



Full wwPDB X-ray Structure Validation Report ⓘ

Dec 3, 2019 – 09:55 PM EST

PDB ID : 1Y1V
Title : Refined RNA Polymerase II-TFIIS complex
Authors : Kettenberger, H.; Armache, K.-J.; Cramer, P.
Deposited on : 2004-11-19
Resolution : 3.80 Å(reported)

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

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

MolProbity	:	4.02b-467
Xtriage (Phenix)	:	1.13
EDS	:	2.4
Percentile statistics	:	20171227.v01 (using entries in the PDB archive December 27th 2017)
Refmac	:	5.8.0158
CCP4	:	7.0 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.4

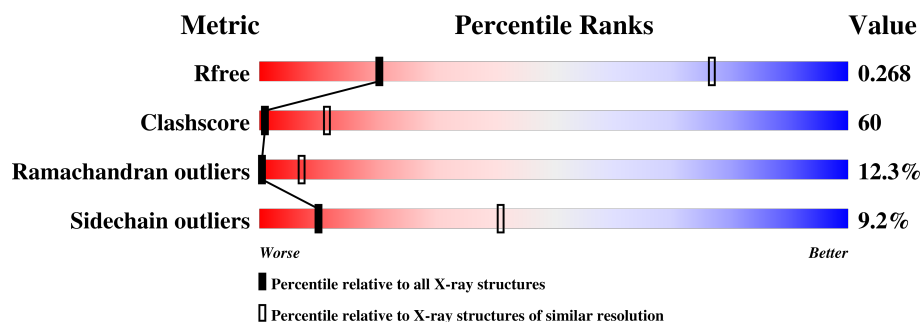
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.80 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	111664	1028 (4.02-3.58)
Clashscore	122126	1061 (4.00-3.60)
Ramachandran outliers	120053	1025 (4.00-3.60)
Sidechain outliers	120020	1019 (4.00-3.60)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. 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 $\leq 5\%$.

Mol	Chain	Length	Quality of chain
1	A	1733	21% 47% 13% • 18%
2	B	1224	24% 52% 13% • 9%
3	C	318	22% 48% 12% • 16%
4	D	221	33% 40% 6% 20%
5	E	215	34% 55% 11%
6	F	155	15% 30% 8% 46%
7	G	171	33% 59% 8%

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Mol	Chain	Length	Quality of chain
8	H	146	
9	I	122	
10	J	70	
11	K	120	
12	L	70	
13	S	179	

2 Entry composition

There are 15 unique types of molecules in this entry. The entry contains 31803 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called DNA-directed RNA polymerase II largest subunit.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	1426	Total	C	N	O	S	0	0	0
			11214	7069	1959	2124	62			

- Molecule 2 is a protein called DNA-directed RNA polymerase II 140 kDa polypeptide.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	1112	Total	C	N	O	S	58	0	0
			8837	5594	1548	1640	55			

- Molecule 3 is a protein called DNA-directed RNA polymerase II 45 kDa polypeptide.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	C	266	Total	C	N	O	S	0	0	0
			2095	1317	348	417	13			

- Molecule 4 is a protein called DNA-directed RNA polymerase II 32 kDa polypeptide.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D	177	Total	C	N	O	S	0	0	0
			1356	840	241	273	2			

- Molecule 5 is a protein called DNA-directed RNA polymerases I, II, and III 27 kDa polypeptide.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	E	214	Total	C	N	O	S	0	0	0
			1752	1111	309	321	11			

- Molecule 6 is a protein called DNA-directed RNA polymerases I, II, and III 23 kDa polypeptide.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F	84	Total	C	N	O	S	0	0	0
			679	434	115	127	3			

- Molecule 7 is a protein called DNA-directed RNA polymerase II 19 kDa polypeptide.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	G	171	Total	C	N	O	S	0	0	0
			1340	861	222	249	8			

- Molecule 8 is a protein called DNA-directed RNA polymerases I, II, and III 14.5 kDa polypeptide.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	H	133	Total	C	N	O	S	0	0	0
			1068	673	180	211	4			

- Molecule 9 is a protein called DNA-directed RNA polymerase II subunit 9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	I	119	Total	C	N	O	S	0	0	0
			971	596	179	186	10			

- Molecule 10 is a protein called DNA-directed RNA polymerases I/II/III subunit 10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	J	65	Total	C	N	O	S	0	0	0
			532	339	93	94	6			

- Molecule 11 is a protein called DNA-directed RNA polymerase II 13.6 kDa polypeptide.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	K	114	Total	C	N	O	S	0	0	0
			919	590	156	171	2			

- Molecule 12 is a protein called DNA-directed RNA polymerases I, II, and III 7.7 kDa polypeptide.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	L	46	Total	C	N	O	S	0	0	0
			364	224	72	64	4			

- Molecule 13 is a protein called Transcription elongation factor S-II.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	S	174	Total	C	N	O	S	0	0	104
			666	454	99	108	5			

- Molecule 14 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
14	J	1	Total	Zn	0	0
			1	1		
14	B	1	Total	Zn	0	0
			1	1		
14	I	2	Total	Zn	0	0
			2	2		
14	C	1	Total	Zn	0	0
			1	1		
14	A	2	Total	Zn	0	0
			2	2		
14	L	1	Total	Zn	0	0
			1	1		
14	S	1	Total	Zn	0	0
			1	1		

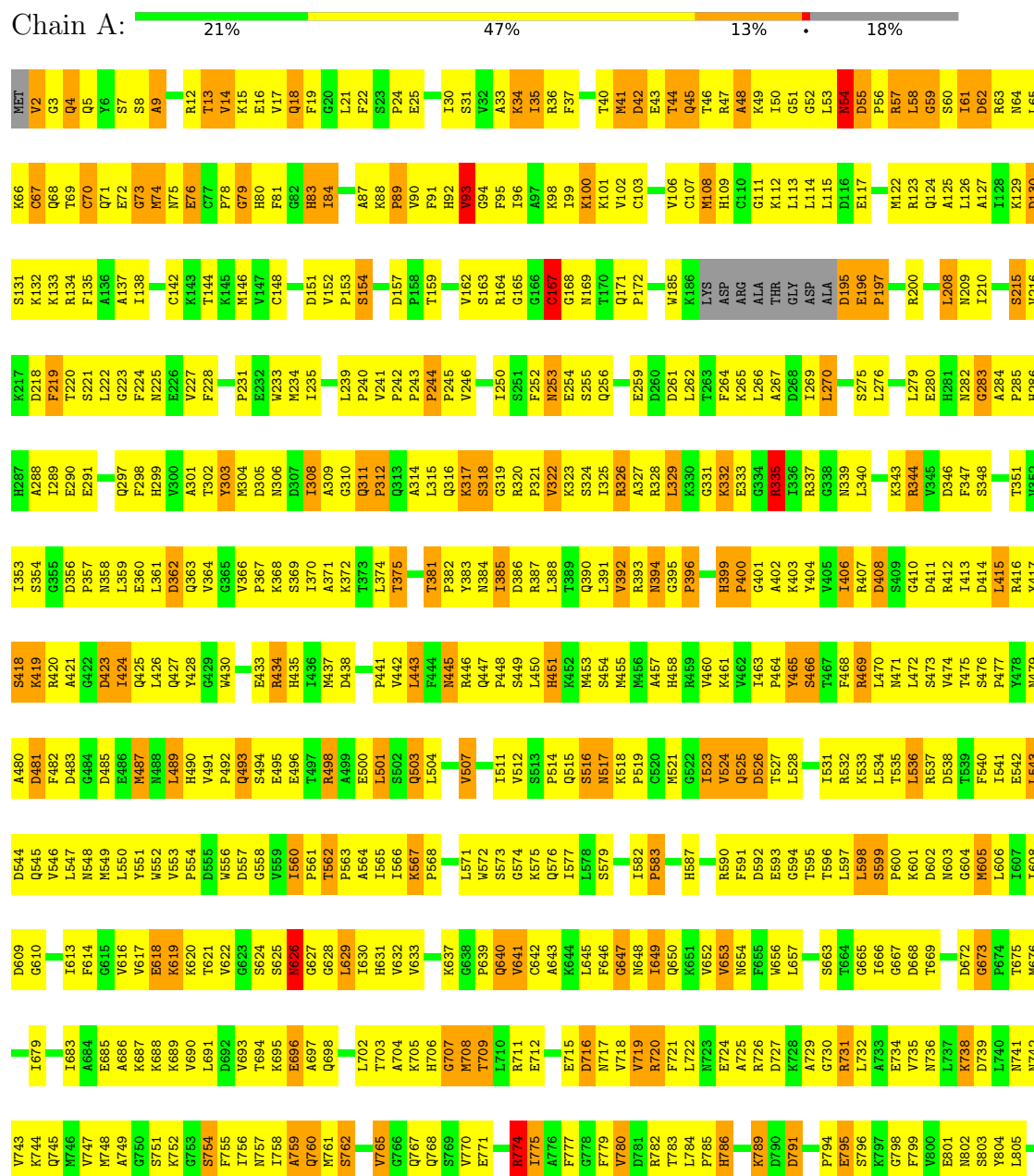
- Molecule 15 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
15	S	1	Total	Mg	0	0
			1	1		

3 Residue-property plots

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

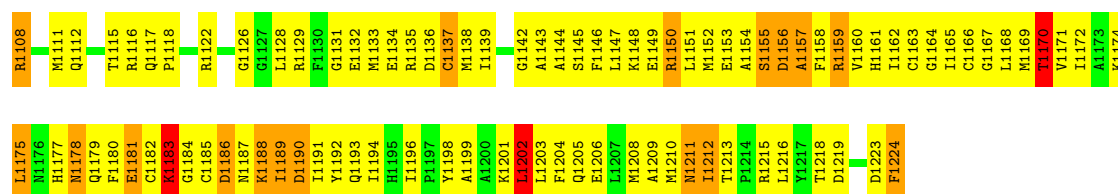
- Molecule 1: DNA-directed RNA polymerase II largest subunit



- Molecule 2: DNA-directed RNA polymerase II 140 kDa polypeptide

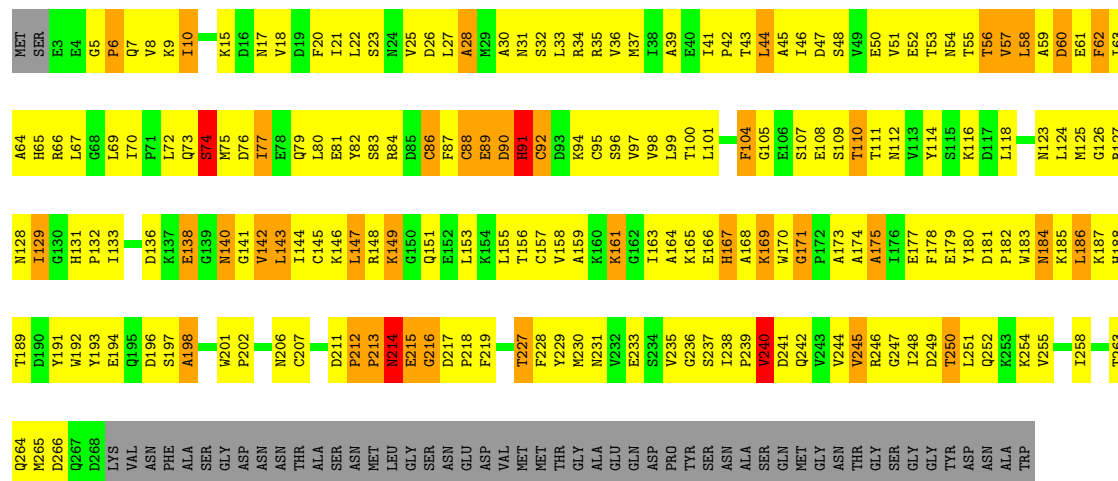


E1041	F960	T1051	L846	N784	ASN	R654	R591	G530	T463	D391	R327	V256	L128	I62	ME1
A1044	S981	G1055	D847	Y785	ASP	H657	N592	Q531	G464	R392	E328	K257	F129	I63	SER
S1045	S982	I1055	R848	N786	LEU	I658	P593	A532	N465	R393	A330	L258	V130	C64	ASP
F1046	R983	G1063	G849	Y787	S988	S989	A594	C533	N466	D394	A339	Y259	I131	E65	LEU
P1047	H984	Y1064	L850	R788	D724	K660	G534	G535	C467	D395	L331	G260	V132	D66	ALA
	G985	T1002	R851	M789	W723	K661	M597	L634	E468	D396	D332	R261	K133	S67	ASN
	Q986	G991	R852	M790	P725	L662	E598	V536	Q469		F333		K134	T68	SER
	Q987	G992	S853	A792	K726	H663	T599	K537		F401	I394	S265	ARG	L69	GLU
	G988	I993	L854	A793	K727	A662	L600	N538	S474	G402	G395	A266	LYS	I70	LYS
	G989	Y994	F855	N794		A663	R601	L539	S475	K403	ARG	R267	TYR	LEU	TYR
	T989	G995	R856	I795	R730	E665	T602	S840	R476	K404	GLY	T268	GLN	GLU	TVR
	G990	G991	R857	Y796	W731		L603	L541		R405	THR	I269	ALA	ASP	ASP
	I1059	I992	S858	Y797		D668	R604	M542	S480	L406	ALA	K270	ILE	LEU	GLU
	R1060	I993	Y859	Y798	T737	ILE	R605	S843	Q481	D407	LEU	A271	ASP	ALA	ASP
	E1061	Y994	R860	P799	F738	GLY	R606	C544	Y482	L408	GLY	T272	VAL	GLN	PRO
	H1062	Y994	D861	Q800	T739	GLY	G607	I545	L483	A409	ILE	T273	PRO	HIS	TYR
	G1063	R995	R859	K801	H740	GLY	P608	S846	N484	G410	LYS	P274	GLY	THR	GLY
	Y1064	Q996	E862	R802	C741	PHE	T609	V547	R485	P411	LYS	Y275	ARG	PHE	PHE
	Q1065	E997	E863	P802	E742	GLU	N610	G548	Y486	L412	K345	I276	GLU	GLU	GLU
	S1066	D998	E864		E743	ASP	P611	T549	T487	L413	E346	K277	LEU	SER	D20
	R1067	M999	K865	T805	I743	VAL	E612	D550	Y488	A414	K347	Q278	LYS	ASP	E21
	G1068	F1000	R866	T806	H744	GLU	V613	P551	S489	F421	R348	D279	TYR	ASN	S22
	F1069	P1001	G867	R807	P745	GLU	S614	M552	S490	F417	R349	I280	GLY	ILE	A23
		T1002	M868	A808	S746	GLY	M615	P553	T491	K418	Q350	P281	LEU	SER	P24
		T1002	S869	M809	W747	PHE	T616	I554	T492	T419	K351	I282	ILE	ARG	I25
		E1003	L870	E810	T748	GLU	L618	L555	S493	L420	E346	V283	ALA	LYS	T26
	E1004	L941	T871	Y811	L749	ASP	R617	T556	H494	F421	K347	I284	GLU	TYR	E28
	G1005	R942	E872	L812	G750	VAL	V618	P556	S488	L424	I355	I285	GLU	GLU	D29
	T1006	S943	R873	K813	F751	GLU	L619	F557	L495		L356	I286	SER	S30	S30
	H1076	T944	F874	F814	A752	GLY	R620	L558	R496		E359	R287	GLU	S91	S91
	T1077	E945		R815	A753	GLY	E621	S559	R497		F360	A288	ASP	K94	K94
	G1078	N946	P877	E816	S754	GLY	K622	E561	T498	D427	L361	E296	ASP	I96	I96
	K1079	Q947	Q876	L817	T755	ASP	E623	G562	N499	F429	P362	I297	SER	Y96	Y96
	K1080	I948	R879	P818	L756	GLY	L624	G563		R430	H363	L298	GLU	V97	V97
	T1081	N949	T880	A819	P757	GLY	K625	M563	T502	Y431	I364	P293	SER	T98	T98
	M1082	D950	N881	G820	F758	GLY	L626	E564	G503	M432	T365	D294	GLY	K99	K99
	A1083	Q951	T882	Q821	P759	GLY	F627	P565	R504		T366	K298	GLY	F38	F38
	Q1084	V952	L883	N822	D760	GLY	T628	L566			L367	E296	V165	R39	R39
	I1085	L953	R884	A823	H761	GLY	D629		K507	E437	L367	E296	V165	E90	E90
	F1086	V954		I824	N762	D694	A630	Y569	L508	GLU	E368	I297	F166	K41	K41
	T1087	T955		V825	Q763	A695	G631	V570	A509	ALA	G369	L298	I167	V102	V102
	G1088	T956		A826	S764		R632	P571	K510	HIS	F370	E299	G168	G42	G42
	P1089	N957	D895	I827	R765	E698	V633	H572	R512	ASP	E371	H300	R169	V108	V108
	T1090	Q958		A828	R766	E699	Y634	Q573	R513	PHE	S372		T234	T109	T109
	Y1091	D959	L898	C829	N767	S700	R635	S574	O513	ASN	R373	Y303	S235	S45	S45
	Y1092	G960	I899	Y830	T768	I701	R636	P575	L514	MEI	K374		H236	Q46	Q46
	Q1093	K962	A900	S831	T769	L702	L637	D576	H515	LYS	A375	W308	V237	Q47	Q47
	R1094	L961	P901	G832	Q770	I703	F638	A577	N516	L446	F376	Q309	A238	P114	P114
	L1095	G902	R901	Y833	S771	A704	L639	T578	T517	A447	F377	M310	E239	Q115	Q115
	R1096	V964	V903	N834	T772	M705	V640	R579	H518		L378		I240	E116	E116
	H1097	K965	R904	Q835	W773		E641	V580	H519	A450	G379	M313	R241	A117	A117
	M1098	V966	V905	E836		E708	D642	V581	G520		Y380	L314	S242	R118	R118
	V1099	T970	S906	D837	G774	D709	D643	V582	L521	T453	M381	K315	S242	L119	L119
	D1100	T971	G907	Q775	Q776	L710	E644	N583	V522	T454	I382	P316	G247	C179	C179
	D1101	S970	E908	M839	A777	E711	S645	G584	C523				S248	Y180	Y180
	K1102	K1033	D909	I840	W778	P712	L646	V585	P524	L457	L385	C317	R249	N121	N121
	I1103	Y1034	V910	M841	G779		G647	H586	A525	K458	L386	F322	T123	D56	D56
	H1104	A1035	T911	N842	W780	A715	H648	H587	E526	Y459	L387	V323	T124	T58	T58
	A1105		I912	Q843	F781	ASN	R649	G588	T527	L460	C388	I324	T253	L59	L59
	R1106	G1039	G913	S844	L782	GLU		G589	P529	A461	A389	Q325	D188	Q60	Q60
	A1107	N1040	K914	S845	T783		V653	H590	E529	A462	L390	D326	L189	D61	D61



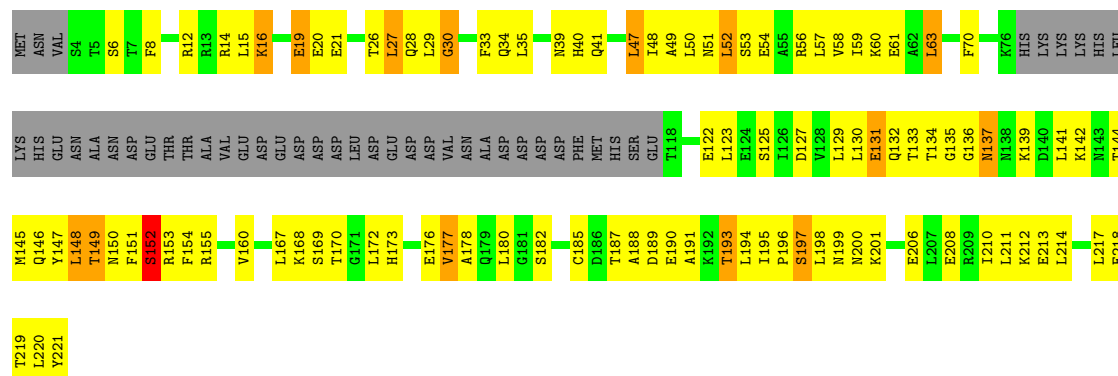
• Molecule 3: DNA-directed RNA polymerase II 45 kDa polypeptide

Chain C: 22% 48% 12% 16%



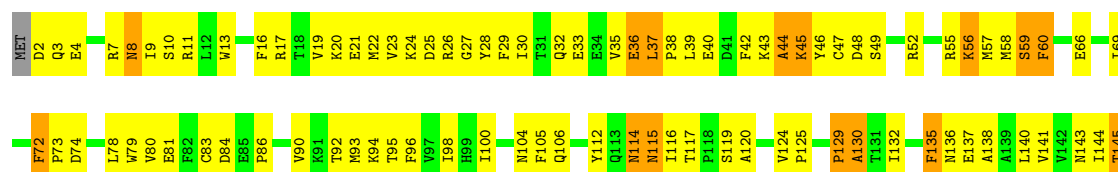
• Molecule 4: DNA-directed RNA polymerase II 32 kDa polypeptide

Chain D: 33% 40% 6% 20%



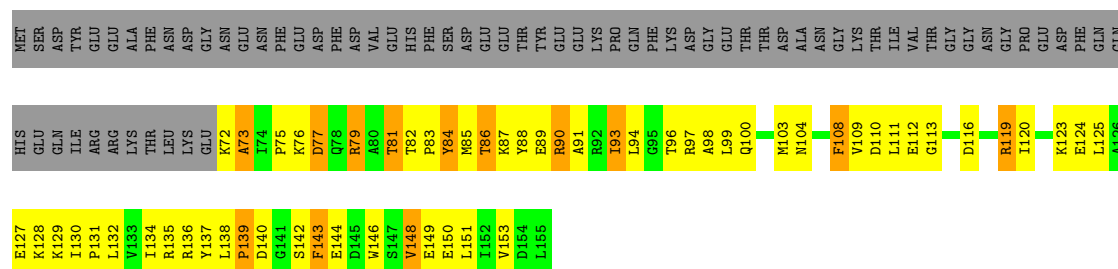
• Molecule 5: DNA-directed RNA polymerases I, II, and III 27 kDa polypeptide

Chain E: 34% 55% 11%

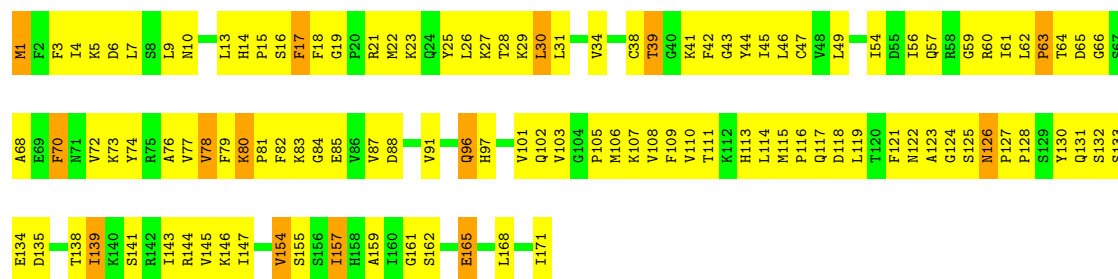




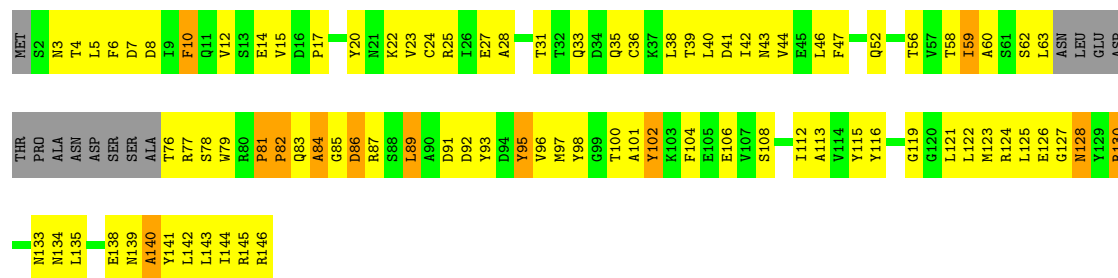
- Molecule 6: DNA-directed RNA polymerases I, II, and III 23 kDa polypeptide



