



Full wwPDB EM Validation Report ⓘ

Nov 10, 2024 – 05:50 am GMT

PDB ID : 6G2I
EMDB ID : EMD-4344
Title : Filament of acetyl-CoA carboxylase and BRCT domains of BRCA1 (ACC-BRCT) at 5.9 Å resolution
Authors : Hunkeler, M.; Hagmann, A.; Stutfeld, E.; Chami, M.; Stahlberg, H.; Maier, T.
Deposited on : 2018-03-23
Resolution : 5.90 Å (reported)

This is a Full wwPDB EM 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/EMValidationReportHelp>

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:

EMDB validation analysis : 0.0.1.dev113
Mogul : 1.8.4, CSD as541be (2020)
MolProbity : 4.02b-467
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.39

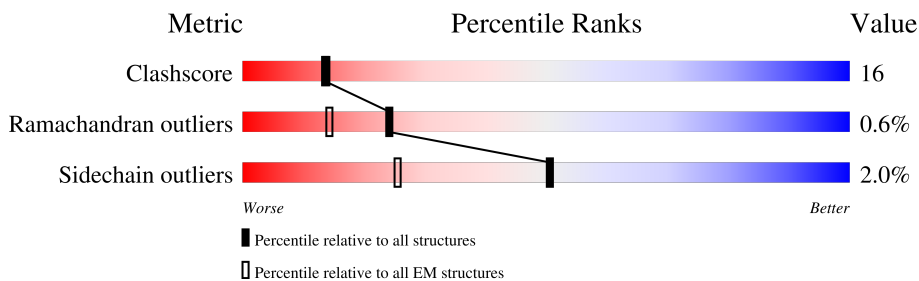
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 5.90 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the 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 EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	2346	<div style="display: flex; justify-content: space-between;"> 65% 58% 28% • 11% </div>
1	B	2346	<div style="display: flex; justify-content: space-between;"> 65% 58% 28% • 11% </div>
1	C	2346	<div style="display: flex; justify-content: space-between;"> 45% 54% 32% • 11% </div>
1	D	2346	<div style="display: flex; justify-content: space-between;"> 27% 48% 35% • • 11% </div>
1	E	2346	<div style="display: flex; justify-content: space-between;"> 27% 50% 36% • 11% </div>
1	F	2346	<div style="display: flex; justify-content: space-between;"> 45% 56% 30% • 11% </div>
1	G	2346	<div style="display: flex; justify-content: space-between;"> 31% 23% 9% 68% </div>
1	J	2346	<div style="display: flex; justify-content: space-between;"> 56% 41% 14% • 44% </div>

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Mol	Chain	Length	Quality of chain
1	Q	2346	
1	R	2346	
2	H	240	
2	K	240	
2	M	240	
2	O	240	
2	S	240	
2	U	240	
2	W	240	
2	Y	240	

2 Entry composition i

There are 2 unique types of molecules in this entry. The entry contains 288810 atoms, of which 143374 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called Acetyl-CoA carboxylase 1.

Mol	Chain	Residues	Atoms							AltConf	Trace
1	D	2080	Total	C	H	N	O	P	S	0	0
			32758	10493	16276	2855	3033	1	100		
1	E	2080	Total	C	H	N	O	P	S	0	0
			32758	10493	16276	2855	3033	1	100		
1	C	2080	Total	C	H	N	O	P	S	0	0
			32757	10493	16275	2855	3033	1	100		
1	F	2080	Total	C	H	N	O	P	S	0	0
			32757	10493	16275	2855	3033	1	100		
1	B	2080	Total	C	H	N	O	P	S	0	0
			32758	10493	16276	2855	3033	1	100		
1	A	2080	Total	C	H	N	O	P	S	0	0
			32758	10493	16276	2855	3033	1	100		
1	G	757	Total	C	H	N	O	S	0	0	
			12055	3855	5997	1050	1124	29			
1	Q	757	Total	C	H	N	O	S	0	0	
			12055	3855	5997	1050	1124	29			
1	J	1323	Total	C	H	N	O	P	S	0	0
			20703	6638	10279	1805	1909	1	71		
1	R	1323	Total	C	H	N	O	P	S	0	0
			20703	6638	10279	1805	1909	1	71		

- Molecule 2 is a protein called Breast cancer type 1 susceptibility protein.

Mol	Chain	Residues	Atoms						AltConf	Trace
2	H	214	Total	C	H	N	O	S	0	0
			3347	1084	1648	289	312	14		
2	K	214	Total	C	H	N	O	S	0	0
			3340	1083	1644	286	313	14		
2	M	214	Total	C	H	N	O	S	0	0
			3347	1084	1648	289	312	14		
2	O	214	Total	C	H	N	O	S	0	0
			3340	1083	1644	286	313	14		
2	S	214	Total	C	H	N	O	S	0	0
			3347	1084	1648	289	312	14		

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Mol	Chain	Residues	Atoms					AltConf	Trace	
			Total	C	H	N	O			S
2	U	214	3340	1083	1644	286	313	14	0	0
2	Y	214	3347	1084	1648	289	312	14	0	0
2	W	214	3340	1083	1644	286	313	14	0	0

There are 208 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
H	1620	MET	-	initiating methionine	UNP P38398
H	1621	LYS	-	expression tag	UNP P38398
H	1622	HIS	-	expression tag	UNP P38398
H	1623	HIS	-	expression tag	UNP P38398
H	1624	HIS	-	expression tag	UNP P38398
H	1625	HIS	-	expression tag	UNP P38398
H	1626	HIS	-	expression tag	UNP P38398
H	1627	HIS	-	expression tag	UNP P38398
H	1628	PRO	-	expression tag	UNP P38398
H	1629	MET	-	expression tag	UNP P38398
H	1630	THR	-	expression tag	UNP P38398
H	1631	SER	-	expression tag	UNP P38398
H	1632	LEU	-	expression tag	UNP P38398
H	1633	TYR	-	expression tag	UNP P38398
H	1634	LYS	-	expression tag	UNP P38398
H	1635	LYS	-	expression tag	UNP P38398
H	1636	ALA	-	expression tag	UNP P38398
H	1637	GLY	-	expression tag	UNP P38398
H	1638	LEU	-	expression tag	UNP P38398
H	1639	GLU	-	expression tag	UNP P38398
H	1640	ASN	-	expression tag	UNP P38398
H	1641	LEU	-	expression tag	UNP P38398
H	1642	TYR	-	expression tag	UNP P38398
H	1643	PHE	-	expression tag	UNP P38398
H	1644	GLN	-	expression tag	UNP P38398
H	1645	GLY	-	expression tag	UNP P38398
K	1620	MET	-	initiating methionine	UNP P38398
K	1621	LYS	-	expression tag	UNP P38398
K	1622	HIS	-	expression tag	UNP P38398
K	1623	HIS	-	expression tag	UNP P38398
K	1624	HIS	-	expression tag	UNP P38398
K	1625	HIS	-	expression tag	UNP P38398

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Chain	Residue	Modelled	Actual	Comment	Reference
K	1626	HIS	-	expression tag	UNP P38398
K	1627	HIS	-	expression tag	UNP P38398
K	1628	PRO	-	expression tag	UNP P38398
K	1629	MET	-	expression tag	UNP P38398
K	1630	THR	-	expression tag	UNP P38398
K	1631	SER	-	expression tag	UNP P38398
K	1632	LEU	-	expression tag	UNP P38398
K	1633	TYR	-	expression tag	UNP P38398
K	1634	LYS	-	expression tag	UNP P38398
K	1635	LYS	-	expression tag	UNP P38398
K	1636	ALA	-	expression tag	UNP P38398
K	1637	GLY	-	expression tag	UNP P38398
K	1638	LEU	-	expression tag	UNP P38398
K	1639	GLU	-	expression tag	UNP P38398
K	1640	ASN	-	expression tag	UNP P38398
K	1641	LEU	-	expression tag	UNP P38398
K	1642	TYR	-	expression tag	UNP P38398
K	1643	PHE	-	expression tag	UNP P38398
K	1644	GLN	-	expression tag	UNP P38398
K	1645	GLY	-	expression tag	UNP P38398
M	1620	MET	-	initiating methionine	UNP P38398
M	1621	LYS	-	expression tag	UNP P38398
M	1622	HIS	-	expression tag	UNP P38398
M	1623	HIS	-	expression tag	UNP P38398
M	1624	HIS	-	expression tag	UNP P38398
M	1625	HIS	-	expression tag	UNP P38398
M	1626	HIS	-	expression tag	UNP P38398
M	1627	HIS	-	expression tag	UNP P38398
M	1628	PRO	-	expression tag	UNP P38398
M	1629	MET	-	expression tag	UNP P38398
M	1630	THR	-	expression tag	UNP P38398
M	1631	SER	-	expression tag	UNP P38398
M	1632	LEU	-	expression tag	UNP P38398
M	1633	TYR	-	expression tag	UNP P38398
M	1634	LYS	-	expression tag	UNP P38398
M	1635	LYS	-	expression tag	UNP P38398
M	1636	ALA	-	expression tag	UNP P38398
M	1637	GLY	-	expression tag	UNP P38398
M	1638	LEU	-	expression tag	UNP P38398
M	1639	GLU	-	expression tag	UNP P38398
M	1640	ASN	-	expression tag	UNP P38398
M	1641	LEU	-	expression tag	UNP P38398

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Chain	Residue	Modelled	Actual	Comment	Reference
M	1642	TYR	-	expression tag	UNP P38398
M	1643	PHE	-	expression tag	UNP P38398
M	1644	GLN	-	expression tag	UNP P38398
M	1645	GLY	-	expression tag	UNP P38398
O	1620	MET	-	initiating methionine	UNP P38398
O	1621	LYS	-	expression tag	UNP P38398
O	1622	HIS	-	expression tag	UNP P38398
O	1623	HIS	-	expression tag	UNP P38398
O	1624	HIS	-	expression tag	UNP P38398
O	1625	HIS	-	expression tag	UNP P38398
O	1626	HIS	-	expression tag	UNP P38398
O	1627	HIS	-	expression tag	UNP P38398
O	1628	PRO	-	expression tag	UNP P38398
O	1629	MET	-	expression tag	UNP P38398
O	1630	THR	-	expression tag	UNP P38398
O	1631	SER	-	expression tag	UNP P38398
O	1632	LEU	-	expression tag	UNP P38398
O	1633	TYR	-	expression tag	UNP P38398
O	1634	LYS	-	expression tag	UNP P38398
O	1635	LYS	-	expression tag	UNP P38398
O	1636	ALA	-	expression tag	UNP P38398
O	1637	GLY	-	expression tag	UNP P38398
O	1638	LEU	-	expression tag	UNP P38398
O	1639	GLU	-	expression tag	UNP P38398
O	1640	ASN	-	expression tag	UNP P38398
O	1641	LEU	-	expression tag	UNP P38398
O	1642	TYR	-	expression tag	UNP P38398
O	1643	PHE	-	expression tag	UNP P38398
O	1644	GLN	-	expression tag	UNP P38398
O	1645	GLY	-	expression tag	UNP P38398
S	1620	MET	-	initiating methionine	UNP P38398
S	1621	LYS	-	expression tag	UNP P38398
S	1622	HIS	-	expression tag	UNP P38398
S	1623	HIS	-	expression tag	UNP P38398
S	1624	HIS	-	expression tag	UNP P38398
S	1625	HIS	-	expression tag	UNP P38398
S	1626	HIS	-	expression tag	UNP P38398
S	1627	HIS	-	expression tag	UNP P38398
S	1628	PRO	-	expression tag	UNP P38398
S	1629	MET	-	expression tag	UNP P38398
S	1630	THR	-	expression tag	UNP P38398
S	1631	SER	-	expression tag	UNP P38398

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Chain	Residue	Modelled	Actual	Comment	Reference
S	1632	LEU	-	expression tag	UNP P38398
S	1633	TYR	-	expression tag	UNP P38398
S	1634	LYS	-	expression tag	UNP P38398
S	1635	LYS	-	expression tag	UNP P38398
S	1636	ALA	-	expression tag	UNP P38398
S	1637	GLY	-	expression tag	UNP P38398
S	1638	LEU	-	expression tag	UNP P38398
S	1639	GLU	-	expression tag	UNP P38398
S	1640	ASN	-	expression tag	UNP P38398
S	1641	LEU	-	expression tag	UNP P38398
S	1642	TYR	-	expression tag	UNP P38398
S	1643	PHE	-	expression tag	UNP P38398
S	1644	GLN	-	expression tag	UNP P38398
S	1645	GLY	-	expression tag	UNP P38398
U	1620	MET	-	initiating methionine	UNP P38398
U	1621	LYS	-	expression tag	UNP P38398
U	1622	HIS	-	expression tag	UNP P38398
U	1623	HIS	-	expression tag	UNP P38398
U	1624	HIS	-	expression tag	UNP P38398
U	1625	HIS	-	expression tag	UNP P38398
U	1626	HIS	-	expression tag	UNP P38398
U	1627	HIS	-	expression tag	UNP P38398
U	1628	PRO	-	expression tag	UNP P38398
U	1629	MET	-	expression tag	UNP P38398
U	1630	THR	-	expression tag	UNP P38398
U	1631	SER	-	expression tag	UNP P38398
U	1632	LEU	-	expression tag	UNP P38398
U	1633	TYR	-	expression tag	UNP P38398
U	1634	LYS	-	expression tag	UNP P38398
U	1635	LYS	-	expression tag	UNP P38398
U	1636	ALA	-	expression tag	UNP P38398
U	1637	GLY	-	expression tag	UNP P38398
U	1638	LEU	-	expression tag	UNP P38398
U	1639	GLU	-	expression tag	UNP P38398
U	1640	ASN	-	expression tag	UNP P38398
U	1641	LEU	-	expression tag	UNP P38398
U	1642	TYR	-	expression tag	UNP P38398
U	1643	PHE	-	expression tag	UNP P38398
U	1644	GLN	-	expression tag	UNP P38398
U	1645	GLY	-	expression tag	UNP P38398
Y	1620	MET	-	initiating methionine	UNP P38398
Y	1621	LYS	-	expression tag	UNP P38398

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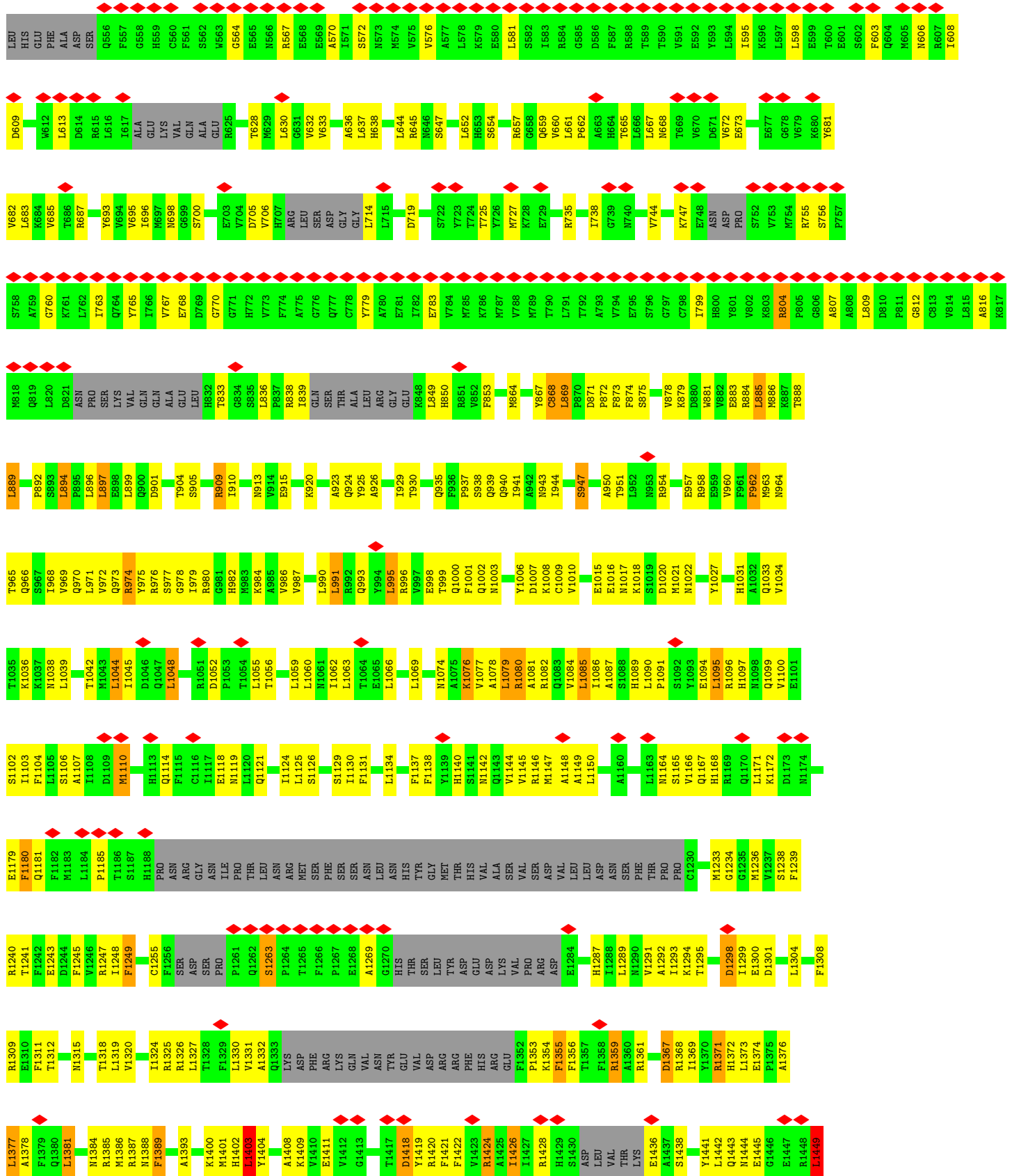
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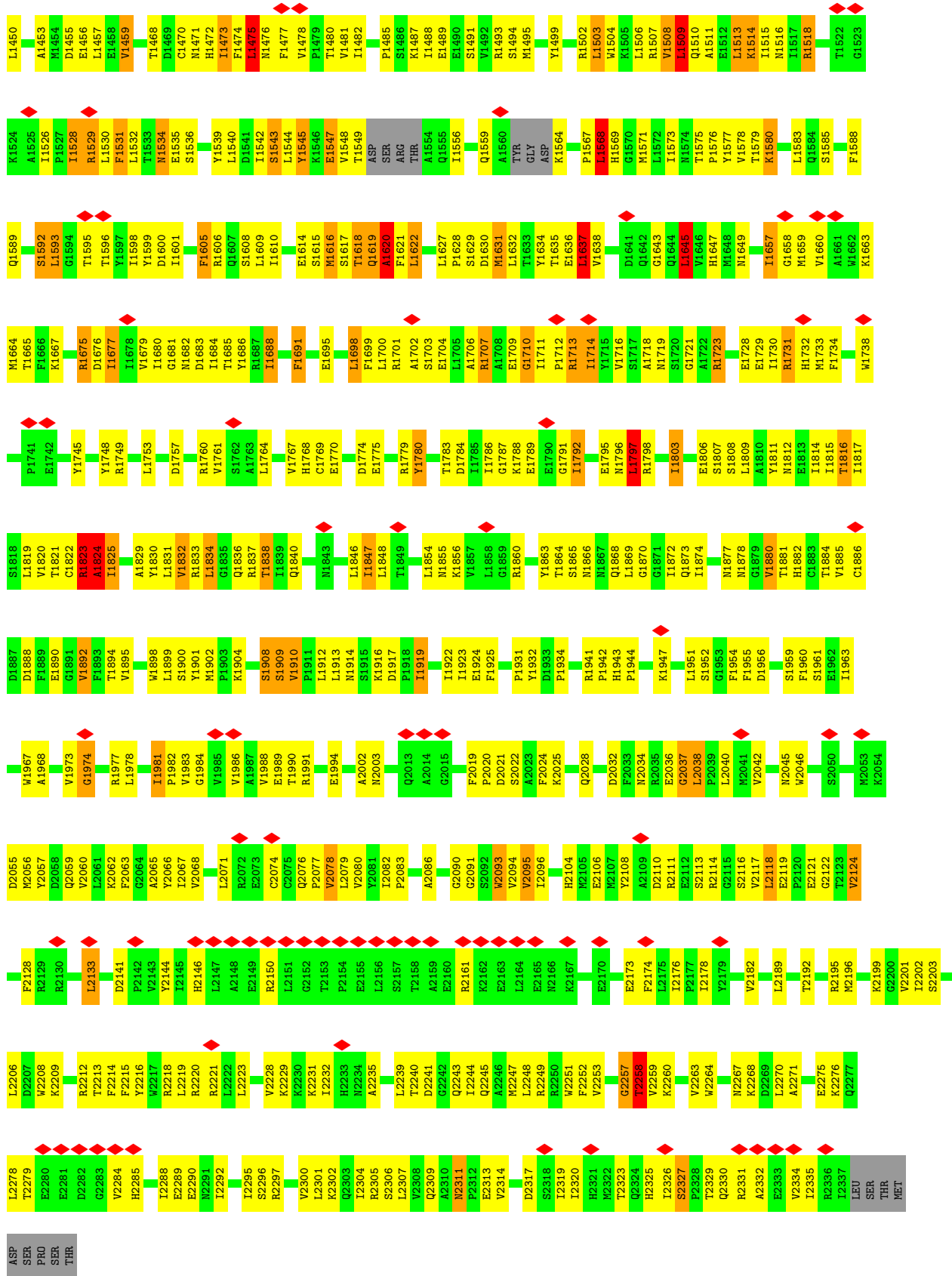
Chain	Residue	Modelled	Actual	Comment	Reference
Y	1622	HIS	-	expression tag	UNP P38398
Y	1623	HIS	-	expression tag	UNP P38398
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Y	1625	HIS	-	expression tag	UNP P38398
Y	1626	HIS	-	expression tag	UNP P38398
Y	1627	HIS	-	expression tag	UNP P38398
Y	1628	PRO	-	expression tag	UNP P38398
Y	1629	MET	-	expression tag	UNP P38398
Y	1630	THR	-	expression tag	UNP P38398
Y	1631	SER	-	expression tag	UNP P38398
Y	1632	LEU	-	expression tag	UNP P38398
Y	1633	TYR	-	expression tag	UNP P38398
Y	1634	LYS	-	expression tag	UNP P38398
Y	1635	LYS	-	expression tag	UNP P38398
Y	1636	ALA	-	expression tag	UNP P38398
Y	1637	GLY	-	expression tag	UNP P38398
Y	1638	LEU	-	expression tag	UNP P38398
Y	1639	GLU	-	expression tag	UNP P38398
Y	1640	ASN	-	expression tag	UNP P38398
Y	1641	LEU	-	expression tag	UNP P38398
Y	1642	TYR	-	expression tag	UNP P38398
Y	1643	PHE	-	expression tag	UNP P38398
Y	1644	GLN	-	expression tag	UNP P38398
Y	1645	GLY	-	expression tag	UNP P38398
W	1620	MET	-	initiating methionine	UNP P38398
W	1621	LYS	-	expression tag	UNP P38398
W	1622	HIS	-	expression tag	UNP P38398
W	1623	HIS	-	expression tag	UNP P38398
W	1624	HIS	-	expression tag	UNP P38398
W	1625	HIS	-	expression tag	UNP P38398
W	1626	HIS	-	expression tag	UNP P38398
W	1627	HIS	-	expression tag	UNP P38398
W	1628	PRO	-	expression tag	UNP P38398
W	1629	MET	-	expression tag	UNP P38398
W	1630	THR	-	expression tag	UNP P38398
W	1631	SER	-	expression tag	UNP P38398
W	1632	LEU	-	expression tag	UNP P38398
W	1633	TYR	-	expression tag	UNP P38398
W	1634	LYS	-	expression tag	UNP P38398
W	1635	LYS	-	expression tag	UNP P38398
W	1636	ALA	-	expression tag	UNP P38398
W	1637	GLY	-	expression tag	UNP P38398

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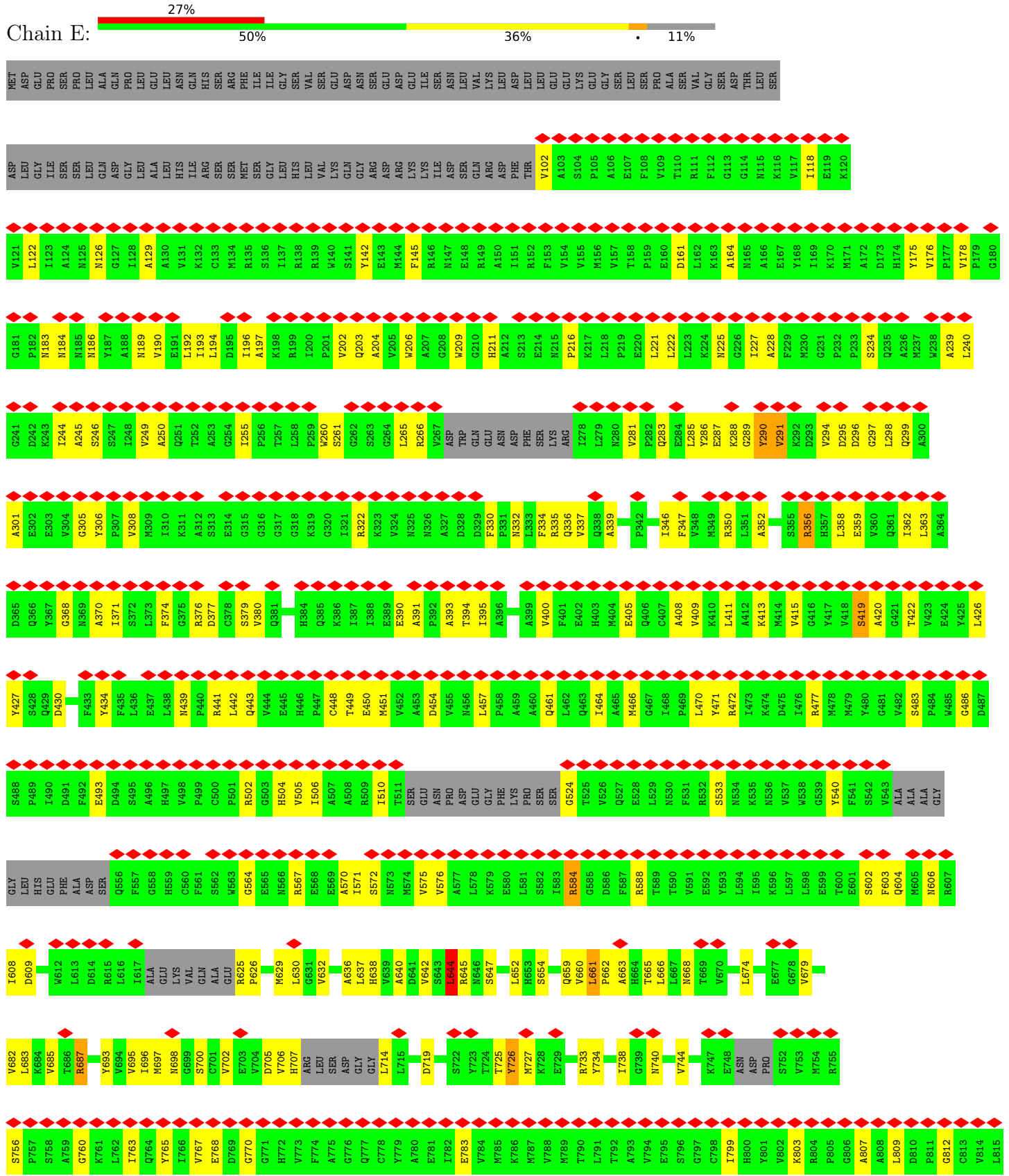
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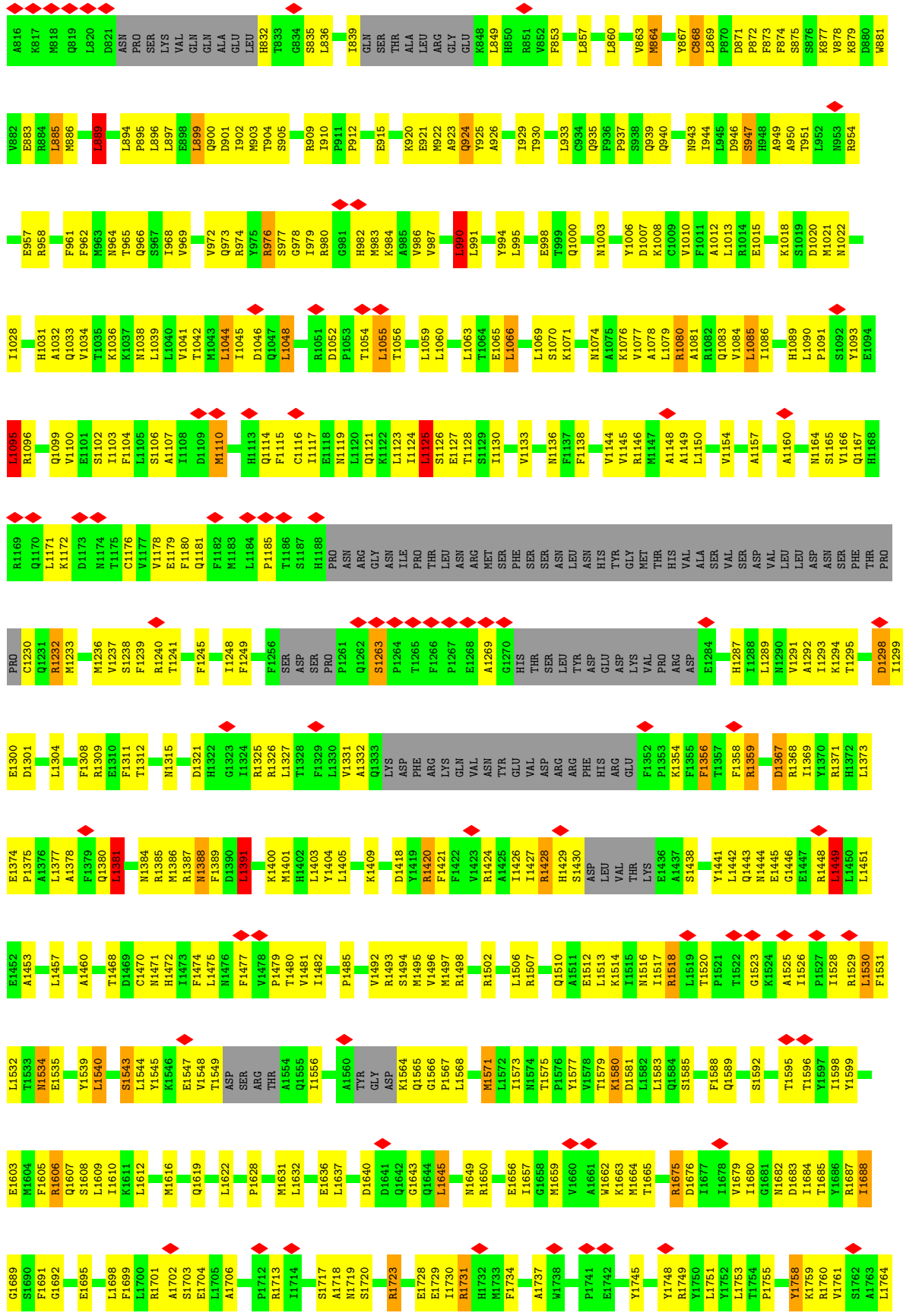
Chain	Residue	Modelled	Actual	Comment	Reference
W	1638	LEU	-	expression tag	UNP P38398
W	1639	GLU	-	expression tag	UNP P38398
W	1640	ASN	-	expression tag	UNP P38398
W	1641	LEU	-	expression tag	UNP P38398
W	1642	TYR	-	expression tag	UNP P38398
W	1643	PHE	-	expression tag	UNP P38398
W	1644	GLN	-	expression tag	UNP P38398
W	1645	GLY	-	expression tag	UNP P38398

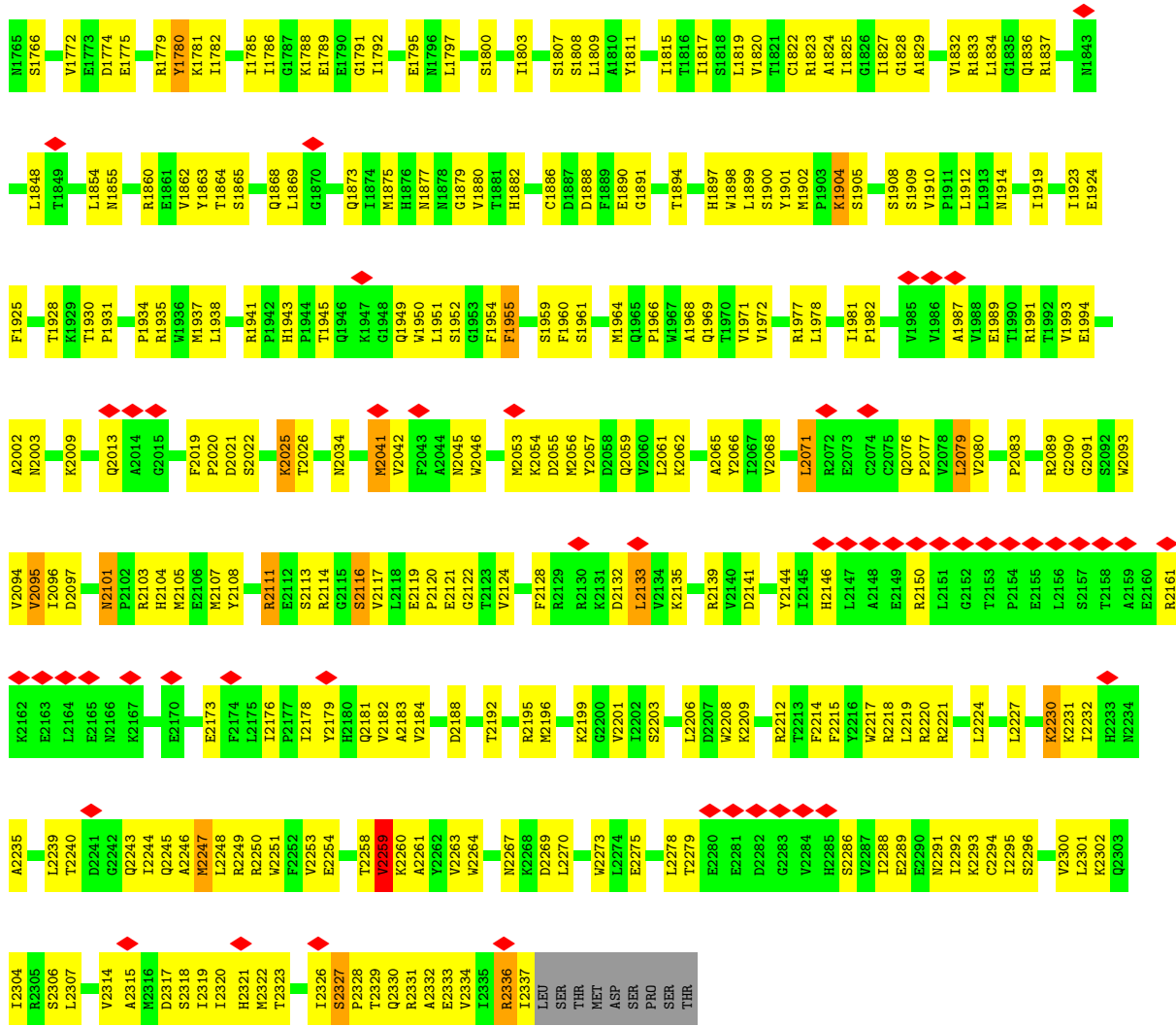




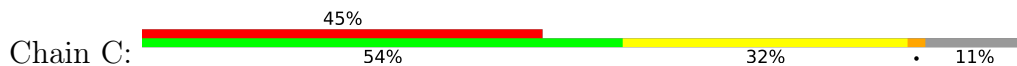
• Molecule 1: Acetyl-CoA carboxylase 1







• Molecule 1: Acetyl-CoA carboxylase 1



MET	ASP
GLY	LEU
PRO	ILE
SER	PRO
PRO	SER
LEU	LEU
ALA	ALA
GLN	M2316
PRO	D2317
LEU	S2318
LEU	M2319
GLU	L2320
LEU	F2174
ASN	L2175
GLN	L2176
HIS	F2177
SER	L2178
SER	F2179
ARG	E2180
PHE	Q2181
ILE	V2182
ILE	A2183
GLY	V2184
LEU	S2188
VAL	T2192
SER	R2195
GLU	H2196
ASN	K2199
ASP	G2200
GLU	L2201
ASP	S2203
ASN	L2206
ARG	D2207
GLU	W2208
ASP	K2209
GLY	R2212
LEU	T2213
LEU	F2214
LEU	F2215
GLU	W2217
GLY	R2218
SER	L2219
PRO	R2220
ALA	R2221
SER	L2224
ASP	L2227
THR	K2230
SER	L2301
SER	L2332
SER	K2302
SER	Q2303

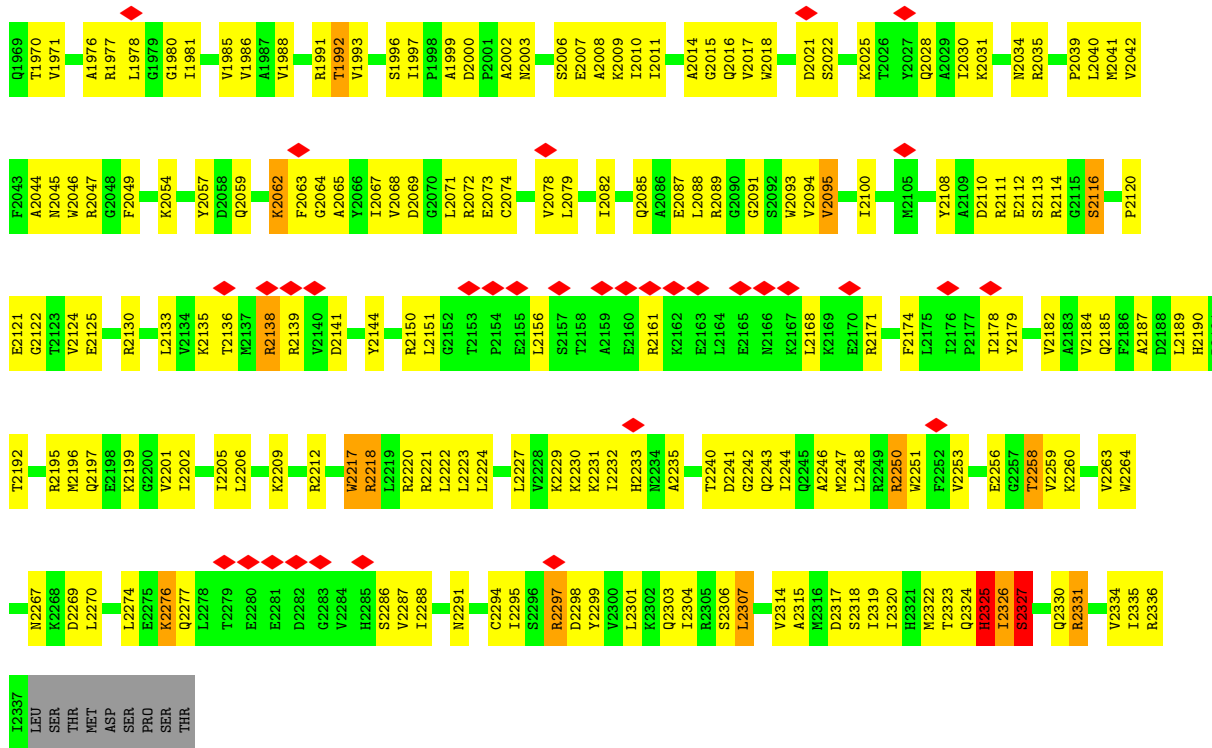
ASP	LEU	GLY	ILE	SER	SER	LEU	LEU	GLN	ASP	GLY	LEU	LEU	LEU	ALA	HIS	ILE	GLN	ARG	SER	SER	MET	SER	GLY	SER	GLY	LEU	LEU	HIS	LEU	GLY	LEU	LEU	LEU	ILE	ASP	ARG	GLY	ASP	ARG	GLU	ARG	GLY	LYS	LYS	ILE	ASP	ASP	ASN	LEU	LEU	VAL	GLN	ARG	ARG	ASP	PHE	THR	V102	A103	S104	P105	A106	E107	F108	V109	T110	R111	F112	G113	A164	G114	M115	K116	V117	I118	E119	K120
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V121	L122	I123	A124	M125	N126	G127	I128	A129	A130	V131	K132	C133	M134	R135	S136	I137	R138	R139	W140	S141	V142	E143	M144	F145	R146	M147	E148	R149	A150	I151	R152	F153	V154	V155	M156	V157	T158	P159	E160	D161	L162	K163	A164	M165	A166	E167	V168	I169	K170	M171	A172	D173	H174	Y175	A236	M237	W238	A239	L240
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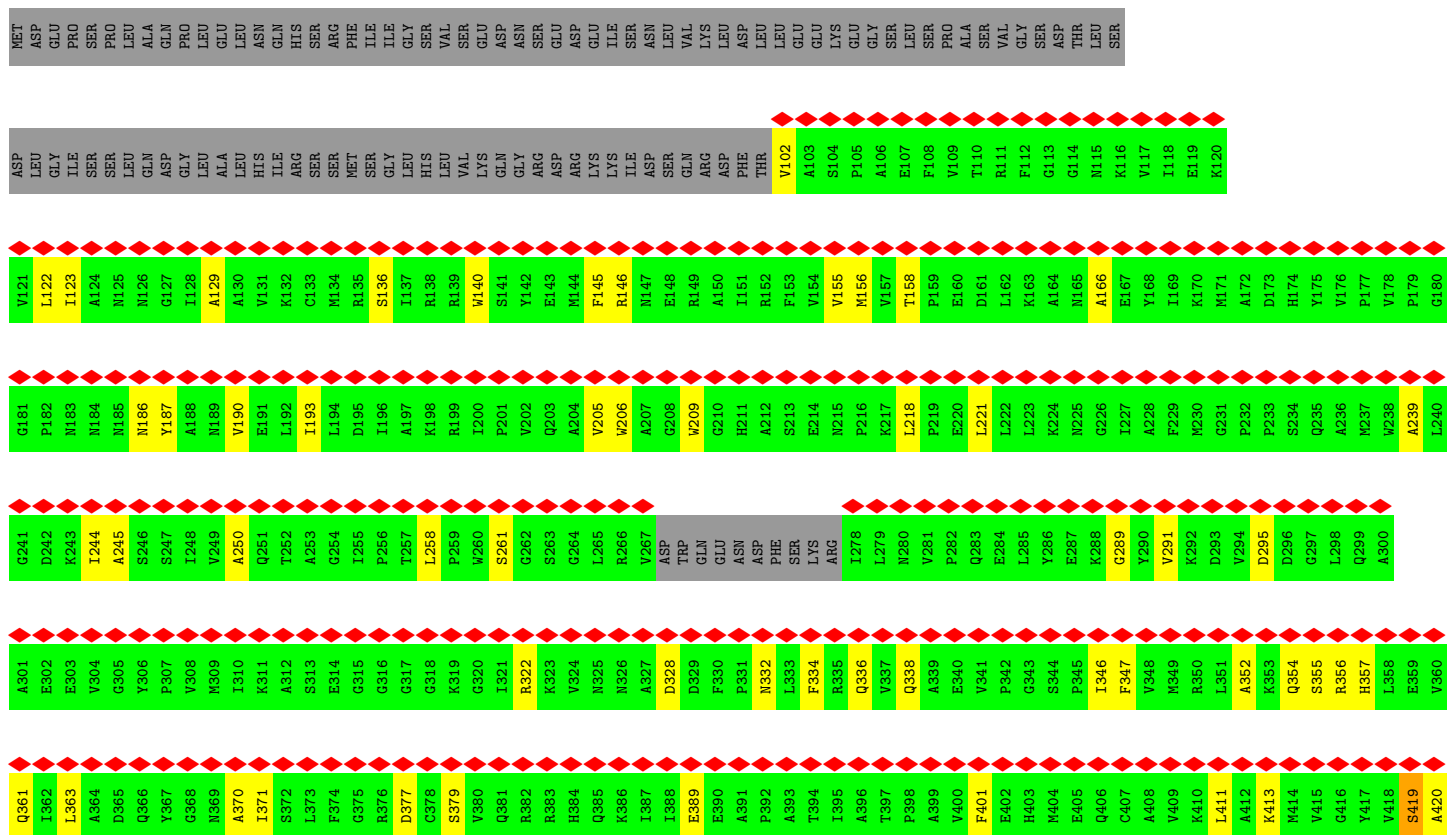
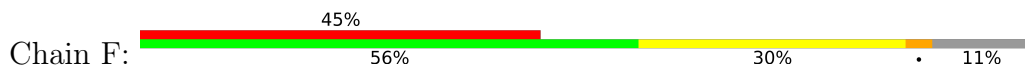
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G241	A301	Q361	G421	G481	F541	E601	L661	S721	E781	SER	D901	M963
D242	E302	I362	T422	V482	S542	S602	P662	S722	I782	THR	I902	N964
K243	E303	L363	V423	S483	V543	F603	A663	Y723	E783	ALA	M903	T965
I244	V304	A364	E424	P484	ALA	Q604	H664	T724	V784	LEU	T904	Q966
A245	G305	A365	Y425	P485	ALA	M605	T665	Y725	M785	ARG	S905	S967
S246	G306	Q366	L426	G486	GLY	N606	L666	Y726	K786	GLY	V906	I968
S247	P307	Q367	Y427	D487	GLY	R607	L667	M727	M787	GLU	S907	V969
I248	V308	G368	S428	S488	LEU	L608	N668	K728	V788	L849	G908	Q970
V249	M309	N369	Q429	P489	HIS	D609	T669	E729	M789	H850	R909	L971
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Q251	K311	I371	G431	D491	ALA	G611	D671	V731	L791	V852	P911	Q973
T252	A312	S372	S432	F492	ASP	M612	V672	D732	T792	F853	P912	R974
A253	S113	L373	F433	E493	SER	L613	E673	R733	A793	H854	N913	Y975
G254	E314	F374	Y434	D494	Q556	D614	L674	Y734	V794	Y855	R914	R976
I255	G315	G375	F435	S495	F557	R615	L675	R735	E795	V856	E915	S977
P256	G316	R376	L436	A496	G558	L616	Y676	I736	S796	L857	K916	G978
T257	G317	D377	E437	H497	H559	I617	E677	T737	G797	D858	I917	I979
L258	G318	C378	L438	V498	C560	ALA	G678	I738	C798	H859	I918	R980
P259	K319	S379	M439	P499	F561	GLU	V679	G739	I799	L860	K919	G981
M260	G320	V380	P440	C500	S562	LYS	K680	N740	H800	H861	K920	H982
S261	I321	Q381	R441	F501	M563	VAL	G681	K741	Y801	R862	M922	M983
G262	R322	R382	L442	R502	G564	GLN	V682	T742	H802	V863	A923	A985
S263	K323	R383	Q443	G503	E566	ALA	L683	C743	R803	M864	Q924	V986
G264	V324	H384	V444	H504	N566	R625	K684	V744	R804	R865	Y925	V987
L265	N325	Q385	E445	V505	R567	P626	V685	F745	P805	G866	A926	M988
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TRP	D329	E389	T449	R509	I571	L630	S689	ASN	L809	P870	I929	R992
GLU	F330	E390	E450	R510	S572	G631	P690	ASP	D810	D871	T930	R993
ASN	P331	A391	M451	I510	N573	V632	M691	PRD	P811	F872	Y932	Y994
ASP	N332	N392	V452	T511	N574	G633	S692	S752	G812	F873	L933	L995
PHE	L333	A393	A453	SER	M575	C634	Y693	V753	C813	R874	L933	R996
SER	F334	T394	D454	ASN	V576	G635	V694	W754	B814	S875	C934	V997
LYS	R335	I395	V455	PRD	A577	A636	V695	R755	L815	S876	Q935	E998
ARG	Q336	A396	V456	ASP	L578	L637	G696	S756	L816	K877	Q939	T999
I278	V337	T397	L457	GLU	K579	H638	I696	P757	A817	V678	Q940	Q1000
L279	Q338	T398	M457	GLY	E580	V639	M697	S758	K817	K879	I941	F1001
M280	A339	P397	P458	PHE	L581	A640	N698	A759	M818	D880	I942	Q1002
V281	E340	A399	A459	LYS	S582	D641	G699	G760	Q819	W881	A942	N1003
P282	E341	V400	A460	PRD	S583	V642	S700	K761	L820	V882	N943	G1004
Q283	V342	F401	Q461	SER	I583	G643	C701	L762	D821	F883	I944	H1005
E284	H403	A402	L462	G524	R584	L644	V702	L763	ASN	R884	L945	Y1006
L285	G343	H403	Q463	T525	G585	R645	E703	Q764	PRO	L885	D946	I1007
Y286	M404	M404	I464	V526	D586	G646	E704	Y765	SER	M886	S947	K1008
E287	P345	E405	I465	Q527	F587	N646	V705	I766	LYS	K887	H948	C1009
K288	P345	Q406	M466	E528	R588	S647	D706	V767	VAL	T888	A949	V1010
G289	I346	C407	G467	L529	T589	V648	V707	V768	GLN	L889	A950	F1011
Y290	F347	A408	I468	N530	T590	S649	L707	D769	GLN	R890	T951	A1012
V291	V348	A409	P469	F531	V591	N650	M651	G770	LEU	D891	L952	L1013
K292	M349	V409	I470	R532	E592	F651	S652	G771	LEU	P892	N953	L1014
D293	R350	K410	L470	S533	Y593	L652	L653	H772	ASP	H832	R954	E1015
V294	L351	L411	Y471	N534	L594	H653	G654	V773	GLY	T833	K955	E1016
D295	A352	A412	R472	N535	L595	S654	L714	W774	GLY	G834	P895	E1017
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G297	Q354	M414	K474	N536	K596	L656	E656	A775	LEU	L836	E957	E1019
L298	S355	V415	D475	V537	L597	L657	R657	G776	SER	P837	R958	S1019
Q299	R356	G416	I476	N538	L598	R657	S717	Q777	ASP	H838	E959	M1020
A300	H357	Y417	R477	G539	E599	G658	Y118	C778	GLY	L839	L990	N1021
	L358	V418	M478	G540	T600	Q659	G659	D719		GLN	F961	N1022
	E359	S419	M479	Y540		V660	G720	A780				

G1891	G1892	F1893	F1894	V1895	L1896	L1899	S1900	R1901	K1904	L1912	L1913	N1914	S1915	L1916	L1917	F1918	D1920	I1921	I1922	I1923	I1924	F1925	V1926	K1929	P1934	R1935	V1936	M1937	L1938	R1960	E1861	V1862	V1863	S1865	M1866	G1948	Q1949	W1950	L1951	G1952	G1953	F1954	Y1957	G1958	S1959	E1962	V1967	A1968								
H1732	M1733	P1744	Y1745	R1749	Y1752	L1753	T1754	Q1755	Q1756	D1757	Y1758	K1759	R1760	V1761	L1764	S1766	V1767	H1768	E1773	D1774	E1775	E1776	E1777	S1778	R1779	I1782	T1783	D1784	I1785	I1786	G1787	K1788	G1791	I1792	G1793	P1794	E1795	M1796	L1797	R1798	G1799	S1800	L1801	M1802	L1803	E1806	S1807	L1809	A1810							
G1658	M1659	W1662	K1663	M1664	T1665	F1666	E1670	E1673	E1674	A1675	D1676	I1677	I1678	V1679	G1681	M1682	D1683	I1684	R1687	I1688	F1691	G1692	P1693	L1697	L1698	F1699	L1700	R1701	L1705	A1706	A1707	A1708	I1711	P1712	R1713	I1714	Y1715	V1716	M1719	A1722	G1725	L1726	A1727	E1728	E1729	I1730	R1731									
P1567	L1568	M1571	M1574	T1575	P1576	Y1577	V1578	T1579	K1580	D1581	Q1584	S1585	K1586	T1589	T1596	Y1597	I1598	Y1599	D1600	I1601	P1602	E1603	M1604	F1605	R1606	Q1607	S1608	L1609	I1610	K1611	L1612	W1613	S1617	L1622	L1632	E1636	D1640	Q1641	Q1642	G1643	M1648	N1649	R1650	L1651	P1652	M1655	E1656	I1657								
M1497	R1498	Y1499	G1500	L1503	W1504	K1505	P1506	R1507	V1508	L1509	Q1510	A1511	E1512	L1513	K1514	I1515	M1516	I1517	R1518	P1521	T1522	G1523	K1524	A1525	L1530	F1531	L1532	T1533	M1534	E1535	Y1539	L1540	D1541	Y1545	K1546	E1547	V1548	T1549	ASP	ARG	THR	A1554	M1557	F1558	Q1559	A1560	TYR	GLY	ASP	R1564	Q1565	G1566				
D1418	Y1419	R1420	F1421	F1422	V1423	R1424	I1427	R1428	N1429	S1430	ASP	VAL	THR	E1436	A1437	S1438	F1439	E1440	Y1441	M1444	E1447	R1448	L1449	L1450	L1451	E1452	M1462	L1463	T1464	N1465	V1466	R1467	D1469	C1470	M1471	H1472	I1473	F1474	L1475	N1476	T1480	V1481	I1482	M1483	D1484	V1492	R1493	L1494	M1495	V1496						
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SER	VAL	SER	ASP	VAL	LEU	LEU	ASP	ASN	ASN	PHE	THR	PRO	Q1230	Q1231	R1232	M1236	S1238	F1239	R1240	E1243	D1244	M1245	V1246	R1247	I1248	F1249	G1253	M1254	C1255	F1256	SER	ASP	SER	PRO	P1261	Q1262	S1263	P1264	T1265	F1266	P1267	E1268	A1269	G1270	HIS	THR	SER	LEU	TYR	ASP	GLU	VAL	ASN	LYS	TYR	GLU
PRO	ARG	ASP	E1284	H1287	L1288	L1289	N1290	V1291	A1292	I1293	K1294	T1295	D1296	Q1297	R1298	M1296	S1238	F1239	R1240	E1243	D1244	M1245	V1246	R1247	I1248	F1249	G1253	M1254	C1255	F1256	SER	ASP	SER	PRO	P1261	Q1262	S1263	P1264	T1265	F1266	P1267	E1268	A1269	G1270	HIS	THR	SER	LEU	TYR	ASP	GLU	VAL	ASN	LYS	TYR	GLU
VAL	ASP	ARG	ARG	PHE	HIS	ARG	GLU	F1352	R1353	K1354	F1355	F1358	R1359	A1360	R1361	D1362	K1363	F1364	E1365	E1366	D1367	R1368	I1369	H1372	L1373	L1377	A1378	F1379	Q1380	L1381	M1384	R1385	M1386	R1387	M1388	F1389	D1390	L1391	I1394	H1399	K1400	M1401	H1402	L1403	Y1404	E1411	G1413	T1414	V1415	T1417						



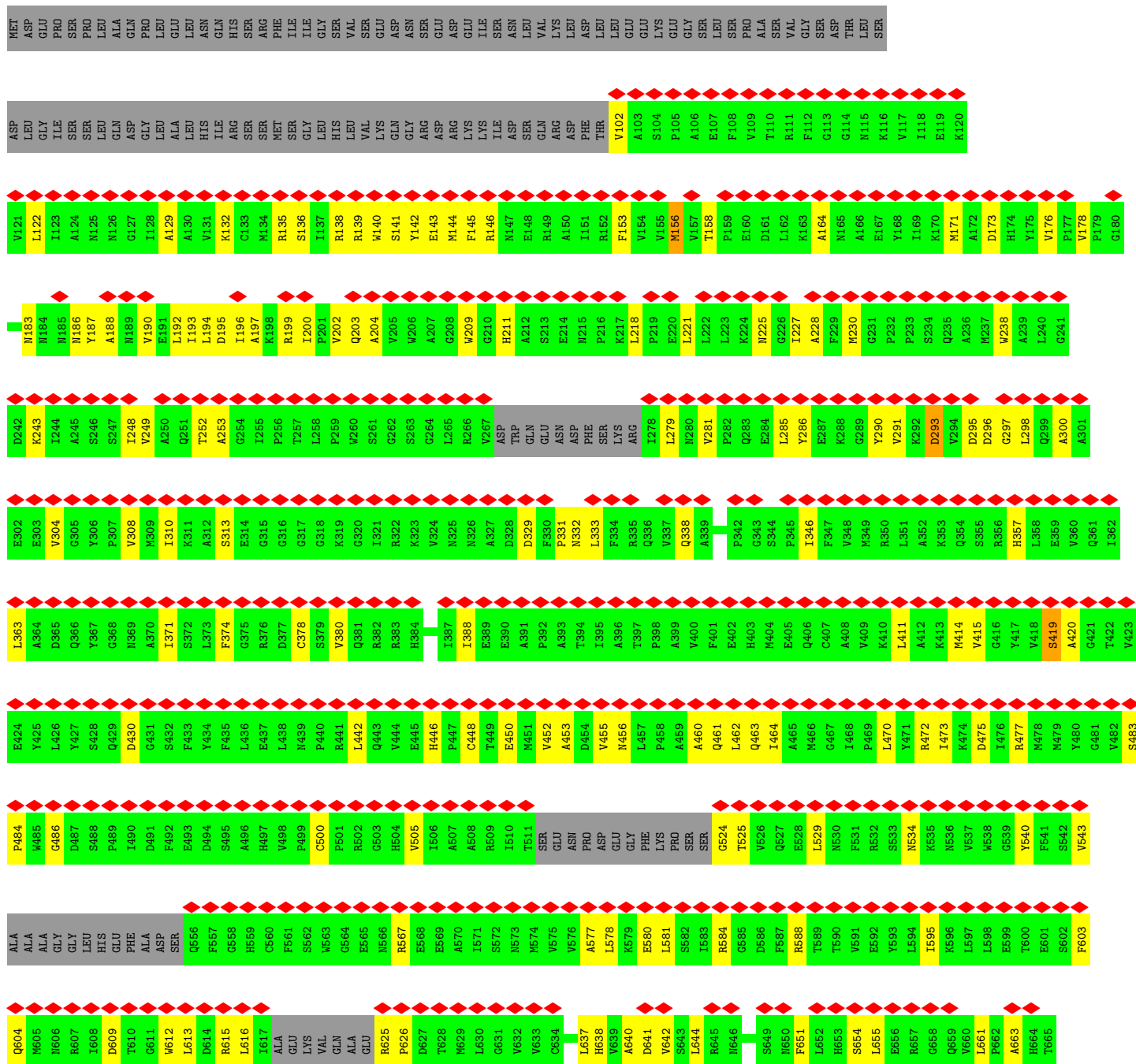
• Molecule 1: Acetyl-CoA carboxylase 1



G421	G481	F541	E601	L661	S721	E781	SER	D901	F962	M1022	V1084	V1144
T422	V482	S542	S602	P662	S722	I782	THR	I901	M963	T1023	L1085	R1146
V423	S483	V543	F603	A663	Y723	E783	ALA	M903	N964	V1024	I1086	M1147
E424	P484	ALA	Q604	H664	T724	V784	LEU	T904	T965	L1025	A1087	A1148
Y425	W485	ALA	M605	T665	T725	M785	ARG	S905	Q966	M1026	S1088	A1149
L426	W485	ALA	N606	L666	Y726	K786	GLY	V906	S967	Y1027	H1089	V1152
Y427	G486	GLY	R607	L667	M727	M787	GLU	S907	I968	I1028	L1090	L1152
S428	D487	LEU	I608	N668	K728	V788	L848	G908	V969	F1029	P1091	F1153
Q429	S488	HIS	D609	T669	E729	M789	H850	R909	Q970	S1030	V1154	V1154
D430	P489	GLU	T610	V670	E730	T790	R851	R909	Q971	H1031	S1092	H1155
G431	I490	PHE	G611	V671	E731	L791	R852	P911	V972	A1032	E1094	H1156
S432	D491	ALA	W612	V672	D732	T792	F853	P912	Q973	Q1033	L1095	L1156
F433	F492	ASP	L613	E673	R733	A793	H854	R912	R974	V1034	R1096	Y1158
Y434	E493	SER	D614	L674	R734	V794	Y855	N913	R975	T1035	M1098	I1159
F435	D494	Q556	L614	E674	R735	A795	V856	E915	R976	T1036	R1098	A1160
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L437	A496	G558	L616	Y676	I736	S796	D858	K916	S978	M1038	V1100	E1101
E437	H497	H559	I617	E677	T737	G797	R859	I918	I979	L1039	S1102	S1102
N439	V498	C560	ALA	G678	I738	C798	L860	K919	R980	L1040	F1104	F1104
P440	P499	F561	GLU	V679	G739	I799	V861	K920	H882	V1041	L1105	L1105
R441	C500	S562	LYS	K680	M740	H800	H862	E921	H883	M1042	S1106	S1106
L442	F501	W563	VAL	Y681	K741	Y801	V863	N922	V883	T1043	A1187	A1187
Q443	R502	G564	GLN	H682	T742	V802	H864	Q924	K884	M1044	I1108	I1108
V444	R502	E565	ALA	L683	C743	K603	H865	Y925	A885	L1044	D1109	D1109
E445	F502	S566	GLU	K684	V744	R804	G866	A926	V886	I1045	M1110	M1110
H446	G503	R567	R225	V685	F745	P805	R867	A926	S987	D1046	Y1111	Y1111
P447	H504	E568	P626	I686	E746	G806	C868	S927	M888	Q1047	G1112	G1112
A450	V505	E569	D627	V686	K747	A607	L869	I928	L890	L1048	C1049	C1049
V452	I506	A570	T628	R687	E748	A808	P970	I929	D871	G1050	G1050	G1050
A453	A507	I571	R629	Q688	ASN	L809	D872	T930	F872	R1051	F1115	F1115
L457	R509	S572	L630	Q689	PRO	D810	P873	S931	F873	D1052	C1116	C1116
A459	I510	M573	G631	S689	S752	P811	F874	Y932	S875	P1053	E1118	E1118
A460	T511	M574	V632	M691	V753	G812	S876	L933	S876	T1054	M1119	M1119
Q461	SER	V575	V633	S692	M754	C813	S877	C934	K877	L1055	L1120	L1120
L462	GLU	V576	C634	Y693	R755	L815	K877	Q935	V878	L1056	Q1121	Q1121
Q463	ASN	V577	G635	S693	R756	A816	V878	Q939	V878	T1057	K1122	K1122
I464	ASN	V578	A636	Y694	R756	L816	V878	Q940	K879	E1058	L1123	L1123
A465	P80	L578	L637	V695	S756	L816	V878	I941	D880	L1059	L1124	L1124
A466	ASP	K579	H638	I696	P757	A816	V878	A942	V882	M1061	S1126	S1126
G467	GLY	E580	H638	M697	P757	R617	V878	N943	E883	I1062	E1127	E1127
I468	PHE	L581	V639	N698	A759	M818	V878	I944	E884	L1063	T1128	T1128
P469	LYS	L582	A640	M699	G760	Q619	V878	A946	L885	T1064	I1130	I1130
P469	P80	S582	D641	G699	K761	L820	V878	S947	M886	E1065	F1131	F1131
L470	SER	I583	V642	S700	K761	L820	V878	A950	K887	L1066	V1133	V1133
Y471	SER	R584	S643	C701	L762	D821	V878	I951	L889	T1067	L1134	L1134
R472	T525	G585	L644	V702	I763	ASN	V878	N951	L889	Q1068	S1070	S1070
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D475	E528	R588	N646	D705	I766	LYS	V878	R954	M886	L1069	T1073	T1073
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K479	S533	L593	H653	SER	H772	T833	V878	E957	P892	A1012	L1018	L1018
D479	K535	K596	S654	GLY	H773	G634	V878	R958	S893	L1013	L1018	L1018
I476	N536	L597	S654	GLY	V773	S635	V878	R958	L894	R1014	L1018	L1018
M477	N536	L597	S654	GLY	F774	L836	V878	R958	P895	E1015	L1018	L1018
M479	N536	L597	S654	GLY	A775	P837	V878	R958	L896	E1016	L1018	L1018
Y480	V537	L597	S654	GLY	G776	R838	V878	R958	L897	M1017	L1018	L1018
Y480	V537	L597	S654	GLY	Q777	R838	V878	R958	L897	K1018	L1018	L1018
Y480	V537	L597	S654	GLY	C778	R838	V878	R958	L897	S1019	L1018	L1018
Y480	V537	L597	S654	GLY	D719	R838	V878	R958	L897	D1020	L1018	L1018
Y480	V537	L597	S654	GLY	G720	R838	V878	R958	L897	M1021	L1018	L1018



• Molecule 1: Acetyl-CoA carboxylase 1



L666	L667	M668	T669	V670	D671	V672	E673	L674	I675	Y676	E677	E678	G679	K680	Y681	V682	L683	K684	V685	T686	R687	Q688	V694	V695	I696	M697	M698	G699	V702	E703	V704	D705	V706	H707	ARG	LEU	SER	ASP	GLY	L714	L715	L716	S717	Y718	D719	G720	S721	S722	Y723	T724	T725	M726	K728	E729	E730				
V731	D732	R733	Y734	R735	I736	T737	I738	G739	N740	K741	T742	T743	V744	F745	E746	K747	E748	ASN	ASP	PRO	S752	V753	M754	R755	S756	P757	S758	A759	G760	K761	L762	I763	Q764	V765	LYS	I766	V767	ARG	LEU	SER	ASP	GLY	H772	H773	F774	A775	G776	Q777	C778	Y779	A780	E781	I782	E783	M784	K786	M787	M788	T790
L791	T792	A793	V794	E795	S796	G797	C798	I799	H800	Y801	V802	K803	R804	P805	G806	A807	A808	L809	D810	P811	G812	C813	V814	L815	P816	K817	M818	Q819	L820	D821	ASN	PRO	SER	LYS	VAL	GLN	GLM	ALA	GLU	LEU	H832	T833	G834	S835	L836	P837	R838	I839	GLN	SER	THR	ALA	LEU	ARG	GLY	K848	L849	H850	
R851	Y855	Y856	L860	V861	M864	C868	L869	P870	D871	P872	F873	S875	V878	K879	D880	M881	V882	E883	R884	L885	R886	K887	T888	L889	R890	D891	S892	S893	L896	L897	E898	L899	Q900	D901	T904	S905	V906	T910	P911	P912	N913	V914	E915	S916	K920	A923	Q924	Y925											
A926	S927	H928	I929	T930	S931	V932	L933	S938	Q939	Q940	I941	A942	N943	I944	L945	D946	S947	A950	T951	L952	N953	R954	E957	R958	E959	V960	F961	P962	N963	N964	T965	Q966	S967	I968	Q970	L971	V972	G973	R974	Y975	R976	S977	G978	I979	R980	G981	H982	L990	L991	R992	Q993	Y994	L995						
R996	V997	E998	T999	Q1000	G1004	H1005	Y1006	D1007	V1010	L1013	R1014	E1015	E1016	M1017	K1018	S1019	M1021	V1024	T951	L952	N953	R954	E957	R958	E959	V960	F961	P962	N963	N964	T965	Q966	S967	I968	Q970	L971	V972	G973	R974	Y975	R976	S977	G978	I979	R980	G981	H982	L990	L991	R992	Q993	Y994	L995						
E1065	L1066	T1067	Q1068	S1070	K1071	T1072	T1073	M1074	A1075	A1078	L1079	R1080	A1081	R1082	Q1083	K1084	L1085	I1086	A1087	S1088	H1089	L1090	P1091	S1092	Y1093	E1094	L1095	R1096	H1097	Q1099	V1100	E1101	S1102	I1103	F1104	L1105	S1106	A1107	I1108	D1109	M1110	Y1111	G1112	H1113	Q1114	F1115	C1116	M1119	L1120	Q1121	K1122	L1123	L1124	L1125	S1126				
S1129	I1130	F1131	D1132	V1133	L1134	P1135	M1136	F1137	Y1139	H1140	V1145	R1146	A1149	L1150	E1151	V1152	Y1153	V1154	R1155	R1156	A1157	Y1158	L1159	A1160	Y1161	E1162	L1163	H1168	R1169	Q1170	L1171	K1172	D1173	M1174	T1175	C1176	V1177	V1178	E1179	F1180	L1184	P1185	T1186	S1187	H1188	PRO	ASN	ARG	GLY	ASN	ILE	PRO	THR						
LEU	ASN	ARG	MET	SER	PHE	SER	ASN	LEU	ASN	HIS	THR	VAL	ALA	SER	VAL	SER	ASP	VAL	LYS	LEU	ASP	ASN	ASP	THR	PRO	C1230	M1233	G1234	G1235	M1236	V1237	S1238	F1239	R1240	T1241	F1242	E1243	D1244	F1245	V1246	R1247	I1248	F1249	D1250	E1251	V1252	M1253	G1254	C1255	F1256	SER								
ASP	SER	PRO	P1261	Q1262	S1263	P1264	T1265	F1266	P1267	E1268	A1269	G1270	HIS	THR	SER	LEU	TYR	ASP	GLU	ASP	VAL	LYS	VAL	PRO	ARG	ASP	E1284	P1285	I1286	H1287	I1288	L1289	N1290	V1291	A1292	I1293	K1294	T1295	D1296	C1297	D1298	I1299	E1300	D1301	D1302	L1303	L1304	A1305	A1306	M1307	F1308	R1309	E1310	F1311	T1312	Q1313	Q1314	N1315	T1316
L1319	V1320	D1321	H1322	G1323	I1324	F1325	L1327	T1328	F1329	L1330	V1331	A1332	Q1333	LYS	ASP	PHE	ARG	LYS	GLN	VAL	ASN	TYR	GLU	VAL	VAL	ARG	ASP	ARG	ARG	HIS	ARG	F1352	L1353	K1354	F1355	F1356	T1357	F1358	D1362	E1365	E1366	D1367	R1368	L1369	Y1370	R1371	H1372	L1373	E1374	P1375	A1376	L1377	A1378	F1379	Q1380	L1381	E1382		
L1383	M1384	R1385	M1386	R1387	N1388	F1389	D1390	L1391	T1392	A1393	P1395	C1396	A1397	M1398	H1399	K1400	M1401	H1402	L1403	Y1404	L1405	G1406	A1407	A1408	N1409	V1410	E1411	V1412	G1413	T1414	V1415	V1416	T1417	L1418	Y1419	R1420	F1421	V1422	R1424	A1425	I1426	I1427	R1428	H1429	S1430	ASP	LEU	VAL	LYS	E1436	A1437	S1438	Y1441	L1442					
E1446	G1446	R1447	L1448	L1449	L1450	L1451	E1452	A1453	M1454	D1455	E1456	L1457	E1458	V1459	A1460	F1461	M1462	N1463	T1464	M1465	V1466	R1467	T1468	D1469	N1470	N1471	H1472	I1473	F1474	L1475	N1476	F1477	V1478	F1479	T1480	I1481	I1482	M1483	I1488	E1489	V1492	M1495	R1498	Y1499	G1500	S1501	R1502	L1503	W1504	K1505	L1506	R1507	V1508	L1509	Q1510				

