



## Full wwPDB EM Validation Report ⓘ

Nov 8, 2022 – 02:01 AM EST

PDB ID : 6M7J  
EMDB ID : EMD-9047  
Title : Mycobacterium tuberculosis RNAP with RbpA/us fork and Corallopironin  
Authors : Darst, S.A.; Campbell, E.A.; Boyaci Selcuk, H.; Chen, J.  
Deposited on : 2018-08-20  
Resolution : 4.40 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](mailto: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>.

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

EMDB validation analysis : 0.0.1.dev43  
Mogul : 1.8.5 (274361), CSD as541be (2020)  
MolProbity : 4.02b-467  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
MapQ : 1.9.9  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.31.2

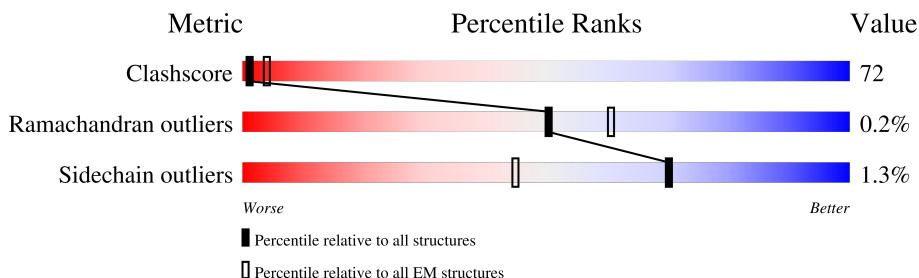
# 1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

*ELECTRON MICROSCOPY*

The reported resolution of this entry is 4.40 Å.

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



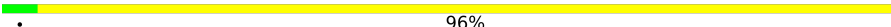
Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

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  $\geq 3$ , 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	347	<div> <div>13%</div> <div>51%</div> <div>•</div> <div>35%</div> </div>
1	B	347	<div> <div>14%</div> <div>54%</div> <div></div> <div>32%</div> </div>
2	C	1179	<div> <div>21%</div> <div>71%</div> <div>•</div> <div>6%</div> </div>
3	D	1326	<div> <div>24%</div> <div>70%</div> <div>•</div> <div>5%</div> </div>
4	E	110	<div> <div>20%</div> <div>55%</div> <div>•</div> <div>25%</div> </div>
5	F	531	<div> <div>17%</div> <div>42%</div> <div>•</div> <div>40%</div> </div>
6	J	111	<div> <div>32%</div> <div>61%</div> <div>5%</div> <div>•</div> </div>
7	O	31	<div> <div>•</div> <div>97%</div> </div>

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Mol	Chain	Length	Quality of chain
8	P	26	 96%

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
11	C0L	D	1404	-	-	X	-

## 2 Entry composition [i](#)

There are 11 unique types of molecules in this entry. The entry contains 27223 atoms, of which 40 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 DNA-directed RNA polymerase subunit alpha.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	225	Total	C	N	O	S	0	0
			1716	1080	296	338	2		
1	B	237	Total	C	N	O	S	0	0
			1759	1112	298	346	3		

- Molecule 2 is a protein called DNA-directed RNA polymerase subunit beta.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	C	1111	Total	C	N	O	S	0	0
			8586	5378	1507	1662	39		

There are 7 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C	1179	LEU	-	expression tag	UNP V9Z879
C	1180	ALA	-	expression tag	UNP V9Z879
C	1181	ARG	-	expression tag	UNP V9Z879
C	1182	HIS	-	expression tag	UNP V9Z879
C	1183	GLY	-	expression tag	UNP V9Z879
C	1184	GLY	-	expression tag	UNP V9Z879
C	1185	SER	-	expression tag	UNP V9Z879

- Molecule 3 is a protein called DNA-directed RNA polymerase subunit beta'.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	D	1266	Total	C	N	O	S	0	0
			9873	6184	1794	1853	42		

There are 10 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
D	-1	GLY	-	expression tag	UNP A5U053
D	0	ALA	-	expression tag	UNP A5U053

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Chain	Residue	Modelled	Actual	Comment	Reference
D	1317	HIS	-	expression tag	UNP A5U053
D	1318	HIS	-	expression tag	UNP A5U053
D	1319	HIS	-	expression tag	UNP A5U053
D	1320	HIS	-	expression tag	UNP A5U053
D	1321	HIS	-	expression tag	UNP A5U053
D	1322	HIS	-	expression tag	UNP A5U053
D	1323	HIS	-	expression tag	UNP A5U053
D	1324	HIS	-	expression tag	UNP A5U053

- Molecule 4 is a protein called DNA-directed RNA polymerase subunit omega.

Mol	Chain	Residues	Atoms				AltConf	Trace
4	E	83	Total	C	N	O	0	0
			649	414	108	127		

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
E	1	GLY	-	expression tag	UNP A0A0T9N9K3

- Molecule 5 is a protein called RNA polymerase sigma factor SigA.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	F	319	Total	C	N	O	S	0	0
			2518	1571	456	482	9		

There are 3 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
F	-2	GLY	-	expression tag	UNP P9WGI0
F	-1	PRO	-	expression tag	UNP P9WGI0
F	0	HIS	-	expression tag	UNP P9WGI0

- Molecule 6 is a protein called RNA polymerase-binding protein RbpA.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	J	108	Total	C	N	O	S	0	0
			881	543	168	167	3		

- Molecule 7 is a DNA chain called DNA (31-MER).

Mol	Chain	Residues	Atoms					AltConf	Trace
7	O	31	Total	C	N	O	P	0	0
			634	305	114	185	30		

- Molecule 8 is a DNA chain called DNA (26-MER).

Mol	Chain	Residues	Atoms					AltConf	Trace
8	P	26	Total	C	N	O	P	0	0
			526	254	94	153	25		

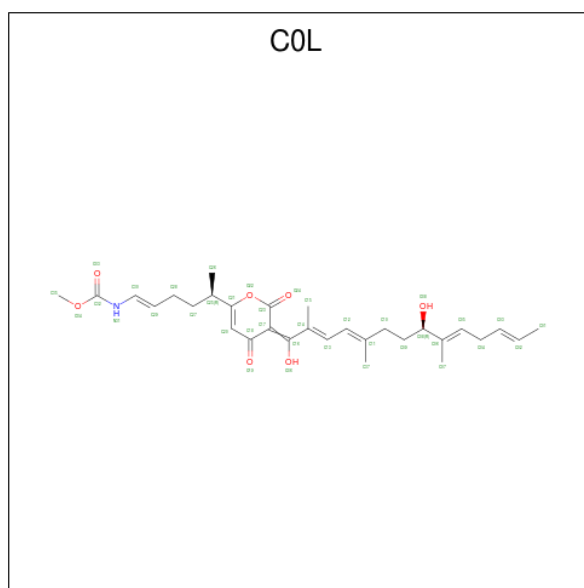
- Molecule 9 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		AltConf
9	D	2	Total	Zn	0
			2	2	

- Molecule 10 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		AltConf
10	D	1	Total	Mg	0
			1	1	

- Molecule 11 is methyl [(1E,5R)-5-{(3E)-3-[(2E,4E,8R,9E,12E)-1,8-dihydroxy-2,5,9-trimethyltetradeca-2,4,9,12-tetraen-1-ylidene]-2,4-dioxo-3,4-dihydro-2H-pyran-6-yl}hex-1-en-1-yl]carbamate (three-letter code: C0L) (formula: C<sub>30</sub>H<sub>41</sub>NO<sub>7</sub>) (labeled as "Ligand of Interest" by depositor).

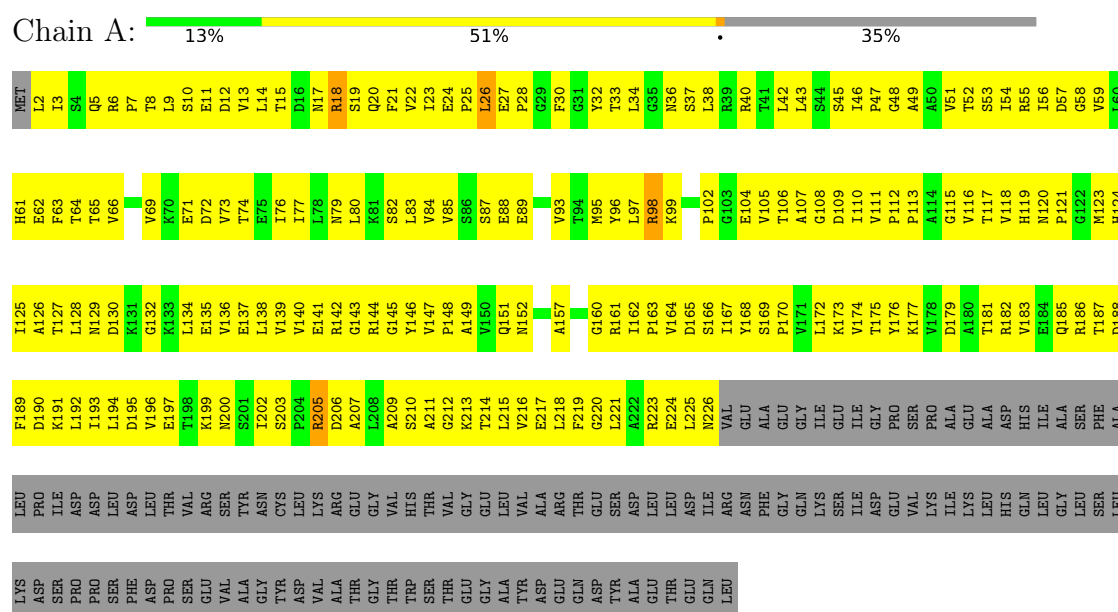


Mol	Chain	Residues	Atoms					AltConf
11	D	1	Total	C	H	N	O	0
			78	30	40	1	7	

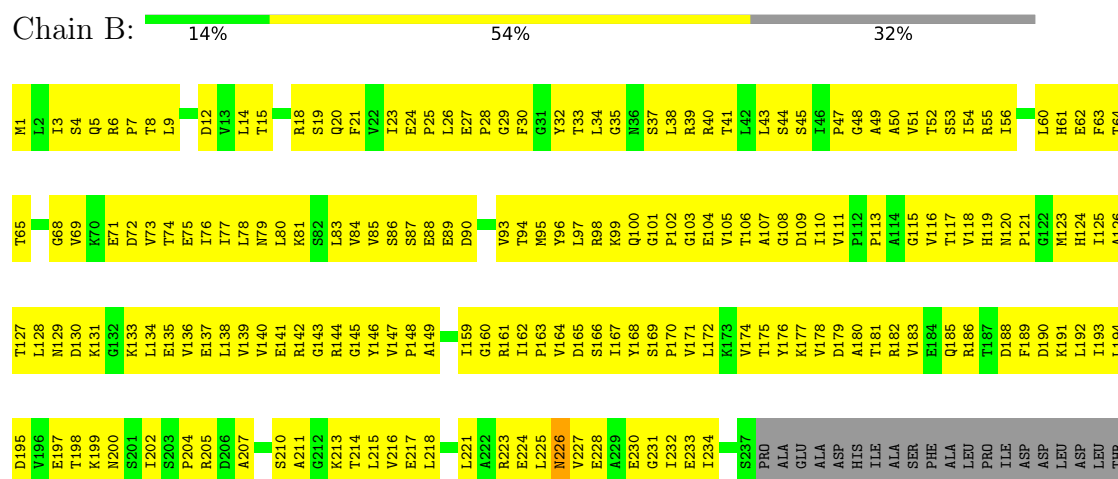
### 3 Residue-property plots

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

#### • Molecule 1: DNA-directed RNA polymerase subunit alpha



#### • Molecule 1: DNA-directed RNA polymerase subunit alpha





[illegible]

- Molecule 2: DNA-directed RNA polymerase subunit beta

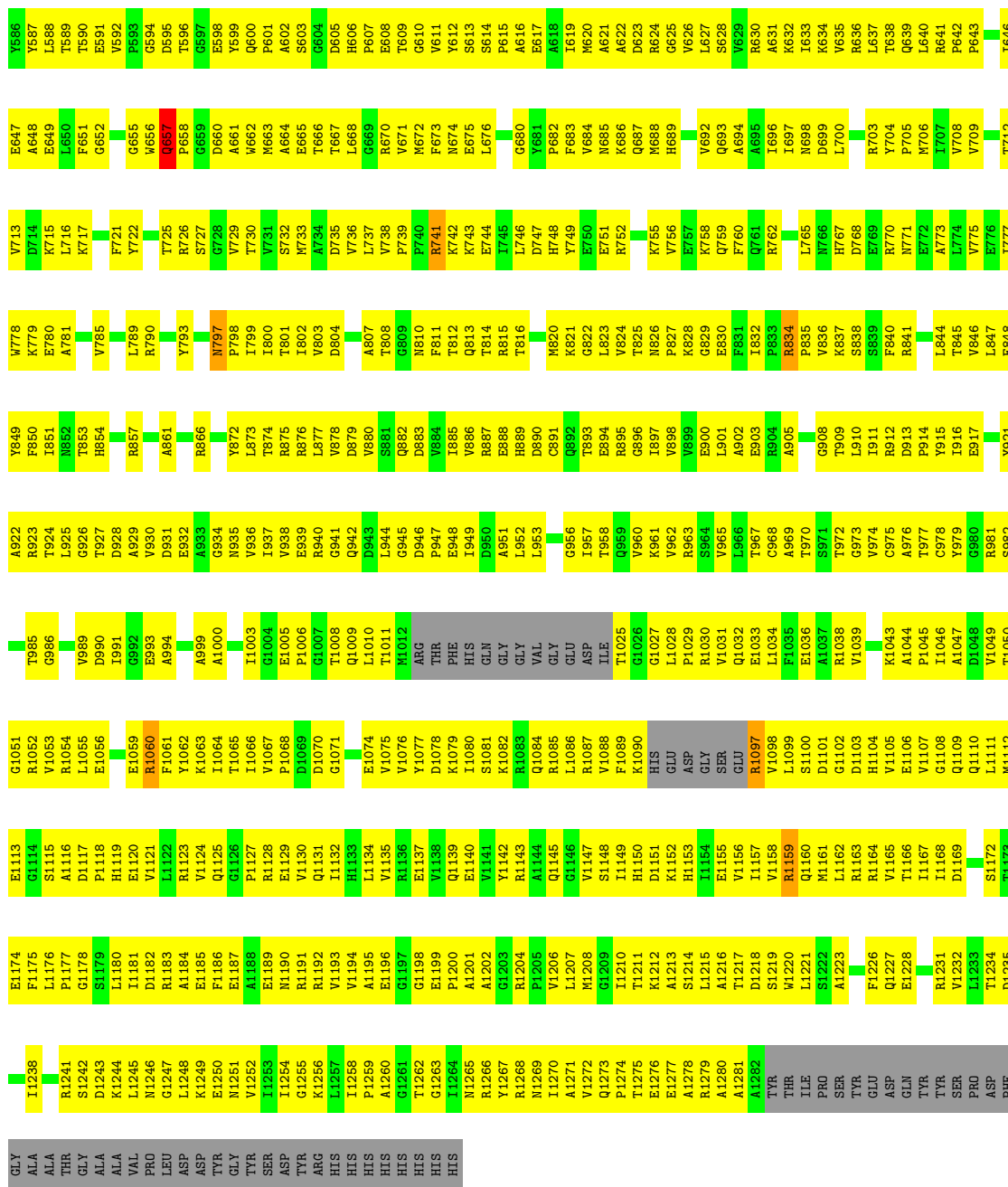
[illegible]

D834	G886	A970	M1031	I1091	GLU
T835	L889	Y971	K1032	K1092	ASP
S836	P900	Y972	H1033	S1093	GLU
L837	V901	V973	H1035	D1094	ASP
K838	E902	P974	L1036	T1095	LEU
V839	D903	P975	V1037	D1096	GLU
P840	M904	V976	V1037	V1097	ARG
H841	P905	P977	D1038	G1098	ALA
G842	P906	D978	K1040	R1099	ALA
E843	F907	G979	K1041	V1100	ALA
S844	L907	A980	H1042	K1101	ASN
G845	A908	Q981	A1043	V1102	LEU
K846	D909	Q982	A1044	V1103	GLY
V847	G910	E982	R1044	E1104	ILE
I850	P911	L985	S1045	A1105	ASN
R851	P912	Q986	T1046	I1106	LEU
V852	V913	G987	G1047	V1107	SER
F853	D914	L988	P1048	K1108	ARG
S854	I915	L989	Y1049	G1109	ASN
R855	I916	S990	S1050	E1110	GLU
E856	V922	C991	M1051	N1111	SER
D857	P923	T992	T1052	A1112	ALA
K858	R924	L993	Q1054	P1113	ALA
R859	R925	P994	Q1054	E1114	VAL
E860	M926	N995	P1055	P1115	GLU
L861	N927	R996	P1056	G1116	ASP
P862	L928	D997	L1057	P1117	LEU
A863	G929	P999	G1058	A1118	ALA
G864	Q930	V999	G1059	E1119	LEU
V865	L931	A1000	K1060	S1120	ALA
N866	L932	L1001	A1061	E1121	ARG
E867	L932	V1002	Q1062	K1122	HIS
L868	E933	D1003	F1063	L1123	GLY
R869	T934	A1004	G1064	L1124	GLY
R870	H941	D1005	Q1066	K1126	SER
V871	S942	G1006	P1067	E1127	
Y872	G943	A1008	F1068	L1128	
V873	W944	M1009	G1069	Q1129	
A874	K945	L1010	E1070	S1130	
Q875	V946	F1011	M1071	L1131	
K876	V952	D1012	E1072	G1132	
R877	P953	G1013	G1073	L1133	
I879	D954	R1014	K1074	N1134	
S880	W955	S1015	A1075	V1135	
D881	A956	G1016	M1076	E1136	
G882	A957	E1017	Q1077	V1137	
D883	R958	P1018	A1078	L1138	
K884	L959	F1019	Y1079	S1139	
L885	P960	P1020	G1080	S1140	
A886	D961	Y1021	A1081	ASP	
G887	E962	P1022	Y1082	GLY	
R888	L963	T1023	A1083	ALA	
H889	L964	T1024	T1084	ALA	
G890	E965	V1025	I1085	ILE	
N891	E966	G1026	Q1086	GLU	
K892	Q967	Y1027	E1087	LEU	
I895	P968	M1028	L1088	ARG	
	N969	Y1029	L1089	GLU	
		T1030	T1090	GLY	

• Molecule 3: DNA-directed RNA polymerase subunit beta'

Chain D:  24% 70% 5%

G-1	G43	I128	R194	G257	V391	R459	A521
N5	K64	I129	R195	S260	R325	L460	I522
F6	Y65	Y130	R196	L261	P326	V461	Q523
D7	K66	F131	V197	K262	K327	D462	L524
D8	V67	A132	R198	K263	L399		H525
E9	R68	A133	D199	L264	K400	A466	P526
L10	R69	Y134	G200	L265	S401	Q467	L527
R11	F70	V135	G201	E202	R334	M468	V528
I12	K71	L136	E202	E203	F335	I469	C529
G13	I73	T137	E204	G204	A336	E530	L530
L14	I74	V139	M205	N205	L405	K471	A531
A15	C75	D140	R206	G206	L406	A472	F532
T16	E76	E141	Q207	L270	L340	K473	N533
A17	R77	E142	L208	A274	N341	R474	A534
E18	C78	M143	R209	E275	D342	M475	D535
D19	G79	H144	D210	S276	L343	V476	M541
I20	V80	R145	R211	L277	Y344	E477	A542
Y25	E81	N146	A212	R278	R346	Q479	V543
G26	V82	E147	Q213	D279	V347	R480	H544
E27	T83	L148	Q214	V280	L348	L545	L546
V28	R84	S149	L216	R282	R350	Q482	P546
R29	R85	T150	L217	N283	R421	V483	L547
K30	K86	L151	D217	G284	Y422	V484	S548
P31	R87	E152	R218	N285	R352	D485	A549
E32	R88	A153	L219	G286	R353	V486	E550
T33	R89	E154	E220	L287	Y424	L487	A551
I34	E90	M155	D221	K287	G426	E488	Q552
N35	R91	A156	L222	K288	R427	V489	A553
Y36	N92	V157	W223	L290	S428	I491	E554
R37	G93	E158	F226	L293	D359	A492	A555
L1125	H94	R159	T227	L294	L360	E493	R556
K1126	E96	V162	K228	G361	G361	I557	L558
E1127	P100	E163	L229	R295	A362	H559	M559
A1008	Y101	D164	A230	L296	P363	V496	L560
M1009	T102	Q165	P231	K297	E364	L497	S561
E1070	H103	R166	K232	V298	L365	L498	S562
M1071	I104	E169	Q233	V299	I366	M499	N563
F1011	Y105	L234	L235	F302	V367	R500	L564
D1012	K43	R173	L236	Q303	N368	A501	L565
G1013	D44	A174	D237	Q304	E370	T503	L566
R1014	G45	E238	E239	S305	K371	L504	S567
S1015	F47	L177	N239	G306	R372	H505	
G1016	C48	E178	L240	N307	M373	R506	S570
E1017	E49	A179	Y241	K310	L374	L507	G571
A1078	X50	D180	R242	Q375	Q375	G508	R572
Y1079	J51	L181	E243	G311	E376	L574	P573
G1080	F52	A182	L244	K312	S377	A575	L575
A1081	G53	E183	V245	V313	V378	M576	M576
Y1082	P54	L184	D246	L314	D379	P577	P577
T1083	T55	E185	R247	D315	A380	R578	R578
A1084	R56	L186	Y248	A316	L381	L579	P579
I1085	D57	A121		V317	F382	M580	M580
Q1086	N58	G188	Y251	P318	D383	N581	N581
E1087	E59	D124	F252	V319	R384	V517	V582
L1088	C60	L125	T253	L320	G385	G518	S583
L1089	Y61	E126	A191	P321	R386	G584	G584
T1090	C62	K127	D192	P322		L585	L585
			A193				

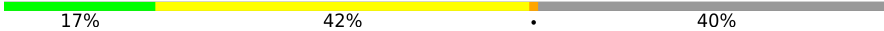


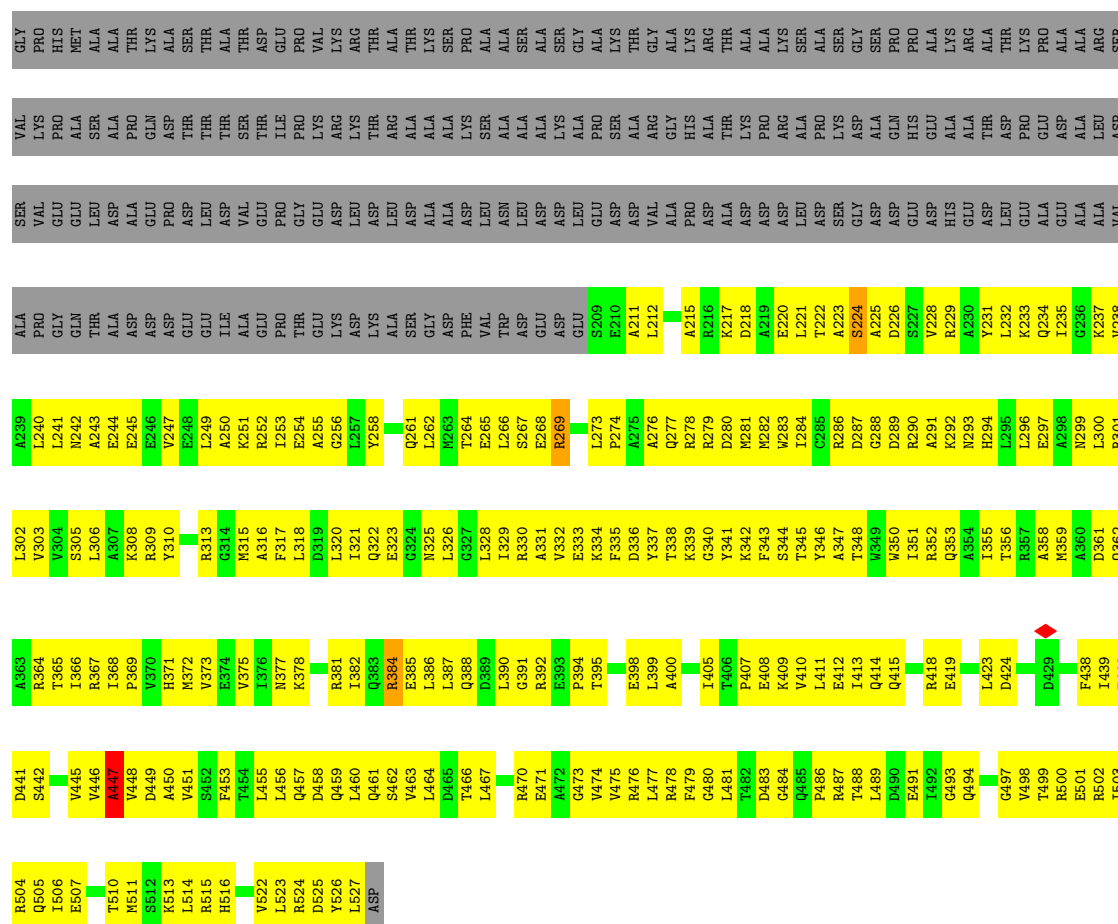
### • Molecule 4: DNA-directed RNA polymerase subunit omega

Chain E: 20% 55% 25%



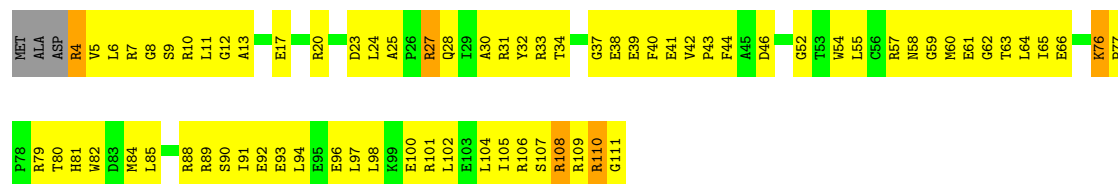
### • Molecule 5: RNA polymerase sigma factor SigA

Chain F:  17% 42% 40%



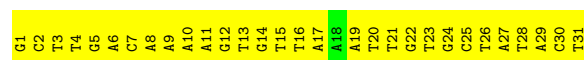
- Molecule 6: RNA polymerase-binding protein RbpA

Chain J:  32% 61% 5%



- Molecule 7: DNA (31-MER)

Chain O:  97%



- Molecule 8: DNA (26-MER)

Chain P:  96%

A1	G2	C3	A4	C5	A6	A7	T8	T9	T10	A11	A12	C13	A14	C15	T16	T17	T18	T19	G20	T21	C22	A23	A24	G25	C26
----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	223000	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 ( $e^-/\text{\AA}^2$ )	69.9	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	1.726	Depositor
Minimum map value	-0.457	Depositor
Average map value	0.006	Depositor
Map value standard deviation	0.082	Depositor
Recommended contour level	0.3	Depositor
Map size (Å)	332.8, 332.8, 332.8	wwPDB
Map dimensions	256, 256, 256	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.3, 1.3, 1.3	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: C0L, ZN, MG

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z  > 5$	RMSZ	$\# Z  > 5$
1	A	0.40	0/1742	0.56	1/2370 (0.0%)
1	B	0.41	0/1786	0.57	0/2435
2	C	0.44	2/8744 (0.0%)	0.59	6/11860 (0.1%)
3	D	0.41	0/10037	0.55	2/13570 (0.0%)
4	E	0.41	0/662	0.53	0/901
5	F	0.39	0/2549	0.55	2/3438 (0.1%)
6	J	0.36	0/897	0.55	0/1210
7	O	0.90	0/710	1.01	0/1095
8	P	0.94	0/589	0.99	0/906
All	All	0.45	2/27716 (0.0%)	0.60	11/37785 (0.0%)

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	C	1068	PHE	C-N	6.87	1.45	1.33
2	C	1074	TRP	CB-CG	5.99	1.61	1.50

All (11) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	1074	TRP	CA-CB-CG	10.61	133.87	113.70
2	C	1074	TRP	N-CA-CB	9.36	127.45	110.60
5	F	447	ALA	C-N-CA	-7.47	103.02	121.70
2	C	686	GLN	C-N-CA	-7.12	103.89	121.70
1	A	26	LEU	C-N-CA	-6.78	104.74	121.70
2	C	1073	CYS	N-CA-C	-6.05	94.66	111.00
2	C	282	ARG	C-N-CD	5.68	140.33	128.40
3	D	834	ARG	C-N-CD	-5.33	108.88	120.60
2	C	1054	GLN	N-CA-C	-5.19	96.99	111.00
3	D	657	GLN	N-CA-C	5.18	124.99	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	F	225	ALA	N-CA-C	5.07	124.68	111.00

There are no chirality outliers.

There are no planarity outliers.

## 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	1716	0	1756	294	0
1	B	1759	0	1783	325	0
2	C	8586	0	8511	1348	0
3	D	9873	0	9941	1452	0
4	E	649	0	645	91	0
5	F	2518	0	2540	417	0
6	J	881	0	861	159	0
7	O	634	0	350	78	0
8	P	526	0	296	65	0
9	D	2	0	0	0	0
10	D	1	0	0	0	0
11	D	38	40	0	22	0
All	All	27183	40	26683	3865	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 72.

All (3865) 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)
5:F:415:GLN:HA	5:F:418:ARG:CD	1.03	1.48
3:D:1249:LYS:HE3	11:D:1404:C0L:N31	1.28	1.46
5:F:415:GLN:CA	5:F:418:ARG:CD	1.97	1.39
5:F:439:ILE:CA	6:J:6:LEU:HD12	1.53	1.37
3:D:641:ARG:N	3:D:657:GLN:HG2	1.40	1.35
2:C:1073:CYS:O	2:C:1075:ALA:N	1.62	1.30
5:F:415:GLN:CA	5:F:418:ARG:HD3	1.57	1.30