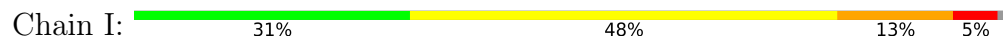
- Molecule 7: DNA-directed RNA polymerase II 19 kDa polypeptide

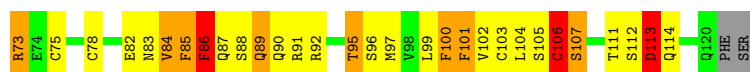


- Molecule 8: DNA-directed RNA polymerases I, II, and III 14.5 kDa polypeptide



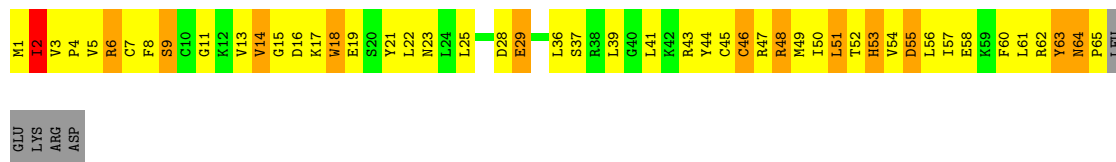
- Molecule 9: DNA-directed RNA polymerase II subunit 9





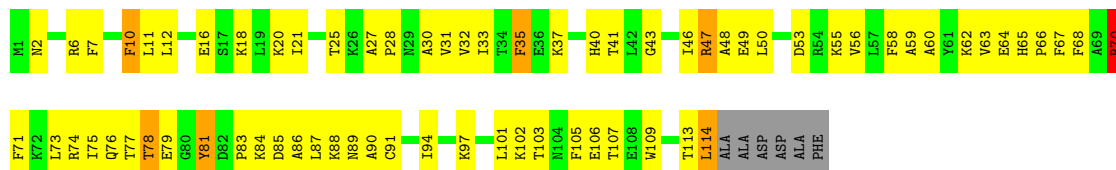
- Molecule 10: DNA-directed RNA polymerases I/II/III subunit 10

Chain J: 23% 51% 17% 7%



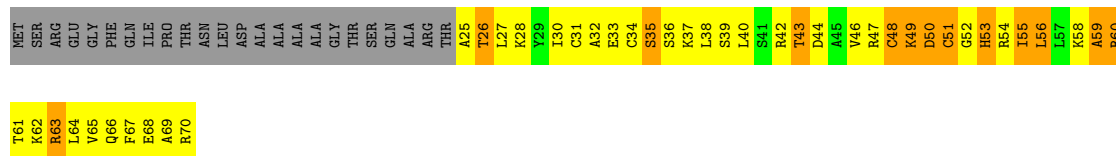
- Molecule 11: DNA-directed RNA polymerase II 13.6 kDa polypeptide

Chain K: 37% 53% 5% 5%



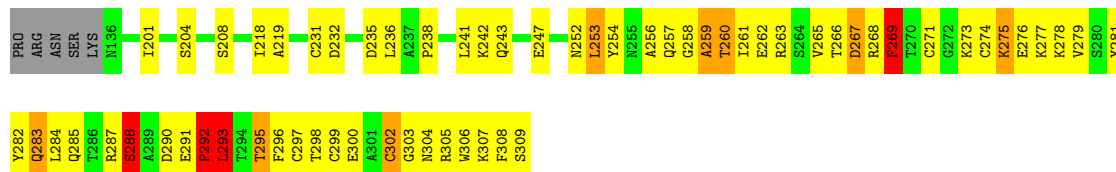
- Molecule 12: DNA-directed RNA polymerases I, II, and III 7.7 kDa polypeptide

Chain L: 6% 41% 19% 34%



- Molecule 13: Transcription elongation factor S-II

Chain S: 62% 28%



4 Data and refinement statistics

Property	Value	Source
Space group	C 2 2 21	Depositor
Cell constants a, b, c, α , β , γ	218.90Å 395.30Å 281.00Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	50.00 – 3.80 49.41 – 3.74	Depositor EDS
% Data completeness (in resolution range)	(Not available) (50.00-3.80) 86.6 (49.41-3.74)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	4.52 (at 3.77Å)	Xtriage
Refinement program	CNS	Depositor
R, R_{free}	0.282 , 0.294 0.257 , 0.268	Depositor DCC
R_{free} test set	2439 reflections (1.99%)	wwPDB-VP
Wilson B-factor (Å ²)	68.0	Xtriage
Anisotropy	0.336	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.28 , 42.2	EDS
L-test for twinning ²	$\langle L \rangle = 0.30$, $\langle L^2 \rangle = 0.13$	Xtriage
Estimated twinning fraction	0.199 for 1/2*h-1/2*k,-3/2*h-1/2*k,-l 0.206 for 1/2*h+1/2*k,3/2*h-1/2*k,-l	Xtriage
F_o, F_c correlation	0.81	EDS
Total number of atoms	31803	wwPDB-VP
Average B, all atoms (Å ²)	72.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.74% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: 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	0.50	2/11417 (0.0%)	0.78	4/15442 (0.0%)
2	B	0.51	4/9009 (0.0%)	0.76	8/12146 (0.1%)
3	C	0.48	0/2133	0.77	1/2891 (0.0%)
4	D	0.41	0/1365	0.64	0/1837
5	E	0.43	0/1788	0.66	0/2406
6	F	0.52	0/691	0.77	0/933
7	G	0.49	0/1368	0.72	0/1844
8	H	0.38	0/1086	0.65	1/1470 (0.1%)
9	I	0.46	0/989	0.77	1/1331 (0.1%)
10	J	0.48	0/541	0.75	0/727
11	K	0.45	0/937	0.67	0/1265
12	L	0.54	0/366	0.79	0/485
13	S	1.31	4/571 (0.7%)	1.64	7/765 (0.9%)
All	All	0.51	10/32261 (0.0%)	0.77	22/43542 (0.1%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
2	B	0	3
13	S	0	2
All	All	0	5

All (10) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	S	269	PHE	C-N	-16.91	0.95	1.34
2	B	467	GLY	C-O	-11.91	1.04	1.23
13	S	260	THR	CA-CB	10.48	1.80	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	468	GLU	CB-CG	8.39	1.68	1.52
13	S	268	ARG	CG-CD	6.05	1.67	1.51
13	S	267	ASP	C-O	6.03	1.34	1.23
2	B	510	LYS	CB-CG	5.59	1.67	1.52
1	A	195	ASP	N-CA	5.47	1.57	1.46
2	B	468	GLU	CG-CD	5.18	1.59	1.51
1	A	196	GLU	CB-CG	5.13	1.61	1.52

All (22) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	S	269	PHE	O-C-N	-19.02	92.27	122.70
13	S	269	PHE	C-N-CA	16.73	163.51	121.70
13	S	269	PHE	CA-C-N	16.08	152.57	117.20
1	A	195	ASP	N-CA-C	9.35	136.25	111.00
2	B	510	LYS	CB-CA-C	-7.63	95.14	110.40
2	B	510	LYS	C-N-CD	-7.44	104.24	120.60
3	C	92	CYS	CA-CB-SG	-6.79	101.77	114.00
13	S	253	LEU	CA-CB-CG	-6.79	99.67	115.30
1	A	1310	GLY	N-CA-C	-6.49	96.88	113.10
9	I	10	CYS	CA-CB-SG	6.20	125.16	114.00
2	B	468	GLU	N-CA-C	5.96	127.09	111.00
13	S	292	PRO	N-CA-C	5.96	127.59	112.10
2	B	467	GLY	CA-C-N	5.86	130.10	117.20
2	B	511	PRO	CA-N-CD	-5.81	103.37	111.50
2	B	508	LEU	C-N-CA	-5.71	107.43	121.70
1	A	344	ARG	N-CA-C	-5.58	95.93	111.00
2	B	510	LYS	C-N-CA	5.55	145.30	122.00
8	H	89	LEU	CA-CB-CG	5.42	127.76	115.30
1	A	865	GLN	N-CA-C	-5.39	96.45	111.00
2	B	296	GLU	N-CA-C	-5.26	96.79	111.00
13	S	302	CYS	CA-CB-SG	5.18	123.32	114.00
13	S	303	GLY	N-CA-C	5.10	125.85	113.10

There are no chirality outliers.

All (5) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	B	510	LYS	Mainchain
2	B	785	TYR	Sidechain
2	B	833	TYR	Sidechain
13	S	269	PHE	Sidechain,Peptide

5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	11214	0	11281	1514	0
2	B	8837	0	8871	1206	0
3	C	2095	0	2052	260	0
4	D	1356	0	1319	101	0
5	E	1752	0	1776	200	0
6	F	679	0	701	82	0
7	G	1340	0	1357	159	0
8	H	1068	0	1040	115	0
9	I	971	0	929	110	0
10	J	532	0	542	103	0
11	K	919	0	929	96	0
12	L	364	0	387	68	0
13	S	666	0	553	105	0
14	A	2	0	0	0	0
14	B	1	0	0	0	0
14	C	1	0	0	0	0
14	I	2	0	0	0	0
14	J	1	0	0	0	0
14	L	1	0	0	0	0
14	S	1	0	0	0	0
15	S	1	0	0	0	0
All	All	31803	0	31737	3774	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 60.

All (3774) 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)
13:S:260:THR:CA	13:S:260:THR:CB	1.80	1.53
13:S:269:PHE:CZ	13:S:297:CYS:SG	2.04	1.50
13:S:269:PHE:CE2	13:S:297:CYS:SG	2.14	1.39
1:A:1230:GLU:OE2	13:S:201:ILE:CA	1.75	1.32
1:A:1283:VAL:CG1	13:S:256:ALA:O	1.78	1.31
1:A:1172:LEU:CD1	13:S:204:SER:CA	2.12	1.27