L2239	L2240	D2241	G2242	Q2243	L2244	Q2245	A2246	M2247	L2248	R2249	R2250	W2251	D2252	E2253	E2254	E2255	E2256	G2257	T2258	R2259	M2260	Q2261	W2262	W2263	W2264	D2265	M2266	L2270	K2276	T2279	E2280	E2281	D2282	G2283	W2284	L2288	E2289	E2290	L2291	R2292	K2293	C2294	L2295	S2296	R2297	D2298	W2299	V2300	K2301	K2302	Q2303	L2304	R2305	S2306	L2307	L1511	E1512	L1513	K1514	I1515	N1516	I1517	R1518	L1519	T1520	P1521	T1522	G1523	K1524	A1525	I1526	P1527	I1528	R1529	L1530	F1531	L1532	T1533	M1534	E1535	V1538	Y1539	L1540	D1541	I1542	S1543	L1544	Y1545	K1546	E1547	V1548	T1549	ASP	SER	ARG	THR	A1554	Q1555	I1556	M1557	F1558	Q1559	Q1560	TYR	GLY	ASP	K1564	G1570	M1571	L1572	T1576	P1576	Y1577	V1578	T1579	K1580	D1581	L1582	L1583	Q1584	S1585	K1586	R1587	F1588	Q1589	A1590	Q1591	S1592	L1593	G1594	T1595	T1596	Y1597	I1598	Y1599	D1600	I1601	P1602	E1603	M1604	F1605	R1606	Q1607	S1608	L1609	I1610	K1611	L1612	W1613	E1614	S1615	M1616	S1617	T1618	Q1619	A1620	F1621	L1622	P1623	S1624	P1625	P1626	L1627	P1628	S1629	D1630	M1631	L1632	T1633	Y1634	L1635	E1636	L1637	V1638	L1639	D1640	D1641	Q1642	Q1643	Q1644	L1645	V1646	H1647	M1648	M1649	R1650	L1651	P1652	G1653	G1654	M1655	E1656	I1657	G1658	M1659	V1660	A1661	W1662	E1663	M1664	T1665	F1666	K1667	S1668	P1669	E1670	Y1671	P1672	E1673	G1674	R1675	D1676	I1677	I1678	V1679	I1680	G1681	M1682	D1683	L1684	T1685	Y1686	R1687	I1688	G1689	S1690	F1691	L1692	T1693	Q1694	L1695	D1696	L1697	L1698	F1699	L1700	D1701	R1702	S1703	E1704	L1705	A1706	R1707	A1708	E1709	G1710	I1711	P1712	R1713	I1714	Y1715	V1716	M1717	A1718	M1719	S1720	A1721	A1722	R1723	I1724	G1725	L1726	A1727	E1728	E1729	I1730	R1731	H1732	M1733	F1734	H1735	R1736	A1737	M1738	V1739	D1740	P1741	E1742	M1743	P1744	K1745	T1746	E1747	Y1748	R1749	Y1750	L1751	L1753	T1754	P1755	Q1756	L1757	L1816	D1757	Y1758	K1759	R1760	V1761	S1762	A1763	L1764	M1765	S1766	V1767	H1768	C1769	E1770	H1771	V1772	E1773	D1774	E1775	G1776	E1777	S1778	R1779	Y1780	K1781	I1782	T1783	D1784	I1785	I1786	G1787	K1788	E1789	E1790	G1791	I1792	G1793	P1794	E1795	M1796	L1797	R1798	G1799	S1800	G1801	M1802	I1803	A1804	G1805	E1806	S1807	S1808	L1809	A1810	I1811	M1812	E1813	I1814	I1815	L1816	I1817	S1818	L1819	V1820	T1821	C1822	R1823	A1824	I1825	G1826	I1827	G1828	A1829	Y1830	L1831	V1832	R1833	L1834	G1835	Q1836	R1837	L1838	I1839	Q1840	V1841	E1842	M1843	S1844	H1845	V1846	I1847	L1848	T1849	G1850	A1851	G1852	A1853	L1854	M1855	K1856	D1857	L1858	G1859	R1860	E1861	V1862	Y1863	T1864	S1865	N1866	M1867	Q1868	L1869	G1870	G1871	I1872	Q1873	L1874	M1875	L1876	M1877	M1878	G1879	V1880	T1881	L1882	H1883	T1884	V1885	D1886	D1887	D1888	F1889	E1890	G1891	V1892	F1893	T1894	V1895	Y1896	G1897	G1898	T1899	R1900	P1901	Y1902	M1903	K1904	S1905	V1906	H1907	S1908	S1909	V1910	P1911	L1912	L1913	M1914	S1915	K1916	D1917	L1918	G1919	D1920	R1921	I1922	V1923	E1924	F1925	N1926	A1927	V1928	E1929	T1930	L1931	Y1932	V1933	E1934	L1935	W1936	M1937	G1938	V1939	T1940	R1941	H1942	C1943	T1944	V1945	T1946	Q1947	G1948	Q1949	W1950	L1951	S1952	F1953	F1954	F1955	D1956	Y1957	G1958	S1959	F1960	S1961	E1962	I1963	M1964	Q1965	F1966	V1967	A1968	G1969	T1970	V1971	V1972	V1973	G1974	R1975	A1976	R1977	L1978	G1979	G1980	I1981	P1982	V1983	G1984	V1985	V1986	V1987	V1988	E1989	T1990	R1991	T1992	V1993	E1994	L1995	S1996	I1997	P1998	A1999	D2000	P2001	A2002	N2003	L2004	D2005	S2006	E2007	A2008	K2009	L2010	I2011	Q2012	Q2013	A2014	G2015	Q2016	V2017	W2018	F2019	P2020	D2021	S2022	A2023	F2024	K2025	Y2027	Q2028	A2029	K2030	K2031	D2032	F2033	N2034	R2035	E2036	G2037	L2038	P2039	L2040	M2041	V2042	F2043	A2044	N2045	W2046	W2047	G2048	F2049	S2050	G2051	G2052	K2053	W2054	D2055	M2056	Y2057	D2058	Q2059	V2060	L2061	K2062	F2063	G2064	A2065	V2066	T2067	V2068	D2069	G2070	L2071	R2072	E2073	C2074	C2075	Q2076	P2077	V2078	L2079	V2080	Y2081	V2082	P2083	P2084	Q2085	A2086	E2087	L2088	R2089	G2090	G2091	S2092	W2093	V2094	V2095	L2096	D2097	S2098	S2099	L2100	M2101	P2102	R2103	H2104	M2105	E2106	M2107	Y2108	A2109	D2110	R2111	E2112	S2113	R2114	G2115	S2116	V2117	L2118	E2119	P2120	E2121	G2122	T2123	V2124	E2125	L2126	K2127	F2128	R2129	R2130	K2131	D2132	L2133	V2134	K2135	T2136	M2137	R2138	R2139	V2140	D2141	P2142	V2143	Y2144	I2145	H2146	L2147	A2148	E2149	R2150	L2151	G2152	T2153	P2154	E2155	L2156	E2157	S2158	T2159	R2200	K2201	L2202	L2203	L2204	L2205	L2206	D2207	W2208	K2209	R2212	T2213	F2214	F2215	Y2216	W2217	R2218	L2219	R2220	R2221	L2222	L2223	L2224	L2227	W2228	K2229	K2230	K2231	L2232	H2233	A2235	W2236	P2237	E2238	L2239	L2240	G2241	Q2242	Q2243	L2244	Q2245	A2246	M2247	L2248	R2249	R2250	W2251	D2252	E2253	E2254	V2255	E2256	G2257	T2258	R2259	M2260	Q2261	W2262	W2263	W2264	D2265	M2266	L2270	K2276	T2279	E2280	E2281	D2282	G2283	W2284	L2288	E2289	E2290	L2291	R2292	K2293	C2294	L2295	S2296	R2297	D2298	W2299	V2300	K2301	K2302	Q2303	L2304	R2305	S2306	L2307
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I736	I737	I738	I739	I740	I741	I742	I743	I744	I745	I746	I747	I748	ASN	ASP	PRO	S752	V753	M754	R755	S756	P757	S758	A759	G760	K761	L762	I763	Q764	Y765	I766	V767	E768	D769	G770	G771	H772	V773	F774	A775	G776	Q777	C778	Y779	A780	E781	I782	E783	V784	M785	K786	M787	V788	M789	T790	L791	T792	A793	V794	E795
S796	G797	C798	I799	H800	Y801	V802	K803	R804	P805	G806	A807	L808	A809	D810	P811	G812	C813	V814	L815	A816	K817	M818	Q819	L820	D821	ASN	PRO	SER	SER	VAL	VAL	GLN	GLM	ALA	GLU	LEU	H832	T833	G834	S835	L836	P837	R838	I839	GLN	SER	THR	ALA	LEU	ARG	GLY	K848	L849	H850	R851	F852	M853	Y854	
V856	L857	V863	M864	M865	G866	Y867	C868	L869	P870	D871	P872	F873	S876	K877	V878	K879	D880	V882	E883	R884	T888	L889	M890	S893	L894	L897	E898	L899	Q900	D901	I902	M903	T904	S905	V906	I910	P911	P912	M913	V914	E915	K916	S917	I918	K919	Y987	K920	E921	M922	A923	Q924	Y925	A926	S927					
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D1132	V1133	M1136	F1137	F1138	Y1139	H1140	S1141	R1146	M1147	A1148	A1149	Y1153	V1154	R1155	R1156	A1157	I1159	A1160	E1162	L1163	M1164	H1168	R1169	Q1170	L1171	K1172	D1173	M1174	T1175	C1176	V1177	V1178	E1179	F1180	L1184	P1185	T1186	S1187	H1188	PRO	ASN	ARG	GLY	ASN	PRO	THR	LEU	ASN	ARG	MET	SER								
PHE	SER	ASN	LEU	ASN	HIS	TYR	GLY	MET	THR	VAL	HIS	ALA	SER	VAL	ASP	ASP	VAL	LEU	LEU	LEU	ASP	ASN	SER	PHE	THR	PRO	C1230	C1234	G1235	M1236	V1237	S1238	F1239	R1240	T1241	F1242	E1243	D1244	V1246	R1247	I1248	F1249	D1250	E1251	V1252	M1253	G1254	C1255	F1256	SER	ASP	PRO	P1261	Q1262	S1263				
P1264	T1265	F1266	P1267	E1268	A1269	G1270	HIS	THR	THR	SER	LEU	THR	ASP	GLU	ASP	LYS	VAL	PRO	ARG	ASP	E1284	P1285	H1287	L1288	L1289	M1290	V1291	A1292	I1293	K1294	T1295	D1296	C1297	D1298	I1299	E1300	D1301	D1302	R1303	L1304	A1305	A1306	M1307	F1308	F1309	E1310	F1311	T1312	Q1313	Q1314	N1315	T1316	L1319	V1320	D1321	H1322	G1323	I1324	
R1325	R1326	L1330	V1331	A1332	Q1333	LYS	ASP	PHE	ARG	LYS	VAL	ASN	TYR	GLU	VAL	ASP	ARG	ARG	HIS	ARG	F1352	P1353	K1354	F1355	F1356	T1357	F1358	R1359	D1362	E1365	E1366	D1367	R1368	I1369	Y1370	R1371	H1372	L1373	E1374	P1375	A1376	L1377	A1378	F1379	Q1380	E1382	L1383	M1388	F1389	D1390	L1391								
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T2329	M2264	Q2197	M2137	P2077	V2017	Y1957	H1897	R1837	E1777	S1717	Y1655	T1595
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R2331	M2266	K2199	R2139	L2079	F2019	S1959	W1899	I1839	R1779	M1719	G1658	Y1597
A2332	G2200	G2200	V2140	V2080	P2020	F1960	S1900	Q1840	Y1780	A1718	G1658	I1598
E2333	V2201	V2201	D2141	Y2081	D2021	S1961	Y1901	V1841	K1781	S1720	M1659	Y1599
V2334	L2202	L2202	P2142	L2082	S2022	E1962	M1902	E1842	I1782	G1721	V1660	D1600
L2335	S2203	S2203	V2143	P2083	F2023	I1963	P1903	M1843	T1783	A1722	A1661	I1601
R2336	D2204	D2204	Y2144	P2084	A2024	M1964	K1904	S1844	D1784	R1723	W1662	P1602
I2337	I2205	I2205	I2145	Q2085	K2025	Q1965	S1905	H1845	I1785	I1724	K1663	E1603
LEU	L2206	L2206	H2146	A2086	T2026	P1966	V1906	L1846	I1786	G1725	M1664	M1604
SER	D2207	D2207	L2147	E2087	Y2027	W1967	H1907	I1847	G1787	L1726	T1665	F1605
THR	W2208	W2208	A2148	L2088	Q2028	A1968	S1908	L1848	K1788	A1727	F1666	R1606
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PRO	R2212	R2212	R2150	G2090	I2030	T1970	V1910	G1850	E1790	E1729	S1668	S1608
THR	F2215	F2215	G2152	G2091	K2031	Y1971	P1911	A1851	G1791	I1730	P1669	L1609
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K2293	L2222	L2222	T2158	S2098	G2037	R1977	D1917	L1858	G1799	V1739	D1676	M1616
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I2295	L2223	L2223	E2160	I2100	P2039	G1979	I1919	R1860	S1800	P1741	I1678	T1618
S2296	L2224	L2224	E2160	M2101	M2041	I1981	R1921	E1861	G1801	E1742	V1679	Q1619
R2297	V2228	V2228	R2161	R2102	V2042	P1982	I1922	V1862	M1802	D1743	I1680	A1620
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L2307	I2244	I2244	E2172	E2112	Q2052	T1992	M1812	I1872	I1812	L1753	G1689	D1630
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A2310	M2247	M2247	L2175	G2115	D2055	L1995	L1935	M1875	T1816	Q1756	G1692	T1633
M2311	L2248	L2248	I2176	S2116	M2056	S1996	W1936	H1876	I1816	D1757	Q1693	Y1634
P2312	R2249	R2249	F2177	V2117	Y2057	I1997	M1937	M1877	I1817	Y1758	E1695	T1635
V2314	R2250	R2250	I2178	L2118	D2058	P1998	L1938	G1878	S1818	R1760	E1696	E1636
A2315	F2252	F2252	P2120	P2120	Q2059	A1999	A1939	G1879	L1819	V1761	L1697	L1637
M2316	F2253	F2253	V2060	V2060	V2060	D2000	G1940	M1880	V1820	S1762	L1698	V1638
D2317	E2254	E2254	L2061	L2061	L2061	P2001	R1941	T1881	I1821	A1763	F1699	L1639
S2318	V2255	V2255	K2062	K2062	K2062	A2002	P1942	H1882	C1822	L1764	L1700	D1640
I2319	A2184	A2184	F2063	F2063	F2063	M2003	H1943	C1883	R1823	R1701	R1700	D1641
I2320	Q2185	Q2185	Q2064	Q2064	Q2064	L2004	L1944	T1884	A1824	M1765	A1702	Q1642
H2321	I2126	I2126	A2065	A2065	A2065	D2005	T1945	V1885	I1825	S1766	S1703	G1643
M2322	F2186	F2186	Y2066	Y2066	Y2066	S2006	Q1946	C1886	G1826	V1767	E1704	Q1644
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Q2324	F2128	F2128	V2068	V2068	V2068	A2008	G1948	D1888	I1827	E1770	A1706	V1646
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	K2131	K2131	L2071	L2071	L2071	I2011	L1951	G1891	Y1830	V1772	E1709	M1650
	D2152	D2152	R2072	R2072	R2072	Q2012	S1952	G1892	L1832	E1773	G1710	L1651
	L2133	L2133	E2073	E2073	E2073	Q2013	G1953	F1893	R1833	D1774	I1711	P1652
	V2134	V2134	C2074	C2074	C2074	A2014	F1954	T1894	L1834			

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R2161	K2162	E2163	L2164	E2165	N2166	K2167	L2168	R2169	K2230	R2171	E2172	E2173	F2174	L2175	I2176	P2177	L2178	E2179	H2180	Q2181	V2182	A2183	Q2184	Q2185	F2186	A2187	D2188	L2189	H2190	D2191	T2192	F2193	P2194	R2195	M2196	Q2197	E2198	K2199	V2200	I2202	S2203	D2204	I2205	L2206	D2207	W2208	K2209	T2210	S2211	R2212	L2213	F2214	F2215	Y2216	W2217	R2218	L2219	R2220	
R2221	L2222	L2223	L2224	E2225	D2226	L2227	V2228	K2229	K2230	K2231	H2232	I2233	N2234	A2235	N2236	P2237	E2238	L2239	T2240	D2241	G2242	Q2243	I2244	Q2245	A2246	M2247	L2248	R2249	R2250	W2251	F2252	V2253	E2254	V2255	E2256	G2257	T2258	V2259	K2260	A2261	Y2262	W2263	W2264	D2265	W2266	N2267	K2268	D2269	L2270	A2271	E2272	W2273	L2274	E2275	K2276	Q2277	L2278	T2279	E2280
E2281	D2282	G2283	V2284	H2285	S2286	V2287	I2288	E2289	E2290	N2291	I2292	K2293	C2294	I2295	S2296	R2297	E2298	Y2299	V2300	L2301	K2302	Q2303	I2304	R2305	S2306	L2307	V2308	Q2309	A2310	N2311	P2312	E2313	V2314	A2315	M2316	D2317	S2318	I2319	I2320	H2321	T2322	T2323	H2324	I2325	I2326	S2327	P2328	T2329	Q2330	R2331	A2332	E2333	V2334	I2335	R2336	I2337	LEU	SER	THR

MET
ASP
SER
PRO
SER
SER
THR

• Molecule 1: Acetyl-CoA carboxylase 1



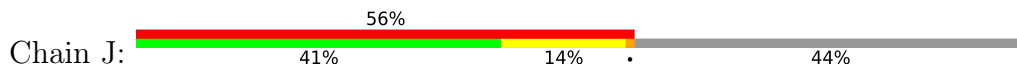
MET	ASP	GLU	LEU	GLY	ILE	ALA	ASN	PRO	SER	THR
ASP	LEU	GLY	ILE	ALA	ASN	PRO	SER	THR	GLY	ILE
VAL	LEU	ILE	ALA	ASN	ASN	ASN	TYR	LEU	ILE	ALA
GLY	PRO	ASN	ASN	ASN	ASN	TYR	ALA	VAL	ASN	GLY
GLY	ASP	LYS	ILE	ALA	VAL	GLU	THR	GLY	ILE	ALA
ALA	GLU	VAL	GLY	TYR	PRO	VAL	VAL	VAL	GLY	ILE
GLN	ILE	LEU	ALA	ALA	ASN	LEU	LEU	PHE	GLY	ILE
GLY	THR	VAL	GLU	LEU	ASP	GLY	THR	PHE	TYR	THR
GLY	VAL	SER	PRO	GLY	GLY	VAL	ASP	GLY	VAL	ASP
PHE	VAL	PRO	ALA	GLY	LEU	ASP	GLY	VAL	LEU	THR

Table with columns containing amino acid codes (e.g., LEU, SER, PHE) and a column of residue IDs (e.g., F1621, L1622, P1623, S1624, P1625, L1626, P1628, D1630, M1631, L1632, T1633, Y1634, T1635, E1636, L1637, V1638, L1639, D1640, D1641, Q1642, G1643, Q1644, L1645, V1646, H1647, M1648, M1649, L1651, P1652, G1653, G1654, M1655, E1656, I1657, G1658, M1659, V1660, A1661, W1662, K1663, M1664, T1665, F1666, K1667, S1668, P1669, E1670, Y1671, P1672, E1673, G1674, R1675, D1676, I1677, I1678, V1679, I1680).

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MET
ASP
SER
PRO
SER
THR

● Molecule 1: Acetyl-CoA carboxylase 1



MET	ASP	LEU	GLY	LEU	PRO	SER	PRO	SER	LEU	ALA	GLN	ASP	LEU	LEU	ALA	LEU	LEU	ASN	GLN	ILE	ARG	HIS	ARG	SER	SER	ARG	PHE	ILE	ILE	GLY	SER	HIS	VAL	VAL	SER	GLN	GLU	L2301	K2302	Q2303	I2304	E2305	S2306	L2307	V2308	Q2309	A2310	M2311	P2312	E2313	W2314	A2315	M2316	D2317	S2318	I2319	I2320	H2321	M2322	T2323	Q2324	H2325	L2326	S2327	K2328	F2329	Q2330	R2331	A2332	E2333	V2334	I2335	R2336	L2337	L2338	L2339	L2340
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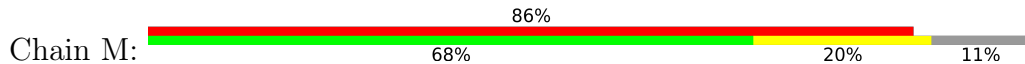
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LEU	M183	K243	E303	L363	V423	S483	S543	F603	A663	Y723	E783	LEU	M903
ARG	M184	I244	V304	A364	E424	P484	ALA	Q604	H664	T724	V784	ARG	T904
GLY	M185	A245	G305	D365	Y425	V485	ALA	M605	T665	T725	M785	GLY	S905
GLU	M186	S246	Y306	Q366	L426	G486	GLY	N606	L666	Y726	K786	GLU	V906
	Y187	S247	P307	Q367	Y427	D487	LEU	R607	L667	M727	M787		
	A188	I248	V308	G368	S428	S488	HIS	I608	N668	K728	V788		
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	S136	P256	G316	R376	L436	A496	G558	L616	V676	I736	S796		
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	R138	L258	G318	C378	L438	V498	C560	ALA	G678	I738	C798		
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	W140	W260	G320	V380	P440	C500	S562	LYS	K680	M740	H800		
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Table with multiple rows and columns of amino acid residue identifiers. The residues are color-coded in various shades of green, yellow, and orange, indicating different validation categories. The table lists residues such as F961, R962, S1142, M1021, A1081, R1082, Q1083, V1084, L1085, I1086, T1087, S1088, H1089, L1090, P1091, S1092, Y1093, I1094, L1095, R1096, H1097, M1098, Q1099, V1100, E1101, S1102, I1103, F1104, L1105, S1106, Q1107, I1108, C1049, M1109, Y1111, G1112, P1053, H1113, T1054, L1055, F1115, C1116, I1117, E1118, M1119, L1120, Q1121, L1122, L1123, I1124, L1125, S1126, E1127, T1128, L1068, L1069, I1130, F1131, D1132, L1133, L1134, P1135, M1136, F1137, Y1139, H1140, M1261, Q1262, S1263, P1264, T1265, F1266, E1268, A1269, H1270, E1284, P1285, I1286, H1287, L1289, M1290, V1291, I1292, I1293, K1294, T1295, C1297, D1296, F1298, I1299, D1300, D1302, R1303, A1304, A1305, A1306, M1307, F1308, R1309, E1310, F1311, L1312, Q1313, Q1314, M1315, A1316, A1317, T1318, L1319, V1320, D1321, H1322, G1323, I1324, R1325, R1326, L1327, T1328, F1329, L1330, V1331, A1332, Q1333, LYS, PHE, PHE, ARG, LYS, VAL, ASN, TYR, GLU, VAL, ASP, H1402, L1403, Y1404, L1405, G1406, A1407, A1408, K1409, V1410, E1411, F1412, G1413, T1414, E1415, V1416, T1417, D1418, Y1419, R1420, F1421, F1422, V1423, R1424, A1425, I1426, I1427, R1428, H1429, S1430, ASP, LEU, VAL, THR, LYS, E1436, A1437, S1438, F1439, E1440, Y1441, L1442, Q1443, M1444, E1445, G1446, E1447, R1448, L1449, L1450, L1451, E1452, A1453, M1454, D1455, E1456, L1457, E1458, V1459, A1460, F1461, M1462, N1463, N1464, N1465, V1466, R1467, T1468, D1469, C1470, N1471, H1472, I1473, F1474, L1475, N1476, F1477, V1478, P1479, T1480, V1481, I1482, M1483, D1484, P1485, S1486, K1487, I1488, E1489, S1491, V1492, R1493, S1494, M1495, V1496, M1497, R1498, Y1499, G1500, S1501, R1502, L1503, W1504, G1506, L1506, R1507, V1508, W1509, Q1510, A1511, E1512, L1513, K1514, I1515, M1516, I1517, R1518, L1519, T1520, P1521, T1522, G1523, K1524, A1525, I1526, P1527, I1528, R1529, L1530, F1531, L1532, T1533, M1534, E1535, S1536, G1537, M1538, E1539, L1540, D1541, I1542, S1543, L1544, Y1545, K1546, E1547, V1548, T1549, ASP, SER, ARG, THR, A1554, Q1555, I1556, M1557, F1558, Q1559, A1560

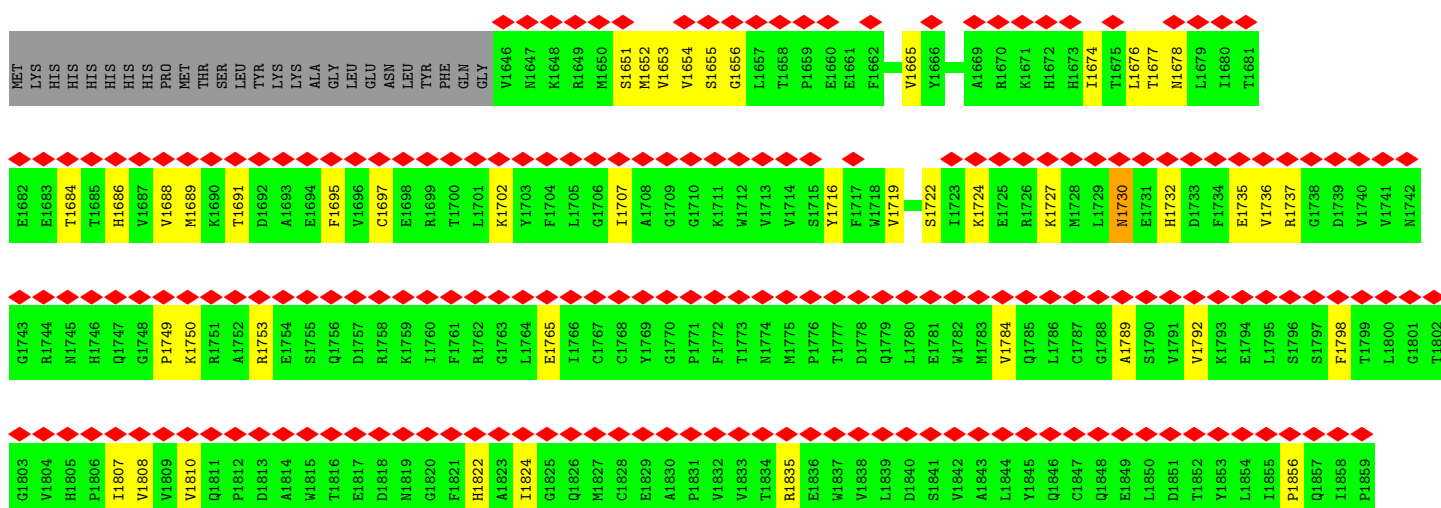
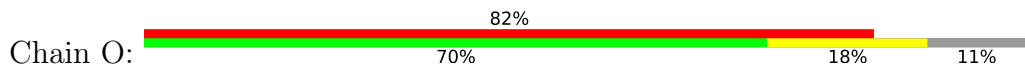
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F541	S542	V543	ALA	ALA	ALA	GLY	GLY	HIS	PHE	ALA	ASP	SER	Q556	D494	S495	A496	H497	V498	P499	C500	P501	R502	G503	H504	V505	I506	A507	A508	R509	I510	T511	SER	GLU	ASN	ASP	GLY	PHE	LYS	SER	SER	G524	L529	N530	F531	R532	S533	N534	K535	N536	V537	W538	G539	Y540							
G481	V482	S483	P484	V485	G486	D487	S488	P489	I490	ALA	ALA	F492	E493	D494	S495	A496	H497	V498	P499	C500	P501	R502	G503	H504	V505	I506	A507	A508	R509	I510	T511	SER	GLU	ASN	ASP	GLY	PHE	LYS	SER	SER	G524	L529	N530	F531	R532	S533	N534	K535	N536	V537	W538	G539	Y540							
G421	T422	V423	E424	Y425	G426	Y427	S428	Q429	D430	G431	S432	F433	Y434	F435	L436	E437	L438	N439	P440	R441	L442	Q443	V444	E445	H446	P447	C448	T449	M451	V452	A453	D454	V455	N456	L457	L458	A459	A460	Q461	L462	Q463	I464	A465	M466	G467	I468	P469	V470	Y471	R472	I473	K474	L475	D476	R477	M478	Y480			
Q361	I362	L363	A364	D365	Q366	Y367	G368	N369	A370	I371	S372	L373	F374	G375	R376	D377	C378	S379	V380	Q381	R382	R383	H384	Q385	K386	I387	I388	E389	E390	A391	P392	A393	T394	I395	A396	T397	P398	A399	V400	F401	A402	H403	M404	E405	Q406	C407	A408	V409	K410	L411	A412	K413	M414	V415	G416	Y417	S419	A420		

Met	Val	Phe	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Gly	Phe	Tyr	S1501	Y1441	L1381	L1382	D1321	P1261	SER
Val	Phe	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	R1502	L1442	E1382	L1383	H1322	Q1262	PHE
Phe	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	L1503	Q1443	L1384	G1323	I1324	S1263	SER
Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	W1504	M1444	M1384	I1324	I1324	P1264	ASN
Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	K1505	M1445	R1385	R1325	R1325	V1145	ASN
Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	G1566	G1446	M1386	R1326	R1326	F1266	ASN
Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	R1507	E1447	R1387	L1327	L1327	F1267	HIS
Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	V1508	R1448	M1388	T1328	T1328	E1268	GLY
Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	L1509	L1449	F1389	F1329	A1269	A1269	THR
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Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	A1511	L1451	L1391	V1331	V1331	H1270	VAL
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Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	L1513	L1453	I1393	Q1333	Q1333	SER	SER
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Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	I1515	D1455	P1395	P1395	P1395	ASP	SER
Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	M1516	E1456	C1396	C1396	C1396	VAL	VAL
Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	I1517	L1457	A1397	A1397	A1397	LEU	LEU
Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	R1518	E1458	M1398	L1397	L1397	LEU	LEU
Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	L1519	V1459	H1399	H1399	H1399	ASP	ASN
Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	T1520	A1460	K1400	TYR	TYR	ASP	ASN
Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	F1461	F1461	M1401	GLU	GLU	E1284	THR
Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	M1462	N1462	H1402	VAL	VAL	P1285	THR
Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	G1523	M1463	L1403	ARG	ARG	P1286	THR
Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Gly	K1524	T1464	Y1404	PHE	PHE	H1287	PRO
Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	A1525	M1465	L1405	HIS	HIS	Q1230	PRO
Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	I1526	V1466	G1406	ARG	ARG	R1232	PRO
Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	F1527	R1467	A1407	GLU	GLU	M1233	PRO
Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	I1528	T1468	A1408	GLU	GLU	Q1167	PRO
Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	R1529	T1469	F1352	P1352	P1352	H1168	PRO
Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	L1530	C1470	K1409	P1353	P1353	H1169	PRO
Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	F1531	M1471	V1410	K1354	K1354	Q1170	PRO
Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Gly	T1532	H1472	E1411	F1355	F1355	L1171	PRO
Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	T1533	I1473	V1412	T1357	T1357	K1172	PRO
Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	M1534	F1474	T1414	F1356	F1356	D1173	PRO
Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	E1535	L1475	E1415	F1358	F1358	M1174	PRO
Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	S1536	M1476	V1416	R1359	R1359	T1175	PRO
Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	G1537	F1477	T1417	A1360	A1360	C1176	PRO
Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Y1539	P1479	D1418	D1362	D1362	C1177	PRO
Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	L1540	T1480	Y1419	K1363	K1363	V1178	PRO
Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	D1541	L1481	F1420	F1364	F1364	E1179	PRO
Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	S1543	I1482	F1421	E1365	E1365	F1180	PRO
Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	L1544	P1484	F1422	E1366	E1366	Q1181	PRO
Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Y1545	M1485	V1423	D1367	D1367	M1183	PRO
Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	L1546	P1486	R1424	R1368	R1368	L1184	PRO
Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	K1546	S1486	A1425	I1369	I1369	P1185	PRO
Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	E1547	K1487	I1426	Y1370	Y1370	T1186	PRO
Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	V1548	I1488	I1427	R1371	R1371	S1187	PRO
Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	T1549	E1489	R1428	H1372	H1372	H1188	PRO
Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	SER	E1490	H1429	L1373	L1373	F1255	PRO
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Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	THR	V1493	LEU	A1376	A1376	ASP	GLY
Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	ALA	R1493	VAL	I1377	I1377	ASP	GLY
Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	THR	S1494	LYS	A1378	A1378	ASP	GLY
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Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	THR	V1496	LYS	F1379	F1379	ASP	GLY
Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	THR	M1497	LYS	Q1380	Q1380	ASP	GLY
Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	THR	F1498	LYS	F1439	F1439	ASP	GLY
Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	THR	M1557	LYS	S1438	S1438	ASP	GLY
Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	THR	F1558	LYS	F1439	F1439	ASP	GLY
Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	Glu	Gly	Pro	Leu	Arg	THR	Q1559	LYS	F1439	F1439	ASP	GLY
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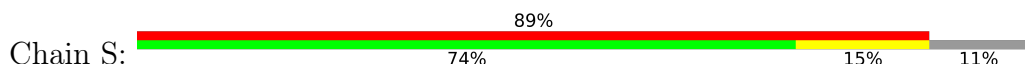
• Molecule 2: Breast cancer type 1 susceptibility protein



• Molecule 2: Breast cancer type 1 susceptibility protein

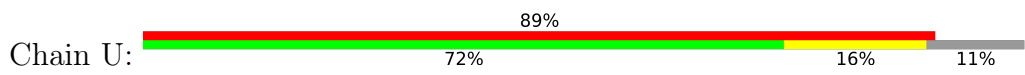


• Molecule 2: Breast cancer type 1 susceptibility protein



V1740	V1741	M1742	G1743	R1744	M1745	H1746	Q1747	G1748	P1749	K1750	R1751	R1752	R1753	E1754	S1755	Q1756	D1757	R1758	K1759	I1760	F1761	R1762	G1763	L1764	E1765	I1766	C1767	Y1768	G1770	P1771	F1772	T1773	M1774	M1775	P1776	T1777	D1778	Q1779	L1780	E1781	M1782	M1783	L1784	Y1785	L1786	C1787	G1788	A1789	S1790	V1791	V1792	K1793	E1794	L1795	S1796	Q1797	F1798	T1799	
L1800	G1801	T1802	G1803	V1804	H1805	P1806	I1807	V1808	V1809	V1810	Q1811	D1812	D1813	A1814	W1815	T1816	E1817	D1818	M1819	G1820	F1821	H1822	A1823	I1824	Y1825	Q1826	M1827	C1828	A1829	A1830	P1831	V1832	V1833	T1834	R1835	E1836	W1837	V1838	L1839	D1840	S1841	V1842	A1843	L1844	Y1845	Q1846	C1847	Q1848	E1849	L1850	D1851	T1852	Y1853	L1854	I1855	P1856	Q1857	I1858	P1859

• Molecule 2: Breast cancer type 1 susceptibility protein



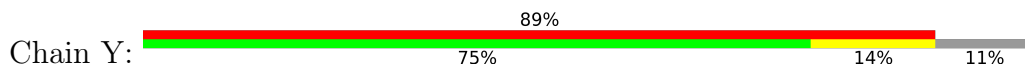
MET	LYS	HIS	HIS	HIS	HIS	PRO	MET	THR	SER	LEU	LEU	LYS	LYS	ALA	GLY	LEU	GLU	ASN	LEU	LEU	PHE	GLN	GLY	V1646	M1647	K1648	R1649	M1650	S1651	M1652	V1653	V1654	S1655	G1656	L1657	T1658	P1659	E1660	E1661	F1662	M1663	L1664	V1665	Y1666	K1667	F1668	A1669	R1670	K1671	H1672	H1673	I1674	T1675	L1676	T1677	M1678	L1679
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I1680	T1681	E1682	E1683	T1684	T1685	H1686	V1687	M1688	M1689	K1690	T1691	D1692	A1693	E1694	F1695	V1696	E1698	R1699	T1700	L1701	K1702	Y1703	F1704	L1705	G1706	I1707	A1708	G1709	G1710	K1711	W1712	V1713	V1714	S1715	Y1716	F1717	W1718	V1719	T1720	Q1721	S1722	I1723	K1724	E1725	R1726	K1727	M1728	L1729	M1730	E1731	H1732	D1733	F1734	E1735	V1736	R1737	G1738	D1739
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V1740	V1741	M1742	G1743	R1744	M1745	H1746	Q1747	G1748	P1749	K1750	R1751	A1752	R1753	E1754	S1755	Q1756	D1757	R1758	K1759	I1760	F1761	R1762	G1763	L1764	E1765	I1766	C1767	C1768	V1769	G1770	P1771	F1772	T1773	M1774	M1775	P1776	T1777	D1778	Q1779	L1780	E1781	M1782	M1783	L1784	Y1785	L1786	C1787	G1788	A1789	S1790	V1791	V1792	K1793	E1794	L1795	S1796	Q1797	F1798	T1799
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L1800	G1801	T1802	G1803	V1804	H1805	P1806	I1807	V1808	V1809	V1810	Q1811	D1812	D1813	A1814	W1815	T1816	E1817	D1818	M1819	G1820	F1821	H1822	A1823	I1824	Y1825	Q1826	M1827	C1828	A1829	A1830	P1831	V1832	V1833	T1834	R1835	E1836	W1837	V1838	L1839	D1840	S1841	V1842	A1843	L1844	Y1845	Q1846	C1847	Q1848	E1849	L1850	D1851	T1852	Y1853	L1854	I1855	P1856	Q1857	I1858	P1859
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• Molecule 2: Breast cancer type 1 susceptibility protein



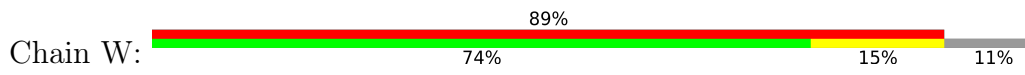
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• Molecule 2: Breast cancer type 1 susceptibility protein



MET	I1680	V1740	L1800
LYS	T1681	V1741	G1801
HIS	E1682	M1742	T1802
HIS	E1683	G1743	G1803
HIS	T1684	R1744	V1804
HIS	T1685	N1745	H1805
HIS	H1686	H1746	P1806
PRO	V1687	Q1747	I1807
MET	V1688	G1748	V1808
THR	M1689	P1749	V1809
LEU	K1690	K1750	V1810
TYR	T1691	R1751	Q1811
LYS	D1692	A1752	P1812
LYS	A1693	R1753	D1813
ALA	E1694	E1754	A1814
LEU	F1695	S1755	M1815
GLU	V1696	Q1756	T1816
LEU	C1697	D1757	E1817
TYR	E1698	R1758	D1818
PHE	R1699	K1759	M1819
GLN	T1700	I1760	G1820
GLY	L1701	F1761	F1821
V1646	K1702	M1762	H1822
M1647	Y1703	G1763	A1823
K1648	F1704	L1764	I1824
R1649	L1705	E1765	G1825
M1650	G1706	I1766	Q1826
S1651	I1707	C1767	M1827
M1652	G1708	Y1769	C1828
M1653	A1709	G1770	E1829
V1654	G1710	P1771	A1830
V1655	K1711	F1772	P1831
S1656	M1712	T1773	V1832
L1657	W1713	T1774	V1833
T1658	V1714	M1774	T1834
P1659	S1715	M1775	R1835
E1660	Y1716	P1776	E1836
E1661	F1717	T1777	M1837
F1662	W1718	D1778	V1838
M1663	V1719	Q1779	L1839
L1664	T1720	L1780	D1840
V1665	Q1721	E1781	S1841
Y1666	S1722	W1782	V1842
K1667	I1723	M1783	A1843
F1668	K1724	V1784	L1844
A1669	E1725	Q1785	L1845
R1670	R1726	L1786	Q1846
M1671	K1727	C1787	C1847
H1672	M1728	G1788	Q1848
H1673	L1729	A1789	E1849
H1674	N1730	S1790	L1850
T1675	E1731	V1791	D1851
L1676	H1732	V1792	T1852
T1677	D1733	K1793	M1853
M1678	F1734	E1794	L1854
L1679	E1735	L1795	I1855
	V1736	S1796	P1856
	R1737	S1797	Q1857
	G1738	F1798	I1858
	D1739	T1799	P1859

4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C2	Depositor
Number of particles used	48483	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	1.0	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.081	Depositor
Minimum map value	-0.033	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.003	Depositor
Recommended contour level	0.015	Depositor
Map size (Å)	397.80798, 397.80798, 397.80798	wwPDB
Map dimensions	376, 376, 376	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.058, 1.058, 1.058	Depositor

5 Model quality i

5.1 Standard geometry i

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

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	A	0.51	3/16819 (0.0%)	1.02	65/22785 (0.3%)
1	B	0.52	4/16819 (0.0%)	1.06	76/22785 (0.3%)
1	C	0.60	3/16819 (0.0%)	1.05	63/22785 (0.3%)
1	D	0.67	8/16819 (0.0%)	1.20	144/22785 (0.6%)
1	E	0.66	4/16819 (0.0%)	1.11	72/22785 (0.3%)
1	F	0.59	3/16819 (0.0%)	1.04	56/22785 (0.2%)
1	G	0.43	0/6199	0.87	7/8406 (0.1%)
1	J	0.41	0/10619	0.91	26/14376 (0.2%)
1	Q	0.43	0/6199	0.88	10/8406 (0.1%)
1	R	0.41	0/10619	0.92	32/14376 (0.2%)
2	H	0.44	0/1740	0.87	1/2364 (0.0%)
2	K	0.40	0/1737	0.79	0/2360
2	M	0.40	0/1740	0.81	0/2364
2	O	0.43	0/1737	0.84	1/2360 (0.0%)
2	S	0.36	0/1740	0.81	4/2364 (0.2%)
2	U	0.36	0/1737	0.75	0/2360
2	W	0.37	0/1737	0.77	2/2360 (0.1%)
2	Y	0.37	0/1740	0.78	0/2364
All	All	0.54	25/148458 (0.0%)	1.02	559/201170 (0.3%)

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	13
1	B	0	13
1	C	0	12
1	D	1	18
1	E	0	11

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Mol	Chain	#Chirality outliers	#Planarity outliers
1	F	0	12
1	J	0	11
1	R	0	11
All	All	1	101

All (25) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	2018	TRP	CB-CG	-7.39	1.36	1.50
1	B	1539	TYR	CB-CG	-7.33	1.40	1.51
1	C	2018	TRP	CB-CG	-7.25	1.37	1.50
1	E	1116	CYS	CB-SG	-7.02	1.70	1.82
1	D	1780	TYR	CD2-CE2	-6.97	1.28	1.39
1	D	2046	TRP	CB-CG	-6.97	1.37	1.50
1	B	1539	TYR	CD2-CE2	-6.85	1.29	1.39
1	B	1049	CYS	CB-SG	-6.65	1.71	1.82
1	F	2217	TRP	CB-CG	-6.46	1.38	1.50
1	A	157	VAL	C-N	6.42	1.48	1.34
1	D	2093	TRP	CB-CG	-6.25	1.39	1.50
1	E	2046	TRP	CB-CG	-6.18	1.39	1.50
1	A	1138	PHE	CA-C	5.90	1.68	1.52
1	C	1992	THR	C-N	-5.83	1.20	1.34
1	E	1780	TYR	CD1-CE1	-5.78	1.30	1.39
1	C	2217	TRP	CB-CG	-5.74	1.40	1.50
1	D	1738	TRP	CB-CG	-5.24	1.40	1.50
1	D	1691	PHE	CD2-CE2	-5.21	1.28	1.39
1	F	2263	VAL	CB-CG1	-5.20	1.42	1.52
1	D	1620	ALA	CA-CB	-5.18	1.41	1.52
1	D	2037	GLY	C-N	5.14	1.45	1.34
1	D	1255	CYS	CB-SG	-5.09	1.73	1.81
1	A	962	PHE	CB-CG	-5.03	1.42	1.51
1	B	1101	GLU	CB-CG	-5.01	1.42	1.52
1	E	1955	PHE	CB-CG	-5.00	1.42	1.51

All (559) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	1503	LEU	CA-CB-CG	10.94	140.47	115.30
1	E	1449	LEU	CA-CB-CG	10.48	139.40	115.30
1	A	991	LEU	CA-CB-CG	10.27	138.93	115.30
1	E	290	TYR	CB-CG-CD2	10.07	127.04	121.00
1	B	290	TYR	CB-CG-CD2	9.91	126.95	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	715	LEU	CA-CB-CG	9.88	138.02	115.30
1	A	1055	LEU	CA-CB-CG	9.77	137.77	115.30
1	C	1938	LEU	CA-CB-CG	9.76	137.75	115.30
1	F	1095	LEU	CA-CB-CG	9.59	137.36	115.30
1	D	1834	LEU	CA-CB-CG	9.56	137.29	115.30
1	A	963	MET	CG-SD-CE	9.31	115.10	100.20
1	A	1403	LEU	CA-CB-CG	9.31	136.71	115.30
1	R	715	LEU	CA-CB-CG	9.21	136.48	115.30
1	J	715	LEU	CA-CB-CG	9.02	136.04	115.30
1	B	2079	LEU	CA-CB-CG	8.99	135.97	115.30
1	R	1381	LEU	CA-CB-CG	8.88	135.73	115.30
1	B	290	TYR	CB-CG-CD1	-8.84	115.70	121.00
1	A	2079	LEU	CA-CB-CG	8.80	135.55	115.30
1	E	290	TYR	CB-CG-CD1	-8.78	115.73	121.00
1	J	1381	LEU	CA-CB-CG	8.76	135.45	115.30
1	D	1601	ILE	CG1-CB-CG2	8.65	130.44	111.40
1	J	687	ARG	NE-CZ-NH2	-8.44	116.08	120.30
1	E	175	TYR	CB-CG-CD1	-8.42	115.95	121.00
1	B	1441	TYR	CA-CB-CG	8.41	129.37	113.40
1	E	1381	LEU	CA-CB-CG	8.36	134.53	115.30
1	B	2223	LEU	CB-CG-CD2	8.35	125.20	111.00
1	D	2223	LEU	CB-CG-CD1	-8.33	96.83	111.00
1	R	1449	LEU	CA-CB-CG	8.32	134.43	115.30
1	J	1449	LEU	CA-CB-CG	8.28	134.34	115.30
1	R	687	ARG	NE-CZ-NH2	-8.25	116.17	120.30
1	C	1044	LEU	CA-CB-CG	8.21	134.18	115.30
1	B	1450	LEU	CA-CB-CG	8.21	134.18	115.30
1	F	715	LEU	CA-CB-CG	8.18	134.11	115.30
1	A	1381	LEU	CA-CB-CG	8.18	134.10	115.30
1	D	1622	LEU	CB-CG-CD1	8.16	124.86	111.00
1	D	1847	ILE	CG1-CB-CG2	8.06	129.12	111.40
1	J	1125	LEU	CA-CB-CG	8.05	133.82	115.30
1	D	2078	VAL	CG1-CB-CG2	8.04	123.77	110.90
1	A	122	LEU	CA-CB-CG	8.03	133.76	115.30
1	R	1125	LEU	CA-CB-CG	8.02	133.73	115.30
1	C	687	ARG	NE-CZ-NH2	-8.01	116.29	120.30
1	B	1622	LEU	CB-CG-CD2	8.01	124.62	111.00
1	D	1638	VAL	CG1-CB-CG2	8.00	123.70	110.90
1	E	175	TYR	CB-CG-CD2	7.97	125.78	121.00
1	D	1922	ILE	CG1-CB-CG2	7.96	128.91	111.40
1	F	1381	LEU	CA-CB-CG	7.95	133.58	115.30
1	D	1815	ILE	CG1-CB-CG2	7.93	128.85	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	2299	TYR	CA-CB-CG	7.92	128.44	113.40
1	A	1571	MET	CA-CB-CG	7.91	126.74	113.30
1	F	687	ARG	NE-CZ-NH2	-7.89	116.35	120.30
1	F	1044	LEU	CA-CB-CG	7.82	133.29	115.30
1	D	1508	VAL	CG1-CB-CG2	7.82	123.41	110.90
1	D	1973	VAL	CG1-CB-CG2	7.82	123.41	110.90
1	D	1716	VAL	CG1-CB-CG2	7.73	123.27	110.90
1	E	1609	LEU	CA-CB-CG	7.71	133.03	115.30
1	D	1885	VAL	CG1-CB-CG2	7.69	123.20	110.90
1	D	1545	TYR	C-N-CA	7.68	140.91	121.70
1	A	963	MET	CB-CG-SD	-7.67	89.39	112.40
1	B	1381	LEU	CA-CB-CG	7.65	132.90	115.30
1	D	1657	ILE	CG1-CB-CG2	7.65	128.23	111.40
1	E	897	LEU	CA-CB-CG	7.63	132.84	115.30
1	C	1698	LEU	CA-CB-CG	7.55	132.66	115.30
1	C	1095	LEU	CA-CB-CG	7.52	132.60	115.30
1	B	1963	ILE	CG1-CB-CG2	7.51	127.92	111.40
1	E	2230	LYS	CB-CG-CD	7.47	131.03	111.60
1	C	1687	ARG	NE-CZ-NH2	-7.46	116.57	120.30
1	B	1539	TYR	CA-CB-CG	7.45	127.55	113.40
1	C	1991	ARG	CB-CA-C	-7.44	95.52	110.40
1	Q	2270	LEU	CB-CG-CD2	7.41	123.60	111.00
1	D	1710	GLY	C-N-CA	7.39	140.17	121.70
1	E	702	VAL	CG1-CB-CG2	7.38	122.71	110.90
1	B	1330	LEU	CA-CB-CG	7.30	132.09	115.30
1	C	1125	LEU	CA-CB-CG	7.29	132.06	115.30
1	F	1125	LEU	CA-CB-CG	7.28	132.03	115.30
1	E	1359	ARG	NE-CZ-NH1	7.25	123.92	120.30
1	D	1909	SER	C-N-CA	7.23	139.77	121.70
1	D	2071	LEU	CA-CB-CG	7.22	131.92	115.30
1	B	156	MET	CB-CG-SD	-7.16	90.91	112.40
1	D	1085	LEU	CA-CB-CG	7.16	131.76	115.30
1	A	2239	LEU	CB-CG-CD2	7.16	123.16	111.00
1	B	718	TYR	CB-CA-C	7.14	124.67	110.40
1	B	2042	VAL	CG1-CB-CG2	7.13	122.31	110.90
1	D	1593	LEU	CB-CG-CD1	7.13	123.11	111.00
1	B	1539	TYR	CB-CA-C	-7.12	96.16	110.40
1	A	1758	TYR	CA-CB-CG	7.11	126.91	113.40
1	R	1237	VAL	CG1-CB-CG2	7.04	122.16	110.90
1	C	2189	LEU	CA-CB-CG	7.03	131.47	115.30
1	D	1797	LEU	CB-CG-CD2	7.03	122.95	111.00
1	F	2040	LEU	CB-CG-CD2	7.02	122.94	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	1938	LEU	CA-CB-CG	7.02	131.44	115.30
1	D	142	TYR	CA-CB-CG	7.01	126.72	113.40
1	B	1758	TYR	CA-CB-CG	7.00	126.70	113.40
1	A	963	MET	CB-CA-C	-7.00	96.41	110.40
1	A	1571	MET	CB-CG-SD	-7.00	91.41	112.40
1	E	142	TYR	CA-CB-CG	6.98	126.67	113.40
1	D	1371	ARG	NE-CZ-NH2	-6.97	116.81	120.30
1	B	1667	LYS	C-N-CA	6.97	139.12	121.70
1	A	156	MET	CB-CG-SD	-6.96	91.53	112.40
1	B	1371	ARG	NE-CZ-NH2	-6.92	116.84	120.30
2	S	1723	ILE	CG1-CB-CG2	6.91	126.60	111.40
1	B	1899	LEU	CB-CG-CD2	6.91	122.74	111.00
1	B	1938	LEU	CA-CB-CG	6.91	131.19	115.30
1	B	2222	LEU	CB-CG-CD2	6.91	122.74	111.00
1	J	1371	ARG	NE-CZ-NH2	-6.90	116.85	120.30
1	D	1974	GLY	C-N-CA	6.90	138.96	121.70
1	D	652	LEU	CA-CB-CG	6.90	131.16	115.30
1	J	791	LEU	CB-CG-CD2	6.90	122.72	111.00
1	E	374	PHE	CB-CG-CD1	-6.89	115.97	120.80
1	D	540	TYR	CB-CG-CD2	6.89	125.14	121.00
1	C	1428	ARG	N-CA-C	-6.87	92.44	111.00
1	A	1326	ARG	NE-CZ-NH1	6.85	123.72	120.30
1	C	540	TYR	CB-CG-CD1	-6.85	116.89	121.00
1	B	1671	TYR	CB-CG-CD2	-6.85	116.89	121.00
1	Q	2322	MET	CA-CB-CG	6.84	124.92	113.30
1	E	1044	LEU	CA-CB-CG	6.81	130.97	115.30
1	E	1403	LEU	CA-CB-CG	6.81	130.96	115.30
1	E	540	TYR	CB-CG-CD2	6.79	125.08	121.00
1	E	1645	LEU	CB-CG-CD1	6.79	122.54	111.00
1	G	2270	LEU	CB-CG-CD1	6.79	122.54	111.00
1	D	1485	PRO	N-CA-C	6.78	129.72	112.10
2	S	1845	TYR	CB-CG-CD2	-6.77	116.94	121.00
1	B	122	LEU	CA-CB-CG	6.76	130.86	115.30
1	E	1125	LEU	CA-CB-CG	6.75	130.82	115.30
1	F	540	TYR	CB-CG-CD1	-6.74	116.96	121.00
1	D	1044	LEU	CA-CB-CG	6.74	130.79	115.30
1	D	1389	PHE	CB-CG-CD2	-6.73	116.09	120.80
1	D	971	LEU	CA-CB-CG	6.72	130.75	115.30
1	D	1600	ASP	CB-CG-OD1	6.71	124.34	118.30
1	F	976	ARG	NE-CZ-NH2	-6.70	116.95	120.30
1	F	1587	ARG	CG-CD-NE	6.69	125.85	111.80
1	A	1046	ASP	CB-CG-OD1	6.69	124.32	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	1832	VAL	CG1-CB-CG2	6.69	121.60	110.90
1	D	1426	ILE	CG1-CB-CG2	6.68	126.09	111.40
1	A	350	ARG	NE-CZ-NH1	6.67	123.63	120.30
1	D	1488	ILE	CG1-CB-CG2	6.66	126.06	111.40
1	A	868	CYS	CA-CB-SG	6.66	125.98	114.00
1	D	1816	THR	N-CA-CB	6.64	122.91	110.30
1	R	1371	ARG	NE-CZ-NH2	-6.61	116.99	120.30
1	D	1543	SER	N-CA-C	-6.61	93.17	111.00
1	D	1892	VAL	CG1-CB-CG2	6.60	121.46	110.90
1	J	1428	ARG	CB-CA-C	6.59	123.58	110.40
1	D	290	TYR	CB-CG-CD2	6.59	124.95	121.00
1	R	1428	ARG	CB-CA-C	6.58	123.56	110.40
1	D	1475	LEU	CB-CG-CD2	-6.54	99.87	111.00
1	C	661	LEU	CA-CB-CG	6.54	130.35	115.30
1	R	145	PHE	CB-CG-CD1	-6.53	116.23	120.80
1	E	2259	VAL	CB-CA-C	-6.51	99.02	111.40
1	R	1289	LEU	CB-CG-CD2	6.51	122.07	111.00
1	F	1428	ARG	N-CA-C	-6.49	93.47	111.00
1	D	290	TYR	CB-CG-CD1	-6.49	117.11	121.00
1	D	290	TYR	CA-CB-CG	6.48	125.71	113.40
1	B	1882	HIS	C-N-CA	6.47	137.88	121.70
2	S	1845	TYR	CB-CG-CD1	6.47	124.88	121.00
1	D	1880	VAL	CG1-CB-CG2	6.47	121.25	110.90
1	F	1640	ASP	CB-CG-OD1	6.46	124.11	118.30
1	D	897	LEU	CA-CB-CG	6.46	130.15	115.30
1	A	1442	LEU	CA-CB-CG	6.45	130.14	115.30
1	D	1509	LEU	CA-CB-CG	6.45	130.12	115.30
1	A	1139	TYR	CB-CG-CD1	-6.44	117.13	121.00
1	C	2297	ARG	CA-CB-CG	6.44	127.56	113.40
1	D	1645	LEU	CB-CG-CD2	6.43	121.94	111.00
1	B	2082	ILE	CG1-CB-CG2	6.43	125.55	111.40
1	D	1459	VAL	CG1-CB-CG2	6.43	121.19	110.90
1	B	868	CYS	CA-CB-SG	6.42	125.55	114.00
1	F	661	LEU	CA-CB-CG	6.41	130.04	115.30
1	C	2062	LYS	CA-CB-CG	6.40	127.49	113.40
1	F	2129	ARG	CG-CD-NE	6.40	125.24	111.80
1	F	884	ARG	CA-CB-CG	6.40	127.47	113.40
1	B	884	ARG	CA-CB-CG	6.39	127.47	113.40
1	E	374	PHE	CB-CG-CD2	6.39	125.27	120.80
1	A	540	TYR	CB-CG-CD1	-6.38	117.17	121.00
1	C	1640	ASP	CB-CG-OD1	6.37	124.04	118.30
1	D	1667	LYS	C-N-CA	6.37	137.63	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	1714	ILE	CG1-CB-CG2	6.36	125.39	111.40
1	Q	1622	LEU	CA-CB-CG	6.36	129.93	115.30
1	R	540	TYR	CB-CG-CD1	-6.36	117.19	121.00
1	F	2250	ARG	NE-CZ-NH1	6.35	123.47	120.30
1	D	1707	ARG	N-CA-CB	6.34	122.02	110.60
1	B	500	CYS	N-CA-C	-6.34	93.88	111.00
1	D	1060	LEU	CB-CG-CD2	6.34	121.77	111.00
1	D	1792	ILE	CG1-CB-CG2	6.33	125.32	111.40
1	A	644	LEU	CA-CB-CG	6.32	129.84	115.30
1	A	1938	LEU	CA-CB-CG	6.31	129.81	115.30
1	D	1441	TYR	CA-CB-CG	6.30	125.38	113.40
1	J	540	TYR	CB-CG-CD1	-6.30	117.22	121.00
1	E	540	TYR	CB-CG-CD1	-6.29	117.22	121.00
1	C	2250	ARG	NE-CZ-NH1	6.29	123.44	120.30
1	C	884	ARG	CA-CB-CG	6.26	127.17	113.40
1	B	991	LEU	CA-CB-CG	6.26	129.70	115.30
1	J	1428	ARG	N-CA-C	-6.26	94.10	111.00
1	C	2258	THR	OG1-CB-CG2	-6.25	95.61	110.00
1	B	1082	ARG	CB-CG-CD	6.25	127.86	111.60
1	D	540	TYR	CB-CG-CD1	-6.25	117.25	121.00
1	E	889	LEU	CA-CB-CG	6.25	129.67	115.30
1	C	401	PHE	CB-CG-CD2	-6.24	116.43	120.80
1	E	1543	SER	N-CA-C	-6.24	94.15	111.00
1	D	962	PHE	CB-CG-CD1	-6.23	116.44	120.80
1	A	718	TYR	N-CA-CB	-6.23	99.39	110.60
1	F	1253	MET	CG-SD-CE	6.23	110.17	100.20
1	C	540	TYR	CB-CG-CD2	6.22	124.73	121.00
1	E	644	LEU	CB-CG-CD1	6.22	121.58	111.00
1	C	2151	LEU	CA-CB-CG	6.22	129.61	115.30
1	B	540	TYR	CB-CG-CD1	-6.22	117.27	121.00
1	A	644	LEU	CB-CG-CD2	6.21	121.56	111.00
1	D	1377	LEU	CA-CB-CG	6.20	129.56	115.30
1	E	1428	ARG	N-CA-C	-6.19	94.28	111.00
1	E	1485	PRO	N-CA-C	6.19	128.20	112.10
1	A	1156	ARG	CG-CD-NE	6.18	124.78	111.80
1	D	1675	ARG	N-CA-CB	6.18	121.72	110.60
1	G	1622	LEU	CA-CB-CG	6.18	129.51	115.30
1	F	540	TYR	CB-CG-CD2	6.18	124.71	121.00
1	R	1428	ARG	N-CA-C	-6.17	94.34	111.00
1	D	881	TRP	CA-CB-CG	6.17	125.42	113.70
1	R	990	LEU	CA-CB-CG	6.17	129.48	115.30
1	C	2218	ARG	NE-CZ-NH1	6.15	123.38	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	1577	TYR	N-CA-C	-6.15	94.39	111.00
1	F	2297	ARG	CA-CB-CG	6.15	126.92	113.40
1	D	1910	VAL	CG1-CB-CG2	6.14	120.73	110.90
1	J	990	LEU	CA-CB-CG	6.13	129.40	115.30
1	B	1021	MET	CA-CB-CG	6.12	123.71	113.30
1	B	1321	ASP	C-N-CA	6.11	136.98	121.70
1	C	2095	VAL	CG1-CB-CG2	6.11	120.67	110.90
1	B	2215	PHE	CB-CA-C	-6.10	98.20	110.40
1	D	1820	VAL	CG1-CB-CG2	6.10	120.66	110.90
2	O	1724	LYS	CA-CB-CG	6.10	126.82	113.40
1	F	2139	ARG	NE-CZ-NH2	-6.10	117.25	120.30
1	D	1478	VAL	CG1-CB-CG2	6.09	120.65	110.90
1	R	1069	LEU	CA-CB-CG	6.08	129.29	115.30
1	B	238	TRP	CA-CB-CG	6.08	125.26	113.70
1	E	1356	PHE	N-CA-C	-6.07	94.62	111.00
1	E	2071	LEU	CA-CB-CG	6.07	129.25	115.30
1	R	791	LEU	CB-CG-CD2	6.07	121.31	111.00
1	Q	2139	ARG	NE-CZ-NH2	-6.06	117.27	120.30
1	R	540	TYR	CB-CG-CD2	6.06	124.64	121.00
1	C	2336	ARG	CA-CB-CG	6.06	126.72	113.40
1	D	1473	ILE	CG1-CB-CG2	6.05	124.71	111.40
1	D	1731	ARG	NE-CZ-NH2	-6.04	117.28	120.30
1	E	1123	LEU	CB-CG-CD2	6.04	121.28	111.00
1	B	718	TYR	CA-CB-CG	6.04	124.88	113.40
1	E	652	LEU	CA-CB-CG	6.04	129.19	115.30
1	A	1451	LEU	CB-CG-CD2	-6.04	100.73	111.00
1	B	1872	ILE	CG1-CB-CG2	6.03	124.67	111.40
1	B	1938	LEU	CB-CG-CD2	6.03	121.26	111.00
1	A	391	ALA	C-N-CD	-6.03	107.33	120.60
1	E	2041	MET	CA-CB-CG	6.03	123.56	113.30
1	F	1568	LEU	CB-CG-CD2	6.03	121.25	111.00
1	B	1389	PHE	CB-CG-CD2	-6.03	116.58	120.80
1	Q	2111	ARG	NE-CZ-NH2	-6.02	117.29	120.30
2	W	1699	ARG	NE-CZ-NH2	-6.01	117.30	120.30
1	C	2331	ARG	CA-CB-CG	6.01	126.62	113.40
1	J	540	TYR	CB-CG-CD2	6.01	124.61	121.00
1	D	1359	ARG	NE-CZ-NH2	6.01	123.30	120.30
1	B	718	TYR	N-CA-CB	-6.01	99.79	110.60
1	D	2258	THR	C-N-CA	6.00	136.69	121.70
1	R	1320	VAL	CG1-CB-CG2	5.99	120.49	110.90
1	D	1150	LEU	CA-CB-CG	5.99	129.07	115.30
1	B	1442	LEU	CA-CB-CG	5.99	129.06	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	2257	GLY	N-CA-C	-5.98	98.14	113.10
1	B	1355	PHE	CB-CG-CD2	-5.98	116.62	120.80
1	R	1448	ARG	NE-CZ-NH2	-5.97	117.31	120.30
1	D	1824	ALA	N-CA-C	5.96	127.09	111.00
1	C	990	LEU	CA-CB-CG	5.96	129.01	115.30
1	F	990	LEU	CA-CB-CG	5.96	129.01	115.30
1	C	1935	ARG	NE-CZ-NH1	5.95	123.28	120.30
1	B	293	ASP	CB-CA-C	5.95	122.29	110.40
1	A	718	TYR	CA-CB-CG	5.94	124.68	113.40
1	E	885	LEU	CA-CB-CG	5.94	128.96	115.30
1	B	1610	ILE	CG1-CB-CG2	5.93	124.44	111.40
1	R	145	PHE	CB-CG-CD2	5.92	124.94	120.80
1	D	1356	PHE	N-CA-C	-5.92	95.03	111.00
1	F	1977	ARG	NE-CZ-NH1	5.92	123.26	120.30
1	G	2111	ARG	NE-CZ-NH2	-5.92	117.34	120.30
1	C	1622	LEU	CA-CB-CG	5.91	128.90	115.30
1	D	1874	ILE	CG1-CB-CG2	5.90	124.39	111.40
1	F	2218	ARG	NE-CZ-NH1	5.90	123.25	120.30
1	B	1138	PHE	CB-CG-CD2	5.89	124.92	120.80
1	E	2247	MET	CA-CB-CG	5.88	123.30	113.30
1	D	962	PHE	CB-CG-CD2	5.88	124.92	120.80
1	F	683	LEU	CA-CB-CG	5.87	128.81	115.30
1	D	885	LEU	CA-CB-CG	5.86	128.79	115.30
1	A	540	TYR	CB-CG-CD2	5.86	124.52	121.00
1	F	401	PHE	CB-CG-CD2	-5.86	116.70	120.80
2	H	1670	ARG	CG-CD-NE	-5.85	99.51	111.80
1	E	881	TRP	CA-CB-CG	5.84	124.80	113.70
1	E	1904	LYS	CB-CG-CD	5.84	126.80	111.60
1	F	2301	LEU	CA-CB-CG	5.84	128.74	115.30
1	D	1579	THR	C-N-CA	5.84	136.30	121.70
1	D	1803	ILE	CG1-CB-CG2	5.83	124.22	111.40
1	A	1330	LEU	CB-CG-CD1	5.83	120.91	111.00
1	D	1880	VAL	CA-CB-CG2	5.83	119.64	110.90
1	D	1529	ARG	CG-CD-NE	5.83	124.03	111.80
1	B	1632	LEU	CA-CB-CG	5.82	128.68	115.30
1	B	2128	PHE	CB-CG-CD2	-5.82	116.73	120.80
1	R	1095	LEU	CA-CB-CG	5.81	128.66	115.30
1	A	983	MET	CA-CB-CG	5.80	123.16	113.30
1	C	683	LEU	CA-CB-CG	5.80	128.64	115.30
1	B	1069	LEU	CB-CG-CD1	5.80	120.86	111.00
1	E	899	LEU	CB-CG-CD1	5.79	120.84	111.00
1	C	1403	LEU	CA-CB-CG	5.79	128.62	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	1449	LEU	CB-CG-CD1	5.79	120.84	111.00
1	D	1823	ARG	CG-CD-NE	-5.78	99.65	111.80
1	E	1675	ARG	N-CA-CB	5.78	121.01	110.60
1	A	1330	LEU	CA-CB-CG	5.78	128.60	115.30
1	R	1368	ARG	CA-CB-CG	5.77	126.09	113.40
1	B	1973	VAL	CG1-CB-CG2	5.76	120.11	110.90
1	A	1047	GLN	CA-CB-CG	5.76	126.07	113.40
1	B	1668	SER	C-N-CA	-5.75	97.85	122.00
1	F	1811	TYR	N-CA-CB	5.74	120.94	110.60
1	D	1531	PHE	CB-CG-CD1	-5.74	116.78	120.80
1	J	1368	ARG	CA-CB-CG	5.74	126.03	113.40
1	R	1253	MET	CB-CA-C	5.74	121.87	110.40
1	D	1079	LEU	CB-CA-C	5.73	121.09	110.20
1	D	1513	LEU	CA-CB-CG	5.73	128.48	115.30
1	E	2111	ARG	NE-CZ-NH2	-5.72	117.44	120.30
1	A	1029	PHE	N-CA-CB	-5.72	100.30	110.60
1	D	1616	MET	CA-CB-CG	-5.72	103.57	113.30
1	E	1854	LEU	CA-CB-CG	5.72	128.45	115.30
1	R	1540	LEU	CA-CB-CG	5.72	128.45	115.30
1	D	1077	VAL	CG1-CB-CG2	5.72	120.05	110.90
1	D	1838	THR	OG1-CB-CG2	5.71	123.12	110.00
1	F	2139	ARG	CB-CA-C	-5.70	98.99	110.40
1	D	238	TRP	CB-CA-C	5.70	121.80	110.40
1	A	1632	LEU	CA-CB-CG	5.69	128.39	115.30
1	E	391	ALA	C-N-CD	-5.69	108.08	120.60
1	A	1403	LEU	CB-CG-CD2	-5.69	101.33	111.00
1	D	1422	PHE	N-CA-CB	5.67	120.81	110.60
1	C	401	PHE	CB-CG-CD1	5.67	124.77	120.80
1	C	1512	GLU	N-CA-CB	5.67	120.80	110.60
1	D	1418	ASP	CB-CG-OD2	-5.66	113.21	118.30
1	D	391	ALA	C-N-CD	-5.65	108.16	120.60
1	D	1531	PHE	CB-CG-CD2	5.64	124.75	120.80
1	E	1731	ARG	NE-CZ-NH2	-5.64	117.48	120.30
1	E	1723	ARG	CG-CD-NE	5.64	123.64	111.80
1	C	500	CYS	N-CA-C	-5.64	95.78	111.00
1	C	2299	TYR	N-CA-CB	-5.63	100.47	110.60
1	B	171	MET	CB-CG-SD	5.63	129.29	112.40
1	D	1568	LEU	CB-CG-CD2	5.62	120.56	111.00
1	D	991	LEU	CA-CB-CG	5.62	128.22	115.30
1	B	1983	VAL	CG1-CB-CG2	5.62	119.89	110.90
1	J	1448	ARG	NE-CZ-NH2	-5.61	117.50	120.30
1	J	279	LEU	CA-CB-CG	5.60	128.18	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	J	1095	LEU	CA-CB-CG	5.60	128.17	115.30
1	C	1935	ARG	NE-CZ-NH2	-5.59	117.50	120.30
1	B	1834	LEU	C-N-CA	5.59	134.04	122.30
1	A	2215	PHE	CB-CA-C	-5.58	99.23	110.40
1	D	2038	LEU	CB-CG-CD1	5.58	120.48	111.00
1	A	2223	LEU	CB-CG-CD1	5.58	120.48	111.00
1	D	1048	LEU	CB-CG-CD1	-5.57	101.53	111.00
1	A	994	TYR	CB-CG-CD2	5.57	124.34	121.00
1	F	500	CYS	N-CA-C	-5.57	95.95	111.00
1	D	2095	VAL	CB-CA-C	-5.57	100.82	111.40
1	E	1389	PHE	CB-CG-CD2	-5.57	116.90	120.80
1	F	1095	LEU	CB-CA-C	5.56	120.77	110.20
1	E	2079	LEU	CA-CB-CG	5.56	128.09	115.30
1	E	1060	LEU	CA-CB-CG	5.56	128.09	115.30
1	D	1592	SER	C-N-CA	5.55	135.58	121.70
1	D	1713	ARG	CG-CD-NE	5.55	123.46	111.80
1	D	2118	LEU	CB-CG-CD1	5.55	120.44	111.00
1	F	1664	MET	CG-SD-CE	5.55	109.08	100.20
1	J	1146	ARG	NE-CZ-NH2	5.55	123.07	120.30
1	C	1367	ASP	CB-CG-OD1	5.55	123.29	118.30
1	Q	2322	MET	CB-CG-SD	5.55	129.04	112.40
1	D	1981	ILE	N-CA-C	5.54	125.96	111.00
1	C	1391	LEU	CA-CB-CG	5.54	128.04	115.30
1	D	1631	MET	CB-CA-C	-5.54	99.33	110.40
1	E	976	ARG	NE-CZ-NH2	-5.54	117.53	120.30
1	A	979	ILE	C-N-CA	5.53	135.53	121.70
1	A	156	MET	CA-CB-CG	5.53	122.70	113.30
1	D	1637	LEU	CB-CG-CD1	5.52	120.39	111.00
1	D	1605	PHE	CB-CG-CD2	-5.52	116.94	120.80
1	E	2095	VAL	CB-CA-C	-5.52	100.91	111.40
2	S	1769	TYR	CB-CG-CD2	-5.51	117.69	121.00
1	D	1487	LYS	N-CA-CB	-5.51	100.68	110.60
1	A	238	TRP	CA-CB-CG	5.50	124.15	113.70
1	E	990	LEU	CB-CG-CD1	5.50	120.34	111.00
1	B	2038	LEU	CA-CB-CG	5.49	127.93	115.30
1	C	1498	ARG	NE-CZ-NH1	5.49	123.04	120.30
1	E	290	TYR	CA-CB-CG	5.49	123.82	113.40
1	D	1616	MET	CB-CA-C	5.48	121.36	110.40
1	A	2250	ARG	NE-CZ-NH1	5.47	123.03	120.30
1	F	1701	ARG	NE-CZ-NH1	5.47	123.03	120.30
1	A	2215	PHE	CB-CG-CD2	-5.46	116.97	120.80
1	D	2257	GLY	N-CA-C	-5.46	99.44	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	1095	LEU	CB-CG-CD1	5.46	120.28	111.00
1	D	1854	LEU	CA-CB-CG	5.46	127.85	115.30
1	D	889	LEU	CA-CB-CG	5.45	127.84	115.30
1	F	1098	ASN	CB-CA-C	-5.45	99.50	110.40
1	D	1631	MET	CA-CB-CG	5.45	122.57	113.30
1	D	1825	ILE	CG1-CB-CG2	5.45	123.39	111.40
1	C	2068	VAL	CG1-CB-CG2	5.45	119.62	110.90
1	A	1139	TYR	CB-CG-CD2	5.45	124.27	121.00
1	B	1975	ARG	N-CA-CB	5.44	120.40	110.60
1	B	1082	ARG	CG-CD-NE	5.44	123.23	111.80
1	A	994	TYR	CB-CG-CD1	-5.44	117.73	121.00
1	A	1060	LEU	CB-CG-CD1	5.44	120.24	111.00
1	F	2250	ARG	NE-CZ-NH2	-5.43	117.58	120.30
1	J	1055	LEU	CA-CB-CG	5.43	127.79	115.30
1	B	2250	ARG	NE-CZ-NH1	5.43	123.01	120.30
1	A	290	TYR	CA-CB-CG	5.43	123.71	113.40
1	E	1403	LEU	N-CA-CB	5.42	121.24	110.40
1	B	290	TYR	CA-CB-CG	5.42	123.70	113.40
1	B	2111	ARG	CA-CB-CG	5.42	125.31	113.40
1	D	1961	SER	N-CA-CB	-5.42	102.38	110.50
1	C	2196	MET	CB-CG-SD	-5.41	96.17	112.40
1	R	868	CYS	CA-CB-SG	5.41	123.73	114.00
1	B	717	SER	N-CA-C	-5.41	96.40	111.00
1	D	1355	PHE	CB-CG-CD2	-5.40	117.02	120.80
1	G	2139	ARG	NE-CZ-NH1	5.40	123.00	120.30
1	F	1139	TYR	CB-CG-CD1	-5.40	117.76	121.00
1	A	500	CYS	N-CA-C	-5.39	96.44	111.00
1	C	1586	LYS	CA-CB-CG	5.39	125.25	113.40
1	F	868	CYS	CA-CB-SG	5.37	123.67	114.00
1	J	868	CYS	CA-CB-SG	5.37	123.67	114.00
1	D	1723	ARG	CG-CD-NE	5.37	123.08	111.80
1	D	1180	PHE	CB-CG-CD2	-5.37	117.04	120.80
1	C	2325	HIS	C-N-CA	5.37	135.11	121.70
1	B	1029	PHE	N-CA-CB	-5.37	100.94	110.60
1	B	1139	TYR	CB-CG-CD1	-5.36	117.79	121.00
1	J	1060	LEU	CA-CB-CG	5.35	127.60	115.30
1	C	2049	PHE	CB-CG-CD2	-5.35	117.06	120.80
1	B	2215	PHE	CB-CG-CD2	-5.34	117.06	120.80
1	E	2330	GLN	CB-CA-C	5.34	121.07	110.40
1	C	2139	ARG	CB-CA-C	-5.34	99.73	110.40
1	G	2139	ARG	NE-CZ-NH2	-5.34	117.63	120.30
1	D	350	ARG	NE-CZ-NH1	5.33	122.97	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	2325	HIS	C-N-CA	5.33	135.04	121.70
1	Q	2139	ARG	NE-CZ-NH1	5.33	122.97	120.30
1	E	661	LEU	CA-CB-CG	5.33	127.56	115.30
1	F	1367	ASP	CB-CG-OD1	5.33	123.10	118.30
1	D	869	LEU	CB-CG-CD2	5.33	120.06	111.00
1	F	401	PHE	CB-CG-CD1	5.33	124.53	120.80
1	F	2331	ARG	CA-CB-CG	5.33	125.12	113.40
1	R	1146	ARG	NE-CZ-NH2	5.33	122.96	120.30
1	F	1055	LEU	CA-CB-CG	5.32	127.54	115.30
1	E	1420	ARG	NE-CZ-NH1	5.32	122.96	120.30
1	D	1450	LEU	CA-CB-CG	5.32	127.53	115.30
1	B	2260	LYS	CA-CB-CG	5.32	125.10	113.40
1	B	430	ASP	CB-CG-OD2	-5.31	113.52	118.30
1	F	146	ARG	NE-CZ-NH1	5.31	122.95	120.30
1	F	2118	LEU	CB-CG-CD1	5.31	120.03	111.00
1	R	1055	LEU	CA-CB-CG	5.31	127.52	115.30
1	D	1002	GLN	C-N-CA	5.30	134.95	121.70
1	D	1577	TYR	CB-CA-C	5.30	121.00	110.40
1	A	894	LEU	CA-CB-CG	5.30	127.48	115.30
1	C	1055	LEU	CA-CB-CG	5.30	127.48	115.30
1	D	2124	VAL	CA-CB-CG1	5.29	118.84	110.90
1	E	1367	ASP	CB-CG-OD1	5.29	123.06	118.30
1	J	1327	LEU	CA-CB-CG	5.29	127.47	115.30
1	F	1467	ARG	CA-CB-CG	5.28	125.02	113.40
1	Q	2307	LEU	CB-CG-CD2	5.28	119.97	111.00
1	E	1640	ASP	CB-CG-OD1	5.27	123.05	118.30
1	E	356	ARG	NE-CZ-NH1	5.27	122.94	120.30
1	E	1391	LEU	CA-CB-CG	5.27	127.41	115.30
1	E	726	TYR	N-CA-CB	5.26	120.08	110.60
1	A	718	TYR	CB-CA-C	5.26	120.93	110.40
1	D	1424	ARG	NE-CZ-NH2	-5.26	117.67	120.30
1	D	1677	ILE	CG1-CB-CG2	5.26	122.97	111.40
1	A	1670	GLU	CB-CA-C	5.26	120.91	110.40
1	D	1008	LYS	CA-CB-CG	5.25	124.95	113.40
1	A	356	ARG	CA-CB-CG	5.25	124.94	113.40
1	E	1359	ARG	NE-CZ-NH2	-5.25	117.68	120.30
1	E	350	ARG	NE-CZ-NH1	5.25	122.92	120.30
1	D	238	TRP	CA-CB-CG	5.24	123.66	113.70
1	R	1356	PHE	N-CA-C	-5.24	96.84	111.00
1	E	1150	LEU	CA-CB-CG	5.24	127.34	115.30
1	F	1698	LEU	CA-CB-CG	5.23	127.34	115.30
1	D	1449	LEU	CA-CB-CG	5.23	127.32	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	1787	GLY	N-CA-C	-5.23	100.03	113.10
1	C	2307	LEU	CB-CG-CD2	5.22	119.88	111.00
1	F	2063	PHE	CB-CG-CD1	5.22	124.45	120.80
1	D	1919	ILE	N-CA-CB	5.22	122.81	110.80
1	R	279	LEU	CA-CB-CG	5.22	127.31	115.30
1	D	1048	LEU	CA-CB-CG	5.22	127.30	115.30
1	A	2221	ARG	NE-CZ-NH1	5.21	122.91	120.30
1	D	1698	LEU	CA-CB-CG	5.21	127.28	115.30
1	C	2139	ARG	NE-CZ-NH2	-5.21	117.69	120.30
1	A	290	TYR	CB-CG-CD2	5.21	124.12	121.00
1	A	871	ASP	N-CA-CB	-5.21	101.23	110.60
1	D	2133	LEU	CA-CB-CG	5.20	127.26	115.30
1	C	1467	ARG	CA-CB-CG	5.20	124.84	113.40
1	B	1377	LEU	CA-CB-CG	5.20	127.25	115.30
1	R	661	LEU	CA-CB-CG	5.20	127.25	115.30
1	E	291	VAL	CA-CB-CG2	5.19	118.68	110.90
1	D	1721	GLY	C-N-CA	5.19	134.67	121.70
1	D	1514	LYS	N-CA-CB	5.19	119.94	110.60
1	C	1977	ARG	CB-CA-C	5.19	120.77	110.40
1	D	1180	PHE	CB-CA-C	-5.18	100.04	110.40
1	C	1421	PHE	CB-CG-CD2	-5.18	117.17	120.80
1	G	1935	ARG	NE-CZ-NH2	-5.18	117.71	120.30
1	E	1055	LEU	CA-CB-CG	5.18	127.21	115.30
1	F	1580	LYS	N-CA-CB	-5.18	101.28	110.60
1	A	1239	PHE	C-N-CA	5.18	134.64	121.70
1	C	632	VAL	CG1-CB-CG2	-5.17	102.62	110.90
1	D	1838	THR	CA-CB-CG2	5.17	119.64	112.40
1	R	1403	LEU	CA-CB-CG	5.17	127.18	115.30
1	C	1568	LEU	CB-CG-CD2	5.16	119.77	111.00
1	J	661	LEU	CA-CB-CG	5.16	127.17	115.30
1	D	291	VAL	CA-CB-CG2	5.16	118.64	110.90
1	E	1403	LEU	CB-CG-CD2	-5.15	102.24	111.00
1	C	1327	LEU	CA-CB-CG	5.15	127.15	115.30
1	C	1170	GLN	N-CA-C	-5.15	97.09	111.00
1	A	1180	PHE	CB-CG-CD2	-5.15	117.19	120.80
1	Q	1938	LEU	CA-CB-CG	5.15	127.15	115.30
1	D	1713	ARG	CB-CG-CD	-5.15	98.22	111.60
1	C	1877	ASN	N-CA-CB	-5.15	101.34	110.60
1	D	1355	PHE	N-CA-CB	5.15	119.86	110.60
1	B	1355	PHE	CB-CG-CD1	5.15	124.40	120.80
1	F	1060	LEU	CA-CB-CG	5.14	127.13	115.30
1	E	2133	LEU	CA-CB-CG	5.14	127.11	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	871	ASP	N-CA-CB	-5.14	101.35	110.60
1	J	1170	GLN	N-CA-C	-5.14	97.13	111.00
1	C	1687	ARG	NE-CZ-NH1	5.12	122.86	120.30
1	F	1391	LEU	CA-CB-CG	5.12	127.07	115.30
1	A	2071	LEU	CA-CB-CG	5.12	127.07	115.30
1	C	238	TRP	CA-CB-CG	5.11	123.40	113.70
1	F	1509	LEU	CA-CB-CG	5.11	127.04	115.30
1	F	2139	ARG	NE-CZ-NH1	5.11	122.85	120.30
1	A	687	ARG	NE-CZ-NH1	5.11	122.85	120.30
1	A	2079	LEU	CB-CG-CD2	-5.10	102.32	111.00
1	B	884	ARG	CB-CA-C	-5.10	100.19	110.40
1	J	991	LEU	CA-CB-CG	5.10	127.03	115.30
1	F	632	VAL	CG1-CB-CG2	-5.10	102.74	110.90
1	D	1528	ILE	CG1-CB-CG2	5.09	122.61	111.40
1	F	1170	GLN	N-CA-C	-5.09	97.25	111.00
1	B	1671	TYR	CB-CG-CD1	5.09	124.05	121.00
1	R	991	LEU	CA-CB-CG	5.09	127.00	115.30
1	A	963	MET	CA-CB-CG	5.09	121.95	113.30
1	E	734	TYR	CB-CG-CD2	-5.08	117.95	121.00
1	E	2336	ARG	CB-CG-CD	5.08	124.81	111.60
1	G	2270	LEU	CB-CG-CD2	5.08	119.64	111.00
2	W	1769	TYR	CB-CG-CD2	-5.08	117.95	121.00
1	C	1566	GLY	N-CA-C	-5.08	100.40	113.10
1	C	1731	ARG	NE-CZ-NH1	5.08	122.84	120.30
1	B	540	TYR	CB-CG-CD2	5.08	124.05	121.00
1	D	1403	LEU	N-CA-CB	5.07	120.55	110.40
1	B	1104	PHE	CB-CG-CD2	-5.06	117.26	120.80
1	D	1663	LYS	C-N-CA	5.05	134.33	121.70
1	D	894	LEU	CA-CB-CG	-5.05	103.68	115.30
1	E	1691	PHE	CB-CG-CD2	-5.05	117.27	120.80
1	C	2324	GLN	C-N-CA	5.05	134.32	121.70
1	J	1403	LEU	CA-CB-CG	5.05	126.91	115.30
1	R	1170	GLN	N-CA-C	-5.04	97.39	111.00
1	E	687	ARG	NE-CZ-NH2	-5.04	117.78	120.30
1	B	2224	LEU	CA-CB-CG	5.04	126.89	115.30
1	E	1797	LEU	CA-CB-CG	5.03	126.86	115.30
1	B	1833	ARG	CG-CD-NE	5.03	122.35	111.80
1	A	728	LYS	N-CA-C	-5.03	97.43	111.00
1	J	1356	PHE	N-CA-C	-5.02	97.44	111.00
1	D	1403	LEU	CA-CB-CG	5.02	126.84	115.30
1	D	1529	ARG	CB-CA-C	5.02	120.43	110.40
1	D	1618	THR	OG1-CB-CG2	5.01	121.53	110.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	1606	ARG	N-CA-CB	-5.01	101.58	110.60
1	C	1114	GLN	CA-CB-CG	5.01	124.42	113.40
1	B	238	TRP	CB-CA-C	5.01	120.42	110.40
1	D	1076	LYS	CB-CG-CD	5.01	124.62	111.60
1	Q	2175	LEU	CA-CB-CG	5.01	126.82	115.30
1	F	1955	PHE	CB-CG-CD2	-5.01	117.29	120.80
1	D	1367	ASP	CB-CG-OD1	5.00	122.80	118.30
1	A	192	LEU	CB-CG-CD2	-5.00	102.49	111.00

All (1) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	D	1838	THR	CB

All (101) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1052	ASP	Peptide
1	A	1171	LEU	Peptide
1	A	1240	ARG	Mainchain
1	A	1249	PHE	Peptide
1	A	1298	ASP	Peptide
1	A	1315	ASN	Peptide
1	A	1332	ALA	Peptide
1	A	1526	ILE	Mainchain
1	A	1564	LYS	Peptide
1	A	924	GLN	Peptide
1	A	957	GLU	Peptide
1	A	963	MET	Mainchain
1	A	974	ARG	Peptide
1	B	1052	ASP	Peptide
1	B	1171	LEU	Peptide
1	B	1249	PHE	Peptide
1	B	1298	ASP	Peptide
1	B	1315	ASN	Peptide
1	B	1332	ALA	Peptide
1	B	1564	LYS	Peptide
1	B	1668	SER	Mainchain,Peptide
1	B	1910	VAL	Peptide
1	B	924	GLN	Peptide
1	B	957	GLU	Peptide
1	B	963	MET	Mainchain

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Mol	Chain	Res	Type	Group
1	C	1052	ASP	Peptide
1	C	1110	MET	Peptide
1	C	1171	LEU	Peptide
1	C	1249	PHE	Peptide
1	C	1298	ASP	Peptide
1	C	1315	ASN	Peptide
1	C	1332	ALA	Peptide
1	C	1547	GLU	Peptide
1	C	1564	LYS	Peptide
1	C	1877	ASN	Sidechain
1	C	924	GLN	Peptide
1	C	957	GLU	Peptide
1	D	1052	ASP	Peptide
1	D	1087	ALA	Peptide
1	D	1110	MET	Peptide
1	D	1171	LEU	Peptide
1	D	1249	PHE	Peptide
1	D	1298	ASP	Peptide
1	D	1315	ASN	Peptide
1	D	1332	ALA	Peptide
1	D	1547	GLU	Peptide
1	D	1564	LYS	Peptide
1	D	1568	LEU	Mainchain
1	D	1619	GLN	Peptide
1	D	1823	ARG	Peptide
1	D	1824	ALA	Peptide
1	D	1908	SER	Peptide
1	D	2278	LEU	Peptide
1	D	924	GLN	Peptide
1	D	957	GLU	Peptide
1	E	1052	ASP	Peptide
1	E	1110	MET	Peptide
1	E	1171	LEU	Peptide
1	E	1249	PHE	Peptide
1	E	1298	ASP	Peptide
1	E	1315	ASN	Peptide
1	E	1332	ALA	Peptide
1	E	1547	GLU	Peptide
1	E	1564	LYS	Peptide
1	E	924	GLN	Peptide
1	E	957	GLU	Peptide
1	F	1052	ASP	Peptide

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Mol	Chain	Res	Type	Group
1	F	1110	MET	Peptide
1	F	1171	LEU	Peptide
1	F	1249	PHE	Peptide
1	F	1298	ASP	Peptide
1	F	1315	ASN	Peptide
1	F	1332	ALA	Peptide
1	F	1547	GLU	Peptide
1	F	1564	LYS	Peptide
1	F	1877	ASN	Sidechain
1	F	924	GLN	Peptide
1	F	957	GLU	Peptide
1	J	1052	ASP	Peptide
1	J	1110	MET	Peptide
1	J	1171	LEU	Peptide
1	J	1249	PHE	Peptide
1	J	1298	ASP	Peptide
1	J	1315	ASN	Peptide
1	J	1332	ALA	Peptide
1	J	1547	GLU	Peptide
1	J	1564	LYS	Peptide
1	J	924	GLN	Peptide
1	J	957	GLU	Peptide
1	R	1052	ASP	Peptide
1	R	1110	MET	Peptide
1	R	1171	LEU	Peptide
1	R	1249	PHE	Peptide
1	R	1298	ASP	Peptide
1	R	1315	ASN	Peptide
1	R	1332	ALA	Peptide
1	R	1547	GLU	Peptide
1	R	1564	LYS	Peptide
1	R	924	GLN	Peptide
1	R	957	GLU	Peptide

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	16482	16276	16330	551	0
1	B	16482	16276	16330	552	0
1	C	16482	16275	16329	647	0
1	D	16482	16276	16329	769	0
1	E	16482	16276	16330	704	0
1	F	16482	16275	16330	615	0
1	G	6058	5997	6015	151	0
1	J	10424	10279	10314	212	0
1	Q	6058	5997	6015	159	0
1	R	10424	10279	10314	217	0
2	H	1699	1648	1655	30	0
2	K	1696	1644	1651	35	0
2	M	1699	1648	1655	36	0
2	O	1696	1644	1651	30	0
2	S	1699	1648	1655	20	0
2	U	1696	1644	1651	29	0
2	W	1696	1644	1651	23	0
2	Y	1699	1648	1655	20	0
All	All	145436	143374	143860	4549	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 16.