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1051:MET:SD	5:F:441:ASP:CG	2.08	1.30
5:F:438:PHE:O	6:J:6:LEU:HG	1.26	1.28
2:C:229:LYS:O	2:C:230:ARG:HG2	1.36	1.17
5:F:415:GLN:HA	5:F:418:ARG:CG	1.74	1.16
5:F:439:ILE:HA	6:J:6:LEU:O	1.43	1.16
5:F:414:GLN:O	5:F:418:ARG:HG3	1.45	1.15
3:D:334:ARG:NH1	5:F:418:ARG:C	2.01	1.14
2:C:181:ARG:HA	2:C:376:ARG:HA	1.25	1.14
3:D:640:LEU:C	3:D:657:GLN:HG3	1.66	1.13
3:D:334:ARG:HH12	5:F:418:ARG:C	1.52	1.12
3:D:640:LEU:C	3:D:657:GLN:CG	2.18	1.11
2:C:96:ILE:HB	2:C:105:LEU:HB3	1.31	1.11
2:C:809:LYS:HB2	2:C:833:ARG:HB2	1.26	1.11
3:D:1249:LYS:CE	11:D:1404:C0L:N31	2.13	1.10
2:C:407:GLN:HB3	2:C:412:ILE:HG21	1.33	1.09
2:C:347:ARG:HB3	2:C:352:GLN:HG3	1.36	1.08
2:C:229:LYS:O	2:C:230:ARG:CG	2.01	1.07
2:C:1068:PHE:HB3	3:D:422:VAL:HG21	1.32	1.07
2:C:633:ARG:HD2	2:C:636:ILE:HD11	1.30	1.07
5:F:438:PHE:O	6:J:6:LEU:CG	2.04	1.06
5:F:415:GLN:HA	5:F:418:ARG:HD2	1.15	1.06
2:C:808:PRO:HA	2:C:832:VAL:HA	1.37	1.05
3:D:641:ARG:N	3:D:657:GLN:CG	2.18	1.05
2:C:215:ASP:HB2	2:C:223:GLY:HA3	1.38	1.04
5:F:439:ILE:CA	6:J:6:LEU:CD1	2.36	1.03
3:D:641:ARG:CA	3:D:657:GLN:HG2	1.87	1.03
5:F:439:ILE:HA	6:J:6:LEU:CD1	1.88	1.03
5:F:318:LEU:HA	5:F:321:ILE:HD12	1.40	1.03
5:F:364:ARG:HH12	5:F:419:GLU:HG2	1.22	1.03
5:F:439:ILE:CG1	6:J:6:LEU:CD1	2.37	1.02
1:A:69:VAL:HG12	1:A:128:LEU:HG	1.40	1.02
2:C:907:LEU:HD12	2:C:911:THR:HB	1.41	1.02
2:C:413:THR:HG22	2:C:416:THR:HG23	1.38	1.01
1:A:9:LEU:HA	1:A:23:ILE:HG12	1.41	1.01
3:D:743:LYS:HA	3:D:746:LEU:HD12	1.42	1.01
5:F:438:PHE:C	6:J:6:LEU:HD11	1.81	1.01
5:F:446:VAL:HG11	5:F:449:ASP:CG	1.80	1.01
5:F:440:GLU:N	6:J:6:LEU:O	1.94	1.00
1:A:49:ALA:HB2	1:A:142:ARG:HD2	1.43	1.00
5:F:446:VAL:HG11	5:F:449:ASP:OD2	1.61	1.00
3:D:1086:LEU:HB3	3:D:1099:LEU:HB3	1.42	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:74:THR:HA	1:B:77:ILE:HD12	1.44	0.99
5:F:438:PHE:C	6:J:6:LEU:CD1	2.30	0.99
1:B:105:VAL:HG23	1:B:128:LEU:HD11	1.42	0.99
3:D:443:LEU:HD12	3:D:444:PRO:HD2	1.45	0.99
2:C:204:VAL:HB	2:C:212:LEU:HD21	1.44	0.98
2:C:847:VAL:HG22	2:C:873:VAL:HG22	1.45	0.98
3:D:878:VAL:HG22	3:D:1000:ALA:HB1	1.43	0.98
1:A:179:ASP:HB2	1:A:191:LYS:HB3	1.45	0.98
2:C:1051:MET:SD	5:F:441:ASP:OD1	2.21	0.97
3:D:334:ARG:HH12	5:F:419:GLU:N	1.60	0.97
3:D:1088:VAL:HA	3:D:1098:VAL:HA	1.44	0.97
3:D:640:LEU:O	3:D:657:GLN:HG3	1.64	0.97
3:D:641:ARG:HA	3:D:657:GLN:CD	1.85	0.97
3:D:1055:LEU:HA	3:D:1064:ILE:HG23	1.46	0.96
1:B:21:PHE:HB2	1:B:194:LEU:HB2	1.46	0.96
3:D:345:ARG:HD2	5:F:365:THR:HG23	1.48	0.96
5:F:440:GLU:O	6:J:7:ARG:HA	1.65	0.96
3:D:235:ILE:HG21	3:D:241:TYR:HB2	1.45	0.95
2:C:853:PHE:HB2	2:C:868:LEU:HB3	1.47	0.95
2:C:1073:CYS:O	2:C:1074:TRP:C	1.98	0.95
2:C:192:ASP:HB2	2:C:199:LEU:HD11	1.46	0.95
1:B:12:ASP:HB3	1:B:20:GLN:HB3	1.49	0.95
2:C:208:ARG:HD3	2:C:307:ASP:HB2	1.48	0.95
2:C:507:ASN:HB3	2:C:511:PHE:H	1.32	0.95
5:F:364:ARG:NH1	5:F:419:GLU:HG2	1.80	0.95
3:D:1050:THR:HG22	3:D:1106:GLU:HA	1.45	0.94
5:F:503:ILE:HA	5:F:506:ILE:HD12	1.49	0.94
5:F:442:SER:HB3	6:J:7:ARG:HD3	1.49	0.94
3:D:923:ARG:HB3	3:D:962:VAL:HG21	1.50	0.94
2:C:1042:HIS:HB2	2:C:1060:LYS:HE2	1.50	0.94
5:F:415:GLN:HA	5:F:418:ARG:HD3	0.94	0.93
1:A:7:PRO:HA	1:A:25:PRO:HD2	1.49	0.93
1:B:97:LEU:HD21	1:B:105:VAL:HG11	1.50	0.93
3:D:616:ALA:HA	3:D:619:ILE:HD12	1.48	0.93
5:F:439:ILE:HG12	6:J:6:LEU:HD13	1.46	0.93
1:B:49:ALA:HA	1:B:142:ARG:HA	1.50	0.93
2:C:1128:LEU:HD11	11:D:1404:C0L:C03	1.99	0.93
5:F:439:ILE:CA	6:J:6:LEU:O	2.17	0.93
2:C:558:ARG:HB3	2:C:570:TYR:HB3	1.48	0.92
2:C:435:GLN:HE21	2:C:460:PRO:HD3	1.35	0.92
1:B:202:ILE:HD11	1:B:207:ALA:HB2	1.51	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:442:GLY:HA3	3:D:523:GLN:HB2	1.48	0.92
5:F:499:THR:HG21	7:O:3:DT:H2'	1.51	0.92
5:F:345:THR:HA	7:O:30:DC:H41	1.34	0.92
3:D:545:LEU:HD12	3:D:546:PRO:HD2	1.50	0.91
3:D:827:PRO:HG3	3:D:854:HIS:HB3	1.48	0.91
3:D:334:ARG:NH2	5:F:419:GLU:O	2.03	0.91
5:F:439:ILE:HA	6:J:6:LEU:HD12	0.92	0.91
7:O:11:DA:H2''	7:O:12:DG:H5''	1.51	0.91
5:F:390:LEU:HD21	5:F:392:ARG:HE	1.36	0.91
2:C:1067:ARG:HB2	3:D:421:ARG:HG3	1.50	0.91
1:B:3:ILE:HB	1:B:234:ILE:HA	1.50	0.91
1:A:54:ILE:HG22	1:A:138:LEU:HA	1.53	0.91
2:C:945:LYS:HA	2:C:965:GLU:HA	1.52	0.90
3:D:443:LEU:HD21	3:D:448:ALA:HB2	1.53	0.90
3:D:1050:THR:HG23	3:D:1107:VAL:HG23	1.52	0.90
5:F:439:ILE:N	6:J:6:LEU:CD1	2.35	0.90
2:C:334:THR:HG23	2:C:337:ASP:H	1.37	0.90
2:C:455:LEU:HD11	2:C:500:LEU:HD23	1.54	0.90
3:D:797:ASN:HB3	3:D:800:ILE:HG22	1.54	0.90
3:D:886:VAL:HG12	3:D:991:ILE:HG23	1.51	0.90
2:C:482:ARG:HB3	2:C:512:ILE:HD13	1.52	0.90
4:E:47:VAL:HG21	4:E:53:LEU:HB2	1.52	0.90
3:D:930:VAL:HA	3:D:936:VAL:HA	1.53	0.89
5:F:439:ILE:CG1	6:J:6:LEU:HD13	2.01	0.89
3:D:1181:ILE:HD11	3:D:1186:PHE:HB2	1.54	0.89
2:C:994:PRO:HB3	2:C:999:ASP:H	1.38	0.89
3:D:504:LEU:HD23	3:D:1005:GLU:HA	1.51	0.89
3:D:1166:THR:HB	3:D:1206:VAL:HG11	1.53	0.89
3:D:334:ARG:HD2	5:F:418:ARG:HB3	1.55	0.88
5:F:326:LEU:HA	5:F:329:ILE:HD12	1.52	0.88
5:F:440:GLU:O	6:J:7:ARG:CA	2.20	0.88
2:C:1067:ARG:HB2	3:D:421:ARG:CB	2.02	0.88
2:C:784:LEU:HA	2:C:790:VAL:HA	1.55	0.88
3:D:17:ALA:HA	3:D:20:ILE:HD12	1.54	0.88
3:D:636:ARG:HA	3:D:663:MET:HA	1.55	0.88
2:C:298:ASN:HA	2:C:302:LYS:HB3	1.55	0.88
3:D:195:ARG:HD3	3:D:198:ARG:HD3	1.53	0.88
1:A:157:ALA:HB1	1:A:161:ARG:HG3	1.53	0.88
1:B:78:LEU:HA	1:B:81:LYS:HE2	1.56	0.87
2:C:802:LEU:HD12	2:C:837:LEU:HG	1.56	0.87
2:C:541:VAL:HG22	2:C:578:TYR:HB2	1.55	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:J:101:ARG:HD3	6:J:104:LEU:HD13	1.56	0.87
2:C:1068:PHE:HB3	3:D:422:VAL:CG2	2.04	0.87
3:D:1235:ASP:HA	3:D:1238:ILE:HD12	1.54	0.87
5:F:487:ARG:HD2	5:F:491:GLU:HG2	1.56	0.87
5:F:438:PHE:HB2	6:J:6:LEU:HD21	1.54	0.87
5:F:439:ILE:HG13	6:J:6:LEU:CD1	2.03	0.87
1:B:192:LEU:HD21	1:B:194:LEU:HD21	1.56	0.87
3:D:937:ILE:HD11	3:D:951:ALA:HB1	1.57	0.87
2:C:608:GLY:HA2	2:C:611:MET:HE3	1.57	0.87
2:C:1044:ARG:HD2	2:C:1063:PHE:HB3	1.55	0.87
3:D:634:LYS:HG2	3:D:665:GLU:HB3	1.55	0.86
2:C:1051:MET:CE	5:F:441:ASP:OD1	2.17	0.86
2:C:245:SER:HB3	2:C:262:LEU:HD21	1.56	0.86
3:D:56:ARG:HG2	6:J:13:ALA:H	1.39	0.86
2:C:956:ALA:HA	2:C:959:LEU:HD12	1.56	0.86
3:D:71:LYS:HA	3:D:82:VAL:HG13	1.58	0.86
3:D:1063:LYS:HD3	3:D:1078:ASP:HA	1.56	0.86
5:F:439:ILE:N	6:J:6:LEU:HD11	1.91	0.86
5:F:479:PHE:HB2	5:F:481:LEU:HG	1.58	0.86
3:D:926:GLY:HA2	3:D:940:ARG:HG3	1.58	0.85
3:D:599:TYR:HB2	3:D:633:ILE:HA	1.59	0.85
6:J:28:GLN:HG3	6:J:46:ASP:HA	1.57	0.85
2:C:544:ALA:HB2	2:C:580:ASP:HB2	1.58	0.85
5:F:415:GLN:O	5:F:418:ARG:HB2	1.76	0.85
2:C:229:LYS:O	2:C:230:ARG:CB	2.24	0.85
2:C:1067:ARG:HB2	3:D:421:ARG:CG	2.06	0.85
1:B:101:GLY:HA2	1:B:131:LYS:HA	1.57	0.84
3:D:280:VAL:O	3:D:284:GLY:N	2.09	0.84
3:D:821:LYS:HB3	3:D:836:VAL:HG11	1.59	0.84
5:F:415:GLN:CB	5:F:418:ARG:HD3	2.07	0.84
2:C:62:GLU:HA	2:C:65:ILE:HD12	1.59	0.84
6:J:91:ILE:HA	6:J:94:LEU:HD12	1.58	0.84
3:D:354:LEU:HA	3:D:357:LEU:HD12	1.56	0.84
5:F:504:ARG:NH1	8:P:22:DC:OP2	2.11	0.84
3:D:641:ARG:CA	3:D:657:GLN:CG	2.53	0.84
3:D:185:GLU:HA	3:D:194:ARG:HH11	1.43	0.83
1:A:202:ILE:HD11	1:A:207:ALA:HB2	1.60	0.83
2:C:689:ILE:HG23	2:C:703:ALA:HA	1.58	0.83
3:D:902:ALA:HA	3:D:913:ASP:H	1.43	0.83
5:F:266:LEU:HD22	5:F:273:LEU:HD12	1.61	0.83
2:C:517:ARG:HG3	2:C:581:VAL:HA	1.59	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:946:VAL:N	2:C:964:LEU:O	2.11	0.83
3:D:965:VAL:HG11	3:D:1156:VAL:HG22	1.58	0.83
2:C:547:PRO:HB2	2:C:555:VAL:HB	1.61	0.83
3:D:420:LYS:HZ2	11:D:1404:C0L:C17	1.91	0.82
7:O:2:DC:H2'	7:O:3:DT:H71	1.61	0.82
1:A:128:LEU:HB3	1:A:132:GLY:HA3	1.61	0.82
2:C:801:ILE:HD13	2:C:838:LYS:HG2	1.61	0.82
5:F:223:ALA:O	5:F:224:SER:O	1.98	0.82
2:C:38:ARG:HD3	2:C:973:SER:HB3	1.62	0.82
5:F:348:THR:HA	5:F:351:ILE:HD12	1.59	0.82
3:D:612:TYR:HB2	3:D:635:VAL:HG12	1.59	0.82
1:B:106:THR:HG22	1:B:124:HIS:HA	1.61	0.82
5:F:364:ARG:HH12	5:F:419:GLU:CG	1.92	0.82
1:B:40:ARG:HH12	3:D:623:ASP:HB3	1.42	0.82
7:O:19:DA:H1'	7:O:20:DT:H5'	1.60	0.82
2:C:789:ILE:HG22	2:C:803:VAL:HG22	1.62	0.82
3:D:641:ARG:HA	3:D:657:GLN:CG	2.10	0.82
3:D:1033:GLU:HA	3:D:1036:GLU:HB2	1.59	0.82
3:D:139:VAL:HA	3:D:252:PHE:HA	1.59	0.81
1:B:100:GLN:HA	1:B:133:LYS:HA	1.61	0.81
2:C:222:VAL:HG21	2:C:234:VAL:H	1.45	0.81
3:D:1052:ARG:HA	3:D:1104:HIS:HA	1.62	0.81
2:C:1058:GLY:HA2	2:C:1064:GLY:HA2	1.63	0.81
2:C:1124:LEU:HD21	11:D:1404:C0L:C06	2.09	0.81
3:D:71:LYS:O	6:J:27:ARG:NH1	2.13	0.81
2:C:1067:ARG:CB	3:D:421:ARG:HA	2.11	0.81
5:F:229:ARG:HA	5:F:232:LEU:HD12	1.62	0.81
2:C:192:ASP:O	2:C:196:ASP:N	2.13	0.81
3:D:1044:ALA:HB3	3:D:1110:GLN:HE21	1.44	0.81
4:E:38:PRO:HG2	4:E:43:LEU:HD11	1.62	0.81
1:B:182:ARG:HG3	1:B:186:ARG:H	1.46	0.81
3:D:820:MET:HE3	3:D:837:LYS:HG2	1.63	0.81
3:D:84:ARG:HD3	3:D:86:LYS:HE3	1.61	0.80
3:D:928:ASP:OD1	3:D:940:ARG:N	2.14	0.80
3:D:189:ALA:HB3	3:D:194:ARG:HD3	1.63	0.80
3:D:640:LEU:C	3:D:657:GLN:HG2	1.92	0.80
5:F:476:ARG:HA	5:F:481:LEU:HB2	1.63	0.80
2:C:720:LEU:N	2:C:914:ASP:OD2	2.14	0.80
3:D:420:LYS:NZ	11:D:1404:C0L:C17	2.45	0.80
2:C:297:GLU:O	2:C:302:LYS:N	2.14	0.80
1:B:107:ALA:HB2	1:B:123:MET:HB3	1.63	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1251:ASN:HD22	3:D:1259:PRO:HD3	1.47	0.80
2:C:225:ARG:HG3	2:C:230:ARG:H	1.47	0.80
2:C:767:GLU:HB3	2:C:805:LYS:HE3	1.64	0.80
5:F:478:ARG:HH22	8:P:20:DG:H5"	1.47	0.80
3:D:286:GLY:O	3:D:290:LEU:N	2.15	0.80
2:C:1137:VAL:HG21	3:D:7:PHE:HD1	1.47	0.80
3:D:1045:PRO:O	3:D:1111:LEU:N	2.15	0.79
3:D:739:PRO:HG2	3:D:742:LYS:HB2	1.63	0.79
5:F:502:ARG:NH1	5:F:505:GLN:OE1	2.14	0.79
1:B:52:THR:HB	1:B:139:VAL:HG12	1.64	0.79
3:D:432:VAL:HG13	3:D:434:PRO:HD3	1.62	0.79
3:D:428:SER:HB3	3:D:522:ILE:HD11	1.65	0.79
3:D:1208:MET:HG3	3:D:1213:ALA:HB2	1.63	0.79
4:E:82:LEU:N	4:E:98:GLU:OE2	2.15	0.79
2:C:1088:LEU:HD23	2:C:1092:LYS:HD2	1.64	0.79
3:D:353:ARG:NE	5:F:323:GLU:OE2	2.16	0.79
6:J:90:SER:HB3	6:J:93:GLU:HG3	1.65	0.79
2:C:1050:SER:H	2:C:1055:GLN:H	1.30	0.79
6:J:108:ARG:HD2	6:J:109:ARG:H	1.48	0.79
1:A:43:LEU:HD23	2:C:902:GLU:HB3	1.65	0.79
2:C:103:MET:HA	2:C:142:ASN:H	1.47	0.79
3:D:945:GLY:N	3:D:948:GLU:OE2	2.15	0.79
5:F:439:ILE:HG12	6:J:6:LEU:CD1	2.07	0.79
6:J:52:GLY:HA2	6:J:64:LEU:HB2	1.64	0.79
1:A:12:ASP:HB3	1:A:20:GLN:HB2	1.64	0.79
5:F:390:LEU:HG	5:F:392:ARG:HG2	1.64	0.79
2:C:644:ALA:N	2:C:700:GLN:O	2.12	0.79
3:D:151:LEU:HD22	3:D:248:TYR:HE1	1.48	0.79
3:D:929:ALA:N	3:D:938:VAL:O	2.15	0.79
1:A:147:VAL:HG12	1:A:166:SER:HB2	1.64	0.78
1:B:179:ASP:HB2	1:B:191:LYS:HB3	1.63	0.78
3:D:1254:ILE:HG13	3:D:1256:LYS:H	1.48	0.78
1:B:84:VAL:HG13	1:B:119:HIS:HB2	1.64	0.78
3:D:567:SER:N	3:D:572:ARG:O	2.15	0.78
5:F:487:ARG:HB3	5:F:491:GLU:HB2	1.64	0.78
1:B:7:PRO:HA	1:B:25:PRO:HD2	1.64	0.78
2:C:131:ALA:O	2:C:157:PHE:N	2.15	0.78
2:C:774:PRO:HG2	2:C:834:ASP:HB2	1.66	0.78
2:C:222:VAL:HG13	2:C:261:THR:HG21	1.66	0.78
2:C:463:LEU:HD13	2:C:468:ALA:HB2	1.64	0.78
1:A:209:ALA:HB2	1:B:225:LEU:HB2	1.65	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:344:SER:OG	7:O:30:DC:OP2	2.02	0.78
6:J:28:GLN:N	6:J:44:PHE:O	2.16	0.78
1:B:79:ASN:HB3	1:B:125:ILE:HG13	1.65	0.78
3:D:481:PRO:HA	3:D:484:TRP:HD1	1.49	0.78
5:F:415:GLN:CA	5:F:418:ARG:HD2	1.84	0.78
2:C:767:GLU:HA	2:C:807:THR:HG22	1.65	0.77
1:A:105:VAL:N	1:A:126:ALA:O	2.17	0.77
1:A:106:THR:N	1:A:109:ASP:OD2	2.17	0.77
3:D:1089:PHE:O	3:D:1097:ARG:N	2.17	0.77
5:F:438:PHE:O	6:J:6:LEU:CD1	2.29	0.77
3:D:599:TYR:OH	3:D:608:GLU:OE1	2.03	0.77
2:C:403:ARG:NH1	2:C:416:THR:O	2.18	0.77
3:D:902:ALA:HB1	3:D:912:ARG:HA	1.67	0.77
2:C:1051:MET:O	6:J:10:ARG:NH2	2.17	0.77
3:D:815:ARG:NH1	3:D:820:MET:O	2.18	0.77
2:C:107:PHE:HA	2:C:137:ALA:HA	1.66	0.77
5:F:500:ARG:NH1	8:P:21:DT:O4	2.17	0.77
1:A:107:ALA:HB2	1:A:123:MET:HB3	1.67	0.77
3:D:1062:TYR:HB2	3:D:1080:ILE:HB	1.66	0.77
3:D:891:CYS:HB2	3:D:969:ALA:HB3	1.66	0.76
3:D:893:THR:HB	3:D:969:ALA:HB2	1.65	0.76
2:C:233:PRO:HG2	2:C:236:VAL:HG23	1.67	0.76
3:D:500:ARG:HB2	3:D:541:MET:HG2	1.67	0.76
2:C:540:VAL:HG23	2:C:561:VAL:HG21	1.67	0.76
2:C:549:ASP:HB3	2:C:553:ARG:HB2	1.65	0.76
3:D:826:ASN:N	3:D:830:GLU:O	2.18	0.76
3:D:1047:ALA:N	3:D:1109:GLN:O	2.17	0.76
5:F:249:LEU:HD22	5:F:291:ALA:HB1	1.66	0.76
5:F:258:TYR:HB2	6:J:94:LEU:HD22	1.68	0.76
5:F:336:ASP:OD1	6:J:89:ARG:NH2	2.18	0.76
3:D:261:ILE:HA	3:D:264:LEU:HD12	1.66	0.76
5:F:463:VAL:O	5:F:466:THR:OG1	2.03	0.76
6:J:31:ARG:HG2	6:J:41:GLU:HG2	1.68	0.76
2:C:975:PRO:HB2	2:C:978:ASP:HB3	1.67	0.76
2:C:1124:LEU:HD23	11:D:1404:C0L:C02	2.16	0.76
1:B:106:THR:N	1:B:109:ASP:OD2	2.16	0.76
3:D:993:GLU:OE2	4:E:51:TYR:OH	2.03	0.76
3:D:342:ASP:OD1	5:F:365:THR:OG1	2.02	0.76
3:D:1190:ASN:HA	3:D:1193:VAL:HG12	1.67	0.76
3:D:1212:LYS:HA	3:D:1215:LEU:HD12	1.68	0.76
5:F:238:VAL:O	5:F:301:ARG:NH2	2.19	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:264:THR:HA	5:F:267:SER:HB3	1.68	0.76
3:D:885:ILE:HG22	3:D:994:ALA:HB2	1.68	0.76
1:B:1:MET:O	1:B:233:GLU:N	2.19	0.76
3:D:336:ALA:HB1	5:F:423:LEU:HD11	1.66	0.76
1:B:1:MET:HB2	1:B:232:ILE:HA	1.68	0.75
2:C:253:GLY:O	2:C:259:ARG:NH1	2.19	0.75
3:D:637:LEU:N	3:D:662:TRP:O	2.18	0.75
3:D:431:VAL:O	3:D:524:LEU:N	2.18	0.75
1:B:104:GLU:HG2	1:B:127:THR:HG22	1.69	0.75
1:B:105:VAL:N	1:B:126:ALA:O	2.19	0.75
1:B:183:VAL:HA	1:B:188:ASP:HA	1.68	0.75
2:C:652:GLU:O	2:C:659:THR:N	2.19	0.75
5:F:330:ARG:NH2	7:O:25:DC:OP2	2.19	0.75
2:C:62:GLU:O	2:C:66:GLY:N	2.20	0.75
2:C:231:ARG:HD2	5:F:211:ALA:HB2	1.67	0.75
2:C:1051:MET:HE3	5:F:441:ASP:OD1	1.85	0.75
1:A:40:ARG:HE	1:B:33:THR:HG22	1.52	0.75
1:B:107:ALA:N	1:B:123:MET:O	2.18	0.75
2:C:549:ASP:N	2:C:553:ARG:O	2.14	0.75
5:F:461:GLN:OE1	5:F:476:ARG:NH2	2.20	0.75
1:A:149:ALA:N	1:A:165:ASP:OD1	2.19	0.75
2:C:518:LYS:HA	2:C:578:TYR:HA	1.67	0.75
2:C:1054:GLN:O	2:C:1055:GLN:CG	2.34	0.75
1:B:98:ARG:HG2	1:B:135:GLU:HA	1.67	0.75
2:C:179:LEU:HD23	2:C:378:LEU:HD13	1.69	0.75
2:C:317:ASN:O	2:C:321:GLY:N	2.19	0.75
5:F:296:LEU:HD21	5:F:332:VAL:HG11	1.69	0.75
5:F:384:ARG:O	5:F:388:GLN:NE2	2.20	0.75
6:J:106:ARG:O	6:J:111:GLY:N	2.20	0.75
1:B:172:LEU:HD13	1:B:199:LYS:H	1.52	0.75
2:C:235:THR:HG21	2:C:265:ASP:HB3	1.68	0.75
2:C:514:THR:O	2:C:531:LEU:N	2.14	0.75
2:C:676:ALA:HB3	2:C:684:ALA:HB3	1.68	0.75
3:D:60:CYS:SG	3:D:64:LYS:N	2.60	0.75
7:O:22:DG:H1'	7:O:23:DT:H5'	1.68	0.75
2:C:102:SER:O	2:C:141:ASN:ND2	2.20	0.74
2:C:1072:GLU:OE2	3:D:503:THR:OG1	2.02	0.74
2:C:641:VAL:HG22	2:C:705:GLY:H	1.50	0.74
2:C:649:VAL:HA	2:C:695:ARG:HA	1.69	0.74
3:D:1051:GLY:O	3:D:1105:VAL:N	2.17	0.74
3:D:930:VAL:HG12	3:D:936:VAL:HG22	1.68	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:119:HIS:O	1:A:200:ASN:ND2	2.20	0.74
3:D:1066:ILE:HD12	3:D:1075:VAL:HB	1.68	0.74
5:F:331:ALA:HB2	5:F:350:TRP:HB2	1.67	0.74
1:B:169:SER:HB3	1:B:171:VAL:HG22	1.69	0.74
2:C:822:ARG:NH1	2:C:828:LYS:O	2.21	0.74
2:C:1044:ARG:NH1	2:C:1057:LEU:O	2.20	0.74
2:C:150:GLN:NE2	2:C:413:THR:OG1	2.20	0.74
3:D:557:ILE:O	3:D:563:ASN:ND2	2.20	0.74
2:C:174:VAL:HG23	2:C:440:MET:HB2	1.68	0.74
3:D:101:VAL:O	3:D:314:LEU:N	2.16	0.74
2:C:278:TYR:CE1	2:C:282:ARG:HD2	2.23	0.74
2:C:853:PHE:N	2:C:868:LEU:O	2.17	0.74
3:D:850:PHE:O	3:D:853:THR:OG1	2.05	0.74
5:F:447:ALA:O	5:F:448:VAL:C	2.18	0.74
2:C:902:GLU:OE1	2:C:902:GLU:N	2.20	0.74
3:D:1249:LYS:HD3	11:D:1404:C0L:C35	2.18	0.74
3:D:1269:ASN:HB2	4:E:109:GLY:HA3	1.69	0.74
3:D:265:ILE:HG21	3:D:310:MET:HA	1.68	0.73
5:F:318:LEU:HD23	5:F:321:ILE:HD12	1.70	0.73
5:F:310:TYR:O	5:F:313:ARG:NE	2.21	0.73
1:B:45:SER:O	1:B:144:ARG:NH1	2.21	0.73
2:C:563:ARG:N	2:C:567:GLU:O	2.21	0.73
3:D:1062:TYR:N	3:D:1080:ILE:O	2.18	0.73
2:C:592:ALA:HB1	2:C:630:MET:HG3	1.70	0.73
3:D:468:ASN:O	3:D:471:SER:OG	2.06	0.73
3:D:636:ARG:HB2	3:D:663:MET:HG2	1.69	0.73
3:D:768:ASP:HA	3:D:771:ASN:HD22	1.52	0.73
1:B:181:THR:HG21	1:B:191:LYS:HD3	1.70	0.73
2:C:941:HIS:ND1	2:C:969:ASN:OD1	2.21	0.73
3:D:431:VAL:HG23	3:D:523:GLN:HA	1.70	0.73
2:C:237:LEU:O	2:C:241:LEU:N	2.21	0.73
5:F:241:LEU:HB3	5:F:245:GLU:HG3	1.69	0.73
2:C:413:THR:O	2:C:416:THR:OG1	2.05	0.73
3:D:1270:ILE:O	4:E:59:LYS:NZ	2.20	0.73
3:D:498:LEU:H	3:D:509:ILE:HG23	1.54	0.73
3:D:756:VAL:HG21	3:D:777:ILE:HD11	1.70	0.73
2:C:38:ARG:NH1	2:C:625:LEU:O	2.22	0.73
3:D:1124:VAL:HG12	3:D:1125:GLN:HG3	1.70	0.73
3:D:1167:ILE:O	3:D:1178:GLY:N	2.19	0.73
5:F:299:ASN:HA	7:O:31:DT:H3	1.54	0.73
2:C:96:ILE:N	2:C:105:LEU:O	2.19	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:133:LEU:HD11	2:C:157:PHE:HB2	1.69	0.72
2:C:403:ARG:HD2	2:C:417:LEU:HA	1.71	0.72
3:D:1164:ARG:NH2	3:D:1216:ALA:O	2.22	0.72
3:D:56:ARG:NE	3:D:59:GLU:OE1	2.23	0.72
3:D:607:PRO:HG2	3:D:609:THR:HG22	1.72	0.72
3:D:798:PRO:HA	3:D:801:THR:HB	1.71	0.72
4:E:42:GLU:OE1	4:E:100:HIS:NE2	2.21	0.72
2:C:48:LEU:HB2	2:C:528:ILE:HD11	1.71	0.72
3:D:639:GLN:HA	3:D:657:GLN:O	1.88	0.72
1:A:14:LEU:HD11	1:A:20:GLN:HG3	1.71	0.72
1:A:26:LEU:HB2	1:A:190:ASP:HB2	1.71	0.72
1:B:146:TYR:O	3:D:624:ARG:NH2	2.18	0.72
2:C:106:SER:N	2:C:138:GLU:O	2.19	0.72
2:C:807:THR:O	2:C:833:ARG:N	2.23	0.72
3:D:354:LEU:HB2	3:D:370:GLU:HG2	1.71	0.72
6:J:54:TRP:N	6:J:61:GLU:OE2	2.22	0.72
2:C:618:LEU:HD22	2:C:748:THR:H	1.55	0.72
1:A:62:GLU:HA	1:A:73:VAL:HG11	1.71	0.72
1:B:103:GLY:O	1:B:128:LEU:N	2.19	0.72
2:C:633:ARG:HA	2:C:636:ILE:HG12	1.71	0.72
3:D:211:ARG:HD3	3:D:214:ARG:HH22	1.53	0.72
3:D:334:ARG:NH1	5:F:418:ARG:O	2.21	0.72
3:D:722:TYR:O	3:D:725:THR:OG1	2.07	0.72
1:A:105:VAL:O	1:A:125:ILE:N	2.21	0.72
2:C:98:ASP:OD2	2:C:102:SER:OG	2.03	0.72
3:D:931:ASP:N	3:D:935:ASN:O	2.22	0.72
1:A:192:LEU:HD21	1:A:194:LEU:HD12	1.70	0.72
2:C:658:ILE:HD11	2:C:688:PRO:HB3	1.69	0.72
3:D:524:LEU:HD11	3:D:528:VAL:HG21	1.70	0.72
5:F:415:GLN:CA	5:F:418:ARG:HG3	2.19	0.72
3:D:406:LEU:HB2	3:D:409:LYS:HB2	1.72	0.72
3:D:93:GLY:O	3:D:319:VAL:N	2.22	0.72
4:E:96:LEU:HA	4:E:99:ILE:HD12	1.71	0.72
1:A:172:LEU:HD23	1:A:199:LYS:HB3	1.72	0.71
3:D:36:TYR:OH	7:O:21:DT:OP1	2.07	0.71
3:D:50:LYS:HA	3:D:80:VAL:HG22	1.70	0.71
2:C:768:GLU:O	2:C:806:VAL:N	2.23	0.71
3:D:108:LYS:HG2	3:D:386:ARG:HG3	1.72	0.71
3:D:590:THR:HG23	3:D:630:ARG:HD2	1.71	0.71
1:A:13:VAL:HA	1:A:19:SER:HB2	1.72	0.71
1:A:107:ALA:HB3	1:A:121:PRO:HA	1.72	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:149:ALA:N	1:B:165:ASP:OD1	2.22	0.71
2:C:559:VAL:O	2:C:571:VAL:N	2.23	0.71
3:D:101:VAL:N	3:D:314:LEU:O	2.22	0.71
3:D:1065:THR:HG22	3:D:1074:GLU:HB3	1.72	0.71
2:C:705:GLY:N	2:C:708:THR:OG1	2.23	0.71
2:C:735:ILE:O	2:C:896:GLY:N	2.19	0.71
3:D:1090:LYS:HD2	3:D:1097:ARG:NE	2.06	0.71
1:A:172:LEU:HB2	1:A:199:LYS:HB3	1.70	0.71
3:D:670:ARG:NH1	3:D:685:ASN:OD1	2.21	0.71
3:D:1142:TYR:HB3	3:D:1147:VAL:HB	1.71	0.71
2:C:38:ARG:NH1	2:C:972:VAL:O	2.22	0.71
2:C:403:ARG:HB2	2:C:407:GLN:HE21	1.56	0.71
3:D:64:LYS:HD3	3:D:77:ARG:HH21	1.55	0.71
3:D:613:SER:N	3:D:617:GLU:OE1	2.24	0.71
2:C:761:ASP:OD2	2:C:866:ASN:ND2	2.24	0.71
1:B:75:GLU:HA	1:B:78:LEU:HD21	1.73	0.71
2:C:104:SER:N	2:C:140:ILE:O	2.21	0.71
3:D:412:ARG:HA	3:D:1227:GLN:HE21	1.56	0.71
1:B:12:ASP:N	1:B:20:GLN:O	2.23	0.71
2:C:1072:GLU:HA	2:C:1075:ALA:HB3	1.72	0.71
3:D:445:LYS:HA	3:D:516:LEU:HD22	1.73	0.71
1:A:46:ILE:HG22	1:A:170:PRO:HG2	1.71	0.71
2:C:889:HIS:NE2	2:C:933:GLU:OE1	2.21	0.70
3:D:1166:THR:HA	3:D:1180:LEU:HD23	1.71	0.70
1:A:10:SER:OG	1:A:22:VAL:O	2.07	0.70
2:C:780:VAL:HG23	2:C:781:LEU:HD12	1.72	0.70
2:C:1077:GLN:NE2	11:D:1404:C0L:O33	2.22	0.70
1:A:105:VAL:HG12	1:A:125:ILE:HD12	1.73	0.70
5:F:273:LEU:HD22	5:F:278:ARG:HB2	1.73	0.70
2:C:384:LEU:HA	2:C:387:ASN:HD22	1.55	0.70
2:C:435:GLN:O	2:C:438:GLN:NE2	2.21	0.70
2:C:563:ARG:HB3	2:C:567:GLU:H	1.56	0.70
6:J:90:SER:OG	6:J:92:GLU:OE1	2.08	0.70
2:C:1083:TYR:N	3:D:554:GLU:OE2	2.24	0.70
3:D:71:LYS:HD3	6:J:24:LEU:HD11	1.72	0.70
3:D:948:GLU:O	3:D:952:LEU:HG	1.91	0.70
3:D:1220:TRP:NE1	3:D:1243:ASP:HB2	2.06	0.70
6:J:28:GLN:NE2	6:J:46:ASP:O	2.25	0.70
3:D:222:ILE:HG13	3:D:244:LEU:HD12	1.73	0.70
2:C:174:VAL:N	2:C:438:GLN:O	2.22	0.70
2:C:1067:ARG:HB2	3:D:421:ARG:HA	1.71	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:134:TYR:O	3:D:235:ILE:N	2.24	0.70
3:D:1167:ILE:HG22	3:D:1177:PRO:HA	1.72	0.70
2:C:207:SER:OG	2:C:307:ASP:O	2.10	0.70
2:C:225:ARG:HE	2:C:230:ARG:HA	1.56	0.70
3:D:400:LYS:HG3	3:D:404:ASP:HB2	1.73	0.70
5:F:503:ILE:HD13	5:F:506:ILE:HD12	1.74	0.70
1:B:62:GLU:OE2	1:B:65:THR:OG1	2.08	0.70
2:C:802:LEU:N	2:C:837:LEU:O	2.17	0.70
3:D:566:LEU:HA	3:D:573:PRO:HA	1.73	0.70
2:C:715:LEU:N	2:C:1029:TYR:OH	2.25	0.69
3:D:579:LEU:O	3:D:583:THR:OG1	2.09	0.69
2:C:532:THR:N	2:C:535:GLU:OE2	2.21	0.69
2:C:644:ALA:O	2:C:699:GLY:N	2.25	0.69
3:D:391:VAL:H	3:D:399:LEU:HD12	1.57	0.69
3:D:505:HIS:CE1	3:D:507:LEU:HB2	2.28	0.69
3:D:1045:PRO:HB2	3:D:1111:LEU:HB2	1.74	0.69
5:F:438:PHE:CB	6:J:6:LEU:HD21	2.22	0.69
6:J:20:ARG:NH1	6:J:23:ASP:O	2.25	0.69
1:A:48:GLY:N	1:A:143:GLY:O	2.25	0.69
1:A:105:VAL:HB	1:A:126:ALA:H	1.56	0.69
2:C:1032:LYS:HE2	2:C:1036:LEU:HD21	1.73	0.69
2:C:493:ASN:HA	2:C:496:LEU:HD12	1.72	0.69
2:C:315:LYS:NZ	2:C:375:ASN:OD1	2.25	0.69
2:C:1067:ARG:HB2	3:D:421:ARG:CA	2.22	0.69
2:C:1128:LEU:CD1	11:D:1404:C0L:C03	2.69	0.69
3:D:420:LYS:NZ	11:D:1404:C0L:C23	2.55	0.69
3:D:825:THR:OG1	3:D:830:GLU:O	2.06	0.69
3:D:1045:PRO:HB2	3:D:1111:LEU:HD22	1.74	0.69
1:B:26:LEU:HB2	1:B:190:ASP:HB2	1.75	0.69
3:D:18:GLU:O	3:D:22:GLN:N	2.24	0.69
3:D:177:LEU:HD11	3:D:198:ARG:HA	1.74	0.69
1:B:134:LEU:HD11	1:B:136:VAL:HG23	1.74	0.69
2:C:1049:TYR:HA	2:C:1056:PRO:HA	1.75	0.69
3:D:445:LYS:NZ	3:D:518:GLU:OE2	2.23	0.69
5:F:317:PHE:CE2	5:F:321:ILE:HD11	2.28	0.69
1:A:48:GLY:O	1:A:143:GLY:N	2.21	0.69
1:B:52:THR:N	1:B:139:VAL:O	2.17	0.69
2:C:128:THR:HB	2:C:169:ASN:H	1.58	0.69
2:C:181:ARG:CA	2:C:376:ARG:HA	2.16	0.69
2:C:182:SER:O	2:C:186:TYR:OH	2.06	0.69
2:C:182:SER:N	2:C:375:ASN:O	2.25	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:507:ASN:HD22	2:C:511:PHE:HB2	1.58	0.69
2:C:802:LEU:HD21	2:C:839:VAL:HB	1.73	0.69
2:C:803:VAL:O	2:C:836:SER:OG	2.11	0.69
3:D:339:ASP:OD2	3:D:400:LYS:HB3	1.91	0.69
5:F:446:VAL:O	5:F:448:VAL:N	2.24	0.69
2:C:140:ILE:HG23	2:C:146:GLU:H	1.56	0.69
3:D:22:GLN:O	6:J:57:ARG:NH2	2.18	0.69
2:C:1119:GLU:OE2	3:D:89:ARG:NH1	2.26	0.69
3:D:406:LEU:HB2	3:D:409:LYS:HD3	1.74	0.69
3:D:433:GLY:N	3:D:524:LEU:O	2.25	0.69
3:D:1068:PRO:HD3	3:D:1074:GLU:HA	1.75	0.69
1:A:73:VAL:O	1:A:77:ILE:HG12	1.94	0.68
2:C:663:ASP:OD1	2:C:695:ARG:NH1	2.22	0.68
3:D:36:TYR:CE2	3:D:37:ARG:HB2	2.28	0.68
3:D:1052:ARG:HG3	3:D:1067:VAL:HG21	1.74	0.68
1:A:95:MET:HG3	1:A:138:LEU:HD13	1.75	0.68
2:C:1111:ASN:HB3	4:E:62:ARG:NH2	2.08	0.68
5:F:322:GLN:HA	5:F:325:ASN:HD22	1.55	0.68
2:C:108:SER:O	2:C:136:THR:N	2.27	0.68
2:C:987:GLY:O	2:C:990:SER:OG	2.09	0.68
3:D:147:GLU:O	3:D:151:LEU:HG	1.93	0.68
3:D:1049:VAL:HA	3:D:1107:VAL:HG13	1.75	0.68
3:D:1066:ILE:HB	3:D:1075:VAL:HB	1.74	0.68
2:C:473:ARG:NH1	2:C:494:ILE:O	2.20	0.68
3:D:144:ARG:O	3:D:148:LEU:HB2	1.93	0.68
2:C:133:LEU:O	2:C:154:MET:N	2.23	0.68
2:C:256:GLU:O	2:C:259:ARG:HG2	1.94	0.68
2:C:883:ASP:HB2	2:C:895:ILE:HD12	1.73	0.68
2:C:1043:ALA:HA	3:D:426:GLY:HA2	1.76	0.68
3:D:641:ARG:HB3	3:D:682:PRO:HA	1.76	0.68
3:D:1153:HIS:O	3:D:1157:ILE:HG12	1.94	0.68
5:F:342:LYS:N	7:O:29:DA:OP2	2.17	0.68
1:A:61:HIS:HA	1:A:162:ILE:HD11	1.76	0.68
2:C:651:GLU:OE2	2:C:667:ARG:NH1	2.27	0.68
5:F:500:ARG:NH2	8:P:20:DG:N7	2.42	0.68
1:A:36:ASN:HB2	2:C:1016:GLY:HA2	1.75	0.68
1:B:30:PHE:O	1:B:33:THR:OG1	2.10	0.68
2:C:313:ARG:HD3	2:C:331:SER:HA	1.74	0.68
2:C:380:THR:HG23	2:C:383:GLU:H	1.58	0.68
3:D:111:PRO:O	3:D:113:ARG:NH1	2.25	0.68
3:D:384:ASN:HD21	3:D:391:VAL:HG23	1.58	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:898:VAL:HA	3:D:960:VAL:O	1.94	0.68
5:F:256:GLY:HA2	5:F:284:ILE:HG22	1.76	0.68
1:B:51:VAL:HA	1:B:140:VAL:HG22	1.76	0.68
3:D:64:LYS:HB2	3:D:77:ARG:NH2	2.08	0.68
3:D:849:TYR:O	3:D:853:THR:HG23	1.94	0.68
5:F:352:ARG:HA	5:F:355:ILE:HD12	1.75	0.68
2:C:1050:SER:O	5:F:441:ASP:HB2	1.93	0.68
3:D:95:ILE:N	3:D:317:VAL:O	2.27	0.68
3:D:95:ILE:O	3:D:317:VAL:N	2.24	0.68
3:D:277:LEU:HD11	3:D:295:ARG:HH12	1.58	0.68
1:B:104:GLU:HA	1:B:127:THR:HA	1.75	0.68
2:C:1011:PHE:HE1	2:C:1018:PRO:HB3	1.58	0.68
3:D:35:ASN:HB3	3:D:38:THR:HG22	1.76	0.68
2:C:648:GLY:HA2	2:C:663:ASP:OD1	1.93	0.67
2:C:1095:ASP:O	2:C:1099:ARG:HG3	1.94	0.67
3:D:367:VAL:HG12	3:D:371:LYS:HE3	1.76	0.67
4:E:33:LEU:O	4:E:36:THR:HG22	1.94	0.67
2:C:403:ARG:HA	2:C:406:THR:OG1	1.94	0.67
2:C:756:GLU:HB2	2:C:870:ARG:HG2	1.75	0.67
2:C:1068:PHE:CB	3:D:422:VAL:HG21	2.20	0.67
2:C:674:LYS:HZ2	2:C:686:GLN:H	1.42	0.67
2:C:725:PRO:HA	2:C:730:ASN:HD21	1.57	0.67
2:C:769:ILE:HA	2:C:805:LYS:HA	1.75	0.67
2:C:827:GLU:OE2	5:F:524:ARG:NH2	2.27	0.67
2:C:1124:LEU:HD21	11:D:1404:C0L:C05	2.24	0.67
2:C:661:MET:HA	2:C:667:ARG:HG2	1.76	0.67
3:D:49:GLU:HG2	3:D:88:ARG:NH1	2.10	0.67
3:D:826:ASN:HD21	3:D:828:LYS:HD2	1.58	0.67
4:E:70:GLN:HE22	4:E:76:LEU:HB2	1.59	0.67
5:F:261:GLN:O	5:F:265:GLU:HG2	1.95	0.67
1:A:15:THR:OG1	1:A:17:ASN:OD1	2.11	0.67
3:D:144:ARG:NH1	3:D:226:PHE:O	2.25	0.67
3:D:939:GLU:OE1	3:D:942:GLN:NE2	2.27	0.67
2:C:557:PRO:O	2:C:573:SER:N	2.28	0.67
3:D:925:LEU:HG	3:D:944:LEU:HD11	1.77	0.67
5:F:439:ILE:N	6:J:6:LEU:HD12	2.01	0.67
5:F:439:ILE:CB	6:J:6:LEU:HD12	2.25	0.67
1:A:169:SER:O	1:A:199:LYS:HD3	1.94	0.67
2:C:395:ARG:HA	2:C:398:ARG:HE	1.60	0.67
2:C:724:MET:O	2:C:730:ASN:ND2	2.28	0.67
2:C:192:ASP:OD1	2:C:194:SER:OG	2.12	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:956:ALA:HA	2:C:959:LEU:CD1	2.25	0.67
2:C:1072:GLU:OE2	3:D:499:ASN:ND2	2.24	0.67
5:F:242:ASN:OD1	5:F:245:GLU:HG2	1.95	0.67
1:A:223:ARG:HD3	1:B:216:VAL:HG11	1.77	0.66
2:C:604:ARG:NH1	2:C:607:MET:SD	2.68	0.66
2:C:1094:ASP:HB3	2:C:1119:GLU:H	1.60	0.66
6:J:32:TYR:CD1	6:J:64:LEU:HA	2.29	0.66
1:B:88:GLU:N	1:B:89:GLU:OE1	2.28	0.66
2:C:123:LYS:HA	2:C:170:GLY:HA2	1.76	0.66
2:C:140:ILE:HG12	2:C:147:ILE:HA	1.77	0.66
2:C:207:SER:H	2:C:308:LEU:HA	1.58	0.66
2:C:259:ARG:O	2:C:263:GLU:HG2	1.95	0.66
2:C:768:GLU:HB3	2:C:806:VAL:HG13	1.77	0.66
2:C:944:TRP:HB2	2:C:991:CYS:SG	2.35	0.66
3:D:742:LYS:HG2	3:D:746:LEU:HD11	1.76	0.66
3:D:905:ALA:N	3:D:909:THR:O	2.27	0.66
1:A:7:PRO:HB3	1:A:25:PRO:O	1.94	0.66
2:C:347:ARG:HA	2:C:350:GLU:HB3	1.78	0.66
2:C:677:ARG:NE	2:C:752:ILE:O	2.28	0.66
2:C:1067:ARG:CB	3:D:421:ARG:HG3	2.22	0.66
3:D:222:ILE:HB	3:D:240:LEU:HD11	1.77	0.66
5:F:252:ARG:CZ	5:F:291:ALA:HB2	2.24	0.66
5:F:264:THR:O	5:F:267:SER:OG	2.08	0.66
5:F:296:LEU:O	5:F:300:LEU:HG	1.95	0.66
2:C:243:TRP:HA	2:C:247:GLN:OE1	1.95	0.66
2:C:558:ARG:NE	2:C:570:TYR:O	2.27	0.66
2:C:656:ASP:O	2:C:672:MET:N	2.26	0.66
2:C:1136:GLU:OE2	3:D:11:ARG:NH2	2.28	0.66
3:D:328:VAL:O	3:D:336:ALA:N	2.19	0.66
3:D:1207:LEU:HD22	3:D:1208:MET:H	1.58	0.66
2:C:130:ALA:HA	2:C:158:PRO:HA	1.77	0.66
2:C:568:VAL:HG21	3:D:847:LEU:HD23	1.76	0.66
3:D:334:ARG:CZ	5:F:419:GLU:O	2.44	0.66
3:D:557:ILE:HD12	4:E:54:VAL:HG22	1.76	0.66
3:D:633:ILE:HD12	3:D:635:VAL:HG13	1.78	0.66
3:D:1088:VAL:HB	3:D:1098:VAL:HG23	1.77	0.66
5:F:488:THR:N	5:F:491:GLU:OE1	2.27	0.66
1:B:97:LEU:HD13	1:B:110:ILE:HA	1.76	0.66
2:C:470:LEU:CD2	2:C:473:ARG:HD2	2.25	0.66
2:C:488:THR:HG22	2:C:606:LEU:HD11	1.77	0.66
2:C:356:THR:OG1	2:C:360:GLY:O	2.10	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:561:VAL:O	2:C:568:VAL:HA	1.96	0.66
2:C:820:LEU:HD13	5:F:479:PHE:HE2	1.60	0.66
5:F:283:TRP:CE3	6:J:105:ILE:HD12	2.30	0.66
5:F:302:LEU:N	7:O:31:DT:O2	2.25	0.66
1:A:173:LYS:HB3	1:A:197:GLU:OE1	1.96	0.66
2:C:441:ASP:OD1	2:C:680:HIS:NE2	2.28	0.66
3:D:142:GLU:OE1	3:D:142:GLU:N	2.28	0.66
2:C:777:SER:O	2:C:781:LEU:HD13	1.96	0.66
2:C:1051:MET:SD	5:F:441:ASP:OD2	2.54	0.66
5:F:478:ARG:O	5:F:486:PRO:HB3	1.96	0.66
1:A:98:ARG:HG3	1:A:135:GLU:HA	1.77	0.66
2:C:822:ARG:O	2:C:826:GLY:N	2.29	0.66
2:C:955:TRP:HA	2:C:958:ARG:HH12	1.61	0.66
3:D:207:GLN:O	3:D:211:ARG:HG2	1.96	0.66
3:D:913:ASP:HB3	3:D:916:ILE:HD11	1.78	0.66
3:D:1220:TRP:HB3	3:D:1241:ARG:HH21	1.61	0.66
2:C:861:LEU:HD23	2:C:865:VAL:HG12	1.78	0.65
5:F:233:LYS:O	5:F:237:LYS:HG3	1.96	0.65
5:F:489:LEU:HD22	5:F:503:ILE:HB	1.77	0.65
1:B:3:ILE:CB	1:B:234:ILE:HA	2.26	0.65
2:C:891:ASN:ND2	2:C:930:GLN:OE1	2.22	0.65
3:D:61:TYR:HB3	3:D:78:CYS:HB2	1.78	0.65
3:D:274:ALA:O	3:D:278:ARG:HG2	1.96	0.65
3:D:638:THR:O	3:D:657:GLN:O	2.14	0.65
5:F:217:LYS:O	5:F:220:GLU:HG3	1.97	0.65
1:B:73:VAL:HG12	1:B:77:ILE:HD11	1.78	0.65
