:GLN:OE1	1:O:304:ILE:HG22	1.88	0.74
1:L:149:MET:HE2	1:L:293:PRO:HD2	1.70	0.74
1:M:393:ASN:HB3	1:M:396:ILE:CD1	2.18	0.74
1:E:149:MET:HE2	1:E:293:PRO:HD2	1.68	0.74
1:M:272:PRO:O	1:M:275:LEU:HB2	1.86	0.74
1:O:107:VAL:HG12	1:O:107:VAL:O	1.86	0.74
1:B:158:LEU:HD12	1:B:164:PRO:HG3	1.70	0.74
1:F:139:SER:HB2	1:F:143:ASN:HD21	1.52	0.74
1:F:257:VAL:HG22	1:J:115:VAL:HG21	1.67	0.74
1:I:124:ASN:HB3	1:I:219:ASP:HB3	1.67	0.74
1:I:304:ILE:HG21	1:I:304:ILE:HD12	1.68	0.74
1:F:154:THR:HG22	1:F:155:GLN:H	1.52	0.73
1:F:211:THR:HG23	1:F:226:SER:CA	2.17	0.73
1:O:181:LYS:HD3	1:O:181:LYS:N	2.02	0.73
1:G:305:PHE:CE1	1:G:333:ASP:HB2	2.22	0.73
1:J:125:LYS:NZ	1:J:125:LYS:CD	2.51	0.73
1:D:240:GLU:HG2	1:D:243:GLY:H	1.53	0.73
1:I:162:ARG:HB3	1:I:162:ARG:NH1	2.02	0.73
1:I:23:SER:O	1:I:25:ASP:N	2.22	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:364:HIS:CD2	1:I:365:GLY:H	2.06	0.73
1:O:201:VAL:HG11	1:O:332:VAL:HG11	1.69	0.73
1:D:201:VAL:HG11	1:D:332:VAL:HG11	1.71	0.73
1:G:314:ALA:HB2	1:G:319:ASN:HA	1.70	0.73
1:A:121:PRO:HB3	1:B:285:PRO:HG2	1.71	0.73
1:B:41:ARG:HH11	1:C:190:LEU:HD23	1.53	0.73
1:B:219:ASP:O	1:B:220:VAL:HG13	1.88	0.73
1:F:156:LEU:C	1:F:156:LEU:HD12	2.12	0.73
1:D:85:PHE:HB2	1:D:88:THR:OG1	1.89	0.73
1:G:119:GLY:HA3	1:H:289:TYR:CE1	2.24	0.73
1:H:237:MET:HB2	1:H:246:LEU:HD21	1.71	0.73
1:L:452:LYS:CG	1:L:452:LYS:CE	2.67	0.73
1:M:78:PRO:HD3	1:M:452:LYS:HA	1.70	0.73
1:E:54:LYS:HZ3	1:E:55:GLN:CB	2.02	0.73
1:I:78:PRO:HG2	1:I:100:TRP:HE1	1.51	0.73
1:K:389:ILE:O	1:K:392:MET:HB3	1.89	0.73
1:C:297:MET:HB2	1:C:297:MET:CE	2.18	0.73
1:F:322:CYS:HB3	1:F:326:GLN:O	1.89	0.73
1:L:373:ILE:HD12	1:L:464:LEU:HD22	1.71	0.73
1:N:68:LEU:HD13	1:N:151:TYR:HD1	1.53	0.73
1:H:66:SER:HB3	1:H:69:GLN:HG3	1.70	0.73
1:J:109:ARG:H	1:J:306:ASN:HD21	1.37	0.73
1:A:124:ASN:HB3	1:A:219:ASP:HB3	1.70	0.72
1:C:297:MET:CE	1:D:256:PHE:HD2	2.00	0.72
1:D:242:TYR:CD2	1:D:392:MET:HG3	2.24	0.72
1:H:363:ARG:HG3	1:I:188:LEU:HD21	1.71	0.72
1:N:355:ASN:HB3	1:O:265:GLY:HA2	1.71	0.72
1:F:21:VAL:HB	1:J:461:GLN:HE22	1.55	0.72
1:F:260:LEU:HD22	1:J:117:ILE:HD12	1.70	0.72
1:J:149:MET:HE2	1:J:293:PRO:HD2	1.71	0.72
1:K:54:LYS:HZ2	1:K:55:GLN:N	1.87	0.72
1:K:200:MET:HE2	1:K:223:ASP:O	1.89	0.72
1:C:91:TYR:HD1	1:C:96:GLN:NE2	1.87	0.72
1:C:232:PRO:HB2	1:C:234:TYR:CE1	2.23	0.72
1:E:339:ASN:ND2	1:E:364:HIS:HB2	2.03	0.72
1:A:164:PRO:HG3	1:A:330:THR:OG1	1.88	0.72
1:C:258:ARG:HG3	1:C:259:HIS:ND1	2.04	0.72
1:E:98:LEU:HD13	1:E:376:LEU:HD11	1.70	0.72
1:F:174:PRO:HG3	1:F:180:VAL:HG23	1.70	0.72
1:F:257:VAL:HG11	1:F:260:LEU:HD21	1.71	0.72
1:G:254:GLN:CG	1:G:254:GLN:CA	2.63	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:98:LEU:HD13	1:K:376:LEU:HD11	1.70	0.72
1:A:76:LYS:CD	1:A:76:LYS:CB	2.66	0.72
1:E:339:ASN:HD22	1:E:364:HIS:HB2	1.53	0.72
1:M:35:TYR:CE2	1:M:457:ALA:HB2	2.23	0.72
1:A:112:PRO:HB3	1:B:231:TYR:CD1	2.24	0.72
1:C:149:MET:HE1	1:C:205:PHE:CZ	2.23	0.72
1:C:210:PHE:O	1:C:214:GLN:HB2	1.89	0.72
1:I:121:PRO:CD	1:I:222:LEU:HD21	2.19	0.72
1:L:255:MET:HG2	1:L:256:PHE:N	2.05	0.72
1:O:120:HIS:CD2	1:O:222:LEU:HD13	2.24	0.72
1:D:99:VAL:HG11	1:D:321:ILE:HG22	1.72	0.72
1:E:54:LYS:HZ2	1:E:55:GLN:N	1.87	0.72
1:H:22:VAL:HG12	1:H:23:SER:N	2.03	0.72
1:N:440:PRO:HG2	1:N:441:LEU:N	2.04	0.72
1:O:373:ILE:HD12	1:O:464:LEU:HD22	1.72	0.72
1:E:133:ASN:N	1:E:133:ASN:HD22	1.87	0.72
1:M:149:MET:CE	1:M:293:PRO:HD2	2.20	0.72
1:N:108:GLY:HA2	1:N:306:ASN:ND2	2.05	0.72
1:B:311:LEU:H	1:B:311:LEU:CD2	1.91	0.72
1:D:70:TYR:OH	1:D:232:PRO:HD3	1.90	0.72
1:D:117:ILE:HG13	1:E:260:LEU:CD2	2.20	0.72
1:M:52:ILE:HD12	1:M:62:VAL:HB	1.70	0.72
1:N:359:LYS:CD	1:N:359:LYS:CB	2.67	0.72
1:B:170:GLY:HA3	1:B:191:LEU:HD12	1.72	0.71
1:C:115:VAL:H	1:C:338:THR:HG23	1.54	0.71
1:F:254:GLN:HG3	1:F:254:GLN:O	1.90	0.71
1:L:342:VAL:HG22	1:L:361:TYR:HB2	1.72	0.71
1:C:297:MET:HE2	1:D:256:PHE:CD2	2.24	0.71
1:D:240:GLU:OE2	1:D:245:MET:HB2	1.89	0.71
1:G:117:ILE:HD12	1:H:260:LEU:HD23	1.71	0.71
1:I:112:PRO:HB3	1:J:231:TYR:HD1	1.54	0.71
1:M:149:MET:HE3	1:M:293:PRO:HD2	1.72	0.71
1:M:201:VAL:HG11	1:M:332:VAL:HG11	1.72	0.71
1:D:155:GLN:HB3	1:D:304:ILE:HG21	1.71	0.71
1:F:371:GLN:HB3	1:F:464:LEU:HD12	1.71	0.71
1:H:298:VAL:HG11	1:H:335:THR:HA	1.73	0.71
1:M:162:ARG:HH11	1:M:162:ARG:HB3	1.54	0.71
1:N:76:LYS:CD	1:N:76:LYS:CB	2.67	0.71
1:O:311:LEU:HD23	1:O:311:LEU:H	1.55	0.71
1:B:148:SER:HB3	1:C:289:TYR:CD2	2.24	0.71
1:C:121:PRO:HD3	1:C:222:LEU:HD21	1.71	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:322:CYS:HB3	1:C:326:GLN:O	1.91	0.71
1:D:188:LEU:N	1:D:188:LEU:CD2	2.53	0.71
1:E:107:VAL:O	1:E:107:VAL:HG12	1.90	0.71
1:F:258:ARG:HG3	1:F:259:HIS:ND1	2.06	0.71
1:E:162:ARG:HB3	1:E:162:ARG:HH11	1.56	0.71
1:L:322:CYS:HB3	1:L:326:GLN:O	1.91	0.71
1:E:393:ASN:HB3	1:E:396:ILE:HD12	1.72	0.71
1:C:298:VAL:HG11	1:C:335:THR:HA	1.72	0.71
1:D:181:LYS:H	1:D:181:LYS:HD3	1.55	0.71
1:D:380:THR:HG21	1:H:380:THR:HG21	1.71	0.71
1:I:44:ALA:O	1:I:365:GLY:HA2	1.90	0.71
1:L:52:ILE:HD13	1:M:269:GLU:OE1	1.91	0.71
1:L:124:ASN:HB3	1:L:219:ASP:HB3	1.72	0.71
1:M:21:VAL:HG21	1:M:241:PRO:HB2	1.72	0.71
1:O:79:ASP:OD1	1:O:81:ASN:HB2	1.91	0.71
1:M:113:LEU:O	1:N:152:LYS:NZ	2.24	0.71
1:A:106:GLU:HG2	1:A:308:PRO:HA	1.73	0.71
1:C:297:MET:CE	1:D:256:PHE:CD2	2.74	0.71
1:F:260:LEU:HB3	1:J:117:ILE:HD12	1.71	0.71
1:H:30:ARG:HB3	1:H:375:GLN:NE2	2.06	0.71
1:O:272:PRO:HD2	1:O:275:LEU:HD12	1.73	0.71
1:G:52:ILE:HD12	1:G:62:VAL:HB	1.73	0.70
1:H:126:LEU:HB3	1:H:262:ASN:HB3	1.73	0.70
1:G:96:GLN:HE22	1:G:378:LYS:HD3	1.54	0.70
1:N:79:ASP:HB3	1:N:82:LYS:HG3	1.73	0.70
1:H:361:TYR:CG	1:I:185:CYS:HB2	2.26	0.70
1:A:219:ASP:HB2	1:A:263:ARG:NH1	2.06	0.70
1:G:355:ASN:HB3	1:H:265:GLY:HA2	1.73	0.70
1:I:155:GLN:HB3	1:I:304:ILE:HG21	1.73	0.70
1:K:372:PHE:O	1:K:373:ILE:HG13	1.91	0.70
1:M:139:SER:HB2	1:M:143:ASN:ND2	2.05	0.70
1:E:155:GLN:OE1	1:E:304:ILE:HG22	1.91	0.70
1:F:156:LEU:HA	1:F:250:LEU:O	1.91	0.70
1:L:79:ASP:OD1	1:L:81:ASN:HB2	1.90	0.70
1:L:467:LYS:CE	1:L:467:LYS:CG	2.70	0.70
1:B:467:LYS:CE	1:B:467:LYS:CG	2.69	0.70
1:G:151:TYR:CG	1:G:203:THR:HB	2.27	0.70
1:L:52:ILE:CD1	1:M:269:GLU:CD	2.64	0.70
1:O:42:LEU:CD2	1:O:447:TRP:HE1	2.04	0.70
1:C:123:LEU:HD23	1:C:147:ILE:HB	1.74	0.70
1:O:393:ASN:HB3	1:O:396:ILE:CD1	2.21	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:120:HIS:HA	1:A:222:LEU:CD2	2.22	0.70
1:F:77:LEU:HD22	1:F:455:PHE:HZ	1.56	0.70
1:F:119:GLY:HA3	1:G:289:TYR:CE1	2.27	0.70
1:F:251:ARG:HH11	1:F:251:ARG:HG3	1.55	0.70
1:N:440:PRO:HG2	1:N:441:LEU:H	1.57	0.70
1:B:154:THR:HG23	1:B:253:GLU:HB3	1.74	0.70
1:O:59:LYS:NZ	1:O:59:LYS:CD	2.55	0.70
1:O:80:PRO:HD2	1:O:325:ASN:OD1	1.91	0.70
1:E:151:TYR:CG	1:E:203:THR:HB	2.27	0.69
1:H:342:VAL:HG23	1:H:342:VAL:O	1.91	0.69
1:J:188:LEU:HD22	1:J:188:LEU:H	1.57	0.69
1:K:37:ALA:HA	1:K:454:LYS:O	1.92	0.69
1:B:117:ILE:O	1:B:117:ILE:HG23	1.91	0.69
1:F:149:MET:HE3	1:F:292:THR:HA	1.74	0.69
1:G:53:LYS:HD3	1:G:58:ASN:HA	1.75	0.69
1:I:181:LYS:H	1:I:181:LYS:HD3	1.57	0.69
1:O:340:MET:HG2	1:O:363:ARG:O	1.92	0.69
1:E:162:ARG:HB3	1:E:162:ARG:NH1	2.07	0.69
1:E:165:ILE:HG23	1:E:245:MET:SD	2.32	0.69
1:N:299:THR:HG22	1:O:254:GLN:HB2	1.74	0.69
1:H:161:CYS:SG	1:H:244:ASP:HB3	2.32	0.69
1:D:97:ARG:O	1:D:98:LEU:HD23	1.92	0.69
1:D:123:LEU:HG	1:D:124:ASN:N	2.07	0.69
1:E:165:ILE:HD11	1:E:233:ASP:HB3	1.73	0.69
1:J:126:LEU:HG	1:J:127:ASP:OD1	1.92	0.69
1:L:82:LYS:O	1:L:83:PHE:C	2.35	0.69
1:A:155:GLN:OE1	1:A:304:ILE:HG22	1.93	0.69
1:G:117:ILE:CD1	1:H:260:LEU:HB3	2.22	0.69
1:G:219:ASP:HB2	1:G:263:ARG:NH1	2.07	0.69
1:C:246:LEU:HD12	1:C:246:LEU:C	2.17	0.69
1:E:32:ASN:C	1:E:33:ILE:HD13	2.17	0.69
1:M:363:ARG:HG3	1:N:188:LEU:HD21	1.74	0.69
1:D:250:LEU:HB2	1:D:304:ILE:HD11	1.74	0.69
1:E:54:LYS:NZ	1:E:55:GLN:HB3	2.07	0.69
1:G:162:ARG:HB3	1:G:162:ARG:HH11	1.58	0.69
1:J:79:ASP:OD1	1:J:81:ASN:HB2	1.93	0.69
1:K:43:LEU:HD21	1:K:367:GLU:HG3	1.74	0.69
1:L:85:PHE:O	1:L:88:THR:OG1	2.09	0.69
1:M:211:THR:HG23	1:M:226:SER:HA	1.75	0.69
1:N:121:PRO:HD3	1:N:222:LEU:HD21	1.73	0.69
1:N:124:ASN:HB3	1:N:219:ASP:HB3	1.73	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:105:VAL:HG12	1:A:106:GLU:H	1.57	0.69
1:B:211:THR:HG23	1:B:226:SER:HA	1.73	0.69
1:G:117:ILE:HD11	1:H:260:LEU:HB3	1.75	0.69
1:L:123:LEU:CD2	1:L:147:ILE:HB	2.22	0.69
1:E:246:LEU:HD12	1:E:246:LEU:C	2.18	0.69
1:B:125:LYS:O	1:B:125:LYS:HD3	1.93	0.68
1:E:156:LEU:CD2	1:E:332:VAL:HB	2.22	0.68
1:I:323:TRP:O	1:I:324:SER:HB2	1.91	0.68
1:A:92:ASP:OD1	1:A:94:ALA:HB3	1.92	0.68
1:I:216:ASN:O	1:I:217:LYS:HG2	1.93	0.68
1:K:283:THR:O	1:K:283:THR:HG22	1.93	0.68
1:B:36:HIS:ND1	1:B:37:ALA:N	2.41	0.68
1:C:91:TYR:CE1	1:C:96:GLN:HB2	2.29	0.68
1:C:297:MET:CB	1:C:297:MET:HE3	2.23	0.68
1:D:154:THR:HG23	1:D:253:GLU:HB3	1.75	0.68
1:I:110:GLY:O	1:I:111:GLN:HB2	1.92	0.68
1:N:123:LEU:HA	1:N:218:SER:O	1.92	0.68
1:C:121:PRO:HB3	1:D:285:PRO:HG2	1.75	0.68
1:F:117:ILE:HG23	1:F:117:ILE:O	1.93	0.68
1:J:123:LEU:HD23	1:J:147:ILE:HD12	1.74	0.68
1:K:117:ILE:HG13	1:L:260:LEU:HD22	1.76	0.68
1:K:168:HIS:NE2	1:K:228:ILE:HD13	2.07	0.68
1:A:52:ILE:HD12	1:A:62:VAL:HB	1.74	0.68
1:F:85:PHE:HB2	1:F:88:THR:OG1	1.94	0.68
1:N:385:VAL:HG12	1:N:389:ILE:HD12	1.75	0.68
1:O:65:VAL:O	1:O:364:HIS:HB3	1.92	0.68
1:G:211:THR:HG23	1:G:226:SER:HA	1.75	0.68
1:I:102:CYS:O	1:I:311:LEU:HD11	1.94	0.68
1:L:78:PRO:HD3	1:L:452:LYS:HA	1.76	0.68
1:L:99:VAL:HG11	1:L:321:ILE:CG2	2.23	0.68
1:G:106:GLU:HG2	1:G:308:PRO:HA	1.76	0.68
1:D:323:TRP:O	1:D:324:SER:HB2	1.92	0.68
1:E:110:GLY:O	1:E:111:GLN:HB2	1.92	0.68
1:L:258:ARG:HB2	1:L:294:SER:HB2	1.76	0.68
1:L:311:LEU:HD23	1:L:311:LEU:H	1.58	0.68
1:M:162:ARG:HB3	1:M:162:ARG:NH1	2.08	0.68
1:M:272:PRO:HD2	1:M:275:LEU:HD12	1.76	0.68
1:B:54:LYS:HB3	1:B:57:SER:HB3	1.74	0.68
1:B:162:ARG:HB3	1:B:162:ARG:HH11	1.59	0.68
1:F:69:GLN:NE2	1:F:71:ARG:HH22	1.91	0.68
1:F:463:PRO:O	1:F:467:LYS:HG3	1.94	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:396:ILE:CD1	1:M:396:ILE:CB	2.72	0.68
1:A:76:LYS:CG	1:A:76:LYS:CE	2.71	0.67
1:F:53:LYS:HD3	1:F:58:ASN:HA	1.75	0.67
1:L:372:PHE:O	1:L:373:ILE:HG13	1.94	0.67
1:C:37:ALA:HB1	1:C:451:LEU:HD13	1.75	0.67
1:E:123:LEU:HA	1:E:218:SER:O	1.92	0.67
1:I:304:ILE:HD13	1:I:304:ILE:HG23	1.77	0.67
1:K:219:ASP:O	1:K:220:VAL:HG13	1.95	0.67
1:L:113:LEU:HD22	1:M:253:GLU:HG3	1.76	0.67
1:L:155:GLN:HB2	1:L:252:ARG:HB3	1.75	0.67
1:O:159:ILE:HG22	1:O:247:PHE:HE1	1.59	0.67
1:D:117:ILE:HG13	1:E:260:LEU:HD22	1.76	0.67
1:M:120:HIS:HB2	1:M:221:PRO:HA	1.75	0.67
1:C:297:MET:CB	1:C:297:MET:CE	2.72	0.67
1:F:169:TRP:CZ3	1:F:190:LEU:HB2	2.29	0.67
1:L:114:GLY:HA2	1:M:255:MET:SD	2.34	0.67
1:M:165:ILE:HG23	1:M:245:MET:SD	2.33	0.67
1:N:78:PRO:HD3	1:N:452:LYS:HA	1.77	0.67
1:N:240:GLU:OE2	1:N:245:MET:HB2	1.93	0.67
1:C:21:VAL:HG21	1:C:241:PRO:HB2	1.76	0.67
1:O:54:LYS:HZ2	1:O:55:GLN:N	1.92	0.67
1:O:108:GLY:HA2	1:O:306:ASN:ND2	2.10	0.67
1:C:155:GLN:HB3	1:C:304:ILE:HG21	1.77	0.67
1:D:462:PHE:O	1:D:466:ARG:HB2	1.94	0.67
1:G:117:ILE:CG2	1:H:291:PRO:HD3	2.24	0.67
1:N:165:ILE:HG23	1:N:245:MET:SD	2.34	0.67
1:D:99:VAL:HG11	1:D:321:ILE:CG2	2.23	0.67
1:D:181:LYS:HE2	1:D:184:GLU:HG2	1.77	0.67
1:G:120:HIS:ND1	1:G:122:LEU:N	2.43	0.67
1:I:254:GLN:HG3	1:I:254:GLN:O	1.93	0.67
1:L:123:LEU:HD23	1:L:147:ILE:HB	1.74	0.67
1:N:26:GLU:OE2	1:N:26:GLU:HA	1.93	0.67
1:D:370:LEU:HB3	1:D:372:PHE:CZ	2.30	0.67
1:F:188:LEU:HD22	1:F:188:LEU:H	1.57	0.67
1:H:385:VAL:O	1:H:389:ILE:HG13	1.95	0.67
1:L:54:LYS:HD2	1:L:55:GLN:N	2.08	0.67
1:B:22:VAL:CG1	1:B:26:GLU:HG3	2.25	0.67
1:B:121:PRO:HD3	1:B:222:LEU:HD21	1.77	0.67
1:D:98:LEU:HD13	1:D:376:LEU:HD11	1.75	0.67
1:H:149:MET:CE	1:H:293:PRO:HD2	2.25	0.67
1:J:211:THR:HG23	1:J:226:SER:HA	1.77	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:156:LEU:HG	1:K:332:VAL:HB	1.75	0.67
1:M:342:VAL:HG21	1:N:185:CYS:SG	2.35	0.67
1:D:181:LYS:H	1:D:181:LYS:CD	2.07	0.66
1:F:209:ASP:O	1:F:213:LEU:HB2	1.94	0.66
1:G:110:GLY:C	1:G:111:GLN:HG2	2.20	0.66
1:K:126:LEU:HB3	1:K:262:ASN:HB3	1.77	0.66
1:J:124:ASN:HD22	1:J:263:ARG:HD2	1.60	0.66
1:E:30:ARG:HB3	1:E:375:GLN:NE2	2.09	0.66
1:I:121:PRO:HB3	1:J:285:PRO:HG2	1.77	0.66
1:O:148:SER:O	1:O:149:MET:HB3	1.95	0.66
1:O:164:PRO:HA	1:O:245:MET:HG3	1.77	0.66
1:B:32:ASN:C	1:B:33:ILE:HD13	2.20	0.66
1:B:342:VAL:HG23	1:B:342:VAL:O	1.95	0.66
1:L:151:TYR:CD1	1:L:203:THR:CG2	2.77	0.66
1:C:24:THR:CG2	1:C:318:ASN:HA	2.25	0.66
1:J:109:ARG:H	1:J:306:ASN:ND2	1.93	0.66
1:L:467:LYS:CD	1:L:467:LYS:CB	2.74	0.66
1:B:222:LEU:HD22	1:B:222:LEU:H	1.60	0.66
1:K:259:HIS:H	1:K:292:THR:HB	1.60	0.66
1:K:273:ALA:HA	1:K:276:TYR:CE2	2.31	0.66
1:M:311:LEU:N	1:M:311:LEU:CD2	2.38	0.66
1:F:77:LEU:HD22	1:F:455:PHE:CZ	2.30	0.66
1:H:155:GLN:OE1	1:H:304:ILE:HG22	1.96	0.66
1:A:256:PHE:HD2	1:E:297:MET:HE2	1.60	0.66
1:G:125:LYS:O	1:G:125:LYS:HD3	1.95	0.66
1:L:44:ALA:O	1:L:365:GLY:HA2	1.95	0.66
1:L:297:MET:HG3	1:M:256:PHE:HB3	1.77	0.66
1:M:149:MET:HA	1:N:260:LEU:HD13	1.76	0.66
1:J:154:THR:HG23	1:J:253:GLU:CB	2.26	0.66
1:I:162:ARG:HB3	1:I:162:ARG:HH11	1.60	0.66
1:O:156:LEU:HD12	1:O:156:LEU:C	2.21	0.66
1:J:246:LEU:C	1:J:246:LEU:HD12	2.20	0.65
1:N:152:LYS:HE3	1:N:253:GLU:HB2	1.76	0.65
1:B:364:HIS:NE2	1:B:366:GLU:OE1	2.29	0.65
1:C:54:LYS:HB3	1:C:57:SER:HB3	1.79	0.65
1:E:22:VAL:CG1	1:E:26:GLU:HG3	2.26	0.65
1:I:258:ARG:HG3	1:I:259:HIS:ND1	2.11	0.65
1:M:105:VAL:HG12	1:M:106:GLU:N	2.11	0.65
1:A:267:VAL:CG2	1:A:267:VAL:CA	2.71	0.65
1:E:164:PRO:HA	1:E:245:MET:CG	2.27	0.65
1:E:474:LEU:HD23	1:E:474:LEU:H	1.62	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:165:ILE:HD11	1:F:236:LYS:HD3	1.79	0.65
1:H:228:ILE:HG22	1:H:230:LYS:HG2	1.77	0.65
1:M:124:ASN:HB3	1:M:219:ASP:HB3	1.78	0.65
1:N:372:PHE:O	1:N:373:ILE:HG13	1.96	0.65
1:B:111:GLN:HB3	1:B:112:PRO:HD2	1.76	0.65
1:D:150:ASP:OD1	1:D:294:SER:HA	1.96	0.65
1:F:103:THR:HG21	1:F:468:PHE:CE1	2.31	0.65
1:I:45:VAL:N	1:I:65:VAL:HG21	2.12	0.65
1:B:124:ASN:HB3	1:B:219:ASP:HB3	1.79	0.65
1:C:97:ARG:C	1:C:98:LEU:HD23	2.22	0.65
1:C:115:VAL:HG21	1:D:257:VAL:HG22	1.77	0.65
1:E:331:VAL:HG11	1:E:368:TYR:HE2	1.60	0.65
1:F:474:LEU:H	1:F:474:LEU:HD23	1.61	0.65
1:I:463:PRO:O	1:I:467:LYS:HG3	1.96	0.65
1:M:322:CYS:HB3	1:M:326:GLN:O	1.96	0.65
1:A:267:VAL:CG2	1:A:267:VAL:CG1	2.71	0.65
1:C:31:THR:CA	1:C:31:THR:CG2	2.72	0.65
1:H:342:VAL:CG2	1:H:361:TYR:HB2	2.26	0.65
1:K:459:LEU:HB2	1:K:469:LEU:HD11	1.77	0.65
1:N:29:THR:HG22	1:N:30:ARG:N	2.11	0.65
1:A:125:LYS:CE	1:A:125:LYS:CG	2.73	0.65
1:B:54:LYS:HD2	1:B:55:GLN:H	1.62	0.65
1:F:21:VAL:HG21	1:F:241:PRO:HB2	1.78	0.65
1:F:103:THR:HG21	1:F:468:PHE:HE1	1.62	0.65
1:G:121:PRO:HD3	1:G:222:LEU:HD21	1.77	0.65
1:J:393:ASN:HD22	1:J:394:PRO:CD	2.09	0.65
1:K:246:LEU:HD12	1:K:246:LEU:O	1.96	0.65
1:L:32:ASN:C	1:L:33:ILE:HD13	2.22	0.65
1:O:162:ARG:HB3	1:O:162:ARG:NH1	2.11	0.65
1:H:30:ARG:HB3	1:H:375:GLN:HE22	1.62	0.65
1:I:117:ILE:HG13	1:J:260:LEU:HD22	1.77	0.65
1:M:21:VAL:HG12	1:M:22:VAL:N	2.09	0.65
1:I:53:LYS:NZ	1:I:53:LYS:CD	2.60	0.65
1:K:314:ALA:HB2	1:K:319:ASN:HA	1.79	0.65
1:A:146:CYS:O	1:A:147:ILE:HG13	1.97	0.64
1:A:148:SER:O	1:A:149:MET:HB3	1.96	0.64
1:I:162:ARG:HG3	1:I:244:ASP:HB3	1.79	0.64
1:L:151:TYR:CG	1:L:203:THR:HB	2.32	0.64
1:B:122:LEU:O	1:B:144:ARG:HD2	1.97	0.64
1:D:188:LEU:H	1:D:188:LEU:CD2	2.11	0.64
1:B:216:ASN:O	1:B:217:LYS:C	2.40	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:394:PRO:HG2	1:C:395:SER:H	1.61	0.64
1:G:149:MET:HE3	1:G:292:THR:HG23	1.79	0.64
1:G:233:ASP:O	1:G:237:MET:HG3	1.98	0.64
1:O:359:LYS:NZ	1:O:359:LYS:CD	2.60	0.64
1:O:474:LEU:HD23	1:O:474:LEU:H	1.62	0.64
1:B:149:MET:HE2	1:B:293:PRO:HD2	1.79	0.64
1:E:346:VAL:HG23	1:E:357:ASN:O	1.98	0.64
1:F:342:VAL:CG2	1:F:361:TYR:HB2	2.27	0.64
1:I:64:LYS:NZ	1:I:64:LYS:CD	2.60	0.64
1:K:53:LYS:HD3	1:K:58:ASN:HA	1.78	0.64
1:M:121:PRO:HD3	1:M:222:LEU:HD21	1.79	0.64
1:M:151:TYR:CG	1:M:203:THR:HB	2.33	0.64
1:C:273:ALA:HA	1:C:276:TYR:CE2	2.32	0.64
1:I:141:THR:HG22	1:I:142:ASP:N	2.13	0.64
1:J:85:PHE:HB2	1:J:88:THR:CG2	2.27	0.64
1:K:188:LEU:N	1:K:188:LEU:HD22	2.12	0.64
1:L:373:ILE:HD11	1:L:464:LEU:HD22	1.79	0.64
1:M:77:LEU:HB2	1:M:325:ASN:O	1.97	0.64
1:M:209:ASP:O	1:M:213:LEU:HB2	1.97	0.64
1:O:123:LEU:HA	1:O:218:SER:O	1.98	0.64
1:O:149:MET:HE2	1:O:205:PHE:HE1	1.60	0.64
1:O:393:ASN:HB3	1:O:396:ILE:HD12	1.79	0.64
1:G:255:MET:HG2	1:G:256:PHE:N	2.13	0.64
1:H:300:SER:O	1:H:303:GLN:HB2	1.98	0.64
1:J:188:LEU:HD22	1:J:188:LEU:N	2.13	0.64
1:A:75:VAL:HB	1:A:327:LEU:HB2	1.80	0.64
1:E:372:PHE:O	1:E:373:ILE:HG13	1.98	0.64
1:G:200:MET:O	1:G:229:CYS:HA	1.97	0.64
1:I:119:GLY:CA	1:I:148:SER:HA	2.28	0.64
1:M:258:ARG:HB3	1:M:292:THR:HG22	1.80	0.64
1:N:155:GLN:HB2	1:N:252:ARG:HB3	1.80	0.64
1:B:109:ARG:H	1:B:306:ASN:ND2	1.95	0.64
1:B:242:TYR:CE2	1:B:392:MET:HG3	2.33	0.64
1:F:151:TYR:CG	1:F:203:THR:HB	2.32	0.64
1:I:392:MET:CE	1:I:392:MET:CG	2.76	0.64
1:C:30:ARG:HB3	1:C:375:GLN:NE2	2.11	0.64
1:E:165:ILE:CD1	1:E:233:ASP:HB3	2.28	0.64
1:F:71:ARG:O	1:F:330:THR:HA	1.98	0.64
1:F:255:MET:HG2	1:F:256:PHE:N	2.12	0.64
1:J:393:ASN:HB3	1:J:396:ILE:HD12	1.78	0.64
1:L:331:VAL:HG11	1:L:368:TYR:CE2	2.31	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:322:CYS:O	1:B:323:TRP:C	2.40	0.63
1:C:79:ASP:OD1	1:C:81:ASN:HB2	1.98	0.63
1:L:157:CYS:HA	1:L:330:THR:O	1.98	0.63
1:A:118:SER:HB3	1:A:223:ASP:OD2	1.98	0.63
1:A:165:ILE:O	1:A:237:MET:HE2	1.98	0.63
1:B:118:SER:HB3	1:B:223:ASP:OD2	1.98	0.63
1:C:49:TYR:O	1:C:64:LYS:HE3	1.97	0.63
1:H:162:ARG:NH1	1:H:162:ARG:HB3	2.12	0.63
1:J:149:MET:HE3	1:J:292:THR:HG23	1.80	0.63
1:K:68:LEU:HD13	1:K:151:TYR:HD1	1.63	0.63
1:L:151:TYR:CD1	1:L:203:THR:HG21	2.32	0.63
1:N:323:TRP:NE1	1:N:392:MET:HE1	2.13	0.63
1:K:118:SER:HB3	1:K:223:ASP:OD2	1.98	0.63
1:K:155:GLN:HB3	1:K:304:ILE:HG21	1.78	0.63
1:M:298:VAL:HG11	1:M:335:THR:HA	1.80	0.63
1:M:336:ARG:O	1:M:338:THR:N	2.29	0.63
1:N:122:LEU:HD13	1:N:144:ARG:NH2	2.13	0.63
1:N:451:LEU:HB3	1:N:454:LYS:HB2	1.78	0.63
1:O:62:VAL:HG12	1:O:63:PRO:HD2	1.81	0.63
1:O:156:LEU:HA	1:O:250:LEU:O	1.98	0.63
1:E:33:ILE:HD13	1:E:33:ILE:N	2.13	0.63
1:E:440:PRO:O	1:E:441:LEU:HD23	1.99	0.63
1:F:83:PHE:HD2	1:F:85:PHE:CZ	2.16	0.63
1:G:22:VAL:CG1	1:G:26:GLU:HG3	2.29	0.63
1:L:216:ASN:O	1:M:277:ILE:HD12	1.99	0.63
1:M:342:VAL:HG23	1:M:342:VAL:O	1.97	0.63
1:D:120:HIS:CD2	1:D:222:LEU:HD13	2.34	0.63
1:H:54:LYS:HB3	1:H:57:SER:HB3	1.80	0.63
1:O:35:TYR:CE2	1:O:457:ALA:HB2	2.34	0.63
1:A:259:HIS:H	1:A:292:THR:HB	1.64	0.63
1:B:151:TYR:CG	1:B:203:THR:HB	2.34	0.63
1:C:162:ARG:HB3	1:C:162:ARG:HH11	1.62	0.63
1:D:233:ASP:CG	1:D:236:LYS:HB2	2.23	0.63
1:D:298:VAL:HG11	1:D:335:THR:HA	1.80	0.63
1:H:21:VAL:HG21	1:H:241:PRO:HB2	1.80	0.63
1:I:148:SER:O	1:I:149:MET:HB3	1.98	0.63
1:J:108:GLY:HA2	1:J:306:ASN:ND2	2.13	0.63
1:M:159:ILE:HG22	1:M:247:PHE:CE1	2.31	0.63
1:C:155:GLN:OE1	1:C:304:ILE:HG22	1.98	0.63
1:L:99:VAL:HG11	1:L:321:ILE:HG23	1.80	0.63
1:L:126:LEU:HB3	1:L:262:ASN:HB3	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:118:SER:HB3	1:M:223:ASP:OD2	1.99	0.63
1:N:353:TYR:HE1	1:O:216:ASN:HB2	1.63	0.63
1:C:149:MET:HE1	1:C:205:PHE:HZ	1.62	0.63
1:F:289:TYR:CD2	1:J:148:SER:HB3	2.34	0.63
1:I:22:VAL:HG12	1:I:23:SER:N	2.14	0.63
1:K:263:ARG:HB2	1:K:288:SER:OG	1.99	0.63
1:N:54:LYS:HD2	1:N:55:GLN:H	1.63	0.63
1:A:305:PHE:HE1	1:A:333:ASP:HB2	1.64	0.63
1:B:297:MET:HE2	1:C:256:PHE:HD2	1.64	0.63
1:C:97:ARG:HG2	1:C:381:LEU:HD11	1.80	0.63
1:H:162:ARG:HB3	1:H:162:ARG:HH11	1.63	0.63
1:L:121:PRO:HB3	1:M:285:PRO:HG2	1.79	0.63
1:E:393:ASN:HB3	1:E:396:ILE:CD1	2.28	0.62
1:I:120:HIS:HA	1:I:222:LEU:CD2	2.29	0.62
1:O:72:VAL:HG21	1:O:195:LEU:O	1.98	0.62
1:G:342:VAL:CG2	1:G:361:TYR:HB2	2.28	0.62
1:H:123:LEU:HD23	1:H:147:ILE:HD12	1.81	0.62
1:I:133:ASN:N	1:I:133:ASN:ND2	2.47	0.62
1:K:123:LEU:HG	1:K:124:ASN:N	2.13	0.62
1:K:257:VAL:HG22	1:O:115:VAL:HG21	1.81	0.62
1:L:237:MET:HG2	1:L:245:MET:HG2	1.81	0.62
1:L:461:GLN:HE22	1:M:21:VAL:HB	1.64	0.62
1:M:354:LYS:NZ	1:M:354:LYS:CD	2.62	0.62
1:N:44:ALA:O	1:N:365:GLY:HA2	1.99	0.62
1:O:123:LEU:HD12	1:O:218:SER:O	1.99	0.62
1:A:322:CYS:HB3	1:A:326:GLN:O	1.99	0.62
1:C:211:THR:HG23	1:C:226:SER:CA	2.21	0.62
1:C:297:MET:HE1	1:D:296:SER:HB2	1.81	0.62
1:D:109:ARG:H	1:D:306:ASN:HD21	1.47	0.62
1:L:34:TYR:CE2	1:L:375:GLN:HB2	2.34	0.62
1:L:372:PHE:C	1:L:373:ILE:HG13	2.24	0.62
1:C:152:LYS:HE3	1:C:253:GLU:HB2	1.81	0.62
1:E:101:ALA:HA	1:E:320:GLY:O	2.00	0.62
1:G:373:ILE:HG13	1:G:464:LEU:HD13	1.80	0.62
1:J:118:SER:HB3	1:J:223:ASP:OD2	1.99	0.62
1:K:169:TRP:NE1	1:O:340:MET:HE1	2.14	0.62
1:K:208:MET:HE2	1:K:210:PHE:CD2	2.33	0.62
1:K:285:PRO:HG2	1:O:121:PRO:HB3	1.80	0.62
1:N:151:TYR:CG	1:N:203:THR:HB	2.34	0.62
1:A:121:PRO:CD	1:A:222:LEU:HD21	2.28	0.62
1:C:162:ARG:HB3	1:C:162:ARG:NH1	2.14	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:68:LEU:HD23	1:N:334:THR:CG2	2.29	0.62
1:N:164:PRO:HG3	1:N:330:THR:OG1	1.99	0.62
1:A:64:LYS:CG	1:A:64:LYS:HE2	2.26	0.62
1:C:43:LEU:HD21	1:D:190:LEU:HD22	1.80	0.62
1:E:237:MET:HG2	1:E:245:MET:HG2	1.80	0.62
1:F:220:VAL:HG12	1:F:224:ILE:HD11	1.82	0.62
1:H:82:LYS:O	1:H:83:PHE:O	2.17	0.62
1:H:123:LEU:HA	1:H:218:SER:O	2.00	0.62
1:H:208:MET:HE1	1:H:214:GLN:HE21	1.63	0.62
1:N:364:HIS:HD2	1:N:365:GLY:H	1.47	0.62
1:D:237:MET:SD	1:D:246:LEU:HD23	2.38	0.62
1:E:328:PHE:HE2	1:E:446:PHE:CE1	2.17	0.62
1:N:21:VAL:HG21	1:N:241:PRO:HB2	1.80	0.62
1:O:188:LEU:HD22	1:O:188:LEU:H	1.65	0.62
1:C:155:GLN:HB2	1:C:252:ARG:HB3	1.80	0.62
1:E:155:GLN:HB3	1:E:304:ILE:HG21	1.81	0.62
1:F:149:MET:HE3	1:F:293:PRO:HD2	1.79	0.62
1:N:112:PRO:HB3	1:O:231:TYR:CD1	2.35	0.62
1:N:152:LYS:CD	1:N:152:LYS:NZ	2.63	0.62
1:N:395:SER:O	1:N:396:ILE:C	2.43	0.62
1:O:34:TYR:CZ	1:O:375:GLN:HG3	2.33	0.62
1:O:181:LYS:HE2	1:O:184:GLU:HG2	1.82	0.62
1:J:36:HIS:ND1	1:J:37:ALA:N	2.47	0.62
1:L:112:PRO:HB3	1:M:231:TYR:CD1	2.35	0.62
1:H:164:PRO:HA	1:H:245:MET:HG3	1.81	0.62
1:H:361:TYR:CD1	1:I:185:CYS:HB2	2.35	0.62
1:K:211:THR:HG23	1:K:226:SER:HA	1.82	0.62
1:F:159:ILE:HD12	1:F:329:VAL:HG22	1.79	0.61
1:F:253:GLU:HG3	1:J:113:LEU:HD22	1.82	0.61
1:K:22:VAL:CG1	1:K:26:GLU:HG3	2.30	0.61
1:L:156:LEU:HG	1:L:332:VAL:HB	1.82	0.61
1:M:331:VAL:HG11	1:M:368:TYR:HE2	1.64	0.61
1:N:68:LEU:HD13	1:N:151:TYR:CD1	2.34	0.61
1:N:117:ILE:HG23	1:N:117:ILE:O	1.98	0.61
1:N:389:ILE:CD1	1:N:389:ILE:CB	2.77	0.61
1:C:92:ASP:HB2	1:I:383:ALA:HB3	1.81	0.61
1:C:371:GLN:C	1:C:372:PHE:CD1	2.79	0.61
1:E:250:LEU:HB2	1:E:304:ILE:HD11	1.81	0.61
1:K:296:SER:OG	1:K:297:MET:N	2.27	0.61
1:M:254:GLN:O	1:M:254:GLN:HG3	2.00	0.61
1:N:364:HIS:HD2	1:N:365:GLY:N	1.97	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:450:ASP:OD1	1:A:452:LYS:HG3	2.00	0.61
1:E:174:PRO:HG3	1:E:180:VAL:HG23	1.81	0.61
1:H:22:VAL:CG1	1:H:26:GLU:HG3	2.30	0.61
1:I:161:CYS:SG	1:I:244:ASP:HB3	2.40	0.61
1:N:247:PHE:CE2	1:N:320:GLY:HA2	2.35	0.61
1:F:152:LYS:NZ	1:J:113:LEU:O	2.33	0.61
1:F:181:LYS:HD3	1:F:181:LYS:H	1.65	0.61
1:I:305:PHE:HE1	1:I:333:ASP:HB2	1.65	0.61
1:J:79:ASP:HB3	1:J:82:LYS:HG3	1.81	0.61
1:J:96:GLN:NE2	1:J:378:LYS:HD3	2.15	0.61
1:J:258:ARG:HB2	1:J:294:SER:HB2	1.82	0.61
1:A:141:THR:HG23	1:E:354:LYS:HA	1.82	0.61
1:B:73:PHE:CD1	1:B:370:LEU:HD11	2.36	0.61
1:B:97:ARG:HE	1:B:400:TRP:HB3	1.65	0.61
1:C:240:GLU:CG	1:C:241:PRO:HD2	2.30	0.61
1:F:97:ARG:O	1:F:98:LEU:HD23	1.99	0.61
1:F:169:TRP:CD1	1:J:340:MET:HE1	2.35	0.61
1:G:155:GLN:HB3	1:G:304:ILE:HG21	1.82	0.61
1:K:124:ASN:HB3	1:K:219:ASP:HB3	1.81	0.61
1:F:331:VAL:HG11	1:F:368:TYR:HE2	1.64	0.61
1:M:161:CYS:SG	1:M:244:ASP:HB3	2.41	0.61
1:O:29:THR:O	1:O:377:CYS:HB3	2.00	0.61
1:O:102:CYS:O	1:O:311:LEU:HD11	2.01	0.61
1:O:263:ARG:HB2	1:O:288:SER:OG	2.00	0.61
1:A:200:MET:HE2	1:A:223:ASP:O	1.99	0.61
1:A:260:LEU:HD13	1:E:149:MET:HA	1.81	0.61
1:C:31:THR:CB	1:C:31:THR:HA	2.18	0.61
1:D:322:CYS:HB3	1:D:326:GLN:O	2.01	0.61
1:D:340:MET:HE1	1:E:169:TRP:CD1	2.35	0.61
1:E:54:LYS:HD2	1:E:55:GLN:H	1.66	0.61
1:K:255:MET:HG2	1:K:256:PHE:N	2.15	0.61
1:F:208:MET:HE2	1:F:210:PHE:CD2	2.34	0.61
1:F:260:LEU:HB3	1:J:117:ILE:CD1	2.30	0.61
1:E:120:HIS:HB2	1:E:221:PRO:HA	1.82	0.61
1:F:461:GLN:HE22	1:G:21:VAL:HB	1.65	0.61
1:J:69:GLN:HE21	1:J:71:ARG:NH2	1.99	0.61
1:K:201:VAL:CG1	1:K:332:VAL:HG11	2.28	0.61
1:N:219:ASP:HB2	1:N:263:ARG:NH1	2.16	0.61
1:O:36:HIS:ND1	1:O:37:ALA:N	2.49	0.61
1:C:361:TYR:CE2	1:D:268:GLY:HA3	2.35	0.61
1:E:24:THR:CG2	1:E:318:ASN:HA	2.31	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:115:VAL:CG2	1:M:257:VAL:HG22	2.30	0.61
1:L:241:PRO:HG2	1:L:242:TYR:H	1.66	0.61
1:M:59:LYS:CD	1:M:59:LYS:NZ	2.63	0.61
1:M:152:LYS:HE3	1:M:253:GLU:HB2	1.82	0.61
1:N:99:VAL:HG11	1:N:321:ILE:CG2	2.30	0.61
1:N:255:MET:HG2	1:N:256:PHE:H	1.60	0.61
1:G:181:LYS:H	1:G:181:LYS:HD3	1.65	0.60
1:G:333:ASP:OD1	1:G:335:THR:HG23	2.00	0.60
1:H:123:LEU:HD23	1:H:147:ILE:HB	1.83	0.60
1:I:223:ASP:OD1	1:I:224:ILE:HG23	2.01	0.60
1:K:382:THR:OG1	1:K:385:VAL:HG23	2.00	0.60
1:L:299:THR:HG22	1:M:254:GLN:HB2	1.83	0.60
1:O:174:PRO:HG3	1:O:180:VAL:HG23	1.83	0.60
1:O:256:PHE:C	1:O:256:PHE:CD1	2.79	0.60
1:A:298:VAL:HG23	1:A:298:VAL:O	2.00	0.60
1:C:124:ASN:HB3	1:C:219:ASP:HB3	1.82	0.60
1:D:24:THR:HG23	1:D:318:ASN:HA	1.82	0.60
1:H:155:GLN:HB2	1:H:252:ARG:HB3	1.83	0.60
1:I:162:ARG:HG3	1:I:244:ASP:CB	2.30	0.60
1:M:103:THR:CG2	1:M:103:THR:CA	2.72	0.60
1:N:22:VAL:HG11	1:N:26:GLU:HG3	1.83	0.60
1:A:159:ILE:HG22	1:A:247:PHE:HE1	1.66	0.60
1:B:164:PRO:HG2	1:B:195:LEU:HD12	1.82	0.60
1:E:315:GLN:C	1:E:315:GLN:NE2	2.59	0.60
1:F:157:CYS:O	1:F:249:TYR:HA	2.01	0.60
1:I:361:TYR:CE2	1:J:268:GLY:HA3	2.37	0.60
1:M:156:LEU:HG	1:M:332:VAL:HB	1.82	0.60
1:A:240:GLU:OE2	1:A:245:MET:HE2	2.01	0.60
1:B:107:VAL:O	1:B:107:VAL:HG12	2.01	0.60
1:F:117:ILE:HG12	1:F:148:SER:HB2	1.82	0.60
1:F:257:VAL:CG1	1:F:260:LEU:HD21	2.30	0.60
1:H:461:GLN:HE22	1:I:21:VAL:HB	1.65	0.60
1:I:353:TYR:HE1	1:J:216:ASN:HB2	1.66	0.60
1:C:165:ILE:CD1	1:C:236:LYS:HD3	2.31	0.60
1:E:149:MET:HE3	1:E:292:THR:HG23	1.82	0.60
1:F:340:MET:HE1	1:G:169:TRP:CD1	2.35	0.60
1:G:21:VAL:HG21	1:G:241:PRO:HB2	1.82	0.60
1:H:151:TYR:CG	1:H:203:THR:HB	2.37	0.60
1:J:126:LEU:HG	1:J:127:ASP:CG	2.26	0.60
1:M:110:GLY:O	1:M:111:GLN:HB2	2.01	0.60
1:C:126:LEU:HB3	1:C:262:ASN:HB3	1.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:154:THR:HG22	1:C:155:GLN:H	1.67	0.60
1:C:461:GLN:HE22	1:D:21:VAL:HB	1.65	0.60
1:D:355:ASN:HB3	1:E:265:GLY:HA2	1.83	0.60
1:G:181:LYS:HD3	1:G:181:LYS:N	2.16	0.60
1:L:24:THR:HG21	1:L:321:ILE:HG13	1.82	0.60
1:L:297:MET:HE2	1:M:296:SER:HB2	1.83	0.60
1:L:340:MET:HB2	1:M:208:MET:SD	2.41	0.60
1:L:452:LYS:CD	1:L:452:LYS:HB2	2.31	0.60
1:B:21:VAL:HG21	1:B:241:PRO:HB2	1.83	0.60
1:C:200:MET:O	1:C:229:CYS:HA	2.02	0.60
1:C:372:PHE:HB2	1:C:374:PHE:CE1	2.37	0.60
1:E:298:VAL:HG11	1:E:335:THR:HA	1.83	0.60
1:F:361:TYR:CG	1:G:185:CYS:HB2	2.37	0.60
1:J:311:LEU:H	1:J:311:LEU:CD2	2.11	0.60
1:K:201:VAL:CG1	1:K:332:VAL:HG21	2.31	0.60
1:N:248:PHE:O	1:N:249:TYR:HB3	2.01	0.60
1:A:33:ILE:HD11	1:A:87:ASP:OD2	2.01	0.60
1:D:148:SER:HB3	1:E:289:TYR:CD2	2.36	0.60
1:H:250:LEU:HB3	1:H:304:ILE:HD11	1.84	0.60
1:K:120:HIS:CD2	1:K:222:LEU:HD13	2.37	0.60
1:K:133:ASN:HD22	1:K:133:ASN:N	2.00	0.60
1:L:111:GLN:HB3	1:L:112:PRO:HD2	1.82	0.60
1:B:222:LEU:H	1:B:222:LEU:CD2	2.13	0.60
1:C:459:LEU:HD12	1:C:469:LEU:HD21	1.84	0.60
1:F:336:ARG:O	1:F:338:THR:N	2.31	0.60
1:L:97:ARG:HG2	1:L:381:LEU:HD11	1.84	0.60
1:N:123:LEU:HD22	1:N:147:ILE:HB	1.84	0.60
1:J:22:VAL:CG1	1:J:26:GLU:HG3	2.32	0.60
1:L:259:HIS:H	1:L:292:THR:HB	1.67	0.60
1:M:155:GLN:OE1	1:M:304:ILE:HG22	2.02	0.60
1:M:373:ILE:CD1	1:M:464:LEU:HD22	2.26	0.60
1:A:188:LEU:HD22	1:A:188:LEU:N	2.17	0.59
1:C:130:GLU:HB2	1:C:260:LEU:HD12	1.84	0.59
1:F:106:GLU:HG2	1:F:308:PRO:HA	1.83	0.59
1:G:259:HIS:H	1:G:292:THR:HB	1.67	0.59
1:I:118:SER:HB3	1:I:223:ASP:OD2	2.02	0.59
1:N:173:THR:HG22	1:N:174:PRO:HD2	1.84	0.59
1:A:167:GLU:HG2	1:A:231:TYR:O	2.02	0.59
1:B:155:GLN:HB2	1:B:252:ARG:HB3	1.83	0.59
1:C:188:LEU:N	1:C:188:LEU:HD22	2.17	0.59
1:D:219:ASP:HB2	1:D:263:ARG:NH1	2.16	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:342:VAL:O	1:K:342:VAL:HG23	2.01	0.59
1:L:69:GLN:HE21	1:L:71:ARG:NH2	1.99	0.59
1:A:102:CYS:HB3	1:A:311:LEU:HD11	1.83	0.59
1:A:125:LYS:CD	1:A:125:LYS:NZ	2.66	0.59
1:A:220:VAL:HB	1:A:224:ILE:HD11	1.84	0.59
1:E:322:CYS:HB3	1:E:326:GLN:O	2.02	0.59
1:J:47:HIS:ND1	1:J:48:PRO:HD2	2.17	0.59
1:L:21:VAL:HG21	1:L:241:PRO:HB2	1.83	0.59
1:L:37:ALA:HB1	1:L:451:LEU:HD13	1.83	0.59
1:M:162:ARG:HG3	1:M:244:ASP:HB2	1.83	0.59