All (4549) 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:B:2264:TRP:HA	1:B:2270:LEU:HD21	1.42	1.00
1:A:197:ALA:HB1	1:A:227:ILE:HD13	1.42	0.98
1:B:197:ALA:HB1	1:B:227:ILE:HD13	1.44	0.97
1:F:1123:LEU:HD12	1:F:1152:VAL:HG21	1.48	0.95
1:C:1123:LEU:HD12	1:C:1152:VAL:HG21	1.48	0.93
1:D:2095:VAL:HG23	1:D:2096:ILE:HG23	1.50	0.93
1:E:632:VAL:HG12	1:E:683:LEU:HD11	1.50	0.91
1:D:1784:ASP:OD1	1:C:2192:THR:OG1	1.88	0.91
1:E:2095:VAL:HG23	1:E:2096:ILE:HG23	1.50	0.91
1:D:1684:ILE:O	1:D:1688:ILE:HA	1.69	0.90
1:F:2015:GLY:O	1:F:2047:ARG:NH1	2.04	0.90
1:F:1923:ILE:O	1:F:2209:LYS:NZ	2.05	0.90
1:B:1833:ARG:NH1	1:B:1880:VAL:O	2.05	0.89
1:C:1066:LEU:HD22	1:C:1081:ALA:HB2	1.54	0.88
1:E:1443:GLN:NE2	1:E:1495:MET:SD	2.46	0.88
1:F:1468:THR:O	1:F:1507:ARG:NE	2.06	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2323:THR:O	1:C:2327:SER:OG	1.92	0.88
1:A:945:LEU:HD11	1:A:968:ILE:HD13	1.55	0.88
1:D:1919:ILE:O	1:D:2213:THR:OG1	1.93	0.87
1:E:668:ASN:ND2	1:E:868:CYS:SG	2.47	0.87
1:F:1098:ASN:OD1	1:A:2332:ALA:N	2.07	0.87
1:D:1745:TYR:OH	1:C:2174:PHE:O	1.93	0.87
1:E:1471:ASN:ND2	1:E:1506:LEU:O	2.08	0.87
1:F:2323:THR:O	1:F:2327:SER:OG	1.91	0.86
1:D:295:ASP:OD1	1:D:970:GLN:NE2	2.08	0.86
1:A:1137:PHE:O	1:A:1140:HIS:ND1	2.07	0.86
1:A:1014:ARG:O	1:A:1018:LYS:HA	1.74	0.86
1:D:1954:PHE:O	1:D:2212:ARG:NH2	2.09	0.86
1:Q:2323:THR:O	1:Q:2327:SER:OG	1.92	0.86
1:D:1063:LEU:HD23	1:D:1085:LEU:HD13	1.57	0.85
1:B:1606:ARG:NH1	1:B:1628:PRO:O	2.09	0.85
1:C:1684:ILE:O	1:C:1688:ILE:HA	1.76	0.85
1:C:2015:GLY:O	1:C:2047:ARG:NH1	2.09	0.85
1:F:2156:LEU:O	1:F:2161:ARG:NH1	2.10	0.84
1:F:1971:VAL:HG22	1:F:1988:VAL:HG22	1.58	0.84
1:B:994:TYR:OH	1:B:1074:ASN:ND2	2.11	0.84
1:E:2117:VAL:HG23	1:F:1797:LEU:HD21	1.57	0.84
1:B:1655:ASN:ND2	1:B:1683:ASP:OD2	2.11	0.84
1:D:1545:TYR:OH	1:D:1567:PRO:O	1.96	0.84
1:D:1791:GLY:O	1:D:1796:ASN:ND2	2.09	0.84
1:A:869:LEU:HD12	1:A:1036:LYS:HB3	1.59	0.84
1:B:1120:LEU:HD22	1:B:1155:ARG:HE	1.41	0.84
1:A:363:LEU:HD11	1:A:460:ALA:HB1	1.59	0.84
1:D:1419:TYR:HB3	1:D:1468:THR:HA	1.59	0.83
1:C:2156:LEU:O	1:C:2161:ARG:NH1	2.11	0.83
1:B:718:TYR:OH	1:B:838:ARG:NH1	2.10	0.83
1:E:725:THR:HG22	1:E:738:ILE:HG23	1.59	0.83
1:A:1531:PHE:O	1:A:1543:SER:OG	1.95	0.83
1:B:1531:PHE:O	1:B:1543:SER:OG	1.96	0.83
1:B:2094:VAL:HG11	1:G:1827:ILE:HD13	1.60	0.83
1:D:979:ILE:HD12	1:D:980:ARG:HG3	1.58	0.83
1:F:1837:ARG:NH2	1:F:2032:ASP:OD2	2.11	0.83
1:A:1689:GLY:O	1:A:1719:ASN:ND2	2.11	0.83
1:D:1967:TRP:O	1:D:2025:LYS:NZ	2.12	0.83
1:F:1655:ASN:ND2	1:F:1659:MET:O	2.11	0.83
1:A:2069:ASP:OD1	1:Q:1808:SER:OG	1.96	0.83
1:G:2323:THR:O	1:G:2327:SER:OG	1.97	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:1612:LEU:HD22	1:Q:1896:LEU:HD13	1.60	0.83
1:R:1146:ARG:NH1	1:R:1238:SER:O	2.12	0.82
1:F:1684:ILE:O	1:F:1688:ILE:HA	1.79	0.82
1:E:1834:LEU:O	1:E:1836:GLN:NE2	2.11	0.82
1:D:1086:ILE:O	1:D:1089:HIS:N	2.13	0.82
1:E:609:ASP:OD2	1:E:714:LEU:N	2.11	0.82
1:C:632:VAL:HG12	1:C:683:LEU:HD11	1.59	0.82
1:A:1833:ARG:NH1	1:A:1880:VAL:O	2.13	0.82
1:A:1954:PHE:O	1:A:2212:ARG:NH1	2.12	0.82
1:D:1079:LEU:O	1:D:1444:ASN:ND2	2.11	0.82
1:F:1682:ASN:OD1	1:F:1715:TYR:OH	1.97	0.82
1:B:1014:ARG:O	1:B:1018:LYS:HA	1.78	0.82
1:F:632:VAL:HG12	1:F:683:LEU:HD11	1.62	0.82
1:B:1140:HIS:O	1:B:1146:ARG:NH2	2.12	0.82
2:U:1722:SER:OG	2:U:1727:LYS:O	1.98	0.82
1:D:1956:ASP:OD1	1:D:2212:ARG:NH1	2.12	0.82
1:C:1663:LYS:NZ	1:C:1665:THR:OG1	2.12	0.82
1:Q:2279:THR:OG1	1:Q:2280:GLU:OE1	1.97	0.82
1:J:1146:ARG:NH1	1:J:1238:SER:O	2.13	0.82
1:D:1908:SER:OG	1:D:1909:SER:O	1.97	0.81
1:A:1703:SER:OG	1:A:1713:ARG:NH1	2.13	0.81
1:D:1780:TYR:OH	1:B:195:ASP:OD1	1.99	0.81
1:D:2297:ARG:HE	1:C:2314:VAL:HG13	1.45	0.81
1:B:1689:GLY:O	1:B:1719:ASN:ND2	2.13	0.81
1:D:995:LEU:HD22	1:D:1066:LEU:HD21	1.63	0.81
1:D:1436:GLU:N	1:D:1482:ILE:O	2.12	0.81
1:C:2258:THR:OG1	1:B:293:ASP:OD1	1.97	0.81
1:C:2030:ILE:HG23	1:C:2040:LEU:HD21	1.59	0.81
1:B:2069:ASP:OD1	1:G:1808:SER:OG	1.97	0.81
1:E:296:ASP:OD1	1:E:299:GLN:NE2	2.14	0.81
1:E:1643:GLY:O	1:E:1701:ARG:NE	2.13	0.81
1:C:1480:THR:O	1:C:1518:ARG:NH1	2.13	0.81
1:E:951:THR:O	1:E:954:ARG:NH1	2.14	0.81
1:E:1359:ARG:NH2	1:E:1367:ASP:OD2	2.14	0.81
1:C:1682:ASN:OD1	1:C:1715:TYR:OH	1.99	0.81
1:R:632:VAL:HG12	1:R:683:LEU:HD11	1.63	0.81
1:D:2199:LYS:NZ	1:C:1795:GLU:OE1	2.13	0.81
1:J:632:VAL:HG12	1:J:683:LEU:HD11	1.63	0.81
1:D:1471:ASN:ND2	1:D:1506:LEU:O	2.14	0.81
1:E:1703:SER:OG	1:E:1713:ARG:NH1	2.14	0.80
1:F:909:ARG:O	1:F:964:ASN:ND2	2.14	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2258:THR:HG22	1:B:296:ASP:HB2	1.60	0.80
1:A:2094:VAL:HG11	1:Q:1827:ILE:HD13	1.63	0.80
1:D:2066:TYR:OH	1:C:2028:GLN:OE1	1.99	0.80
1:B:666:LEU:HD13	1:B:1025:LEU:HD21	1.63	0.80
1:E:1745:TYR:OH	1:F:2174:PHE:O	1.99	0.80
1:C:909:ARG:O	1:C:964:ASN:ND2	2.14	0.80
1:C:1253:MET:O	2:W:1726:ARG:NH2	2.15	0.80
1:C:1388:ASN:ND2	1:C:1577:TYR:O	2.14	0.80
1:D:974:ARG:O	1:D:982:HIS:NE2	2.14	0.80
1:E:857:LEU:HD21	1:E:885:LEU:HD11	1.64	0.80
1:E:1565:GLN:NE2	1:E:1566:GLY:O	2.15	0.80
1:B:1833:ARG:NH2	1:B:1836:GLN:O	2.16	0.79
1:B:615:ARG:NH2	1:B:724:THR:OG1	2.14	0.79
2:O:1722:SER:OG	2:O:1727:LYS:O	1.99	0.79
1:R:1471:ASN:ND2	1:R:1506:LEU:O	2.16	0.79
1:D:1615:SER:O	1:D:1618:THR:HB	1.82	0.79
1:F:1471:ASN:ND2	1:F:1506:LEU:O	2.15	0.79
1:B:2319:ILE:HD12	1:G:2330:GLN:HE21	1.45	0.79
1:C:1545:TYR:OH	1:C:1567:PRO:O	2.00	0.79
2:H:1689:MET:O	2:H:1716:TYR:N	2.16	0.79
1:J:1557:MET:SD	1:J:1559:GLN:NE2	2.56	0.79
1:D:2124:VAL:O	1:D:2128:PHE:N	2.16	0.79
1:C:1796:ASN:O	1:C:1800:SER:OG	2.00	0.79
1:F:2030:ILE:HG23	1:F:2040:LEU:HD11	1.63	0.79
1:G:1986:VAL:HG23	1:G:2042:VAL:HG13	1.65	0.79
1:B:898:GLU:OE1	1:B:975:TYR:OH	1.99	0.79
2:S:1678:ASN:O	2:S:1702:LYS:NZ	2.11	0.79
1:E:1468:THR:O	1:E:1507:ARG:NH1	2.16	0.78
1:A:638:HIS:NE2	1:A:725:THR:OG1	2.15	0.78
1:A:2319:ILE:HD12	1:Q:2330:GLN:HE21	1.47	0.78
1:Q:1606:ARG:NH1	1:Q:1628:PRO:O	2.16	0.78
1:E:1126:SER:OG	1:E:1428:ARG:NH2	2.16	0.78
1:A:1066:LEU:HD22	1:A:1081:ALA:HB2	1.65	0.78
1:D:332:ASN:ND2	1:D:905:SER:OG	2.16	0.78
1:D:609:ASP:OD2	1:D:714:LEU:N	2.16	0.78
1:B:1703:SER:OG	1:B:1713:ARG:NH1	2.15	0.78
1:F:917:SER:HB3	1:F:944:ILE:HD13	1.63	0.78
1:Q:1837:ARG:NH1	1:Q:2032:ASP:OD2	2.17	0.78
1:J:451:MET:O	1:J:502:ARG:NH2	2.16	0.78
1:D:332:ASN:ND2	1:D:905:SER:O	2.16	0.78
1:F:2246:ALA:HB3	1:A:946:ASP:OD1	1.84	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:1707:ARG:NE	1:Q:1806:GLU:OE2	2.17	0.78
1:A:910:ILE:HD11	1:A:914:VAL:HG12	1.65	0.78
1:J:1471:ASN:ND2	1:J:1506:LEU:O	2.16	0.78
1:C:1612:LEU:HD22	1:C:1896:LEU:HG	1.66	0.78
1:E:1954:PHE:O	1:E:2212:ARG:NH1	2.17	0.78
1:G:1606:ARG:NH1	1:G:1628:PRO:O	2.17	0.78
1:G:1812:ASN:OD1	1:G:2035:ARG:NH1	2.17	0.78
1:D:294:VAL:HG22	1:D:298:LEU:HD12	1.65	0.77
1:F:1480:THR:O	1:F:1518:ARG:NH1	2.17	0.77
1:B:2221:ARG:NH1	1:B:2264:TRP:O	2.17	0.77
1:R:451:MET:O	1:R:502:ARG:NH2	2.17	0.77
1:D:1007:ASP:O	1:D:1010:VAL:HG12	1.84	0.77
1:F:2221:ARG:NH1	1:F:2264:TRP:O	2.18	0.77
1:A:1655:ASN:ND2	1:A:1683:ASP:OD2	2.17	0.77
1:E:1910:VAL:HG23	1:E:1912:LEU:HD21	1.67	0.77
1:E:2293:LYS:NZ	1:F:2313:GLU:OE2	2.17	0.77
1:R:951:THR:O	1:R:954:ARG:NH1	2.18	0.77
1:E:472:ARG:NH1	1:E:486:GLY:O	2.18	0.77
2:W:1833:VAL:HG11	2:W:1850:LEU:HD22	1.66	0.77
1:R:1038:ASN:ND2	1:R:1073:THR:O	2.17	0.77
1:C:2259:VAL:HG23	1:B:296:ASP:OD2	1.83	0.77
1:F:567:ARG:NH2	1:F:603:PHE:O	2.18	0.77
1:R:372:SER:O	1:R:480:TYR:OH	2.03	0.77
1:C:2246:ALA:HB3	1:B:946:ASP:OD1	1.84	0.77
1:B:1734:PHE:O	1:G:2139:ARG:NE	2.18	0.77
2:O:1735:GLU:OE2	2:O:1753:ARG:NE	2.16	0.77
1:E:1079:LEU:O	1:E:1444:ASN:ND2	2.17	0.77
1:C:1808:SER:O	1:C:1812:ASN:ND2	2.18	0.77
1:F:2289:GLU:OE1	1:F:2293:LYS:NZ	2.18	0.77
2:K:1722:SER:OG	2:K:1727:LYS:O	2.02	0.77
1:D:261:SER:OG	1:D:289:GLY:O	2.03	0.76
1:E:1003:ASN:O	1:E:1008:LYS:NZ	2.17	0.76
1:A:1238:SER:HA	1:A:1292:ALA:HB3	1.67	0.76
1:D:451:MET:O	1:D:502:ARG:NH2	2.18	0.76
1:D:471:TYR:O	1:D:477:ARG:NH1	2.18	0.76
1:D:1331:VAL:HG22	1:D:1354:LYS:O	1.85	0.76
1:B:1013:LEU:HD13	1:B:1024:VAL:HG13	1.65	0.76
1:A:1013:LEU:HD13	1:A:1024:VAL:HG13	1.67	0.76
2:S:1833:VAL:HG11	2:S:1850:LEU:HD22	1.65	0.76
1:E:126:ASN:ND2	1:E:161:ASP:OD2	2.16	0.76
1:B:1480:THR:O	1:B:1518:ARG:NH1	2.18	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1539:TYR:OH	1:B:1606:ARG:NH2	2.19	0.76
1:Q:2089:ARG:NH1	1:Q:2116:SER:OG	2.18	0.76
1:D:951:THR:O	1:D:954:ARG:NH1	2.18	0.76
1:D:1082:ARG:HA	1:D:1085:LEU:HD23	1.67	0.76
1:C:567:ARG:NH2	1:C:603:PHE:O	2.17	0.76
1:C:2325:HIS:O	1:C:2327:SER:OG	2.04	0.76
1:B:363:LEU:HD11	1:B:460:ALA:HB1	1.66	0.76
1:E:1086:ILE:O	1:E:1089:HIS:N	2.18	0.76
1:D:1531:PHE:O	1:D:1543:SER:OG	2.04	0.76
1:D:1658:GLY:O	1:D:1683:ASP:N	2.17	0.76
1:C:1655:ASN:ND2	1:C:1659:MET:O	2.18	0.76
1:C:1860:ARG:NH1	1:C:1862:VAL:HG22	2.00	0.76
1:F:1901:TYR:OH	1:F:1959:SER:O	2.04	0.76
1:B:2200:GLY:O	1:G:1798:ARG:NH1	2.19	0.76
1:D:2195:ARG:NE	1:C:1786:ILE:O	2.18	0.76
1:E:1238:SER:HA	1:E:1292:ALA:HB3	1.66	0.76
1:A:1480:THR:O	1:A:1518:ARG:NH1	2.19	0.76
1:Q:2156:LEU:O	1:Q:2161:ARG:NH1	2.19	0.76
1:E:608:ILE:O	1:E:726:TYR:OH	2.03	0.76
1:E:1904:LYS:NZ	1:E:1905:SER:OG	2.18	0.76
1:D:725:THR:HG22	1:D:738:ILE:HG23	1.68	0.76
1:R:261:SER:OG	1:R:289:GLY:O	2.03	0.76
1:C:451:MET:O	1:C:502:ARG:NH2	2.18	0.75
1:A:1369:ILE:HA	1:A:1393:ALA:HB2	1.67	0.75
1:Q:2280:GLU:OE1	1:Q:2280:GLU:N	2.18	0.75
1:D:1606:ARG:NH1	1:D:1628:PRO:O	2.19	0.75
1:D:1764:LEU:O	1:D:1788:LYS:NZ	2.18	0.75
1:E:1076:LYS:O	1:E:1448:ARG:NH2	2.18	0.75
1:E:1099:GLN:O	1:E:1102:SER:OG	2.00	0.75
1:E:1901:TYR:OH	1:E:1959:SER:O	2.04	0.75
1:F:602:SER:OG	1:F:740:ASN:OD1	2.02	0.75
1:C:1401:MET:HE3	1:C:1449:LEU:HB3	1.69	0.75
1:F:451:MET:O	1:F:502:ARG:NH2	2.18	0.75
1:B:1471:ASN:ND2	1:B:1506:LEU:O	2.20	0.75
1:D:1359:ARG:NH1	1:D:1367:ASP:OD2	2.18	0.75
1:D:1643:GLY:O	1:D:1701:ARG:NE	2.18	0.75
1:E:1007:ASP:O	1:E:1010:VAL:HG12	1.86	0.75
1:A:945:LEU:HD13	1:A:968:ILE:HG21	1.67	0.75
1:A:1534:ASN:ND2	1:A:1539:TYR:O	2.20	0.75
1:G:2156:LEU:O	1:G:2161:ARG:NH1	2.20	0.75
1:J:1123:LEU:O	1:J:1156:ARG:NH1	2.19	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:283:GLN:O	1:D:287:GLU:N	2.20	0.75
1:D:1834:LEU:O	1:D:1836:GLN:NE2	2.20	0.75
1:E:332:ASN:ND2	1:E:905:SER:O	2.20	0.75
1:E:567:ARG:NH2	1:E:603:PHE:O	2.19	0.75
1:B:613:LEU:HD23	1:B:616:LEU:HD12	1.68	0.75
1:J:477:ARG:NH1	1:J:484:PRO:O	2.20	0.75
1:B:1968:ALA:O	1:B:2025:LYS:NZ	2.16	0.75
1:J:372:SER:O	1:J:480:TYR:OH	2.05	0.75
2:U:1810:VAL:O	2:U:1835:ARG:N	2.20	0.75
1:D:1238:SER:HA	1:D:1292:ALA:HB3	1.68	0.75
1:D:1369:ILE:O	1:D:1404:TYR:OH	2.02	0.75
1:C:958:ARG:O	1:C:962:PHE:N	2.20	0.75
1:C:2221:ARG:NH1	1:C:2264:TRP:O	2.19	0.75
1:F:1263:SEP:O3P	2:S:1670:ARG:NH1	2.19	0.75
1:G:1837:ARG:NH1	1:G:2032:ASP:OD2	2.20	0.74
1:J:972:VAL:O	1:J:976:ARG:N	2.20	0.74
1:R:1123:LEU:O	1:R:1156:ARG:NH1	2.19	0.74
1:D:1443:GLN:NE2	1:D:1495:MET:SD	2.60	0.74
1:E:184:ASN:O	1:E:189:ASN:ND2	2.19	0.74
1:F:1665:THR:OG1	1:F:1676:ASP:OD1	2.04	0.74
1:B:996:ARG:NH1	1:B:1027:TYR:OH	2.20	0.74
1:Q:1855:ASN:ND2	1:Q:1863:TYR:O	2.20	0.74
1:E:719:ASP:OD2	1:E:839:ILE:N	2.19	0.74
1:C:2110:ASP:O	1:C:2113:SER:OG	2.02	0.74
1:F:1079:LEU:O	1:F:1444:ASN:ND2	2.20	0.74
1:D:1099:GLN:O	1:D:1102:SER:OG	2.03	0.74
1:E:1263:SEP:O3P	2:K:1666:TYR:OH	2.03	0.74
1:C:2089:ARG:NH1	1:C:2116:SER:OG	2.20	0.74
1:F:2110:ASP:O	1:F:2113:SER:OG	2.03	0.74
1:A:1734:PHE:O	1:Q:2139:ARG:NE	2.19	0.74
1:D:293:ASP:OD1	1:D:293:ASP:N	2.19	0.74
1:D:973:GLN:NE2	1:E:2254:GLU:OE2	2.21	0.74
1:A:1069:LEU:HD21	1:A:1078:ALA:HB2	1.69	0.74
1:G:2089:ARG:NH1	1:G:2116:SER:OG	2.19	0.74
1:B:1520:THR:HG23	1:B:1521:PRO:HD3	1.70	0.74
1:B:136:SER:O	1:B:456:ASN:ND2	2.20	0.74
1:B:910:ILE:HD11	1:B:914:VAL:HG12	1.68	0.74
2:K:1689:MET:O	2:K:1716:TYR:N	2.21	0.74
1:D:180:GLY:O	1:D:185:ASN:ND2	2.20	0.74
1:D:1605:PHE:O	1:D:1608:SER:OG	2.05	0.74
1:C:972:VAL:O	1:C:976:ARG:N	2.20	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1728:GLU:OE1	1:C:1731:ARG:NH1	2.21	0.74
1:F:2243:GLN:NE2	1:A:947:SER:OG	2.20	0.74
1:D:1878:ASN:OD1	1:D:1880:VAL:HG23	1.87	0.74
1:B:1544:LEU:O	1:B:1564:LYS:NZ	2.19	0.74
1:C:1864:THR:OG1	1:C:1868:GLN:NE2	2.21	0.74
1:F:2259:VAL:HG23	1:A:296:ASP:OD2	1.88	0.73
1:B:1313:GLN:NE2	1:B:1365:GLU:OE1	2.20	0.73
1:D:1499:TYR:CD2	1:D:1503:LEU:HD22	2.24	0.73
1:C:1560:ALA:O	1:C:1564:LYS:NZ	2.20	0.73
1:Q:1986:VAL:HG23	1:Q:2042:VAL:HG13	1.70	0.73
1:D:1748:TYR:CE1	1:C:2182:VAL:HG22	2.23	0.73
1:E:1603:GLU:OE2	1:E:1607:GLN:NE2	2.21	0.73
1:B:1386:MET:SD	1:B:1424:ARG:NH2	2.62	0.73
1:E:451:MET:O	1:E:502:ARG:NH2	2.20	0.73
1:E:972:VAL:O	1:E:976:ARG:N	2.20	0.73
1:E:1445:GLU:O	1:E:1449:LEU:HD13	1.89	0.73
1:E:1786:ILE:O	1:F:2195:ARG:NE	2.21	0.73
1:F:1808:SER:O	1:F:1812:ASN:ND2	2.21	0.73
1:G:2315:ALA:O	1:G:2318:SER:OG	2.04	0.73
1:C:1463:ASN:OD1	1:C:1464:THR:N	2.21	0.73
1:B:1045:ILE:HD13	1:B:1080:ARG:HG2	1.70	0.73
1:A:1722:ALA:HB3	1:Q:2117:VAL:HG21	1.69	0.73
1:D:995:LEU:O	1:D:999:THR:HG22	1.88	0.73
1:D:2106:GLU:OE1	1:D:2218:ARG:NH2	2.22	0.73
1:F:1860:ARG:NH1	1:F:1862:VAL:HG22	2.04	0.73
1:E:1091:PRO:HB2	1:E:1095:LEU:HD21	1.70	0.73
1:B:1039:LEU:O	1:B:1042:THR:OG1	2.02	0.73
2:Y:1810:VAL:O	2:Y:1835:ARG:N	2.21	0.73
1:D:472:ARG:NH1	1:D:486:GLY:O	2.22	0.73
1:E:1114:GLN:NE2	1:E:1144:VAL:O	2.22	0.73
1:R:1290:ASN:OD1	1:R:1328:THR:OG1	2.04	0.73
1:E:1829:ALA:O	1:E:1832:VAL:HG22	1.89	0.72
1:B:1375:PRO:HA	1:B:1378:ALA:HB3	1.71	0.72
1:A:705:ASP:O	1:A:717:SER:OG	2.06	0.72
1:E:1545:TYR:OH	1:E:1567:PRO:O	2.06	0.72
1:A:1390:ASP:N	1:A:1407:ALA:O	2.22	0.72
1:D:1445:GLU:O	1:D:1449:LEU:HD13	1.87	0.72
1:D:2304:ILE:HD12	1:C:2304:ILE:HG23	1.71	0.72
1:E:1925:PHE:O	1:E:2208:TRP:NE1	2.22	0.72
1:F:1864:THR:OG1	1:F:1868:GLN:NE2	2.22	0.72
1:D:1442:LEU:HD21	1:D:1477:PHE:CE2	2.25	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1108:ILE:HG21	1:B:1145:VAL:HG13	1.71	0.72
1:A:1388:ASN:ND2	1:A:1577:TYR:O	2.19	0.72
1:D:1514:LYS:HA	1:D:1529:ARG:HA	1.72	0.72
1:F:1417:THR:OG1	1:F:1467:ARG:NH2	2.22	0.72
1:Q:2291:ASN:O	1:Q:2295:ILE:HD12	1.89	0.72
1:F:190:VAL:HG12	1:F:221:LEU:HD12	1.71	0.72
1:Q:2336:ARG:NH1	1:R:1098:ASN:OD1	2.21	0.72
1:D:567:ARG:NH2	1:D:603:PHE:O	2.23	0.72
1:D:1811:TYR:OH	1:D:2032:ASP:OD1	2.05	0.72
1:D:1925:PHE:O	1:D:2208:TRP:NE1	2.21	0.72
1:E:244:ILE:HD11	1:E:347:PHE:HB3	1.69	0.72
1:F:958:ARG:O	1:F:962:PHE:N	2.20	0.72
1:B:1309:ARG:O	1:B:1312:THR:OG1	2.03	0.72
1:E:255:ILE:HD11	1:E:411:LEU:HB2	1.72	0.72
1:E:1114:GLN:HE21	1:E:1148:ALA:HB2	1.53	0.72
1:E:1775:GLU:OE1	1:E:1779:ARG:NH2	2.23	0.72
1:E:2057:TYR:OH	1:F:1877:ASN:O	2.05	0.72
1:B:1480:THR:OG1	1:B:1518:ARG:NH1	2.23	0.72
1:B:2174:PHE:O	1:G:1745:TYR:OH	2.06	0.72
1:D:1418:ASP:OD2	1:D:1420:ARG:NH1	2.23	0.72
1:E:2196:MET:O	1:E:2201:VAL:HG22	1.89	0.72
1:F:972:VAL:O	1:F:976:ARG:N	2.23	0.72
1:B:2089:ARG:NH1	1:B:2116:SER:OG	2.23	0.72
1:B:2302:LYS:O	1:B:2306:SER:OG	2.02	0.72
1:A:1375:PRO:HA	1:A:1378:ALA:HB3	1.72	0.72
1:A:2200:GLY:O	1:Q:1798:ARG:NH1	2.22	0.72
1:G:1707:ARG:NE	1:G:1806:GLU:OE2	2.22	0.72
1:D:2124:VAL:HG13	1:D:2128:PHE:HB3	1.71	0.72
1:E:1494:SER:OG	1:E:1498:ARG:NH2	2.23	0.72
1:C:602:SER:OG	1:C:740:ASN:OD1	2.02	0.72
1:B:901:ASP:O	1:B:904:THR:OG1	2.07	0.72
1:D:2196:MET:O	1:D:2201:VAL:HG22	1.90	0.71
1:E:1900:SER:OG	1:E:1977:ARG:NH2	2.22	0.71
1:C:1476:ASN:OD1	1:C:1514:LYS:NZ	2.18	0.71
1:C:1753:LEU:HD11	1:C:1757:ASP:HB3	1.71	0.71
1:A:1833:ARG:NH2	1:A:1836:GLN:O	2.23	0.71
1:D:2329:THR:HG21	1:E:1054:THR:HG21	1.72	0.71
1:E:2066:TYR:OH	1:F:2028:GLN:OE1	2.08	0.71
1:C:1996:SER:HA	1:C:2010:ILE:HD12	1.70	0.71
1:A:666:LEU:HD13	1:A:1025:LEU:HD21	1.71	0.71
1:A:1606:ARG:NH1	1:A:1628:PRO:O	2.23	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:126:ASN:ND2	1:D:161:ASP:OD2	2.23	0.71
1:D:1713:ARG:O	1:D:1816:THR:HA	1.89	0.71
1:F:2258:THR:OG1	1:A:293:ASP:N	2.24	0.71
1:D:1892:VAL:HA	1:D:1895:VAL:HG23	1.72	0.71
1:E:2094:VAL:HG11	1:F:1827:ILE:HD13	1.72	0.71
1:F:471:TYR:O	1:F:477:ARG:NH1	2.23	0.71
1:J:1290:ASN:OD1	1:J:1328:THR:OG1	2.05	0.71
1:R:1266:PHE:O	2:S:1699:ARG:NH2	2.23	0.71
1:D:1900:SER:OG	1:D:1977:ARG:NH2	2.22	0.71
1:E:1637:LEU:HB3	1:E:1645:LEU:HD11	1.70	0.71
1:E:2124:VAL:O	1:E:2128:PHE:N	2.22	0.71
1:E:413:LYS:NZ	1:E:493:GLU:OE2	2.23	0.71
1:C:2082:ILE:HG12	1:C:2088:LEU:HD13	1.73	0.71
1:C:2224:LEU:HB2	1:C:2274:LEU:HD13	1.73	0.71
1:B:1534:ASN:ND2	1:B:1539:TYR:O	2.24	0.71
1:R:567:ARG:NH2	1:R:603:PHE:O	2.23	0.71
1:D:2253:VAL:O	1:D:2257:GLY:C	2.28	0.71
1:E:332:ASN:ND2	1:E:905:SER:OG	2.18	0.71
1:E:961:PHE:O	1:E:965:THR:HG22	1.89	0.71
1:C:1670:GLU:OE2	1:C:1675:ARG:NH1	2.23	0.71
1:F:1430:SER:O	1:F:1430:SER:OG	2.07	0.71
1:B:567:ARG:NH2	1:B:603:PHE:O	2.23	0.71
1:D:1934:PRO:HG3	1:D:1989:GLU:HA	1.73	0.71
1:E:968:ILE:O	1:E:972:VAL:HG12	1.91	0.71
1:E:2334:VAL:HG21	1:F:2334:VAL:HG21	1.73	0.71
1:G:1901:TYR:OH	1:G:1959:SER:O	2.09	0.71
1:D:293:ASP:OD2	1:E:2259:VAL:N	2.23	0.71
1:E:978:GLY:O	1:E:982:HIS:ND1	2.23	0.71
1:E:1386:MET:SD	1:E:1424:ARG:NE	2.61	0.71
1:G:2323:THR:OG1	1:G:2331:ARG:NH2	2.23	0.71
1:Q:1901:TYR:OH	1:Q:1959:SER:O	2.06	0.71
1:J:567:ARG:NH2	1:J:603:PHE:O	2.24	0.71
1:D:413:LYS:NZ	1:D:493:GLU:OE2	2.21	0.71
1:C:1294:LYS:O	1:C:1295:THR:OG1	2.09	0.71
1:F:1123:LEU:O	1:F:1156:ARG:NH1	2.24	0.71
1:G:2291:ASN:O	1:G:2295:ILE:HD12	1.91	0.71
1:G:2336:ARG:NH1	1:J:1098:ASN:OD1	2.24	0.71
1:C:295:ASP:OD1	1:C:966:GLN:NE2	2.22	0.70
1:F:1661:ALA:HB2	1:F:1680:ILE:HG22	1.73	0.70
1:B:1786:ILE:O	1:G:2195:ARG:NE	2.23	0.70
1:B:2117:VAL:HA	1:G:1797:LEU:HD21	1.73	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2046:TRP:N	1:F:2087:GLU:O	2.24	0.70
1:F:2089:ARG:NH1	1:F:2116:SER:OG	2.25	0.70
1:A:2089:ARG:NH1	1:A:2116:SER:OG	2.24	0.70
1:D:1637:LEU:HB3	1:D:1645:LEU:HD21	1.73	0.70
1:E:2304:ILE:HG12	1:F:2304:ILE:HD12	1.73	0.70
1:F:1545:TYR:OH	1:F:1567:PRO:O	2.07	0.70
1:R:1238:SER:HA	1:R:1292:ALA:HB3	1.73	0.70
2:M:1742:ASN:HB3	2:M:1844:LEU:HD21	1.73	0.70
1:F:760:GLY:O	1:F:809:LEU:N	2.24	0.70
1:B:1369:ILE:HA	1:B:1393:ALA:HB2	1.71	0.70
1:A:926:ALA:O	1:A:929:ILE:HG22	1.91	0.70
1:R:655:LEU:O	1:R:1014:ARG:NH1	2.24	0.70
2:K:1742:ASN:HB3	2:K:1844:LEU:HD21	1.72	0.70
2:O:1810:VAL:O	2:O:1835:ARG:N	2.24	0.70
1:C:471:TYR:O	1:C:477:ARG:NH1	2.24	0.70
1:D:1114:GLN:HE21	1:D:1148:ALA:HB2	1.56	0.70
1:D:1695:GLU:HA	1:D:1698:LEU:CD2	2.22	0.70
1:D:1753:LEU:HD22	1:D:1757:ASP:HB3	1.74	0.70
1:E:1331:VAL:HG22	1:E:1354:LYS:O	1.92	0.70
1:C:1707:ARG:NE	1:C:1806:GLU:OE2	2.23	0.70
1:F:2258:THR:HG22	1:A:296:ASP:H	1.55	0.70
1:F:1007:ASP:O	1:F:1010:VAL:HG12	1.90	0.70
1:B:1815:ILE:HD13	1:B:1902:MET:SD	2.31	0.70
1:A:1544:LEU:O	1:A:1564:LYS:NZ	2.24	0.70
1:C:1290:ASN:OD1	1:C:1328:THR:OG1	2.07	0.70
1:A:1901:TYR:OH	1:A:1959:SER:O	2.10	0.70
1:A:2117:VAL:HA	1:Q:1797:LEU:HD21	1.74	0.70
1:J:958:ARG:O	1:J:962:PHE:N	2.25	0.70
1:C:1511:ALA:HB3	1:C:1532:LEU:HB2	1.73	0.70
1:G:1612:LEU:HD22	1:G:1896:LEU:HD13	1.72	0.70
1:J:668:ASN:ND2	1:J:868:CYS:SG	2.65	0.70
1:E:283:GLN:O	1:E:287:GLU:N	2.25	0.70
1:C:1079:LEU:O	1:C:1444:ASN:ND2	2.25	0.70
1:F:1098:ASN:HB2	1:A:2332:ALA:HB2	1.74	0.69
1:F:1816:THR:OG1	1:F:1835:GLY:O	2.09	0.69
1:A:2050:SER:OG	1:A:2055:ASP:OD2	2.05	0.69
1:D:1614:GLU:O	1:D:1617:SER:OG	2.05	0.69
1:E:1518:ARG:NH1	1:E:1523:GLY:O	2.25	0.69
1:C:129:ALA:HB2	1:C:209:TRP:CZ3	2.27	0.69
1:C:921:GLU:OE1	1:C:924:GLN:NE2	2.25	0.69
1:F:1096:ARG:NH2	1:F:1129:SER:O	2.25	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1636:GLU:OE2	1:E:1650:ARG:N	2.21	0.69
1:E:1822:CYS:SG	1:E:1823:ARG:N	2.64	0.69
1:A:1971:VAL:O	1:A:2025:LYS:NZ	2.25	0.69
1:D:660:VAL:HB	1:D:1010:VAL:HG11	1.75	0.69
1:C:1007:ASP:O	1:C:1010:VAL:HG12	1.91	0.69
1:G:1682:ASN:OD1	1:G:1715:TYR:OH	2.07	0.69
1:F:2224:LEU:HB2	1:F:2274:LEU:HD13	1.74	0.69
1:A:294:VAL:HG11	1:A:966:GLN:HB2	1.74	0.69
1:R:1503:LEU:O	1:R:1507:ARG:N	2.24	0.69
1:E:1683:ASP:OD2	1:E:1685:THR:OG1	2.05	0.69
1:C:1123:LEU:O	1:C:1156:ARG:NH1	2.25	0.69
1:C:1851:ALA:N	1:C:1869:LEU:HD11	2.07	0.69
1:F:129:ALA:HB2	1:F:209:TRP:CZ3	2.27	0.69
1:F:1996:SER:HA	1:F:2010:ILE:HD12	1.75	0.69
1:F:2325:HIS:O	1:F:2327:SER:OG	2.11	0.69
1:D:1817:ILE:HD12	1:D:1837:ARG:HB2	1.75	0.69
1:C:760:GLY:O	1:C:809:LEU:N	2.26	0.69
1:B:567:ARG:NH1	1:B:604:GLN:O	2.25	0.69
1:J:1038:ASN:ND2	1:J:1073:THR:O	2.24	0.69
2:W:1678:ASN:O	2:W:1702:LYS:NZ	2.21	0.69
1:D:244:ILE:HD11	1:D:347:PHE:HB3	1.75	0.69
1:D:1932:TYR:O	1:D:1990:THR:OG1	2.09	0.69
1:F:370:ALA:HB3	1:F:413:LYS:HG3	1.75	0.69
1:B:477:ARG:NH2	1:B:483:SER:O	2.24	0.69
1:A:901:ASP:O	1:A:904:THR:OG1	2.10	0.69
1:D:1635:THR:HG21	1:D:1647:HIS:HB3	1.75	0.69
1:E:1309:ARG:O	1:E:1312:THR:OG1	2.05	0.69
1:F:2258:THR:HG22	1:A:296:ASP:HB2	1.75	0.69
1:A:1331:VAL:HG22	1:A:1354:LYS:O	1.93	0.69
1:D:2290:GLU:OE1	1:D:2290:GLU:N	2.26	0.69
1:B:1390:ASP:N	1:B:1407:ALA:O	2.26	0.68
1:J:1445:GLU:O	1:J:1449:LEU:HD13	1.93	0.68
1:D:1309:ARG:O	1:D:1312:THR:OG1	2.06	0.68
1:F:1839:ILE:HD12	1:F:1895:VAL:HG22	1.75	0.68
1:D:420:ALA:HB3	1:D:461:GLN:HE21	1.57	0.68
1:E:377:ASP:N	1:E:390:GLU:O	2.26	0.68
1:E:2195:ARG:NE	1:F:1786:ILE:O	2.27	0.68
1:Q:1682:ASN:OD1	1:Q:1715:TYR:OH	2.07	0.68
1:J:1007:ASP:O	1:J:1010:VAL:HG12	1.94	0.68
1:E:2220:ARG:NH1	1:E:2224:LEU:HD11	2.07	0.68
2:M:1689:MET:O	2:M:1716:TYR:N	2.26	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1372:HIS:O	1:D:1373:LEU:HD22	1.94	0.68
1:C:370:ALA:HB3	1:C:413:LYS:HG3	1.75	0.68
1:F:1511:ALA:HB3	1:F:1532:LEU:HB2	1.75	0.68
1:B:2050:SER:OG	1:B:2055:ASP:OD2	2.04	0.68
1:A:2331:ARG:O	1:A:2334:VAL:HG12	1.93	0.68
1:G:1855:ASN:ND2	1:G:1863:TYR:O	2.26	0.68
1:J:197:ALA:HB1	1:J:227:ILE:HD13	1.73	0.68
1:R:668:ASN:ND2	1:R:868:CYS:SG	2.67	0.68
1:D:1233:MET:SD	1:D:1233:MET:N	2.66	0.68
1:D:1320:VAL:O	2:M:1726:ARG:NE	2.26	0.68
1:F:1670:GLU:OE2	1:F:1675:ARG:NH1	2.25	0.68
1:R:1445:GLU:O	1:R:1449:LEU:HD13	1.94	0.68
1:D:1475:LEU:HD11	1:D:1477:PHE:CD1	2.28	0.68
1:D:186:ASN:OD1	1:D:186:ASN:N	2.25	0.68
1:D:804:ARG:HH22	1:D:807:ALA:HB2	1.58	0.68
1:D:1748:TYR:OH	1:C:2185:GLN:NE2	2.26	0.68
1:D:2296:SER:O	1:D:2300:VAL:HG23	1.94	0.68
1:F:2333:GLU:OE1	1:F:2336:ARG:NH2	2.27	0.68
1:A:1405:LEU:HD23	1:A:1421:PHE:CD1	2.28	0.68
1:R:1294:LYS:O	1:R:1295:THR:OG1	2.11	0.68
2:O:1665:VAL:HG22	2:O:1719:VAL:HG21	1.74	0.68
1:D:901:ASP:O	1:D:904:THR:OG1	2.10	0.68
1:E:1848:LEU:HD13	1:F:2049:PHE:CE2	2.29	0.68
1:A:2300:VAL:HG13	1:Q:2307:LEU:HD22	1.75	0.68
1:D:1769:CYS:SG	1:D:1770:GLU:N	2.67	0.68
1:D:1968:ALA:HB3	1:D:2025:LYS:NZ	2.09	0.68
1:F:1955:PHE:HZ	1:F:1985:VAL:HG11	1.59	0.68
1:J:655:LEU:O	1:J:1014:ARG:NH1	2.27	0.68
1:D:968:ILE:O	1:D:972:VAL:HG12	1.94	0.67
1:B:1722:ALA:HB3	1:G:2117:VAL:HG21	1.76	0.67
1:B:2040:LEU:O	1:B:2078:VAL:HA	1.94	0.67
1:A:1855:ASN:ND2	1:A:1863:TYR:O	2.27	0.67
1:R:1121:GLN:O	1:R:1125:LEU:N	2.27	0.67
1:E:178:VAL:HG12	1:E:196:ILE:HD11	1.75	0.67
1:E:602:SER:OG	1:E:740:ASN:OD1	2.04	0.67
1:R:370:ALA:HB3	1:R:413:LYS:HG3	1.77	0.67
1:E:756:SER:O	1:E:812:GLY:N	2.27	0.67
1:C:609:ASP:OD2	1:C:714:LEU:N	2.27	0.67
1:A:941:ILE:HD11	1:A:972:VAL:HB	1.76	0.67
1:J:1359:ARG:NH2	1:J:1367:ASP:OD2	2.27	0.67
1:E:203:GLN:O	1:E:228:ALA:N	2.26	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:976:ARG:NE	1:B:2254:GLU:OE1	2.27	0.67
1:B:626:PRO:HB3	1:B:738:ILE:HD12	1.77	0.67
1:G:2178:ILE:HD12	1:G:2181:GLN:HE21	1.59	0.67
1:D:1419:TYR:CB	1:D:1468:THR:HA	2.24	0.67
1:E:471:TYR:O	1:E:477:ARG:NH1	2.26	0.67
1:J:361:GLN:NE2	1:J:421:GLY:O	2.28	0.67
1:R:1359:ARG:NH2	1:R:1367:ASP:OD2	2.27	0.67
1:E:935:GLN:OE1	1:E:935:GLN:N	2.28	0.67
1:E:1146:ARG:NH1	1:E:1238:SER:O	2.27	0.67
1:C:1643:GLY:O	1:C:1701:ARG:NE	2.27	0.67
1:G:1655:ASN:ND2	1:G:1657:ILE:O	2.28	0.67
1:D:799:ILE:HG23	1:D:816:ALA:HB1	1.77	0.67
1:D:129:ALA:HB2	1:D:209:TRP:CZ3	2.30	0.67
1:D:1378:ALA:HB1	1:D:1381:LEU:HD11	1.75	0.67
1:D:2276:LYS:O	1:D:2285:HIS:ND1	2.26	0.67
1:E:2224:LEU:HD23	1:E:2227:LEU:HD13	1.77	0.67
1:B:1312:THR:O	1:B:1315:ASN:O	2.13	0.67
1:E:921:GLU:OE1	1:E:924:GLN:NE2	2.28	0.67
1:E:2300:VAL:HG13	1:F:2307:LEU:HD22	1.77	0.67
1:C:472:ARG:NH1	1:C:486:GLY:O	2.28	0.67
1:F:1988:VAL:HG21	1:F:2046:TRP:CZ2	2.30	0.67
1:R:361:GLN:NE2	1:R:421:GLY:O	2.28	0.67
1:E:261:SER:OG	1:E:289:GLY:O	2.13	0.67
1:E:1785:ILE:CD1	1:F:2189:LEU:HD13	2.25	0.67
1:B:1175:THR:HG23	1:B:1239:PHE:CE1	2.30	0.67
1:A:2182:VAL:HG22	1:Q:1748:TYR:CE1	2.30	0.67
2:U:1691:THR:HG1	2:U:1715:SER:HG	1.22	0.67
1:E:2009:LYS:NZ	1:F:2005:ASP:OD2	2.28	0.66
1:E:2021:ASP:OD1	1:E:2022:SER:N	2.27	0.66
1:C:2187:ALA:O	1:C:2190:HIS:ND1	2.28	0.66
1:F:1992:THR:HG21	1:F:2012:GLN:HB2	1.77	0.66
1:B:2080:VAL:O	1:B:2108:TYR:N	2.25	0.66
1:A:207:ALA:HB1	1:A:213:SER:HA	1.76	0.66
1:J:1066:LEU:HD22	1:J:1081:ALA:HB2	1.76	0.66
1:D:2093:TRP:CD1	1:C:1797:LEU:HD22	2.31	0.66
1:E:129:ALA:HB2	1:E:209:TRP:CZ3	2.31	0.66
1:E:332:ASN:O	1:E:336:GLN:N	2.28	0.66
1:E:654:SER:CB	1:E:661:LEU:HD13	2.25	0.66
1:E:1321:ASP:OD1	2:K:1726:ARG:NH2	2.29	0.66
1:E:1549:THR:HG23	1:E:1556:ILE:HD13	1.76	0.66
1:F:1056:THR:HG23	1:F:1059:LEU:HB3	1.78	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1238:SER:HA	1:B:1292:ALA:HB3	1.76	0.66
1:D:2300:VAL:HG13	1:C:2307:LEU:HD22	1.76	0.66
1:E:1381:LEU:HD11	1:E:1426:ILE:HD11	1.75	0.66
1:C:190:VAL:HG12	1:C:221:LEU:HD12	1.76	0.66
1:A:176:VAL:HG11	1:A:196:ILE:HG12	1.77	0.66
1:A:1437:ALA:O	1:A:1441:TYR:N	2.27	0.66
1:A:1533:THR:OG1	1:A:1541:ASP:O	2.10	0.66
1:Q:1986:VAL:CG2	1:Q:2042:VAL:HG13	2.25	0.66
1:B:1901:TYR:OH	1:B:1959:SER:O	2.08	0.66
1:A:419:SER:OG	1:A:420:ALA:N	2.29	0.66
1:Q:1655:ASN:ND2	1:Q:1657:ILE:O	2.28	0.66
1:E:197:ALA:HA	1:E:202:VAL:HG22	1.78	0.66
1:C:976:ARG:NH2	1:B:2254:GLU:OE2	2.28	0.66
1:F:472:ARG:NH1	1:F:486:GLY:O	2.28	0.66
1:B:2331:ARG:O	1:B:2334:VAL:HG12	1.96	0.66
1:A:1786:ILE:O	1:Q:2195:ARG:NE	2.28	0.66
2:H:1735:GLU:O	2:H:1750:LYS:NZ	2.27	0.66
2:M:1718:TRP:NE1	2:M:1729:LEU:O	2.29	0.66
1:E:1864:THR:OG1	1:E:1868:GLN:NE2	2.28	0.66
1:C:950:ALA:O	1:C:954:ARG:NH2	2.29	0.66
1:J:1123:LEU:HD12	1:J:1152:VAL:HG21	1.78	0.66
1:R:958:ARG:O	1:R:962:PHE:N	2.28	0.66
2:H:1810:VAL:O	2:H:1835:ARG:N	2.28	0.66
1:D:972:VAL:O	1:D:976:ARG:N	2.29	0.66
1:D:1114:GLN:NE2	1:D:1144:VAL:O	2.29	0.66
1:E:186:ASN:N	1:E:186:ASN:OD1	2.26	0.66
1:E:998:GLU:OE1	1:E:1074:ASN:ND2	2.28	0.66
1:R:1421:PHE:CE2	1:R:1457:LEU:HD21	2.30	0.66
2:O:1689:MET:O	2:O:1716:TYR:N	2.28	0.66
1:E:770:GLY:N	1:E:799:ILE:O	2.29	0.66
1:C:2021:ASP:OD1	1:C:2022:SER:N	2.28	0.66
1:D:1892:VAL:HA	1:D:1895:VAL:CG2	2.26	0.66
1:A:1917:ASP:OD1	1:A:1921:ARG:NE	2.28	0.66
1:D:377:ASP:N	1:D:390:GLU:O	2.29	0.66
1:E:1115:PHE:CD1	1:E:1117:ILE:HD13	2.32	0.66
1:C:1471:ASN:ND2	1:C:1506:LEU:O	2.29	0.66
1:F:1676:ASP:O	1:F:1904:LYS:NZ	2.27	0.66
1:F:2291:ASN:O	1:F:2295:ILE:HD12	1.96	0.66
1:B:1917:ASP:OD1	1:B:1921:ARG:NE	2.29	0.66
1:J:1421:PHE:CE2	1:J:1457:LEU:HD21	2.31	0.66
1:D:2021:ASP:OD1	1:D:2022:SER:N	2.28	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:132:LYS:NZ	1:A:450:GLU:OE1	2.29	0.65
1:R:1123:LEU:HD12	1:R:1152:VAL:HG21	1.77	0.65
1:D:197:ALA:HA	1:D:202:VAL:HG22	1.79	0.65
1:D:654:SER:CB	1:D:661:LEU:HD13	2.26	0.65
1:E:760:GLY:O	1:E:809:LEU:N	2.29	0.65
1:E:2091:GLY:O	1:E:2095:VAL:HG22	1.95	0.65
1:C:2230:LYS:O	1:C:2233:HIS:ND1	2.29	0.65
1:F:1613:TRP:CZ3	1:F:1622:LEU:HD11	2.32	0.65
1:B:1454:MET:HG2	1:B:1506:LEU:HD21	1.79	0.65
1:A:477:ARG:NH2	1:A:483:SER:O	2.29	0.65
1:A:1069:LEU:O	1:A:1069:LEU:HD12	1.96	0.65
1:Q:2178:ILE:HD12	1:Q:2181:GLN:HE21	1.61	0.65
1:J:1121:GLN:O	1:J:1125:LEU:N	2.29	0.65
1:D:719:ASP:OD2	1:D:839:ILE:N	2.30	0.65
1:E:990:LEU:HD12	1:E:991:LEU:N	2.11	0.65
1:E:1034:VAL:O	1:E:1038:ASN:N	2.29	0.65
1:R:355:SER:O	1:R:610:THR:N	2.29	0.65
1:D:328:ASP:OD2	1:D:850:HIS:NE2	2.24	0.65
1:D:1374:GLU:OE1	1:D:1376:ALA:HB3	1.96	0.65
1:D:1830:TYR:OH	1:C:2064:GLY:O	2.14	0.65
1:E:1066:LEU:HA	1:E:1069:LEU:HD23	1.79	0.65
1:C:2034:ASN:ND2	1:C:2073:GLU:O	2.29	0.65
1:B:1481:VAL:HG22	1:B:1517:ILE:HG22	1.77	0.65
1:A:389:GLU:HB2	1:A:507:ALA:HB3	1.76	0.65
1:Q:2315:ALA:O	1:Q:2318:SER:OG	2.11	0.65
1:C:1727:ALA:O	1:C:1730:ILE:HG22	1.96	0.65
1:F:295:ASP:OD1	1:F:966:GLN:NE2	2.29	0.65
1:J:413:LYS:NZ	1:J:493:GLU:OE2	2.30	0.65
1:J:1266:PHE:O	2:W:1699:ARG:NH2	2.30	0.65
1:E:1568:LEU:HD11	1:E:1571:MET:HB3	1.78	0.65
1:C:1439:PHE:CE1	1:C:1481:VAL:HG21	2.32	0.65
1:C:1471:ASN:ND2	1:C:1507:ARG:O	2.30	0.65
1:C:1676:ASP:O	1:C:1904:LYS:NZ	2.30	0.65
1:F:1643:GLY:O	1:F:1701:ARG:NE	2.26	0.65
1:B:970:GLN:O	1:B:974:ARG:NE	2.29	0.65
2:H:1654:VAL:HG11	2:H:1665:VAL:HG21	1.78	0.65
1:D:1824:ALA:O	1:D:1829:ALA:N	2.29	0.65
1:R:1158:TYR:OH	1:R:1288:ILE:HG21	1.96	0.65
1:C:2291:ASN:O	1:C:2295:ILE:HD12	1.97	0.65
1:F:1294:LYS:O	1:F:1295:THR:OG1	2.12	0.65
1:G:1941:ARG:O	1:G:1951:LEU:N	2.30	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:190:VAL:HG12	1:J:221:LEU:HD12	1.79	0.65
1:R:972:VAL:O	1:R:976:ARG:N	2.30	0.65
1:D:1707:ARG:HA	1:D:1814:ILE:HD11	1.79	0.65
1:D:2063:PHE:O	1:D:2067:ILE:HD12	1.97	0.65
1:E:281:VAL:HG12	1:E:286:TYR:HB2	1.79	0.65
1:C:1146:ARG:NH1	1:C:1238:SER:O	2.29	0.65
1:C:1439:PHE:HE1	1:C:1481:VAL:HG21	1.62	0.65
1:B:1100:VAL:HG21	1:B:1133:VAL:HG21	1.77	0.65
1:B:2037:GLY:O	1:B:2076:GLN:NE2	2.30	0.65
1:A:203:GLN:O	1:A:228:ALA:HB3	1.97	0.65
1:J:355:SER:O	1:J:610:THR:N	2.29	0.65
2:O:1654:VAL:HG12	2:O:1688:VAL:HB	1.77	0.65
1:E:439:ASN:HD22	1:E:443:GLN:HG2	1.62	0.65
1:C:1764:LEU:HD13	1:C:1788:LYS:NZ	2.12	0.65
1:F:896:LEU:HD11	1:F:926:ALA:HB2	1.77	0.65
1:F:2138:ARG:NH1	1:F:2145:ILE:O	2.29	0.65
1:B:183:ASN:O	1:B:188:ALA:HB3	1.96	0.65
1:A:136:SER:O	1:A:456:ASN:ND2	2.29	0.65
1:A:1069:LEU:HD11	1:A:1078:ALA:HB2	1.78	0.65
1:A:1086:ILE:O	1:A:1089:HIS:N	2.30	0.65
1:A:2319:ILE:HD11	1:Q:2322:MET:HB3	1.79	0.65
1:J:909:ARG:O	1:J:964:ASN:ND2	2.29	0.65
1:D:960:VAL:HG12	1:D:964:ASN:HD21	1.62	0.64
1:E:1531:PHE:O	1:E:1543:SER:OG	2.09	0.64
1:D:332:ASN:HD22	1:D:905:SER:HG	1.42	0.64
1:E:1924:GLU:O	1:E:2209:LYS:NZ	2.30	0.64
1:C:1901:TYR:OH	1:C:1959:SER:O	2.14	0.64
1:F:1120:LEU:HD12	1:F:1152:VAL:HG23	1.78	0.64
1:B:1289:LEU:HD11	1:B:1291:VAL:HG13	1.77	0.64
1:J:1158:TYR:OH	1:J:1288:ILE:HG21	1.97	0.64
2:S:1689:MET:O	2:S:1716:TYR:N	2.29	0.64
1:D:636:ALA:HB2	1:D:683:LEU:HD22	1.79	0.64
1:D:920:LYS:O	1:D:923:ALA:HB3	1.97	0.64
1:E:2227:LEU:O	1:E:2230:LYS:HG2	1.97	0.64
1:C:1673:GLU:N	1:C:1673:GLU:OE1	2.30	0.64
1:C:2059:GLN:HE21	1:C:2062:LYS:HE2	1.62	0.64
1:R:898:GLU:OE2	1:R:974:ARG:NH1	2.30	0.64
2:H:1755:SER:O	2:H:1845:TYR:OH	2.14	0.64
1:D:1471:ASN:ND2	1:D:1507:ARG:O	2.31	0.64
2:M:1691:THR:HG21	2:M:1736:VAL:HG12	1.80	0.64
1:D:332:ASN:O	1:D:336:GLN:N	2.28	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1707:ARG:HA	1:D:1814:ILE:CD1	2.27	0.64
1:F:1318:THR:HA	2:S:1726:ARG:NH1	2.12	0.64
1:F:1851:ALA:N	1:F:1869:LEU:HD11	2.13	0.64
1:R:1437:ALA:HB3	1:R:1481:VAL:HG23	1.77	0.64
2:M:1707:ILE:HG23	2:M:1752:ALA:CB	2.27	0.64
1:D:662:PRO:HG2	1:D:665:THR:HG23	1.80	0.64
1:C:2044:ALA:HB1	1:C:2088:LEU:HD21	1.79	0.64
1:B:1052:ASP:O	1:B:1054:THR:N	2.30	0.64
1:B:2141:ASP:OD1	1:B:2179:TYR:OH	2.15	0.64
1:J:371:ILE:HD11	1:J:476:ILE:HD12	1.79	0.64
1:J:1293:ILE:N	1:J:1330:LEU:O	2.30	0.64
1:E:477:ARG:NE	1:E:483:SER:O	2.30	0.64
1:E:1128:THR:HG22	1:E:1430:SER:CB	2.28	0.64
1:C:1839:ILE:HD12	1:C:1895:VAL:HG22	1.78	0.64
1:F:950:ALA:O	1:F:954:ARG:NH2	2.30	0.64
1:F:2021:ASP:OD1	1:F:2022:SER:N	2.30	0.64
1:J:1503:LEU:O	1:J:1507:ARG:N	2.31	0.64
1:R:1066:LEU:HD22	1:R:1081:ALA:HB2	1.79	0.64
2:H:1808:VAL:HG11	2:H:1824:ILE:HD13	1.80	0.64
1:F:1595:THR:OG1	1:F:1596:THR:N	2.31	0.64
1:B:1954:PHE:O	1:B:2212:ARG:NH1	2.30	0.64
1:B:2091:GLY:O	1:B:2095:VAL:HG22	1.98	0.64
1:R:477:ARG:NH1	1:R:484:PRO:O	2.31	0.64
1:E:1446:GLY:HA2	1:E:1449:LEU:HD22	1.79	0.64
1:C:615:ARG:CZ	1:C:715:LEU:HD13	2.27	0.64
1:F:136:SER:O	1:F:456:ASN:ND2	2.31	0.64
1:F:2034:ASN:ND2	1:F:2073:GLU:O	2.30	0.64
1:B:1386:MET:CE	1:B:1391:LEU:HD23	2.28	0.64
1:R:909:ARG:O	1:R:964:ASN:ND2	2.31	0.64
1:D:2065:ALA:O	1:D:2068:VAL:HG12	1.98	0.64
1:B:197:ALA:HA	1:B:202:VAL:HG22	1.80	0.64
1:B:1386:MET:SD	1:B:1391:LEU:HD23	2.38	0.64
1:A:1722:ALA:HB1	1:A:1796:ASN:HB3	1.80	0.64
1:A:2021:ASP:OD1	1:A:2022:SER:N	2.30	0.64
1:Q:1808:SER:N	1:Q:1834:LEU:HD11	2.12	0.64
1:J:1114:GLN:HE21	1:J:1148:ALA:HB2	1.63	0.64
1:D:1493:ARG:HH21	1:D:1540:LEU:HD11	1.63	0.63
1:E:2253:VAL:HG13	1:E:2258:THR:HA	1.79	0.63
1:C:2258:THR:HG21	1:B:293:ASP:O	1.98	0.63
1:B:419:SER:OG	1:B:420:ALA:N	2.30	0.63
1:J:261:SER:OG	1:J:289:GLY:O	2.17	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:1238:SER:HA	1:J:1292:ALA:HB3	1.80	0.63
1:D:1066:LEU:HA	1:D:1069:LEU:HD23	1.79	0.63
1:D:1384:ASN:HA	1:D:1387:ARG:HG3	1.80	0.63
1:E:2061:LEU:HD11	1:F:1848:LEU:HD11	1.78	0.63
1:F:1502:ARG:O	1:F:1506:LEU:HD23	1.98	0.63
1:F:2068:VAL:HG13	1:F:2100:ILE:HG12	1.80	0.63
1:B:1069:LEU:HD12	1:B:1069:LEU:O	1.98	0.63
1:E:1384:ASN:HA	1:E:1387:ARG:HB2	1.80	0.63
1:E:1695:GLU:O	1:E:1698:LEU:HD23	1.98	0.63
1:F:900:GLN:O	1:F:904:THR:HG23	1.98	0.63
1:F:1250:ASP:O	1:F:1254:GLY:N	2.31	0.63
1:G:2128:PHE:CD1	1:G:2183:ALA:HB1	2.33	0.63
1:Q:1941:ARG:O	1:Q:1951:LEU:N	2.31	0.63
1:D:853:PHE:CE1	1:D:885:LEU:HD12	2.34	0.63
1:F:1539:TYR:OH	1:F:1606:ARG:NH1	2.31	0.63
1:B:2264:TRP:HA	1:B:2270:LEU:CD2	2.25	0.63
1:A:281:VAL:HG12	1:A:286:TYR:HB2	1.80	0.63
1:A:666:LEU:CD1	1:A:1025:LEU:HD21	2.28	0.63
1:D:1532:LEU:HD21	1:D:1542:ILE:HG23	1.81	0.63
1:D:1798:ARG:HE	1:C:2201:VAL:HG12	1.62	0.63
1:D:1803:ILE:O	1:D:1807:SER:OG	2.08	0.63
1:D:1803:ILE:HD13	1:D:1831:LEU:HD11	1.79	0.63
1:E:1128:THR:HG22	1:E:1430:SER:HB2	1.80	0.63
1:E:1928:THR:OG1	1:E:1930:THR:O	2.16	0.63
1:C:1096:ARG:NH2	1:C:1129:SER:O	2.31	0.63
1:C:1839:ILE:HD12	1:C:1895:VAL:CG2	2.28	0.63
1:F:1707:ARG:NE	1:F:1806:GLU:OE2	2.32	0.63
1:F:1968:ALA:HB2	1:F:2021:ASP:HB2	1.80	0.63
1:F:2319:ILE:HA	1:F:2322:MET:HB2	1.81	0.63
1:J:258:LEU:HD21	1:J:352:ALA:HB2	1.80	0.63
1:R:510:ILE:O	1:R:558:GLY:N	2.32	0.63
2:U:1689:MET:O	2:U:1716:TYR:N	2.29	0.63
2:Y:1689:MET:O	2:Y:1716:TYR:N	2.30	0.63
1:D:450:GLU:HG3	1:D:457:LEU:HD12	1.81	0.63
1:E:1828:GLY:O	1:E:1832:VAL:HG13	1.98	0.63
1:E:1912:LEU:HD13	1:E:1981:ILE:HG13	1.80	0.63
1:G:1986:VAL:HG22	1:G:2042:VAL:HG22	1.81	0.63
1:J:258:LEU:CD2	1:J:352:ALA:HB2	2.29	0.63
1:D:1020:ASP:OD1	1:D:1021:MET:N	2.32	0.63
1:D:1840:GLN:NE2	1:D:1870:GLY:O	2.30	0.63
1:D:1864:THR:OG1	1:D:1868:GLN:NE2	2.31	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2220:ARG:HH11	1:E:2224:LEU:HD11	1.63	0.63
1:C:1120:LEU:HD12	1:C:1152:VAL:HG23	1.81	0.63
1:C:1774:ASP:O	1:C:1779:ARG:NH1	2.32	0.63
1:C:1978:LEU:HD11	1:C:2212:ARG:HG3	1.81	0.63
1:D:1470:CYS:HA	1:D:1509:LEU:HD22	1.80	0.63
1:D:1534:ASN:ND2	1:D:1539:TYR:O	2.32	0.63
1:C:921:GLU:O	1:C:925:TYR:N	2.31	0.63
1:C:2016:GLN:O	1:C:2047:ARG:N	2.22	0.63
1:F:921:GLU:O	1:F:925:TYR:N	2.32	0.63
1:F:1375:PRO:HA	1:F:1378:ALA:HB3	1.80	0.63
1:B:666:LEU:CD1	1:B:1025:LEU:HD21	2.28	0.63
2:K:1661:GLU:O	2:K:1716:TYR:OH	2.11	0.63
1:D:1438:SER:OG	1:D:1481:VAL:HG21	1.99	0.63
1:E:1427:ILE:CD1	1:E:1449:LEU:HD21	2.28	0.63
1:C:638:HIS:CD2	1:C:736:ILE:HG23	2.34	0.63
1:C:1595:THR:OG1	1:C:1596:THR:N	2.31	0.63
1:C:2250:ARG:HD2	1:B:969:VAL:HG11	1.80	0.63
1:A:296:ASP:O	1:A:300:ALA:N	2.28	0.63
1:D:1480:THR:O	1:D:1518:ARG:NH1	2.32	0.62
1:C:896:LEU:HD11	1:C:926:ALA:HB2	1.80	0.62
1:C:1056:THR:HG23	1:C:1059:LEU:HB3	1.81	0.62
1:C:2229:LYS:HG2	1:C:2248:LEU:HD22	1.81	0.62
1:G:1873:GLN:O	1:G:1877:ASN:ND2	2.27	0.62
1:R:258:LEU:HD21	1:R:352:ALA:HB2	1.81	0.62
1:D:533:SER:OG	1:D:576:VAL:HG13	1.99	0.62
1:D:995:LEU:HD11	1:D:1069:LEU:HD21	1.80	0.62
1:D:998:GLU:OE1	1:D:1074:ASN:ND2	2.31	0.62
1:F:1104:PHE:HE2	1:F:1145:VAL:HG13	1.64	0.62
1:E:1385:ARG:NE	1:E:1512:GLU:OE2	2.32	0.62
1:F:2096:ILE:HD12	1:F:2096:ILE:O	2.00	0.62
1:B:651:PHE:CG	1:B:1025:LEU:HD22	2.34	0.62
1:B:1855:ASN:ND2	1:B:1863:TYR:O	2.33	0.62
1:A:1132:ASP:OD1	1:A:1333:GLN:NE2	2.32	0.62
1:R:1114:GLN:HE21	1:R:1148:ALA:HB2	1.64	0.62
1:D:2247:MET:SD	1:D:2248:LEU:N	2.73	0.62
1:E:1091:PRO:CB	1:E:1095:LEU:HD21	2.28	0.62
1:E:2296:SER:O	1:E:2300:VAL:HG23	2.00	0.62
1:F:1020:ASP:OD1	1:F:1021:MET:N	2.32	0.62
1:A:1038:ASN:ND2	1:A:1073:THR:O	2.32	0.62
1:Q:2034:ASN:ND2	1:Q:2070:GLY:O	2.33	0.62
1:J:718:TYR:OH	1:J:838:ARG:NH1	2.32	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:1385:ARG:NH2	1:J:1512:GLU:OE2	2.32	0.62
1:R:1007:ASP:O	1:R:1010:VAL:HG12	2.00	0.62
1:D:2110:ASP:O	1:D:2113:SER:OG	2.16	0.62
1:F:1417:THR:O	1:F:1467:ARG:NH1	2.31	0.62
1:F:2034:ASN:ND2	1:F:2074:CYS:HA	2.15	0.62
1:B:1445:GLU:OE1	1:B:1448:ARG:NH2	2.32	0.62
1:A:641:ASP:HA	1:A:644:LEU:HD12	1.81	0.62
1:D:1749:ARG:NE	1:D:1775:GLU:OE2	2.26	0.62
1:B:926:ALA:O	1:B:929:ILE:HG22	1.99	0.62
1:A:1052:ASP:O	1:A:1054:THR:N	2.32	0.62
1:J:613:LEU:HD23	1:J:616:LEU:HD12	1.81	0.62
1:R:190:VAL:HG12	1:R:221:LEU:HD12	1.81	0.62
1:R:718:TYR:OH	1:R:838:ARG:NH1	2.32	0.62
1:D:995:LEU:HD22	1:D:1066:LEU:CD2	2.30	0.62
1:C:917:SER:HB3	1:C:944:ILE:HD13	1.82	0.62
1:C:2046:TRP:N	1:C:2087:GLU:O	2.33	0.62
1:B:472:ARG:NH1	1:B:486:GLY:O	2.33	0.62
1:G:1917:ASP:OD1	1:G:1921:ARG:NE	2.33	0.62
1:G:1986:VAL:CG2	1:G:2042:VAL:HG13	2.29	0.62
1:J:419:SER:OG	1:J:420:ALA:N	2.32	0.62
1:D:892:PRO:O	1:D:925:TYR:OH	2.13	0.62
1:E:1377:LEU:HD12	1:E:1380:GLN:HG3	1.81	0.62
1:E:1891:GLY:O	1:E:1894:THR:HG22	1.99	0.62
1:E:1897:HIS:NE2	1:E:1901:TYR:OH	2.32	0.62
1:C:1539:TYR:OH	1:C:1606:ARG:NH1	2.33	0.62
1:A:2224:LEU:HB3	1:A:2274:LEU:HD22	1.81	0.62
1:A:2253:VAL:HG22	1:A:2261:ALA:HA	1.81	0.62
1:C:1020:ASP:OD1	1:C:1021:MET:N	2.32	0.62
1:A:2302:LYS:O	1:A:2306:SER:OG	2.08	0.62
1:J:1083:GLN:OE1	1:J:1444:ASN:ND2	2.33	0.62
2:W:1742:ASN:HB3	2:W:1844:LEU:HD21	1.81	0.62
1:B:1671:TYR:OH	1:B:1902:MET:O	2.11	0.62
1:B:2300:VAL:HG13	1:G:2307:LEU:HD22	1.81	0.62
1:A:1294:LYS:O	1:A:1295:THR:OG1	2.11	0.62
1:G:1968:ALA:HB2	1:G:2021:ASP:HB2	1.81	0.62
1:R:356:ARG:NH2	1:R:377:ASP:OD2	2.33	0.62
1:R:1385:ARG:NH2	1:R:1512:GLU:OE2	2.33	0.62
2:O:1654:VAL:HG11	2:O:1665:VAL:HG21	1.80	0.62
1:D:394:THR:OG1	1:D:606:ASN:ND2	2.33	0.61
1:E:2094:VAL:CG1	1:F:1827:ILE:HD13	2.30	0.61
1:C:419:SER:OG	1:C:420:ALA:N	2.33	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:296:ASP:O	1:B:300:ALA:N	2.27	0.61
1:B:2108:TYR:OH	1:B:2218:ARG:NE	2.23	0.61
1:G:2081:TYR:OH	1:G:2110:ASP:OD1	2.18	0.61
1:R:258:LEU:CD2	1:R:352:ALA:HB2	2.29	0.61
1:D:1733:MET:HG3	1:D:1753:LEU:HD21	1.82	0.61
1:D:2302:LYS:O	1:D:2306:SER:OG	2.13	0.61
1:C:1557:MET:SD	1:C:1559:GLN:NE2	2.72	0.61
1:C:2201:VAL:HG23	1:C:2202:ILE:HG23	1.83	0.61
1:E:1233:MET:N	1:E:1233:MET:SD	2.72	0.61
1:F:638:HIS:CD2	1:F:736:ILE:HG23	2.35	0.61
1:A:911:PRO:O	1:A:914:VAL:N	2.32	0.61
1:A:1458:GLU:HA	1:A:1461:PHE:HD2	1.65	0.61
1:D:756:SER:O	1:D:812:GLY:N	2.33	0.61
1:D:1684:ILE:O	1:D:1688:ILE:CA	2.46	0.61
1:E:441:ARG:NH1	1:E:442:LEU:O	2.33	0.61
1:E:1811:TYR:OH	1:E:1837:ARG:NH1	2.34	0.61
1:E:1943:HIS:NE2	1:E:1945:THR:OG1	2.34	0.61
1:C:1076:LYS:O	1:C:1080:ARG:N	2.33	0.61
1:C:1986:VAL:HG23	1:C:2042:VAL:HG23	1.81	0.61
1:B:1069:LEU:HD13	1:B:1074:ASN:O	2.00	0.61
1:A:686:THR:O	1:A:694:VAL:HG12	2.01	0.61
1:A:2117:VAL:CG1	1:Q:1722:ALA:HB3	2.30	0.61
2:K:1691:THR:HG22	2:K:1697:CYS:HB3	1.81	0.61
1:E:1682:ASN:ND2	1:E:1718:ALA:O	2.33	0.61
1:C:1039:LEU:O	1:C:1042:THR:OG1	2.12	0.61
1:C:1714:ILE:HD12	1:C:1817:ILE:HB	1.82	0.61
1:C:1968:ALA:HB2	1:C:2021:ASP:HB2	1.81	0.61
1:F:613:LEU:HD23	1:F:616:LEU:HD12	1.83	0.61
1:F:946:ASP:HA	1:F:949:ALA:HB3	1.82	0.61
1:B:102:VAL:HG23	1:B:145:PHE:CE1	2.34	0.61
1:B:1385:ARG:NE	1:B:1575:THR:O	2.34	0.61
1:B:1810:ALA:O	1:B:1814:ILE:N	2.32	0.61
1:B:2307:LEU:O	1:B:2311:ASN:N	2.33	0.61
1:A:183:ASN:O	1:A:188:ALA:HB3	2.01	0.61
1:Q:2128:PHE:CD1	1:Q:2183:ALA:HB1	2.35	0.61
2:O:1691:THR:HG22	2:O:1697:CYS:HB3	1.82	0.61
1:E:1873:GLN:O	1:E:1877:ASN:ND2	2.27	0.61
1:C:625:ARG:NH1	1:C:742:THR:O	2.33	0.61
1:C:1996:SER:CA	1:C:2010:ILE:HD12	2.30	0.61
1:F:884:ARG:O	1:F:888:THR:OG1	2.13	0.61
1:F:933:LEU:HD22	1:A:2305:ARG:HD3	1.83	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1253:MET:SD	2:S:1724:LYS:HA	2.40	0.61
1:F:2303:GLN:O	1:F:2306:SER:OG	2.15	0.61
1:B:911:PRO:O	1:B:914:VAL:N	2.31	0.61
1:B:1312:THR:O	1:B:1315:ASN:C	2.39	0.61
1:J:921:GLU:O	1:J:925:TYR:N	2.33	0.61
1:D:1556:ILE:HB	1:D:1573:ILE:HD11	1.83	0.61
1:D:1588:PHE:O	1:D:1592:SER:OG	2.14	0.61
1:E:1556:ILE:HB	1:E:1573:ILE:HD11	1.83	0.61
1:C:2258:THR:HG22	1:B:296:ASP:CB	2.30	0.61
1:A:898:GLU:OE1	1:A:975:TYR:OH	2.16	0.61
1:Q:1808:SER:O	1:Q:1812:ASN:ND2	2.33	0.61
1:J:1317:ALA:HB1	2:Y:1726:ARG:HB2	1.82	0.61
1:R:686:THR:HG21	1:R:870:PRO:HB3	1.83	0.61
1:D:760:GLY:O	1:D:809:LEU:N	2.34	0.61
1:C:1121:GLN:O	1:C:1125:LEU:HD23	2.00	0.61
1:C:1240:ARG:O	1:C:1294:LYS:N	2.34	0.61
1:C:1497:MET:SD	1:C:1498:ARG:N	2.74	0.61
1:B:129:ALA:HB2	1:B:209:TRP:CH2	2.36	0.61
1:B:951:THR:O	1:B:954:ARG:NH1	2.33	0.61
1:J:972:VAL:HG22	1:J:976:ARG:HB3	1.83	0.61
1:R:1253:MET:SD	2:U:1726:ARG:NE	2.74	0.61
1:R:1293:ILE:N	1:R:1330:LEU:O	2.32	0.61
2:M:1833:VAL:HG11	2:M:1850:LEU:HD22	1.82	0.61
1:D:1880:VAL:HG22	1:C:2059:GLN:OE1	2.00	0.61
1:D:2334:VAL:HG21	1:C:2334:VAL:HG21	1.83	0.61
1:E:979:ILE:HD12	1:E:980:ARG:N	2.16	0.61
1:E:2178:ILE:O	1:E:2182:VAL:HG23	1.99	0.61
1:F:1121:GLN:O	1:F:1125:LEU:HD23	2.00	0.61
1:F:1245:PHE:O	1:F:1249:PHE:N	2.34	0.61
1:B:2021:ASP:OD1	1:B:2022:SER:N	2.34	0.61
1:E:194:LEU:HD11	1:E:225:ASN:CB	2.30	0.61
1:E:1020:ASP:OD1	1:E:1021:MET:N	2.33	0.61
1:E:2289:GLU:N	1:E:2289:GLU:OE1	2.32	0.61
1:C:946:ASP:HA	1:C:949:ALA:HB3	1.82	0.61
1:B:248:ILE:HG21	1:B:285:LEU:HD21	1.82	0.61
1:B:298:LEU:HD21	1:B:331:PRO:HG3	1.82	0.61
1:E:1493:ARG:NE	1:E:1540:LEU:HD21	2.16	0.60
1:E:1680:ILE:HG21	1:E:1699:PHE:CD1	2.36	0.60
1:C:1843:ASN:O	1:C:1843:ASN:ND2	2.31	0.60
1:C:2034:ASN:ND2	1:C:2074:CYS:HA	2.16	0.60
1:F:1360:ALA:HB2	1:F:1365:GLU:HA	1.82	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:2132:ASP:O	1:G:2136:THR:HG23	2.00	0.60
1:G:2280:GLU:OE1	1:G:2280:GLU:N	2.34	0.60
1:R:613:LEU:HD23	1:R:616:LEU:HD12	1.82	0.60
1:E:363:LEU:HD11	1:E:464:ILE:HD11	1.84	0.60
1:E:2065:ALA:O	1:E:2068:VAL:HG12	2.01	0.60
1:E:2221:ARG:NH1	1:E:2264:TRP:O	2.31	0.60
1:F:1509:LEU:HD12	1:F:1534:ASN:O	2.01	0.60
1:B:1075:ALA:O	1:B:1079:LEU:HD13	2.01	0.60
1:A:443:GLN:NE2	1:A:445:GLU:OE1	2.35	0.60
1:A:472:ARG:NH1	1:A:486:GLY:O	2.33	0.60
1:Q:2039:PRO:HG3	1:Q:2223:LEU:HD21	1.83	0.60
1:J:370:ALA:HB3	1:J:413:LYS:HG3	1.81	0.60
1:D:965:THR:O	1:D:969:VAL:HG13	2.02	0.60
1:D:2174:PHE:O	1:C:1745:TYR:OH	2.18	0.60
1:E:129:ALA:HB1	1:E:206:TRP:CH2	2.36	0.60
1:E:1289:LEU:HD21	1:E:1291:VAL:HG13	1.83	0.60
1:F:419:SER:OG	1:F:420:ALA:N	2.33	0.60
1:B:969:VAL:HA	1:B:972:VAL:HG12	1.82	0.60
1:B:1421:PHE:CE1	1:B:1460:ALA:HB1	2.35	0.60
1:G:2021:ASP:OD1	1:G:2022:SER:N	2.35	0.60
1:R:1321:ASP:HB2	2:U:1726:ARG:HB3	1.82	0.60
2:H:1668:PHE:HB2	2:H:1723:ILE:HD11	1.82	0.60
1:D:747:LYS:O	1:D:755:ARG:NH2	2.34	0.60
1:D:1532:LEU:CD2	1:D:1542:ILE:HG23	2.31	0.60
1:E:449:THR:HB	1:E:457:LEU:HD11	1.83	0.60
1:E:2124:VAL:HG13	1:E:2128:PHE:HB3	1.84	0.60
1:F:1827:ILE:HD12	1:F:1830:TYR:HB2	1.83	0.60
1:F:1996:SER:CA	1:F:2010:ILE:HD12	2.32	0.60
1:F:2178:ILE:HD12	1:F:2181:GLN:HE21	1.65	0.60
1:B:1480:THR:O	1:B:1480:THR:OG1	2.20	0.60
1:B:1718:ALA:HB1	1:B:1822:CYS:SG	2.41	0.60
1:A:2014:ALA:HB3	1:A:2017:VAL:HG21	1.84	0.60
1:J:356:ARG:NH2	1:J:377:ASP:OD2	2.33	0.60
2:H:1665:VAL:HA	2:H:1719:VAL:HG11	1.82	0.60
1:D:1499:TYR:OH	1:D:1506:LEU:HD12	2.01	0.60
1:E:1039:LEU:O	1:E:1042:THR:OG1	2.05	0.60
1:E:1369:ILE:HG23	1:E:1404:TYR:CE2	2.37	0.60
1:E:1755:PRO:HA	1:E:1758:TYR:CD1	2.36	0.60
1:E:2230:LYS:HG3	1:E:2231:LYS:N	2.14	0.60
1:C:926:ALA:O	1:C:929:ILE:HG22	2.02	0.60
1:C:1613:TRP:O	1:C:1617:SER:OG	2.11	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1060:LEU:O	1:F:1064:THR:N	2.31	0.60
1:F:1306:ALA:O	1:F:1309:ARG:NH1	2.34	0.60
1:F:1418:ASP:OD1	1:F:1419:TYR:N	2.34	0.60
1:A:1403:LEU:HD21	1:A:1456:GLU:HB2	1.82	0.60
1:A:2117:VAL:HG13	1:Q:1722:ALA:HB3	1.83	0.60
1:R:1083:GLN:OE1	1:R:1444:ASN:ND2	2.33	0.60
1:D:668:ASN:ND2	1:D:868:CYS:SG	2.75	0.60
1:D:1824:ALA:HB1	1:D:1846:LEU:HD13	1.84	0.60
1:E:1154:VAL:HG13	1:E:1180:PHE:CE1	2.37	0.60
1:F:926:ALA:O	1:F:929:ILE:HG22	2.02	0.60
1:B:991:LEU:HD21	1:B:1062:ILE:HG21	1.83	0.60
1:G:1671:TYR:OH	1:G:1904:LYS:N	2.35	0.60
2:M:1664:LEU:HD23	2:M:1723:ILE:HD12	1.83	0.60
2:O:1689:MET:HB2	2:O:1736:VAL:HG11	1.83	0.60
1:E:1482:ILE:HG22	1:E:1518:ARG:HG2	1.82	0.60
1:E:1530:LEU:HD11	1:E:1544:LEU:HD12	1.83	0.60
1:C:1123:LEU:CD1	1:C:1152:VAL:HG21	2.29	0.60
1:C:1360:ALA:HB2	1:C:1365:GLU:HA	1.83	0.60
1:C:1545:TYR:OH	1:C:1568:LEU:O	2.19	0.60
1:F:1991:ARG:NH1	1:F:1992:THR:O	2.35	0.60
1:R:419:SER:OG	1:R:420:ALA:N	2.32	0.60
1:R:1020:ASP:OD1	1:R:1021:MET:N	2.35	0.60
1:D:178:VAL:HG21	1:D:186:ASN:HB3	1.82	0.60
1:E:1115:PHE:CE1	1:E:1117:ILE:HD13	2.37	0.60
1:B:641:ASP:HA	1:B:644:LEU:HD12	1.83	0.60
1:B:1919:ILE:HG21	1:B:2216:TYR:CG	2.37	0.60
1:R:1496:VAL:HG11	1:R:1540:LEU:HD11	1.84	0.60
1:D:194:LEU:HD11	1:D:225:ASN:CB	2.32	0.60
1:D:661:LEU:O	1:D:1006:TYR:OH	2.20	0.60
1:D:1856:LYS:NZ	1:C:2121:GLU:OE2	2.33	0.60
1:E:2337:ILE:HG22	1:F:2331:ARG:HE	1.66	0.60
1:F:1612:LEU:HD22	1:F:1896:LEU:HD13	1.83	0.60
2:K:1665:VAL:HA	2:K:1719:VAL:HG11	1.84	0.60
1:D:1657:ILE:HA	1:D:1686:TYR:CE2	2.36	0.60
1:D:1775:GLU:OE1	1:D:1779:ARG:NH2	2.35	0.60
1:C:136:SER:O	1:C:456:ASN:ND2	2.34	0.60
1:C:636:ALA:HB1	1:C:685:VAL:CG2	2.31	0.60
1:C:2232:ILE:CD1	1:C:2248:LEU:HD21	2.32	0.60
1:C:2286:SER:OG	1:C:2287:VAL:N	2.34	0.60
1:F:1146:ARG:NH1	1:F:1238:SER:O	2.35	0.60
1:F:2026:THR:HG22	1:F:2030:ILE:HD12	1.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:188:ALA:HB2	1:A:212:ALA:HB2	1.82	0.60
1:J:686:THR:HG21	1:J:870:PRO:HB3	1.82	0.60
2:W:1691:THR:HG21	2:W:1736:VAL:HG12	1.84	0.60
1:E:533:SER:HB2	1:E:576:VAL:HG13	1.83	0.59
1:C:1138:PHE:O	1:C:1238:SER:OG	2.18	0.59
1:A:964:ASN:O	1:A:968:ILE:HG22	2.02	0.59
2:H:1654:VAL:HG12	2:H:1688:VAL:HB	1.84	0.59
1:C:1123:LEU:O	1:C:1428:ARG:NH2	2.34	0.59
1:C:1999:ALA:HB2	1:C:2008:ALA:N	2.17	0.59
1:F:1394:ILE:HB	1:F:1403:LEU:HD12	1.83	0.59
1:F:1999:ALA:HB2	1:F:2008:ALA:N	2.17	0.59
1:B:1014:ARG:NH2	1:B:1018:LYS:O	2.35	0.59
1:B:2263:VAL:HG12	1:B:2270:LEU:CD1	2.32	0.59
1:A:700:SER:OG	1:A:835:SER:N	2.35	0.59
1:A:2220:ARG:NH1	1:A:2223:LEU:HD12	2.17	0.59
1:Q:1917:ASP:OD1	1:Q:1921:ARG:NE	2.35	0.59
1:J:1245:PHE:O	1:J:1249:PHE:N	2.36	0.59
1:D:1103:ILE:O	1:D:1106:SER:OG	2.20	0.59
1:E:430:ASP:OD1	1:E:645:ARG:NE	2.35	0.59
1:E:1968:ALA:HB3	1:E:2025:LYS:HE2	1.84	0.59
1:C:972:VAL:HG22	1:C:976:ARG:HB3	1.85	0.59
1:B:941:ILE:HD13	1:B:968:ILE:HG12	1.83	0.59
1:B:943:ASN:OD1	1:B:944:ILE:N	2.34	0.59
1:A:929:ILE:O	1:A:930:THR:OG1	2.18	0.59
1:A:1076:LYS:NZ	1:A:1448:ARG:O	2.34	0.59
1:A:1719:ASN:N	1:A:1823:ARG:O	2.34	0.59
1:D:1107:ALA:HB1	1:D:1119:ASN:ND2	2.17	0.59
1:F:1885:VAL:HG11	1:F:1891:GLY:HA2	1.84	0.59
1:A:1014:ARG:NH2	1:A:1018:LYS:O	2.35	0.59
1:J:663:ALA:HB1	1:J:1032:ALA:CB	2.32	0.59
1:R:636:ALA:HB2	1:R:683:LEU:HG	1.85	0.59
1:D:1374:GLU:HB3	1:D:1377:LEU:HD13	1.84	0.59
1:D:1386:MET:SD	1:D:1424:ARG:NH1	2.75	0.59
1:E:933:LEU:HB2	1:C:2320:ILE:HD12	1.84	0.59
1:C:939:GLN:OE1	1:B:2239:LEU:HD22	2.01	0.59
1:C:1099:GLN:HB2	1:B:2329:THR:HG22	1.83	0.59
1:F:976:ARG:NE	1:A:2254:GLU:OE2	2.30	0.59
1:B:706:VAL:HG12	1:B:716:LEU:HD12	1.84	0.59
1:A:943:ASN:OD1	1:A:944:ILE:N	2.35	0.59
1:D:947:SER:O	1:D:950:ALA:HB3	2.03	0.59
1:D:2289:GLU:OE1	1:D:2289:GLU:N	2.35	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:666:LEU:O	1:E:687:ARG:NH2	2.35	0.59
1:C:1138:PHE:CE2	1:C:1292:ALA:HB2	2.38	0.59
1:C:2016:GLN:HB2	1:C:2047:ARG:HG3	1.83	0.59
1:C:2135:LYS:O	1:C:2138:ARG:NH1	2.35	0.59
1:F:328:ASP:OD2	1:F:850:HIS:NE2	2.35	0.59
1:B:941:ILE:HD11	1:B:972:VAL:HB	1.85	0.59
1:A:2220:ARG:HH12	1:A:2223:LEU:HD12	1.67	0.59
1:G:1983:VAL:HG12	1:G:2039:PRO:HG2	1.85	0.59
1:Q:2021:ASP:OD1	1:Q:2022:SER:N	2.35	0.59
1:J:1294:LYS:O	1:J:1295:THR:OG1	2.12	0.59
1:R:972:VAL:HG22	1:R:976:ARG:HB3	1.82	0.59
2:S:1810:VAL:O	2:S:1835:ARG:N	2.36	0.59
1:D:197:ALA:CB	1:D:227:ILE:HD13	2.31	0.59
1:D:363:LEU:HD11	1:D:464:ILE:CD1	2.33	0.59
1:E:1808:SER:HA	1:E:1834:LEU:HD11	1.84	0.59
1:C:187:TYR:O	1:C:193:ILE:HD11	2.02	0.59
1:F:363:LEU:HD11	1:F:460:ALA:HB1	1.83	0.59
1:F:1613:TRP:HZ3	1:F:1622:LEU:HD11	1.68	0.59
1:A:291:VAL:HG21	1:A:297:GLY:CA	2.33	0.59
1:A:1481:VAL:CG2	1:A:1517:ILE:HG22	2.33	0.59
1:G:2129:ARG:O	1:G:2133:LEU:HD23	2.02	0.59
1:D:1378:ALA:HB1	1:D:1381:LEU:CD1	2.33	0.59
1:D:1808:SER:O	1:D:1812:ASN:ND2	2.36	0.59
1:E:2059:GLN:HE21	1:F:1878:ASN:HB2	1.67	0.59
1:F:921:GLU:OE1	1:F:924:GLN:NE2	2.35	0.59
1:F:1981:ILE:HD11	1:F:2220:ARG:HB2	1.84	0.59
1:B:668:ASN:HB3	1:B:686:THR:HG23	1.83	0.59
1:B:1069:LEU:HD21	1:B:1078:ALA:H	1.67	0.59
1:B:1923:ILE:HD11	1:B:2212:ARG:HB2	1.85	0.59
1:G:1808:SER:N	1:G:1834:LEU:HD11	2.17	0.59
1:J:143:GLU:OE2	1:J:474:LYS:NZ	2.32	0.59
1:J:663:ALA:HB1	1:J:1032:ALA:HB1	1.84	0.59
1:R:1305:ALA:HB2	1:R:1371:ARG:HH22	1.68	0.59
1:D:129:ALA:HB1	1:D:206:TRP:CH2	2.38	0.59
1:D:370:ALA:HB3	1:D:413:LYS:HG3	1.83	0.59
1:D:1680:ILE:HG21	1:D:1699:PHE:CD1	2.38	0.59
1:E:1807:SER:HB2	1:E:1834:LEU:HD21	1.84	0.59
1:F:2304:ILE:HD13	1:F:2307:LEU:HD12	1.83	0.59
1:G:2178:ILE:CD1	1:G:2181:GLN:HE21	2.16	0.59
1:Q:2275:GLU:O	1:Q:2279:THR:OG1	2.21	0.59
1:R:663:ALA:HB1	1:R:1032:ALA:CB	2.33	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1819:LEU:HD23	1:E:1819:LEU:H	1.68	0.59
1:C:1601:ILE:HD12	1:C:1602:PRO:N	2.18	0.59
1:F:2276:LYS:O	1:F:2277:GLN:NE2	2.36	0.59
1:B:1100:VAL:HA	1:B:1103:ILE:HG22	1.85	0.59
1:D:1167:GLN:N	1:D:1167:GLN:OE1	2.36	0.58
1:E:1534:ASN:ND2	1:E:1539:TYR:O	2.36	0.58
1:E:1588:PHE:O	1:E:1592:SER:OG	2.18	0.58
1:E:2221:ARG:NH1	1:E:2270:LEU:HD12	2.18	0.58
1:C:1075:ALA:O	1:C:1079:LEU:HD23	2.03	0.58
1:F:1836:GLN:OE1	1:F:2028:GLN:NE2	2.35	0.58
1:B:1710:GLY:HA2	1:B:1814:ILE:HG22	1.84	0.58
1:B:1751:LEU:O	1:B:1782:ILE:HG22	2.02	0.58
1:A:1924:GLU:O	1:A:2209:LYS:NZ	2.36	0.58
1:D:295:ASP:OD2	1:E:2258:THR:N	2.33	0.58
1:E:925:TYR:OH	1:E:929:ILE:HD13	2.03	0.58
1:C:2287:VAL:O	1:C:2291:ASN:ND2	2.37	0.58
1:B:1524:LYS:HD3	1:B:1526:ILE:HD11	1.84	0.58
1:A:2174:PHE:O	1:Q:1745:TYR:OH	2.20	0.58
1:G:1973:VAL:HG12	1:G:1986:VAL:HG12	1.85	0.58
1:J:1020:ASP:OD1	1:J:1021:MET:N	2.35	0.58
1:R:663:ALA:HB1	1:R:1032:ALA:HB1	1.85	0.58
1:D:1078:ALA:O	1:D:1081:ALA:HB3	2.03	0.58
1:D:1489:GLU:OE2	1:D:1493:ARG:NH2	2.37	0.58
1:D:1872:ILE:HG21	1:D:1884:THR:HG21	1.84	0.58
1:D:2093:TRP:NE1	1:C:1797:LEU:HD22	2.18	0.58
1:D:2251:TRP:CE3	1:D:2288:ILE:HG23	2.37	0.58
1:D:2275:GLU:O	1:D:2279:THR:OG1	2.13	0.58
1:E:1090:LEU:HD11	1:E:1096:ARG:NH1	2.19	0.58
1:E:1287:HIS:O	1:E:1325:ARG:N	2.32	0.58
1:C:1289:LEU:HD22	1:C:1327:LEU:CD1	2.33	0.58
1:C:933:LEU:HD22	1:B:2305:ARG:HD3	1.86	0.58
1:C:2258:THR:HG22	1:B:296:ASP:H	1.69	0.58
1:F:707:HIS:N	1:F:715:LEU:O	2.35	0.58
1:B:1239:PHE:CZ	1:B:1248:ILE:HG21	2.39	0.58
1:A:1470:CYS:HA	1:A:1509:LEU:HD12	1.85	0.58
1:A:1743:ASP:OD2	1:A:1746:LYS:NZ	2.35	0.58
1:J:187:TYR:O	1:J:193:ILE:HD11	2.03	0.58
1:J:636:ALA:HB2	1:J:683:LEU:HG	1.84	0.58
2:K:1792:VAL:HG11	2:K:1798:PHE:CD1	2.39	0.58
1:D:1473:ILE:HB	1:D:1510:GLN:O	2.02	0.58
1:C:1385:ARG:NH2	1:C:1510:GLN:HE21	2.01	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1670:GLU:HA	1:F:1913:LEU:HD21	1.84	0.58
1:F:2217:TRP:HB3	1:F:2267:ASN:HB3	1.84	0.58
1:B:2128:PHE:CZ	1:B:2133:LEU:HD11	2.39	0.58
1:A:1020:ASP:OD1	1:A:1021:MET:N	2.37	0.58
1:R:1069:LEU:HB2	1:R:1078:ALA:HB2	1.85	0.58
1:D:1838:THR:HG22	1:D:1881:THR:HA	1.86	0.58
1:E:920:LYS:O	1:E:923:ALA:HB3	2.03	0.58
1:C:707:HIS:N	1:C:715:LEU:O	2.37	0.58
1:C:1418:ASP:OD1	1:C:1419:TYR:N	2.32	0.58
1:F:675:ILE:HG21	1:F:820:LEU:HD11	1.85	0.58
1:B:1006:TYR:O	1:B:1010:VAL:HG23	2.02	0.58
1:A:310:ILE:HD13	1:A:334:PHE:HA	1.86	0.58
1:Q:2109:ALA:HB2	1:Q:2202:ILE:HG21	1.86	0.58
1:J:640:ALA:O	1:J:644:LEU:HD13	2.04	0.58
1:J:1436:GLU:N	1:J:1483:MET:SD	2.76	0.58
1:R:129:ALA:HB2	1:R:209:TRP:CZ3	2.39	0.58
1:R:413:LYS:NZ	1:R:493:GLU:OE2	2.37	0.58
1:D:194:LEU:HD11	1:D:225:ASN:HB2	1.86	0.58
1:D:1620:ALA:HB3	1:D:1916:LYS:HG3	1.86	0.58
1:F:122:LEU:HD23	1:F:205:VAL:HG22	1.85	0.58
1:F:636:ALA:HB1	1:F:685:VAL:CG2	2.34	0.58
1:F:1083:GLN:NE2	1:F:1445:GLU:OE2	2.37	0.58
1:F:1123:LEU:CD1	1:F:1152:VAL:HG21	2.29	0.58
1:F:1657:ILE:HD12	1:F:1695:GLU:HA	1.86	0.58
1:F:1962:GLU:CD	1:F:1972:VAL:HG13	2.23	0.58
1:A:945:LEU:CD1	1:A:968:ILE:HG21	2.32	0.58
1:A:1383:LEU:CD1	1:A:1391:LEU:HD21	2.34	0.58
1:E:370:ALA:HB3	1:E:413:LYS:HG3	1.85	0.58
1:E:1619:GLN:OE1	1:E:1977:ARG:NH1	2.37	0.58
1:E:1824:ALA:CB	1:E:1832:VAL:HG11	2.34	0.58
1:F:2080:VAL:HB	1:F:2107:MET:HG3	1.86	0.58
1:B:609:ASP:OD2	1:B:714:LEU:N	2.36	0.58
1:B:963:MET:HA	1:B:966:GLN:HG2	1.84	0.58
1:D:439:ASN:HD22	1:D:443:GLN:HG2	1.69	0.58
1:D:1369:ILE:HG23	1:D:1404:TYR:CE2	2.39	0.58
1:E:450:GLU:HG3	1:E:457:LEU:HD12	1.86	0.58
1:C:613:LEU:HD23	1:C:616:LEU:HD12	1.86	0.58
1:C:1038:ASN:OD1	1:C:1077:VAL:HG21	2.04	0.58
1:B:1020:ASP:OD1	1:B:1021:MET:N	2.37	0.58
1:A:426:LEU:N	1:A:434:TYR:O	2.34	0.58
1:A:1480:THR:O	1:A:1480:THR:OG1	2.20	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:921:GLU:O	1:R:925:TYR:N	2.35	0.58
1:E:965:THR:O	1:E:969:VAL:HG13	2.03	0.58
1:C:2082:ILE:HD12	1:C:2108:TYR:O	2.03	0.58
1:B:442:LEU:HD11	1:B:446:HIS:CG	2.38	0.58
1:B:2117:VAL:CG1	1:G:1722:ALA:HB3	2.34	0.58
1:B:2315:ALA:HB1	1:G:2330:GLN:HE22	1.68	0.58
1:D:449:THR:HB	1:D:457:LEU:HD11	1.87	0.57
1:D:2201:VAL:HG23	1:D:2202:ILE:HG23	1.85	0.57
1:C:1430:SER:O	1:C:1430:SER:OG	2.11	0.57
1:B:132:LYS:NZ	1:B:450:GLU:OE1	2.36	0.57
1:G:2331:ARG:O	1:G:2334:VAL:HG12	2.04	0.57
1:R:640:ALA:O	1:R:644:LEU:HD13	2.04	0.57
2:Y:1691:THR:HG21	2:Y:1736:VAL:HG12	1.83	0.57
1:D:1589:GLN:O	1:D:1593:LEU:HD13	2.04	0.57
1:D:1986:VAL:HG23	1:D:2040:LEU:HD12	1.86	0.57
1:E:2333:GLU:O	1:E:2336:ARG:HG2	2.04	0.57
1:Q:1655:ASN:ND2	1:Q:1659:MET:O	2.36	0.57
2:H:1651:SER:O	2:H:1686:HIS:N	2.37	0.57
2:M:1765:GLU:O	2:M:1807:ILE:N	2.37	0.57
2:Y:1751:ARG:NH2	2:Y:1844:LEU:O	2.37	0.57
1:D:1978:LEU:HD21	1:D:1983:VAL:HG11	1.86	0.57
1:E:1044:LEU:C	1:E:1048:LEU:HD22	2.24	0.57
1:E:1167:GLN:OE1	1:E:1167:GLN:N	2.37	0.57
1:F:1076:LYS:O	1:F:1080:ARG:N	2.37	0.57
1:B:190:VAL:HG11	1:B:221:LEU:HD12	1.86	0.57
1:A:920:LYS:O	1:A:923:ALA:HB3	2.04	0.57
1:R:865:ASN:O	1:R:1030:SER:OG	2.15	0.57
1:R:1298:ASP:O	1:R:1304:LEU:HD11	2.03	0.57
1:D:1803:ILE:CD1	1:D:1831:LEU:HD11	2.34	0.57
1:E:1095:LEU:HD22	1:E:1096:ARG:N	2.19	0.57
1:F:609:ASP:OD2	1:F:714:LEU:N	2.38	0.57
1:F:1489:GLU:O	1:F:1493:ARG:NE	2.26	0.57
1:F:1956:ASP:OD2	1:F:1980:GLY:N	2.37	0.57
1:A:1178:VAL:HG12	1:A:1236:MET:HB3	1.86	0.57
1:A:1480:THR:OG1	1:A:1518:ARG:NH1	2.38	0.57
1:R:1437:ALA:HB3	1:R:1481:VAL:CG2	2.35	0.57
2:K:1833:VAL:HG11	2:K:1850:LEU:HD22	1.86	0.57
2:W:1689:MET:O	2:W:1716:TYR:N	2.34	0.57
1:D:244:ILE:HD11	1:D:347:PHE:CB	2.34	0.57
1:D:1636:GLU:OE1	1:D:1636:GLU:N	2.36	0.57
1:E:1528:ILE:HD12	1:E:1530:LEU:HD13	1.87	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2195:ARG:NH2	1:F:1795:GLU:OE2	2.37	0.57
1:E:2319:ILE:O	1:E:2323:THR:N	2.37	0.57
1:C:361:GLN:NE2	1:C:421:GLY:O	2.37	0.57
1:C:2133:LEU:O	1:C:2136:THR:HG22	2.04	0.57
1:C:2221:ARG:HD2	1:C:2270:LEU:HD23	1.86	0.57
1:F:1971:VAL:CG2	1:F:1988:VAL:HG22	2.32	0.57
1:B:939:GLN:HG2	1:B:976:ARG:HE	1.68	0.57
1:A:780:ALA:HB3	1:A:791:LEU:HD12	1.84	0.57
1:A:1822:CYS:SG	1:A:1823:ARG:N	2.78	0.57
1:R:1454:MET:O	1:R:1458:GLU:N	2.38	0.57
1:D:982:HIS:O	1:D:986:VAL:HG22	2.03	0.57
1:D:1924:GLU:N	1:D:1952:SER:OG	2.36	0.57
1:E:661:LEU:O	1:E:1006:TYR:OH	2.23	0.57
1:E:857:LEU:CD2	1:E:885:LEU:HD11	2.32	0.57
1:E:1719:ASN:OD1	1:E:1720:SER:N	2.31	0.57
1:C:413:LYS:NZ	1:C:493:GLU:OE2	2.37	0.57
1:C:2130:ARG:O	1:C:2133:LEU:N	2.38	0.57
1:F:683:LEU:HD13	1:F:697:MET:HG2	1.86	0.57
1:F:1678:ILE:HG12	1:F:1706:ALA:HB2	1.87	0.57
1:F:2094:VAL:HG13	1:F:2095:VAL:HG23	1.86	0.57
1:A:941:ILE:HD13	1:A:968:ILE:HD11	1.84	0.57
1:G:2077:PRO:HD2	1:G:2223:LEU:HD23	1.86	0.57
1:Q:1830:TYR:CE2	1:Q:1848:LEU:HD22	2.40	0.57
1:J:1305:ALA:HB2	1:J:1371:ARG:HH22	1.68	0.57
2:O:1707:ILE:HD11	2:O:1749:PRO:HG3	1.86	0.57
1:D:884:ARG:O	1:D:888:THR:HG23	2.05	0.57
1:D:1243:GLU:O	1:D:1247:ARG:NE	2.36	0.57
1:D:1373:LEU:HD23	1:D:1402:HIS:CE1	2.39	0.57
1:E:571:ILE:O	1:E:575:VAL:HG23	2.03	0.57
1:E:910:ILE:HG12	1:E:915:GLU:HB2	1.85	0.57
1:E:1421:PHE:CE2	1:E:1457:LEU:HD21	2.39	0.57
1:C:1138:PHE:HE2	1:C:1292:ALA:HB2	1.68	0.57
1:C:1636:GLU:OE1	1:C:1636:GLU:N	2.37	0.57
1:C:2217:TRP:HB3	1:C:2267:ASN:HB3	1.87	0.57
1:B:612:TRP:CZ2	1:B:616:LEU:HD11	2.39	0.57
1:B:943:ASN:OD1	1:B:944:ILE:HG23	2.04	0.57
1:B:1294:LYS:O	1:B:1295:THR:OG1	2.13	0.57
1:A:143:GLU:O	1:A:146:ARG:NH1	2.38	0.57
1:J:1248:ILE:HG22	1:J:1248:ILE:O	2.05	0.57
1:R:1052:ASP:O	1:R:1054:THR:N	2.37	0.57
1:D:1680:ILE:HD11	1:D:1702:ALA:HB3	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1683:ASP:OD2	1:D:1685:THR:OG1	2.16	0.57
1:E:420:ALA:HB3	1:E:461:GLN:HE21	1.70	0.57
1:E:644:LEU:O	1:E:647:SER:OG	2.20	0.57
1:E:662:PRO:HG2	1:E:665:THR:HG23	1.87	0.57
1:E:923:ALA:O	1:E:926:ALA:HB3	2.04	0.57
1:E:2113:SER:O	1:E:2114:ARG:NH1	2.36	0.57
1:B:1305:ALA:HB2	1:B:1371:ARG:HH22	1.70	0.57
1:A:197:ALA:HA	1:A:202:VAL:HG22	1.85	0.57
1:A:1006:TYR:O	1:A:1010:VAL:HG23	2.05	0.57
1:A:1056:THR:HG23	1:A:1059:LEU:CB	2.35	0.57
1:A:1120:LEU:HD22	1:A:1155:ARG:HE	1.69	0.57
1:Q:1968:ALA:HB2	1:Q:2021:ASP:HB2	1.86	0.57
1:Q:2128:PHE:HE2	1:Q:2187:ALA:HB2	1.70	0.57
1:J:1052:ASP:O	1:J:1054:THR:N	2.37	0.57
1:D:197:ALA:HB3	1:D:227:ILE:HD13	1.87	0.57
1:D:1588:PHE:O	1:D:1592:SER:CB	2.52	0.57
1:D:1619:GLN:HE22	1:D:1959:SER:HA	1.70	0.57
1:D:1872:ILE:CG2	1:D:1884:THR:HG21	2.35	0.57
1:D:1956:ASP:CG	1:D:1978:LEU:HA	2.25	0.57
1:D:2042:VAL:HB	1:D:2080:VAL:HG22	1.86	0.57
1:E:964:ASN:O	1:E:968:ILE:HG22	2.04	0.57
1:E:1090:LEU:HD21	1:E:1096:ARG:NH1	2.20	0.57
1:E:1605:PHE:O	1:E:1608:SER:OG	2.21	0.57
1:F:1138:PHE:O	1:F:1238:SER:OG	2.22	0.57
1:F:1970:THR:HA	1:F:1993:VAL:HG21	1.86	0.57
1:Q:2129:ARG:O	1:Q:2133:LEU:HD23	2.05	0.57
1:D:644:LEU:O	1:D:647:SER:OG	2.18	0.57
1:D:2059:GLN:HE21	1:C:1878:ASN:HB2	1.70	0.57
1:D:2311:ASN:O	1:D:2314:VAL:HG22	2.05	0.57
1:E:2093:TRP:NE1	1:F:1797:LEU:HD13	2.20	0.57
1:B:1056:THR:HG23	1:B:1059:LEU:HB3	1.87	0.57
1:B:1829:ALA:HB3	1:B:1848:LEU:HD23	1.87	0.57
1:A:651:PHE:CG	1:A:1025:LEU:HD22	2.39	0.57
1:G:1833:ARG:HD3	1:G:1880:VAL:HG13	1.87	0.57
1:R:1239:PHE:CZ	1:R:1248:ILE:HG21	2.39	0.57
1:D:939:GLN:NE2	1:D:940:GLN:HE22	2.03	0.56
1:B:1815:ILE:HD11	1:B:2036:GLU:OE2	2.05	0.56
1:B:2081:TYR:HA	1:B:2108:TYR:O	2.05	0.56
1:B:2263:VAL:HG12	1:B:2270:LEU:HD11	1.87	0.56
1:A:158:THR:HG21	1:A:186:ASN:HD22	1.68	0.56
1:G:2333:GLU:OE1	1:G:2336:ARG:NH2	2.37	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:O:1735:GLU:O	2:O:1750:LYS:NZ	2.37	0.56
1:D:1146:ARG:NH1	1:D:1238:SER:O	2.37	0.56
1:C:2315:ALA:O	1:C:2318:SER:OG	2.07	0.56
1:F:2230:LYS:O	1:F:2233:HIS:ND1	2.38	0.56
1:B:1090:LEU:HD22	1:B:1091:PRO:HD2	1.86	0.56
1:B:1418:ASP:OD2	1:B:1579:THR:OG1	2.18	0.56
1:B:1473:ILE:HD11	1:B:1508:VAL:HG11	1.87	0.56
1:Q:1833:ARG:HD3	1:Q:1880:VAL:HG13	1.86	0.56
1:D:966:GLN:HA	1:D:969:VAL:HG22	1.86	0.56
1:D:1688:ILE:O	1:D:1823:ARG:NH2	2.38	0.56
1:D:2119:GLU:OE1	1:D:2121:GLU:N	2.37	0.56
1:D:2304:ILE:HD12	1:C:2304:ILE:HD12	1.87	0.56
1:E:1429:HIS:O	1:E:1441:TYR:OH	2.09	0.56
1:E:1497:MET:CE	1:E:1540:LEU:HD22	2.35	0.56
1:E:2307:LEU:HD22	1:F:2304:ILE:HD11	1.86	0.56
1:C:442:LEU:HD11	1:C:446:HIS:CG	2.41	0.56
1:C:1245:PHE:O	1:C:1248:ILE:N	2.38	0.56
1:F:1534:ASN:ND2	1:F:1539:TYR:O	2.37	0.56
1:B:780:ALA:HB3	1:B:791:LEU:HD12	1.87	0.56
1:B:1013:LEU:CD1	1:B:1024:VAL:HG13	2.35	0.56
1:B:1132:ASP:O	1:B:1333:GLN:NE2	2.38	0.56
1:B:1171:LEU:HD12	1:B:1177:VAL:HG21	1.87	0.56
1:A:454:ASP:OD2	1:A:502:ARG:NH2	2.38	0.56
1:A:1038:ASN:HD22	1:A:1073:THR:HG22	1.70	0.56
1:A:1585:SER:O	1:A:1589:GLN:NE2	2.38	0.56
1:A:1886:CYS:N	1:A:1890:GLU:OE2	2.34	0.56
1:A:2108:TYR:C	1:A:2202:ILE:HD11	2.26	0.56
1:Q:1735:HIS:N	1:Q:1752:TYR:O	2.38	0.56
1:Q:2077:PRO:HD2	1:Q:2223:LEU:HD23	1.86	0.56
1:Q:2087:GLU:O	1:Q:2088:LEU:HD22	2.05	0.56
1:J:1239:PHE:CZ	1:J:1248:ILE:HG21	2.41	0.56
1:R:187:TYR:O	1:R:193:ILE:HD11	2.05	0.56
1:R:332:ASN:OD1	1:R:909:ARG:NH2	2.37	0.56
2:M:1668:PHE:CG	2:M:1719:VAL:HG13	2.40	0.56
1:D:1515:ILE:HG13	1:D:1528:ILE:HB	1.88	0.56
1:E:2302:LYS:O	1:E:2306:SER:OG	2.18	0.56
1:F:2241:ASP:OD1	1:F:2242:GLY:N	2.39	0.56
1:B:1722:ALA:HB1	1:B:1796:ASN:HB3	1.86	0.56
1:Q:1809:LEU:O	1:Q:1813:GLU:N	2.39	0.56
1:Q:2178:ILE:CD1	1:Q:2181:GLN:HE21	2.17	0.56
1:J:1534:ASN:ND2	1:J:1539:TYR:O	2.38	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:572:SER:O	1:D:576:VAL:HG12	2.06	0.56
1:D:1684:ILE:O	1:D:1688:ILE:C	2.43	0.56
1:D:2239:LEU:HB2	1:D:2244:ILE:HD11	1.88	0.56
1:E:1031:HIS:O	1:E:1034:VAL:HG23	2.04	0.56
1:E:1860:ARG:NH2	1:E:2002:ALA:O	2.39	0.56
1:E:1912:LEU:HD13	1:E:1981:ILE:CG1	2.35	0.56
1:E:1931:PRO:HB2	1:E:1991:ARG:CG	2.36	0.56
1:A:249:VAL:HG11	1:A:415:VAL:CG2	2.36	0.56
1:A:1084:VAL:O	1:A:1088:SER:OG	2.18	0.56
1:A:2260:LYS:HE3	1:A:2263:VAL:HG21	1.87	0.56
1:D:1627:LEU:O	1:D:1630:ASP:N	2.37	0.56
1:D:1924:GLU:O	1:D:2209:LYS:NZ	2.39	0.56
1:E:2275:GLU:O	1:E:2279:THR:N	2.34	0.56
1:C:2276:LYS:O	1:C:2277:GLN:NE2	2.39	0.56
1:F:899:LEU:HD13	1:F:922:MET:HB2	1.86	0.56
1:F:1839:ILE:HD12	1:F:1895:VAL:CG2	2.35	0.56
1:A:328:ASP:OD2	1:A:850:HIS:NE2	2.35	0.56
1:A:1069:LEU:HD13	1:A:1074:ASN:O	2.06	0.56
1:A:1444:ASN:OD1	1:A:1445:GLU:N	2.39	0.56
1:Q:2132:ASP:O	1:Q:2136:THR:HG23	2.06	0.56
2:K:1751:ARG:NH2	2:K:1844:LEU:O	2.39	0.56
2:O:1822:HIS:ND1	2:O:1856:PRO:O	2.35	0.56
1:D:632:VAL:HG21	1:D:681:TYR:CD2	2.41	0.56
1:C:258:LEU:CD2	1:C:352:ALA:HB2	2.36	0.56
1:C:2030:ILE:CG2	1:C:2040:LEU:HD21	2.32	0.56
1:F:361:GLN:NE2	1:F:421:GLY:O	2.39	0.56
1:B:1636:GLU:N	1:B:1636:GLU:OE1	2.39	0.56
1:B:1822:CYS:SG	1:B:1823:ARG:N	2.78	0.56
1:B:2139:ARG:NH2	1:G:1731:ARG:O	2.38	0.56
1:J:187:TYR:O	1:J:212:ALA:HB2	2.05	0.56
1:R:998:GLU:OE1	1:R:1074:ASN:ND2	2.33	0.56
1:E:979:ILE:HD12	1:E:980:ARG:HB2	1.88	0.56
1:C:2319:ILE:HA	1:C:2322:MET:HB2	1.87	0.56
1:F:1843:ASN:O	1:F:1843:ASN:ND2	2.31	0.56
1:B:1267:PRO:O	2:K:1699:ARG:NH2	2.38	0.56
1:A:666:LEU:HD23	1:A:1029:PHE:CZ	2.40	0.56
1:A:1079:LEU:HD21	1:A:1447:GLU:HB2	1.87	0.56
1:A:1636:GLU:OE1	1:A:1636:GLU:N	2.39	0.56
1:G:1830:TYR:CE2	1:G:1848:LEU:HD22	2.41	0.56
2:Y:1654:VAL:HG11	2:Y:1665:VAL:HG21	1.87	0.56
1:D:1091:PRO:HB2	1:D:1095:LEU:HD21	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1588:PHE:O	1:E:1592:SER:CB	2.54	0.56
1:E:2239:LEU:CB	1:E:2244:ILE:HD11	2.36	0.56
1:C:1289:LEU:HD22	1:C:1327:LEU:HD13	1.88	0.56
1:C:1935:ARG:NH2	1:C:1962:GLU:OE1	2.37	0.56
1:Q:1924:GLU:O	1:Q:2209:LYS:NZ	2.39	0.56
1:J:510:ILE:O	1:J:558:GLY:N	2.36	0.56
2:K:1699:ARG:NH1	2:K:1840:ASP:OD1	2.37	0.56
2:U:1691:THR:HG21	2:U:1736:VAL:HG12	1.88	0.56
1:C:1239:PHE:HZ	1:C:1248:ILE:HG21	1.70	0.56
1:F:1768:HIS:ND1	1:F:1784:ASP:OD2	2.38	0.56
1:B:963:MET:HA	1:B:966:GLN:HE21	1.71	0.56
1:B:1052:ASP:HA	1:B:1055:LEU:HD21	1.87	0.56
1:G:2087:GLU:O	1:G:2088:LEU:HD22	2.06	0.56
1:J:1298:ASP:O	1:J:1304:LEU:HD11	2.06	0.56
1:R:1104:PHE:HE2	1:R:1145:VAL:HG13	1.71	0.56
1:D:454:ASP:OD2	1:D:502:ARG:NE	2.40	0.55
1:D:477:ARG:NH2	1:D:483:SER:O	2.39	0.55
1:F:1250:ASP:HA	1:F:1253:MET:HG2	1.88	0.55
1:F:1557:MET:SD	1:F:1559:GLN:NE2	2.80	0.55
1:B:836:LEU:HD13	1:B:838:ARG:HD2	1.87	0.55
1:B:910:ILE:HG12	1:B:915:GLU:HB2	1.88	0.55
1:A:129:ALA:HB2	1:A:209:TRP:CH2	2.42	0.55
1:A:1912:LEU:HD22	1:A:1981:ILE:HG23	1.88	0.55
1:G:2241:ASP:OD1	1:G:2242:GLY:N	2.39	0.55
1:Q:1964:MET:O	1:Q:2025:LYS:NZ	2.29	0.55
2:M:1691:THR:HG22	2:M:1697:CYS:HB3	1.87	0.55
2:S:1676:LEU:N	2:U:1678:ASN:OD1	2.37	0.55
1:D:506:ILE:HG12	1:D:570:ALA:HB1	1.88	0.55
1:D:705:ASP:OD1	1:D:705:ASP:N	2.39	0.55
1:D:767:VAL:HG12	1:D:768:GLU:H	1.71	0.55
1:D:1245:PHE:O	1:D:1248:ILE:N	2.39	0.55
1:E:1675:ARG:NH1	1:E:1902:MET:O	2.39	0.55
1:E:1680:ILE:HD11	1:E:1702:ALA:HB3	1.89	0.55
1:C:1534:ASN:ND2	1:C:1539:TYR:O	2.38	0.55
1:F:1973:VAL:HG12	1:F:1986:VAL:HG12	1.89	0.55
1:A:959:GLU:HA	1:A:962:PHE:HB3	1.88	0.55
1:G:1736:VAL:HG22	1:G:1751:LEU:CD2	2.35	0.55
1:Q:2111:ARG:HG2	1:Q:2205:ILE:HG21	1.87	0.55
1:J:356:ARG:N	1:J:427:TYR:O	2.39	0.55
1:R:767:VAL:HG12	1:R:768:GLU:H	1.71	0.55
2:M:1676:LEU:N	2:O:1678:ASN:OD1	2.34	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:W:1694:GLU:OE1	2:W:1744:ARG:NH2	2.38	0.55
1:F:2132:ASP:O	1:F:2136:THR:HG23	2.07	0.55
1:B:638:HIS:O	1:B:642:VAL:HG23	2.07	0.55
1:B:1408:ALA:O	1:B:1416:VAL:HG12	2.06	0.55
1:A:958:ARG:O	1:A:962:PHE:N	2.36	0.55
1:R:129:ALA:HB1	1:R:206:TRP:HH2	1.71	0.55
2:K:1707:ILE:HG23	2:K:1752:ALA:CB	2.35	0.55
1:D:1824:ALA:HB3	1:D:1825:ILE:HD13	1.89	0.55
1:E:1622:LEU:HD23	1:E:1622:LEU:H	1.71	0.55
1:E:1968:ALA:HB3	1:E:2025:LYS:CE	2.37	0.55
1:C:640:ALA:O	1:C:644:LEU:HD13	2.06	0.55
1:C:736:ILE:HD12	1:C:745:PHE:CE2	2.42	0.55
1:C:1768:HIS:ND1	1:C:1784:ASP:OD2	2.39	0.55
1:F:258:LEU:CD2	1:F:352:ALA:HB2	2.36	0.55
1:B:651:PHE:CD1	1:B:1025:LEU:HD22	2.41	0.55
1:B:705:ASP:N	1:B:705:ASP:OD1	2.40	0.55
1:B:2232:ILE:HG13	1:B:2292:ILE:HG22	1.88	0.55
2:W:1751:ARG:NH2	2:W:1844:LEU:O	2.39	0.55
1:D:441:ARG:NH1	1:D:442:LEU:O	2.36	0.55
1:D:1319:LEU:HD11	1:D:1361:ARG:O	2.06	0.55
1:D:1576:PRO:O	1:D:1578:VAL:HG23	2.07	0.55
1:E:705:ASP:N	1:E:705:ASP:OD1	2.40	0.55
1:E:994:TYR:OH	1:E:1074:ASN:OD1	2.23	0.55
1:C:1099:GLN:O	1:C:1103:ILE:HG22	2.06	0.55
1:C:1230:CYS:O	1:C:1232:ARG:NH1	2.39	0.55
1:B:668:ASN:CB	1:B:686:THR:HG23	2.36	0.55
1:B:1243:GLU:OE2	1:B:1247:ARG:NH1	2.39	0.55
1:A:660:VAL:HG23	1:A:1010:VAL:HG11	1.88	0.55
1:J:129:ALA:HB1	1:J:206:TRP:HH2	1.72	0.55
2:O:1736:VAL:HG23	2:O:1749:PRO:HG2	1.88	0.55
2:U:1833:VAL:HG11	2:U:1850:LEU:HD22	1.88	0.55
1:D:1568:LEU:HD21	1:D:1571:MET:HG2	1.88	0.55
1:D:2055:ASP:OD1	1:D:2056:MET:N	2.40	0.55
1:D:2240:THR:O	1:D:2244:ILE:HD12	2.07	0.55
1:C:356:ARG:NH2	1:C:377:ASP:OD2	2.38	0.55
1:C:363:LEU:HD11	1:C:460:ALA:HB1	1.89	0.55
1:F:356:ARG:NH2	1:F:377:ASP:OD2	2.39	0.55
1:B:2108:TYR:C	1:B:2202:ILE:HD11	2.27	0.55
1:A:994:TYR:OH	1:A:1074:ASN:OD1	2.24	0.55
1:G:1964:MET:O	1:G:2025:LYS:NZ	2.25	0.55
1:J:1454:MET:O	1:J:1458:GLU:N	2.38	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:1511:ALA:HB3	1:J:1532:LEU:HD22	1.89	0.55
1:R:1317:ALA:HB1	2:U:1726:ARG:HB2	1.87	0.55
1:D:1031:HIS:O	1:D:1034:VAL:HG23	2.06	0.55
1:D:1784:ASP:OD2	1:D:1786:ILE:HD13	2.06	0.55
1:D:1931:PRO:HB2	1:D:1991:ARG:HG2	1.89	0.55
1:D:2113:SER:O	1:D:2114:ARG:NH1	2.37	0.55
1:E:2101:ASN:ND2	1:E:2103:ARG:HB3	2.22	0.55
1:E:2201:VAL:HG12	1:F:1798:ARG:HD3	1.89	0.55
1:F:442:LEU:HD11	1:F:446:HIS:CG	2.42	0.55
1:F:990:LEU:HD12	1:F:991:LEU:N	2.22	0.55
1:F:1238:SER:HA	1:F:1292:ALA:HB3	1.87	0.55
1:B:612:TRP:CE2	1:B:616:LEU:HD11	2.42	0.55
1:B:2329:THR:O	1:B:2332:ALA:HB3	2.06	0.55
1:A:140:TRP:HB2	1:A:456:ASN:HD22	1.72	0.55
1:A:773:VAL:HG22	1:A:797:GLY:O	2.06	0.55
1:A:889:LEU:HD11	1:A:982:HIS:HB2	1.89	0.55
1:A:900:GLN:O	1:A:904:THR:HG23	2.07	0.55
1:A:1443:GLN:HA	1:A:1495:MET:HE2	1.89	0.55
2:H:1660:GLU:O	2:H:1664:LEU:N	2.38	0.55
2:K:1666:TYR:O	2:K:1670:ARG:N	2.37	0.55
1:D:836:LEU:HD22	1:D:838:ARG:CZ	2.36	0.55
1:D:2034:ASN:ND2	1:D:2074:CYS:SG	2.80	0.55
1:E:358:LEU:HD22	1:E:393:ALA:HB2	1.89	0.55
1:E:1245:PHE:O	1:E:1248:ILE:N	2.39	0.55
1:C:455:VAL:HA	1:C:475:ASP:HB3	1.88	0.55
1:C:615:ARG:HH12	1:C:715:LEU:HA	1.70	0.55
1:C:1938:LEU:O	1:C:1954:PHE:N	2.40	0.55
1:B:135:ARG:O	1:B:139:ARG:N	2.33	0.55
1:B:1299:ILE:O	1:B:1301:ASP:N	2.40	0.55
1:B:2139:ARG:NH1	1:G:1734:PHE:O	2.39	0.55
1:A:947:SER:O	1:A:950:ALA:HB3	2.07	0.55
1:A:1751:LEU:O	1:A:1782:ILE:HG22	2.07	0.55
2:M:1707:ILE:HG23	2:M:1752:ALA:HB2	1.88	0.55
1:D:1616:MET:O	1:D:1620:ALA:HA	2.07	0.55
1:D:1902:MET:SD	1:D:1902:MET:N	2.80	0.55
1:E:901:ASP:O	1:E:904:THR:OG1	2.24	0.55
1:C:654:SER:O	1:C:659:GLN:N	2.40	0.55
1:F:1055:LEU:HD11	1:F:1059:LEU:HD22	1.89	0.55
1:A:1014:ARG:O	1:A:1018:LYS:CA	2.51	0.55
1:A:1082:ARG:HH21	1:A:1085:LEU:HD22	1.72	0.55
1:A:1682:ASN:ND2	1:A:1718:ALA:O	2.38	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:2079:LEU:HD13	1:Q:2215:PHE:HD1	1.71	0.55
1:J:767:VAL:HG12	1:J:768:GLU:H	1.71	0.55
1:R:1534:ASN:ND2	1:R:1539:TYR:O	2.40	0.55
1:D:1797:LEU:HD21	1:C:2094:VAL:HA	1.89	0.55
1:E:2173:GLU:HA	1:E:2176:ILE:HD12	1.89	0.55
1:C:683:LEU:HD13	1:C:697:MET:HG2	1.89	0.55
1:C:899:LEU:HD13	1:C:922:MET:HB2	1.89	0.55
1:F:654:SER:O	1:F:659:GLN:N	2.39	0.55
1:B:773:VAL:HG22	1:B:797:GLY:O	2.07	0.55
1:A:1810:ALA:O	1:A:1814:ILE:N	2.36	0.55
1:A:2201:VAL:HG11	1:Q:1794:PRO:HB2	1.88	0.55
1:Q:1671:TYR:OH	1:Q:1904:LYS:N	2.40	0.55
1:J:898:GLU:OE2	1:J:974:ARG:NH1	2.39	0.55
1:J:1083:GLN:HG2	1:J:1444:ASN:HD21	1.71	0.55
1:D:923:ALA:O	1:D:926:ALA:HB3	2.07	0.54
1:C:990:LEU:HD12	1:C:991:LEU:N	2.22	0.54
1:F:640:ALA:O	1:F:644:LEU:HD13	2.05	0.54
1:F:980:ARG:HA	1:F:983:MET:HG3	1.89	0.54
1:F:2087:GLU:O	1:F:2088:LEU:HD22	2.07	0.54
1:F:2286:SER:OG	1:F:2287:VAL:N	2.40	0.54
1:R:1457:LEU:HD22	1:R:1506:LEU:HG	1.89	0.54
2:U:1751:ARG:NH2	2:U:1844:LEU:O	2.39	0.54
1:D:630:LEU:HD21	1:D:738:ILE:HG21	1.88	0.54
1:D:804:ARG:NH2	1:D:807:ALA:HB2	2.22	0.54
1:D:853:PHE:CZ	1:D:889:LEU:HB3	2.42	0.54
1:D:1956:ASP:OD1	1:D:1978:LEU:HA	2.06	0.54
1:D:1968:ALA:HB3	1:D:2025:LYS:HZ3	1.71	0.54
1:D:2082:ILE:HD11	1:D:2086:ALA:HB1	1.88	0.54
1:C:2224:LEU:HD13	1:C:2274:LEU:CB	2.37	0.54
1:F:455:VAL:HA	1:F:475:ASP:HB3	1.89	0.54