2:C:1012:ASP:HB3	2:C:1015:SER:OG	1.95	0.65
3:D:277:LEU:HB2	3:D:296:LEU:HD13	1.79	0.65
5:F:336:ASP:OD1	5:F:338:THR:N	2.29	0.65
1:A:43:LEU:HD21	2:C:901:VAL:HG13	1.79	0.65
2:C:646:GLU:HG2	2:C:647:SER:O	1.95	0.65
3:D:139:VAL:HG13	3:D:141:GLU:HG2	1.78	0.65
1:A:52:THR:N	1:A:139:VAL:O	2.23	0.65
2:C:96:ILE:O	2:C:105:LEU:N	2.23	0.65
3:D:260:SER:O	3:D:264:LEU:HG	1.97	0.65
3:D:1068:PRO:HD2	3:D:1074:GLU:HG2	1.78	0.65
5:F:440:GLU:O	6:J:7:ARG:HB2	1.96	0.65
5:F:478:ARG:NH1	5:F:488:THR:HA	2.12	0.65
3:D:57:ASP:HB3	3:D:58:TRP:CE3	2.32	0.65
3:D:353:ARG:HD3	5:F:322:GLN:HB3	1.78	0.65
3:D:641:ARG:NH1	3:D:680:GLY:O	2.26	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:642:VAL:O	2:C:702:ILE:HG22	1.96	0.65
3:D:927:THR:CG2	3:D:961:LYS:HB3	2.27	0.65
1:A:102:PRO:HD3	1:A:130:ASP:HA	1.78	0.65
2:C:51:PRO:O	2:C:633:ARG:NH2	2.29	0.65
2:C:786:GLU:OE1	2:C:786:GLU:N	2.30	0.65
3:D:1272:VAL:HG22	4:E:106:HIS:HB2	1.78	0.65
5:F:335:PHE:CE1	5:F:343:PHE:HA	2.32	0.65
7:O:9:DA:H1'	7:O:10:DA:H5'	1.78	0.65
8:P:1:DA:H1'	8:P:2:DG:O4'	1.97	0.65
2:C:822:ARG:HD3	2:C:827:GLU:HB2	1.77	0.65
3:D:206:ARG:HB2	3:D:209:ARG:NH2	2.11	0.65
3:D:641:ARG:O	3:D:683:PHE:N	2.30	0.65
3:D:713:VAL:HA	3:D:716:LEU:HD12	1.78	0.65
5:F:316:ALA:O	5:F:320:LEU:HG	1.97	0.65
1:B:213:LYS:NZ	1:B:217:GLU:OE2	2.24	0.65
2:C:189:GLU:HA	2:C:199:LEU:O	1.97	0.65
2:C:208:ARG:NH2	2:C:304:LYS:O	2.25	0.65
2:C:691:ASP:N	2:C:694:ASP:OD2	2.28	0.65
2:C:1096:THR:HA	2:C:1099:ARG:NH2	2.11	0.65
3:D:329:GLN:NE2	6:J:9:SER:OG	2.22	0.65
3:D:921:TYR:HE1	3:D:949:ILE:HG13	1.62	0.65
5:F:440:GLU:O	6:J:7:ARG:CB	2.45	0.65
5:F:478:ARG:HH11	5:F:488:THR:HA	1.62	0.65
2:C:517:ARG:O	2:C:579:MET:N	2.16	0.64
3:D:931:ASP:HB3	3:D:935:ASN:OD1	1.97	0.64
3:D:1147:VAL:HG12	3:D:1149:ILE:HG12	1.77	0.64
2:C:103:MET:HB2	2:C:139:PHE:CZ	2.33	0.64
2:C:238:LEU:HB3	2:C:243:TRP:HB2	1.79	0.64
3:D:699:ASP:OD1	3:D:703:ARG:NH1	2.30	0.64
3:D:1211:THR:O	3:D:1215:LEU:HG	1.97	0.64
1:B:226:ASN:HD21	1:B:228:GLU:HB2	1.60	0.64
2:C:48:LEU:HD22	2:C:528:ILE:HD13	1.78	0.64
2:C:1073:CYS:C	2:C:1075:ALA:N	2.48	0.64
3:D:821:LYS:HB3	3:D:836:VAL:CG1	2.28	0.64
3:D:1100:SER:N	3:D:1103:ASP:OD2	2.30	0.64
5:F:407:PRO:O	5:F:411:LEU:HG	1.97	0.64
5:F:414:GLN:C	5:F:418:ARG:HG3	2.17	0.64
1:B:172:LEU:HD13	1:B:199:LYS:N	2.11	0.64
1:B:182:ARG:HD3	1:B:185:GLN:HB3	1.79	0.64
2:C:604:ARG:HD2	2:C:607:MET:SD	2.37	0.64
3:D:27:GLU:OE2	3:D:96:GLU:N	2.20	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:223:TRP:O	3:D:227:THR:HG23	1.96	0.64
3:D:1265:ASN:OD1	3:D:1268:ARG:NH2	2.22	0.64
1:A:157:ALA:CB	1:A:161:ARG:HG3	2.26	0.64
3:D:58:TRP:CD2	3:D:68:VAL:HG22	2.33	0.64
3:D:148:LEU:HA	3:D:151:LEU:HD12	1.78	0.64
3:D:510:GLN:OE1	3:D:561:SER:HA	1.97	0.64
3:D:891:CYS:HB3	3:D:970:THR:HG23	1.79	0.64
5:F:467:LEU:HB3	5:F:471:GLU:OE1	1.97	0.64
6:J:55:LEU:HA	6:J:61:GLU:HA	1.80	0.64
6:J:64:LEU:HD23	6:J:66:GLU:H	1.63	0.64
1:B:214:THR:HA	1:B:217:GLU:OE1	1.97	0.64
2:C:347:ARG:NH2	2:C:352:GLN:OE1	2.31	0.64
3:D:64:LYS:HB2	3:D:77:ARG:HH21	1.63	0.64
3:D:383:ASP:HA	3:D:401:SER:OG	1.98	0.64
3:D:1068:PRO:CD	3:D:1074:GLU:HG2	2.28	0.64
3:D:1276:GLU:HG2	3:D:1279:ARG:HE	1.62	0.64
5:F:258:TYR:CG	6:J:94:LEU:HB3	2.32	0.64
1:B:147:VAL:HG12	1:B:166:SER:HB2	1.78	0.64
2:C:200:HIS:HB2	2:C:216:VAL:HG21	1.79	0.64
2:C:239:LYS:HB3	2:C:270:THR:HA	1.80	0.64
2:C:540:VAL:HG13	2:C:577:ASP:H	1.63	0.64
3:D:999:ALA:HB1	3:D:1153:HIS:HB3	1.80	0.64
6:J:106:ARG:HA	6:J:110:ARG:HG2	1.80	0.64
2:C:245:SER:OG	2:C:262:LEU:HD11	1.97	0.64
2:C:403:ARG:HB2	2:C:407:GLN:HG2	1.79	0.64
2:C:414:PRO:HA	2:C:417:LEU:HB2	1.80	0.64
3:D:603:SER:HA	3:D:606:HIS:O	1.97	0.64
2:C:186:TYR:O	2:C:202:VAL:HA	1.97	0.64
2:C:298:ASN:HA	2:C:302:LYS:CB	2.26	0.64
2:C:442:GLN:O	2:C:678:SER:OG	2.16	0.64
2:C:707:CYS:O	2:C:714:ALA:N	2.31	0.64
2:C:767:GLU:HG2	2:C:807:THR:HG21	1.80	0.64
3:D:52:PHE:O	3:D:91:ARG:HD2	1.98	0.64
3:D:75:CYS:SG	3:D:78:CYS:N	2.61	0.64
3:D:1128:ARG:O	3:D:1132:ILE:HG12	1.98	0.64
2:C:133:LEU:CB	2:C:154:MET:HB3	2.27	0.64
2:C:240:ALA:HA	2:C:274:LEU:CD2	2.28	0.64
3:D:75:CYS:HB3	3:D:78:CYS:SG	2.37	0.64
3:D:505:HIS:HE1	3:D:507:LEU:HB2	1.61	0.64
3:D:802:ILE:HG23	3:D:807:ALA:HB3	1.80	0.64
1:B:108:GLY:N	1:B:121:PRO:O	2.28	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:485:PRO:O	3:D:857:ARG:NH2	2.31	0.63
2:C:1134:ASN:HB2	3:D:15:ALA:HA	1.80	0.63
3:D:1139:GLN:O	3:D:1143:ARG:HG3	1.98	0.63
3:D:1181:ILE:HD12	3:D:1185:GLU:HG2	1.81	0.63
1:A:76:ILE:O	1:A:80:LEU:HG	1.98	0.63
1:B:97:LEU:N	1:B:136:VAL:O	2.29	0.63
2:C:229:LYS:HZ2	2:C:281:LEU:HD12	1.63	0.63
3:D:277:LEU:HD23	3:D:296:LEU:HB2	1.80	0.63
1:A:15:THR:OG1	1:A:18:ARG:HG3	1.98	0.63
1:A:43:LEU:HD23	2:C:902:GLU:CB	2.28	0.63
1:B:171:VAL:HA	1:B:198:THR:HG22	1.79	0.63
2:C:132:PRO:HB3	2:C:153:PHE:HE1	1.63	0.63
2:C:139:PHE:O	2:C:148:LYS:N	2.30	0.63
2:C:628:THR:N	2:C:631:GLU:OE2	2.28	0.63
2:C:737:LEU:HD12	2:C:895:ILE:HG23	1.79	0.63
4:E:39:PRO:O	4:E:43:LEU:HG	1.98	0.63
1:B:79:ASN:CB	1:B:125:ILE:HG13	2.28	0.63
2:C:274:LEU:HG	2:C:292:ALA:HB1	1.80	0.63
2:C:610:ASN:O	2:C:613:ARG:HG2	1.99	0.63
2:C:809:LYS:HB3	2:C:831:GLU:O	1.98	0.63
2:C:1048:PRO:O	2:C:1056:PRO:HA	1.97	0.63
2:C:1109:GLY:HA3	3:D:458:LYS:HE3	1.79	0.63
3:D:35:ASN:CB	3:D:38:THR:HG22	2.28	0.63
3:D:173:ARG:NH1	3:D:204:GLU:OE1	2.31	0.63
3:D:277:LEU:CB	3:D:296:LEU:HD13	2.29	0.63
3:D:439:HIS:CE1	4:E:33:LEU:HD11	2.34	0.63
3:D:459:ARG:HA	3:D:462:ASP:OD2	1.97	0.63
3:D:708:VAL:HG22	4:E:29:TYR:HB2	1.80	0.63
3:D:939:GLU:HG2	3:D:940:ARG:O	1.97	0.63
3:D:1052:ARG:O	3:D:1067:VAL:HB	1.98	0.63
1:B:14:LEU:HB2	1:B:18:ARG:O	1.99	0.63
2:C:261:THR:O	2:C:265:ASP:N	2.32	0.63
2:C:353:THR:HG23	2:C:354:THR:HG22	1.80	0.63
2:C:1003:ASP:OD1	2:C:1007:LYS:N	2.30	0.63
2:C:1124:LEU:CD2	11:D:1404:C0L:C02	2.77	0.63
3:D:493:GLU:HA	4:E:35:ILE:HD13	1.79	0.63
3:D:982:SER:HB3	3:D:985:THR:OG1	1.99	0.63
1:A:24:GLU:HB2	1:A:25:PRO:HA	1.81	0.63
1:A:182:ARG:HA	1:A:188:ASP:HB3	1.81	0.63
3:D:30:LYS:HD2	3:D:43:LYS:O	1.99	0.63
3:D:106:TYR:HB3	3:D:114:LEU:HG	1.81	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1249:LYS:CD	11:D:1404:C0L:N31	2.61	0.63
5:F:440:GLU:O	6:J:8:GLY:N	2.31	0.63
8:P:17:DT:H2"	8:P:18:DT:H71	1.80	0.63
1:B:171:VAL:HA	1:B:198:THR:CG2	2.29	0.63
2:C:443:ASN:ND2	2:C:613:ARG:O	2.28	0.63
2:C:465:ARG:NH2	2:C:492:PRO:O	2.29	0.63
2:C:563:ARG:NH2	2:C:569:GLU:OE1	2.30	0.63
2:C:770:THR:N	2:C:804:GLY:O	2.28	0.63
3:D:244:LEU:O	3:D:247:ARG:N	2.30	0.63
3:D:411:GLY:HA2	3:D:1228:GLU:H	1.64	0.63
3:D:670:ARG:HD3	3:D:685:ASN:HA	1.81	0.63
3:D:803:VAL:HG22	3:D:808:THR:O	1.99	0.63
3:D:894:GLU:O	3:D:961:LYS:NZ	2.20	0.63
6:J:109:ARG:HH12	6:J:110:ARG:HH21	1.46	0.63
2:C:469:GLY:O	2:C:472:VAL:HG22	1.98	0.63
2:C:716:GLY:HA3	2:C:1030:ILE:O	1.99	0.63
5:F:334:LYS:HD3	5:F:350:TRP:CZ2	2.33	0.63
5:F:378:LYS:O	5:F:382:ILE:HG12	1.97	0.63
5:F:440:GLU:HB3	6:J:7:ARG:HB3	1.80	0.63
6:J:52:GLY:CA	6:J:64:LEU:HB2	2.28	0.63
2:C:771:ARG:O	2:C:773:ILE:HG12	1.98	0.63
2:C:831:GLU:OE1	2:C:831:GLU:N	2.32	0.63
3:D:190:LYS:NZ	3:D:192:ASP:HB3	2.13	0.63
3:D:457:MET:HE3	3:D:473:LYS:N	2.14	0.63
5:F:228:VAL:O	5:F:232:LEU:HG	1.99	0.63
5:F:355:ILE:O	5:F:359:MET:HG3	1.99	0.63
1:A:129:ASN:OD1	1:A:132:GLY:N	2.32	0.62
2:C:144:THR:HG23	2:C:146:GLU:OE1	1.99	0.62
2:C:451:HIS:HA	2:C:454:ARG:NH2	2.13	0.62
2:C:476:HIS:ND1	2:C:477:PRO:HD2	2.14	0.62
2:C:507:ASN:HB3	2:C:511:PHE:N	2.10	0.62
2:C:1054:GLN:O	2:C:1055:GLN:HG2	1.97	0.62
3:D:737:LEU:HB2	3:D:793:TYR:CE1	2.34	0.62
3:D:1251:ASN:HA	3:D:1254:ILE:HG12	1.79	0.62
3:D:1274:PRO:HA	4:E:104:LEU:HD23	1.79	0.62
3:D:174:ALA:O	3:D:178:GLU:HG3	1.99	0.62
3:D:1273:GLN:O	4:E:105:GLU:HG2	1.99	0.62
2:C:958:ARG:HD3	2:C:958:ARG:H	1.64	0.62
2:C:1057:LEU:HD21	2:C:1062:GLN:HE21	1.64	0.62
3:D:228:LYS:O	3:D:233:GLN:NE2	2.20	0.62
3:D:1036:GLU:HB3	3:D:1038:ARG:HG2	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:67:TYR:CZ	4:E:71:LEU:HD21	2.33	0.62
5:F:446:VAL:HG21	5:F:449:ASP:OD2	1.98	0.62
5:F:501:GLU:OE1	5:F:504:ARG:NE	2.18	0.62
1:A:89:GLU:OE1	1:A:89:GLU:N	2.33	0.62
1:A:142:ARG:NH2	1:B:230:GLU:OE1	2.33	0.62
1:B:9:LEU:HD13	1:B:23:ILE:HD11	1.79	0.62
2:C:514:THR:N	2:C:531:LEU:O	2.24	0.62
2:C:622:GLU:H	2:C:717:LYS:HE2	1.64	0.62
2:C:660:VAL:HG22	2:C:668:ARG:O	2.00	0.62
3:D:60:CYS:HB2	3:D:78:CYS:SG	2.39	0.62
3:D:103:HIS:HB3	3:D:106:TYR:HD2	1.64	0.62
3:D:435:GLN:HG2	3:D:436:LEU:HD23	1.80	0.62
3:D:696:ILE:O	3:D:700:LEU:HG	1.99	0.62
3:D:968:CYS:SG	3:D:975:CYS:N	2.69	0.62
3:D:1062:TYR:HB2	3:D:1080:ILE:CG2	2.29	0.62
2:C:55:ASP:HA	2:C:58:THR:OG1	2.00	0.62
2:C:781:LEU:HA	2:C:784:LEU:HD13	1.82	0.62
4:E:83:VAL:HG13	4:E:97:ARG:HH21	1.65	0.62
1:A:181:THR:HG21	1:A:189:PHE:CE2	2.34	0.62
1:B:7:PRO:HB3	1:B:25:PRO:O	1.99	0.62
2:C:624:PRO:HA	2:C:718:ASN:HD21	1.64	0.62
2:C:927:ASN:O	2:C:930:GLN:HG2	2.00	0.62
3:D:268:PHE:HE2	3:D:270:ILE:HG22	1.64	0.62
3:D:823:LEU:HD23	3:D:835:PRO:HB3	1.79	0.62
3:D:889:HIS:O	3:D:977:THR:HG23	1.99	0.62
3:D:1009:GLN:O	3:D:1145:GLN:NE2	2.32	0.62
3:D:1270:ILE:HG22	3:D:1272:VAL:HG23	1.80	0.62
1:A:170:PRO:O	1:A:199:LYS:HG2	2.00	0.62
2:C:133:LEU:HB2	2:C:154:MET:HB3	1.79	0.62
2:C:200:HIS:HB2	2:C:216:VAL:CG2	2.29	0.62
2:C:549:ASP:HB3	2:C:553:ARG:CB	2.30	0.62
3:D:1117:ASP:OD2	3:D:1119:HIS:HB2	2.00	0.62
3:D:1189:GLU:OE2	3:D:1192:ARG:NH2	2.28	0.62
5:F:329:ILE:HG22	5:F:333:GLU:OE2	2.00	0.62
5:F:460:LEU:HD13	5:F:464:LEU:HD13	1.79	0.62
5:F:488:THR:HB	8:P:20:DG:OP2	1.98	0.62
1:A:12:ASP:O	1:A:20:GLN:N	2.24	0.62
2:C:295:LEU:O	2:C:299:LEU:HG	2.00	0.62
2:C:507:ASN:ND2	2:C:509:PHE:HB2	2.15	0.62
2:C:631:GLU:OE1	2:C:631:GLU:N	2.31	0.62
2:C:740:ARG:NH1	2:C:744:GLU:OE1	2.33	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:815:THR:HB	2:C:817:GLU:OE1	2.00	0.62
3:D:83:THR:HG23	3:D:84:ARG:O	1.99	0.62
3:D:1162:LEU:HD23	3:D:1207:LEU:HD23	1.82	0.62
6:J:34:THR:CG2	6:J:38:GLU:HB2	2.30	0.62
1:A:52:THR:HB	1:A:139:VAL:HG12	1.81	0.62
2:C:41:PHE:CD2	2:C:980:ALA:HB2	2.35	0.62
3:D:151:LEU:HD22	3:D:248:TYR:CE1	2.33	0.62
5:F:455:LEU:HA	5:F:458:ASP:OD2	2.00	0.62
1:A:181:THR:OG1	1:A:189:PHE:N	2.28	0.62
2:C:559:VAL:N	2:C:571:VAL:O	2.31	0.62
2:C:650:ILE:CG2	2:C:692:ALA:HA	2.30	0.62
2:C:855:ARG:HE	2:C:861:LEU:HB2	1.65	0.62
2:C:1137:VAL:O	3:D:-1:GLY:N	2.26	0.62
2:C:1139:SER:HA	3:D:8:ASP:H	1.65	0.62
3:D:245:VAL:HA	3:D:252:PHE:HZ	1.65	0.62
3:D:885:ILE:HG22	3:D:994:ALA:CB	2.30	0.62
7:O:2:DC:H2'	7:O:3:DT:C7	2.30	0.62
1:B:3:ILE:HD13	1:B:234:ILE:HG12	1.81	0.61
1:B:18:ARG:NH1	1:B:197:GLU:OE1	2.27	0.61
2:C:140:ILE:HA	2:C:146:GLU:O	1.99	0.61
2:C:652:GLU:HA	2:C:692:ALA:CB	2.30	0.61
2:C:777:SER:HB3	2:C:780:VAL:HG22	1.81	0.61
2:C:1074:TRP:CH2	3:D:875:ARG:HA	2.35	0.61
3:D:49:GLU:OE1	3:D:54:PRO:HA	2.00	0.61
3:D:162:VAL:HG11	3:D:216:LEU:HG	1.82	0.61
3:D:384:ASN:H	3:D:401:SER:HB3	1.65	0.61
3:D:826:ASN:HB3	3:D:830:GLU:N	2.14	0.61
3:D:834:ARG:HB3	3:D:835:PRO:HA	1.82	0.61
3:D:1191:ARG:O	3:D:1194:VAL:HG22	2.00	0.61
5:F:446:VAL:CG1	5:F:449:ASP:CG	2.65	0.61
1:A:11:GLU:HG2	1:A:21:PHE:CE1	2.35	0.61
1:B:30:PHE:HA	1:B:33:THR:CG2	2.29	0.61
2:C:140:ILE:HG23	2:C:146:GLU:N	2.15	0.61
2:C:369:ASP:O	2:C:375:ASN:ND2	2.27	0.61
2:C:855:ARG:NH1	2:C:862:PRO:O	2.32	0.61
3:D:212:ALA:O	3:D:215:GLU:HG2	2.00	0.61
3:D:328:VAL:O	3:D:335:PHE:HB3	2.01	0.61
8:P:11:DA:H4'	8:P:12:DA:OP1	2.00	0.61
1:B:1:MET:HB2	1:B:232:ILE:HG12	1.82	0.61
1:B:39:ARG:HG3	1:B:174:VAL:CG1	2.31	0.61
2:C:541:VAL:HA	2:C:578:TYR:O	2.00	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:652:GLU:HA	2:C:692:ALA:HB1	1.82	0.61
3:D:600:GLN:HE22	3:D:602:ALA:HB2	1.66	0.61
5:F:296:LEU:CD2	5:F:332:VAL:HG11	2.30	0.61
5:F:415:GLN:O	5:F:418:ARG:CB	2.48	0.61
2:C:168:ILE:O	2:C:171:THR:OG1	2.04	0.61
2:C:853:PHE:O	2:C:868:LEU:N	2.28	0.61
2:C:952:VAL:HG12	2:C:953:PRO:O	2.00	0.61
3:D:874:THR:O	3:D:878:VAL:HG23	2.00	0.61
3:D:893:THR:O	3:D:940:ARG:NH1	2.34	0.61
1:A:40:ARG:NH2	1:B:32:TYR:HB2	2.14	0.61
1:B:3:ILE:HG23	1:B:5:GLN:H	1.65	0.61
2:C:221:THR:HA	2:C:261:THR:CG2	2.30	0.61
2:C:272:GLU:HA	2:C:275:LEU:HD21	1.81	0.61
2:C:1037:VAL:HG11	3:D:520:LYS:HB2	1.83	0.61
3:D:344:TYR:O	3:D:348:ILE:HG12	2.00	0.61
3:D:354:LEU:HD13	3:D:370:GLU:HB3	1.82	0.61
3:D:596:THR:HB	3:D:628:SER:H	1.63	0.61
3:D:866:ARG:HD2	3:D:1010:LEU:O	1.99	0.61
3:D:1266:ARG:HA	4:E:109:GLY:O	2.00	0.61
1:A:214:THR:O	1:A:217:GLU:HB2	2.00	0.61
1:B:1:MET:N	1:B:231:GLY:O	2.34	0.61
2:C:89:VAL:HA	2:C:92:GLU:OE2	2.01	0.61
2:C:557:PRO:HA	2:C:573:SER:OG	2.01	0.61
2:C:1071:MET:CE	3:D:502:PRO:HA	2.29	0.61
3:D:239:ASN:HD21	3:D:242:ARG:HH21	1.49	0.61
5:F:241:LEU:HD11	5:F:294:HIS:CE1	2.35	0.61
5:F:382:ILE:HA	5:F:385:GLU:OE1	2.01	0.61
1:A:14:LEU:HB2	1:A:19:SER:HA	1.83	0.61
1:B:218:LEU:HD12	1:B:221:LEU:HD12	1.82	0.61
2:C:212:LEU:HA	2:C:226:ILE:HA	1.82	0.61
2:C:675:PHE:N	2:C:685:ASN:OD1	2.34	0.61
2:C:759:ALA:HB3	2:C:867:GLU:N	2.15	0.61
2:C:1007:LYS:HB3	2:C:1022:PRO:HB2	1.81	0.61
1:B:168:TYR:O	1:B:170:PRO:HD3	2.01	0.61
2:C:344:TYR:OH	2:C:366:GLU:N	2.28	0.61
3:D:222:ILE:CB	3:D:240:LEU:HD11	2.30	0.61
3:D:412:ARG:HA	3:D:1227:GLN:NE2	2.15	0.61
3:D:1062:TYR:HB2	3:D:1080:ILE:CB	2.30	0.61
2:C:224:VAL:O	2:C:232:GLN:HB2	2.00	0.61
2:C:310:ARG:HE	2:C:328:ILE:HB	1.64	0.61
3:D:136:ILE:HG13	3:D:229:LEU:HD11	1.81	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:443:LEU:HD12	3:D:444:PRO:CD	2.26	0.61
4:E:42:GLU:HA	4:E:45:ASP:OD2	2.01	0.61
4:E:60:ARG:NH2	4:E:80:GLY:HA3	2.16	0.61
1:B:84:VAL:HG22	1:B:119:HIS:CD2	2.35	0.61
1:B:84:VAL:CG1	1:B:119:HIS:HB2	2.30	0.61
1:B:113:PRO:O	1:B:116:VAL:HG22	2.00	0.61
2:C:233:PRO:HG2	2:C:236:VAL:CG2	2.31	0.61
2:C:429:GLU:O	2:C:433:THR:OG1	2.18	0.61
2:C:774:PRO:HD2	2:C:834:ASP:OD1	2.00	0.61
2:C:855:ARG:N	2:C:866:ASN:O	2.27	0.61
3:D:30:LYS:CD	3:D:44:ASP:HB2	2.31	0.61
3:D:127:LYS:HA	3:D:132:ALA:HB3	1.82	0.61
3:D:350:ARG:NH1	3:D:373:MET:O	2.34	0.61
3:D:448:ALA:HA	3:D:451:LEU:HB2	1.83	0.61
3:D:847:LEU:O	3:D:851:ILE:HG12	2.00	0.61
3:D:1088:VAL:HG23	3:D:1098:VAL:N	2.16	0.61
4:E:70:GLN:NE2	4:E:76:LEU:HB2	2.14	0.61
5:F:415:GLN:CB	5:F:418:ARG:CD	2.70	0.61
5:F:499:THR:O	5:F:503:ILE:HG12	2.01	0.61
2:C:320:LEU:HB2	2:C:322:LEU:HG	1.83	0.60
2:C:352:GLN:HB3	2:C:365:VAL:HG21	1.83	0.60
2:C:854:SER:N	2:C:859:ASP:OD2	2.26	0.60
2:C:884:LYS:HE2	2:C:892:LYS:HD2	1.82	0.60
2:C:944:TRP:O	2:C:966:ALA:N	2.31	0.60
2:C:1038:ASP:HA	2:C:1041:ILE:HG22	1.83	0.60
2:C:1074:TRP:HH2	3:D:875:ARG:HA	1.65	0.60
3:D:374:LEU:O	3:D:377:SER:OG	2.11	0.60
3:D:567:SER:HB2	3:D:571:GLY:N	2.16	0.60
3:D:1032:GLN:O	3:D:1036:GLU:N	2.32	0.60
5:F:408:GLU:HA	5:F:411:LEU:HD12	1.83	0.60
6:J:106:ARG:HA	6:J:110:ARG:CG	2.31	0.60
1:A:105:VAL:HG12	1:A:125:ILE:HB	1.82	0.60
2:C:252:PHE:HB3	2:C:255:SER:CB	2.31	0.60
2:C:435:GLN:NE2	2:C:459:GLY:HA2	2.16	0.60
3:D:400:LYS:HA	3:D:404:ASP:OD2	2.00	0.60
3:D:606:HIS:ND1	3:D:607:PRO:O	2.33	0.60
3:D:1168:ILE:HG13	3:D:1202:ALA:CB	2.31	0.60
8:P:21:DT:H1'	8:P:22:DC:H5'	1.82	0.60
1:B:54:ILE:O	1:B:162:ILE:HG13	2.01	0.60
2:C:105:LEU:HA	2:C:139:PHE:HA	1.83	0.60
2:C:185:VAL:HA	2:C:204:VAL:HG22	1.82	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1057:LEU:HD23	2:C:1062:GLN:HG2	1.82	0.60
3:D:124:ASP:HB3	3:D:234:LEU:CD2	2.31	0.60
3:D:257:GLY:O	3:D:260:SER:OG	2.13	0.60
3:D:749:TYR:HA	3:D:752:ARG:HD3	1.84	0.60
1:A:181:THR:HG1	1:A:189:PHE:H	1.47	0.60
2:C:223:GLY:HA2	2:C:231:ARG:HH22	1.67	0.60
2:C:1138:LEU:HA	3:D:-1:GLY:H3	1.67	0.60
3:D:511:ALA:N	3:D:559:MET:O	2.30	0.60
3:D:879:ASP:HB3	3:D:1226:PHE:HE1	1.66	0.60
3:D:1045:PRO:HD2	3:D:1112:MET:HG2	1.84	0.60
1:B:95:MET:HB2	1:B:138:LEU:HB2	1.83	0.60
1:B:183:VAL:HA	1:B:188:ASP:CA	2.30	0.60
2:C:650:ILE:HG13	2:C:694:ASP:HB2	1.83	0.60
2:C:688:PRO:HA	2:C:703:ALA:HB2	1.83	0.60
2:C:862:PRO:HG2	2:C:865:VAL:HG21	1.84	0.60
2:C:1083:TYR:O	2:C:1087:GLU:HG2	2.01	0.60
3:D:879:ASP:HB3	3:D:1226:PHE:CE1	2.36	0.60
5:F:453:PHE:O	5:F:456:LEU:HB3	2.02	0.60
1:B:49:ALA:HB2	1:B:142:ARG:HB3	1.82	0.60
1:B:97:LEU:HD21	1:B:105:VAL:CG1	2.28	0.60
1:B:170:PRO:HA	1:B:199:LYS:CE	2.32	0.60
2:C:407:GLN:HG3	2:C:417:LEU:CD2	2.32	0.60
2:C:855:ARG:HB2	2:C:866:ASN:HA	1.84	0.60
2:C:1050:SER:N	2:C:1055:GLN:O	2.35	0.60
3:D:279:ASP:O	3:D:282:ARG:HB3	2.02	0.60
3:D:453:LYS:HB3	3:D:454:PRO:HD3	1.81	0.60
3:D:496:VAL:O	3:D:511:ALA:HA	2.01	0.60
3:D:607:PRO:O	3:D:609:THR:HG23	2.01	0.60
3:D:671:VAL:O	3:D:675:GLU:HG3	2.01	0.60
3:D:1063:LYS:HZ2	3:D:1078:ASP:HB3	1.66	0.60
5:F:234:GLN:HA	5:F:237:LYS:CE	2.31	0.60
1:B:87:SER:HG	1:B:116:VAL:HA	1.66	0.60
2:C:163:LYS:HE2	2:C:640:ASP:OD1	2.01	0.60
2:C:644:ALA:HB3	2:C:700:GLN:H	1.65	0.60
2:C:760:ARG:HB2	2:C:767:GLU:OE2	2.02	0.60
3:D:1158:VAL:HA	3:D:1161:MET:CG	2.32	0.60
5:F:364:ARG:HD2	5:F:368:ILE:HD12	1.82	0.60
5:F:506:ILE:O	5:F:510:THR:HG23	2.02	0.60
1:A:3:ILE:HD11	1:A:27:GLU:OE2	2.02	0.60
1:A:95:MET:HA	1:A:113:PRO:HD3	1.84	0.60
1:B:223:ARG:HG2	1:B:227:VAL:HG22	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:413:THR:HG23	2:C:415:GLN:HB3	1.84	0.60
2:C:524:VAL:HG12	2:C:525:SER:O	2.01	0.60
2:C:647:SER:HA	2:C:697:GLU:HA	1.83	0.60
2:C:721:VAL:HG23	2:C:915:ILE:O	2.02	0.60
3:D:237:ASP:O	3:D:238:GLU:HG3	2.01	0.60
3:D:360:LEU:HD21	5:F:329:ILE:HG21	1.84	0.60
3:D:1151:ASP:O	3:D:1155:GLU:HG3	2.01	0.60
3:D:1187:GLU:O	3:D:1191:ARG:HG2	2.01	0.60
1:B:85:VAL:HG23	1:B:117:THR:C	2.22	0.60
2:C:470:LEU:HD22	2:C:473:ARG:HD2	1.83	0.60
2:C:1139:SER:OG	3:D:6:PHE:HB3	2.02	0.60
3:D:121:ALA:HB3	3:D:124:ASP:OD2	2.02	0.60
5:F:334:LYS:NZ	7:O:25:DC:H3'	2.17	0.60
2:C:71:ARG:HH11	2:C:82:PRO:HB2	1.66	0.60
2:C:252:PHE:HB3	2:C:255:SER:HB2	1.84	0.60
2:C:442:GLN:HG3	2:C:678:SER:OG	2.02	0.60
2:C:488:THR:O	2:C:610:ASN:ND2	2.28	0.60
2:C:559:VAL:O	2:C:571:VAL:HG12	2.02	0.60
2:C:944:TRP:NE1	2:C:963:LEU:O	2.30	0.60
3:D:76:GLU:N	3:D:76:GLU:OE1	2.31	0.60
3:D:334:ARG:NH1	5:F:419:GLU:N	2.36	0.60
3:D:383:ASP:HA	3:D:401:SER:HG	1.67	0.60
3:D:1128:ARG:HA	3:D:1131:GLN:OE1	2.02	0.60
3:D:1190:ASN:O	3:D:1194:VAL:HG13	2.01	0.60
5:F:439:ILE:C	6:J:6:LEU:O	2.40	0.60
1:B:96:TYR:HB2	1:B:111:VAL:CG1	2.32	0.59
2:C:152:VAL:HG21	2:C:418:ILE:CD1	2.32	0.59
2:C:601:ASP:OD2	2:C:603:ASN:ND2	2.35	0.59
3:D:263:LYS:HA	3:D:266:GLU:OE1	2.01	0.59
3:D:826:ASN:HA	3:D:832:ILE:HD11	1.82	0.59
3:D:1050:THR:HG23	3:D:1107:VAL:CG2	2.28	0.59
5:F:318:LEU:HD23	5:F:321:ILE:CD1	2.31	0.59
6:J:76:LYS:HG2	6:J:77:PRO:O	2.02	0.59
2:C:689:ILE:HG12	2:C:702:ILE:O	2.02	0.59
3:D:594:GLY:N	3:D:598:GLU:OE2	2.34	0.59
3:D:771:ASN:O	3:D:775:VAL:HG23	2.01	0.59
5:F:414:GLN:O	5:F:418:ARG:CG	2.35	0.59
5:F:439:ILE:HG13	6:J:6:LEU:HD11	1.81	0.59
1:A:56:ILE:O	1:A:59:VAL:HG22	2.02	0.59
1:B:96:TYR:CD1	1:B:137:GLU:HG2	2.36	0.59
2:C:50:VAL:HG11	2:C:633:ARG:HG2	1.83	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:641:VAL:HG22	2:C:705:GLY:N	2.16	0.59
2:C:721:VAL:HG22	2:C:722:ALA:O	2.02	0.59
3:D:970:THR:CG2	3:D:975:CYS:HB3	2.33	0.59
5:F:415:GLN:CA	5:F:418:ARG:CG	2.53	0.59
1:A:53:SER:CB	1:A:163:PRO:HA	2.32	0.59
1:A:55:ARG:HB3	1:A:137:GLU:OE2	2.02	0.59
1:B:106:THR:CG2	1:B:124:HIS:HA	2.33	0.59
2:C:54:LEU:O	2:C:58:THR:HG23	2.02	0.59
2:C:205:ILE:HG22	2:C:211:TRP:CD1	2.37	0.59
2:C:584:ARG:O	2:C:587:VAL:HG12	2.03	0.59
2:C:677:ARG:HB2	2:C:752:ILE:HG21	1.84	0.59
2:C:1073:CYS:O	2:C:1075:ALA:CA	2.49	0.59
3:D:460:LEU:HD11	3:D:472:ALA:CB	2.31	0.59
3:D:878:VAL:HG22	3:D:1000:ALA:CB	2.26	0.59
3:D:924:THR:OG1	3:D:963:ARG:HB2	2.02	0.59
5:F:262:LEU:HA	5:F:265:GLU:CG	2.32	0.59
7:O:14:DG:H2"	7:O:15:DT:H72	1.83	0.59
1:B:12:ASP:O	1:B:20:GLN:N	2.22	0.59
2:C:675:PHE:HA	2:C:683:CYS:SG	2.42	0.59
2:C:768:GLU:O	2:C:805:LYS:HG2	2.02	0.59
2:C:1007:LYS:CB	2:C:1022:PRO:HB2	2.32	0.59
3:D:177:LEU:CD1	3:D:198:ARG:HA	2.31	0.59
3:D:592:VAL:O	3:D:595:ASP:HB2	2.01	0.59
1:A:23:ILE:HG22	1:A:26:LEU:HD21	1.83	0.59
1:A:53:SER:HB3	1:A:163:PRO:HA	1.84	0.59
1:A:216:VAL:HG13	1:B:216:VAL:HG23	1.85	0.59
1:A:223:ARG:HG3	1:B:213:LYS:N	2.18	0.59
2:C:278:TYR:CE2	2:C:287:PRO:HA	2.37	0.59
2:C:641:VAL:HG13	2:C:703:ALA:O	2.02	0.59
2:C:751:HIS:O	2:C:874:ALA:HA	2.03	0.59
2:C:822:ARG:HH12	2:C:829:ALA:HA	1.66	0.59
3:D:136:ILE:CD1	3:D:229:LEU:HD11	2.33	0.59
3:D:738:VAL:HB	3:D:739:PRO:HD2	1.83	0.59
2:C:128:THR:OG1	2:C:168:ILE:HA	2.03	0.59
2:C:275:LEU:HB3	2:C:289:LYS:NZ	2.18	0.59
2:C:652:GLU:N	2:C:659:THR:OG1	2.36	0.59
2:C:747:LEU:HB2	2:C:879:ILE:HB	1.85	0.59
2:C:994:PRO:HB3	2:C:999:ASP:N	2.13	0.59
3:D:11:ARG:HA	3:D:1242:SER:HA	1.84	0.59
3:D:212:ALA:HA	3:D:215:GLU:HG2	1.83	0.59
3:D:612:TYR:HD1	3:D:617:GLU:HG2	1.68	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:686:LYS:HB2	3:D:688:MET:HE1	1.84	0.59
4:E:84:GLU:O	4:E:97:ARG:NH2	2.36	0.59
8:P:3:DC:H1'	8:P:4:DA:C5'	2.33	0.59
1:A:14:LEU:CG	1:A:20:GLN:HG3	2.33	0.59
1:B:175:THR:CG2	1:B:195:ASP:HB3	2.33	0.59
2:C:945:LYS:HA	2:C:965:GLU:CA	2.30	0.59
3:D:101:VAL:HG13	3:D:375:GLN:OE1	2.03	0.59
3:D:365:ILE:H	3:D:365:ILE:HD12	1.65	0.59
3:D:589:THR:HG21	3:D:688:MET:HG2	1.85	0.59
3:D:638:THR:HG22	3:D:661:ALA:HA	1.83	0.59
3:D:742:LYS:O	3:D:746:LEU:HG	2.02	0.59
4:E:67:TYR:O	4:E:71:LEU:HG	2.02	0.59
4:E:95:ALA:O	4:E:99:ILE:HG13	2.03	0.59
5:F:373:VAL:HG12	5:F:377:ASN:HD21	1.67	0.59
2:C:1072:GLU:HA	2:C:1075:ALA:CB	2.32	0.59
3:D:412:ARG:H	3:D:1227:GLN:HG3	1.68	0.59
3:D:460:LEU:HD11	3:D:472:ALA:HB2	1.84	0.59
3:D:481:PRO:HA	3:D:484:TRP:CD1	2.36	0.59
3:D:642:PRO:HB3	3:D:662:TRP:CZ3	2.38	0.59
5:F:243:ALA:O	5:F:247:VAL:HG23	2.03	0.59
5:F:463:VAL:HA	5:F:466:THR:HG23	1.85	0.59
3:D:459:ARG:O	3:D:462:ASP:HB2	2.01	0.59
3:D:1055:LEU:HD21	3:D:1086:LEU:HD21	1.84	0.59
6:J:64:LEU:HD23	6:J:65:ILE:HG22	1.85	0.59
1:A:214:THR:CG2	1:B:232:ILE:HB	2.33	0.58
1:B:87:SER:HB3	1:B:89:GLU:OE1	2.03	0.58
2:C:92:GLU:HG3	2:C:93:LEU:CD2	2.33	0.58
2:C:105:LEU:HD13	2:C:139:PHE:HB2	1.84	0.58
2:C:381:VAL:O	2:C:385:ILE:HG12	2.03	0.58
2:C:548:ILE:HG12	2:C:554:PHE:CE1	2.37	0.58
2:C:737:LEU:HD23	2:C:915:ILE:HG22	1.85	0.58
3:D:25:TYR:HA	6:J:57:ARG:HG3	1.84	0.58
3:D:215:GLU:O	3:D:219:LEU:HD23	2.03	0.58
3:D:362:ALA:HB1	3:D:363:PRO:HD2	1.85	0.58
3:D:553:ALA:HB1	4:E:54:VAL:HG13	1.84	0.58
3:D:641:ARG:HG3	3:D:647:GLU:OE2	2.03	0.58
3:D:737:LEU:O	3:D:793:TYR:OH	2.13	0.58
3:D:898:VAL:HG12	3:D:961:LYS:N	2.17	0.58
3:D:926:GLY:CA	3:D:940:ARG:HG3	2.31	0.58
3:D:1070:ASP:N	3:D:1071:GLY:HA2	2.18	0.58
3:D:1181:ILE:HB	3:D:1185:GLU:OE1	2.02	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:292:LYS:O	5:F:296:LEU:HG	2.03	0.58
5:F:408:GLU:OE1	5:F:408:GLU:N	2.31	0.58
5:F:411:LEU:O	5:F:415:GLN:HG3	2.03	0.58
1:A:97:LEU:HB3	1:A:136:VAL:CG1	2.33	0.58
2:C:102:SER:HB2	2:C:143:ASN:HD21	1.68	0.58
2:C:147:ILE:O	2:C:148:LYS:HD2	2.02	0.58
2:C:212:LEU:CB	2:C:226:ILE:HG13	2.33	0.58
2:C:945:LYS:HG3	2:C:965:GLU:HB3	1.84	0.58
3:D:56:ARG:HG2	6:J:13:ALA:N	2.16	0.58
3:D:119:ASP:HB2	3:D:295:ARG:HH21	1.66	0.58
3:D:120:LEU:HD11	3:D:232:LYS:HD3	1.86	0.58
3:D:162:VAL:HB	3:D:216:LEU:HD21	1.85	0.58
3:D:241:TYR:O	3:D:245:VAL:HG23	2.02	0.58
3:D:1036:GLU:CB	3:D:1038:ARG:HG2	2.33	0.58
5:F:333:GLU:HA	6:J:81:HIS:CE1	2.38	0.58
5:F:476:ARG:HA	5:F:481:LEU:HD12	1.86	0.58
6:J:97:LEU:HA	6:J:100:GLU:OE1	2.03	0.58
1:A:14:LEU:CB	1:A:19:SER:HA	2.34	0.58
1:A:99:LYS:HB3	1:A:134:LEU:HB3	1.85	0.58
1:B:48:GLY:N	1:B:143:GLY:O	2.36	0.58
1:B:104:GLU:HG2	1:B:127:THR:HA	1.84	0.58
2:C:39:VAL:HG11	2:C:963:LEU:HD21	1.83	0.58
2:C:115:VAL:HG11	2:C:129:TYR:CZ	2.39	0.58
2:C:413:THR:CG2	2:C:415:GLN:HB3	2.33	0.58
2:C:456:SER:CB	2:C:497:ILE:HG12	2.33	0.58
2:C:1076:MET:HE1	2:C:1084:THR:HB	1.85	0.58
3:D:612:TYR:OH	3:D:627:LEU:HD11	2.03	0.58
3:D:615:PRO:O	3:D:619:ILE:HG13	2.03	0.58
3:D:1150:HIS:ND1	3:D:1152:LYS:HG2	2.18	0.58
4:E:60:ARG:HD2	4:E:63:GLN:OE1	2.04	0.58
5:F:325:ASN:O	5:F:329:ILE:HG13	2.02	0.58
5:F:462:SER:O	5:F:466:THR:HG23	2.03	0.58
1:A:108:GLY:CA	1:A:121:PRO:HB3	2.33	0.58
1:B:72:ASP:OD2	1:B:74:THR:HG22	2.03	0.58
2:C:768:GLU:N	2:C:806:VAL:O	2.36	0.58
2:C:1003:ASP:OD2	2:C:1005:ASP:HB2	2.03	0.58
3:D:345:ARG:NE	5:F:365:THR:HA	2.18	0.58
3:D:1158:VAL:HA	3:D:1161:MET:SD	2.44	0.58
6:J:55:LEU:HG	6:J:60:MET:O	2.03	0.58
2:C:274:LEU:CG	2:C:292:ALA:HB1	2.34	0.58
3:D:73:ILE:O	3:D:81:GLU:HG3	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:125:LEU:HA	3:D:128:ILE:HD12	1.84	0.58
3:D:127:LYS:CA	3:D:132:ALA:HB3	2.34	0.58
3:D:192:ASP:OD2	3:D:196:LYS:HE3	2.04	0.58
3:D:457:MET:HA	3:D:460:LEU:HD21	1.85	0.58
3:D:689:HIS:O	3:D:693:GLN:HG3	2.03	0.58
3:D:737:LEU:HB2	3:D:793:TYR:HE1	1.68	0.58
3:D:1053:VAL:HG22	3:D:1055:LEU:N	2.19	0.58
5:F:464:LEU:HD23	5:F:476:ARG:HE	1.69	0.58
2:C:216:VAL:HG11	2:C:349:HIS:CD2	2.39	0.58
3:D:550:GLU:HG3	4:E:58:ALA:HB1	1.84	0.58
3:D:1087:ARG:NH1	3:D:1110:GLN:OE1	2.37	0.58
3:D:1247:GLY:O	3:D:1259:PRO:HG3	2.04	0.58
5:F:455:LEU:HD13	5:F:458:ASP:OD2	2.04	0.58
1:A:97:LEU:HB3	1:A:136:VAL:HG12	1.85	0.58
1:B:96:TYR:HB2	1:B:111:VAL:HG11	1.86	0.58
2:C:310:ARG:O	2:C:328:ILE:HG21	2.04	0.58
2:C:603:ASN:O	2:C:607:MET:HG3	2.04	0.58
2:C:660:VAL:CG2	2:C:668:ARG:HB3	2.34	0.58
2:C:789:ILE:HG22	2:C:803:VAL:CG2	2.33	0.58
2:C:881:ASP:HA	2:C:895:ILE:CG2	2.33	0.58
2:C:1067:ARG:CG	3:D:421:ARG:HA	2.33	0.58
3:D:173:ARG:HD3	3:D:204:GLU:HB2	1.85	0.58
3:D:599:TYR:HA	3:D:610:GLY:HA3	1.84	0.58
3:D:767:HIS:O	3:D:770:ARG:HG3	2.03	0.58
3:D:827:PRO:HG3	3:D:854:HIS:CB	2.29	0.58
3:D:1066:ILE:HD12	3:D:1075:VAL:CB	2.34	0.58
1:A:214:THR:HG23	1:B:232:ILE:HB	1.86	0.58
2:C:105:LEU:HD12	2:C:138:GLU:O	2.03	0.58
2:C:158:PRO:HG2	2:C:431:PHE:CE2	2.38	0.58
3:D:667:THR:O	3:D:671:VAL:HG23	2.04	0.58
3:D:963:ARG:HD3	3:D:978:CYS:SG	2.43	0.58
1:A:14:LEU:CD1	1:A:20:GLN:HG3	2.34	0.58
1:B:27:GLU:HB2	1:B:30:PHE:CE2	2.39	0.58
3:D:739:PRO:CG	3:D:742:LYS:HB2	2.34	0.58
3:D:742:LYS:HE2	3:D:746:LEU:HD21	1.85	0.58
5:F:223:ALA:O	5:F:224:SER:C	2.42	0.58
5:F:336:ASP:OD2	5:F:339:LYS:HG3	2.03	0.58
2:C:72:GLU:O	2:C:76:GLU:HG2	2.04	0.58
2:C:104:SER:O	2:C:140:ILE:N	2.20	0.58
3:D:134:TYR:CD1	3:D:256:MET:HB2	2.39	0.58
3:D:468:ASN:OD1	3:D:471:SER:N	2.20	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:557:ILE:CD1	4:E:54:VAL:HG22	2.34	0.58
3:D:672:MET:HA	3:D:675:GLU:OE1	2.04	0.58
3:D:905:ALA:HB2	3:D:911:ILE:HG23	1.86	0.58
3:D:990:ASP:OD2	4:E:49:SER:HB2	2.04	0.58
1:B:64:THR:O	1:B:65:THR:OG1	2.21	0.57
2:C:62:GLU:O	2:C:65:ILE:HB	2.04	0.57
2:C:240:ALA:HA	2:C:274:LEU:HD21	1.86	0.57
2:C:408:ASP:OD1	2:C:412:ILE:HG23	2.03	0.57
2:C:583:PRO:O	2:C:584:ARG:HD2	2.04	0.57
2:C:780:VAL:HG23	2:C:781:LEU:CD1	2.34	0.57
3:D:177:LEU:HD12	3:D:180:ASP:HB2	1.86	0.57
3:D:457:MET:HA	3:D:460:LEU:CD2	2.34	0.57
3:D:910:LEU:HD21	3:D:956:GLY:HA2	1.86	0.57
3:D:989:VAL:CG2	3:D:993:GLU:HG3	2.34	0.57
5:F:306:LEU:CD1	5:F:351:ILE:HG21	2.34	0.57
6:J:85:LEU:HD11	6:J:89:ARG:HG3	1.85	0.57
1:B:49:ALA:HA	1:B:142:ARG:CA	2.31	0.57
1:B:54:ILE:O	1:B:162:ILE:N	2.31	0.57
1:B:98:ARG:HG2	1:B:135:GLU:CB	2.33	0.57
1:B:145:GLY:O	1:B:169:SER:N	2.36	0.57
2:C:291:SER:HA	2:C:294:THR:OG1	2.04	0.57
2:C:560:LEU:HA	2:C:569:GLU:O	2.04	0.57
2:C:715:LEU:O	2:C:1031:MET:HG2	2.04	0.57
3:D:614:SER:O	3:D:617:GLU:HB3	2.03	0.57
3:D:823:LEU:HD23	3:D:835:PRO:CB	2.34	0.57
3:D:912:ARG:HG2	3:D:913:ASP:O	2.04	0.57
1:A:97:LEU:HD13	1:A:110:ILE:HA	1.87	0.57
2:C:238:LEU:HG	2:C:248:ILE:HG12	1.86	0.57
2:C:314:TYR:HB2	2:C:328:ILE:HG12	1.87	0.57
2:C:533:ALA:O	2:C:536:GLU:HB3	2.04	0.57
2:C:563:ARG:HD3	2:C:564:LYS:H	1.69	0.57
2:C:733:ASP:O	2:C:735:ILE:HG13	2.04	0.57
3:D:851:ILE:HA	3:D:854:HIS:HD2	1.68	0.57
3:D:1248:LEU:O	3:D:1252:VAL:HG23	2.04	0.57
5:F:331:ALA:HB2	5:F:350:TRP:CB	2.35	0.57
5:F:386:LEU:HD13	5:F:398:GLU:OE2	2.05	0.57
1:B:39:ARG:HG3	1:B:174:VAL:HG11	1.86	0.57
2:C:83:VAL:HA	2:C:87:GLU:OE1	2.04	0.57
2:C:278:TYR:O	2:C:282:ARG:HG2	2.04	0.57
2:C:401:ARG:HA	2:C:404:MET:HB2	1.86	0.57
2:C:473:ARG:NH2	2:C:496:LEU:HD11	2.19	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:882:GLY:H	2:C:895:ILE:HB	1.68	0.57
3:D:276:SER:O	3:D:280:VAL:HG23	2.04	0.57
3:D:329:GLN:HG2	6:J:9:SER:O	2.05	0.57
3:D:882:GLN:O	3:D:1248:LEU:HD21	2.04	0.57
2:C:139:PHE:HB3	2:C:148:LYS:HB2	1.85	0.57
2:C:681:GLY:O	2:C:752:ILE:N	2.37	0.57
3:D:428:SER:HB3	3:D:522:ILE:CD1	2.34	0.57
3:D:684:VAL:HG13	3:D:686:LYS:HZ3	1.69	0.57
3:D:820:MET:CE	3:D:837:LYS:HA	2.34	0.57
3:D:1088:VAL:CA	3:D:1098:VAL:HA	2.28	0.57
3:D:1219:SER:OG	3:D:1243:ASP:OD2	2.11	0.57
4:E:50:LYS:O	4:E:54:VAL:HG23	2.05	0.57
2:C:820:LEU:HD11	2:C:824:ILE:HD11	1.86	0.57