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1232:ASN:HD21	13:S:238:PRO:CA	1.48	1.25
13:S:235:ASP:CA	13:S:242:LYS:HE2	1.72	1.18
1:A:1283:VAL:HG13	13:S:256:ALA:O	1.41	1.15
7:G:138:THR:HG22	7:G:139:ILE:H	1.11	1.15
1:A:1017:LEU:HB2	5:E:206:GLY:H	1.11	1.14
1:A:353:ILE:HG21	1:A:487:MET:HG3	1.31	1.12
4:D:40:HIS:HB3	7:G:73:LYS:HZ3	1.09	1.12
1:A:794:PRO:HG2	1:A:795:GLU:OE2	1.49	1.11
1:A:225:ASN:ND2	1:A:228:PHE:H	1.47	1.11
10:J:57:ILE:HA	10:J:60:PHE:HD2	1.14	1.09
1:A:868:TYR:CE1	1:A:1064:VAL:HG11	1.88	1.09
1:A:590:ARG:NH2	1:A:620:LYS:HB3	1.66	1.09
1:A:913:LEU:HD12	1:A:914:GLU:H	1.15	1.09
1:A:1329:THR:H	1:A:1335:ILE:HD11	1.02	1.09
1:A:899:VAL:HB	1:A:929:LEU:HD11	1.33	1.08
1:A:855:THR:HG21	1:A:857:ARG:HE	1.10	1.08
2:B:1095:LEU:HD12	2:B:1095:LEU:H	1.11	1.08
7:G:14:HIS:HD2	7:G:16:SER:HB2	1.15	1.08
1:A:868:TYR:HE1	1:A:1064:VAL:HG11	1.15	1.07
3:C:45:ALA:HA	3:C:72:LEU:HD12	1.28	1.07
6:F:82:THR:HG22	6:F:84:TYR:H	1.15	1.07
1:A:1172:LEU:HD13	13:S:204:SER:CA	1.81	1.06
4:D:40:HIS:HB3	7:G:73:LYS:NZ	1.69	1.06
10:J:64:ASN:HB3	10:J:65:PRO:CD	1.86	1.05
2:B:112:LEU:HD12	2:B:113:TYR:H	1.19	1.05
1:A:779:PHE:HE1	1:A:785:PRO:HD3	1.20	1.05
1:A:47:ARG:HH12	1:A:254:GLU:HB3	1.21	1.05
13:S:235:ASP:CA	13:S:242:LYS:CE	2.34	1.05
2:B:579:ARG:HB2	2:B:586:TRP:HE1	1.19	1.04
2:B:839:MET:CG	2:B:1010:LEU:HD11	1.88	1.04
3:C:133:ILE:HD11	3:C:237:SER:HA	1.39	1.04
7:G:111:THR:HG22	7:G:113:HIS:H	1.19	1.04
1:A:834:THR:HG21	1:A:1077:THR:HG23	1.39	1.04
1:A:1135:ARG:NH1	13:S:256:ALA:HB2	1.72	1.03
1:A:901:LEU:H	1:A:926:GLN:NE2	1.54	1.03
1:A:768:GLN:HG2	1:A:816:HIS:HA	1.39	1.02
13:S:291:GLU:N	13:S:292:PRO:HD2	1.72	1.02
2:B:508:LEU:CB	2:B:510:LYS:H	1.70	1.02
2:B:1065:GLN:HE21	2:B:1067:ARG:N	1.58	1.02
1:A:1172:LEU:HD11	13:S:204:SER:CA	1.85	1.02
2:B:1159:ARG:HD3	2:B:1193:GLN:HG3	1.42	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1199:ARG:HH22	13:S:241:LEU:HD13	1.21	1.01
2:B:589:VAL:HG12	2:B:590:HIS:H	1.24	1.00
1:A:164:ARG:HG3	1:A:165:GLY:H	1.26	1.00
2:B:273:LEU:HB2	2:B:276:ILE:HD12	1.43	1.00
2:B:918:ILE:HD12	2:B:935:ARG:HD2	1.43	1.00
2:B:23:ALA:HB1	2:B:24:PRO:HD2	1.44	1.00
1:A:53:LEU:HD23	1:A:54:ASN:N	1.76	1.00
1:A:886:ILE:HD11	1:A:943:LEU:HB3	1.44	0.99
1:A:1283:VAL:HG12	13:S:256:ALA:O	1.57	0.99
1:A:896:ARG:HD3	1:A:897:TYR:HE1	1.26	0.99
11:K:65:HIS:CD2	11:K:67:PHE:H	1.81	0.99
1:A:63:ARG:HA	1:A:74:MET:SD	2.01	0.99
2:B:510:LYS:HD2	2:B:510:LYS:O	1.60	0.99
1:A:853:ASP:OD1	1:A:855:THR:HB	1.62	0.99
1:A:1199:ARG:NH2	13:S:241:LEU:HD13	1.78	0.98
2:B:1162:ILE:HD11	2:B:1194:ILE:HD13	1.45	0.98
1:A:490:HIS:HB3	2:B:1150:ARG:NH1	1.79	0.98
2:B:295:GLY:H	2:B:298:LEU:HD23	1.27	0.98
2:B:65:GLU:HG3	2:B:66:ASP:H	1.27	0.98
3:C:56:THR:HG21	3:C:145:CYS:SG	2.03	0.98
2:B:839:MET:HG3	2:B:1010:LEU:HD11	1.01	0.97
10:J:64:ASN:HB3	10:J:65:PRO:HD3	1.45	0.97
1:A:225:ASN:HD22	1:A:228:PHE:H	1.03	0.97
2:B:863:GLU:OE2	2:B:873:THR:HA	1.64	0.97
1:A:913:LEU:HD12	1:A:914:GLU:N	1.81	0.96
1:A:1081:LEU:HD12	1:A:1082:ASN:OD1	1.66	0.96
1:A:1011:GLN:NE2	1:A:1015:VAL:HG21	1.78	0.96
2:B:882:THR:HG22	2:B:884:ARG:H	1.29	0.95
1:A:779:PHE:CE1	1:A:785:PRO:HD3	2.00	0.95
1:A:1172:LEU:CD2	13:S:204:SER:CA	2.44	0.95
2:B:211:VAL:O	2:B:480:SER:HA	1.65	0.95
2:B:824:ILE:HG12	10:J:48:ARG:HH12	1.31	0.95
1:A:1189:SER:O	1:A:1241:ARG:HD3	1.66	0.95
2:B:583:ASN:HD21	2:B:628:THR:HB	1.29	0.95
2:B:987:LYS:HZ2	13:S:290:ASP:HB3	1.32	0.95
3:C:73:GLN:HE21	3:C:75:MET:H	1.03	0.95
1:A:399:HIS:HB3	1:A:400:PRO:HD3	1.45	0.94
1:A:1232:ASN:ND2	13:S:238:PRO:CA	2.29	0.94
2:B:1002:THR:HG21	2:B:1006:ILE:HD12	1.49	0.93
1:A:337:ARG:CZ	1:A:839:ARG:HH12	1.81	0.93
2:B:999:MET:HG3	2:B:1000:PRO:HD2	1.49	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:85:PHE:HD2	9:I:85:PHE:H	0.93	0.93
1:A:1424:VAL:HG22	1:A:1436:ILE:HD11	1.48	0.93
2:B:1065:GLN:NE2	2:B:1067:ARG:H	1.67	0.93
10:J:57:ILE:HA	10:J:60:PHE:CD2	2.04	0.93
1:A:70:CYS:O	1:A:72:GLU:HG2	1.68	0.93
2:B:287:ARG:HG2	2:B:292:ILE:HA	1.48	0.92
6:F:76:LYS:O	6:F:79:ARG:HD3	1.70	0.92
2:B:1169:MET:HE1	2:B:1201:LYS:HA	1.48	0.92
13:S:279:VAL:HG22	13:S:299:CYS:HA	1.50	0.92
1:A:49:LYS:NZ	1:A:61:ILE:HG13	1.84	0.92
2:B:1183:LYS:HE3	2:B:1183:LYS:N	1.85	0.92
5:E:153:HIS:O	5:E:154:ILE:HG13	1.69	0.92
1:A:1341:ILE:HG23	1:A:1342:GLU:H	1.32	0.92
1:A:590:ARG:HH21	1:A:620:LYS:HB3	1.27	0.92
7:G:14:HIS:CD2	7:G:16:SER:HB2	2.04	0.92
1:A:14:VAL:H	1:A:1432:GLN:HE22	1.05	0.91
3:C:167:HIS:HD2	3:C:169:LYS:H	1.17	0.91
2:B:168:GLY:H	2:B:450:ALA:HB1	1.34	0.91
3:C:63:ILE:HA	3:C:66:ARG:HG3	1.50	0.91
1:A:1362:TYR:HD1	1:A:1363:VAL:H	1.18	0.91
2:B:549:THR:HG22	2:B:550:ASP:H	1.35	0.91
1:A:1329:THR:HG22	1:A:1331:SER:H	1.36	0.91
1:A:864:ILE:O	1:A:865:GLN:HG3	1.72	0.90
2:B:846:ILE:HG23	2:B:974:PRO:HG2	1.51	0.90
1:A:1161:THR:HG22	1:A:1163:ILE:H	1.36	0.90
1:A:490:HIS:HB3	2:B:1150:ARG:HH11	1.36	0.90
11:K:65:HIS:HD2	11:K:67:PHE:H	1.10	0.90
9:I:111:THR:HG22	9:I:112:SER:H	1.37	0.90
3:C:57:VAL:HG11	10:J:60:PHE:HB3	1.52	0.89
1:A:1329:THR:N	1:A:1335:ILE:HD11	1.87	0.89
1:A:560:ILE:HG13	8:H:78:SER:HB2	1.51	0.89
1:A:666:ILE:HD12	1:A:667:GLY:H	1.35	0.89
1:A:1118:VAL:O	1:A:1305:VAL:HG13	1.71	0.89
2:B:35:SER:HA	2:B:811:TYR:HE2	1.36	0.89
4:D:56:ARG:HB2	4:D:148:LEU:HD22	1.52	0.89
1:A:1004:ASN:ND2	5:E:167:ARG:HD2	1.88	0.89
11:K:56:VAL:HA	11:K:77:THR:HG22	1.55	0.89
1:A:708:MET:HE2	1:A:1089:VAL:HG13	1.55	0.88
1:A:524:VAL:HG12	1:A:525:GLN:H	1.38	0.88
2:B:1095:LEU:HD12	2:B:1095:LEU:N	1.88	0.88
10:J:6:ARG:HG2	10:J:13:VAL:HA	1.55	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:835:GLN:HA	2:B:1013:ASN:HD22	1.35	0.88
5:E:197:LYS:HE2	5:E:199:ILE:HD11	1.55	0.88
5:E:22:MET:HE3	5:E:26:ARG:NE	1.89	0.88
2:B:800:GLN:HB3	10:J:52:THR:HG21	1.54	0.88
2:B:365:THR:HG23	2:B:367:LEU:HG	1.55	0.88
1:A:1029:ARG:HG3	1:A:1029:ARG:HH11	1.38	0.88
1:A:55:ASP:C	1:A:57:ARG:H	1.73	0.88
2:B:269:ILE:HD11	2:B:386:LEU:HD21	1.55	0.88
7:G:23:LYS:HG3	7:G:56:ILE:HD11	1.55	0.88
1:A:351:THR:HG22	2:B:1103:ILE:HA	1.55	0.88
1:A:567:LYS:HB3	8:H:96:VAL:H	1.39	0.88
1:A:1100:ARG:HH21	1:A:1351:GLU:HG2	1.39	0.88
5:E:117:THR:HG22	5:E:119:SER:H	1.39	0.88
7:G:13:LEU:HD21	7:G:17:PHE:HB2	1.56	0.88
7:G:1:MET:HG3	7:G:85:GLU:CD	1.93	0.88
8:H:40:LEU:HD13	8:H:123:MET:HB2	1.53	0.88
1:A:466:SER:O	2:B:1103:ILE:HD11	1.74	0.87
1:A:1121:GLU:HG2	1:A:1122:PRO:HD2	1.55	0.87
1:A:901:LEU:H	1:A:926:GLN:HE21	1.22	0.87
5:E:22:MET:HE3	5:E:26:ARG:HE	1.37	0.87
1:A:1313:LEU:HD23	1:A:1338:VAL:HG21	1.57	0.87
2:B:579:ARG:HB2	2:B:586:TRP:NE1	1.90	0.87
2:B:830:TYR:CE2	2:B:1000:PRO:HD3	2.09	0.87
8:H:84:ALA:HB1	8:H:87:ARG:HB2	1.57	0.87
1:A:443:LEU:HG	2:B:1146:PHE:HE2	1.38	0.87
2:B:1007:VAL:HG22	2:B:1008:PRO:HD2	1.57	0.87
2:B:217:ARG:HE	2:B:405:ARG:HB2	1.40	0.87
2:B:582:VAL:HG23	2:B:626:ILE:HB	1.57	0.87
1:A:855:THR:HG21	1:A:857:ARG:NE	1.89	0.86
2:B:113:TYR:HB3	2:B:114:PRO:HD2	1.55	0.86
1:A:587:HIS:CD2	1:A:969:GLN:HG2	2.11	0.86
7:G:1:MET:HG3	7:G:85:GLU:OE2	1.75	0.86
2:B:466:TRP:O	2:B:468:GLU:N	2.08	0.86
3:C:213:PRO:O	3:C:214:ASN:HB2	1.74	0.86
2:B:467:GLY:O	2:B:468:GLU:HB2	1.73	0.86
9:I:29:CYS:SG	9:I:32:CYS:N	2.48	0.86
2:B:39:ARG:NH2	2:B:665:GLU:HG2	1.89	0.86
1:A:1341:ILE:HG23	1:A:1342:GLU:N	1.89	0.85
13:S:265:VAL:CG1	13:S:278:LYS:HA	2.06	0.85
2:B:37:PHE:HE2	2:B:542:MET:HA	1.40	0.85
2:B:880:THR:HB	2:B:934:LYS:HD2	1.56	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:43:ARG:HG3	10:J:45:CYS:SG	2.16	0.85
2:B:493:SER:HA	2:B:751:VAL:HG21	1.57	0.85
2:B:562:GLY:HA3	2:B:590:HIS:CE1	2.12	0.85
1:A:1362:TYR:CD1	1:A:1363:VAL:N	2.44	0.85
1:A:665:GLY:HA2	2:B:1026:LEU:HD21	1.58	0.85
1:A:446:ARG:HD2	1:A:480:ALA:HB2	1.58	0.85
2:B:839:MET:HG3	2:B:1010:LEU:CD1	1.98	0.85
1:A:1166:ASP:OD2	1:A:1239:ARG:HD2	1.76	0.85
2:B:955:THR:HG23	12:L:54:ARG:O	1.77	0.85
1:A:1116:LEU:N	1:A:1308:THR:HG22	1.92	0.85
1:A:963:ILE:HD13	1:A:1049:ILE:HG13	1.58	0.85
7:G:138:THR:HG22	7:G:139:ILE:N	1.91	0.85
9:I:85:PHE:N	9:I:85:PHE:CD2	2.45	0.84
10:J:14:VAL:CG1	10:J:50:ILE:HD11	2.05	0.84
1:A:49:LYS:HZ3	1:A:61:ILE:HG13	1.39	0.84
5:E:153:HIS:HB3	5:E:196:VAL:HG11	1.58	0.84
1:A:1116:LEU:H	1:A:1308:THR:HG22	1.41	0.84
2:B:781:PHE:O	2:B:782:LEU:HG	1.78	0.84
2:B:843:GLN:HB2	2:B:993:THR:HB	1.58	0.84
2:B:766:ARG:NH2	2:B:1020:ARG:HG2	1.92	0.84
2:B:1065:GLN:HE21	2:B:1067:ARG:H	0.86	0.84
2:B:1107:ALA:O	2:B:1108:ARG:HG2	1.77	0.84
2:B:653:VAL:HG22	2:B:689:LEU:HB3	1.60	0.84
1:A:537:ARG:HD2	8:H:20:TYR:HE1	1.40	0.84
1:A:896:ARG:HD3	1:A:897:TYR:CE1	2.11	0.84
3:C:244:VAL:O	3:C:248:ILE:HG13	1.76	0.84
1:A:540:PHE:HB3	1:A:571:LEU:HD23	1.59	0.84
1:A:472:LEU:HD11	2:B:835:GLN:NE2	1.93	0.84
5:E:153:HIS:HB3	5:E:196:VAL:CG1	2.08	0.84
1:A:503:GLN:HE21	6:F:90:ARG:HH21	1.25	0.83
3:C:92:CYS:SG	3:C:95:CYS:SG	2.75	0.83
10:J:3:VAL:HG21	10:J:18:TRP:HB2	1.59	0.83
1:A:1291:VAL:HG13	1:A:1292:PRO:HD2	1.59	0.83
8:H:100:THR:HG23	8:H:138:GLU:HA	1.58	0.83
1:A:1116:LEU:HD23	1:A:1311:VAL:HG22	1.60	0.83
1:A:353:ILE:HD12	1:A:470:LEU:HD21	1.61	0.83
10:J:9:SER:OG	10:J:45:CYS:HB2	1.79	0.83
1:A:743:VAL:O	1:A:747:VAL:HG23	1.79	0.83
2:B:510:LYS:O	2:B:510:LYS:CD	2.25	0.82
2:B:510:LYS:HG2	2:B:512:ARG:H	1.43	0.82
13:S:291:GLU:H	13:S:292:PRO:HD2	1.42	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:16:ASP:OD1	10:J:17:LYS:HD2	1.80	0.82
13:S:288:SER:O	13:S:292:PRO:HD3	1.80	0.82
1:A:567:LYS:CG	1:A:568:PRO:HD2	2.09	0.82
2:B:1020:ARG:HG2	2:B:1020:ARG:HH11	1.44	0.82
2:B:502:ILE:HG22	2:B:502:ILE:O	1.79	0.82
9:I:111:THR:HG22	9:I:113:ASP:H	1.43	0.82
1:A:14:VAL:HG23	1:A:1432:GLN:NE2	1.95	0.82
1:A:1239:ARG:HH22	1:A:1241:ARG:HH22	1.25	0.82
2:B:295:GLY:N	2:B:298:LEU:HD23	1.94	0.81
1:A:649:ILE:O	1:A:653:VAL:HG23	1.80	0.81
6:F:86:THR:OG1	6:F:89:GLU:HG3	1.80	0.81
1:A:1237:ILE:HG22	1:A:1238:ILE:N	1.96	0.81
2:B:102:VAL:HG23	2:B:112:LEU:HB2	1.63	0.81
7:G:111:THR:HG22	7:G:113:HIS:N	1.95	0.81
2:B:816:GLU:O	2:B:817:LEU:HD23	1.80	0.81
1:A:628:GLY:O	1:A:632:VAL:HG23	1.81	0.81
2:B:1007:VAL:CG2	2:B:1008:PRO:HD2	2.10	0.81
2:B:1159:ARG:HB3	2:B:1159:ARG:HH11	1.44	0.81
1:A:669:THR:O	1:A:762:SER:HB3	1.81	0.81
9:I:56:ALA:HB2	9:I:89:GLN:CG	2.10	0.81
1:A:1127:ASP:HB3	1:A:1130:GLN:HB3	1.63	0.81
1:A:1372:VAL:O	1:A:1376:THR:HG22	1.81	0.81
1:A:78:PRO:HA	2:B:1201:LYS:NZ	1.96	0.81
2:B:1169:MET:CE	2:B:1201:LYS:HA	2.11	0.81
13:S:235:ASP:CA	13:S:242:LYS:CG	2.58	0.81
1:A:1094:VAL:HG13	1:A:1113:THR:HG21	1.63	0.81
1:A:1317:MET:O	1:A:1322:ILE:HD11	1.80	0.81
1:A:795:GLU:CD	1:A:795:GLU:H	1.83	0.81
7:G:1:MET:HE3	7:G:80:LYS:C	2.00	0.81
9:I:6:PHE:HB3	9:I:12:ASN:O	1.80	0.81
1:A:666:ILE:HD12	1:A:667:GLY:N	1.95	0.80
2:B:510:LYS:HD2	2:B:510:LYS:C	1.98	0.80
1:A:471:ASN:O	1:A:474:VAL:HG12	1.81	0.80
2:B:862:GLN:HG2	2:B:963:PHE:HD1	1.45	0.80
1:A:399:HIS:O	1:A:401:GLY:N	2.14	0.80
2:B:1204:PHE:O	2:B:1208:MET:HG3	1.82	0.80
9:I:58:VAL:HG12	9:I:60:GLN:H	1.47	0.80
1:A:1017:LEU:HB2	5:E:206:GLY:N	1.93	0.80
2:B:1099:VAL:HG13	2:B:1100:ASP:H	1.44	0.80
6:F:82:THR:HG22	6:F:84:TYR:N	1.97	0.80
11:K:65:HIS:HD2	11:K:67:PHE:N	1.79	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:47:ARG:HB3	11:K:47:ARG:HH11	1.47	0.80
1:A:335:ARG:HE	1:A:339:ASN:ND2	1.79	0.79
1:A:56:PRO:O	1:A:57:ARG:HG3	1.82	0.79
1:A:49:LYS:HE2	1:A:61:ILE:HD12	1.62	0.79
2:B:508:LEU:C	2:B:510:LYS:N	2.30	0.79
2:B:589:VAL:HG12	2:B:590:HIS:N	1.95	0.79
9:I:58:VAL:HG22	9:I:62:ILE:HD12	1.63	0.79
3:C:73:GLN:NE2	3:C:75:MET:H	1.79	0.79
1:A:1444:MET:HE1	6:F:135:ARG:HB2	1.62	0.79
1:A:825:ILE:HG21	2:B:510:LYS:HE3	1.64	0.79
9:I:55:THR:HG23	9:I:100:PHE:HD2	1.48	0.79
2:B:359:GLU:O	2:B:362:PRO:HD3	1.82	0.79
2:B:509:ALA:O	2:B:510:LYS:HD2	1.81	0.79
2:B:508:LEU:C	2:B:510:LYS:H	1.81	0.79
9:I:85:PHE:HD2	9:I:85:PHE:N	1.78	0.79
3:C:133:ILE:CD1	3:C:237:SER:HA	2.12	0.79
13:S:265:VAL:HG13	13:S:278:LYS:HA	1.65	0.79
1:A:1435:PRO:HA	1:A:1439:GLY:O	1.82	0.79
1:A:299:HIS:HA	1:A:302:THR:HG22	1.65	0.79
1:A:494:SER:O	1:A:498:ARG:HG2	1.82	0.79
13:S:269:PHE:HZ	13:S:297:CYS:SG	1.97	0.79
2:B:364:ILE:HG12	2:B:585:VAL:HG13	1.65	0.79
3:C:98:VAL:C	3:C:99:LEU:HD23	2.04	0.79
2:B:806:THR:HG22	2:B:808:ALA:H	1.48	0.79
7:G:9:LEU:HD12	7:G:10:ASN:H	1.48	0.79
2:B:613:VAL:HG13	2:B:627:PHE:O	1.84	0.78
1:A:1444:MET:HG2	7:G:60:ARG:HA	1.65	0.78
1:A:1135:ARG:NH1	13:S:256:ALA:CB	2.46	0.78
1:A:608:ILE:HB	1:A:613:ILE:HD11	1.65	0.78
2:B:593:PRO:HG2	2:B:617:ARG:NH2	1.99	0.78
1:A:537:ARG:HD2	8:H:20:TYR:CE1	2.18	0.78
1:A:339:ASN:HB3	2:B:1117:GLN:HE22	1.48	0.78
3:C:167:HIS:CD2	3:C:169:LYS:H	2.02	0.78
3:C:212:PRO:HB3	3:C:213:PRO:HD2	1.64	0.78
5:E:124:VAL:HG13	5:E:132:ILE:HD12	1.64	0.78
5:E:154:ILE:H	5:E:196:VAL:HG13	1.49	0.78
13:S:271:CYS:SG	13:S:304:ASN:ND2	2.57	0.78
1:A:587:HIS:HD2	1:A:969:GLN:HG2	1.48	0.78
1:A:849:MET:HE1	1:A:1061:GLY:HA2	1.64	0.78
2:B:112:LEU:HD12	2:B:113:TYR:N	1.96	0.78
2:B:510:LYS:HG2	2:B:512:ARG:HG3	1.64	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:882:THR:HG22	2:B:884:ARG:N	1.99	0.78
4:D:40:HIS:CB	7:G:73:LYS:HZ3	1.94	0.78
2:B:987:LYS:NZ	13:S:290:ASP:HB3	1.98	0.78
1:A:1283:VAL:HG13	13:S:256:ALA:C	2.04	0.78
4:D:48:ILE:HG21	7:G:4:ILE:HD12	1.66	0.77
1:A:1441:PHE:CZ	6:F:89:GLU:HA	2.18	0.77
1:A:765:VAL:HG23	1:A:802:ASN:O	1.84	0.77
1:A:1127:ASP:HB3	1:A:1130:GLN:CB	2.14	0.77
1:A:866:PHE:O	1:A:867:ILE:HD12	1.85	0.77
1:A:1017:LEU:HB3	5:E:205:SER:HA	1.64	0.77
1:A:1090:ALA:HA	1:A:1093:LYS:HE3	1.66	0.77
1:A:164:ARG:HG3	1:A:165:GLY:N	1.98	0.77
1:A:515:GLN:O	1:A:516:SER:HB3	1.85	0.77
2:B:1206:GLU:O	2:B:1209:ALA:HB3	1.83	0.77
2:B:508:LEU:HB3	2:B:510:LYS:H	1.48	0.77
2:B:615:MET:HB3	2:B:626:ILE:HG12	1.66	0.77
10:J:45:CYS:O	10:J:48:ARG:HG3	1.85	0.77
2:B:1106:ARG:HG3	2:B:1107:ALA:N	1.96	0.77
3:C:47:ASP:HA	12:L:69:ALA:CB	2.15	0.77
4:D:35:LEU:H	4:D:35:LEU:HD12	1.48	0.77
7:G:87:VAL:HB	7:G:103:VAL:HG11	1.67	0.77
12:L:30:ILE:HD11	12:L:59:ALA:HB2	1.64	0.77
1:A:908:LEU:HD12	1:A:983:ILE:HD11	1.67	0.77