1:B:203:GLN:O	1:B:228:ALA:HB3	2.07	0.54
1:B:767:VAL:HG12	1:B:768:GLU:H	1.72	0.54
1:A:194:LEU:HD11	1:A:225:ASN:OD1	2.06	0.54
1:A:363:LEU:CD1	1:A:460:ALA:HB1	2.33	0.54
1:A:1245:PHE:O	1:A:1248:ILE:N	2.41	0.54
1:R:1083:GLN:HG2	1:R:1444:ASN:HD21	1.71	0.54
1:R:1511:ALA:HB3	1:R:1532:LEU:HD22	1.88	0.54
2:K:1704:PHE:HB3	2:K:1842:VAL:HG11	1.89	0.54
1:D:937:PRO:CB	1:D:940:GLN:HE21	2.21	0.54
1:D:1748:TYR:CD1	1:C:2182:VAL:HG22	2.41	0.54
1:E:1795:GLU:OE1	1:F:2199:LYS:NZ	2.36	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:477:ARG:NE	1:C:483:SER:O	2.40	0.54
1:F:1138:PHE:HE2	1:F:1292:ALA:HB1	1.71	0.54
1:F:2138:ARG:NH1	1:F:2148:ALA:HB3	2.22	0.54
1:F:2224:LEU:HD13	1:F:2274:LEU:CB	2.37	0.54
1:J:252:THR:O	1:J:266:ARG:NH2	2.40	0.54
2:K:1822:HIS:ND1	2:K:1856:PRO:O	2.34	0.54
1:D:332:ASN:OD1	1:D:909:ARG:NH2	2.40	0.54
1:D:1682:ASN:OD1	1:D:1683:ASP:N	2.40	0.54
1:E:958:ARG:O	1:E:962:PHE:N	2.38	0.54
1:B:2044:ALA:HB1	1:B:2088:LEU:HD13	1.89	0.54
1:A:1509:LEU:HD22	1:A:1535:GLU:O	2.07	0.54
1:A:2141:ASP:OD1	1:A:2179:TYR:OH	2.22	0.54
1:R:1248:ILE:HG22	1:R:1248:ILE:O	2.06	0.54
2:M:1775:MET:SD	2:M:1780:LEU:HD13	2.47	0.54
1:D:1368:ARG:HG3	1:D:1393:ALA:HB3	1.89	0.54
1:D:1913:LEU:HD12	1:D:1913:LEU:N	2.22	0.54
1:D:2114:ARG:NE	1:D:2192:THR:HG22	2.23	0.54
1:E:1121:GLN:O	1:E:1125:LEU:HD23	2.08	0.54
1:E:2239:LEU:HB2	1:E:2244:ILE:HD11	1.89	0.54
1:C:980:ARG:HA	1:C:983:MET:HG3	1.90	0.54
1:C:1584:GLN:OE1	1:C:1584:GLN:N	2.40	0.54
1:C:2263:VAL:HG13	1:C:2269:ASP:HB2	1.88	0.54
1:F:1230:CYS:O	1:F:1232:ARG:NH1	2.40	0.54
1:F:1468:THR:OG1	1:F:1507:ARG:NH2	2.41	0.54
1:F:1774:ASP:O	1:F:1779:ARG:NH1	2.37	0.54
1:F:1938:LEU:O	1:F:1954:PHE:N	2.41	0.54
1:B:279:LEU:HB2	1:B:415:VAL:HG13	1.90	0.54
1:A:767:VAL:HG12	1:A:768:GLU:H	1.72	0.54
1:A:969:VAL:HA	1:A:972:VAL:HG12	1.90	0.54
1:G:1924:GLU:O	1:G:2209:LYS:NZ	2.41	0.54
1:J:281:VAL:HG12	1:J:286:TYR:HB2	1.90	0.54
1:J:463:GLN:OE1	1:J:473:ILE:HG23	2.08	0.54
1:R:991:LEU:HD12	1:R:992:ARG:HE	1.72	0.54
1:D:1919:ILE:HG21	1:D:2216:TYR:CG	2.43	0.54
1:E:265:LEU:HD21	1:E:288:LYS:CB	2.37	0.54
1:E:377:ASP:O	1:E:390:GLU:N	2.34	0.54
1:E:2132:ASP:OD1	1:F:1731:ARG:NH2	2.41	0.54
1:B:869:LEU:HD12	1:B:1036:LYS:HB3	1.90	0.54
1:B:1055:LEU:HB3	1:B:1056:THR:HG22	1.90	0.54
1:B:1680:ILE:HG21	1:B:1699:PHE:HD1	1.73	0.54
1:J:1046:ASP:OD1	1:J:1080:ARG:NH2	2.41	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:660:VAL:CG2	1:R:1010:VAL:HG11	2.38	0.54
1:E:244:ILE:HD11	1:E:347:PHE:CB	2.36	0.54
1:E:1056:THR:HG23	1:E:1059:LEU:HB3	1.90	0.54
1:E:1457:LEU:O	1:E:1457:LEU:HD23	2.07	0.54
1:F:767:VAL:HG12	1:F:768:GLU:H	1.72	0.54
1:B:332:ASN:CG	1:B:906:VAL:HG13	2.28	0.54
1:B:782:ILE:HG23	1:B:791:LEU:HD11	1.90	0.54
1:A:2264:TRP:HA	1:A:2270:LEU:HD11	1.89	0.54
2:K:1707:ILE:HG23	2:K:1752:ALA:HB2	1.88	0.54
2:M:1792:VAL:HG11	2:M:1798:PHE:CD1	2.42	0.54
1:D:240:LEU:HD21	1:D:249:VAL:HG11	1.89	0.54
1:D:1549:THR:HA	1:D:1556:ILE:HD13	1.89	0.54
1:D:2251:TRP:HE3	1:D:2288:ILE:HD12	1.72	0.54
1:C:1601:ILE:HD11	1:C:1662:TRP:CZ3	2.43	0.54
1:A:651:PHE:CD1	1:A:1025:LEU:HD13	2.43	0.54
2:U:1832:VAL:HG12	2:U:1855:ILE:HD12	1.89	0.54
1:E:1160:ALA:HB2	1:E:1380:GLN:HE21	1.73	0.54
1:C:974:ARG:O	1:C:982:HIS:ND1	2.41	0.54
1:F:187:TYR:O	1:F:193:ILE:HD11	2.08	0.54
1:F:1052:ASP:O	1:F:1054:THR:N	2.40	0.54
1:F:1931:PRO:HG2	1:F:1991:ARG:HB3	1.90	0.54
1:G:2039:PRO:HG3	1:G:2223:LEU:HD21	1.89	0.54
1:J:129:ALA:HB2	1:J:209:TRP:CH2	2.43	0.54
1:J:1496:VAL:HG11	1:J:1540:LEU:HD11	1.90	0.54
2:W:1704:PHE:CE1	2:W:1843:ALA:HB2	2.42	0.54
1:D:896:LEU:HD13	1:D:925:TYR:CD2	2.43	0.54
1:D:1099:GLN:HE21	1:D:1103:ILE:HD11	1.73	0.54
1:D:1683:ASP:OD2	1:D:1686:TYR:N	2.41	0.54
1:E:2022:SER:O	1:E:2026:THR:OG1	2.07	0.54
1:E:2329:THR:O	1:E:2332:ALA:HB3	2.08	0.54
1:C:1052:ASP:O	1:C:1054:THR:N	2.40	0.54
1:C:1083:GLN:HG2	1:C:1444:ASN:HD21	1.73	0.54
1:C:1263:SEP:OG	2:W:1670:ARG:NH2	2.41	0.54
1:C:1861:GLU:OE2	1:C:1864:THR:HG22	2.08	0.54
1:F:1086:ILE:O	1:F:1089:HIS:N	2.40	0.54
1:B:1329:PHE:HB2	1:B:1356:PHE:HB2	1.90	0.54
1:A:335:ARG:CB	1:A:963:MET:HG3	2.38	0.54
1:Q:2331:ARG:O	1:Q:2334:VAL:HG12	2.07	0.54
1:R:705:ASP:N	1:R:705:ASP:OD1	2.41	0.54
2:M:1715:SER:N	2:M:1734:PHE:O	2.40	0.54
1:D:925:TYR:OH	1:D:929:ILE:HD13	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2178:ILE:O	1:D:2182:VAL:HG23	2.06	0.53
1:E:394:THR:OG1	1:E:606:ASN:ND2	2.41	0.53
1:E:767:VAL:HG12	1:E:768:GLU:H	1.73	0.53
1:E:1090:LEU:HD11	1:E:1096:ARG:HH11	1.73	0.53
1:C:1121:GLN:O	1:C:1125:LEU:N	2.41	0.53
1:C:1705:LEU:O	1:C:1708:ALA:HB3	2.08	0.53
1:C:2087:GLU:C	1:C:2088:LEU:HD12	2.28	0.53
1:F:258:LEU:HD11	1:F:426:LEU:HD23	1.90	0.53
1:F:1121:GLN:O	1:F:1125:LEU:N	2.41	0.53
1:B:158:THR:HG21	1:B:186:ASN:HD22	1.74	0.53
1:B:1138:PHE:CE2	1:B:1292:ALA:HB1	2.43	0.53
1:A:1056:THR:HG23	1:A:1059:LEU:HB3	1.90	0.53
1:A:1467:ARG:NH2	1:A:1468:THR:O	2.40	0.53
1:A:1650:ARG:NH2	1:A:1654:GLY:O	2.41	0.53
1:A:1671:TYR:OH	1:A:1904:LYS:N	2.37	0.53
1:A:2013:GLN:NE2	1:A:2021:ASP:OD2	2.41	0.53
1:Q:1986:VAL:HG22	1:Q:2042:VAL:HG22	1.89	0.53
1:D:978:GLY:O	1:D:982:HIS:ND1	2.41	0.53
1:D:1499:TYR:HD2	1:D:1503:LEU:HD22	1.71	0.53
1:D:2117:VAL:HG23	1:C:1797:LEU:CD2	2.37	0.53
1:E:572:SER:O	1:E:576:VAL:HG12	2.09	0.53
1:E:1517:ILE:HG12	1:E:1518:ARG:H	1.74	0.53
1:E:1994:GLU:N	1:E:1994:GLU:OE1	2.42	0.53
1:E:2264:TRP:CD2	1:E:2270:LEU:HD11	2.44	0.53
1:E:2322:MET:HG2	1:F:2308:VAL:HG11	1.88	0.53
1:C:1524:LYS:HG3	1:C:1524:LYS:O	2.09	0.53
1:C:1601:ILE:HG13	1:C:1602:PRO:HD3	1.90	0.53
1:F:1622:LEU:HD13	1:F:1669:PRO:HB3	1.90	0.53
1:F:1944:PRO:O	1:F:1947:LYS:NZ	2.41	0.53
1:B:363:LEU:CD1	1:B:460:ALA:HB1	2.37	0.53
1:B:1042:THR:HA	1:B:1045:ILE:HG22	1.90	0.53
1:B:1405:LEU:HD23	1:B:1421:PHE:CD1	2.43	0.53
1:B:1833:ARG:HH21	1:B:1836:GLN:HA	1.73	0.53
1:B:1878:ASN:HD22	1:G:2057:TYR:HA	1.74	0.53
1:B:2229:LYS:HB2	1:B:2244:ILE:HG21	1.90	0.53
1:A:156:MET:CE	1:A:193:ILE:HG12	2.39	0.53
1:A:1055:LEU:HB3	1:A:1056:THR:HG22	1.91	0.53
1:Q:2094:VAL:HG13	1:Q:2095:VAL:HG23	1.89	0.53
1:Q:2128:PHE:CG	1:Q:2183:ALA:HB1	2.44	0.53
1:R:312:ALA:HB2	1:R:337:VAL:CG1	2.38	0.53
1:D:1475:LEU:HD12	1:D:1513:LEU:HD13	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1530:LEU:HD12	1:D:1543:SER:O	2.08	0.53
1:E:1579:THR:HG23	1:E:1581:ASP:OD1	2.08	0.53
1:F:935:GLN:OE1	1:F:935:GLN:N	2.42	0.53
1:F:1700:LEU:HB2	1:F:1803:ILE:HD11	1.89	0.53
1:F:2113:SER:O	1:F:2114:ARG:NH1	2.39	0.53
1:B:878:VAL:O	1:B:882:VAL:HG23	2.09	0.53
1:G:1969:GLN:OE1	1:G:1991:ARG:NH2	2.42	0.53
2:U:1689:MET:HB2	2:U:1736:VAL:HG11	1.90	0.53
1:D:1595:THR:OG1	1:D:1596:THR:N	2.40	0.53
1:F:634:CYS:O	1:F:638:HIS:N	2.41	0.53
1:F:736:ILE:HD12	1:F:745:PHE:CE2	2.44	0.53
1:F:2315:ALA:O	1:F:2318:SER:OG	2.09	0.53
1:B:178:VAL:HG12	1:B:192:LEU:CD2	2.39	0.53
1:B:252:THR:HG22	1:B:414:MET:HE3	1.90	0.53
1:A:166:ALA:O	1:A:169:ILE:HD12	2.09	0.53
1:A:1609:LEU:HD11	1:A:1666:PHE:CD2	2.43	0.53
1:E:2061:LEU:CD1	1:F:1848:LEU:HD11	2.38	0.53
1:E:2334:VAL:CG2	1:F:2334:VAL:HG21	2.38	0.53
1:B:1368:ARG:NE	1:B:1393:ALA:O	2.41	0.53
1:B:1557:MET:SD	1:B:1559:GLN:NE2	2.81	0.53
1:B:1938:LEU:HD23	1:B:1955:PHE:CD2	2.43	0.53
1:B:1971:VAL:HG13	1:B:2025:LYS:HZ2	1.73	0.53
1:A:448:CYS:SG	1:A:507:ALA:HB2	2.49	0.53
1:R:129:ALA:HB2	1:R:209:TRP:CH2	2.44	0.53
1:D:301:ALA:HB1	1:D:308:VAL:HG11	1.90	0.53
1:E:129:ALA:HB1	1:E:206:TRP:HH2	1.74	0.53
1:E:1472:HIS:HB2	1:E:1510:GLN:HE21	1.73	0.53
1:E:1774:ASP:O	1:E:1779:ARG:NH1	2.41	0.53
1:E:2119:GLU:OE1	1:E:2121:GLU:N	2.40	0.53
1:C:727:MET:SD	1:C:727:MET:N	2.82	0.53
1:C:1988:VAL:HG21	1:C:2046:TRP:CZ2	2.43	0.53
1:B:186:ASN:OD1	1:B:186:ASN:N	2.41	0.53
1:R:356:ARG:N	1:R:427:TYR:O	2.38	0.53
1:R:1391:LEU:HD23	1:R:1404:TYR:CD2	2.43	0.53
2:M:1651:SER:O	2:M:1686:HIS:N	2.41	0.53
1:D:1472:HIS:HA	1:D:1510:GLN:HB3	1.90	0.53
1:E:1091:PRO:CG	1:E:1095:LEU:HD21	2.39	0.53
1:C:1139:TYR:CE2	1:C:1294:LYS:HB2	2.43	0.53
1:C:2224:LEU:HD13	1:C:2274:LEU:HB2	1.91	0.53
1:F:1606:ARG:HH22	1:F:1632:LEU:HD23	1.72	0.53
1:F:2251:TRP:CG	1:F:2288:ILE:HD11	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:164:ALA:O	1:B:524:GLY:N	2.41	0.53
1:B:680:LYS:O	1:B:832:HIS:NE2	2.41	0.53
1:A:2139:ARG:NH1	1:Q:1734:PHE:O	2.36	0.53
1:G:1935:ARG:O	1:G:1939:ALA:N	2.34	0.53
1:D:1860:ARG:NH2	1:D:2002:ALA:O	2.42	0.53
1:D:1919:ILE:HG21	1:D:2216:TYR:CD2	2.44	0.53
1:D:2252:PHE:HD2	1:D:2253:VAL:HG23	1.73	0.53
1:E:197:ALA:CB	1:E:227:ILE:HD13	2.38	0.53
1:C:800:HIS:N	1:C:817:LYS:O	2.39	0.53
1:C:1385:ARG:NE	1:C:1512:GLU:OE2	2.42	0.53
1:C:2298:ASP:HB3	1:B:939:GLN:HE22	1.74	0.53
1:F:974:ARG:O	1:F:982:HIS:ND1	2.41	0.53
1:B:1248:ILE:HG22	1:B:1248:ILE:O	2.08	0.53
1:B:2201:VAL:HG11	1:G:1794:PRO:HB2	1.91	0.53
1:B:2289:GLU:OE1	1:B:2289:GLU:N	2.41	0.53
1:J:1104:PHE:HE2	1:J:1145:VAL:HG13	1.72	0.53
2:S:1701:LEU:HD13	2:S:1775:MET:HG3	1.89	0.53
1:D:874:PHE:CZ	1:D:878:VAL:HG11	2.43	0.53
1:D:2045:ASN:HD21	1:D:2083:PRO:HD2	1.73	0.53
1:E:1931:PRO:HB2	1:E:1991:ARG:HG2	1.90	0.53
1:C:1885:VAL:HG11	1:C:1891:GLY:HA2	1.91	0.53
1:F:727:MET:N	1:F:727:MET:SD	2.81	0.53
1:F:972:VAL:HG22	1:F:976:ARG:HB3	1.90	0.53
1:F:1677:ILE:HA	1:F:1711:ILE:HD13	1.91	0.53
1:F:1861:GLU:OE2	1:F:1864:THR:HG22	2.08	0.53
1:F:2178:ILE:CD1	1:F:2181:GLN:HE21	2.22	0.53
1:B:1245:PHE:CZ	1:B:1291:VAL:HG11	2.44	0.53
1:B:2311:ASN:O	1:B:2314:VAL:HG12	2.08	0.53
1:A:352:ALA:O	1:A:707:HIS:NE2	2.42	0.53
1:A:1481:VAL:HG22	1:A:1517:ILE:HG22	1.89	0.53
1:Q:1837:ARG:NH2	1:Q:2036:GLU:OE2	2.42	0.53
1:Q:2236:ASN:HB2	1:Q:2239:LEU:HD12	1.91	0.53
1:J:921:GLU:OE1	1:J:924:GLN:NE2	2.42	0.53
1:J:1391:LEU:HD23	1:J:1404:TYR:CD2	2.43	0.53
1:J:1437:ALA:HB3	1:J:1481:VAL:HG23	1.90	0.53
1:R:660:VAL:HG23	1:R:1010:VAL:HG11	1.90	0.53
1:D:1299:ILE:O	1:D:1301:ASP:N	2.37	0.53
1:E:660:VAL:HB	1:E:1010:VAL:HG11	1.90	0.53
1:E:668:ASN:OD1	1:E:687:ARG:NE	2.41	0.53
1:E:1480:THR:O	1:E:1480:THR:OG1	2.23	0.53
1:C:1401:MET:CE	1:C:1449:LEU:HB3	2.38	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:581:LEU:O	1:A:584:ARG:HG3	2.09	0.53
1:A:943:ASN:OD1	1:A:944:ILE:HG23	2.09	0.53
1:G:2068:VAL:HG13	1:G:2100:ILE:HG12	1.91	0.53
2:K:1765:GLU:O	2:K:1807:ILE:N	2.40	0.53
1:D:2118:LEU:HD12	1:D:2119:GLU:HG3	1.92	0.52
1:D:2268:LYS:O	1:D:2271:ALA:HB3	2.09	0.52
1:E:1063:LEU:HD12	1:E:1085:LEU:HD13	1.91	0.52
1:C:705:ASP:N	1:C:705:ASP:OD1	2.41	0.52
1:C:935:GLN:OE1	1:C:935:GLN:N	2.42	0.52
1:C:2085:GLN:N	1:C:2112:GLU:O	2.40	0.52
1:G:1809:LEU:O	1:G:1813:GLU:N	2.42	0.52
2:H:1720:THR:O	2:H:1724:LYS:N	2.36	0.52
1:D:628:THR:O	1:D:632:VAL:HG23	2.09	0.52
1:D:1596:THR:OG1	1:D:1888:ASP:OD2	2.26	0.52
1:E:683:LEU:HD13	1:E:697:MET:HG2	1.91	0.52
1:C:261:SER:OG	1:C:289:GLY:O	2.26	0.52
1:C:767:VAL:HG12	1:C:768:GLU:H	1.74	0.52
1:C:2000:ASP:N	1:C:2006:SER:OG	2.37	0.52
1:F:1664:MET:N	1:F:1664:MET:SD	2.83	0.52
1:B:193:ILE:HG21	1:B:218:LEU:HD11	1.92	0.52
1:B:580:GLU:OE2	1:B:584:ARG:NH2	2.42	0.52
1:B:1481:VAL:CG2	1:B:1517:ILE:HG22	2.39	0.52
1:J:864:MET:SD	1:J:990:LEU:HD13	2.49	0.52
1:R:864:MET:SD	1:R:990:LEU:HD13	2.49	0.52
1:D:2173:GLU:HA	1:D:2176:ILE:HD12	1.91	0.52
1:E:2089:ARG:NH2	1:E:2188:ASP:OD1	2.41	0.52
1:C:651:PHE:CE2	1:C:1025:LEU:HD12	2.45	0.52
1:C:1394:ILE:HB	1:C:1403:LEU:HD12	1.90	0.52
1:F:1677:ILE:HD13	1:F:1714:ILE:HG12	1.90	0.52
1:B:1178:VAL:HG12	1:B:1236:MET:HB3	1.91	0.52
1:B:1467:ARG:NH2	1:B:1468:THR:O	2.39	0.52
1:A:966:GLN:HA	1:A:969:VAL:HG12	1.90	0.52
1:A:1680:ILE:HG21	1:A:1699:PHE:HD1	1.73	0.52
1:Q:1839:ILE:HD12	1:Q:1895:VAL:HG22	1.90	0.52
1:R:197:ALA:HB1	1:R:227:ILE:HD13	1.92	0.52
1:D:849:LEU:HD22	1:D:894:LEU:CD2	2.39	0.52
1:D:1102:SER:OG	1:D:1103:ILE:N	2.39	0.52
1:D:1688:ILE:HG22	1:D:1823:ARG:NH2	2.24	0.52
1:D:2221:ARG:HG2	1:D:2271:ALA:HB2	1.91	0.52
1:D:2307:LEU:HD22	1:C:2304:ILE:HD11	1.92	0.52
1:C:1874:ILE:HG22	1:C:1875:MET:HE2	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:705:ASP:OD1	1:F:705:ASP:N	2.41	0.52
1:F:2067:ILE:HD11	1:F:2095:VAL:HG12	1.91	0.52
1:B:947:SER:O	1:B:950:ALA:HB3	2.09	0.52
1:B:1448:ARG:NH1	1:B:1452:GLU:OE2	2.41	0.52
1:A:187:TYR:O	1:A:193:ILE:HD11	2.10	0.52
1:R:252:THR:O	1:R:266:ARG:NH2	2.42	0.52
1:D:358:LEU:HD22	1:D:393:ALA:CB	2.39	0.52
1:D:1059:LEU:O	1:D:1062:ILE:N	2.42	0.52
1:D:2253:VAL:O	1:D:2258:THR:N	2.42	0.52
1:E:696:ILE:HG23	1:E:700:SER:O	2.09	0.52
1:E:1475:LEU:HD11	1:E:1477:PHE:CZ	2.44	0.52
1:F:1039:LEU:O	1:F:1042:THR:OG1	2.14	0.52
1:F:1630:ASP:O	1:F:1667:LYS:NZ	2.35	0.52
1:B:249:VAL:HG11	1:B:415:VAL:CG2	2.40	0.52
1:B:964:ASN:O	1:B:968:ILE:HG22	2.09	0.52
1:A:294:VAL:HG11	1:A:966:GLN:CB	2.39	0.52
1:A:991:LEU:HD13	1:A:1062:ILE:HG21	1.92	0.52
1:A:1312:THR:O	1:A:1315:ASN:O	2.27	0.52
1:G:1736:VAL:HG22	1:G:1751:LEU:HD22	1.92	0.52
1:D:194:LEU:HD12	1:D:227:ILE:HD12	1.90	0.52
1:D:239:ALA:HA	1:D:245:ALA:HB1	1.90	0.52
1:D:1110:MET:HA	1:D:1144:VAL:HG21	1.92	0.52
1:D:1130:ILE:O	1:D:1130:ILE:HG22	2.09	0.52
1:D:1664:MET:SD	1:D:1679:VAL:HG21	2.50	0.52
1:D:2253:VAL:HG13	1:D:2258:THR:HA	1.90	0.52
1:E:294:VAL:HG22	1:E:298:LEU:HD12	1.91	0.52
1:E:966:GLN:HA	1:E:969:VAL:HG22	1.91	0.52
1:C:1509:LEU:HD12	1:C:1534:ASN:O	2.09	0.52
1:C:1895:VAL:HG12	1:C:1899:LEU:CD1	2.40	0.52
1:F:608:ILE:O	1:F:726:TYR:OH	2.22	0.52
1:B:2124:VAL:O	1:B:2128:PHE:N	2.43	0.52
1:B:2178:ILE:HG23	1:B:2179:TYR:CD2	2.45	0.52
1:A:1021:MET:SD	1:A:1024:VAL:HG11	2.49	0.52
1:A:1935:ARG:NH2	1:A:1962:GLU:OE1	2.40	0.52
1:G:1655:ASN:ND2	1:G:1659:MET:O	2.42	0.52
1:Q:2319:ILE:HA	1:Q:2322:MET:HB2	1.91	0.52
1:J:705:ASP:N	1:J:705:ASP:OD1	2.41	0.52
1:D:1679:VAL:HG22	1:D:1714:ILE:HD11	1.91	0.52
1:E:306:TYR:HA	1:E:308:VAL:HG13	1.91	0.52
1:B:281:VAL:CG1	1:B:286:TYR:HB2	2.40	0.52
1:B:1045:ILE:HD13	1:B:1080:ARG:CG	2.38	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1971:VAL:O	1:B:2025:LYS:NZ	2.42	0.52
1:A:737:THR:HG22	1:A:742:THR:HG23	1.90	0.52
1:A:1078:ALA:O	1:A:1081:ALA:HB3	2.10	0.52
1:A:1530:LEU:HD12	1:A:1544:LEU:HD13	1.92	0.52
1:A:1638:VAL:O	1:A:1646:VAL:N	2.42	0.52
1:A:2080:VAL:O	1:A:2108:TYR:N	2.38	0.52
1:A:2311:ASN:O	1:A:2314:VAL:HG12	2.10	0.52
1:R:1528:ILE:HG22	1:R:1545:TYR:O	2.09	0.52
1:D:190:VAL:HG11	1:D:221:LEU:HB2	1.92	0.52
1:D:380:VAL:HG23	1:D:608:ILE:HD13	1.92	0.52
1:D:1833:ARG:HD3	1:C:2062:LYS:HG2	1.92	0.52
1:D:2206:LEU:HD11	1:D:2214:PHE:CD2	2.45	0.52
1:E:642:VAL:O	1:E:645:ARG:HB3	2.10	0.52
1:E:1045:ILE:HD13	1:E:1080:ARG:HE	1.75	0.52
1:E:1923:ILE:HD11	1:E:2212:ARG:HB2	1.92	0.52
1:C:884:ARG:O	1:C:888:THR:OG1	2.11	0.52
1:C:943:ASN:OD1	1:C:944:ILE:N	2.43	0.52
1:C:1598:ILE:HD13	1:C:1682:ASN:O	2.10	0.52
1:F:1002:GLN:OE1	1:F:1071:LYS:NZ	2.40	0.52
1:A:626:PRO:HB3	1:A:738:ILE:HD12	1.90	0.52
1:A:2251:TRP:CE3	1:A:2288:ILE:HG23	2.45	0.52
1:Q:2241:ASP:OD1	1:Q:2242:GLY:N	2.42	0.52
1:R:186:ASN:OD1	1:R:186:ASN:N	2.42	0.52
1:D:377:ASP:O	1:D:390:GLU:N	2.40	0.52
1:D:1568:LEU:O	1:D:1568:LEU:HD23	2.10	0.52
1:D:2045:ASN:ND2	1:D:2086:ALA:HB2	2.24	0.52
1:D:2295:ILE:HD13	1:E:939:GLN:NE2	2.23	0.52
1:D:2304:ILE:CD1	1:C:2304:ILE:HD12	2.40	0.52
1:E:1424:ARG:HA	1:E:1474:PHE:HB3	1.92	0.52
1:E:2243:GLN:O	1:E:2246:ALA:HB3	2.10	0.52
1:C:186:ASN:OD1	1:C:186:ASN:N	2.43	0.52
1:C:1060:LEU:O	1:C:1064:THR:N	2.38	0.52
1:F:939:GLN:HE21	1:A:2247:MET:CE	2.23	0.52
1:F:1424:ARG:HG2	1:F:1474:PHE:HB3	1.90	0.52
1:F:1587:ARG:HD2	1:F:1597:TYR:HB2	1.92	0.52
1:B:869:LEU:HD12	1:B:1036:LYS:HG3	1.92	0.52
1:B:1021:MET:SD	1:B:1024:VAL:HG11	2.49	0.52
1:B:1099:GLN:O	1:B:1102:SER:OG	2.18	0.52
1:B:1853:ALA:O	1:B:1857:VAL:HG23	2.09	0.52
1:A:1839:ILE:HD11	1:A:1898:TRP:CH2	2.45	0.52
1:A:2201:VAL:HG12	1:Q:1798:ARG:HB2	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:2079:LEU:HD13	1:G:2215:PHE:HD1	1.75	0.52
2:M:1792:VAL:HG11	2:M:1798:PHE:HD1	1.75	0.52
2:O:1654:VAL:CG1	2:O:1665:VAL:HG11	2.40	0.52
1:D:311:LYS:HG2	1:D:321:ILE:HG23	1.92	0.52
1:D:603:PHE:HD1	1:D:608:ILE:HG21	1.75	0.52
1:E:1107:ALA:HB1	1:E:1119:ASN:ND2	2.24	0.52
1:E:2315:ALA:O	1:E:2318:SER:OG	2.28	0.52
1:C:1132:ASP:OD1	1:C:1333:GLN:NE2	2.41	0.52
1:C:1411:GLU:OE2	1:C:1412:VAL:HG22	2.08	0.52
1:C:1749:ARG:NH2	1:C:1774:ASP:OD2	2.43	0.52
1:C:2064:GLY:O	1:C:2067:ILE:HG13	2.10	0.52
1:B:856:VAL:O	1:B:860:LEU:HD13	2.09	0.52
1:B:896:LEU:HD11	1:B:926:ALA:HB2	1.92	0.52
1:B:1407:ALA:HB1	1:B:1416:VAL:HG21	1.91	0.52
1:B:1636:GLU:N	1:B:1648:MET:O	2.42	0.52
1:A:291:VAL:HG21	1:A:297:GLY:HA2	1.91	0.52
1:A:463:GLN:OE1	1:A:473:ILE:HG23	2.10	0.52
1:A:1130:ILE:O	1:A:1130:ILE:HG22	2.09	0.52
1:A:2289:GLU:OE1	1:A:2289:GLU:N	2.40	0.52
1:J:143:GLU:O	1:J:146:ARG:NH1	2.42	0.52
2:O:1808:VAL:HG11	2:O:1824:ILE:HD13	1.92	0.52
1:D:1180:PHE:HB2	1:D:1234:GLY:N	2.24	0.51
1:E:874:PHE:CZ	1:E:878:VAL:HG11	2.44	0.51
1:E:886:MET:HA	1:E:889:LEU:HG	1.92	0.51
1:E:2079:LEU:HD13	1:E:2215:PHE:CD1	2.45	0.51
1:C:1598:ILE:HG23	1:C:1599:TYR:CD2	2.45	0.51
1:C:1727:ALA:HB1	1:C:1729:GLU:CD	2.31	0.51
1:F:939:GLN:NE2	1:A:2247:MET:SD	2.79	0.51
1:F:1442:LEU:HD13	1:F:1477:PHE:CD2	2.46	0.51
1:F:1499:TYR:O	1:F:1503:LEU:HD13	2.10	0.51
1:F:2082:ILE:HD12	1:F:2108:TYR:O	2.10	0.51
1:F:2319:ILE:O	1:F:2323:THR:HG23	2.10	0.51
1:B:1130:ILE:O	1:B:1130:ILE:HG22	2.10	0.51
1:A:186:ASN:OD1	1:A:186:ASN:N	2.43	0.51
1:A:332:ASN:ND2	1:A:905:SER:O	2.42	0.51
1:A:782:ILE:HG23	1:A:791:LEU:HD11	1.93	0.51
1:A:1330:LEU:HD13	1:A:1355:PHE:CE1	2.46	0.51
1:A:1391:LEU:HD22	1:A:1404:TYR:HD2	1.74	0.51
1:A:2078:VAL:CG1	1:A:2105:MET:HG2	2.40	0.51
1:J:1528:ILE:HG22	1:J:1545:TYR:O	2.09	0.51
1:R:1245:PHE:O	1:R:1249:PHE:N	2.43	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2228:VAL:O	1:D:2231:LYS:N	2.44	0.51
1:C:759:ALA:HB2	1:C:811:PRO:HD3	1.92	0.51
1:C:1568:LEU:O	1:C:1568:LEU:HD23	2.10	0.51
1:F:186:ASN:OD1	1:F:186:ASN:N	2.42	0.51
1:F:1466:VAL:O	1:F:1467:ARG:HG3	2.09	0.51
1:F:1941:ARG:O	1:F:1951:LEU:N	2.43	0.51
1:F:2064:GLY:O	1:F:2067:ILE:HG13	2.11	0.51
1:B:638:HIS:CE1	1:B:714:LEU:HD12	2.45	0.51
1:B:1707:ARG:HA	1:B:1814:ILE:HG21	1.92	0.51
1:B:1971:VAL:CG1	1:B:2025:LYS:HZ2	2.23	0.51
1:A:694:VAL:HG11	1:A:870:PRO:HG3	1.90	0.51
1:A:851:ARG:O	1:A:855:TYR:HB3	2.10	0.51
1:A:1069:LEU:CD2	1:A:1078:ALA:HB2	2.39	0.51
1:A:1288:ILE:O	1:A:1289:LEU:HD22	2.10	0.51
1:A:1981:ILE:HD13	1:A:2216:TYR:CE1	2.45	0.51
1:Q:1609:LEU:HD23	1:Q:1631:MET:SD	2.50	0.51
1:Q:2137:MET:O	1:Q:2141:ASP:N	2.42	0.51
2:K:1691:THR:HG21	2:K:1736:VAL:HG12	1.91	0.51
1:D:1540:LEU:HD12	1:D:1540:LEU:O	2.11	0.51
1:D:2221:ARG:NH1	1:D:2267:ASN:OD1	2.44	0.51
1:E:899:LEU:HD13	1:E:922:MET:CE	2.41	0.51
1:E:1388:ASN:HA	1:E:1409:LYS:HE2	1.92	0.51
1:F:1068:GLN:O	1:F:1070:SER:OG	2.25	0.51
1:B:187:TYR:O	1:B:193:ILE:HD11	2.10	0.51
1:B:864:MET:CE	1:B:1040:LEU:HD22	2.40	0.51
1:B:1530:LEU:HD12	1:B:1544:LEU:HD13	1.91	0.51
1:B:1598:ILE:CD1	1:B:1660:VAL:HG21	2.40	0.51
1:B:1878:ASN:OD1	1:B:1880:VAL:HG23	2.10	0.51
1:A:455:VAL:HG22	1:A:475:ASP:HB3	1.92	0.51
1:A:705:ASP:OD1	1:A:705:ASP:N	2.41	0.51
1:G:1767:VAL:HG12	1:G:1785:ILE:HA	1.93	0.51
1:Q:2326:ILE:O	1:Q:2326:ILE:HG22	2.10	0.51
1:D:1419:TYR:HB3	1:D:1468:THR:HG22	1.93	0.51
1:D:1657:ILE:HD11	1:D:1698:LEU:HD13	1.92	0.51
1:E:706:VAL:HG22	1:E:707:HIS:H	1.74	0.51
1:E:2291:ASN:O	1:E:2295:ILE:HD12	2.10	0.51
1:E:2328:PRO:HA	1:E:2331:ARG:HG3	1.92	0.51
1:C:143:GLU:O	1:C:146:ARG:NH1	2.43	0.51
1:C:1997:ILE:HG13	1:C:2011:ILE:HD12	1.91	0.51
1:F:1056:THR:HG23	1:F:1059:LEU:CB	2.40	0.51
1:F:2138:ARG:HH11	1:F:2148:ALA:HB3	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2320:ILE:O	1:F:2323:THR:OG1	2.29	0.51
1:B:878:VAL:HG11	1:B:1040:LEU:HD12	1.91	0.51
1:B:1489:GLU:HG2	1:B:1542:ILE:HD13	1.91	0.51
1:A:1312:THR:O	1:A:1315:ASN:C	2.49	0.51
1:A:1437:ALA:HB1	1:A:1441:TYR:CZ	2.45	0.51
1:Q:2026:THR:HG22	1:Q:2030:ILE:HD12	1.91	0.51
1:J:1442:LEU:O	1:J:1446:GLY:N	2.40	0.51
1:R:688:GLN:HB2	1:R:694:VAL:HG12	1.93	0.51
1:R:926:ALA:O	1:R:929:ILE:HG22	2.10	0.51
1:R:1324:ILE:HD11	2:U:1726:ARG:CZ	2.40	0.51
2:M:1678:ASN:OD1	2:O:1676:LEU:N	2.39	0.51
1:D:1513:LEU:HD21	1:D:1532:LEU:HD12	1.93	0.51
1:D:1840:GLN:O	1:D:1884:THR:HG23	2.11	0.51
1:E:377:ASP:OD1	1:E:379:SER:OG	2.24	0.51
1:E:912:PRO:HA	1:E:915:GLU:HB3	1.93	0.51
1:C:1470:CYS:HA	1:C:1509:LEU:HB3	1.91	0.51
1:C:1657:ILE:HD11	1:C:1698:LEU:HD12	1.93	0.51
1:C:1761:VAL:HA	1:C:1764:LEU:HD12	1.91	0.51
1:B:129:ALA:HB2	1:B:209:TRP:CZ3	2.46	0.51
1:A:1034:VAL:O	1:A:1038:ASN:N	2.44	0.51
1:G:2111:ARG:HG2	1:G:2205:ILE:HG21	1.93	0.51
1:G:2178:ILE:HG23	1:G:2179:TYR:CD2	2.45	0.51
1:J:926:ALA:O	1:J:929:ILE:HG22	2.10	0.51
1:R:1324:ILE:HD11	2:U:1726:ARG:NH1	2.26	0.51
2:W:1718:TRP:NE1	2:W:1729:LEU:O	2.44	0.51
1:D:1034:VAL:O	1:D:1038:ASN:N	2.42	0.51
1:D:1289:LEU:HD21	1:D:1291:VAL:HG13	1.93	0.51
1:D:1713:ARG:HH11	1:D:1816:THR:HG21	1.75	0.51
1:D:2111:ARG:O	1:D:2114:ARG:NH1	2.42	0.51
1:E:947:SER:O	1:E:950:ALA:HB3	2.11	0.51
1:E:2301:LEU:HA	1:E:2304:ILE:HD12	1.91	0.51
1:C:1055:LEU:HD11	1:C:1059:LEU:HD22	1.93	0.51
1:C:1066:LEU:CD2	1:C:1081:ALA:HB2	2.36	0.51
1:C:1971:VAL:HG22	1:C:1988:VAL:HG22	1.92	0.51
1:F:615:ARG:HH12	1:F:715:LEU:HA	1.76	0.51
1:A:2113:SER:O	1:A:2114:ARG:NH1	2.39	0.51
1:G:1935:ARG:NH2	1:G:1962:GLU:OE1	2.44	0.51
1:G:2044:ALA:HB1	1:G:2088:LEU:HD11	1.92	0.51
1:J:332:ASN:OD1	1:J:909:ARG:NH2	2.44	0.51
1:D:698:ASN:HD22	1:D:833:THR:HG22	1.76	0.51
1:D:943:ASN:OD1	1:D:944:ILE:N	2.44	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1873:GLN:HA	1:D:1877:ASN:ND2	2.25	0.51
1:D:2284:VAL:O	1:D:2284:VAL:HG12	2.11	0.51
1:E:1684:ILE:HD12	1:E:1719:ASN:N	2.25	0.51
1:E:1688:ILE:HG22	1:E:1720:SER:HB3	1.92	0.51
1:C:122:LEU:HD23	1:C:205:VAL:HG22	1.92	0.51
1:C:1086:ILE:HG21	1:C:1441:TYR:CD1	2.45	0.51
1:F:1287:HIS:O	1:F:1325:ARG:N	2.41	0.51
1:F:1640:ASP:OD1	1:F:1642:GLN:N	2.44	0.51
1:B:666:LEU:HD23	1:B:1029:PHE:CZ	2.45	0.51
1:B:1048:LEU:HD21	1:B:1055:LEU:HD11	1.91	0.51
1:B:1373:LEU:HG	1:B:1378:ALA:HB2	1.93	0.51
1:A:963:MET:HA	1:A:966:GLN:HG2	1.92	0.51
1:A:1811:TYR:CD1	1:A:1816:THR:HG22	2.46	0.51
1:Q:2221:ARG:NH1	1:Q:2264:TRP:O	2.40	0.51
1:R:1375:PRO:HA	1:R:1378:ALA:HB3	1.92	0.51
2:O:1652:MET:HG3	2:O:1674:ILE:HG21	1.91	0.51
2:Y:1833:VAL:HG11	2:Y:1850:LEU:HD22	1.93	0.51
1:D:1548:VAL:HG21	1:D:1559:GLN:OE1	2.09	0.51
1:E:1126:SER:CB	1:E:1130:ILE:HD11	2.41	0.51
1:E:1418:ASP:OD2	1:E:1420:ARG:HD2	2.11	0.51
1:E:1978:LEU:HD23	1:E:1978:LEU:H	1.76	0.51
1:C:258:LEU:HD11	1:C:426:LEU:HD23	1.92	0.51
1:C:1079:LEU:HD12	1:C:1444:ASN:HA	1.92	0.51
1:C:1239:PHE:CZ	1:C:1248:ILE:HG21	2.45	0.51
1:C:1492:VAL:HG22	1:C:1532:LEU:HD11	1.93	0.51
1:F:1289:LEU:HD22	1:F:1327:LEU:CD1	2.41	0.51
1:B:1436:GLU:OE1	1:B:1436:GLU:N	2.44	0.51
1:B:2077:PRO:HG2	1:B:2223:LEU:N	2.25	0.51
1:B:2220:ARG:O	1:B:2224:LEU:HD13	2.11	0.51
1:A:154:VAL:HG13	1:A:174:HIS:O	2.10	0.51
1:A:1454:MET:HB2	1:A:1506:LEU:HD21	1.93	0.51
1:A:2091:GLY:O	1:A:2095:VAL:HG22	2.11	0.51
1:J:935:GLN:N	1:J:935:GLN:OE1	2.44	0.51
1:R:310:ILE:HD11	1:R:330:PHE:CD1	2.45	0.51
1:D:879:LYS:O	1:D:883:GLU:HG2	2.11	0.51
1:D:1091:PRO:CB	1:D:1095:LEU:HD21	2.41	0.51
1:E:835:SER:C	1:E:836:LEU:HD12	2.31	0.51
1:E:1427:ILE:HD12	1:E:1449:LEU:HD21	1.93	0.51
1:E:2114:ARG:NE	1:E:2192:THR:HG22	2.26	0.51
1:C:2224:LEU:CB	1:C:2274:LEU:HD13	2.39	0.51
1:C:2258:THR:CG2	1:B:296:ASP:H	2.23	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1098:ASN:CB	1:A:2332:ALA:HB2	2.40	0.51
1:F:1411:GLU:OE2	1:F:1412:VAL:HG12	2.11	0.51
1:F:2221:ARG:HD2	1:F:2270:LEU:HD23	1.93	0.51
1:B:869:LEU:HD12	1:B:1036:LYS:CG	2.40	0.51
1:B:2295:ILE:H	1:B:2295:ILE:HD12	1.76	0.51
1:J:990:LEU:HD12	1:J:991:LEU:N	2.26	0.51
2:H:1742:ASN:HB3	2:H:1844:LEU:HD21	1.92	0.51
2:W:1691:THR:HG22	2:W:1697:CYS:HB3	1.93	0.51
1:D:129:ALA:HB1	1:D:206:TRP:HH2	1.74	0.51
1:D:1529:ARG:N	1:D:1547:GLU:OE2	2.44	0.51
1:D:2020:PRO:N	1:D:2060:VAL:HG23	2.26	0.51
1:D:2232:ILE:O	1:D:2235:ALA:HB3	2.10	0.51
1:E:189:ASN:HB2	1:E:192:LEU:HB3	1.92	0.51
1:E:1421:PHE:CD2	1:E:1457:LEU:HD21	2.46	0.51
1:C:1095:LEU:O	1:C:1099:GLN:N	2.44	0.51
1:C:1451:LEU:HD21	1:C:1499:TYR:OH	2.11	0.51
1:A:1467:ARG:NE	1:A:1468:THR:O	2.42	0.51
1:A:2291:ASN:O	1:A:2295:ILE:HD12	2.10	0.51
1:G:2026:THR:HG22	1:G:2030:ILE:HD12	1.93	0.51
1:J:651:PHE:CZ	1:J:655:LEU:HD22	2.46	0.51
1:D:363:LEU:HD11	1:D:464:ILE:HD11	1.92	0.50
1:E:504:HIS:N	1:E:564:GLY:O	2.37	0.50
1:E:937:PRO:CB	1:E:940:GLN:HE21	2.24	0.50
1:E:1723:ARG:NH1	1:E:1791:GLY:O	2.44	0.50
1:C:1466:VAL:O	1:C:1467:ARG:HG3	2.11	0.50
1:F:1100:VAL:HG12	1:F:1130:ILE:HG23	1.93	0.50
1:F:1568:LEU:HD23	1:F:1568:LEU:O	2.11	0.50
1:F:1954:PHE:O	1:F:2212:ARG:NH1	2.43	0.50
1:F:2232:ILE:CD1	1:F:2248:LEU:HD11	2.40	0.50
1:A:1129:SER:HB2	1:A:1428:ARG:HE	1.76	0.50
1:D:987:VAL:HG21	1:D:1048:LEU:HD11	1.93	0.50
1:D:1677:ILE:HD12	1:D:1714:ILE:CD1	2.41	0.50
1:D:1901:TYR:OH	1:D:1959:SER:O	2.29	0.50
1:E:448:CYS:HA	1:E:505:VAL:HG11	1.93	0.50
1:E:1657:ILE:HD11	1:E:1698:LEU:HD13	1.93	0.50
1:E:1910:VAL:CG2	1:E:1912:LEU:HD21	2.40	0.50
1:C:1609:LEU:HD11	1:C:1666:PHE:CD2	2.46	0.50
1:C:1941:ARG:O	1:C:1951:LEU:N	2.42	0.50
1:C:2218:ARG:CD	1:C:2221:ARG:HE	2.25	0.50
1:F:912:PRO:HA	1:F:915:GLU:HB3	1.93	0.50
1:F:1492:VAL:O	1:F:1496:VAL:HG12	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:952:LEU:HD23	1:B:961:PHE:CD2	2.47	0.50
1:A:423:VAL:HG13	1:A:435:PHE:HE1	1.75	0.50
1:A:941:ILE:HD13	1:A:968:ILE:CD1	2.41	0.50
1:A:970:GLN:O	1:A:974:ARG:NE	2.42	0.50
1:A:1013:LEU:CD1	1:A:1024:VAL:HG13	2.39	0.50
1:A:1636:GLU:N	1:A:1648:MET:O	2.42	0.50
1:R:608:ILE:HG22	1:R:612:TRP:CE2	2.47	0.50
1:R:1475:LEU:HD12	1:R:1475:LEU:O	2.11	0.50
2:H:1736:VAL:HG23	2:H:1749:PRO:HG2	1.91	0.50
1:D:1954:PHE:CE1	1:D:2212:ARG:HA	2.46	0.50
1:C:724:THR:O	1:C:739:GLY:N	2.44	0.50
1:C:1816:THR:OG1	1:C:1835:GLY:O	2.24	0.50
1:C:1821:THR:HG23	1:C:1888:ASP:OD1	2.12	0.50
1:F:2224:LEU:HD13	1:F:2274:LEU:HB2	1.93	0.50
1:B:666:LEU:HD23	1:B:1029:PHE:CE2	2.46	0.50
1:B:2319:ILE:HG23	1:G:2319:ILE:HG12	1.93	0.50
1:A:567:ARG:NH2	1:A:603:PHE:O	2.44	0.50
1:R:992:ARG:NH1	1:R:1065:GLU:OE1	2.43	0.50
1:D:1529:ARG:NH2	1:D:1573:ILE:O	2.44	0.50
1:D:1955:PHE:CE1	1:D:1978:LEU:HD22	2.47	0.50
1:D:2045:ASN:HD22	1:D:2086:ALA:HB2	1.76	0.50
1:E:510:ILE:HD12	1:E:584:ARG:NH1	2.27	0.50
1:E:1157:ALA:HB1	1:E:1374:GLU:OE2	2.11	0.50
1:B:2319:ILE:HD11	1:G:2322:MET:HB3	1.94	0.50
1:A:1511:ALA:HB3	1:A:1532:LEU:HB2	1.94	0.50
1:A:2304:ILE:HG13	1:Q:2307:LEU:HD13	1.93	0.50
1:J:1457:LEU:HD22	1:J:1506:LEU:HG	1.92	0.50
1:J:1518:ARG:NH1	1:J:1523:GLY:O	2.44	0.50
2:K:1730:ASN:HD21	2:K:1732:HIS:HD2	1.60	0.50
1:D:386:LYS:NZ	1:D:424:GLU:OE2	2.44	0.50
1:D:1017:ASN:ND2	1:D:1027:TYR:OH	2.45	0.50
1:D:1033:GLN:HG3	1:D:1036:LYS:HB2	1.94	0.50
1:D:2259:VAL:HG13	1:E:296:ASP:OD1	2.10	0.50
1:C:634:CYS:O	1:C:638:HIS:N	2.43	0.50
1:C:1302:ASP:O	1:C:1306:ALA:N	2.44	0.50
1:F:675:ILE:HG21	1:F:820:LEU:CD1	2.41	0.50
1:F:990:LEU:CD1	1:F:1044:LEU:HD11	2.42	0.50
1:F:1977:ARG:NH2	1:F:1980:GLY:O	2.42	0.50
1:A:245:ALA:CB	1:A:281:VAL:HG21	2.41	0.50
1:A:567:ARG:NH1	1:A:604:GLN:O	2.44	0.50
1:A:2077:PRO:HG2	1:A:2223:LEU:N	2.26	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:310:ILE:HD11	1:J:330:PHE:CD1	2.47	0.50
1:J:370:ALA:O	1:J:409:VAL:HG13	2.11	0.50
1:J:688:GLN:HB2	1:J:694:VAL:HG12	1.93	0.50
1:J:1060:LEU:O	1:J:1064:THR:N	2.40	0.50
1:R:707:HIS:N	1:R:715:LEU:O	2.45	0.50
2:K:1669:ALA:O	2:K:1673:HIS:N	2.44	0.50
1:D:849:LEU:HD22	1:D:894:LEU:HD22	1.93	0.50
1:D:1797:LEU:CD2	1:C:2094:VAL:HA	2.41	0.50
1:D:2243:GLN:HE22	1:E:947:SER:N	2.09	0.50
1:E:2269:ASP:O	1:E:2273:TRP:N	2.45	0.50
1:C:615:ARG:NH1	1:C:715:LEU:HA	2.27	0.50
1:C:1895:VAL:HG12	1:C:1899:LEU:HD12	1.94	0.50
1:F:920:LYS:O	1:F:923:ALA:HB3	2.12	0.50
1:F:1858:LEU:HD12	1:F:1862:VAL:HG21	1.93	0.50
1:F:2103:ARG:HD2	1:F:2245:GLN:HE21	1.76	0.50
1:B:938:SER:CB	1:B:972:VAL:HG23	2.42	0.50
1:A:1046:ASP:OD1	1:A:1047:GLN:N	2.44	0.50
1:A:1177:VAL:HG22	1:A:1237:VAL:HG22	1.94	0.50
1:A:1829:ALA:HB3	1:A:1848:LEU:HD23	1.92	0.50
1:A:2230:LYS:O	1:A:2234:ASN:N	2.44	0.50
1:J:203:GLN:O	1:J:228:ALA:HB3	2.12	0.50
1:J:998:GLU:OE1	1:J:1074:ASN:ND2	2.42	0.50
1:J:1069:LEU:HB2	1:J:1078:ALA:HB2	1.93	0.50
1:R:510:ILE:HD13	1:R:560:CYS:SG	2.51	0.50
1:D:1445:GLU:OE1	1:D:1449:LEU:HD21	2.12	0.50
1:D:1503:LEU:CD1	1:D:1508:VAL:HB	2.42	0.50
1:D:1760:ARG:HG3	1:D:1761:VAL:H	1.75	0.50
1:E:1299:ILE:O	1:E:1301:ASP:N	2.36	0.50
1:F:2119:GLU:OE1	1:F:2121:GLU:N	2.43	0.50
1:B:463:GLN:OE1	1:B:473:ILE:HG23	2.11	0.50
1:A:199:ARG:HE	1:A:200:ILE:HD13	1.76	0.50
1:A:1146:ARG:NH1	1:A:1238:SER:O	2.45	0.50
1:A:1169:ARG:HB2	1:A:1177:VAL:HB	1.93	0.50
1:J:1475:LEU:HD12	1:J:1475:LEU:O	2.12	0.50
1:R:636:ALA:HB1	1:R:685:VAL:CG2	2.42	0.50
2:K:1792:VAL:HG11	2:K:1798:PHE:HD1	1.77	0.50
1:D:335:ARG:O	1:D:339:ALA:N	2.40	0.50
1:D:1994:GLU:OE1	1:D:1994:GLU:N	2.44	0.50
1:E:301:ALA:HB1	1:E:308:VAL:HG11	1.92	0.50
1:E:426:LEU:N	1:E:434:TYR:O	2.37	0.50
1:E:1482:ILE:HD13	1:E:1520:THR:HA	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1513:LEU:HD13	1:E:1532:LEU:HD13	1.92	0.50
1:C:510:ILE:HD11	1:C:540:TYR:O	2.11	0.50
1:C:1101:GLU:O	1:C:1105:LEU:HD23	2.11	0.50
1:F:910:ILE:HG12	1:F:915:GLU:HB2	1.93	0.50
1:F:1263:SEP:OG	2:S:1670:ARG:NH2	2.45	0.50
1:F:1471:ASN:ND2	1:F:1507:ARG:O	2.45	0.50
1:F:2119:GLU:OE2	1:F:2122:GLY:N	2.45	0.50
1:F:2289:GLU:O	1:F:2293:LYS:HD2	2.11	0.50
1:B:1530:LEU:HD23	1:B:1531:PHE:N	2.26	0.50
1:B:2232:ILE:O	1:B:2235:ALA:HB3	2.11	0.50
1:A:1240:ARG:O	1:A:1294:LYS:HB3	2.12	0.50
1:A:1688:ILE:O	1:A:1688:ILE:HG22	2.11	0.50
1:G:2094:VAL:HG13	1:G:2095:VAL:HG23	1.92	0.50
1:Q:2160:GLU:O	1:Q:2164:LEU:N	2.42	0.50
2:M:1704:PHE:HB3	2:M:1842:VAL:HG11	1.93	0.50
2:O:1784:VAL:HB	2:O:1789:ALA:HB3	1.93	0.50
2:S:1704:PHE:CE1	2:S:1843:ALA:HB2	2.47	0.50
1:D:1039:LEU:O	1:D:1042:THR:OG1	2.12	0.50
1:D:1456:GLU:O	1:D:1459:VAL:HB	2.12	0.50
1:D:1767:VAL:HA	1:D:1786:ILE:HG12	1.94	0.50
1:E:2317:ASP:O	1:E:2320:ILE:HG12	2.12	0.50
1:C:920:LYS:O	1:C:923:ALA:HB3	2.12	0.50
1:C:1056:THR:HG23	1:C:1059:LEU:CB	2.41	0.50
1:C:2232:ILE:O	1:C:2235:ALA:HB3	2.12	0.50
1:F:332:ASN:OD1	1:F:909:ARG:NH2	2.45	0.50
1:F:1897:HIS:HE2	1:F:1961:SER:HB2	1.76	0.50
1:F:2007:GLU:O	1:F:2009:LYS:NZ	2.40	0.50
1:B:1330:LEU:HD13	1:B:1355:PHE:CE1	2.46	0.50
1:B:1919:ILE:HG21	1:B:2216:TYR:HB2	1.93	0.50
1:G:2128:PHE:CG	1:G:2183:ALA:HB1	2.47	0.50
1:J:510:ILE:HG22	1:J:581:LEU:HD21	1.94	0.50
1:J:1375:PRO:HA	1:J:1378:ALA:HB3	1.93	0.50
1:D:1838:THR:CG2	1:D:1881:THR:HA	2.41	0.49
1:D:2036:GLU:OE1	1:D:2038:LEU:HD13	2.12	0.49
1:C:2111:ARG:HG2	1:C:2205:ILE:HG22	1.94	0.49
1:F:477:ARG:NE	1:F:483:SER:O	2.42	0.49
1:F:1248:ILE:O	1:F:1248:ILE:HG22	2.12	0.49
1:F:1651:LEU:HD12	1:F:1652:PRO:HD2	1.94	0.49
1:F:1821:THR:HG23	1:F:1888:ASP:OD1	2.12	0.49
1:B:1014:ARG:O	1:B:1018:LYS:CA	2.54	0.49
1:B:1096:ARG:O	1:B:1100:VAL:HG22	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1097:HIS:HA	1:B:1100:VAL:HG22	1.94	0.49
1:B:1560:ALA:HB2	1:B:1564:LYS:NZ	2.27	0.49
1:B:1919:ILE:HG21	1:B:2216:TYR:CB	2.42	0.49
1:G:2137:MET:O	1:G:2141:ASP:N	2.42	0.49
1:R:1072:THR:O	1:R:1499:TYR:OH	2.16	0.49
1:D:2045:ASN:ND2	1:D:2083:PRO:HD2	2.27	0.49
1:E:763:ILE:HD11	1:E:783:GLU:HB2	1.93	0.49
1:E:1598:ILE:HG13	1:E:1599:TYR:H	1.76	0.49
1:F:651:PHE:CE2	1:F:1025:LEU:HD12	2.47	0.49
1:F:1587:ARG:CD	1:F:1597:TYR:HB2	2.41	0.49
1:B:374:PHE:CD2	1:B:453:ALA:HB2	2.47	0.49
1:B:1613:TRP:CE3	1:B:1622:LEU:HD12	2.46	0.49
1:A:1288:ILE:C	1:A:1289:LEU:HD22	2.32	0.49
1:A:2315:ALA:HB1	1:Q:2330:GLN:HE22	1.75	0.49
1:R:1046:ASP:OD1	1:R:1080:ARG:NH2	2.45	0.49
1:E:430:ASP:HA	1:E:645:ARG:HD2	1.94	0.49
1:E:687:ARG:HB3	1:E:867:TYR:HE2	1.76	0.49
1:E:2221:ARG:NE	1:E:2267:ASN:OD1	2.46	0.49
1:C:140:TRP:CE3	1:C:459:ALA:HB1	2.47	0.49
1:C:510:ILE:HD13	1:C:560:CYS:SG	2.53	0.49
1:C:1104:PHE:CE2	1:C:1145:VAL:HG13	2.47	0.49
1:C:1299:ILE:O	1:C:1301:ASP:N	2.42	0.49
1:F:2015:GLY:O	1:F:2017:VAL:HG23	2.12	0.49
1:B:204:ALA:HB1	1:B:230:MET:HG3	1.94	0.49
1:B:1530:LEU:HD21	1:B:1542:ILE:HG23	1.93	0.49
1:B:1572:LEU:O	1:B:1575:THR:OG1	2.30	0.49
1:B:1670:GLU:HG2	1:B:1913:LEU:HD21	1.94	0.49
1:B:1811:TYR:CD1	1:B:1816:THR:HG22	2.47	0.49
1:A:331:PRO:HB3	1:A:966:GLN:HG3	1.93	0.49
1:G:2148:ALA:O	1:G:2152:GLY:N	2.44	0.49
1:J:291:VAL:HG11	1:J:297:GLY:HA2	1.94	0.49
1:J:660:VAL:CG2	1:J:1010:VAL:HG11	2.43	0.49
1:R:357:HIS:HE2	1:R:424:GLU:HB3	1.77	0.49
1:D:1403:LEU:HG	1:D:1456:GLU:HB3	1.95	0.49
1:D:1665:THR:HG23	1:D:1676:ASP:OD1	2.12	0.49
1:D:2037:GLY:O	1:D:2076:GLN:NE2	2.45	0.49
1:D:2059:GLN:HB3	1:D:2062:LYS:HD3	1.94	0.49
1:E:853:PHE:CE1	1:E:885:LEU:HD12	2.47	0.49
1:E:1078:ALA:O	1:E:1081:ALA:HB3	2.12	0.49
1:E:1367:ASP:OD1	1:E:1368:ARG:N	2.45	0.49
1:E:1514:LYS:HA	1:E:1529:ARG:HA	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1571:MET:SD	1:E:1575:THR:OG1	2.63	0.49
1:E:1949:GLN:HG3	1:E:1950:TRP:H	1.77	0.49
1:C:2062:LYS:O	1:C:2065:ALA:HB3	2.13	0.49
1:C:2113:SER:O	1:C:2114:ARG:NH1	2.39	0.49
1:F:1661:ALA:HB2	1:F:1680:ILE:CG2	2.41	0.49
1:F:2218:ARG:CD	1:F:2221:ARG:HE	2.25	0.49
1:F:2224:LEU:CB	1:F:2274:LEU:HD13	2.40	0.49
1:B:1585:SER:O	1:B:1589:GLN:NE2	2.45	0.49
1:A:910:ILE:HG12	1:A:915:GLU:HB2	1.94	0.49
1:A:1140:HIS:O	1:A:1146:ARG:NH2	2.34	0.49
1:J:186:ASN:OD1	1:J:186:ASN:N	2.42	0.49
1:J:312:ALA:HB2	1:J:337:VAL:HG13	1.94	0.49
1:J:608:ILE:HG22	1:J:612:TRP:CE2	2.46	0.49
1:J:1075:ALA:O	1:J:1079:LEU:HD23	2.13	0.49
1:J:1230:CYS:O	1:J:1232:ARG:NH1	2.45	0.49
1:R:1530:LEU:HD11	1:R:1544:LEU:HD13	1.94	0.49
1:D:244:ILE:HD13	1:D:290:TYR:CB	2.42	0.49
1:D:637:LEU:HD12	1:D:685:VAL:HG13	1.93	0.49
1:D:1701:ARG:HA	1:D:1704:GLU:HG2	1.94	0.49
1:D:2325:HIS:O	1:D:2326:ILE:HD13	2.12	0.49
1:C:1640:ASP:OD1	1:C:1642:GLN:N	2.45	0.49
1:F:261:SER:OG	1:F:289:GLY:O	2.31	0.49
1:B:851:ARG:O	1:B:855:TYR:HB3	2.13	0.49
1:B:930:THR:O	1:B:930:THR:HG22	2.13	0.49
1:A:644:LEU:HD22	1:A:687:ARG:HD3	1.94	0.49
1:A:655:LEU:HD11	1:A:1021:MET:H	1.77	0.49
1:A:972:VAL:O	1:A:976:ARG:HD3	2.13	0.49
1:A:1682:ASN:HD21	1:A:1718:ALA:C	2.15	0.49
1:A:1853:ALA:O	1:A:1857:VAL:HG23	2.12	0.49
1:R:896:LEU:O	1:R:900:GLN:N	2.44	0.49
1:D:306:TYR:HA	1:D:308:VAL:HG13	1.94	0.49
1:D:636:ALA:HA	1:D:672:VAL:HG11	1.94	0.49
1:D:1095:LEU:HD22	1:D:1096:ARG:N	2.26	0.49
1:D:1886:CYS:N	1:D:1890:GLU:OE2	2.41	0.49
1:E:197:ALA:HB1	1:E:227:ILE:HD13	1.95	0.49
1:E:362:ILE:HD11	1:E:408:ALA:HB1	1.95	0.49
1:F:943:ASN:OD1	1:F:944:ILE:N	2.45	0.49
1:F:1509:LEU:HD11	1:F:1535:GLU:CD	2.33	0.49
1:F:2061:LEU:HD23	1:F:2061:LEU:H	1.78	0.49
1:A:988:MET:HA	1:A:991:LEU:HD12	1.92	0.49
1:A:1171:LEU:HD12	1:A:1177:VAL:HG21	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1471:ASN:HB2	1:A:1508:VAL:HA	1.95	0.49
1:R:203:GLN:O	1:R:228:ALA:HB3	2.12	0.49
1:R:651:PHE:CZ	1:R:655:LEU:HD22	2.48	0.49
1:R:961:PHE:O	1:R:965:THR:HG22	2.13	0.49
2:H:1691:THR:HG21	2:H:1736:VAL:HG12	1.94	0.49
2:Y:1666:TYR:O	2:Y:1670:ARG:N	2.42	0.49
1:D:2019:PHE:HB2	1:D:2021:ASP:OD1	2.13	0.49
1:E:244:ILE:HG23	1:E:260:TRP:CZ3	2.48	0.49
1:E:896:LEU:HD12	1:E:899:LEU:HD11	1.95	0.49
1:E:1526:ILE:HD12	1:E:1526:ILE:O	2.13	0.49
1:E:1730:ILE:CD1	1:E:1761:VAL:HG11	2.43	0.49
1:C:1855:ASN:OD1	1:C:1862:VAL:N	2.46	0.49
1:F:1680:ILE:HD11	1:F:1713:ARG:HD3	1.94	0.49
1:F:2315:ALA:O	1:F:2319:ILE:N	2.43	0.49
1:B:1289:LEU:CD1	1:B:1291:VAL:HG13	2.43	0.49
1:B:1518:ARG:C	1:B:1519:LEU:HD22	2.33	0.49
1:A:869:LEU:CD1	1:A:1036:LYS:HB3	2.38	0.49
1:A:2297:ARG:O	1:A:2301:LEU:N	2.43	0.49
1:A:2308:VAL:HG11	1:Q:2322:MET:SD	2.52	0.49
1:G:1735:HIS:N	1:G:1752:TYR:O	2.43	0.49
1:Q:1932:TYR:CE1	1:Q:1990:THR:HG21	2.48	0.49
1:J:109:VAL:HG22	1:J:466:MET:HB3	1.94	0.49
2:U:1755:SER:O	2:U:1845:TYR:OH	2.26	0.49
1:D:355:SER:OG	1:D:426:LEU:HD11	2.13	0.49
1:D:849:LEU:HD23	1:D:849:LEU:O	2.13	0.49
1:D:2036:GLU:CD	1:D:2038:LEU:HD13	2.33	0.49
1:E:334:PHE:CE1	1:E:346:ILE:HG21	2.48	0.49
1:E:853:PHE:CZ	1:E:889:LEU:HB3	2.48	0.49
1:E:1044:LEU:O	1:E:1048:LEU:HD22	2.12	0.49
1:C:1306:ALA:O	1:C:1309:ARG:NH1	2.44	0.49
1:C:1680:ILE:N	1:C:1680:ILE:HD12	2.28	0.49
1:C:2108:TYR:HB3	1:C:2206:LEU:HD13	1.95	0.49
1:F:1073:THR:OG1	1:F:1502:ARG:NH2	2.42	0.49
1:F:1121:GLN:C	1:F:1125:LEU:HD23	2.33	0.49
1:B:2251:TRP:CE3	1:B:2288:ILE:HG23	2.48	0.49
1:G:1664:MET:HE1	1:G:1679:VAL:HG12	1.93	0.49
1:G:2176:ILE:HG22	1:G:2177:PRO:HD3	1.95	0.49
1:Q:2068:VAL:HG13	1:Q:2100:ILE:HG12	1.94	0.49
1:Q:2270:LEU:HD23	1:Q:2274:LEU:HD11	1.95	0.49
1:D:2057:TYR:OH	1:C:1877:ASN:O	2.23	0.49
1:E:1045:ILE:HD13	1:E:1080:ARG:HD3	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2219:LEU:C	1:E:2219:LEU:HD13	2.33	0.49
1:C:183:ASN:O	1:C:188:ALA:HB3	2.13	0.49
1:C:912:PRO:HA	1:C:915:GLU:HB3	1.95	0.49
1:C:1372:HIS:HB3	1:C:1399:HIS:HB3	1.93	0.49
1:C:1381:LEU:HD13	1:C:1386:MET:CE	2.43	0.49
1:C:1505:LYS:O	1:C:1507:ARG:NH1	2.46	0.49
1:C:1828:GLY:O	1:C:1832:VAL:HG23	2.12	0.49
1:F:140:TRP:CD2	1:F:459:ALA:HB1	2.47	0.49
1:F:1812:ASN:HA	1:F:2035:ARG:HD2	1.94	0.49
1:B:1994:GLU:OE1	1:B:1994:GLU:N	2.46	0.49
1:A:612:TRP:NE1	1:A:616:LEU:HD21	2.27	0.49
1:A:634:CYS:CB	1:A:725:THR:HG21	2.42	0.49
1:A:1598:ILE:HG21	1:A:1683:ASP:HB3	1.94	0.49
1:A:2307:LEU:O	1:A:2311:ASN:N	2.45	0.49
1:Q:1595:THR:OG1	1:Q:1596:THR:N	2.46	0.49
1:J:293:ASP:N	1:J:293:ASP:OD1	2.45	0.49
1:R:370:ALA:O	1:R:409:VAL:HG13	2.13	0.49
1:D:358:LEU:HD22	1:D:393:ALA:HB2	1.94	0.49
1:D:1421:PHE:CD1	1:D:1457:LEU:HD12	2.48	0.49
1:E:240:LEU:HD21	1:E:249:VAL:HG11	1.94	0.49
1:E:1886:CYS:N	1:E:1890:GLU:OE2	2.38	0.49
1:F:1973:VAL:HG12	1:F:1986:VAL:CG1	2.43	0.49
1:B:156:MET:CE	1:B:193:ILE:HG12	2.43	0.49
1:B:249:VAL:HG11	1:B:415:VAL:HG23	1.95	0.49
1:A:863:VAL:HG13	1:A:869:LEU:HD21	1.93	0.49
1:A:1079:LEU:HD23	1:A:1448:ARG:HB2	1.94	0.49
1:A:2178:ILE:HG23	1:A:2179:TYR:CD2	2.48	0.49
1:J:636:ALA:HB1	1:J:685:VAL:CG2	2.42	0.49
1:R:293:ASP:OD1	1:R:293:ASP:N	2.45	0.49
1:R:921:GLU:OE1	1:R:924:GLN:NE2	2.46	0.49
1:R:990:LEU:HD12	1:R:991:LEU:N	2.27	0.49
1:D:2128:PHE:CE2	1:D:2133:LEU:HD23	2.48	0.48
1:E:1723:ARG:HD3	1:E:1792:ILE:HG22	1.94	0.48
1:E:1730:ILE:HD13	1:E:1761:VAL:HG11	1.95	0.48
1:E:1764:LEU:HD12	1:E:1788:LYS:HE3	1.94	0.48
1:E:2042:VAL:HB	1:E:2080:VAL:HG22	1.94	0.48
1:C:900:GLN:HE21	1:C:904:THR:CG2	2.26	0.48
1:C:1606:ARG:O	1:C:1610:ILE:HG13	2.13	0.48
1:F:1126:SER:OG	1:F:1428:ARG:NH2	2.41	0.48
1:F:1960:PHE:HA	1:F:1976:ALA:HB2	1.94	0.48
1:B:1169:ARG:HB2	1:B:1177:VAL:HB	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2229:LYS:CB	1:B:2244:ILE:HG21	2.43	0.48
1:A:2287:VAL:HG12	1:A:2291:ASN:OD1	2.12	0.48
1:D:504:HIS:N	1:D:564:GLY:O	2.38	0.48
1:D:1165:SER:O	1:D:1181:GLN:HB2	2.13	0.48
1:D:1385:ARG:NE	1:D:1575:THR:O	2.46	0.48
1:E:1045:ILE:HD13	1:E:1080:ARG:NE	2.28	0.48
1:E:1780:TYR:OH	1:A:191:GLU:OE2	2.21	0.48
1:E:2097:ASP:HA	1:E:2107:MET:HE1	1.95	0.48
1:C:1534:ASN:HD22	1:C:1535:GLU:N	2.12	0.48
1:C:1657:ILE:HD11	1:C:1698:LEU:CD1	2.43	0.48
1:C:1865:SER:O	1:C:1868:GLN:HB2	2.13	0.48
1:F:2091:GLY:HA2	1:F:2094:VAL:HG12	1.95	0.48
1:F:2232:ILE:O	1:F:2235:ALA:HB3	2.13	0.48
1:F:2315:ALA:O	1:F:2319:ILE:HG13	2.13	0.48
1:A:1038:ASN:ND2	1:A:1073:THR:HG22	2.28	0.48
1:A:1524:LYS:HD3	1:A:1526:ILE:HD11	1.94	0.48
1:A:2124:VAL:HG13	1:A:2128:PHE:HB2	1.95	0.48
1:Q:1954:PHE:CE2	1:Q:1978:LEU:HD13	2.48	0.48
1:J:1121:GLN:C	1:J:1125:LEU:HD23	2.33	0.48
1:R:1442:LEU:O	1:R:1446:GLY:N	2.40	0.48
2:K:1720:THR:O	2:K:1724:LYS:N	2.39	0.48
1:D:644:LEU:HD23	1:D:667:LEU:O	2.13	0.48
1:D:1576:PRO:O	1:D:1578:VAL:N	2.46	0.48
1:E:864:MET:SD	1:E:990:LEU:HD13	2.53	0.48
1:E:1045:ILE:HD12	1:E:1046:ASP:N	2.27	0.48
1:E:2260:LYS:HD2	1:E:2263:VAL:HG21	1.95	0.48
1:C:1104:PHE:HE2	1:C:1145:VAL:HG13	1.77	0.48
1:F:636:ALA:HB2	1:F:683:LEU:HG	1.94	0.48
1:F:1534:ASN:HD22	1:F:1535:GLU:N	2.11	0.48
1:F:1608:SER:HB3	1:F:1896:LEU:HD21	1.94	0.48
1:F:1612:LEU:HD22	1:F:1896:LEU:CD1	2.42	0.48
1:J:1369:ILE:HD12	1:J:1391:LEU:HD22	1.94	0.48
1:D:1706:ALA:HA	1:D:1711:ILE:HD11	1.94	0.48
1:D:1734:PHE:HA	1:D:1753:LEU:HD23	1.95	0.48
1:D:1955:PHE:HA	1:D:2212:ARG:NH2	2.28	0.48
1:D:2093:TRP:HE1	1:C:1797:LEU:HB3	1.77	0.48
1:D:2221:ARG:CG	1:D:2271:ALA:HB2	2.44	0.48
1:E:359:GLU:N	1:E:376:ARG:O	2.41	0.48
1:E:1718:ALA:HB1	1:E:1822:CYS:SG	2.54	0.48
1:E:2053:MET:HB2	1:F:1863:TYR:CE1	2.49	0.48
1:F:1663:LYS:NZ	1:F:1665:THR:OG1	2.46	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1403:LEU:HD21	1:A:1456:GLU:CB	2.43	0.48
1:A:1974:GLY:O	1:A:1985:VAL:N	2.43	0.48
1:A:2221:ARG:HD2	1:A:2270:LEU:CD1	2.44	0.48
1:J:1121:GLN:O	1:J:1125:LEU:HD23	2.13	0.48
1:R:935:GLN:N	1:R:935:GLN:OE1	2.45	0.48
2:M:1808:VAL:HG11	2:M:1824:ILE:HD13	1.95	0.48
1:D:1684:ILE:HD12	1:D:1718:ALA:C	2.33	0.48
1:D:1817:ILE:HG23	1:D:1837:ARG:HB2	1.94	0.48
1:D:2079:LEU:HD22	1:D:2215:PHE:HE1	1.77	0.48
1:E:943:ASN:OD1	1:E:944:ILE:N	2.47	0.48
1:C:943:ASN:HB3	1:B:2243:GLN:HB3	1.96	0.48
1:C:1782:ILE:N	1:C:1782:ILE:HD12	2.29	0.48
1:C:1865:SER:O	1:C:1868:GLN:N	2.45	0.48
1:F:1711:ILE:HG22	1:F:1905:SER:HB3	1.94	0.48
1:F:1901:TYR:HB2	1:F:1902:MET:HE3	1.95	0.48
1:B:2046:TRP:O	1:B:2088:LEU:HA	2.13	0.48
1:A:193:ILE:O	1:A:197:ALA:N	2.33	0.48
1:A:1454:MET:HG3	1:A:1506:LEU:HD21	1.94	0.48
1:Q:1873:GLN:O	1:Q:1877:ASN:ND2	2.33	0.48
1:Q:2148:ALA:O	1:Q:2152:GLY:N	2.44	0.48
1:Q:2178:ILE:HG23	1:Q:2179:TYR:CD2	2.48	0.48
1:J:112:PHE:HB2	1:J:468:ILE:HD12	1.96	0.48
1:J:129:ALA:HB2	1:J:209:TRP:CZ3	2.48	0.48
1:R:1121:GLN:C	1:R:1125:LEU:HD23	2.33	0.48
1:R:1255:CYS:SG	2:U:1667:LYS:NZ	2.79	0.48
1:R:1499:TYR:O	1:R:1503:LEU:HD13	2.13	0.48
2:S:1825:GLY:N	2:S:1857:GLN:OE1	2.41	0.48
2:U:1780:LEU:HD22	2:U:1835:ARG:HD2	1.95	0.48
1:D:118:ILE:HD12	1:D:466:MET:HG3	1.96	0.48
1:D:1695:GLU:HA	1:D:1698:LEU:HD23	1.96	0.48
1:E:1720:SER:HA	1:E:1825:ILE:HB	1.95	0.48
1:C:258:LEU:HD22	1:C:352:ALA:HB2	1.95	0.48
1:C:1651:LEU:HD12	1:C:1652:PRO:HD2	1.96	0.48
1:C:1912:LEU:HD22	1:C:1980:GLY:O	2.13	0.48
1:F:1518:ARG:HE	1:F:1523:GLY:HA2	1.77	0.48
1:F:1807:SER:O	1:F:1834:LEU:HD21	2.12	0.48
1:B:176:VAL:HG11	1:B:196:ILE:HG12	1.95	0.48
1:B:1069:LEU:HD21	1:B:1078:ALA:N	2.29	0.48
1:A:244:ILE:HD13	1:A:290:TYR:HB3	1.96	0.48
1:A:1475:LEU:N	1:A:1512:GLU:OE2	2.47	0.48
1:A:1710:GLY:HA2	1:A:1814:ILE:HG22	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1994:GLU:OE1	1:A:1994:GLU:N	2.47	0.48
1:J:707:HIS:N	1:J:715:LEU:O	2.45	0.48
1:J:991:LEU:HD12	1:J:992:ARG:HE	1.78	0.48
1:J:1299:ILE:O	1:J:1301:ASP:N	2.45	0.48
1:D:849:LEU:O	1:D:853:PHE:HB2	2.14	0.48
1:D:1475:LEU:C	1:D:1475:LEU:HD13	2.33	0.48
1:D:1713:ARG:O	1:D:1816:THR:OG1	2.19	0.48
1:E:118:ILE:HD12	1:E:466:MET:HG3	1.94	0.48
1:E:356:ARG:HG3	1:E:395:ILE:HG21	1.94	0.48
1:E:400:VAL:HG11	1:E:427:TYR:HE1	1.78	0.48
1:C:2007:GLU:O	1:C:2009:LYS:NZ	2.40	0.48
1:B:156:MET:HE2	1:B:193:ILE:HG12	1.96	0.48
1:B:380:VAL:HG11	1:B:388:ILE:HB	1.94	0.48
1:B:1719:ASN:N	1:B:1823:ARG:O	2.39	0.48
1:B:1785:ILE:HG21	1:G:2190:HIS:CD2	2.49	0.48
1:B:2113:SER:O	1:B:2114:ARG:NH1	2.40	0.48
1:B:2117:VAL:HG13	1:G:1722:ALA:HB3	1.96	0.48
1:Q:2064:GLY:O	1:Q:2067:ILE:HG22	2.14	0.48
1:Q:2323:THR:OG1	1:Q:2331:ARG:NH2	2.46	0.48
1:J:312:ALA:HB2	1:J:337:VAL:CG1	2.44	0.48
1:J:357:HIS:HE2	1:J:424:GLU:HB3	1.78	0.48
1:J:914:VAL:HG11	1:J:945:LEU:HD12	1.95	0.48
1:J:1530:LEU:HD11	1:J:1544:LEU:HD13	1.95	0.48
1:R:962:PHE:HA	1:R:965:THR:HG22	1.94	0.48
1:R:1060:LEU:O	1:R:1064:THR:OG1	2.24	0.48
1:R:1121:GLN:O	1:R:1125:LEU:HD23	2.13	0.48
1:D:118:ILE:HD12	1:D:466:MET:CG	2.44	0.48
1:D:122:LEU:HD23	1:D:205:VAL:HG22	1.96	0.48
1:D:510:ILE:HG22	1:D:581:LEU:HD21	1.96	0.48
1:D:935:GLN:OE1	1:D:935:GLN:N	2.47	0.48
1:D:1001:PHE:O	1:D:1009:CYS:HB3	2.13	0.48
1:D:1684:ILE:HD13	1:D:1822:CYS:HB3	1.95	0.48
1:E:630:LEU:HD11	1:E:738:ILE:HG21	1.95	0.48
1:E:1033:GLN:HB3	1:E:1036:LYS:HB2	1.95	0.48
1:E:1938:LEU:O	1:E:1955:PHE:N	2.36	0.48
1:E:2336:ARG:HG3	1:E:2337:ILE:HD12	1.95	0.48
1:C:239:ALA:HA	1:C:245:ALA:HB1	1.95	0.48
1:C:636:ALA:HB2	1:C:683:LEU:HG	1.96	0.48
1:C:1760:ARG:HG3	1:C:1761:VAL:N	2.28	0.48
1:C:1860:ARG:HH12	1:C:1862:VAL:HG22	1.79	0.48
1:C:1992:THR:HA	1:C:2014:ALA:HA	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2331:ARG:O	1:F:2335:ILE:HG13	2.13	0.48
1:B:1524:LYS:CD	1:B:1526:ILE:HD11	2.43	0.48
1:B:2065:ALA:HB1	1:G:1834:LEU:HA	1.96	0.48
1:A:1096:ARG:O	1:A:1100:VAL:HG22	2.14	0.48
1:Q:2018:TRP:NE1	1:Q:2092:SER:OG	2.45	0.48
1:J:1086:ILE:O	1:J:1089:HIS:N	2.43	0.48
1:J:1360:ALA:HB2	1:J:1365:GLU:HA	1.96	0.48
1:J:1496:VAL:HG23	1:J:1503:LEU:HD21	1.94	0.48
2:S:1808:VAL:HG11	2:S:1824:ILE:HG21	1.96	0.48
1:D:913:ASN:N	1:D:913:ASN:OD1	2.45	0.48
1:D:1684:ILE:HD11	1:D:1823:ARG:NH1	2.28	0.48
1:D:1695:GLU:O	1:D:1698:LEU:HD23	2.14	0.48
1:D:1809:LEU:HD12	1:C:2072:ARG:HH11	1.79	0.48
1:D:2317:ASP:O	1:D:2320:ILE:HG12	2.14	0.48
1:E:194:LEU:HD11	1:E:225:ASN:HB2	1.94	0.48
1:E:294:VAL:HG23	1:E:330:PHE:CE2	2.48	0.48
1:E:1063:LEU:HD11	1:E:1081:ALA:O	2.14	0.48
1:E:1481:VAL:HG22	1:E:1482:ILE:H	1.79	0.48
1:E:1595:THR:OG1	1:E:1596:THR:N	2.47	0.48
1:C:1811:TYR:O	1:C:2035:ARG:HD2	2.14	0.48
1:C:1923:ILE:HG23	1:C:1953:GLY:C	2.34	0.48
1:C:2206:LEU:HD12	1:C:2206:LEU:N	2.29	0.48
1:F:102:VAL:HG23	1:F:145:PHE:CE1	2.48	0.48
1:F:569:GLU:OE2	1:F:573:ASN:ND2	2.40	0.48
1:F:1239:PHE:CZ	1:F:1248:ILE:HG21	2.48	0.48
1:F:2063:PHE:O	1:F:2067:ILE:HG23	2.14	0.48
1:B:374:PHE:HD2	1:B:453:ALA:HB2	1.78	0.48
1:B:1488:ILE:O	1:B:1492:VAL:HG22	2.14	0.48
1:B:1535:GLU:N	1:B:1535:GLU:OE1	2.47	0.48
1:B:2315:ALA:CB	1:G:2330:GLN:HE22	2.26	0.48
1:A:863:VAL:O	1:A:1037:LYS:NZ	2.46	0.48
1:A:1359:ARG:N	1:A:1365:GLU:O	2.47	0.48
1:A:1753:LEU:HB2	1:A:1758:TYR:HB3	1.95	0.48
1:A:2228:VAL:O	1:A:2232:ILE:HD12	2.14	0.48
1:Q:2333:GLU:OE1	1:Q:2336:ARG:NH2	2.43	0.48
1:J:371:ILE:HD11	1:J:476:ILE:CD1	2.44	0.48
1:R:1369:ILE:HD12	1:R:1391:LEU:HD22	1.95	0.48
2:S:1742:ASN:HB3	2:S:1844:LEU:HD21	1.95	0.48
1:D:637:LEU:HD11	1:D:693:TYR:CD2	2.49	0.48
1:D:1442:LEU:HD21	1:D:1477:PHE:HE2	1.77	0.48
1:E:1130:ILE:O	1:E:1130:ILE:HG22	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:851:ARG:O	1:C:855:TYR:N	2.37	0.48
1:C:1355:PHE:O	1:C:1372:HIS:N	2.43	0.48
1:C:2251:TRP:CD1	1:C:2288:ILE:HD11	2.49	0.48
1:F:809:LEU:HD11	1:F:815:LEU:HD21	1.95	0.48
1:F:1299:ILE:O	1:F:1301:ASP:N	2.41	0.48
1:F:1971:VAL:HG13	1:F:1987:ALA:O	2.14	0.48
1:B:136:SER:C	1:B:456:ASN:HD21	2.15	0.48
1:B:1419:TYR:HB3	1:B:1466:VAL:HG21	1.95	0.48
1:B:1924:GLU:O	1:B:2209:LYS:NZ	2.47	0.48
1:G:2319:ILE:HA	1:G:2322:MET:HB2	1.96	0.48
1:J:961:PHE:O	1:J:965:THR:HG22	2.13	0.48
1:J:1289:LEU:HD21	1:J:1291:VAL:HG13	1.95	0.48
1:R:979:ILE:HD12	1:R:980:ARG:N	2.29	0.48
1:D:1664:MET:CE	1:D:1679:VAL:HG21	2.43	0.47
1:D:1917:ASP:OD2	1:D:1956:ASP:HA	2.14	0.47
1:C:569:GLU:OE2	1:C:573:ASN:ND2	2.39	0.47
1:C:863:VAL:HG21	1:C:881:TRP:CH2	2.49	0.47
1:C:910:ILE:HG12	1:C:915:GLU:HB2	1.94	0.47
1:C:1114:GLN:HE22	1:C:1147:MET:HB3	1.79	0.47
1:C:1494:SER:HA	1:C:1497:MET:HG3	1.96	0.47
1:B:197:ALA:HB1	1:B:227:ILE:CD1	2.32	0.47
1:B:249:VAL:HG12	1:B:411:LEU:HD12	1.96	0.47
1:A:866:GLY:HA3	1:A:1030:SER:HB2	1.96	0.47
1:G:1860:ARG:NH2	1:G:2001:PRO:O	2.47	0.47
1:Q:2079:LEU:HD12	1:Q:2219:LEU:HB2	1.95	0.47
1:J:962:PHE:HA	1:J:965:THR:HG22	1.94	0.47
1:J:1457:LEU:HD13	1:J:1506:LEU:HD23	1.96	0.47
1:R:638:HIS:CD2	1:R:736:ILE:HG23	2.49	0.47
1:D:306:TYR:CZ	1:D:327:ALA:HB2	2.49	0.47
1:D:1369:ILE:HA	1:D:1393:ALA:HB2	1.96	0.47
1:D:2068:VAL:HB	1:D:2095:VAL:HG12	1.96	0.47
1:E:1405:LEU:HD23	1:E:1421:PHE:CD1	2.48	0.47
1:E:1789:GLU:OE1	1:E:1792:ILE:HG23	2.14	0.47
1:E:2108:TYR:OH	1:E:2218:ARG:NE	2.46	0.47
1:C:1873:GLN:C	1:C:1877:ASN:HD22	2.17	0.47
1:F:953:ASN:HA	1:F:958:ARG:HD3	1.96	0.47
1:F:954:ARG:HG3	1:A:2200:GLY:HA3	1.95	0.47
1:F:1602:PRO:HA	1:F:1605:PHE:CD1	2.49	0.47
1:F:1992:THR:HG23	1:F:2013:GLN:C	2.34	0.47
1:F:2236:ASN:HB3	1:F:2239:LEU:HD12	1.96	0.47
1:F:2258:THR:HG21	1:A:293:ASP:O	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1083:GLN:NE2	1:B:1445:GLU:OE2	2.45	0.47
1:B:1172:LYS:HZ2	1:B:1248:ILE:HG23	1.78	0.47
1:A:698:ASN:HB3	1:A:833:THR:HG22	1.97	0.47
1:A:1421:PHE:HB3	1:A:1457:LEU:HD11	1.96	0.47
1:G:1836:GLN:OE1	1:G:2028:GLN:NE2	2.47	0.47
1:G:2064:GLY:O	1:G:2067:ILE:HG22	2.14	0.47
1:Q:1696:ASP:O	1:Q:1803:ILE:HD11	2.13	0.47
1:Q:1973:VAL:HG11	1:Q:2026:THR:HA	1.96	0.47
1:R:109:VAL:HG22	1:R:466:MET:HB3	1.96	0.47
1:R:1314:GLN:NE2	1:R:1315:ASN:OD1	2.47	0.47
2:H:1652:MET:HA	2:H:1686:HIS:HB2	1.96	0.47
2:M:1758:ARG:O	2:M:1845:TYR:OH	2.26	0.47
2:W:1689:MET:HB2	2:W:1736:VAL:HG11	1.96	0.47
1:D:1294:LYS:O	1:D:1295:THR:OG1	2.20	0.47
1:D:1438:SER:O	1:D:1442:LEU:N	2.29	0.47
1:D:2077:PRO:HA	1:D:2104:HIS:O	2.14	0.47
1:D:2146:HIS:CE1	1:D:2150:ARG:HE	2.31	0.47
1:E:1375:PRO:HA	1:E:1378:ALA:HB3	1.96	0.47
1:C:1287:HIS:O	1:C:1325:ARG:N	2.43	0.47
1:C:1499:TYR:O	1:C:1503:LEU:HD13	2.14	0.47
1:C:1794:PRO:HA	1:C:1797:LEU:HD12	1.95	0.47
1:F:258:LEU:HD22	1:F:352:ALA:HB2	1.96	0.47
1:F:973:GLN:HE21	1:A:2254:GLU:HA	1.79	0.47
1:F:1405:LEU:HD23	1:F:1421:PHE:HD1	1.79	0.47
1:F:1828:GLY:O	1:F:1832:VAL:HG23	2.14	0.47
1:B:626:PRO:CB	1:B:738:ILE:HD12	2.43	0.47
1:B:2230:LYS:O	1:B:2234:ASN:N	2.43	0.47
1:B:2291:ASN:O	1:B:2295:ILE:HD12	2.14	0.47
1:A:1999:ALA:HB2	1:A:2008:ALA:N	2.29	0.47
1:G:1680:ILE:HG21	1:G:1699:PHE:HD1	1.79	0.47
1:J:979:ILE:HD12	1:J:980:ARG:N	2.29	0.47
1:R:1230:CYS:O	1:R:1232:ARG:NH1	2.47	0.47
1:D:1684:ILE:HD12	1:D:1719:ASN:N	2.29	0.47
1:D:1816:THR:O	1:D:1817:ILE:HD13	2.14	0.47
1:D:2090:GLY:O	1:D:2094:VAL:HG23	2.13	0.47
1:E:869:LEU:HD22	1:E:874:PHE:CD1	2.49	0.47
1:E:1166:VAL:HG22	1:E:1179:GLU:O	2.15	0.47
1:E:2288:ILE:H	1:E:2288:ILE:HD12	1.78	0.47
1:C:123:ILE:HG23	1:C:206:TRP:CE3	2.49	0.47
1:C:193:ILE:HG21	1:C:218:LEU:HD11	1.97	0.47
1:C:1129:SER:H	1:C:1430:SER:HB2	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:193:ILE:HG21	1:F:218:LEU:HD11	1.95	0.47
1:F:2016:GLN:HB2	1:F:2047:ARG:HG3	1.96	0.47
1:F:2258:THR:HG22	1:A:296:ASP:CB	2.42	0.47
1:B:1240:ARG:O	1:B:1294:LYS:HB3	2.14	0.47
1:B:1390:ASP:HB3	1:B:1407:ALA:HB3	1.96	0.47
1:B:1539:TYR:HH	1:B:1606:ARG:NH2	2.11	0.47
1:A:204:ALA:HB1	1:A:230:MET:HG3	1.95	0.47
1:A:2296:SER:O	1:A:2300:VAL:HG23	2.15	0.47
1:G:1595:THR:OG1	1:G:1596:THR:N	2.48	0.47
1:J:158:THR:HG22	1:J:186:ASN:HD22	1.79	0.47
1:R:1532:LEU:HD12	1:R:1542:ILE:HG23	1.96	0.47
2:M:1664:LEU:CD2	2:M:1723:ILE:HD12	2.44	0.47
2:U:1707:ILE:HG21	2:U:1842:VAL:O	2.14	0.47
1:D:1455:ASP:O	1:D:1459:VAL:HG23	2.13	0.47
1:E:937:PRO:HB2	1:E:940:GLN:HE21	1.80	0.47
1:E:969:VAL:O	1:E:973:GLN:HB2	2.15	0.47
1:E:1665:THR:HG23	1:E:1676:ASP:OD1	2.13	0.47
1:E:1692:GLY:HA3	1:E:1723:ARG:NH2	2.30	0.47
1:E:1971:VAL:HG23	1:E:1987:ALA:O	2.14	0.47
1:C:640:ALA:CB	1:C:685:VAL:HG11	2.45	0.47
1:C:1121:GLN:C	1:C:1125:LEU:HD23	2.33	0.47
1:C:1152:VAL:HG22	1:C:1156:ARG:HG3	1.97	0.47
1:F:239:ALA:HA	1:F:245:ALA:HB1	1.96	0.47
1:F:1598:ILE:HG23	1:F:1599:TYR:CD2	2.49	0.47
1:F:1705:LEU:O	1:F:1708:ALA:HB3	2.13	0.47
1:B:1839:ILE:HD11	1:B:1898:TRP:CH2	2.50	0.47
1:A:1408:ALA:O	1:A:1416:VAL:HG12	2.14	0.47
1:Q:2096:ILE:HD12	1:Q:2096:ILE:O	2.14	0.47
1:J:578:LEU:O	1:J:595:ILE:HD11	2.15	0.47
1:J:941:ILE:HD11	1:J:972:VAL:HB	1.97	0.47
1:J:1067:THR:HG21	1:J:1085:LEU:HD23	1.97	0.47
1:J:1571:MET:SD	1:J:1575:THR:HG21	2.55	0.47
2:M:1650:MET:HB3	2:M:1674:ILE:HG23	1.94	0.47
2:U:1654:VAL:HG12	2:U:1688:VAL:HB	1.96	0.47
2:U:1691:THR:HG22	2:U:1697:CYS:HB3	1.95	0.47
1:D:362:ILE:HD11	1:D:408:ALA:HB1	1.94	0.47
1:D:682:VAL:O	1:D:698:ASN:N	2.47	0.47
1:D:937:PRO:HB2	1:D:940:GLN:HE21	1.78	0.47
1:D:1063:LEU:HD12	1:D:1081:ALA:HB1	1.96	0.47
1:D:1526:ILE:CD1	1:D:1528:ILE:HD11	2.44	0.47
1:D:1598:ILE:HG13	1:D:1599:TYR:H	1.80	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1691:PHE:HE2	1:D:1719:ASN:HB2	1.80	0.47
1:D:1789:GLU:HB3	1:D:1792:ILE:HD13	1.96	0.47
1:D:1840:GLN:O	1:D:1884:THR:HA	2.15	0.47
1:E:216:PRO:O	1:E:234:SER:OG	2.31	0.47
1:E:910:ILE:CG1	1:E:915:GLU:HB2	2.43	0.47
1:E:1070:SER:O	1:E:1070:SER:OG	2.29	0.47
1:E:1076:LYS:HG3	1:E:1077:VAL:HG23	1.96	0.47
1:E:1481:VAL:HG22	1:E:1482:ILE:N	2.29	0.47
1:E:1680:ILE:HG21	1:E:1699:PHE:HD1	1.77	0.47
1:F:2238:GLU:OE1	1:F:2238:GLU:N	2.40	0.47
1:B:1483:MET:HB2	1:B:1488:ILE:HD11	1.96	0.47
1:B:1753:LEU:HB2	1:B:1758:TYR:HB3	1.96	0.47
1:B:2095:VAL:HG23	1:B:2096:ILE:HG23	1.96	0.47
1:A:138:ARG:O	1:A:142:TYR:N	2.43	0.47
1:A:941:ILE:HD13	1:A:968:ILE:HG12	1.96	0.47
1:J:1079:LEU:HD12	1:J:1444:ASN:HA	1.97	0.47
1:R:1457:LEU:HD13	1:R:1506:LEU:HD23	1.95	0.47
2:Y:1691:THR:OG1	2:Y:1715:SER:OG	2.29	0.47
1:D:869:LEU:HD13	1:D:874:PHE:CG	2.49	0.47
1:D:1381:LEU:O	1:D:1381:LEU:HD12	2.14	0.47
1:D:1418:ASP:OD1	1:D:1419:TYR:N	2.48	0.47
1:D:1910:VAL:HG11	1:D:1982:PRO:CG	2.44	0.47
1:D:2251:TRP:HE3	1:D:2288:ILE:HG23	1.76	0.47
1:D:2319:ILE:HD11	1:C:2322:MET:HB3	1.95	0.47
1:D:2329:THR:O	1:D:2332:ALA:HB3	2.14	0.47
1:E:190:VAL:HG11	1:E:221:LEU:HB2	1.97	0.47
1:E:291:VAL:HA	1:E:296:ASP:HB3	1.96	0.47
1:E:629:MET:HB3	1:E:836:LEU:HD11	1.95	0.47
1:E:869:LEU:HD12	1:E:1036:LYS:HD2	1.95	0.47
1:E:1127:GLU:OE1	1:E:1479:PRO:HB3	2.15	0.47
1:E:2221:ARG:HD3	1:E:2267:ASN:O	2.14	0.47
1:C:976:ARG:NH1	1:C:977:SER:OG	2.48	0.47
1:C:990:LEU:CD1	1:C:1044:LEU:HD11	2.44	0.47
1:C:1248:ILE:O	1:C:1248:ILE:HG22	2.14	0.47
1:C:2218:ARG:CZ	1:C:2222:LEU:HD21	2.44	0.47
1:C:2221:ARG:CZ	1:C:2267:ASN:HA	2.45	0.47
1:F:1102:SER:OG	1:F:1103:ILE:N	2.47	0.47
1:F:1129:SER:H	1:F:1430:SER:HB2	1.80	0.47
1:F:1865:SER:O	1:F:1868:GLN:HB2	2.14	0.47
1:F:2221:ARG:CZ	1:F:2267:ASN:HA	2.45	0.47
1:B:176:VAL:HG21	1:B:196:ILE:HG12	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:889:LEU:O	1:B:979:ILE:HG22	2.15	0.47
1:B:900:GLN:O	1:B:904:THR:HG23	2.14	0.47
1:B:1534:ASN:HD22	1:B:1535:GLU:N	2.12	0.47
1:A:116:LYS:HE2	1:A:228:ALA:HB2	1.95	0.47
1:A:253:ALA:HB2	1:A:414:MET:SD	2.55	0.47
1:A:1097:HIS:CD2	1:A:1133:VAL:HG12	2.50	0.47
1:A:1248:ILE:HG22	1:A:1248:ILE:O	2.15	0.47
1:A:1436:GLU:OE1	1:A:1436:GLU:N	2.47	0.47
1:G:1839:ILE:HD12	1:G:1895:VAL:HG22	1.97	0.47
1:G:2221:ARG:NH1	1:G:2264:TRP:O	2.46	0.47
1:Q:2071:LEU:HD21	1:Q:2105:MET:SD	2.54	0.47
1:J:974:ARG:O	1:J:982:HIS:ND1	2.48	0.47
1:J:1100:VAL:HA	1:J:1103:ILE:HG22	1.97	0.47
1:R:974:ARG:O	1:R:982:HIS:ND1	2.47	0.47
1:D:849:LEU:HD21	1:D:888:THR:HB	1.96	0.47
1:D:2059:GLN:NE2	1:C:1878:ASN:O	2.48	0.47
1:E:118:ILE:HD12	1:E:466:MET:CG	2.45	0.47
1:E:636:ALA:HB2	1:E:683:LEU:HG	1.95	0.47
1:E:1934:PRO:HD3	1:E:1989:GLU:HA	1.96	0.47
1:E:2307:LEU:CD2	1:F:2304:ILE:HD11	2.44	0.47
1:F:123:ILE:HG23	1:F:206:TRP:CE3	2.50	0.47
1:F:756:SER:N	1:F:813:CYS:O	2.47	0.47
1:F:1606:ARG:O	1:F:1610:ILE:HG13	2.15	0.47
1:F:1855:ASN:OD1	1:F:1862:VAL:N	2.48	0.47
1:F:2018:TRP:HE1	1:F:2092:SER:HG	1.61	0.47
1:F:2082:ILE:HG22	1:F:2086:ALA:HB3	1.97	0.47
1:F:2082:ILE:HD13	1:F:2109:ALA:HB2	1.96	0.47
1:F:2224:LEU:HD13	1:F:2274:LEU:HB3	1.97	0.47
1:A:1785:ILE:HG21	1:Q:2190:HIS:CD2	2.49	0.47
1:R:943:ASN:OD1	1:R:944:ILE:N	2.47	0.47
2:H:1689:MET:HB2	2:H:1736:VAL:HG11	1.97	0.47
2:K:1652:MET:HG2	2:K:1686:HIS:HB2	1.96	0.47
2:W:1809:VAL:HG13	2:W:1835:ARG:HA	1.97	0.47
1:D:1138:PHE:HB3	1:D:1149:ALA:HB3	1.97	0.47
1:D:1723:ARG:NH1	1:D:1789:GLU:OE2	2.48	0.47
1:D:1910:VAL:HG21	1:D:1982:PRO:HD2	1.97	0.47
1:E:1124:ILE:O	1:E:1124:ILE:HG22	2.15	0.47
1:E:1138:PHE:HB3	1:E:1149:ALA:CB	2.45	0.47
1:E:1405:LEU:HD22	1:E:1420:ARG:O	2.15	0.47
1:E:1421:PHE:CE1	1:E:1460:ALA:HB1	2.50	0.47
1:E:2261:ALA:O	1:E:2264:TRP:HB3	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:194:LEU:HD22	1:C:221:LEU:HB3	1.96	0.47
1:C:328:ASP:OD2	1:C:850:HIS:NE2	2.47	0.47
1:C:1090:LEU:HD11	1:C:1096:ARG:CZ	2.45	0.47
1:C:1921:ARG:NH1	1:C:1953:GLY:O	2.43	0.47
1:F:140:TRP:CE3	1:F:459:ALA:HB1	2.49	0.47
1:F:1132:ASP:OD1	1:F:1333:GLN:NE2	2.48	0.47
1:F:1895:VAL:HG12	1:F:1899:LEU:HD12	1.96	0.47
1:B:920:LYS:O	1:B:923:ALA:HB3	2.14	0.47
1:B:1502:ARG:HE	1:B:1503:LEU:HD12	1.80	0.47
1:B:1999:ALA:HB2	1:B:2008:ALA:N	2.30	0.47
1:A:912:PRO:HA	1:A:915:GLU:HB3	1.97	0.47
1:A:1079:LEU:HD21	1:A:1447:GLU:CB	2.44	0.47
1:A:1314:GLN:HE22	1:A:1315:ASN:ND2	2.13	0.47
1:A:1707:ARG:HA	1:A:1814:ILE:HG21	1.97	0.47
1:G:1843:ASN:O	1:G:1843:ASN:ND2	2.47	0.47
1:G:2096:ILE:O	1:G:2096:ILE:HD12	2.15	0.47
1:R:206:TRP:HZ2	1:R:442:LEU:HD22	1.80	0.47
1:R:1123:LEU:HD12	1:R:1152:VAL:HG11	1.97	0.47
2:H:1665:VAL:HG22	2:H:1719:VAL:HG11	1.97	0.47
2:Y:1780:LEU:HD22	2:Y:1835:ARG:HD2	1.97	0.47
1:D:638:HIS:ND1	1:D:727:MET:HB3	2.30	0.47
1:D:1138:PHE:HB3	1:D:1149:ALA:CB	2.45	0.47
1:D:1955:PHE:HA	1:D:2212:ARG:HH22	1.80	0.47
1:D:2082:ILE:HG12	1:D:2113:SER:HB2	1.95	0.47
1:D:2091:GLY:O	1:D:2095:VAL:HG22	2.15	0.47
1:D:2229:LYS:HG2	1:D:2244:ILE:HG21	1.96	0.47
1:E:239:ALA:HA	1:E:245:ALA:HB1	1.97	0.47
1:E:1612:LEU:HD21	1:E:1616:MET:HG3	1.97	0.47
1:E:2055:ASP:OD1	1:E:2056:MET:N	2.47	0.47
1:C:608:ILE:O	1:C:726:TYR:OH	2.24	0.47
1:C:630:LEU:O	1:C:634:CYS:N	2.42	0.47
1:C:1548:VAL:HG21	1:C:1559:GLN:O	2.15	0.47
1:C:1873:GLN:HA	1:C:1877:ASN:ND2	2.30	0.47
1:C:1954:PHE:O	1:C:2212:ARG:NH1	2.43	0.47
1:F:1090:LEU:HD11	1:F:1096:ARG:CZ	2.45	0.47
1:B:448:CYS:HA	1:B:505:VAL:HG11	1.97	0.47
1:B:577:ALA:O	1:B:581:LEU:N	2.44	0.47
1:B:1469:ASP:O	1:B:1509:LEU:HD12	2.14	0.47
1:A:178:VAL:HG12	1:A:192:LEU:CD2	2.45	0.47
1:A:374:PHE:CD2	1:A:453:ALA:HB2	2.50	0.47
1:A:1069:LEU:HD21	1:A:1078:ALA:CB	2.44	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1643:GLY:HA3	1:A:1697:LEU:HD21	1.97	0.47
1:J:1101:GLU:O	1:J:1105:LEU:HD23	2.15	0.47
1:R:158:THR:HG22	1:R:186:ASN:HD22	1.80	0.47
1:R:760:GLY:O	1:R:809:LEU:N	2.48	0.47
1:R:941:ILE:HD11	1:R:972:VAL:HB	1.97	0.47
1:D:1491:SER:O	1:D:1494:SER:OG	2.23	0.46
1:D:2288:ILE:O	1:D:2292:ILE:HG13	2.14	0.46
1:E:291:VAL:HG22	1:E:346:ILE:O	2.15	0.46
1:E:1038:ASN:OD1	1:E:1077:VAL:HG21	2.15	0.46
1:E:1908:SER:OG	1:E:1909:SER:O	2.33	0.46
1:E:2019:PHE:HB2	1:E:2021:ASP:OD1	2.14	0.46
1:E:2089:ARG:NH1	1:E:2116:SER:OG	2.49	0.46
1:E:2139:ARG:NH1	1:F:1734:PHE:O	2.47	0.46
1:E:2247:MET:SD	1:E:2248:LEU:N	2.88	0.46
1:E:2291:ASN:O	1:E:2294:CYS:N	2.48	0.46
1:C:615:ARG:NH1	1:C:714:LEU:O	2.46	0.46
1:C:1819:LEU:CD2	1:C:1892:VAL:HG12	2.45	0.46
1:C:2082:ILE:CG1	1:C:2088:LEU:HD13	2.43	0.46
1:C:2303:GLN:O	1:C:2306:SER:OG	2.24	0.46
1:F:1108:ILE:HD13	1:F:1116:CYS:SG	2.55	0.46
1:F:1809:LEU:HD12	1:F:1810:ALA:N	2.30	0.46
1:F:2295:ILE:HD12	1:F:2295:ILE:H	1.79	0.46
1:B:978:GLY:O	1:B:982:HIS:ND1	2.39	0.46
1:B:1140:HIS:O	1:B:1146:ARG:HD3	2.15	0.46
1:A:1882:HIS:HE1	1:A:2028:GLN:HE22	1.62	0.46
1:R:102:VAL:HG23	1:R:145:PHE:CE1	2.51	0.46
2:H:1765:GLU:O	2:H:1807:ILE:N	2.45	0.46
1:D:102:VAL:HG23	1:D:145:PHE:CD1	2.50	0.46
1:D:332:ASN:HD21	1:D:336:GLN:HE21	1.63	0.46
1:D:442:LEU:HB2	1:D:461:GLN:HE22	1.80	0.46
1:D:765:TYR:OH	1:D:799:ILE:HG21	2.15	0.46
1:D:2331:ARG:O	1:D:2334:VAL:HG12	2.15	0.46
1:E:1737:ALA:HB2	1:E:1779:ARG:HE	1.80	0.46
1:E:2090:GLY:O	1:E:2094:VAL:HG23	2.15	0.46
1:C:863:VAL:HG21	1:C:881:TRP:HH2	1.80	0.46
1:C:1558:PHE:N	1:C:1571:MET:O	2.42	0.46
1:F:454:ASP:OD2	1:F:502:ARG:NE	2.48	0.46
1:F:640:ALA:CB	1:F:685:VAL:HG11	2.45	0.46
1:F:1598:ILE:HA	1:F:1601:ILE:HG12	1.97	0.46
1:F:1602:PRO:HA	1:F:1605:PHE:CE1	2.50	0.46
1:F:1605:PHE:HZ	1:F:1632:LEU:HD22	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:138:ARG:O	1:B:142:TYR:N	2.40	0.46
1:B:1321:ASP:OD1	2:H:1726:ARG:NH2	2.47	0.46
1:A:136:SER:C	1:A:456:ASN:HD21	2.19	0.46
1:A:899:LEU:HD21	1:A:922:MET:HA	1.96	0.46
1:A:1598:ILE:CD1	1:A:1660:VAL:HG21	2.45	0.46
1:A:2108:TYR:OH	1:A:2218:ARG:NE	2.46	0.46
2:M:1691:THR:CG2	2:M:1736:VAL:HG12	2.44	0.46
2:W:1810:VAL:O	2:W:1835:ARG:N	2.45	0.46
1:D:938:SER:OG	1:D:939:GLN:N	2.48	0.46
1:D:1700:LEU:HD22	1:D:1701:ARG:HH11	1.80	0.46
1:E:122:LEU:HB2	1:E:202:VAL:HG21	1.98	0.46
1:C:454:ASP:OD2	1:C:502:ARG:NE	2.48	0.46
1:C:1178:VAL:HG12	1:C:1236:MET:HB3	1.97	0.46
1:C:1492:VAL:O	1:C:1496:VAL:HG12	2.16	0.46
1:F:945:LEU:HD11	1:F:965:THR:HA	1.97	0.46
1:F:1305:ALA:HA	1:F:1308:PHE:HB2	1.97	0.46
1:B:1596:THR:N	1:B:1888:ASP:OD2	2.46	0.46
1:G:2071:LEU:HD21	1:G:2105:MET:SD	2.56	0.46
1:Q:1875:MET:SD	1:Q:1880:VAL:HG11	2.56	0.46
1:R:332:ASN:O	1:R:336:GLN:N	2.45	0.46
2:M:1784:VAL:HB	2:M:1789:ALA:HB3	1.96	0.46
1:D:1114:GLN:NE2	1:D:1148:ALA:HB2	2.27	0.46
1:D:1389:PHE:N	1:D:1409:LYS:HE3	2.30	0.46
1:E:335:ARG:O	1:E:339:ALA:N	2.38	0.46
1:E:1083:GLN:HG2	1:E:1444:ASN:ND2	2.31	0.46
1:E:2146:HIS:CE1	1:E:2150:ARG:HE	2.33	0.46
1:C:1845:HIS:HB3	1:C:1867:ASN:HA	1.98	0.46
1:B:304:VAL:HG23	1:B:308:VAL:HG12	1.96	0.46
1:B:1289:LEU:HD12	1:B:1327:LEU:HG	1.97	0.46
1:B:1308:PHE:HB3	1:B:1358:PHE:HE2	1.80	0.46
1:B:1668:SER:CB	1:B:1671:TYR:HB2	2.45	0.46
1:A:1555:GLN:HB2	1:A:1572:LEU:HD23	1.98	0.46
1:J:1408:ALA:HB2	1:J:1418:ASP:HB3	1.97	0.46
1:D:1055:LEU:HD12	1:D:1056:THR:HG22	1.96	0.46
1:D:1124:ILE:HG22	1:D:1124:ILE:O	2.16	0.46
1:D:2040:LEU:O	1:D:2078:VAL:HA	2.16	0.46
1:E:853:PHE:CE1	1:E:889:LEU:HB3	2.50	0.46
1:E:1369:ILE:O	1:E:1404:TYR:OH	2.22	0.46
1:E:1628:PRO:HA	1:E:1631:MET:HG2	1.97	0.46
1:E:2247:MET:HA	1:E:2250:ARG:CZ	2.45	0.46
1:C:504:HIS:N	1:C:564:GLY:O	2.43	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1086:ILE:HG21	1:C:1441:TYR:CE1	2.50	0.46
1:C:1167:GLN:OE1	1:C:1167:GLN:N	2.48	0.46
1:C:1612:LEU:HB2	1:C:1896:LEU:HD21	1.97	0.46
1:C:1967:TRP:O	1:C:2025:LYS:NZ	2.36	0.46
1:C:2258:THR:OG1	1:B:293:ASP:N	2.48	0.46
1:F:1167:GLN:OE1	1:F:1167:GLN:N	2.49	0.46
1:F:1691:PHE:HB2	1:F:1722:ALA:HA	1.96	0.46
1:F:1903:PRO:HD3	1:F:1910:VAL:HG12	1.96	0.46
1:B:371:ILE:HG12	1:B:470:LEU:HD13	1.97	0.46
1:B:1428:ARG:HB3	1:B:1478:VAL:HB	1.97	0.46
1:B:2107:MET:HB3	1:B:2202:ILE:HA	1.96	0.46
1:A:374:PHE:HD2	1:A:453:ALA:HB2	1.80	0.46
1:A:1059:LEU:O	1:A:1062:ILE:N	2.47	0.46
1:A:1075:ALA:O	1:A:1079:LEU:HD13	2.15	0.46
1:A:1565:GLN:HE21	1:A:1648:MET:HG3	1.80	0.46
1:A:1927:PRO:HG3	1:A:1937:MET:HG3	1.98	0.46
1:A:2221:ARG:HD2	1:A:2270:LEU:HD12	1.96	0.46
1:Q:1651:LEU:HD12	1:Q:1652:PRO:HD2	1.96	0.46
1:R:143:GLU:O	1:R:146:ARG:NH1	2.48	0.46
1:R:938:SER:OG	1:R:939:GLN:N	2.49	0.46
1:R:1171:LEU:HD12	1:R:1251:GLU:OE2	2.14	0.46
1:D:836:LEU:HD22	1:D:838:ARG:NH2	2.31	0.46
1:D:1438:SER:HB2	1:D:1481:VAL:HG11	1.98	0.46
1:E:102:VAL:HG23	1:E:145:PHE:CD1	2.50	0.46
1:E:176:VAL:HG11	1:E:196:ILE:HG23	1.97	0.46
1:E:869:LEU:HD22	1:E:874:PHE:CE1	2.50	0.46
1:E:1492:VAL:O	1:E:1496:VAL:HG12	2.15	0.46
1:E:2079:LEU:HD12	1:E:2079:LEU:O	2.15	0.46
1:C:860:LEU:O	1:C:864:MET:N	2.48	0.46
1:C:917:SER:CB	1:C:944:ILE:HD13	2.44	0.46
1:C:1326:ARG:HG3	1:C:1359:ARG:HG2	1.98	0.46
1:C:1812:ASN:HA	1:C:2035:ARG:HD2	1.96	0.46
1:F:979:ILE:HD12	1:F:980:ARG:N	2.31	0.46
1:B:963:MET:HA	1:B:966:GLN:NE2	2.30	0.46
1:A:634:CYS:SG	1:A:716:LEU:HD22	2.56	0.46
1:A:1028:ILE:HA	1:A:1031:HIS:CD2	2.50	0.46
1:A:1100:VAL:HA	1:A:1103:ILE:HG22	1.98	0.46
1:J:1480:THR:O	1:J:1480:THR:OG1	2.31	0.46
2:W:1715:SER:N	2:W:1734:PHE:O	2.47	0.46
1:D:455:VAL:HG22	1:D:475:ASP:HB3	1.97	0.46
1:D:1003:ASN:N	1:D:1003:ASN:OD1	2.47	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1539:TYR:CE2	1:D:1629:SER:HA	2.51	0.46
1:D:1956:ASP:OD2	1:D:1978:LEU:HA	2.16	0.46
1:E:322:ARG:NH1	1:E:337:VAL:HG22	2.31	0.46
1:E:1056:THR:HG23	1:E:1059:LEU:CB	2.46	0.46
1:C:2287:VAL:HG12	1:C:2291:ASN:HD21	1.81	0.46
1:F:630:LEU:O	1:F:634:CYS:N	2.43	0.46
1:F:1714:ILE:HD12	1:F:1817:ILE:HB	1.98	0.46
1:F:2085:GLN:N	1:F:2112:GLU:O	2.46	0.46
1:B:1121:GLN:O	1:B:1125:LEU:HB3	2.16	0.46
1:B:1151:GLU:O	1:B:1155:ARG:HG3	2.15	0.46
1:B:1482:ILE:HG23	1:B:1519:LEU:HA	1.97	0.46
1:B:2304:ILE:HA	1:G:2304:ILE:HD12	1.98	0.46
1:A:1056:THR:HG23	1:A:1059:LEU:HB2	1.97	0.46
1:G:1651:LEU:HD12	1:G:1652:PRO:HD2	1.98	0.46
1:Q:1956:ASP:OD1	1:Q:2212:ARG:NH2	2.42	0.46
1:Q:2225:GLU:HA	1:Q:2274:LEU:HD22	1.97	0.46
1:J:193:ILE:HG21	1:J:218:LEU:CD1	2.45	0.46
1:R:454:ASP:OD2	1:R:502:ARG:NE	2.48	0.46
2:H:1784:VAL:HB	2:H:1789:ALA:HB3	1.98	0.46
1:D:1709:GLU:HB3	1:D:1711:ILE:HG12	1.97	0.46
1:E:902:ILE:HG23	1:E:903:MET:N	2.31	0.46
1:C:1468:THR:O	1:C:1507:ARG:NE	2.46	0.46
1:F:991:LEU:HD12	1:F:992:ARG:HE	1.81	0.46
1:F:1970:THR:HG23	1:F:1971:VAL:HG23	1.98	0.46
1:F:2258:THR:CG2	1:A:296:ASP:HB2	2.44	0.46
1:B:1511:ALA:HB3	1:B:1532:LEU:HB2	1.98	0.46
1:A:157:VAL:HG11	1:A:162:LEU:HD12	1.98	0.46
1:A:879:LYS:O	1:A:883:GLU:HG2	2.15	0.46
1:A:889:LEU:HD21	1:A:982:HIS:HB2	1.98	0.46
1:A:1628:PRO:HA	1:A:1631:MET:HG2	1.98	0.46
1:A:2295:ILE:HD12	1:A:2295:ILE:H	1.81	0.46
1:G:2270:LEU:HD13	1:G:2274:LEU:CD1	2.46	0.46
1:J:1287:HIS:O	1:J:1325:ARG:N	2.49	0.46
1:R:380:VAL:HG11	1:R:388:ILE:HB	1.98	0.46
1:R:1299:ILE:O	1:R:1301:ASP:N	2.46	0.46
2:H:1669:ALA:HB1	2:H:1674:ILE:O	2.16	0.46
2:S:1651:SER:O	2:S:1686:HIS:N	2.43	0.46
2:W:1792:VAL:HG11	2:W:1798:PHE:HD1	1.81	0.46
1:D:637:LEU:HD12	1:D:685:VAL:CG1	2.46	0.46
1:D:1249:PHE:HE1	1:D:1318:THR:HG22	1.80	0.46
1:D:1768:HIS:O	1:D:1783:THR:OG1	2.21	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1912:LEU:CD2	1:D:1981:ILE:HG22	2.45	0.46
1:E:2141:ASP:OD1	1:E:2179:TYR:OH	2.34	0.46
1:C:140:TRP:CD2	1:C:459:ALA:HB1	2.51	0.46
1:C:1818:SER:C	1:C:1819:LEU:HD12	2.36	0.46
1:F:1138:PHE:CE2	1:F:1292:ALA:HB1	2.49	0.46
1:F:1482:ILE:HG23	1:F:1518:ARG:O	2.15	0.46
1:B:332:ASN:CB	1:B:906:VAL:HG22	2.46	0.46
1:B:849:LEU:HD23	1:B:849:LEU:O	2.16	0.46
1:B:2064:GLY:O	1:B:2067:ILE:HG22	2.15	0.46
1:A:780:ALA:HB3	1:A:791:LEU:CD1	2.45	0.46
1:G:2318:SER:O	1:G:2322:MET:N	2.45	0.46
1:Q:1988:VAL:HG11	1:Q:2016:GLN:HA	1.96	0.46
1:Q:2297:ARG:O	1:Q:2300:VAL:HG22	2.15	0.46
1:R:1512:GLU:HG2	1:R:1531:PHE:HA	1.98	0.46
1:D:883:GLU:HA	1:D:886:MET:HG2	1.98	0.46
1:D:2239:LEU:CB	1:D:2244:ILE:HD11	2.46	0.46
1:E:683:LEU:HD12	1:E:695:VAL:CG1	2.45	0.46
1:E:1875:MET:SD	1:E:1880:VAL:HG11	2.56	0.46
1:C:1678:ILE:HD12	1:C:1678:ILE:N	2.31	0.46
1:C:1684:ILE:O	1:C:1688:ILE:CA	2.56	0.46
1:C:1711:ILE:HG23	1:C:1712:PRO:HD2	1.98	0.46
1:C:2091:GLY:O	1:C:2094:VAL:HG12	2.16	0.46
1:C:2135:LYS:HA	1:C:2138:ARG:CD	2.46	0.46
1:F:1060:LEU:HA	1:F:1063:LEU:HB3	1.97	0.46
1:F:1528:ILE:HG22	1:F:1546:LYS:HA	1.98	0.46
1:F:1994:GLU:HG3	1:F:2010:ILE:HG13	1.98	0.46
1:F:2258:THR:HG22	1:A:296:ASP:N	2.27	0.46
1:B:767:VAL:HG12	1:B:768:GLU:N	2.31	0.46
1:A:1524:LYS:CD	1:A:1526:ILE:HD11	2.46	0.46
1:A:1535:GLU:OE1	1:A:1535:GLU:N	2.49	0.46
1:Q:2253:VAL:HG22	1:Q:2261:ALA:HA	1.97	0.46
1:R:681:TYR:HB3	1:R:683:LEU:HD21	1.98	0.46
2:U:1730:ASN:HD21	2:U:1732:HIS:HD2	1.63	0.46
1:D:853:PHE:CE1	1:D:889:LEU:HB3	2.52	0.45
1:D:1308:PHE:O	1:D:1311:PHE:HB3	2.16	0.45
1:D:1707:ARG:HA	1:D:1814:ILE:HD13	1.98	0.45
1:D:2119:GLU:OE2	1:D:2122:GLY:N	2.49	0.45
1:E:733:ARG:NH1	1:E:744:VAL:HG12	2.30	0.45
1:E:1000:GLN:OE1	1:E:1012:ALA:HB1	2.16	0.45
1:C:293:ASP:N	1:C:293:ASP:OD1	2.48	0.45
1:C:979:ILE:HD12	1:C:980:ARG:N	2.31	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1598:ILE:O	1:C:1601:ILE:HG13	2.16	0.45
1:F:510:ILE:HD13	1:F:560:CYS:SG	2.56	0.45
1:F:625:ARG:HB3	1:F:626:PRO:CD	2.46	0.45
1:F:726:TYR:O	1:F:737:THR:OG1	2.24	0.45
1:F:1820:VAL:HG12	1:F:1844:SER:HB2	1.98	0.45
1:B:199:ARG:HE	1:B:200:ILE:HD13	1.81	0.45
1:B:1513:LEU:HD21	1:B:1530:LEU:HD22	1.98	0.45
1:A:672:VAL:HG13	1:A:734:TYR:HE2	1.79	0.45
1:A:1411:GLU:OE2	1:A:1412:VAL:HG12	2.16	0.45
1:G:1691:PHE:N	1:G:1721:GLY:O	2.44	0.45
1:Q:1912:LEU:HD23	1:Q:1981:ILE:HG12	1.98	0.45
1:R:1510:GLN:OE1	1:R:1577:TYR:OH	2.32	0.45
2:M:1677:THR:HG22	2:O:1677:THR:HG22	1.98	0.45
1:D:1373:LEU:HD13	1:D:1373:LEU:HA	1.81	0.45
1:D:1675:ARG:NH1	1:D:1902:MET:O	2.50	0.45
1:D:1677:ILE:HD12	1:D:1714:ILE:HD11	1.98	0.45
1:D:2216:TYR:OH	1:D:2220:ARG:NH1	2.50	0.45
1:E:197:ALA:CA	1:E:202:VAL:HG22	2.45	0.45
1:E:419:SER:HA	1:E:464:ILE:HG21	1.97	0.45
1:E:1824:ALA:O	1:E:1829:ALA:HB2	2.17	0.45
1:E:2077:PRO:HA	1:E:2104:HIS:O	2.16	0.45
1:E:2203:SER:HB3	1:E:2218:ARG:NH2	2.31	0.45
1:E:2300:VAL:HG13	1:F:2307:LEU:CD2	2.45	0.45
1:E:2300:VAL:O	1:E:2304:ILE:HG13	2.16	0.45
1:C:939:GLN:HG2	1:B:2247:MET:HE3	1.97	0.45
1:C:1753:LEU:HD23	1:C:1758:TYR:HA	1.97	0.45
1:C:1858:LEU:HD12	1:C:1862:VAL:HG21	1.97	0.45
1:C:1938:LEU:HD22	1:C:1939:ALA:HB2	1.97	0.45
1:C:2135:LYS:O	1:C:2138:ARG:HD3	2.16	0.45
1:F:1152:VAL:HG22	1:F:1156:ARG:HG3	1.99	0.45
1:F:1912:LEU:HD13	1:F:1913:LEU:O	2.16	0.45
1:F:1962:GLU:OE2	1:F:1972:VAL:HG13	2.16	0.45
1:F:2218:ARG:CZ	1:F:2222:LEU:HD21	2.46	0.45
1:B:959:GLU:HA	1:B:962:PHE:HB3	1.97	0.45
1:B:1139:TYR:O	1:B:1240:ARG:NH1	2.49	0.45
1:B:1471:ASN:HB2	1:B:1508:VAL:HG13	1.98	0.45
1:B:2124:VAL:HG21	1:B:2184:VAL:HG12	1.98	0.45
1:B:2182:VAL:HG22	1:G:1748:TYR:CE1	2.51	0.45
1:A:1045:ILE:HG21	1:A:1080:ARG:NE	2.31	0.45
1:A:1060:LEU:HD12	1:A:1061:ASN:N	2.31	0.45
1:A:2065:ALA:HB1	1:Q:1834:LEU:HA	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1045:ILE:HD11	1:D:1080:ARG:NH2	2.32	0.45
1:D:1898:TRP:CZ2	1:D:1963:ILE:HG23	2.52	0.45
1:E:297:GLY:O	1:E:301:ALA:N	2.44	0.45
1:E:894:LEU:HD12	1:E:895:PRO:CD	2.45	0.45
1:C:1808:SER:HA	1:C:1834:LEU:HD12	1.99	0.45
1:C:2221:ARG:NH2	1:C:2267:ASN:OD1	2.50	0.45
1:F:1383:LEU:HD23	1:F:1383:LEU:H	1.82	0.45
1:F:1564:LYS:NZ	1:F:1565:GLN:O	2.33	0.45
1:F:1845:HIS:HB3	1:F:1867:ASN:HA	1.97	0.45
1:B:2096:ILE:O	1:B:2096:ILE:HD12	2.16	0.45
1:A:773:VAL:N	1:A:797:GLY:O	2.41	0.45
1:J:1116:CYS:O	1:J:1120:LEU:N	2.43	0.45
1:R:569:GLU:OE2	1:R:573:ASN:ND2	2.40	0.45
1:R:920:LYS:O	1:R:923:ALA:HB3	2.17	0.45
1:R:1483:MET:O	1:R:1517:ILE:HD11	2.16	0.45
2:U:1822:HIS:ND1	2:U:1856:PRO:O	2.49	0.45
1:D:178:VAL:HB	1:D:192:LEU:HD21	1.98	0.45
1:D:964:ASN:O	1:D:968:ILE:HD12	2.17	0.45
1:D:1504:TRP:HZ3	1:D:1536:SER:HG	1.60	0.45
1:D:1728:GLU:OE1	1:D:1731:ARG:NH2	2.50	0.45
1:D:1923:ILE:HD11	1:D:2212:ARG:HB2	1.97	0.45
1:D:2297:ARG:NE	1:C:2314:VAL:HG22	2.31	0.45
1:D:2335:ILE:HG23	1:C:2335:ILE:HG23	1.97	0.45
1:C:355:SER:O	1:C:610:THR:N	2.49	0.45
1:C:1568:LEU:HD21	1:C:1571:MET:HB2	1.98	0.45
1:C:2319:ILE:HG22	1:C:2323:THR:HG23	1.98	0.45
1:F:900:GLN:HE21	1:F:904:THR:HG21	1.81	0.45