1:A:216:ASN:HB2	1:E:353:TYR:HE1	1.68	0.59
1:E:42:LEU:HB3	1:E:447:TRP:CZ2	2.37	0.59
1:E:80:PRO:HD2	1:E:325:ASN:OD1	2.03	0.59
1:G:42:LEU:HB3	1:G:447:TRP:CZ2	2.37	0.59
1:G:250:LEU:HB2	1:G:304:ILE:HD11	1.84	0.59
1:I:237:MET:CG	1:I:245:MET:HG2	2.31	0.59
1:J:107:VAL:O	1:J:107:VAL:HG12	2.01	0.59
1:K:255:MET:HE3	1:K:293:PRO:HB3	1.84	0.59
1:K:343:CYS:HB2	1:K:360:GLU:CD	2.27	0.59
1:O:149:MET:HE2	1:O:205:PHE:CE1	2.37	0.59
1:K:68:LEU:HD13	1:K:151:TYR:CD1	2.37	0.59
1:L:209:ASP:OD2	1:L:209:ASP:C	2.44	0.59
1:M:123:LEU:HA	1:M:218:SER:O	2.03	0.59
1:N:54:LYS:CB	1:N:57:SER:HB3	2.32	0.59
1:O:280:THR:O	1:O:281:THR:HB	2.03	0.59
1:O:382:THR:OG1	1:O:385:VAL:HG23	2.02	0.59
1:F:69:GLN:HE21	1:F:71:ARG:NH2	1.99	0.59
1:K:45:VAL:C	1:K:65:VAL:HG21	2.26	0.59
1:L:297:MET:HE2	1:M:256:PHE:CD2	2.37	0.59
1:N:371:GLN:HB3	1:N:464:LEU:HD12	1.84	0.59
1:H:37:ALA:HB1	1:H:451:LEU:HD13	1.84	0.59
1:H:44:ALA:HB2	1:H:447:TRP:CH2	2.38	0.59
1:H:133:ASN:HD22	1:H:133:ASN:N	2.01	0.59
1:H:258:ARG:HB2	1:H:294:SER:HB2	1.83	0.59
1:O:237:MET:HG2	1:O:245:MET:HG2	1.85	0.59
1:A:299:THR:C	1:A:301:ASP:N	2.57	0.59
1:A:462:PHE:O	1:A:466:ARG:HB2	2.02	0.59
1:B:44:ALA:O	1:B:365:GLY:HA2	2.03	0.59
1:B:47:HIS:HB2	1:B:52:ILE:HD11	1.84	0.59
1:D:121:PRO:HG3	1:E:287:THR:OG1	2.03	0.59
1:F:323:TRP:HE1	1:F:392:MET:HE1	1.68	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:373:ILE:HD12	1:G:464:LEU:HD22	1.84	0.59
1:I:142:ASP:OD2	1:I:144:ARG:NE	2.35	0.59
1:L:220:VAL:HG23	1:L:225:CYS:HB2	1.85	0.59
1:M:382:THR:OG1	1:M:385:VAL:HG23	2.02	0.59
1:N:117:ILE:HG13	1:O:260:LEU:HD22	1.85	0.59
1:A:151:TYR:CG	1:A:203:THR:HB	2.37	0.59
1:B:99:VAL:HG11	1:B:321:ILE:CG2	2.33	0.59
1:C:89:SER:O	1:I:384:ASP:OD1	2.20	0.59
1:I:280:THR:CG2	1:I:280:THR:HB	2.18	0.59
1:L:52:ILE:HD13	1:M:269:GLU:CG	2.32	0.59
1:O:47:HIS:HB3	1:O:50:TYR:O	2.03	0.59
1:A:304:ILE:CD1	1:A:304:ILE:CB	2.79	0.59
1:L:85:PHE:HB2	1:L:88:THR:OG1	2.03	0.59
1:B:47:HIS:ND1	1:B:48:PRO:HD2	2.18	0.58
1:D:110:GLY:HA3	1:D:367:GLU:CD	2.28	0.58
1:E:156:LEU:HA	1:E:250:LEU:O	2.03	0.58
1:F:155:GLN:HB3	1:F:304:ILE:HG21	1.85	0.58
1:G:181:LYS:H	1:G:181:LYS:CD	2.16	0.58
1:I:204:GLY:HA3	1:I:293:PRO:HG3	1.84	0.58
1:N:162:ARG:HB3	1:N:162:ARG:NH1	2.15	0.58
1:C:280:THR:O	1:C:281:THR:HB	2.02	0.58
1:J:72:VAL:HG23	1:J:197:ASP:N	2.18	0.58
1:J:372:PHE:O	1:J:373:ILE:HG12	2.02	0.58
1:K:231:TYR:CD1	1:O:112:PRO:HB3	2.37	0.58
1:M:122:LEU:HD13	1:M:144:ARG:NH2	2.18	0.58
1:N:220:VAL:HG23	1:N:225:CYS:CB	2.33	0.58
1:O:181:LYS:H	1:O:181:LYS:CD	2.12	0.58
1:A:125:LYS:CD	1:A:125:LYS:O	2.52	0.58
1:B:79:ASP:OD1	1:B:81:ASN:HB2	2.03	0.58
1:E:192:ASN:ND2	1:E:236:LYS:HE2	2.18	0.58
1:K:54:LYS:NZ	1:K:55:GLN:HB3	2.19	0.58
1:A:21:VAL:HB	1:E:461:GLN:HE22	1.69	0.58
1:B:181:LYS:H	1:B:181:LYS:HD3	1.68	0.58
1:B:222:LEU:HD22	1:B:222:LEU:N	2.18	0.58
1:B:364:HIS:HD2	1:B:365:GLY:N	2.02	0.58
1:E:155:GLN:HB2	1:E:252:ARG:HB3	1.85	0.58
1:H:474:LEU:HD23	1:H:474:LEU:H	1.68	0.58
1:J:219:ASP:HB2	1:J:263:ARG:NH1	2.17	0.58
1:M:71:ARG:O	1:M:330:THR:HA	2.04	0.58
1:A:265:GLY:HA2	1:E:355:ASN:HB3	1.85	0.58
1:B:216:ASN:O	1:B:217:LYS:HG2	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:79:ASP:O	1:D:81:ASN:N	2.36	0.58
1:F:268:GLY:HA3	1:J:361:TYR:CZ	2.38	0.58
1:F:305:PHE:O	1:F:307:LYS:HG3	2.04	0.58
1:G:54:LYS:NZ	1:G:56:ASP:H	2.00	0.58
1:I:126:LEU:HB3	1:I:262:ASN:HB3	1.84	0.58
1:N:141:THR:CG2	1:N:142:ASP:N	2.65	0.58
1:N:359:LYS:CG	1:N:359:LYS:CE	2.80	0.58
1:B:170:GLY:HA3	1:B:191:LEU:CD1	2.33	0.58
1:F:21:VAL:HG11	1:F:241:PRO:O	2.04	0.58
1:G:164:PRO:HG3	1:G:330:THR:HG21	1.86	0.58
1:G:201:VAL:HG11	1:G:332:VAL:HG11	1.85	0.58
1:H:44:ALA:HB2	1:H:447:TRP:HH2	1.69	0.58
1:K:102:CYS:O	1:K:311:LEU:HD11	2.03	0.58
1:K:269:GLU:OE1	1:O:363:ARG:NH2	2.36	0.58
1:L:171:LYS:HE3	1:L:212:THR:O	2.02	0.58
1:L:393:ASN:HD22	1:L:394:PRO:HD2	1.68	0.58
1:M:88:THR:HB	1:M:91:TYR:CD2	2.39	0.58
1:M:162:ARG:HG3	1:M:244:ASP:CB	2.33	0.58
1:O:174:PRO:HG3	1:O:180:VAL:CG2	2.34	0.58
1:A:162:ARG:HG3	1:A:244:ASP:HB3	1.85	0.58
1:B:237:MET:SD	1:B:246:LEU:HD23	2.43	0.58
1:C:123:LEU:HA	1:C:218:SER:O	2.04	0.58
1:D:262:ASN:ND2	1:D:289:TYR:CD2	2.72	0.58
1:F:165:ILE:HD13	1:F:236:LYS:HD3	1.84	0.58
1:G:108:GLY:HA2	1:G:306:ASN:ND2	2.18	0.58
1:G:165:ILE:HG23	1:G:245:MET:SD	2.43	0.58
1:K:181:LYS:HE2	1:K:184:GLU:CG	2.34	0.58
1:K:297:MET:HG3	1:L:256:PHE:HB3	1.85	0.58
1:L:202:ASP:HA	1:L:229:CYS:HB3	1.86	0.58
1:A:121:PRO:HD3	1:A:222:LEU:HD21	1.85	0.58
1:F:247:PHE:CE2	1:F:320:GLY:HA2	2.39	0.58
1:H:109:ARG:H	1:H:306:ASN:ND2	2.01	0.58
1:I:24:THR:HG21	1:I:321:ILE:HG13	1.86	0.58
1:K:80:PRO:HD3	1:K:100:TRP:CD1	2.39	0.58
1:N:47:HIS:HB2	1:N:52:ILE:CD1	2.31	0.58
1:N:166:GLY:N	1:N:193:THR:O	2.33	0.58
1:A:253:GLU:HG3	1:E:113:LEU:HD22	1.84	0.58
1:B:79:ASP:OD1	1:B:81:ASN:ND2	2.32	0.58
1:H:312:GLN:HG3	1:H:313:ARG:N	2.19	0.58
1:I:119:GLY:HA3	1:I:148:SER:HA	1.84	0.58
1:C:24:THR:HG23	1:C:318:ASN:HA	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:98:LEU:HD13	1:C:376:LEU:HD11	1.86	0.58
1:D:113:LEU:HD22	1:E:253:GLU:HG3	1.86	0.58
1:G:258:ARG:O	1:G:259:HIS:ND1	2.36	0.58
1:H:149:MET:HE3	1:H:293:PRO:HD2	1.84	0.58
1:K:96:GLN:HE22	1:K:378:LYS:HD3	1.69	0.58
1:L:298:VAL:HG23	1:M:255:MET:O	2.04	0.58
1:N:111:GLN:NE2	1:N:367:GLU:OE1	2.35	0.58
1:A:52:ILE:O	1:A:61:ALA:HB3	2.03	0.57
1:C:119:GLY:HA3	1:D:289:TYR:CE1	2.38	0.57
1:F:115:VAL:HG21	1:G:257:VAL:HG22	1.84	0.57
1:G:386:MET:HG2	1:G:397:LEU:HD21	1.85	0.57
1:H:208:MET:HE1	1:H:214:GLN:NE2	2.19	0.57
1:I:155:GLN:HB3	1:I:304:ILE:CG2	2.34	0.57
1:K:202:ASP:HA	1:K:229:CYS:HB3	1.85	0.57
1:L:219:ASP:HB2	1:L:263:ARG:NH1	2.19	0.57
1:M:220:VAL:HG23	1:M:225:CYS:CB	2.33	0.57
1:M:305:PHE:HE1	1:M:333:ASP:HB2	1.69	0.57
1:N:149:MET:HE2	1:N:293:PRO:HD2	1.86	0.57
1:N:272:PRO:O	1:N:274:ASP:N	2.37	0.57
1:N:342:VAL:O	1:N:342:VAL:HG23	2.04	0.57
1:A:21:VAL:HG12	1:A:22:VAL:N	2.19	0.57
1:C:42:LEU:HB3	1:C:447:TRP:CZ2	2.39	0.57
1:E:280:THR:O	1:E:281:THR:HB	2.05	0.57
1:F:188:LEU:N	1:F:188:LEU:CD2	2.64	0.57
1:J:96:GLN:HE22	1:J:378:LYS:HD3	1.67	0.57
1:K:117:ILE:HD11	1:L:260:LEU:HB3	1.86	0.57
1:K:133:ASN:N	1:K:133:ASN:ND2	2.52	0.57
1:K:260:LEU:CD1	1:O:149:MET:HA	2.34	0.57
1:L:161:CYS:SG	1:L:244:ASP:HB3	2.44	0.57
1:M:21:VAL:CG1	1:M:22:VAL:N	2.67	0.57
1:G:31:THR:OG1	1:G:376:LEU:O	2.16	0.57
1:G:379:ILE:HD12	1:G:400:TRP:HH2	1.68	0.57
1:I:43:LEU:HD23	1:I:367:GLU:HG3	1.84	0.57
1:J:192:ASN:ND2	1:J:236:LYS:HE2	2.19	0.57
1:N:209:ASP:O	1:N:213:LEU:HB2	2.04	0.57
1:C:35:TYR:CE2	1:C:457:ALA:HB2	2.39	0.57
1:C:474:LEU:HD23	1:C:474:LEU:H	1.68	0.57
1:F:333:ASP:OD2	1:F:336:ARG:NH1	2.37	0.57
1:I:80:PRO:HD2	1:I:325:ASN:OD1	2.04	0.57
1:J:305:PHE:HE1	1:J:333:ASP:CB	2.16	0.57
1:K:105:VAL:HG12	1:K:106:GLU:N	2.20	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:298:VAL:HG11	1:K:335:THR:HA	1.87	0.57
1:L:35:TYR:O	1:L:373:ILE:HA	2.03	0.57
1:L:109:ARG:HB3	1:L:109:ARG:NH1	2.20	0.57
1:M:54:LYS:HG3	1:M:56:ASP:H	1.67	0.57
1:O:240:GLU:OE2	1:O:245:MET:HE2	2.05	0.57
1:B:41:ARG:NH1	1:C:190:LEU:HD23	2.18	0.57
1:B:109:ARG:N	1:B:306:ASN:HD21	1.99	0.57
1:C:115:VAL:N	1:C:338:THR:HG23	2.17	0.57
1:C:233:ASP:OD1	1:C:233:ASP:O	2.22	0.57
1:G:149:MET:CE	1:G:292:THR:HG23	2.33	0.57
1:G:461:GLN:HE22	1:H:21:VAL:HB	1.68	0.57
1:I:389:ILE:O	1:I:392:MET:HB3	2.04	0.57
1:J:72:VAL:HG21	1:J:196:GLN:CA	2.35	0.57
1:J:151:TYR:CG	1:J:203:THR:HB	2.39	0.57
1:L:255:MET:HE3	1:L:293:PRO:HB3	1.86	0.57
1:C:97:ARG:O	1:C:98:LEU:HD23	2.04	0.57
1:F:69:GLN:NE2	1:F:71:ARG:NH2	2.52	0.57
1:F:216:ASN:HB2	1:J:353:TYR:HE1	1.69	0.57
1:G:126:LEU:HB3	1:G:262:ASN:HB3	1.86	0.57
1:G:165:ILE:HD11	1:G:236:LYS:HD3	1.86	0.57
1:I:43:LEU:CD2	1:I:367:GLU:HG3	2.34	0.57
1:J:155:GLN:HB2	1:J:252:ARG:HB3	1.87	0.57
1:K:122:LEU:HD13	1:K:144:ARG:NH2	2.18	0.57
1:L:342:VAL:HG23	1:L:342:VAL:O	2.02	0.57
1:C:216:ASN:O	1:C:217:LYS:C	2.47	0.57
1:E:305:PHE:HE1	1:E:333:ASP:CG	2.13	0.57
1:F:219:ASP:HB2	1:F:263:ARG:NH1	2.19	0.57
1:F:251:ARG:HH11	1:F:251:ARG:CG	2.14	0.57
1:H:342:VAL:O	1:H:342:VAL:CG2	2.52	0.57
1:I:167:GLU:HG3	1:I:231:TYR:O	2.04	0.57
1:K:120:HIS:HB3	1:K:123:LEU:HB2	1.87	0.57
1:A:355:ASN:HB3	1:B:265:GLY:HA2	1.86	0.57
1:B:69:GLN:NE2	1:B:71:ARG:HH22	2.03	0.57
1:C:154:THR:HG22	1:C:155:GLN:N	2.20	0.57
1:D:373:ILE:CD1	1:D:464:LEU:HD13	2.35	0.57
1:E:201:VAL:HG11	1:E:332:VAL:HG11	1.87	0.57
1:E:220:VAL:O	1:E:221:PRO:C	2.45	0.57
1:F:283:THR:O	1:F:284:LEU:HB3	2.05	0.57
1:I:310:TRP:CH2	1:I:464:LEU:CD2	2.88	0.57
1:I:311:LEU:HD23	1:I:311:LEU:H	1.69	0.57
1:N:342:VAL:CG2	1:N:361:TYR:HB2	2.35	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:24:THR:CG2	1:O:318:ASN:HA	2.34	0.57
1:B:155:GLN:OE1	1:B:304:ILE:HG22	2.04	0.57
1:C:22:VAL:CG1	1:C:23:SER:N	2.65	0.57
1:D:258:ARG:HB2	1:D:294:SER:HB2	1.86	0.57
1:G:35:TYR:O	1:G:373:ILE:HA	2.04	0.57
1:M:150:ASP:OD1	1:M:294:SER:HA	2.03	0.57
1:O:42:LEU:HB3	1:O:447:TRP:CZ2	2.39	0.57
1:C:53:LYS:HD3	1:C:58:ASN:HA	1.86	0.57
1:F:24:THR:HG23	1:F:318:ASN:HA	1.87	0.57
1:F:80:PRO:HD2	1:F:325:ASN:OD1	2.04	0.57
1:H:311:LEU:HD23	1:H:311:LEU:H	1.69	0.57
1:I:151:TYR:CG	1:I:203:THR:HB	2.40	0.57
1:J:312:GLN:HG3	1:J:313:ARG:H	1.68	0.57
1:J:381:LEU:C	1:J:386:MET:HE2	2.30	0.57
1:K:322:CYS:HB3	1:K:326:GLN:O	2.05	0.57
1:L:342:VAL:CG2	1:L:361:TYR:HB2	2.34	0.57
1:A:181:LYS:N	1:A:181:LYS:HD3	2.19	0.56
1:B:36:HIS:CE1	1:B:37:ALA:O	2.57	0.56
1:F:160:GLY:HA3	1:F:245:MET:O	2.05	0.56
1:H:219:ASP:HB2	1:H:263:ARG:NH1	2.20	0.56
1:I:115:VAL:H	1:I:338:THR:HG23	1.70	0.56
1:K:260:LEU:HD11	1:O:149:MET:HA	1.87	0.56
1:L:54:LYS:HZ3	1:L:55:GLN:HB3	1.69	0.56
1:M:121:PRO:HB3	1:N:285:PRO:HG2	1.87	0.56
1:O:202:ASP:HA	1:O:229:CYS:HB3	1.86	0.56
1:B:393:ASN:HD22	1:B:394:PRO:HD2	1.70	0.56
1:E:45:VAL:HG12	1:E:46:GLY:N	2.19	0.56
1:E:219:ASP:O	1:E:220:VAL:HG13	2.04	0.56
1:I:219:ASP:O	1:I:220:VAL:HG13	2.05	0.56
1:J:311:LEU:HG	1:J:311:LEU:O	2.04	0.56
1:K:139:SER:HB2	1:K:143:ASN:HD21	1.70	0.56
1:L:119:GLY:HA2	1:L:148:SER:HA	1.87	0.56
1:L:305:PHE:HE1	1:L:333:ASP:HB2	1.69	0.56
1:B:22:VAL:HG11	1:B:26:GLU:HG3	1.87	0.56
1:C:123:LEU:CD2	1:C:147:ILE:HB	2.34	0.56
1:F:105:VAL:HG12	1:F:106:GLU:N	2.18	0.56
1:F:234:TYR:O	1:F:238:VAL:HG23	2.04	0.56
1:F:257:VAL:CG2	1:J:115:VAL:HG21	2.33	0.56
1:F:382:THR:OG1	1:F:385:VAL:HG23	2.06	0.56
1:G:222:LEU:H	1:G:222:LEU:HD22	1.69	0.56
1:H:69:GLN:HA	1:H:199:ASP:O	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:240:GLU:HG2	1:H:243:GLY:H	1.71	0.56
1:J:152:LYS:HG3	1:J:255:MET:HB3	1.86	0.56
1:K:233:ASP:O	1:K:237:MET:HG3	2.05	0.56
1:L:149:MET:HA	1:M:260:LEU:CD1	2.35	0.56
1:L:297:MET:HE1	1:M:296:SER:OG	2.05	0.56
1:M:42:LEU:HD22	1:M:447:TRP:NE1	2.19	0.56
1:M:297:MET:HE2	1:N:256:PHE:HD2	1.70	0.56
1:N:160:GLY:HA3	1:N:245:MET:O	2.05	0.56
1:N:369:ASP:OD2	1:N:371:GLN:HG3	2.04	0.56
1:O:98:LEU:HD13	1:O:376:LEU:HD11	1.87	0.56
1:A:167:GLU:HG3	1:A:167:GLU:O	2.06	0.56
1:A:297:MET:HE2	1:B:256:PHE:HD2	1.70	0.56
1:G:92:ASP:OD2	1:G:94:ALA:HB3	2.05	0.56
1:G:459:LEU:HD12	1:G:469:LEU:HD21	1.87	0.56
1:H:155:GLN:HB3	1:H:304:ILE:HG21	1.87	0.56
1:I:299:THR:O	1:I:301:ASP:N	2.39	0.56
1:J:318:ASN:C	1:J:318:ASN:OD1	2.47	0.56
1:K:185:CYS:HB2	1:O:361:TYR:CD1	2.40	0.56
1:M:471:GLN:C	1:M:473:GLY:H	2.13	0.56
1:O:366:GLU:HG3	1:O:368:TYR:HE1	1.70	0.56
1:A:255:MET:HG2	1:A:256:PHE:N	2.21	0.56
1:A:298:VAL:C	1:A:299:THR:HG23	2.25	0.56
1:B:340:MET:HE1	1:C:169:TRP:NE1	2.20	0.56
1:D:394:PRO:HG2	1:D:395:SER:H	1.70	0.56
1:F:109:ARG:HB3	1:F:109:ARG:CZ	2.35	0.56
1:F:121:PRO:HD3	1:F:222:LEU:CD2	2.33	0.56
1:F:156:LEU:HD12	1:F:157:CYS:N	2.20	0.56
1:I:394:PRO:O	1:I:398:GLU:HG3	2.06	0.56
1:L:300:SER:OG	1:M:253:GLU:HG2	2.06	0.56
1:O:224:ILE:CD1	1:O:224:ILE:CB	2.80	0.56
1:A:300:SER:OG	1:B:253:GLU:HG2	2.05	0.56
1:C:240:GLU:HG3	1:C:241:PRO:HD2	1.88	0.56
1:L:237:MET:CG	1:L:245:MET:HG2	2.35	0.56
1:M:373:ILE:HD11	1:M:465:GLY:HA2	1.87	0.56
1:N:28:VAL:HG22	1:N:379:ILE:HG12	1.86	0.56
1:A:231:TYR:CD1	1:E:112:PRO:HB3	2.41	0.56
1:A:298:VAL:C	1:A:299:THR:CG2	2.75	0.56
1:B:119:GLY:HA2	1:B:148:SER:HA	1.88	0.56
1:D:165:ILE:O	1:D:165:ILE:HG13	2.05	0.56
1:N:259:HIS:H	1:N:292:THR:HB	1.71	0.56
1:A:273:ALA:HA	1:A:276:TYR:CE2	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:315:GLN:C	1:E:315:GLN:HE21	2.13	0.56
1:H:181:LYS:HD3	1:H:181:LYS:H	1.71	0.56
1:H:389:ILE:O	1:H:389:ILE:HG22	2.06	0.56
1:J:196:GLN:N	1:J:199:ASP:OD2	2.31	0.56
1:L:466:ARG:NH1	1:M:315:GLN:O	2.39	0.56
1:M:364:HIS:HD2	1:M:365:GLY:H	1.54	0.56
1:B:311:LEU:HD23	1:B:311:LEU:N	2.02	0.56
1:C:145:GLU:OE1	1:D:132:SER:HB3	2.05	0.56
1:D:163:PRO:HD3	1:D:328:PHE:CZ	2.41	0.56
1:E:22:VAL:HG12	1:E:23:SER:N	2.19	0.56
1:F:169:TRP:H	1:F:208:MET:HA	1.69	0.56
1:H:27:TYR:CE2	1:H:388:TYR:HE2	2.23	0.56
1:H:312:GLN:CG	1:H:313:ARG:H	2.19	0.56
1:H:386:MET:O	1:H:397:LEU:HD11	2.05	0.56
1:L:272:PRO:HD2	1:L:275:LEU:HD12	1.87	0.56
1:M:219:ASP:HB2	1:M:263:ARG:CZ	2.35	0.56
1:O:258:ARG:HB2	1:O:294:SER:HB2	1.86	0.56
1:O:298:VAL:HG11	1:O:335:THR:HA	1.88	0.56
1:C:29:THR:CG2	1:C:30:ARG:N	2.69	0.56
1:E:22:VAL:HG11	1:E:26:GLU:HG3	1.88	0.56
1:F:246:LEU:C	1:F:246:LEU:HD12	2.30	0.56
1:G:156:LEU:HA	1:G:250:LEU:O	2.04	0.56
1:H:156:LEU:HA	1:H:250:LEU:O	2.06	0.56
1:K:70:TYR:CD2	1:K:195:LEU:HD22	2.41	0.56
1:N:29:THR:CG2	1:N:30:ARG:N	2.69	0.56
1:N:298:VAL:O	1:N:298:VAL:HG23	2.05	0.56
1:O:126:LEU:HB3	1:O:262:ASN:HB3	1.87	0.56
1:A:200:MET:O	1:A:229:CYS:HA	2.06	0.55
1:B:295:GLY:O	1:B:296:SER:HB3	2.05	0.55
1:I:152:LYS:HE3	1:I:253:GLU:HB2	1.86	0.55
1:I:366:GLU:HG3	1:I:368:TYR:HE1	1.71	0.55
1:J:221:PRO:O	1:J:225:CYS:HB3	2.06	0.55
1:A:242:TYR:CE2	1:A:392:MET:HG3	2.41	0.55
1:D:152:LYS:HE2	1:D:253:GLU:HB2	1.88	0.55
1:D:342:VAL:HG23	1:D:342:VAL:O	2.06	0.55
1:G:361:TYR:CE2	1:H:268:GLY:HA3	2.41	0.55
1:K:152:LYS:HE3	1:K:253:GLU:HB2	1.87	0.55
1:L:247:PHE:CE2	1:L:320:GLY:HA2	2.41	0.55
1:M:223:ASP:OD1	1:M:224:ILE:HG23	2.07	0.55
1:B:139:SER:HB2	1:B:143:ASN:HD21	1.71	0.55
1:D:209:ASP:OD2	1:D:209:ASP:C	2.47	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:298:VAL:HG11	1:G:335:THR:HA	1.87	0.55
1:J:119:GLY:HA2	1:J:148:SER:HA	1.89	0.55
1:N:41:ARG:HH11	1:O:190:LEU:HD23	1.69	0.55
1:N:114:GLY:C	1:N:115:VAL:CG1	2.80	0.55
1:N:120:HIS:CD2	1:N:222:LEU:HD13	2.40	0.55
1:N:364:HIS:CD2	1:N:365:GLY:N	2.75	0.55
1:O:247:PHE:CZ	1:O:320:GLY:HA2	2.41	0.55
1:A:201:VAL:HG13	1:A:332:VAL:HG21	1.87	0.55
1:C:331:VAL:HG11	1:C:368:TYR:HE2	1.72	0.55
1:C:393:ASN:HB3	1:C:396:ILE:CD1	2.35	0.55
1:F:259:HIS:H	1:F:292:THR:HB	1.71	0.55
1:G:71:ARG:HB3	1:G:73:PHE:CE1	2.41	0.55
1:N:258:ARG:HB2	1:N:294:SER:HB2	1.88	0.55
1:O:210:PHE:CZ	1:O:224:ILE:HD12	2.41	0.55
1:C:121:PRO:CB	1:D:285:PRO:HG2	2.37	0.55
1:G:120:HIS:HE1	1:G:122:LEU:HB2	1.71	0.55
1:H:149:MET:HA	1:I:260:LEU:CD1	2.36	0.55
1:I:35:TYR:CE2	1:I:457:ALA:HB2	2.42	0.55
1:K:68:LEU:CD1	1:K:151:TYR:HD1	2.19	0.55
1:K:461:GLN:HE22	1:L:21:VAL:HB	1.72	0.55
1:N:219:ASP:HB2	1:N:263:ARG:CZ	2.37	0.55
1:A:467:LYS:NZ	1:A:467:LYS:CD	2.66	0.55
1:C:181:LYS:CD	1:C:181:LYS:H	2.19	0.55
1:D:54:LYS:HG3	1:D:56:ASP:H	1.71	0.55
1:D:461:GLN:HE22	1:E:21:VAL:HB	1.72	0.55
1:E:224:ILE:CD1	1:E:224:ILE:CB	2.76	0.55
1:F:117:ILE:HG13	1:G:260:LEU:HD22	1.89	0.55
1:H:156:LEU:HG	1:H:332:VAL:H	1.71	0.55
1:I:346:VAL:O	1:I:346:VAL:HG12	2.06	0.55
1:J:109:ARG:N	1:J:306:ASN:HD21	2.05	0.55
1:J:119:GLY:CA	1:J:148:SER:HA	2.37	0.55
1:J:393:ASN:HB3	1:J:396:ILE:CD1	2.36	0.55
1:L:393:ASN:HB3	1:L:396:ILE:CG1	2.30	0.55
1:O:68:LEU:HD23	1:O:334:THR:HG21	1.88	0.55
1:O:263:ARG:HB2	1:O:288:SER:HG	1.71	0.55
1:B:120:HIS:HA	1:B:222:LEU:CD2	2.37	0.55
1:B:219:ASP:C	1:B:220:VAL:HG22	2.32	0.55
1:C:114:GLY:O	1:C:335:THR:O	2.23	0.55
1:E:21:VAL:HG21	1:E:241:PRO:HB2	1.88	0.55
1:G:117:ILE:HD12	1:H:260:LEU:CD2	2.37	0.55
1:H:54:LYS:HD2	1:H:55:GLN:H	1.72	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:353:TYR:HE1	1:I:216:ASN:HB2	1.70	0.55
1:J:462:PHE:N	1:J:462:PHE:CD1	2.75	0.55
1:K:342:VAL:CG2	1:K:361:TYR:HB2	2.37	0.55
1:L:22:VAL:CG1	1:L:26:GLU:HG3	2.36	0.55
1:M:124:ASN:HD21	1:M:263:ARG:HB3	1.72	0.55
1:B:258:ARG:HG3	1:B:259:HIS:CE1	2.41	0.55
1:C:139:SER:HB2	1:C:143:ASN:HD21	1.71	0.55
1:C:297:MET:CG	1:C:297:MET:CA	2.79	0.55
1:C:394:PRO:HG2	1:C:395:SER:N	2.20	0.55
1:I:29:THR:HB	1:I:378:LYS:HG3	1.89	0.55
1:K:154:THR:HG23	1:K:253:GLU:CB	2.37	0.55
1:K:258:ARG:HB3	1:K:292:THR:HG22	1.89	0.55
1:M:318:ASN:HD21	1:M:323:TRP:HE1	1.55	0.55
1:A:459:LEU:O	1:A:465:GLY:HA3	2.07	0.55
1:B:119:GLY:O	1:B:221:PRO:HA	2.07	0.55
1:C:77:LEU:HD22	1:C:455:PHE:CZ	2.41	0.55
1:C:101:ALA:O	1:C:375:GLN:N	2.35	0.55
1:C:312:GLN:HG3	1:C:313:ARG:H	1.72	0.55
1:C:336:ARG:O	1:C:338:THR:N	2.39	0.55
1:D:363:ARG:HG3	1:E:188:LEU:HD21	1.89	0.55
1:H:69:GLN:HE21	1:H:71:ARG:NH2	2.05	0.55
1:L:103:THR:O	1:L:103:THR:HG22	2.07	0.55
1:M:80:PRO:HD2	1:M:325:ASN:OD1	2.07	0.55
1:M:181:LYS:HD3	1:M:181:LYS:N	2.22	0.55
1:O:54:LYS:HD2	1:O:55:GLN:H	1.72	0.55
1:C:91:TYR:HE1	1:C:96:GLN:HB2	1.71	0.55
1:C:353:TYR:HE1	1:D:216:ASN:HB2	1.72	0.55
1:D:233:ASP:OD1	1:D:236:LYS:HB2	2.07	0.55
1:F:244:ASP:O	1:F:245:MET:C	2.50	0.55
1:G:54:LYS:HZ3	1:G:56:ASP:H	1.53	0.55
1:H:280:THR:O	1:H:281:THR:HB	2.06	0.55
1:I:299:THR:C	1:I:301:ASP:N	2.63	0.55
1:L:181:LYS:H	1:L:181:LYS:HD3	1.72	0.55
1:M:318:ASN:HD21	1:M:323:TRP:NE1	2.04	0.55
1:O:228:ILE:CD1	1:O:228:ILE:CB	2.77	0.55
1:C:136:VAL:HG12	1:C:137:GLY:N	2.21	0.54
1:C:158:LEU:O	1:C:159:ILE:HD13	2.07	0.54
1:D:42:LEU:HB3	1:D:447:TRP:CZ2	2.42	0.54
1:E:125:LYS:HE2	1:E:261:PHE:CE2	2.42	0.54
1:F:260:LEU:CD2	1:J:117:ILE:HD12	2.37	0.54
1:L:77:LEU:HD11	1:L:374:PHE:CE2	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:117:ILE:HG13	1:O:148:SER:HB2	1.89	0.54
1:A:297:MET:HE2	1:B:256:PHE:CD2	2.42	0.54
1:B:200:MET:HE2	1:B:223:ASP:O	2.07	0.54
1:C:27:TYR:CD1	1:C:28:VAL:HG23	2.43	0.54
1:F:91:TYR:CE1	1:F:96:GLN:HB2	2.42	0.54
1:G:106:GLU:HG2	1:G:308:PRO:CA	2.37	0.54
1:G:263:ARG:HB2	1:G:288:SER:OG	2.07	0.54
1:H:363:ARG:HG3	1:H:363:ARG:HH11	1.72	0.54
1:J:118:SER:O	1:J:149:MET:N	2.35	0.54
1:A:259:HIS:O	1:A:260:LEU:HD23	2.07	0.54
1:C:102:CYS:HB3	1:C:311:LEU:HD11	1.89	0.54
1:D:314:ALA:HB2	1:D:319:ASN:HA	1.89	0.54
1:H:54:LYS:NZ	1:H:55:GLN:CB	2.68	0.54
1:J:69:GLN:HE21	1:J:71:ARG:HH22	1.56	0.54
1:J:72:VAL:HG23	1:J:196:GLN:C	2.32	0.54
1:K:52:ILE:HD12	1:K:62:VAL:CB	2.29	0.54
1:N:181:LYS:HD3	1:N:181:LYS:N	2.22	0.54
1:O:37:ALA:HB1	1:O:451:LEU:HD13	1.88	0.54
1:D:225:CYS:SG	1:D:226:SER:N	2.80	0.54
1:D:366:GLU:HG3	1:D:368:TYR:HE1	1.72	0.54
1:E:103:THR:HB	1:E:373:ILE:O	2.08	0.54
1:F:216:ASN:O	1:F:217:LYS:HG2	2.07	0.54
1:A:105:VAL:CG1	1:A:106:GLU:N	2.67	0.54
1:B:157:CYS:HA	1:B:330:THR:O	2.07	0.54
1:B:231:TYR:OH	1:B:253:GLU:OE2	2.23	0.54
1:C:85:PHE:HB2	1:C:88:THR:CG2	2.37	0.54
1:C:151:TYR:CG	1:C:203:THR:HB	2.43	0.54
1:C:296:SER:OG	1:C:297:MET:N	2.39	0.54
1:D:333:ASP:OD1	1:D:335:THR:HG23	2.08	0.54
1:F:45:VAL:HG12	1:F:46:GLY:N	2.21	0.54
1:K:79:ASP:OD1	1:K:81:ASN:HB2	2.08	0.54
1:M:385:VAL:O	1:M:389:ILE:HG13	2.07	0.54
1:A:121:PRO:HD2	1:A:222:LEU:HD21	1.90	0.54
1:B:112:PRO:HB3	1:C:231:TYR:CD1	2.43	0.54
1:B:113:LEU:HD22	1:C:253:GLU:HG3	1.90	0.54
1:F:174:PRO:CG	1:F:180:VAL:CG2	2.79	0.54
1:G:54:LYS:HD2	1:G:55:GLN:H	1.73	0.54
1:G:126:LEU:HG	1:G:127:ASP:CG	2.32	0.54
1:I:23:SER:C	1:I:25:ASP:H	2.14	0.54
1:I:151:TYR:OH	1:I:221:PRO:HB2	2.08	0.54
1:K:201:VAL:HG13	1:K:332:VAL:HG21	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:59:LYS:NZ	1:L:59:LYS:CD	2.67	0.54
1:L:297:MET:CE	1:M:296:SER:HB2	2.38	0.54
1:M:101:ALA:HA	1:M:320:GLY:O	2.08	0.54
1:M:181:LYS:HD3	1:M:181:LYS:H	1.72	0.54
1:N:440:PRO:CG	1:N:441:LEU:N	2.71	0.54
1:B:242:TYR:CD2	1:B:392:MET:HG3	2.43	0.54
1:H:193:THR:HG21	1:H:230:LYS:HE2	1.89	0.54
1:H:342:VAL:HG22	1:H:361:TYR:HB2	1.90	0.54
1:I:149:MET:HE2	1:I:293:PRO:CD	2.35	0.54
1:J:69:GLN:NE2	1:J:71:ARG:HH22	2.04	0.54
1:J:157:CYS:HA	1:J:330:THR:O	2.07	0.54
1:J:342:VAL:HG23	1:J:361:TYR:HB2	1.88	0.54
1:A:85:PHE:HB3	1:A:86:PRO:HD2	1.89	0.54
1:A:361:TYR:CG	1:B:185:CYS:HB2	2.43	0.54
1:A:474:LEU:HD23	1:A:474:LEU:H	1.72	0.54
1:B:134:LYS:NZ	1:B:134:LYS:HD3	2.22	0.54
1:B:384:ASP:OD2	1:J:92:ASP:HB2	2.08	0.54
1:D:156:LEU:HG	1:D:332:VAL:HB	1.89	0.54
1:E:36:HIS:ND1	1:E:37:ALA:N	2.55	0.54
1:E:261:PHE:HB2	1:E:290:PHE:CE2	2.42	0.54
1:F:151:TYR:CD2	1:F:203:THR:HB	2.42	0.54
1:F:185:CYS:HB2	1:J:361:TYR:CD2	2.43	0.54
1:F:395:SER:O	1:F:396:ILE:C	2.44	0.54
1:K:151:TYR:OH	1:K:221:PRO:HB2	2.08	0.54
1:L:152:LYS:HG3	1:L:255:MET:HB3	1.90	0.54
1:M:318:ASN:ND2	1:M:323:TRP:HE1	2.06	0.54
1:N:113:LEU:HD22	1:O:253:GLU:HG3	1.89	0.54
1:N:210:PHE:HD2	1:N:214:GLN:OE1	1.90	0.54
1:N:297:MET:HE2	1:O:296:SER:HB2	1.90	0.54
1:N:343:CYS:HB3	1:O:214:GLN:HA	1.89	0.54
1:O:80:PRO:HD3	1:O:100:TRP:NE1	2.23	0.54
1:O:179:GLN:O	1:O:181:LYS:N	2.41	0.54
1:C:219:ASP:HB2	1:C:263:ARG:CZ	2.38	0.54
1:D:104:GLY:O	1:D:372:PHE:HA	2.07	0.54
1:I:85:PHE:HB2	1:I:88:THR:OG1	2.08	0.54
1:M:159:ILE:HD12	1:M:329:VAL:HG22	1.90	0.54
1:O:155:GLN:HB3	1:O:304:ILE:CG2	2.34	0.54
1:C:297:MET:CB	1:C:297:MET:SD	2.93	0.54
1:C:366:GLU:HG3	1:C:368:TYR:HE1	1.72	0.54
1:E:174:PRO:HG3	1:E:180:VAL:CG2	2.38	0.54
1:F:314:ALA:HB2	1:F:319:ASN:HA	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:342:VAL:HG22	1:F:361:TYR:HB2	1.90	0.54
1:F:393:ASN:HB3	1:F:396:ILE:CG1	2.36	0.54
1:I:298:VAL:HG11	1:I:335:THR:HA	1.89	0.54
1:L:467:LYS:O	1:L:468:PHE:C	2.51	0.54
1:M:342:VAL:CG2	1:M:361:TYR:HB2	2.38	0.54
1:O:311:LEU:HD23	1:O:311:LEU:N	2.23	0.54
1:A:49:TYR:C	1:A:64:LYS:HD2	2.33	0.53
1:B:211:THR:HG23	1:B:226:SER:CA	2.38	0.53
1:B:237:MET:HE3	1:B:246:LEU:CD2	2.37	0.53
1:D:124:ASN:HB3	1:D:219:ASP:HB3	1.90	0.53
1:F:174:PRO:CG	1:F:180:VAL:HG21	2.35	0.53
1:F:361:TYR:CE2	1:G:268:GLY:HA3	2.42	0.53
1:I:181:LYS:H	1:I:181:LYS:CD	2.20	0.53
1:I:364:HIS:CD2	1:I:365:GLY:N	2.75	0.53
1:M:353:TYR:HE1	1:N:216:ASN:HB2	1.72	0.53
1:N:353:TYR:CD1	1:O:144:ARG:NH1	2.76	0.53
1:H:120:HIS:HB3	1:H:123:LEU:HB2	1.90	0.53
1:I:220:VAL:HG23	1:I:225:CYS:HA	1.89	0.53
1:K:21:VAL:HG21	1:K:241:PRO:HB2	1.89	0.53
1:K:123:LEU:HA	1:K:218:SER:O	2.08	0.53
1:L:372:PHE:O	1:L:373:ILE:CG1	2.56	0.53
1:M:88:THR:HB	1:M:91:TYR:HD2	1.73	0.53
1:N:148:SER:O	1:N:149:MET:HB3	2.08	0.53
1:D:299:THR:HG22	1:E:254:GLN:HB2	1.90	0.53
1:H:363:ARG:NH2	1:I:269:GLU:OE1	2.40	0.53
1:I:114:GLY:HA3	1:I:338:THR:OG1	2.08	0.53
1:I:142:ASP:OD2	1:I:144:ARG:HG3	2.08	0.53
1:N:106:GLU:HG2	1:N:308:PRO:HA	1.90	0.53
1:O:153:GLN:HG2	1:O:254:GLN:HG2	1.91	0.53
1:A:53:LYS:HD3	1:A:58:ASN:HA	1.89	0.53
1:A:154:THR:HG23	1:A:253:GLU:HB3	1.91	0.53
1:A:268:GLY:HA3	1:E:361:TYR:CE2	2.43	0.53
1:A:393:ASN:HD22	1:A:394:PRO:CD	2.19	0.53
1:B:298:VAL:HG11	1:B:335:THR:HA	1.90	0.53
1:D:255:MET:HG2	1:D:256:PHE:N	2.24	0.53
1:F:268:GLY:HA3	1:J:361:TYR:CE2	2.44	0.53
1:H:54:LYS:HZ3	1:H:55:GLN:HB3	1.71	0.53
1:H:106:GLU:HG3	1:H:464:LEU:HG	1.91	0.53
1:J:27:TYR:CE2	1:J:388:TYR:HE2	2.26	0.53
1:J:68:LEU:HD22	1:J:151:TYR:HD1	1.73	0.53
1:J:82:LYS:O	1:J:83:PHE:C	2.52	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:115:VAL:HA	1:K:337:SER:OG	2.09	0.53
1:K:155:GLN:OE1	1:K:304:ILE:HG22	2.09	0.53
1:K:381:LEU:C	1:K:386:MET:HE2	2.34	0.53
1:N:272:PRO:HD2	1:N:275:LEU:HD12	1.90	0.53
1:O:233:ASP:OD1	1:O:236:LYS:HB2	2.08	0.53
1:O:372:PHE:O	1:O:373:ILE:HG13	2.09	0.53
1:D:109:ARG:H	1:D:306:ASN:ND2	2.06	0.53
1:E:133:ASN:N	1:E:133:ASN:ND2	2.51	0.53
1:E:258:ARG:HG3	1:E:259:HIS:ND1	2.24	0.53
1:G:254:GLN:CB	1:G:254:GLN:CD	2.70	0.53
1:G:297:MET:HG3	1:H:255:MET:O	2.09	0.53
1:H:54:LYS:HG3	1:H:56:ASP:H	1.73	0.53
1:J:318:ASN:OD1	1:J:319:ASN:N	2.41	0.53
1:L:50:TYR:CE2	1:M:271:VAL:HG22	2.44	0.53
1:L:52:ILE:HD13	1:M:269:GLU:HG2	1.89	0.53
1:B:33:ILE:HD13	1:B:33:ILE:N	2.23	0.53
1:B:120:HIS:HA	1:B:222:LEU:HD21	1.91	0.53
1:C:195:LEU:HD23	1:C:230:LYS:HD2	1.90	0.53
1:G:24:THR:HG23	1:G:318:ASN:HA	1.88	0.53
1:G:188:LEU:HD22	1:G:188:LEU:N	2.23	0.53
1:G:192:ASN:ND2	1:G:236:LYS:HE2	2.23	0.53
1:H:54:LYS:HZ3	1:H:55:GLN:CB	2.21	0.53
1:H:109:ARG:N	1:H:306:ASN:HD21	2.04	0.53
1:H:192:ASN:ND2	1:H:236:LYS:HE2	2.23	0.53
1:K:79:ASP:HB3	1:K:82:LYS:HE2	1.91	0.53
1:N:76:LYS:CG	1:N:76:LYS:CE	2.85	0.53
1:N:164:PRO:HA	1:N:245:MET:HG3	1.91	0.53
1:O:106:GLU:HG2	1:O:308:PRO:HA	1.90	0.53
1:O:386:MET:HG2	1:O:397:LEU:HD21	1.90	0.53
1:B:69:GLN:HE21	1:B:71:ARG:NH2	2.06	0.53
1:D:259:HIS:H	1:D:292:THR:HB	1.73	0.53
1:E:305:PHE:CE1	1:E:333:ASP:HB2	2.44	0.53
1:E:346:VAL:HG23	1:E:357:ASN:C	2.34	0.53
1:I:255:MET:HG2	1:I:256:PHE:H	1.73	0.53
1:J:83:PHE:HD2	1:J:85:PHE:HZ	1.50	0.53
1:A:49:TYR:O	1:A:64:LYS:HD2	2.08	0.53
1:A:124:ASN:HD22	1:A:263:ARG:HD2	1.73	0.53
1:C:122:LEU:HD13	1:C:144:ARG:NH2	2.24	0.53
1:D:24:THR:CG2	1:D:318:ASN:HA	2.39	0.53
1:E:152:LYS:HE2	1:E:253:GLU:HB2	1.91	0.53
1:E:336:ARG:HH11	1:E:336:ARG:HG3	1.73	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:291:PRO:HD3	1:J:117:ILE:CG2	2.35	0.53
1:I:50:TYR:CD1	1:I:50:TYR:O	2.62	0.53
1:K:154:THR:HG23	1:K:253:GLU:HB3	1.89	0.53
1:M:97:ARG:HG2	1:M:381:LEU:HD11	1.91	0.53
1:O:105:VAL:HG12	1:O:106:GLU:N	2.24	0.53
1:B:162:ARG:HB3	1:B:162:ARG:NH1	2.24	0.53
1:C:77:LEU:HD22	1:C:455:PHE:HZ	1.73	0.53
1:C:471:GLN:O	1:C:473:GLY:N	2.41	0.53
1:G:342:VAL:HG23	1:G:342:VAL:O	2.08	0.53
1:H:35:TYR:CZ	1:H:457:ALA:HB2	2.42	0.53
1:K:96:GLN:NE2	1:K:378:LYS:HD3	2.23	0.53
1:B:459:LEU:HD12	1:B:469:LEU:HD21	1.90	0.53
1:C:117:ILE:HG23	1:C:117:ILE:O	2.07	0.53
1:D:148:SER:HG	1:E:129:THR:HG1	1.49	0.53
1:F:215:ALA:O	1:F:217:LYS:N	2.42	0.53
1:F:237:MET:CG	1:F:245:MET:HG2	2.39	0.53
1:G:99:VAL:HG12	1:G:100:TRP:N	2.23	0.53
1:L:115:VAL:HG22	1:M:255:MET:CE	2.39	0.53
1:N:222:LEU:HA	1:N:225:CYS:SG	2.48	0.53
1:N:258:ARG:HB3	1:N:292:THR:CG2	2.37	0.53
1:O:151:TYR:CG	1:O:203:THR:HB	2.43	0.53
1:C:234:TYR:O	1:C:238:VAL:HG23	2.08	0.52
1:C:462:PHE:N	1:C:462:PHE:CD1	2.76	0.52
1:D:164:PRO:HG3	1:D:330:THR:OG1	2.09	0.52
1:G:109:ARG:NH2	1:G:333:ASP:OD2	2.39	0.52
1:G:160:GLY:HA2	1:G:247:PHE:CE1	2.44	0.52
1:H:36:HIS:ND1	1:H:37:ALA:N	2.56	0.52
1:H:165:ILE:HG23	1:H:245:MET:SD	2.49	0.52
1:M:474:LEU:HD23	1:M:474:LEU:H	1.73	0.52
1:N:393:ASN:HB3	1:N:396:ILE:HD12	1.92	0.52
1:A:124:ASN:HD21	1:A:264:ALA:H	1.57	0.52
1:A:149:MET:CE	1:A:293:PRO:HD2	2.38	0.52
1:F:257:VAL:HG11	1:F:260:LEU:CD2	2.39	0.52
1:F:460:ASP:OD2	1:F:460:ASP:O	2.28	0.52
1:K:255:MET:SD	1:O:114:GLY:HA2	2.48	0.52
1:O:22:VAL:HG12	1:O:23:SER:N	2.24	0.52
1:O:80:PRO:HD3	1:O:100:TRP:CD1	2.44	0.52
1:B:108:GLY:HA2	1:B:306:ASN:ND2	2.25	0.52
1:B:361:TYR:CZ	1:C:268:GLY:HA3	2.44	0.52
1:B:371:GLN:HB3	1:B:464:LEU:HD12	1.91	0.52
1:E:87:ASP:O	1:E:90:PHE:CE1	2.63	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:331:VAL:HG11	1:E:368:TYR:CE2	2.42	0.52
1:E:333:ASP:OD1	1:E:335:THR:HG23	2.10	0.52
1:H:393:ASN:ND2	1:H:395:SER:H	2.07	0.52
1:I:124:ASN:OD1	1:I:264:ALA:HB3	2.09	0.52
1:K:99:VAL:HG12	1:K:100:TRP:N	2.24	0.52
1:M:314:ALA:HB2	1:M:319:ASN:HA	1.90	0.52
1:F:216:ASN:C	1:F:217:LYS:HG2	2.33	0.52
1:H:255:MET:HE3	1:H:293:PRO:HB3	1.91	0.52
1:H:277:ILE:O	1:H:278:LYS:C	2.52	0.52
1:H:344:SER:HB3	1:I:183:GLY:O	2.09	0.52
1:I:31:THR:OG1	1:I:376:LEU:HB3	2.08	0.52
1:J:125:LYS:HD2	1:J:145:GLU:OE2	2.09	0.52
1:L:373:ILE:CG1	1:L:464:LEU:HD13	2.37	0.52
1:L:466:ARG:NH1	1:M:316:GLY:HA2	2.25	0.52
1:M:363:ARG:NH2	1:N:269:GLU:OE1	2.40	0.52
1:A:220:VAL:HG23	1:A:225:CYS:HB3	1.90	0.52
1:A:339:ASN:ND2	1:A:364:HIS:ND1	2.58	0.52
1:C:45:VAL:HG12	1:C:46:GLY:N	2.23	0.52
1:C:146:CYS:O	1:C:147:ILE:HG13	2.10	0.52
1:D:261:PHE:HB2	1:D:290:PHE:CE2	2.45	0.52
1:D:373:ILE:HD12	1:D:464:LEU:CD2	2.38	0.52
1:E:37:ALA:HB1	1:E:451:LEU:HD13	1.92	0.52
1:E:255:MET:HE3	1:E:293:PRO:HB3	1.90	0.52
1:F:102:CYS:HB3	1:F:311:LEU:HD11	1.90	0.52
1:G:232:PRO:HB2	1:G:234:TYR:CE1	2.44	0.52
1:I:73:PHE:O	1:I:328:PHE:HA	2.09	0.52
1:I:121:PRO:HD2	1:I:222:LEU:HD21	1.92	0.52
1:K:144:ARG:NH1	1:K:218:SER:OG	2.42	0.52
1:L:28:VAL:HG11	1:L:321:ILE:HD12	1.92	0.52
1:O:342:VAL:HG22	1:O:361:TYR:HB2	1.90	0.52
1:A:220:VAL:CG2	1:A:225:CYS:HA	2.39	0.52
1:B:69:GLN:NE2	1:B:71:ARG:NH2	2.58	0.52
1:B:298:VAL:CG1	1:B:335:THR:HA	2.39	0.52
1:C:357:ASN:O	1:C:357:ASN:ND2	2.43	0.52
1:D:120:HIS:ND1	1:D:122:LEU:C	2.68	0.52
1:E:131:ASN:O	1:E:132:SER:O	2.26	0.52
1:G:29:THR:HG22	1:G:30:ARG:O	2.09	0.52
1:H:75:VAL:HB	1:H:327:LEU:HB2	1.92	0.52
1:K:152:LYS:HA	1:K:255:MET:HB2	1.90	0.52
1:L:106:GLU:HG2	1:L:308:PRO:HA	1.91	0.52
1:L:298:VAL:HG11	1:L:335:THR:HA	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:76:LYS:HB3	1:O:452:LYS:NZ	2.25	0.52
1:O:196:GLN:HB3	1:O:445:THR:O	2.10	0.52