2:C:988:LEU:O	2:C:991:CYS:N	2.32	0.57
2:C:1071:MET:SD	3:D:503:THR:N	2.76	0.57
2:C:1084:THR:O	2:C:1088:LEU:HG	2.05	0.57
2:C:1123:VAL:O	2:C:1127:GLU:HG3	2.05	0.57
3:D:74:ILE:HG12	3:D:81:GLU:CA	2.35	0.57
3:D:206:ARG:HB2	3:D:209:ARG:CZ	2.35	0.57
3:D:639:GLN:NE2	3:D:658:PRO:O	2.34	0.57
3:D:656:TRP:HE3	3:D:658:PRO:HD2	1.70	0.57
3:D:866:ARG:NH1	3:D:1011:THR:HA	2.19	0.57
3:D:946:ASP:HB2	3:D:947:PRO:HD3	1.87	0.57
3:D:1275:THR:HG22	4:E:103:LEU:O	2.04	0.57
5:F:241:LEU:HB3	5:F:245:GLU:CG	2.35	0.57
5:F:242:ASN:O	5:F:245:GLU:HB2	2.04	0.57
5:F:367:ARG:NH2	7:O:22:DG:OP1	2.37	0.57
1:B:18:ARG:HG3	1:B:197:GLU:HB2	1.85	0.57
2:C:244:THR:OG1	2:C:247:GLN:HG3	2.05	0.57
2:C:616:VAL:HG22	2:C:1032:LYS:O	2.04	0.57
2:C:982:GLU:O	2:C:986:GLN:HG3	2.04	0.57
2:C:1068:PHE:H	3:D:422:VAL:HG23	1.70	0.57
3:D:119:ASP:HB2	3:D:295:ARG:NH2	2.20	0.57
3:D:173:ARG:HG2	3:D:205:MET:HB2	1.85	0.57
3:D:329:GLN:HE21	6:J:9:SER:HG	1.52	0.57
3:D:589:THR:HG21	3:D:688:MET:CG	2.34	0.57
3:D:895:ARG:HB2	3:D:967:THR:HB	1.85	0.57
1:B:63:PHE:HB2	3:D:603:SER:OG	2.04	0.57
1:B:175:THR:HG22	1:B:195:ASP:HB3	1.87	0.57
2:C:134:PHE:HA	2:C:152:VAL:O	2.04	0.57
2:C:229:LYS:HZ2	2:C:281:LEU:HA	1.70	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:443:ASN:OD1	2:C:447:SER:HB3	2.04	0.57
2:C:581:VAL:HG22	2:C:585:GLN:OE1	2.05	0.57
2:C:632:LEU:O	2:C:636:ILE:HG23	2.04	0.57
2:C:888:ARG:NH2	2:C:933:GLU:OE2	2.26	0.57
3:D:158:GLU:O	3:D:162:VAL:HG23	2.04	0.57
3:D:1162:LEU:CD2	3:D:1207:LEU:HD23	2.34	0.57
1:A:177:LYS:N	1:A:193:ILE:O	2.33	0.57
2:C:312:GLY:O	2:C:316:VAL:HG23	2.05	0.57
2:C:716:GLY:N	2:C:1029:TYR:OH	2.38	0.57
2:C:943:GLY:O	2:C:993:LEU:HG	2.05	0.57
2:C:1042:HIS:NE2	2:C:1063:PHE:O	2.37	0.57
3:D:30:LYS:HD2	3:D:44:ASP:HB2	1.87	0.57
3:D:173:ARG:HG2	3:D:205:MET:CA	2.35	0.57
3:D:262:GLN:HG3	3:D:310:MET:HE3	1.87	0.57
3:D:341:ASN:O	3:D:345:ARG:HG3	2.05	0.57
3:D:444:PRO:HG2	3:D:447:MET:HB3	1.87	0.57
3:D:466:ALA:HB1	3:D:471:SER:OG	2.05	0.57
5:F:276:ALA:O	5:F:279:ARG:HG2	2.04	0.57
6:J:28:GLN:O	6:J:44:PHE:N	2.38	0.57
6:J:106:ARG:HA	6:J:110:ARG:CD	2.35	0.57
1:A:53:SER:HB2	1:A:162:ILE:O	2.05	0.57
1:A:80:LEU:HD22	1:A:83:LEU:HD11	1.86	0.57
1:B:3:ILE:HG12	1:B:234:ILE:HG23	1.84	0.57
1:B:95:MET:HE1	1:B:140:VAL:HB	1.87	0.57
2:C:103:MET:HB2	2:C:139:PHE:HZ	1.68	0.57
2:C:529:VAL:HG12	2:C:531:LEU:HG	1.87	0.57
2:C:650:ILE:N	2:C:694:ASP:O	2.22	0.57
2:C:1103:TYR:O	2:C:1107:VAL:HG23	2.04	0.57
3:D:47:PHE:CE2	3:D:327:MET:HE3	2.40	0.57
3:D:52:PHE:CD2	3:D:322:PRO:HG3	2.40	0.57
3:D:75:CYS:O	3:D:79:GLY:N	2.26	0.57
3:D:319:VAL:HG13	3:D:344:TYR:CZ	2.40	0.57
3:D:915:TYR:CE1	3:D:1143:ARG:HG2	2.40	0.57
3:D:927:THR:HG21	3:D:961:LYS:HB3	1.86	0.57
3:D:1272:VAL:HG22	4:E:106:HIS:CB	2.35	0.57
7:O:19:DA:H4'	7:O:20:DT:OP1	2.05	0.57
1:A:147:VAL:HG22	1:A:148:PRO:O	2.05	0.56
2:C:185:VAL:HG12	2:C:204:VAL:HG22	1.87	0.56
2:C:674:LYS:HZ2	2:C:685:ASN:HB3	1.70	0.56
2:C:884:LYS:CE	2:C:892:LYS:HD2	2.35	0.56
3:D:50:LYS:CA	3:D:80:VAL:HG22	2.34	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:70:GLN:HG3	4:E:73:GLU:OE2	2.05	0.56
6:J:108:ARG:CD	6:J:109:ARG:H	2.17	0.56
2:C:225:ARG:HG3	2:C:230:ARG:N	2.19	0.56
2:C:540:VAL:HG22	2:C:576:VAL:HG22	1.87	0.56
2:C:582:SER:HB2	2:C:583:PRO:HD2	1.86	0.56
2:C:674:LYS:NZ	2:C:685:ASN:HB3	2.19	0.56
2:C:759:ALA:CB	2:C:867:GLU:HB3	2.34	0.56
2:C:1097:VAL:O	2:C:1101:LYS:HG2	2.05	0.56
3:D:706:MET:N	4:E:41:ASP:OD2	2.37	0.56
4:E:38:PRO:HG2	4:E:43:LEU:HD21	1.87	0.56
1:A:5:GLN:NE2	1:A:25:PRO:HG3	2.20	0.56
1:A:8:THR:O	1:A:23:ILE:HG23	2.06	0.56
1:A:24:GLU:HA	1:A:26:LEU:HG	1.88	0.56
1:A:27:GLU:O	1:A:30:PHE:HB3	2.04	0.56
1:A:105:VAL:CG1	1:A:125:ILE:HB	2.35	0.56
1:B:51:VAL:CA	1:B:140:VAL:HG22	2.35	0.56
1:B:53:SER:CB	1:B:163:PRO:HA	2.35	0.56
2:C:129:TYR:CE2	2:C:159:MET:HB2	2.41	0.56
2:C:206:PRO:HG2	2:C:209:GLY:HA3	1.88	0.56
2:C:220:ASP:OD2	2:C:257:ILE:HA	2.05	0.56
2:C:239:LYS:NZ	2:C:268:VAL:HA	2.21	0.56
2:C:482:ARG:HG2	2:C:512:ILE:HG21	1.86	0.56
2:C:612:GLN:HG3	2:C:1031:MET:SD	2.45	0.56
2:C:648:GLY:O	2:C:696:VAL:N	2.37	0.56
2:C:883:ASP:OD1	2:C:1037:VAL:HG23	2.05	0.56
2:C:982:GLU:OE2	3:D:841:ARG:NH2	2.38	0.56
2:C:1124:LEU:O	2:C:1128:LEU:HG	2.05	0.56
3:D:27:GLU:HB2	3:D:94:HIS:NE2	2.20	0.56
3:D:34:ILE:HG13	3:D:40:LYS:C	2.26	0.56
3:D:206:ARG:HA	3:D:209:ARG:CG	2.34	0.56
3:D:229:LEU:HA	3:D:233:GLN:OE1	2.05	0.56
3:D:289:LYS:O	3:D:293:LEU:HG	2.05	0.56
3:D:328:VAL:CG1	3:D:336:ALA:HB3	2.35	0.56
3:D:340:LEU:HA	3:D:343:LEU:HD12	1.85	0.56
3:D:601:PRO:HA	3:D:608:GLU:CB	2.35	0.56
3:D:1065:THR:HG23	3:D:1076:VAL:HA	1.87	0.56
3:D:1274:PRO:HG2	4:E:79:VAL:CG1	2.36	0.56
5:F:442:SER:CB	6:J:7:ARG:HD3	2.31	0.56
5:F:446:VAL:CG1	5:F:449:ASP:OD2	2.46	0.56
7:O:19:DA:C8	7:O:20:DT:H72	2.40	0.56
1:A:152:ASN:ND2	1:A:161:ARG:HB2	2.20	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:506:VAL:HG12	2:C:507:ASN:O	2.06	0.56
2:C:882:GLY:N	2:C:895:ILE:HB	2.21	0.56
2:C:922:VAL:HB	2:C:923:PRO:HD3	1.86	0.56
3:D:203:ARG:O	3:D:206:ARG:HG2	2.05	0.56
1:A:61:HIS:CD2	1:A:63:PHE:HB2	2.41	0.56
1:A:172:LEU:HD12	1:A:197:GLU:OE2	2.04	0.56
2:C:50:VAL:HA	2:C:503:TYR:HE1	1.71	0.56
2:C:771:ARG:HD2	2:C:786:GLU:HA	1.87	0.56
2:C:989:LEU:HD21	2:C:1006:GLY:N	2.20	0.56
3:D:69:ARG:HB2	6:J:20:ARG:HH22	1.71	0.56
3:D:185:GLU:HA	3:D:194:ARG:NH1	2.16	0.56
3:D:741:ARG:HB2	3:D:744:GLU:OE2	2.04	0.56
3:D:911:ILE:HD12	3:D:911:ILE:O	2.06	0.56
5:F:356:THR:HA	5:F:359:MET:SD	2.46	0.56
8:P:17:DT:H1'	8:P:18:DT:H5'	1.88	0.56
1:A:32:TYR:CE1	2:C:1018:PRO:HD3	2.41	0.56
2:C:523:VAL:HA	2:C:552:GLY:C	2.26	0.56
2:C:658:ILE:O	2:C:669:THR:HA	2.04	0.56
2:C:1133:LEU:O	2:C:1135:VAL:HG23	2.06	0.56
3:D:199:ASP:O	3:D:203:ARG:HG3	2.04	0.56
5:F:315:MET:SD	5:F:359:MET:HA	2.46	0.56
1:A:113:PRO:O	1:A:116:VAL:HG22	2.04	0.56
2:C:799:GLY:N	2:C:839:VAL:HG13	2.20	0.56
2:C:1079:TYR:CD2	3:D:559:MET:HG2	2.40	0.56
3:D:74:ILE:HG12	3:D:81:GLU:HA	1.88	0.56
3:D:435:GLN:OE1	3:D:435:GLN:N	2.32	0.56
3:D:1030:ARG:O	3:D:1034:LEU:HG	2.06	0.56
3:D:1142:TYR:O	3:D:1147:VAL:N	2.37	0.56
3:D:1158:VAL:HA	3:D:1161:MET:HG3	1.88	0.56
1:A:25:PRO:O	1:A:26:LEU:HD23	2.04	0.56
1:A:26:LEU:H	1:A:189:PHE:HB2	1.70	0.56
1:B:39:ARG:O	1:B:43:LEU:HD13	2.06	0.56
2:C:41:PHE:HB3	2:C:43:LYS:NZ	2.21	0.56
2:C:540:VAL:CG1	2:C:576:VAL:HA	2.36	0.56
3:D:78:CYS:SG	3:D:79:GLY:N	2.79	0.56
3:D:235:ILE:HD13	3:D:241:TYR:HD1	1.71	0.56
3:D:624:ARG:HB3	3:D:626:VAL:HG23	1.88	0.56
3:D:905:ALA:HB3	3:D:909:THR:N	2.21	0.56
3:D:923:ARG:NH2	3:D:1155:GLU:OE2	2.37	0.56
3:D:1181:ILE:HD11	3:D:1186:PHE:CB	2.32	0.56
5:F:241:LEU:HB3	5:F:245:GLU:CB	2.35	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:339:LYS:HB3	5:F:341:TYR:CE2	2.41	0.56
5:F:502:ARG:NH2	7:O:1:DG:H3'	2.21	0.56
7:O:11:DA:C2'	7:O:12:DG:H5''	2.30	0.56
1:A:95:MET:HG2	1:A:138:LEU:HB2	1.86	0.56
1:B:104:GLU:CG	1:B:127:THR:HG22	2.34	0.56
1:B:210:SER:O	1:B:214:THR:HG23	2.06	0.56
2:C:230:ARG:NH2	5:F:212:LEU:HA	2.21	0.56
2:C:762:THR:N	2:C:765:GLY:O	2.38	0.56
3:D:58:TRP:HA	3:D:82:VAL:HG23	1.86	0.56
3:D:84:ARG:HD3	3:D:86:LYS:CE	2.33	0.56
3:D:642:PRO:HD2	3:D:657:GLN:NE2	2.21	0.56
3:D:893:THR:HG21	3:D:967:THR:O	2.06	0.56
5:F:476:ARG:CA	5:F:481:LEU:HB2	2.36	0.56
1:B:169:SER:HB3	1:B:171:VAL:CG2	2.35	0.56
2:C:138:GLU:HA	2:C:148:LYS:O	2.06	0.56
2:C:344:TYR:CE1	2:C:365:VAL:HA	2.40	0.56
2:C:731:TYR:N	2:C:734:ALA:HB3	2.21	0.56
2:C:759:ALA:HB3	2:C:867:GLU:H	1.71	0.56
3:D:350:ARG:HA	3:D:353:ARG:NH1	2.21	0.56
3:D:760:PHE:CD1	3:D:770:ARG:HG2	2.41	0.56
3:D:775:VAL:CG1	3:D:779:LYS:HE3	2.36	0.56
5:F:334:LYS:NZ	7:O:25:DC:OP1	2.38	0.56
1:B:162:ILE:HD12	1:B:162:ILE:O	2.06	0.55
1:B:183:VAL:HA	1:B:188:ASP:H	1.70	0.55
2:C:48:LEU:HG	2:C:49:GLU:O	2.05	0.55
2:C:71:ARG:NH1	2:C:82:PRO:O	2.39	0.55
2:C:131:ALA:N	2:C:157:PHE:O	2.39	0.55
2:C:653:VAL:HA	2:C:658:ILE:HG12	1.88	0.55
2:C:677:ARG:HG3	2:C:752:ILE:HB	1.88	0.55
2:C:720:LEU:HA	2:C:1026:GLY:O	2.06	0.55
2:C:802:LEU:HD11	2:C:839:VAL:HA	1.87	0.55
2:C:1054:GLN:O	2:C:1055:GLN:HG3	2.04	0.55
3:D:153:ALA:O	3:D:157:VAL:HG23	2.05	0.55
3:D:1061:PHE:HB2	3:D:1080:ILE:O	2.06	0.55
3:D:1108:GLY:HA3	3:D:1125:GLN:NE2	2.21	0.55
3:D:1276:GLU:HA	3:D:1279:ARG:CB	2.36	0.55
5:F:253:ILE:HG12	5:F:288:GLY:O	2.05	0.55
5:F:335:PHE:O	6:J:88:ARG:NH1	2.39	0.55
5:F:471:GLU:O	5:F:475:VAL:HG23	2.06	0.55
6:J:106:ARG:HA	6:J:110:ARG:HD3	1.87	0.55
1:A:97:LEU:O	1:A:136:VAL:N	2.39	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:105:VAL:HB	1:A:126:ALA:N	2.20	0.55
1:A:172:LEU:CB	1:A:199:LYS:HB3	2.34	0.55
1:A:181:THR:HG21	1:A:189:PHE:CZ	2.41	0.55
2:C:306:TYR:HE2	2:C:333:LEU:HG	1.70	0.55
2:C:424:VAL:HA	2:C:427:ILE:HD12	1.89	0.55
2:C:601:ASP:OD1	2:C:602:ALA:N	2.40	0.55
2:C:689:ILE:HG13	2:C:690:VAL:HG13	1.88	0.55
2:C:756:GLU:OE1	2:C:870:ARG:HD3	2.07	0.55
2:C:767:GLU:HG2	2:C:807:THR:CG2	2.36	0.55
3:D:137:THR:HG23	3:D:253:THR:OG1	2.06	0.55
3:D:820:MET:HE2	3:D:836:VAL:O	2.06	0.55
3:D:929:ALA:O	3:D:937:ILE:N	2.38	0.55
3:D:1260:ALA:O	3:D:1263:GLY:N	2.40	0.55
5:F:258:TYR:CD1	6:J:94:LEU:HD13	2.41	0.55
5:F:456:LEU:HA	5:F:526:TYR:CE2	2.41	0.55
1:B:103:GLY:N	1:B:128:LEU:HB2	2.22	0.55
2:C:33:PRO:HG2	2:C:700:GLN:HG3	1.88	0.55
2:C:255:SER:HB3	2:C:258:MET:CG	2.37	0.55
2:C:518:LYS:HB3	2:C:578:TYR:CE1	2.40	0.55
2:C:756:GLU:CB	2:C:870:ARG:HG2	2.36	0.55
2:C:995:ASN:OD1	2:C:996:ARG:N	2.37	0.55
2:C:1003:ASP:OD1	2:C:1006:GLY:N	2.38	0.55
2:C:1067:ARG:O	2:C:1067:ARG:HG2	2.06	0.55
3:D:27:GLU:HB2	3:D:94:HIS:CE1	2.42	0.55
3:D:370:GLU:HB2	5:F:322:GLN:NE2	2.21	0.55
3:D:400:LYS:HG3	3:D:404:ASP:CB	2.37	0.55
3:D:902:ALA:CB	3:D:912:ARG:HA	2.35	0.55
3:D:1052:ARG:HA	3:D:1104:HIS:CA	2.35	0.55
3:D:1054:ARG:HB3	3:D:1065:THR:O	2.06	0.55
1:A:18:ARG:HB3	1:A:197:GLU:HA	1.87	0.55
1:A:179:ASP:CB	1:A:191:LYS:HB3	2.29	0.55
1:A:185:GLN:HB2	1:A:187:THR:HG22	1.88	0.55
1:A:195:ASP:OD1	1:A:196:VAL:N	2.39	0.55
1:A:211:ALA:O	1:A:215:LEU:HD23	2.06	0.55
1:A:216:VAL:HG13	1:B:216:VAL:CG2	2.35	0.55
1:B:101:GLY:O	1:B:128:LEU:HD23	2.07	0.55
2:C:134:PHE:CD1	2:C:153:PHE:HA	2.41	0.55
2:C:168:ILE:HG22	2:C:169:ASN:OD1	2.07	0.55
2:C:272:GLU:O	2:C:275:LEU:HG	2.05	0.55
2:C:651:GLU:OE1	2:C:667:ARG:HD2	2.07	0.55
2:C:1049:TYR:HA	2:C:1056:PRO:CA	2.36	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:18:GLU:HA	3:D:21:ARG:HG2	1.87	0.55
5:F:459:GLN:O	5:F:462:SER:OG	2.18	0.55
8:P:5:DC:H2"	8:P:6:DA:OP2	2.07	0.55
1:B:183:VAL:HA	1:B:188:ASP:N	2.22	0.55
2:C:189:GLU:HB3	2:C:200:HIS:CG	2.41	0.55
2:C:208:ARG:NH2	2:C:305:ARG:HA	2.22	0.55
2:C:298:ASN:HD22	2:C:302:LYS:HE2	1.72	0.55
2:C:413:THR:OG1	2:C:414:PRO:HD2	2.06	0.55
2:C:507:ASN:HA	2:C:513:GLU:CD	2.26	0.55
2:C:622:GLU:O	2:C:714:ALA:HB1	2.07	0.55
3:D:158:GLU:OE2	3:D:219:LEU:HG	2.06	0.55
3:D:295:ARG:O	3:D:299:VAL:HG23	2.07	0.55
3:D:381:LEU:O	3:D:401:SER:HB2	2.07	0.55
3:D:589:THR:HG21	3:D:688:MET:HB2	1.89	0.55
3:D:873:LEU:O	3:D:877:LEU:HG	2.07	0.55
3:D:965:VAL:HG11	3:D:1156:VAL:CG2	2.32	0.55
4:E:56:TYR:OH	4:E:104:LEU:HB2	2.07	0.55
5:F:463:VAL:HA	5:F:466:THR:CG2	2.36	0.55
1:B:85:VAL:HG23	1:B:118:VAL:N	2.21	0.55
2:C:191:ILE:HG13	2:C:197:LYS:C	2.27	0.55
2:C:255:SER:HB3	2:C:258:MET:HB2	1.89	0.55
2:C:760:ARG:HA	2:C:864:GLY:O	2.07	0.55
2:C:790:VAL:HG13	2:C:802:LEU:O	2.06	0.55
3:D:134:TYR:HB2	3:D:235:ILE:HB	1.89	0.55
3:D:599:TYR:CD2	3:D:601:PRO:HD3	2.42	0.55
3:D:729:VAL:HB	3:D:798:PRO:HB3	1.89	0.55
3:D:1181:ILE:HD12	3:D:1185:GLU:CG	2.37	0.55
1:B:146:TYR:HD1	1:B:167:ILE:HA	1.71	0.55
2:C:59:ASP:HA	2:C:62:GLU:HG2	1.87	0.55
2:C:210:ALA:HB3	2:C:300:PHE:HE1	1.72	0.55
2:C:380:THR:O	2:C:384:LEU:HG	2.07	0.55
2:C:563:ARG:HB3	2:C:567:GLU:HB2	1.88	0.55
2:C:785:ASP:N	2:C:789:ILE:O	2.24	0.55
2:C:792:ILE:HD11	2:C:850:ILE:HD12	1.89	0.55
2:C:905:PRO:HA	2:C:1011:PHE:O	2.07	0.55
2:C:955:TRP:CE2	2:C:987:GLY:HA3	2.42	0.55
2:C:1055:GLN:NE2	3:D:420:LYS:HD3	2.22	0.55
2:C:1067:ARG:HH12	3:D:418:LEU:HD21	1.70	0.55
2:C:1094:ASP:CB	2:C:1119:GLU:H	2.20	0.55
3:D:1033:GLU:HA	3:D:1036:GLU:CB	2.34	0.55
5:F:289:ASP:O	5:F:292:LYS:HB3	2.06	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:34:LEU:O	1:A:37:SER:HB3	2.06	0.55
1:A:82:SER:O	1:A:123:MET:HE1	2.06	0.55
1:B:52:THR:HB	1:B:139:VAL:CG1	2.35	0.55
2:C:301:PHE:HE1	2:C:334:THR:HA	1.70	0.55
2:C:384:LEU:HA	2:C:387:ASN:ND2	2.21	0.55
2:C:505:ARG:NH2	2:C:513:GLU:OE1	2.34	0.55
2:C:543:GLN:HA	2:C:580:ASP:OD2	2.07	0.55
2:C:853:PHE:CD2	2:C:868:LEU:HD12	2.41	0.55
2:C:1040:LYS:C	2:C:1060:LYS:HE3	2.26	0.55
2:C:1096:THR:HA	2:C:1099:ARG:CZ	2.35	0.55
3:D:1167:ILE:HG23	3:D:1169:ASP:O	2.07	0.55
5:F:247:VAL:HG13	5:F:251:LYS:HE3	1.89	0.55
5:F:322:GLN:HA	5:F:325:ASN:ND2	2.21	0.55
5:F:342:LYS:HG2	7:O:29:DA:H3'	1.88	0.55
2:C:278:TYR:CD2	2:C:287:PRO:HA	2.41	0.55
2:C:376:ARG:NH2	2:C:457:ALA:HB2	2.22	0.55
2:C:722:ALA:O	2:C:723:ILE:HD13	2.07	0.55
2:C:736:ILE:HD11	2:C:916:ILE:HB	1.88	0.55
3:D:64:LYS:HG2	3:D:65:TYR:CE2	2.41	0.55
3:D:127:LYS:O	3:D:132:ALA:N	2.37	0.55
3:D:329:GLN:OE1	6:J:11:LEU:HD21	2.07	0.55
3:D:674:ASN:HD21	3:D:684:VAL:H	1.55	0.55
3:D:747:ASP:O	3:D:751:GLU:HG3	2.06	0.55
5:F:315:MET:CE	5:F:362:GLN:HB2	2.37	0.55
5:F:445:VAL:HG12	5:F:447:ALA:N	2.22	0.55
1:B:98:ARG:HA	1:B:134:LEU:O	2.07	0.55
2:C:191:ILE:HA	2:C:198:THR:HA	1.89	0.55
2:C:236:VAL:HG13	2:C:273:ALA:HB1	1.89	0.55
2:C:1119:GLU:O	2:C:1123:VAL:HG23	2.07	0.55
3:D:131:PHE:CD1	3:D:256:MET:HG2	2.42	0.55
3:D:181:LEU:HD21	3:D:198:ARG:CD	2.37	0.55
3:D:468:ASN:ND2	3:D:470:LYS:HB3	2.21	0.55
3:D:636:ARG:HG2	3:D:662:TRP:C	2.28	0.55
3:D:896:GLY:N	3:D:967:THR:HG21	2.22	0.55
3:D:1066:ILE:HG13	3:D:1077:TYR:HE2	1.72	0.55
5:F:439:ILE:CG1	6:J:6:LEU:HD12	2.26	0.55
6:J:6:LEU:HD12	6:J:6:LEU:O	2.07	0.55
1:A:33:THR:CG2	1:B:37:SER:HA	2.38	0.54
1:A:141:GLU:HG2	1:A:142:ARG:O	2.06	0.54
2:C:435:GLN:HG3	2:C:436:LEU:HD12	1.87	0.54
2:C:651:GLU:CD	2:C:667:ARG:HD2	2.27	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:696:VAL:HB	2:C:700:GLN:OE1	2.06	0.54
3:D:826:ASN:ND2	3:D:828:LYS:HB2	2.22	0.54
3:D:845:THR:N	3:D:848:GLU:OE1	2.39	0.54
1:A:145:GLY:N	1:A:168:TYR:HB2	2.21	0.54
1:A:174:VAL:O	2:C:910:GLY:HA3	2.06	0.54
1:B:90:ASP:OD1	1:B:142:ARG:HD3	2.07	0.54
1:B:98:ARG:HG2	1:B:135:GLU:CA	2.34	0.54
1:B:211:ALA:O	1:B:214:THR:OG1	2.23	0.54
2:C:789:ILE:HG22	2:C:803:VAL:HG13	1.89	0.54
3:D:86:LYS:O	3:D:89:ARG:HB3	2.08	0.54
3:D:262:GLN:O	3:D:266:GLU:HG3	2.08	0.54
3:D:524:LEU:HD21	3:D:528:VAL:HG23	1.89	0.54
3:D:530:GLU:HB2	3:D:578:ARG:HH11	1.73	0.54
3:D:736:VAL:HG22	3:D:799:ILE:HD13	1.90	0.54
8:P:14:DA:H1'	8:P:15:DC:H5'	1.88	0.54
1:A:147:VAL:CG1	1:A:166:SER:HB2	2.37	0.54
1:B:63:PHE:HB2	3:D:603:SER:CB	2.36	0.54
2:C:277:ILE:HD13	2:C:280:LYS:NZ	2.23	0.54
2:C:306:TYR:OH	2:C:333:LEU:HD11	2.08	0.54
3:D:64:LYS:HE3	3:D:75:CYS:SG	2.47	0.54
3:D:206:ARG:HA	3:D:209:ARG:HG3	1.88	0.54
3:D:262:GLN:HG3	3:D:310:MET:CE	2.37	0.54
3:D:356:ARG:HA	3:D:359:ASP:OD2	2.06	0.54
3:D:423:ASP:OD1	3:D:424:TYR:N	2.39	0.54
3:D:438:LEU:HA	3:D:525:HIS:CD2	2.42	0.54
3:D:895:ARG:NH1	3:D:967:THR:HA	2.23	0.54
3:D:922:ALA:CB	3:D:981:ARG:HB3	2.37	0.54
3:D:1025:THR:HG22	3:D:1030:ARG:HB2	1.89	0.54
1:A:74:THR:HA	1:A:77:ILE:CG1	2.38	0.54
2:C:222:VAL:HB	2:C:234:VAL:HG13	1.88	0.54
2:C:222:VAL:CG2	2:C:233:PRO:HA	2.36	0.54
2:C:647:SER:CB	2:C:697:GLU:HA	2.37	0.54
2:C:841:HIS:O	2:C:843:GLU:HG3	2.07	0.54
2:C:1007:LYS:HD2	2:C:1022:PRO:O	2.07	0.54
3:D:329:GLN:HB2	3:D:335:PHE:CD1	2.42	0.54
3:D:457:MET:O	3:D:460:LEU:HG	2.08	0.54
3:D:585:LEU:O	3:D:589:THR:HG23	2.08	0.54
3:D:612:TYR:CZ	3:D:627:LEU:HD11	2.43	0.54
3:D:921:TYR:HA	3:D:944:LEU:O	2.07	0.54
5:F:317:PHE:O	5:F:321:ILE:HG13	2.08	0.54
7:O:24:DG:H1'	7:O:25:DC:H5'	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:73:VAL:O	1:B:77:ILE:HG13	2.08	0.54
2:C:113:ASP:HB2	2:C:132:PRO:HD2	1.88	0.54
2:C:187:PHE:N	2:C:368:ASP:OD2	2.41	0.54
3:D:55:THR:O	6:J:12:GLY:HA3	2.07	0.54
3:D:212:ALA:HA	3:D:215:GLU:CD	2.27	0.54
3:D:334:ARG:NH1	5:F:419:GLU:O	2.41	0.54
3:D:367:VAL:CG1	3:D:371:LYS:HE3	2.37	0.54
3:D:914:PRO:HG2	3:D:915:TYR:CD2	2.43	0.54
3:D:1028:LEU:HB3	3:D:1029:PRO:HD3	1.88	0.54
5:F:241:LEU:HD11	5:F:294:HIS:HE1	1.70	0.54
8:P:22:DC:H2"	8:P:23:DA:C8	2.43	0.54
1:A:54:ILE:CG2	1:A:138:LEU:HA	2.34	0.54
1:A:113:PRO:HD2	1:A:116:VAL:HG21	1.89	0.54
1:A:177:LYS:O	1:A:193:ILE:N	2.41	0.54
1:B:71:GLU:OE2	1:B:127:THR:HG23	2.08	0.54
2:C:77:ARG:HG2	2:C:77:ARG:O	2.08	0.54
2:C:89:VAL:HA	2:C:92:GLU:HG2	1.90	0.54
2:C:106:SER:O	2:C:138:GLU:N	2.27	0.54
2:C:516:TYR:CE2	2:C:531:LEU:HB2	2.42	0.54
2:C:540:VAL:HG11	2:C:575:GLU:O	2.08	0.54
3:D:329:GLN:HB2	3:D:335:PHE:CE1	2.42	0.54
3:D:662:TRP:CZ3	3:D:664:ALA:HB2	2.43	0.54
3:D:684:VAL:HG13	3:D:686:LYS:NZ	2.21	0.54
3:D:721:PHE:O	3:D:725:THR:HG23	2.08	0.54
3:D:910:LEU:CD2	3:D:956:GLY:HA2	2.38	0.54
3:D:1169:ASP:O	3:D:1201:ALA:HB1	2.07	0.54
1:A:107:ALA:HB3	1:A:121:PRO:CA	2.37	0.54
2:C:182:SER:CB	2:C:377:ARG:HD2	2.37	0.54
2:C:232:GLN:NE2	2:C:233:PRO:HD2	2.23	0.54
2:C:373:PHE:CE2	2:C:479:HIS:HA	2.43	0.54
2:C:622:GLU:HB3	2:C:717:LYS:HD3	1.90	0.54
2:C:907:LEU:CD1	2:C:911:THR:HB	2.29	0.54
2:C:1035:HIS:HA	2:C:1040:LYS:HZ1	1.73	0.54
2:C:1054:GLN:C	2:C:1055:GLN:HG3	2.27	0.54
3:D:472:ALA:O	3:D:476:VAL:HG23	2.07	0.54
3:D:736:VAL:CG1	3:D:841:ARG:HD2	2.37	0.54
3:D:880:VAL:HG21	3:D:1210:ILE:HB	1.90	0.54
3:D:1056:GLU:HB3	3:D:1063:LYS:O	2.08	0.54
3:D:1234:THR:O	3:D:1238:ILE:HG13	2.07	0.54
3:D:1251:ASN:HA	3:D:1254:ILE:CG1	2.37	0.54
4:E:56:TYR:CE2	4:E:99:ILE:HG12	2.43	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:478:ARG:NH1	8:P:20:DG:OP1	2.23	0.54
1:B:107:ALA:CB	1:B:123:MET:HB3	2.37	0.54
2:C:97:GLU:HG3	2:C:103:MET:O	2.08	0.54
2:C:516:TYR:CD2	2:C:531:LEU:HB2	2.43	0.54
2:C:820:LEU:HD13	5:F:479:PHE:CE2	2.40	0.54
2:C:1023:VAL:HG13	3:D:730:THR:HG21	1.90	0.54
3:D:937:ILE:HD11	3:D:951:ALA:CB	2.35	0.54
3:D:1009:GLN:O	3:D:1011:THR:HG23	2.08	0.54
3:D:1050:THR:H	3:D:1107:VAL:HG22	1.73	0.54
5:F:502:ARG:O	5:F:506:ILE:HG13	2.08	0.54
2:C:200:HIS:CD2	2:C:348:LEU:HG	2.43	0.54
2:C:320:LEU:HA	2:C:363:VAL:HG11	1.89	0.54
2:C:522:GLY:O	2:C:553:ARG:HA	2.07	0.54
2:C:1070:GLU:OE1	3:D:417:LEU:HB2	2.08	0.54
2:C:1111:ASN:ND2	4:E:65:ASN:HB3	2.22	0.54
3:D:49:GLU:CD	3:D:54:PRO:HA	2.28	0.54
3:D:797:ASN:O	3:D:801:THR:OG1	2.23	0.54
3:D:1084:GLN:C	3:D:1085:ARG:HD2	2.28	0.54
8:P:20:DG:H1'	8:P:21:DT:C5'	2.37	0.54
1:A:87:SER:HB3	1:A:142:ARG:CD	2.38	0.54
1:A:221:LEU:HD12	1:A:225:LEU:CD2	2.37	0.54
1:B:182:ARG:CD	1:B:185:GLN:HB3	2.36	0.54
2:C:229:LYS:O	2:C:230:ARG:HB3	2.07	0.54
2:C:725:PRO:HA	2:C:730:ASN:ND2	2.23	0.54
3:D:811:PHE:O	3:D:814:THR:HB	2.08	0.54
5:F:317:PHE:CD2	5:F:321:ILE:HD11	2.43	0.54
7:O:3:DT:H1'	7:O:4:DT:C5'	2.38	0.54
7:O:5:DG:H1'	7:O:6:DA:H5'	1.90	0.54
1:A:55:ARG:NE	1:A:137:GLU:OE2	2.40	0.53
1:B:24:GLU:HB2	1:B:25:PRO:HA	1.90	0.53
1:B:63:PHE:HB2	3:D:603:SER:HB3	1.90	0.53
1:B:75:GLU:HA	1:B:78:LEU:CD2	2.37	0.53
2:C:104:SER:HB3	2:C:142:ASN:OD1	2.09	0.53
2:C:677:ARG:HD2	2:C:752:ILE:HG22	1.89	0.53
2:C:1054:GLN:NE2	3:D:89:ARG:HH22	2.06	0.53
3:D:590:THR:HG23	3:D:630:ARG:CD	2.37	0.53
3:D:612:TYR:HB2	3:D:635:VAL:CG1	2.33	0.53
3:D:1276:GLU:HA	3:D:1279:ARG:HB3	1.90	0.53
1:B:172:LEU:HB2	1:B:198:THR:HA	1.90	0.53
2:C:38:ARG:HA	2:C:971:ILE:HG13	1.89	0.53
2:C:352:GLN:HB2	2:C:365:VAL:HG11	1.89	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:558:ARG:NH2	2:C:570:TYR:HB2	2.23	0.53
2:C:571:VAL:HG21	2:C:575:GLU:HB2	1.90	0.53
2:C:683:CYS:HA	2:C:752:ILE:HD11	1.89	0.53
2:C:883:ASP:O	2:C:895:ILE:HG13	2.08	0.53
2:C:900:PRO:HD2	2:C:903:ASP:OD2	2.08	0.53
3:D:369:ASN:OD1	3:D:372:ARG:NH2	2.41	0.53
3:D:668:LEU:HA	3:D:671:VAL:CG2	2.39	0.53
3:D:979:TYR:O	3:D:1152:LYS:NZ	2.38	0.53
3:D:1055:LEU:HB3	3:D:1101:ASP:HA	1.91	0.53
3:D:1166:THR:HG22	3:D:1204:ARG:O	2.08	0.53
1:B:19:SER:HB2	1:B:204:PRO:HG2	1.90	0.53
2:C:113:ASP:HB2	2:C:132:PRO:HB2	1.90	0.53
2:C:118:PRO:HG2	2:C:121:GLU:HB3	1.89	0.53
2:C:610:ASN:OD1	2:C:613:ARG:NH2	2.42	0.53
2:C:624:PRO:HB3	2:C:1029:TYR:CG	2.44	0.53
2:C:818:GLU:OE2	2:C:822:ARG:NE	2.41	0.53
2:C:1127:GLU:O	2:C:1131:LEU:HG	2.09	0.53
3:D:30:LYS:HE3	3:D:44:ASP:OD2	2.07	0.53
3:D:339:ASP:HB2	5:F:424:ASP:OD2	2.08	0.53
3:D:587:TYR:O	3:D:630:ARG:HD3	2.09	0.53
3:D:1055:LEU:HB3	3:D:1101:ASP:CB	2.39	0.53
5:F:488:THR:HB	8:P:20:DG:P	2.48	0.53
6:J:27:ARG:HB2	6:J:44:PHE:O	2.08	0.53
1:A:173:LYS:O	1:A:197:GLU:HB3	2.08	0.53
1:B:21:PHE:O	1:B:194:LEU:N	2.41	0.53
1:B:170:PRO:O	1:B:199:LYS:HE3	2.08	0.53
2:C:396:MET:O	2:C:400:VAL:HG23	2.09	0.53
2:C:592:ALA:CB	2:C:630:MET:HG3	2.36	0.53
2:C:654:SER:OG	2:C:657:TYR:N	2.26	0.53
2:C:816:PRO:HB2	5:F:481:LEU:HD23	1.90	0.53
3:D:525:HIS:CG	3:D:526:PRO:HD2	2.44	0.53
3:D:642:PRO:HB3	3:D:662:TRP:CH2	2.43	0.53
3:D:673:PHE:CZ	3:D:688:MET:HG3	2.44	0.53
3:D:1046:ILE:HA	3:D:1110:GLN:HA	1.89	0.53
5:F:329:ILE:O	5:F:333:GLU:HG3	2.08	0.53
5:F:440:GLU:N	6:J:7:ARG:HA	2.23	0.53
8:P:3:DC:H1'	8:P:4:DA:H5'	1.91	0.53
1:B:78:LEU:CA	1:B:81:LYS:HE2	2.35	0.53
2:C:39:VAL:CG1	2:C:963:LEU:HD21	2.38	0.53
2:C:133:LEU:CD1	2:C:157:PHE:HB2	2.37	0.53
2:C:719:LEU:O	2:C:1028:MET:N	2.33	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:821:LEU:HD23	5:F:527:LEU:HD21	1.90	0.53
3:D:494:HIS:CD2	3:D:545:LEU:HD11	2.43	0.53
3:D:606:HIS:HB2	3:D:607:PRO:HD2	1.90	0.53
3:D:790:ARG:HB2	3:D:811:PHE:CZ	2.44	0.53
5:F:339:LYS:HD2	7:O:27:DA:C5	2.43	0.53
5:F:381:ARG:HG2	5:F:385:GLU:OE2	2.09	0.53
8:P:12:DA:H3'	8:P:12:DA:OP2	2.08	0.53
2:C:68:PRO:HA	2:C:71:ARG:CB	2.39	0.53
2:C:376:ARG:HH21	2:C:457:ALA:HB2	1.73	0.53
2:C:519:VAL:HA	2:C:524:VAL:HA	1.90	0.53
2:C:541:VAL:HG22	2:C:578:TYR:CB	2.33	0.53
2:C:543:GLN:CD	3:D:847:LEU:HD11	2.28	0.53
2:C:560:LEU:HD22	2:C:568:VAL:CG1	2.39	0.53
2:C:759:ALA:O	2:C:866:ASN:N	2.41	0.53
2:C:801:ILE:HD13	2:C:838:LYS:CG	2.35	0.53
3:D:35:ASN:O	3:D:39:LEU:HD23	2.09	0.53
3:D:206:ARG:O	3:D:209:ARG:HG3	2.09	0.53
3:D:1248:LEU:HD12	3:D:1249:LYS:N	2.23	0.53
5:F:386:LEU:HB2	5:F:394:PRO:HG2	1.91	0.53
1:A:220:GLY:HA2	1:A:223:ARG:CB	2.39	0.53
2:C:688:PRO:HA	2:C:703:ALA:CB	2.39	0.53
2:C:717:LYS:O	2:C:1029:TYR:HA	2.08	0.53
2:C:1072:GLU:HG2	3:D:509:ILE:HG13	1.89	0.53
2:C:1118:PRO:HG2	2:C:1121:PHE:CB	2.38	0.53
3:D:134:TYR:CB	3:D:235:ILE:HB	2.38	0.53
3:D:165:GLN:NE2	3:D:169:GLU:OE2	2.41	0.53
3:D:284:GLY:O	3:D:289:LYS:HD3	2.08	0.53
3:D:334:ARG:HH12	5:F:419:GLU:CA	2.20	0.53
3:D:672:MET:O	3:D:675:GLU:HB2	2.08	0.53
3:D:1081:SER:HB2	3:D:1084:GLN:HG2	1.90	0.53
3:D:1182:ASP:OD1	3:D:1183:ARG:N	2.41	0.53
3:D:1270:ILE:HG12	4:E:108:GLU:HA	1.90	0.53
5:F:405:ILE:HD12	5:F:409:LYS:CG	2.39	0.53
8:P:25:DG:H2''	8:P:26:DC:H6	1.74	0.53
1:A:43:LEU:HD23	2:C:902:GLU:CA	2.38	0.53
1:A:127:THR:C	1:A:128:LEU:HD12	2.29	0.53
1:A:221:LEU:CD2	1:B:7:PRO:HG2	2.39	0.53
1:B:30:PHE:HB3	1:B:34:LEU:HD23	1.90	0.53
1:B:180:ALA:O	1:B:183:VAL:HG13	2.09	0.53
2:C:563:ARG:HG3	2:C:565:ALA:H	1.74	0.53
2:C:689:ILE:HD11	2:C:701:VAL:HG12	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:772:ASP:O	2:C:773:ILE:HD13	2.09	0.53
2:C:1100:VAL:HG12	5:F:447:ALA:HB1	1.91	0.53
3:D:1043:LYS:HA	3:D:1115:SER:O	2.08	0.53
4:E:64:ILE:O	4:E:67:TYR:HB3	2.09	0.53
8:P:7:DA:C2'	8:P:8:DT:H71	2.38	0.53
1:B:50:ALA:O	1:B:140:VAL:HG13	2.08	0.53
2:C:161:THR:OG1	2:C:165:THR:N	2.23	0.53
2:C:403:ARG:HD3	2:C:407:GLN:NE2	2.23	0.53
2:C:674:LYS:HZ2	2:C:686:GLN:N	2.05	0.53
2:C:1007:LYS:HG2	2:C:1024:THR:N	2.24	0.53
2:C:1008:ALA:O	2:C:1022:PRO:HA	2.09	0.53
2:C:1068:PHE:CB	3:D:422:VAL:CG2	2.81	0.53
3:D:16:THR:O	3:D:20:ILE:HG13	2.08	0.53
3:D:58:TRP:O	3:D:66:LYS:HA	2.09	0.53
3:D:58:TRP:HD1	3:D:82:VAL:HG22	1.74	0.53
3:D:147:GLU:OE2	3:D:150:THR:OG1	2.23	0.53
3:D:876:ARG:O	3:D:880:VAL:HG23	2.09	0.53
3:D:1251:ASN:HB3	3:D:1256:LYS:O	2.09	0.53
3:D:1271:ALA:HB3	4:E:107:THR:OG1	2.08	0.53
5:F:276:ALA:HA	5:F:279:ARG:HG2	1.90	0.53
7:O:19:DA:H2'	7:O:20:DT:C7	2.39	0.53
1:A:83:LEU:HD23	1:A:123:MET:SD	2.49	0.53
2:C:65:ILE:HG23	2:C:112:PHE:CE2	2.43	0.53
2:C:208:ARG:HG2	2:C:307:ASP:O	2.09	0.53
2:C:334:THR:HG23	2:C:337:ASP:N	2.17	0.53
2:C:548:ILE:HG12	2:C:554:PHE:HE1	1.73	0.53
2:C:816:PRO:HA	2:C:819:ARG:CZ	2.39	0.53
2:C:1124:LEU:HD23	11:D:1404:C0L:C01	2.39	0.53
3:D:35:ASN:HD22	3:D:38:THR:HG22	1.73	0.53
3:D:107:PHE:HB2	3:D:114:LEU:HD12	1.91	0.53
3:D:887:ARG:HD2	3:D:972:THR:O	2.09	0.53
5:F:353:GLN:HG3	7:O:26:DT:O4	2.08	0.53
6:J:52:GLY:HA2	6:J:64:LEU:HD12	1.91	0.53
6:J:80:THR:OG1	6:J:82:TRP:HB3	2.09	0.53
8:P:8:DT:H2''	8:P:9:DT:O5'	2.09	0.53
1:A:110:ILE:O	1:A:112:PRO:HD3	2.08	0.52
1:A:220:GLY:HA2	1:A:223:ARG:HB3	1.90	0.52
2:C:295:LEU:HG	2:C:299:LEU:HD11	1.91	0.52
3:D:480:ARG:O	3:D:483:VAL:HG12	2.09	0.52
3:D:1086:LEU:HG	3:D:1099:LEU:HD23	1.91	0.52
1:B:15:THR:CG2	1:B:18:ARG:HB3	2.40	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:93:VAL:HG12	1:B:140:VAL:O	2.10	0.52
2:C:152:VAL:HG11	2:C:418:ILE:HD13	1.91	0.52
2:C:280:LYS:O	2:C:283:PRO:HD3	2.09	0.52
2:C:993:LEU:HD12	2:C:993:LEU:O	2.09	0.52
2:C:1050:SER:OG	2:C:1051:MET:N	2.40	0.52
3:D:49:GLU:O	3:D:53:GLY:N	2.39	0.52
3:D:104:ILE:HG23	3:D:105:TRP:CD1	2.44	0.52
3:D:282:ARG:HG3	3:D:283:ASN:OD1	2.09	0.52
3:D:548:SER:O	3:D:552:GLN:HG3	2.09	0.52
4:E:60:ARG:HH11	4:E:63:GLN:HB2	1.74	0.52
5:F:459:GLN:O	5:F:463:VAL:HG23	2.09	0.52
1:A:52:THR:HB	1:A:139:VAL:CG1	2.39	0.52
1:B:7:PRO:HA	1:B:25:PRO:CD	2.37	0.52
2:C:117:ALA:HB3	2:C:122:CYS:SG	2.49	0.52
2:C:153:PHE:CE2	2:C:155:GLY:HA2	2.44	0.52
2:C:334:THR:CG2	2:C:336:GLU:HB3	2.39	0.52
2:C:540:VAL:HG13	2:C:576:VAL:HA	1.91	0.52
3:D:53:GLY:O	3:D:88:ARG:NH1	2.35	0.52
3:D:548:SER:OG	3:D:551:ALA:N	2.23	0.52
3:D:1086:LEU:HD23	3:D:1099:LEU:HG	1.91	0.52
3:D:1274:PRO:HA	4:E:104:LEU:HA	1.91	0.52
3:D:1275:THR:HA	4:E:105:GLU:OE1	2.09	0.52
1:B:76:ILE:O	1:B:80:LEU:HG	2.09	0.52
1:B:147:VAL:CG1	1:B:166:SER:HB2	2.39	0.52
2:C:160:MET:SD	2:C:164:GLY:HA2	2.50	0.52
2:C:206:PRO:HG3	2:C:306:TYR:CE1	2.44	0.52
2:C:323:HIS:ND1	2:C:326:GLU:OE2	2.36	0.52
2:C:658:ILE:HD11	2:C:688:PRO:CB	2.36	0.52
2:C:881:ASP:HA	2:C:895:ILE:HG21	1.91	0.52
2:C:1054:GLN:C	2:C:1055:GLN:CG	2.78	0.52
2:C:1073:CYS:O	2:C:1076:MET:N	2.42	0.52
3:D:100:PRO:HG2	3:D:262:GLN:OE1	2.09	0.52
3:D:704:TYR:HB3	3:D:705:PRO:HD2	1.91	0.52
3:D:1086:LEU:HD23	3:D:1099:LEU:CG	2.40	0.52
4:E:30:ASP:OD1	4:E:31:THR:N	2.42	0.52
5:F:302:LEU:HB2	7:O:31:DT:C2	2.44	0.52
6:J:34:THR:HG21	6:J:38:GLU:HB2	1.91	0.52
6:J:54:TRP:O	6:J:62:GLY:N	2.39	0.52
1:A:49:ALA:HA	1:A:142:ARG:HA	1.92	0.52
1:B:119:HIS:O	1:B:200:ASN:ND2	2.40	0.52
2:C:134:PHE:HD1	2:C:153:PHE:HA	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:243:TRP:HE3	2:C:247:GLN:HB3	1.75	0.52
2:C:1106:ILE:HG21	3:D:454:PRO:HB2	1.92	0.52
3:D:70:PHE:HB3	3:D:73:ILE:HD11	1.92	0.52
3:D:91:ARG:O	3:D:321:PRO:HG3	2.10	0.52
3:D:126:GLU:HG3	3:D:130:TYR:CD2	2.45	0.52
3:D:592:VAL:HB	3:D:595:ASP:OD2	2.09	0.52
3:D:596:THR:HB	3:D:628:SER:N	2.23	0.52
3:D:674:ASN:ND2	3:D:684:VAL:H	2.07	0.52
6:J:81:HIS:HA	6:J:84:MET:HE2	1.92	0.52
6:J:107:SER:HA	6:J:111:GLY:O	2.08	0.52
7:O:24:DG:H1'	7:O:25:DC:C5'	2.39	0.52
1:A:32:TYR:HB3	2:C:1016:GLY:O	2.09	0.52
1:B:1:MET:HB2	1:B:232:ILE:HG23	1.92	0.52
1:B:52:THR:O	1:B:164:VAL:HG22	2.08	0.52
2:C:38:ARG:CD	2:C:973:SER:HB3	2.38	0.52
2:C:192:ASP:HB2	2:C:199:LEU:CD1	2.31	0.52
2:C:221:THR:HA	2:C:261:THR:HG22	1.91	0.52
2:C:239:LYS:HZ3	2:C:268:VAL:HA	1.75	0.52
2:C:272:GLU:HA	2:C:275:LEU:CD2	2.39	0.52
2:C:1081:ALA:HB1	3:D:554:GLU:HB3	1.92	0.52
3:D:192:ASP:O	3:D:196:LYS:HG3	2.10	0.52
3:D:342:ASP:O	3:D:346:ARG:HG3	2.10	0.52
3:D:812:THR:O	3:D:816:THR:HG23	2.10	0.52
3:D:1085:ARG:HD3	3:D:1113:GLU:OE2	2.08	0.52
3:D:1157:ILE:HG22	3:D:1161:MET:HE3	1.92	0.52
3:D:1270:ILE:HG23	4:E:107:THR:O	2.09	0.52
5:F:445:VAL:HG12	5:F:447:ALA:H	1.75	0.52
1:A:22:VAL:HG23	1:A:192:LEU:O	2.09	0.52
2:C:211:TRP:O	2:C:227:ASP:N	2.43	0.52
2:C:277:ILE:HD13	2:C:280:LYS:HZ1	1.73	0.52
2:C:313:ARG:CD	2:C:331:SER:HA	2.37	0.52
2:C:727:GLU:H	3:D:725:THR:HG22	1.74	0.52
2:C:840:PRO:HG2	2:C:843:GLU:OE2	2.08	0.52
3:D:138:SER:N	3:D:253:THR:OG1	2.43	0.52
4:E:59:LYS:O	4:E:63:GLN:HG3	2.09	0.52
7:O:16:DT:H2''	7:O:17:DA:O5'	2.09	0.52
8:P:11:DA:H1'	8:P:12:DA:H5'	1.90	0.52
1:A:18:ARG:HB2	1:A:196:VAL:O	2.09	0.52
1:A:226:ASN:ND2	1:B:205:ARG:HG3	2.23	0.52
2:C:195:THR:HG22	2:C:197:LYS:HG3	1.92	0.52
2:C:563:ARG:HB3	2:C:567:GLU:N	2.24	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:707:CYS:HB3	2:C:715:LEU:HD23	1.92	0.52