1:F:2217:TRP:CB	1:F:2267:ASN:HB3	2.45	0.45
1:B:153:PHE:O	1:B:173:ASP:N	2.47	0.45
1:B:884:ARG:O	1:B:888:THR:HG23	2.16	0.45
1:B:893:SER:O	1:B:897:LEU:HD12	2.16	0.45
1:B:1454:MET:CG	1:B:1506:LEU:HD21	2.45	0.45
1:B:1482:ILE:HD13	1:B:1520:THR:HA	1.99	0.45
1:B:2296:SER:O	1:B:2300:VAL:HG23	2.15	0.45
1:A:332:ASN:CB	1:A:906:VAL:HG22	2.47	0.45
1:A:407:CYS:HG	1:A:433:PHE:HZ	1.62	0.45
1:A:941:ILE:HD13	1:A:968:ILE:CG1	2.47	0.45
1:A:1405:LEU:HD23	1:A:1421:PHE:CE1	2.51	0.45
1:A:1754:THR:O	1:A:1758:TYR:N	2.42	0.45
1:G:1875:MET:SD	1:G:1880:VAL:HG11	2.56	0.45
1:D:432:SER:OG	1:D:645:ARG:NH2	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:633:VAL:HG13	1:D:695:VAL:HG11	1.99	0.45
1:D:687:ARG:HB3	1:D:867:TYR:HE2	1.82	0.45
1:D:2229:LYS:NZ	1:D:2241:ASP:OD1	2.47	0.45
1:E:1516:ASN:HB3	1:E:1525:ALA:HB1	1.98	0.45
1:E:1664:MET:SD	1:E:1679:VAL:HG21	2.57	0.45
1:C:707:HIS:HB3	1:C:715:LEU:HB2	1.99	0.45
1:C:953:ASN:HA	1:C:958:ARG:HD3	1.97	0.45
1:C:2298:ASP:O	1:C:2301:LEU:HG	2.16	0.45
1:C:2315:ALA:O	1:C:2319:ILE:HG13	2.16	0.45
1:F:976:ARG:HE	1:A:2254:GLU:CD	2.15	0.45
1:F:2319:ILE:O	1:F:2322:MET:HB2	2.16	0.45
1:B:1314:GLN:HE22	1:B:1315:ASN:ND2	2.15	0.45
1:B:1598:ILE:HD13	1:B:1660:VAL:HG21	1.99	0.45
1:A:1132:ASP:O	1:A:1333:GLN:NE2	2.50	0.45
1:A:1267:PRO:O	2:M:1699:ARG:NH2	2.50	0.45
1:A:1423:VAL:CG1	1:A:1473:ILE:HD13	2.46	0.45
1:A:1598:ILE:HD13	1:A:1660:VAL:HG21	1.97	0.45
1:Q:1973:VAL:HG12	1:Q:1986:VAL:HG12	1.98	0.45
1:J:380:VAL:HG11	1:J:388:ILE:HB	1.99	0.45
1:R:980:ARG:HA	1:R:983:MET:HG3	1.97	0.45
1:R:1167:GLN:OE1	1:R:1167:GLN:N	2.50	0.45
2:M:1657:LEU:HD23	2:M:1690:LYS:HB2	1.99	0.45
1:D:938:SER:HG	1:D:939:GLN:H	1.64	0.45
1:D:1091:PRO:CG	1:D:1095:LEU:HD21	2.47	0.45
1:D:1384:ASN:HA	1:D:1387:ARG:CG	2.46	0.45
1:D:1728:GLU:OE1	1:D:1732:HIS:NE2	2.49	0.45
1:E:405:GLU:O	1:E:409:VAL:HG23	2.16	0.45
1:E:636:ALA:HB1	1:E:685:VAL:CG2	2.46	0.45
1:E:682:VAL:HG11	1:E:698:ASN:HB3	1.97	0.45
1:E:1138:PHE:HB3	1:E:1149:ALA:HB3	1.98	0.45
1:E:1165:SER:HB2	1:E:1181:GLN:HG3	1.97	0.45
1:C:1384:ASN:HA	1:C:1387:ARG:HB2	1.99	0.45
1:C:1874:ILE:HG22	1:C:1875:MET:CE	2.47	0.45
1:C:2100:ILE:H	1:C:2100:ILE:HD12	1.82	0.45
1:C:2230:LYS:HA	1:C:2233:HIS:HD1	1.81	0.45
1:F:334:PHE:HE2	1:F:338:GLN:HE21	1.65	0.45
1:F:352:ALA:HB3	1:F:426:LEU:HD21	1.97	0.45
1:F:1377:LEU:HD12	1:F:1380:GLN:HG3	1.99	0.45
1:F:1873:GLN:C	1:F:1877:ASN:HD22	2.18	0.45
1:F:1997:ILE:HG13	1:F:2011:ILE:HD12	1.98	0.45
1:F:2329:THR:O	1:F:2332:ALA:HB3	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:626:PRO:CG	1:B:738:ILE:HD12	2.46	0.45
1:B:663:ALA:HB2	1:B:1028:ILE:HG22	1.97	0.45
1:B:892:PRO:HG2	1:B:929:ILE:HD11	1.99	0.45
1:B:1028:ILE:HA	1:B:1031:HIS:CD2	2.52	0.45
1:B:1069:LEU:HD21	1:B:1078:ALA:HB2	1.98	0.45
1:A:304:VAL:HG23	1:A:308:VAL:HG12	1.99	0.45
1:A:1313:GLN:NE2	1:A:1365:GLU:OE1	2.31	0.45
1:A:1734:PHE:CE2	1:A:1751:LEU:HD22	2.51	0.45
1:A:2124:VAL:O	1:A:2128:PHE:N	2.50	0.45
1:Q:2197:GLN:HB3	1:Q:2202:ILE:HD11	1.98	0.45
1:J:724:THR:O	1:J:739:GLY:N	2.50	0.45
1:J:1123:LEU:HD12	1:J:1152:VAL:HG11	1.98	0.45
1:J:1171:LEU:HD12	1:J:1251:GLU:OE2	2.17	0.45
1:J:1437:ALA:HB3	1:J:1481:VAL:CG2	2.46	0.45
1:D:380:VAL:HG13	1:D:613:LEU:HG	1.97	0.45
1:D:453:ALA:HB1	1:D:455:VAL:HG23	1.99	0.45
1:E:849:LEU:O	1:E:853:PHE:HB2	2.17	0.45
1:E:2300:VAL:CG1	1:F:2307:LEU:HD22	2.45	0.45
1:C:332:ASN:OD1	1:C:909:ARG:NH2	2.49	0.45
1:C:1482:ILE:HG23	1:C:1518:ARG:O	2.15	0.45
1:F:389:GLU:HB2	1:F:507:ALA:HB3	1.99	0.45
1:F:419:SER:N	1:F:464:ILE:HG21	2.32	0.45
1:F:1385:ARG:HG3	1:F:1575:THR:O	2.17	0.45
1:F:1705:LEU:C	1:F:1705:LEU:HD13	2.36	0.45
1:F:2218:ARG:HD2	1:F:2221:ARG:HE	1.82	0.45
1:B:141:SER:O	1:B:145:PHE:N	2.39	0.45
1:B:455:VAL:HG13	1:B:475:ASP:HB3	1.98	0.45
1:B:2014:ALA:HB3	1:B:2017:VAL:HG21	1.97	0.45
1:A:2139:ARG:NH2	1:Q:1731:ARG:O	2.50	0.45
1:G:2079:LEU:HD12	1:G:2219:LEU:HB2	1.98	0.45
1:G:2136:THR:HG22	1:G:2139:ARG:HH22	1.82	0.45
1:Q:1936:TRP:CG	1:Q:1941:ARG:HB3	2.51	0.45
1:Q:2081:TYR:OH	1:Q:2110:ASP:OD1	2.28	0.45
2:U:1806:PRO:HG2	2:U:1830:ALA:HB2	1.99	0.45
1:D:426:LEU:N	1:D:434:TYR:O	2.36	0.45
1:D:1063:LEU:HD21	1:D:1084:VAL:HG12	1.97	0.45
1:D:1910:VAL:HG11	1:D:1982:PRO:HG3	1.99	0.45
1:E:1758:TYR:O	1:E:1760:ARG:N	2.50	0.45
1:E:1808:SER:CA	1:E:1834:LEU:HD11	2.45	0.45
1:C:102:VAL:HG23	1:C:145:PHE:CE1	2.52	0.45
1:C:352:ALA:HB3	1:C:426:LEU:HD21	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:387:ILE:CG2	1:C:594:LEU:HD21	2.47	0.45
1:C:2015:GLY:O	1:C:2017:VAL:HG23	2.17	0.45
1:C:2227:LEU:O	1:C:2230:LYS:HG2	2.17	0.45
1:F:1606:ARG:NH2	1:F:1632:LEU:HD23	2.31	0.45
1:F:1801:GLY:O	1:F:1804:ALA:HB3	2.17	0.45
1:F:1878:ASN:OD1	1:F:1880:VAL:HG23	2.16	0.45
1:F:1945:THR:O	1:F:1947:LYS:N	2.49	0.45
1:B:310:ILE:HG23	1:B:346:ILE:HG21	1.98	0.45
1:B:945:LEU:HB3	1:B:965:THR:HG22	1.99	0.45
1:B:1175:THR:HG23	1:B:1239:PHE:HE1	1.78	0.45
1:B:1245:PHE:HZ	1:B:1291:VAL:HG11	1.82	0.45
1:B:1687:ARG:O	1:B:1689:GLY:N	2.50	0.45
1:A:371:ILE:HG12	1:A:470:LEU:HD13	1.99	0.45
1:A:442:LEU:HD11	1:A:446:HIS:CG	2.52	0.45
1:A:1443:GLN:NE2	1:A:1491:SER:O	2.47	0.45
1:A:1931:PRO:HB3	1:A:1991:ARG:HG3	1.98	0.45
1:G:1841:VAL:HA	1:G:1885:VAL:HG23	1.99	0.45
1:G:2270:LEU:HD13	1:G:2274:LEU:HD11	1.99	0.45
1:Q:1691:PHE:N	1:Q:1721:GLY:O	2.45	0.45
1:J:206:TRP:HZ2	1:J:442:LEU:HD22	1.82	0.45
1:J:681:TYR:HB3	1:J:683:LEU:HD21	1.97	0.45
1:R:1457:LEU:HA	1:R:1460:ALA:HB3	1.98	0.45
2:K:1701:LEU:HD13	2:K:1775:MET:HG3	1.99	0.45
1:D:1589:GLN:O	1:D:1593:LEU:HB2	2.17	0.45
1:D:1786:ILE:O	1:C:2195:ARG:NE	2.49	0.45
1:D:1910:VAL:HG21	1:D:1982:PRO:CG	2.47	0.45
1:E:194:LEU:HD12	1:E:227:ILE:HD12	1.98	0.45
1:E:370:ALA:O	1:E:409:VAL:HG13	2.16	0.45
1:E:1110:MET:HA	1:E:1144:VAL:HG11	1.97	0.45
1:E:1176:CYS:O	1:E:1237:VAL:HG13	2.17	0.45
1:E:1904:LYS:HG3	1:E:1905:SER:N	2.31	0.45
1:E:2314:VAL:HG12	1:E:2318:SER:HB3	1.99	0.45
1:C:1042:THR:O	1:C:1046:ASP:N	2.48	0.45
1:C:1705:LEU:C	1:C:1705:LEU:HD13	2.37	0.45
1:F:1098:ASN:O	1:F:1098:ASN:ND2	2.50	0.45
1:F:2082:ILE:HD12	1:F:2082:ILE:H	1.82	0.45
1:F:2111:ARG:HG2	1:F:2205:ILE:HG22	1.98	0.45
1:B:1386:MET:HE3	1:B:1389:PHE:HB3	1.99	0.45
1:B:1771:HIS:NE2	1:B:1778:SER:OG	2.43	0.45
1:B:2078:VAL:HG13	1:B:2105:MET:HG2	1.99	0.45
1:A:133:CYS:SG	1:A:137:ILE:HD12	2.57	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:853:PHE:CE2	1:A:894:LEU:HD11	2.51	0.45
1:A:1100:VAL:CG2	1:A:1133:VAL:HG21	2.47	0.45
1:J:943:ASN:OD1	1:J:944:ILE:N	2.49	0.45
1:R:1101:GLU:O	1:R:1105:LEU:HD23	2.17	0.45
2:M:1668:PHE:HB2	2:M:1723:ILE:HD11	1.98	0.45
2:O:1651:SER:O	2:O:1686:HIS:N	2.44	0.45
1:D:1063:LEU:CD1	1:D:1081:ALA:HB1	2.47	0.45
1:D:1243:GLU:C	1:D:1247:ARG:HE	2.18	0.45
1:D:1475:LEU:HD11	1:D:1477:PHE:CG	2.51	0.45
1:D:1482:ILE:HG23	1:D:1518:ARG:O	2.17	0.45
1:D:1513:LEU:HB2	1:D:1530:LEU:HB3	1.99	0.45
1:D:1535:GLU:OE1	1:D:1535:GLU:N	2.50	0.45
1:D:1606:ARG:O	1:D:1610:ILE:HG13	2.17	0.45
1:D:1882:HIS:ND1	1:D:1963:ILE:HD12	2.32	0.45
1:E:984:LYS:O	1:E:987:VAL:HG12	2.16	0.45
1:E:1028:ILE:HA	1:E:1031:HIS:CD2	2.51	0.45
1:E:1580:LYS:O	1:E:1583:LEU:N	2.50	0.45
1:C:258:LEU:HD21	1:C:352:ALA:HB2	1.99	0.45
1:C:1427:ILE:HD11	1:C:1449:LEU:CD1	2.47	0.45
1:C:1509:LEU:HD11	1:C:1535:GLU:CD	2.37	0.45
1:C:2247:MET:HG2	1:C:2251:TRP:CE2	2.52	0.45
1:C:2253:VAL:HG12	1:B:295:ASP:OD2	2.17	0.45
1:F:1873:GLN:HA	1:F:1877:ASN:ND2	2.32	0.45
1:B:1123:LEU:HD22	1:B:1130:ILE:HG21	1.98	0.45
1:B:2013:GLN:NE2	1:B:2021:ASP:OD2	2.50	0.45
1:J:760:GLY:O	1:J:809:LEU:N	2.49	0.45
1:J:1079:LEU:HD12	1:J:1444:ASN:CA	2.47	0.45
1:R:724:THR:O	1:R:739:GLY:N	2.51	0.45
1:D:510:ILE:CG2	1:D:581:LEU:HD21	2.47	0.44
1:D:886:MET:HA	1:D:889:LEU:HG	1.99	0.44
1:D:976:ARG:NE	1:D:977:SER:OG	2.50	0.44
1:D:990:LEU:HA	1:D:993:GLN:OE1	2.16	0.44
1:D:1000:GLN:HE21	1:D:1016:GLU:CB	2.30	0.44
1:D:1239:PHE:O	1:D:1293:ILE:HA	2.17	0.44
1:D:2057:TYR:HA	1:C:1878:ASN:HD22	1.82	0.44
1:E:767:VAL:HG12	1:E:768:GLU:N	2.31	0.44
1:E:2019:PHE:HB3	1:E:2020:PRO:HD2	1.98	0.44
1:E:2101:ASN:H	1:E:2105:MET:CE	2.31	0.44
1:C:1102:SER:OG	1:C:1103:ILE:N	2.50	0.44
1:C:1246:VAL:HG23	1:C:1311:PHE:CE1	2.52	0.44
1:C:1498:ARG:HD3	1:C:1499:TYR:CD1	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1509:LEU:HD11	1:C:1535:GLU:OE2	2.17	0.44
1:C:2325:HIS:O	1:C:2327:SER:N	2.51	0.44
1:F:1171:LEU:HD13	1:F:1251:GLU:OE2	2.17	0.44
1:F:1677:ILE:HG22	1:F:1712:PRO:HD2	1.99	0.44
1:F:2082:ILE:HD12	1:F:2082:ILE:N	2.31	0.44
1:B:1186:THR:O	1:B:1186:THR:HG22	2.16	0.44
1:B:1580:LYS:NZ	1:B:1583:LEU:HD22	2.32	0.44
1:A:696:ILE:HD11	1:A:870:PRO:HB2	1.98	0.44
1:A:1484:ASP:HB2	1:A:1487:LYS:HE2	1.99	0.44
1:A:2040:LEU:HB3	1:A:2078:VAL:HG23	1.98	0.44
1:G:1932:TYR:CE1	1:G:1990:THR:HG21	2.52	0.44
1:J:865:ASN:O	1:J:1030:SER:OG	2.14	0.44
1:J:945:LEU:HD21	1:J:961:PHE:CZ	2.52	0.44
1:J:1154:VAL:HG21	1:J:1178:VAL:HG11	1.99	0.44
2:O:1695:PHE:O	2:O:1737:ARG:N	2.43	0.44
1:D:278:ILE:HG23	1:D:415:VAL:O	2.17	0.44
1:D:767:VAL:HG12	1:D:768:GLU:N	2.32	0.44
1:D:886:MET:O	1:D:889:LEU:HG	2.17	0.44
1:D:1130:ILE:HG22	1:D:1134:LEU:HB2	2.00	0.44
1:D:1894:THR:HG22	1:D:1898:TRP:CD1	2.53	0.44
1:D:2257:GLY:C	1:D:2259:VAL:H	2.21	0.44
1:D:2264:TRP:CE3	1:D:2270:LEU:HD11	2.53	0.44
1:D:2326:ILE:HG22	1:D:2327:SER:N	2.33	0.44
1:E:506:ILE:HG12	1:E:570:ALA:HB1	1.98	0.44
1:E:871:ASP:HB3	1:E:872:PRO:HD2	1.98	0.44
1:E:1070:SER:O	1:E:1071:LYS:HE2	2.17	0.44
1:E:1080:ARG:HD2	1:E:1448:ARG:HH12	1.82	0.44
1:E:1090:LEU:HD21	1:E:1096:ARG:CZ	2.47	0.44
1:E:1807:SER:CB	1:E:1834:LEU:HD21	2.48	0.44
1:C:188:ALA:HA	1:C:212:ALA:HB2	1.99	0.44
1:F:1514:LYS:CG	1:F:1529:ARG:HE	2.30	0.44
1:F:1978:LEU:HD11	1:F:2212:ARG:HG3	1.99	0.44
1:F:2040:LEU:HD12	1:F:2078:VAL:HG22	1.99	0.44
1:F:2325:HIS:CG	1:F:2326:ILE:H	2.35	0.44
1:B:889:LEU:HD21	1:B:979:ILE:O	2.17	0.44
1:A:194:LEU:HA	1:A:197:ALA:HB3	1.99	0.44
1:A:294:VAL:HG12	1:A:962:PHE:CZ	2.53	0.44
1:A:849:LEU:HD12	1:A:894:LEU:HA	1.98	0.44
1:G:2319:ILE:O	1:G:2323:THR:HG23	2.18	0.44
1:J:1457:LEU:HA	1:J:1460:ALA:HB3	1.98	0.44
1:R:212:ALA:HB1	1:R:218:LEU:HD22	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:1657:LEU:HD21	2:H:1716:TYR:CD1	2.53	0.44
1:D:693:TYR:CE2	1:D:706:VAL:HG11	2.51	0.44
1:D:1955:PHE:HE1	1:D:1978:LEU:HD22	1.82	0.44
1:E:1154:VAL:HG22	1:E:1180:PHE:CZ	2.53	0.44
1:E:2117:VAL:HG11	1:F:1722:ALA:HB3	2.00	0.44
1:C:628:THR:O	1:C:632:VAL:N	2.38	0.44
1:C:1705:LEU:O	1:C:1708:ALA:N	2.50	0.44
1:F:686:THR:HG21	1:F:870:PRO:HB3	1.99	0.44
1:F:1613:TRP:CE3	1:F:1622:LEU:HD21	2.53	0.44
1:B:419:SER:N	1:B:464:ILE:HG21	2.31	0.44
1:B:651:PHE:CD1	1:B:1025:LEU:HD13	2.52	0.44
1:B:1467:ARG:NE	1:B:1468:THR:O	2.47	0.44
1:A:1057:ASP:HA	1:A:1060:LEU:HG	1.99	0.44
1:A:1104:PHE:O	1:A:1107:ALA:HB3	2.17	0.44
1:A:1120:LEU:CD2	1:A:1155:ARG:HE	2.29	0.44
1:R:767:VAL:HG12	1:R:768:GLU:N	2.32	0.44
1:R:1100:VAL:HA	1:R:1103:ILE:HG22	1.99	0.44
2:O:1691:THR:HG21	2:O:1736:VAL:HG12	1.99	0.44
1:D:995:LEU:CD1	1:D:1069:LEU:HD21	2.47	0.44
1:D:1368:ARG:HA	1:D:1371:ARG:HG2	2.00	0.44
1:D:1599:TYR:CE1	1:D:1660:VAL:HG11	2.52	0.44
1:D:1701:ARG:O	1:D:1704:GLU:HG2	2.17	0.44
1:D:1830:TYR:OH	1:C:2095:VAL:HG13	2.16	0.44
1:E:853:PHE:CD1	1:E:885:LEU:HD12	2.52	0.44
1:E:1128:THR:HG22	1:E:1430:SER:OG	2.17	0.44
1:E:1734:PHE:HA	1:E:1753:LEU:HD23	1.99	0.44
1:E:1766:SER:HB2	1:E:1788:LYS:HD3	2.00	0.44
1:E:1924:GLU:N	1:E:1952:SER:OG	2.47	0.44
1:E:2331:ARG:O	1:E:2334:VAL:HG12	2.17	0.44
1:C:356:ARG:N	1:C:427:TYR:O	2.45	0.44
1:C:1238:SER:HA	1:C:1292:ALA:HB3	1.99	0.44
1:C:1678:ILE:HG22	1:C:1680:ILE:HD11	1.98	0.44
1:C:1945:THR:O	1:C:1947:LYS:N	2.51	0.44
1:F:799:ILE:HG23	1:F:816:ALA:HB3	2.00	0.44
1:F:1042:THR:O	1:F:1046:ASP:N	2.50	0.44
1:F:1539:TYR:CE2	1:F:1629:SER:HA	2.52	0.44
1:F:2016:GLN:O	1:F:2047:ARG:N	2.40	0.44
1:A:613:LEU:HD23	1:A:616:LEU:HD12	1.98	0.44
1:A:1138:PHE:O	1:A:1238:SER:OG	2.27	0.44
1:A:1854:LEU:O	1:A:1858:LEU:N	2.48	0.44
1:A:2044:ALA:HB1	1:A:2088:LEU:HD13	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:1863:TYR:OH	1:Q:2000:ASP:OD1	2.35	0.44
1:J:638:HIS:CD2	1:J:736:ILE:HG23	2.53	0.44
1:J:980:ARG:HA	1:J:983:MET:HG3	1.98	0.44
1:D:767:VAL:HG23	1:D:779:TYR:HA	1.99	0.44
1:E:194:LEU:HD11	1:E:225:ASN:CG	2.37	0.44
1:E:265:LEU:HD22	1:E:285:LEU:CD1	2.48	0.44
1:E:422:THR:HG21	1:E:443:GLN:HE22	1.83	0.44
1:E:663:ALA:HB1	1:E:1032:ALA:CB	2.48	0.44
1:E:1160:ALA:CB	1:E:1380:GLN:HE21	2.29	0.44
1:E:1230:CYS:O	1:E:1232:ARG:NH1	2.49	0.44
1:E:1438:SER:O	1:E:1442:LEU:N	2.31	0.44
1:E:1596:THR:OG1	1:E:1888:ASP:OD2	2.26	0.44
1:E:1800:SER:HB3	1:E:1827:ILE:HD13	1.99	0.44
1:E:1865:SER:O	1:E:1868:GLN:HB2	2.17	0.44
1:C:946:ASP:OD2	1:B:2246:ALA:HB2	2.17	0.44
1:C:1069:LEU:HB2	1:C:1078:ALA:HB2	1.99	0.44
1:C:1305:ALA:HA	1:C:1308:PHE:HB2	1.98	0.44
1:F:1711:ILE:HG22	1:F:1905:SER:CB	2.47	0.44
1:F:2244:ILE:O	1:F:2248:LEU:HD23	2.18	0.44
1:B:332:ASN:ND2	1:B:905:SER:O	2.50	0.44
1:B:525:THR:O	1:B:543:VAL:N	2.41	0.44
1:B:998:GLU:OE2	1:B:1034:VAL:HG13	2.16	0.44
1:B:1048:LEU:O	1:B:1051:ARG:N	2.45	0.44
1:B:1384:ASN:HA	1:B:1387:ARG:HG3	2.00	0.44
1:A:377:ASP:O	1:A:389:GLU:HA	2.16	0.44
1:A:1986:VAL:HG21	1:A:2030:ILE:HD11	1.98	0.44
1:J:966:GLN:HA	1:J:969:VAL:HG22	1.99	0.44
2:Y:1657:LEU:HD21	2:Y:1716:TYR:CG	2.53	0.44
1:D:984:LYS:NZ	1:D:1056:THR:HG22	2.31	0.44
1:D:1326:ARG:C	1:D:1327:LEU:HD12	2.38	0.44
1:D:1408:ALA:HB2	1:D:1418:ASP:HB3	2.00	0.44
1:D:1866:ASN:OD1	1:D:1869:LEU:HD12	2.18	0.44
1:D:1895:VAL:HG12	1:D:1899:LEU:HD13	1.98	0.44
1:E:567:ARG:NH1	1:E:604:GLN:O	2.45	0.44
1:E:714:LEU:HD22	1:E:725:THR:O	2.18	0.44
1:E:1377:LEU:CD2	1:E:1426:ILE:HD13	2.48	0.44
1:E:1815:ILE:HD11	1:E:1817:ILE:CG2	2.48	0.44
1:E:2045:ASN:HD21	1:E:2083:PRO:HD2	1.83	0.44
1:C:419:SER:N	1:C:464:ILE:HG21	2.33	0.44
1:C:628:THR:O	1:C:632:VAL:HG23	2.18	0.44
1:C:1492:VAL:HG11	1:C:1530:LEU:HD11	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1766:SER:O	1:C:1786:ILE:N	2.48	0.44
1:F:704:VAL:HG12	1:F:718:TYR:HD1	1.83	0.44
1:F:976:ARG:NH1	1:F:977:SER:OG	2.50	0.44
1:F:1100:VAL:CG1	1:F:1130:ILE:HG23	2.47	0.44
1:F:1355:PHE:O	1:F:1372:HIS:N	2.41	0.44
1:F:1962:GLU:HG3	1:F:1973:VAL:O	2.17	0.44
1:B:291:VAL:HG21	1:B:297:GLY:CA	2.47	0.44
1:B:753:VAL:HG13	1:B:817:LYS:HE2	1.99	0.44
1:B:970:GLN:C	1:B:974:ARG:HE	2.18	0.44
1:B:1135:PRO:HA	1:B:1138:PHE:CD1	2.53	0.44
1:B:2220:ARG:HH12	1:B:2223:LEU:HD22	1.81	0.44
1:A:335:ARG:CB	1:A:963:MET:HE3	2.47	0.44
1:A:1687:ARG:O	1:A:1689:GLY:N	2.50	0.44
1:A:1971:VAL:HG21	1:A:2046:TRP:HZ2	1.82	0.44
1:Q:1767:VAL:HG12	1:Q:1785:ILE:HA	1.99	0.44
1:J:634:CYS:O	1:J:638:HIS:N	2.51	0.44
1:J:1167:GLN:OE1	1:J:1167:GLN:N	2.50	0.44
1:R:780:ALA:HB3	1:R:791:LEU:HD12	1.99	0.44
1:R:945:LEU:HD21	1:R:961:PHE:CZ	2.52	0.44
2:Y:1657:LEU:HD21	2:Y:1716:TYR:CD1	2.52	0.44
1:D:197:ALA:HB1	1:D:227:ILE:HD13	1.98	0.44
1:D:306:TYR:CE1	1:D:327:ALA:HB2	2.53	0.44
1:D:1606:ARG:HH12	1:D:1631:MET:HB2	1.83	0.44
1:E:637:LEU:HD11	1:E:693:TYR:CD1	2.53	0.44
1:E:1045:ILE:HD13	1:E:1080:ARG:CD	2.48	0.44
1:E:1701:ARG:O	1:E:1704:GLU:HG2	2.16	0.44
1:C:1147:MET:O	1:C:1168:HIS:NE2	2.50	0.44
1:C:2229:LYS:CG	1:C:2248:LEU:HD22	2.46	0.44
1:F:1104:PHE:CE2	1:F:1145:VAL:HG13	2.48	0.44
1:F:1147:MET:SD	1:F:1168:HIS:HB3	2.58	0.44
1:F:1239:PHE:HZ	1:F:1248:ILE:HG21	1.83	0.44
1:F:2054:LYS:O	1:F:2057:TYR:HB3	2.18	0.44
1:F:2250:ARG:NH1	1:A:946:ASP:OD2	2.51	0.44
1:B:886:MET:SD	1:B:890:ARG:NH2	2.91	0.44
1:A:189:ASN:O	1:A:193:ILE:HG13	2.18	0.44
1:A:1801:GLY:N	1:Q:2094:VAL:HG23	2.32	0.44
1:A:2319:ILE:O	1:A:2323:THR:HG22	2.18	0.44
1:J:683:LEU:HD13	1:J:697:MET:HG2	2.00	0.44
1:R:1408:ALA:HB2	1:R:1418:ASP:HB3	1.99	0.44
2:M:1707:ILE:HD11	2:M:1749:PRO:HG3	2.00	0.44
2:Y:1652:MET:HA	2:Y:1686:HIS:HB2	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1632:LEU:HD21	1:D:1634:TYR:HB3	2.00	0.44
1:E:194:LEU:HD13	1:E:222:LEU:HD23	1.99	0.44
1:E:1055:LEU:HD11	1:E:1059:LEU:HD22	1.98	0.44
1:E:2286:SER:OG	1:E:2289:GLU:HB2	2.18	0.44
1:C:357:HIS:N	1:C:379:SER:OG	2.39	0.44
1:C:578:LEU:O	1:C:582:SER:N	2.49	0.44
1:C:674:LEU:HD11	1:C:745:PHE:CD1	2.53	0.44
1:C:1416:VAL:HG23	1:C:1419:TYR:CE1	2.53	0.44
1:C:2319:ILE:O	1:C:2323:THR:HG23	2.17	0.44
1:F:930:THR:HG22	1:F:930:THR:O	2.18	0.44
1:F:961:PHE:O	1:F:965:THR:HG22	2.17	0.44
1:B:655:LEU:HD13	1:B:1021:MET:HB3	2.00	0.44
1:B:2124:VAL:HG13	1:B:2128:PHE:HB2	2.00	0.44
1:A:252:THR:HB	1:A:414:MET:HE1	2.00	0.44
1:A:419:SER:N	1:A:464:ILE:HG21	2.32	0.44
1:A:625:ARG:HB3	1:A:626:PRO:CD	2.48	0.44
1:A:893:SER:O	1:A:897:LEU:HD12	2.18	0.44
1:A:995:LEU:CD1	1:A:1062:ILE:HG23	2.48	0.44
1:A:1389:PHE:HA	1:A:1408:ALA:HA	2.00	0.44
1:A:1445:GLU:O	1:A:1449:LEU:HD12	2.18	0.44
1:J:1145:VAL:O	1:J:1149:ALA:HB3	2.18	0.44
1:R:683:LEU:HD13	1:R:697:MET:HG2	1.99	0.44
1:R:1067:THR:HG21	1:R:1085:LEU:HD23	2.00	0.44
2:W:1714:VAL:HG11	2:W:1731:GLU:HB3	2.00	0.44
1:D:368:GLY:O	1:D:413:LYS:HG2	2.17	0.44
1:D:770:GLY:N	1:D:799:ILE:O	2.51	0.44
1:D:1044:LEU:O	1:D:1048:LEU:HB2	2.18	0.44
1:D:1248:ILE:HG22	1:D:1248:ILE:O	2.18	0.44
1:D:2045:ASN:HD22	1:D:2086:ALA:CB	2.31	0.44
1:E:1308:PHE:O	1:E:1311:PHE:HB3	2.18	0.44
1:E:1682:ASN:HD22	1:E:1719:ASN:ND2	2.15	0.44
1:E:1782:ILE:HG12	1:E:1785:ILE:HD11	2.00	0.44
1:E:2217:TRP:O	1:E:2267:ASN:ND2	2.51	0.44
1:C:874:PHE:O	1:C:877:LYS:N	2.50	0.44
1:C:943:ASN:CB	1:B:2243:GLN:HB3	2.48	0.44
1:C:1243:GLU:O	1:C:1246:VAL:HG12	2.18	0.44
1:C:1369:ILE:O	1:C:1404:TYR:OH	2.24	0.44
1:C:1926:VAL:HG22	1:C:2209:LYS:NZ	2.33	0.44
1:C:2240:THR:HG22	1:C:2242:GLY:H	1.82	0.44
1:C:2243:GLN:O	1:C:2247:MET:HB2	2.17	0.44
1:C:2295:ILE:HD12	1:C:2295:ILE:H	1.82	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:943:ASN:O	1:F:947:SER:N	2.49	0.44
1:F:1098:ASN:HB3	1:A:2329:THR:HA	1.99	0.44
1:F:1240:ARG:O	1:F:1294:LYS:N	2.47	0.44
1:B:2103:ARG:NH1	1:B:2241:ASP:OD1	2.45	0.44
1:A:330:PHE:O	1:A:334:PHE:N	2.45	0.44
1:A:651:PHE:CD2	1:A:1025:LEU:HD22	2.53	0.44
1:A:993:GLN:O	1:A:997:VAL:HG23	2.18	0.44
1:A:1103:ILE:O	1:A:1106:SER:OG	2.36	0.44
1:A:1369:ILE:HD11	1:A:1391:LEU:O	2.18	0.44
1:A:1941:ARG:O	1:A:1951:LEU:N	2.50	0.44
1:G:1774:ASP:O	1:G:1779:ARG:NH1	2.51	0.44
1:G:2160:GLU:HA	1:G:2163:GLU:HG2	2.00	0.44
1:J:638:HIS:NE2	1:J:736:ILE:HG23	2.33	0.44
1:D:243:LYS:HE2	1:D:437:GLU:HB3	2.00	0.43
1:D:991:LEU:HG	1:D:1066:LEU:HD11	2.00	0.43
1:D:1355:PHE:HB2	1:D:1372:HIS:HA	1.99	0.43
1:E:454:ASP:OD2	1:E:502:ARG:NE	2.51	0.43
1:E:980:ARG:O	1:E:984:LYS:HG3	2.18	0.43
1:E:1133:VAL:O	1:E:1136:ASN:N	2.49	0.43
1:E:1401:MET:SD	1:E:1453:ALA:HB2	2.58	0.43
1:E:1717:SER:HG	1:E:1820:VAL:HA	1.83	0.43
1:E:1855:ASN:OD1	1:E:1862:VAL:N	2.51	0.43
1:C:945:LEU:HD11	1:C:965:THR:HA	2.00	0.43
1:C:1518:ARG:HE	1:C:1523:GLY:HA2	1.83	0.43
1:C:1605:PHE:CE2	1:C:1609:LEU:HD12	2.53	0.43
1:C:1893:PHE:HA	1:C:1896:LEU:HD23	2.00	0.43
1:F:628:THR:O	1:F:632:VAL:N	2.38	0.43
1:F:851:ARG:O	1:F:855:TYR:N	2.40	0.43
1:F:1123:LEU:O	1:F:1428:ARG:NH2	2.51	0.43
1:F:1416:VAL:HG23	1:F:1419:TYR:CE1	2.52	0.43
1:F:2141:ASP:OD1	1:F:2171:ARG:NH2	2.51	0.43
1:F:2230:LYS:O	1:F:2234:ASN:ND2	2.51	0.43
1:B:682:VAL:C	1:B:683:LEU:HD12	2.38	0.43
1:B:1130:ILE:HG22	1:B:1134:LEU:HB2	1.99	0.43
1:B:2106:GLU:OE1	1:B:2222:LEU:HD11	2.18	0.43
1:B:2251:TRP:HA	1:B:2254:GLU:HG2	2.00	0.43
1:A:1469:ASP:HA	1:A:1507:ARG:HE	1.82	0.43
1:A:1839:ILE:HG22	1:A:1885:VAL:HG22	2.00	0.43
1:A:2019:PHE:HB2	1:A:2021:ASP:OD1	2.17	0.43
1:G:1619:GLN:HE22	1:G:1956:ASP:CB	2.30	0.43
1:Q:1956:ASP:OD2	1:Q:1980:GLY:N	2.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:938:SER:OG	1:J:939:GLN:N	2.51	0.43
2:H:1665:VAL:HG12	2:H:1676:LEU:HD22	1.99	0.43
2:M:1668:PHE:CD2	2:M:1719:VAL:HG13	2.52	0.43
2:Y:1701:LEU:HD13	2:Y:1775:MET:HG3	1.98	0.43
1:D:1142:ASN:HB3	1:D:1145:VAL:HG12	2.00	0.43
1:D:1503:LEU:HD12	1:D:1508:VAL:HB	1.99	0.43
1:D:1637:LEU:CB	1:D:1645:LEU:HD21	2.47	0.43
1:D:1910:VAL:HG21	1:D:1982:PRO:CD	2.48	0.43
1:D:2079:LEU:HD23	1:D:2080:VAL:N	2.33	0.43
1:D:2189:LEU:O	1:D:2192:THR:HG23	2.18	0.43
1:D:2251:TRP:HB3	1:D:2288:ILE:CD1	2.49	0.43
1:E:900:GLN:O	1:E:904:THR:HG23	2.18	0.43
1:E:1385:ARG:HG2	1:E:1577:TYR:HB2	2.00	0.43
1:E:1421:PHE:CG	1:E:1457:LEU:HD11	2.53	0.43
1:E:1442:LEU:HD11	1:E:1477:PHE:CZ	2.53	0.43
1:E:1966:PRO:HA	1:E:1969:GLN:NE2	2.33	0.43
1:C:194:LEU:HD22	1:C:221:LEU:HD13	2.00	0.43
1:C:1124:ILE:HG23	1:C:1159:ILE:HG21	1.99	0.43
1:C:2059:GLN:HE21	1:C:2062:LYS:CE	2.28	0.43
1:C:2224:LEU:HD13	1:C:2274:LEU:HB3	2.01	0.43
1:C:2287:VAL:HG12	1:C:2291:ASN:ND2	2.33	0.43
1:F:629:MET:O	1:F:633:VAL:HG23	2.18	0.43
1:F:835:SER:C	1:F:836:LEU:HD12	2.38	0.43
1:F:1133:VAL:O	1:F:1136:ASN:N	2.52	0.43
1:F:1438:SER:HB2	1:F:1481:VAL:HG11	1.99	0.43
1:F:1501:SER:O	1:F:1504:TRP:N	2.51	0.43
1:F:1931:PRO:CB	1:F:1991:ARG:HB3	2.48	0.43
1:B:194:LEU:HD11	1:B:225:ASN:CG	2.37	0.43
1:B:2068:VAL:HG22	1:B:2095:VAL:HG12	2.00	0.43
1:B:2079:LEU:HB2	1:B:2108:TYR:CE2	2.53	0.43
1:A:1306:ALA:O	1:A:1309:ARG:HG2	2.18	0.43
1:A:2044:ALA:HB1	1:A:2088:LEU:CD1	2.48	0.43
1:A:2178:ILE:O	1:A:2182:VAL:HG23	2.17	0.43
1:A:2326:ILE:HG21	1:Q:2316:MET:HE3	2.01	0.43
1:Q:1774:ASP:O	1:Q:1779:ARG:NH1	2.52	0.43
1:Q:1812:ASN:OD1	1:Q:2035:ARG:NH1	2.51	0.43
1:R:1492:VAL:O	1:R:1496:VAL:HG12	2.17	0.43
1:D:1475:LEU:HD21	1:D:1477:PHE:CE1	2.54	0.43
1:D:2319:ILE:HG22	1:D:2323:THR:HG23	2.00	0.43
1:E:1102:SER:OG	1:E:1103:ILE:N	2.51	0.43
1:E:1373:LEU:HD23	1:E:1374:GLU:N	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1687:ARG:O	1:E:1689:GLY:N	2.51	0.43
1:E:1910:VAL:HG11	1:E:1982:PRO:HG2	1.99	0.43
1:E:1935:ARG:CG	1:E:1972:VAL:HG11	2.48	0.43
1:E:2231:LYS:O	1:E:2231:LYS:HG3	2.18	0.43
1:E:2288:ILE:O	1:E:2292:ILE:HG13	2.17	0.43
1:C:1240:ARG:O	1:C:1294:LYS:HB3	2.18	0.43
1:C:1606:ARG:HH22	1:C:1632:LEU:HD23	1.82	0.43
1:C:1917:ASP:OD1	1:C:1921:ARG:NE	2.47	0.43
1:C:1934:PRO:O	1:C:1937:MET:HG3	2.18	0.43
1:C:1981:ILE:HD11	1:C:2220:ARG:HB2	2.00	0.43
1:C:2063:PHE:O	1:C:2067:ILE:HG23	2.18	0.43
1:F:767:VAL:HG12	1:F:768:GLU:N	2.33	0.43
1:F:2178:ILE:HG23	1:F:2179:TYR:CD1	2.54	0.43
1:B:992:ARG:HA	1:B:995:LEU:HB3	2.00	0.43
1:B:1059:LEU:HD13	1:B:1063:LEU:HD23	1.99	0.43
1:B:1069:LEU:HD11	1:B:1078:ALA:CB	2.48	0.43
1:B:1383:LEU:HD12	1:B:1424:ARG:NH1	2.33	0.43
1:B:2173:GLU:HA	1:B:2176:ILE:HD12	2.00	0.43
1:A:525:THR:O	1:A:543:VAL:N	2.43	0.43
1:A:884:ARG:O	1:A:888:THR:HG23	2.18	0.43
1:A:1066:LEU:HD21	1:A:1077:VAL:HG12	1.99	0.43
1:A:1539:TYR:CD1	1:A:1629:SER:HA	2.53	0.43
1:G:1978:LEU:HD12	1:G:2212:ARG:NH1	2.32	0.43
1:G:2326:ILE:HG22	1:G:2326:ILE:O	2.17	0.43
1:Q:2119:GLU:OE1	1:Q:2121:GLU:HG2	2.19	0.43
1:J:295:ASP:OD1	1:J:970:GLN:NE2	2.45	0.43
1:R:638:HIS:NE2	1:R:736:ILE:HG23	2.32	0.43
1:R:966:GLN:HA	1:R:969:VAL:HG22	2.00	0.43
1:R:1511:ALA:H	1:R:1532:LEU:HB2	1.84	0.43
1:D:405:GLU:O	1:D:409:VAL:HG23	2.18	0.43
1:D:1099:GLN:HE21	1:D:1103:ILE:CD1	2.31	0.43
1:D:1129:SER:HB3	1:D:1428:ARG:O	2.19	0.43
1:D:1147:MET:CE	1:D:1168:HIS:HB3	2.48	0.43
1:D:1872:ILE:HG22	1:D:1884:THR:OG1	2.19	0.43
1:E:879:LYS:O	1:E:883:GLU:HG2	2.18	0.43
1:E:946:ASP:HA	1:E:949:ALA:HB3	2.01	0.43
1:E:1943:HIS:CD2	1:E:1945:THR:HG1	2.36	0.43
1:E:2119:GLU:OE2	1:E:2122:GLY:N	2.52	0.43
1:C:631:GLY:O	1:C:635:GLY:N	2.46	0.43
1:C:991:LEU:HD12	1:C:992:ARG:HE	1.83	0.43
1:C:1083:GLN:HG2	1:C:1444:ASN:ND2	2.32	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1424:ARG:HG2	1:C:1474:PHE:HB3	2.00	0.43
1:C:2039:PRO:HG3	1:C:2223:LEU:HD21	2.00	0.43
1:F:696:ILE:HG23	1:F:700:SER:O	2.18	0.43
1:F:1403:LEU:HB3	1:F:1423:VAL:HG23	2.01	0.43
1:F:1481:VAL:HG23	1:F:1517:ILE:HG22	2.00	0.43
1:F:1663:LYS:HA	1:F:1678:ILE:HG22	1.99	0.43
1:F:1874:ILE:HG22	1:F:1875:MET:HE2	2.00	0.43
1:B:654:SER:OG	1:B:661:LEU:HD13	2.18	0.43
1:B:944:ILE:HG13	1:B:945:LEU:N	2.33	0.43
1:B:1839:ILE:HG22	1:B:1885:VAL:HG22	2.00	0.43
1:B:2046:TRP:H	1:B:2088:LEU:HD12	1.82	0.43
1:B:2127:LYS:HE2	1:G:1726:LEU:HG	2.00	0.43
1:A:654:SER:CB	1:A:661:LEU:HD22	2.48	0.43
1:A:767:VAL:HG12	1:A:768:GLU:N	2.32	0.43
1:A:1010:VAL:HG22	1:A:1028:ILE:HD11	2.00	0.43
1:A:1454:MET:CG	1:A:1506:LEU:HD21	2.47	0.43
1:Q:1935:ARG:NH2	1:Q:1962:GLU:OE1	2.52	0.43
1:Q:1938:LEU:HD11	1:Q:1985:VAL:HG11	1.99	0.43
1:J:1067:THR:HG22	1:J:1082:ARG:N	2.34	0.43
1:R:1094:GLU:HA	1:R:1097:HIS:HB3	1.99	0.43
1:R:1517:ILE:HG12	1:R:1518:ARG:H	1.83	0.43
2:K:1689:MET:HB2	2:K:1736:VAL:HG11	2.00	0.43
2:O:1652:MET:HG2	2:O:1686:HIS:HB2	2.01	0.43
1:D:281:VAL:HG12	1:D:286:TYR:HB2	2.01	0.43
1:D:1118:GLU:O	1:D:1121:GLN:HG2	2.19	0.43
1:D:1164:ASN:O	1:D:1165:SER:OG	2.28	0.43
1:D:1468:THR:O	1:D:1507:ARG:NH1	2.50	0.43
1:D:1865:SER:O	1:D:1868:GLN:N	2.50	0.43
1:D:2117:VAL:HG23	1:C:1797:LEU:HD21	2.00	0.43
1:E:352:ALA:CB	1:E:426:LEU:HD21	2.47	0.43
1:E:714:LEU:HD21	1:E:727:MET:HE1	1.99	0.43
1:E:899:LEU:HD12	1:E:900:GLN:N	2.34	0.43
1:E:1993:VAL:O	1:E:2013:GLN:N	2.43	0.43
1:C:1373:LEU:HB2	1:C:1402:HIS:CE1	2.53	0.43
1:B:1237:VAL:HG21	1:B:1252:VAL:HG13	1.99	0.43
1:A:1014:ARG:HA	1:A:1021:MET:HE2	2.00	0.43
1:A:1101:GLU:OE1	1:A:1105:LEU:HD11	2.17	0.43
1:G:1609:LEU:HD23	1:G:1631:MET:SD	2.58	0.43
1:G:2206:LEU:HD11	1:G:2214:PHE:CD2	2.53	0.43
1:J:332:ASN:O	1:J:336:GLN:N	2.47	0.43
1:J:1492:VAL:O	1:J:1496:VAL:HG12	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:625:ARG:HB3	1:R:626:PRO:CD	2.48	0.43
1:R:930:THR:O	1:R:930:THR:HG22	2.18	0.43
2:H:1653:VAL:HG13	2:H:1684:THR:CG2	2.48	0.43
1:D:1079:LEU:HA	1:D:1079:LEU:HD13	1.66	0.43
1:D:1730:ILE:CD1	1:D:1761:VAL:HG11	2.49	0.43
1:D:1797:LEU:HG	1:C:2094:VAL:HB	2.00	0.43
1:D:1803:ILE:HA	1:D:1806:GLU:OE1	2.17	0.43
1:D:1960:PHE:CE1	1:D:1974:GLY:HA3	2.54	0.43
1:D:2219:LEU:C	1:D:2219:LEU:HD13	2.39	0.43
1:E:204:ALA:HB2	1:E:228:ALA:HB3	2.00	0.43
1:E:371:ILE:HG23	1:E:470:LEU:HD13	2.01	0.43
1:E:894:LEU:HG	1:E:895:PRO:HD3	2.01	0.43
1:E:925:TYR:CZ	1:E:929:ILE:HD13	2.54	0.43
1:E:998:GLU:OE2	1:E:1034:VAL:HG13	2.18	0.43
1:E:1703:SER:O	1:E:1706:ALA:HB3	2.18	0.43
1:E:2059:GLN:HB3	1:E:2062:LYS:HD2	1.99	0.43
1:C:240:LEU:HD21	1:C:249:VAL:HG11	2.01	0.43
1:C:1104:PHE:CZ	1:C:1148:ALA:HB3	2.53	0.43
1:C:1289:LEU:HD22	1:C:1327:LEU:HD12	1.99	0.43
1:C:1760:ARG:O	1:C:1764:LEU:HG	2.19	0.43
1:C:2124:VAL:HG11	1:C:2184:VAL:HG12	2.01	0.43
1:F:510:ILE:HD12	1:F:584:ARG:HH22	1.83	0.43
1:F:1115:PHE:CD1	1:F:1117:ILE:HD13	2.53	0.43
1:B:1239:PHE:HZ	1:B:1248:ILE:HG21	1.82	0.43
1:B:1471:ASN:HB2	1:B:1508:VAL:HA	2.01	0.43
1:A:140:TRP:O	1:A:144:MET:N	2.47	0.43
1:A:956:SER:HA	1:A:958:ARG:HE	1.83	0.43
1:A:1059:LEU:HD13	1:A:1063:LEU:HD23	2.01	0.43
1:A:1237:VAL:HG21	1:A:1252:VAL:HG13	1.99	0.43
1:A:2075:CYS:O	1:A:2104:HIS:NE2	2.52	0.43
1:J:248:ILE:HD13	1:J:281:VAL:HG11	2.00	0.43
1:J:1512:GLU:HG2	1:J:1531:PHE:HA	2.01	0.43
1:R:1104:PHE:CE2	1:R:1145:VAL:HG13	2.53	0.43
2:W:1834:THR:HG22	2:W:1855:ILE:HD11	2.00	0.43
1:D:255:ILE:HD11	1:D:411:LEU:HB2	2.01	0.43
1:D:660:VAL:CB	1:D:1010:VAL:HG11	2.46	0.43
1:D:925:TYR:CZ	1:D:929:ILE:HD13	2.53	0.43
1:D:1659:MET:HA	1:D:1681:GLY:O	2.18	0.43
1:D:1803:ILE:O	1:D:1807:SER:CB	2.66	0.43
1:D:2019:PHE:HB3	1:D:2020:PRO:HD2	2.00	0.43
1:E:380:VAL:CG2	1:E:608:ILE:HD13	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1000:GLN:CG	1:E:1013:LEU:HD23	2.48	0.43
1:E:1326:ARG:C	1:E:1327:LEU:HD12	2.38	0.43
1:E:1391:LEU:H	1:E:1391:LEU:HD13	1.84	0.43
1:E:2054:LYS:HD2	1:F:2000:ASP:HB2	2.00	0.43
1:C:281:VAL:HG12	1:C:286:TYR:HB2	2.01	0.43
1:C:291:VAL:HG22	1:C:346:ILE:O	2.19	0.43
1:C:1597:TYR:O	1:C:1601:ILE:HG23	2.19	0.43
1:C:1716:VAL:HG22	1:C:1819:LEU:HB2	1.99	0.43
1:C:2256:GLU:O	1:C:2260:LYS:NZ	2.44	0.43
1:C:2320:ILE:O	1:C:2323:THR:OG1	2.37	0.43
1:F:510:ILE:HD11	1:F:540:TYR:O	2.18	0.43
1:F:1483:MET:O	1:F:1517:ILE:HD12	2.18	0.43
1:F:1868:GLN:O	1:F:1874:ILE:HD11	2.19	0.43
1:F:1925:PHE:HD2	1:F:1937:MET:HA	1.83	0.43
1:F:1954:PHE:CE2	1:F:1978:LEU:HD13	2.52	0.43
1:F:2123:THR:HG21	1:F:2187:ALA:HB1	2.01	0.43
1:B:140:TRP:O	1:B:144:MET:N	2.46	0.43
1:B:1060:LEU:O	1:B:1060:LEU:HD13	2.19	0.43
1:B:1613:TRP:HE3	1:B:1622:LEU:HD12	1.82	0.43
1:A:682:VAL:C	1:A:683:LEU:HD12	2.39	0.43
1:Q:1978:LEU:HD12	1:Q:2212:ARG:NH1	2.34	0.43
1:J:625:ARG:HB3	1:J:626:PRO:CD	2.48	0.43
1:J:874:PHE:CE2	1:J:1040:LEU:HD12	2.53	0.43
1:J:1535:GLU:N	1:J:1535:GLU:OE1	2.52	0.43
1:R:874:PHE:CE2	1:R:1040:LEU:HD12	2.54	0.43
1:R:900:GLN:O	1:R:904:THR:HG23	2.18	0.43
1:R:1063:LEU:HG	1:R:1084:VAL:HG11	1.99	0.43
1:D:536:ASN:O	1:D:536:ASN:ND2	2.48	0.43
1:D:980:ARG:O	1:D:984:LYS:HG2	2.18	0.43
1:D:1298:ASP:O	1:D:1300:GLU:N	2.52	0.43
1:D:1319:LEU:HD12	1:D:1324:ILE:H	1.84	0.43
1:D:1731:ARG:O	1:C:2135:LYS:NZ	2.52	0.43
1:E:654:SER:O	1:E:659:GLN:N	2.51	0.43
1:E:1093:TYR:HB3	1:E:1095:LEU:HD12	2.01	0.43
1:E:1166:VAL:HG13	1:E:1179:GLU:O	2.18	0.43
1:E:1421:PHE:CB	1:E:1457:LEU:HD11	2.49	0.43
1:E:1472:HIS:HE1	1:E:1512:GLU:HG3	1.84	0.43
1:E:1720:SER:CA	1:E:1825:ILE:HB	2.49	0.43
1:E:2253:VAL:HG13	1:E:2258:THR:CA	2.45	0.43
1:C:640:ALA:HB2	1:C:685:VAL:HG11	2.01	0.43
1:C:686:THR:HG21	1:C:870:PRO:HB3	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:696:ILE:HG23	1:C:700:SER:O	2.19	0.43
1:C:726:TYR:O	1:C:737:THR:OG1	2.22	0.43
1:C:1648:MET:HG2	1:C:1650:ARG:HB3	2.00	0.43
1:C:1862:VAL:HG11	1:C:2002:ALA:HB2	2.00	0.43
1:C:1877:ASN:C	1:C:1967:TRP:HB2	2.39	0.43
1:F:291:VAL:HG22	1:F:346:ILE:O	2.19	0.43
1:F:966:GLN:HA	1:F:969:VAL:HG22	2.01	0.43
1:F:1240:ARG:O	1:F:1294:LYS:HB3	2.19	0.43
1:F:1657:ILE:HD11	1:F:1698:LEU:HD22	2.01	0.43
1:F:1761:VAL:HA	1:F:1764:LEU:HD12	2.01	0.43
1:B:281:VAL:HG11	1:B:286:TYR:HB2	2.01	0.43
1:B:1734:PHE:CE2	1:B:1751:LEU:HD22	2.54	0.43
1:B:2109:ALA:HB1	1:B:2113:SER:OG	2.18	0.43
1:A:291:VAL:HG22	1:A:347:PHE:HA	2.00	0.43
1:A:1474:PHE:HA	1:A:1512:GLU:HG3	2.01	0.43
1:Q:2045:ASN:HA	1:Q:2086:ALA:HB1	2.01	0.43
1:Q:2128:PHE:CE2	1:Q:2187:ALA:HB2	2.52	0.43
1:J:631:GLY:O	1:J:635:GLY:N	2.45	0.43
1:J:852:VAL:O	1:J:856:VAL:HG23	2.18	0.43
1:J:930:THR:O	1:J:930:THR:HG22	2.18	0.43
1:J:1094:GLU:HA	1:J:1097:HIS:HB3	2.00	0.43
1:R:430:ASP:OD1	1:R:645:ARG:NH1	2.52	0.43
1:D:969:VAL:HG11	1:E:2250:ARG:HD2	2.00	0.43
1:D:1263:SEP:O1P	2:O:1656:GLY:N	2.41	0.43
1:D:1421:PHE:CG	1:D:1457:LEU:HD12	2.53	0.43
1:D:1677:ILE:HG22	1:D:1712:PRO:HB2	2.00	0.43
1:D:1703:SER:HA	1:D:1713:ARG:HD2	2.01	0.43
1:D:2093:TRP:HE1	1:C:1797:LEU:HD22	1.81	0.43
1:D:2108:TYR:HE1	1:D:2203:SER:HB2	1.84	0.43
1:D:2264:TRP:O	1:D:2270:LEU:HD22	2.19	0.43
1:E:2232:ILE:O	1:E:2235:ALA:HB3	2.19	0.43
1:E:2320:ILE:HA	1:E:2323:THR:HG22	2.01	0.43
1:C:930:THR:O	1:C:930:THR:HG22	2.19	0.43
1:C:1114:GLN:HE21	1:C:1148:ALA:HA	1.83	0.43
1:C:1767:VAL:HG12	1:C:1785:ILE:HA	2.01	0.43
1:C:2150:ARG:O	1:C:2156:LEU:HD11	2.19	0.43
1:F:158:THR:HG22	1:F:186:ASN:HD22	1.84	0.43
1:F:1439:PHE:O	1:F:1443:GLN:HB2	2.19	0.43
1:F:2221:ARG:NH2	1:F:2267:ASN:OD1	2.52	0.43
1:B:1289:LEU:C	1:B:1289:LEU:HD13	2.39	0.43
1:A:1123:LEU:HD13	1:A:1156:ARG:HD2	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1609:LEU:HD11	1:A:1666:PHE:CG	2.54	0.43
1:A:2326:ILE:HG22	1:A:2327:SER:N	2.34	0.43
1:Q:2151:LEU:HA	1:Q:2164:LEU:HD13	2.01	0.43
1:R:852:VAL:O	1:R:856:VAL:HG23	2.19	0.43
1:R:1535:GLU:N	1:R:1535:GLU:OE1	2.52	0.43
2:O:1792:VAL:HG11	2:O:1798:PHE:CD1	2.54	0.43
2:Y:1735:GLU:OE2	2:Y:1753:ARG:NH2	2.48	0.43
1:D:763:ILE:HD11	1:D:783:GLU:CG	2.48	0.43
1:D:991:LEU:CG	1:D:1066:LEU:HD11	2.49	0.43
1:D:998:GLU:OE2	1:D:1034:VAL:HG22	2.19	0.43
1:D:1287:HIS:O	1:D:1325:ARG:N	2.43	0.43
1:D:1621:PHE:CE2	1:D:1916:LYS:HG2	2.54	0.43
1:D:1718:ALA:HB2	1:D:1821:THR:OG1	2.19	0.43
1:D:1988:VAL:HG13	1:D:1988:VAL:O	2.18	0.43
1:E:625:ARG:HB3	1:E:626:PRO:CD	2.49	0.43
1:E:2206:LEU:HD21	1:E:2214:PHE:CE2	2.54	0.43
1:C:1114:GLN:HE21	1:C:1148:ALA:CA	2.32	0.43
1:C:1391:LEU:HD13	1:C:1404:TYR:CD2	2.54	0.43
1:C:1873:GLN:HA	1:C:1877:ASN:HD22	1.84	0.43
1:C:2217:TRP:CB	1:C:2267:ASN:HB3	2.49	0.43
1:C:2218:ARG:HD2	1:C:2221:ARG:HE	1.83	0.43
1:F:706:VAL:HG22	1:F:707:HIS:H	1.84	0.43
1:F:1934:PRO:O	1:F:1937:MET:HG3	2.19	0.43
1:B:1381:LEU:O	1:B:1383:LEU:N	2.52	0.43
1:B:2201:VAL:HG12	1:G:1798:ARG:HB2	2.01	0.43
1:A:452:VAL:CG1	1:A:505:VAL:HG23	2.48	0.43
1:A:609:ASP:OD1	1:A:612:TRP:N	2.52	0.43
1:A:668:ASN:HD22	1:A:868:CYS:HB2	1.84	0.43
1:A:924:GLN:HA	1:A:927:SER:H	1.84	0.43
1:A:2068:VAL:O	1:A:2071:LEU:HD23	2.18	0.43
1:G:2098:SER:H	1:G:2107:MET:HE3	1.84	0.43
1:J:1517:ILE:HG12	1:J:1518:ARG:H	1.84	0.43
2:M:1704:PHE:CE1	2:M:1843:ALA:HB2	2.54	0.43
2:Y:1691:THR:HG1	2:Y:1715:SER:HG	1.59	0.43
1:D:896:LEU:HD13	1:D:925:TYR:HD2	1.83	0.42
1:D:979:ILE:HD12	1:D:980:ARG:CG	2.40	0.42
1:D:1457:LEU:HD22	1:D:1457:LEU:N	2.34	0.42
1:D:1515:ILE:HG12	1:D:1528:ILE:O	2.19	0.42
1:D:1967:TRP:CZ2	1:D:2021:ASP:HB2	2.54	0.42
1:D:2114:ARG:CZ	1:D:2192:THR:HG22	2.49	0.42
1:D:2141:ASP:HB3	1:D:2144:TYR:HB3	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1535:GLU:N	1:E:1535:GLU:OE1	2.52	0.42
1:C:389:GLU:HB2	1:C:507:ALA:HB3	2.00	0.42
1:C:1060:LEU:HA	1:C:1063:LEU:HB3	2.01	0.42
1:C:2294:CYS:O	1:C:2297:ARG:HB3	2.19	0.42
1:F:258:LEU:HD21	1:F:352:ALA:HB2	2.00	0.42
1:F:943:ASN:CB	1:A:2243:GLN:HB3	2.49	0.42
1:F:1076:LYS:HG3	1:F:1077:VAL:HG13	2.00	0.42
1:F:1405:LEU:HD23	1:F:1421:PHE:CD1	2.54	0.42
1:F:1675:ARG:NH2	1:F:1899:LEU:O	2.46	0.42
1:F:1705:LEU:HD22	1:F:1708:ALA:HB3	2.01	0.42
1:F:1867:ASN:O	1:F:1871:GLY:N	2.45	0.42
1:F:1991:ARG:CZ	1:F:1993:VAL:HA	2.49	0.42
1:F:2150:ARG:O	1:F:2156:LEU:HD11	2.19	0.42
1:A:1391:LEU:HB2	1:A:1404:TYR:HB3	2.01	0.42
1:A:2106:GLU:OE1	1:A:2222:LEU:HD11	2.19	0.42
1:G:1710:GLY:HA2	1:G:1814:ILE:HG22	2.01	0.42
1:Q:2291:ASN:ND2	1:R:977:SER:OG	2.52	0.42
1:R:1079:LEU:HD12	1:R:1444:ASN:HA	2.00	0.42
1:D:910:ILE:CG1	1:D:915:GLU:HB2	2.50	0.42
1:D:1126:SER:OG	1:D:1428:ARG:NH2	2.52	0.42
1:D:1688:ILE:HG22	1:D:1823:ARG:HH22	1.83	0.42
1:E:679:VAL:HG23	1:E:832:HIS:CE1	2.55	0.42
1:E:965:THR:O	1:E:969:VAL:HG22	2.19	0.42
1:E:1065:GLU:OE1	1:E:1069:LEU:HD21	2.19	0.42
1:E:1530:LEU:HD21	1:E:1544:LEU:HD13	2.00	0.42
1:C:706:VAL:HG22	1:C:707:HIS:H	1.84	0.42
1:C:1693:PRO:CD	1:C:1791:GLY:HA2	2.49	0.42
1:C:2071:LEU:O	1:C:2071:LEU:HD23	2.18	0.42
1:C:2227:LEU:O	1:C:2231:LYS:HG2	2.18	0.42
1:F:355:SER:O	1:F:610:THR:N	2.51	0.42
1:F:1509:LEU:HD11	1:F:1535:GLU:OE2	2.18	0.42
1:F:2082:ILE:HG23	1:F:2088:LEU:HD23	2.00	0.42
1:B:998:GLU:OE1	1:B:1034:VAL:HG13	2.19	0.42
1:B:1670:GLU:CG	1:B:1913:LEU:HD21	2.49	0.42
1:A:155:VAL:HG22	1:A:172:ALA:HB3	2.01	0.42
1:A:240:LEU:HD21	1:A:415:VAL:HG21	2.01	0.42
1:A:1874:ILE:HD12	1:Q:2053:MET:SD	2.59	0.42
1:Q:1735:HIS:O	1:Q:1751:LEU:HA	2.20	0.42
1:Q:1736:VAL:HG22	1:Q:1751:LEU:CD2	2.49	0.42
1:J:1510:GLN:OE1	1:J:1577:TYR:OH	2.31	0.42
1:R:291:VAL:HG11	1:R:297:GLY:HA2	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:178:VAL:HG12	1:D:196:ILE:HD11	2.01	0.42
1:D:297:GLY:O	1:D:301:ALA:N	2.41	0.42
1:D:1104:PHE:O	1:D:1107:ALA:HB3	2.19	0.42
1:D:1585:SER:O	1:D:1589:GLN:NE2	2.52	0.42
1:D:2297:ARG:HE	1:C:2314:VAL:CG1	2.23	0.42
1:E:400:VAL:HG11	1:E:427:TYR:CE1	2.54	0.42
1:E:1513:LEU:HD12	1:E:1513:LEU:N	2.34	0.42
1:E:1598:ILE:HG13	1:E:1599:TYR:N	2.35	0.42
1:E:1882:HIS:HA	1:E:1964:MET:HE2	2.01	0.42
1:E:2128:PHE:HE2	1:E:2133:LEU:HD23	1.84	0.42
1:E:2244:ILE:O	1:E:2247:MET:HG3	2.19	0.42
1:C:1082:ARG:HD3	1:C:1440:GLU:HB2	2.00	0.42
1:C:1471:ASN:HD22	1:C:1507:ARG:C	2.21	0.42
1:C:1976:ALA:HB3	1:C:1985:VAL:HG21	2.01	0.42
1:F:682:VAL:HG11	1:F:698:ASN:HB3	2.01	0.42
1:F:724:THR:O	1:F:739:GLY:N	2.52	0.42
1:F:860:LEU:O	1:F:864:MET:N	2.49	0.42
1:F:1065:GLU:O	1:F:1068:GLN:HG2	2.19	0.42
1:F:1135:PRO:HA	1:F:1138:PHE:CE1	2.54	0.42
1:F:1976:ALA:O	1:F:1982:PRO:HA	2.19	0.42
1:F:2088:LEU:O	1:F:2115:GLY:HA2	2.19	0.42
1:B:1495:MET:O	1:B:1498:ARG:HB3	2.18	0.42
1:B:1854:LEU:O	1:B:1858:LEU:N	2.50	0.42
1:A:129:ALA:HB2	1:A:209:TRP:CZ3	2.54	0.42
1:A:625:ARG:NH1	1:A:742:THR:O	2.52	0.42
1:A:1024:VAL:O	1:A:1027:TYR:HB2	2.19	0.42
1:A:1069:LEU:CG	1:A:1078:ALA:HB2	2.49	0.42
1:A:1114:GLN:HE21	1:A:1148:ALA:HA	1.84	0.42
1:A:1373:LEU:HG	1:A:1378:ALA:HB2	2.02	0.42
1:A:1421:PHE:CE1	1:A:1460:ALA:HB1	2.55	0.42
1:A:2124:VAL:HG21	1:A:2184:VAL:HG12	2.00	0.42
1:J:128:ILE:HG23	1:J:209:TRP:HH2	1.83	0.42
1:J:920:LYS:O	1:J:923:ALA:HB3	2.19	0.42
1:J:1066:LEU:O	1:J:1069:LEU:HD23	2.20	0.42
1:R:1120:LEU:HD12	1:R:1152:VAL:HG23	2.01	0.42
2:K:1707:ILE:HD11	2:K:1749:PRO:HG3	2.01	0.42
2:U:1691:THR:CG2	2:U:1736:VAL:HG12	2.50	0.42
2:U:1764:LEU:HD23	2:U:1805:HIS:HB2	2.01	0.42
2:W:1705:LEU:HD22	2:W:1782:TRP:HE3	1.83	0.42
1:D:448:CYS:HA	1:D:505:VAL:HG11	2.00	0.42
1:D:735:ARG:HG3	1:D:744:VAL:HG22	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1411:GLU:OE1	1:D:1411:GLU:N	2.53	0.42
1:D:2057:TYR:HD1	1:C:1874:ILE:HG23	1.85	0.42
1:D:2295:ILE:HA	1:E:939:GLN:HE22	1.85	0.42
1:E:863:VAL:HG13	1:E:874:PHE:HZ	1.85	0.42
1:E:1429:HIS:O	1:E:1430:SER:HB3	2.19	0.42
1:E:2117:VAL:CG2	1:F:1797:LEU:HD21	2.40	0.42
1:C:625:ARG:HB3	1:C:626:PRO:CD	2.49	0.42
1:C:1377:LEU:HD12	1:C:1380:GLN:HG3	2.01	0.42
1:C:1677:ILE:HD13	1:C:1714:ILE:HG12	2.01	0.42
1:C:1752:TYR:HB2	1:C:1779:ARG:HB3	2.00	0.42
1:C:2046:TRP:O	1:C:2088:LEU:HA	2.19	0.42
1:C:2122:GLY:O	1:C:2125:GLU:HG2	2.19	0.42
1:F:631:GLY:O	1:F:635:GLY:N	2.46	0.42
1:F:939:GLN:OE1	1:A:2239:LEU:HD22	2.20	0.42
1:F:943:ASN:HB3	1:A:2243:GLN:HB3	2.02	0.42
1:F:1138:PHE:HA	1:F:1149:ALA:HB3	2.01	0.42
1:F:1534:ASN:HD22	1:F:1535:GLU:H	1.67	0.42
1:F:1877:ASN:C	1:F:1967:TRP:HB2	2.39	0.42
1:B:452:VAL:HG13	1:B:505:VAL:HG23	2.01	0.42
1:B:625:ARG:HB3	1:B:626:PRO:CD	2.48	0.42
1:B:1580:LYS:HE2	1:B:1583:LEU:HD22	2.02	0.42
1:B:2078:VAL:CG1	1:B:2105:MET:HG2	2.49	0.42
1:A:141:SER:O	1:A:145:PHE:N	2.37	0.42
1:A:331:PRO:O	1:A:966:GLN:NE2	2.52	0.42
1:A:634:CYS:SG	1:A:725:THR:HG21	2.59	0.42
1:A:666:LEU:HD23	1:A:1029:PHE:CE2	2.54	0.42
1:A:718:TYR:OH	1:A:838:ARG:NH2	2.52	0.42
1:A:977:SER:O	1:A:977:SER:OG	2.25	0.42
1:A:1370:TYR:CE1	1:A:1378:ALA:HB1	2.54	0.42
1:G:1936:TRP:CG	1:G:1941:ARG:HB3	2.55	0.42
1:Q:1836:GLN:OE1	1:Q:2028:GLN:NE2	2.52	0.42
1:Q:2306:SER:O	1:Q:2309:GLN:HG2	2.20	0.42
1:R:424:GLU:N	1:R:437:GLU:O	2.49	0.42
2:S:1691:THR:HG21	2:S:1736:VAL:HG12	2.01	0.42
1:D:149:ARG:NH1	1:D:173:ASP:OD1	2.52	0.42
1:D:241:GLY:HA3	1:D:440:PRO:HG3	2.01	0.42
1:D:370:ALA:O	1:D:409:VAL:HG13	2.20	0.42
1:D:463:GLN:OE1	1:D:473:ILE:HG23	2.20	0.42
1:D:871:ASP:HB3	1:D:872:PRO:HD2	2.02	0.42
1:D:1241:THR:HG22	1:D:1295:THR:CG2	2.49	0.42
1:E:193:ILE:O	1:E:197:ALA:N	2.39	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:638:HIS:ND1	1:E:727:MET:HB3	2.35	0.42
1:E:1240:ARG:HA	1:E:1294:LYS:HB3	2.00	0.42
1:E:1606:ARG:O	1:E:1610:ILE:HG13	2.19	0.42
1:E:1659:MET:HG3	1:E:1698:LEU:HD21	2.01	0.42
1:E:1751:LEU:O	1:E:1782:ILE:HG22	2.19	0.42
1:E:1863:TYR:CB	1:E:1869:LEU:HD21	2.49	0.42
1:E:1898:TRP:NE1	1:E:1961:SER:OG	2.50	0.42
1:E:2321:HIS:HE1	1:F:2305:ARG:HE	1.68	0.42
1:C:1333:GLN:HE21	1:C:1352:PHE:N	2.18	0.42
1:C:1675:ARG:NH2	1:C:1899:LEU:O	2.43	0.42
1:C:1725:GLY:C	1:C:1792:ILE:HD12	2.40	0.42
1:C:1782:ILE:HD12	1:C:1782:ILE:H	1.85	0.42
1:C:2141:ASP:OD1	1:C:2171:ARG:NH2	2.52	0.42
1:F:123:ILE:HB	1:F:155:VAL:HG12	2.01	0.42
1:F:1893:PHE:HA	1:F:1896:LEU:HD21	2.01	0.42
1:B:1084:VAL:O	1:B:1088:SER:OG	2.26	0.42
1:B:1766:SER:O	1:B:1787:GLY:N	2.44	0.42
1:B:2260:LYS:NZ	1:B:2263:VAL:HG11	2.35	0.42
1:B:2319:ILE:O	1:B:2323:THR:HG22	2.19	0.42
1:A:850:HIS:O	1:A:854:HIS:ND1	2.43	0.42
1:A:2309:GLN:NE2	1:Q:2324:GLN:OE1	2.47	0.42
1:G:1727:ALA:HB3	1:G:1785:ILE:HD11	2.02	0.42
1:G:1812:ASN:HA	1:G:2035:ARG:HD2	2.02	0.42
1:G:1954:PHE:CE2	1:G:1978:LEU:HD13	2.55	0.42
1:G:2151:LEU:HD21	1:G:2168:LEU:HD22	2.00	0.42
1:Q:1736:VAL:HG22	1:Q:1751:LEU:HD22	2.01	0.42
2:S:1705:LEU:HD22	2:S:1782:TRP:HE3	1.84	0.42
2:Y:1782:TRP:CE2	2:Y:1786:LEU:HD11	2.55	0.42
1:D:194:LEU:HD11	1:D:225:ASN:CG	2.38	0.42
1:D:249:VAL:HG11	1:D:415:VAL:HG21	2.02	0.42
1:D:975:TYR:HA	1:D:982:HIS:CE1	2.55	0.42
1:D:1978:LEU:O	1:D:1981:ILE:HG13	2.20	0.42
1:D:2301:LEU:HD12	1:D:2302:LYS:N	2.35	0.42
1:E:246:SER:O	1:E:250:ALA:N	2.32	0.42
1:E:930:THR:O	1:E:930:THR:HG22	2.19	0.42
1:E:1819:LEU:HD23	1:E:1819:LEU:N	2.31	0.42
1:E:2195:ARG:NH1	1:F:1793:GLY:HA3	2.35	0.42
1:E:2227:LEU:HD23	1:E:2227:LEU:C	2.40	0.42
1:E:2321:HIS:CE1	1:F:2305:ARG:HE	2.36	0.42
1:C:450:GLU:HG3	1:C:457:LEU:HD12	2.02	0.42
1:C:1246:VAL:HG23	1:C:1311:PHE:HE1	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1697:LEU:HA	1:C:1700:LEU:HB3	2.01	0.42
1:C:2232:ILE:HD12	1:C:2248:LEU:HD21	1.99	0.42
1:C:2325:HIS:CG	1:C:2326:ILE:H	2.36	0.42
1:F:707:HIS:HB3	1:F:715:LEU:HB2	2.00	0.42
1:F:1373:LEU:CD2	1:F:1378:ALA:HB2	2.50	0.42
1:F:2061:LEU:H	1:F:2061:LEU:CD2	2.33	0.42
1:A:194:LEU:HD11	1:A:225:ASN:CG	2.40	0.42
1:A:371:ILE:HG23	1:A:470:LEU:HD13	2.00	0.42
1:A:2095:VAL:HG23	1:A:2096:ILE:HG23	2.02	0.42
1:A:2326:ILE:HG22	1:A:2327:SER:H	1.84	0.42
1:Q:1862:VAL:HG11	1:Q:2002:ALA:HB2	2.02	0.42
1:R:312:ALA:HB2	1:R:337:VAL:HG13	2.01	0.42
2:U:1668:PHE:CG	2:U:1719:VAL:HG13	2.53	0.42
1:D:763:ILE:HD11	1:D:783:GLU:HG3	2.01	0.42
1:D:930:THR:HG22	1:D:930:THR:O	2.20	0.42
1:E:765:TYR:OH	1:E:799:ILE:HG21	2.19	0.42
1:E:1239:PHE:O	1:E:1293:ILE:HA	2.19	0.42
1:E:1585:SER:O	1:E:1589:GLN:NE2	2.53	0.42
1:E:2128:PHE:CE2	1:E:2183:ALA:HB2	2.54	0.42
1:E:2141:ASP:HB3	1:E:2144:TYR:HB3	2.02	0.42
1:E:2181:GLN:O	1:E:2184:VAL:HG22	2.20	0.42
1:C:759:ALA:O	1:C:784:VAL:HG22	2.20	0.42
1:C:1075:ALA:HB3	1:C:1447:GLU:OE2	2.20	0.42
1:C:1691:PHE:HB2	1:C:1722:ALA:HA	2.01	0.42
1:C:1817:ILE:HG21	1:C:1895:VAL:HG13	2.01	0.42
1:F:322:ARG:NE	1:F:336:GLN:OE1	2.51	0.42
1:F:371:ILE:HG12	1:F:470:LEU:HD13	2.02	0.42
1:F:1124:ILE:HG23	1:F:1159:ILE:HG21	2.02	0.42
1:F:1506:LEU:HB2	1:F:1508:VAL:HG23	2.01	0.42
1:B:993:GLN:O	1:B:997:VAL:HG23	2.20	0.42
1:B:1006:TYR:HE1	1:B:1028:ILE:HG23	1.85	0.42
1:B:1386:MET:O	1:B:1389:PHE:HB2	2.19	0.42
1:B:1515:ILE:CG2	1:B:1528:ILE:HD11	2.49	0.42
1:B:2323:THR:HG21	1:G:2334:VAL:HG21	2.01	0.42
1:A:197:ALA:CB	1:A:227:ILE:HD13	2.31	0.42
1:A:322:ARG:NE	1:A:336:GLN:OE1	2.47	0.42
1:A:944:ILE:HG13	1:A:945:LEU:N	2.35	0.42
1:A:1298:ASP:O	1:A:1300:GLU:N	2.53	0.42
1:R:1079:LEU:HD12	1:R:1444:ASN:CA	2.50	0.42
2:Y:1824:ILE:HG22	2:Y:1828:CYS:SG	2.59	0.42
1:D:176:VAL:HG11	1:D:196:ILE:HG12	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1381:LEU:HB3	1:D:1474:PHE:CE2	2.54	0.42
1:D:1426:ILE:HG12	1:D:1476:ASN:HD21	1.84	0.42
1:D:1457:LEU:HA	1:D:1457:LEU:HD13	1.61	0.42
1:D:1657:ILE:HD11	1:D:1698:LEU:CD1	2.50	0.42
1:D:1703:SER:HB3	1:D:1713:ARG:NH2	2.34	0.42
1:D:1865:SER:O	1:D:1868:GLN:HB2	2.20	0.42
1:D:1943:HIS:O	1:D:1947:LYS:HG3	2.20	0.42
1:D:1954:PHE:O	1:D:2212:ARG:HD2	2.20	0.42
1:D:1978:LEU:HB2	1:D:2212:ARG:NH1	2.34	0.42
1:E:714:LEU:HD21	1:E:727:MET:CE	2.50	0.42
1:E:1015:GLU:HA	1:E:1018:LYS:CG	2.49	0.42
1:E:1041:VAL:HG11	1:E:1077:VAL:CG1	2.49	0.42
1:E:1178:VAL:HG12	1:E:1236:MET:HB3	2.01	0.42
1:C:765:TYR:OH	1:C:799:ILE:HG21	2.19	0.42
1:C:774:PHE:N	1:C:777:GLN:OE1	2.52	0.42
1:C:1367:ASP:OD1	1:C:1368:ARG:N	2.53	0.42
1:C:1389:PHE:CE1	1:C:1420:ARG:HD2	2.55	0.42
1:C:1678:ILE:HD13	1:C:1706:ALA:HB1	2.02	0.42
1:C:1719:ASN:N	1:C:1823:ARG:O	2.48	0.42
1:C:2054:LYS:O	1:C:2057:TYR:HB3	2.20	0.42
1:C:2120:PRO:O	1:C:2124:VAL:HG22	2.20	0.42
1:F:641:ASP:O	1:F:645:ARG:N	2.43	0.42
1:F:976:ARG:HG3	1:F:977:SER:N	2.34	0.42
1:F:1245:PHE:O	1:F:1248:ILE:N	2.52	0.42
1:F:1603:GLU:O	1:F:1607:GLN:NE2	2.52	0.42
1:F:1811:TYR:O	1:F:2035:ARG:HD2	2.19	0.42
1:B:684:LYS:HB2	1:B:696:ILE:HB	2.02	0.42
1:B:1080:ARG:HH21	1:B:1083:GLN:HB3	1.85	0.42
1:B:1180:PHE:HB2	1:B:1234:GLY:HA3	2.02	0.42
1:B:1671:TYR:OH	1:B:1903:PRO:HA	2.20	0.42
1:B:2227:LEU:O	1:B:2230:LYS:HG2	2.20	0.42
1:A:1428:ARG:HB3	1:A:1478:VAL:CG2	2.50	0.42
1:A:2117:VAL:N	1:Q:1797:LEU:HD11	2.35	0.42
1:G:2030:ILE:HG21	1:G:2067:ILE:HD11	2.01	0.42
1:Q:2217:TRP:HB3	1:Q:2267:ASN:HB3	2.01	0.42
1:R:355:SER:OG	1:R:426:LEU:HD11	2.20	0.42
1:R:727:MET:N	1:R:727:MET:SD	2.92	0.42
2:H:1715:SER:N	2:H:1734:PHE:O	2.47	0.42
2:M:1746:HIS:O	2:M:1751:ARG:NH1	2.53	0.42
1:D:294:VAL:HG23	1:D:330:PHE:CE2	2.55	0.42
1:D:312:ALA:N	1:D:320:GLY:O	2.44	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:984:LYS:HZ1	1:D:1056:THR:HG22	1.85	0.42
1:D:1309:ARG:O	1:D:1312:THR:N	2.53	0.42
1:D:1829:ALA:HA	1:D:1832:VAL:HG12	2.02	0.42
1:D:1986:VAL:HB	1:D:2042:VAL:HG13	2.02	0.42
1:D:2300:VAL:O	1:D:2304:ILE:HG12	2.20	0.42
1:D:2311:ASN:ND2	1:D:2313:GLU:OE1	2.52	0.42
1:D:2335:ILE:HG23	1:C:2335:ILE:CG2	2.50	0.42
1:E:1055:LEU:HD12	1:E:1059:LEU:HD13	2.02	0.42
1:E:1684:ILE:HD11	1:E:1823:ARG:CZ	2.50	0.42
1:E:1938:LEU:HD21	1:E:1960:PHE:CD1	2.55	0.42
1:E:1943:HIS:CE1	1:E:1951:LEU:HD21	2.55	0.42
1:C:1700:LEU:CB	1:C:1803:ILE:HD11	2.50	0.42
1:C:2178:ILE:HG23	1:C:2179:TYR:CD1	2.55	0.42
1:C:2319:ILE:O	1:C:2322:MET:HB2	2.20	0.42
1:C:2331:ARG:O	1:C:2335:ILE:HG13	2.19	0.42
1:F:357:HIS:N	1:F:379:SER:OG	2.39	0.42
1:F:1648:MET:HG2	1:F:1650:ARG:HB3	2.00	0.42
1:F:2016:GLN:HE21	1:F:2045:ASN:ND2	2.17	0.42
1:B:1429:HIS:O	1:B:1441:TYR:OH	2.30	0.42
1:B:1447:GLU:OE1	1:B:1447:GLU:N	2.47	0.42
1:A:1239:PHE:CZ	1:A:1248:ILE:HG21	2.54	0.42
1:A:2015:GLY:O	1:A:2017:VAL:HG23	2.20	0.42
1:G:2240:THR:HG22	1:G:2242:GLY:H	1.84	0.42
1:Q:1860:ARG:NH2	1:Q:2001:PRO:O	2.51	0.42
1:Q:2030:ILE:HG21	1:Q:2067:ILE:HD11	2.02	0.42
1:Q:2240:THR:HG22	1:Q:2241:ASP:OD1	2.20	0.42
1:J:767:VAL:HG12	1:J:768:GLU:N	2.32	0.42
1:J:780:ALA:HB3	1:J:791:LEU:HD12	2.01	0.42
1:R:1116:CYS:O	1:R:1120:LEU:N	2.42	0.42
2:K:1784:VAL:HB	2:K:1789:ALA:HB3	2.01	0.42
1:E:1729:GLU:OE1	1:E:1729:GLU:N	2.48	0.42
1:E:1748:TYR:CD1	1:F:2182:VAL:HG22	2.55	0.42
1:E:1937:MET:O	1:E:1954:PHE:N	2.51	0.42
1:C:1126:SER:OG	1:C:1428:ARG:NH2	2.40	0.42
1:C:1840:GLN:HB3	1:C:1872:ILE:HG22	2.01	0.42
1:C:1936:TRP:CD1	1:C:1941:ARG:HB3	2.55	0.42
1:C:2259:VAL:HG22	1:B:291:VAL:HA	2.01	0.42
1:F:450:GLU:HG3	1:F:457:LEU:HD12	2.02	0.42
1:F:809:LEU:HD12	1:F:813:CYS:SG	2.59	0.42
1:F:910:ILE:CG1	1:F:915:GLU:HB2	2.49	0.42
1:F:1719:ASN:N	1:F:1823:ARG:O	2.44	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1791:GLY:C	1:F:1796:ASN:HD21	2.22	0.42
1:B:1391:LEU:HD12	1:B:1391:LEU:O	2.19	0.42
1:B:1606:ARG:NH2	1:B:1632:LEU:HG	2.35	0.42
1:Q:1700:LEU:HD11	1:Q:1802:MET:HG2	2.01	0.42
1:Q:1923:ILE:HD12	1:Q:2208:TRP:O	2.20	0.42
1:J:352:ALA:HB3	1:J:426:LEU:CD2	2.50	0.42
1:J:1120:LEU:HD12	1:J:1152:VAL:HG23	2.01	0.42
1:J:1314:GLN:NE2	1:J:1315:ASN:OD1	2.52	0.42
1:R:631:GLY:O	1:R:635:GLY:N	2.45	0.42
1:R:1403:LEU:HA	1:R:1423:VAL:HA	2.01	0.42
1:D:301:ALA:O	1:D:305:GLY:N	2.50	0.41
1:D:1330:LEU:HD23	1:D:1330:LEU:C	2.41	0.41
1:D:1401:MET:CE	1:D:1453:ALA:HB2	2.50	0.41
1:D:1516:ASN:HA	1:D:1526:ILE:O	2.20	0.41
1:D:1719:ASN:OD1	1:D:1825:ILE:N	2.49	0.41
1:E:1298:ASP:O	1:E:1300:GLU:N	2.53	0.41
1:E:1470:CYS:O	1:E:1510:GLN:NE2	2.53	0.41
1:E:1941:ARG:O	1:E:1950:TRP:HA	2.20	0.41
1:E:2278:LEU:N	1:E:2278:LEU:HD22	2.34	0.41
1:C:954:ARG:HG3	1:B:2200:GLY:HA3	2.02	0.41
1:C:976:ARG:HG3	1:C:977:SER:N	2.34	0.41
1:C:1603:GLU:OE1	1:C:1607:GLN:NE2	2.53	0.41
1:C:1693:PRO:O	1:C:1697:LEU:HB2	2.19	0.41
1:C:1727:ALA:HB3	1:C:1730:ILE:HG22	2.02	0.41
1:F:1451:LEU:HD11	1:F:1499:TYR:OH	2.19	0.41
1:B:176:VAL:HG11	1:B:196:ILE:CG1	2.50	0.41
1:B:253:ALA:HB2	1:B:414:MET:SD	2.60	0.41
1:B:638:HIS:HB2	1:B:727:MET:HG3	2.01	0.41
1:B:1031:HIS:O	1:B:1034:VAL:HG23	2.20	0.41
1:B:1735:HIS:CE1	1:B:1754:THR:HG23	2.55	0.41
1:B:1851:ALA:HA	1:B:1869:LEU:HD11	2.02	0.41
1:B:1929:LYS:HG2	1:B:2085:GLN:HE21	1.84	0.41
1:A:444:VAL:HG22	1:A:540:TYR:OH	2.20	0.41
1:A:903:MET:HE2	1:A:918:ILE:HD13	2.02	0.41
1:A:941:ILE:HD11	1:A:972:VAL:CB	2.48	0.41
1:A:960:VAL:O	1:A:963:MET:HB3	2.19	0.41
1:A:1919:ILE:HG13	1:A:1979:GLY:HA3	2.01	0.41
1:A:1971:VAL:HG13	1:A:2025:LYS:NZ	2.34	0.41
1:A:2096:ILE:HD12	1:A:2096:ILE:O	2.19	0.41
1:G:2197:GLN:HB3	1:G:2202:ILE:HD11	2.02	0.41
1:J:1245:PHE:O	1:J:1248:ILE:N	2.52	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:371:ILE:HD11	1:R:476:ILE:HD12	2.02	0.41
1:R:914:VAL:HG11	1:R:945:LEU:HD12	2.00	0.41
2:S:1730:ASN:HD22	2:S:1731:GLU:N	2.18	0.41
2:U:1701:LEU:HD13	2:U:1775:MET:HG3	2.02	0.41
1:D:197:ALA:CA	1:D:202:VAL:HG22	2.46	0.41
1:D:450:GLU:CG	1:D:457:LEU:HD12	2.49	0.41
1:D:1774:ASP:O	1:D:1779:ARG:NH1	2.53	0.41
1:D:1941:ARG:HG3	1:D:1942:PRO:O	2.21	0.41
1:D:2260:LYS:O	1:D:2263:VAL:HB	2.20	0.41
1:E:265:LEU:HD22	1:E:285:LEU:HD12	2.01	0.41
1:E:1103:ILE:O	1:E:1106:SER:OG	2.36	0.41
1:E:1309:ARG:O	1:E:1312:THR:N	2.53	0.41
1:E:1528:ILE:HD12	1:E:1530:LEU:CD1	2.50	0.41
1:E:1753:LEU:HD13	1:E:1758:TYR:HA	2.02	0.41
1:E:1879:GLY:HA2	1:E:1964:MET:SD	2.59	0.41
1:E:2068:VAL:HA	1:E:2071:LEU:CD2	2.50	0.41
1:E:2076:GLN:HA	1:E:2104:HIS:CD2	2.55	0.41
1:C:674:LEU:HD11	1:C:745:PHE:CG	2.56	0.41
1:C:835:SER:C	1:C:836:LEU:HD12	2.39	0.41
1:C:1110:MET:HG2	1:C:1144:VAL:HG11	2.01	0.41
1:C:1314:GLN:NE2	1:C:1315:ASN:OD1	2.53	0.41
1:C:1384:ASN:O	1:C:1576:PRO:HA	2.20	0.41
1:C:1419:TYR:HB3	1:C:1466:VAL:HG21	2.01	0.41
1:C:1472:HIS:HA	1:C:1510:GLN:O	2.20	0.41
1:C:1503:LEU:HG	1:C:1508:VAL:HG21	2.02	0.41
1:F:923:ALA:O	1:F:926:ALA:HB3	2.20	0.41
1:F:1326:ARG:C	1:F:1327:LEU:HD22	2.40	0.41
1:F:1766:SER:O	1:F:1786:ILE:N	2.50	0.41
1:F:1811:TYR:CZ	1:F:1836:GLN:HG3	2.56	0.41
1:F:2067:ILE:CD1	1:F:2095:VAL:HG12	2.50	0.41
1:B:1233:MET:N	1:B:1233:MET:SD	2.93	0.41
1:B:1408:ALA:O	1:B:1410:VAL:HG23	2.20	0.41
1:A:332:ASN:HB2	1:A:906:VAL:HG22	2.02	0.41
1:A:696:ILE:CD1	1:A:870:PRO:HB2	2.50	0.41
1:A:1125:LEU:HD23	1:A:1125:LEU:O	2.20	0.41
1:A:1919:ILE:CG1	1:A:1979:GLY:HA3	2.50	0.41
1:Q:1612:LEU:HD13	1:Q:1896:LEU:CD1	2.50	0.41
1:R:1076:LYS:HB2	1:R:1448:ARG:HE	1.84	0.41
1:R:1245:PHE:O	1:R:1248:ILE:N	2.53	0.41
1:D:696:ILE:HG23	1:D:700:SER:O	2.20	0.41
1:D:938:SER:O	1:D:941:ILE:HG13	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1137:PHE:O	1:D:1140:HIS:HB3	2.20	0.41
1:D:1147:MET:HE1	1:D:1168:HIS:HB3	2.02	0.41
1:D:1424:ARG:HG2	1:D:1474:PHE:HB3	2.03	0.41
1:D:1473:ILE:HB	1:D:1511:ALA:HA	2.02	0.41
1:D:1912:LEU:HD22	1:D:1981:ILE:HG22	2.01	0.41
1:D:2024:PHE:O	1:D:2028:GLN:HG2	2.20	0.41
1:E:183:ASN:HA	1:E:186:ASN:OD1	2.20	0.41
1:E:368:GLY:O	1:E:413:LYS:HG2	2.20	0.41
1:E:1327:LEU:HB2	1:E:1358:PHE:O	2.20	0.41
1:E:1475:LEU:HD21	1:E:1477:PHE:CG	2.55	0.41
1:E:1699:PHE:CD2	1:E:1803:ILE:HD11	2.55	0.41
1:E:1825:ILE:O	1:E:1828:GLY:N	2.52	0.41
1:E:1935:ARG:HG2	1:E:1972:VAL:HG11	2.01	0.41
1:C:1483:MET:O	1:C:1517:ILE:HD12	2.20	0.41
1:C:2069:ASP:OD1	1:C:2072:ARG:NH2	2.53	0.41
1:F:1329:PHE:O	1:F:1356:PHE:N	2.46	0.41
1:F:1373:LEU:HD23	1:F:1378:ALA:HB2	2.02	0.41
1:F:1613:TRP:CZ3	1:F:1622:LEU:HD21	2.55	0.41
1:F:1760:ARG:HG3	1:F:1761:VAL:H	1.84	0.41
1:F:2251:TRP:CD1	1:F:2288:ILE:HD11	2.55	0.41
1:B:637:LEU:HA	1:B:640:ALA:HB3	2.02	0.41
1:B:971:LEU:HD23	1:B:974:ARG:NH2	2.35	0.41
1:B:2068:VAL:O	1:B:2071:LEU:HD23	2.20	0.41
1:A:243:LYS:HD2	1:A:313:SER:HA	2.01	0.41
1:A:651:PHE:CE1	1:A:1025:LEU:HD13	2.55	0.41
1:A:878:VAL:O	1:A:882:VAL:HG23	2.19	0.41
1:A:1069:LEU:CD1	1:A:1078:ALA:HB2	2.46	0.41
1:A:1515:ILE:CG2	1:A:1528:ILE:HD11	2.51	0.41
1:A:1923:ILE:HD11	1:A:2212:ARG:HB2	2.02	0.41
1:A:2288:ILE:H	1:A:2288:ILE:HD12	1.86	0.41
1:Q:1680:ILE:HG21	1:Q:1699:PHE:HD1	1.85	0.41
1:Q:1828:GLY:O	1:Q:1832:VAL:HG23	2.20	0.41
1:Q:2206:LEU:HD11	1:Q:2214:PHE:CD2	2.55	0.41
1:D:693:TYR:CZ	1:D:706:VAL:HG21	2.55	0.41
1:D:1096:ARG:O	1:D:1100:VAL:HG22	2.19	0.41
1:D:1125:LEU:O	1:D:1125:LEU:HD13	2.19	0.41
1:D:1166:VAL:HG13	1:D:1179:GLU:O	2.20	0.41
1:D:2258:THR:HG22	1:E:295:ASP:HB2	2.03	0.41
1:E:654:SER:HB2	1:E:661:LEU:HD13	2.01	0.41
1:E:969:VAL:HA	1:E:972:VAL:HG12	2.02	0.41
1:E:986:VAL:HG23	1:E:987:VAL:N	2.34	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1675:ARG:NH1	1:E:1899:LEU:O	2.54	0.41
1:E:2232:ILE:N	1:E:2232:ILE:HD12	2.34	0.41
1:C:322:ARG:NE	1:C:336:GLN:OE1	2.52	0.41
1:C:917:SER:HB2	1:C:944:ILE:HG21	2.02	0.41
1:C:1124:ILE:HG23	1:C:1159:ILE:CG2	2.50	0.41
1:C:1534:ASN:HD22	1:C:1535:GLU:H	1.67	0.41
1:F:1098:ASN:HA	1:F:1101:GLU:HB3	2.01	0.41
1:F:1711:ILE:C	1:F:1711:ILE:HD12	2.40	0.41
1:F:2133:LEU:O	1:F:2136:THR:OG1	2.30	0.41
1:F:2319:ILE:HG22	1:F:2323:THR:HG23	2.02	0.41
1:B:230:MET:HE3	1:B:462:LEU:HA	2.01	0.41
1:B:625:ARG:NH1	1:B:742:THR:O	2.52	0.41
1:B:1556:ILE:O	1:B:1572:LEU:HA	2.21	0.41
1:B:1726:LEU:HD12	1:G:2127:LYS:HD3	2.03	0.41
1:B:1751:LEU:HD21	1:G:2182:VAL:HG13	2.02	0.41
1:B:1973:VAL:HG21	1:B:2029:ALA:HB2	2.00	0.41
1:A:359:GLU:HB3	1:A:422:THR:HG23	2.02	0.41
1:A:423:VAL:HG13	1:A:435:PHE:CE1	2.55	0.41
1:A:1613:TRP:CE3	1:A:1622:LEU:HD12	2.55	0.41
1:A:2062:LYS:HG2	1:Q:1833:ARG:HE	1.85	0.41
1:A:2131:LYS:O	1:A:2135:LYS:N	2.45	0.41
1:A:2232:ILE:O	1:A:2235:ALA:HB3	2.21	0.41
1:G:1973:VAL:HG21	1:G:2029:ALA:HB2	2.02	0.41
1:Q:1605:PHE:CE2	1:Q:1609:LEU:HD22	2.55	0.41
1:J:122:LEU:HD21	1:J:156:MET:CE	2.51	0.41
1:R:1408:ALA:O	1:R:1416:VAL:HG12	2.20	0.41
2:K:1704:PHE:HE2	2:K:1839:LEU:HD22	1.86	0.41
2:O:1730:ASN:HD21	2:O:1732:HIS:HD2	1.69	0.41
1:D:400:VAL:HG11	1:D:427:TYR:HE1	1.86	0.41
1:D:595:ILE:HA	1:D:598:LEU:HD12	2.03	0.41
1:D:1094:GLU:HA	1:D:1097:HIS:HB3	2.03	0.41
1:D:1580:LYS:O	1:D:1583:LEU:N	2.54	0.41
1:D:1659:MET:HG3	1:D:1698:LEU:HD11	2.01	0.41
1:D:1713:ARG:HE	1:D:1816:THR:CB	2.34	0.41
1:D:1729:GLU:OE1	1:D:1729:GLU:N	2.47	0.41
1:D:2195:ARG:NH1	1:C:1793:GLY:HA3	2.35	0.41
1:D:2195:ARG:O	1:D:2199:LYS:HG2	2.21	0.41
1:E:886:MET:O	1:E:889:LEU:HG	2.20	0.41
1:E:995:LEU:HD21	1:E:1069:LEU:HD11	2.02	0.41
1:E:2240:THR:O	1:E:2243:GLN:HG2	2.21	0.41
1:E:2326:ILE:HG22	1:E:2327:SER:N	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:151:ILE:HD12	1:C:462:LEU:HD21	2.03	0.41
1:C:633:VAL:O	1:C:636:ALA:HB3	2.20	0.41
1:C:1309:ARG:O	1:C:1312:THR:OG1	2.28	0.41
1:C:1863:TYR:OH	1:C:2000:ASP:OD1	2.36	0.41
1:C:1925:PHE:HD2	1:C:1937:MET:HA	1.85	0.41
1:C:2327:SER:HA	1:C:2330:GLN:HB3	2.01	0.41
1:F:1470:CYS:HA	1:F:1509:LEU:HB3	2.02	0.41
1:F:1489:GLU:C	1:F:1493:ARG:HE	2.18	0.41
1:F:1712:PRO:HD3	1:F:1904:LYS:O	2.21	0.41
1:B:995:LEU:HG	1:B:1066:LEU:HD21	2.03	0.41
1:B:2101:ASN:H	1:B:2105:MET:CE	2.33	0.41
1:B:2116:SER:C	1:G:1797:LEU:HD11	2.40	0.41
1:A:420:ALA:HB3	1:A:461:GLN:HG2	2.03	0.41
1:A:1096:ARG:HA	1:A:1099:GLN:HB3	2.03	0.41
1:A:2127:LYS:HE2	1:Q:1726:LEU:HG	2.01	0.41
1:G:2297:ARG:O	1:G:2300:VAL:HG22	2.20	0.41
1:Q:2240:THR:HG22	1:Q:2242:GLY:H	1.86	0.41
1:J:1130:ILE:HG22	1:J:1130:ILE:O	2.20	0.41
1:J:1384:ASN:HA	1:J:1387:ARG:HB2	2.01	0.41
1:R:1369:ILE:HD12	1:R:1391:LEU:CD2	2.50	0.41
1:R:1480:THR:O	1:R:1480:THR:OG1	2.32	0.41
2:H:1664:LEU:CD2	2:H:1723:ILE:HD12	2.50	0.41
2:K:1755:SER:O	2:K:1845:TYR:OH	2.34	0.41
1:D:1757:ASP:HA	1:D:1760:ARG:HE	1.86	0.41
1:D:2113:SER:O	1:D:2114:ARG:HG2	2.21	0.41
1:D:2327:SER:HB2	1:D:2330:GLN:HG2	2.03	0.41
1:E:283:GLN:HA	1:E:286:TYR:HB3	2.03	0.41
1:E:894:LEU:HD12	1:E:895:PRO:HD3	2.03	0.41
1:E:1588:PHE:O	1:E:1592:SER:HB3	2.19	0.41
1:E:1772:VAL:HG21	1:E:1781:LYS:HB2	2.02	0.41
1:E:2056:MET:CE	1:E:2061:LEU:HD21	2.51	0.41
1:C:122:LEU:HD21	1:C:156:MET:CE	2.50	0.41
1:C:1970:THR:HA	1:C:1993:VAL:HG21	2.02	0.41
1:F:668:ASN:ND2	1:F:868:CYS:SG	2.93	0.41
1:F:1481:VAL:O	1:F:1517:ILE:HA	2.20	0.41
1:F:1895:VAL:HG12	1:F:1899:LEU:CD1	2.51	0.41
1:B:194:LEU:HA	1:B:197:ALA:HB3	2.02	0.41
1:B:442:LEU:HB2	1:B:461:GLN:HE22	1.85	0.41
1:B:1175:THR:CG2	1:B:1237:VAL:HG13	2.50	0.41
1:B:2307:LEU:HD22	1:G:2304:ILE:HD11	2.03	0.41
1:A:998:GLU:OE1	1:A:1074:ASN:ND2	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1516:ASN:HA	1:A:1526:ILE:O	2.20	0.41
1:R:281:VAL:HG12	1:R:286:TYR:HB2	2.03	0.41
1:R:1130:ILE:O	1:R:1130:ILE:HG22	2.20	0.41
2:O:1765:GLU:O	2:O:1807:ILE:N	2.53	0.41
1:D:236:ALA:O	1:D:240:LEU:HB2	2.21	0.41
1:D:1944:PRO:HD2	1:D:1951:LEU:HG	2.03	0.41
1:E:874:PHE:O	1:E:877:LYS:N	2.54	0.41
1:E:1125:LEU:HG	1:E:1125:LEU:O	2.20	0.41
1:C:615:ARG:NH2	1:C:715:LEU:HD22	2.36	0.41
1:C:2016:GLN:HE21	1:C:2045:ASN:ND2	2.19	0.41
1:C:2041:MET:HG2	1:C:2079:LEU:HB2	2.03	0.41
1:C:2093:TRP:CH2	1:C:2201:VAL:HG21	2.55	0.41
1:C:2122:GLY:HA2	1:C:2125:GLU:HG2	2.02	0.41
1:C:2260:LYS:O	1:C:2263:VAL:HB	2.21	0.41
1:C:2317:ASP:O	1:C:2320:ILE:HG12	2.20	0.41
1:F:448:CYS:HA	1:F:505:VAL:HG11	2.03	0.41
1:F:1913:LEU:HB2	1:F:1977:ARG:NH2	2.35	0.41
1:F:2258:THR:CG2	1:A:296:ASP:H	2.30	0.41
1:B:243:LYS:HD2	1:B:313:SER:HA	2.02	0.41
1:B:780:ALA:HB3	1:B:791:LEU:CD1	2.50	0.41
1:B:1289:LEU:HD11	1:B:1291:VAL:CG1	2.50	0.41
1:B:1499:TYR:O	1:B:1503:LEU:HD13	2.21	0.41
1:B:1545:TYR:CG	1:B:1558:PHE:HB3	2.55	0.41
1:B:1748:TYR:CD1	1:G:2182:VAL:HG22	2.56	0.41
1:B:2062:LYS:HG2	1:G:1833:ARG:HE	1.86	0.41
1:B:2297:ARG:O	1:B:2301:LEU:N	2.46	0.41
1:A:156:MET:SD	1:A:178:VAL:HG11	2.61	0.41
1:A:1437:ALA:HB1	1:A:1441:TYR:CE1	2.56	0.41
1:A:1527:PRO:HG2	1:A:1547:GLU:HB2	2.02	0.41
1:G:2082:ILE:HG12	1:G:2088:LEU:HD23	2.03	0.41
1:J:205:VAL:HG11	1:J:218:LEU:HD21	2.03	0.41
1:J:1408:ALA:O	1:J:1416:VAL:HG12	2.20	0.41
1:R:706:VAL:HG22	1:R:707:HIS:H	1.86	0.41
2:K:1704:PHE:CE1	2:K:1843:ALA:HB2	2.56	0.41
2:W:1792:VAL:HG11	2:W:1798:PHE:CD1	2.56	0.41
1:D:294:VAL:HG22	1:D:298:LEU:CD1	2.43	0.41
1:D:1847:ILE:HG21	1:D:1869:LEU:HD13	2.03	0.41
1:D:1984:GLY:C	1:D:2040:LEU:HD13	2.41	0.41
1:E:164:ALA:O	1:E:524:GLY:N	2.54	0.41
1:E:1612:LEU:HD23	1:E:1612:LEU:C	2.40	0.41
1:E:1636:GLU:HA	1:E:1662:TRP:HA	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1749:ARG:NE	1:E:1775:GLU:OE2	2.35	0.41
1:E:2120:PRO:HB3	1:E:2184:VAL:O	2.20	0.41
1:E:2220:ARG:O	1:E:2224:LEU:HD12	2.21	0.41
1:E:2300:VAL:HG12	1:E:2304:ILE:HD11	2.03	0.41
1:C:668:ASN:ND2	1:C:868:CYS:SG	2.94	0.41
1:F:354:GLN:O	1:F:714:LEU:N	2.53	0.41
1:F:1095:LEU:O	1:F:1098:ASN:HB3	2.20	0.41
1:F:1331:VAL:HG22	1:F:1354:LYS:O	2.21	0.41
1:F:2263:VAL:CG1	1:F:2269:ASP:HB2	2.50	0.41
1:F:2288:ILE:HA	1:F:2291:ASN:HD22	1.85	0.41
1:B:178:VAL:HA	1:B:192:LEU:HD21	2.03	0.41
1:B:442:LEU:HD11	1:B:446:HIS:ND1	2.36	0.41
1:A:310:ILE:HD11	1:A:330:PHE:CE1	2.55	0.41
1:A:380:VAL:HG11	1:A:388:ILE:HB	2.02	0.41
1:A:1309:ARG:NH1	1:A:1366:GLU:OE2	2.54	0.41
1:A:1408:ALA:HB2	1:A:1418:ASP:HB2	2.03	0.41
1:A:1424:ARG:HA	1:A:1474:PHE:HB3	2.02	0.41
1:G:1636:GLU:OE2	1:G:1650:ARG:NH2	2.46	0.41
1:Q:2044:ALA:HB1	1:Q:2088:LEU:HD11	2.02	0.41
1:J:377:ASP:OD1	1:J:379:SER:OG	2.28	0.41
1:R:454:ASP:OD1	1:R:502:ARG:NH2	2.54	0.41
1:R:1145:VAL:O	1:R:1149:ALA:HB3	2.20	0.41
1:R:1391:LEU:H	1:R:1391:LEU:HD13	1.85	0.41
1:D:894:LEU:HD23	1:D:897:LEU:HD13	2.01	0.41
1:D:1015:GLU:HA	1:D:1018:LYS:CG	2.51	0.41
1:D:1475:LEU:HD13	1:D:1475:LEU:O	2.21	0.41
1:D:1855:ASN:ND2	1:D:1863:TYR:O	2.38	0.41
1:D:1954:PHE:HE1	1:D:2212:ARG:HA	1.84	0.41
1:D:2229:LYS:HE2	1:D:2244:ILE:HG21	2.03	0.41
1:D:2305:ARG:O	1:D:2309:GLN:HG2	2.20	0.41
1:E:679:VAL:HG22	1:E:832:HIS:HA	2.02	0.41
1:E:1248:ILE:O	1:E:1248:ILE:HG22	2.20	0.41
1:E:1420:ARG:HG2	1:E:1470:CYS:HB3	2.01	0.41
1:E:1637:LEU:HD21	1:E:1663:LYS:HB2	2.03	0.41
1:E:1656:GLU:HG3	1:E:1657:ILE:HG23	2.03	0.41
1:E:1728:GLU:OE1	1:E:1731:ARG:NH2	2.54	0.41
1:E:1800:SER:O	1:E:1803:ILE:HG22	2.21	0.41
1:E:1833:ARG:HB2	1:F:2061:LEU:HD12	2.03	0.41
1:E:1919:ILE:H	1:E:1919:ILE:HD12	1.85	0.41
1:E:1931:PRO:HB2	1:E:1991:ARG:HG3	2.02	0.41
1:E:2195:ARG:O	1:E:2199:LYS:HG2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2320:ILE:HD12	1:A:933:LEU:HD23	2.03	0.41
1:C:945:LEU:O	1:C:949:ALA:N	2.50	0.41
1:C:1086:ILE:O	1:C:1089:HIS:N	2.46	0.41
1:C:1122:LYS:O	1:C:1126:SER:HB3	2.20	0.41
1:C:1636:GLU:HB2	1:C:1648:MET:O	2.20	0.41
1:C:1819:LEU:HD11	1:C:1895:VAL:HG21	2.03	0.41
1:C:2218:ARG:HD3	1:C:2221:ARG:HE	1.86	0.41
1:F:122:LEU:HD21	1:F:156:MET:CE	2.51	0.41
1:F:166:ALA:HB2	1:F:525:THR:HG21	2.03	0.41
1:F:640:ALA:HB2	1:F:685:VAL:HG11	2.03	0.41
1:F:1302:ASP:OD1	1:F:1302:ASP:N	2.54	0.41
1:F:1699:PHE:O	1:F:1703:SER:OG	2.35	0.41
1:F:2068:VAL:O	1:F:2072:ARG:HB2	2.20	0.41
1:F:2227:LEU:O	1:F:2230:LYS:HB3	2.20	0.41
1:F:2258:THR:OG1	1:A:293:ASP:HB2	2.21	0.41
1:F:2258:THR:HG23	1:F:2259:VAL:N	2.35	0.41
1:B:724:THR:O	1:B:738:ILE:HG23	2.21	0.41
1:B:780:ALA:CB	1:B:791:LEU:HD12	2.51	0.41
1:B:861:VAL:HG23	1:B:990:LEU:HD22	2.02	0.41
1:B:1369:ILE:HG23	1:B:1404:TYR:OH	2.21	0.41
1:B:1410:VAL:HG12	1:B:1411:GLU:N	2.35	0.41
1:B:1533:THR:OG1	1:B:1541:ASP:O	2.33	0.41
1:B:2019:PHE:HB2	1:B:2021:ASP:OD1	2.20	0.41
1:B:2055:ASP:OD1	1:B:2056:MET:N	2.54	0.41
1:B:2107:MET:HB3	1:B:2202:ILE:HD12	2.03	0.41
1:B:2107:MET:HG2	1:B:2202:ILE:HD12	2.02	0.41
1:B:2151:LEU:HA	1:B:2164:LEU:HD13	2.03	0.41
1:A:193:ILE:HG21	1:A:218:LEU:HD11	2.02	0.41
1:A:1703:SER:HG	1:A:1713:ARG:NH1	2.17	0.41
1:A:1919:ILE:H	1:A:1919:ILE:HD12	1.86	0.41
1:A:2116:SER:C	1:Q:1797:LEU:HD11	2.41	0.41
1:A:2117:VAL:HG11	1:Q:1722:ALA:HB3	2.03	0.41
1:A:2259:VAL:HG13	1:A:2260:LYS:HG2	2.02	0.41
1:G:1923:ILE:HD12	1:G:2208:TRP:O	2.20	0.41
1:G:2039:PRO:CG	1:G:2223:LEU:HD21	2.50	0.41
1:G:2045:ASN:HA	1:G:2086:ALA:HB1	2.03	0.41
1:G:2108:TYR:OH	1:G:2218:ARG:NE	2.53	0.41
1:J:357:HIS:N	1:J:379:SER:OG	2.48	0.41
1:J:371:ILE:CD1	1:J:476:ILE:HD12	2.50	0.41
1:J:510:ILE:CG2	1:J:581:LEU:HD21	2.51	0.41
1:J:1104:PHE:CE2	1:J:1145:VAL:HG13	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:655:LEU:HD21	1:R:1024:VAL:HG11	2.03	0.41
2:H:1695:PHE:O	2:H:1737:ARG:N	2.42	0.41
2:K:1808:VAL:HG11	2:K:1824:ILE:HD13	2.01	0.41
2:M:1665:VAL:HA	2:M:1719:VAL:HG11	2.02	0.41
2:Y:1651:SER:O	2:Y:1686:HIS:N	2.54	0.41
2:Y:1832:VAL:HG12	2:Y:1855:ILE:HD12	2.02	0.41
1:D:356:ARG:HG3	1:D:395:ILE:HG21	2.02	0.41
1:D:869:LEU:HD22	1:D:874:PHE:CD1	2.56	0.41
1:D:1789:GLU:OE1	1:D:1792:ILE:HG23	2.20	0.41
1:E:249:VAL:HG11	1:E:415:VAL:HG21	2.03	0.41
1:E:637:LEU:HD11	1:E:693:TYR:CG	2.56	0.41
1:E:1809:LEU:HD23	1:E:1809:LEU:C	2.41	0.41
1:E:2045:ASN:OD1	1:E:2083:PRO:HD2	2.21	0.41
1:E:2206:LEU:HD11	1:E:2214:PHE:CD2	2.56	0.41
1:C:899:LEU:O	1:C:903:MET:HB2	2.20	0.41
1:C:1119:ASN:O	1:C:1123:LEU:N	2.49	0.41
1:C:1331:VAL:HG22	1:C:1354:LYS:O	2.21	0.41
1:C:1693:PRO:O	1:C:1697:LEU:CB	2.69	0.41
1:C:1848:LEU:HD22	1:C:1848:LEU:N	2.36	0.41
1:F:633:VAL:O	1:F:636:ALA:HB3	2.21	0.41
1:F:721:SER:OG	1:F:722:SER:N	2.53	0.41
1:F:889:LEU:HD13	1:F:983:MET:HG2	2.03	0.41
1:F:1830:TYR:CE2	1:F:1848:LEU:HD22	2.56	0.41
1:B:338:GLN:HE22	1:B:963:MET:HB2	1.85	0.41
1:B:357:HIS:CE1	1:B:378:CYS:HG	2.39	0.41
1:B:1139:TYR:CE2	1:B:1294:LYS:HG2	2.56	0.41
1:A:294:VAL:HG12	1:A:962:PHE:CE2	2.56	0.41
1:Q:1885:VAL:HG11	1:Q:1891:GLY:HA2	2.03	0.41
1:J:1403:LEU:HA	1:J:1423:VAL:HA	2.01	0.41
1:R:122:LEU:HD21	1:R:156:MET:CE	2.51	0.41
2:H:1738:GLY:HA2	2:H:1746:HIS:CE1	2.57	0.41
2:H:1766:ILE:HD12	2:H:1789:ALA:CB	2.51	0.41
2:K:1651:SER:O	2:K:1686:HIS:N	2.47	0.41
2:O:1653:VAL:HG13	2:O:1684:THR:CG2	2.51	0.41
2:U:1765:GLU:O	2:U:1807:ILE:N	2.50	0.41
1:D:315:GLY:HA3	1:D:319:LYS:O	2.22	0.40
1:D:1090:LEU:HD11	1:D:1096:ARG:NH1	2.35	0.40
1:D:1978:LEU:N	1:D:1978:LEU:HD23	2.36	0.40
1:D:2201:VAL:HG12	1:C:1798:ARG:HD3	2.03	0.40
1:E:637:LEU:HD13	1:E:685:VAL:HG11	2.02	0.40
1:E:706:VAL:HG22	1:E:707:HIS:N	2.36	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1966:PRO:HA	1:E:1969:GLN:HE21	1.86	0.40
1:E:1978:LEU:O	1:E:1981:ILE:HD12	2.21	0.40
1:E:2251:TRP:HA	1:E:2254:GLU:HB3	2.03	0.40
1:C:641:ASP:O	1:C:645:ARG:N	2.43	0.40
1:C:1711:ILE:HG12	1:C:1904:LYS:NZ	2.36	0.40
1:C:2040:LEU:HD22	1:C:2078:VAL:HG22	2.01	0.40
1:F:250:ALA:HA	1:F:411:LEU:HD13	2.03	0.40
1:F:1598:ILE:HG23	1:F:1599:TYR:N	2.36	0.40
1:F:1874:ILE:HG22	1:F:1875:MET:CE	2.51	0.40
1:F:1896:LEU:HA	1:F:1899:LEU:HB2	2.03	0.40
1:F:2221:ARG:HB2	1:F:2274:LEU:HD12	2.04	0.40
1:B:291:VAL:HG21	1:B:297:GLY:HA2	2.03	0.40
1:B:1613:TRP:CZ2	1:B:1626:PRO:HD3	2.56	0.40
1:A:889:LEU:HD11	1:A:982:HIS:CB	2.51	0.40
1:A:1025:LEU:O	1:A:1029:PHE:HB3	2.20	0.40
1:A:1180:PHE:HB2	1:A:1234:GLY:HA3	2.01	0.40
1:A:1671:TYR:OH	1:A:1903:PRO:HA	2.21	0.40
1:G:2024:PHE:O	1:G:2028:GLN:N	2.46	0.40
1:G:2163:GLU:O	1:G:2167:LYS:N	2.40	0.40
1:Q:2176:ILE:HG22	1:Q:2177:PRO:HD3	2.03	0.40
2:K:1739:ASP:OD1	2:K:1746:HIS:NE2	2.51	0.40
1:D:295:ASP:OD2	1:E:2258:THR:HG22	2.21	0.40
1:D:336:GLN:O	1:D:340:GLU:N	2.44	0.40
1:D:1240:ARG:HA	1:D:1294:LYS:HB3	2.02	0.40
1:D:1588:PHE:O	1:D:1592:SER:HB3	2.21	0.40
1:D:1700:LEU:HD23	1:D:1700:LEU:C	2.41	0.40
1:D:1710:GLY:HA2	1:D:1814:ILE:HD13	2.03	0.40
1:E:803:LYS:HE3	1:E:807:ALA:HB3	2.03	0.40
1:E:972:VAL:HG22	1:E:976:ARG:HB3	2.03	0.40
1:E:976:ARG:HG3	1:E:977:SER:N	2.37	0.40
1:E:1289:LEU:HD21	1:E:1291:VAL:CG1	2.51	0.40
1:E:1327:LEU:HD12	1:E:1327:LEU:N	2.36	0.40
1:C:639:VAL:HG21	1:C:672:VAL:HG13	2.03	0.40
1:C:966:GLN:HA	1:C:969:VAL:HG22	2.03	0.40
1:C:1115:PHE:CD1	1:C:1117:ILE:HD13	2.56	0.40
1:C:1603:GLU:O	1:C:1607:GLN:NE2	2.55	0.40
1:C:1836:GLN:HE22	1:C:2031:LYS:HE3	1.86	0.40
1:C:2082:ILE:HD12	1:C:2082:ILE:N	2.36	0.40
1:C:2144:TYR:CD1	1:C:2168:LEU:HD22	2.57	0.40
1:C:2197:GLN:HB3	1:C:2202:ILE:HD11	2.03	0.40
1:F:1828:GLY:HA2	1:F:1831:LEU:HD21	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2317:ASP:O	1:F:2320:ILE:HG12	2.21	0.40
1:B:578:LEU:HB3	1:B:595:ILE:HG12	2.02	0.40
1:B:1368:ARG:CZ	1:B:1395:PRO:HD3	2.51	0.40
1:B:1668:SER:HB3	1:B:1671:TYR:HB2	2.02	0.40
1:B:2088:LEU:HD23	1:B:2093:TRP:HB2	2.03	0.40
1:A:857:LEU:HD11	1:A:986:VAL:HG21	2.03	0.40
1:A:1103:ILE:C	1:A:1106:SER:HG	2.25	0.40
1:A:1368:ARG:HA	1:A:1371:ARG:HG2	2.03	0.40
1:A:2284:VAL:O	1:A:2284:VAL:HG22	2.21	0.40
1:D:334:PHE:CE1	1:D:346:ILE:HG21	2.57	0.40
1:D:673:GLU:HB3	1:D:747:LYS:HE3	2.03	0.40
1:D:1131:PHE:HD2	1:D:1353:PRO:HD2	1.86	0.40
1:D:1711:ILE:H	1:D:1711:ILE:HG13	1.73	0.40
1:D:1795:GLU:OE1	1:C:2199:LYS:NZ	2.43	0.40
1:D:1797:LEU:HD22	1:C:2093:TRP:CE3	2.57	0.40
1:D:2095:VAL:HG23	1:D:2096:ILE:CG2	2.37	0.40
1:D:2275:GLU:O	1:D:2279:THR:N	2.53	0.40
1:E:1164:ASN:OD1	1:E:1164:ASN:N	2.55	0.40
1:E:2320:ILE:HG13	1:E:2321:HIS:N	2.37	0.40
1:C:1130:ILE:O	1:C:1130:ILE:HG22	2.22	0.40
1:F:450:GLU:HG2	1:F:455:VAL:O	2.21	0.40
1:F:1104:PHE:CZ	1:F:1148:ALA:HB3	2.57	0.40
1:F:1122:LYS:O	1:F:1126:SER:HB3	2.20	0.40
1:F:1386:MET:SD	1:F:1424:ARG:NE	2.94	0.40
1:F:1548:VAL:HG21	1:F:1559:GLN:O	2.22	0.40
1:B:329:ASP:HB3	1:B:333:LEU:HD11	2.04	0.40
1:B:912:PRO:HA	1:B:915:GLU:HB3	2.04	0.40
1:B:980:ARG:HG3	1:B:981:GLY:N	2.36	0.40
1:B:1039:LEU:O	1:B:1042:THR:N	2.54	0.40
1:A:952:LEU:HD23	1:A:961:PHE:CD2	2.56	0.40
1:A:2055:ASP:OD1	1:A:2056:MET:N	2.55	0.40
1:G:1700:LEU:HD11	1:G:1802:MET:HG2	2.03	0.40
1:Q:2325:HIS:CG	1:Q:2326:ILE:H	2.39	0.40
1:J:1391:LEU:HD13	1:J:1391:LEU:H	1.85	0.40
1:R:1060:LEU:O	1:R:1064:THR:N	2.45	0.40
1:R:1436:GLU:N	1:R:1483:MET:SD	2.94	0.40
1:R:1534:ASN:ND2	1:R:1537:GLY:O	2.55	0.40
2:S:1680:ILE:HD12	2:S:1687:VAL:HG22	2.03	0.40
1:D:190:VAL:HG21	1:D:218:LEU:HA	2.03	0.40
1:D:250:ALA:HA	1:D:411:LEU:HD13	2.04	0.40
1:D:657:ARG:HB2	1:D:659:GLN:OE1	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:958:ARG:O	1:D:962:PHE:N	2.39	0.40
1:D:966:GLN:OE1	1:E:2253:VAL:HG11	2.21	0.40
1:D:1892:VAL:O	1:D:1895:VAL:HB	2.21	0.40
1:D:2243:GLN:HE22	1:E:946:ASP:C	2.25	0.40
1:E:454:ASP:OD1	1:E:502:ARG:NH2	2.54	0.40
1:E:899:LEU:HA	1:E:902:ILE:HG22	2.03	0.40
1:E:1096:ARG:O	1:E:1100:VAL:HG22	2.21	0.40
1:E:1241:THR:HG22	1:E:1295:THR:CG2	2.52	0.40
1:E:1381:LEU:H	1:E:1381:LEU:CD1	2.34	0.40
1:E:1682:ASN:ND2	1:E:1719:ASN:HB2	2.36	0.40
1:E:1865:SER:O	1:E:1868:GLN:N	2.54	0.40
1:C:448:CYS:HA	1:C:505:VAL:HG11	2.02	0.40
1:C:896:LEU:CD1	1:C:926:ALA:HB2	2.51	0.40
1:C:1754:THR:HG22	1:C:1777:GLU:OE2	2.22	0.40
1:C:2241:ASP:HA	1:C:2244:ILE:HB	2.03	0.40
1:F:244:ILE:HD11	1:F:347:PHE:HB3	2.03	0.40
1:F:1079:LEU:HD13	1:F:1079:LEU:HA	1.94	0.40
1:F:1246:VAL:HG23	1:F:1311:PHE:CE1	2.56	0.40
1:F:1492:VAL:HG22	1:F:1532:LEU:HD11	2.03	0.40
1:B:1736:VAL:HG21	1:G:2182:VAL:HG11	2.04	0.40
1:B:1920:ASP:HA	1:B:2213:THR:OG1	2.21	0.40
1:B:2284:VAL:HG22	1:B:2284:VAL:O	2.21	0.40
1:B:2292:ILE:HD12	1:B:2293:LYS:N	2.36	0.40
1:A:411:LEU:HD23	1:A:438:LEU:HD12	2.03	0.40
1:A:1025:LEU:O	1:A:1029:PHE:CB	2.69	0.40
1:G:2018:TRP:NE1	1:G:2092:SER:OG	2.45	0.40
1:Q:2258:THR:CG2	1:R:299:GLN:HE21	2.34	0.40
1:J:727:MET:SD	1:J:727:MET:N	2.95	0.40
1:R:634:CYS:O	1:R:638:HIS:N	2.53	0.40
1:R:655:LEU:HD23	1:R:1021:MET:HB3	2.04	0.40
2:O:1655:SER:HB2	2:O:1702:LYS:HB2	2.03	0.40
1:D:896:LEU:HD12	1:D:899:LEU:HD11	2.01	0.40
1:D:979:ILE:CD1	1:D:980:ARG:HG3	2.39	0.40
1:D:986:VAL:HG23	1:D:987:VAL:N	2.36	0.40
1:D:2093:TRP:CE3	1:D:2096:ILE:HD11	2.57	0.40
1:E:301:ALA:O	1:E:305:GLY:N	2.53	0.40
1:E:637:LEU:HA	1:E:640:ALA:HB3	2.03	0.40
1:E:1063:LEU:HG	1:E:1084:VAL:HG11	2.04	0.40
1:E:1104:PHE:HE2	1:E:1145:VAL:HG13	1.87	0.40
1:E:1356:PHE:HA	1:E:1371:ARG:HE	1.87	0.40
1:E:1368:ARG:HA	1:E:1371:ARG:HG2	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2057:TYR:O	1:E:2059:GLN:HG3	2.22	0.40
1:E:2319:ILE:HA	1:E:2322:MET:HB2	2.03	0.40
1:C:1104:PHE:HZ	1:C:1148:ALA:HB3	1.87	0.40
1:C:1104:PHE:O	1:C:1108:ILE:HG12	2.21	0.40
1:C:1470:CYS:SG	1:C:1509:LEU:HD23	2.61	0.40
1:C:1481:VAL:O	1:C:1517:ILE:HA	2.21	0.40
1:C:1799:GLY:O	1:C:1802:MET:HB3	2.21	0.40
1:C:1809:LEU:HD23	1:C:1810:ALA:N	2.37	0.40
1:F:639:VAL:HG21	1:F:672:VAL:HG13	2.02	0.40
1:F:1315:ASN:HB3	1:F:1317:ALA:HB3	2.03	0.40
1:F:1333:GLN:HE21	1:F:1352:PHE:N	2.19	0.40
1:F:1983:VAL:HG21	1:F:2041:MET:CG	2.51	0.40
1:F:2060:VAL:HA	1:F:2063:PHE:HD2	1.87	0.40
1:F:2221:ARG:HH11	1:F:2270:LEU:HB3	1.86	0.40
1:B:143:GLU:O	1:B:146:ARG:NH1	2.54	0.40
1:B:477:ARG:NE	1:B:484:PRO:O	2.55	0.40
1:B:696:ILE:CD1	1:B:870:PRO:HB2	2.52	0.40
1:B:995:LEU:O	1:B:999:THR:HG22	2.22	0.40
1:B:1138:PHE:CD2	1:B:1292:ALA:HB1	2.57	0.40
1:B:1385:ARG:O	1:B:1577:TYR:N	2.49	0.40
1:R:1457:LEU:HD23	1:R:1457:LEU:O	2.22	0.40
2:M:1691:THR:OG1	2:M:1715:SER:OG	2.11	0.40
2:W:1691:THR:CG2	2:W:1736:VAL:HG12	2.49	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	A	2047/2346 (87%)	1889 (92%)	147 (7%)	11 (0%)	25 65
1	B	2047/2346 (87%)	1888 (92%)	146 (7%)	13 (1%)	22 61