3:C:73:GLN:HE21	3:C:75:MET:N	1.82	0.76
9:I:62:ILE:HG22	9:I:62:ILE:O	1.84	0.76
7:G:121:PHE:HB2	7:G:130:TYR:CE2	2.20	0.76
9:I:82:GLU:HB3	9:I:104:LEU:HD12	1.67	0.76
1:A:830:LYS:HB2	1:A:1081:LEU:HD23	1.67	0.76
1:A:563:PRO:HG3	1:A:572:TRP:CZ2	2.20	0.76
1:A:590:ARG:HD3	1:A:604:GLY:HA2	1.67	0.76
1:A:767:GLN:OE1	1:A:799:PHE:HB2	1.83	0.76
2:B:583:ASN:ND2	2:B:628:THR:HB	2.00	0.76
8:H:4:THR:HA	8:H:60:ALA:HB2	1.66	0.76
2:B:291:ILE:HD13	2:B:300:HIS:NE2	2.00	0.76
1:A:1224:LEU:HD12	1:A:1241:ARG:O	1.84	0.76
4:D:185:CYS:HA	4:D:190:GLU:OE1	1.85	0.76
5:E:124:VAL:HG13	5:E:132:ILE:HB	1.68	0.76
10:J:44:TYR:HA	10:J:47:ARG:HB2	1.68	0.76
1:A:963:ILE:HD11	1:A:1048:ASN:HB2	1.68	0.76
2:B:1165:ILE:HG22	2:B:1166:CYS:N	1.99	0.76
9:I:34:TYR:CD2	9:I:35:VAL:N	2.54	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:489:LEU:HD12	1:A:490:HIS:N	1.99	0.76
2:B:467:GLY:O	2:B:468:GLU:CB	2.29	0.76
1:A:106:VAL:HG13	1:A:112:LYS:O	1.86	0.76
1:A:1132:LYS:HE2	13:S:253:LEU:HD21	1.68	0.76
1:A:107:CYS:H	1:A:114:LEU:HD21	1.51	0.76
2:B:1084:GLN:HE21	2:B:1084:GLN:N	1.84	0.76
13:S:235:ASP:CA	13:S:242:LYS:HG2	2.16	0.76
2:B:1187:ASN:O	2:B:1188:LYS:HB2	1.84	0.76
5:E:7:ARG:HG3	5:E:8:ASN:N	2.00	0.76
11:K:113:THR:O	11:K:114:LEU:HB2	1.84	0.76
1:A:567:LYS:HB3	8:H:96:VAL:N	2.01	0.75
2:B:745:PRO:O	2:B:748:ILE:HG12	1.86	0.75
1:A:225:ASN:HD22	1:A:228:PHE:N	1.80	0.75
1:A:820:GLY:O	1:A:822:GLU:N	2.20	0.75
2:B:98:THR:O	2:B:126:SER:HB2	1.86	0.75
1:A:1027:ALA:HB3	1:A:1030:ARG:HB2	1.68	0.75
1:A:95:PHE:CD1	1:A:234:MET:HG2	2.20	0.75
1:A:826:ASP:O	1:A:830:LYS:HB3	1.85	0.75
2:B:515:HIS:CD2	2:B:517:THR:H	2.02	0.75
2:B:918:ILE:HD12	2:B:935:ARG:CD	2.15	0.75
2:B:1224:PHE:HE2	5:E:171:LYS:HG3	1.52	0.75
8:H:59:ILE:HG22	8:H:60:ALA:N	2.01	0.75
1:A:754:SER:H	1:A:757:ASN:HD22	1.35	0.75
2:B:705:MET:HA	2:B:705:MET:CE	2.17	0.75
9:I:26:LEU:HD23	9:I:37:GLU:HA	1.67	0.75
1:A:1204:ASP:HA	13:S:252:ASN:HB3	1.65	0.75
2:B:39:ARG:HH21	2:B:665:GLU:HG2	1.46	0.75
3:C:90:ASP:O	3:C:91:HIS:CD2	2.39	0.75
2:B:777:ALA:HA	2:B:1095:LEU:HA	1.68	0.75
8:H:81:PRO:CB	8:H:82:PRO:HD2	2.17	0.75
1:A:285:PRO:HG2	1:A:288:ALA:HB3	1.67	0.75
1:A:95:PHE:O	1:A:99:ILE:HG13	1.87	0.75
2:B:510:LYS:HG2	2:B:512:ARG:CG	2.17	0.75
1:A:1107:VAL:HG12	1:A:1107:VAL:O	1.87	0.75
2:B:899:ILE:HD11	2:B:911:ILE:HA	1.68	0.75
10:J:7:CYS:SG	10:J:49:MET:HE3	2.26	0.75
1:A:1079:MET:HE2	1:A:1101:LEU:HD23	1.67	0.74
1:A:346:ASP:HB3	2:B:1108:ARG:H	1.51	0.74
4:D:145:MET:O	4:D:149:THR:HB	1.87	0.74
2:B:1160:VAL:HG12	2:B:1161:HIS:N	2.02	0.74
2:B:758:PHE:CE2	2:B:1044:ALA:HA	2.21	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:147:LEU:HB2	3:C:151:GLN:HB2	1.69	0.74
9:I:101:PHE:N	9:I:101:PHE:CD1	2.55	0.74
1:A:1406:VAL:HG12	1:A:1410:PHE:CE1	2.21	0.74
1:A:899:VAL:CB	1:A:929:LEU:HD11	2.16	0.74
2:B:1084:GLN:NE2	2:B:1084:GLN:N	2.35	0.74
1:A:1135:ARG:HH12	13:S:256:ALA:HB2	1.49	0.74
3:C:50:GLU:HG2	12:L:64:LEU:HD13	1.69	0.74
1:A:31:SER:HA	1:A:81:PHE:O	1.87	0.74
2:B:563:MET:HE1	2:B:580:VAL:HB	1.69	0.74
2:B:977:GLY:HA3	2:B:1099:VAL:HB	1.70	0.74
1:A:1172:LEU:HD22	13:S:204:SER:CA	2.16	0.74
1:A:853:ASP:OD1	1:A:855:THR:N	2.21	0.74
7:G:122:ASN:ND2	7:G:125:SER:HB3	2.02	0.74
1:A:1239:ARG:HH22	1:A:1241:ARG:NH2	1.85	0.74
1:A:741:ASN:HD22	1:A:744:LYS:H	1.35	0.74
1:A:68:GLN:HE22	1:A:80:HIS:CD2	2.06	0.74
2:B:508:LEU:CB	2:B:510:LYS:N	2.50	0.74
2:B:508:LEU:HB2	2:B:510:LYS:H	1.52	0.74
9:I:111:THR:HG22	9:I:112:SER:N	2.03	0.74
1:A:337:ARG:CZ	1:A:839:ARG:NH1	2.50	0.74
1:A:897:TYR:HD1	1:A:897:TYR:N	1.85	0.74
2:B:515:HIS:HD2	2:B:517:THR:H	1.35	0.74
4:D:170:THR:CG2	4:D:172:LEU:HG	2.16	0.74
5:E:135:PHE:HD2	5:E:140:LEU:HD21	1.52	0.74
1:A:1170:ILE:HG23	1:A:1174:PHE:CE1	2.22	0.74
1:A:858:ASN:HD22	1:A:858:ASN:C	1.90	0.74
2:B:1142:GLY:HA3	6:F:88:TYR:HE2	1.52	0.74
2:B:769:TYR:CE2	2:B:987:LYS:NZ	2.55	0.74
2:B:1180:PHE:HB3	2:B:1191:ILE:HD12	1.69	0.73
2:B:541:LEU:HB2	2:B:747:MET:HE3	1.68	0.73
1:A:518:LYS:HB2	1:A:519:PRO:HD2	1.69	0.73
7:G:145:VAL:HG12	7:G:146:LYS:N	2.03	0.73
1:A:1445:ILE:HD12	1:A:1445:ILE:H	1.53	0.73
1:A:364:VAL:HG12	1:A:458:HIS:HB3	1.71	0.73
2:B:827:ILE:HD12	2:B:1086:PHE:HD2	1.53	0.73
3:C:104:PHE:HD2	3:C:105:GLY:N	1.86	0.73
7:G:91:VAL:HG23	7:G:141:SER:O	1.88	0.73
9:I:101:PHE:H	9:I:101:PHE:HD1	1.34	0.73
1:A:1444:MET:CE	6:F:135:ARG:HB2	2.18	0.73
8:H:36:CYS:HA	8:H:126:GLU:O	1.88	0.73
1:A:335:ARG:NH1	2:B:1206:GLU:OE2	2.22	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:71:GLN:C	1:A:73:GLY:H	1.91	0.73
1:A:256:GLN:HE21	2:B:918:ILE:HD11	1.54	0.73
1:A:265:LYS:HE2	1:A:322:VAL:CG1	2.19	0.73
1:A:903:ASN:HD22	1:A:904:THR:N	1.87	0.73
3:C:6:PRO:HB3	3:C:25:VAL:HG12	1.69	0.73
4:D:144:THR:O	4:D:148:LEU:HB2	1.89	0.73
1:A:541:ILE:HD13	1:A:549:MET:HE1	1.69	0.73
1:A:901:LEU:HG	1:A:926:GLN:HE21	1.53	0.73
2:B:1002:THR:CG2	2:B:1006:ILE:HD12	2.19	0.72
7:G:115:MET:HB2	7:G:116:PRO:HD2	1.70	0.72
1:A:1420:ASP:HB3	1:A:1422:ARG:HG3	1.71	0.72
1:A:1428:VAL:HG13	2:B:1151:LEU:HD21	1.71	0.72
1:A:1341:ILE:CG2	1:A:1342:GLU:H	2.03	0.72
1:A:648:ASN:O	1:A:652:VAL:HG23	1.88	0.72
1:A:979:SER:OG	1:A:980:ASP:N	2.22	0.72
2:B:801:LYS:O	10:J:52:THR:HG23	1.89	0.72
1:A:1057:VAL:HG12	1:A:1058:VAL:H	1.54	0.72
1:A:1402:PHE:CE1	1:A:1403:GLU:HG3	2.24	0.72
1:A:288:ALA:HA	1:A:291:GLU:OE2	1.89	0.72
1:A:40:THR:HG21	1:A:259:GLU:OE2	1.89	0.72
1:A:821:ARG:HB2	1:A:821:ARG:HH11	1.53	0.72
2:B:172:ILE:HD13	2:B:178:ASN:CB	2.19	0.72
2:B:873:THR:O	2:B:914:LYS:HA	1.88	0.72
5:E:213:ILE:HG12	5:E:214:CYS:H	1.54	0.72
6:F:111:LEU:HD12	6:F:111:LEU:H	1.54	0.72
7:G:80:LYS:HG2	7:G:80:LYS:O	1.87	0.72
9:I:59:VAL:O	9:I:60:GLN:HB2	1.88	0.72
1:A:310:GLY:O	1:A:312:PRO:HD2	1.89	0.72
3:C:45:ALA:CA	3:C:72:LEU:HD12	2.16	0.72
1:A:1385:THR:O	1:A:1388:GLY:N	2.21	0.72
10:J:41:LEU:HD11	10:J:50:ILE:HG13	1.70	0.72
1:A:370:ILE:HG23	2:B:1105:ALA:HB2	1.72	0.72
1:A:1011:GLN:HE22	1:A:1015:VAL:HG21	1.52	0.72
1:A:668:ASP:HB3	1:A:743:VAL:HG23	1.71	0.72
2:B:291:ILE:HD13	2:B:300:HIS:CD2	2.25	0.72
5:E:16:PHE:CZ	5:E:20:LYS:HE2	2.25	0.72
9:I:34:TYR:CE2	9:I:36:GLU:HB3	2.25	0.72
1:A:1086:PHE:HE2	13:S:261:ILE:HD11	1.54	0.72
2:B:282:ILE:HD12	2:B:382:ILE:HD13	1.72	0.72
2:B:953:LEU:O	2:B:953:LEU:HD23	1.89	0.72
2:B:1031:LEU:HA	2:B:1055:ILE:HD13	1.72	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:43:GLY:HA3	7:G:80:LYS:HB3	1.70	0.71
8:H:44:VAL:HG12	8:H:44:VAL:O	1.89	0.71
1:A:1015:VAL:HG12	1:A:1019:CYS:SG	2.30	0.71
1:A:215:SER:HB3	1:A:218:ASP:OD2	1.89	0.71
2:B:114:PRO:HG2	2:B:115:GLN:H	1.54	0.71
6:F:86:THR:HG23	6:F:89:GLU:CD	2.10	0.71
2:B:957:ASN:O	2:B:959:ASP:N	2.22	0.71
1:A:381:THR:HG23	1:A:382:PRO:HD2	1.70	0.71
1:A:666:ILE:HD11	2:B:1067:ARG:O	1.90	0.71
2:B:763:GLN:HG2	2:B:765:PRO:HD2	1.70	0.71
3:C:32:SER:O	3:C:36:VAL:HG23	1.89	0.71
9:I:71:SER:OG	9:I:83:ASN:HB2	1.90	0.71
13:S:271:CYS:SG	13:S:302:CYS:SG	2.89	0.71
1:A:375:THR:OG1	1:A:433:GLU:HB3	1.91	0.71
2:B:123:THR:O	2:B:125:SER:N	2.22	0.71
1:A:1325:THR:O	5:E:148:GLU:HB2	1.90	0.71
1:A:1172:LEU:HD21	13:S:204:SER:CA	2.21	0.71
1:A:13:THR:O	2:B:1218:THR:HG22	1.90	0.71
2:B:1166:CYS:O	2:B:1168:LEU:N	2.22	0.71
2:B:363:HIS:O	2:B:364:ILE:HB	1.91	0.71
2:B:976:ILE:HD11	2:B:992:ILE:HA	1.71	0.71
4:D:54:GLU:O	4:D:58:VAL:HG23	1.89	0.71
9:I:56:ALA:HB2	9:I:89:GLN:HG3	1.72	0.71
1:A:225:ASN:ND2	1:A:228:PHE:N	2.32	0.71
1:A:463:ILE:HB	1:A:464:PRO:HD2	1.72	0.71
1:A:1436:ILE:HD13	2:B:1139:ILE:HG23	1.73	0.71
2:B:579:ARG:CB	2:B:586:TRP:HE1	2.00	0.71
2:B:986:GLN:NE2	2:B:1022:THR:HG21	2.05	0.71
1:A:59:GLY:HA2	1:A:67:CYS:SG	2.30	0.71
1:A:90:VAL:HG12	1:A:91:PHE:N	2.03	0.71
2:B:53:GLN:HG2	2:B:547:VAL:HG22	1.72	0.71
2:B:604:ARG:NH2	2:B:613:VAL:O	2.23	0.71
3:C:73:GLN:NE2	3:C:74:SER:H	1.89	0.71
12:L:32:ALA:HB3	12:L:55:ILE:CD1	2.21	0.71
1:A:1334:ASP:C	1:A:1336:MET:H	1.94	0.70
1:A:441:PRO:HD2	1:A:498:ARG:NH2	2.06	0.70
2:B:261:ARG:O	2:B:267:ARG:HD3	1.90	0.70
1:A:315:LEU:HD23	1:A:321:PRO:HA	1.73	0.70
2:B:510:LYS:HB2	2:B:511:PRO:CD	2.21	0.70
2:B:563:MET:CE	2:B:580:VAL:HB	2.21	0.70
1:A:1147:THR:HG22	1:A:1149:ALA:H	1.56	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:351:THR:HB	2:B:1103:ILE:HD12	1.72	0.70
1:A:384:ASN:OD1	1:A:388:LEU:HD12	1.92	0.70
1:A:152:VAL:HG13	1:A:153:PRO:HD2	1.73	0.70
1:A:370:ILE:HG22	1:A:374:LEU:CD1	2.21	0.70
1:A:567:LYS:NZ	8:H:46:LEU:HB2	2.07	0.70
1:A:897:TYR:CD1	1:A:897:TYR:N	2.56	0.70
1:A:95:PHE:HD1	1:A:234:MET:HG2	1.57	0.70
8:H:102:TYR:N	8:H:102:TYR:CD2	2.58	0.70
1:A:1435:PRO:O	1:A:1436:ILE:HG13	1.91	0.70
1:A:888:GLY:O	1:A:940:ARG:NH2	2.25	0.70
2:B:496:ARG:HH11	2:B:496:ARG:HB3	1.56	0.70
1:A:1279:ILE:HD11	1:A:1316:VAL:HG21	1.72	0.70
1:A:1116:LEU:N	1:A:1308:THR:CG2	2.54	0.70
1:A:414:ASP:OD1	1:A:416:ARG:HG3	1.91	0.70
1:A:339:ASN:HB3	2:B:1117:GLN:NE2	2.05	0.70
2:B:794:ASN:C	2:B:795:ILE:HD12	2.11	0.70
2:B:857:ARG:HG2	2:B:858:SER:H	1.55	0.70
5:E:135:PHE:CD2	5:E:140:LEU:HD21	2.26	0.70
1:A:1057:VAL:HG12	1:A:1058:VAL:N	2.06	0.70
1:A:608:ILE:HG23	1:A:969:GLN:OE1	1.91	0.70
5:E:202:SER:OG	5:E:204:THR:HG22	1.91	0.70
1:A:870:GLU:HG2	5:E:208:TYR:CD2	2.27	0.70
1:A:698:GLN:HA	9:I:97:MET:O	1.90	0.70
1:A:1280:GLU:O	1:A:1281:ARG:O	2.10	0.70
2:B:292:ILE:HD13	2:B:326:ASP:HA	1.73	0.70
1:A:852:TYR:CD1	6:F:136:ARG:HB3	2.27	0.70
10:J:2:ILE:HG12	10:J:57:ILE:HD12	1.74	0.70
1:A:1242:VAL:HG12	1:A:1243:VAL:H	1.56	0.70
2:B:857:ARG:HH21	2:B:942:ARG:CZ	2.04	0.70
1:A:239:LEU:HD12	1:A:240:PRO:HD2	1.74	0.70
3:C:191:TYR:HD2	3:C:201:TRP:CD1	2.09	0.70
1:A:567:LYS:HD2	1:A:568:PRO:HD2	1.73	0.69
1:A:78:PRO:HA	2:B:1201:LYS:HZ2	1.57	0.69
2:B:510:LYS:HB2	2:B:511:PRO:HD2	1.74	0.69
2:B:637:LEU:O	2:B:690:VAL:HG13	1.90	0.69
2:B:831:SER:OG	2:B:840:ILE:HD11	1.92	0.69
3:C:105:GLY:HA3	3:C:149:LYS:O	1.92	0.69
2:B:483:LEU:HD11	2:B:491:THR:HG23	1.73	0.69
2:B:546:SER:OG	2:B:631:GLY:N	2.22	0.69
5:E:2:ASP:O	5:E:3:GLN:HG2	1.92	0.69
13:S:291:GLU:N	13:S:292:PRO:CD	2.53	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:855:THR:CG2	1:A:857:ARG:HE	1.99	0.69
3:C:147:LEU:HD12	3:C:151:GLN:O	1.91	0.69
1:A:1334:ASP:O	1:A:1336:MET:N	2.25	0.69
1:A:289:ILE:C	1:A:291:GLU:H	1.95	0.69
1:A:347:PHE:H	2:B:1107:ALA:HA	1.57	0.69
2:B:1023:VAL:O	2:B:1027:ILE:HG13	1.93	0.69
2:B:510:LYS:CD	2:B:510:LYS:C	2.61	0.69
3:C:238:ILE:CG2	3:C:242:GLN:HB2	2.22	0.69
5:E:124:VAL:HA	5:E:132:ILE:HD12	1.73	0.69
13:S:271:CYS:SG	13:S:274:CYS:SG	2.90	0.69
1:A:265:LYS:HD2	1:A:265:LYS:N	2.06	0.69
1:A:367:PRO:HB3	1:A:465:TYR:O	1.91	0.69
1:A:69:THR:O	1:A:71:GLN:N	2.25	0.69
2:B:862:GLN:HG2	2:B:963:PHE:CD1	2.28	0.69
1:A:1283:VAL:HG12	1:A:1284:MET:H	1.58	0.69
1:A:407:ARG:HG2	1:A:430:TRP:CZ2	2.27	0.69
1:A:92:HIS:O	1:A:94:GLY:N	2.25	0.69
9:I:56:ALA:HB2	9:I:89:GLN:HG2	1.72	0.69
11:K:12:LEU:H	11:K:12:LEU:HD12	1.58	0.69
1:A:1325:THR:HG22	1:A:1326:ARG:HG3	1.74	0.69
2:B:510:LYS:CB	2:B:511:PRO:HD2	2.21	0.69
2:B:606:LYS:HD2	2:B:608:ASP:OD2	1.92	0.69
1:A:1261:LYS:HA	1:A:1264:GLU:HB3	1.73	0.69
1:A:1443:VAL:O	1:A:1444:MET:HG3	1.91	0.69
1:A:889:SER:HB3	1:A:1297:GLU:HG2	1.75	0.69
2:B:200:GLY:HA2	2:B:202:TYR:CE2	2.28	0.69
2:B:294:ASP:OD2	2:B:294:ASP:N	2.24	0.69
6:F:111:LEU:C	6:F:113:GLY:H	1.96	0.69
1:A:606:LEU:HG	1:A:613:ILE:HD12	1.74	0.69
12:L:38:LEU:O	12:L:39:SER:HB3	1.91	0.69
1:A:84:ILE:HD11	1:A:270:LEU:HD13	1.74	0.69
1:A:367:PRO:HG2	1:A:370:ILE:HG13	1.74	0.69
2:B:824:ILE:HG12	10:J:48:ARG:NH1	2.08	0.69
2:B:871:THR:HG22	2:B:872:GLU:O	1.93	0.69
7:G:123:ALA:C	7:G:125:SER:H	1.96	0.69
1:A:567:LYS:CD	1:A:568:PRO:HD2	2.23	0.69
1:A:535:THR:HG21	1:A:616:VAL:HA	1.73	0.69
2:B:112:LEU:CD1	2:B:113:TYR:H	2.03	0.69
2:B:281:PRO:HG2	2:B:284:ILE:HG13	1.74	0.69
2:B:282:ILE:CD1	2:B:382:ILE:HD13	2.23	0.69
2:B:552:MET:HA	2:B:555:ILE:HB	1.75	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:983:ARG:NH1	2:B:1028:GLU:OE1	2.26	0.69
3:C:242:GLN:HA	3:C:245:VAL:HG23	1.73	0.69
3:C:39:ALA:HA	3:C:164:ALA:HB3	1.74	0.69
1:A:1135:ARG:HH11	13:S:256:ALA:HB2	1.57	0.69
2:B:839:MET:CE	2:B:1010:LEU:HD21	2.23	0.68
2:B:948:ILE:HG22	2:B:949:VAL:O	1.93	0.68
7:G:96:GLN:HA	7:G:121:PHE:CE2	2.28	0.68
1:A:1079:MET:CE	1:A:1101:LEU:HD23	2.23	0.68
7:G:106:MET:HG3	7:G:157:ILE:O	1.93	0.68
8:H:81:PRO:HB2	8:H:82:PRO:HD2	1.74	0.68
2:B:1165:ILE:HG22	2:B:1166:CYS:H	1.59	0.68
1:A:390:GLN:HE21	1:A:394:ASN:ND2	1.91	0.68
3:C:6:PRO:HB3	3:C:25:VAL:CG1	2.24	0.68
6:F:119:ARG:HH11	6:F:119:ARG:HG3	1.57	0.68
1:A:858:ASN:ND2	1:A:860:LEU:H	1.92	0.68
2:B:986:GLN:OE1	2:B:986:GLN:HA	1.92	0.68
5:E:164:LEU:HD13	5:E:211:TYR:CE2	2.27	0.68
1:A:1237:ILE:HG22	1:A:1238:ILE:H	1.55	0.68
2:B:821:GLN:HE22	2:B:851:PHE:H	1.42	0.68
1:A:134:ARG:HG2	1:A:134:ARG:O	1.94	0.68
1:A:332:LYS:HG3	1:A:333:GLU:HG2	1.75	0.68
1:A:337:ARG:NH2	1:A:839:ARG:HH12	1.90	0.68
2:B:1146:PHE:CD1	2:B:1146:PHE:O	2.47	0.68
2:B:773:MET:C	2:B:775:LYS:H	1.95	0.68
4:D:130:LEU:C	4:D:132:GLN:H	1.97	0.68
5:E:207:ARG:HH11	5:E:207:ARG:HB3	1.58	0.68
1:A:709:THR:HG22	1:A:712:GLU:H	1.59	0.68
1:A:901:LEU:HD22	1:A:919:ILE:CG2	2.24	0.68
2:B:839:MET:HE3	2:B:1010:LEU:HD21	1.74	0.68
6:F:97:ARG:NH2	6:F:108:PHE:HE1	1.92	0.68
1:A:901:LEU:N	1:A:926:GLN:NE2	2.36	0.68
2:B:758:PHE:HE1	2:B:1027:ILE:HG22	1.56	0.68
1:A:1081:LEU:HD21	1:A:1098:VAL:HG21	1.74	0.68
1:A:837:ILE:HA	1:A:840:ARG:HD3	1.76	0.68
10:J:7:CYS:SG	10:J:46:CYS:HA	2.34	0.68
1:A:1089:VAL:O	1:A:1089:VAL:HG12	1.95	0.67
1:A:1364:ASN:OD1	1:A:1366:ARG:HD2	1.94	0.67
2:B:1115:THR:O	2:B:1116:ARG:HB2	1.92	0.67
2:B:642:ASP:HB3	2:B:649:LYS:CD	2.23	0.67
5:E:143:ASN:HD22	5:E:146:HIS:CE1	2.12	0.67
1:A:1192:LEU:HG	1:A:1193:LEU:N	2.09	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1227:ILE:HG22	1:A:1228:TRP:N	2.09	0.67
1:A:519:PRO:HG2	1:A:624:SER:O	1.94	0.67
2:B:1169:MET:HE1	2:B:1201:LYS:CA	2.24	0.67
1:A:1410:PHE:HA	2:B:1212:ILE:HD11	1.75	0.67
2:B:378:LEU:HD12	2:B:378:LEU:O	1.94	0.67
7:G:127:PRO:HG2	7:G:138:THR:HG21	1.74	0.67
1:A:1121:GLU:CG	1:A:1122:PRO:HD2	2.24	0.67