1:A:47:HIS:O	1:A:64:LYS:HA	2.10	0.52
1:D:120:HIS:HB2	1:D:221:PRO:HA	1.92	0.52
1:D:273:ALA:HA	1:D:276:TYR:CE2	2.44	0.52
1:E:54:LYS:NZ	1:E:55:GLN:N	2.58	0.52
1:F:148:SER:OG	1:G:129:THR:OG1	2.27	0.52
1:G:28:VAL:HG22	1:G:379:ILE:HG12	1.91	0.52
1:J:120:HIS:HB2	1:J:221:PRO:HA	1.92	0.52
1:L:109:ARG:H	1:L:306:ASN:HD21	1.58	0.52
1:M:72:VAL:HG21	1:M:196:GLN:CA	2.40	0.52
1:A:106:GLU:HB3	1:A:371:GLN:HB2	1.90	0.52
1:A:463:PRO:HG2	1:A:464:LEU:H	1.75	0.52
1:C:340:MET:HG2	1:C:363:ARG:O	2.10	0.52
1:D:42:LEU:HB3	1:D:447:TRP:HZ2	1.74	0.52
1:E:382:THR:OG1	1:E:385:VAL:HG23	2.10	0.52
1:J:72:VAL:CG2	1:J:196:GLN:C	2.83	0.52
1:J:79:ASP:OD1	1:J:81:ASN:N	2.42	0.52
1:J:124:ASN:ND2	1:J:263:ARG:HD2	2.23	0.52
1:K:112:PRO:HB3	1:L:231:TYR:CD1	2.45	0.52
1:N:188:LEU:HD22	1:N:188:LEU:N	2.24	0.52
1:A:165:ILE:CD1	1:A:236:LYS:HD3	2.40	0.52
1:A:181:LYS:N	1:A:181:LYS:CD	2.73	0.52
1:B:117:ILE:HD11	1:C:260:LEU:HB3	1.91	0.52
1:B:157:CYS:O	1:B:249:TYR:HA	2.10	0.52
1:B:363:ARG:NH2	1:C:269:GLU:OE1	2.40	0.52
1:C:156:LEU:HA	1:C:250:LEU:O	2.10	0.52
1:F:37:ALA:HB3	1:F:372:PHE:HB2	1.90	0.52
1:F:117:ILE:CD1	1:F:117:ILE:CB	2.80	0.52
1:G:141:THR:HG22	1:G:142:ASP:N	2.23	0.52
1:H:27:TYR:CE2	1:H:388:TYR:CE2	2.98	0.52
1:H:199:ASP:OD2	1:H:230:LYS:NZ	2.43	0.52
1:K:355:ASN:HB3	1:L:265:GLY:HA2	1.91	0.52
1:L:119:GLY:N	1:L:221:PRO:HB3	2.24	0.52
1:L:463:PRO:HG3	1:M:238:VAL:HG12	1.91	0.52
1:N:220:VAL:HG23	1:N:225:CYS:HB2	1.92	0.52
1:O:314:ALA:HB2	1:O:319:ASN:HA	1.92	0.52
1:E:24:THR:HG23	1:E:318:ASN:HA	1.92	0.52
1:E:149:MET:HE3	1:E:293:PRO:HD2	1.92	0.52
1:E:240:GLU:OE2	1:E:245:MET:HE2	2.09	0.52
1:F:246:LEU:HD12	1:F:246:LEU:O	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:333:ASP:OD1	1:F:335:THR:HG23	2.08	0.52
1:H:152:LYS:HB2	1:H:255:MET:HG3	1.92	0.52
1:J:24:THR:HG23	1:J:318:ASN:HA	1.92	0.52
1:N:156:LEU:HA	1:N:250:LEU:O	2.09	0.52
1:B:258:ARG:HD2	1:C:130:GLU:OE1	2.11	0.51
1:E:54:LYS:NZ	1:E:55:GLN:CB	2.67	0.51
1:E:85:PHE:HB2	1:E:88:THR:OG1	2.10	0.51
1:E:96:GLN:O	1:E:97:ARG:HD3	2.10	0.51
1:F:257:VAL:CG1	1:F:260:LEU:CD2	2.87	0.51
1:G:237:MET:SD	1:G:245:MET:HG2	2.51	0.51
1:I:77:LEU:HB3	1:I:78:PRO:HD2	1.91	0.51
1:K:30:ARG:HB3	1:K:375:GLN:NE2	2.25	0.51
1:K:80:PRO:HD3	1:K:100:TRP:NE1	2.25	0.51
1:L:474:LEU:HD23	1:L:474:LEU:H	1.75	0.51
1:N:299:THR:O	1:N:300:SER:C	2.53	0.51
1:A:151:TYR:CD1	1:A:203:THR:HB	2.46	0.51
1:C:105:VAL:HG12	1:C:106:GLU:N	2.25	0.51
1:E:149:MET:HE1	1:E:205:PHE:CZ	2.46	0.51
1:F:22:VAL:HG12	1:F:23:SER:N	2.25	0.51
1:F:149:MET:HA	1:G:260:LEU:CD1	2.40	0.51
1:F:149:MET:HE1	1:F:205:PHE:CZ	2.45	0.51
1:F:162:ARG:HG3	1:F:244:ASP:HB3	1.92	0.51
1:J:72:VAL:HG21	1:J:196:GLN:HA	1.92	0.51
1:J:342:VAL:HG23	1:J:342:VAL:O	2.11	0.51
1:K:92:ASP:OD1	1:K:94:ALA:HB3	2.10	0.51
1:A:299:THR:C	1:A:301:ASP:H	2.18	0.51
1:D:68:LEU:HD22	1:D:203:THR:HG22	1.92	0.51
1:I:69:GLN:HA	1:I:199:ASP:O	2.09	0.51
1:K:101:ALA:HB2	1:K:377:CYS:SG	2.50	0.51
1:L:370:LEU:HB3	1:L:372:PHE:CE1	2.45	0.51
1:M:112:PRO:HB3	1:N:231:TYR:CD1	2.44	0.51
1:A:113:LEU:HD12	1:A:113:LEU:H	1.75	0.51
1:B:364:HIS:CD2	1:B:365:GLY:N	2.79	0.51
1:H:22:VAL:CG1	1:H:23:SER:N	2.73	0.51
1:H:256:PHE:CD1	1:H:256:PHE:C	2.87	0.51
1:I:117:ILE:HG13	1:J:260:LEU:CD2	2.40	0.51
1:J:28:VAL:HG22	1:J:379:ILE:HG12	1.93	0.51
1:L:247:PHE:HA	1:L:315:GLN:HG3	1.93	0.51
1:L:258:ARG:HB3	1:L:292:THR:HG22	1.93	0.51
1:N:121:PRO:CD	1:N:222:LEU:HD21	2.41	0.51
1:N:125:LYS:O	1:N:125:LYS:HD3	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:144:ARG:NH1	1:N:218:SER:OG	2.43	0.51
1:A:78:PRO:O	1:A:78:PRO:HG2	2.11	0.51
1:A:125:LYS:HE2	1:A:261:PHE:CE2	2.46	0.51
1:A:157:CYS:HA	1:A:330:THR:O	2.11	0.51
1:B:366:GLU:HG3	1:B:368:TYR:HE1	1.74	0.51
1:C:76:LYS:HD2	1:C:452:LYS:NZ	2.25	0.51
1:D:181:LYS:HD3	1:D:181:LYS:N	2.24	0.51
1:E:305:PHE:HE1	1:E:333:ASP:HB2	1.74	0.51
1:F:157:CYS:HA	1:F:330:THR:O	2.10	0.51
1:F:273:ALA:HA	1:F:276:TYR:CE2	2.46	0.51
1:H:82:LYS:C	1:H:83:PHE:O	2.54	0.51
1:I:123:LEU:HA	1:I:218:SER:O	2.10	0.51
1:I:240:GLU:OE2	1:I:245:MET:HB2	2.09	0.51
1:K:394:PRO:HG2	1:K:395:SER:N	2.23	0.51
1:K:459:LEU:HD12	1:K:469:LEU:CD2	2.37	0.51
1:L:149:MET:HA	1:M:260:LEU:HD13	1.93	0.51
1:M:133:ASN:N	1:M:133:ASN:HD22	2.07	0.51
1:O:272:PRO:O	1:O:275:LEU:HB2	2.11	0.51
1:A:120:HIS:ND1	1:A:122:LEU:N	2.53	0.51
1:C:153:GLN:O	1:C:253:GLU:HA	2.10	0.51
1:C:471:GLN:C	1:C:473:GLY:H	2.19	0.51
1:F:95:SER:O	1:F:381:LEU:HB2	2.10	0.51
1:F:159:ILE:HG22	1:F:247:PHE:HE1	1.75	0.51
1:H:363:ARG:HG3	1:I:188:LEU:CD2	2.38	0.51
1:H:462:PHE:N	1:H:462:PHE:CD1	2.79	0.51
1:I:298:VAL:C	1:I:299:THR:CG2	2.84	0.51
1:K:28:VAL:HG22	1:K:379:ILE:HG12	1.91	0.51
1:K:258:ARG:HB2	1:K:294:SER:HB2	1.93	0.51
1:K:361:TYR:CE2	1:L:268:GLY:HA3	2.45	0.51
1:L:108:GLY:HA2	1:L:306:ASN:ND2	2.26	0.51
1:L:233:ASP:O	1:L:237:MET:HG3	2.11	0.51
1:L:240:GLU:CG	1:L:241:PRO:HD2	2.40	0.51
1:O:120:HIS:HB2	1:O:221:PRO:HA	1.92	0.51
1:A:125:LYS:O	1:A:125:LYS:HD2	2.10	0.51
1:C:164:PRO:HG3	1:C:330:THR:OG1	2.10	0.51
1:C:300:SER:O	1:C:303:GLN:HB2	2.10	0.51
1:C:467:LYS:O	1:C:468:PHE:C	2.54	0.51
1:D:311:LEU:HD23	1:D:311:LEU:H	1.74	0.51
1:E:110:GLY:O	1:E:111:GLN:CB	2.58	0.51
1:F:297:MET:HE2	1:G:256:PHE:HD2	1.75	0.51
1:L:54:LYS:CD	1:L:55:GLN:H	2.19	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:158:LEU:O	1:M:159:ILE:HD13	2.10	0.51
1:A:165:ILE:HG23	1:A:245:MET:SD	2.50	0.51
1:A:250:LEU:HB2	1:A:304:ILE:HD11	1.92	0.51
1:F:121:PRO:CD	1:F:222:LEU:HD21	2.35	0.51
1:F:162:ARG:HG3	1:F:244:ASP:CB	2.40	0.51
1:J:87:ASP:O	1:J:90:PHE:CE1	2.64	0.51
1:K:361:TYR:CZ	1:L:268:GLY:HA3	2.45	0.51
1:L:85:PHE:HB2	1:L:88:THR:CG2	2.41	0.51
1:O:45:VAL:HG12	1:O:46:GLY:N	2.25	0.51
1:A:74:ARG:NH2	1:A:441:LEU:HD12	2.26	0.51
1:A:181:LYS:CD	1:A:181:LYS:H	2.24	0.51
1:A:185:CYS:HB2	1:E:361:TYR:CD2	2.46	0.51
1:A:247:PHE:CE2	1:A:320:GLY:HA2	2.46	0.51
1:C:29:THR:HG22	1:C:30:ARG:N	2.26	0.51
1:C:219:ASP:HB2	1:C:263:ARG:HH11	1.74	0.51
1:D:152:LYS:HA	1:D:255:MET:HB2	1.91	0.51
1:E:151:TYR:CD2	1:E:203:THR:HB	2.46	0.51
1:E:164:PRO:HB2	1:E:237:MET:SD	2.51	0.51
1:F:120:HIS:HB2	1:F:221:PRO:HA	1.93	0.51
1:F:297:MET:HE2	1:G:256:PHE:CD2	2.46	0.51
1:G:22:VAL:HG12	1:G:26:GLU:HG3	1.93	0.51
1:J:120:HIS:CD2	1:J:222:LEU:HD13	2.46	0.51
1:M:54:LYS:HD2	1:M:55:GLN:H	1.75	0.51
1:M:305:PHE:O	1:M:307:LYS:HG3	2.11	0.51
1:M:361:TYR:CE2	1:N:268:GLY:HA3	2.45	0.51
1:M:471:GLN:C	1:M:473:GLY:N	2.66	0.51
1:N:65:VAL:O	1:N:364:HIS:HB3	2.11	0.51
1:A:354:LYS:HA	1:B:141:THR:HG23	1.93	0.51
1:B:96:GLN:O	1:B:97:ARG:HG2	2.11	0.51
1:C:31:THR:CB	1:C:31:THR:C	2.76	0.51
1:C:112:PRO:HB3	1:D:231:TYR:CD1	2.46	0.51
1:D:122:LEU:HD13	1:D:144:ARG:NH2	2.26	0.51
1:D:123:LEU:HG	1:D:124:ASN:H	1.75	0.51
1:G:104:GLY:HA2	1:G:309:TYR:O	2.11	0.51
1:H:101:ALA:HA	1:H:320:GLY:O	2.11	0.51
1:I:33:ILE:HD11	1:I:87:ASP:HB3	1.91	0.51
1:I:164:PRO:HG3	1:I:330:THR:OG1	2.11	0.51
1:K:146:CYS:O	1:K:147:ILE:CG1	2.54	0.51
1:L:115:VAL:HG21	1:M:257:VAL:CG2	2.36	0.51
1:L:125:LYS:O	1:L:125:LYS:HD3	2.11	0.51
1:M:217:LYS:NZ	1:N:274:ASP:O	2.23	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:220:VAL:CG1	1:M:224:ILE:HD11	2.40	0.51
1:A:120:HIS:HA	1:A:222:LEU:HD21	1.93	0.50
1:C:54:LYS:HG3	1:C:56:ASP:H	1.75	0.50
1:C:96:GLN:O	1:C:97:ARG:HD3	2.11	0.50
1:E:216:ASN:O	1:E:217:LYS:HG2	2.11	0.50
1:F:323:TRP:NE1	1:F:392:MET:HE1	2.26	0.50
1:G:120:HIS:HB2	1:G:221:PRO:HA	1.93	0.50
1:G:162:ARG:HB3	1:G:162:ARG:NH1	2.23	0.50
1:G:323:TRP:O	1:G:324:SER:HB2	2.12	0.50
1:I:24:THR:CG2	1:I:318:ASN:HA	2.41	0.50
1:I:112:PRO:HA	1:J:231:TYR:CE1	2.46	0.50
1:I:149:MET:HE3	1:I:292:THR:HG23	1.91	0.50
1:J:117:ILE:HD11	1:J:148:SER:HB2	1.92	0.50
1:L:109:ARG:H	1:L:306:ASN:ND2	2.09	0.50
1:M:102:CYS:O	1:M:311:LEU:HD11	2.11	0.50
1:A:389:ILE:O	1:A:392:MET:HB3	2.10	0.50
1:B:49:TYR:HA	1:B:223:ASP:HB3	1.93	0.50
1:C:113:LEU:HD23	1:C:298:VAL:HB	1.93	0.50
1:H:149:MET:HA	1:I:260:LEU:HD13	1.93	0.50
1:I:39:SER:OG	1:I:370:LEU:HB2	2.11	0.50
1:J:22:VAL:HG12	1:J:23:SER:N	2.25	0.50
1:K:115:VAL:HG21	1:L:257:VAL:HG22	1.92	0.50
1:L:36:HIS:ND1	1:L:37:ALA:N	2.59	0.50
1:L:52:ILE:HG21	1:M:269:GLU:HG2	1.92	0.50
1:N:333:ASP:OD1	1:N:335:THR:HG23	2.12	0.50
1:B:41:ARG:HH11	1:C:190:LEU:CD2	2.22	0.50
1:B:151:TYR:OH	1:B:221:PRO:HB2	2.12	0.50
1:B:393:ASN:ND2	1:B:395:SER:H	2.09	0.50
1:B:468:PHE:O	1:B:469:LEU:C	2.54	0.50
1:E:92:ASP:OD1	1:E:94:ALA:HB3	2.11	0.50
1:E:318:ASN:OD1	1:E:318:ASN:C	2.54	0.50
1:F:185:CYS:SG	1:J:363:ARG:NH1	2.84	0.50
1:F:462:PHE:O	1:F:463:PRO:C	2.52	0.50
1:G:120:HIS:CE1	1:G:122:LEU:H	2.29	0.50
1:J:74:ARG:CZ	1:J:441:LEU:HD12	2.41	0.50
1:J:79:ASP:OD1	1:J:81:ASN:CB	2.57	0.50
1:K:358:PHE:CE2	1:L:216:ASN:HA	2.45	0.50
1:L:117:ILE:HG23	1:L:117:ILE:O	2.11	0.50
1:M:22:VAL:HG12	1:M:23:SER:N	2.25	0.50
1:N:47:HIS:ND1	1:N:48:PRO:HD2	2.26	0.50
1:N:79:ASP:O	1:N:81:ASN:N	2.44	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:107:VAL:O	1:O:107:VAL:CG1	2.53	0.50
1:A:216:ASN:O	1:B:277:ILE:HD12	2.12	0.50
1:D:105:VAL:HG12	1:D:106:GLU:N	2.26	0.50
1:G:101:ALA:HA	1:G:320:GLY:O	2.11	0.50
1:G:120:HIS:O	1:G:121:PRO:C	2.50	0.50
1:G:342:VAL:HG22	1:G:361:TYR:HB2	1.94	0.50
1:I:165:ILE:O	1:I:237:MET:HE2	2.12	0.50
1:I:450:ASP:OD2	1:I:452:LYS:HD2	2.11	0.50
1:K:343:CYS:CB	1:K:360:GLU:OE2	2.56	0.50
1:L:450:ASP:OD2	1:L:452:LYS:HD2	2.12	0.50
1:M:343:CYS:HB3	1:N:214:GLN:HA	1.93	0.50
1:O:328:PHE:HE2	1:O:446:PHE:CE1	2.30	0.50
1:D:115:VAL:HG21	1:E:257:VAL:HG22	1.92	0.50
1:D:314:ALA:CB	1:D:319:ASN:HA	2.41	0.50
1:D:382:THR:O	1:D:386:MET:HG3	2.11	0.50
1:D:471:GLN:C	1:D:473:GLY:N	2.69	0.50
1:E:273:ALA:HA	1:E:276:TYR:CE2	2.47	0.50
1:G:29:THR:HG22	1:G:30:ARG:N	2.24	0.50
1:G:209:ASP:O	1:G:213:LEU:HB2	2.12	0.50
1:I:361:TYR:CZ	1:J:268:GLY:HA3	2.47	0.50
1:J:31:THR:O	1:J:375:GLN:NE2	2.36	0.50
1:N:71:ARG:HB3	1:N:73:PHE:CE1	2.46	0.50
1:N:305:PHE:HE1	1:N:333:ASP:HB2	1.75	0.50
1:O:464:LEU:O	1:O:464:LEU:CD2	2.59	0.50
1:B:393:ASN:HD22	1:B:394:PRO:CD	2.24	0.50
1:J:78:PRO:HG2	1:J:78:PRO:O	2.12	0.50
1:K:54:LYS:NZ	1:K:55:GLN:CB	2.75	0.50
1:M:157:CYS:HA	1:M:330:THR:O	2.12	0.50
1:A:256:PHE:HB3	1:E:297:MET:HG3	1.93	0.50
1:B:250:LEU:HB2	1:B:304:ILE:HD11	1.93	0.50
1:C:342:VAL:CG2	1:C:361:TYR:HB2	2.41	0.50
1:F:355:ASN:HB3	1:G:265:GLY:HA2	1.94	0.50
1:I:258:ARG:HB3	1:I:292:THR:HG22	1.94	0.50
1:L:80:PRO:HD3	1:L:100:TRP:NE1	2.26	0.50
1:L:122:LEU:O	1:L:144:ARG:HD2	2.12	0.50
1:L:299:THR:HG22	1:M:254:GLN:CB	2.41	0.50
1:M:47:HIS:HB2	1:M:52:ILE:HD11	1.92	0.50
1:A:64:LYS:CD	1:A:64:LYS:HB2	2.38	0.50
1:B:54:LYS:HD2	1:B:55:GLN:N	2.25	0.50
1:C:41:ARG:HH11	1:D:190:LEU:HD23	1.75	0.50
1:D:79:ASP:CG	1:D:325:ASN:HD21	2.19	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:298:VAL:HG11	1:F:335:THR:HA	1.93	0.50
1:G:24:THR:C	1:G:26:GLU:H	2.19	0.50
1:G:462:PHE:O	1:G:466:ARG:HB2	2.11	0.50
1:H:311:LEU:H	1:H:311:LEU:CD2	2.24	0.50
1:I:273:ALA:HA	1:I:276:TYR:CE2	2.46	0.50
1:J:126:LEU:HB3	1:J:262:ASN:HB3	1.93	0.50
1:J:298:VAL:HG11	1:J:335:THR:HA	1.94	0.50
1:L:117:ILE:HD12	1:M:260:LEU:HD22	1.94	0.50
1:L:139:SER:HB2	1:L:143:ASN:HD21	1.77	0.50
1:M:106:GLU:HB3	1:M:371:GLN:HB2	1.92	0.50
1:N:323:TRP:HE1	1:N:392:MET:HE1	1.76	0.50
1:O:233:ASP:OD1	1:O:233:ASP:C	2.54	0.50
1:C:318:ASN:OD1	1:C:321:ILE:HB	2.12	0.50
1:D:119:GLY:N	1:D:221:PRO:HB3	2.27	0.50
1:F:253:GLU:HG2	1:J:300:SER:OG	2.11	0.50
1:F:254:GLN:HB2	1:J:299:THR:HG22	1.93	0.50
1:G:273:ALA:HA	1:G:276:TYR:CE2	2.47	0.50
1:H:258:ARG:HB3	1:H:292:THR:HG22	1.92	0.50
1:I:22:VAL:CG1	1:I:26:GLU:HG3	2.42	0.50
1:I:157:CYS:O	1:I:249:TYR:HA	2.12	0.50
1:I:305:PHE:CE1	1:I:333:ASP:HB2	2.46	0.50
1:J:68:LEU:HD22	1:J:151:TYR:CD1	2.47	0.50
1:K:24:THR:HG21	1:K:321:ILE:HG13	1.94	0.50
1:K:393:ASN:HB3	1:K:396:ILE:CD1	2.42	0.50
1:L:343:CYS:SG	1:M:216:ASN:HB3	2.51	0.50
1:O:122:LEU:O	1:O:218:SER:HB3	2.12	0.50
1:A:21:VAL:CG1	1:A:22:VAL:N	2.74	0.49
1:D:258:ARG:HB3	1:D:292:THR:HG22	1.93	0.49
1:F:24:THR:CG2	1:F:318:ASN:HA	2.41	0.49
1:F:256:PHE:HD2	1:J:297:MET:HE2	1.77	0.49
1:G:363:ARG:HG3	1:H:188:LEU:HD21	1.94	0.49
1:J:284:LEU:HD12	1:J:285:PRO:HD2	1.94	0.49
1:L:72:VAL:HG22	1:L:330:THR:HG23	1.94	0.49
1:L:109:ARG:HB3	1:L:109:ARG:HH11	1.77	0.49
1:M:35:TYR:CZ	1:M:457:ALA:HB2	2.46	0.49
1:N:110:GLY:C	1:N:111:GLN:HG2	2.36	0.49
1:N:152:LYS:CE	1:N:152:LYS:HG2	2.41	0.49
1:O:120:HIS:HB3	1:O:123:LEU:HD13	1.94	0.49
1:O:160:GLY:HA3	1:O:245:MET:O	2.12	0.49
1:O:219:ASP:O	1:O:220:VAL:HG13	2.11	0.49
1:B:147:ILE:HA	1:C:129:THR:O	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:27:TYR:CD1	1:C:28:VAL:CG2	2.95	0.49
1:C:121:PRO:HG3	1:D:287:THR:OG1	2.12	0.49
1:D:73:PHE:O	1:D:328:PHE:HA	2.12	0.49
1:D:117:ILE:HG13	1:E:260:LEU:HD23	1.92	0.49
1:F:138:ASN:HD21	1:F:283:THR:CB	2.24	0.49
1:K:340:MET:HG2	1:K:363:ARG:O	2.12	0.49
1:L:112:PRO:C	1:L:113:LEU:O	2.54	0.49
1:L:248:PHE:CZ	1:L:309:TYR:HB3	2.47	0.49
1:N:41:ARG:NH1	1:O:190:LEU:HD23	2.26	0.49
1:O:54:LYS:HB3	1:O:57:SER:HB3	1.94	0.49
1:O:99:VAL:HG11	1:O:321:ILE:HG23	1.93	0.49
1:B:22:VAL:HG12	1:B:26:GLU:HG3	1.94	0.49
1:E:156:LEU:HD23	1:E:332:VAL:HB	1.92	0.49
1:F:80:PRO:HB2	1:F:98:LEU:HB2	1.93	0.49
1:F:144:ARG:NH2	1:G:279:GLY:HA3	2.28	0.49
1:F:343:CYS:HB3	1:G:214:GLN:HA	1.93	0.49
1:F:373:ILE:HD12	1:F:464:LEU:HD22	1.93	0.49
1:G:120:HIS:CE1	1:G:122:LEU:HB2	2.47	0.49
1:H:171:LYS:HE2	1:H:186:PRO:HG3	1.94	0.49
1:I:366:GLU:HG3	1:I:368:TYR:CE1	2.47	0.49
1:J:130:GLU:HB2	1:J:260:LEU:HD12	1.94	0.49
1:K:296:SER:HB2	1:O:297:MET:HE1	1.94	0.49
1:M:53:LYS:HD3	1:M:58:ASN:HA	1.95	0.49
1:O:79:ASP:OD1	1:O:81:ASN:CB	2.60	0.49
1:B:78:PRO:HD3	1:B:452:LYS:HA	1.94	0.49
1:D:106:GLU:HG2	1:D:308:PRO:HA	1.93	0.49
1:F:174:PRO:CG	1:F:180:VAL:HG23	2.40	0.49
1:G:353:TYR:HE1	1:H:216:ASN:HB2	1.76	0.49
1:G:453:GLU:HG3	1:G:453:GLU:O	2.13	0.49
1:I:210:PHE:HE1	1:I:229:CYS:HG	1.58	0.49
1:J:211:THR:HG23	1:J:226:SER:CA	2.42	0.49
1:L:54:LYS:NZ	1:L:55:GLN:HB3	2.27	0.49
1:M:27:TYR:O	1:M:27:TYR:CD1	2.65	0.49
1:C:222:LEU:HA	1:C:225:CYS:SG	2.53	0.49
1:D:131:ASN:O	1:D:132:SER:C	2.56	0.49
1:D:216:ASN:O	1:D:217:LYS:C	2.56	0.49
1:E:24:THR:HG21	1:E:319:ASN:H	1.77	0.49
1:E:30:ARG:HB3	1:E:375:GLN:HE22	1.76	0.49
1:F:216:ASN:O	1:F:217:LYS:C	2.55	0.49
1:G:24:THR:HA	1:G:27:TYR:CE2	2.47	0.49
1:G:71:ARG:HG3	1:G:368:TYR:CZ	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:107:VAL:O	1:H:107:VAL:HG12	2.12	0.49
1:H:174:PRO:HG3	1:H:180:VAL:HG23	1.93	0.49
1:I:304:ILE:HD13	1:I:305:PHE:CE2	2.48	0.49
1:I:462:PHE:O	1:I:466:ARG:HB2	2.12	0.49
1:J:164:PRO:HA	1:J:245:MET:HG3	1.94	0.49
1:J:395:SER:O	1:J:396:ILE:C	2.55	0.49
1:K:269:GLU:OE1	1:O:52:ILE:HD13	2.12	0.49
1:A:353:TYR:HE1	1:B:216:ASN:HB2	1.77	0.49
1:A:463:PRO:HA	1:A:466:ARG:NH1	2.28	0.49
1:B:237:MET:CG	1:B:245:MET:HG2	2.42	0.49
1:C:300:SER:OG	1:D:253:GLU:HG2	2.12	0.49
1:D:208:MET:HE3	1:D:213:LEU:HB2	1.95	0.49
1:D:370:LEU:HB3	1:D:372:PHE:CE1	2.48	0.49
1:D:461:GLN:HB2	1:D:462:PHE:CE1	2.48	0.49
1:D:471:GLN:C	1:D:473:GLY:H	2.20	0.49
1:F:269:GLU:OE1	1:J:363:ARG:NH2	2.45	0.49
1:H:24:THR:CG2	1:H:318:ASN:HA	2.43	0.49
1:I:152:LYS:HA	1:I:255:MET:HB2	1.95	0.49
1:L:24:THR:HG23	1:L:318:ASN:HA	1.93	0.49
1:L:223:ASP:OD1	1:L:224:ILE:HG23	2.13	0.49
1:L:297:MET:HE2	1:M:256:PHE:HD2	1.76	0.49
1:M:110:GLY:O	1:M:111:GLN:CB	2.61	0.49
1:M:123:LEU:O	1:M:144:ARG:HB3	2.12	0.49
1:N:99:VAL:HG11	1:N:321:ILE:HG22	1.94	0.49
1:A:269:GLU:OE1	1:E:52:ILE:HD13	2.12	0.49
1:E:139:SER:HB2	1:E:143:ASN:HD21	1.77	0.49
1:E:372:PHE:C	1:E:373:ILE:HG13	2.37	0.49
1:F:117:ILE:HD11	1:G:260:LEU:HB3	1.95	0.49
1:K:24:THR:C	1:K:26:GLU:N	2.69	0.49
1:K:46:GLY:HA2	1:K:62:VAL:HG12	1.94	0.49
1:L:119:GLY:HA3	1:M:289:TYR:CE1	2.48	0.49
1:M:167:GLU:HG3	1:M:167:GLU:O	2.12	0.49
1:O:440:PRO:HG2	1:O:441:LEU:H	1.78	0.49
1:O:474:LEU:H	1:O:474:LEU:CD2	2.26	0.49
1:A:383:ALA:HB3	1:F:92:ASP:HB2	1.94	0.49
1:D:108:GLY:HA2	1:D:306:ASN:ND2	2.28	0.49
1:F:80:PRO:HD3	1:F:100:TRP:CD1	2.48	0.49
1:F:149:MET:CE	1:F:292:THR:HA	2.42	0.49
1:F:149:MET:HA	1:G:260:LEU:HD13	1.94	0.49
1:G:69:GLN:NE2	1:G:71:ARG:HH22	2.11	0.49
1:H:109:ARG:NH1	1:H:109:ARG:HB3	2.27	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:160:GLY:HA3	1:H:245:MET:O	2.12	0.49
1:I:342:VAL:O	1:I:342:VAL:HG23	2.13	0.49
1:M:22:VAL:CG1	1:M:26:GLU:HG3	2.43	0.49
1:A:71:ARG:O	1:A:330:THR:HA	2.11	0.49
1:A:240:GLU:HG2	1:A:243:GLY:H	1.78	0.49
1:E:152:LYS:CE	1:E:253:GLU:HB2	2.43	0.49
1:F:43:LEU:HD23	1:F:367:GLU:HB2	1.95	0.49
1:G:30:ARG:HD3	1:G:377:CYS:SG	2.52	0.49
1:H:237:MET:HB2	1:H:246:LEU:CD2	2.42	0.49
1:L:156:LEU:HA	1:L:250:LEU:O	2.13	0.49
1:M:37:ALA:HA	1:M:454:LYS:O	2.13	0.49
1:N:262:ASN:HD22	1:N:262:ASN:HA	1.37	0.49
1:O:49:TYR:HA	1:O:223:ASP:HB3	1.95	0.49
1:O:233:ASP:OD1	1:O:233:ASP:O	2.31	0.49
1:A:216:ASN:HA	1:E:358:PHE:CE2	2.48	0.49
1:C:46:GLY:O	1:C:363:ARG:HD3	2.12	0.49
1:D:96:GLN:NE2	1:D:378:LYS:HD3	2.27	0.49
1:D:255:MET:HG3	1:D:293:PRO:HB2	1.94	0.49
1:E:68:LEU:HG	1:E:334:THR:HG22	1.95	0.49
1:E:141:THR:HG22	1:E:142:ASP:N	2.28	0.49
1:F:70:TYR:OH	1:F:232:PRO:HD3	2.13	0.49
1:G:109:ARG:H	1:G:306:ASN:HD21	1.60	0.49
1:H:47:HIS:HB3	1:H:50:TYR:O	2.12	0.49
1:H:70:TYR:OH	1:H:232:PRO:HD3	2.12	0.49
1:I:54:LYS:HZ3	1:I:55:GLN:N	2.11	0.49
1:I:172:GLY:O	1:I:187:PRO:HG2	2.12	0.49
1:J:362:LEU:C	1:J:363:ARG:HG2	2.38	0.49
1:O:159:ILE:HG22	1:O:247:PHE:CE1	2.44	0.49
1:A:253:GLU:HG2	1:E:300:SER:OG	2.13	0.48
1:C:165:ILE:HG23	1:C:245:MET:SD	2.53	0.48
1:D:393:ASN:HD22	1:D:394:PRO:HD2	1.77	0.48
1:F:150:ASP:OD1	1:F:294:SER:HA	2.12	0.48
1:F:363:ARG:NH1	1:G:185:CYS:SG	2.86	0.48
1:G:69:GLN:NE2	1:G:71:ARG:NH2	2.61	0.48
1:G:88:THR:HB	1:G:91:TYR:CD2	2.47	0.48
1:H:116:GLY:C	1:H:117:ILE:HG22	2.38	0.48
1:H:154:THR:HG22	1:H:155:GLN:N	2.28	0.48
1:H:321:ILE:HG21	1:H:323:TRP:CZ2	2.48	0.48
1:J:272:PRO:O	1:J:275:LEU:HB2	2.13	0.48
1:K:119:GLY:O	1:K:222:LEU:HD22	2.13	0.48
1:K:450:ASP:OD1	1:K:452:LYS:HG3	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:92:ASP:C	1:L:92:ASP:OD1	2.55	0.48
1:L:104:GLY:HA3	1:L:310:TRP:CE3	2.48	0.48
1:L:220:VAL:HG23	1:L:225:CYS:CB	2.42	0.48
1:L:361:TYR:CZ	1:M:268:GLY:HA3	2.47	0.48
1:O:125:LYS:C	1:O:125:LYS:HD3	2.38	0.48
1:A:120:HIS:CD2	1:A:222:LEU:HD13	2.48	0.48
1:A:237:MET:SD	1:A:246:LEU:HD23	2.53	0.48
1:B:442:LYS:HG2	1:B:442:LYS:O	2.12	0.48
1:C:196:GLN:O	1:C:197:ASP:C	2.56	0.48
1:D:219:ASP:O	1:D:220:VAL:HG13	2.12	0.48
1:D:283:THR:O	1:D:284:LEU:O	2.32	0.48
1:D:353:TYR:HE1	1:E:216:ASN:HB2	1.78	0.48
1:E:246:LEU:C	1:E:246:LEU:CD1	2.85	0.48
1:F:139:SER:HB2	1:F:143:ASN:ND2	2.25	0.48
1:F:269:GLU:OE1	1:J:52:ILE:HD13	2.13	0.48
1:H:82:LYS:O	1:H:83:PHE:C	2.56	0.48
1:H:119:GLY:CA	1:H:148:SER:HA	2.43	0.48
1:H:120:HIS:HB2	1:H:221:PRO:HA	1.94	0.48
1:J:386:MET:HG2	1:J:397:LEU:HD21	1.94	0.48
1:L:123:LEU:HA	1:L:218:SER:O	2.13	0.48
1:L:240:GLU:OE2	1:L:245:MET:HB2	2.12	0.48
1:N:47:HIS:CB	1:N:52:ILE:HD11	2.39	0.48
1:N:117:ILE:HD11	1:O:260:LEU:HB3	1.95	0.48
1:N:359:LYS:CD	1:O:268:GLY:HA2	2.40	0.48
1:N:393:ASN:HD22	1:N:394:PRO:HD2	1.77	0.48
1:C:43:LEU:CD2	1:D:190:LEU:HD22	2.42	0.48
1:D:144:ARG:NH1	1:D:218:SER:OG	2.45	0.48
1:D:258:ARG:HD3	1:D:258:ARG:HA	1.65	0.48
1:I:450:ASP:OD1	1:I:452:LYS:HD2	2.13	0.48
1:K:24:THR:HG23	1:K:318:ASN:HA	1.95	0.48
1:L:113:LEU:O	1:M:152:LYS:NZ	2.47	0.48
1:M:195:LEU:HD23	1:M:230:LYS:HD2	1.95	0.48
1:A:142:ASP:N	1:E:355:ASN:OD1	2.46	0.48
1:A:210:PHE:HD2	1:A:214:GLN:OE1	1.96	0.48
1:A:269:GLU:OE1	1:E:363:ARG:NH2	2.46	0.48
1:C:370:LEU:HB3	1:C:372:PHE:CE1	2.48	0.48
1:D:54:LYS:HB3	1:D:57:SER:HB3	1.96	0.48
1:D:465:GLY:O	1:D:468:PHE:HB3	2.13	0.48
1:F:92:ASP:OD1	1:F:94:ALA:HB3	2.13	0.48
1:I:216:ASN:C	1:I:217:LYS:HG2	2.38	0.48
1:K:121:PRO:HD2	1:K:222:LEU:HD21	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:303:GLN:HE22	1:K:335:THR:HG21	1.79	0.48
1:M:181:LYS:HE2	1:M:184:GLU:HG2	1.96	0.48
1:N:29:THR:HB	1:N:378:LYS:HG3	1.96	0.48
1:N:118:SER:O	1:N:149:MET:N	2.45	0.48
1:O:262:ASN:HD22	1:O:262:ASN:HA	1.53	0.48
1:A:47:HIS:HB3	1:A:50:TYR:O	2.14	0.48
1:B:297:MET:HE1	1:C:296:SER:CB	2.43	0.48
1:C:154:THR:HG23	1:C:253:GLU:HB3	1.95	0.48
1:D:79:ASP:C	1:D:81:ASN:H	2.21	0.48
1:D:107:VAL:O	1:D:107:VAL:HG12	2.12	0.48
1:D:326:GLN:O	1:D:327:LEU:HD23	2.14	0.48
1:D:385:VAL:O	1:D:386:MET:C	2.54	0.48
1:E:52:ILE:HD12	1:E:62:VAL:HB	1.96	0.48
1:G:305:PHE:HE1	1:G:333:ASP:CB	2.21	0.48
1:H:24:THR:HG23	1:H:318:ASN:HA	1.96	0.48
1:I:149:MET:HE1	1:I:205:PHE:HZ	1.78	0.48
1:I:299:THR:O	1:I:300:SER:C	2.57	0.48
1:K:66:SER:HB3	1:K:69:GLN:HG3	1.94	0.48
1:K:366:GLU:HG3	1:K:368:TYR:HE1	1.78	0.48
1:L:33:ILE:N	1:L:33:ILE:CD1	2.76	0.48
1:M:327:LEU:HD23	1:M:327:LEU:HA	1.46	0.48
1:N:207:ALA:HA	1:N:229:CYS:O	2.12	0.48
1:O:27:TYR:CD1	1:O:28:VAL:HG23	2.49	0.48
1:O:52:ILE:HD12	1:O:62:VAL:HB	1.96	0.48
1:O:70:TYR:CE1	1:O:201:VAL:HA	2.49	0.48
1:O:167:GLU:HA	1:O:191:LEU:O	2.13	0.48
1:A:470:LEU:O	1:A:473:GLY:N	2.45	0.48
1:B:359:LYS:HB3	1:B:361:TYR:CE1	2.48	0.48
1:C:201:VAL:HG11	1:C:332:VAL:HG11	1.95	0.48
1:D:34:TYR:HA	1:D:374:PHE:O	2.13	0.48
1:D:210:PHE:CE2	1:D:220:VAL:HG11	2.48	0.48
1:H:162:ARG:HG3	1:H:244:ASP:CB	2.44	0.48
1:I:244:ASP:O	1:I:245:MET:C	2.56	0.48
1:J:45:VAL:HA	1:J:364:HIS:O	2.14	0.48
1:J:139:SER:HB2	1:J:143:ASN:HD21	1.79	0.48
1:J:328:PHE:HE2	1:J:446:PHE:CE1	2.31	0.48
1:L:121:PRO:CB	1:M:285:PRO:HG2	2.43	0.48
1:N:323:TRP:O	1:N:324:SER:HB2	2.13	0.48
1:N:440:PRO:CG	1:N:441:LEU:H	2.23	0.48
1:O:219:ASP:C	1:O:220:VAL:HG22	2.38	0.48
1:O:255:MET:HE3	1:O:293:PRO:HB3	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:117:ILE:O	1:B:117:ILE:CG2	2.60	0.48
1:C:52:ILE:HD13	1:D:269:GLU:CD	2.38	0.48
1:C:280:THR:O	1:C:281:THR:CB	2.62	0.48
1:D:118:SER:O	1:D:148:SER:HA	2.14	0.48
1:D:133:ASN:N	1:D:133:ASN:HD22	2.12	0.48
1:D:466:ARG:O	1:D:469:LEU:HB2	2.14	0.48
1:E:120:HIS:O	1:E:121:PRO:C	2.56	0.48
1:E:381:LEU:C	1:E:386:MET:HE2	2.39	0.48
1:F:83:PHE:HB3	1:F:85:PHE:CE1	2.48	0.48
1:F:459:LEU:HB2	1:F:469:LEU:HD11	1.96	0.48
1:G:117:ILE:HD12	1:H:260:LEU:HB3	1.93	0.48
1:G:120:HIS:ND1	1:G:122:LEU:C	2.72	0.48
1:H:208:MET:CE	1:H:214:GLN:NE2	2.75	0.48
1:J:124:ASN:HD21	1:J:263:ARG:HB3	1.78	0.48
1:K:119:GLY:HA3	1:K:148:SER:HA	1.95	0.48
1:L:101:ALA:HB2	1:L:377:CYS:SG	2.54	0.48
1:L:241:PRO:HG2	1:L:242:TYR:N	2.28	0.48
1:M:327:LEU:HD12	1:M:374:PHE:CE2	2.49	0.48
1:O:149:MET:HE3	1:O:293:PRO:HD2	1.94	0.48
1:O:210:PHE:CE2	1:O:224:ILE:HD12	2.48	0.48
1:A:120:HIS:HA	1:A:222:LEU:HD22	1.93	0.48
1:B:29:THR:HB	1:B:378:LYS:HG3	1.96	0.48
1:B:68:LEU:HD22	1:B:203:THR:HG22	1.94	0.48
1:D:471:GLN:O	1:D:473:GLY:N	2.46	0.48
1:I:23:SER:O	1:I:24:THR:C	2.56	0.48
1:J:255:MET:HE3	1:J:293:PRO:HB3	1.96	0.48
1:K:181:LYS:HD3	1:K:181:LYS:N	2.21	0.48
1:L:219:ASP:O	1:L:220:VAL:HG13	2.13	0.48
1:M:211:THR:HG23	1:M:226:SER:CA	2.44	0.48
1:A:302:ALA:O	1:A:303:GLN:C	2.52	0.48
1:D:217:LYS:NZ	1:D:217:LYS:HD3	2.27	0.48
1:F:161:CYS:SG	1:F:244:ASP:HB3	2.54	0.48
1:F:363:ARG:NH2	1:G:269:GLU:OE1	2.43	0.48
1:G:70:TYR:OH	1:G:232:PRO:HD3	2.14	0.48
1:J:298:VAL:O	1:J:299:THR:CG2	2.62	0.48
1:K:54:LYS:HZ3	1:K:55:GLN:HB3	1.79	0.48
1:N:105:VAL:HG13	1:N:372:PHE:CE2	2.49	0.48
1:O:85:PHE:HB2	1:O:88:THR:CG2	2.43	0.48
1:O:109:ARG:HB3	1:O:109:ARG:NH1	2.29	0.48
1:B:79:ASP:C	1:B:81:ASN:H	2.22	0.48
1:B:184:GLU:OE1	1:B:184:GLU:HA	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:160:GLY:HA3	1:D:245:MET:O	2.14	0.48
1:D:233:ASP:O	1:D:237:MET:HG3	2.14	0.48
1:E:308:PRO:HG2	1:E:308:PRO:O	2.13	0.48
1:G:263:ARG:HB2	1:G:288:SER:HG	1.79	0.48
1:I:141:THR:CG2	1:I:142:ASP:N	2.77	0.48
1:K:33:ILE:HB	1:K:376:LEU:HB3	1.95	0.48
1:K:114:GLY:C	1:K:115:VAL:HG13	2.38	0.48
1:K:373:ILE:HD12	1:K:464:LEU:HD22	1.96	0.48
1:L:342:VAL:O	1:L:342:VAL:CG2	2.61	0.48
1:M:145:GLU:OE1	1:N:132:SER:HB3	2.14	0.48
1:N:68:LEU:CD2	1:N:334:THR:HG21	2.39	0.48
1:N:261:PHE:HB2	1:N:290:PHE:CE2	2.49	0.48
1:A:136:VAL:O	1:A:137:GLY:O	2.30	0.47
1:A:305:PHE:CE1	1:A:333:ASP:HB2	2.48	0.47
1:C:156:LEU:HG	1:C:332:VAL:CB	2.37	0.47
1:D:340:MET:HB2	1:E:208:MET:SD	2.53	0.47
1:F:114:GLY:N	1:F:335:THR:O	2.42	0.47
1:F:165:ILE:N	1:F:237:MET:SD	2.86	0.47
1:F:450:ASP:OD1	1:F:452:LYS:HG3	2.14	0.47
1:G:29:THR:CG2	1:G:30:ARG:N	2.77	0.47
1:H:340:MET:HG2	1:H:363:ARG:O	2.14	0.47
1:I:280:THR:CG2	1:I:280:THR:CA	2.82	0.47
1:L:97:ARG:HE	1:L:400:TRP:HB3	1.79	0.47
1:L:246:LEU:HD12	1:L:246:LEU:C	2.38	0.47
1:N:361:TYR:CE2	1:O:268:GLY:HA3	2.49	0.47
1:A:125:LYS:CD	1:A:125:LYS:C	2.86	0.47
1:B:152:LYS:HG3	1:B:255:MET:CB	2.45	0.47
1:E:237:MET:HG2	1:E:245:MET:CG	2.43	0.47
1:F:188:LEU:H	1:F:188:LEU:CD2	2.25	0.47
1:G:255:MET:HG2	1:G:256:PHE:H	1.78	0.47
1:J:85:PHE:CB	1:J:88:THR:OG1	2.58	0.47
1:K:70:TYR:CE2	1:K:195:LEU:HD22	2.48	0.47
1:K:287:THR:O	1:K:287:THR:HG22	2.14	0.47
1:M:343:CYS:O	1:N:215:ALA:N	2.47	0.47
1:M:358:PHE:CE2	1:N:216:ASN:HA	2.49	0.47
1:N:363:ARG:HG3	1:O:188:LEU:HD21	1.95	0.47
1:O:21:VAL:HG21	1:O:241:PRO:HB2	1.96	0.47
1:O:79:ASP:OD1	1:O:81:ASN:N	2.44	0.47
1:C:79:ASP:OD2	1:C:325:ASN:ND2	2.47	0.47
1:C:149:MET:HE3	1:C:292:THR:HA	1.96	0.47
1:D:342:VAL:CG2	1:D:361:TYR:HB2	2.44	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:240:GLU:CG	1:E:241:PRO:HD2	2.45	0.47
1:G:133:ASN:HD22	1:G:133:ASN:N	2.12	0.47
1:G:216:ASN:C	1:G:217:LYS:HG2	2.39	0.47
1:H:85:PHE:HB2	1:H:88:THR:OG1	2.14	0.47
1:I:79:ASP:HB3	1:I:82:LYS:HG3	1.95	0.47
1:I:299:THR:C	1:I:301:ASP:H	2.21	0.47
1:J:22:VAL:HG11	1:J:26:GLU:HG3	1.97	0.47
1:J:240:GLU:CG	1:J:241:PRO:HD2	2.44	0.47
1:K:240:GLU:OE2	1:K:245:MET:HB2	2.14	0.47
1:L:219:ASP:HB2	1:L:263:ARG:CZ	2.45	0.47
1:M:174:PRO:HG3	1:M:180:VAL:HG23	1.96	0.47
1:N:79:ASP:OD1	1:N:81:ASN:HB2	2.13	0.47
1:N:105:VAL:HG12	1:N:106:GLU:N	2.28	0.47
1:N:331:VAL:HG11	1:N:368:TYR:HE2	1.80	0.47
1:D:331:VAL:HG11	1:D:368:TYR:HE2	1.80	0.47
1:G:148:SER:O	1:G:149:MET:HB3	2.12	0.47
1:G:181:LYS:N	1:G:181:LYS:CD	2.77	0.47
1:I:54:LYS:NZ	1:I:56:ASP:H	2.12	0.47
1:K:185:CYS:HB2	1:O:361:TYR:CG	2.50	0.47
1:L:115:VAL:HG22	1:M:255:MET:HE1	1.97	0.47
1:L:395:SER:O	1:L:396:ILE:C	2.57	0.47
1:M:29:THR:CG2	1:M:30:ARG:N	2.77	0.47
1:A:123:LEU:HD12	1:A:219:ASP:HA	1.96	0.47
1:A:256:PHE:CD1	1:A:257:VAL:N	2.83	0.47
1:A:384:ASP:OD2	1:F:92:ASP:HB2	2.14	0.47
1:F:102:CYS:O	1:F:311:LEU:HD11	2.14	0.47
1:F:250:LEU:CB	1:F:304:ILE:HD11	2.44	0.47
1:G:37:ALA:HB1	1:G:451:LEU:HD13	1.96	0.47
1:G:278:LYS:HB2	1:J:351:SER:O	2.15	0.47
1:H:69:GLN:NE2	1:H:71:ARG:HH22	2.13	0.47
1:H:123:LEU:HD12	1:H:219:ASP:HA	1.96	0.47
1:H:151:TYR:CD2	1:H:203:THR:HB	2.49	0.47
1:I:340:MET:HB2	1:J:208:MET:SD	2.54	0.47
1:J:123:LEU:HD22	1:J:147:ILE:HB	1.96	0.47
1:K:157:CYS:HA	1:K:330:THR:O	2.14	0.47
1:L:311:LEU:HD23	1:L:311:LEU:N	2.26	0.47
1:L:361:TYR:CD2	1:M:185:CYS:HB2	2.50	0.47
1:L:471:GLN:CD	1:L:471:GLN:C	2.83	0.47
1:M:220:VAL:O	1:M:221:PRO:C	2.56	0.47
1:M:461:GLN:NE2	1:N:21:VAL:HB	2.16	0.47
1:O:149:MET:HE1	1:O:205:PHE:HZ	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:201:VAL:CG1	1:A:332:VAL:HG21	2.45	0.47
1:A:220:VAL:HG23	1:A:225:CYS:CB	2.44	0.47
1:B:342:VAL:O	1:B:342:VAL:CG2	2.63	0.47
1:C:354:LYS:HA	1:D:141:THR:HG23	1.96	0.47
1:C:393:ASN:HB3	1:C:396:ILE:HD12	1.97	0.47
1:D:148:SER:OG	1:E:129:THR:OG1	2.24	0.47
1:D:233:ASP:H	1:D:237:MET:HE2	1.79	0.47
1:E:233:ASP:O	1:E:234:TYR:C	2.55	0.47
1:F:97:ARG:C	1:F:98:LEU:HG	2.40	0.47
1:G:69:GLN:HA	1:G:199:ASP:O	2.15	0.47
1:I:24:THR:HG23	1:I:318:ASN:HA	1.97	0.47
1:I:342:VAL:HG22	1:I:361:TYR:HB2	1.97	0.47
1:K:79:ASP:CB	1:K:82:LYS:HE2	2.44	0.47
1:K:257:VAL:CG1	1:K:291:PRO:HB2	2.44	0.47
1:L:54:LYS:HZ3	1:L:55:GLN:CB	2.28	0.47
1:L:151:TYR:CD1	1:L:203:THR:HB	2.49	0.47
1:M:148:SER:O	1:M:149:MET:HB3	2.15	0.47
1:M:311:LEU:HG	1:M:311:LEU:O	2.14	0.47
1:N:114:GLY:HA2	1:O:255:MET:SD	2.55	0.47
1:N:190:LEU:HD12	1:N:190:LEU:HA	1.59	0.47
1:A:258:ARG:HG3	1:A:259:HIS:ND1	2.30	0.47
1:A:258:ARG:HB2	1:A:294:SER:HB2	1.97	0.47
1:A:470:LEU:O	1:A:471:GLN:C	2.58	0.47
1:B:125:LYS:HD3	1:B:125:LYS:C	2.40	0.47
1:B:354:LYS:HB2	1:B:354:LYS:HE3	1.65	0.47
1:C:47:HIS:O	1:C:64:LYS:HA	2.15	0.47
1:C:149:MET:HB2	1:C:292:THR:HG23	1.97	0.47
1:D:162:ARG:HG3	1:D:244:ASP:HB2	1.95	0.47
1:D:193:THR:HG23	1:D:230:LYS:HD3	1.95	0.47
1:D:311:LEU:H	1:D:311:LEU:CD2	2.27	0.47
1:D:359:LYS:CE	1:D:359:LYS:HG2	2.40	0.47
1:E:152:LYS:HB2	1:E:255:MET:HB2	1.96	0.47
1:E:181:LYS:HE2	1:E:184:GLU:HG2	1.97	0.47
1:E:220:VAL:HG23	1:E:225:CYS:HA	1.96	0.47
1:E:467:LYS:O	1:E:470:LEU:HB3	2.14	0.47
1:F:145:GLU:OE1	1:G:132:SER:HB3	2.14	0.47
1:F:215:ALA:C	1:F:217:LYS:H	2.23	0.47
1:G:46:GLY:O	1:G:363:ARG:HA	2.15	0.47
1:G:109:ARG:H	1:G:306:ASN:ND2	2.12	0.47
1:G:331:VAL:HG11	1:G:368:TYR:HE2	1.79	0.47