3:D:35:ASN:ND2	3:D:38:THR:H	2.07	0.52
3:D:181:LEU:HD21	3:D:198:ARG:HG2	1.91	0.52
3:D:354:LEU:HB2	3:D:370:GLU:CG	2.37	0.52
3:D:866:ARG:HH12	3:D:1011:THR:HG22	1.74	0.52
3:D:913:ASP:OD1	3:D:914:PRO:HD2	2.10	0.52
3:D:913:ASP:OD2	3:D:915:TYR:N	2.43	0.52
3:D:1047:ALA:HB3	3:D:1109:GLN:N	2.24	0.52
3:D:1278:ALA:HB1	4:E:103:LEU:HD23	1.92	0.52
5:F:447:ALA:O	5:F:450:ALA:N	2.42	0.52
6:J:102:LEU:HD21	6:J:106:ARG:NH2	2.25	0.52
1:A:177:LYS:O	1:A:192:LEU:HD12	2.10	0.52
1:B:85:VAL:HA	1:B:117:THR:O	2.10	0.52
2:C:248:ILE:O	2:C:252:PHE:N	2.40	0.52
2:C:303:GLU:HB3	2:C:332:THR:CB	2.40	0.52
2:C:320:LEU:CB	2:C:322:LEU:HG	2.39	0.52
2:C:322:LEU:CD2	2:C:357:VAL:HG11	2.40	0.52
2:C:380:THR:O	2:C:383:GLU:HB3	2.10	0.52
3:D:146:ASN:OD1	3:D:147:GLU:N	2.43	0.52
3:D:446:LEU:O	3:D:449:LEU:HB3	2.09	0.52
3:D:888:GLU:O	3:D:976:ALA:N	2.36	0.52
3:D:928:ASP:HA	3:D:939:GLU:HA	1.91	0.52
5:F:479:PHE:HD2	5:F:481:LEU:HD11	1.74	0.52
1:A:66:VAL:HB	1:A:69:VAL:CG2	2.39	0.52
1:A:66:VAL:HB	1:A:69:VAL:HG21	1.90	0.52
1:B:78:LEU:HA	1:B:81:LYS:HG3	1.92	0.52
2:C:111:ARG:HG3	2:C:134:PHE:HB2	1.92	0.52
2:C:222:VAL:HG23	2:C:233:PRO:HA	1.92	0.52
2:C:344:TYR:CZ	2:C:365:VAL:HA	2.44	0.52
2:C:868:LEU:HD22	2:C:869:VAL:H	1.75	0.52
2:C:883:ASP:OD1	2:C:1037:VAL:N	2.43	0.52
3:D:72:GLY:O	6:J:43:PRO:HB2	2.10	0.52
3:D:232:LYS:O	3:D:234:LEU:HD12	2.09	0.52
3:D:566:LEU:HD23	3:D:573:PRO:CA	2.40	0.52
3:D:901:LEU:HD12	3:D:957:ILE:O	2.10	0.52
3:D:970:THR:OG1	3:D:973:GLY:O	2.27	0.52
3:D:1055:LEU:HA	3:D:1064:ILE:CG2	2.30	0.52
5:F:400:ALA:HB2	5:F:407:PRO:HA	1.92	0.52
1:A:23:ILE:O	1:A:26:LEU:HD11	2.10	0.51
1:B:30:PHE:HA	1:B:33:THR:HG23	1.91	0.51
2:C:719:LEU:O	2:C:1027:TYR:HA	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:747:LEU:CB	2:C:879:ILE:HB	2.40	0.51
2:C:759:ALA:HB2	2:C:867:GLU:HB3	1.92	0.51
3:D:135:VAL:HG23	3:D:234:LEU:HA	1.92	0.51
3:D:380:ALA:O	3:D:384:ASN:HB2	2.10	0.51
3:D:908:GLY:O	3:D:909:THR:HG23	2.10	0.51
3:D:1208:MET:SD	3:D:1213:ALA:HA	2.50	0.51
5:F:299:ASN:HA	7:O:31:DT:N3	2.24	0.51
7:O:28:DT:H5'	7:O:28:DT:H6	1.74	0.51
1:A:49:ALA:CB	1:A:142:ARG:HA	2.41	0.51
1:B:56:ILE:HG12	1:B:136:VAL:CG2	2.40	0.51
1:B:86:SER:O	1:B:117:THR:HG22	2.11	0.51
2:C:89:VAL:O	2:C:93:LEU:HD23	2.09	0.51
2:C:624:PRO:HB3	2:C:1029:TYR:CD1	2.45	0.51
2:C:819:ARG:NH2	5:F:479:PHE:O	2.43	0.51
2:C:1092:LYS:NZ	3:D:545:LEU:O	2.43	0.51
3:D:285:LYS:N	3:D:289:LYS:HB2	2.24	0.51
3:D:322:PRO:HB3	3:D:325:ARG:NH2	2.25	0.51
3:D:478:ARG:HB3	3:D:480:ARG:NE	2.25	0.51
3:D:567:SER:O	3:D:571:GLY:N	2.36	0.51
3:D:626:VAL:HG12	3:D:627:LEU:HG	1.92	0.51
4:E:92:LEU:O	4:E:96:LEU:HG	2.09	0.51
5:F:342:LYS:CB	7:O:29:DA:H3'	2.40	0.51
1:B:75:GLU:O	1:B:78:LEU:HG	2.11	0.51
2:C:347:ARG:CB	2:C:352:GLN:HG3	2.23	0.51
2:C:1072:GLU:HG2	3:D:509:ILE:CD1	2.41	0.51
3:D:246:ASP:OD1	3:D:247:ARG:N	2.43	0.51
3:D:416:ASN:OD1	3:D:417:LEU:N	2.39	0.51
3:D:736:VAL:HG12	3:D:841:ARG:HD2	1.92	0.51
3:D:1182:ASP:HB3	3:D:1185:GLU:CB	2.41	0.51
1:A:14:LEU:HD21	1:A:20:GLN:HG3	1.92	0.51
1:A:177:LYS:HE3	1:A:193:ILE:CD1	2.40	0.51
2:C:167:ILE:HA	2:C:171:THR:O	2.10	0.51
2:C:208:ARG:NH1	2:C:307:ASP:OD2	2.43	0.51
2:C:355:MET:O	2:C:362:GLU:HA	2.10	0.51
2:C:793:GLY:O	2:C:846:LYS:HD2	2.10	0.51
2:C:1007:LYS:CE	2:C:1022:PRO:HG2	2.40	0.51
2:C:1020:PRO:HG2	2:C:1021:TYR:CD2	2.46	0.51
3:D:444:PRO:HG2	3:D:447:MET:CB	2.40	0.51
3:D:459:ARG:HH11	3:D:462:ASP:HB2	1.76	0.51
3:D:683:PHE:CE2	3:D:685:ASN:HB2	2.44	0.51
3:D:712:THR:O	3:D:716:LEU:HG	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1065:THR:CG2	3:D:1074:GLU:HB3	2.39	0.51
3:D:1180:LEU:HD22	3:D:1206:VAL:HG21	1.92	0.51
3:D:1272:VAL:HG21	4:E:56:TYR:HA	1.92	0.51
4:E:83:VAL:HG12	4:E:98:GLU:HG3	1.93	0.51
5:F:278:ARG:O	5:F:282:MET:HG2	2.11	0.51
5:F:499:THR:HG23	7:O:3:DT:P	2.50	0.51
5:F:503:ILE:HD13	5:F:506:ILE:CD1	2.40	0.51
6:J:20:ARG:HH11	6:J:23:ASP:HB3	1.75	0.51
6:J:101:ARG:CD	6:J:104:LEU:HD13	2.35	0.51
7:O:20:DT:H2"	7:O:21:DT:H71	1.93	0.51
1:A:26:LEU:CB	1:A:190:ASP:HB2	2.39	0.51
1:A:71:GLU:OE2	1:A:127:THR:HG22	2.10	0.51
1:A:149:ALA:HB1	1:A:163:PRO:HB2	1.93	0.51
1:A:205:ARG:HD3	1:A:206:ASP:N	2.25	0.51
1:B:85:VAL:HB	1:B:118:VAL:HA	1.93	0.51
2:C:909:ASP:OD2	2:C:1001:LEU:HD11	2.11	0.51
3:D:88:ARG:O	3:D:321:PRO:HB3	2.10	0.51
3:D:768:ASP:HA	3:D:771:ASN:ND2	2.22	0.51
5:F:342:LYS:HG2	7:O:30:DC:OP2	2.10	0.51
6:J:64:LEU:HD23	6:J:65:ILE:N	2.26	0.51
1:A:54:ILE:HB	1:A:137:GLU:O	2.11	0.51
2:C:224:VAL:HB	2:C:232:GLN:CB	2.40	0.51
2:C:657:TYR:HA	2:C:670:TYR:O	2.10	0.51
2:C:1008:ALA:H	2:C:1023:VAL:H	1.57	0.51
2:C:1134:ASN:N	3:D:13:GLY:O	2.43	0.51
3:D:614:SER:OG	3:D:617:GLU:N	2.34	0.51
3:D:824:VAL:HG11	3:D:851:ILE:HG22	1.92	0.51
3:D:1169:ASP:HB2	3:D:1202:ALA:HB3	1.92	0.51
4:E:87:LEU:HD13	4:E:88:GLN:HB2	1.92	0.51
5:F:262:LEU:O	5:F:265:GLU:HB2	2.11	0.51
5:F:438:PHE:C	6:J:6:LEU:CG	2.71	0.51
1:A:149:ALA:HB1	1:A:163:PRO:CB	2.41	0.51
1:B:48:GLY:O	1:B:143:GLY:N	2.33	0.51
2:C:132:PRO:HB3	2:C:153:PHE:CE1	2.45	0.51
2:C:226:ILE:O	2:C:229:LYS:HB2	2.11	0.51
2:C:484:CYS:CB	2:C:588:SER:HB3	2.41	0.51
2:C:488:THR:CG2	2:C:606:LEU:HD11	2.41	0.51
2:C:754:GLU:HA	2:C:871:VAL:O	2.11	0.51
2:C:1109:GLY:CA	3:D:458:LYS:HE3	2.41	0.51
3:D:31:PRO:HB3	3:D:348:ILE:HB	1.93	0.51
3:D:370:GLU:OE1	5:F:322:GLN:HG3	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:383:ASP:OD2	3:D:386:ARG:NH2	2.44	0.51
3:D:1052:ARG:CA	3:D:1104:HIS:HA	2.36	0.51
3:D:1130:VAL:O	3:D:1134:LEU:HG	2.11	0.51
3:D:1169:ASP:HB2	3:D:1202:ALA:CB	2.40	0.51
3:D:1269:ASN:CB	4:E:109:GLY:HA3	2.40	0.51
5:F:286:ARG:O	5:F:290:ARG:HG3	2.10	0.51
5:F:522:VAL:HG23	5:F:523:LEU:CD2	2.40	0.51
6:J:64:LEU:CD2	6:J:66:GLU:H	2.24	0.51
1:A:5:GLN:HE21	1:A:25:PRO:HG3	1.74	0.51
1:A:27:GLU:OE1	1:A:28:PRO:HD2	2.11	0.51
1:A:80:LEU:HD21	1:A:125:ILE:HG23	1.93	0.51
1:A:85:VAL:HG23	1:A:117:THR:C	2.31	0.51
1:A:175:THR:HB	2:C:910:GLY:HA3	1.92	0.51
1:B:28:PRO:HA	1:B:190:ASP:OD2	2.10	0.51
1:B:55:ARG:HB3	1:B:161:ARG:HA	1.93	0.51
2:C:140:ILE:CG1	2:C:147:ILE:HA	2.40	0.51
2:C:185:VAL:HG12	2:C:204:VAL:CG2	2.40	0.51
2:C:241:LEU:HB3	2:C:243:TRP:HD1	1.74	0.51
2:C:357:VAL:CG2	2:C:358:PRO:HD2	2.41	0.51
2:C:641:VAL:CG2	2:C:708:THR:HG21	2.41	0.51
2:C:1137:VAL:HG21	3:D:7:PHE:CD1	2.38	0.51
3:D:317:VAL:HG12	3:D:318:PRO:O	2.10	0.51
3:D:668:LEU:O	3:D:671:VAL:HB	2.10	0.51
3:D:877:LEU:O	3:D:880:VAL:HB	2.10	0.51
5:F:283:TRP:HA	5:F:286:ARG:HE	1.76	0.51
5:F:310:TYR:HD2	5:F:355:ILE:HG21	1.75	0.51
1:A:2:LEU:HD23	1:B:143:GLY:HA2	1.93	0.51
1:A:22:VAL:HA	1:A:192:LEU:O	2.11	0.51
2:C:400:VAL:O	2:C:404:MET:N	2.42	0.51
2:C:587:VAL:HG23	2:C:591:THR:HG22	1.93	0.51
2:C:633:ARG:HH11	2:C:636:ILE:HG13	1.75	0.51
2:C:633:ARG:CA	2:C:636:ILE:HG12	2.41	0.51
2:C:854:SER:HA	2:C:867:GLU:HA	1.93	0.51
2:C:889:HIS:HB2	2:C:891:ASN:CG	2.32	0.51
3:D:545:LEU:HD12	3:D:546:PRO:CD	2.32	0.51
3:D:820:MET:HG3	3:D:837:LYS:HA	1.93	0.51
3:D:866:ARG:NE	3:D:1008:THR:O	2.43	0.51
3:D:912:ARG:HG3	3:D:916:ILE:HD12	1.93	0.51
3:D:1172:SER:OG	3:D:1199:GLU:HG3	2.11	0.51
8:P:8:DT:H2'	8:P:9:DT:H72	1.93	0.51
1:B:134:LEU:HD11	1:B:136:VAL:CG2	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:170:PRO:HA	1:B:199:LYS:HE3	1.92	0.51
2:C:354:THR:N	2:C:365:VAL:HG23	2.26	0.51
2:C:356:THR:HA	2:C:362:GLU:HA	1.93	0.51
2:C:454:ARG:O	2:C:455:LEU:HD23	2.11	0.51
3:D:222:ILE:HD11	3:D:244:LEU:CB	2.41	0.51
3:D:372:ARG:O	3:D:376:GLU:HG3	2.11	0.51
3:D:497:LEU:O	3:D:543:VAL:HA	2.11	0.51
3:D:566:LEU:HB3	3:D:571:GLY:O	2.11	0.51
4:E:38:PRO:CG	4:E:43:LEU:HD21	2.41	0.51
5:F:347:ALA:O	5:F:351:ILE:HG13	2.10	0.51
1:B:50:ALA:C	1:B:140:VAL:HG13	2.31	0.50
2:C:61:PHE:CE2	2:C:65:ILE:HD11	2.46	0.50
2:C:113:ASP:O	2:C:131:ALA:HB1	2.10	0.50
2:C:275:LEU:HD12	2:C:276:ASP:N	2.27	0.50
2:C:484:CYS:SG	2:C:588:SER:N	2.84	0.50
2:C:541:VAL:C	2:C:561:VAL:HG23	2.32	0.50
2:C:583:PRO:HG2	2:C:584:ARG:NE	2.26	0.50
2:C:1011:PHE:CE1	2:C:1018:PRO:HB3	2.42	0.50
2:C:1100:VAL:HG12	5:F:447:ALA:CB	2.41	0.50
2:C:1131:LEU:HD21	3:D:402:LEU:HB3	1.92	0.50
3:D:177:LEU:HA	3:D:180:ASP:OD2	2.11	0.50
3:D:190:LYS:HZ3	3:D:192:ASP:HB3	1.75	0.50
3:D:222:ILE:HD11	3:D:244:LEU:HA	1.93	0.50
3:D:222:ILE:CG1	3:D:244:LEU:HD12	2.38	0.50
3:D:262:GLN:HG2	3:D:266:GLU:OE2	2.11	0.50
3:D:813:GLN:O	3:D:816:THR:OG1	2.27	0.50
3:D:896:GLY:O	3:D:961:LYS:HG3	2.11	0.50
3:D:1061:PHE:HE2	3:D:1063:LYS:HE2	1.75	0.50
3:D:1085:ARG:HB2	3:D:1113:GLU:OE2	2.11	0.50
3:D:1231:ARG:HA	3:D:1234:THR:HG22	1.92	0.50
5:F:250:ALA:O	5:F:254:GLU:HG3	2.10	0.50
6:J:40:PHE:CZ	6:J:58:ASN:HB2	2.46	0.50
7:O:20:DT:C2'	7:O:21:DT:H71	2.42	0.50
1:B:3:ILE:CD1	1:B:234:ILE:HG12	2.41	0.50
1:B:41:THR:O	1:B:45:SER:N	2.44	0.50
2:C:548:ILE:HA	2:C:554:PHE:HD1	1.75	0.50
2:C:571:VAL:HG22	2:C:572:PRO:O	2.11	0.50
2:C:756:GLU:CG	2:C:868:LEU:HD21	2.41	0.50
3:D:148:LEU:O	3:D:148:LEU:HD13	2.11	0.50
3:D:212:ALA:HA	3:D:215:GLU:CG	2.42	0.50
3:D:940:ARG:HH11	3:D:963:ARG:HH21	1.58	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:47:VAL:HG11	4:E:53:LEU:HD23	1.93	0.50
5:F:410:VAL:O	5:F:414:GLN:HG3	2.11	0.50
6:J:54:TRP:N	6:J:62:GLY:O	2.44	0.50
1:A:117:THR:HG23	1:A:119:HIS:CE1	2.46	0.50
1:A:215:LEU:HD12	1:A:219:PHE:CE2	2.46	0.50
1:B:223:ARG:HE	1:B:227:VAL:HG13	1.76	0.50
2:C:128:THR:CB	2:C:169:ASN:H	2.24	0.50
2:C:202:VAL:CG1	2:C:214:PHE:HB2	2.40	0.50
2:C:224:VAL:HG21	2:C:234:VAL:N	2.26	0.50
2:C:650:ILE:HG12	2:C:694:ASP:C	2.32	0.50
2:C:732:GLU:OE2	3:D:535:ASP:HA	2.11	0.50
2:C:1137:VAL:HA	3:D:10:LEU:HD12	1.93	0.50
3:D:58:TRP:CA	3:D:82:VAL:HG23	2.41	0.50
3:D:136:ILE:CG1	3:D:229:LEU:HD11	2.41	0.50
3:D:412:ARG:N	3:D:1227:GLN:HG3	2.26	0.50
3:D:1273:GLN:O	4:E:105:GLU:N	2.43	0.50
5:F:387:LEU:O	5:F:391:GLY:N	2.43	0.50
1:A:172:LEU:HB3	1:A:197:GLU:HG2	1.93	0.50
2:C:150:GLN:CD	2:C:414:PRO:HG2	2.32	0.50
2:C:200:HIS:CG	2:C:349:HIS:HB2	2.46	0.50
2:C:230:ARG:HH21	5:F:212:LEU:HA	1.76	0.50
2:C:475:VAL:HG23	3:D:854:HIS:ND1	2.27	0.50
2:C:1066:GLN:HG3	3:D:427:ARG:NH2	2.26	0.50
3:D:181:LEU:HD21	3:D:198:ARG:CG	2.41	0.50
3:D:748:HIS:CE1	3:D:752:ARG:HD2	2.46	0.50
3:D:1274:PRO:HG2	4:E:79:VAL:HG11	1.94	0.50
1:A:95:MET:CG	1:A:138:LEU:HD22	2.42	0.50
1:B:39:ARG:HD2	1:B:176:TYR:CE1	2.47	0.50
1:B:77:ILE:O	1:B:81:LYS:HG3	2.11	0.50
2:C:861:LEU:HD23	2:C:865:VAL:CG1	2.41	0.50
2:C:904:MET:HG3	2:C:913:VAL:HG22	1.92	0.50
3:D:34:ILE:HG13	3:D:40:LYS:O	2.12	0.50
3:D:75:CYS:SG	3:D:77:ARG:HB2	2.52	0.50
3:D:353:ARG:O	3:D:357:LEU:HG	2.10	0.50
3:D:434:PRO:O	3:D:717:LYS:NZ	2.39	0.50
3:D:566:LEU:HD23	3:D:573:PRO:HA	1.92	0.50
7:O:1:DG:H2''	7:O:2:DC:O5'	2.11	0.50
1:B:21:PHE:HB2	1:B:194:LEU:CB	2.30	0.50
1:B:32:TYR:CZ	1:B:178:VAL:HG21	2.46	0.50
1:B:55:ARG:HD3	1:B:137:GLU:OE1	2.12	0.50
2:C:277:ILE:HA	2:C:280:LYS:NZ	2.27	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:413:THR:HG23	2:C:416:THR:H	1.76	0.50
2:C:731:TYR:H	2:C:734:ALA:HB3	1.75	0.50
2:C:736:ILE:CD1	2:C:916:ILE:HB	2.42	0.50
2:C:903:ASP:OD1	2:C:903:ASP:N	2.43	0.50
3:D:103:HIS:HB3	3:D:106:TYR:CD2	2.45	0.50
3:D:322:PRO:HA	3:D:325:ARG:CG	2.42	0.50
3:D:1181:ILE:HG13	3:D:1182:ASP:O	2.10	0.50
5:F:513:LYS:HD2	5:F:516:HIS:CE1	2.46	0.50
6:J:97:LEU:O	6:J:100:GLU:HB3	2.12	0.50
7:O:19:DA:H2''	7:O:20:DT:O5'	2.12	0.50
1:A:107:ALA:HB3	1:A:121:PRO:C	2.31	0.50
2:C:113:ASP:OD2	2:C:132:PRO:HB2	2.11	0.50
2:C:188:ASP:O	2:C:201:SER:N	2.45	0.50
2:C:347:ARG:CD	2:C:355:MET:HG3	2.41	0.50
2:C:540:VAL:CG2	2:C:576:VAL:HA	2.42	0.50
2:C:762:THR:HG23	2:C:764:LEU:N	2.27	0.50
2:C:1055:GLN:HE22	3:D:420:LYS:HD3	1.77	0.50
3:D:58:TRP:CE2	3:D:68:VAL:HG13	2.47	0.50
3:D:498:LEU:O	3:D:509:ILE:HG12	2.12	0.50
3:D:922:ALA:HB1	3:D:981:ARG:HB3	1.92	0.50
3:D:981:ARG:HG2	3:D:982:SER:O	2.12	0.50
5:F:381:ARG:O	5:F:385:GLU:HG3	2.11	0.50
5:F:408:GLU:O	5:F:412:GLU:HG3	2.12	0.50
1:A:88:GLU:HG2	1:A:115:GLY:O	2.11	0.50
1:B:60:LEU:HD12	1:B:61:HIS:HD2	1.77	0.50
2:C:102:SER:HB2	2:C:143:ASN:ND2	2.27	0.50
2:C:275:LEU:HB3	2:C:289:LYS:HZ1	1.77	0.50
2:C:426:ALA:HA	2:C:429:GLU:CG	2.42	0.50
2:C:507:ASN:CB	2:C:511:PHE:HB2	2.41	0.50
2:C:822:ARG:CD	2:C:827:GLU:HB2	2.41	0.50
3:D:334:ARG:NH1	5:F:418:ARG:CA	2.74	0.50
3:D:406:LEU:CB	3:D:409:LYS:HB2	2.38	0.50
3:D:420:LYS:NZ	11:D:1404:C0L:C16	2.74	0.50
3:D:646:ILE:O	3:D:649:GLU:HB3	2.12	0.50
3:D:917:GLU:HG2	3:D:921:TYR:CE2	2.46	0.50
5:F:348:THR:CA	5:F:351:ILE:HD12	2.37	0.50
8:P:11:DA:H1'	8:P:12:DA:C5'	2.41	0.50
1:A:223:ARG:HD2	1:B:213:LYS:HA	1.94	0.50
1:B:74:THR:HA	1:B:77:ILE:CD1	2.29	0.50
2:C:38:ARG:HB2	2:C:971:ILE:HD12	1.94	0.50
2:C:240:ALA:HA	2:C:274:LEU:HD22	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:704:ASP:OD2	2:C:710:ASP:N	2.45	0.50
2:C:1103:TYR:HE2	5:F:448:VAL:HG23	1.75	0.50
2:C:1138:LEU:HA	3:D:-1:GLY:N	2.26	0.50
3:D:743:LYS:HA	3:D:746:LEU:CD1	2.30	0.50
3:D:1061:PHE:HA	3:D:1082:LYS:N	2.27	0.50
6:J:31:ARG:HG2	6:J:41:GLU:CG	2.40	0.50
6:J:34:THR:HG21	6:J:40:PHE:HE2	1.77	0.50
7:O:3:DT:H1'	7:O:4:DT:H5'	1.93	0.50
7:O:6:DA:H1'	7:O:7:DC:C5'	2.42	0.50
7:O:27:DA:P	7:O:27:DA:H2'	2.51	0.50
8:P:5:DC:H1'	8:P:6:DA:O5'	2.12	0.50
8:P:16:DT:H2''	8:P:17:DT:H71	1.94	0.50
1:A:186:ARG:HH11	1:B:148:PRO:HB2	1.77	0.49
1:B:1:MET:N	1:B:232:ILE:HA	2.27	0.49
1:B:40:ARG:NH1	3:D:623:ASP:HB3	2.20	0.49
1:B:107:ALA:HB3	1:B:121:PRO:O	2.11	0.49
1:B:215:LEU:O	1:B:218:LEU:HB3	2.12	0.49
2:C:147:ILE:C	2:C:148:LYS:HD2	2.33	0.49
2:C:326:GLU:OE1	2:C:326:GLU:N	2.45	0.49
2:C:347:ARG:O	2:C:350:GLU:HB3	2.11	0.49
2:C:523:VAL:HG13	2:C:552:GLY:HA3	1.93	0.49
2:C:540:VAL:O	2:C:576:VAL:HG13	2.12	0.49
2:C:611:MET:O	2:C:614:GLN:N	2.40	0.49
2:C:797:ARG:O	2:C:839:VAL:HG11	2.11	0.49
2:C:1136:GLU:O	3:D:10:LEU:HD12	2.13	0.49
3:D:550:GLU:OE2	4:E:62:ARG:HD2	2.12	0.49
3:D:595:ASP:N	3:D:598:GLU:OE2	2.45	0.49
3:D:820:MET:HG3	3:D:837:LYS:C	2.32	0.49
3:D:930:VAL:HG12	3:D:936:VAL:CG2	2.38	0.49
3:D:1090:LYS:HG3	3:D:1097:ARG:HD3	1.93	0.49
3:D:1190:ASN:CA	3:D:1193:VAL:HG12	2.40	0.49
3:D:1276:GLU:HG2	3:D:1279:ARG:NE	2.26	0.49
5:F:274:PRO:HG2	5:F:277:GLN:CG	2.41	0.49
5:F:297:GLU:HA	5:F:300:LEU:CD1	2.42	0.49
5:F:336:ASP:N	7:O:27:DA:N1	2.46	0.49
5:F:457:GLN:O	5:F:460:LEU:HB3	2.11	0.49
5:F:510:THR:O	5:F:514:LEU:HD23	2.12	0.49
7:O:25:DC:C2'	7:O:26:DT:H71	2.42	0.49
8:P:23:DA:H2''	8:P:24:DA:O5'	2.12	0.49
1:A:74:THR:HA	1:A:77:ILE:HG12	1.93	0.49
1:B:137:GLU:C	1:B:138:LEU:HD12	2.33	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:347:ARG:HA	2:C:350:GLU:CB	2.41	0.49
2:C:354:THR:HA	2:C:363:VAL:O	2.12	0.49
2:C:718:ASN:C	2:C:719:LEU:HD12	2.32	0.49
3:D:672:MET:HA	3:D:675:GLU:CD	2.32	0.49
3:D:781:ALA:O	3:D:785:VAL:HG23	2.12	0.49
5:F:300:LEU:O	5:F:303:VAL:HB	2.12	0.49
8:P:24:DA:H2''	8:P:25:DG:H5'	1.94	0.49
2:C:353:THR:O	2:C:365:VAL:N	2.38	0.49
2:C:662:HIS:HB2	2:C:666:THR:O	2.12	0.49
2:C:1007:LYS:HB3	2:C:1023:VAL:N	2.26	0.49
3:D:404:ASP:O	3:D:409:LYS:HE2	2.12	0.49
3:D:441:CYS:SG	3:D:514:PRO:HA	2.52	0.49
3:D:498:LEU:O	3:D:509:ILE:HA	2.13	0.49
3:D:1044:ALA:HB1	3:D:1112:MET:HB2	1.93	0.49
3:D:1049:VAL:CA	3:D:1107:VAL:HA	2.42	0.49
1:A:165:ASP:OD2	2:C:878:LYS:NZ	2.28	0.49
1:B:26:LEU:H	1:B:189:PHE:HB3	1.76	0.49
1:B:147:VAL:HG22	1:B:148:PRO:O	2.12	0.49
2:C:38:ARG:HB2	2:C:971:ILE:CD1	2.42	0.49
2:C:388:GLN:HA	2:C:391:VAL:HG12	1.93	0.49
3:D:494:HIS:HB2	4:E:90:LYS:NZ	2.28	0.49
3:D:564:ASN:O	3:D:565:ILE:HD13	2.13	0.49
3:D:589:THR:HG21	3:D:688:MET:CB	2.42	0.49
3:D:683:PHE:HE2	3:D:685:ASN:HB2	1.76	0.49
3:D:742:LYS:HG2	3:D:746:LEU:CD1	2.42	0.49
3:D:759:GLN:O	3:D:762:ARG:HB2	2.13	0.49
3:D:1254:ILE:HD11	3:D:1256:LYS:HB3	1.93	0.49
5:F:330:ARG:HA	5:F:333:GLU:OE1	2.11	0.49
2:C:252:PHE:HB3	2:C:255:SER:OG	2.13	0.49
2:C:529:VAL:HG12	2:C:531:LEU:CG	2.41	0.49
2:C:633:ARG:HA	2:C:636:ILE:CG1	2.39	0.49
2:C:721:VAL:HG23	2:C:915:ILE:HG13	1.95	0.49
2:C:737:LEU:HD23	2:C:915:ILE:CG2	2.42	0.49
3:D:134:TYR:CE1	3:D:256:MET:HB2	2.47	0.49
3:D:589:THR:HB	3:D:687:GLN:HA	1.95	0.49
3:D:1249:LYS:CD	11:D:1404:C0L:C32	2.91	0.49
4:E:38:PRO:HG2	4:E:43:LEU:CD1	2.39	0.49
4:E:50:LYS:O	4:E:53:LEU:HB3	2.12	0.49
1:A:43:LEU:CD2	2:C:901:VAL:HG13	2.41	0.49
1:A:87:SER:HB3	1:A:142:ARG:HD3	1.95	0.49
2:C:89:VAL:HA	2:C:92:GLU:CD	2.33	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:180:VAL:O	2:C:377:ARG:N	2.45	0.49
2:C:187:PHE:H	2:C:368:ASP:HB2	1.77	0.49
2:C:205:ILE:O	2:C:205:ILE:HG13	2.13	0.49
2:C:231:ARG:HG3	5:F:211:ALA:HB1	1.94	0.49
2:C:507:ASN:HA	2:C:513:GLU:OE2	2.12	0.49
2:C:571:VAL:HG23	2:C:575:GLU:OE1	2.11	0.49
2:C:737:LEU:HD12	2:C:895:ILE:CG2	2.43	0.49
2:C:755:HIS:O	2:C:870:ARG:HA	2.13	0.49
3:D:184:LEU:CB	3:D:194:ARG:HG2	2.42	0.49
3:D:500:ARG:HD3	3:D:534:ALA:HB2	1.92	0.49
3:D:1250:GLU:O	3:D:1254:ILE:HG12	2.12	0.49
3:D:1251:ASN:HD22	3:D:1259:PRO:CD	2.23	0.49
5:F:440:GLU:C	6:J:7:ARG:HA	2.31	0.49
6:J:30:ALA:O	6:J:41:GLU:HA	2.12	0.49
1:A:167:ILE:O	1:A:167:ILE:HG13	2.13	0.49
1:B:159:ILE:HD12	1:B:160:GLY:N	2.28	0.49
1:B:226:ASN:ND2	1:B:228:GLU:HB2	2.28	0.49
2:C:178:GLN:O	2:C:378:LEU:HD12	2.13	0.49
2:C:241:LEU:HD21	2:C:335:GLU:CB	2.42	0.49
2:C:540:VAL:HG13	2:C:577:ASP:N	2.26	0.49
2:C:542:ALA:HA	2:C:561:VAL:HA	1.93	0.49
2:C:994:PRO:HA	2:C:999:ASP:O	2.12	0.49
2:C:1017:GLU:OE1	2:C:1018:PRO:HD2	2.12	0.49
2:C:1049:TYR:CD2	2:C:1056:PRO:HG3	2.46	0.49
3:D:320:ILE:HG13	3:D:321:PRO:HD2	1.95	0.49
3:D:500:ARG:HB2	3:D:541:MET:CG	2.41	0.49
3:D:638:THR:HG22	3:D:661:ALA:CB	2.43	0.49
3:D:1051:GLY:O	3:D:1105:VAL:HG22	2.13	0.49
3:D:1157:ILE:HG22	3:D:1161:MET:CE	2.43	0.49
3:D:1160:GLN:HA	3:D:1163:ARG:CG	2.43	0.49
3:D:1168:ILE:HG13	3:D:1202:ALA:HB1	1.93	0.49
3:D:1184:ALA:HA	3:D:1187:GLU:OE1	2.12	0.49
3:D:1265:ASN:HB3	3:D:1269:ASN:ND2	2.27	0.49
4:E:56:TYR:HE2	4:E:99:ILE:HG12	1.77	0.49
6:J:101:ARG:HA	6:J:104:LEU:HB3	1.95	0.49
1:B:3:ILE:O	1:B:4:SER:OG	2.26	0.49
1:B:54:ILE:HD12	1:B:56:ILE:HD11	1.94	0.49
2:C:189:GLU:O	2:C:189:GLU:HG2	2.13	0.49
2:C:476:HIS:CG	2:C:477:PRO:HD2	2.47	0.49
2:C:840:PRO:HG2	2:C:843:GLU:CD	2.32	0.49
2:C:1035:HIS:HA	2:C:1040:LYS:NZ	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:218:ARG:O	3:D:221:ASP:HB3	2.13	0.49
3:D:328:VAL:HG13	3:D:336:ALA:HB3	1.93	0.49
3:D:550:GLU:HG3	4:E:58:ALA:CB	2.42	0.49
3:D:572:ARG:HB2	3:D:573:PRO:HD2	1.93	0.49
3:D:588:LEU:HD13	3:D:588:LEU:O	2.13	0.49
3:D:607:PRO:HG2	3:D:609:THR:CG2	2.42	0.49
3:D:648:ALA:HA	3:D:652:GLY:H	1.77	0.49
3:D:851:ILE:HA	3:D:854:HIS:CD2	2.47	0.49
3:D:1148:SER:O	3:D:1149:ILE:HD13	2.12	0.49
1:B:51:VAL:HA	1:B:140:VAL:HA	1.94	0.49
1:B:213:LYS:HG2	1:B:217:GLU:OE2	2.13	0.49
2:C:571:VAL:CG2	2:C:575:GLU:HB2	2.43	0.49
2:C:633:ARG:HA	2:C:636:ILE:CD1	2.42	0.49
2:C:822:ARG:HD2	2:C:827:GLU:O	2.13	0.49
3:D:596:THR:HB	3:D:628:SER:CB	2.42	0.49
3:D:866:ARG:NH1	3:D:1011:THR:HG22	2.27	0.49
3:D:924:THR:HA	3:D:942:GLN:O	2.13	0.49
4:E:40:ILE:HA	4:E:43:LEU:HD12	1.95	0.49
5:F:366:ILE:O	5:F:366:ILE:HG13	2.13	0.49
6:J:55:LEU:HD21	6:J:59:GLY:HA2	1.95	0.49
8:P:6:DA:P	8:P:6:DA:H2'	2.52	0.49
8:P:17:DT:H1'	8:P:18:DT:C5'	2.42	0.49
1:A:3:ILE:O	1:A:3:ILE:HG13	2.13	0.49
1:A:14:LEU:HB2	1:A:18:ARG:HD3	1.93	0.49
1:A:66:VAL:O	1:A:69:VAL:HG22	2.13	0.49
2:C:42:ALA:HA	2:C:978:ASP:OD2	2.12	0.49
2:C:220:ASP:CG	2:C:257:ILE:HG12	2.33	0.49
2:C:338:VAL:O	2:C:341:THR:HB	2.13	0.49
2:C:620:ARG:HB3	2:C:717:LYS:NZ	2.27	0.49
2:C:721:VAL:CG2	2:C:915:ILE:HG13	2.43	0.49
3:D:71:LYS:C	3:D:73:ILE:HG12	2.33	0.49
3:D:656:TRP:N	3:D:660:ASP:OD2	2.37	0.49
3:D:1027:GLY:O	3:D:1030:ARG:HB3	2.12	0.49
2:C:281:LEU:HD23	2:C:295:LEU:HD21	1.93	0.48
2:C:403:ARG:CD	2:C:417:LEU:HA	2.42	0.48
2:C:463:LEU:HD22	2:C:468:ALA:HB2	1.94	0.48
2:C:587:VAL:HG23	2:C:591:THR:CG2	2.42	0.48
3:D:17:ALA:O	3:D:21:ARG:HG2	2.13	0.48
3:D:319:VAL:HG13	3:D:344:TYR:CE1	2.48	0.48
3:D:500:ARG:CB	3:D:541:MET:HG2	2.41	0.48
3:D:709:VAL:O	3:D:713:VAL:HG23	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:742:LYS:CE	3:D:746:LEU:HD21	2.43	0.48
3:D:800:ILE:HG12	3:D:804:ASP:OD1	2.13	0.48
3:D:1251:ASN:OD1	3:D:1254:ILE:HD11	2.14	0.48
2:C:229:LYS:NZ	2:C:281:LEU:HD12	2.28	0.48
2:C:289:LYS:HE2	2:C:289:LYS:HA	1.95	0.48
2:C:607:MET:O	2:C:611:MET:HG3	2.13	0.48
3:D:28:VAL:HG21	3:D:46:LEU:HD23	1.96	0.48
3:D:124:ASP:HB3	3:D:234:LEU:HD21	1.95	0.48
3:D:141:GLU:OE1	3:D:144:ARG:NH2	2.46	0.48
3:D:163:GLU:OE1	3:D:166:ARG:HD3	2.13	0.48
3:D:222:ILE:HD13	3:D:247:ARG:NH2	2.28	0.48
3:D:348:ILE:HG22	3:D:352:ASN:HD21	1.79	0.48
3:D:1169:ASP:HB2	3:D:1202:ALA:H	1.78	0.48
6:J:33:ARG:N	6:J:63:THR:O	2.45	0.48
8:P:16:DT:H2"	8:P:17:DT:OP2	2.12	0.48
1:B:75:GLU:CD	1:B:78:LEU:HD11	2.33	0.48
2:C:300:PHE:HA	2:C:306:TYR:CD2	2.48	0.48
2:C:334:THR:HG23	2:C:336:GLU:HB3	1.95	0.48
2:C:347:ARG:HA	2:C:350:GLU:OE1	2.13	0.48
2:C:961:ASP:OD1	2:C:962:GLU:N	2.35	0.48
3:D:181:LEU:HD22	3:D:185:GLU:OE2	2.13	0.48
3:D:1265:ASN:HB3	3:D:1269:ASN:HD22	1.77	0.48
5:F:297:GLU:HA	5:F:300:LEU:HD12	1.94	0.48
5:F:372:MET:O	5:F:375:VAL:HG22	2.13	0.48
1:A:221:LEU:HD12	1:A:225:LEU:HD22	1.94	0.48
1:B:47:PRO:HG3	1:B:144:ARG:CZ	2.44	0.48
2:C:32:VAL:HB	2:C:35:ALA:HB2	1.95	0.48
2:C:109:ASP:OD2	2:C:111:ARG:HD2	2.13	0.48
2:C:335:GLU:O	2:C:339:VAL:HG13	2.13	0.48
2:C:396:MET:CE	2:C:419:ASN:H	2.26	0.48
2:C:476:HIS:HB3	2:C:479:HIS:HD2	1.77	0.48
2:C:689:ILE:HG12	2:C:702:ILE:C	2.34	0.48
2:C:727:GLU:H	3:D:725:THR:CG2	2.26	0.48
2:C:776:ILE:HG13	2:C:780:VAL:HG21	1.96	0.48
2:C:1081:ALA:HB1	3:D:554:GLU:CD	2.34	0.48
3:D:173:ARG:CG	3:D:205:MET:HB2	2.42	0.48
3:D:229:LEU:HD12	3:D:233:GLN:OE1	2.13	0.48
3:D:636:ARG:CB	3:D:663:MET:HG2	2.42	0.48
3:D:651:PHE:HD2	3:D:655:GLY:HA2	1.78	0.48
3:D:885:ILE:HA	3:D:994:ALA:HA	1.94	0.48
3:D:897:ILE:O	3:D:961:LYS:HA	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1088:VAL:HG23	3:D:1098:VAL:CA	2.44	0.48
6:J:79:ARG:HD3	6:J:84:MET:SD	2.54	0.48
1:A:14:LEU:HD21	1:A:20:GLN:CD	2.34	0.48
1:A:61:HIS:HA	1:A:162:ILE:CD1	2.43	0.48
1:A:118:VAL:HG12	1:A:120:ASN:H	1.78	0.48
1:A:177:LYS:HG3	1:A:193:ILE:HB	1.96	0.48
1:B:56:ILE:HG23	1:B:136:VAL:HG22	1.96	0.48
2:C:222:VAL:CB	2:C:234:VAL:HG13	2.42	0.48
2:C:455:LEU:HD11	2:C:500:LEU:CD2	2.36	0.48
2:C:456:SER:HB3	2:C:497:ILE:HG12	1.96	0.48
2:C:505:ARG:HG2	2:C:506:VAL:H	1.77	0.48
2:C:600:ASP:CG	2:C:927:ASN:HA	2.34	0.48
2:C:816:PRO:HB3	5:F:479:PHE:O	2.13	0.48
2:C:846:LYS:O	2:C:873:VAL:HG13	2.12	0.48
3:D:144:ARG:HG3	3:D:226:PHE:CE2	2.49	0.48
3:D:364:GLU:HG3	3:D:368:ASN:OD1	2.13	0.48
6:J:88:ARG:O	6:J:89:ARG:HD3	2.13	0.48
8:P:15:DC:H2''	8:P:16:DT:H71	1.95	0.48
1:B:104:GLU:HG2	1:B:127:THR:CG2	2.41	0.48
2:C:161:THR:HG1	2:C:165:THR:H	1.53	0.48
2:C:161:THR:HG23	2:C:165:THR:O	2.13	0.48
2:C:236:VAL:O	2:C:240:ALA:CB	2.62	0.48
2:C:736:ILE:HD11	2:C:916:ILE:CG1	2.42	0.48
2:C:868:LEU:HD13	2:C:869:VAL:N	2.29	0.48
2:C:1114:GLU:HG2	2:C:1115:PRO:HD2	1.94	0.48
3:D:58:TRP:CE3	3:D:68:VAL:HG22	2.48	0.48
3:D:106:TYR:CB	3:D:114:LEU:HG	2.44	0.48
3:D:166:ARG:HH21	3:D:209:ARG:HB2	1.79	0.48
3:D:350:ARG:NH1	3:D:377:SER:HB3	2.28	0.48
3:D:494:HIS:NE2	3:D:545:LEU:HD11	2.29	0.48
3:D:821:LYS:N	3:D:838:SER:O	2.41	0.48
3:D:1207:LEU:HD13	3:D:1208:MET:N	2.29	0.48
7:O:19:DA:H2'	7:O:20:DT:H72	1.93	0.48
2:C:356:THR:HB	2:C:362:GLU:HB3	1.96	0.48
2:C:491:GLY:O	2:C:494:ILE:HG13	2.13	0.48
2:C:548:ILE:HD11	2:C:579:MET:SD	2.54	0.48
2:C:887:GLY:HA3	2:C:1028:MET:CE	2.43	0.48
2:C:1066:GLN:HG3	3:D:427:ARG:CZ	2.44	0.48
3:D:888:GLU:OE1	3:D:970:THR:HG22	2.13	0.48
1:B:146:TYR:HB2	3:D:620:MET:CE	2.44	0.48
2:C:50:VAL:HA	2:C:503:TYR:CE1	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:407:GLN:HB3	2:C:412:ILE:CG2	2.23	0.48
2:C:482:ARG:CG	2:C:512:ILE:HG21	2.43	0.48
2:C:626:VAL:HG13	2:C:888:ARG:HH22	1.78	0.48
2:C:1012:ASP:HB2	2:C:1019:PHE:CZ	2.48	0.48
2:C:1067:ARG:HH11	3:D:421:ARG:HH21	1.62	0.48
2:C:1068:PHE:HB2	3:D:544:HIS:CE1	2.49	0.48
2:C:1126:LYS:HD3	2:C:1129:GLN:OE1	2.13	0.48
3:D:278:ARG:O	3:D:281:ILE:HG13	2.14	0.48
3:D:732:SER:N	3:D:735:ASP:OD2	2.23	0.48
3:D:1063:LYS:NZ	3:D:1078:ASP:HB3	2.28	0.48
3:D:1198:GLY:C	3:D:1200:PRO:HD3	2.34	0.48
5:F:322:GLN:O	5:F:325:ASN:HB2	2.13	0.48
6:J:107:SER:HA	6:J:111:GLY:C	2.33	0.48
1:B:78:LEU:HD12	1:B:79:ASN:N	2.29	0.48
2:C:133:LEU:HB3	2:C:154:MET:HB3	1.95	0.48
2:C:179:LEU:HB3	2:C:376:ARG:HE	1.77	0.48
2:C:1040:LYS:O	2:C:1060:LYS:HE3	2.14	0.48
3:D:573:PRO:C	3:D:574:LEU:HD12	2.34	0.48
3:D:749:TYR:OH	3:D:780:GLU:HG3	2.14	0.48
3:D:923:ARG:HB3	3:D:962:VAL:CG2	2.33	0.48
3:D:1249:LYS:HE3	11:D:1404:C0L:C30	2.30	0.48
5:F:261:GLN:HG2	6:J:82:TRP:CH2	2.49	0.48
5:F:273:LEU:HD11	5:F:281:MET:SD	2.54	0.48
5:F:306:LEU:HD12	5:F:351:ILE:HG21	1.95	0.48
1:A:26:LEU:HB2	1:A:190:ASP:CB	2.41	0.48
1:B:94:THR:O	1:B:95:MET:HG3	2.13	0.48
2:C:517:ARG:CG	2:C:581:VAL:HA	2.36	0.48
2:C:635:ALA:HA	2:C:638:ALA:CB	2.43	0.48
2:C:654:SER:OG	2:C:657:TYR:O	2.31	0.48
2:C:769:ILE:HD12	2:C:867:GLU:OE1	2.14	0.48
2:C:1007:LYS:HA	2:C:1023:VAL:O	2.14	0.48
2:C:1041:ILE:HD12	3:D:520:LYS:HB3	1.96	0.48
3:D:553:ALA:CB	4:E:54:VAL:HG13	2.43	0.48
3:D:895:ARG:CZ	3:D:967:THR:HA	2.44	0.48
3:D:939:GLU:OE1	3:D:939:GLU:N	2.41	0.48
5:F:310:TYR:HB3	5:F:313:ARG:HH21	1.79	0.48
6:J:90:SER:O	6:J:94:LEU:HG	2.14	0.48
1:A:223:ARG:NH2	1:A:224:GLU:HB2	2.29	0.47
1:B:53:SER:HB2	1:B:162:ILE:C	2.34	0.47
1:B:53:SER:HB3	1:B:163:PRO:HA	1.95	0.47
2:C:380:THR:HG22	2:C:383:GLU:HB2	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:596:PHE:CE1	2:C:932:LEU:HB3	2.49	0.47
2:C:821:LEU:HD23	5:F:527:LEU:CD2	2.44	0.47
2:C:1121:PHE:CE1	3:D:1254:ILE:HG22	2.49	0.47
3:D:11:ARG:HG3	3:D:1242:SER:HB2	1.96	0.47
3:D:824:VAL:HG11	3:D:851:ILE:O	2.14	0.47
3:D:891:CYS:SG	3:D:969:ALA:N	2.77	0.47
3:D:1053:VAL:CG1	3:D:1055:LEU:HB2	2.44	0.47
3:D:1085:ARG:HB2	3:D:1113:GLU:CD	2.34	0.47
3:D:1160:GLN:HA	3:D:1163:ARG:HG2	1.96	0.47
5:F:231:TYR:O	5:F:235:ILE:HG12	2.14	0.47
7:O:27:DA:H4'	7:O:28:DT:OP1	2.14	0.47
1:B:99:LYS:O	1:B:134:LEU:N	2.41	0.47
2:C:89:VAL:HA	2:C:92:GLU:CG	2.43	0.47
2:C:180:VAL:HG21	2:C:379:ARG:HG3	1.96	0.47
2:C:257:ILE:O	2:C:261:THR:HG23	2.14	0.47
2:C:540:VAL:CG2	2:C:561:VAL:HG21	2.41	0.47
2:C:650:ILE:HG12	2:C:694:ASP:O	2.13	0.47
2:C:777:SER:HB3	2:C:780:VAL:CG2	2.44	0.47
2:C:825:PHE:CD2	5:F:527:LEU:HD11	2.49	0.47
3:D:107:PHE:CZ	3:D:129:ILE:HD11	2.48	0.47
3:D:633:ILE:HD12	3:D:635:VAL:CG1	2.43	0.47
3:D:1044:ALA:O	3:D:1116:ALA:HB2	2.13	0.47
3:D:1131:GLN:O	3:D:1135:VAL:HG23	2.14	0.47
5:F:220:GLU:OE2	5:F:221:LEU:HD12	2.14	0.47
5:F:247:VAL:O	5:F:251:LYS:HG3	2.13	0.47
5:F:358:ALA:HA	5:F:361:ASP:OD2	2.14	0.47
8:P:8:DT:C6	8:P:9:DT:H72	2.49	0.47
1:A:223:ARG:CD	1:B:216:VAL:HG11	2.44	0.47
1:B:18:ARG:O	1:B:18:ARG:HG2	2.12	0.47
1:B:87:SER:OG	1:B:116:VAL:HA	2.13	0.47
2:C:471:GLU:HA	2:C:474:ASP:OD2	2.15	0.47
2:C:681:GLY:O	2:C:751:HIS:HA	2.14	0.47
2:C:768:GLU:HB3	2:C:806:VAL:CG1	2.44	0.47
3:D:8:ASP:O	3:D:1245:LEU:HD12	2.15	0.47
3:D:149:SER:O	3:D:152:GLU:HG2	2.14	0.47
3:D:222:ILE:CG1	3:D:240:LEU:HD11	2.44	0.47
3:D:391:VAL:HB	3:D:399:LEU:CD1	2.44	0.47
3:D:499:ASN:OD1	3:D:509:ILE:HD11	2.15	0.47
3:D:576:MET:HG3	3:D:697:ILE:CD1	2.43	0.47
3:D:810:ASN:OD1	3:D:813:GLN:HG3	2.14	0.47
3:D:930:VAL:CG1	3:D:936:VAL:HG22	2.42	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:945:GLY:O	3:D:949:ILE:HG12	2.15	0.47
3:D:1235:ASP:CA	3:D:1238:ILE:HD12	2.37	0.47
4:E:33:LEU:H	4:E:36:THR:CG2	2.26	0.47
5:F:261:GLN:O	5:F:264:THR:HG22	2.14	0.47
1:A:49:ALA:HB2	1:A:142:ARG:HA	1.97	0.47
1:A:183:VAL:HG12	1:A:188:ASP:OD1	2.15	0.47
1:B:30:PHE:HB3	1:B:34:LEU:CD2	2.43	0.47
1:B:84:VAL:O	1:B:119:HIS:N	2.38	0.47
1:B:134:LEU:CD1	1:B:136:VAL:HG23	2.42	0.47
1:B:223:ARG:HH21	1:B:227:VAL:HG13	1.79	0.47
2:C:85:GLY:O	2:C:89:VAL:HG23	2.14	0.47
2:C:1007:LYS:NZ	2:C:1022:PRO:HG2	2.30	0.47
2:C:1049:TYR:CD1	2:C:1056:PRO:HD3	2.49	0.47
3:D:71:LYS:HG2	6:J:24:LEU:HD12	1.96	0.47
3:D:752:ARG:HA	3:D:755:LYS:HE3	1.96	0.47
1:A:52:THR:O	1:A:164:VAL:HB	2.15	0.47
1:A:215:LEU:HD12	1:A:219:PHE:HE2	1.79	0.47
1:B:78:LEU:HA	1:B:81:LYS:CE	2.35	0.47
1:B:87:SER:HA	1:B:115:GLY:O	2.14	0.47
1:B:213:LYS:O	1:B:216:VAL:HG12	2.15	0.47
2:C:55:ASP:HB3	2:C:59:ASP:OD2	2.13	0.47
2:C:179:LEU:CD2	2:C:378:LEU:HD13	2.42	0.47
2:C:208:ARG:HH22	2:C:305:ARG:HA	1.78	0.47
2:C:241:LEU:HG	2:C:243:TRP:HE1	1.79	0.47
2:C:426:ALA:HA	2:C:429:GLU:HG3	1.96	0.47
3:D:119:ASP:C	3:D:120:LEU:HD12	2.34	0.47
3:D:426:GLY:HA3	3:D:447:MET:HE3	1.96	0.47
3:D:570:SER:HB3	3:D:1148:SER:O	2.15	0.47
3:D:624:ARG:HD2	3:D:626:VAL:CG2	2.45	0.47