1:A:1376:THR:OG1	1:A:1377:THR:N	2.23	0.67
2:B:594:ALA:HA	2:B:617:ARG:NH1	2.09	0.67
1:A:115:LEU:HB2	1:A:122:MET:HE1	1.75	0.67
1:A:49:LYS:NZ	1:A:60:SER:HA	2.09	0.67
2:B:205:ILE:N	2:B:205:ILE:HD12	2.10	0.67
2:B:37:PHE:CE1	2:B:41:LYS:HG3	2.29	0.67
1:A:1100:ARG:HH21	1:A:1351:GLU:CG	2.07	0.67
1:A:135:PHE:C	1:A:137:ALA:H	1.97	0.67
2:B:1010:LEU:HD12	2:B:1011:ILE:H	1.60	0.67
2:B:273:LEU:CB	2:B:276:ILE:HD12	2.21	0.67
2:B:880:THR:O	2:B:881:ASN:HB2	1.94	0.67
5:E:210:SER:C	5:E:211:TYR:CD1	2.68	0.67
1:A:53:LEU:HD23	1:A:54:ASN:H	1.54	0.67
1:A:55:ASP:CG	1:A:55:ASP:O	2.31	0.67
2:B:854:LEU:HB3	2:B:856:PHE:HE1	1.60	0.67
3:C:73:GLN:HB3	3:C:131:HIS:H	1.60	0.67
1:A:567:LYS:HD3	8:H:95:TYR:CG	2.30	0.67
7:G:13:LEU:HD23	7:G:14:HIS:N	2.10	0.67
1:A:1083:THR:HG21	1:A:1085:HIS:CE1	2.30	0.67
1:A:1447:GLU:OE2	7:G:23:LYS:HB2	1.94	0.67
1:A:709:THR:HB	1:A:712:GLU:HB2	1.76	0.67
7:G:91:VAL:HB	7:G:139:ILE:O	1.95	0.67
1:A:1118:VAL:HG12	1:A:1327:ILE:HG13	1.77	0.67
1:A:337:ARG:HD3	2:B:1132:GLU:OE1	1.95	0.67
1:A:41:MET:O	1:A:50:ILE:HG13	1.94	0.67
3:C:86:CYS:O	3:C:88:CYS:N	2.27	0.67
12:L:58:LYS:O	12:L:59:ALA:O	2.13	0.67
1:A:829:VAL:HG13	2:B:507:LYS:HG2	1.76	0.67
1:A:870:GLU:HB2	5:E:204:THR:HG21	1.76	0.67
1:A:886:ILE:CD1	1:A:943:LEU:HB3	2.22	0.67
1:A:982:THR:O	1:A:985:ASP:HB2	1.94	0.67
2:B:1159:ARG:HB3	2:B:1159:ARG:NH1	2.09	0.67
2:B:1198:TYR:CE1	2:B:1201:LYS:HD2	2.30	0.67
2:B:654:ARG:H	2:B:657:HIS:HD2	1.41	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:97:VAL:HG12	2:B:178:ASN:ND2	2.09	0.67
9:I:34:TYR:HE2	9:I:36:GLU:HB3	1.60	0.67
1:A:1104:ILE:O	1:A:1107:VAL:N	2.23	0.66
1:A:1161:THR:OG1	1:A:1170:ILE:HD11	1.95	0.66
2:B:240:ILE:HG22	2:B:254:LEU:HB3	1.77	0.66
2:B:622:LYS:HE3	9:I:59:VAL:HG22	1.76	0.66
3:C:47:ASP:HA	12:L:69:ALA:HB3	1.77	0.66
5:E:198:ILE:HD11	5:E:212:ARG:HG3	1.76	0.66
13:S:265:VAL:HG11	13:S:278:LYS:HA	1.76	0.66
13:S:302:CYS:SG	13:S:304:ASN:ND2	2.68	0.66
1:A:75:ASN:O	1:A:76:GLU:HB3	1.95	0.66
2:B:169:ARG:HB2	2:B:454:THR:HG23	1.75	0.66
7:G:73:LYS:HE2	7:G:74:TYR:O	1.95	0.66
1:A:1329:THR:H	1:A:1335:ILE:CD1	1.95	0.66
1:A:265:LYS:HD2	1:A:265:LYS:H	1.60	0.66
2:B:172:ILE:HD13	2:B:178:ASN:HB2	1.76	0.66
2:B:546:SER:OG	2:B:630:ALA:HA	1.95	0.66
2:B:898:LEU:HB2	12:L:58:LYS:NZ	2.10	0.66
1:A:1331:SER:OG	1:A:1333:ILE:HG22	1.94	0.66
1:A:90:VAL:HG13	1:A:297:GLN:OE1	1.96	0.66
1:A:997:LEU:HD13	1:A:1018:PHE:HE2	1.60	0.66
2:B:1099:VAL:HG13	2:B:1100:ASP:N	2.10	0.66
2:B:900:ALA:O	2:B:903:VAL:HG23	1.95	0.66
1:A:254:GLU:HB2	2:B:935:ARG:HH22	1.60	0.66
1:A:825:ILE:C	1:A:827:THR:H	1.96	0.66
2:B:95:ILE:HG13	2:B:130:VAL:HG22	1.77	0.66
2:B:1065:GLN:HB2	3:C:201:TRP:CZ3	2.31	0.66
3:C:43:THR:HG22	3:C:44:LEU:N	2.10	0.66
8:H:84:ALA:CB	8:H:87:ARG:HB2	2.25	0.66
1:A:1283:VAL:HG12	1:A:1284:MET:N	2.11	0.66
1:A:1283:VAL:O	1:A:1306:LEU:HA	1.96	0.66
1:A:1445:ILE:HD12	1:A:1445:ILE:N	2.11	0.66
1:A:908:LEU:CD1	1:A:983:ILE:HD11	2.25	0.66
2:B:1065:GLN:HB3	2:B:1069:PHE:O	1.95	0.66
2:B:1102:LYS:O	2:B:1103:ILE:C	2.34	0.66
2:B:705:MET:H	2:B:710:LEU:CD1	2.09	0.66
9:I:58:VAL:HG13	9:I:62:ILE:CG1	2.25	0.66
13:S:218:ILE:CA	13:S:219:ALA:CA	2.73	0.66
1:A:1313:LEU:HD23	1:A:1338:VAL:CG2	2.25	0.66
1:A:1437:GLY:HA3	6:F:88:TYR:CD2	2.30	0.66
1:A:63:ARG:HG2	1:A:74:MET:SD	2.36	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:770:GLN:HG2	2:B:983:ARG:O	1.96	0.66
2:B:910:VAL:HG12	2:B:911:ILE:N	2.11	0.66
2:B:991:GLY:O	2:B:992:ILE:HB	1.94	0.66
3:C:263:THR:C	3:C:265:MET:H	1.99	0.66
12:L:28:LYS:HB2	12:L:39:SER:HB2	1.78	0.66
1:A:903:ASN:HD22	1:A:903:ASN:C	1.99	0.66
2:B:705:MET:H	2:B:710:LEU:HD12	1.61	0.66
1:A:275:SER:O	1:A:279:LEU:HG	1.96	0.66
1:A:34:LYS:HB2	1:A:36:ARG:HH21	1.60	0.66
1:A:567:LYS:HB2	1:A:568:PRO:CD	2.25	0.66
2:B:1159:ARG:NE	2:B:1193:GLN:HE21	1.94	0.66
2:B:589:VAL:CG1	2:B:590:HIS:H	2.06	0.66
2:B:616:ILE:HD12	2:B:616:ILE:N	2.11	0.66
2:B:882:THR:CG2	2:B:884:ARG:HB2	2.25	0.66
2:B:899:ILE:CG2	2:B:903:VAL:HG21	2.25	0.66
5:E:182:ASP:O	5:E:185:ALA:N	2.28	0.66
8:H:41:ASP:O	8:H:42:ILE:HG13	1.96	0.66
13:S:235:ASP:CA	13:S:242:LYS:HE3	2.26	0.66
1:A:264:PHE:O	1:A:267:ALA:HB3	1.96	0.65
1:A:886:ILE:HG22	1:A:887:GLY:N	2.11	0.65
2:B:802:PRO:HA	2:B:822:ASN:HD21	1.61	0.65
5:E:157:SER:OG	5:E:160:GLU:HG3	1.95	0.65
1:A:591:PHE:HA	1:A:595:THR:HG21	1.77	0.65
2:B:579:ARG:HD2	2:B:586:TRP:CZ2	2.30	0.65
2:B:65:GLU:HG3	2:B:66:ASP:N	2.07	0.65
2:B:322:PHE:HZ	9:I:30:ARG:HB3	1.61	0.65
2:B:953:LEU:CD2	2:B:965:LYS:HB2	2.26	0.65
3:C:63:ILE:CA	3:C:66:ARG:HG3	2.26	0.65
11:K:67:PHE:C	11:K:68:PHE:HD2	1.98	0.65
1:A:1291:VAL:HG13	1:A:1292:PRO:CD	2.25	0.65
2:B:23:ALA:HB1	2:B:24:PRO:CD	2.23	0.65
2:B:411:PRO:O	2:B:414:ALA:HB3	1.95	0.65
2:B:981:ALA:HB2	2:B:987:LYS:HA	1.79	0.65
3:C:241:ASP:O	3:C:245:VAL:HG23	1.96	0.65
4:D:137:ASN:HD22	4:D:137:ASN:C	2.00	0.65
5:E:78:LEU:HD23	5:E:79:TRP:N	2.11	0.65
12:L:61:THR:HG21	12:L:63:ARG:HG2	1.78	0.65
1:A:107:CYS:N	1:A:114:LEU:HD21	2.11	0.65
2:B:856:PHE:N	2:B:856:PHE:CD1	2.64	0.65
3:C:174:ALA:O	3:C:175:ALA:HB2	1.95	0.65
3:C:50:GLU:HG2	12:L:64:LEU:CD1	2.25	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:294:ASP:O	2:B:296:GLU:N	2.30	0.65
2:B:687:GLU:O	2:B:689:LEU:HG	1.96	0.65
2:B:773:MET:C	2:B:775:LYS:N	2.48	0.65
1:A:55:ASP:N	1:A:56:PRO:HD3	2.11	0.65
1:A:871:ASP:OD1	1:A:1366:ARG:NH2	2.29	0.65
2:B:594:ALA:HA	2:B:617:ARG:HH12	1.60	0.65
2:B:794:ASN:O	2:B:795:ILE:HD12	1.96	0.65
3:C:5:GLY:O	3:C:7:GLN:HG3	1.96	0.65
3:C:92:CYS:SG	3:C:94:LYS:HB3	2.36	0.65
4:D:211:LEU:HD23	4:D:214:LEU:HD12	1.79	0.65
1:A:1080:THR:HG21	13:S:284:LEU:HD13	1.77	0.65
2:B:365:THR:HG23	2:B:367:LEU:H	1.61	0.65
1:A:538:ASP:OD2	8:H:22:LYS:HB2	1.96	0.65
1:A:689:LYS:HE2	1:A:721:PHE:CE2	2.32	0.65
2:B:322:PHE:CZ	9:I:30:ARG:HB3	2.32	0.65
12:L:60:ARG:HG2	12:L:61:THR:H	1.60	0.65
1:A:87:ALA:HB3	1:A:276:LEU:HD23	1.77	0.65
1:A:550:LEU:HD22	1:A:556:TRP:CE2	2.31	0.65
2:B:820:GLY:N	2:B:1091:TYR:OH	2.29	0.65
7:G:14:HIS:HD2	7:G:16:SER:CB	2.03	0.65
9:I:101:PHE:N	9:I:101:PHE:HD1	1.91	0.65
1:A:47:ARG:NH2	1:A:255:SER:H	1.95	0.64
1:A:593:GLU:O	1:A:595:THR:N	2.30	0.64
2:B:1223:ASP:O	2:B:1224:PHE:HB2	1.96	0.64
2:B:217:ARG:NE	2:B:405:ARG:HB2	2.10	0.64
2:B:54:PHE:CE2	2:B:59:LEU:HD13	2.32	0.64
2:B:825:VAL:HG22	2:B:1010:LEU:HB3	1.79	0.64
7:G:143:ILE:HG22	7:G:144:ARG:N	2.11	0.64
1:A:14:VAL:N	1:A:1432:GLN:HE22	1.88	0.64
1:A:243:PRO:O	1:A:246:VAL:HG23	1.98	0.64
1:A:855:THR:HG23	1:A:857:ARG:HG3	1.78	0.64
2:B:1184:GLY:C	2:B:1186:ASP:H	1.96	0.64
2:B:237:VAL:HG22	2:B:257:LYS:HA	1.78	0.64
2:B:361:LEU:HD21	2:B:377:PHE:CD2	2.32	0.64
2:B:37:PHE:HD2	2:B:542:MET:SD	2.21	0.64
2:B:39:ARG:HH21	2:B:665:GLU:CG	2.10	0.64
2:B:835:GLN:HA	2:B:1013:ASN:ND2	2.10	0.64
4:D:47:LEU:HD13	4:D:48:ILE:H	1.63	0.64
1:A:1409:LEU:O	1:A:1412:ALA:HB3	1.98	0.64
1:A:370:ILE:HG22	1:A:374:LEU:HD11	1.80	0.64
1:A:550:LEU:HD22	1:A:556:TRP:NE1	2.11	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:827:ILE:HD12	2:B:1086:PHE:CD2	2.32	0.64
2:B:227:LYS:HB2	2:B:395:GLN:OE1	1.97	0.64
2:B:952:VAL:HG12	2:B:953:LEU:N	2.11	0.64
2:B:975:GLN:NE2	2:B:1100:ASP:OD2	2.30	0.64
7:G:138:THR:CG2	7:G:139:ILE:H	1.95	0.64
13:S:269:PHE:HE2	13:S:297:CYS:SG	2.14	0.64
1:A:1029:ARG:HH11	1:A:1029:ARG:CG	2.09	0.64
1:A:1199:ARG:HH22	13:S:241:LEU:CD1	2.02	0.64
1:A:1423:GLY:O	1:A:1426:GLU:N	2.31	0.64
1:A:535:THR:HG21	1:A:617:VAL:H	1.63	0.64
2:B:1060:ARG:HH11	2:B:1060:ARG:HG2	1.61	0.64
2:B:54:PHE:HE1	2:B:414:ALA:HA	1.62	0.64
1:A:1074:GLU:HB3	1:A:1075:PRO:HD3	1.80	0.64
1:A:1148:ILE:O	1:A:1148:ILE:HG22	1.98	0.64
1:A:67:CYS:O	1:A:70:CYS:HB3	1.96	0.64
2:B:955:THR:HG22	2:B:956:THR:N	2.12	0.64
8:H:102:TYR:N	8:H:102:TYR:HD2	1.96	0.64
1:A:1035:TYR:O	1:A:1037:LEU:N	2.25	0.64
1:A:567:LYS:HG3	1:A:568:PRO:HD2	1.80	0.64
1:A:783:THR:HG21	1:A:815:PHE:CZ	2.33	0.64
2:B:315:LYS:N	2:B:316:PRO:HD2	2.11	0.64
3:C:179:GLU:HG2	3:C:180:TYR:N	2.12	0.64
6:F:86:THR:HG23	6:F:89:GLU:OE1	1.97	0.64
7:G:111:THR:CG2	7:G:113:HIS:H	2.04	0.64
1:A:1072:ILE:O	1:A:1075:PRO:HG2	1.98	0.64
2:B:1156:ASP:O	2:B:1157:ALA:O	2.15	0.64
2:B:261:ARG:HB3	2:B:261:ARG:NH1	2.11	0.64
4:D:35:LEU:N	4:D:35:LEU:HD12	2.12	0.64
2:B:1224:PHE:CE2	5:E:171:LYS:HG3	2.32	0.64
13:S:282:TYR:CE2	13:S:296:PHE:HB2	2.33	0.64
13:S:279:VAL:HG13	13:S:298:THR:O	1.98	0.64
1:A:1098:VAL:N	1:A:1099:PRO:HD2	2.13	0.64
1:A:1428:VAL:HG13	2:B:1151:LEU:CD2	2.28	0.64
1:A:768:GLN:CG	1:A:816:HIS:HA	2.22	0.64
2:B:120:ARG:HG2	2:B:955:THR:HG21	1.79	0.64
2:B:63:ILE:HA	2:B:421:PHE:CE2	2.33	0.64
3:C:235:VAL:HG13	10:J:13:VAL:HG23	1.79	0.64
1:A:1206:ASP:O	1:A:1274:ARG:NH1	2.31	0.64
1:A:1120:LEU:O	1:A:1323:ASP:HB2	1.98	0.64
1:A:407:ARG:HD2	1:A:413:ILE:HD11	1.78	0.64
1:A:642:CYS:O	1:A:645:LEU:N	2.27	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:853:ASP:OD1	1:A:855:THR:CB	2.40	0.64
1:A:996:ASN:C	1:A:998:LEU:HD12	2.18	0.64
2:B:446:LEU:O	2:B:447:ALA:HB3	1.97	0.64
2:B:508:LEU:HB2	2:B:510:LYS:N	2.10	0.64
2:B:859:TYR:HD1	2:B:859:TYR:H	1.44	0.64
5:E:177:ARG:C	5:E:212:ARG:HD3	2.18	0.64
1:A:1283:VAL:CG1	13:S:256:ALA:C	2.62	0.63
1:A:17:VAL:HG23	1:A:1421:CYS:SG	2.38	0.63
1:A:845:LEU:HD12	1:A:1069:ALA:HB2	1.80	0.63
2:B:390:LEU:O	2:B:392:ARG:HG3	1.97	0.63
2:B:737:THR:HG21	9:I:66:PRO:HA	1.79	0.63
3:C:143:LEU:HD12	3:C:145:CYS:H	1.64	0.63
9:I:113:ASP:O	9:I:114:GLN:HG3	1.98	0.63
11:K:12:LEU:HD21	11:K:18:LYS:HG2	1.80	0.63
1:A:845:LEU:HB3	1:A:848:ILE:HD12	1.80	0.63
1:A:849:MET:CE	1:A:1061:GLY:HA2	2.28	0.63
2:B:117:ALA:HA	2:B:122:LEU:HD12	1.78	0.63
12:L:28:LYS:HB2	12:L:39:SER:CB	2.28	0.63
1:A:1080:THR:O	1:A:1081:LEU:HD22	1.97	0.63
2:B:294:ASP:C	2:B:296:GLU:H	2.01	0.63
2:B:37:PHE:CE2	2:B:542:MET:HA	2.27	0.63
5:E:197:LYS:HG2	5:E:197:LYS:O	1.97	0.63
7:G:14:HIS:ND1	7:G:15:PRO:HD2	2.12	0.63
8:H:81:PRO:CB	8:H:82:PRO:CD	2.77	0.63
3:C:35:ARG:NH1	11:K:41:THR:N	2.47	0.63
1:A:637:LYS:HB3	1:A:641:VAL:HG21	1.81	0.63
1:A:706:HIS:CE1	13:S:257:GLN:OE1	2.51	0.63
2:B:1051:THR:HB	2:B:1054:GLY:H	1.64	0.63
2:B:204:ILE:C	2:B:205:ILE:HD12	2.19	0.63
3:C:35:ARG:NH1	11:K:41:THR:H	1.96	0.63
8:H:93:TYR:HB3	8:H:144:ILE:O	1.98	0.63
7:G:14:HIS:CE1	7:G:15:PRO:HD2	2.34	0.63
7:G:6:ASP:O	7:G:7:LEU:HD23	1.98	0.63
1:A:704:ALA:O	1:A:705:LYS:HB2	1.97	0.63
2:B:508:LEU:HB2	2:B:510:LYS:CA	2.28	0.63
8:H:42:ILE:HG23	8:H:95:TYR:CE1	2.34	0.63
1:A:367:PRO:HA	1:A:463:ILE:O	1.99	0.63
1:A:922:ASP:OD1	1:A:924:LYS:N	2.32	0.63
2:B:604:ARG:NH2	2:B:614:SER:HA	2.14	0.63
3:C:235:VAL:HG21	10:J:6:ARG:NH2	2.14	0.63
1:A:534:LEU:O	1:A:574:GLY:HA3	1.98	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:S:279:VAL:HG13	13:S:298:THR:C	2.19	0.63
2:B:1149:GLU:O	2:B:1151:LEU:N	2.32	0.63
2:B:604:ARG:HH22	2:B:614:SER:HA	1.62	0.63
1:A:1230:GLU:O	1:A:1232:ASN:N	2.32	0.62
1:A:93:VAL:HG22	1:A:301:ALA:HA	1.80	0.62
1:A:61:ILE:O	1:A:63:ARG:N	2.32	0.62
2:B:254:LEU:HD23	2:B:381:MET:HE1	1.81	0.62
2:B:292:ILE:HD11	2:B:327:ARG:H	1.64	0.62
4:D:144:THR:HG21	7:G:46:LEU:HD13	1.81	0.62
8:H:89:LEU:HB3	8:H:91:ASP:OD1	1.98	0.62
1:A:283:GLY:O	1:A:285:PRO:HD3	1.99	0.62
2:B:1020:ARG:CG	2:B:1020:ARG:HH11	2.09	0.62
2:B:1099:VAL:HG22	2:B:1103:ILE:HD13	1.80	0.62
2:B:284:ILE:HD13	2:B:333:PHE:HD2	1.64	0.62
3:C:147:LEU:HB2	3:C:151:GLN:CB	2.29	0.62
5:E:192:ARG:HG3	5:E:192:ARG:HH11	1.64	0.62
7:G:126:ASN:HD22	7:G:127:PRO:HA	1.63	0.62
7:G:49:LEU:HD21	7:G:77:VAL:HG23	1.80	0.62
8:H:123:MET:HE3	8:H:142:LEU:CD2	2.29	0.62
8:H:123:MET:HE3	8:H:142:LEU:HD22	1.80	0.62
2:B:526:GLU:OE2	2:B:752:ALA:HB2	1.98	0.62
5:E:86:PRO:O	5:E:114:ASN:HB2	1.99	0.62
7:G:34:VAL:HG12	7:G:45:ILE:HG21	1.80	0.62
11:K:47:ARG:NH1	11:K:47:ARG:HB3	2.12	0.62
1:A:1402:PHE:O	1:A:1404:GLU:N	2.32	0.62
1:A:265:LYS:HE2	1:A:322:VAL:HG13	1.81	0.62
1:A:683:ILE:HG21	1:A:801:GLU:HG3	1.80	0.62
2:B:129:PHE:HA	2:B:165:VAL:O	1.99	0.62
8:H:40:LEU:CD1	8:H:123:MET:HB2	2.27	0.62
9:I:87:GLN:O	9:I:89:GLN:OE1	2.18	0.62
13:S:274:CYS:O	13:S:276:GLU:N	2.32	0.62
2:B:604:ARG:NH1	2:B:691:GLU:OE2	2.33	0.62
2:B:952:VAL:HG12	2:B:953:LEU:H	1.64	0.62
1:A:1342:GLU:CD	5:E:198:ILE:HG21	2.18	0.62
6:F:97:ARG:NH2	6:F:108:PHE:CE1	2.68	0.62
10:J:5:VAL:HG12	10:J:6:ARG:HG3	1.80	0.62
1:A:1172:LEU:CG	13:S:204:SER:CA	2.77	0.62
1:A:1279:ILE:HD11	1:A:1316:VAL:CG2	2.29	0.62
1:A:708:MET:O	1:A:709:THR:O	2.17	0.62
2:B:705:MET:HA	2:B:705:MET:HE2	1.81	0.62
2:B:780:VAL:HG12	2:B:782:LEU:O	1.99	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:67:LEU:HA	3:C:70:ILE:CD1	2.30	0.62
6:F:103:MET:HE2	7:G:65:ASP:HB2	1.81	0.62
1:A:1213:GLY:HA2	1:A:1216:ILE:HD12	1.81	0.62
1:A:21:LEU:HG	1:A:1413:GLY:O	2.00	0.62
1:A:44:THR:O	1:A:45:GLN:HB2	1.99	0.62
1:A:546:VAL:HG21	1:A:572:TRP:CE3	2.34	0.62
1:A:590:ARG:HG3	1:A:590:ARG:NH1	2.15	0.62
1:A:605:MET:SD	1:A:621:THR:HG21	2.40	0.62
1:A:998:LEU:HD12	1:A:998:LEU:H	1.65	0.62
2:B:31:TRP:CZ3	2:B:34:ILE:HD12	2.35	0.62
2:B:859:TYR:CD1	2:B:859:TYR:N	2.67	0.62
5:E:168:TYR:HB3	5:E:170:LEU:HG	1.81	0.62
1:A:515:GLN:OE1	1:A:1071:SER:HA	1.99	0.62
1:A:818:MET:HG2	2:B:514:LEU:HG	1.81	0.62
2:B:762:ASN:HD21	2:B:1024:ALA:HB3	1.64	0.62
2:B:1084:GLN:HG2	3:C:201:TRP:CZ2	2.34	0.62
1:A:1017:LEU:CB	5:E:205:SER:HA	2.29	0.62
11:K:91:CYS:O	11:K:94:ILE:HB	1.99	0.62
2:B:763:GLN:NE2	13:S:293:LEU:HG	2.15	0.62
1:A:90:VAL:CG1	1:A:91:PHE:N	2.63	0.62
1:A:886:ILE:HG13	1:A:943:LEU:CD1	2.30	0.62
2:B:1033:LYS:HD2	2:B:1087:PHE:O	2.00	0.62
2:B:37:PHE:CD1	2:B:41:LYS:HG3	2.35	0.62
6:F:97:ARG:HH22	6:F:108:PHE:HE1	1.45	0.62
7:G:114:LEU:HD23	7:G:161:GLY:O	2.00	0.62
1:A:289:ILE:O	1:A:291:GLU:N	2.33	0.62
1:A:897:TYR:HD2	1:A:936:LEU:HD13	1.65	0.62
2:B:1001:PHE:CZ	2:B:1073:TYR:HB2	2.35	0.62
2:B:236:HIS:CE1	2:B:389:ALA:HA	2.35	0.62
2:B:601:ARG:O	2:B:605:ARG:HG3	2.00	0.62
2:B:69:LEU:HD22	2:B:429:PHE:CE1	2.35	0.62
7:G:80:LYS:HE2	7:G:82:PHE:CZ	2.34	0.62
1:A:1001:ARG:O	1:A:1002:GLY:O	2.18	0.61
1:A:1019:CYS:O	1:A:1022:LEU:HB3	1.99	0.61