1:G:364:HIS:NE2	1:G:366:GLU:OE1	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:111:GLN:HB3	1:H:112:PRO:CD	2.40	0.47
1:H:361:TYR:CD2	1:I:185:CYS:HB2	2.49	0.47
1:I:211:THR:HG23	1:I:226:SER:HA	1.97	0.47
1:J:79:ASP:C	1:J:81:ASN:H	2.23	0.47
1:J:96:GLN:O	1:J:97:ARG:HD3	2.13	0.47
1:K:35:TYR:O	1:K:373:ILE:HA	2.14	0.47
1:K:237:MET:HG2	1:K:245:MET:HE3	1.96	0.47
1:K:246:LEU:HD12	1:K:246:LEU:C	2.39	0.47
1:L:71:ARG:HG3	1:L:368:TYR:CZ	2.50	0.47
1:L:156:LEU:HD21	1:L:332:VAL:HG21	1.96	0.47
1:M:121:PRO:HD3	1:M:222:LEU:CD2	2.44	0.47
1:M:459:LEU:O	1:M:460:ASP:C	2.57	0.47
1:M:463:PRO:O	1:M:464:LEU:C	2.57	0.47
1:N:79:ASP:C	1:N:81:ASN:H	2.23	0.47
1:N:151:TYR:OH	1:N:221:PRO:HB2	2.15	0.47
1:N:370:LEU:HB3	1:N:372:PHE:CZ	2.49	0.47
1:O:76:LYS:HB3	1:O:452:LYS:HZ1	1.80	0.47
1:O:164:PRO:HA	1:O:245:MET:CG	2.44	0.47
1:O:233:ASP:CG	1:O:236:LYS:HB2	2.40	0.47
1:O:298:VAL:CG1	1:O:335:THR:HA	2.44	0.47
1:A:106:GLU:HG3	1:A:464:LEU:HG	1.95	0.47
1:B:220:VAL:O	1:B:221:PRO:C	2.52	0.47
1:C:342:VAL:HG21	1:D:185:CYS:SG	2.55	0.47
1:D:21:VAL:C	1:D:22:VAL:HG23	2.39	0.47
1:F:233:ASP:OD1	1:F:236:LYS:HB2	2.14	0.47
1:F:250:LEU:HB2	1:F:304:ILE:HD11	1.96	0.47
1:G:54:LYS:HZ3	1:G:55:GLN:N	2.13	0.47
1:H:154:THR:HA	1:H:252:ARG:O	2.14	0.47
1:H:393:ASN:HD22	1:H:394:PRO:HD2	1.80	0.47
1:I:385:VAL:O	1:I:389:ILE:HG13	2.15	0.47
1:I:392:MET:HB3	1:I:393:ASN:H	1.54	0.47
1:J:29:THR:HG22	1:J:30:ARG:N	2.29	0.47
1:J:200:MET:HE2	1:J:223:ASP:O	2.14	0.47
1:J:323:TRP:O	1:J:324:SER:HB2	2.14	0.47
1:K:287:THR:OG1	1:O:121:PRO:HG3	2.14	0.47
1:M:149:MET:HE1	1:M:205:PHE:HZ	1.80	0.47
1:M:340:MET:HG2	1:M:363:ARG:O	2.15	0.47
1:O:284:LEU:HD12	1:O:285:PRO:HD2	1.95	0.47
1:O:462:PHE:O	1:O:466:ARG:HB2	2.15	0.47
1:A:117:ILE:HA	1:A:149:MET:O	2.15	0.47
1:A:158:LEU:C	1:A:159:ILE:HD13	2.39	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:159:ILE:HD12	1:A:329:VAL:HG22	1.97	0.47
1:C:37:ALA:HB1	1:C:451:LEU:CD1	2.42	0.47
1:E:92:ASP:OD1	1:E:94:ALA:CB	2.63	0.47
1:E:97:ARG:O	1:E:98:LEU:HD23	2.14	0.47
1:H:29:THR:HG22	1:H:30:ARG:N	2.30	0.47
1:J:149:MET:HE1	1:J:205:PHE:HZ	1.80	0.47
1:J:155:GLN:HB3	1:J:304:ILE:HG21	1.97	0.47
1:J:240:GLU:HG3	1:J:241:PRO:HD2	1.96	0.47
1:L:118:SER:O	1:L:149:MET:N	2.48	0.47
1:L:244:ASP:O	1:L:245:MET:C	2.58	0.47
1:M:27:TYR:O	1:M:27:TYR:HD1	1.98	0.47
1:M:194:VAL:O	1:M:196:GLN:HG3	2.14	0.47
1:N:372:PHE:C	1:N:373:ILE:HG13	2.40	0.47
1:O:247:PHE:HA	1:O:315:GLN:HG3	1.97	0.47
1:O:464:LEU:O	1:O:464:LEU:HD23	2.15	0.47
1:A:292:THR:HG22	1:A:293:PRO:O	2.14	0.47
1:B:118:SER:CB	1:B:223:ASP:OD2	2.62	0.47
1:I:155:GLN:OE1	1:I:304:ILE:HG22	2.15	0.47
1:I:255:MET:CG	1:I:256:PHE:N	2.77	0.47
1:K:256:PHE:CD2	1:O:297:MET:HE2	2.50	0.47
1:M:96:GLN:HE22	1:M:378:LYS:HD3	1.80	0.47
1:M:219:ASP:HB2	1:M:263:ARG:HH11	1.70	0.47
1:N:129:THR:HG23	1:N:262:ASN:HB2	1.97	0.47
1:N:382:THR:OG1	1:N:385:VAL:HG23	2.15	0.47
1:O:272:PRO:CD	1:O:275:LEU:HD12	2.43	0.47
1:B:71:ARG:HG3	1:B:368:TYR:CZ	2.50	0.46
1:B:180:VAL:HG12	1:B:184:GLU:HB2	1.97	0.46
1:B:217:LYS:CG	1:B:217:LYS:O	2.64	0.46
1:E:181:LYS:H	1:E:181:LYS:HD3	1.80	0.46
1:E:240:GLU:HG3	1:E:241:PRO:HD2	1.97	0.46
1:E:393:ASN:HD22	1:E:394:PRO:N	2.13	0.46
1:F:328:PHE:HE2	1:F:446:PHE:CE1	2.33	0.46
1:H:262:ASN:HD22	1:H:262:ASN:HA	1.28	0.46
1:I:208:MET:HE2	1:I:210:PHE:CD2	2.50	0.46
1:J:32:ASN:O	1:J:33:ILE:HD13	2.14	0.46
1:K:151:TYR:CD1	1:K:203:THR:HB	2.50	0.46
1:K:458:ASP:O	1:K:462:PHE:HE1	1.98	0.46
1:L:111:GLN:HB3	1:L:112:PRO:CD	2.45	0.46
1:M:68:LEU:O	1:M:201:VAL:HG23	2.15	0.46
1:A:216:ASN:O	1:A:217:LYS:HG2	2.15	0.46
1:A:299:THR:O	1:A:301:ASP:N	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:221:PRO:O	1:B:225:CYS:HB3	2.15	0.46
1:B:393:ASN:HB3	1:B:396:ILE:CD1	2.45	0.46
1:B:467:LYS:CD	1:B:467:LYS:NZ	2.77	0.46
1:C:70:TYR:OH	1:C:232:PRO:HD3	2.16	0.46
1:C:150:ASP:OD1	1:C:294:SER:HA	2.14	0.46
1:D:21:VAL:HG11	1:D:241:PRO:O	2.15	0.46
1:D:442:LYS:HB3	1:D:442:LYS:HE3	1.61	0.46
1:E:340:MET:HG2	1:E:363:ARG:O	2.14	0.46
1:F:118:SER:HB3	1:F:223:ASP:OD2	2.16	0.46
1:J:83:PHE:CD2	1:J:85:PHE:CZ	2.90	0.46
1:K:74:ARG:NH2	1:K:441:LEU:CD1	2.74	0.46
1:K:114:GLY:O	1:K:115:VAL:CG1	2.63	0.46
1:K:304:ILE:HD13	1:K:305:PHE:CE2	2.50	0.46
1:L:111:GLN:NE2	1:M:167:GLU:OE1	2.48	0.46
1:M:41:ARG:HH11	1:N:190:LEU:HD23	1.80	0.46
1:M:154:THR:HG23	1:M:253:GLU:CB	2.29	0.46
1:N:29:THR:HG22	1:N:30:ARG:O	2.15	0.46
1:B:65:VAL:O	1:B:364:HIS:HB3	2.15	0.46
1:D:165:ILE:CD1	1:D:236:LYS:HD3	2.45	0.46
1:E:159:ILE:HD12	1:E:329:VAL:HG22	1.96	0.46
1:E:305:PHE:HE1	1:E:333:ASP:CB	2.28	0.46
1:G:258:ARG:C	1:G:259:HIS:ND1	2.73	0.46
1:H:255:MET:HG2	1:H:256:PHE:N	2.29	0.46
1:I:79:ASP:O	1:I:81:ASN:N	2.49	0.46
1:J:73:PHE:CD1	1:J:370:LEU:HD11	2.51	0.46
1:K:119:GLY:CA	1:K:148:SER:HA	2.45	0.46
1:K:169:TRP:CD1	1:O:340:MET:SD	3.08	0.46
1:K:361:TYR:CD1	1:L:185:CYS:HB2	2.51	0.46
1:M:240:GLU:OE2	1:M:245:MET:HB2	2.16	0.46
1:M:255:MET:HG2	1:M:256:PHE:N	2.29	0.46
1:A:393:ASN:ND2	1:A:394:PRO:HD2	2.26	0.46
1:B:148:SER:O	1:B:149:MET:HB3	2.15	0.46
1:D:471:GLN:O	1:D:472:ALA:C	2.58	0.46
1:E:138:ASN:HD21	1:E:283:THR:CB	2.29	0.46
1:F:106:GLU:HB3	1:F:371:GLN:HB2	1.96	0.46
1:F:125:LYS:O	1:F:125:LYS:HD3	2.15	0.46
1:F:327:LEU:HD11	1:F:374:PHE:HE2	1.81	0.46
1:G:73:PHE:O	1:G:328:PHE:HA	2.15	0.46
1:K:30:ARG:HD3	1:K:377:CYS:SG	2.56	0.46
1:K:315:GLN:CD	1:K:316:GLY:N	2.74	0.46
1:L:99:VAL:HG11	1:L:321:ILE:HG22	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:261:PHE:HE2	1:M:131:ASN:OD1	1.97	0.46
1:L:363:ARG:NH2	1:M:269:GLU:OE1	2.47	0.46
1:N:149:MET:HE1	1:N:205:PHE:HZ	1.80	0.46
1:N:271:VAL:HA	1:N:272:PRO:HD3	1.65	0.46
1:O:22:VAL:HG13	1:O:26:GLU:HG3	1.95	0.46
1:O:188:LEU:HD22	1:O:188:LEU:N	2.29	0.46
1:A:28:VAL:HG22	1:A:379:ILE:HD11	1.96	0.46
1:A:370:LEU:HD23	1:A:370:LEU:HA	1.72	0.46
1:B:297:MET:HE2	1:C:256:PHE:CD2	2.49	0.46
1:C:85:PHE:HB2	1:C:88:THR:HG23	1.98	0.46
1:C:117:ILE:HG12	1:C:148:SER:HB2	1.97	0.46
1:D:102:CYS:O	1:D:311:LEU:HD11	2.16	0.46
1:D:380:THR:HG22	1:D:382:THR:HG23	1.97	0.46
1:E:68:LEU:HD13	1:E:151:TYR:HD1	1.80	0.46
1:E:117:ILE:O	1:E:117:ILE:HG23	2.15	0.46
1:F:134:LYS:NZ	1:F:134:LYS:HD2	2.28	0.46
1:F:327:LEU:HA	1:F:327:LEU:HD23	1.68	0.46
1:H:52:ILE:O	1:H:61:ALA:HB3	2.16	0.46
1:I:364:HIS:HD2	1:I:365:GLY:N	1.99	0.46
1:I:442:LYS:HE3	1:I:442:LYS:HB3	1.71	0.46
1:L:355:ASN:OD1	1:M:142:ASP:N	2.48	0.46
1:M:262:ASN:HD22	1:M:262:ASN:HA	1.59	0.46
1:N:361:TYR:CZ	1:O:268:GLY:HA3	2.51	0.46
1:A:28:VAL:HG22	1:A:379:ILE:CD1	2.46	0.46
1:C:52:ILE:HD13	1:D:269:GLU:OE1	2.16	0.46
1:D:56:ASP:O	1:D:57:SER:O	2.34	0.46
1:F:165:ILE:HD11	1:F:236:LYS:CD	2.45	0.46
1:F:442:LYS:HB3	1:F:442:LYS:HE3	1.61	0.46
1:I:302:ALA:O	1:I:303:GLN:C	2.58	0.46
1:J:146:CYS:C	1:J:147:ILE:HG13	2.41	0.46
1:J:236:LYS:O	1:J:237:MET:C	2.57	0.46
1:J:372:PHE:O	1:J:373:ILE:CG1	2.63	0.46
1:K:127:ASP:O	1:K:129:THR:HG23	2.16	0.46
1:M:220:VAL:HG23	1:M:225:CYS:HB3	1.96	0.46
1:N:54:LYS:HD2	1:N:55:GLN:N	2.31	0.46
1:O:200:MET:HB3	1:O:229:CYS:SG	2.56	0.46
1:O:337:SER:HA	1:O:364:HIS:CE1	2.50	0.46
1:B:104:GLY:HA2	1:B:309:TYR:O	2.15	0.46
1:B:156:LEU:CD2	1:B:332:VAL:HB	2.46	0.46
1:C:121:PRO:HD3	1:C:222:LEU:CD2	2.42	0.46
1:D:96:GLN:HE22	1:D:378:LYS:HD3	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:225:CYS:SG	1:I:226:SER:N	2.89	0.46
1:I:310:TRP:HH2	1:I:464:LEU:CD2	2.29	0.46
1:N:111:GLN:HB3	1:N:112:PRO:HD2	1.97	0.46
1:O:153:GLN:O	1:O:253:GLU:HA	2.16	0.46
1:C:103:THR:HB	1:C:373:ILE:O	2.15	0.46
1:C:361:TYR:CZ	1:D:268:GLY:HA3	2.51	0.46
1:D:79:ASP:C	1:D:81:ASN:N	2.73	0.46
1:F:115:VAL:N	1:F:338:THR:HG23	2.31	0.46
1:F:393:ASN:C	1:F:393:ASN:HD22	2.22	0.46
1:H:327:LEU:HA	1:H:327:LEU:HD23	1.41	0.46
1:I:28:VAL:HG11	1:I:321:ILE:HD12	1.98	0.46
1:K:109:ARG:HH11	1:K:109:ARG:HD2	1.41	0.46
1:K:256:PHE:HD2	1:O:297:MET:HE2	1.80	0.46
1:L:123:LEU:HD22	1:L:147:ILE:HB	1.96	0.46
1:L:373:ILE:CD1	1:L:464:LEU:HD13	2.46	0.46
1:M:121:PRO:CD	1:M:222:LEU:HD21	2.45	0.46
1:M:222:LEU:HD12	1:N:275:LEU:HB3	1.98	0.46
1:M:400:TRP:O	1:M:401:ASN:HB3	2.15	0.46
1:B:303:GLN:NE2	1:B:335:THR:HG21	2.31	0.46
1:C:162:ARG:HG3	1:C:244:ASP:HB2	1.98	0.46
1:D:148:SER:HB3	1:E:289:TYR:CE2	2.50	0.46
1:D:296:SER:OG	1:D:297:MET:N	2.48	0.46
1:D:362:LEU:HD23	1:D:362:LEU:HA	1.72	0.46
1:G:382:THR:OG1	1:G:385:VAL:HG23	2.16	0.46
1:I:110:GLY:O	1:I:111:GLN:CB	2.64	0.46
1:J:200:MET:HB2	1:J:228:ILE:O	2.16	0.46
1:K:71:ARG:HA	1:K:197:ASP:OD1	2.16	0.46
1:L:24:THR:HA	1:L:27:TYR:CE2	2.51	0.46
1:L:297:MET:CE	1:M:296:SER:CB	2.94	0.46
1:L:318:ASN:ND2	1:L:323:TRP:HE1	2.14	0.46
1:N:149:MET:HA	1:O:260:LEU:HD13	1.98	0.46
1:O:395:SER:O	1:O:396:ILE:C	2.58	0.46
1:A:99:VAL:HG12	1:A:100:TRP:N	2.31	0.46
1:B:209:ASP:HB2	1:B:228:ILE:HG12	1.97	0.46
1:D:92:ASP:O	1:D:96:GLN:HB2	2.15	0.46
1:D:361:TYR:CD2	1:E:185:CYS:HB2	2.51	0.46
1:E:54:LYS:HD2	1:E:55:GLN:N	2.31	0.46
1:F:162:ARG:O	1:F:163:PRO:C	2.58	0.46
1:H:78:PRO:HD3	1:H:452:LYS:HA	1.97	0.46
1:I:327:LEU:HA	1:I:327:LEU:HD23	1.53	0.46
1:I:461:GLN:HE22	1:J:21:VAL:HB	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:105:VAL:CG1	1:K:106:GLU:N	2.79	0.46
1:K:188:LEU:HD22	1:K:188:LEU:H	1.81	0.46
1:K:262:ASN:ND2	1:K:289:TYR:CD2	2.84	0.46
1:L:247:PHE:HB2	1:L:314:ALA:HB1	1.97	0.46
1:L:273:ALA:HA	1:L:276:TYR:CE2	2.50	0.46
1:M:72:VAL:CG2	1:M:197:ASP:N	2.78	0.46
1:M:149:MET:HE2	1:M:205:PHE:CE1	2.50	0.46
1:M:157:CYS:O	1:M:249:TYR:HA	2.15	0.46
1:O:72:VAL:HG21	1:O:195:LEU:C	2.41	0.46
1:O:116:GLY:C	1:O:117:ILE:HG22	2.39	0.46
1:A:54:LYS:HG3	1:A:56:ASP:H	1.80	0.45
1:C:258:ARG:HH11	1:C:258:ARG:HD2	1.46	0.45
1:F:372:PHE:O	1:F:373:ILE:HG13	2.16	0.45
1:H:97:ARG:O	1:H:98:LEU:HD23	2.16	0.45
1:H:237:MET:HG2	1:H:245:MET:HE3	1.97	0.45
1:I:72:VAL:HG22	1:I:330:THR:HG23	1.97	0.45
1:I:152:LYS:HB2	1:I:255:MET:HG3	1.99	0.45
1:L:181:LYS:HE2	1:L:184:GLU:HG2	1.97	0.45
1:M:372:PHE:O	1:M:373:ILE:HG13	2.16	0.45
1:M:373:ILE:HD13	1:M:468:PHE:HB2	1.97	0.45
1:D:323:TRP:NE1	1:D:392:MET:HE1	2.31	0.45
1:F:361:TYR:CD1	1:G:185:CYS:HB2	2.51	0.45
1:G:373:ILE:HG21	1:G:373:ILE:HD13	1.70	0.45
1:I:393:ASN:ND2	1:I:395:SER:H	2.14	0.45
1:J:249:TYR:C	1:J:250:LEU:HG	2.42	0.45
1:K:45:VAL:HG12	1:K:46:GLY:N	2.30	0.45
1:K:209:ASP:O	1:K:213:LEU:HB2	2.16	0.45
1:L:66:SER:HB3	1:L:69:GLN:HG3	1.99	0.45
1:N:124:ASN:ND2	1:N:263:ARG:HD3	2.32	0.45
1:N:305:PHE:CE1	1:N:333:ASP:HB2	2.51	0.45
1:O:22:VAL:CG1	1:O:23:SER:N	2.79	0.45
1:O:54:LYS:HZ3	1:O:55:GLN:HB3	1.81	0.45
1:A:179:GLN:O	1:A:181:LYS:N	2.49	0.45
1:B:219:ASP:HB2	1:B:263:ARG:NH1	2.32	0.45
1:C:253:GLU:O	1:C:254:GLN:HB3	2.14	0.45
1:C:311:LEU:HG	1:C:311:LEU:O	2.16	0.45
1:C:336:ARG:HH11	1:C:336:ARG:HG3	1.81	0.45
1:C:355:ASN:HB3	1:D:265:GLY:HA2	1.97	0.45
1:D:234:TYR:O	1:D:238:VAL:HG23	2.16	0.45
1:D:262:ASN:HD22	1:D:262:ASN:HA	1.49	0.45
1:E:245:MET:HE2	1:E:245:MET:HB2	1.74	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:41:ARG:HH11	1:G:190:LEU:HD23	1.80	0.45
1:F:74:ARG:HD2	1:F:446:PHE:HD1	1.82	0.45
1:F:148:SER:HG	1:G:129:THR:HG1	1.61	0.45
1:G:54:LYS:CD	1:G:55:GLN:H	2.29	0.45
1:G:210:PHE:CE2	1:G:220:VAL:HG11	2.52	0.45
1:H:250:LEU:CB	1:H:304:ILE:HD11	2.46	0.45
1:J:122:LEU:O	1:J:144:ARG:HD2	2.16	0.45
1:J:155:GLN:OE1	1:J:304:ILE:HG22	2.16	0.45
1:K:295:GLY:O	1:K:296:SER:HB3	2.15	0.45
1:M:163:PRO:O	1:M:163:PRO:HG2	2.17	0.45
1:O:53:LYS:O	1:O:54:LYS:C	2.60	0.45
1:O:200:MET:HE2	1:O:223:ASP:O	2.16	0.45
1:O:258:ARG:O	1:O:259:HIS:ND1	2.50	0.45
1:A:34:TYR:HA	1:A:374:PHE:O	2.16	0.45
1:A:123:LEU:HA	1:A:218:SER:O	2.16	0.45
1:A:304:ILE:HG23	1:A:305:PHE:N	2.32	0.45
1:A:383:ALA:HB3	1:F:92:ASP:CG	2.41	0.45
1:C:354:LYS:HA	1:D:141:THR:CG2	2.47	0.45
1:F:192:ASN:C	1:F:193:THR:HG22	2.40	0.45
1:F:362:LEU:HA	1:F:362:LEU:HD23	1.76	0.45
1:G:254:GLN:NE2	1:G:295:GLY:O	2.47	0.45
1:H:21:VAL:C	1:H:22:VAL:HG23	2.39	0.45
1:H:169:TRP:H	1:H:208:MET:HA	1.81	0.45
1:I:115:VAL:CG2	1:J:257:VAL:HG22	2.31	0.45
1:L:121:PRO:CD	1:L:222:LEU:HD21	2.38	0.45
1:O:35:TYR:CZ	1:O:457:ALA:HB2	2.51	0.45
1:A:123:LEU:O	1:A:144:ARG:HB3	2.16	0.45
1:A:185:CYS:HB2	1:E:361:TYR:CG	2.52	0.45
1:B:91:TYR:CE1	1:B:96:GLN:HB2	2.51	0.45
1:B:201:VAL:HG11	1:B:332:VAL:HG11	1.98	0.45
1:B:346:VAL:O	1:B:346:VAL:HG12	2.16	0.45
1:B:361:TYR:CD2	1:C:185:CYS:HB2	2.51	0.45
1:C:149:MET:HE1	1:C:205:PHE:CE1	2.52	0.45
1:C:156:LEU:C	1:C:156:LEU:CD1	2.81	0.45
1:D:114:GLY:O	1:D:335:THR:O	2.34	0.45
1:D:196:GLN:O	1:D:197:ASP:C	2.56	0.45
1:E:68:LEU:HD22	1:E:203:THR:HG22	1.98	0.45
1:E:385:VAL:O	1:E:389:ILE:HG13	2.16	0.45
1:F:117:ILE:CG1	1:F:148:SER:HB2	2.46	0.45
1:F:240:GLU:HG3	1:F:241:PRO:HD2	1.98	0.45
1:F:289:TYR:CE2	1:J:148:SER:HB3	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:262:ASN:HD22	1:I:262:ASN:HA	1.57	0.45
1:I:304:ILE:HG23	1:I:305:PHE:CE2	2.52	0.45
1:J:101:ALA:HA	1:J:320:GLY:O	2.16	0.45
1:K:155:GLN:HB2	1:K:252:ARG:HB3	1.99	0.45
1:K:163:PRO:HD3	1:K:328:PHE:CZ	2.51	0.45
1:L:165:ILE:CD1	1:L:236:LYS:HD3	2.47	0.45
1:L:367:GLU:OE2	1:M:235:LEU:HD12	2.16	0.45
1:M:222:LEU:HA	1:M:225:CYS:SG	2.56	0.45
1:M:240:GLU:HG2	1:M:243:GLY:H	1.80	0.45
1:O:29:THR:HB	1:O:378:LYS:HG2	1.98	0.45
1:O:223:ASP:OD1	1:O:224:ILE:HG23	2.16	0.45
1:B:26:GLU:HA	1:B:26:GLU:OE2	2.17	0.45
1:B:112:PRO:C	1:B:113:LEU:O	2.55	0.45
1:B:373:ILE:HD12	1:B:464:LEU:HD22	1.99	0.45
1:D:371:GLN:HB3	1:D:464:LEU:HD12	1.98	0.45
1:F:296:SER:OG	1:F:297:MET:N	2.46	0.45
1:I:208:MET:O	1:I:228:ILE:HA	2.16	0.45
1:J:27:TYR:CE2	1:J:388:TYR:CE2	3.04	0.45
1:J:171:LYS:HE2	1:J:186:PRO:HG3	1.98	0.45
1:K:352:THR:HA	1:M:278:LYS:O	2.17	0.45
1:L:80:PRO:HD2	1:L:325:ASN:OD1	2.17	0.45
1:L:216:ASN:O	1:L:217:LYS:HG2	2.16	0.45
1:L:469:LEU:HD23	1:L:469:LEU:HA	1.82	0.45
1:M:364:HIS:CD2	1:M:365:GLY:N	2.85	0.45
1:M:459:LEU:HD12	1:M:469:LEU:HD21	1.98	0.45
1:O:304:ILE:HG23	1:O:305:PHE:CD1	2.52	0.45
1:O:467:LYS:O	1:O:468:PHE:C	2.58	0.45
1:A:290:PHE:HA	1:A:291:PRO:HD3	1.74	0.45
1:B:188:LEU:HD22	1:B:188:LEU:N	2.32	0.45
1:B:201:VAL:CG1	1:B:332:VAL:HG21	2.46	0.45
1:C:217:LYS:HG3	1:D:276:TYR:HA	1.99	0.45
1:D:280:THR:O	1:D:281:THR:HB	2.17	0.45
1:E:149:MET:HE1	1:E:205:PHE:HZ	1.80	0.45
1:F:75:VAL:HB	1:F:327:LEU:HB2	1.98	0.45
1:F:126:LEU:HB3	1:F:262:ASN:HB3	1.98	0.45
1:H:69:GLN:HE21	1:H:71:ARG:HH22	1.64	0.45
1:H:123:LEU:HD12	1:H:218:SER:O	2.17	0.45
1:H:393:ASN:HB3	1:H:396:ILE:CD1	2.45	0.45
1:I:50:TYR:HA	1:I:64:LYS:HD2	1.99	0.45
1:I:298:VAL:C	1:I:299:THR:HG23	2.41	0.45
1:J:219:ASP:O	1:J:220:VAL:HG13	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:257:VAL:HG13	1:K:291:PRO:HB2	1.97	0.45
1:L:32:ASN:HD22	1:L:32:ASN:HA	1.24	0.45
1:L:123:LEU:HD23	1:L:147:ILE:HD12	1.97	0.45
1:L:351:SER:O	1:N:278:LYS:HB2	2.16	0.45
1:D:32:ASN:C	1:D:33:ILE:HD13	2.42	0.45
1:E:150:ASP:CG	1:E:150:ASP:O	2.60	0.45
1:E:474:LEU:HB3	1:F:474:LEU:HD13	1.98	0.45
1:F:25:ASP:N	1:F:25:ASP:OD1	2.47	0.45
1:F:314:ALA:CB	1:F:319:ASN:HA	2.46	0.45
1:G:386:MET:HG2	1:G:397:LEU:CD2	2.47	0.45
1:H:221:PRO:O	1:H:225:CYS:HB3	2.17	0.45
1:H:272:PRO:HD2	1:H:275:LEU:HD12	1.98	0.45
1:I:297:MET:HE2	1:J:256:PHE:CD2	2.52	0.45
1:J:98:LEU:HA	1:J:98:LEU:HD23	1.67	0.45
1:B:97:ARG:O	1:B:378:LYS:HA	2.16	0.45
1:C:233:ASP:OD1	1:C:233:ASP:C	2.59	0.45
1:D:53:LYS:HD3	1:D:58:ASN:HA	1.99	0.45
1:F:185:CYS:HB2	1:J:361:TYR:CG	2.51	0.45
1:H:222:LEU:HA	1:H:225:CYS:SG	2.56	0.45
1:H:284:LEU:HA	1:H:284:LEU:HD12	1.59	0.45
1:H:394:PRO:O	1:H:395:SER:C	2.59	0.45
1:I:232:PRO:HB2	1:I:234:TYR:CE1	2.52	0.45
1:J:83:PHE:HB3	1:J:85:PHE:CE1	2.52	0.45
1:J:133:ASN:C	1:J:134:LYS:HG2	2.42	0.45
1:J:219:ASP:HB2	1:J:263:ARG:CZ	2.47	0.45
1:L:119:GLY:CA	1:L:148:SER:HA	2.46	0.45
1:L:164:PRO:HG3	1:L:330:THR:OG1	2.17	0.45
1:M:244:ASP:O	1:M:245:MET:C	2.60	0.45
1:N:200:MET:HE2	1:N:223:ASP:O	2.17	0.45
1:N:295:GLY:O	1:N:296:SER:HB3	2.16	0.45
1:O:77:LEU:HB2	1:O:325:ASN:O	2.16	0.45
1:B:210:PHE:HD2	1:B:214:GLN:OE1	2.00	0.45
1:B:318:ASN:OD1	1:B:318:ASN:C	2.60	0.45
1:B:380:THR:HG21	1:J:380:THR:HG21	1.98	0.45
1:D:163:PRO:HD3	1:D:328:PHE:CE1	2.52	0.45
1:D:311:LEU:HD23	1:D:311:LEU:N	2.30	0.45
1:E:327:LEU:HD23	1:E:327:LEU:HA	1.39	0.45
1:E:379:ILE:HD12	1:E:400:TRP:HH2	1.82	0.45
1:F:291:PRO:HG2	1:F:291:PRO:O	2.16	0.45
1:G:119:GLY:O	1:G:221:PRO:HB3	2.17	0.45
1:I:181:LYS:HD3	1:I:181:LYS:N	2.27	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:181:LYS:HE2	1:I:184:GLU:OE2	2.17	0.45
1:I:280:THR:O	1:I:281:THR:HB	2.17	0.45
1:I:381:LEU:CB	1:I:386:MET:HE2	2.36	0.45
1:J:79:ASP:O	1:J:81:ASN:N	2.49	0.45
1:J:107:VAL:O	1:J:107:VAL:CG1	2.61	0.45
1:K:381:LEU:HD22	1:K:386:MET:HG2	1.98	0.45
1:N:240:GLU:OE2	1:N:245:MET:HE2	2.17	0.45
1:O:300:SER:O	1:O:303:GLN:HB2	2.16	0.45
1:O:337:SER:HA	1:O:364:HIS:HE1	1.82	0.45
1:A:151:TYR:CE1	1:A:203:THR:HG21	2.52	0.44
1:A:222:LEU:HD22	1:A:222:LEU:H	1.82	0.44
1:D:109:ARG:NH2	1:D:333:ASP:OD2	2.50	0.44
1:D:209:ASP:HB2	1:D:228:ILE:HG12	1.99	0.44
1:E:395:SER:O	1:E:396:ILE:C	2.59	0.44
1:F:96:GLN:HE22	1:F:378:LYS:HD3	1.82	0.44
1:G:299:THR:O	1:G:300:SER:C	2.59	0.44
1:H:330:THR:O	1:H:331:VAL:HG23	2.17	0.44
1:I:393:ASN:ND2	1:I:393:ASN:C	2.75	0.44
1:J:80:PRO:HD2	1:J:325:ASN:OD1	2.17	0.44
1:J:165:ILE:HG23	1:J:245:MET:SD	2.57	0.44
1:K:117:ILE:HG13	1:L:260:LEU:CD2	2.45	0.44
1:K:160:GLY:HA3	1:K:245:MET:O	2.17	0.44
1:L:54:LYS:HB3	1:L:57:SER:HB3	1.99	0.44
1:M:72:VAL:HG23	1:M:197:ASP:N	2.31	0.44
1:N:122:LEU:O	1:N:144:ARG:HD2	2.17	0.44
1:N:185:CYS:HA	1:N:186:PRO:HD2	1.77	0.44
1:A:122:LEU:HD13	1:A:144:ARG:NH2	2.32	0.44
1:B:29:THR:HG22	1:B:30:ARG:N	2.30	0.44
1:B:71:ARG:HD3	1:B:71:ARG:HA	1.72	0.44
1:B:340:MET:HB2	1:C:208:MET:SD	2.58	0.44
1:C:368:TYR:CD1	1:C:368:TYR:N	2.85	0.44
1:F:91:TYR:HE1	1:F:96:GLN:HB2	1.81	0.44
1:G:24:THR:C	1:G:26:GLU:N	2.73	0.44
1:G:69:GLN:HE21	1:G:71:ARG:NH2	2.15	0.44
1:G:305:PHE:O	1:G:307:LYS:HG3	2.16	0.44
1:H:220:VAL:HG12	1:H:224:ILE:HD11	1.99	0.44
1:I:158:LEU:O	1:I:159:ILE:HD13	2.17	0.44
1:I:297:MET:HG3	1:J:255:MET:C	2.43	0.44
1:K:380:THR:O	1:K:382:THR:HG23	2.17	0.44
1:L:52:ILE:HB	1:L:62:VAL:HG23	1.98	0.44
1:M:152:LYS:NZ	1:M:152:LYS:HD2	2.31	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:164:PRO:HA	1:M:245:MET:HG3	1.99	0.44
1:N:34:TYR:C	1:N:35:TYR:HD1	2.25	0.44
1:N:66:SER:HB3	1:N:69:GLN:HG3	1.99	0.44
1:N:257:VAL:HG12	1:N:291:PRO:HB2	1.98	0.44
1:O:371:GLN:CB	1:O:464:LEU:HD12	2.48	0.44
1:E:123:LEU:HD22	1:E:147:ILE:HB	1.99	0.44
1:G:44:ALA:O	1:G:365:GLY:HA2	2.17	0.44
1:G:119:GLY:N	1:G:221:PRO:HB3	2.32	0.44
1:G:361:TYR:CG	1:H:185:CYS:HB2	2.53	0.44
1:H:149:MET:HE2	1:H:293:PRO:HD2	2.00	0.44
1:H:324:SER:O	1:H:325:ASN:C	2.59	0.44
1:I:33:ILE:HD11	1:I:87:ASP:CB	2.47	0.44
1:I:255:MET:CE	1:I:293:PRO:HB3	2.37	0.44
1:J:393:ASN:ND2	1:J:394:PRO:HD2	2.23	0.44
1:K:331:VAL:HG11	1:K:368:TYR:HE2	1.81	0.44
1:L:297:MET:HE1	1:M:296:SER:CB	2.47	0.44
1:M:32:ASN:HD22	1:M:32:ASN:HA	1.62	0.44
1:M:103:THR:HB	1:M:373:ILE:HG22	1.99	0.44
1:M:105:VAL:CG1	1:M:106:GLU:N	2.78	0.44
1:M:237:MET:HG2	1:M:245:MET:HG2	1.99	0.44
1:M:364:HIS:CD2	1:M:365:GLY:H	2.35	0.44
1:O:70:TYR:HE1	1:O:201:VAL:HA	1.82	0.44
1:O:161:CYS:O	1:O:162:ARG:HG2	2.18	0.44
1:C:101:ALA:O	1:C:374:PHE:HA	2.18	0.44
1:D:149:MET:CE	1:D:292:THR:HG23	2.40	0.44
1:E:24:THR:CG2	1:E:319:ASN:H	2.30	0.44
1:I:123:LEU:HD22	1:I:147:ILE:HB	1.99	0.44
1:I:342:VAL:CG2	1:I:361:TYR:HB2	2.47	0.44
1:J:32:ASN:HD22	1:J:32:ASN:HA	1.43	0.44
1:J:82:LYS:O	1:J:83:PHE:O	2.36	0.44
1:K:45:VAL:CA	1:K:65:VAL:HG21	2.47	0.44
1:K:114:GLY:C	1:K:115:VAL:CG1	2.90	0.44
1:K:148:SER:O	1:K:149:MET:HB3	2.17	0.44
1:K:165:ILE:HG23	1:K:245:MET:SD	2.57	0.44
1:L:99:VAL:HG12	1:L:100:TRP:O	2.18	0.44
1:L:304:ILE:HG21	1:L:304:ILE:HD13	1.59	0.44
1:L:381:LEU:HD21	1:L:400:TRP:CZ3	2.53	0.44
1:N:101:ALA:HA	1:N:320:GLY:O	2.18	0.44
1:N:119:GLY:O	1:N:222:LEU:HD22	2.17	0.44
1:A:363:ARG:HD3	1:A:363:ARG:HA	1.78	0.44
1:D:47:HIS:HB2	1:D:52:ILE:HD11	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:120:HIS:HE1	1:D:122:LEU:HB2	1.82	0.44
1:F:109:ARG:HH11	1:F:109:ARG:CB	2.22	0.44
1:F:311:LEU:HD23	1:F:311:LEU:H	1.83	0.44
1:G:47:HIS:O	1:G:64:LYS:HA	2.17	0.44
1:H:54:LYS:CD	1:H:55:GLN:H	2.30	0.44
1:H:181:LYS:HD3	1:H:181:LYS:N	2.32	0.44
1:H:393:ASN:HD22	1:H:394:PRO:CD	2.30	0.44
1:I:120:HIS:HA	1:I:222:LEU:HD22	1.98	0.44
1:I:220:VAL:CG2	1:I:225:CYS:HA	2.47	0.44
1:K:22:VAL:HG12	1:K:23:SER:N	2.33	0.44
1:L:263:ARG:NH1	1:L:290:PHE:CE2	2.85	0.44
1:L:298:VAL:C	1:L:299:THR:HG23	2.41	0.44
1:L:370:LEU:HA	1:L:370:LEU:HD23	1.80	0.44
1:M:115:VAL:HG21	1:N:257:VAL:HG22	1.99	0.44
1:M:123:LEU:HD12	1:M:218:SER:O	2.18	0.44
1:M:222:LEU:HD12	1:N:275:LEU:HD13	2.00	0.44
1:M:462:PHE:O	1:M:463:PRO:C	2.60	0.44
1:N:103:THR:HG22	1:N:103:THR:O	2.17	0.44
1:N:393:ASN:HD22	1:N:394:PRO:CD	2.29	0.44
1:A:193:THR:HG21	1:A:230:LYS:HE2	2.00	0.44
1:B:46:GLY:O	1:B:363:ARG:HA	2.18	0.44
1:D:92:ASP:OD1	1:D:94:ALA:HB3	2.18	0.44
1:D:156:LEU:HA	1:D:250:LEU:O	2.18	0.44
1:D:469:LEU:HD23	1:D:469:LEU:HA	1.51	0.44
1:E:47:HIS:O	1:E:64:LYS:HA	2.17	0.44
1:E:106:GLU:HG2	1:E:308:PRO:HA	2.00	0.44
1:G:54:LYS:HZ3	1:G:56:ASP:N	2.15	0.44
1:G:138:ASN:C	1:G:139:SER:O	2.58	0.44
1:G:144:ARG:NH1	1:G:218:SER:OG	2.50	0.44
1:H:71:ARG:HD3	1:H:71:ARG:HA	1.55	0.44
1:H:149:MET:HE1	1:H:205:PHE:HZ	1.82	0.44
1:H:242:TYR:CE2	1:H:392:MET:HG3	2.52	0.44
1:I:40:SER:HB3	1:I:454:LYS:NZ	2.33	0.44
1:I:117:ILE:HD11	1:J:260:LEU:HB3	1.98	0.44
1:I:363:ARG:NH2	1:J:269:GLU:OE1	2.39	0.44
1:J:220:VAL:O	1:J:221:PRO:C	2.60	0.44
1:O:311:LEU:H	1:O:311:LEU:CD2	2.23	0.44
1:A:115:VAL:HG21	1:B:257:VAL:HG22	2.00	0.44
1:A:220:VAL:HG21	1:A:225:CYS:HA	1.99	0.44
1:B:237:MET:CB	1:B:246:LEU:CD2	2.96	0.44
1:B:327:LEU:HD23	1:B:327:LEU:HA	1.67	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:39:SER:C	1:C:40:SER:O	2.60	0.44
1:C:74:ARG:HD2	1:C:446:PHE:HD1	1.83	0.44
1:C:233:ASP:O	1:C:237:MET:HG3	2.18	0.44
1:D:466:ARG:NH1	1:E:315:GLN:O	2.50	0.44
1:E:74:ARG:HG3	1:E:328:PHE:CZ	2.52	0.44
1:E:288:SER:OG	1:E:288:SER:O	2.35	0.44
1:H:373:ILE:HD12	1:H:464:LEU:HD22	1.99	0.44
1:I:120:HIS:HA	1:I:121:PRO:HD3	1.78	0.44
1:J:53:LYS:O	1:J:54:LYS:C	2.61	0.44
1:L:209:ASP:OD2	1:L:209:ASP:O	2.36	0.44
1:O:133:ASN:HD22	1:O:133:ASN:N	2.14	0.44
1:O:149:MET:HE1	1:O:205:PHE:CZ	2.53	0.44
1:O:373:ILE:CD1	1:O:464:LEU:HD22	2.45	0.44
1:B:102:CYS:SG	1:B:103:THR:N	2.91	0.44
1:B:123:LEU:HD12	1:B:219:ASP:HA	1.99	0.44
1:B:167:GLU:HG3	1:B:231:TYR:O	2.17	0.44
1:C:442:LYS:HE3	1:C:442:LYS:HB3	1.67	0.44
1:D:68:LEU:O	1:D:201:VAL:HG22	2.18	0.44
1:E:103:THR:HG21	1:E:468:PHE:CE1	2.53	0.44
1:F:257:VAL:HG22	1:J:115:VAL:CG2	2.42	0.44
1:F:318:ASN:OD1	1:F:321:ILE:CB	2.56	0.44
1:F:440:PRO:HG2	1:F:441:LEU:H	1.81	0.44
1:G:299:THR:HG22	1:H:254:GLN:HB2	1.99	0.44
1:I:50:TYR:CD1	1:I:50:TYR:C	2.95	0.44
1:K:353:TYR:HE1	1:L:216:ASN:HB2	1.83	0.44
1:L:69:GLN:NE2	1:L:71:ARG:NH2	2.66	0.44
1:M:72:VAL:HG21	1:M:196:GLN:HA	2.00	0.44
1:M:278:LYS:HD3	1:M:278:LYS:HA	1.84	0.44
1:N:123:LEU:HG	1:N:124:ASN:N	2.32	0.44
1:N:310:TRP:O	1:N:312:GLN:N	2.51	0.44
1:N:461:GLN:H	1:N:461:GLN:HG2	1.43	0.44
1:O:342:VAL:CG2	1:O:361:TYR:HB2	2.48	0.44
1:O:363:ARG:HA	1:O:363:ARG:HD3	1.91	0.44
1:B:299:THR:HG22	1:C:254:GLN:HB2	1.98	0.44
1:C:102:CYS:O	1:C:311:LEU:HD11	2.18	0.44
1:D:395:SER:O	1:D:396:ILE:C	2.59	0.44
1:E:47:HIS:HB2	1:E:52:ILE:HD11	1.98	0.44
1:E:66:SER:HB3	1:E:69:GLN:HG3	2.00	0.44
1:E:75:VAL:HB	1:E:327:LEU:HB2	1.98	0.44
1:E:464:LEU:HD22	1:E:464:LEU:C	2.43	0.44
1:F:79:ASP:C	1:F:81:ASN:H	2.26	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:120:HIS:HA	1:F:222:LEU:HD22	1.99	0.44
1:G:21:VAL:HG12	1:G:22:VAL:N	2.32	0.44
1:G:363:ARG:HA	1:G:363:ARG:HD3	1.80	0.44
1:K:157:CYS:O	1:K:249:TYR:HA	2.17	0.44
1:K:200:MET:O	1:K:229:CYS:HA	2.18	0.44
1:K:362:LEU:HD23	1:K:362:LEU:HA	1.79	0.44
1:L:223:ASP:OD1	1:L:224:ILE:N	2.51	0.44
1:N:37:ALA:HA	1:N:454:LYS:O	2.18	0.44
1:N:461:GLN:HE21	1:N:461:GLN:HB3	1.54	0.44
1:O:287:THR:HG22	1:O:289:TYR:CE1	2.53	0.44
1:B:258:ARG:HD2	1:B:258:ARG:HH11	1.57	0.43
1:B:450:ASP:OD1	1:B:452:LYS:HB2	2.18	0.43
1:B:450:ASP:OD1	1:B:452:LYS:HG3	2.18	0.43
1:C:32:ASN:HD22	1:C:32:ASN:HA	1.57	0.43
1:E:28:VAL:HG22	1:E:379:ILE:HG12	1.98	0.43
1:E:272:PRO:HD2	1:E:275:LEU:CD1	2.39	0.43
1:F:232:PRO:HB2	1:F:234:TYR:CE1	2.53	0.43
1:G:153:GLN:NE2	1:G:298:VAL:HG13	2.33	0.43
1:H:23:SER:C	1:H:25:ASP:N	2.75	0.43
1:I:79:ASP:C	1:I:81:ASN:H	2.25	0.43
1:I:162:ARG:HG3	1:I:244:ASP:HB2	2.00	0.43
1:I:300:SER:OG	1:J:253:GLU:HG2	2.18	0.43
1:I:323:TRP:HE1	1:I:392:MET:HE1	1.82	0.43
1:M:327:LEU:CD1	1:M:374:PHE:HE2	2.31	0.43
1:O:54:LYS:NZ	1:O:55:GLN:HB3	2.33	0.43
1:O:464:LEU:CD2	1:O:464:LEU:C	2.90	0.43
1:B:22:VAL:HG12	1:B:23:SER:N	2.32	0.43
1:B:258:ARG:HB2	1:B:294:SER:HB2	1.99	0.43
1:B:314:ALA:HB2	1:B:319:ASN:HA	1.99	0.43
1:C:80:PRO:HD2	1:C:325:ASN:OD1	2.18	0.43
1:C:297:MET:HB2	1:D:256:PHE:HB3	2.01	0.43
1:D:181:LYS:CD	1:D:181:LYS:N	2.79	0.43
1:E:170:GLY:O	1:E:189:GLU:N	2.49	0.43
1:E:363:ARG:HD3	1:E:363:ARG:HA	1.84	0.43
1:F:32:ASN:C	1:F:33:ILE:HD13	2.43	0.43
1:F:125:LYS:HE3	1:F:261:PHE:CE2	2.53	0.43
1:G:312:GLN:HG3	1:G:313:ARG:H	1.83	0.43
1:H:220:VAL:CG1	1:H:224:ILE:HD11	2.48	0.43
1:I:32:ASN:HD22	1:I:32:ASN:HA	1.43	0.43
1:L:240:GLU:HG3	1:L:241:PRO:HD2	1.99	0.43
1:M:72:VAL:HG11	1:M:195:LEU:O	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:52:ILE:O	1:N:61:ALA:HB3	2.18	0.43
1:O:44:ALA:O	1:O:65:VAL:HG11	2.19	0.43
1:O:66:SER:HB3	1:O:69:GLN:HG3	1.99	0.43
1:O:79:ASP:OD1	1:O:79:ASP:C	2.62	0.43
1:O:149:MET:HE3	1:O:292:THR:HG23	1.99	0.43
1:O:152:LYS:HA	1:O:255:MET:HB2	1.98	0.43
1:O:210:PHE:HD2	1:O:214:GLN:OE1	2.00	0.43
1:A:44:ALA:O	1:A:365:GLY:HA2	2.18	0.43
1:A:299:THR:O	1:A:300:SER:C	2.62	0.43
1:B:190:LEU:HA	1:B:190:LEU:HD12	1.61	0.43
1:B:449:VAL:O	1:B:449:VAL:HG12	2.17	0.43
1:C:47:HIS:HB3	1:C:50:TYR:O	2.17	0.43
1:D:52:ILE:HG21	1:E:269:GLU:HG2	2.00	0.43
1:D:117:ILE:HG21	1:E:291:PRO:HD3	1.99	0.43
1:E:220:VAL:CG2	1:E:225:CYS:HA	2.48	0.43
1:F:32:ASN:HD22	1:F:32:ASN:HA	1.35	0.43
1:F:231:TYR:O	1:F:232:PRO:C	2.58	0.43
1:F:283:THR:O	1:F:284:LEU:CB	2.66	0.43
1:G:111:GLN:HB3	1:G:112:PRO:HD2	1.99	0.43
1:G:212:THR:OG1	1:G:213:LEU:HD13	2.18	0.43
1:I:147:ILE:HA	1:J:129:THR:O	2.18	0.43
1:K:109:ARG:NH1	1:K:367:GLU:O	2.51	0.43
1:K:269:GLU:HG3	1:O:361:TYR:CE2	2.54	0.43
1:L:29:THR:HG22	1:L:30:ARG:N	2.32	0.43
1:O:117:ILE:CG1	1:O:148:SER:HB2	2.48	0.43
1:O:470:LEU:HD12	1:O:470:LEU:HA	1.60	0.43
1:B:171:LYS:HE2	1:B:186:PRO:HG3	2.00	0.43
1:C:76:LYS:HD2	1:C:452:LYS:HZ1	1.82	0.43
1:C:231:TYR:CD2	1:C:231:TYR:C	2.95	0.43
1:C:312:GLN:HG3	1:C:313:ARG:N	2.32	0.43
1:D:110:GLY:C	1:D:111:GLN:HG2	2.43	0.43
1:E:152:LYS:CB	1:E:255:MET:HB2	2.49	0.43
1:F:54:LYS:HD2	1:F:55:GLN:H	1.83	0.43
1:F:394:PRO:O	1:F:395:SER:C	2.61	0.43
1:G:133:ASN:N	1:G:133:ASN:ND2	2.63	0.43
1:G:143:ASN:OD1	1:G:143:ASN:N	2.50	0.43
1:G:165:ILE:CD1	1:G:236:LYS:HD3	2.49	0.43
1:I:297:MET:HG3	1:J:255:MET:O	2.18	0.43
1:K:110:GLY:C	1:K:111:GLN:HG2	2.41	0.43
1:K:169:TRP:CD1	1:O:340:MET:HE1	2.54	0.43
1:K:459:LEU:N	1:K:459:LEU:HD23	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:120:HIS:HA	1:L:222:LEU:HD22	2.00	0.43
1:L:368:TYR:N	1:L:368:TYR:CD1	2.86	0.43
1:M:29:THR:HG22	1:M:30:ARG:N	2.34	0.43
1:M:42:LEU:HD22	1:M:447:TRP:HE1	1.81	0.43
1:M:91:TYR:CE1	1:M:96:GLN:HB2	2.52	0.43
1:M:119:GLY:O	1:M:221:PRO:HB3	2.17	0.43
1:M:181:LYS:O	1:M:184:GLU:HB2	2.18	0.43
1:M:222:LEU:O	1:M:224:ILE:N	2.52	0.43
1:O:99:VAL:HG11	1:O:321:ILE:CG2	2.48	0.43
1:O:155:GLN:HB2	1:O:252:ARG:HB3	2.00	0.43
1:B:117:ILE:HD12	1:C:260:LEU:CD2	2.49	0.43
1:B:126:LEU:HB3	1:B:262:ASN:HB3	2.01	0.43
1:C:42:LEU:HB3	1:C:447:TRP:HZ2	1.83	0.43
1:C:156:LEU:HD12	1:C:157:CYS:N	2.32	0.43
1:D:340:MET:SD	1:E:169:TRP:CD1	3.12	0.43
1:E:131:ASN:O	1:E:132:SER:C	2.61	0.43
1:F:39:SER:OG	1:F:42:LEU:HD11	2.18	0.43
1:G:155:GLN:HB3	1:G:304:ILE:CG2	2.49	0.43
1:G:240:GLU:OE2	1:G:245:MET:HE2	2.18	0.43
1:H:123:LEU:HD23	1:H:147:ILE:CD1	2.48	0.43
1:I:299:THR:HG22	1:J:254:GLN:HB2	1.99	0.43
1:J:54:LYS:HZ3	1:J:55:GLN:N	2.17	0.43
1:J:167:GLU:O	1:J:167:GLU:HG3	2.18	0.43
1:J:324:SER:O	1:J:325:ASN:HB2	2.18	0.43
1:K:29:THR:HB	1:K:378:LYS:HG2	2.00	0.43
1:L:49:TYR:HA	1:L:223:ASP:HB3	2.01	0.43
1:L:87:ASP:O	1:L:90:PHE:CE1	2.72	0.43
1:L:215:ALA:C	1:L:217:LYS:H	2.26	0.43
1:N:167:GLU:O	1:N:167:GLU:HG3	2.19	0.43
1:A:78:PRO:HG2	1:A:100:TRP:HE1	1.84	0.43
1:A:117:ILE:HG21	1:B:291:PRO:HD3	2.01	0.43
1:B:340:MET:CE	1:C:169:TRP:CD1	2.94	0.43
1:E:237:MET:CG	1:E:245:MET:HG2	2.47	0.43
1:E:346:VAL:O	1:E:347:SER:HB3	2.18	0.43
1:H:361:TYR:CE2	1:I:268:GLY:HA3	2.54	0.43
1:I:465:GLY:O	1:I:468:PHE:HB3	2.18	0.43
1:L:46:GLY:O	1:L:363:ARG:HD3	2.19	0.43
1:L:180:VAL:HG12	1:L:184:GLU:HB2	2.00	0.43