3:D:925:LEU:O	3:D:941:GLY:N	2.34	0.47
3:D:1064:ILE:HD12	3:D:1080:ILE:HD13	1.95	0.47
3:D:1190:ASN:HA	3:D:1193:VAL:CG1	2.40	0.47
6:J:23:ASP:C	6:J:24:LEU:HD22	2.35	0.47
1:A:221:LEU:HD22	1:B:7:PRO:HG2	1.95	0.47
1:B:38:LEU:O	1:B:41:THR:HB	2.14	0.47
1:B:81:LYS:HE3	3:D:613:SER:HB3	1.97	0.47
2:C:132:PRO:HA	2:C:156:ASP:HA	1.97	0.47
2:C:519:VAL:HG23	2:C:524:VAL:N	2.30	0.47
2:C:651:GLU:HB3	2:C:659:THR:O	2.15	0.47
2:C:981:GLN:O	2:C:985:LEU:HG	2.15	0.47
2:C:1066:GLN:HB2	3:D:425:SER:HB3	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1071:MET:SD	3:D:502:PRO:HA	2.53	0.47
3:D:245:VAL:HA	3:D:252:PHE:CZ	2.47	0.47
3:D:525:HIS:O	3:D:528:VAL:HG22	2.15	0.47
3:D:592:VAL:HG23	3:D:630:ARG:HB2	1.96	0.47
3:D:651:PHE:CD2	3:D:655:GLY:HA2	2.50	0.47
3:D:749:TYR:CE2	3:D:781:ALA:HA	2.50	0.47
3:D:1030:ARG:HA	3:D:1033:GLU:OE2	2.15	0.47
5:F:299:ASN:O	5:F:303:VAL:HG23	2.14	0.47
5:F:464:LEU:CD2	5:F:476:ARG:HE	2.26	0.47
1:A:28:PRO:HA	1:A:190:ASP:OD1	2.15	0.47
1:A:84:VAL:HG12	1:A:120:ASN:OD1	2.13	0.47
1:A:181:THR:OG1	1:A:189:PHE:O	2.21	0.47
2:C:138:GLU:OE2	2:C:140:ILE:HD11	2.15	0.47
2:C:140:ILE:HG12	2:C:146:GLU:O	2.15	0.47
2:C:255:SER:CB	2:C:258:MET:HB2	2.44	0.47
2:C:256:GLU:HA	2:C:259:ARG:NE	2.29	0.47
2:C:398:ARG:HD2	2:C:399:VAL:HG23	1.97	0.47
2:C:501:SER:HA	2:C:587:VAL:O	2.15	0.47
2:C:543:GLN:HG3	3:D:847:LEU:HD11	1.97	0.47
2:C:583:PRO:HG2	2:C:584:ARG:HE	1.79	0.47
2:C:648:GLY:O	2:C:695:ARG:HG3	2.15	0.47
2:C:762:THR:HG21	2:C:764:LEU:HB2	1.96	0.47
2:C:774:PRO:HG2	2:C:834:ASP:CB	2.42	0.47
2:C:1072:GLU:CA	2:C:1075:ALA:HB3	2.44	0.47
2:C:1098:GLY:O	2:C:1102:VAL:HG23	2.14	0.47
2:C:1120:SER:OG	11:D:1404:C0L:O36	2.25	0.47
3:D:57:ASP:HB3	3:D:58:TRP:HE3	1.78	0.47
3:D:73:ILE:HA	6:J:43:PRO:O	2.14	0.47
3:D:245:VAL:HG22	3:D:252:PHE:CZ	2.50	0.47
3:D:374:LEU:O	3:D:378:VAL:HG23	2.14	0.47
3:D:475:MET:O	3:D:479:GLN:N	2.40	0.47
3:D:560:LEU:HB3	3:D:563:ASN:ND2	2.30	0.47
3:D:573:PRO:HD3	3:D:698:ASN:OD1	2.15	0.47
3:D:758:LYS:O	3:D:762:ARG:HG2	2.14	0.47
3:D:778:TRP:CH2	3:D:837:LYS:HD3	2.49	0.47
3:D:891:CYS:HB3	3:D:970:THR:CG2	2.43	0.47
3:D:1052:ARG:HB2	3:D:1102:GLY:C	2.35	0.47
3:D:1054:ARG:N	3:D:1067:VAL:HG23	2.30	0.47
3:D:1056:GLU:H	3:D:1064:ILE:HG12	1.80	0.47
3:D:1127:PRO:O	3:D:1131:GLN:HG3	2.14	0.47
3:D:1223:ALA:HA	3:D:1226:PHE:CE2	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1228:GLU:O	3:D:1232:VAL:HG23	2.15	0.47
5:F:273:LEU:HD23	5:F:274:PRO:O	2.13	0.47
5:F:315:MET:HE3	5:F:362:GLN:HB2	1.97	0.47
5:F:335:PHE:HA	5:F:346:TYR:CE2	2.50	0.47
5:F:390:LEU:CD2	5:F:394:PRO:HA	2.45	0.47
7:O:28:DT:H2''	7:O:29:DA:C8	2.50	0.47
8:P:15:DC:H1'	8:P:16:DT:C5'	2.45	0.47
1:A:65:THR:HG21	2:C:656:ASP:OD2	2.15	0.47
1:A:129:ASN:ND2	2:C:652:GLU:OE2	2.48	0.47
1:A:183:VAL:N	1:A:188:ASP:OD1	2.48	0.47
1:B:83:LEU:HD11	1:B:118:VAL:HG13	1.95	0.47
2:C:68:PRO:HA	2:C:71:ARG:HB3	1.97	0.47
2:C:385:ILE:O	2:C:389:ILE:HG13	2.14	0.47
2:C:483:MET:CE	2:C:498:GLY:HA3	2.44	0.47
2:C:547:PRO:O	2:C:555:VAL:HG23	2.15	0.47
2:C:647:SER:HA	2:C:697:GLU:CA	2.45	0.47
2:C:683:CYS:SG	2:C:684:ALA:N	2.88	0.47
2:C:739:ASN:ND2	2:C:743:GLU:OE2	2.47	0.47
3:D:190:LYS:HZ2	3:D:192:ASP:HB3	1.79	0.47
3:D:560:LEU:HD12	3:D:561:SER:H	1.80	0.47
3:D:601:PRO:HA	3:D:608:GLU:HG2	1.96	0.47
3:D:671:VAL:HG12	3:D:675:GLU:OE2	2.15	0.47
3:D:802:ILE:CG2	3:D:807:ALA:HB3	2.44	0.47
3:D:903:GLU:O	3:D:911:ILE:HG13	2.15	0.47
3:D:1152:LYS:HA	3:D:1155:GLU:CD	2.34	0.47
5:F:306:LEU:HD13	5:F:351:ILE:HG21	1.96	0.47
5:F:479:PHE:CB	5:F:481:LEU:HG	2.37	0.47
1:B:28:PRO:HA	1:B:29:GLY:HA2	1.39	0.47
1:B:84:VAL:HG11	1:B:200:ASN:OD1	2.15	0.47
2:C:202:VAL:HG12	2:C:214:PHE:HB2	1.96	0.47
2:C:674:LYS:HA	2:C:685:ASN:HA	1.97	0.47
2:C:770:THR:HG23	2:C:772:ASP:O	2.15	0.47
2:C:854:SER:HB3	2:C:857:ASP:OD2	2.14	0.47
2:C:1134:ASN:N	3:D:15:ALA:HB2	2.30	0.47
3:D:30:LYS:N	3:D:44:ASP:O	2.48	0.47
3:D:135:VAL:HG23	3:D:233:GLN:C	2.35	0.47
3:D:189:ALA:HB3	3:D:194:ARG:CD	2.38	0.47
3:D:320:ILE:CG2	3:D:325:ARG:HD3	2.45	0.47
3:D:844:LEU:HD23	3:D:848:GLU:HB3	1.97	0.47
3:D:991:ILE:HG22	3:D:991:ILE:O	2.15	0.47
3:D:1003:ILE:O	3:D:1006:PRO:HD2	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:220:GLU:O	5:F:224:SER:OG	2.30	0.47
5:F:283:TRP:CA	5:F:286:ARG:HH21	2.27	0.47
1:A:144:ARG:HD2	1:B:1:MET:CE	2.45	0.47
1:A:207:ALA:O	1:A:210:SER:OG	2.25	0.47
2:C:111:ARG:CG	2:C:134:PHE:HB2	2.45	0.47
2:C:182:SER:HB3	2:C:377:ARG:HB3	1.97	0.47
2:C:381:VAL:HG13	2:C:382:GLY:H	1.79	0.47
2:C:635:ALA:HA	2:C:638:ALA:HB3	1.97	0.47
2:C:855:ARG:HH11	2:C:861:LEU:CB	2.27	0.47
2:C:1015:SER:OG	2:C:1016:GLY:N	2.47	0.47
2:C:1043:ALA:HB1	3:D:451:LEU:HD21	1.95	0.47
2:C:1125:LEU:O	2:C:1129:GLN:HG3	2.14	0.47
3:D:173:ARG:HH21	3:D:177:LEU:N	2.13	0.47
3:D:181:LEU:HD21	3:D:198:ARG:HD2	1.95	0.47
3:D:322:PRO:HA	3:D:325:ARG:NE	2.30	0.47
3:D:567:SER:HA	3:D:574:LEU:HD11	1.97	0.47
3:D:686:LYS:HB2	3:D:688:MET:CE	2.44	0.47
3:D:760:PHE:CG	3:D:770:ARG:HG2	2.50	0.47
3:D:890:ASP:OD1	3:D:963:ARG:NH1	2.37	0.47
3:D:1192:ARG:O	3:D:1195:ALA:HB3	2.14	0.47
5:F:415:GLN:C	5:F:418:ARG:HD3	2.30	0.47
6:J:79:ARG:NH2	7:O:24:DG:O3'	2.45	0.47
1:A:10:SER:OG	1:A:22:VAL:HG13	2.15	0.46
1:B:29:GLY:O	1:B:33:THR:HG23	2.14	0.46
2:C:32:VAL:HG13	2:C:33:PRO:HD2	1.98	0.46
2:C:302:LYS:O	2:C:302:LYS:HD2	2.16	0.46
2:C:346:VAL:O	2:C:350:GLU:HB2	2.14	0.46
2:C:795:GLU:HB2	2:C:846:LYS:NZ	2.30	0.46
2:C:997:ASP:HB2	2:C:999:ASP:OD2	2.14	0.46
3:D:64:LYS:HZ2	3:D:65:TYR:HE2	1.63	0.46
3:D:230:ALA:HB1	3:D:231:PRO:HD2	1.96	0.46
3:D:474:ARG:O	3:D:478:ARG:HG2	2.14	0.46
3:D:743:LYS:O	3:D:746:LEU:HB2	2.15	0.46
3:D:801:THR:HA	3:D:804:ASP:OD2	2.14	0.46
3:D:1039:VAL:HG12	3:D:1117:ASP:HB3	1.97	0.46
3:D:1271:ALA:N	4:E:107:THR:O	2.45	0.46
3:D:1275:THR:HG23	3:D:1278:ALA:H	1.80	0.46
5:F:241:LEU:HD22	5:F:245:GLU:CD	2.35	0.46
5:F:274:PRO:HG2	5:F:277:GLN:HB2	1.98	0.46
5:F:390:LEU:HD23	5:F:394:PRO:HA	1.96	0.46
5:F:415:GLN:CG	5:F:418:ARG:HD2	2.45	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:P:19:DT:H2''	8:P:20:DG:C8	2.50	0.46
1:A:72:ASP:OD2	1:A:74:THR:HG22	2.16	0.46
2:C:33:PRO:HB2	2:C:700:GLN:CD	2.36	0.46
2:C:191:ILE:HA	2:C:197:LYS:O	2.15	0.46
2:C:717:LYS:HB2	2:C:719:LEU:HD11	1.97	0.46
2:C:1067:ARG:HG3	3:D:421:ARG:HA	1.96	0.46
2:C:1104:GLU:HG3	2:C:1108:LYS:HE3	1.96	0.46
2:C:1128:LEU:O	2:C:1133:LEU:HB2	2.15	0.46
3:D:7:PHE:HD2	3:D:1256:LYS:HZ1	1.62	0.46
3:D:101:VAL:HG11	3:D:378:VAL:HG11	1.97	0.46
3:D:107:PHE:CA	3:D:114:LEU:HD12	2.45	0.46
3:D:727:SER:OG	3:D:729:VAL:HG13	2.16	0.46
3:D:834:ARG:NE	3:D:834:ARG:HA	2.31	0.46
3:D:901:LEU:HD12	3:D:958:THR:HA	1.96	0.46
3:D:1065:THR:HG23	3:D:1075:VAL:C	2.36	0.46
3:D:1235:ASP:HA	3:D:1238:ILE:CD1	2.36	0.46
5:F:491:GLU:O	5:F:494:GLN:HB3	2.15	0.46
6:J:110:ARG:H	6:J:110:ARG:HD2	1.81	0.46
1:A:22:VAL:HG21	1:A:191:LYS:NZ	2.31	0.46
1:B:170:PRO:HA	1:B:199:LYS:NZ	2.30	0.46
2:C:92:GLU:HG3	2:C:93:LEU:HD22	1.95	0.46
2:C:181:ARG:O	2:C:181:ARG:NH1	2.40	0.46
2:C:311:VAL:HG22	2:C:509:PHE:CD1	2.50	0.46
2:C:543:GLN:CG	3:D:847:LEU:HD11	2.46	0.46
2:C:771:ARG:HD2	2:C:785:ASP:O	2.15	0.46
3:D:68:VAL:HB	6:J:17:GLU:OE1	2.15	0.46
3:D:131:PHE:HA	3:D:256:MET:CG	2.46	0.46
3:D:741:ARG:O	3:D:744:GLU:HG2	2.15	0.46
3:D:773:ALA:O	3:D:777:ILE:HG13	2.16	0.46
3:D:912:ARG:CG	3:D:916:ILE:HD12	2.46	0.46
3:D:1199:GLU:O	3:D:1199:GLU:HG2	2.15	0.46
1:A:172:LEU:CD2	1:A:199:LYS:HB3	2.45	0.46
1:A:176:TYR:HB2	1:A:192:LEU:HD11	1.97	0.46
1:B:170:PRO:O	1:B:199:LYS:HG2	2.14	0.46
2:C:108:SER:N	2:C:136:THR:O	2.49	0.46
2:C:414:PRO:O	2:C:418:ILE:HG13	2.15	0.46
2:C:544:ALA:HB2	2:C:580:ASP:CB	2.39	0.46
2:C:802:LEU:HD21	2:C:839:VAL:CB	2.43	0.46
2:C:805:LYS:HB3	2:C:835:THR:O	2.16	0.46
2:C:1067:ARG:HB2	3:D:421:ARG:HB2	1.91	0.46
3:D:882:GLN:HG3	3:D:883:ASP:CG	2.35	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1090:LYS:HD2	3:D:1097:ARG:CD	2.45	0.46
3:D:1090:LYS:CG	3:D:1097:ARG:HD3	2.44	0.46
3:D:1103:ASP:O	3:D:1105:VAL:HG13	2.16	0.46
3:D:1165:VAL:N	3:D:1181:ILE:O	2.36	0.46
7:O:6:DA:H1'	7:O:7:DC:H5'	1.98	0.46
8:P:10:DT:H2''	8:P:11:DA:C8	2.51	0.46
2:C:41:PHE:CE2	2:C:980:ALA:HB2	2.50	0.46
2:C:46:GLU:OE1	2:C:46:GLU:N	2.38	0.46
2:C:51:PRO:HD3	2:C:503:TYR:CD1	2.51	0.46
2:C:102:SER:O	2:C:142:ASN:N	2.48	0.46
2:C:224:VAL:HB	2:C:232:GLN:C	2.36	0.46
2:C:624:PRO:HA	2:C:718:ASN:ND2	2.29	0.46
2:C:1050:SER:O	5:F:441:ASP:CB	2.63	0.46
2:C:1075:ALA:O	2:C:1078:ALA:HB3	2.16	0.46
2:C:1117:ILE:HG23	2:C:1118:PRO:HD2	1.97	0.46
3:D:334:ARG:HH12	5:F:419:GLU:C	2.19	0.46
3:D:460:LEU:HD12	3:D:461:VAL:N	2.29	0.46
3:D:576:MET:SD	3:D:694:ALA:HB2	2.55	0.46
3:D:676:LEU:CD1	3:D:715:LYS:HB3	2.46	0.46
3:D:929:ALA:C	3:D:936:VAL:HG13	2.35	0.46
5:F:265:GLU:O	5:F:268:GLU:HG3	2.16	0.46
5:F:286:ARG:HB3	5:F:290:ARG:NH2	2.30	0.46
5:F:310:TYR:CD2	5:F:355:ILE:HG21	2.50	0.46
5:F:440:GLU:HB3	6:J:7:ARG:CB	2.45	0.46
7:O:4:DT:H1'	7:O:5:DG:H5'	1.96	0.46
7:O:12:DG:H2'	7:O:13:DT:H72	1.97	0.46
8:P:9:DT:H2'	8:P:10:DT:H71	1.97	0.46
1:A:40:ARG:HE	1:B:33:THR:CG2	2.25	0.46
2:C:38:ARG:CZ	2:C:971:ILE:HB	2.45	0.46
2:C:207:SER:N	2:C:308:LEU:HA	2.29	0.46
2:C:285:GLU:CD	2:C:286:PRO:HD2	2.35	0.46
2:C:386:GLN:HA	2:C:389:ILE:HD12	1.97	0.46
2:C:446:LEU:HB2	2:C:713:MET:CE	2.46	0.46
2:C:650:ILE:HG21	2:C:692:ALA:HA	1.98	0.46
2:C:650:ILE:CG1	2:C:694:ASP:HB2	2.44	0.46
2:C:1068:PHE:H	3:D:422:VAL:CG2	2.28	0.46
3:D:277:LEU:HB3	3:D:296:LEU:HD13	1.98	0.46
3:D:487:LEU:HA	3:D:490:VAL:HG22	1.97	0.46
3:D:589:THR:CB	3:D:688:MET:H	2.29	0.46
3:D:749:TYR:CG	3:D:781:ALA:HB2	2.50	0.46
3:D:975:CYS:SG	3:D:977:THR:OG1	2.71	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1029:PRO:O	3:D:1033:GLU:HG2	2.15	0.46
3:D:1158:VAL:HG22	3:D:1161:MET:SD	2.54	0.46
6:J:92:GLU:O	6:J:96:GLU:HG2	2.15	0.46
1:A:56:ILE:HG12	1:A:136:VAL:HA	1.97	0.46
2:C:241:LEU:HD11	2:C:335:GLU:CB	2.45	0.46
2:C:678:SER:OG	2:C:679:ASN:N	2.48	0.46
2:C:883:ASP:HB2	2:C:895:ILE:CD1	2.43	0.46
3:D:239:ASN:ND2	3:D:242:ARG:HH21	2.13	0.46
3:D:263:LYS:HD3	3:D:266:GLU:OE1	2.15	0.46
3:D:513:GLU:HB2	4:E:35:ILE:HG21	1.98	0.46
3:D:631:ALA:O	3:D:667:THR:HG22	2.16	0.46
3:D:905:ALA:HB3	3:D:909:THR:H	1.80	0.46
3:D:1223:ALA:HA	3:D:1226:PHE:CD2	2.51	0.46
5:F:338:THR:HG23	6:J:89:ARG:NH2	2.31	0.46
1:A:95:MET:CA	1:A:113:PRO:HD3	2.46	0.46
1:A:112:PRO:HB2	1:A:116:VAL:HG23	1.97	0.46
1:B:1:MET:CB	1:B:232:ILE:HA	2.42	0.46
1:B:104:GLU:CD	1:B:127:THR:HG22	2.36	0.46
2:C:180:VAL:CG2	2:C:379:ARG:HG3	2.46	0.46
2:C:403:ARG:CB	2:C:407:GLN:HG2	2.44	0.46
2:C:563:ARG:O	2:C:566:GLY:N	2.40	0.46
2:C:847:VAL:HG22	2:C:873:VAL:CG2	2.30	0.46
2:C:1045:SER:HB2	3:D:424:TYR:CE1	2.50	0.46
3:D:500:ARG:NH1	3:D:532:PHE:O	2.49	0.46
5:F:218:ASP:O	5:F:222:THR:HG23	2.15	0.46
5:F:306:LEU:O	5:F:309:ARG:HG2	2.15	0.46
5:F:480:GLY:O	5:F:484:GLY:N	2.44	0.46
6:J:33:ARG:HA	6:J:38:GLU:O	2.15	0.46
8:P:11:DA:H2"	8:P:12:DA:C8	2.51	0.46
1:A:40:ARG:NE	1:B:33:THR:HG22	2.25	0.46
1:A:172:LEU:HD23	1:A:199:LYS:CB	2.44	0.46
1:B:50:ALA:HB3	1:B:168:TYR:CE1	2.50	0.46
1:B:97:LEU:CD1	1:B:110:ILE:HA	2.44	0.46
2:C:68:PRO:HA	2:C:71:ARG:HB2	1.98	0.46
2:C:118:PRO:HG2	2:C:121:GLU:CB	2.45	0.46
2:C:476:HIS:CD2	2:C:478:SER:H	2.33	0.46
2:C:736:ILE:HD11	2:C:916:ILE:HD12	1.96	0.46
2:C:1002:VAL:HG13	2:C:1007:LYS:O	2.15	0.46
3:D:58:TRP:CD1	3:D:82:VAL:HG22	2.51	0.46
3:D:137:THR:N	3:D:253:THR:O	2.48	0.46
3:D:173:ARG:HG2	3:D:205:MET:CB	2.45	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:195:ARG:CD	3:D:198:ARG:HD3	2.36	0.46
3:D:343:LEU:O	3:D:347:VAL:HG23	2.16	0.46
3:D:391:VAL:N	3:D:399:LEU:HD12	2.30	0.46
3:D:497:LEU:O	3:D:543:VAL:HG13	2.16	0.46
3:D:497:LEU:C	3:D:498:LEU:HD12	2.36	0.46
3:D:895:ARG:NH1	3:D:967:THR:HG22	2.30	0.46
3:D:1045:PRO:CB	3:D:1111:LEU:HD22	2.43	0.46
3:D:1081:SER:O	3:D:1084:GLN:HB2	2.16	0.46
3:D:1182:ASP:HB3	3:D:1185:GLU:HB3	1.96	0.46
1:B:55:ARG:O	1:B:136:VAL:HG13	2.15	0.46
1:B:78:LEU:HD13	3:D:636:ARG:NH2	2.31	0.46
1:B:146:TYR:HB2	3:D:620:MET:HE1	1.98	0.46
2:C:463:LEU:CD1	2:C:468:ALA:HB2	2.43	0.46
2:C:465:ARG:HH22	2:C:492:PRO:HG2	1.81	0.46
2:C:540:VAL:HG22	2:C:576:VAL:HA	1.98	0.46
2:C:795:GLU:HA	2:C:846:LYS:HD3	1.98	0.46
2:C:1041:ILE:CD1	3:D:520:LYS:HB3	2.45	0.46
2:C:1044:ARG:NH2	2:C:1048:PRO:HD2	2.31	0.46
3:D:56:ARG:HB3	3:D:59:GLU:OE1	2.16	0.46
3:D:640:LEU:HD11	3:D:675:GLU:HG2	1.98	0.46
3:D:1049:VAL:HA	3:D:1107:VAL:HG22	1.96	0.46
4:E:33:LEU:O	4:E:33:LEU:HD12	2.16	0.46
1:B:53:SER:O	1:B:139:VAL:HB	2.16	0.45
1:B:108:GLY:HA2	1:B:121:PRO:HB3	1.97	0.45
2:C:673:ARG:HB2	2:C:686:GLN:NE2	2.31	0.45
3:D:921:TYR:CE1	3:D:949:ILE:HG13	2.48	0.45
3:D:927:THR:HG23	3:D:961:LYS:HB3	1.96	0.45
3:D:1152:LYS:O	3:D:1156:VAL:HG23	2.16	0.45
3:D:1234:THR:HG23	3:D:1235:ASP:H	1.82	0.45
4:E:98:GLU:O	4:E:101:ALA:HB3	2.16	0.45
5:F:251:LYS:HE2	5:F:337:TYR:CE2	2.51	0.45
5:F:302:LEU:HA	5:F:305:SER:OG	2.16	0.45
7:O:6:DA:H1'	7:O:7:DC:O5'	2.16	0.45
1:A:14:LEU:HD11	1:A:20:GLN:CG	2.44	0.45
1:A:182:ARG:HA	1:A:188:ASP:CB	2.44	0.45
1:B:14:LEU:HD12	1:B:18:ARG:O	2.16	0.45
2:C:584:ARG:HH12	2:C:976:VAL:H	1.63	0.45
2:C:668:ARG:HD3	2:C:670:TYR:OH	2.16	0.45
2:C:672:MET:HE3	2:C:688:PRO:HB3	1.97	0.45
2:C:875:GLN:HE21	2:C:877:ARG:HE	1.63	0.45
3:D:62:CYS:SG	3:D:77:ARG:NH2	2.89	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:310:MET:O	3:D:313:VAL:HG22	2.16	0.45
3:D:590:THR:CG2	3:D:630:ARG:HH11	2.29	0.45
3:D:886:VAL:HG22	3:D:974:VAL:HG23	1.98	0.45
3:D:948:GLU:OE1	3:D:948:GLU:N	2.31	0.45
3:D:1208:MET:HE3	3:D:1213:ALA:HB1	1.98	0.45
3:D:1277:GLU:O	3:D:1280:ALA:HB3	2.17	0.45
5:F:334:LYS:HD3	5:F:350:TRP:HZ2	1.77	0.45
1:A:6:ARG:NH2	1:B:217:GLU:O	2.49	0.45
1:A:177:LYS:HE2	1:A:193:ILE:HG21	1.98	0.45
1:B:30:PHE:O	1:B:34:LEU:HG	2.17	0.45
1:B:47:PRO:HG3	1:B:144:ARG:NH2	2.31	0.45
1:B:56:ILE:HG12	1:B:136:VAL:HG22	1.99	0.45
2:C:105:LEU:HB2	2:C:139:PHE:HD1	1.82	0.45
2:C:1044:ARG:HH21	2:C:1047:GLY:CA	2.29	0.45
2:C:1067:ARG:CA	3:D:421:ARG:HA	2.47	0.45
3:D:426:GLY:HA3	3:D:447:MET:CE	2.46	0.45
3:D:642:PRO:CD	3:D:657:GLN:NE2	2.80	0.45
3:D:751:GLU:O	3:D:755:LYS:HE2	2.17	0.45
3:D:1210:ILE:HG13	3:D:1211:THR:N	2.32	0.45
5:F:330:ARG:HH22	7:O:24:DG:H3'	1.81	0.45
1:A:137:GLU:C	1:A:138:LEU:HD12	2.36	0.45
1:B:214:THR:O	1:B:217:GLU:HB2	2.17	0.45
2:C:48:LEU:HD12	2:C:49:GLU:H	1.82	0.45
2:C:608:GLY:CA	2:C:611:MET:HE3	2.39	0.45
2:C:626:VAL:HA	2:C:972:VAL:O	2.17	0.45
2:C:647:SER:H	2:C:698:ALA:HB2	1.80	0.45
2:C:650:ILE:HG22	2:C:692:ALA:HA	1.97	0.45
2:C:784:LEU:HD23	2:C:788:GLY:O	2.15	0.45
2:C:851:ARG:HB3	2:C:870:ARG:HB2	1.98	0.45
2:C:961:ASP:O	2:C:962:GLU:HG3	2.15	0.45
2:C:1007:LYS:HE3	2:C:1022:PRO:HG2	1.97	0.45
2:C:1053:THR:OG1	2:C:1055:GLN:HG3	2.15	0.45
3:D:336:ALA:HB1	5:F:423:LEU:CD1	2.43	0.45
3:D:592:VAL:HG23	3:D:630:ARG:CB	2.46	0.45
3:D:752:ARG:O	3:D:756:VAL:HG23	2.16	0.45
3:D:938:VAL:HG13	3:D:942:GLN:OE1	2.17	0.45
5:F:511:MET:HB3	5:F:515:ARG:HH22	1.80	0.45
7:O:8:DA:H2''	7:O:9:DA:C8	2.50	0.45
1:A:32:TYR:HB2	2:C:1017:GLU:OE2	2.17	0.45
1:A:79:ASN:O	1:A:82:SER:HB3	2.17	0.45
1:A:221:LEU:O	1:A:225:LEU:HD13	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:55:ARG:HB3	1:B:161:ARG:CA	2.47	0.45
2:C:401:ARG:O	2:C:404:MET:HB3	2.16	0.45
2:C:447:SER:CB	2:C:613:ARG:HB2	2.46	0.45
2:C:559:VAL:HG12	2:C:560:LEU:O	2.17	0.45
2:C:598:GLU:OE1	2:C:598:GLU:N	2.31	0.45
2:C:689:ILE:CD1	2:C:701:VAL:HG12	2.47	0.45
2:C:756:GLU:CG	2:C:870:ARG:HG2	2.47	0.45
2:C:767:GLU:HB3	2:C:805:LYS:CE	2.40	0.45
2:C:845:GLY:HA3	2:C:874:ALA:O	2.17	0.45
2:C:1010:LEU:O	2:C:1018:PRO:HA	2.16	0.45
2:C:1050:SER:HB3	2:C:1053:THR:O	2.16	0.45
3:D:219:LEU:O	3:D:222:ILE:HG22	2.16	0.45
3:D:239:ASN:ND2	3:D:243:GLU:OE2	2.50	0.45
3:D:441:CYS:HB3	3:D:512:PHE:HB3	1.98	0.45
3:D:499:ASN:HD22	3:D:500:ARG:N	2.14	0.45
3:D:633:ILE:O	3:D:665:GLU:HA	2.15	0.45
3:D:890:ASP:HB2	3:D:977:THR:HG21	1.97	0.45
5:F:409:LYS:O	5:F:413:ILE:HG13	2.17	0.45
5:F:415:GLN:N	5:F:418:ARG:HD2	2.31	0.45
5:F:470:ARG:O	5:F:474:VAL:HG23	2.16	0.45
8:P:14:DA:H1'	8:P:15:DC:C5'	2.47	0.45
1:B:41:THR:O	1:B:44:SER:N	2.49	0.45
1:B:81:LYS:NZ	3:D:613:SER:H	2.14	0.45
1:B:193:ILE:O	1:B:194:LEU:HD23	2.17	0.45
2:C:119:VAL:HG13	2:C:167:ILE:HD12	1.98	0.45
2:C:182:SER:HB3	2:C:377:ARG:HD2	1.98	0.45
2:C:523:VAL:HA	2:C:552:GLY:O	2.17	0.45
2:C:654:SER:HG	2:C:657:TYR:H	1.59	0.45
2:C:687:CYS:O	2:C:703:ALA:HB1	2.16	0.45
2:C:725:PRO:CA	2:C:730:ASN:HD21	2.27	0.45
2:C:762:THR:CG2	2:C:764:LEU:HB2	2.46	0.45
3:D:131:PHE:HD1	3:D:256:MET:HG2	1.82	0.45
3:D:184:LEU:O	3:D:194:ARG:HD3	2.16	0.45
3:D:248:TYR:O	3:D:251:TYR:HB2	2.17	0.45
3:D:457:MET:HE1	3:D:473:LYS:HB2	1.97	0.45
3:D:468:ASN:HD21	3:D:470:LYS:HB3	1.82	0.45
3:D:579:LEU:CD2	3:D:808:THR:HB	2.46	0.45
3:D:621:ALA:O	3:D:626:VAL:HB	2.16	0.45
3:D:847:LEU:H	3:D:847:LEU:HD12	1.80	0.45
3:D:947:PRO:HD2	3:D:948:GLU:OE1	2.16	0.45
3:D:1066:ILE:CD1	3:D:1075:VAL:HB	2.40	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1262:THR:HB	4:E:55:ILE:HD11	1.99	0.45
6:J:28:GLN:O	6:J:43:PRO:HA	2.16	0.45
1:A:97:LEU:C	1:A:98:ARG:HD3	2.37	0.45
1:A:137:GLU:OE2	1:A:161:ARG:NH1	2.50	0.45
2:C:280:LYS:HB2	2:C:280:LYS:HZ2	1.81	0.45
2:C:1090:THR:OG1	2:C:1115:PRO:HB3	2.16	0.45
3:D:24:SER:HA	3:D:92:MET:O	2.16	0.45
3:D:441:CYS:HB3	3:D:512:PHE:CB	2.46	0.45
3:D:581:MET:O	3:D:585:LEU:HG	2.17	0.45
3:D:705:PRO:HB2	4:E:41:ASP:OD2	2.17	0.45
3:D:1032:GLN:O	3:D:1036:GLU:HG2	2.17	0.45
3:D:1045:PRO:HD2	3:D:1112:MET:CG	2.47	0.45
4:E:81:PRO:O	4:E:82:LEU:HD23	2.17	0.45
5:F:302:LEU:N	7:O:31:DT:H1'	2.32	0.45
5:F:309:ARG:NH2	5:F:352:ARG:HD3	2.31	0.45
5:F:310:TYR:CB	5:F:313:ARG:HH21	2.30	0.45
5:F:369:PRO:O	5:F:373:VAL:HG23	2.16	0.45
6:J:97:LEU:HG	6:J:100:GLU:OE1	2.16	0.45
2:C:113:ASP:HB2	2:C:132:PRO:CD	2.46	0.45
2:C:206:PRO:CB	2:C:308:LEU:HB3	2.47	0.45
2:C:442:GLN:O	2:C:442:GLN:HG3	2.17	0.45
2:C:455:LEU:HG	2:C:499:SER:HA	1.98	0.45
2:C:505:ARG:O	2:C:513:GLU:N	2.50	0.45
2:C:818:GLU:O	2:C:822:ARG:HG2	2.16	0.45
2:C:821:LEU:O	2:C:825:PHE:HB2	2.17	0.45
2:C:922:VAL:HG22	2:C:930:GLN:NE2	2.32	0.45
2:C:929:GLY:HA2	2:C:932:LEU:HD12	1.98	0.45
2:C:1050:SER:CB	2:C:1053:THR:HG23	2.46	0.45
3:D:108:LYS:HE2	3:D:386:ARG:O	2.17	0.45
3:D:886:VAL:HA	3:D:974:VAL:HG23	1.97	0.45
3:D:1045:PRO:HB2	3:D:1111:LEU:CB	2.43	0.45
5:F:258:TYR:CD1	6:J:94:LEU:HB3	2.52	0.45
5:F:348:THR:HG22	5:F:352:ARG:HE	1.82	0.45
1:A:95:MET:SD	1:A:110:ILE:HG21	2.57	0.45
1:A:107:ALA:CB	1:A:121:PRO:HA	2.44	0.45
2:C:182:SER:HB2	2:C:183:PRO:HD2	1.98	0.45
2:C:313:ARG:HB2	2:C:328:ILE:CG2	2.47	0.45
2:C:335:GLU:O	2:C:339:VAL:HG22	2.16	0.45
2:C:414:PRO:HA	2:C:417:LEU:HD12	1.98	0.45
2:C:520:VAL:HG12	2:C:521:ASP:CG	2.38	0.45
2:C:707:CYS:HB3	2:C:715:LEU:CD2	2.47	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1104:GLU:OE2	2:C:1108:LYS:NZ	2.32	0.45
2:C:1118:PRO:HG2	2:C:1121:PHE:HB2	1.98	0.45
3:D:27:GLU:HG3	3:D:95:ILE:HA	1.99	0.45
3:D:48:CYS:SG	3:D:50:LYS:HB3	2.57	0.45
3:D:110:VAL:HA	3:D:111:PRO:HA	1.84	0.45
3:D:136:ILE:HD11	3:D:229:LEU:HD11	1.98	0.45
3:D:912:ARG:HH21	3:D:953:LEU:CD2	2.29	0.45
3:D:913:ASP:HB3	3:D:916:ILE:CD1	2.46	0.45
3:D:1053:VAL:HG12	3:D:1103:ASP:H	1.82	0.45
3:D:1065:THR:HG23	3:D:1076:VAL:CA	2.46	0.45
5:F:261:GLN:HG2	6:J:82:TRP:CZ2	2.52	0.45
8:P:5:DC:H2''	8:P:6:DA:C8	2.51	0.45
8:P:17:DT:C2'	8:P:18:DT:H71	2.47	0.45
1:A:146:TYR:HA	1:A:166:SER:O	2.17	0.45
1:B:19:SER:HB2	1:B:204:PRO:CG	2.46	0.45
1:B:56:ILE:HG12	1:B:136:VAL:CG1	2.46	0.45
2:C:113:ASP:HB2	2:C:132:PRO:CB	2.47	0.45
2:C:230:ARG:HH22	5:F:215:ALA:N	2.15	0.45
2:C:799:GLY:H	2:C:839:VAL:HG13	1.82	0.45
2:C:1133:LEU:C	3:D:15:ALA:HB2	2.36	0.45
3:D:8:ASP:C	3:D:1245:LEU:HD12	2.37	0.45
3:D:295:ARG:O	3:D:298:VAL:HG22	2.17	0.45
3:D:322:PRO:HA	3:D:325:ARG:HG2	1.98	0.45
3:D:348:ILE:HG22	3:D:352:ASN:ND2	2.32	0.45
3:D:441:CYS:HB3	3:D:512:PHE:CD2	2.52	0.45
3:D:474:ARG:O	3:D:477:GLU:HB2	2.17	0.45
3:D:775:VAL:HG12	3:D:779:LYS:HE3	1.99	0.45
3:D:815:ARG:HH12	3:D:821:LYS:C	2.20	0.45
3:D:896:GLY:O	3:D:961:LYS:HE3	2.16	0.45
3:D:1167:ILE:O	3:D:1177:PRO:HA	2.17	0.45
3:D:1168:ILE:HG13	3:D:1202:ALA:HB3	1.98	0.45
3:D:1254:ILE:CD1	3:D:1256:LYS:HB3	2.47	0.45
5:F:233:LYS:O	5:F:237:LYS:HE3	2.17	0.45
1:A:26:LEU:HB2	1:A:190:ASP:CA	2.47	0.44
1:B:224:GLU:O	1:B:225:LEU:HD23	2.16	0.44
2:C:352:GLN:CB	2:C:365:VAL:HG21	2.45	0.44
2:C:1072:GLU:OE1	2:C:1072:GLU:N	2.50	0.44
3:D:34:ILE:HA	3:D:40:LYS:O	2.17	0.44
3:D:56:ARG:HA	6:J:13:ALA:O	2.16	0.44
3:D:71:LYS:O	3:D:73:ILE:HG12	2.17	0.44
3:D:360:LEU:CD2	5:F:329:ILE:HG21	2.45	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:406:LEU:HB2	3:D:409:LYS:CB	2.44	0.44
3:D:775:VAL:O	3:D:779:LYS:HG3	2.17	0.44
3:D:872:TYR:OH	3:D:876:ARG:NH1	2.46	0.44
3:D:925:LEU:HD12	3:D:938:VAL:HG12	1.99	0.44
3:D:981:ARG:HD3	3:D:986:GLY:HA2	1.99	0.44
3:D:1047:ALA:HB3	3:D:1109:GLN:H	1.82	0.44
1:A:61:HIS:CD2	1:A:63:PHE:H	2.35	0.44
1:A:128:LEU:HD23	1:A:132:GLY:CA	2.47	0.44
2:C:189:GLU:HB3	2:C:200:HIS:HA	1.98	0.44
2:C:423:VAL:O	2:C:427:ILE:HG13	2.17	0.44
2:C:1082:ALA:CB	3:D:1258:ILE:HG12	2.47	0.44
2:C:1094:ASP:HB3	2:C:1119:GLU:HB3	2.00	0.44
3:D:384:ASN:HD22	3:D:399:LEU:HD13	1.83	0.44
3:D:406:LEU:HB2	3:D:409:LYS:CD	2.45	0.44
5:F:309:ARG:HH21	5:F:352:ARG:HD3	1.83	0.44
5:F:356:THR:O	5:F:359:MET:HB2	2.17	0.44
5:F:371:HIS:HE1	7:O:21:DT:H2'	1.82	0.44
6:J:108:ARG:HD2	6:J:109:ARG:N	2.25	0.44
2:C:109:ASP:OD2	2:C:111:ARG:HB3	2.17	0.44
2:C:230:ARG:HH22	5:F:215:ALA:H	1.65	0.44
2:C:343:GLU:O	2:C:347:ARG:HG3	2.17	0.44
2:C:407:GLN:HG3	2:C:417:LEU:HD23	1.99	0.44
2:C:560:LEU:HD22	2:C:568:VAL:HG12	1.98	0.44
2:C:905:PRO:O	2:C:913:VAL:HG13	2.18	0.44
2:C:1110:GLU:HG2	4:E:69:ASN:OD1	2.18	0.44
3:D:35:ASN:ND2	3:D:38:THR:HG22	2.32	0.44
3:D:114:LEU:HD23	3:D:312:MET:HE1	1.99	0.44
3:D:319:VAL:HG22	3:D:344:TYR:CE1	2.53	0.44
3:D:367:VAL:O	3:D:371:LYS:HG3	2.17	0.44
3:D:383:ASP:HA	3:D:401:SER:CB	2.47	0.44
3:D:433:GLY:HA3	3:D:436:LEU:HD12	1.98	0.44
3:D:692:VAL:O	3:D:696:ILE:HG13	2.17	0.44
3:D:1181:ILE:HB	3:D:1185:GLU:CD	2.38	0.44
5:F:293:ASN:O	5:F:297:GLU:HG3	2.17	0.44
5:F:415:GLN:HG2	5:F:418:ARG:HD2	1.99	0.44
6:J:90:SER:H	6:J:93:GLU:CD	2.21	0.44
7:O:25:DC:H2''	7:O:26:DT:H71	1.99	0.44
7:O:30:DC:H6	7:O:30:DC:H2'	1.65	0.44
8:P:25:DG:H2''	8:P:26:DC:C6	2.53	0.44
1:A:6:ARG:HB2	1:A:7:PRO:HD2	1.98	0.44
1:A:186:ARG:NH1	1:B:148:PRO:HB2	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:84:VAL:HG22	1:B:119:HIS:HD2	1.80	0.44
2:C:117:ALA:HB1	2:C:118:PRO:HD2	1.99	0.44
2:C:224:VAL:O	2:C:224:VAL:HG12	2.18	0.44
2:C:348:LEU:HD12	2:C:365:VAL:HG12	1.99	0.44
2:C:425:ALA:O	2:C:429:GLU:HG3	2.17	0.44
2:C:455:LEU:O	2:C:497:ILE:HG23	2.17	0.44
2:C:1051:MET:HE3	6:J:8:GLY:O	2.18	0.44
2:C:1057:LEU:HD23	2:C:1062:GLN:CG	2.47	0.44
3:D:412:ARG:CA	3:D:1227:GLN:HG3	2.48	0.44
3:D:480:ARG:HB3	3:D:482:GLN:NE2	2.32	0.44
3:D:622:ALA:HB2	3:D:627:LEU:HB2	1.99	0.44
3:D:648:ALA:O	3:D:652:GLY:N	2.50	0.44
3:D:1050:THR:N	3:D:1107:VAL:HG22	2.32	0.44
3:D:1208:MET:HG3	3:D:1213:ALA:CB	2.41	0.44
4:E:89:GLU:HG2	4:E:93:SER:HB3	1.99	0.44
5:F:315:MET:HE1	5:F:362:GLN:HB2	1.99	0.44
5:F:415:GLN:HB3	5:F:418:ARG:HD3	1.96	0.44
6:J:33:ARG:CZ	6:J:37:GLY:HA2	2.48	0.44
8:P:17:DT:H2''	8:P:18:DT:OP2	2.18	0.44
2:C:244:THR:O	2:C:248:ILE:HG13	2.18	0.44
2:C:308:LEU:HD21	2:C:313:ARG:CD	2.47	0.44
2:C:354:THR:CA	2:C:365:VAL:HG23	2.47	0.44
2:C:647:SER:CA	2:C:697:GLU:HA	2.46	0.44
2:C:792:ILE:CD1	2:C:850:ILE:HD12	2.48	0.44
2:C:902:GLU:HG2	2:C:903:ASP:N	2.32	0.44
3:D:5:ASN:O	3:D:5:ASN:ND2	2.50	0.44
3:D:468:ASN:ND2	5:F:525:ASP:HB3	2.33	0.44
3:D:485:ASP:O	3:D:488:GLU:HB3	2.18	0.44
3:D:496:VAL:O	3:D:497:LEU:HD23	2.17	0.44
3:D:662:TRP:HZ3	3:D:664:ALA:HB2	1.79	0.44
3:D:1207:LEU:HD22	3:D:1208:MET:N	2.27	0.44
5:F:252:ARG:NE	5:F:287:ASP:OD2	2.47	0.44
5:F:309:ARG:HG3	5:F:310:TYR:CD1	2.52	0.44
5:F:332:VAL:HB	5:F:343:PHE:HZ	1.82	0.44
5:F:479:PHE:C	5:F:486:PRO:HG3	2.37	0.44
8:P:9:DT:C2'	8:P:10:DT:H71	2.47	0.44
1:A:51:VAL:HA	1:A:140:VAL:HA	1.98	0.44
1:A:128:LEU:HD23	1:A:132:GLY:C	2.38	0.44
1:B:15:THR:HG22	1:B:18:ARG:HB3	2.00	0.44
1:B:95:MET:HE2	1:B:138:LEU:O	2.17	0.44
1:B:95:MET:HE3	1:B:140:VAL:HG23	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:213:LYS:O	1:B:217:GLU:HG3	2.17	0.44
2:C:97:GLU:OE2	2:C:142:ASN:ND2	2.50	0.44
2:C:103:MET:HA	2:C:141:ASN:HA	2.00	0.44
2:C:217:ASP:HB2	2:C:221:THR:OG1	2.18	0.44
2:C:280:LYS:C	2:C:283:PRO:HD3	2.37	0.44
2:C:308:LEU:HD21	2:C:313:ARG:HD3	1.99	0.44
2:C:338:VAL:O	2:C:342:ILE:HG13	2.18	0.44
2:C:1049:TYR:CG	2:C:1056:PRO:HG3	2.53	0.44
2:C:1131:LEU:HD21	3:D:402:LEU:CB	2.48	0.44
3:D:131:PHE:HA	3:D:256:MET:SD	2.58	0.44
3:D:144:ARG:NH1	3:D:229:LEU:HB3	2.32	0.44
3:D:263:LYS:O	3:D:266:GLU:HB2	2.18	0.44
3:D:453:LYS:HA	3:D:456:VAL:HG12	1.99	0.44
3:D:484:TRP:O	3:D:487:LEU:HB3	2.17	0.44
3:D:637:LEU:HB2	3:D:662:TRP:CE2	2.51	0.44
3:D:789:LEU:CD2	3:D:815:ARG:HA	2.48	0.44
3:D:1169:ASP:N	3:D:1202:ALA:HB3	2.32	0.44
3:D:1183:ARG:O	3:D:1187:GLU:HG3	2.18	0.44
5:F:240:LEU:HD22	7:O:31:DT:C4	2.52	0.44
5:F:249:LEU:HD22	5:F:291:ALA:CB	2.42	0.44
6:J:4:ARG:HD3	6:J:5:VAL:O	2.17	0.44
2:C:40:SER:HA	2:C:973:SER:O	2.18	0.44
2:C:113:ASP:HB2	2:C:132:PRO:CG	2.48	0.44
2:C:455:LEU:O	2:C:497:ILE:HA	2.17	0.44
2:C:543:GLN:O	2:C:546:SER:OG	2.25	0.44
2:C:544:ALA:CB	2:C:580:ASP:HB2	2.39	0.44
2:C:884:LYS:O	2:C:1033:LEU:HD13	2.18	0.44
3:D:69:ARG:CA	6:J:20:ARG:HH22	2.31	0.44
3:D:148:LEU:O	3:D:152:GLU:HG2	2.18	0.44
3:D:305:SER:HB2	3:D:307:ASN:ND2	2.31	0.44
3:D:765:LEU:HD12	3:D:770:ARG:N	2.33	0.44
3:D:898:VAL:HG12	3:D:961:LYS:CA	2.47	0.44
3:D:1050:THR:HG22	3:D:1106:GLU:CA	2.33	0.44
3:D:1123:ARG:HG3	3:D:1204:ARG:HH22	1.82	0.44
3:D:1165:VAL:HA	3:D:1206:VAL:HG22	1.99	0.44
5:F:334:LYS:HZ1	7:O:25:DC:H3'	1.81	0.44
6:J:32:TYR:CD2	6:J:54:TRP:HB3	2.52	0.44
8:P:15:DC:H1'	8:P:16:DT:H5'	1.99	0.44
1:A:9:LEU:HD13	1:B:221:LEU:O	2.17	0.44
1:A:95:MET:CG	1:A:138:LEU:HB2	2.48	0.44
1:B:96:TYR:O	1:B:111:VAL:HG12	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:96:TYR:CE1	1:B:137:GLU:HG2	2.52	0.44
2:C:40:SER:OG	2:C:975:PRO:HD3	2.18	0.44
2:C:41:PHE:CE1	2:C:963:LEU:HD13	2.53	0.44
2:C:64:LEU:CD1	2:C:385:ILE:HB	2.48	0.44
3:D:36:TYR:CD2	3:D:37:ARG:HB2	2.52	0.44
3:D:71:LYS:CA	3:D:82:VAL:HG13	2.40	0.44
3:D:285:LYS:O	3:D:288:LYS:HB3	2.18	0.44
3:D:327:MET:HA	3:D:336:ALA:O	2.18	0.44
3:D:383:ASP:HB2	3:D:403:SER:OG	2.18	0.44
3:D:447:MET:O	3:D:451:LEU:HD23	2.18	0.44
3:D:631:ALA:C	3:D:667:THR:HG22	2.38	0.44
3:D:767:HIS:CE1	3:D:771:ASN:HD21	2.35	0.44
3:D:1190:ASN:O	3:D:1193:VAL:HG12	2.17	0.44
3:D:1195:ALA:O	3:D:1196:GLU:HB2	2.17	0.44
5:F:342:LYS:CG	7:O:29:DA:H3'	2.48	0.44
8:P:7:DA:H2'	8:P:8:DT:H71	2.00	0.44
1:A:95:MET:SD	1:A:138:LEU:HD22	2.57	0.44
1:B:8:THR:N	1:B:24:GLU:O	2.47	0.44
1:B:107:ALA:HB3	1:B:121:PRO:C	2.38	0.44
2:C:102:SER:C	2:C:142:ASN:HB2	2.39	0.44
2:C:140:ILE:HD11	2:C:147:ILE:HG22	2.00	0.44
2:C:147:ILE:O	2:C:147:ILE:HG13	2.18	0.44
2:C:245:SER:CB	2:C:262:LEU:HD21	2.38	0.44
2:C:274:LEU:HD12	2:C:292:ALA:HB1	2.00	0.44
2:C:317:ASN:ND2	2:C:323:HIS:HB2	2.33	0.44
2:C:395:ARG:HA	2:C:398:ARG:NE	2.30	0.44
2:C:633:ARG:O	2:C:636:ILE:HG12	2.17	0.44
2:C:802:LEU:HB2	2:C:837:LEU:HG	2.00	0.44
2:C:906:PHE:CD2	2:C:910:GLY:HA2	2.53	0.44
3:D:590:THR:HB	3:D:687:GLN:NE2	2.32	0.44
3:D:605:ASP:OD1	3:D:605:ASP:N	2.51	0.44
3:D:895:ARG:NH2	3:D:967:THR:HA	2.33	0.44
3:D:923:ARG:C	3:D:944:LEU:HD12	2.39	0.44
3:D:931:ASP:O	3:D:934:GLY:N	2.50	0.44
4:E:60:ARG:NH1	4:E:64:ILE:HG13	2.33	0.44
5:F:280:ASP:O	5:F:284:ILE:HG12	2.16	0.44
1:A:144:ARG:HD2	1:B:1:MET:HE3	2.00	0.43
1:A:177:LYS:HE3	1:A:193:ILE:HD13	2.00	0.43
2:C:505:ARG:HG2	2:C:506:VAL:N	2.33	0.43
3:D:173:ARG:HG2	3:D:205:MET:N	2.32	0.43
3:D:212:ALA:HA	3:D:215:GLU:OE2	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:328:VAL:HG12	3:D:336:ALA:HB3	1.98	0.43
3:D:328:VAL:HG22	3:D:329:GLN:H	1.83	0.43
3:D:443:LEU:HD21	3:D:448:ALA:CB	2.37	0.43
3:D:642:PRO:HB2	3:D:643:PRO:HD2	1.99	0.43
3:D:693:GLN:O	3:D:697:ILE:HG13	2.18	0.43
3:D:929:ALA:O	3:D:937:ILE:HG22	2.18	0.43
3:D:1160:GLN:O	3:D:1163:ARG:HG2	2.18	0.43
3:D:1172:SER:H	3:D:1199:GLU:HG3	1.83	0.43
5:F:278:ARG:O	5:F:281:MET:HG2	2.18	0.43
5:F:300:LEU:HA	5:F:303:VAL:CG2	2.48	0.43
5:F:351:ILE:O	5:F:355:ILE:HG13	2.17	0.43
5:F:405:ILE:HD12	5:F:409:LYS:HG3	2.00	0.43
7:O:1:DG:H2''	7:O:2:DC:C5'	2.47	0.43
7:O:12:DG:H2''	7:O:13:DT:H5'	2.00	0.43
8:P:21:DT:OP1	8:P:21:DT:H3'	2.18	0.43