1:A:455:MET:HE3	2:B:1134:GLU:HG3	1.82	0.61
1:A:590:ARG:HH21	1:A:620:LYS:CB	2.08	0.61
1:A:858:ASN:ND2	1:A:858:ASN:C	2.53	0.61
2:B:1201:LYS:HE2	2:B:1205:GLN:OE1	2.00	0.61
2:B:750:GLY:O	2:B:751:VAL:C	2.39	0.61
12:L:31:CYS:HB3	12:L:34:CYS:C	2.21	0.61
1:A:756:ILE:HG21	13:S:283:GLN:NE2	2.14	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:256:GLN:NE2	2:B:918:ILE:HD11	2.14	0.61
7:G:80:LYS:HE2	7:G:82:PHE:HZ	1.64	0.61
1:A:705:LYS:HA	13:S:254:TYR:OH	2.00	0.61
1:A:691:LEU:O	1:A:694:THR:HB	1.99	0.61
1:A:866:PHE:C	1:A:867:ILE:HD12	2.21	0.61
2:B:1106:ARG:HG3	2:B:1107:ALA:H	1.65	0.61
2:B:510:LYS:CG	2:B:512:ARG:H	2.11	0.61
2:B:773:MET:O	2:B:776:GLN:N	2.28	0.61
3:C:46:ILE:HD13	3:C:157:CYS:SG	2.41	0.61
1:A:1206:ASP:O	1:A:1207:LEU:HG	2.00	0.61
1:A:1237:ILE:CG2	1:A:1238:ILE:N	2.63	0.61
1:A:442:VAL:O	1:A:457:ALA:HA	2.00	0.61
2:B:758:PHE:CE1	2:B:1027:ILE:HG22	2.35	0.61
2:B:292:ILE:CD1	2:B:326:ASP:HA	2.30	0.61
2:B:541:LEU:HD12	2:B:747:MET:HE1	1.83	0.61
3:C:58:LEU:CD2	3:C:58:LEU:H	2.14	0.61
5:E:157:SER:C	5:E:159:ASP:H	2.04	0.61
5:E:78:LEU:HD21	5:E:80:VAL:HG23	1.81	0.61
6:F:79:ARG:HG3	6:F:144:GLU:OE1	2.00	0.61
1:A:489:LEU:HD12	1:A:489:LEU:C	2.21	0.61
1:A:50:ILE:C	1:A:52:GLY:H	2.03	0.61
1:A:412:ARG:NH2	2:B:1108:ARG:NH1	2.48	0.61
3:C:248:ILE:HD13	11:K:101:LEU:HD22	1.82	0.61
4:D:40:HIS:CE1	4:D:41:GLN:HG3	2.35	0.61
1:A:852:TYR:CE2	1:A:1060:PRO:HB2	2.36	0.61
1:A:1081:LEU:HD11	1:A:1098:VAL:HB	1.81	0.61
1:A:1227:ILE:HG22	1:A:1228:TRP:H	1.64	0.61
1:A:244:PRO:HG2	1:A:245:PRO:HD3	1.81	0.61
1:A:91:PHE:HD2	1:A:96:ILE:HG12	1.66	0.61
9:I:8:ARG:O	9:I:10:CYS:N	2.33	0.61
1:A:1155:ASP:HB3	1:A:1241:ARG:HH21	1.66	0.61
1:A:133:LYS:C	1:A:135:PHE:H	2.02	0.61
1:A:152:VAL:CG1	1:A:153:PRO:HD2	2.31	0.61
1:A:335:ARG:HE	1:A:339:ASN:HD22	1.45	0.61
1:A:629:LEU:O	1:A:633:VAL:HG23	2.01	0.61
1:A:857:ARG:HD3	1:A:861:GLY:O	2.00	0.61
2:B:562:GLY:HA3	2:B:590:HIS:HE1	1.65	0.61
2:B:899:ILE:CD1	2:B:911:ILE:HA	2.30	0.61
7:G:108:VAL:HG22	7:G:159:ALA:HB3	1.81	0.61
10:J:57:ILE:HG23	10:J:58:GLU:N	2.16	0.61
1:A:1081:LEU:CD1	1:A:1098:VAL:HB	2.30	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:528:LEU:O	1:A:531:ILE:HG22	2.01	0.61
2:B:35:SER:HA	2:B:811:TYR:CE2	2.27	0.61
2:B:508:LEU:HB2	2:B:510:LYS:HB3	1.83	0.61
1:A:870:GLU:HG2	5:E:208:TYR:CG	2.36	0.61
1:A:694:THR:O	1:A:698:GLN:HG3	1.99	0.61
1:A:804:TYR:OH	2:B:763:GLN:HA	2.01	0.61
3:C:212:PRO:CB	3:C:213:PRO:HD2	2.31	0.61
8:H:23:VAL:HG13	8:H:42:ILE:O	2.00	0.61
9:I:106:CYS:O	9:I:107:SER:HB2	1.99	0.61
1:A:869:GLY:O	5:E:204:THR:HG21	2.01	0.61
2:B:496:ARG:NH1	2:B:539:LEU:HB2	2.16	0.61
4:D:134:THR:HG22	4:D:135:GLY:N	2.16	0.61
1:A:902:LEU:O	1:A:903:ASN:HB2	2.01	0.60
2:B:533:CYS:O	2:B:535:LEU:N	2.34	0.60
5:E:198:ILE:CD1	5:E:212:ARG:HH11	2.14	0.60
1:A:446:ARG:CD	1:A:480:ALA:HB2	2.31	0.60
2:B:487:THR:HG22	2:B:488:TYR:N	2.15	0.60
4:D:51:ASN:O	4:D:54:GLU:HB3	2.01	0.60
9:I:55:THR:HG23	9:I:100:PHE:CD2	2.33	0.60
1:A:1161:THR:C	1:A:1163:ILE:H	2.04	0.60
2:B:240:ILE:CG2	2:B:254:LEU:HB3	2.31	0.60
2:B:701:ILE:HD11	2:B:703:ILE:HD11	1.83	0.60
3:C:177:GLU:HB2	3:C:231:ASN:HB3	1.83	0.60
7:G:146:LYS:HB2	7:G:168:LEU:HD11	1.82	0.60
8:H:56:THR:O	8:H:144:ILE:HA	2.01	0.60
10:J:57:ILE:HG23	10:J:58:GLU:H	1.66	0.60
1:A:563:PRO:HG3	1:A:572:TRP:CE2	2.37	0.60
1:A:606:LEU:HB2	1:A:614:PHE:CE2	2.37	0.60
2:B:1096:ARG:O	2:B:1097:HIS:HB2	2.00	0.60
2:B:510:LYS:HG2	2:B:512:ARG:CB	2.30	0.60
2:B:545:ILE:HG22	2:B:546:SER:O	2.01	0.60
3:C:142:VAL:H	10:J:16:ASP:HB3	1.66	0.60
5:E:55:ARG:C	5:E:57:MET:H	2.03	0.60
5:E:60:PHE:CE2	5:E:80:VAL:HB	2.36	0.60
13:S:291:GLU:H	13:S:292:PRO:CD	2.14	0.60
1:A:1164:PRO:HG2	1:A:1165:GLU:H	1.66	0.60
1:A:254:GLU:CB	2:B:935:ARG:HH22	2.14	0.60
1:A:49:LYS:HE2	1:A:61:ILE:CD1	2.29	0.60
1:A:786:HIS:CD2	1:A:786:HIS:N	2.69	0.60
2:B:605:ARG:CZ	2:B:639:ILE:HD13	2.31	0.60
8:H:113:ALA:HB2	8:H:126:GLU:HG3	1.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:S:298:THR:HG23	13:S:305:ARG:HG2	1.82	0.60
1:A:134:ARG:O	1:A:138:ILE:HG13	2.01	0.60
1:A:225:ASN:ND2	1:A:227:VAL:H	1.98	0.60
1:A:47:ARG:HH22	1:A:254:GLU:HA	1.65	0.60
1:A:761:MET:HA	1:A:804:TYR:HB2	1.83	0.60
2:B:189:LEU:HA	2:B:192:LEU:HD12	1.82	0.60
2:B:642:ASP:HB3	2:B:649:LYS:HD2	1.84	0.60
2:B:705:MET:N	2:B:710:LEU:HD12	2.16	0.60
2:B:830:TYR:HE2	2:B:1000:PRO:HD3	1.66	0.60
4:D:35:LEU:H	4:D:35:LEU:CD1	2.14	0.60
6:F:72:LYS:O	6:F:73:ALA:HB3	2.02	0.60
7:G:23:LYS:HG3	7:G:56:ILE:CD1	2.28	0.60
1:A:963:ILE:HD11	1:A:1048:ASN:CB	2.30	0.60
1:A:1116:LEU:HB3	1:A:1311:VAL:HG22	1.83	0.60
2:B:1159:ARG:HE	2:B:1193:GLN:HE21	1.50	0.60
3:C:107:SER:C	3:C:109:SER:H	2.04	0.60
4:D:33:PHE:CE2	7:G:80:LYS:NZ	2.70	0.60
11:K:50:LEU:HD11	11:K:75:ILE:CD1	2.31	0.60
13:S:287:ARG:HD3	13:S:291:GLU:OE1	2.01	0.60
1:A:144:THR:O	1:A:146:MET:HG3	2.01	0.60
1:A:820:GLY:C	1:A:822:GLU:H	2.05	0.60
2:B:880:THR:HG21	2:B:934:LYS:HE3	1.82	0.60
10:J:3:VAL:HG21	10:J:18:TRP:CB	2.30	0.60
12:L:31:CYS:HB3	12:L:35:SER:HA	1.84	0.60
1:A:1134:ILE:O	1:A:1138:ILE:HG13	2.02	0.60
1:A:1164:PRO:HG2	1:A:1165:GLU:HG3	1.82	0.60
1:A:332:LYS:H	1:A:337:ARG:HB3	1.67	0.60
1:A:392:VAL:HG13	1:A:415:LEU:HD11	1.84	0.60
1:A:863:VAL:HG12	1:A:864:ILE:N	2.17	0.60
2:B:216:GLU:HA	2:B:406:LEU:HD23	1.84	0.60
2:B:578:THR:HG23	2:B:622:LYS:HA	1.84	0.60
4:D:210:ILE:O	4:D:214:LEU:HG	2.01	0.60
1:A:852:TYR:CE1	6:F:136:ARG:HG2	2.36	0.60
1:A:1261:LYS:O	1:A:1264:GLU:HB3	2.01	0.60
1:A:407:ARG:HG2	1:A:430:TRP:CH2	2.37	0.60
1:A:567:LYS:HD3	8:H:95:TYR:CD2	2.37	0.60
1:A:863:VAL:O	1:A:864:ILE:HG12	2.02	0.60
1:A:896:ARG:HB3	1:A:897:TYR:CD1	2.37	0.60
2:B:1180:PHE:HB3	2:B:1191:ILE:CD1	2.31	0.60
4:D:19:GLU:O	4:D:21:GLU:N	2.35	0.60
3:C:169:LYS:NZ	12:L:69:ALA:HB3	2.16	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1334:ASP:C	1:A:1336:MET:N	2.55	0.59
1:A:1372:VAL:CG1	1:A:1373:ASP:N	2.65	0.59
1:A:1423:GLY:O	1:A:1424:VAL:C	2.40	0.59
2:B:1159:ARG:HE	2:B:1193:GLN:NE2	2.00	0.59
2:B:429:PHE:HA	2:B:432:MET:HE2	1.84	0.59
2:B:789:MET:HE2	2:B:965:LYS:HB3	1.83	0.59
2:B:797:TYR:C	2:B:798:TYR:HD2	2.04	0.59
5:E:23:VAL:HG13	5:E:78:LEU:HD13	1.84	0.59
8:H:91:ASP:C	8:H:93:TYR:H	2.04	0.59
1:A:1104:ILE:O	1:A:1106:ASN:N	2.35	0.59
1:A:399:HIS:CB	1:A:400:PRO:HD3	2.26	0.59
2:B:102:VAL:CG2	2:B:112:LEU:HB2	2.33	0.59
2:B:129:PHE:HE2	2:B:166:PHE:HD1	1.49	0.59
2:B:898:LEU:HB2	12:L:58:LYS:HZ3	1.67	0.59
1:A:1237:ILE:CG2	1:A:1238:ILE:H	2.15	0.59
1:A:469:ARG:HG2	1:A:469:ARG:HH11	1.67	0.59
1:A:821:ARG:O	1:A:825:ILE:HG13	2.01	0.59
2:B:1183:LYS:CE	2:B:1183:LYS:N	2.62	0.59
2:B:510:LYS:CB	2:B:511:PRO:CD	2.79	0.59
4:D:176:GLU:OE2	4:D:198:LEU:HD23	2.02	0.59
5:E:46:TYR:CE2	5:E:58:MET:HA	2.37	0.59
8:H:56:THR:HB	8:H:145:ARG:HG2	1.84	0.59
8:H:59:ILE:HG22	8:H:60:ALA:H	1.64	0.59
12:L:61:THR:CG2	12:L:63:ARG:HG2	2.31	0.59
1:A:475:THR:HG23	1:A:476:SER:N	2.17	0.59
1:A:40:THR:HG23	1:A:54:ASN:HD21	1.67	0.59
1:A:343:LYS:HE2	2:B:1156:ASP:OD2	2.02	0.59
2:B:310:MET:O	2:B:313:MET:HB2	2.02	0.59
2:B:653:VAL:CG2	2:B:689:LEU:HB3	2.30	0.59
2:B:778:MET:CE	2:B:1094:ARG:HD3	2.32	0.59
2:B:807:ARG:HH11	2:B:807:ARG:HB3	1.66	0.59
9:I:111:THR:CG2	9:I:112:SER:H	2.13	0.59
10:J:41:LEU:CD1	10:J:50:ILE:HG13	2.32	0.59
12:L:32:ALA:HB3	12:L:55:ILE:HD12	1.83	0.59
1:A:556:TRP:C	1:A:558:GLY:H	2.05	0.59
1:A:855:THR:CG2	1:A:857:ARG:HG3	2.32	0.59
2:B:1166:CYS:HB2	2:B:1168:LEU:HD12	1.84	0.59
2:B:973:ILE:HG23	2:B:974:PRO:HD2	1.84	0.59
3:C:104:PHE:CD2	3:C:105:GLY:N	2.70	0.59
7:G:145:VAL:CG1	7:G:146:LYS:N	2.64	0.59
7:G:6:ASP:HB3	7:G:73:LYS:HZ1	1.66	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:58:VAL:HA	9:I:62:ILE:CD1	2.32	0.59
2:B:46:GLN:HG3	2:B:47:GLN:H	1.68	0.59
3:C:58:LEU:N	3:C:58:LEU:CD2	2.65	0.59
5:E:94:LYS:HE2	5:E:98:ILE:HD11	1.84	0.59
7:G:1:MET:SD	7:G:1:MET:O	2.61	0.59
1:A:834:THR:HG23	1:A:1077:THR:HA	1.85	0.59
1:A:1424:VAL:HG11	2:B:1139:ILE:HD13	1.84	0.59
1:A:391:LEU:O	1:A:394:ASN:N	2.35	0.59
2:B:521:LEU:HB3	2:B:633:VAL:HG11	1.85	0.59
2:B:899:ILE:HG22	2:B:900:ALA:N	2.17	0.59
1:A:72:GLU:O	1:A:73:GLY:O	2.20	0.59
1:A:868:TYR:CE1	1:A:1064:VAL:CG1	2.77	0.59
2:B:1095:LEU:CD1	2:B:1095:LEU:H	1.87	0.59
2:B:240:ILE:O	2:B:240:ILE:HG23	2.02	0.59
2:B:546:SER:HG	2:B:630:ALA:HA	1.68	0.59
2:B:854:LEU:HB3	2:B:856:PHE:CE1	2.37	0.59
3:C:174:ALA:O	3:C:175:ALA:CB	2.51	0.59
4:D:170:THR:HG22	4:D:172:LEU:HG	1.82	0.59
1:A:1397:LEU:HA	1:A:1400:CYS:CB	2.32	0.59
1:A:567:LYS:HB3	8:H:95:TYR:HA	1.83	0.59
1:A:808:LEU:HD21	1:A:816:HIS:HD2	1.68	0.59
2:B:1160:VAL:CG1	2:B:1161:HIS:N	2.66	0.59
3:C:35:ARG:HH11	11:K:41:THR:N	2.01	0.59
5:E:164:LEU:HD22	5:E:211:TYR:CD2	2.37	0.59
2:B:954:VAL:O	12:L:55:ILE:O	2.20	0.59
1:A:1151:GLU:HB3	1:A:1153:TYR:HE1	1.68	0.59
1:A:1191:TRP:CD1	1:A:1256:GLU:HB2	2.37	0.59
1:A:1370:LEU:O	1:A:1374:VAL:HG23	2.02	0.59
1:A:25:GLU:CD	1:A:25:GLU:H	2.06	0.59
2:B:113:TYR:HB3	2:B:114:PRO:CD	2.29	0.59
1:A:782:ARG:NH2	2:B:699:GLU:O	2.34	0.59
2:B:798:TYR:CE1	10:J:4:PRO:HB3	2.38	0.59
2:B:841:MET:O	2:B:993:THR:HG22	2.02	0.59
8:H:40:LEU:HD12	8:H:122:LEU:O	2.03	0.59
9:I:101:PHE:O	9:I:102:VAL:HG23	2.03	0.59
1:A:1116:LEU:HB3	1:A:1311:VAL:CG2	2.33	0.58
1:A:399:HIS:HB3	1:A:400:PRO:CD	2.26	0.58
1:A:687:LYS:O	1:A:690:VAL:HB	2.03	0.58
1:A:697:ALA:HB2	1:A:702:LEU:HD12	1.85	0.58
2:B:527:THR:OG1	2:B:528:PRO:HD2	2.03	0.58
2:B:879:ARG:O	2:B:880:THR:HB	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:S:295:THR:O	13:S:295:THR:HG22	2.02	0.58
1:A:1030:ARG:HG3	1:A:1034:GLU:OE2	2.03	0.58
1:A:1095:THR:OG1	1:A:1112:LYS:HB2	2.03	0.58
1:A:528:LEU:HD23	1:A:751:SER:HA	1.85	0.58
2:B:549:THR:HG22	2:B:550:ASP:N	2.12	0.58
1:A:667:GLY:HA3	3:C:192:TRP:CH2	2.38	0.58
5:E:114:ASN:O	5:E:115:ASN:HB3	2.03	0.58
8:H:24:CYS:SG	8:H:44:VAL:HG21	2.43	0.58
1:A:1342:GLU:CG	5:E:198:ILE:HD13	2.33	0.58
1:A:265:LYS:O	1:A:266:LEU:C	2.41	0.58
1:A:360:GLU:HB2	1:A:363:GLN:HG3	1.84	0.58
1:A:361:LEU:HG	1:A:507:VAL:HG11	1.85	0.58
2:B:1034:VAL:HG12	2:B:1035:ALA:N	2.17	0.58
2:B:1065:GLN:HG3	2:B:1068:GLY:H	1.69	0.58
1:A:22:PHE:HB2	2:B:1211:ASN:OD1	2.03	0.58
1:A:1422:ARG:HH22	2:B:1224:PHE:C	2.06	0.58
2:B:189:LEU:O	2:B:192:LEU:N	2.31	0.58
2:B:511:PRO:C	2:B:513:GLN:N	2.51	0.58
3:C:66:ARG:NH2	10:J:5:VAL:HG23	2.18	0.58
6:F:111:LEU:N	6:F:111:LEU:HD12	2.18	0.58
10:J:19:GLU:O	10:J:23:ASN:HB2	2.03	0.58
11:K:31:VAL:HG12	11:K:32:VAL:N	2.18	0.58
1:A:321:PRO:O	1:A:322:VAL:HG23	2.03	0.58
1:A:535:THR:CG2	1:A:616:VAL:HA	2.33	0.58
1:A:847:ASP:HB2	1:A:859:SER:H	1.68	0.58
2:B:763:GLN:HE22	13:S:293:LEU:HG	1.67	0.58
2:B:807:ARG:NH1	2:B:807:ARG:HB3	2.19	0.58
2:B:911:ILE:HD11	2:B:941:LEU:CD1	2.34	0.58
3:C:59:ALA:O	3:C:62:PHE:HB3	2.03	0.58
4:D:48:ILE:HG21	7:G:4:ILE:HB	1.85	0.58
5:E:198:ILE:CD1	5:E:212:ARG:HG3	2.34	0.58
8:H:42:ILE:HG23	8:H:95:TYR:HE1	1.67	0.58
1:A:848:ILE:HB	1:A:1065:GLY:HA3	1.85	0.58
1:A:1127:ASP:O	1:A:1130:GLN:HB3	2.03	0.58
1:A:1222:ASN:O	1:A:1223:ASP:HB3	2.04	0.58
2:B:570:VAL:HG23	2:B:573:GLN:HB3	1.85	0.58
2:B:815:ARG:HD3	2:B:1041:GLU:OE2	2.03	0.58
2:B:918:ILE:CD1	2:B:935:ARG:HD2	2.27	0.58
1:A:1074:GLU:N	1:A:1075:PRO:HD2	2.19	0.58
1:A:500:GLU:OE2	1:A:1438:THR:HG21	2.03	0.58
1:A:785:PRO:HG2	1:A:786:HIS:HD2	1.68	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:235:SER:HB3	2:B:258:LEU:HG	1.86	0.58
2:B:404:LYS:HE2	2:B:404:LYS:HA	1.85	0.58
3:C:17:ASN:OD1	3:C:233:GLU:HG3	2.02	0.58
5:E:144:ILE:O	5:E:146:HIS:N	2.37	0.58
1:A:305:ASP:CG	1:A:326:ARG:HD2	2.24	0.58
1:A:666:ILE:CD1	1:A:667:GLY:N	2.66	0.58
2:B:483:LEU:HD12	2:B:484:ASN:H	1.67	0.58
2:B:519:TRP:C	2:B:519:TRP:CD1	2.77	0.58
2:B:380:TYR:OH	2:B:623:GLU:OE2	2.21	0.58
2:B:782:LEU:HD12	2:B:788:ARG:HH11	1.67	0.58
4:D:33:PHE:CE1	7:G:80:LYS:HE3	2.39	0.58
7:G:119:LEU:HD13	7:G:132:SER:HB2	1.86	0.58
7:G:9:LEU:HD12	7:G:10:ASN:N	2.16	0.58
9:I:2:THR:O	9:I:3:THR:C	2.41	0.58
2:B:824:ILE:CG1	10:J:48:ARG:HH12	2.11	0.58
2:B:785:TYR:HE2	10:J:60:PHE:CE1	2.22	0.58
13:S:300:GLU:HG3	13:S:300:GLU:O	2.04	0.58
1:A:1446:ASP:HB3	1:A:1449:SER:OG	2.04	0.58
1:A:567:LYS:CB	1:A:568:PRO:CD	2.81	0.58
1:A:69:THR:C	1:A:71:GLN:N	2.57	0.58
1:A:827:THR:O	1:A:831:THR:HB	2.04	0.58
3:C:124:LEU:O	3:C:127:ARG:HG2	2.04	0.58
5:E:13:TRP:O	5:E:16:PHE:HB3	2.03	0.58
7:G:117:GLN:O	7:G:119:LEU:N	2.37	0.58
1:A:446:ARG:HB2	1:A:487:MET:SD	2.43	0.58
1:A:55:ASP:C	1:A:57:ARG:N	2.46	0.58
1:A:744:LYS:HE2	1:A:748:MET:HE2	1.86	0.58
1:A:903:ASN:ND2	1:A:905:ASP:H	2.02	0.58
2:B:762:ASN:HD21	2:B:1024:ALA:CB	2.17	0.58
2:B:1147:LEU:HD23	2:B:1147:LEU:C	2.24	0.58
2:B:1186:ASP:OD1	2:B:1186:ASP:O	2.22	0.58
2:B:461:LEU:HD12	2:B:461:LEU:H	1.68	0.58
2:B:855:PHE:CD1	2:B:855:PHE:C	2.75	0.58
9:I:58:VAL:HG13	9:I:62:ILE:HG13	1.84	0.58
11:K:53:ASP:HB3	11:K:56:VAL:HG23	1.86	0.58
1:A:1074:GLU:HB3	1:A:1075:PRO:CD	2.34	0.58
1:A:1316:VAL:O	1:A:1322:ILE:HD13	2.04	0.58
2:B:1132:GLU:O	2:B:1135:ARG:HB3	2.04	0.58
2:B:325:GLN:HG2	9:I:31:THR:CG2	2.34	0.58
2:B:708:GLU:O	2:B:710:LEU:N	2.37	0.58
4:D:47:LEU:HD11	7:G:3:PHE:CD2	2.39	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:162:ARG:HG2	5:E:162:ARG:HH11	1.68	0.58
6:F:85:MET:HE1	6:F:148:VAL:HG12	1.85	0.58
1:A:598:LEU:HD22	8:H:25:ARG:NH1	2.18	0.58
10:J:8:PHE:HD1	10:J:49:MET:HE1	1.69	0.58
1:A:115:LEU:HD12	1:A:142:CYS:SG	2.44	0.57
1:A:672:ASP:HB2	1:A:736:ASN:OD1	2.04	0.57
1:A:895:LYS:HG2	1:A:895:LYS:O	2.03	0.57
2:B:394:ASP:OD1	9:I:91:ARG:HB3	2.05	0.57
2:B:57:TYR:CD1	2:B:57:TYR:N	2.72	0.57
2:B:603:LEU:HB3	2:B:609:ILE:HD11	1.84	0.57
2:B:903:VAL:HG12	2:B:904:ARG:N	2.17	0.57
2:B:992:ILE:HD13	2:B:994:TYR:CE1	2.38	0.57
3:C:82:TYR:CE1	3:C:161:LYS:HD3	2.39	0.57
4:D:56:ARG:HA	4:D:148:LEU:HD13	1.86	0.57
5:E:157:SER:O	5:E:159:ASP:N	2.37	0.57
7:G:117:GLN:C	7:G:119:LEU:H	2.07	0.57
8:H:84:ALA:C	8:H:86:ASP:H	2.06	0.57
9:I:88:SER:C	9:I:90:GLN:H	2.07	0.57
1:A:1161:THR:HG22	1:A:1163:ILE:N	2.14	0.57
1:A:1421:CYS:HA	1:A:1426:GLU:HB3	1.87	0.57
1:A:168:GLY:O	1:A:169:ASN:C	2.43	0.57