1:N:181:LYS:HD3	1:N:181:LYS:H	1.83	0.43
1:N:340:MET:HB2	1:O:208:MET:SD	2.58	0.43
1:A:311:LEU:H	1:A:311:LEU:CD2	2.13	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:284:LEU:HA	1:B:285:PRO:HD2	1.80	0.43
1:B:342:VAL:CG2	1:B:361:TYR:HB2	2.49	0.43
1:B:442:LYS:O	1:B:442:LYS:CG	2.67	0.43
1:D:74:ARG:HG3	1:D:328:PHE:CZ	2.53	0.43
1:D:462:PHE:O	1:D:463:PRO:C	2.60	0.43
1:F:121:PRO:HB2	1:G:284:LEU:HD11	2.01	0.43
1:I:284:LEU:HA	1:I:285:PRO:HD2	1.82	0.43
1:K:211:THR:HG23	1:K:226:SER:CA	2.48	0.43
1:K:289:TYR:CE1	1:O:119:GLY:HA3	2.53	0.43
1:K:342:VAL:HG21	1:L:185:CYS:SG	2.58	0.43
1:K:361:TYR:CG	1:L:185:CYS:HB2	2.53	0.43
1:L:34:TYR:CD1	1:L:34:TYR:N	2.87	0.43
1:L:327:LEU:HD23	1:L:327:LEU:HA	1.59	0.43
1:M:149:MET:HE2	1:M:205:PHE:HE1	1.84	0.43
1:M:155:GLN:HB3	1:M:304:ILE:HG21	2.00	0.43
1:N:42:LEU:HB3	1:N:447:TRP:CZ2	2.53	0.43
1:N:117:ILE:O	1:N:117:ILE:CG2	2.64	0.43
1:N:207:ALA:CA	1:N:229:CYS:O	2.67	0.43
1:O:257:VAL:HG13	1:O:291:PRO:HB2	1.99	0.43
1:A:165:ILE:HD13	1:A:236:LYS:HD3	1.99	0.43
1:B:161:CYS:SG	1:B:244:ASP:HB3	2.59	0.43
1:C:131:ASN:O	1:C:132:SER:O	2.36	0.43
1:E:79:ASP:O	1:E:81:ASN:N	2.52	0.43
1:E:237:MET:HG2	1:E:245:MET:SD	2.59	0.43
1:F:106:GLU:HG2	1:F:308:PRO:CA	2.49	0.43
1:F:117:ILE:O	1:F:117:ILE:CG2	2.65	0.43
1:G:42:LEU:HB3	1:G:447:TRP:HZ2	1.83	0.43
1:H:122:LEU:O	1:H:218:SER:HB3	2.18	0.43
1:H:310:TRP:NE1	1:H:471:GLN:HG3	2.34	0.43
1:I:33:ILE:HB	1:I:376:LEU:HB2	2.01	0.43
1:I:67:GLY:H	1:I:364:HIS:CE1	2.37	0.43
1:I:278:LYS:HD3	1:I:278:LYS:HA	1.87	0.43
1:I:327:LEU:HD11	1:I:374:PHE:HE2	1.82	0.43
1:I:336:ARG:O	1:I:338:THR:N	2.51	0.43
1:J:35:TYR:CE2	1:J:457:ALA:HB2	2.54	0.43
1:K:50:TYR:CD1	1:K:50:TYR:C	2.97	0.43
1:K:110:GLY:O	1:K:111:GLN:HB2	2.19	0.43
1:L:185:CYS:HA	1:L:186:PRO:HD2	1.87	0.43
1:M:298:VAL:C	1:M:299:THR:CG2	2.92	0.43
1:M:343:CYS:H	1:N:214:GLN:HA	1.84	0.43
1:N:43:LEU:HD23	1:N:367:GLU:HG3	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:120:HIS:O	1:N:146:CYS:HA	2.18	0.43
1:N:216:ASN:O	1:N:217:LYS:HG2	2.19	0.43
1:N:359:LYS:CD	1:N:359:LYS:HB3	2.47	0.43
1:A:101:ALA:HA	1:A:320:GLY:O	2.18	0.43
1:C:22:VAL:CG1	1:C:26:GLU:HG3	2.49	0.43
1:C:72:VAL:HG21	1:C:195:LEU:O	2.19	0.43
1:C:109:ARG:HB2	1:C:336:ARG:CZ	2.48	0.43
1:C:262:ASN:HD22	1:C:262:ASN:HA	1.26	0.43
1:C:372:PHE:CB	1:C:374:PHE:CE1	3.02	0.43
1:E:358:PHE:CD1	1:E:358:PHE:N	2.87	0.43
1:F:124:ASN:HD21	1:F:263:ARG:HB3	1.83	0.43
1:F:153:GLN:O	1:F:253:GLU:HA	2.18	0.43
1:F:220:VAL:CG1	1:F:224:ILE:HD11	2.47	0.43
1:F:240:GLU:OE2	1:F:245:MET:HE2	2.18	0.43
1:F:284:LEU:HA	1:F:284:LEU:HD12	1.69	0.43
1:H:35:TYR:CD2	1:H:456:SER:O	2.72	0.43
1:I:53:LYS:HB2	1:I:59:LYS:O	2.19	0.43
1:J:139:SER:HB2	1:J:143:ASN:ND2	2.34	0.43
1:J:342:VAL:CG2	1:J:361:TYR:HB2	2.49	0.43
1:L:298:VAL:CG1	1:L:335:THR:HA	2.49	0.43
1:N:124:ASN:HD22	1:N:263:ARG:CD	2.32	0.43
1:N:157:CYS:O	1:N:249:TYR:HA	2.19	0.43
1:O:70:TYR:OH	1:O:232:PRO:HD3	2.19	0.43
1:O:91:TYR:HD1	1:O:96:GLN:NE2	2.17	0.43
1:A:71:ARG:HA	1:A:71:ARG:HD3	1.75	0.43
1:A:133:ASN:N	1:A:133:ASN:HD22	2.17	0.43
1:A:296:SER:HB2	1:E:297:MET:HE1	2.01	0.43
1:A:361:TYR:CD1	1:B:185:CYS:HB2	2.54	0.43
1:B:29:THR:HG22	1:B:30:ARG:O	2.19	0.43
1:B:210:PHE:HE1	1:B:229:CYS:HG	1.66	0.43
1:B:222:LEU:CD2	1:B:222:LEU:N	2.80	0.43
1:F:70:TYR:CE2	1:F:195:LEU:HD22	2.54	0.43
1:F:238:VAL:HG12	1:J:463:PRO:HG3	2.01	0.43
1:G:122:LEU:O	1:G:218:SER:HB3	2.19	0.43
1:G:389:ILE:O	1:G:392:MET:HB3	2.19	0.43
1:J:371:GLN:HB2	1:J:464:LEU:HD12	2.01	0.43
1:K:312:GLN:HG3	1:K:313:ARG:H	1.84	0.43
1:L:71:ARG:N	1:L:331:VAL:O	2.52	0.43
1:N:232:PRO:HB2	1:N:234:TYR:CZ	2.54	0.43
1:O:71:ARG:HG3	1:O:368:TYR:CZ	2.53	0.43
1:O:103:THR:HB	1:O:373:ILE:O	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:114:GLY:N	1:O:335:THR:O	2.44	0.43
1:A:296:SER:HB2	1:E:297:MET:CE	2.49	0.42
1:A:311:LEU:HD23	1:A:311:LEU:N	2.21	0.42
1:E:158:LEU:C	1:E:159:ILE:HD13	2.44	0.42
1:E:210:PHE:CD1	1:E:210:PHE:N	2.87	0.42
1:E:469:LEU:HD23	1:E:469:LEU:HA	1.56	0.42
1:H:120:HIS:HA	1:H:121:PRO:HD3	1.85	0.42
1:H:459:LEU:O	1:H:461:GLN:N	2.52	0.42
1:I:59:LYS:HE2	1:I:59:LYS:HB3	1.77	0.42
1:K:145:GLU:OE1	1:L:132:SER:HB3	2.18	0.42
1:K:269:GLU:HG3	1:O:361:TYR:CD2	2.54	0.42
1:A:24:THR:C	1:A:26:GLU:N	2.75	0.42
1:A:147:ILE:HG21	1:A:147:ILE:HD13	1.86	0.42
1:A:209:ASP:O	1:A:213:LEU:HB2	2.20	0.42
1:B:237:MET:HB2	1:B:246:LEU:HD21	2.01	0.42
1:C:92:ASP:OD1	1:C:92:ASP:C	2.60	0.42
1:C:117:ILE:HD13	1:D:289:TYR:HB3	2.01	0.42
1:C:181:LYS:CD	1:C:181:LYS:N	2.82	0.42
1:C:188:LEU:N	1:C:188:LEU:CD2	2.80	0.42
1:D:29:THR:HB	1:D:378:LYS:HG3	2.01	0.42
1:E:308:PRO:O	1:E:308:PRO:CG	2.67	0.42
1:F:292:THR:C	1:F:293:PRO:O	2.59	0.42
1:G:233:ASP:C	1:G:233:ASP:OD1	2.62	0.42
1:G:263:ARG:HG2	1:G:290:PHE:CD2	2.54	0.42
1:I:311:LEU:HD23	1:I:311:LEU:N	2.33	0.42
1:K:79:ASP:OD1	1:K:81:ASN:ND2	2.46	0.42
1:K:146:CYS:C	1:K:147:ILE:HG13	2.42	0.42
1:L:34:TYR:CD2	1:L:375:GLN:HB2	2.55	0.42
1:A:216:ASN:O	1:A:217:LYS:C	2.59	0.42
1:B:70:TYR:OH	1:B:232:PRO:HD3	2.19	0.42
1:C:284:LEU:HD12	1:C:284:LEU:HA	1.63	0.42
1:D:92:ASP:HB2	1:H:384:ASP:OD2	2.19	0.42
1:D:220:VAL:O	1:D:221:PRO:C	2.61	0.42
1:E:82:LYS:O	1:E:83:PHE:C	2.62	0.42
1:E:342:VAL:CG2	1:E:361:TYR:HB2	2.49	0.42
1:G:71:ARG:HD3	1:G:71:ARG:HA	1.43	0.42
1:H:22:VAL:HG12	1:H:23:SER:H	1.78	0.42
1:H:149:MET:HE1	1:H:205:PHE:CZ	2.54	0.42
1:H:372:PHE:C	1:H:373:ILE:HG13	2.43	0.42
1:I:22:VAL:CG1	1:I:23:SER:N	2.81	0.42
1:K:85:PHE:CB	1:K:88:THR:OG1	2.60	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:142:ASP:OD2	1:K:144:ARG:HG3	2.19	0.42
1:K:463:PRO:O	1:K:467:LYS:HG3	2.19	0.42
1:M:181:LYS:H	1:M:181:LYS:CD	2.30	0.42
1:M:235:LEU:HA	1:M:235:LEU:HD23	1.80	0.42
1:M:340:MET:HB2	1:N:208:MET:SD	2.59	0.42
1:M:370:LEU:HB3	1:M:372:PHE:CE1	2.54	0.42
1:N:103:THR:N	1:N:373:ILE:O	2.49	0.42
1:N:189:GLU:HG2	1:N:191:LEU:HD23	2.01	0.42
1:B:138:ASN:HD21	1:B:283:THR:HB	1.85	0.42
1:D:370:LEU:HB3	1:D:372:PHE:HZ	1.83	0.42
1:E:125:LYS:HE3	1:E:147:ILE:HD11	2.01	0.42
1:E:216:ASN:O	1:E:217:LYS:C	2.62	0.42
1:E:255:MET:HG2	1:E:256:PHE:H	1.78	0.42
1:F:92:ASP:HA	1:F:93:PRO:HD2	1.90	0.42
1:F:138:ASN:ND2	1:F:283:THR:OG1	2.35	0.42
1:F:285:PRO:HG2	1:J:121:PRO:HB3	2.02	0.42
1:G:157:CYS:HB2	1:G:305:PHE:HE2	1.84	0.42
1:H:22:VAL:HG11	1:H:26:GLU:HG3	2.01	0.42
1:H:181:LYS:H	1:H:181:LYS:CD	2.31	0.42
1:H:242:TYR:CZ	1:H:392:MET:HG3	2.54	0.42
1:K:153:GLN:O	1:K:253:GLU:HA	2.19	0.42
1:K:298:VAL:CG1	1:K:335:THR:HA	2.49	0.42
1:K:458:ASP:O	1:K:462:PHE:CE1	2.72	0.42
1:L:50:TYR:HE2	1:M:271:VAL:HG22	1.83	0.42
1:L:459:LEU:H	1:L:459:LEU:HG	1.51	0.42
1:M:331:VAL:HG11	1:M:368:TYR:CE2	2.50	0.42
1:O:23:SER:O	1:O:26:GLU:HB2	2.18	0.42
1:A:355:ASN:ND2	1:B:264:ALA:HB1	2.35	0.42
1:A:459:LEU:HD12	1:A:469:LEU:HD21	2.01	0.42
1:B:24:THR:C	1:B:26:GLU:N	2.78	0.42
1:B:165:ILE:HG23	1:B:245:MET:SD	2.59	0.42
1:B:232:PRO:O	1:B:234:TYR:N	2.52	0.42
1:B:240:GLU:HG2	1:B:242:TYR:H	1.85	0.42
1:C:109:ARG:HB3	1:C:109:ARG:CZ	2.47	0.42
1:C:131:ASN:O	1:C:132:SER:C	2.63	0.42
1:E:156:LEU:HD21	1:E:332:VAL:HB	2.00	0.42
1:E:323:TRP:O	1:E:324:SER:HB2	2.20	0.42
1:E:393:ASN:HD22	1:E:393:ASN:C	2.27	0.42
1:F:44:ALA:C	1:F:45:VAL:HG23	2.44	0.42
1:F:149:MET:HE1	1:F:205:PHE:HZ	1.83	0.42
1:F:256:PHE:CD2	1:J:297:MET:HE2	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:146:CYS:O	1:H:147:ILE:HG13	2.18	0.42
1:H:162:ARG:HG3	1:H:244:ASP:HB3	2.02	0.42
1:H:312:GLN:H	1:H:312:GLN:HG2	1.68	0.42
1:L:75:VAL:HB	1:L:327:LEU:HB2	2.01	0.42
1:L:114:GLY:N	1:L:335:THR:O	2.45	0.42
1:M:71:ARG:HA	1:M:71:ARG:HD3	1.84	0.42
1:M:165:ILE:HD13	1:M:236:LYS:HD3	2.01	0.42
1:N:124:ASN:HD22	1:N:263:ARG:HD3	1.84	0.42
1:N:342:VAL:HG22	1:N:361:TYR:HB2	2.00	0.42
1:A:327:LEU:HD23	1:A:327:LEU:HA	1.53	0.42
1:B:54:LYS:NZ	1:B:55:GLN:HB3	2.34	0.42
1:C:161:CYS:SG	1:C:244:ASP:HB3	2.60	0.42
1:C:364:HIS:NE2	1:C:366:GLU:OE1	2.52	0.42
1:D:384:ASP:OD2	1:H:92:ASP:HB2	2.19	0.42
1:F:141:THR:HG22	1:F:142:ASP:N	2.34	0.42
1:F:237:MET:HB3	1:F:245:MET:HG2	2.01	0.42
1:H:54:LYS:CB	1:H:57:SER:HB3	2.49	0.42
1:J:24:THR:C	1:J:26:GLU:H	2.27	0.42
1:K:214:GLN:HA	1:O:343:CYS:HB3	2.02	0.42
1:K:321:ILE:HG21	1:K:323:TRP:CZ2	2.55	0.42
1:L:346:VAL:O	1:L:346:VAL:HG12	2.19	0.42
1:N:115:VAL:H	1:N:338:THR:HG23	1.85	0.42
1:N:158:LEU:HD23	1:N:249:TYR:HB2	2.01	0.42
1:N:233:ASP:C	1:N:233:ASP:OD1	2.63	0.42
1:O:240:GLU:OE2	1:O:245:MET:HB2	2.19	0.42
1:A:257:VAL:CG2	1:E:115:VAL:HG21	2.26	0.42
1:B:85:PHE:HB2	1:B:88:THR:OG1	2.19	0.42
1:C:246:LEU:C	1:C:246:LEU:CD1	2.91	0.42
1:C:298:VAL:C	1:C:299:THR:CG2	2.92	0.42
1:D:304:ILE:HG23	1:D:305:PHE:CE2	2.55	0.42
1:E:175:SER:O	1:E:177:ALA:N	2.52	0.42
1:E:327:LEU:HD11	1:E:374:PHE:HE2	1.84	0.42
1:E:339:ASN:ND2	1:E:364:HIS:CB	2.80	0.42
1:F:310:TRP:NE1	1:F:471:GLN:HG3	2.34	0.42
1:G:255:MET:CG	1:G:256:PHE:N	2.81	0.42
1:G:342:VAL:HG23	1:G:361:TYR:HB2	1.99	0.42
1:H:54:LYS:NZ	1:H:55:GLN:H	2.18	0.42
1:H:210:PHE:CD1	1:H:210:PHE:N	2.86	0.42
1:I:30:ARG:HB3	1:I:375:GLN:NE2	2.34	0.42
1:I:314:ALA:HB2	1:I:319:ASN:HA	2.00	0.42
1:J:142:ASP:OD2	1:J:144:ARG:HG3	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:258:ARG:HG3	1:J:259:HIS:ND1	2.35	0.42
1:K:54:LYS:HZ2	1:K:55:GLN:H	1.63	0.42
1:L:392:MET:CE	1:L:392:MET:CG	2.94	0.42
1:M:103:THR:CG2	1:M:103:THR:C	2.93	0.42
1:N:71:ARG:HA	1:N:71:ARG:HD3	1.76	0.42
1:N:327:LEU:HD23	1:N:327:LEU:HA	1.72	0.42
1:N:343:CYS:SG	1:N:360:GLU:OE2	2.78	0.42
1:O:32:ASN:HD22	1:O:32:ASN:HA	1.48	0.42
1:O:73:PHE:CD1	1:O:370:LEU:HD11	2.55	0.42
1:O:271:VAL:HA	1:O:272:PRO:HD3	1.77	0.42
1:O:370:LEU:HD23	1:O:370:LEU:HA	1.71	0.42
1:B:126:LEU:HG	1:B:127:ASP:CG	2.45	0.42
1:B:164:PRO:HA	1:B:245:MET:HG3	2.00	0.42
1:B:228:ILE:HG21	1:B:228:ILE:HD13	1.55	0.42
1:B:237:MET:HB3	1:B:246:LEU:CD2	2.50	0.42
1:C:37:ALA:HB3	1:C:374:PHE:HE1	1.85	0.42
1:C:117:ILE:HG13	1:D:260:LEU:CD2	2.41	0.42
1:C:460:ASP:O	1:C:460:ASP:OD2	2.37	0.42
1:D:71:ARG:HB3	1:D:73:PHE:CE1	2.54	0.42
1:D:340:MET:HE1	1:E:169:TRP:NE1	2.34	0.42
1:F:124:ASN:ND2	1:F:263:ARG:HB3	2.35	0.42
1:G:327:LEU:HD23	1:G:327:LEU:HA	1.87	0.42
1:I:123:LEU:CD2	1:I:147:ILE:HB	2.50	0.42
1:I:159:ILE:HG23	1:I:159:ILE:HD12	1.79	0.42
1:I:303:GLN:HE22	1:I:335:THR:HG21	1.84	0.42
1:J:298:VAL:H	1:J:298:VAL:HG22	1.35	0.42
1:J:324:SER:O	1:J:325:ASN:C	2.63	0.42
1:K:33:ILE:HD12	1:K:33:ILE:HG23	1.82	0.42
1:K:54:LYS:HZ3	1:K:55:GLN:CB	2.33	0.42
1:L:91:TYR:CE1	1:L:96:GLN:HB2	2.54	0.42
1:L:372:PHE:C	1:L:373:ILE:CG1	2.92	0.42
1:M:120:HIS:HA	1:M:121:PRO:HD3	1.73	0.42
1:N:40:SER:O	1:N:41:ARG:C	2.61	0.42
1:A:220:VAL:O	1:A:221:PRO:C	2.62	0.42
1:A:224:ILE:HG13	1:A:225:CYS:N	2.34	0.42
1:B:32:ASN:HD22	1:B:32:ASN:HA	1.59	0.42
1:B:171:LYS:HE3	1:B:212:THR:O	2.20	0.42
1:B:364:HIS:CD2	1:B:366:GLU:OE1	2.72	0.42
1:C:54:LYS:NZ	1:C:55:GLN:HB3	2.35	0.42
1:C:71:ARG:O	1:C:330:THR:HA	2.20	0.42
1:C:80:PRO:HD3	1:C:100:TRP:CD1	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:150:ASP:HB3	1:D:257:VAL:HG21	2.00	0.42
1:C:162:ARG:HG3	1:C:244:ASP:CB	2.50	0.42
1:E:70:TYR:HA	1:E:332:VAL:HG22	2.02	0.42
1:E:99:VAL:HG11	1:E:321:ILE:CG2	2.49	0.42
1:E:315:GLN:NE2	1:E:316:GLY:N	2.68	0.42
1:F:80:PRO:HB2	1:F:98:LEU:CB	2.49	0.42
1:F:201:VAL:H	1:F:201:VAL:HG22	1.49	0.42
1:G:240:GLU:OE2	1:G:245:MET:HB2	2.19	0.42
1:G:280:THR:OG1	1:G:281:THR:N	2.53	0.42
1:H:162:ARG:HG3	1:H:244:ASP:HB2	2.02	0.42
1:H:311:LEU:HD23	1:H:311:LEU:N	2.33	0.42
1:I:54:LYS:NZ	1:I:55:GLN:HB3	2.34	0.42
1:I:92:ASP:HA	1:I:93:PRO:HD2	1.78	0.42
1:J:117:ILE:HD11	1:J:148:SER:CB	2.49	0.42
1:K:185:CYS:HA	1:K:186:PRO:HD2	1.80	0.42
1:K:283:THR:O	1:K:283:THR:CG2	2.63	0.42
1:L:47:HIS:HB3	1:L:50:TYR:O	2.20	0.42
1:M:149:MET:HE2	1:M:293:PRO:HD2	1.97	0.42
1:M:327:LEU:HD12	1:M:374:PHE:HE2	1.84	0.42
1:O:122:LEU:HD13	1:O:144:ARG:NH2	2.35	0.42
1:A:342:VAL:CG2	1:A:361:TYR:HB2	2.50	0.42
1:B:151:TYR:CE1	1:B:203:THR:HG21	2.55	0.42
1:B:267:VAL:O	1:B:268:GLY:C	2.61	0.42
1:C:103:THR:HG21	1:C:468:PHE:HE1	1.85	0.42
1:D:127:ASP:O	1:D:129:THR:HG23	2.20	0.42
1:D:393:ASN:HB3	1:D:396:ILE:HG13	2.02	0.42
1:F:30:ARG:HB3	1:F:375:GLN:HE22	1.84	0.42
1:F:461:GLN:HE21	1:F:461:GLN:HB3	1.62	0.42
1:I:70:TYR:OH	1:I:232:PRO:HD3	2.20	0.42
1:I:362:LEU:HD23	1:I:362:LEU:HA	1.90	0.42
1:I:390:HIS:O	1:I:394:PRO:HD3	2.20	0.42
1:J:159:ILE:HG23	1:J:159:ILE:HD12	1.61	0.42
1:K:167:GLU:HG2	1:K:231:TYR:O	2.20	0.42
1:K:339:ASN:ND2	1:K:364:HIS:HB2	2.34	0.42
1:K:347:SER:C	1:K:349:SER:H	2.27	0.42
1:K:464:LEU:HD23	1:K:464:LEU:HA	1.73	0.42
1:L:71:ARG:HD3	1:L:71:ARG:HA	1.67	0.42
1:L:152:LYS:HA	1:L:255:MET:HB2	2.02	0.42
1:L:216:ASN:N	1:L:216:ASN:OD1	2.51	0.42
1:L:256:PHE:CD1	1:L:256:PHE:C	2.97	0.42
1:M:142:ASP:OD2	1:M:144:ARG:NE	2.53	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:123:LEU:CD2	1:N:147:ILE:HB	2.50	0.42
1:O:284:LEU:HD12	1:O:284:LEU:HA	1.72	0.42
1:B:103:THR:O	1:B:103:THR:HG22	2.20	0.41
1:C:468:PHE:C	1:C:468:PHE:CD2	2.98	0.41
1:D:21:VAL:HG21	1:D:241:PRO:HB2	2.02	0.41
1:D:68:LEU:HD13	1:D:151:TYR:HD1	1.85	0.41
1:E:339:ASN:ND2	1:E:364:HIS:CG	2.87	0.41
1:G:464:LEU:O	1:G:465:GLY:C	2.59	0.41
1:I:102:CYS:HA	1:I:374:PHE:CD2	2.55	0.41
1:I:318:ASN:OD1	1:I:321:ILE:HB	2.20	0.41
1:I:333:ASP:OD1	1:I:333:ASP:C	2.62	0.41
1:I:379:ILE:HD12	1:I:400:TRP:HH2	1.85	0.41
1:J:284:LEU:HA	1:J:285:PRO:HD2	1.79	0.41
1:K:32:ASN:HD22	1:K:32:ASN:HA	1.52	0.41
1:K:118:SER:CB	1:K:223:ASP:OD2	2.66	0.41
1:M:103:THR:HG21	1:M:468:PHE:CE1	2.55	0.41
1:N:66:SER:OG	1:N:67:GLY:N	2.52	0.41
1:O:50:TYR:CD1	1:O:50:TYR:C	2.97	0.41
1:O:186:PRO:O	1:O:186:PRO:HG2	2.20	0.41
1:A:364:HIS:HD2	1:A:365:GLY:N	2.18	0.41
1:C:461:GLN:HB2	1:C:462:PHE:CE1	2.55	0.41
1:C:468:PHE:O	1:C:472:ALA:N	2.38	0.41
1:E:31:THR:O	1:E:33:ILE:N	2.51	0.41
1:E:138:ASN:HD21	1:E:283:THR:HB	1.86	0.41
1:E:299:THR:O	1:E:300:SER:C	2.63	0.41
1:F:265:GLY:HA2	1:J:355:ASN:HB3	2.02	0.41
1:G:103:THR:HG21	1:G:468:PHE:HE1	1.84	0.41
1:G:110:GLY:C	1:G:111:GLN:CG	2.87	0.41
1:H:124:ASN:OD1	1:H:264:ALA:HB3	2.20	0.41
1:H:395:SER:O	1:H:396:ILE:C	2.64	0.41
1:I:238:VAL:O	1:I:238:VAL:CG1	2.66	0.41
1:J:216:ASN:O	1:J:217:LYS:C	2.63	0.41
1:K:39:SER:HG	1:K:370:LEU:H	1.68	0.41
1:K:244:ASP:O	1:K:245:MET:C	2.63	0.41
1:K:262:ASN:ND2	1:K:289:TYR:CE2	2.88	0.41
1:K:311:LEU:HD23	1:K:311:LEU:H	1.85	0.41
1:M:78:PRO:HD2	1:M:455:PHE:CE1	2.55	0.41
1:O:371:GLN:OE1	1:O:464:LEU:HB2	2.20	0.41
1:A:381:LEU:O	1:A:386:MET:HE2	2.20	0.41
1:A:393:ASN:HB3	1:A:396:ILE:HD12	2.03	0.41
1:C:151:TYR:CD2	1:C:203:THR:HB	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:121:PRO:CB	1:E:285:PRO:HG2	2.41	0.41
1:D:327:LEU:HD23	1:D:327:LEU:HA	1.59	0.41
1:F:240:GLU:CG	1:F:241:PRO:HD2	2.50	0.41
1:F:315:GLN:CD	1:F:316:GLY:N	2.78	0.41
1:G:235:LEU:HD23	1:G:235:LEU:HA	1.83	0.41
1:H:76:LYS:O	1:H:451:LEU:HB2	2.20	0.41
1:I:98:LEU:HA	1:I:377:CYS:O	2.20	0.41
1:I:202:ASP:HA	1:I:229:CYS:HB3	2.01	0.41
1:J:32:ASN:C	1:J:33:ILE:HD13	2.45	0.41
1:J:381:LEU:O	1:J:386:MET:HE2	2.21	0.41
1:K:339:ASN:HD22	1:K:364:HIS:HB2	1.84	0.41
1:L:361:TYR:CE2	1:M:268:GLY:HA3	2.55	0.41
1:N:109:ARG:HB3	1:N:109:ARG:NH1	2.35	0.41
1:O:250:LEU:CB	1:O:304:ILE:HD11	2.49	0.41
1:B:196:GLN:O	1:B:199:ASP:OD2	2.39	0.41
1:D:119:GLY:HA3	1:E:289:TYR:CZ	2.56	0.41
1:D:122:LEU:O	1:D:218:SER:HB3	2.20	0.41
1:D:315:GLN:HE21	1:D:315:GLN:HB2	1.57	0.41
1:E:102:CYS:N	1:E:320:GLY:O	2.51	0.41
1:E:181:LYS:HD3	1:E:181:LYS:N	2.35	0.41
1:E:249:TYR:CD2	1:E:249:TYR:N	2.88	0.41
1:E:339:ASN:HD22	1:E:364:HIS:CB	2.27	0.41
1:F:220:VAL:CG1	1:F:224:ILE:CD1	2.98	0.41
1:G:311:LEU:H	1:G:311:LEU:HD23	1.85	0.41
1:G:343:CYS:SG	1:G:358:PHE:HB3	2.60	0.41
1:H:381:LEU:O	1:H:386:MET:HE2	2.19	0.41
1:I:109:ARG:HH11	1:I:109:ARG:HD2	1.60	0.41
1:I:336:ARG:HH11	1:I:336:ARG:CG	2.33	0.41
1:I:458:ASP:O	1:I:462:PHE:HE1	2.02	0.41
1:J:216:ASN:C	1:J:217:LYS:HG2	2.45	0.41
1:K:109:ARG:H	1:K:306:ASN:ND2	2.18	0.41
1:L:22:VAL:HG12	1:L:23:SER:N	2.34	0.41
1:L:97:ARG:CG	1:L:381:LEU:HD11	2.49	0.41
1:M:165:ILE:CD1	1:M:236:LYS:HD3	2.51	0.41
1:N:155:GLN:HA	1:N:332:VAL:O	2.20	0.41
1:N:196:GLN:O	1:N:197:ASP:C	2.63	0.41
1:N:207:ALA:HB1	1:N:229:CYS:O	2.21	0.41
1:N:373:ILE:HD11	1:N:464:LEU:HD22	2.01	0.41
1:O:119:GLY:CA	1:O:148:SER:HA	2.51	0.41
1:A:54:LYS:HD2	1:A:55:GLN:H	1.86	0.41
1:A:64:LYS:CG	1:A:64:LYS:O	2.69	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:142:ASP:OD2	1:A:144:ARG:NE	2.53	0.41
1:D:124:ASN:N	1:D:218:SER:O	2.53	0.41
1:E:71:ARG:HD3	1:E:197:ASP:OD1	2.21	0.41
1:F:201:VAL:HG11	1:F:332:VAL:HG11	2.02	0.41
1:F:262:ASN:HD22	1:F:262:ASN:HA	1.35	0.41
1:H:119:GLY:HA3	1:H:148:SER:HA	2.02	0.41
1:I:97:ARG:O	1:I:98:LEU:HD23	2.21	0.41
1:J:394:PRO:O	1:J:395:SER:C	2.63	0.41
1:K:47:HIS:ND1	1:K:48:PRO:HD2	2.36	0.41
1:L:103:THR:O	1:L:103:THR:CG2	2.68	0.41
1:M:57:SER:OG	1:M:58:ASN:N	2.53	0.41
1:M:196:GLN:O	1:M:197:ASP:C	2.63	0.41
1:M:242:TYR:CZ	1:M:392:MET:HB2	2.55	0.41
1:M:467:LYS:O	1:M:468:PHE:C	2.61	0.41
1:N:47:HIS:O	1:N:64:LYS:HA	2.21	0.41
1:N:181:LYS:N	1:N:181:LYS:CD	2.84	0.41
1:O:92:ASP:OD2	1:O:94:ALA:HB3	2.21	0.41
1:O:250:LEU:HB2	1:O:304:ILE:HD11	2.01	0.41
1:A:80:PRO:HD2	1:A:325:ASN:OD1	2.20	0.41
1:A:124:ASN:OD1	1:A:264:ALA:HB3	2.21	0.41
1:B:111:GLN:NE2	1:B:367:GLU:OE1	2.45	0.41
1:B:152:LYS:HG3	1:B:255:MET:HB2	2.02	0.41
1:C:22:VAL:HG12	1:C:23:SER:H	1.80	0.41
1:C:120:HIS:HA	1:C:121:PRO:HD3	1.96	0.41
1:D:109:ARG:HH11	1:D:109:ARG:HD2	1.68	0.41
1:E:181:LYS:H	1:E:181:LYS:CD	2.34	0.41
1:F:22:VAL:HG12	1:F:23:SER:H	1.85	0.41
1:F:152:LYS:HA	1:F:255:MET:HB2	2.02	0.41
1:F:251:ARG:CG	1:F:251:ARG:NH1	2.78	0.41
1:F:261:PHE:O	1:F:289:TYR:HA	2.21	0.41
1:G:200:MET:HE2	1:G:223:ASP:O	2.21	0.41
1:G:233:ASP:CG	1:G:236:LYS:HB2	2.46	0.41
1:H:80:PRO:HD2	1:H:325:ASN:OD1	2.21	0.41
1:H:298:VAL:CG1	1:H:335:THR:HA	2.47	0.41
1:J:389:ILE:O	1:J:392:MET:HB3	2.21	0.41
1:K:97:ARG:HG3	1:K:400:TRP:CD2	2.56	0.41
1:K:296:SER:HB2	1:O:297:MET:CE	2.50	0.41
1:L:159:ILE:HG23	1:L:159:ILE:HD12	1.68	0.41
1:M:72:VAL:HG21	1:M:196:GLN:C	2.45	0.41
1:M:232:PRO:HB3	1:M:237:MET:HE1	2.02	0.41
1:O:327:LEU:HD12	1:O:374:PHE:HE2	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:330:THR:O	1:O:331:VAL:HG23	2.21	0.41
1:A:24:THR:HG23	1:A:318:ASN:HA	2.02	0.41
1:A:126:LEU:HD12	1:A:126:LEU:HA	1.84	0.41
1:A:141:THR:HG22	1:A:142:ASP:N	2.33	0.41
1:A:220:VAL:HG23	1:A:225:CYS:HA	2.01	0.41
1:A:248:PHE:O	1:A:249:TYR:HB3	2.21	0.41
1:C:83:PHE:HD2	1:C:85:PHE:CZ	2.38	0.41
1:C:258:ARG:HB3	1:C:292:THR:HG22	2.02	0.41
1:C:324:SER:O	1:C:325:ASN:C	2.62	0.41
1:C:363:ARG:HD3	1:C:363:ARG:HA	1.73	0.41
1:D:120:HIS:CE1	1:D:122:LEU:O	2.74	0.41
1:E:101:ALA:CA	1:E:320:GLY:O	2.67	0.41
1:E:459:LEU:N	1:E:459:LEU:HD23	2.36	0.41
1:F:123:LEU:HA	1:F:218:SER:O	2.20	0.41
1:F:156:LEU:O	1:F:157:CYS:HB2	2.20	0.41
1:F:234:TYR:O	1:F:238:VAL:CG2	2.68	0.41
1:F:460:ASP:OD2	1:F:460:ASP:C	2.64	0.41
1:G:216:ASN:O	1:H:277:ILE:HD12	2.20	0.41
1:H:29:THR:HB	1:H:378:LYS:HG2	2.03	0.41
1:H:77:LEU:HD22	1:H:455:PHE:HZ	1.85	0.41
1:H:201:VAL:HG11	1:H:332:VAL:HG11	2.02	0.41
1:H:450:ASP:OD1	1:H:452:LYS:HG3	2.20	0.41
1:I:450:ASP:CG	1:I:452:LYS:HD2	2.46	0.41
1:J:136:VAL:O	1:J:137:GLY:O	2.39	0.41
1:L:116:GLY:N	1:L:337:SER:OG	2.50	0.41
1:L:144:ARG:NH2	1:M:279:GLY:HA3	2.34	0.41
1:L:231:TYR:O	1:L:232:PRO:C	2.63	0.41
1:L:353:TYR:CE2	1:M:144:ARG:HD3	2.55	0.41
1:L:467:LYS:CD	1:L:467:LYS:HB2	2.50	0.41
1:M:123:LEU:CD2	1:M:147:ILE:HB	2.51	0.41
1:M:162:ARG:HG3	1:M:244:ASP:HB3	2.01	0.41
1:M:228:ILE:HG21	1:M:228:ILE:HD13	1.67	0.41
1:N:32:ASN:HD22	1:N:32:ASN:HA	1.57	0.41
1:N:298:VAL:H	1:N:298:VAL:HG22	1.43	0.41
1:O:102:CYS:O	1:O:311:LEU:CD1	2.69	0.41
1:A:371:GLN:CB	1:A:464:LEU:HD12	2.41	0.41
1:B:53:LYS:HB3	1:B:53:LYS:HE2	1.72	0.41
1:B:261:PHE:HB2	1:B:290:PHE:CE2	2.55	0.41
1:B:364:HIS:HD2	1:B:365:GLY:H	1.68	0.41
1:C:149:MET:CE	1:C:205:PHE:CE1	3.04	0.41
1:C:240:GLU:HG2	1:C:241:PRO:HD2	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:275:LEU:HD23	1:D:275:LEU:HA	1.93	0.41
1:E:54:LYS:HZ2	1:E:56:ASP:H	1.68	0.41
1:E:153:GLN:O	1:E:253:GLU:HA	2.20	0.41
1:E:256:PHE:CD1	1:E:256:PHE:C	2.98	0.41
1:E:471:GLN:CD	1:E:471:GLN:C	2.88	0.41
1:F:30:ARG:HB3	1:F:375:GLN:NE2	2.36	0.41
1:F:154:THR:O	1:F:155:GLN:HG3	2.20	0.41
1:F:302:ALA:O	1:F:303:GLN:C	2.63	0.41
1:F:324:SER:O	1:F:325:ASN:C	2.61	0.41
1:G:298:VAL:O	1:H:254:GLN:HA	2.19	0.41
1:G:312:GLN:HG3	1:G:313:ARG:N	2.36	0.41
1:H:127:ASP:OD1	1:H:127:ASP:N	2.54	0.41
1:I:120:HIS:HB3	1:I:123:LEU:HB2	2.02	0.41
1:J:85:PHE:HB2	1:J:88:THR:HG23	2.02	0.41
1:K:139:SER:HB2	1:K:143:ASN:ND2	2.34	0.41
1:K:312:GLN:HG3	1:K:313:ARG:N	2.36	0.41
1:M:54:LYS:HD2	1:M:55:GLN:N	2.35	0.41
1:N:21:VAL:C	1:N:22:VAL:HG23	2.46	0.41
1:N:314:ALA:N	1:N:319:ASN:OD1	2.52	0.41
1:O:54:LYS:NZ	1:O:56:ASP:H	2.19	0.41
1:A:23:SER:O	1:A:26:GLU:HB2	2.21	0.41
1:A:24:THR:CG2	1:A:318:ASN:HA	2.50	0.41
1:A:109:ARG:HB3	1:A:336:ARG:CZ	2.50	0.41
1:A:155:GLN:HB2	1:A:252:ARG:HB3	2.03	0.41
1:A:312:GLN:H	1:A:312:GLN:HG2	1.52	0.41
1:A:392:MET:HB3	1:A:393:ASN:H	1.74	0.41
1:B:52:ILE:HD12	1:B:62:VAL:HB	2.03	0.41
1:B:79:ASP:C	1:B:81:ASN:N	2.78	0.41
1:B:87:ASP:O	1:B:90:PHE:CZ	2.74	0.41
1:B:278:LYS:O	1:E:352:THR:HA	2.21	0.41
1:B:295:GLY:O	1:B:296:SER:CB	2.69	0.41
1:B:315:GLN:HE21	1:B:315:GLN:HB2	1.49	0.41
1:B:361:TYR:CE2	1:C:268:GLY:HA3	2.55	0.41
1:C:150:ASP:CB	1:D:257:VAL:HG21	2.51	0.41
1:C:159:ILE:HD12	1:C:159:ILE:HG23	1.79	0.41
1:C:295:GLY:O	1:C:296:SER:C	2.62	0.41
1:C:384:ASP:OD2	1:I:92:ASP:HB2	2.21	0.41
1:D:109:ARG:NH1	1:D:367:GLU:O	2.53	0.41
1:D:146:CYS:O	1:D:147:ILE:HG13	2.21	0.41
1:D:248:PHE:O	1:D:249:TYR:HB3	2.21	0.41
1:D:353:TYR:C	1:D:354:LYS:CG	2.94	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:33:ILE:HD11	1:E:87:ASP:OD2	2.21	0.41
1:E:71:ARG:O	1:E:330:THR:HA	2.21	0.41
1:F:381:LEU:CD2	1:F:397:LEU:HD21	2.51	0.41
1:G:22:VAL:HG12	1:G:23:SER:N	2.35	0.41
1:G:34:TYR:CD1	1:G:34:TYR:N	2.89	0.41
1:G:50:TYR:O	1:G:50:TYR:CD1	2.74	0.41
1:G:296:SER:OG	1:G:297:MET:N	2.50	0.41
1:H:77:LEU:HD22	1:H:455:PHE:CZ	2.56	0.41
1:H:79:ASP:OD1	1:H:79:ASP:C	2.63	0.41
1:H:102:CYS:O	1:H:311:LEU:HD11	2.21	0.41
1:H:118:SER:O	1:H:149:MET:N	2.54	0.41
1:H:120:HIS:ND1	1:H:122:LEU:N	2.68	0.41
1:I:169:TRP:CZ2	1:I:190:LEU:HD13	2.56	0.41
1:J:231:TYR:HD2	1:J:232:PRO:O	2.04	0.41
1:K:234:TYR:O	1:K:238:VAL:CG2	2.61	0.41
1:L:126:LEU:CB	1:L:262:ASN:O	2.69	0.41
1:L:190:LEU:HD12	1:L:190:LEU:HA	1.87	0.41
1:L:212:THR:OG1	1:L:213:LEU:HD13	2.21	0.41
1:M:355:ASN:HB3	1:N:265:GLY:HA2	2.03	0.41
1:N:28:VAL:HG22	1:N:379:ILE:CD1	2.51	0.41
1:N:114:GLY:C	1:N:115:VAL:HG13	2.45	0.41
1:N:133:ASN:N	1:N:133:ASN:HD22	2.18	0.41
1:N:362:LEU:HD23	1:N:362:LEU:HA	1.52	0.41
1:O:33:ILE:CG2	1:O:35:TYR:HE1	2.34	0.41
1:O:87:ASP:O	1:O:87:ASP:CG	2.63	0.41
1:O:258:ARG:HH11	1:O:258:ARG:HD2	1.70	0.41
1:O:323:TRP:HE1	1:O:392:MET:CE	2.34	0.41
1:A:119:GLY:O	1:A:221:PRO:HB3	2.19	0.41
1:A:216:ASN:C	1:A:217:LYS:HG2	2.46	0.41
1:B:68:LEU:HD13	1:B:151:TYR:HD1	1.86	0.41
1:B:102:CYS:HB2	1:B:327:LEU:HD11	2.03	0.41
1:B:464:LEU:O	1:B:467:LYS:HB2	2.21	0.41
1:C:54:LYS:CB	1:C:57:SER:HB3	2.50	0.41
1:C:151:TYR:OH	1:C:221:PRO:HG2	2.21	0.41
1:D:22:VAL:HG12	1:D:26:GLU:HG3	2.03	0.41
1:D:53:LYS:HE2	1:D:53:LYS:HB3	1.95	0.41
1:H:247:PHE:HA	1:H:315:GLN:HG3	2.02	0.41
1:H:273:ALA:HA	1:H:276:TYR:CE2	2.56	0.41
1:K:216:ASN:O	1:K:217:LYS:HG2	2.21	0.41
1:K:393:ASN:HD22	1:K:394:PRO:HD2	1.86	0.41
1:L:69:GLN:HA	1:L:199:ASP:O	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:147:ILE:HG23	1:M:129:THR:O	2.21	0.41
1:L:246:LEU:O	1:L:315:GLN:OE1	2.39	0.41
1:M:97:ARG:CG	1:M:381:LEU:HD11	2.49	0.41
1:M:200:MET:O	1:M:229:CYS:HA	2.20	0.41
1:M:305:PHE:CE1	1:M:333:ASP:HB2	2.51	0.41
1:N:120:HIS:ND1	1:N:122:LEU:C	2.79	0.41
1:N:250:LEU:HB2	1:N:304:ILE:CD1	2.43	0.41
1:O:91:TYR:CE1	1:O:96:GLN:HB2	2.55	0.41
1:O:158:LEU:H	1:O:158:LEU:HG	1.51	0.41
1:A:54:LYS:HB3	1:A:57:SER:HB3	2.03	0.40
1:A:141:THR:HA	1:E:355:ASN:OD1	2.21	0.40
1:B:54:LYS:HZ3	1:B:55:GLN:CB	2.33	0.40
1:B:165:ILE:HD11	1:B:233:ASP:HB3	2.03	0.40
1:B:467:LYS:O	1:B:468:PHE:C	2.61	0.40
1:C:31:THR:H	1:C:375:GLN:HE21	1.69	0.40
1:C:373:ILE:HG13	1:C:464:LEU:HD13	2.03	0.40
1:D:123:LEU:HB3	1:D:145:GLU:O	2.21	0.40
1:D:254:GLN:NE2	1:D:295:GLY:O	2.54	0.40
1:F:45:VAL:CG1	1:F:46:GLY:N	2.82	0.40
1:F:393:ASN:C	1:F:393:ASN:ND2	2.75	0.40
1:G:119:GLY:HA2	1:G:148:SER:HA	2.03	0.40
1:I:165:ILE:O	1:I:165:ILE:HG13	2.21	0.40
1:I:298:VAL:O	1:I:299:THR:HG22	2.20	0.40
1:J:138:ASN:C	1:J:139:SER:O	2.63	0.40
1:K:52:ILE:O	1:K:61:ALA:HB3	2.21	0.40
1:K:181:LYS:HE2	1:K:184:GLU:HG3	2.01	0.40
1:L:370:LEU:HB3	1:L:372:PHE:HE1	1.86	0.40
1:M:109:ARG:HG3	1:M:305:PHE:CD1	2.57	0.40
1:N:102:CYS:SG	1:N:311:LEU:HD21	2.61	0.40
1:N:235:LEU:HD23	1:N:235:LEU:HA	1.70	0.40
1:N:318:ASN:OD1	1:N:321:ILE:N	2.39	0.40
1:A:69:GLN:HA	1:A:199:ASP:O	2.20	0.40
1:A:262:ASN:HD22	1:A:262:ASN:HA	1.50	0.40
1:B:79:ASP:O	1:B:81:ASN:N	2.54	0.40
1:B:279:GLY:O	1:B:280:THR:C	2.63	0.40
1:B:461:GLN:HE22	1:C:21:VAL:HB	1.86	0.40
1:B:469:LEU:HA	1:B:469:LEU:HD23	1.87	0.40
1:C:109:ARG:HH11	1:C:109:ARG:CB	2.17	0.40
1:C:247:PHE:CE2	1:C:320:GLY:HA2	2.56	0.40
1:C:271:VAL:HA	1:C:272:PRO:HD3	1.92	0.40
1:C:372:PHE:C	1:C:373:ILE:HG13	2.46	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:139:SER:HB2	1:D:143:ASN:HD21	1.87	0.40
1:E:100:TRP:CZ3	1:E:376:LEU:HB2	2.57	0.40
1:E:393:ASN:ND2	1:E:395:SER:H	2.19	0.40
1:F:119:GLY:CA	1:G:289:TYR:CE1	3.00	0.40
1:J:149:MET:CE	1:J:292:THR:HG23	2.50	0.40
1:K:164:PRO:HA	1:K:245:MET:HG3	2.03	0.40
1:L:37:ALA:HB3	1:L:372:PHE:HB2	2.03	0.40
1:L:277:ILE:HG22	1:O:353:TYR:HB2	2.02	0.40
1:L:315:GLN:CD	1:L:316:GLY:H	2.30	0.40
1:O:161:CYS:O	1:O:161:CYS:SG	2.79	0.40
1:A:36:HIS:ND1	1:A:37:ALA:N	2.69	0.40
1:B:71:ARG:NH1	1:B:197:ASP:OD1	2.41	0.40
1:B:119:GLY:O	1:B:221:PRO:CA	2.69	0.40
1:C:220:VAL:CG1	1:C:224:ILE:HD11	2.52	0.40
1:D:118:SER:O	1:D:149:MET:N	2.53	0.40
1:E:119:GLY:CA	1:E:148:SER:HA	2.50	0.40
1:F:41:ARG:NH1	1:G:190:LEU:HD23	2.36	0.40
1:H:254:GLN:O	1:H:254:GLN:HG3	2.17	0.40
1:H:312:GLN:CG	1:H:313:ARG:N	2.79	0.40
1:I:112:PRO:CB	1:J:231:TYR:CD1	2.98	0.40
1:I:296:SER:HB3	1:I:297:MET:H	1.60	0.40
1:J:311:LEU:O	1:J:311:LEU:CG	2.66	0.40
1:J:463:PRO:HA	1:J:466:ARG:NH1	2.36	0.40
1:K:167:GLU:O	1:K:167:GLU:CG	2.55	0.40
1:L:88:THR:HB	1:L:91:TYR:CD2	2.56	0.40
1:L:160:GLY:HA2	1:L:247:PHE:CE1	2.57	0.40
1:M:362:LEU:HD23	1:M:362:LEU:HA	1.83	0.40
1:N:97:ARG:O	1:N:378:LYS:HA	2.21	0.40
1:A:165:ILE:O	1:A:237:MET:CE	2.68	0.40
1:B:152:LYS:HG3	1:B:255:MET:HB3	2.03	0.40
1:B:312:GLN:HG3	1:B:313:ARG:N	2.36	0.40
1:C:42:LEU:HD22	1:C:447:TRP:NE1	2.37	0.40
1:C:283:THR:O	1:C:284:LEU:CB	2.67	0.40
1:C:312:GLN:H	1:C:312:GLN:HG2	1.55	0.40
1:E:341:SER:HB3	1:E:362:LEU:HD23	2.03	0.40
1:F:321:ILE:HG23	1:F:321:ILE:HD12	1.72	0.40
1:G:110:GLY:O	1:G:111:GLN:CG	2.70	0.40
1:H:27:TYR:CD1	1:H:28:VAL:HG23	2.56	0.40
1:H:87:ASP:OD1	1:H:90:PHE:CZ	2.75	0.40
1:H:343:CYS:HA	1:H:359:LYS:O	2.21	0.40
1:J:124:ASN:ND2	1:J:263:ARG:HB3	2.36	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:114:GLY:O	1:K:115:VAL:HG12	2.21	0.40
1:K:156:LEU:HA	1:K:250:LEU:O	2.22	0.40
1:K:268:GLY:HA3	1:O:361:TYR:CE2	2.57	0.40
1:K:278:LYS:HD3	1:K:278:LYS:HA	1.85	0.40
1:L:166:GLY:O	1:L:192:ASN:HA	2.22	0.40
1:L:258:ARG:HB2	1:L:294:SER:CB	2.47	0.40
1:L:372:PHE:HB3	1:L:374:PHE:CE1	2.57	0.40
1:M:123:LEU:HD23	1:M:147:ILE:HB	2.04	0.40
1:M:370:LEU:HD23	1:M:370:LEU:HA	1.97	0.40
1:O:311:LEU:O	1:O:311:LEU:HG	2.21	0.40
1:B:87:ASP:O	1:B:90:PHE:CE1	2.74	0.40
1:B:395:SER:O	1:B:396:ILE:C	2.62	0.40
1:C:471:GLN:C	1:C:473:GLY:N	2.80	0.40
1:D:83:PHE:HB3	1:D:85:PHE:CE1	2.56	0.40
1:D:147:ILE:HD13	1:D:147:ILE:HG21	1.90	0.40
1:D:152:LYS:CE	1:D:253:GLU:HB2	2.51	0.40
1:D:222:LEU:H	1:D:222:LEU:HD22	1.86	0.40
1:E:24:THR:HG23	1:E:317:HIS:O	2.21	0.40
1:E:54:LYS:NZ	1:E:55:GLN:H	2.19	0.40
1:E:70:TYR:OH	1:E:232:PRO:HD3	2.22	0.40
1:E:280:THR:O	1:E:281:THR:CB	2.65	0.40
1:F:249:TYR:HE1	1:F:251:ARG:NH1	2.19	0.40
1:F:459:LEU:HA	1:F:459:LEU:HD23	1.75	0.40
1:G:42:LEU:HA	1:G:42:LEU:HD23	1.85	0.40
1:G:76:LYS:HA	1:G:76:LYS:HD3	1.90	0.40
1:G:155:GLN:OE1	1:G:304:ILE:HG22	2.22	0.40
1:G:170:GLY:HA3	1:G:191:LEU:CD1	2.52	0.40
1:G:242:TYR:CD2	1:G:392:MET:HE3	2.57	0.40
1:H:79:ASP:OD1	1:H:81:ASN:HB2	2.22	0.40
1:I:125:LYS:C	1:I:125:LYS:HD3	2.47	0.40
1:I:165:ILE:HD11	1:I:236:LYS:HB3	2.04	0.40
1:J:256:PHE:CD1	1:J:257:VAL:N	2.89	0.40
1:K:141:THR:HA	1:O:355:ASN:OD1	2.20	0.40
1:K:196:GLN:O	1:K:197:ASP:C	2.62	0.40
1:L:315:GLN:CG	1:L:316:GLY:H	2.35	0.40
1:M:103:THR:HG21	1:M:468:PHE:HE1	1.86	0.40
1:O:220:VAL:O	1:O:225:CYS:HB3	2.21	0.40