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	C	2047/2346 (87%)	1884 (92%)	150 (7%)	13 (1%)	22	61
1	D	2047/2346 (87%)	1879 (92%)	154 (8%)	14 (1%)	19	57
1	E	2047/2346 (87%)	1895 (93%)	138 (7%)	14 (1%)	19	57
1	F	2047/2346 (87%)	1884 (92%)	150 (7%)	13 (1%)	22	61
1	G	755/2346 (32%)	727 (96%)	25 (3%)	3 (0%)	30	68
1	J	1290/2346 (55%)	1157 (90%)	125 (10%)	8 (1%)	22	61
1	Q	755/2346 (32%)	727 (96%)	24 (3%)	4 (0%)	25	65
1	R	1290/2346 (55%)	1158 (90%)	124 (10%)	8 (1%)	22	61
2	H	212/240 (88%)	207 (98%)	5 (2%)	0	100	100
2	K	212/240 (88%)	206 (97%)	6 (3%)	0	100	100
2	M	212/240 (88%)	205 (97%)	7 (3%)	0	100	100
2	O	212/240 (88%)	205 (97%)	7 (3%)	0	100	100
2	S	212/240 (88%)	206 (97%)	6 (3%)	0	100	100
2	U	212/240 (88%)	205 (97%)	7 (3%)	0	100	100
2	W	212/240 (88%)	205 (97%)	7 (3%)	0	100	100
2	Y	212/240 (88%)	205 (97%)	7 (3%)	0	100	100
All	All	18068/25380 (71%)	16732 (93%)	1235 (7%)	101 (1%)	24	61