1:A:35:ILE:HD12	1:A:241:VAL:HG21	1.86	0.57
2:B:773:MET:O	2:B:775:LYS:N	2.37	0.57
9:I:59:VAL:HG12	9:I:59:VAL:O	2.04	0.57
10:J:1:MET:H2	10:J:56:LEU:N	2.00	0.57
1:A:963:ILE:CD1	1:A:1049:ILE:HG13	2.30	0.57
1:A:443:LEU:HG	2:B:1146:PHE:CE2	2.28	0.57
1:A:642:CYS:O	1:A:645:LEU:HB3	2.04	0.57
1:A:808:LEU:N	1:A:808:LEU:HD12	2.20	0.57
1:A:818:MET:HA	2:B:514:LEU:HB3	1.87	0.57
3:C:69:LEU:H	3:C:69:LEU:HD12	1.69	0.57
8:H:100:THR:HG22	8:H:101:ALA:N	2.19	0.57
10:J:14:VAL:HG13	10:J:50:ILE:HD11	1.85	0.57
11:K:47:ARG:HD3	11:K:59:ALA:O	2.04	0.57
3:C:167:HIS:CE1	12:L:70:ARG:HA	2.39	0.57
13:S:236:LEU:CA	13:S:242:LYS:HE3	2.34	0.57
1:A:1353:TYR:CD2	1:A:1353:TYR:C	2.77	0.57
1:A:42:ASP:C	1:A:44:THR:H	2.07	0.57
1:A:57:ARG:O	1:A:58:LEU:O	2.21	0.57
2:B:1145:SER:C	2:B:1147:LEU:N	2.55	0.57
2:B:168:GLY:HA2	2:B:454:THR:OG1	2.05	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1164:PRO:O	1:A:1166:ASP:N	2.36	0.57
1:A:90:VAL:HG13	1:A:297:GLN:CD	2.25	0.57
1:A:984:LYS:O	1:A:988:LEU:HB2	2.03	0.57
2:B:192:LEU:O	2:B:193:LYS:HB2	2.04	0.57
2:B:640:VAL:O	2:B:641:GLU:C	2.41	0.57
2:B:694:ASP:O	2:B:698:GLU:HB2	2.05	0.57
3:C:114:TYR:HB3	3:C:140:ASN:O	2.04	0.57
5:E:153:HIS:O	5:E:154:ILE:CG1	2.49	0.57
7:G:80:LYS:CE	7:G:82:PHE:HZ	2.17	0.57
1:A:1289:ARG:NH1	1:A:1326:ARG:NH1	2.52	0.57
2:B:860:MET:HB2	2:B:965:LYS:HG2	1.87	0.57
3:C:196:ASP:OD1	3:C:198:ALA:HB3	2.05	0.57
5:E:204:THR:CG2	5:E:205:SER:N	2.67	0.57
6:F:77:ASP:C	6:F:79:ARG:H	2.08	0.57
7:G:109:PHE:CD1	7:G:110:VAL:N	2.71	0.57
10:J:8:PHE:CD1	10:J:49:MET:SD	2.98	0.57
1:A:1362:TYR:HD1	1:A:1363:VAL:N	1.85	0.57
2:B:296:GLU:O	2:B:299:GLU:HB2	2.04	0.57
2:B:953:LEU:HD21	2:B:965:LYS:HB2	1.87	0.57
1:A:469:ARG:NH2	2:B:991:GLY:O	2.37	0.57
1:A:1359:ASP:HB3	13:S:307:LYS:HE2	1.87	0.57
1:A:1063:MET:CG	1:A:1436:ILE:HG23	2.35	0.57
1:A:403:LYS:O	1:A:404:TYR:CG	2.58	0.57
1:A:560:ILE:HD12	8:H:79:TRP:O	2.05	0.57
1:A:92:HIS:O	1:A:95:PHE:N	2.37	0.57
2:B:557:PHE:C	2:B:557:PHE:CD2	2.77	0.57
5:E:84:ASP:O	5:E:86:PRO:HD3	2.05	0.57
9:I:58:VAL:HA	9:I:62:ILE:HD11	1.87	0.57
9:I:6:PHE:HA	9:I:14:LEU:HG	1.85	0.57
1:A:1335:ILE:O	1:A:1335:ILE:HG22	2.05	0.57
1:A:491:VAL:HG12	1:A:492:PRO:O	2.04	0.57
2:B:1085:ILE:HG22	2:B:1086:PHE:N	2.19	0.57
2:B:217:ARG:HE	2:B:405:ARG:CB	2.15	0.57
2:B:522:VAL:HG12	2:B:523:CYS:N	2.19	0.57
2:B:558:LEU:O	2:B:560:GLU:N	2.37	0.57
2:B:620:ARG:NH2	9:I:89:GLN:NE2	2.52	0.57
2:B:840:ILE:HB	2:B:1011:ILE:HB	1.85	0.57
8:H:83:GLN:C	8:H:85:GLY:H	2.08	0.57
1:A:845:LEU:O	1:A:1065:GLY:HA3	2.05	0.57
1:A:289:ILE:C	1:A:291:GLU:N	2.58	0.57
1:A:492:PRO:O	1:A:493:GLN:NE2	2.38	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:730:GLY:C	1:A:732:LEU:H	2.09	0.57
1:A:798:GLY:HA2	1:A:815:PHE:CD1	2.39	0.57
2:B:1182:CYS:C	2:B:1183:LYS:HE3	2.25	0.57
2:B:1156:ASP:HB3	2:B:1198:TYR:H	1.70	0.57
2:B:325:GLN:HG2	9:I:31:THR:HG23	1.86	0.57
3:C:181:ASP:OD1	3:C:186:LEU:HD13	2.05	0.57
6:F:75:PRO:O	6:F:77:ASP:O	2.23	0.57
12:L:43:THR:O	12:L:43:THR:HG22	2.04	0.57
1:A:1080:THR:HG22	1:A:1081:LEU:N	2.20	0.56
1:A:1090:ALA:CA	1:A:1093:LYS:HE3	2.34	0.56
1:A:1203:ASN:O	1:A:1204:ASP:C	2.44	0.56
1:A:18:GLN:HG3	1:A:228:PHE:CE1	2.40	0.56
1:A:382:PRO:HD3	1:A:428:TYR:CE2	2.40	0.56
1:A:495:GLU:O	1:A:498:ARG:HG3	2.04	0.56
1:A:666:ILE:H	2:B:1026:LEU:HD22	1.70	0.56
2:B:1007:VAL:HG22	2:B:1008:PRO:CD	2.32	0.56
2:B:1172:ILE:O	2:B:1172:ILE:HG22	2.05	0.56
2:B:172:ILE:HD13	2:B:178:ASN:HB3	1.86	0.56
3:C:89:GLU:O	3:C:90:ASP:HB3	2.05	0.56
4:D:40:HIS:CB	7:G:73:LYS:NZ	2.58	0.56
1:A:730:GLY:O	1:A:732:LEU:N	2.38	0.56
2:B:603:LEU:HB3	2:B:609:ILE:CD1	2.35	0.56
3:C:167:HIS:HD2	3:C:169:LYS:N	1.97	0.56
3:C:82:TYR:O	3:C:84:ARG:N	2.38	0.56
7:G:1:MET:CE	7:G:80:LYS:H	2.18	0.56
1:A:1051:ALA:O	1:A:1053:PHE:N	2.39	0.56
1:A:685:GLU:HG3	1:A:686:ALA:N	2.20	0.56
1:A:84:ILE:HG23	1:A:239:LEU:HB3	1.86	0.56
1:A:899:VAL:CG2	1:A:908:LEU:HD21	2.35	0.56
2:B:1000:PRO:O	2:B:1007:VAL:HG23	2.05	0.56
2:B:278:GLN:HG2	2:B:279:ASP:H	1.68	0.56
4:D:51:ASN:ND2	4:D:54:GLU:OE2	2.38	0.56
7:G:15:PRO:HA	7:G:18:PHE:CD1	2.41	0.56
1:A:1081:LEU:HD21	1:A:1098:VAL:CG2	2.35	0.56
1:A:1299:VAL:HG12	1:A:1300:LYS:N	2.19	0.56
1:A:306:ASN:ND2	1:A:322:VAL:HB	2.21	0.56
1:A:34:LYS:CB	1:A:36:ARG:HH21	2.18	0.56
1:A:775:ILE:HG13	1:A:798:GLY:HA3	1.86	0.56
1:A:996:ASN:O	1:A:998:LEU:HD12	2.04	0.56
3:C:101:LEU:HD13	3:C:118:LEU:HD23	1.88	0.56
5:E:35:VAL:C	5:E:37:LEU:H	2.08	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:65:HIS:CD2	11:K:67:PHE:N	2.60	0.56
12:L:62:LYS:H	12:L:62:LYS:HD2	1.70	0.56
1:A:130:ASP:O	1:A:132:LYS:N	2.39	0.56
1:A:532:ARG:HH22	1:A:745:GLN:HG2	1.69	0.56
2:B:247:GLY:H	2:B:418:LYS:HZ3	1.54	0.56
2:B:528:PRO:HG2	2:B:533:CYS:HA	1.88	0.56
2:B:593:PRO:HG2	2:B:617:ARG:CZ	2.35	0.56
2:B:29:ASP:HB3	2:B:658:ILE:CD1	2.34	0.56
2:B:911:ILE:HD11	2:B:941:LEU:HD13	1.86	0.56
3:C:143:LEU:C	3:C:143:LEU:HD12	2.25	0.56
1:A:1453:TYR:CZ	6:F:129:LYS:HA	2.40	0.56
9:I:111:THR:HG22	9:I:113:ASP:N	2.19	0.56
1:A:1438:THR:HB	2:B:1144:ALA:CB	2.36	0.56
1:A:78:PRO:CB	2:B:1201:LYS:HE3	2.36	0.56
2:B:286:PHE:HE2	2:B:375:ALA:HB1	1.70	0.56
2:B:511:PRO:C	2:B:513:GLN:H	2.08	0.56
2:B:766:ARG:NH2	2:B:1020:ARG:CG	2.67	0.56
2:B:784:ASN:O	2:B:788:ARG:HG3	2.06	0.56
10:J:57:ILE:O	10:J:60:PHE:N	2.39	0.56
1:A:928:LEU:O	1:A:930:ASP:N	2.39	0.56
2:B:1135:ARG:O	2:B:1139:ILE:HG13	2.06	0.56
2:B:1177:HIS:C	2:B:1179:GLN:H	2.08	0.56
2:B:47:GLN:O	2:B:173:MET:HE1	2.06	0.56
2:B:857:ARG:HH21	2:B:942:ARG:NH1	2.04	0.56
3:C:123:ASN:ND2	3:C:125:MET:SD	2.79	0.56
3:C:18:VAL:HG12	3:C:20:PHE:HD2	1.70	0.56
5:E:19:VAL:O	5:E:23:VAL:HG23	2.06	0.56
5:E:178:ILE:HG22	5:E:213:ILE:O	2.06	0.56
9:I:64:SER:O	9:I:66:PRO:HD3	2.05	0.56
10:J:13:VAL:HG12	10:J:14:VAL:N	2.21	0.56
13:S:241:LEU:O	13:S:242:LYS:C	2.43	0.56
1:A:98:LYS:O	1:A:102:VAL:HG23	2.05	0.56
1:A:1130:GLN:HA	1:A:1133:LEU:HD12	1.86	0.56
1:A:4:GLN:O	1:A:5:GLN:HB2	2.05	0.56
1:A:547:LEU:HD22	11:K:58:PHE:CD1	2.40	0.56
2:B:1020:ARG:CG	2:B:1020:ARG:NH1	2.68	0.56
2:B:498:THR:O	2:B:536:VAL:HG13	2.05	0.56
2:B:642:ASP:O	2:B:644:GLU:N	2.30	0.56
3:C:163:ILE:O	3:C:166:GLU:N	2.36	0.56
5:E:56:LYS:HE3	5:E:84:ASP:HB2	1.87	0.56
1:A:874:ASP:CA	1:A:1058:VAL:HG23	2.36	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1140:HIS:HB2	1:A:1276:VAL:O	2.06	0.56
1:A:663:SER:OG	2:B:1085:ILE:HG23	2.06	0.56
1:A:71:GLN:O	1:A:73:GLY:N	2.39	0.56
1:A:936:LEU:N	1:A:936:LEU:HD23	2.21	0.56
1:A:339:ASN:CB	2:B:1117:GLN:HE22	2.19	0.56
2:B:254:LEU:HD23	2:B:381:MET:CE	2.36	0.56
2:B:377:PHE:O	2:B:380:TYR:N	2.39	0.56
2:B:37:PHE:CD2	2:B:542:MET:SD	2.99	0.56
2:B:999:MET:HB3	2:B:1007:VAL:HG21	1.88	0.56
7:G:1:MET:O	7:G:1:MET:HE1	2.05	0.56
9:I:90:GLN:NE2	9:I:92:ARG:HD2	2.21	0.56
1:A:567:LYS:CB	8:H:95:TYR:HA	2.36	0.56
1:A:986:ILE:HD11	1:A:1032:LEU:HD11	1.87	0.56
2:B:766:ARG:HH21	2:B:1020:ARG:HG2	1.71	0.56
2:B:327:ARG:O	2:B:331:LEU:HD13	2.06	0.56
2:B:521:LEU:HB3	2:B:633:VAL:CG1	2.36	0.56
2:B:996:ARG:NH2	3:C:175:ALA:HA	2.20	0.56
3:C:242:GLN:O	3:C:246:ARG:N	2.37	0.56
3:C:82:TYR:CD1	3:C:161:LYS:HD3	2.41	0.56
5:E:176:PRO:O	5:E:212:ARG:HA	2.06	0.56
2:B:798:TYR:HE1	10:J:4:PRO:HB3	1.71	0.56
1:A:1044:TRP:O	1:A:1047:SER:N	2.38	0.56
1:A:306:ASN:HB2	1:A:324:SER:HB3	1.87	0.56
1:A:42:ASP:HB3	1:A:45:GLN:H	1.70	0.56
1:A:503:GLN:C	1:A:504:LEU:HD12	2.25	0.56
1:A:72:GLU:HB3	1:A:76:GLU:HG3	1.88	0.56
1:A:963:ILE:HD13	1:A:1049:ILE:CG1	2.32	0.56
1:A:78:PRO:HB3	2:B:1201:LYS:HE3	1.88	0.56
2:B:744:HIS:CG	2:B:745:PRO:HD2	2.41	0.56
2:B:945:GLU:O	2:B:946:ASN:HB3	2.06	0.56
7:G:114:LEU:HG	7:G:162:SER:CB	2.36	0.56
11:K:21:ILE:HG23	11:K:31:VAL:HG11	1.88	0.56
1:A:861:GLY:HA3	5:E:174:GLN:NE2	2.21	0.55
2:B:1065:GLN:HG2	2:B:1069:PHE:HB2	1.88	0.55
2:B:569:TYR:CE1	2:B:589:VAL:HG21	2.41	0.55
2:B:60:GLN:O	2:B:63:ILE:HG22	2.06	0.55
2:B:635:ARG:NH2	2:B:742:GLU:OE2	2.29	0.55
11:K:67:PHE:C	11:K:68:PHE:CD2	2.78	0.55
12:L:30:ILE:O	12:L:56:LEU:HA	2.06	0.55
1:A:1127:ASP:HB3	1:A:1130:GLN:HB2	1.89	0.55
3:C:133:ILE:CD1	3:C:237:SER:CA	2.82	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:1:MET:CE	7:G:1:MET:O	2.54	0.55
11:K:58:PHE:HE2	11:K:74:ARG:HE	1.53	0.55
1:A:414:ASP:OD1	1:A:416:ARG:CG	2.54	0.55
1:A:679:ILE:O	1:A:683:ILE:HG13	2.06	0.55
1:A:785:PRO:HG2	1:A:786:HIS:CD2	2.42	0.55
1:A:808:LEU:CD1	1:A:808:LEU:H	2.19	0.55
1:A:853:ASP:CG	1:A:855:THR:HB	2.25	0.55
2:B:31:TRP:CE3	2:B:34:ILE:HD12	2.41	0.55
2:B:582:VAL:HA	2:B:626:ILE:O	2.06	0.55
2:B:847:ASP:C	2:B:849:GLY:H	2.09	0.55
3:C:31:ASN:O	3:C:32:SER:C	2.45	0.55
4:D:39:ASN:ND2	4:D:41:GLN:HB2	2.21	0.55
8:H:5:LEU:HB2	8:H:60:ALA:H	1.71	0.55
9:I:105:SER:O	9:I:106:CYS:HB3	2.06	0.55
1:A:1373:ASP:O	1:A:1376:THR:HG23	2.06	0.55
1:A:1341:ILE:HD12	1:A:1379:GLY:O	2.05	0.55
1:A:265:LYS:HE2	1:A:322:VAL:HG11	1.89	0.55
1:A:708:MET:HE2	1:A:1089:VAL:CG1	2.33	0.55
1:A:71:GLN:C	1:A:73:GLY:N	2.60	0.55
1:A:823:GLY:C	1:A:825:ILE:H	2.08	0.55
2:B:1189:ILE:HG22	2:B:1190:ASP:N	2.22	0.55
2:B:118:ARG:HH11	2:B:204:ILE:HD11	1.72	0.55
4:D:27:LEU:HD11	4:D:197:SER:HB2	1.89	0.55
5:E:47:CYS:HA	5:E:52:ARG:O	2.06	0.55
12:L:30:ILE:HG22	12:L:31:CYS:N	2.20	0.55
12:L:49:LYS:O	12:L:50:ASP:HB2	2.05	0.55
1:A:1265:ASN:C	1:A:1267:MET:N	2.60	0.55
1:A:1420:ASP:O	1:A:1421:CYS:HB2	2.07	0.55
1:A:590:ARG:HG3	1:A:590:ARG:HH11	1.72	0.55
2:B:242:SER:OG	2:B:252:SER:O	2.23	0.55
2:B:502:ILE:CG2	2:B:502:ILE:O	2.52	0.55
2:B:54:PHE:HA	2:B:58:THR:HB	1.88	0.55
2:B:635:ARG:HB2	2:B:636:PRO:CD	2.36	0.55
1:A:1313:LEU:O	1:A:1315:GLU:N	2.39	0.55
1:A:18:GLN:HG3	1:A:228:PHE:HE1	1.72	0.55
1:A:78:PRO:O	1:A:79:GLY:O	2.25	0.55
1:A:896:ARG:HB3	1:A:897:TYR:HD1	1.70	0.55
1:A:896:ARG:O	1:A:1029:ARG:HB3	2.07	0.55
3:C:9:LYS:O	3:C:10:ILE:C	2.44	0.55
3:C:90:ASP:O	3:C:91:HIS:CG	2.60	0.55
5:E:211:TYR:CD1	5:E:211:TYR:N	2.74	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:100:GLN:O	6:F:103:MET:HB2	2.07	0.55
6:F:84:TYR:N	6:F:84:TYR:CD1	2.73	0.55
8:H:24:CYS:HB2	8:H:44:VAL:HG21	1.89	0.55
1:A:997:LEU:HD13	1:A:1018:PHE:CE2	2.42	0.55
1:A:730:GLY:C	1:A:732:LEU:N	2.59	0.55
1:A:668:ASP:CB	1:A:743:VAL:HG23	2.36	0.55
1:A:965:GLN:O	1:A:968:GLN:HB2	2.06	0.55
3:C:70:ILE:HD13	3:C:144:ILE:HD11	1.88	0.55
3:C:166:GLU:O	3:C:167:HIS:HB2	2.07	0.55
3:C:46:ILE:HG13	3:C:72:LEU:HD11	1.88	0.55
3:C:90:ASP:O	3:C:90:ASP:CG	2.43	0.55
5:E:124:VAL:HG13	5:E:132:ILE:CD1	2.36	0.55
5:E:213:ILE:HG12	5:E:214:CYS:N	2.21	0.55
7:G:13:LEU:HD23	7:G:14:HIS:H	1.70	0.55
4:D:47:LEU:HD11	7:G:3:PHE:HD2	1.72	0.55
10:J:21:TYR:HA	10:J:39:LEU:HD11	1.87	0.55
1:A:390:GLN:HE21	1:A:394:ASN:HD21	1.53	0.55
1:A:897:TYR:HB3	1:A:936:LEU:HD12	1.89	0.55
2:B:363:HIS:CD2	2:B:364:ILE:HG13	2.42	0.55
2:B:378:LEU:O	2:B:382:ILE:HG13	2.07	0.55
2:B:563:MET:HE2	2:B:587:HIS:C	2.28	0.55
2:B:873:THR:HG22	2:B:874:PHE:N	2.22	0.55
3:C:58:LEU:HD23	3:C:58:LEU:H	1.71	0.55
9:I:84:VAL:O	9:I:84:VAL:HG22	2.07	0.55
12:L:31:CYS:HB3	12:L:35:SER:N	2.21	0.55
1:A:993:LEU:HD22	1:A:1046:LEU:HD22	1.88	0.55
1:A:1265:ASN:C	1:A:1267:MET:H	2.09	0.55
1:A:848:ILE:HB	1:A:1065:GLY:CA	2.37	0.55
1:A:901:LEU:N	1:A:926:GLN:HE21	1.98	0.55
2:B:1020:ARG:NH1	2:B:1020:ARG:HG2	2.20	0.55
2:B:488:TYR:CE2	2:B:813:LYS:HB2	2.42	0.55
2:B:533:CYS:C	2:B:535:LEU:H	2.09	0.55
2:B:363:HIS:CD2	2:B:585:VAL:HG22	2.42	0.55
2:B:597:MET:SD	2:B:624:LEU:HD11	2.47	0.55
8:H:7:ASP:O	8:H:8:ASP:HB2	2.06	0.55
9:I:25:LEU:HB3	9:I:38:ALA:HB2	1.89	0.55
12:L:47:ARG:HH11	12:L:47:ARG:HG3	1.72	0.55
1:A:1334:ASP:O	1:A:1337:GLU:N	2.40	0.55
1:A:356:ASP:HB3	1:A:359:LEU:HG	1.88	0.55
1:A:715:GLU:O	1:A:717:ASN:N	2.39	0.55
2:B:1084:GLN:HE21	2:B:1084:GLN:H	1.55	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:265:SER:O	2:B:266:ALA:HB3	2.07	0.55
2:B:25:ILE:HG23	2:B:29:ASP:HB3	1.89	0.55
2:B:637:LEU:HD12	2:B:693:ILE:HD12	1.88	0.55
2:B:781:PHE:O	2:B:782:LEU:CG	2.54	0.55
2:B:805:THR:HA	2:B:809:MET:HE1	1.89	0.55
3:C:27:LEU:HD12	3:C:228:PHE:HE2	1.70	0.55
8:H:127:GLY:HA3	8:H:130:ARG:NH2	2.22	0.55
2:B:800:GLN:CB	10:J:52:THR:HG21	2.33	0.55
1:A:1102:LYS:HG2	1:A:1106:ASN:ND2	2.22	0.54
1:A:1155:ASP:OD2	1:A:1161:THR:HG23	2.07	0.54
1:A:15:LYS:HG3	2:B:1218:THR:O	2.06	0.54
1:A:820:GLY:C	1:A:822:GLU:N	2.60	0.54
1:A:919:ILE:O	1:A:921:GLY:N	2.40	0.54
1:A:982:THR:HG22	1:A:984:LYS:H	1.73	0.54
1:A:786:HIS:HE1	2:B:519:TRP:CZ2	2.25	0.54
2:B:542:MET:HG2	2:B:747:MET:HB3	1.89	0.54
2:B:711:GLU:H	2:B:712:PRO:HD2	1.72	0.54
1:A:1017:LEU:HD23	5:E:204:THR:C	2.27	0.54
13:S:243:GLN:O	13:S:247:GLU:HG3	2.07	0.54
1:A:1329:THR:HG22	1:A:1331:SER:N	2.15	0.54
1:A:298:PHE:CZ	1:A:314:ALA:HB2	2.42	0.54
1:A:381:THR:HG23	1:A:382:PRO:CD	2.37	0.54
1:A:382:PRO:HD3	1:A:428:TYR:CD2	2.42	0.54
2:B:1017:ILE:HG22	2:B:1018:PRO:N	2.21	0.54
2:B:382:ILE:O	2:B:385:LEU:HB3	2.08	0.54
3:C:67:LEU:HD23	3:C:70:ILE:HD11	1.89	0.54
5:E:124:VAL:CA	5:E:132:ILE:HD12	2.37	0.54
5:E:48:ASP:CG	5:E:49:SER:H	2.11	0.54
7:G:88:ASP:HA	7:G:144:ARG:HA	1.88	0.54
1:A:1397:LEU:O	1:A:1400:CYS:HB3	2.06	0.54
1:A:353:ILE:HG21	1:A:487:MET:CG	2.20	0.54
1:A:49:LYS:HZ1	1:A:61:ILE:N	2.05	0.54
1:A:775:ILE:CG1	1:A:798:GLY:HA3	2.38	0.54
2:B:356:LEU:HA	2:B:360:PHE:HB2	1.90	0.54
3:C:183:TRP:O	3:C:185:LYS:HG3	2.06	0.54
8:H:126:GLU:C	8:H:130:ARG:HH22	2.11	0.54
8:H:139:ASN:O	8:H:140:ALA:HB2	2.08	0.54
11:K:46:ILE:O	11:K:50:LEU:HB2	2.07	0.54
1:A:1396:ALA:O	1:A:1398:MET:N	2.41	0.54
1:A:41:MET:O	1:A:42:ASP:C	2.45	0.54
1:A:597:LEU:HD12	1:A:597:LEU:N	2.21	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:604:GLY:O	1:A:605:MET:HB2	2.07	0.54
1:A:855:THR:HG23	1:A:856:THR:N	2.23	0.54
1:A:867:ILE:CG2	1:A:872:GLY:N	2.71	0.54
1:A:905:ASP:C	1:A:906:HIS:HD1	2.10	0.54
1:A:996:ASN:HA	1:A:998:LEU:CD1	2.38	0.54
2:B:1165:ILE:CG2	2:B:1166:CYS:N	2.70	0.54
3:C:143:LEU:HD12	3:C:145:CYS:N	2.22	0.54
3:C:250:THR:O	3:C:254:LYS:HG3	2.07	0.54
5:E:90:VAL:O	5:E:90:VAL:HG22	2.07	0.54
7:G:18:PHE:HZ	7:G:68:ALA:HB2	1.71	0.54
9:I:34:TYR:HD2	9:I:35:VAL:N	2.05	0.54