There are no symmetry-related clashes.

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	413/423 (98%)	348 (84%)	52 (13%)	13 (3%)	3	20
1	B	413/423 (98%)	343 (83%)	55 (13%)	15 (4%)	2	17
1	C	413/423 (98%)	344 (83%)	47 (11%)	22 (5%)	1	10
1	D	413/423 (98%)	352 (85%)	50 (12%)	11 (3%)	4	22
1	E	413/423 (98%)	336 (81%)	64 (16%)	13 (3%)	3	20
1	F	413/423 (98%)	346 (84%)	55 (13%)	12 (3%)	3	21
1	G	413/423 (98%)	353 (86%)	46 (11%)	14 (3%)	3	18
1	H	413/423 (98%)	347 (84%)	50 (12%)	16 (4%)	2	16
1	I	413/423 (98%)	343 (83%)	53 (13%)	17 (4%)	2	15
1	J	413/423 (98%)	351 (85%)	48 (12%)	14 (3%)	3	18
1	K	413/423 (98%)	349 (84%)	49 (12%)	15 (4%)	2	17
1	L	413/423 (98%)	348 (84%)	52 (13%)	13 (3%)	3	20
1	M	413/423 (98%)	338 (82%)	60 (14%)	15 (4%)	2	17
1	N	413/423 (98%)	345 (84%)	56 (14%)	12 (3%)	3	21
1	O	413/423 (98%)	335 (81%)	59 (14%)	19 (5%)	2	13
All	All	6195/6345 (98%)	5178 (84%)	796 (13%)	221 (4%)	2	17