1:A:172:LEU:HD12	1:A:197:GLU:CD	2.37	0.43
1:A:173:LYS:HG2	1:A:174:VAL:N	2.33	0.43
1:B:99:LYS:O	1:B:133:LYS:HA	2.18	0.43
2:C:158:PRO:HG2	2:C:431:PHE:CZ	2.53	0.43
2:C:519:VAL:HG23	2:C:523:VAL:C	2.39	0.43
2:C:833:ARG:NH1	2:C:835:THR:HG22	2.33	0.43
3:D:70:PHE:CA	3:D:73:ILE:HD11	2.47	0.43
3:D:73:ILE:HG23	6:J:27:ARG:HH11	1.83	0.43
3:D:425:SER:HA	3:D:543:VAL:O	2.18	0.43
3:D:457:MET:CE	3:D:473:LYS:HB2	2.48	0.43
3:D:515:MET:O	3:D:517:VAL:HG23	2.19	0.43
3:D:1065:THR:CG2	3:D:1076:VAL:HG22	2.48	0.43
3:D:1266:ARG:HA	4:E:109:GLY:C	2.38	0.43
4:E:60:ARG:O	4:E:63:GLN:HB2	2.18	0.43
5:F:342:LYS:H	7:O:29:DA:P	2.35	0.43
1:B:75:GLU:OE2	1:B:78:LEU:HD11	2.18	0.43
2:C:238:LEU:O	2:C:243:TRP:N	2.51	0.43
2:C:760:ARG:N	2:C:767:GLU:OE1	2.47	0.43
2:C:922:VAL:HG13	2:C:927:ASN:OD1	2.18	0.43
2:C:993:LEU:HA	2:C:994:PRO:HD3	1.93	0.43
2:C:1087:GLU:O	2:C:1091:ILE:HG12	2.18	0.43
3:D:797:ASN:HD22	3:D:798:PRO:HD2	1.82	0.43
3:D:900:GLU:O	3:D:958:THR:HB	2.18	0.43
3:D:912:ARG:HH21	3:D:953:LEU:HD22	1.82	0.43
3:D:931:ASP:OD1	3:D:932:GLU:HG3	2.17	0.43
3:D:1059:GLU:C	3:D:1060:ARG:HD3	2.38	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:445:VAL:CG1	5:F:447:ALA:H	2.30	0.43
6:J:31:ARG:O	6:J:65:ILE:HB	2.19	0.43
1:A:26:LEU:HD12	1:A:191:LYS:N	2.33	0.43
1:A:45:SER:HB3	1:B:232:ILE:HD12	2.00	0.43
1:A:152:ASN:OD1	1:A:157:ALA:HB3	2.18	0.43
2:C:381:VAL:HG13	2:C:382:GLY:N	2.33	0.43
2:C:401:ARG:HA	2:C:404:MET:CB	2.47	0.43
2:C:1049:TYR:CA	2:C:1056:PRO:HA	2.47	0.43
3:D:397:ARG:CG	3:D:398:PRO:HD2	2.48	0.43
3:D:512:PHE:CE1	3:D:561:SER:HB2	2.53	0.43
3:D:633:ILE:HG12	3:D:666:THR:O	2.19	0.43
3:D:1052:ARG:HA	3:D:1103:ASP:O	2.18	0.43
3:D:1175:PHE:C	3:D:1176:LEU:HD12	2.39	0.43
3:D:1183:ARG:HG2	3:D:1187:GLU:OE2	2.18	0.43
3:D:1186:PHE:O	3:D:1190:ASN:ND2	2.51	0.43
3:D:1248:LEU:HA	3:D:1259:PRO:CD	2.48	0.43
3:D:1276:GLU:HA	3:D:1279:ARG:HB2	1.99	0.43
5:F:480:GLY:HA2	5:F:483:ASP:OD1	2.18	0.43
7:O:16:DT:H2''	7:O:17:DA:C8	2.54	0.43
2:C:89:VAL:O	2:C:92:GLU:HG2	2.18	0.43
2:C:175:VAL:HA	2:C:436:LEU:O	2.18	0.43
2:C:473:ARG:NH1	2:C:496:LEU:HG	2.33	0.43
2:C:926:MET:HE3	3:D:840:PHE:CD2	2.54	0.43
2:C:1074:TRP:CZ2	3:D:878:VAL:HB	2.53	0.43
3:D:58:TRP:N	3:D:83:THR:O	2.49	0.43
3:D:118:LEU:O	3:D:232:LYS:HE2	2.18	0.43
3:D:334:ARG:HG2	3:D:334:ARG:HH11	1.83	0.43
3:D:557:ILE:HD13	4:E:53:LEU:HD12	2.00	0.43
3:D:887:ARG:NH1	3:D:972:THR:HB	2.33	0.43
4:E:60:ARG:HH22	4:E:80:GLY:HA3	1.82	0.43
5:F:487:ARG:HB3	5:F:491:GLU:CB	2.43	0.43
8:P:7:DA:H2''	8:P:8:DT:OP2	2.19	0.43
8:P:15:DC:H1'	8:P:16:DT:O5'	2.17	0.43
8:P:21:DT:H1'	8:P:22:DC:C5'	2.46	0.43
8:P:25:DG:H2''	8:P:26:DC:OP2	2.18	0.43
1:A:57:ASP:OD1	1:A:58:GLY:N	2.51	0.43
1:B:8:THR:O	1:B:23:ILE:HG23	2.17	0.43
1:B:9:LEU:HA	1:B:23:ILE:HG12	2.01	0.43
2:C:115:VAL:HG12	2:C:159:MET:HG3	1.99	0.43
2:C:308:LEU:O	2:C:331:SER:HB2	2.19	0.43
2:C:442:GLN:HE21	2:C:679:ASN:N	2.16	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:540:VAL:CG2	2:C:576:VAL:HG22	2.48	0.43
2:C:736:ILE:CD1	2:C:916:ILE:HD12	2.48	0.43
2:C:760:ARG:HB2	2:C:767:GLU:CD	2.39	0.43
2:C:1049:TYR:CE2	2:C:1056:PRO:HG3	2.53	0.43
3:D:144:ARG:HH12	3:D:229:LEU:N	2.17	0.43
3:D:480:ARG:HB3	3:D:482:GLN:HE22	1.84	0.43
3:D:487:LEU:HG	3:D:491:ILE:CD1	2.48	0.43
3:D:596:THR:HG22	3:D:626:VAL:O	2.18	0.43
3:D:1033:GLU:HA	3:D:1036:GLU:CG	2.48	0.43
3:D:1055:LEU:HB3	3:D:1101:ASP:CA	2.48	0.43
3:D:1060:ARG:HG2	3:D:1061:PHE:HD1	1.82	0.43
3:D:1110:GLN:HG2	3:D:1112:MET:O	2.17	0.43
3:D:1137:GLU:O	3:D:1140:GLU:HB3	2.19	0.43
3:D:1267:TYR:O	4:E:55:ILE:HG21	2.18	0.43
5:F:258:TYR:CE2	6:J:98:LEU:HD22	2.53	0.43
5:F:276:ALA:HA	5:F:279:ARG:HE	1.81	0.43
5:F:305:SER:O	5:F:308:LYS:HG2	2.18	0.43
5:F:330:ARG:O	5:F:333:GLU:HB2	2.18	0.43
1:A:14:LEU:CG	1:A:19:SER:HA	2.49	0.43
1:A:176:TYR:CB	1:A:194:LEU:HA	2.48	0.43
1:B:21:PHE:CB	1:B:194:LEU:HB2	2.33	0.43
1:B:51:VAL:HA	1:B:140:VAL:CG2	2.47	0.43
1:B:149:ALA:HA	1:B:164:VAL:O	2.18	0.43
2:C:204:VAL:O	2:C:206:PRO:HD3	2.19	0.43
2:C:354:THR:HB	2:C:364:PRO:HA	2.01	0.43
2:C:369:ASP:CG	2:C:372:HIS:H	2.22	0.43
2:C:721:VAL:HG23	2:C:915:ILE:C	2.39	0.43
2:C:721:VAL:O	2:C:1025:VAL:HA	2.19	0.43
2:C:736:ILE:HD11	2:C:916:ILE:CB	2.49	0.43
2:C:952:VAL:CG1	2:C:956:ALA:HB3	2.49	0.43
2:C:977:PHE:CZ	3:D:846:VAL:HG22	2.54	0.43
2:C:1079:TYR:O	3:D:558:LEU:HD23	2.19	0.43
3:D:101:VAL:HG13	3:D:375:GLN:CD	2.39	0.43
3:D:127:LYS:HB3	3:D:132:ALA:HB3	2.00	0.43
3:D:166:ARG:HB2	3:D:212:ALA:CB	2.48	0.43
3:D:284:GLY:C	3:D:289:LYS:HB2	2.39	0.43
3:D:637:LEU:HA	3:D:637:LEU:HD23	1.81	0.43
3:D:706:MET:O	3:D:709:VAL:HB	2.18	0.43
3:D:759:GLN:HA	3:D:762:ARG:CG	2.48	0.43
5:F:262:LEU:HD23	5:F:266:LEU:HD13	2.00	0.43
8:P:10:DT:H4'	8:P:11:DA:OP1	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:24:GLU:HA	1:A:26:LEU:CD2	2.48	0.43
1:A:98:ARG:HD2	1:A:135:GLU:HG2	2.01	0.43
1:A:212:GLY:O	1:A:216:VAL:HG23	2.19	0.43
1:B:73:VAL:O	1:B:76:ILE:HB	2.19	0.43
1:B:102:PRO:HD3	1:B:131:LYS:H	1.83	0.43
2:C:622:GLU:HB3	2:C:717:LYS:CD	2.48	0.43
2:C:806:VAL:HG23	2:C:833:ARG:O	2.18	0.43
2:C:1012:ASP:CG	2:C:1015:SER:H	2.22	0.43
3:D:591:GLU:OE2	3:D:632:LYS:HB2	2.19	0.43
3:D:725:THR:OG1	3:D:726:ARG:NH1	2.50	0.43
3:D:824:VAL:CG1	3:D:851:ILE:HG22	2.48	0.43
3:D:938:VAL:HG13	3:D:942:GLN:CD	2.39	0.43
3:D:1125:GLN:HB2	3:D:1129:GLU:HG2	2.00	0.43
5:F:415:GLN:O	5:F:418:ARG:CG	2.67	0.43
8:P:1:DA:H1'	8:P:2:DG:H5'	2.00	0.43
1:A:64:THR:O	1:A:73:VAL:HG23	2.18	0.43
1:A:172:LEU:HB2	1:A:199:LYS:CB	2.45	0.43
1:A:177:LYS:CG	1:A:193:ILE:HB	2.49	0.43
1:A:182:ARG:HA	1:A:188:ASP:CG	2.39	0.43
1:B:102:PRO:HB3	1:B:130:ASP:HA	1.99	0.43
2:C:399:VAL:O	2:C:402:GLU:HB3	2.18	0.43
2:C:484:CYS:HB3	2:C:588:SER:HB3	1.99	0.43
2:C:907:LEU:HG	2:C:911:THR:O	2.19	0.43
3:D:69:ARG:CB	6:J:20:ARG:HH22	2.32	0.43
3:D:319:VAL:HG22	3:D:344:TYR:HE1	1.83	0.43
3:D:411:GLY:HA2	3:D:1228:GLU:N	2.33	0.43
3:D:1065:THR:OG1	3:D:1076:VAL:HG13	2.19	0.43
3:D:1220:TRP:O	3:D:1223:ALA:HB3	2.19	0.43
3:D:1221:LEU:HD11	11:D:1404:C0L:C04	2.49	0.43
1:A:53:SER:HB2	1:A:163:PRO:HA	1.99	0.43
1:B:18:ARG:HA	1:B:197:GLU:HA	2.01	0.43
1:B:105:VAL:HB	1:B:126:ALA:HB3	2.00	0.43
2:C:463:LEU:O	2:C:463:LEU:HD12	2.19	0.43
2:C:476:HIS:HB3	2:C:479:HIS:CD2	2.53	0.43
2:C:646:GLU:OE1	2:C:662:HIS:HB3	2.19	0.43
2:C:853:PHE:HD2	2:C:868:LEU:HD12	1.83	0.43
3:D:127:LYS:CB	3:D:132:ALA:HB3	2.48	0.43
3:D:425:SER:OG	3:D:426:GLY:N	2.51	0.43
3:D:550:GLU:OE1	3:D:550:GLU:N	2.44	0.43
3:D:556:ARG:HH12	4:E:35:ILE:HD12	1.83	0.43
3:D:607:PRO:C	3:D:609:THR:HG23	2.39	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1086:LEU:HD23	3:D:1099:LEU:HB3	2.01	0.43
5:F:234:GLN:HA	5:F:237:LYS:HD2	2.01	0.43
5:F:241:LEU:CB	5:F:245:GLU:HG3	2.44	0.43
6:J:88:ARG:HG3	6:J:89:ARG:HG2	2.00	0.43
7:O:10:DA:H2"	7:O:11:DA:C8	2.54	0.43
1:A:14:LEU:H	1:A:19:SER:HA	1.84	0.42
2:C:189:GLU:N	2:C:189:GLU:OE1	2.52	0.42
2:C:802:LEU:HD12	2:C:837:LEU:CG	2.38	0.42
2:C:1011:PHE:HD1	2:C:1018:PRO:HA	1.84	0.42
3:D:101:VAL:HG13	3:D:375:GLN:NE2	2.34	0.42
3:D:180:ASP:HB3	3:D:197:VAL:CG1	2.49	0.42
3:D:281:ILE:HG21	3:D:293:LEU:HD23	2.01	0.42
3:D:445:LYS:HA	3:D:516:LEU:CD2	2.45	0.42
3:D:487:LEU:HA	3:D:490:VAL:CG2	2.49	0.42
3:D:1068:PRO:HD3	3:D:1074:GLU:HG2	2.01	0.42
3:D:1268:ARG:HD2	3:D:1268:ARG:O	2.19	0.42
5:F:269:ARG:HD2	5:F:269:ARG:O	2.19	0.42
1:A:54:ILE:HD12	1:A:136:VAL:HG21	2.01	0.42
2:C:220:ASP:OD1	2:C:257:ILE:HG12	2.19	0.42
2:C:222:VAL:HB	2:C:224:VAL:CG2	2.49	0.42
2:C:274:LEU:CD1	2:C:292:ALA:HB1	2.49	0.42
2:C:587:VAL:HG22	2:C:591:THR:HB	2.01	0.42
2:C:660:VAL:HG21	2:C:670:TYR:HE2	1.84	0.42
2:C:1131:LEU:HB2	2:C:1133:LEU:CD1	2.50	0.42
3:D:110:VAL:O	3:D:110:VAL:HG13	2.18	0.42
3:D:345:ARG:O	3:D:349:ASN:ND2	2.52	0.42
3:D:517:VAL:HG11	3:D:523:GLN:CD	2.40	0.42
3:D:640:LEU:O	3:D:657:GLN:CG	2.46	0.42
3:D:797:ASN:HD21	3:D:799:ILE:HD12	1.84	0.42
3:D:822:GLY:O	3:D:835:PRO:HB2	2.19	0.42
5:F:258:TYR:HD1	6:J:82:TRP:HH2	1.67	0.42
5:F:386:LEU:CB	5:F:394:PRO:HG2	2.49	0.42
5:F:395:THR:O	5:F:399:LEU:HG	2.18	0.42
5:F:410:VAL:HA	5:F:413:ILE:HD12	2.01	0.42
6:J:85:LEU:O	6:J:89:ARG:N	2.52	0.42
6:J:91:ILE:O	6:J:94:LEU:HB2	2.19	0.42
1:A:24:GLU:OE1	1:A:191:LYS:HD2	2.19	0.42
1:A:43:LEU:HD21	2:C:901:VAL:CG1	2.48	0.42
1:A:104:GLU:HG3	1:A:124:HIS:CD2	2.53	0.42
1:A:161:ARG:O	1:A:162:ILE:HD13	2.18	0.42
1:A:213:LYS:HE2	1:B:223:ARG:NH2	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:18:ARG:HB2	1:B:197:GLU:HG3	2.01	0.42
1:B:32:TYR:CE1	2:C:1014:ARG:HD3	2.54	0.42
1:B:39:ARG:HD2	1:B:176:TYR:HE1	1.84	0.42
1:B:89:GLU:OE1	1:B:89:GLU:N	2.52	0.42
1:B:104:GLU:CA	1:B:128:LEU:HD13	2.49	0.42
1:B:106:THR:HA	1:B:125:ILE:N	2.33	0.42
1:B:134:LEU:HD21	1:B:136:VAL:CG2	2.49	0.42
2:C:122:CYS:HB3	2:C:127:MET:O	2.18	0.42
2:C:189:GLU:HA	2:C:199:LEU:C	2.40	0.42
2:C:220:ASP:C	2:C:257:ILE:HG23	2.39	0.42
2:C:317:ASN:CG	2:C:323:HIS:HB2	2.38	0.42
2:C:355:MET:C	2:C:362:GLU:HA	2.40	0.42
2:C:955:TRP:HA	2:C:958:ARG:NH1	2.32	0.42
2:C:1007:LYS:HD2	2:C:1022:PRO:C	2.39	0.42
3:D:138:SER:OG	3:D:139:VAL:N	2.53	0.42
3:D:240:LEU:O	3:D:244:LEU:HB2	2.19	0.42
3:D:261:ILE:O	3:D:265:ILE:HG13	2.20	0.42
3:D:1118:PRO:HA	3:D:1121:VAL:CG1	2.49	0.42
3:D:1220:TRP:CB	3:D:1241:ARG:HH21	2.28	0.42
3:D:1244:LYS:HB3	3:D:1246:ASN:ND2	2.34	0.42
5:F:329:ILE:O	5:F:332:VAL:HG12	2.20	0.42
5:F:442:SER:HB3	6:J:7:ARG:CD	2.36	0.42
5:F:493:GLY:O	5:F:497:GLY:N	2.52	0.42
5:F:507:GLU:HA	5:F:510:THR:OG1	2.19	0.42
1:A:71:GLU:CD	1:A:127:THR:H	2.23	0.42
1:A:87:SER:OG	1:A:88:GLU:N	2.53	0.42
1:B:50:ALA:N	1:B:141:GLU:O	2.40	0.42
2:C:140:ILE:HG12	2:C:146:GLU:C	2.40	0.42
2:C:200:HIS:ND1	2:C:349:HIS:HB2	2.35	0.42
2:C:344:TYR:CE1	2:C:363:VAL:HG23	2.53	0.42
2:C:600:ASP:OD1	2:C:928:ILE:N	2.53	0.42
2:C:714:ALA:O	2:C:715:LEU:HD23	2.19	0.42
2:C:741:LEU:O	2:C:745:ASP:N	2.53	0.42
3:D:87:VAL:O	3:D:90:GLU:N	2.37	0.42
3:D:129:ILE:HG13	3:D:130:TYR:N	2.35	0.42
3:D:445:LYS:O	3:D:449:LEU:HB2	2.19	0.42
3:D:453:LYS:HA	3:D:456:VAL:CG1	2.49	0.42
3:D:676:LEU:HD12	3:D:715:LYS:HB3	2.01	0.42
3:D:826:ASN:O	3:D:829:GLY:N	2.51	0.42
3:D:1077:TYR:O	3:D:1080:ILE:HD11	2.19	0.42
3:D:1156:VAL:O	3:D:1159:ARG:HB3	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:226:ASP:CG	5:F:229:ARG:H	2.23	0.42
6:J:32:TYR:O	6:J:39:GLU:HA	2.19	0.42
2:C:278:TYR:CE1	2:C:282:ARG:CD	2.98	0.42
2:C:626:VAL:CG1	2:C:888:ARG:HH22	2.33	0.42
2:C:1072:GLU:O	2:C:1076:MET:HG3	2.20	0.42
3:D:108:LYS:O	3:D:108:LYS:HG3	2.20	0.42
3:D:212:ALA:CA	3:D:215:GLU:HG2	2.49	0.42
3:D:420:LYS:HZ1	11:D:1404:C0L:C23	2.31	0.42
3:D:503:THR:HG21	3:D:508:GLY:HA3	2.00	0.42
3:D:797:ASN:O	3:D:801:THR:N	2.48	0.42
3:D:974:VAL:HG12	3:D:1159:ARG:HH12	1.84	0.42
3:D:1075:VAL:HG12	3:D:1077:TYR:CE2	2.54	0.42
3:D:1125:GLN:CB	3:D:1129:GLU:HG2	2.50	0.42
3:D:1198:GLY:O	3:D:1200:PRO:HD3	2.19	0.42
5:F:336:ASP:OD1	5:F:337:TYR:N	2.52	0.42
5:F:473:GLY:O	5:F:477:LEU:HG	2.19	0.42
7:O:22:DG:H2''	7:O:23:DT:O5'	2.20	0.42
1:A:105:VAL:HG12	1:A:125:ILE:CD1	2.46	0.42
1:B:120:ASN:N	1:B:121:PRO:HD3	2.35	0.42
3:D:169:GLU:OE1	3:D:208:ILE:HG23	2.20	0.42
3:D:420:LYS:HZ1	11:D:1404:C0L:C16	2.32	0.42
3:D:596:THR:HB	3:D:628:SER:HB2	2.01	0.42
3:D:601:PRO:HA	3:D:608:GLU:HB3	2.01	0.42
3:D:601:PRO:HA	3:D:608:GLU:HA	2.01	0.42
3:D:725:THR:OG1	3:D:726:ARG:HD2	2.19	0.42
3:D:1061:PHE:CE2	3:D:1063:LYS:HE2	2.55	0.42
3:D:1064:ILE:HG22	3:D:1065:THR:N	2.34	0.42
3:D:1118:PRO:HA	3:D:1121:VAL:HG12	2.01	0.42
3:D:1251:ASN:HA	3:D:1254:ILE:CD1	2.49	0.42
7:O:12:DG:H2''	7:O:13:DT:C5'	2.49	0.42
8:P:21:DT:H2''	8:P:22:DC:OP2	2.19	0.42
1:A:46:ILE:CG2	1:A:170:PRO:HG2	2.46	0.42
1:A:104:GLU:HG3	1:A:124:HIS:HD2	1.84	0.42
1:A:177:LYS:HE3	1:A:193:ILE:HD12	2.01	0.42
1:B:34:LEU:HD12	1:B:35:GLY:N	2.35	0.42
1:B:86:SER:HB3	1:B:117:THR:CG2	2.50	0.42
2:C:255:SER:HB3	2:C:258:MET:CB	2.50	0.42
2:C:377:ARG:HA	2:C:511:PHE:CE1	2.55	0.42
2:C:453:ARG:NH2	2:C:500:LEU:HB2	2.34	0.42
2:C:560:LEU:HA	2:C:560:LEU:HD23	1.91	0.42
2:C:723:ILE:O	2:C:723:ILE:HG22	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:771:ARG:HG3	2:C:788:GLY:H	1.84	0.42
2:C:1112:ILE:HG23	2:C:1113:PRO:HD2	2.01	0.42
3:D:47:PHE:HE2	3:D:327:MET:HE3	1.84	0.42
3:D:410:GLN:O	3:D:1228:GLU:N	2.53	0.42
3:D:595:ASP:H	3:D:598:GLU:CD	2.23	0.42
3:D:599:TYR:HD1	3:D:610:GLY:HA3	1.84	0.42
3:D:1199:GLU:N	3:D:1199:GLU:OE1	2.53	0.42
4:E:101:ALA:HB1	4:E:103:LEU:HD13	2.01	0.42
5:F:342:LYS:HZ2	7:O:29:DA:C3'	2.32	0.42
1:A:218:LEU:O	1:A:221:LEU:HB3	2.20	0.42
1:B:3:ILE:HB	1:B:233:GLU:O	2.20	0.42
1:B:113:PRO:HD2	1:B:116:VAL:HG21	2.02	0.42
2:C:41:PHE:HB3	2:C:43:LYS:HZ2	1.85	0.42
2:C:185:VAL:O	2:C:185:VAL:HG23	2.19	0.42
2:C:290:GLU:C	2:C:294:THR:HG1	2.22	0.42
2:C:322:LEU:HD23	2:C:357:VAL:HG11	2.00	0.42
2:C:396:MET:HE3	2:C:419:ASN:H	1.85	0.42
2:C:583:PRO:HB2	2:C:584:ARG:HE	1.84	0.42
2:C:796:VAL:HG22	2:C:845:GLY:O	2.19	0.42
2:C:875:GLN:HE21	2:C:877:ARG:HH21	1.68	0.42
2:C:1009:MET:O	2:C:1010:LEU:HD23	2.19	0.42
3:D:50:LYS:HG3	3:D:79:GLY:O	2.19	0.42
3:D:52:PHE:HB2	3:D:88:ARG:NH1	2.35	0.42
3:D:937:ILE:HD13	3:D:952:LEU:HD23	2.02	0.42
3:D:940:ARG:NH1	3:D:963:ARG:HH21	2.17	0.42
3:D:1079:LYS:HD3	3:D:1079:LYS:HA	1.89	0.42
3:D:1119:HIS:CE1	3:D:1207:LEU:HD12	2.55	0.42
6:J:76:LYS:H	6:J:76:LYS:HD3	1.83	0.42
7:O:5:DG:H1'	7:O:6:DA:C5'	2.50	0.42
1:B:1:MET:CB	1:B:232:ILE:HG12	2.49	0.42
1:B:7:PRO:CA	1:B:25:PRO:HD2	2.43	0.42
1:B:97:LEU:HD12	1:B:97:LEU:HA	1.79	0.42
2:C:483:MET:HE2	2:C:498:GLY:HA3	2.01	0.42
2:C:515:PRO:HA	2:C:529:VAL:O	2.20	0.42
2:C:697:GLU:OE1	2:C:697:GLU:N	2.53	0.42
2:C:851:ARG:O	2:C:869:VAL:HA	2.20	0.42
2:C:862:PRO:O	2:C:865:VAL:HB	2.20	0.42
3:D:155:MET:CE	3:D:219:LEU:HB3	2.50	0.42
3:D:277:LEU:HD21	3:D:295:ARG:NH1	2.34	0.42
3:D:1120:GLU:O	3:D:1124:VAL:HG23	2.20	0.42
5:F:262:LEU:HA	5:F:265:GLU:HG2	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:345:THR:OG1	7:O:29:DA:H2'	2.19	0.42
6:J:65:ILE:HG23	6:J:66:GLU:HG2	2.01	0.42
8:P:6:DA:OP2	8:P:6:DA:H2'	2.19	0.42
1:A:14:LEU:N	1:A:19:SER:HA	2.35	0.42
1:B:164:VAL:HG23	1:B:165:ASP:O	2.20	0.42
1:B:172:LEU:HB2	1:B:197:GLU:O	2.20	0.42
1:B:192:LEU:HD12	1:B:193:ILE:N	2.34	0.42
2:C:70:TRP:HH2	2:C:83:VAL:N	2.18	0.42
2:C:254:PHE:HE2	2:C:347:ARG:HG2	1.84	0.42
2:C:413:THR:O	2:C:416:THR:N	2.53	0.42
2:C:419:ASN:HD21	2:C:421:ARG:CG	2.33	0.42
2:C:483:MET:HG3	2:C:499:SER:O	2.20	0.42
2:C:546:SER:O	2:C:548:ILE:N	2.52	0.42
2:C:635:ALA:O	2:C:638:ALA:HB3	2.20	0.42
2:C:792:ILE:HD12	2:C:792:ILE:H	1.84	0.42
2:C:884:LYS:C	2:C:885:LEU:HD12	2.41	0.42
3:D:83:THR:OG1	3:D:84:ARG:N	2.53	0.42
3:D:173:ARG:HD3	3:D:201:GLY:O	2.20	0.42
3:D:567:SER:HB3	3:D:570:SER:H	1.85	0.42
3:D:1066:ILE:N	3:D:1075:VAL:O	2.37	0.42
3:D:1234:THR:HG23	3:D:1235:ASP:N	2.35	0.42
5:F:231:TYR:O	5:F:235:ILE:HG23	2.20	0.42
5:F:244:GLU:HA	5:F:247:VAL:CG2	2.49	0.42
1:A:38:LEU:O	1:A:42:LEU:HG	2.19	0.41
1:A:144:ARG:C	1:A:168:TYR:HB2	2.40	0.41
1:A:146:TYR:CE1	1:A:165:ASP:HB3	2.55	0.41
1:B:85:VAL:CB	1:B:118:VAL:HA	2.49	0.41
1:B:102:PRO:CD	1:B:131:LYS:H	2.33	0.41
1:B:177:LYS:O	1:B:192:LEU:HD12	2.20	0.41
1:B:192:LEU:HD12	1:B:193:ILE:H	1.84	0.41
2:C:395:ARG:HA	2:C:398:ARG:CG	2.50	0.41
2:C:532:THR:HG22	2:C:535:GLU:CD	2.40	0.41
2:C:558:ARG:HH21	2:C:570:TYR:HB2	1.84	0.41
2:C:683:CYS:HA	2:C:752:ILE:CD1	2.50	0.41
2:C:854:SER:O	2:C:859:ASP:HB2	2.19	0.41
3:D:169:GLU:O	3:D:208:ILE:HD13	2.19	0.41
3:D:497:LEU:HB3	3:D:509:ILE:HG21	2.03	0.41
3:D:847:LEU:HD12	3:D:847:LEU:N	2.35	0.41
3:D:901:LEU:HB3	3:D:958:THR:HA	2.02	0.41
3:D:930:VAL:CA	3:D:936:VAL:HA	2.38	0.41
3:D:1046:ILE:HG22	3:D:1110:GLN:HA	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1053:VAL:HG13	3:D:1101:ASP:HA	2.02	0.41
3:D:1168:ILE:N	3:D:1202:ALA:O	2.51	0.41
3:D:1251:ASN:HA	3:D:1254:ILE:HD11	2.02	0.41
5:F:446:VAL:O	5:F:446:VAL:HG12	2.19	0.41
1:A:14:LEU:CD2	1:A:20:GLN:HG3	2.50	0.41
1:B:106:THR:HA	1:B:125:ILE:H	1.85	0.41
2:C:94:SER:OG	2:C:95:PRO:HA	2.20	0.41
2:C:395:ARG:O	2:C:398:ARG:HG3	2.20	0.41
2:C:470:LEU:HD21	3:D:861:ALA:HB1	2.02	0.41
2:C:556:GLU:HB2	2:C:557:PRO:HD2	2.02	0.41
2:C:789:ILE:CG2	2:C:803:VAL:HG13	2.50	0.41
3:D:302:PHE:HA	3:D:305:SER:OG	2.20	0.41
3:D:587:TYR:O	3:D:590:THR:HG22	2.20	0.41
3:D:866:ARG:HH11	3:D:1011:THR:HA	1.82	0.41
3:D:1062:TYR:O	3:D:1080:ILE:HB	2.21	0.41
3:D:1062:TYR:CB	3:D:1080:ILE:HB	2.46	0.41
3:D:1086:LEU:HD23	3:D:1099:LEU:CB	2.50	0.41
5:F:264:THR:HA	5:F:267:SER:CB	2.45	0.41
5:F:318:LEU:O	5:F:321:ILE:HB	2.20	0.41
5:F:522:VAL:HG23	5:F:523:LEU:HD23	2.01	0.41
8:P:4:DA:H3'	8:P:4:DA:OP1	2.20	0.41
1:A:203:SER:OG	1:A:205:ARG:HG3	2.20	0.41
1:B:171:VAL:C	1:B:172:LEU:HD12	2.40	0.41
2:C:152:VAL:HG21	2:C:418:ILE:HD13	2.03	0.41
2:C:298:ASN:HD22	2:C:302:LYS:CE	2.33	0.41
2:C:447:SER:OG	2:C:613:ARG:HB2	2.20	0.41
2:C:532:THR:HG22	2:C:535:GLU:OE2	2.20	0.41
2:C:762:THR:HG23	2:C:765:GLY:N	2.35	0.41
2:C:805:LYS:HD3	2:C:835:THR:HG1	1.85	0.41
3:D:33:THR:HG21	5:F:365:THR:HG22	2.02	0.41
3:D:148:LEU:HA	3:D:151:LEU:HB2	2.02	0.41
3:D:496:VAL:HG22	3:D:512:PHE:O	2.20	0.41
1:A:194:LEU:HD23	1:A:195:ASP:N	2.35	0.41
1:B:6:ARG:NH1	1:B:234:ILE:HG22	2.35	0.41
1:B:15:THR:HG23	1:B:18:ARG:HB3	2.03	0.41
1:B:75:GLU:HG3	1:B:79:ASN:HD21	1.86	0.41
1:B:84:VAL:HG13	1:B:84:VAL:O	2.20	0.41
1:B:87:SER:O	1:B:142:ARG:NH1	2.53	0.41
2:C:224:VAL:C	2:C:232:GLN:HB2	2.41	0.41
2:C:271:ASP:HA	2:C:274:LEU:HB2	2.02	0.41
2:C:290:GLU:OE1	2:C:290:GLU:N	2.39	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:407:GLN:HG3	2:C:417:LEU:HD21	2.00	0.41
2:C:728:GLY:O	2:C:731:TYR:HB2	2.19	0.41
2:C:891:ASN:OD1	2:C:891:ASN:N	2.53	0.41
2:C:1111:ASN:ND2	4:E:66:ASP:OD1	2.50	0.41
3:D:69:ARG:NH1	6:J:25:ALA:HB2	2.36	0.41
3:D:800:ILE:HG12	3:D:804:ASP:OD2	2.20	0.41
3:D:1251:ASN:CA	3:D:1254:ILE:HG12	2.50	0.41
5:F:328:LEU:O	5:F:332:VAL:HG12	2.20	0.41
5:F:448:VAL:O	5:F:451:VAL:HG12	2.21	0.41
1:A:36:ASN:HD22	2:C:1016:GLY:N	2.19	0.41
1:A:151:GLN:NE2	2:C:795:GLU:OE2	2.40	0.41
1:B:60:LEU:HD23	1:B:159:ILE:HD13	2.03	0.41
1:B:134:LEU:CG	1:B:136:VAL:HG23	2.50	0.41
2:C:50:VAL:HA	2:C:51:PRO:HD3	1.90	0.41
2:C:239:LYS:HZ3	2:C:268:VAL:HG13	1.85	0.41
2:C:273:ALA:O	2:C:277:ILE:HG12	2.20	0.41
2:C:278:TYR:CD1	2:C:282:ARG:HD2	2.55	0.41
2:C:541:VAL:O	2:C:561:VAL:HG23	2.20	0.41
2:C:1094:ASP:HB3	2:C:1119:GLU:CB	2.51	0.41
3:D:104:ILE:O	3:D:108:LYS:N	2.38	0.41
3:D:270:ILE:CD1	3:D:303:GLN:HA	2.50	0.41
3:D:350:ARG:HH11	3:D:377:SER:HB3	1.83	0.41
3:D:601:PRO:HA	3:D:608:GLU:CG	2.51	0.41
3:D:822:GLY:O	3:D:836:VAL:HB	2.19	0.41
3:D:1030:ARG:CZ	3:D:1034:LEU:HD21	2.50	0.41
3:D:1055:LEU:CB	3:D:1101:ASP:HA	2.50	0.41
3:D:1231:ARG:HA	3:D:1234:THR:CG2	2.50	0.41
5:F:242:ASN:H	5:F:245:GLU:CG	2.34	0.41
5:F:334:LYS:HZ3	7:O:25:DC:H3'	1.85	0.41
5:F:382:ILE:HD13	5:F:385:GLU:OE1	2.21	0.41
6:J:55:LEU:HG	6:J:60:MET:C	2.40	0.41
2:C:126:ASP:O	2:C:169:ASN:HA	2.21	0.41
2:C:455:LEU:HD21	2:C:500:LEU:HD21	2.01	0.41
2:C:600:ASP:CG	2:C:929:GLY:H	2.24	0.41
2:C:648:GLY:C	2:C:695:ARG:HG3	2.40	0.41
2:C:1055:GLN:HA	2:C:1056:PRO:HD3	1.95	0.41
2:C:1089:LEU:HA	2:C:1089:LEU:HD23	1.80	0.41
3:D:35:ASN:O	3:D:39:LEU:HA	2.20	0.41
3:D:159:ARG:HD2	3:D:220:GLU:OE2	2.20	0.41
3:D:438:LEU:HG	3:D:561:SER:OG	2.21	0.41
3:D:624:ARG:HG2	3:D:625:GLY:N	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:923:ARG:HH21	3:D:1150:HIS:CE1	2.39	0.41
3:D:1027:GLY:O	3:D:1031:VAL:HG23	2.20	0.41
3:D:1052:ARG:HG2	3:D:1067:VAL:HG11	2.02	0.41
3:D:1063:LYS:CD	3:D:1078:ASP:HA	2.41	0.41
5:F:234:GLN:HA	5:F:237:LYS:CD	2.51	0.41
5:F:368:ILE:HG23	5:F:369:PRO:HD2	2.03	0.41
6:J:105:ILE:HG13	6:J:108:ARG:NH2	2.36	0.41
8:P:11:DA:H1'	8:P:12:DA:O5'	2.20	0.41
1:A:56:ILE:HG12	1:A:135:GLU:O	2.21	0.41
1:A:223:ARG:CD	1:B:213:LYS:HA	2.50	0.41
1:B:68:GLY:O	1:B:129:ASN:N	2.40	0.41
2:C:178:GLN:HA	2:C:456:SER:O	2.21	0.41
2:C:234:VAL:O	2:C:238:LEU:HD23	2.21	0.41
2:C:239:LYS:NZ	2:C:268:VAL:HG13	2.36	0.41
2:C:347:ARG:NE	2:C:355:MET:HB2	2.36	0.41
2:C:532:THR:HG22	2:C:535:GLU:HG2	2.03	0.41
2:C:589:VAL:O	2:C:592:ALA:HB3	2.21	0.41
2:C:654:SER:N	2:C:657:TYR:O	2.53	0.41
2:C:805:LYS:HD3	2:C:835:THR:OG1	2.20	0.41
2:C:860:GLU:O	2:C:861:LEU:HD12	2.21	0.41
2:C:889:HIS:HB2	2:C:891:ASN:ND2	2.35	0.41
2:C:899:LEU:HD13	2:C:899:LEU:HA	1.85	0.41
2:C:1134:ASN:HB3	3:D:13:GLY:C	2.41	0.41
3:D:107:PHE:HZ	3:D:126:GLU:HB2	1.85	0.41
3:D:118:LEU:HD23	3:D:118:LEU:HA	1.83	0.41
3:D:445:LYS:CA	3:D:516:LEU:HD22	2.47	0.41
3:D:480:ARG:HA	3:D:481:PRO:HD3	1.95	0.41
3:D:503:THR:CG2	3:D:508:GLY:HA3	2.51	0.41
3:D:665:GLU:HG3	3:D:665:GLU:O	2.21	0.41
5:F:245:GLU:O	5:F:249:LEU:HG	2.20	0.41
5:F:502:ARG:HA	5:F:502:ARG:HD2	1.83	0.41
1:A:47:PRO:HG3	1:B:230:GLU:HG2	2.03	0.41
2:C:148:LYS:HB3	2:C:414:PRO:HD3	2.03	0.41
2:C:223:GLY:CA	2:C:231:ARG:HH22	2.34	0.41
2:C:290:GLU:O	2:C:294:THR:OG1	2.35	0.41
2:C:436:LEU:HD11	2:C:460:PRO:HD2	2.03	0.41
2:C:524:VAL:HG23	2:C:554:PHE:CZ	2.56	0.41
2:C:689:ILE:CG2	2:C:704:ASP:H	2.34	0.41
2:C:1007:LYS:HB2	2:C:1022:PRO:HB2	2.02	0.41
2:C:1043:ALA:HA	3:D:426:GLY:CA	2.49	0.41
2:C:1071:MET:SD	3:D:502:PRO:CA	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:10:LEU:HB3	3:D:1245:LEU:HD21	2.03	0.41
3:D:61:TYR:CB	3:D:78:CYS:HB2	2.50	0.41
3:D:84:ARG:HG2	3:D:86:LYS:HG2	2.03	0.41
3:D:432:VAL:HG22	3:D:434:PRO:HD3	2.03	0.41
3:D:451:LEU:HD13	3:D:451:LEU:HA	1.89	0.41
3:D:822:GLY:O	3:D:836:VAL:N	2.54	0.41
3:D:1140:GLU:HA	3:D:1143:ARG:HD2	2.01	0.41
3:D:1162:LEU:HD23	3:D:1162:LEU:HA	1.86	0.41
4:E:38:PRO:HB2	4:E:39:PRO:HD2	2.03	0.41
4:E:40:ILE:HA	4:E:43:LEU:HB2	2.02	0.41
5:F:342:LYS:HG3	5:F:344:SER:H	1.86	0.41
5:F:451:VAL:O	5:F:455:LEU:HD23	2.21	0.41
6:J:58:ASN:ND2	6:J:60:MET:HG2	2.36	0.41
7:O:15:DT:H2"	7:O:16:DT:C6	2.56	0.41
1:A:14:LEU:HD21	1:A:20:GLN:CG	2.50	0.41
1:A:34:LEU:O	1:A:34:LEU:HD13	2.20	0.41
1:A:83:LEU:HA	1:A:123:MET:SD	2.61	0.41
1:A:89:GLU:OE2	1:A:93:VAL:HG11	2.20	0.41
1:A:98:ARG:HG3	1:A:135:GLU:HG2	2.03	0.41
1:B:53:SER:HB2	1:B:162:ILE:O	2.21	0.41
1:B:69:VAL:O	1:B:129:ASN:ND2	2.51	0.41
1:B:86:SER:O	1:B:116:VAL:HA	2.21	0.41
2:C:98:ASP:OD1	2:C:98:ASP:N	2.52	0.41
2:C:229:LYS:HD3	2:C:229:LYS:HA	1.32	0.41
2:C:238:LEU:HD12	2:C:243:TRP:CG	2.56	0.41
2:C:270:THR:C	2:C:274:LEU:HD23	2.41	0.41
2:C:403:ARG:O	2:C:407:GLN:HG2	2.21	0.41
2:C:476:HIS:HD2	2:C:478:SER:OG	2.04	0.41
2:C:749:SER:OG	2:C:877:ARG:HB2	2.20	0.41
2:C:764:LEU:CB	2:C:808:PRO:HG2	2.51	0.41
2:C:851:ARG:O	2:C:870:ARG:N	2.36	0.41
2:C:887:GLY:HA3	2:C:1028:MET:HE1	2.02	0.41
2:C:934:THR:HG22	2:C:1026:GLY:HA3	2.03	0.41
2:C:956:ALA:HA	2:C:959:LEU:CG	2.51	0.41
2:C:958:ARG:HD3	2:C:958:ARG:N	2.33	0.41
2:C:1048:PRO:O	2:C:1057:LEU:N	2.45	0.41
3:D:74:ILE:HG23	3:D:80:VAL:N	2.36	0.41
3:D:334:ARG:CD	5:F:418:ARG:HB3	2.38	0.41
3:D:354:LEU:HD22	3:D:370:GLU:HG3	2.03	0.41
3:D:525:HIS:HE1	3:D:527:LEU:HD12	1.85	0.41
3:D:546:PRO:O	3:D:547:LEU:HD23	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:611:VAL:HA	3:D:634:LYS:O	2.21	0.41
3:D:749:TYR:CZ	3:D:781:ALA:HA	2.56	0.41
3:D:800:ILE:HG12	3:D:804:ASP:CG	2.41	0.41
3:D:1045:PRO:HB2	3:D:1111:LEU:CD2	2.47	0.41
3:D:1169:ASP:CB	3:D:1202:ALA:HB3	2.50	0.41
3:D:1191:ARG:NE	3:D:1191:ARG:HA	2.36	0.41
3:D:1217:THR:OG1	3:D:1218:ASP:N	2.54	0.41
5:F:242:ASN:ND2	5:F:244:GLU:OE2	2.54	0.41
5:F:337:TYR:O	5:F:340:GLY:N	2.39	0.41
5:F:347:ALA:HB1	5:F:351:ILE:HD11	2.02	0.41
5:F:415:GLN:C	5:F:418:ARG:HG3	2.40	0.41
5:F:498:VAL:CG2	5:F:503:ILE:HD11	2.51	0.41
7:O:9:DA:H1'	7:O:10:DA:C5'	2.48	0.41
1:A:221:LEU:HD12	1:A:225:LEU:HD21	2.03	0.41
1:B:1:MET:HB2	1:B:232:ILE:CA	2.45	0.41
1:B:18:ARG:HD2	1:B:197:GLU:OE1	2.21	0.41
1:B:29:GLY:HA2	1:B:190:ASP:OD2	2.21	0.41
2:C:70:TRP:HA	2:C:73:SER:HB2	2.03	0.41
2:C:84:GLY:H	2:C:87:GLU:CD	2.24	0.41
2:C:199:LEU:HD22	2:C:216:VAL:O	2.21	0.41
2:C:236:VAL:O	2:C:240:ALA:HB2	2.21	0.41
2:C:516:TYR:CD2	2:C:531:LEU:HD12	2.56	0.41
2:C:621:SER:O	2:C:709:ASP:HB2	2.21	0.41
2:C:653:VAL:HA	2:C:658:ILE:HA	2.02	0.41
2:C:720:LEU:HD12	2:C:1026:GLY:O	2.21	0.41
2:C:764:LEU:HB3	2:C:808:PRO:HG2	2.03	0.41
2:C:776:ILE:HG13	2:C:780:VAL:CG2	2.51	0.41
2:C:851:ARG:HD2	2:C:851:ARG:HA	1.91	0.41
2:C:924:ARG:HH22	2:C:925:ARG:HH11	1.69	0.41
2:C:942:SER:O	2:C:968:PRO:HB3	2.21	0.41
2:C:1048:PRO:C	2:C:1056:PRO:HA	2.41	0.41
2:C:1072:GLU:HG2	3:D:509:ILE:CG1	2.51	0.41
3:D:354:LEU:HD13	3:D:370:GLU:CB	2.48	0.41
3:D:820:MET:HG3	3:D:837:LYS:CA	2.51	0.41
3:D:876:ARG:HD2	3:D:1211:THR:HG22	2.02	0.41
3:D:1039:VAL:HG23	3:D:1039:VAL:O	2.20	0.41
3:D:1174:GLU:HG3	3:D:1174:GLU:O	2.21	0.41
5:F:515:ARG:CZ	5:F:515:ARG:HB2	2.50	0.41
8:P:4:DA:H2''	8:P:5:DC:O5'	2.21	0.41
8:P:22:DC:H2''	8:P:23:DA:OP2	2.21	0.41
1:A:53:SER:O	1:A:139:VAL:HB	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:55:ARG:CD	1:A:160:GLY:HA3	2.51	0.40
1:A:95:MET:O	1:A:138:LEU:N	2.54	0.40
1:A:96:TYR:O	1:A:111:VAL:HG12	2.21	0.40
1:A:96:TYR:CD1	1:A:137:GLU:HA	2.56	0.40
1:A:148:PRO:HA	1:A:165:ASP:OD1	2.21	0.40
1:B:106:THR:CA	1:B:125:ILE:HG22	2.50	0.40
2:C:40:SER:HB2	2:C:973:SER:OG	2.21	0.40
2:C:212:LEU:HB2	2:C:226:ILE:HG13	2.00	0.40
2:C:349:HIS:ND1	2:C:349:HIS:O	2.54	0.40
2:C:489:PRO:O	2:C:494:ILE:HG12	2.21	0.40
2:C:798:ASP:HA	2:C:839:VAL:HG13	2.03	0.40
2:C:944:TRP:C	2:C:993:LEU:HD23	2.42	0.40
2:C:1042:HIS:O	3:D:427:ARG:N	2.52	0.40
3:D:18:GLU:HA	3:D:21:ARG:CG	2.50	0.40
3:D:129:ILE:HG13	3:D:130:TYR:CD2	2.56	0.40
3:D:797:ASN:HD22	3:D:798:PRO:CD	2.34	0.40
3:D:1065:THR:HG21	3:D:1076:VAL:HG22	2.03	0.40
3:D:1172:SER:N	3:D:1199:GLU:HG3	2.36	0.40
5:F:334:LYS:HG2	5:F:346:TYR:HH	1.87	0.40
5:F:513:LYS:HD2	5:F:516:HIS:HE1	1.86	0.40
6:J:32:TYR:HD1	6:J:64:LEU:HA	1.83	0.40
6:J:42:VAL:HB	6:J:44:PHE:CE2	2.57	0.40
6:J:55:LEU:HD11	6:J:59:GLY:O	2.20	0.40
8:P:14:DA:H2"	8:P:15:DC:OP2	2.19	0.40
8:P:15:DC:H2"	8:P:16:DT:OP2	2.20	0.40
1:A:107:ALA:N	1:A:123:MET:O	2.55	0.40
1:A:118:VAL:HG12	1:A:119:HIS:N	2.36	0.40
2:C:179:LEU:HD23	2:C:179:LEU:HA	1.94	0.40
2:C:627:GLY:H	2:C:973:SER:HA	1.86	0.40
2:C:754:GLU:OE2	2:C:870:ARG:HD2	2.21	0.40
2:C:906:PHE:CB	2:C:912:PRO:HA	2.51	0.40
3:D:207:GLN:HE21	3:D:211:ARG:NE	2.20	0.40
3:D:229:LEU:HA	3:D:229:LEU:HD12	1.87	0.40
3:D:524:LEU:HG	3:D:525:HIS:O	2.21	0.40
3:D:1036:GLU:HB2	3:D:1038:ARG:HG2	2.04	0.40
3:D:1211:THR:O	3:D:1214:SER:OG	2.34	0.40
5:F:234:GLN:HA	5:F:237:LYS:HE3	2.00	0.40
5:F:358:ALA:HA	5:F:361:ASP:HB2	2.02	0.40
1:A:7:PRO:HA	1:A:25:PRO:CD	2.33	0.40
1:A:95:MET:HB3	1:A:113:PRO:CD	2.50	0.40
1:B:3:ILE:CG1	1:B:234:ILE:HA	2.51	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:104:GLU:HG2	1:B:127:THR:CB	2.52	0.40
2:C:116:LYS:NZ	2:C:130:ALA:HB3	2.36	0.40
2:C:180:VAL:O	2:C:377:ARG:HG2	2.22	0.40
2:C:353:THR:O	2:C:364:PRO:HA	2.21	0.40
2:C:357:VAL:HG22	2:C:358:PRO:HD2	2.02	0.40
2:C:455:LEU:N	2:C:498:GLY:O	2.46	0.40
2:C:802:LEU:HB2	2:C:837:LEU:CG	2.51	0.40
2:C:1095:ASP:OD2	2:C:1098:GLY:HA3	2.21	0.40
3:D:24:SER:OG	3:D:93:GLY:HA2	2.21	0.40
3:D:27:GLU:HG3	3:D:94:HIS:O	2.21	0.40
3:D:329:GLN:HA	3:D:335:PHE:CB	2.51	0.40
3:D:1278:ALA:O	3:D:1281:ALA:HB3	2.21	0.40
5:F:339:LYS:HB3	5:F:341:TYR:HE2	1.84	0.40
5:F:440:GLU:CA	6:J:7:ARG:HA	2.51	0.40
1:A:45:SER:HA	1:A:144:ARG:HH11	1.85	0.40
2:C:275:LEU:HB3	2:C:289:LYS:HZ3	1.87	0.40
2:C:347:ARG:HG2	2:C:350:GLU:OE1	2.21	0.40
2:C:413:THR:CG2	2:C:416:THR:H	2.34	0.40
2:C:731:TYR:OH	3:D:578:ARG:HD3	2.21	0.40
2:C:739:ASN:N	2:C:899:LEU:O	2.53	0.40
3:D:95:ILE:HB	3:D:317:VAL:HB	2.02	0.40
3:D:816:THR:HG22	3:D:821:LYS:CD	2.52	0.40
5:F:415:GLN:HG2	5:F:418:ARG:CD	2.52	0.40
5:F:447:ALA:O	5:F:449:ASP:N	2.53	0.40
7:O:12:DG:H2''	7:O:13:DT:O5'	2.21	0.40
7:O:27:DA:H2'	7:O:27:DA:OP2	2.21	0.40
8:P:2:DG:H2''	8:P:3:DC:O5'	2.20	0.40
8:P:20:DG:H1'	8:P:21:DT:O5'	2.22	0.40
1:B:48:GLY:HA3	1:B:168:TYR:O	2.22	0.40
2:C:447:SER:HB2	2:C:613:ARG:HB2	2.04	0.40
2:C:456:SER:HB2	2:C:497:ILE:HG12	2.04	0.40
2:C:514:THR:HG23	2:C:515:PRO:HD2	2.02	0.40
2:C:649:VAL:O	2:C:661:MET:HB3	2.21	0.40
2:C:1067:ARG:HG3	3:D:421:ARG:CA	2.52	0.40
2:C:1086:GLN:HG3	3:D:1255:GLY:O	2.21	0.40
3:D:33:THR:HB	3:D:327:MET:CE	2.52	0.40
3:D:41:PRO:HB3	3:D:47:PHE:HB2	2.04	0.40
3:D:194:ARG:O	3:D:198:ARG:HG3	2.22	0.40
3:D:314:LEU:HD11	3:D:316:ALA:O	2.21	0.40
3:D:497:LEU:HB2	3:D:544:HIS:HB2	2.03	0.40
3:D:577:PRO:HB3	3:D:581:MET:SD	2.61	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:736:VAL:O	3:D:841:ARG:NE	2.54	0.40
5:F:255:ALA:CB	6:J:101:ARG:HG3	2.52	0.40
6:J:10:ARG:HD2	6:J:10:ARG:N	2.36	0.40
8:P:9:DT:H2"	8:P:10:DT:C6	2.57	0.40