All (101) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	D	211	HIS
1	D	419	SER
1	D	868	CYS
1	D	1688	ILE
1	E	211	HIS
1	E	419	SER
1	E	868	CYS
1	C	868	CYS
1	C	2326	ILE
1	F	868	CYS
1	F	2326	ILE
1	B	211	HIS
1	B	868	CYS
1	B	1304	LEU
1	B	1688	ILE

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Mol	Chain	Res	Type
1	A	868	CYS
1	A	1297	CYS
1	A	1304	LEU
1	G	2325	HIS
1	G	2326	ILE
1	Q	2325	HIS
1	Q	2326	ILE
1	J	211	HIS
1	J	868	CYS
1	J	1304	LEU
1	R	211	HIS
1	R	868	CYS
1	R	1304	LEU
1	D	873	PHE
1	D	1269	ALA
1	D	1304	LEU
1	D	1580	LYS
1	D	1620	ALA
1	E	1269	ALA
1	E	1304	LEU
1	E	1580	LYS
1	E	1688	ILE
1	E	2259	VAL
1	C	419	SER
1	C	1269	ALA
1	C	1304	LEU
1	C	2276	LYS
1	F	419	SER
1	F	1269	ALA
1	F	1304	LEU
1	B	1269	ALA
1	B	1669	PRO
1	A	211	HIS
1	A	1269	ALA
1	A	1688	ILE
1	G	1688	ILE
1	Q	1688	ILE
1	J	419	SER
1	J	1269	ALA
1	R	419	SER
1	R	1269	ALA
1	D	2258	THR