All (221) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	113	LEU
1	A	126	LEU
1	A	337	SER
1	B	177	ALA
1	B	323	TRP
1	C	215	ALA
1	C	337	SER
1	D	57	SER

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Mol	Chain	Res	Type
1	D	139	SER
1	D	303	GLN
1	E	132	SER
1	E	337	SER
1	F	216	ASN
1	F	337	SER
1	G	176	ASN
1	G	216	ASN
1	G	284	LEU
1	G	461	GLN
1	H	83	PHE
1	H	176	ASN
1	H	337	SER
1	H	460	ASP
1	I	176	ASN
1	I	184	GLU
1	I	337	SER
1	J	83	PHE
1	J	176	ASN
1	K	139	SER
1	L	83	PHE
1	L	139	SER
1	M	223	ASP
1	M	325	ASN
1	M	337	SER
1	N	461	GLN
1	O	57	SER
1	O	176	ASN
1	O	180	VAL
1	O	184	GLU
1	O	284	LEU
1	O	337	SER
1	A	137	GLY
1	A	180	VAL
1	A	284	LEU
1	A	300	SER
1	B	180	VAL
1	B	348	SER
1	C	176	ASN
1	C	177	ALA
1	C	216	ASN
1	C	278	LYS

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Mol	Chain	Res	Type
1	D	126	LEU
1	E	32	ASN
1	E	117	ILE
1	F	57	SER
1	G	180	VAL
1	G	303	GLN
1	G	442	LYS
1	H	54	LYS
1	H	278	LYS
1	I	24	THR
1	I	126	LEU
1	I	300	SER
1	I	392	MET
1	J	137	GLY
1	L	132	SER
1	L	177	ALA
1	L	396	ILE
1	M	117	ILE
1	M	180	VAL
1	M	278	LYS
1	N	126	LEU
1	N	139	SER
1	N	273	ALA
1	O	126	LEU
1	O	177	ALA
1	A	142	ASP
1	A	278	LYS
1	B	126	LEU
1	B	233	ASP
1	C	32	ASN
1	C	132	SER
1	C	184	GLU
1	C	325	ASN
1	C	460	ASP
1	C	472	ALA
1	D	80	PRO
1	D	138	ASN
1	D	176	ASN
1	D	381	LEU
1	D	472	ALA
1	E	40	SER
1	E	184	GLU