There are no symmetry-related clashes.

## 5.3 Torsion angles

### 5.3.1 Protein backbone

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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	223/347 (64%)	192 (86%)	31 (14%)	0	100	100
1	B	235/347 (68%)	199 (85%)	36 (15%)	0	100	100
2	C	1109/1179 (94%)	959 (86%)	146 (13%)	4 (0%)	34	72
3	D	1260/1326 (95%)	1109 (88%)	150 (12%)	1 (0%)	51	85
4	E	81/110 (74%)	72 (89%)	9 (11%)	0	100	100
5	F	317/531 (60%)	291 (92%)	24 (8%)	2 (1%)	25	65
6	J	106/111 (96%)	91 (86%)	14 (13%)	1 (1%)	17	56
All	All	3331/3951 (84%)	2913 (88%)	410 (12%)	8 (0%)	50	81

All (8) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	C	231	ARG
2	C	1074	TRP
3	D	422	VAL
5	F	224	SER
5	F	447	ALA
2	C	230	ARG
2	C	1068	PHE

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Mol	Chain	Res	Type
6	J	108	ARG

### 5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all 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	194/297 (65%)	191 (98%)	3 (2%)	65	80
1	B	194/297 (65%)	193 (100%)	1 (0%)	88	93
2	C	933/997 (94%)	920 (99%)	13 (1%)	67	81
3	D	1042/1103 (94%)	1030 (99%)	12 (1%)	71	84
4	E	69/89 (78%)	68 (99%)	1 (1%)	67	81
5	F	264/429 (62%)	262 (99%)	2 (1%)	81	89
6	J	93/97 (96%)	89 (96%)	4 (4%)	29	55
All	All	2789/3309 (84%)	2753 (99%)	36 (1%)	70	82

All (36) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	18	ARG
1	A	98	ARG
1	A	205	ARG
1	B	226	ASN
2	C	77	ARG
2	C	81	ASN
2	C	141	ASN
2	C	148	LYS
2	C	181	ARG
2	C	193	LYS
2	C	229	LYS
2	C	231	ARG
2	C	282	ARG
2	C	419	ASN
2	C	584	ARG
2	C	787	ARG

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Mol	Chain	Res	Type
2	C	958	ARG
3	D	5	ASN
3	D	209	ARG
3	D	239	ASN
3	D	422	VAL
3	D	499	ASN
3	D	657	GLN
3	D	733	MET
3	D	741	ARG
3	D	797	ASN
3	D	1060	ARG
3	D	1097	ARG
3	D	1159	ARG
4	E	65	ASN
5	F	269	ARG
5	F	384	ARG
6	J	4	ARG
6	J	27	ARG
6	J	76	LYS
6	J	110	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (53) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	5	GLN
1	A	36	ASN
1	A	79	ASN
1	A	124	HIS
1	A	185	GLN
1	B	5	GLN
1	B	61	HIS
1	B	79	ASN
1	B	124	HIS
1	B	226	ASN
2	C	81	ASN
2	C	141	ASN
2	C	150	GLN
2	C	298	ASN
2	C	386	GLN
2	C	387	ASN
2	C	419	ASN
2	C	435	GLN

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Mol	Chain	Res	Type
2	C	442	GLN
2	C	476	HIS
2	C	479	HIS
2	C	729	HIS
2	C	841	HIS
2	C	875	GLN
2	C	920	HIS
2	C	1034	HIS
2	C	1054	GLN
2	C	1055	GLN
2	C	1062	GLN
3	D	5	ASN
3	D	207	GLN
3	D	239	ASN
3	D	307	ASN
3	D	329	GLN
3	D	352	ASN
3	D	465	HIS
3	D	494	HIS
3	D	564	ASN
3	D	687	GLN
3	D	748	HIS
3	D	771	ASN
3	D	797	ASN
3	D	1133	HIS
3	D	1145	GLN
3	D	1227	GLN
3	D	1269	ASN
4	E	65	ASN
5	F	294	HIS
5	F	322	GLN
5	F	325	ASN
5	F	377	ASN
5	F	516	HIS
6	J	58	ASN

### 5.3.3 RNA ⓘ

There are no RNA molecules in this entry.



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

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

## 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

Of 4 ligands modelled in this entry, 3 are monoatomic - leaving 1 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z  > 2$	Counts	RMSZ	$\# Z  > 2$
11	C0L	D	1404	-	36,38,38	2.64	13 (36%)	38,49,49	2.97	12 (31%)

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
11	C0L	D	1404	-	-	20/38/57/57	0/1/1/1

All (13) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	D	1404	C0L	O24-C23	8.59	1.39	1.21
11	D	1404	C0L	O19-C18	5.65	1.39	1.24
11	D	1404	C0L	C17-C16	4.63	1.50	1.39
11	D	1404	C0L	O36-C16	-4.53	1.18	1.33
11	D	1404	C0L	C17-C18	-4.05	1.35	1.45
11	D	1404	C0L	C13-C12	3.83	1.56	1.42
11	D	1404	C0L	C32-N31	3.66	1.43	1.37
11	D	1404	C0L	C20-C18	-3.66	1.34	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	D	1404	C0L	O34-C35	-3.05	1.38	1.45
11	D	1404	C0L	O34-C32	2.53	1.38	1.34
11	D	1404	C0L	C17-C23	-2.51	1.38	1.45
11	D	1404	C0L	O38-C08	-2.22	1.38	1.42
11	D	1404	C0L	O22-C23	-2.09	1.35	1.39

All (12) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	D	1404	C0L	O34-C32-N31	10.52	120.31	109.16
11	D	1404	C0L	C23-O22-C21	-6.85	118.02	122.22
11	D	1404	C0L	C35-O34-C32	-6.18	108.37	115.66
11	D	1404	C0L	O36-C16-C17	4.89	128.88	119.87
11	D	1404	C0L	C13-C12-C11	-4.75	120.00	127.30
11	D	1404	C0L	O33-C32-N31	-4.37	119.36	125.41
11	D	1404	C0L	C23-C17-C18	4.29	121.99	119.41
11	D	1404	C0L	O34-C32-O33	-2.89	120.33	124.58
11	D	1404	C0L	C28-C27-C25	-2.70	109.26	114.39
11	D	1404	C0L	O19-C18-C17	-2.59	119.31	122.97
11	D	1404	C0L	C10-C09-C08	-2.23	111.42	114.46
11	D	1404	C0L	O22-C23-O24	2.15	119.07	115.20

There are no chirality outliers.

All (20) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
11	D	1404	C0L	C05-C06-C08-C09
11	D	1404	C0L	C07-C06-C08-C09
11	D	1404	C0L	C13-C14-C16-O36
11	D	1404	C0L	C15-C14-C16-O36
11	D	1404	C0L	C14-C16-C17-C18
11	D	1404	C0L	C14-C16-C17-C23
11	D	1404	C0L	O36-C16-C17-C18
11	D	1404	C0L	O36-C16-C17-C23
11	D	1404	C0L	C20-C21-C25-C26
11	D	1404	C0L	O22-C21-C25-C26
11	D	1404	C0L	O22-C21-C25-C27
11	D	1404	C0L	N31-C32-O34-C35
11	D	1404	C0L	O33-C32-O34-C35
11	D	1404	C0L	O34-C32-N31-C30
11	D	1404	C0L	C07-C06-C08-O38
11	D	1404	C0L	O33-C32-N31-C30

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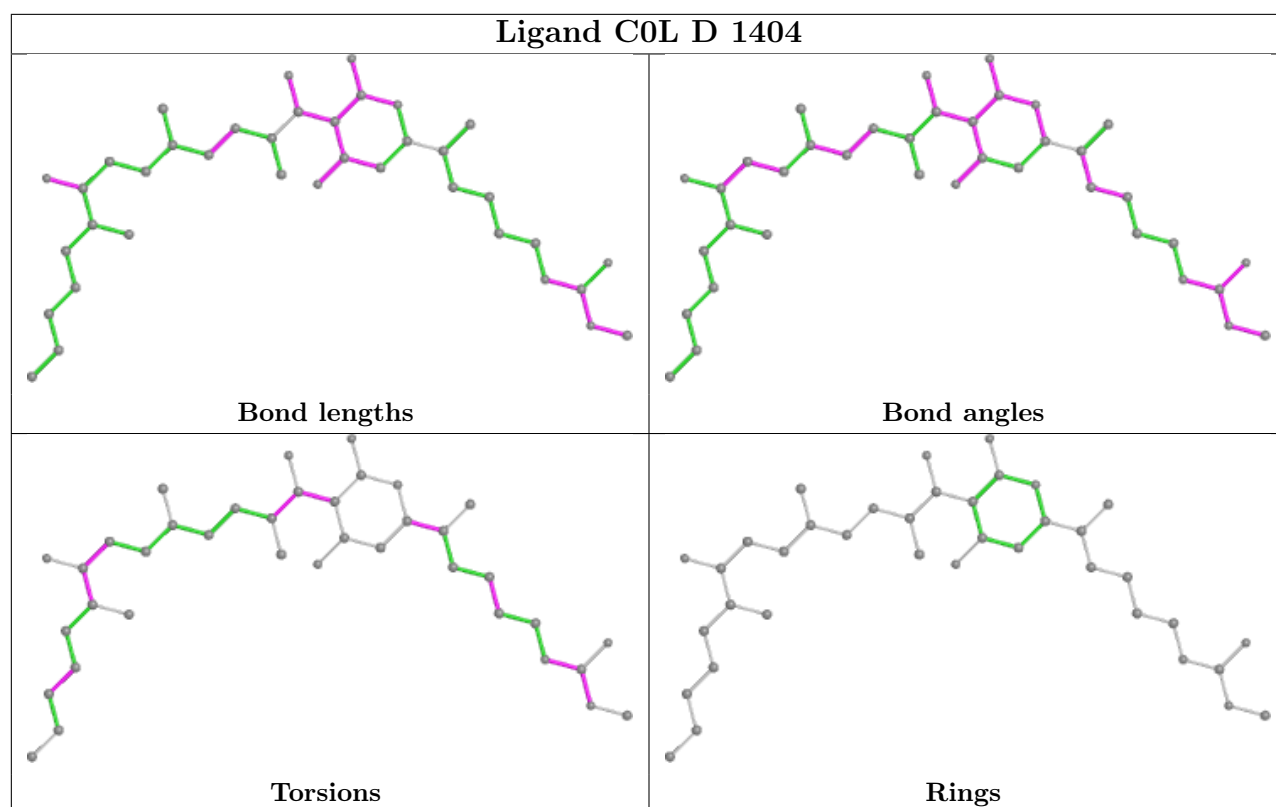
Mol	Chain	Res	Type	Atoms
11	D	1404	C0L	C05-C06-C08-O38
11	D	1404	C0L	C02-C03-C04-C05
11	D	1404	C0L	C27-C28-C29-C30
11	D	1404	C0L	C06-C08-C09-C10

There are no ring outliers.

1 monomer is involved in 22 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
11	D	1404	C0L	22	0

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



## 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.

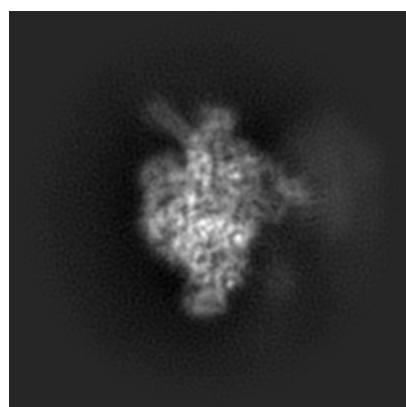
## 6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-9047. These allow visual inspection of the internal detail of the map and identification of artifacts.

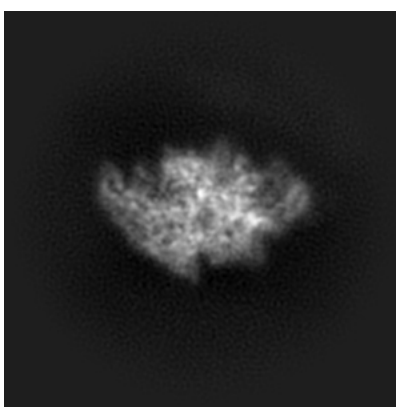
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

### 6.1 Orthogonal projections [i](#)

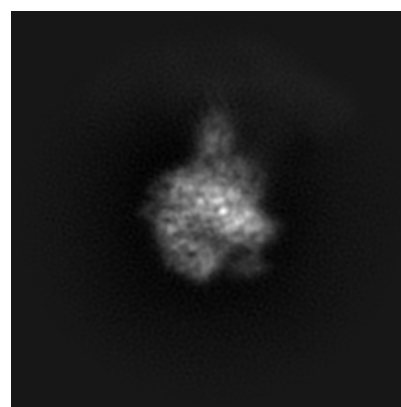
#### 6.1.1 Primary map



X



Y

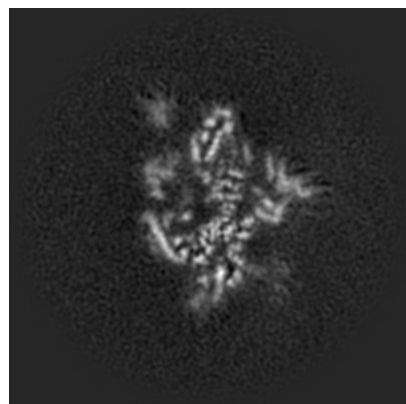


Z

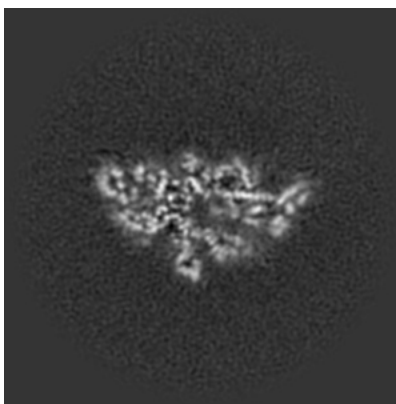
The images above show the map projected in three orthogonal directions.

### 6.2 Central slices [i](#)

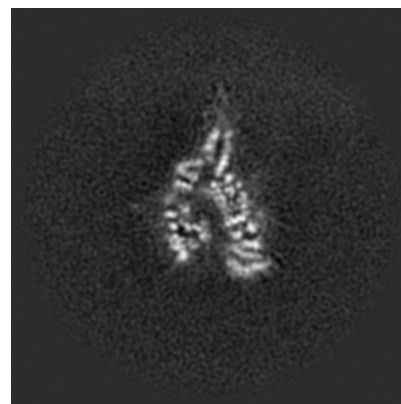
#### 6.2.1 Primary map



X Index: 128



Y Index: 128

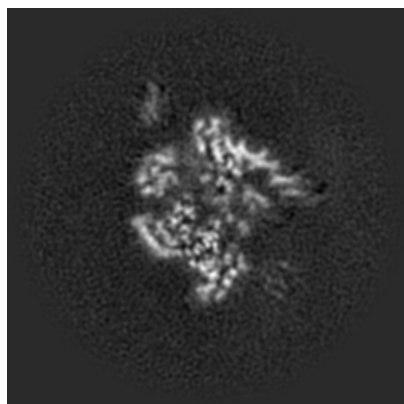


Z Index: 128

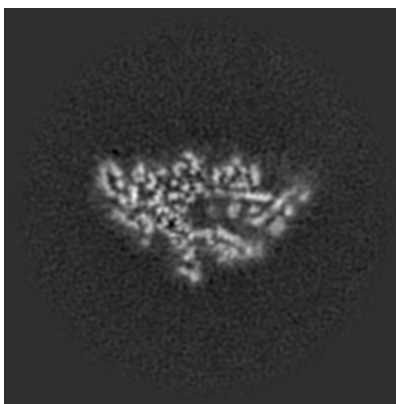
The images above show central slices of the map in three orthogonal directions.

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

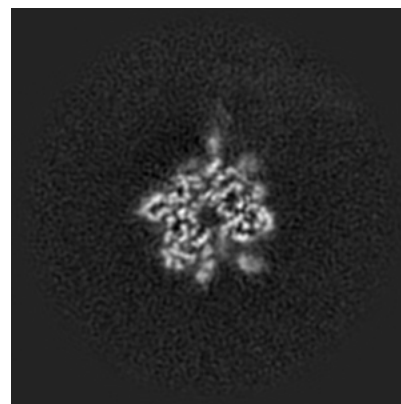
### 6.3.1 Primary map



X Index: 122



Y Index: 126



Z Index: 119

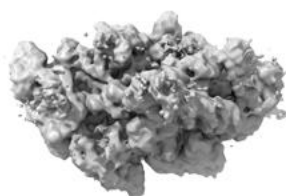
The images above show the largest variance slices of the map in three orthogonal directions.

## 6.4 Orthogonal surface views [i](#)

### 6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.3. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

## 6.5 Mask visualisation

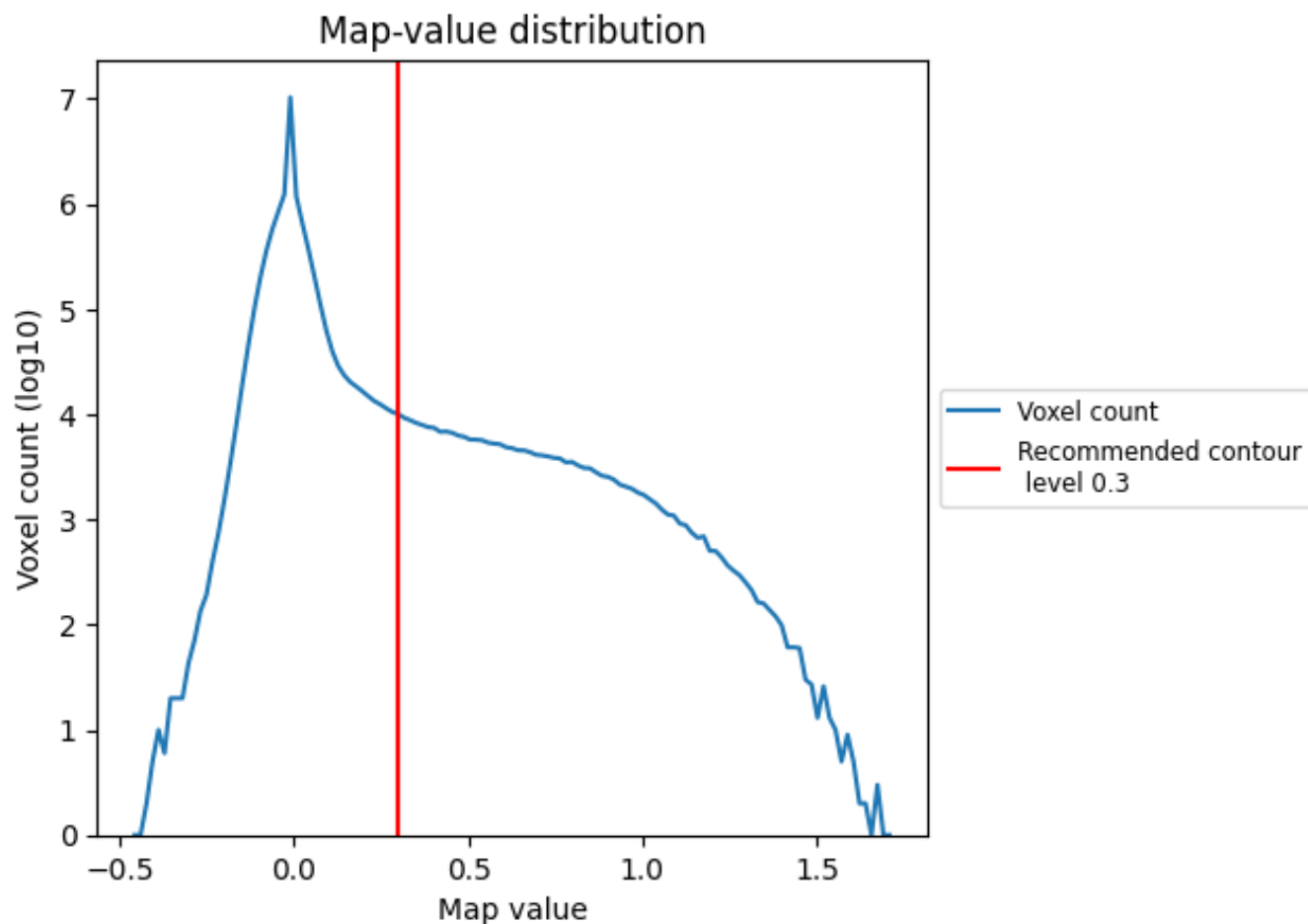
This section was not generated. No masks/segmentation were deposited.



## 7 Map analysis [i](#)

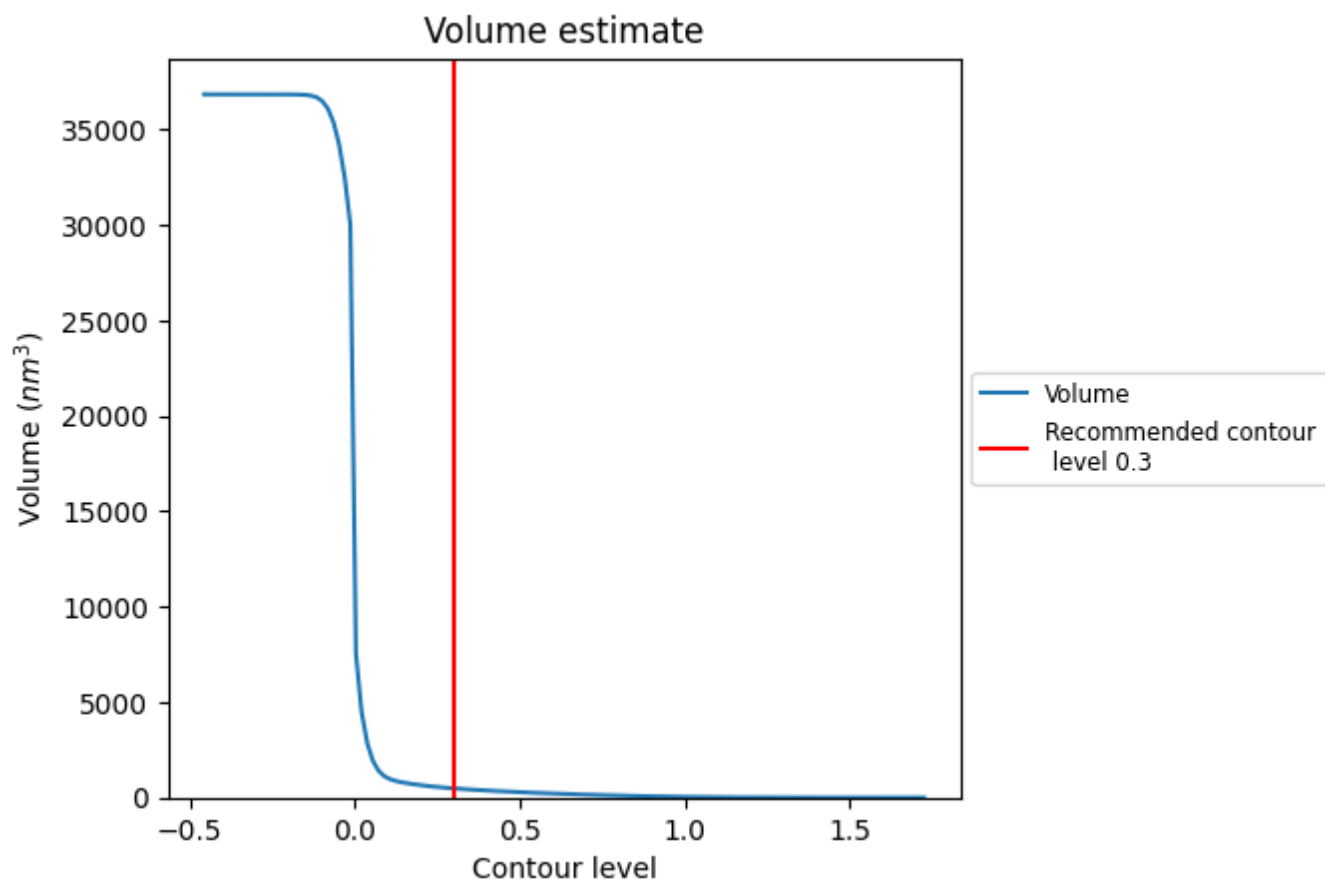
This section contains the results of statistical analysis of the map.

### 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.

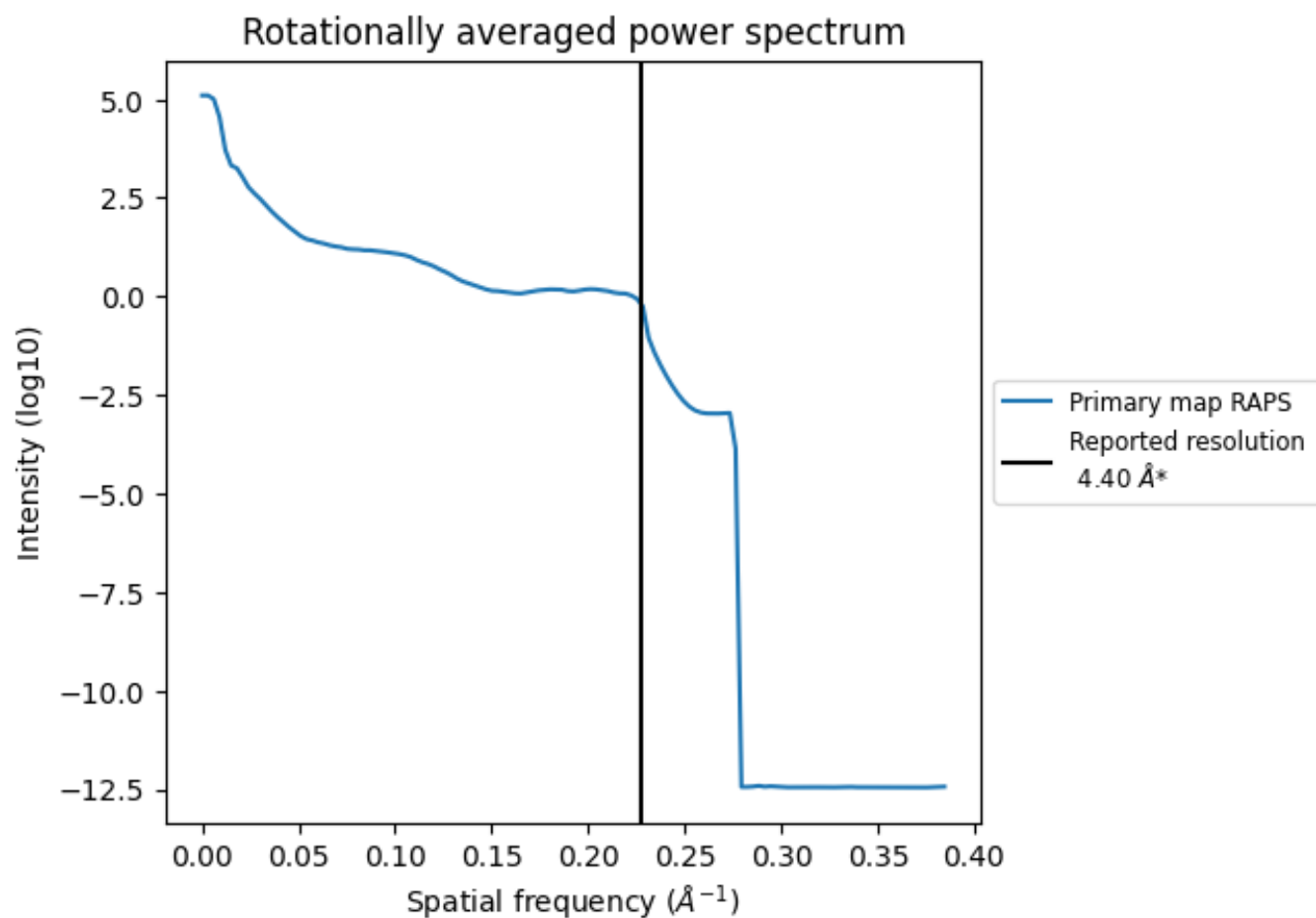
## 7.2 Volume estimate [i](#)



The volume at the recommended contour level is 480  $\text{nm}^3$ ; this corresponds to an approximate mass of 434 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 ⓘ



\*Reported resolution corresponds to spatial frequency of 0.227 Å<sup>-1</sup>

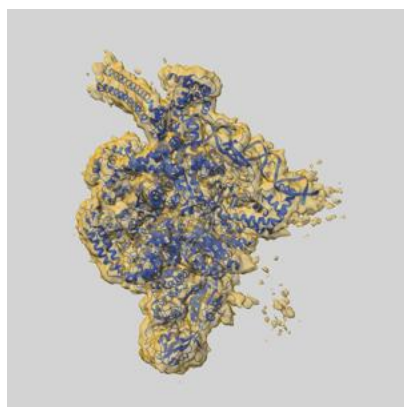
## 8 Fourier-Shell correlation

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

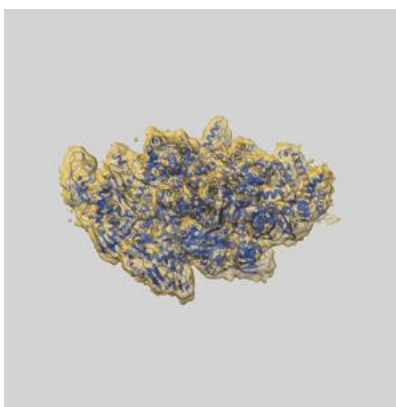
## 9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-9047 and PDB model 6M7J. Per-residue inclusion information can be found in section [3](#) on page [8](#).

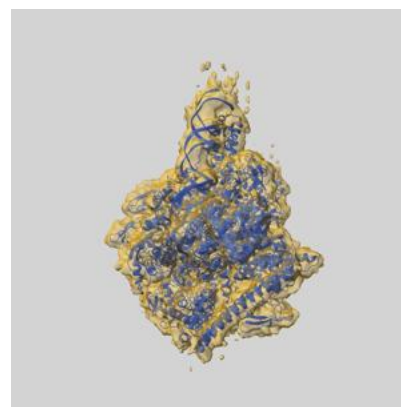
### 9.1 Map-model overlay [i](#)



X



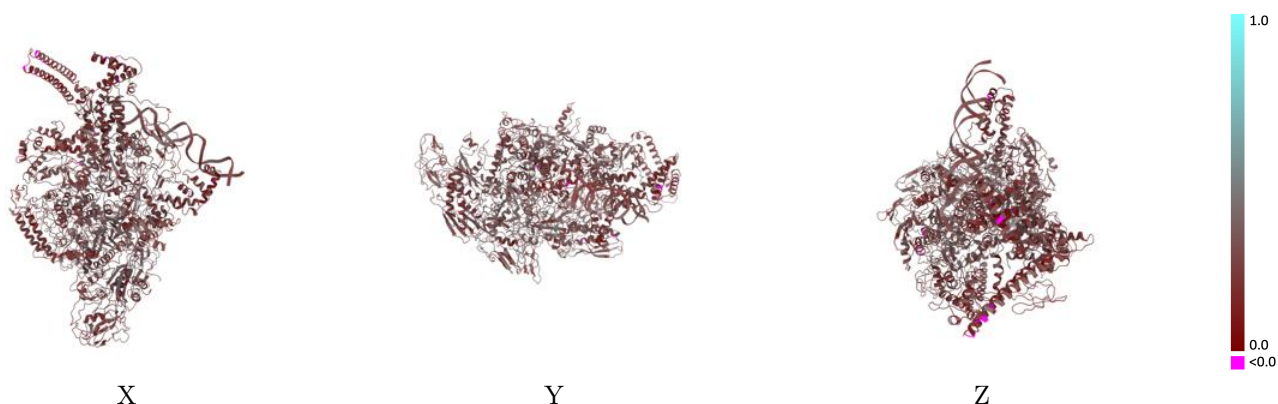
Y



Z

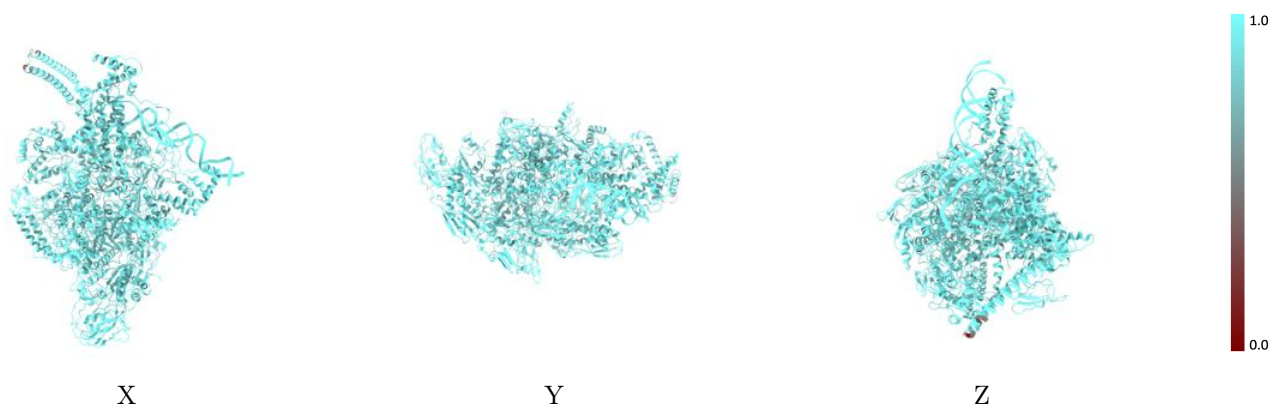
The images above show the 3D surface view of the map at the recommended contour level 0.3 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



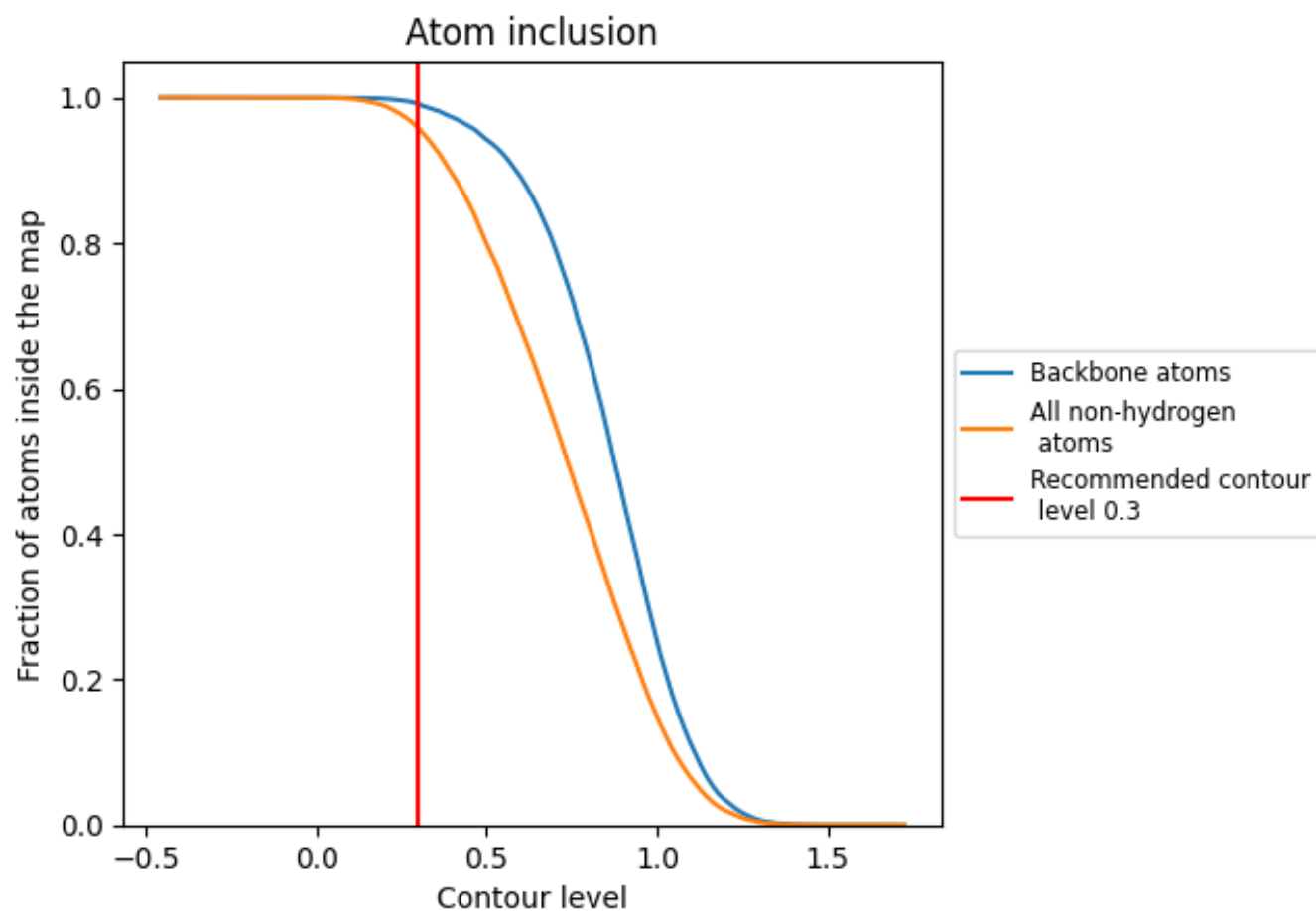
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.3).

## 9.4 Atom inclusion [i](#)



At the recommended contour level, 99% of all backbone atoms, 96% 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 (0.3) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	<div><div></div>0.9580</div>	<div><div></div>0.2970</div>
A	<div><div></div>0.9667</div>	<div><div></div>0.3200</div>
B	<div><div></div>0.9706</div>	<div><div></div>0.3000</div>
C	<div><div></div>0.9584</div>	<div><div></div>0.3070</div>
D	<div><div></div>0.9538</div>	<div><div></div>0.2960</div>
E	<div><div></div>0.9638</div>	<div><div></div>0.3080</div>
F	<div><div></div>0.9456</div>	<div><div></div>0.2500</div>
J	<div><div></div>0.9538</div>	<div><div></div>0.2830</div>
O	<div><div></div>0.9953</div>	<div><div></div>0.3060</div>
P	<div><div></div>0.9981</div>	<div><div></div>0.2990</div>

1.0

0.0

<0.0