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Mol	Chain	Res	Type
1	E	873	PHE
1	E	1400	LYS
1	E	1759	LYS
1	C	873	PHE
1	C	1400	LYS
1	C	2325	HIS
1	F	873	PHE
1	F	1688	ILE
1	F	2276	LYS
1	F	2325	HIS
1	B	419	SER
1	B	873	PHE
1	A	419	SER
1	A	873	PHE
1	A	1580	LYS
1	J	873	PHE
1	R	873	PHE
1	D	1400	LYS
1	C	1172	LYS
1	C	1688	ILE
1	C	1759	LYS
1	F	1172	LYS
1	F	1400	LYS
1	B	1580	LYS
1	D	1172	LYS
1	D	1569	HIS
1	E	1172	LYS
1	F	1580	LYS
1	F	2327	SER
1	B	1172	LYS
1	A	1093	TYR
1	A	1172	LYS
1	J	1172	LYS
1	R	1172	LYS
1	C	2327	SER
1	E	1548	VAL
1	B	1911	PRO
1	D	1185	PRO
1	E	1185	PRO
1	B	1185	PRO
1	B	1910	VAL
1	Q	2327	SER

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Mol	Chain	Res	Type
1	R	1548	VAL
1	J	1548	VAL

5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	1784/2056 (87%)	1748 (98%)	36 (2%)	50	68
1	B	1784/2056 (87%)	1755 (98%)	29 (2%)	58	73
1	C	1784/2056 (87%)	1745 (98%)	39 (2%)	47	65
1	D	1784/2056 (87%)	1739 (98%)	45 (2%)	42	61
1	E	1784/2056 (87%)	1734 (97%)	50 (3%)	38	57
1	F	1784/2056 (87%)	1750 (98%)	34 (2%)	52	69
1	G	660/2056 (32%)	655 (99%)	5 (1%)	79	85
1	J	1124/2056 (55%)	1093 (97%)	31 (3%)	38	57
1	Q	660/2056 (32%)	654 (99%)	6 (1%)	75	83
1	R	1124/2056 (55%)	1089 (97%)	35 (3%)	35	54
2	H	186/214 (87%)	185 (100%)	1 (0%)	86	89
2	K	186/214 (87%)	185 (100%)	1 (0%)	86	89
2	M	186/214 (87%)	184 (99%)	2 (1%)	70	80
2	O	186/214 (87%)	185 (100%)	1 (0%)	86	89
2	S	186/214 (87%)	184 (99%)	2 (1%)	70	80
2	U	186/214 (87%)	185 (100%)	1 (0%)	86	89
2	W	186/214 (87%)	185 (100%)	1 (0%)	86	89
2	Y	186/214 (87%)	184 (99%)	2 (1%)	70	80
All	All	15760/22272 (71%)	15439 (98%)	321 (2%)	50	68

All (321) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	D	266	ARG
1	D	283	GLN
1	D	290	TYR
1	D	536	ASN
1	D	804	ARG
1	D	864	MET
1	D	875	SER
1	D	909	ARG
1	D	947	SER
1	D	963	MET
1	D	974	ARG
1	D	995	LEU
1	D	996	ARG
1	D	1022	ASN
1	D	1076	LYS
1	D	1080	ARG
1	D	1095	LEU
1	D	1236	MET
1	D	1381	LEU
1	D	1388	ASN
1	D	1403	LEU
1	D	1449	LEU
1	D	1475	LEU
1	D	1502	ARG
1	D	1509	LEU
1	D	1518	ARG
1	D	1534	ASN
1	D	1544	LEU
1	D	1609	LEU
1	D	1622	LEU
1	D	1637	LEU
1	D	1645	LEU
1	D	1649	ASN
1	D	1797	LEU
1	D	1819	LEU
1	D	1848	LEU
1	D	1904	LYS
1	D	1914	ASN
1	D	2003	ASN
1	D	2116	SER
1	D	2161	ARG
1	D	2245	GLN
1	D	2249	ARG

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Mol	Chain	Res	Type
1	D	2311	ASN
1	D	2327	SER
1	E	266	ARG
1	E	290	TYR
1	E	584	ARG
1	E	588	ARG
1	E	644	LEU
1	E	674	LEU
1	E	860	LEU
1	E	864	MET
1	E	875	SER
1	E	889	LEU
1	E	909	ARG
1	E	947	SER
1	E	974	ARG
1	E	983	MET
1	E	990	LEU
1	E	1022	ASN
1	E	1048	LEU
1	E	1066	LEU
1	E	1080	ARG
1	E	1085	LEU
1	E	1095	LEU
1	E	1125	LEU
1	E	1232	ARG
1	E	1381	LEU
1	E	1388	ASN
1	E	1391	LEU
1	E	1449	LEU
1	E	1451	LEU
1	E	1502	ARG
1	E	1518	ARG
1	E	1530	LEU
1	E	1534	ASN
1	E	1540	LEU
1	E	1571	MET
1	E	1632	LEU
1	E	1649	ASN
1	E	1758	TYR
1	E	1914	ASN
1	E	2003	ASN
1	E	2025	LYS

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Mol	Chain	Res	Type
1	E	2034	ASN
1	E	2041	MET
1	E	2101	ASN
1	E	2111	ARG
1	E	2116	SER
1	E	2135	LYS
1	E	2161	ARG
1	E	2245	GLN
1	E	2249	ARG
1	E	2327	SER
1	C	529	LEU
1	C	534	ASN
1	C	644	LEU
1	C	674	LEU
1	C	715	LEU
1	C	860	LEU
1	C	875	SER
1	C	889	LEU
1	C	909	ARG
1	C	947	SER
1	C	974	ARG
1	C	983	MET
1	C	990	LEU
1	C	1022	ASN
1	C	1061	ASN
1	C	1074	ASN
1	C	1080	ARG
1	C	1085	LEU
1	C	1095	LEU
1	C	1125	LEU
1	C	1232	ARG
1	C	1247	ARG
1	C	1303	ARG
1	C	1309	ARG
1	C	1381	LEU
1	C	1384	ASN
1	C	1438	SER
1	C	1467	ARG
1	C	1498	ARG
1	C	1518	ARG
1	C	1534	ASN
1	C	1540	LEU

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Mol	Chain	Res	Type
1	C	1564	LYS
1	C	1649	ASN
1	C	1843	ASN
1	C	2003	ASN
1	C	2116	SER
1	C	2138	ARG
1	C	2327	SER
1	F	529	LEU
1	F	534	ASN
1	F	644	LEU
1	F	674	LEU
1	F	860	LEU
1	F	875	SER
1	F	889	LEU
1	F	909	ARG
1	F	947	SER
1	F	974	ARG
1	F	983	MET
1	F	990	LEU
1	F	1022	ASN
1	F	1061	ASN
1	F	1066	LEU
1	F	1080	ARG
1	F	1085	LEU
1	F	1095	LEU
1	F	1098	ASN
1	F	1125	LEU
1	F	1232	ARG
1	F	1309	ARG
1	F	1381	LEU
1	F	1467	ARG
1	F	1493	ARG
1	F	1506	LEU
1	F	1518	ARG
1	F	1534	ASN
1	F	1540	LEU
1	F	1649	ASN
1	F	1843	ASN
1	F	2003	ASN
1	F	2116	SER
1	F	2327	SER
1	B	529	LEU

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Mol	Chain	Res	Type
1	B	534	ASN
1	B	588	ARG
1	B	875	SER
1	B	916	LYS
1	B	974	ARG
1	B	1060	LEU
1	B	1080	ARG
1	B	1253	MET
1	B	1330	LEU
1	B	1381	LEU
1	B	1438	SER
1	B	1518	ARG
1	B	1524	LYS
1	B	1534	ASN
1	B	1540	LEU
1	B	1564	LYS
1	B	1758	TYR
1	B	1914	ASN
1	B	2003	ASN
1	B	2025	LYS
1	B	2034	ASN
1	B	2111	ARG
1	B	2116	SER
1	B	2135	LYS
1	B	2161	ARG
1	B	2223	LEU
1	B	2245	GLN
1	B	2327	SER
1	A	283	GLN
1	A	290	TYR
1	A	500	CYS
1	A	529	LEU
1	A	534	ASN
1	A	584	ARG
1	A	588	ARG
1	A	734	TYR
1	A	916	LYS
1	A	920	LYS
1	A	947	SER
1	A	974	ARG
1	A	996	ARG
1	A	1060	LEU

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Mol	Chain	Res	Type
1	A	1240	ARG
1	A	1303	ARG
1	A	1330	LEU
1	A	1381	LEU
1	A	1398	ASN
1	A	1438	SER
1	A	1502	ARG
1	A	1518	ARG
1	A	1524	LYS
1	A	1534	ASN
1	A	1540	LEU
1	A	1758	TYR
1	A	1914	ASN
1	A	2003	ASN
1	A	2025	LYS
1	A	2034	ASN
1	A	2111	ARG
1	A	2116	SER
1	A	2135	LYS
1	A	2161	ARG
1	A	2245	GLN
1	A	2327	SER
1	G	1843	ASN
1	G	2003	ASN
1	G	2116	SER
1	G	2206	LEU
1	G	2270	LEU
1	Q	1667	LYS
1	Q	1843	ASN
1	Q	2003	ASN
1	Q	2116	SER
1	Q	2206	LEU
1	Q	2280	GLU
1	J	290	TYR
1	J	529	LEU
1	J	588	ARG
1	J	615	ARG
1	J	644	LEU
1	J	674	LEU
1	J	734	TYR
1	J	860	LEU
1	J	875	SER

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Mol	Chain	Res	Type
1	J	889	LEU
1	J	909	ARG
1	J	974	ARG
1	J	983	MET
1	J	990	LEU
1	J	1022	ASN
1	J	1061	ASN
1	J	1080	ARG
1	J	1085	LEU
1	J	1095	LEU
1	J	1098	ASN
1	J	1125	LEU
1	J	1232	ARG
1	J	1381	LEU
1	J	1388	ASN
1	J	1391	LEU
1	J	1438	SER
1	J	1449	LEU
1	J	1451	LEU
1	J	1518	ARG
1	J	1534	ASN
1	J	1540	LEU
1	R	290	TYR
1	R	529	LEU
1	R	588	ARG
1	R	615	ARG
1	R	644	LEU
1	R	674	LEU
1	R	734	TYR
1	R	860	LEU
1	R	875	SER
1	R	889	LEU
1	R	909	ARG
1	R	916	LYS
1	R	974	ARG
1	R	983	MET
1	R	990	LEU
1	R	1022	ASN
1	R	1061	ASN
1	R	1068	GLN
1	R	1080	ARG
1	R	1085	LEU

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Mol	Chain	Res	Type
1	R	1095	LEU
1	R	1098	ASN
1	R	1125	LEU
1	R	1232	ARG
1	R	1381	LEU
1	R	1388	ASN
1	R	1391	LEU
1	R	1438	SER
1	R	1449	LEU
1	R	1451	LEU
1	R	1518	ARG
1	R	1524	LYS
1	R	1534	ASN
1	R	1540	LEU
1	R	1571	MET
2	H	1758	ARG
2	K	1730	ASN
2	M	1664	LEU
2	M	1730	ASN
2	O	1730	ASN
2	S	1664	LEU
2	S	1730	ASN
2	U	1730	ASN
2	Y	1664	LEU
2	Y	1730	ASN
2	W	1730	ASN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (233) such sidechains are listed below:

Mol	Chain	Res	Type
1	D	185	ASN
1	D	225	ASN
1	D	332	ASN
1	D	461	GLN
1	D	606	ASN
1	D	668	ASN
1	D	707	HIS
1	D	859	ASN
1	D	862	ASN
1	D	900	GLN
1	D	940	GLN
1	D	964	ASN

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Mol	Chain	Res	Type
1	D	1000	GLN
1	D	1017	ASN
1	D	1099	GLN
1	D	1114	GLN
1	D	1119	ASN
1	D	1181	GLN
1	D	1314	GLN
1	D	1315	ASN
1	D	1388	ASN
1	D	1402	HIS
1	D	1569	HIS
1	D	1589	GLN
1	D	1649	ASN
1	D	1655	ASN
1	D	1768	HIS
1	D	1877	ASN
1	D	1914	ASN
1	D	2003	ASN
1	D	2034	ASN
1	D	2045	ASN
1	D	2059	GLN
1	D	2243	GLN
1	D	2245	GLN
1	D	2277	GLN
1	D	2330	GLN
1	E	185	ASN
1	E	203	GLN
1	E	225	ASN
1	E	332	ASN
1	E	338	GLN
1	E	443	GLN
1	E	461	GLN
1	E	606	ASN
1	E	707	HIS
1	E	859	ASN
1	E	900	GLN
1	E	940	GLN
1	E	966	GLN
1	E	970	GLN
1	E	993	GLN
1	E	1033	GLN
1	E	1099	GLN

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Mol	Chain	Res	Type
1	E	1114	GLN
1	E	1119	ASN
1	E	1181	GLN
1	E	1380	GLN
1	E	1388	ASN
1	E	1429	HIS
1	E	1443	GLN
1	E	1534	ASN
1	E	1565	GLN
1	E	1569	HIS
1	E	1589	GLN
1	E	1649	ASN
1	E	1655	ASN
1	E	1682	ASN
1	E	1768	HIS
1	E	1914	ASN
1	E	2003	ASN
1	E	2034	ASN
1	E	2101	ASN
1	E	2146	HIS
1	E	2234	ASN
1	E	2243	GLN
1	E	2321	HIS
1	C	225	ASN
1	C	251	GLN
1	C	859	ASN
1	C	900	GLN
1	C	964	ASN
1	C	1033	GLN
1	C	1074	ASN
1	C	1114	GLN
1	C	1333	GLN
1	C	1384	ASN
1	C	1444	ASN
1	C	1510	GLN
1	C	1534	ASN
1	C	1559	GLN
1	C	1619	GLN
1	C	1732	HIS
1	C	1877	ASN
1	C	2003	ASN
1	C	2016	GLN

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Mol	Chain	Res	Type
1	C	2059	GLN
1	C	2076	GLN
1	C	2085	GLN
1	C	2146	HIS
1	C	2277	GLN
1	C	2291	ASN
1	F	225	ASN
1	F	251	GLN
1	F	859	ASN
1	F	900	GLN
1	F	924	GLN
1	F	964	ASN
1	F	1033	GLN
1	F	1083	GLN
1	F	1114	GLN
1	F	1333	GLN
1	F	1429	HIS
1	F	1534	ASN
1	F	1559	GLN
1	F	1619	GLN
1	F	1649	ASN
1	F	1756	GLN
1	F	1812	ASN
1	F	1877	ASN
1	F	1965	GLN
1	F	2003	ASN
1	F	2013	GLN
1	F	2076	GLN
1	F	2085	GLN
1	F	2181	GLN
1	F	2234	ASN
1	F	2243	GLN
1	F	2245	GLN
1	F	2277	GLN
1	F	2291	ASN
1	B	185	ASN
1	B	429	GLN
1	B	859	ASN
1	B	939	GLN
1	B	940	GLN
1	B	948	HIS
1	B	966	GLN

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Mol	Chain	Res	Type
1	B	1074	ASN
1	B	1089	HIS
1	B	1113	HIS
1	B	1114	GLN
1	B	1143	GLN
1	B	1181	GLN
1	B	1314	GLN
1	B	1372	HIS
1	B	1398	ASN
1	B	1534	ASN
1	B	1589	GLN
1	B	1682	ASN
1	B	1914	ASN
1	B	2003	ASN
1	B	2028	GLN
1	B	2180	HIS
1	B	2309	GLN
1	A	125	ASN
1	A	859	ASN
1	A	928	ASN
1	A	940	GLN
1	A	948	HIS
1	A	964	ASN
1	A	973	GLN
1	A	1114	GLN
1	A	1314	GLN
1	A	1472	HIS
1	A	1534	ASN
1	A	1565	GLN
1	A	1589	GLN
1	A	1644	GLN
1	A	1682	ASN
1	A	1914	ASN
1	A	2003	ASN
1	A	2028	GLN
1	A	2180	HIS
1	A	2234	ASN
1	G	1619	GLN
1	G	1642	GLN
1	G	2003	ASN
1	G	2028	GLN
1	G	2181	GLN

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Mol	Chain	Res	Type
1	G	2291	ASN
1	G	2330	GLN
1	Q	1619	GLN
1	Q	1642	GLN
1	Q	1843	ASN
1	Q	2003	ASN
1	Q	2028	GLN
1	Q	2181	GLN
1	Q	2236	ASN
1	Q	2330	GLN
1	J	251	GLN
1	J	381	GLN
1	J	859	ASN
1	J	924	GLN
1	J	1033	GLN
1	J	1061	ASN
1	J	1083	GLN
1	J	1114	GLN
1	J	1388	ASN
1	J	1444	ASN
1	J	1472	HIS
1	R	251	GLN
1	R	299	GLN
1	R	381	GLN
1	R	859	ASN
1	R	900	GLN
1	R	924	GLN
1	R	1033	GLN
1	R	1083	GLN
1	R	1114	GLN
1	R	1388	ASN
1	R	1444	ASN
1	R	1472	HIS
2	H	1730	ASN
2	H	1779	GLN
2	K	1730	ASN
2	K	1732	HIS
2	K	1756	GLN
2	K	1779	GLN
2	M	1730	ASN
2	M	1779	GLN
2	O	1730	ASN

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Mol	Chain	Res	Type
2	O	1732	HIS
2	O	1756	GLN
2	O	1779	GLN
2	S	1730	ASN
2	S	1779	GLN
2	U	1730	ASN
2	U	1756	GLN
2	Y	1730	ASN
2	W	1730	ASN
2	W	1732	HIS
2	W	1742	ASN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

8 non-standard protein/DNA/RNA residues are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
1	SEP	F	1263	1	8,9,10	1.54	1 (12%)	8,12,14	0.92	0
1	SEP	J	1263	1	8,9,10	1.56	1 (12%)	8,12,14	1.42	2 (25%)
1	SEP	D	1263	1	8,9,10	1.51	1 (12%)	8,12,14	1.22	2 (25%)
1	SEP	R	1263	1	8,9,10	1.57	1 (12%)	8,12,14	1.32	2 (25%)
1	SEP	B	1263	1	8,9,10	1.53	1 (12%)	8,12,14	0.89	0
1	SEP	E	1263	1	8,9,10	1.52	1 (12%)	8,12,14	1.32	2 (25%)
1	SEP	A	1263	1	8,9,10	1.54	1 (12%)	8,12,14	1.74	2 (25%)
1	SEP	C	1263	1	8,9,10	1.55	1 (12%)	8,12,14	1.83	2 (25%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	SEP	F	1263	1	-	1/5/8/10	-
1	SEP	J	1263	1	-	1/5/8/10	-
1	SEP	D	1263	1	-	1/5/8/10	-
1	SEP	R	1263	1	-	1/5/8/10	-
1	SEP	B	1263	1	-	1/5/8/10	-
1	SEP	E	1263	1	-	1/5/8/10	-
1	SEP	A	1263	1	-	1/5/8/10	-
1	SEP	C	1263	1	-	1/5/8/10	-

All (8) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	1263	SEP	P-O1P	3.47	1.61	1.50
1	R	1263	SEP	P-O1P	3.41	1.61	1.50
1	J	1263	SEP	P-O1P	3.40	1.61	1.50
1	B	1263	SEP	P-O1P	3.39	1.61	1.50
1	F	1263	SEP	P-O1P	3.36	1.61	1.50
1	E	1263	SEP	P-O1P	3.35	1.61	1.50
1	A	1263	SEP	P-O1P	3.34	1.61	1.50
1	D	1263	SEP	P-O1P	3.27	1.61	1.50

All (12) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	1263	SEP	OG-CB-CA	3.54	111.59	108.14
1	C	1263	SEP	P-OG-CB	-3.26	109.33	118.30
1	C	1263	SEP	OG-CB-CA	2.92	110.99	108.14
1	J	1263	SEP	OG-CB-CA	2.72	110.79	108.14
1	A	1263	SEP	P-OG-CB	-2.64	111.02	118.30
1	R	1263	SEP	OG-CB-CA	2.29	110.37	108.14
1	J	1263	SEP	P-OG-CB	-2.23	112.14	118.30
1	R	1263	SEP	P-OG-CB	-2.22	112.17	118.30
1	E	1263	SEP	OG-CB-CA	2.21	110.29	108.14
1	E	1263	SEP	P-OG-CB	-2.18	112.29	118.30
1	D	1263	SEP	P-OG-CB	-2.11	112.48	118.30
1	D	1263	SEP	O2P-P-OG	2.01	112.07	106.73

There are no chirality outliers.

All (8) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	D	1263	SEP	N-CA-CB-OG
1	E	1263	SEP	N-CA-CB-OG
1	C	1263	SEP	N-CA-CB-OG
1	F	1263	SEP	N-CA-CB-OG
1	B	1263	SEP	N-CA-CB-OG
1	A	1263	SEP	N-CA-CB-OG
1	J	1263	SEP	N-CA-CB-OG
1	R	1263	SEP	N-CA-CB-OG

There are no ring outliers.

4 monomers are involved in 5 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
1	F	1263	SEP	2	0
1	D	1263	SEP	1	0
1	E	1263	SEP	1	0
1	C	1263	SEP	1	0

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

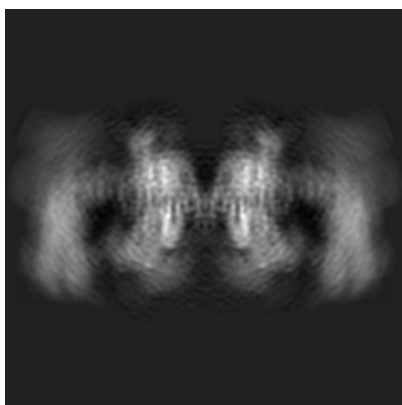
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-4344. These allow visual inspection of the internal detail of the map and identification of artifacts.

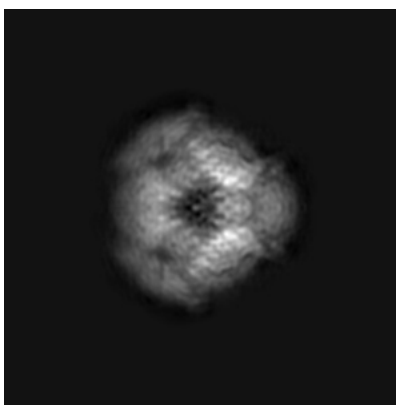
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

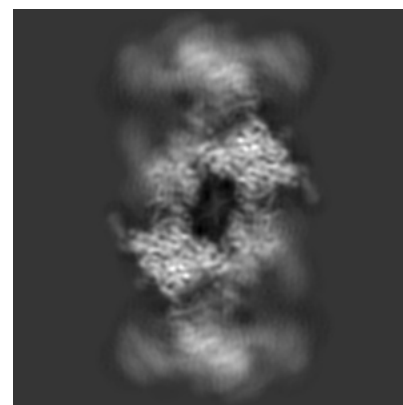
6.1.1 Primary map



X



Y

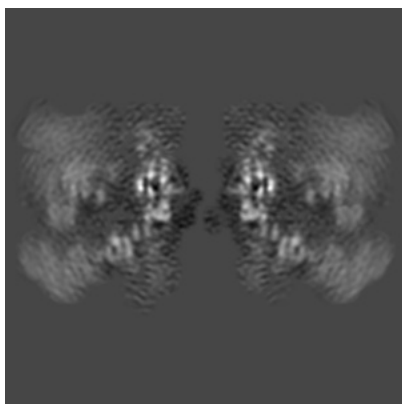


Z

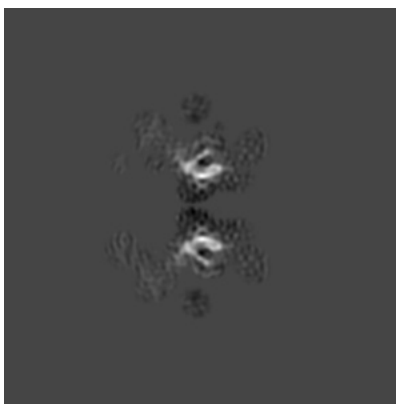
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

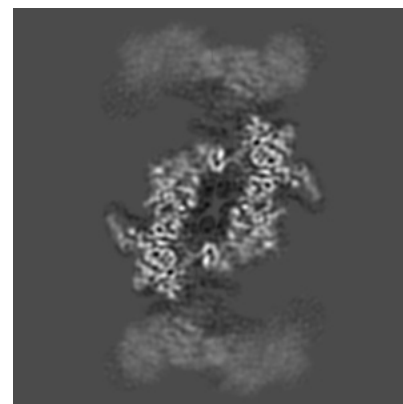
6.2.1 Primary map



X Index: 188



Y Index: 188

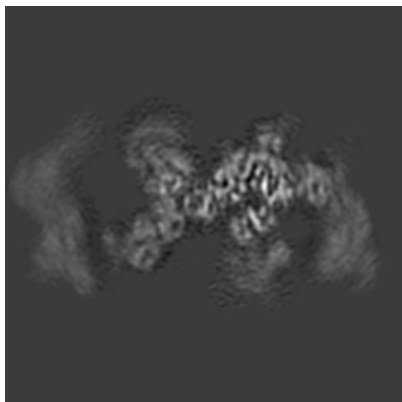


Z Index: 188

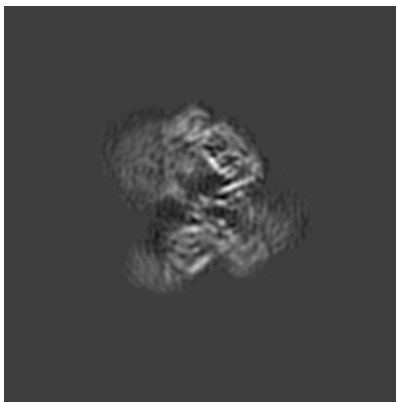
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [\(i\)](#)

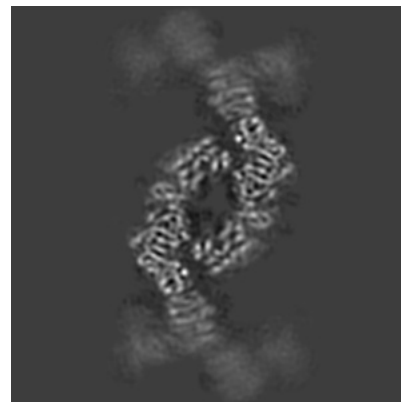
6.3.1 Primary map



X Index: 219



Y Index: 223

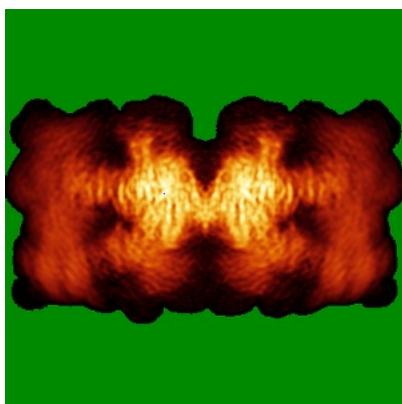


Z Index: 201

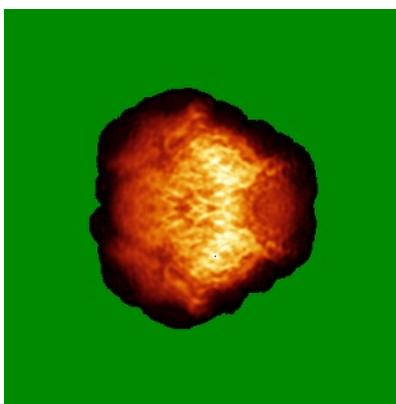
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [\(i\)](#)

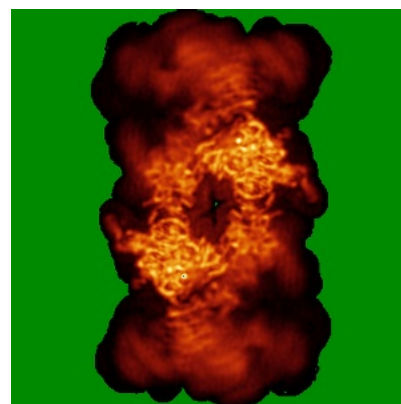
6.4.1 Primary map



X



Y



Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.015. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

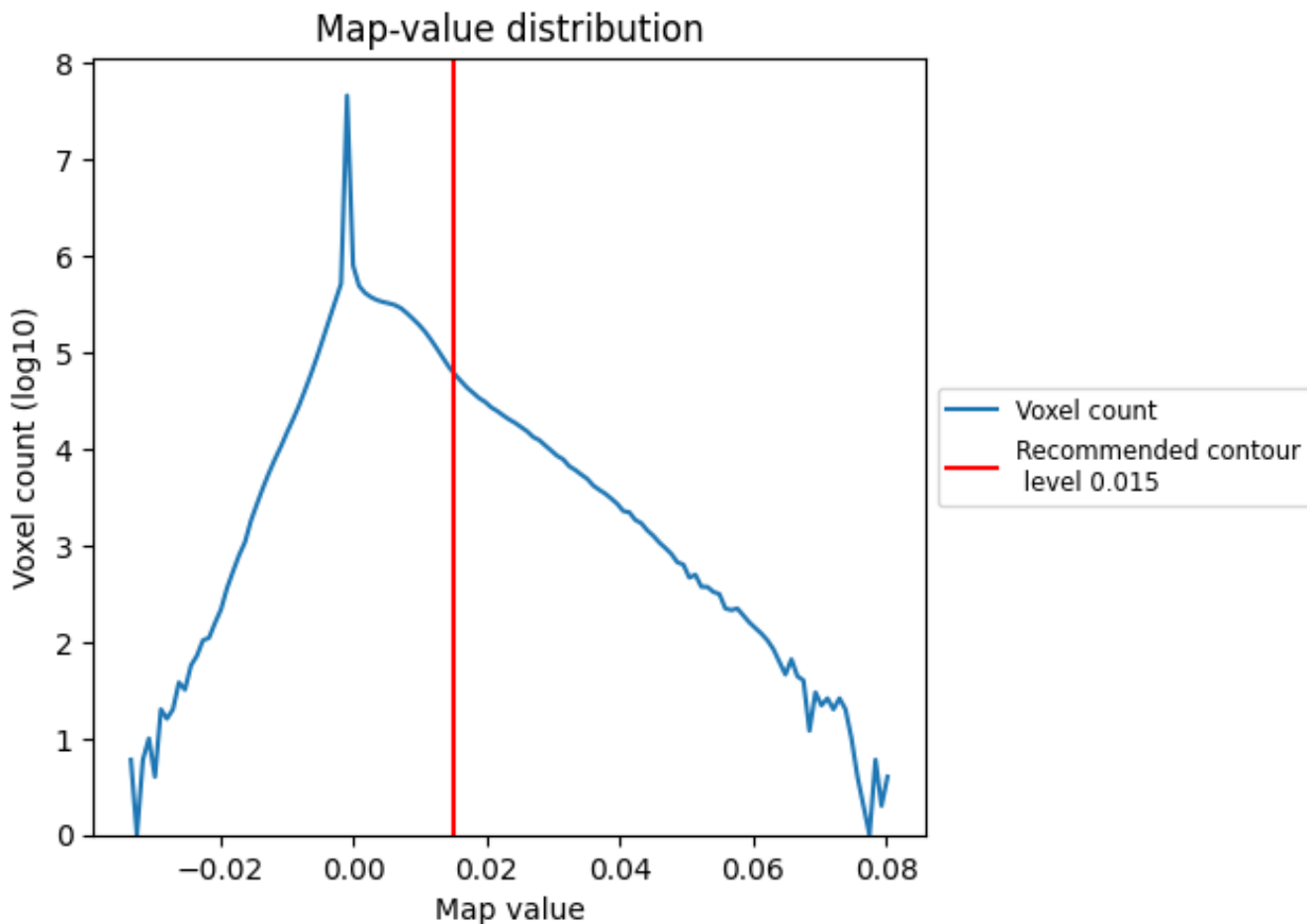
6.6 Mask visualisation [i](#)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis [i](#)

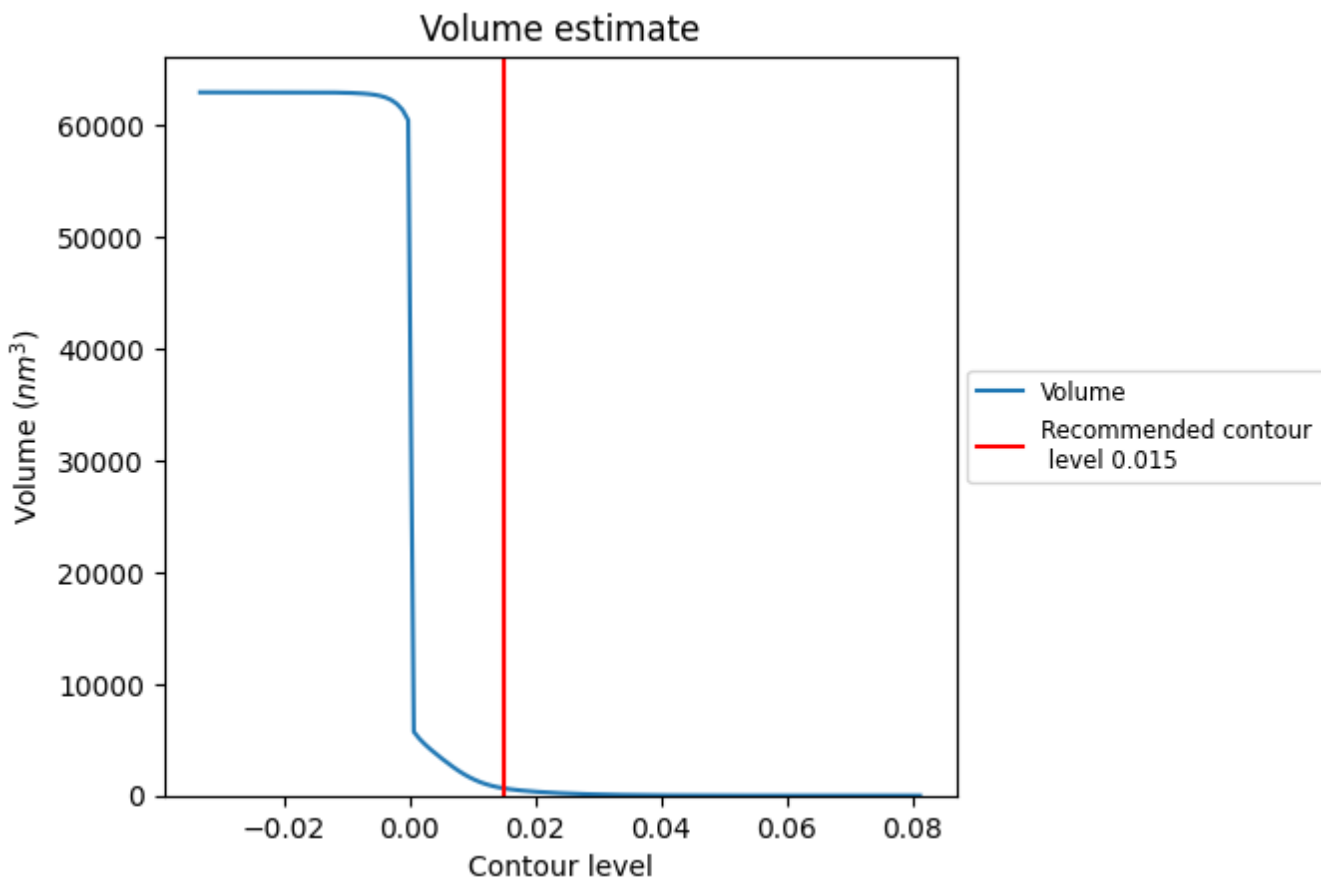
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

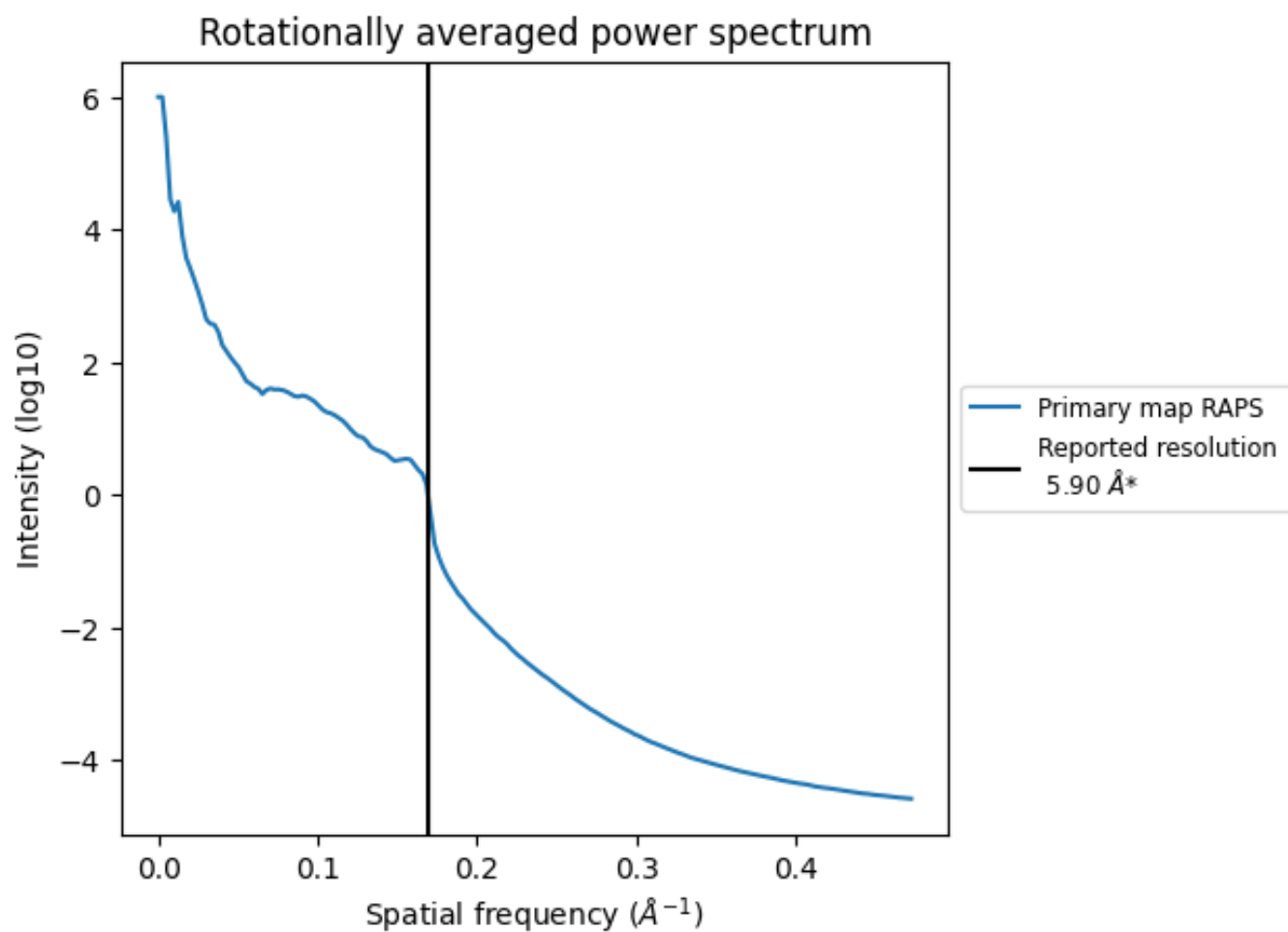
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 649 nm³; this corresponds to an approximate mass of 587 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum [i](#)



*Reported resolution corresponds to spatial frequency of 0.169\AA^{-1}

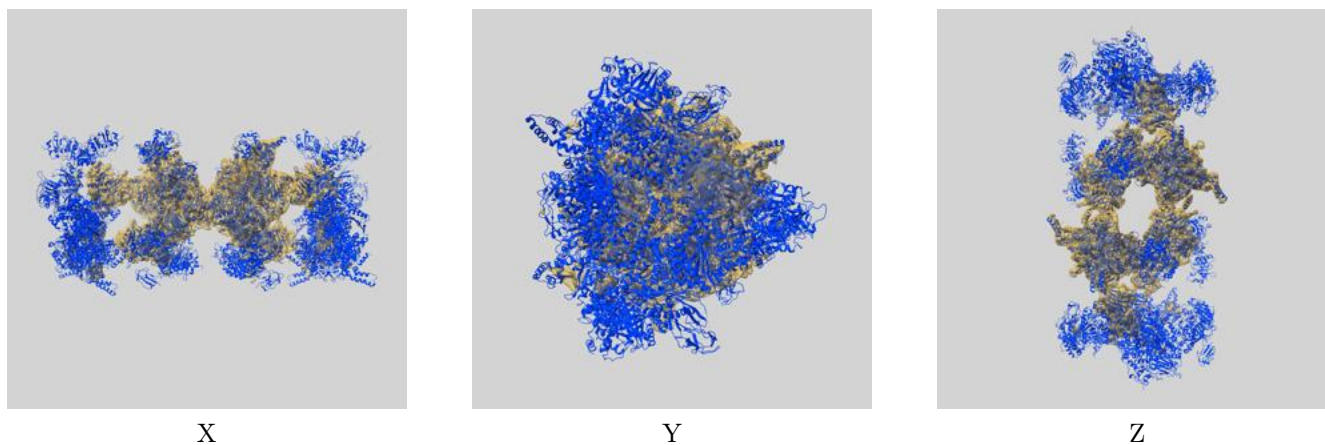
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

9 Map-model fit [i](#)

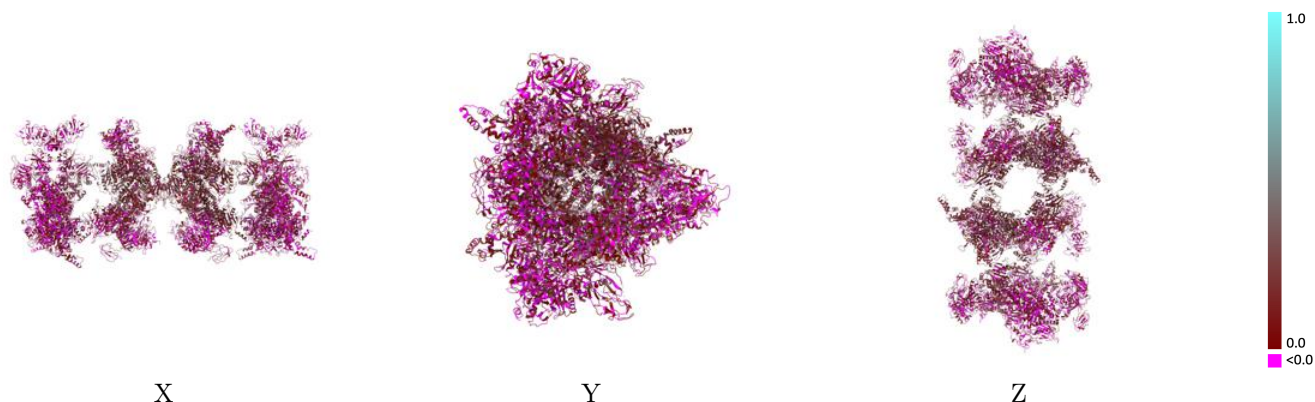
This section contains information regarding the fit between EMDB map EMD-4344 and PDB model 6G2I. Per-residue inclusion information can be found in section 3 on page 11.

9.1 Map-model overlay [i](#)



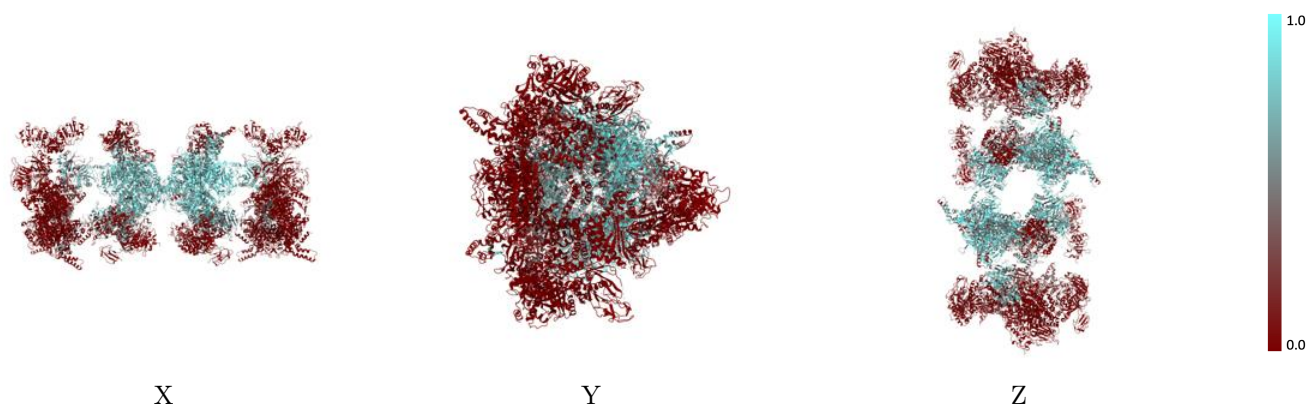
The images above show the 3D surface view of the map at the recommended contour level 0.015 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



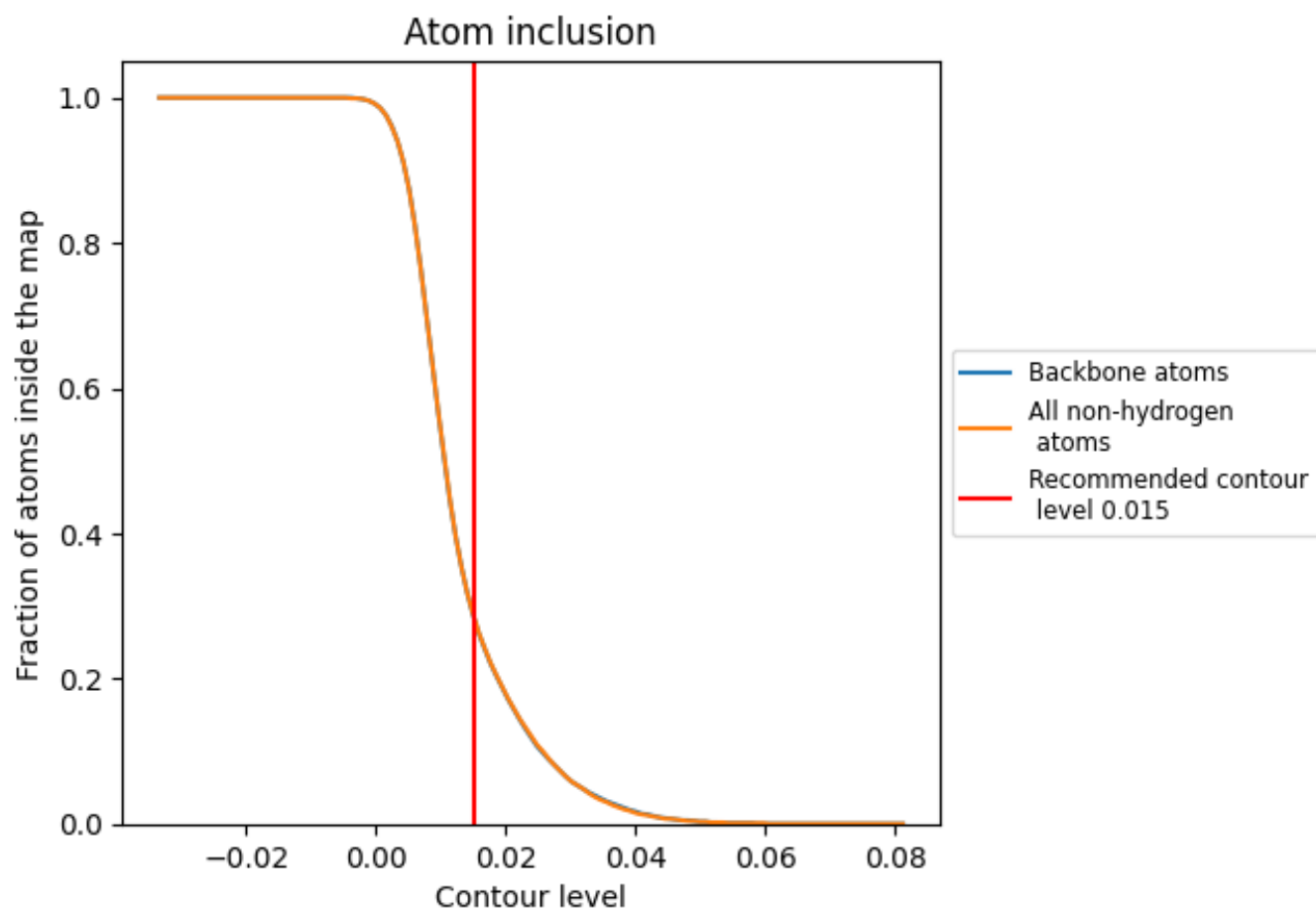
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.015).







































9.4 Atom inclusion [i](#)



At the recommended contour level, 29% of all backbone atoms, 29% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.015) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.2880	 0.1080
A	 0.2280	 0.0990
B	 0.2300	 0.1000
C	 0.4240	 0.1330
D	 0.5950	 0.1610
E	 0.5900	 0.1610
F	 0.4230	 0.1330
G	 0.0360	 0.0800
H	 0.0710	 0.0540
J	 0.0060	 0.0540
K	 0.0520	 0.0450
M	 0.0470	 0.0510
O	 0.0730	 0.0580
Q	 0.0350	 0.0770
R	 0.0060	 0.0540
S	 0.0020	 0.0510
U	 0.0020	 0.0510
W	 0.0000	 0.0370
Y	 0.0010	 0.0380