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Mol	Chain	Res	Type
1	E	347	SER
1	F	139	SER
1	F	142	ASP
1	F	284	LEU
1	H	137	GLY
1	H	139	SER
1	H	184	GLU
1	I	139	SER
1	I	177	ALA
1	I	347	SER
1	J	442	LYS
1	K	180	VAL
1	K	311	LEU
1	K	461	GLN
1	L	126	LEU
1	M	177	ALA
1	M	216	ASN
1	M	461	GLN
1	M	470	LEU
1	N	142	ASP
1	N	177	ALA
1	N	322	CYS
1	O	131	ASN
1	O	149	MET
1	O	278	LYS
1	O	303	GLN
1	O	396	ILE
1	B	117	ILE
1	B	133	ASN
1	B	296	SER
1	B	337	SER
1	B	347	SER
1	C	40	SER
1	C	157	CYS
1	C	254	GLN
1	C	284	LEU
1	D	273	ALA
1	D	284	LEU
1	E	284	LEU
1	F	177	ALA
1	F	215	ALA
1	G	281	THR

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Mol	Chain	Res	Type
1	G	296	SER
1	H	40	SER
1	H	177	ALA
1	H	284	LEU
1	H	470	LEU
1	I	284	LEU
1	I	303	GLN
1	J	25	ASP
1	J	54	LYS
1	J	177	ALA
1	J	285	PRO
1	K	176	ASN
1	K	284	LEU
1	K	300	SER
1	K	373	ILE
1	L	134	LYS
1	L	138	ASN
1	L	284	LEU
1	M	176	ASN
1	M	284	LEU
1	N	303	GLN
1	O	54	LYS
1	O	223	ASP
1	O	460	ASP
1	A	291	PRO
1	A	306	ASN
1	B	132	SER
1	B	284	LEU
1	C	139	SER
1	C	237	MET
1	E	273	ALA
1	F	80	PRO
1	F	248	PHE
1	F	392	MET
1	G	57	SER
1	I	142	ASP
1	I	149	MET
1	I	223	ASP
1	J	80	PRO
1	J	126	LEU
1	J	296	SER
1	K	132	SER

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Mol	Chain	Res	Type
1	K	177	ALA
1	K	223	ASP
1	K	392	MET
1	L	117	ILE
1	L	142	ASP
1	M	137	GLY
1	M	306	ASN
1	N	80	PRO
1	N	284	LEU
1	O	325	ASN
1	O	399	ASP
1	A	149	MET
1	B	311	LEU
1	C	126	LEU
1	C	243	GLY
1	G	126	LEU
1	G	177	ALA
1	J	284	LEU
1	K	337	SER
1	L	278	LYS
1	M	86	PRO
1	N	137	GLY
1	F	180	VAL
1	J	111	GLN
1	E	111	GLN
1	E	285	PRO
1	H	86	PRO
1	I	291	PRO
1	J	117	ILE
1	K	243	GLY
1	E	63	PRO
1	G	111	GLN
1	G	117	ILE
1	H	180	VAL
1	I	80	PRO
1	K	320	GLY
1	L	373	ILE
1	N	396	ILE
1	A	86	PRO
1	B	111	GLN
1	C	86	PRO
1	C	111	GLN

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Mol	Chain	Res	Type
1	E	86	PRO
1	H	268	GLY
1	O	86	PRO

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	367/369 (100%)	331 (90%)	36 (10%)	7	28
1	B	367/369 (100%)	314 (86%)	53 (14%)	3	14
1	C	367/369 (100%)	324 (88%)	43 (12%)	5	20
1	D	367/369 (100%)	328 (89%)	39 (11%)	6	24
1	E	367/369 (100%)	324 (88%)	43 (12%)	5	20
1	F	367/369 (100%)	317 (86%)	50 (14%)	3	16
1	G	367/369 (100%)	323 (88%)	44 (12%)	5	20
1	H	367/369 (100%)	317 (86%)	50 (14%)	3	16
1	I	367/369 (100%)	319 (87%)	48 (13%)	4	17
1	J	367/369 (100%)	316 (86%)	51 (14%)	3	15
1	K	367/369 (100%)	328 (89%)	39 (11%)	6	24
1	L	367/369 (100%)	322 (88%)	45 (12%)	4	19
1	M	367/369 (100%)	320 (87%)	47 (13%)	4	18
1	N	367/369 (100%)	319 (87%)	48 (13%)	4	17
1	O	367/369 (100%)	322 (88%)	45 (12%)	4	19
All	All	5505/5535 (100%)	4824 (88%)	681 (12%)	4	19

All (681) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	32	ASN
1	A	52	ILE
1	A	64	LYS

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Mol	Chain	Res	Type
1	A	78	PRO
1	A	83	PHE
1	A	96	GLN
1	A	106	GLU
1	A	117	ILE
1	A	118	SER
1	A	127	ASP
1	A	149	MET
1	A	153	GLN
1	A	154	THR
1	A	191	LEU
1	A	201	VAL
1	A	211	THR
1	A	213	LEU
1	A	220	VAL
1	A	245	MET
1	A	247	PHE
1	A	251	ARG
1	A	255	MET
1	A	257	VAL
1	A	262	ASN
1	A	278	LYS
1	A	304	ILE
1	A	308	PRO
1	A	311	LEU
1	A	315	GLN
1	A	330	THR
1	A	338	THR
1	A	363	ARG
1	A	366	GLU
1	A	389	ILE
1	A	391	SER
1	A	464	LEU
1	B	32	ASN
1	B	33	ILE
1	B	48	PRO
1	B	71	ARG
1	B	83	PHE
1	B	96	GLN
1	B	106	GLU
1	B	112	PRO
1	B	113	LEU

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Mol	Chain	Res	Type
1	B	115	VAL
1	B	118	SER
1	B	127	ASP
1	B	149	MET
1	B	156	LEU
1	B	158	LEU
1	B	162	ARG
1	B	164	PRO
1	B	167	GLU
1	B	180	VAL
1	B	181	LYS
1	B	193	THR
1	B	201	VAL
1	B	211	THR
1	B	220	VAL
1	B	221	PRO
1	B	222	LEU
1	B	225	CYS
1	B	227	SER
1	B	240	GLU
1	B	250	LEU
1	B	251	ARG
1	B	252	ARG
1	B	255	MET
1	B	257	VAL
1	B	262	ASN
1	B	267	VAL
1	B	270	THR
1	B	291	PRO
1	B	298	VAL
1	B	300	SER
1	B	301	ASP
1	B	304	ILE
1	B	311	LEU
1	B	315	GLN
1	B	326	GLN
1	B	327	LEU
1	B	332	VAL
1	B	338	THR
1	B	340	MET
1	B	373	ILE
1	B	462	PHE

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Mol	Chain	Res	Type
1	B	464	LEU
1	B	474	LEU
1	C	32	ASN
1	C	62	VAL
1	C	83	PHE
1	C	99	VAL
1	C	106	GLU
1	C	109	ARG
1	C	113	LEU
1	C	117	ILE
1	C	127	ASP
1	C	149	MET
1	C	153	GLN
1	C	154	THR
1	C	162	ARG
1	C	167	GLU
1	C	201	VAL
1	C	211	THR
1	C	220	VAL
1	C	222	LEU
1	C	246	LEU
1	C	247	PHE
1	C	251	ARG
1	C	252	ARG
1	C	254	GLN
1	C	255	MET
1	C	257	VAL
1	C	262	ASN
1	C	274	ASP
1	C	287	THR
1	C	293	PRO
1	C	298	VAL
1	C	304	ILE
1	C	311	LEU
1	C	315	GLN
1	C	319	ASN
1	C	326	GLN
1	C	330	THR
1	C	336	ARG
1	C	338	THR
1	C	340	MET
1	C	366	GLU

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Mol	Chain	Res	Type
1	C	445	THR
1	C	464	LEU
1	C	474	LEU
1	D	25	ASP
1	D	32	ASN
1	D	42	LEU
1	D	62	VAL
1	D	66	SER
1	D	83	PHE
1	D	106	GLU
1	D	117	ILE
1	D	118	SER
1	D	145	GLU
1	D	146	CYS
1	D	153	GLN
1	D	158	LEU
1	D	165	ILE
1	D	188	LEU
1	D	201	VAL
1	D	211	THR
1	D	222	LEU
1	D	232	PRO
1	D	238	VAL
1	D	247	PHE
1	D	250	LEU
1	D	251	ARG
1	D	255	MET
1	D	257	VAL
1	D	262	ASN
1	D	291	PRO
1	D	293	PRO
1	D	298	VAL
1	D	301	ASP
1	D	304	ILE
1	D	307	LYS
1	D	311	LEU
1	D	315	GLN
1	D	326	GLN
1	D	327	LEU
1	D	338	THR
1	D	464	LEU
1	D	474	LEU

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Mol	Chain	Res	Type
1	E	33	ILE
1	E	83	PHE
1	E	106	GLU
1	E	112	PRO
1	E	117	ILE
1	E	127	ASP
1	E	133	ASN
1	E	153	GLN
1	E	154	THR
1	E	156	LEU
1	E	158	LEU
1	E	162	ARG
1	E	181	LYS
1	E	188	LEU
1	E	193	THR
1	E	201	VAL
1	E	211	THR
1	E	220	VAL
1	E	222	LEU
1	E	251	ARG
1	E	252	ARG
1	E	255	MET
1	E	257	VAL
1	E	260	LEU
1	E	262	ASN
1	E	270	THR
1	E	292	THR
1	E	298	VAL
1	E	301	ASP
1	E	304	ILE
1	E	311	LEU
1	E	315	GLN
1	E	326	GLN
1	E	334	THR
1	E	338	THR
1	E	341	SER
1	E	346	VAL
1	E	366	GLU
1	E	376	LEU
1	E	387	THR
1	E	440	PRO
1	E	464	LEU

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Mol	Chain	Res	Type
1	E	474	LEU
1	F	23	SER
1	F	24	THR
1	F	32	ASN
1	F	72	VAL
1	F	83	PHE
1	F	99	VAL
1	F	106	GLU
1	F	109	ARG
1	F	118	SER
1	F	148	SER
1	F	149	MET
1	F	153	GLN
1	F	158	LEU
1	F	162	ARG
1	F	167	GLU
1	F	180	VAL
1	F	181	LYS
1	F	188	LEU
1	F	191	LEU
1	F	193	THR
1	F	200	MET
1	F	201	VAL
1	F	211	THR
1	F	220	VAL
1	F	232	PRO
1	F	239	SER
1	F	240	GLU
1	F	245	MET
1	F	247	PHE
1	F	251	ARG
1	F	252	ARG
1	F	255	MET
1	F	257	VAL
1	F	260	LEU
1	F	262	ASN
1	F	291	PRO
1	F	315	GLN
1	F	326	GLN
1	F	330	THR
1	F	334	THR
1	F	338	THR

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Mol	Chain	Res	Type
1	F	340	MET
1	F	348	SER
1	F	363	ARG
1	F	366	GLU
1	F	387	THR
1	F	395	SER
1	F	442	LYS
1	F	464	LEU
1	F	474	LEU
1	G	32	ASN
1	G	41	ARG
1	G	63	PRO
1	G	83	PHE
1	G	99	VAL
1	G	106	GLU
1	G	117	ILE
1	G	118	SER
1	G	127	ASP
1	G	143	ASN
1	G	153	GLN
1	G	158	LEU
1	G	162	ARG
1	G	193	THR
1	G	201	VAL
1	G	211	THR
1	G	213	LEU
1	G	247	PHE
1	G	250	LEU
1	G	251	ARG
1	G	255	MET
1	G	257	VAL
1	G	262	ASN
1	G	269	GLU
1	G	270	THR
1	G	274	ASP
1	G	280	THR
1	G	287	THR
1	G	291	PRO
1	G	304	ILE
1	G	311	LEU
1	G	315	GLN
1	G	321	ILE

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Mol	Chain	Res	Type
1	G	326	GLN
1	G	327	LEU
1	G	338	THR
1	G	340	MET
1	G	366	GLU
1	G	387	THR
1	G	397	LEU
1	G	445	THR
1	G	462	PHE
1	G	464	LEU
1	G	474	LEU
1	H	32	ASN
1	H	75	VAL
1	H	83	PHE
1	H	99	VAL
1	H	106	GLU
1	H	109	ARG
1	H	117	ILE
1	H	123	LEU
1	H	127	ASP
1	H	133	ASN
1	H	149	MET
1	H	153	GLN
1	H	156	LEU
1	H	158	LEU
1	H	162	ARG
1	H	167	GLU
1	H	180	VAL
1	H	188	LEU
1	H	193	THR
1	H	201	VAL
1	H	211	THR
1	H	213	LEU
1	H	220	VAL
1	H	222	LEU
1	H	227	SER
1	H	238	VAL
1	H	245	MET
1	H	246	LEU
1	H	247	PHE
1	H	251	ARG
1	H	252	ARG

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Mol	Chain	Res	Type
1	H	255	MET
1	H	257	VAL
1	H	260	LEU
1	H	262	ASN
1	H	298	VAL
1	H	311	LEU
1	H	315	GLN
1	H	326	GLN
1	H	330	THR
1	H	338	THR
1	H	339	ASN
1	H	340	MET
1	H	366	GLU
1	H	379	ILE
1	H	445	THR
1	H	451	LEU
1	H	462	PHE
1	H	464	LEU
1	H	474	LEU
1	I	53	LYS
1	I	59	LYS
1	I	66	SER
1	I	78	PRO
1	I	83	PHE
1	I	90	PHE
1	I	99	VAL
1	I	106	GLU
1	I	117	ILE
1	I	118	SER
1	I	127	ASP
1	I	133	ASN
1	I	143	ASN
1	I	148	SER
1	I	153	GLN
1	I	154	THR
1	I	156	LEU
1	I	158	LEU
1	I	162	ARG
1	I	165	ILE
1	I	167	GLU
1	I	193	THR
1	I	201	VAL

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Mol	Chain	Res	Type
1	I	209	ASP
1	I	211	THR
1	I	213	LEU
1	I	220	VAL
1	I	222	LEU
1	I	247	PHE
1	I	251	ARG
1	I	255	MET
1	I	257	VAL
1	I	262	ASN
1	I	269	GLU
1	I	287	THR
1	I	298	VAL
1	I	304	ILE
1	I	311	LEU
1	I	315	GLN
1	I	319	ASN
1	I	330	THR
1	I	336	ARG
1	I	338	THR
1	I	373	ILE
1	I	387	THR
1	I	391	SER
1	I	464	LEU
1	I	474	LEU
1	J	32	ASN
1	J	36	HIS
1	J	62	VAL
1	J	72	VAL
1	J	83	PHE
1	J	96	GLN
1	J	99	VAL
1	J	106	GLU
1	J	117	ILE
1	J	118	SER
1	J	125	LYS
1	J	127	ASP
1	J	149	MET
1	J	154	THR
1	J	156	LEU
1	J	158	LEU
1	J	162	ARG

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Mol	Chain	Res	Type
1	J	188	LEU
1	J	193	THR
1	J	200	MET
1	J	201	VAL
1	J	211	THR
1	J	213	LEU
1	J	220	VAL
1	J	222	LEU
1	J	223	ASP
1	J	225	CYS
1	J	238	VAL
1	J	239	SER
1	J	240	GLU
1	J	245	MET
1	J	247	PHE
1	J	251	ARG
1	J	252	ARG
1	J	255	MET
1	J	257	VAL
1	J	260	LEU
1	J	262	ASN
1	J	288	SER
1	J	304	ILE
1	J	311	LEU
1	J	315	GLN
1	J	321	ILE
1	J	330	THR
1	J	338	THR
1	J	341	SER
1	J	352	THR
1	J	384	ASP
1	J	462	PHE
1	J	464	LEU
1	J	474	LEU
1	K	32	ASN
1	K	68	LEU
1	K	83	PHE
1	K	96	GLN
1	K	106	GLU
1	K	117	ILE
1	K	127	ASP
1	K	153	GLN

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Mol	Chain	Res	Type
1	K	154	THR
1	K	162	ARG
1	K	181	LYS
1	K	193	THR
1	K	201	VAL
1	K	211	THR
1	K	232	PRO
1	K	245	MET
1	K	247	PHE
1	K	251	ARG
1	K	252	ARG
1	K	255	MET
1	K	257	VAL
1	K	262	ASN
1	K	272	PRO
1	K	286	SER
1	K	291	PRO
1	K	292	THR
1	K	293	PRO
1	K	301	ASP
1	K	304	ILE
1	K	311	LEU
1	K	315	GLN
1	K	330	THR
1	K	334	THR
1	K	338	THR
1	K	343	CYS
1	K	366	GLU
1	K	391	SER
1	K	395	SER
1	K	464	LEU
1	L	25	ASP
1	L	32	ASN
1	L	33	ILE
1	L	62	VAL
1	L	71	ARG
1	L	76	LYS
1	L	90	PHE
1	L	106	GLU
1	L	112	PRO
1	L	117	ILE
1	L	118	SER

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Mol	Chain	Res	Type
1	L	127	ASP
1	L	149	MET
1	L	154	THR
1	L	156	LEU
1	L	158	LEU
1	L	193	THR
1	L	201	VAL
1	L	209	ASP
1	L	211	THR
1	L	213	LEU
1	L	220	VAL
1	L	240	GLU
1	L	247	PHE
1	L	250	LEU
1	L	251	ARG
1	L	255	MET
1	L	257	VAL
1	L	260	LEU
1	L	262	ASN
1	L	270	THR
1	L	278	LYS
1	L	280	THR
1	L	292	THR
1	L	298	VAL
1	L	304	ILE
1	L	311	LEU
1	L	312	GLN
1	L	315	GLN
1	L	326	GLN
1	L	338	THR
1	L	396	ILE
1	L	443	ASN
1	L	459	LEU
1	L	464	LEU
1	M	25	ASP
1	M	32	ASN
1	M	72	VAL
1	M	83	PHE
1	M	99	VAL
1	M	106	GLU
1	M	113	LEU
1	M	117	ILE

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Mol	Chain	Res	Type
1	M	118	SER
1	M	127	ASP
1	M	136	VAL
1	M	147	ILE
1	M	149	MET
1	M	153	GLN
1	M	154	THR
1	M	156	LEU
1	M	158	LEU
1	M	162	ARG
1	M	163	PRO
1	M	193	THR
1	M	201	VAL
1	M	211	THR
1	M	220	VAL
1	M	232	PRO
1	M	240	GLU
1	M	245	MET
1	M	247	PHE
1	M	251	ARG
1	M	252	ARG
1	M	255	MET
1	M	257	VAL
1	M	262	ASN
1	M	278	LYS
1	M	286	SER
1	M	287	THR
1	M	304	ILE
1	M	311	LEU
1	M	315	GLN
1	M	326	GLN
1	M	330	THR
1	M	331	VAL
1	M	334	THR
1	M	338	THR
1	M	339	ASN
1	M	366	GLU
1	M	381	LEU
1	M	464	LEU
1	N	32	ASN
1	N	48	PRO
1	N	71	ARG

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Mol	Chain	Res	Type
1	N	82	LYS
1	N	83	PHE
1	N	96	GLN
1	N	106	GLU
1	N	115	VAL
1	N	117	ILE
1	N	118	SER
1	N	127	ASP
1	N	143	ASN
1	N	149	MET
1	N	153	GLN
1	N	154	THR
1	N	158	LEU
1	N	162	ARG
1	N	167	GLU
1	N	188	LEU
1	N	193	THR
1	N	194	VAL
1	N	201	VAL
1	N	211	THR
1	N	213	LEU
1	N	222	LEU
1	N	247	PHE
1	N	250	LEU
1	N	251	ARG
1	N	255	MET
1	N	257	VAL
1	N	262	ASN
1	N	287	THR
1	N	291	PRO
1	N	292	THR
1	N	304	ILE
1	N	311	LEU
1	N	315	GLN
1	N	319	ASN
1	N	322	CYS
1	N	326	GLN
1	N	327	LEU
1	N	338	THR
1	N	339	ASN
1	N	352	THR
1	N	389	ILE

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Mol	Chain	Res	Type
1	N	391	SER
1	N	440	PRO
1	N	451	LEU
1	O	32	ASN
1	O	41	ARG
1	O	52	ILE
1	O	62	VAL
1	O	72	VAL
1	O	83	PHE
1	O	106	GLU
1	O	113	LEU
1	O	117	ILE
1	O	127	ASP
1	O	153	GLN
1	O	158	LEU
1	O	161	CYS
1	O	162	ARG
1	O	180	VAL
1	O	181	LYS
1	O	193	THR
1	O	200	MET
1	O	201	VAL
1	O	208	MET
1	O	211	THR
1	O	213	LEU
1	O	220	VAL
1	O	222	LEU
1	O	227	SER
1	O	247	PHE
1	O	251	ARG
1	O	255	MET
1	O	257	VAL
1	O	260	LEU
1	O	262	ASN
1	O	270	THR
1	O	298	VAL
1	O	304	ILE
1	O	311	LEU
1	O	315	GLN
1	O	325	ASN
1	O	326	GLN
1	O	330	THR

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Mol	Chain	Res	Type
1	O	338	THR
1	O	339	ASN
1	O	366	GLU
1	O	391	SER
1	O	464	LEU
1	O	474	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (220) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	32	ASN
1	A	124	ASN
1	A	131	ASN
1	A	133	ASN
1	A	153	GLN
1	A	306	ASN
1	A	319	ASN
1	A	339	ASN
1	A	371	GLN
1	A	393	ASN
1	A	461	GLN
1	B	32	ASN
1	B	69	GLN
1	B	96	GLN
1	B	133	ASN
1	B	138	ASN
1	B	143	ASN
1	B	153	GLN
1	B	178	ASN
1	B	192	ASN
1	B	262	ASN
1	B	303	GLN
1	B	306	ASN
1	B	315	GLN
1	B	357	ASN
1	B	364	HIS
1	B	393	ASN
1	B	443	ASN
1	B	461	GLN
1	C	32	ASN
1	C	69	GLN
1	C	96	GLN

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Mol	Chain	Res	Type
1	C	133	ASN
1	C	143	ASN
1	C	153	GLN
1	C	178	ASN
1	C	254	GLN
1	C	262	ASN
1	C	315	GLN
1	C	326	GLN
1	C	339	ASN
1	C	375	GLN
1	C	393	ASN
1	C	461	GLN
1	D	32	ASN
1	D	69	GLN
1	D	133	ASN
1	D	143	ASN
1	D	262	ASN
1	D	306	ASN
1	D	315	GLN
1	D	317	HIS
1	D	339	ASN
1	D	357	ASN
1	D	371	GLN
1	D	393	ASN
1	D	443	ASN
1	D	461	GLN
1	E	32	ASN
1	E	69	GLN
1	E	81	ASN
1	E	96	GLN
1	E	111	GLN
1	E	133	ASN
1	E	143	ASN
1	E	153	GLN
1	E	306	ASN
1	E	315	GLN
1	E	319	ASN
1	E	339	ASN
1	E	364	HIS
1	E	393	ASN
1	E	461	GLN
1	F	32	ASN

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Mol	Chain	Res	Type
1	F	69	GLN
1	F	96	GLN
1	F	124	ASN
1	F	133	ASN
1	F	143	ASN
1	F	153	GLN
1	F	176	ASN
1	F	262	ASN
1	F	306	ASN
1	F	315	GLN
1	F	339	ASN
1	F	364	HIS
1	F	393	ASN
1	F	461	GLN
1	F	471	GLN
1	G	32	ASN
1	G	69	GLN
1	G	96	GLN
1	G	133	ASN
1	G	153	GLN
1	G	168	HIS
1	G	262	ASN
1	G	306	ASN
1	G	315	GLN
1	G	339	ASN
1	G	393	ASN
1	G	461	GLN
1	G	471	GLN
1	H	32	ASN
1	H	69	GLN
1	H	81	ASN
1	H	96	GLN
1	H	133	ASN
1	H	176	ASN
1	H	262	ASN
1	H	306	ASN
1	H	315	GLN
1	H	339	ASN
1	H	393	ASN
1	H	461	GLN
1	H	471	GLN
1	I	32	ASN

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Mol	Chain	Res	Type
1	I	36	HIS
1	I	69	GLN
1	I	81	ASN
1	I	133	ASN
1	I	143	ASN
1	I	153	GLN
1	I	176	ASN
1	I	254	GLN
1	I	262	ASN
1	I	306	ASN
1	I	312	GLN
1	I	315	GLN
1	I	339	ASN
1	I	364	HIS
1	I	393	ASN
1	I	461	GLN
1	J	32	ASN
1	J	69	GLN
1	J	96	GLN
1	J	133	ASN
1	J	138	ASN
1	J	143	ASN
1	J	153	GLN
1	J	176	ASN
1	J	254	GLN
1	J	262	ASN
1	J	306	ASN
1	J	315	GLN
1	J	317	HIS
1	J	339	ASN
1	J	393	ASN
1	J	461	GLN
1	K	32	ASN
1	K	69	GLN
1	K	96	GLN
1	K	133	ASN
1	K	143	ASN
1	K	153	GLN
1	K	178	ASN
1	K	262	ASN
1	K	303	GLN
1	K	306	ASN

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Mol	Chain	Res	Type
1	K	315	GLN
1	K	339	ASN
1	K	357	ASN
1	K	371	GLN
1	K	393	ASN
1	K	461	GLN
1	L	32	ASN
1	L	55	GLN
1	L	69	GLN
1	L	96	GLN
1	L	143	ASN
1	L	153	GLN
1	L	262	ASN
1	L	303	GLN
1	L	306	ASN
1	L	315	GLN
1	L	339	ASN
1	L	364	HIS
1	L	375	GLN
1	L	393	ASN
1	L	461	GLN
1	L	471	GLN
1	M	32	ASN
1	M	69	GLN
1	M	96	GLN
1	M	133	ASN
1	M	143	ASN
1	M	168	HIS
1	M	214	GLN
1	M	262	ASN
1	M	315	GLN
1	M	339	ASN
1	M	357	ASN
1	M	364	HIS
1	M	371	GLN
1	M	393	ASN
1	M	461	GLN
1	M	471	GLN
1	N	32	ASN
1	N	69	GLN
1	N	133	ASN
1	N	262	ASN

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Mol	Chain	Res	Type
1	N	306	ASN
1	N	315	GLN
1	N	339	ASN
1	N	393	ASN
1	N	401	ASN
1	N	461	GLN
1	O	32	ASN
1	O	69	GLN
1	O	96	GLN
1	O	133	ASN
1	O	143	ASN
1	O	153	GLN
1	O	168	HIS
1	O	262	ASN
1	O	306	ASN
1	O	315	GLN
1	O	364	HIS
1	O	393	ASN
1	O	461	GLN
1	O	471	GLN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no oligosaccharides 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 [i](#)

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

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	417/423 (98%)	-1.37	0 100 100	21, 52, 109, 134	0
1	B	417/423 (98%)	-1.34	0 100 100	25, 51, 110, 139	0
1	C	417/423 (98%)	-1.32	0 100 100	22, 56, 109, 138	0
1	D	417/423 (98%)	-1.32	0 100 100	24, 56, 110, 146	0
1	E	417/423 (98%)	-1.34	0 100 100	24, 54, 112, 139	0
1	F	417/423 (98%)	-1.38	0 100 100	20, 51, 111, 140	0
1	G	417/423 (98%)	-1.34	1 (0%) 91 86	22, 55, 107, 133	0
1	H	417/423 (98%)	-1.32	1 (0%) 91 86	21, 57, 112, 140	0
1	I	417/423 (98%)	-1.33	0 100 100	22, 56, 110, 140	0
1	J	417/423 (98%)	-1.40	0 100 100	21, 53, 111, 141	0
1	K	417/423 (98%)	-1.28	0 100 100	25, 66, 112, 140	0
1	L	417/423 (98%)	-1.33	0 100 100	26, 60, 111, 145	0
1	M	417/423 (98%)	-1.31	0 100 100	27, 63, 116, 141	0
1	N	417/423 (98%)	-1.32	0 100 100	22, 62, 113, 144	0
1	O	417/423 (98%)	-1.31	0 100 100	24, 61, 112, 143	0
All	All	6255/6345 (98%)	-1.34	2 (0%) 100 100	20, 57, 111, 146	0

All (2) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	G	55	GLN	2.5
1	H	176	ASN	2.1

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

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

6.3 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

6.4 Ligands [i](#)

There are no ligands in this entry.

6.5 Other polymers [i](#)

There are no such residues in this entry.