13:S:293:LEU:HD23	13:S:293:LEU:N	2.23	0.54
1:A:1079:MET:HE2	1:A:1101:LEU:CD2	2.37	0.54
1:A:470:LEU:CD2	1:A:487:MET:CE	2.86	0.54
2:B:1219:ASP:O	2:B:1219:ASP:OD1	2.25	0.54
2:B:210:LYS:HA	2:B:481:GLN:O	2.07	0.54
2:B:693:ILE:HD11	2:B:740:HIS:CD2	2.43	0.54
2:B:861:ASP:OD1	2:B:862:GLN:N	2.41	0.54
5:E:39:LEU:O	5:E:42:PHE:HB3	2.08	0.54
10:J:23:ASN:C	10:J:25:LEU:H	2.09	0.54
1:A:1017:LEU:O	1:A:1017:LEU:HD12	2.07	0.54
1:A:1021:LEU:O	1:A:1025:ARG:HG2	2.08	0.54
1:A:877:HIS:CD2	1:A:1056:SER:HA	2.41	0.54
1:A:1125:ALA:C	1:A:1127:ASP:H	2.10	0.54
1:A:133:LYS:C	1:A:135:PHE:N	2.60	0.54
1:A:308:ILE:HG22	1:A:309:ALA:H	1.73	0.54
1:A:476:SER:OG	1:A:477:PRO:HD3	2.08	0.54
1:A:626:ASN:O	1:A:631:HIS:HB2	2.07	0.54
1:A:69:THR:C	1:A:71:GLN:H	2.10	0.54
2:B:1099:VAL:O	2:B:1102:LYS:N	2.36	0.54
2:B:1106:ARG:CG	2:B:1107:ALA:N	2.69	0.54
2:B:611:PRO:HB3	2:B:685:LEU:HD11	1.89	0.54
2:B:865:LYS:NZ	2:B:869:SER:HA	2.23	0.54
3:C:174:ALA:HB2	3:C:235:VAL:HG22	1.90	0.54
3:C:183:TRP:O	3:C:185:LYS:N	2.41	0.54
3:C:39:ALA:CA	3:C:164:ALA:HB3	2.37	0.54
4:D:130:LEU:C	4:D:132:GLN:N	2.61	0.54
5:E:144:ILE:HG13	5:E:145:THR:H	1.72	0.54
5:E:60:PHE:HE2	5:E:80:VAL:HB	1.73	0.54
5:E:90:VAL:HA	5:E:120:ALA:HB2	1.89	0.54
7:G:81:PRO:HG3	7:G:106:MET:SD	2.47	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:58:THR:HG22	8:H:59:ILE:H	1.73	0.54
9:I:62:ILE:CG2	9:I:62:ILE:O	2.55	0.54
11:K:83:PRO:O	11:K:86:ALA:N	2.41	0.54
1:A:703:THR:O	1:A:705:LYS:HG2	2.07	0.54
1:A:68:GLN:C	1:A:70:CYS:H	2.09	0.54
1:A:886:ILE:HG13	1:A:943:LEU:HD12	1.90	0.54
2:B:1072:MET:HE2	2:B:1085:ILE:HB	1.89	0.54
3:C:44:LEU:HD23	3:C:72:LEU:HB2	1.90	0.54
6:F:84:TYR:HD1	6:F:84:TYR:N	2.06	0.54
8:H:14:GLU:HG2	8:H:15:VAL:N	2.22	0.54
8:H:95:TYR:HE2	8:H:97:MET:HG2	1.72	0.54
9:I:88:SER:O	9:I:90:GLN:N	2.41	0.54
1:A:1305:VAL:HG12	1:A:1306:LEU:N	2.23	0.54
1:A:1313:LEU:CD1	1:A:1327:ILE:HD13	2.38	0.54
1:A:534:LEU:HD13	1:A:656:TRP:CG	2.43	0.54
1:A:75:ASN:O	1:A:76:GLU:CB	2.55	0.54
2:B:431:TYR:CE2	2:B:447:ALA:HB2	2.42	0.54
2:B:498:THR:HB	2:B:537:LYS:O	2.08	0.54
2:B:555:ILE:HG22	2:B:556:THR:N	2.21	0.54
2:B:955:THR:CG2	2:B:956:THR:N	2.71	0.54
4:D:213:GLU:O	4:D:217:LEU:HG	2.07	0.54
9:I:7:CYS:SG	9:I:8:ARG:O	2.66	0.54
1:A:1161:THR:C	1:A:1163:ILE:N	2.61	0.54
2:B:1163:CYS:SG	2:B:1165:ILE:HB	2.48	0.54
2:B:1165:ILE:CG2	2:B:1185:CYS:HB3	2.38	0.54
2:B:203:PHE:HB3	2:B:205:ILE:HD11	1.90	0.54
2:B:658:ILE:O	2:B:661:LEU:HB2	2.07	0.54
2:B:879:ARG:O	2:B:934:LYS:HD2	2.08	0.54
2:B:94:LYS:HG2	2:B:95:ILE:N	2.22	0.54
2:B:970:THR:HG22	2:B:971:THR:N	2.22	0.54
8:H:130:ARG:HA	8:H:133:ASN:HB2	1.90	0.54
11:K:65:HIS:CD2	11:K:66:PRO:CD	2.90	0.54
1:A:1116:LEU:CD2	1:A:1311:VAL:HG22	2.36	0.54
1:A:1376:THR:O	1:A:1377:THR:C	2.46	0.54
1:A:35:ILE:HA	1:A:52:GLY:O	2.07	0.54
1:A:688:LYS:C	1:A:690:VAL:H	2.12	0.54
1:A:741:ASN:HD21	1:A:743:VAL:HB	1.72	0.54
2:B:1182:CYS:O	2:B:1182:CYS:SG	2.66	0.54
2:B:230:ALA:N	2:B:231:PRO:HD2	2.23	0.54
2:B:94:LYS:HG2	2:B:95:ILE:H	1.73	0.54
11:K:31:VAL:CG1	11:K:32:VAL:N	2.70	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1123:GLY:O	1:A:1125:ALA:N	2.41	0.53
1:A:1436:ILE:O	1:A:1437:GLY:C	2.46	0.53
2:B:197:PHE:HZ	2:B:816:GLU:HG2	1.73	0.53
2:B:205:ILE:N	2:B:205:ILE:CD1	2.72	0.53
2:B:487:THR:HG22	2:B:488:TYR:H	1.73	0.53
1:A:1441:PHE:HZ	6:F:89:GLU:HA	1.67	0.53
9:I:55:THR:CG2	9:I:100:PHE:HD2	2.17	0.53
11:K:47:ARG:HH11	11:K:48:ALA:N	2.06	0.53
11:K:58:PHE:HB3	11:K:76:GLN:HE21	1.72	0.53
1:A:1063:MET:CE	1:A:1436:ILE:HG12	2.39	0.53
1:A:1173:HIS:CD2	1:A:1227:ILE:HG23	2.43	0.53
2:B:179:CYS:SG	2:B:181:LEU:HB2	2.48	0.53
2:B:203:PHE:HB3	2:B:205:ILE:CD1	2.37	0.53
2:B:224:GLN:O	2:B:238:ALA:HA	2.08	0.53
2:B:984:HIS:NE2	2:B:1025:HIS:HA	2.24	0.53
5:E:55:ARG:O	5:E:57:MET:N	2.41	0.53
6:F:77:ASP:C	6:F:79:ARG:N	2.61	0.53
8:H:116:TYR:HB2	8:H:123:MET:HB3	1.90	0.53
1:A:1261:LYS:CA	1:A:1264:GLU:HB3	2.38	0.53
1:A:1305:VAL:CG1	1:A:1306:LEU:N	2.71	0.53
1:A:1454:MET:HG3	1:A:1454:MET:O	2.08	0.53
1:A:335:ARG:HH11	2:B:1206:GLU:CD	2.10	0.53
1:A:41:MET:HB3	1:A:48:ALA:O	2.08	0.53
1:A:423:ASP:OD1	1:A:424:ILE:N	2.42	0.53
1:A:468:PHE:CE2	1:A:489:LEU:HD23	2.43	0.53
2:B:1001:PHE:CE1	2:B:1073:TYR:HB2	2.43	0.53
2:B:827:ILE:CD1	2:B:1086:PHE:HD2	2.21	0.53
2:B:817:LEU:O	2:B:818:PRO:O	2.26	0.53
3:C:27:LEU:O	3:C:28:ALA:C	2.46	0.53
3:C:92:CYS:H	3:C:95:CYS:HG	1.57	0.53
6:F:116:ASP:O	6:F:120:ILE:HG13	2.09	0.53
1:A:1204:ASP:HA	13:S:252:ASN:CB	2.36	0.53
1:A:129:LYS:O	1:A:130:ASP:HB2	2.08	0.53
1:A:1343:ALA:O	1:A:1346:ALA:HB3	2.09	0.53
1:A:381:THR:HG22	1:A:383:TYR:H	1.73	0.53
1:A:392:VAL:HG21	1:A:426:LEU:HD11	1.91	0.53
3:C:97:VAL:HG12	3:C:98:VAL:N	2.23	0.53
4:D:123:LEU:HD23	4:D:149:THR:HG21	1.90	0.53
7:G:78:VAL:HG12	7:G:79:PHE:H	1.74	0.53
8:H:84:ALA:C	8:H:86:ASP:N	2.60	0.53
9:I:103:CYS:HB3	9:I:106:CYS:SG	2.48	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1079:MET:HE3	1:A:1098:VAL:HG22	1.90	0.53
1:A:1148:ILE:O	1:A:1149:ALA:HB2	2.09	0.53
1:A:1299:VAL:HG12	1:A:1300:LYS:H	1.74	0.53
1:A:135:PHE:C	1:A:137:ALA:N	2.60	0.53
1:A:567:LYS:CB	1:A:568:PRO:HD2	2.38	0.53
1:A:708:MET:SD	1:A:1091:SER:OG	2.66	0.53
1:A:720:ARG:O	1:A:724:GLU:HB2	2.09	0.53
1:A:63:ARG:CA	1:A:74:MET:SD	2.89	0.53
2:B:1010:LEU:HD12	2:B:1011:ILE:N	2.23	0.53
2:B:1032:SER:C	2:B:1034:VAL:H	2.12	0.53
2:B:1187:ASN:O	2:B:1188:LYS:CB	2.56	0.53
3:C:88:CYS:SG	3:C:91:HIS:C	2.87	0.53
4:D:129:LEU:O	4:D:132:GLN:HB2	2.08	0.53
4:D:14:ARG:O	4:D:16:LYS:N	2.41	0.53
11:K:53:ASP:HB3	11:K:56:VAL:CG2	2.39	0.53
1:A:1396:ALA:O	1:A:1399:ARG:N	2.41	0.53
1:A:503:GLN:HE21	6:F:90:ARG:NH2	2.02	0.53
1:A:523:ILE:HG22	1:A:528:LEU:HB2	1.88	0.53
1:A:867:ILE:HG22	1:A:871:ASP:N	2.24	0.53
2:B:125:SER:HA	2:B:171:PRO:HA	1.89	0.53
2:B:214:ALA:HB3	2:B:498:THR:HA	1.90	0.53
3:C:112:ASN:HB3	3:C:114:TYR:CE1	2.44	0.53
3:C:144:ILE:O	3:C:145:CYS:HB2	2.08	0.53
9:I:61:ASP:C	9:I:63:GLY:H	2.12	0.53
1:A:1086:PHE:O	1:A:1087:ALA:C	2.47	0.53
1:A:1385:THR:O	1:A:1387:HIS:N	2.42	0.53
1:A:151:ASP:OD1	1:A:163:SER:HB3	2.09	0.53
1:A:303:TYR:CE1	1:A:325:ILE:HD11	2.43	0.53
1:A:372:LYS:HA	1:A:435:HIS:ND1	2.24	0.53
2:B:31:TRP:O	2:B:34:ILE:N	2.42	0.53
2:B:39:ARG:HG2	2:B:39:ARG:HH11	1.73	0.53
2:B:551:PRO:C	2:B:553:PRO:HD2	2.29	0.53
3:C:33:LEU:HG	3:C:37:MET:CE	2.38	0.53
5:E:154:ILE:O	5:E:196:VAL:HA	2.09	0.53
7:G:128:PRO:O	7:G:138:THR:HG23	2.09	0.53
1:A:511:ILE:O	1:A:519:PRO:HA	2.08	0.53
1:A:587:HIS:HD2	1:A:969:GLN:CG	2.19	0.53
2:B:167:ILE:HG22	2:B:453:ILE:HD12	1.91	0.53
2:B:225:VAL:HA	2:B:237:VAL:O	2.08	0.53
2:B:37:PHE:HE2	2:B:542:MET:CA	2.17	0.53
3:C:51:VAL:HG22	3:C:155:LEU:CD2	2.39	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:196:PRO:C	4:D:198:LEU:H	2.11	0.53
7:G:123:ALA:C	7:G:125:SER:N	2.63	0.53
8:H:6:PHE:O	8:H:58:THR:HA	2.08	0.53
9:I:106:CYS:SG	9:I:107:SER:N	2.82	0.53
10:J:57:ILE:O	10:J:60:PHE:HB2	2.09	0.53
13:S:231:CYS:CA	13:S:232:ASP:CA	2.86	0.53
1:A:1036:ARG:HH11	1:A:1036:ARG:HG2	1.74	0.53
1:A:1097:GLY:O	1:A:1100:ARG:HB3	2.09	0.53
1:A:47:ARG:NH1	1:A:254:GLU:HB3	2.06	0.53
1:A:317:LYS:O	1:A:318:SER:CB	2.57	0.53
1:A:84:ILE:HG22	1:A:239:LEU:O	2.08	0.53
2:B:100:PRO:HD2	2:B:180:TYR:CE1	2.43	0.53
2:B:273:LEU:HD21	2:B:360:PHE:CE1	2.44	0.53
2:B:856:PHE:N	2:B:856:PHE:HD1	2.06	0.53
10:J:48:ARG:HE	10:J:49:MET:HE2	1.73	0.53
11:K:49:GLU:OE2	11:K:97:LYS:HE3	2.09	0.53
1:A:231:PRO:HA	1:A:234:MET:HE2	1.91	0.53
1:A:785:PRO:HG2	2:B:703:ILE:HD12	1.91	0.53
1:A:823:GLY:O	1:A:825:ILE:N	2.41	0.53
1:A:898:ARG:HD3	1:A:933:TYR:CD1	2.45	0.53
2:B:298:LEU:CD2	2:B:298:LEU:N	2.72	0.53
2:B:906:SER:O	2:B:941:LEU:HD23	2.09	0.53
3:C:35:ARG:HH11	11:K:41:THR:CA	2.22	0.53
4:D:49:ALA:HB1	4:D:178:ALA:HB2	1.91	0.53
5:E:161:LYS:C	5:E:163:GLU:N	2.61	0.53
13:S:258:GLY:O	13:S:259:ALA:C	2.46	0.53
1:A:106:VAL:HA	1:A:114:LEU:HD21	1.90	0.52
2:B:562:GLY:HA3	2:B:590:HIS:ND1	2.24	0.52
2:B:806:THR:HG22	2:B:808:ALA:N	2.22	0.52
3:C:133:ILE:HD11	3:C:237:SER:CA	2.24	0.52
5:E:7:ARG:O	5:E:9:ILE:N	2.42	0.52
7:G:25:TYR:O	7:G:28:THR:HB	2.09	0.52
10:J:1:MET:HE2	10:J:60:PHE:HE2	1.74	0.52
1:A:823:GLY:HA3	13:S:285:GLN:HB2	1.90	0.52
1:A:1011:GLN:O	1:A:1015:VAL:HG23	2.09	0.52
1:A:1397:LEU:HA	1:A:1400:CYS:HB3	1.90	0.52
1:A:262:LEU:HD22	1:A:303:TYR:HE1	1.73	0.52
1:A:49:LYS:HZ2	1:A:60:SER:HA	1.72	0.52
1:A:825:ILE:C	1:A:827:THR:N	2.61	0.52
1:A:964:ILE:O	1:A:968:GLN:HG2	2.09	0.52
2:B:1115:THR:HG22	2:B:1117:GLN:HG3	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1166:CYS:O	2:B:1166:CYS:SG	2.68	0.52
2:B:323:VAL:O	2:B:323:VAL:HG12	2.09	0.52
2:B:373:ARG:HA	2:B:566:LEU:HD23	1.91	0.52
2:B:789:MET:HE2	2:B:965:LYS:O	2.09	0.52
5:E:124:VAL:HB	5:E:125:PRO:HD3	1.92	0.52
6:F:111:LEU:C	6:F:113:GLY:N	2.62	0.52
8:H:17:PRO:HB3	8:H:24:CYS:SG	2.49	0.52
1:A:1114:PRO:O	1:A:1311:VAL:CG2	2.58	0.52
1:A:583:PRO:O	1:A:610:GLY:HA3	2.10	0.52
1:A:751:SER:O	1:A:752:LYS:HG2	2.09	0.52
1:A:808:LEU:H	1:A:808:LEU:HD12	1.74	0.52
2:B:347:LYS:HG3	2:B:348:ARG:H	1.74	0.52
2:B:257:LYS:O	2:B:385:LEU:HD21	2.08	0.52
2:B:401:PHE:HB2	2:B:517:THR:OG1	2.10	0.52
2:B:558:LEU:C	2:B:560:GLU:H	2.12	0.52
2:B:644:GLU:C	2:B:646:LEU:H	2.13	0.52
2:B:901:PRO:O	2:B:903:VAL:N	2.41	0.52
3:C:9:LYS:O	3:C:10:ILE:O	2.26	0.52
3:C:263:THR:C	3:C:265:MET:N	2.63	0.52
3:C:61:GLU:HA	3:C:64:ALA:HB3	1.91	0.52
5:E:147:HIS:CD2	5:E:149:LEU:H	2.27	0.52
5:E:78:LEU:HD23	5:E:78:LEU:C	2.30	0.52
5:E:7:ARG:HG3	5:E:8:ASN:H	1.73	0.52
7:G:17:PHE:N	7:G:17:PHE:CD2	2.76	0.52
11:K:31:VAL:O	11:K:74:ARG:HA	2.10	0.52
1:A:14:VAL:HG23	1:A:1432:GLN:HE22	1.75	0.52
1:A:326:ARG:HG2	1:A:327:ALA:N	2.24	0.52
1:A:477:PRO:CG	1:A:521:MET:HG2	2.39	0.52
1:A:53:LEU:HD23	1:A:54:ASN:HB3	1.91	0.52
1:A:808:LEU:HD21	1:A:816:HIS:CD2	2.44	0.52
1:A:853:ASP:O	1:A:854:ASN:HB2	2.09	0.52
1:A:864:ILE:O	1:A:865:GLN:CG	2.50	0.52
2:B:205:ILE:O	2:B:206:ASN:C	2.47	0.52
2:B:376:PHE:CE2	2:B:569:TYR:HD2	2.28	0.52
2:B:57:TYR:N	2:B:57:TYR:HD1	2.06	0.52
3:C:239:PRO:O	3:C:240:VAL:C	2.46	0.52
3:C:31:ASN:O	3:C:34:ARG:N	2.43	0.52
3:C:99:LEU:HD12	3:C:118:LEU:HD13	1.91	0.52
4:D:185:CYS:HB3	4:D:211:LEU:CD1	2.39	0.52
7:G:109:PHE:CG	7:G:110:VAL:N	2.78	0.52
7:G:146:LYS:NZ	7:G:165:GLU:OE2	2.38	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:18:PHE:CZ	7:G:68:ALA:HB2	2.44	0.52
9:I:68:LEU:HB3	9:I:84:VAL:HG23	1.90	0.52
10:J:3:VAL:HG21	10:J:18:TRP:CG	2.43	0.52
1:A:1310:GLY:O	1:A:1311:VAL:HG23	2.08	0.52
1:A:514:PRO:O	1:A:875:ALA:HB1	2.08	0.52
1:A:877:HIS:O	1:A:878:ILE:HG12	2.09	0.52
2:B:212:LEU:HD21	2:B:466:TRP:HH2	1.74	0.52
2:B:210:LYS:HD2	2:B:481:GLN:O	2.09	0.52
2:B:782:LEU:CD1	2:B:788:ARG:HH11	2.23	0.52
4:D:198:LEU:O	4:D:200:ASN:N	2.42	0.52
5:E:212:ARG:HH11	5:E:212:ARG:HG3	1.75	0.52
1:A:1394:THR:O	1:A:1399:ARG:NE	2.38	0.52
1:A:1406:VAL:CG1	1:A:1410:PHE:CE1	2.90	0.52
1:A:316:GLN:O	1:A:317:LYS:C	2.47	0.52
1:A:688:LYS:C	1:A:690:VAL:N	2.61	0.52
1:A:695:LYS:C	1:A:697:ALA:H	2.11	0.52
1:A:744:LYS:HG2	1:A:748:MET:HE3	1.91	0.52
1:A:412:ARG:NH2	2:B:1108:ARG:HH12	2.07	0.52
2:B:225:VAL:HG22	2:B:396:ASP:OD2	2.10	0.52
2:B:360:PHE:O	2:B:361:LEU:C	2.47	0.52
2:B:522:VAL:CG1	2:B:523:CYS:N	2.71	0.52
3:C:215:GLU:O	3:C:217:ASP:N	2.43	0.52
3:C:99:LEU:HD23	3:C:99:LEU:N	2.23	0.52
1:A:866:PHE:CD2	5:E:168:TYR:CE1	2.98	0.52
9:I:100:PHE:CD1	9:I:100:PHE:N	2.78	0.52
1:A:1073:GLY:HA2	1:A:1076:ALA:HB3	1.91	0.52
2:B:401:PHE:HD2	2:B:521:LEU:HD12	1.75	0.52
2:B:431:TYR:CZ	2:B:447:ALA:HB2	2.44	0.52
7:G:143:ILE:CG2	7:G:144:ARG:N	2.73	0.52
8:H:59:ILE:O	8:H:60:ALA:HB3	2.10	0.52
1:A:1088:GLY:O	1:A:1089:VAL:HG23	2.09	0.52
1:A:1213:GLY:O	1:A:1216:ILE:N	2.42	0.52
2:B:457:LEU:O	2:B:461:LEU:HD12	2.10	0.52
2:B:49:ASP:HA	2:B:52:ASN:HD22	1.75	0.52
2:B:857:ARG:NH2	2:B:942:ARG:NH1	2.57	0.52
3:C:236:GLY:C	3:C:238:ILE:H	2.13	0.52
3:C:58:LEU:N	3:C:58:LEU:HD22	2.25	0.52
5:E:168:TYR:CB	5:E:170:LEU:HG	2.40	0.52
1:A:1444:MET:O	6:F:132:LEU:HA	2.10	0.52
1:A:553:VAL:HG22	1:A:652:VAL:HG22	1.92	0.52
2:B:1045:SER:O	2:B:1046:PRO:O	2.27	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:223:VAL:CG1	2:B:381:MET:HG2	2.40	0.52
1:A:785:PRO:CG	2:B:703:ILE:HD12	2.40	0.52
2:B:865:LYS:HE2	2:B:871:THR:OG1	2.10	0.52
2:B:870:ILE:CG2	2:B:917:PRO:HG2	2.40	0.52
3:C:31:ASN:OD1	3:C:34:ARG:HD3	2.10	0.52
5:E:55:ARG:C	5:E:57:MET:N	2.63	0.52
10:J:55:ASP:OD2	10:J:58:GLU:HG2	2.10	0.52
12:L:28:LYS:HB2	12:L:39:SER:HA	1.91	0.52
1:A:1101:LEU:HB2	1:A:1355:VAL:HG11	1.91	0.52
1:A:1377:THR:O	1:A:1379:GLY:N	2.42	0.52
1:A:1443:VAL:C	1:A:1444:MET:HG3	2.30	0.52
1:A:18:GLN:HB3	2:B:1215:ARG:HG3	1.92	0.52
1:A:55:ASP:N	1:A:56:PRO:CD	2.73	0.52
1:A:898:ARG:HD3	1:A:933:TYR:CE1	2.45	0.52
2:B:1147:LEU:O	2:B:1148:LYS:C	2.45	0.52
2:B:508:LEU:O	2:B:510:LYS:N	2.42	0.52
2:B:57:TYR:O	2:B:59:LEU:N	2.42	0.52
2:B:640:VAL:HG23	2:B:740:HIS:HA	1.92	0.52
8:H:89:LEU:C	8:H:91:ASP:H	2.12	0.52
1:A:321:PRO:O	1:A:322:VAL:CB	2.57	0.51
1:A:35:ILE:O	1:A:35:ILE:HG22	2.11	0.51
1:A:841:LEU:O	1:A:845:LEU:HG	2.10	0.51
1:A:351:THR:HG21	2:B:1103:ILE:HG13	1.91	0.51
5:E:161:LYS:C	5:E:163:GLU:H	2.14	0.51
5:E:92:THR:O	5:E:95:THR:HB	2.10	0.51
13:S:235:ASP:CA	13:S:242:LYS:HG3	2.38	0.51
1:A:675:THR:O	1:A:679:ILE:HG13	2.11	0.51
1:A:725:ALA:O	1:A:729:ALA:N	2.42	0.51
1:A:856:THR:HB	1:A:865:GLN:HB2	1.93	0.51
2:B:1032:SER:C	2:B:1034:VAL:N	2.64	0.51
2:B:1034:VAL:HG23	2:B:1059:LEU:CD1	2.40	0.51
2:B:1082:MET:O	3:C:189:THR:HG23	2.10	0.51
2:B:54:PHE:CE1	2:B:414:ALA:HA	2.42	0.51
2:B:508:LEU:HB2	2:B:510:LYS:CB	2.40	0.51
2:B:758:PHE:CE2	2:B:1044:ALA:CA	2.92	0.51
3:C:104:PHE:HD2	3:C:105:GLY:H	1.56	0.51
4:D:134:THR:HG22	4:D:136:GLY:H	1.75	0.51
9:I:54:GLU:O	9:I:100:PHE:CE2	2.63	0.51
12:L:36:SER:O	12:L:37:LYS:C	2.48	0.51
12:L:38:LEU:HG	12:L:39:SER:N	2.26	0.51
1:A:1029:ARG:NH1	1:A:1029:ARG:CG	2.70	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1148:ILE:O	1:A:1148:ILE:CG2	2.59	0.51
1:A:1325:THR:CG2	1:A:1326:ARG:HG3	2.40	0.51
1:A:348:SER:HB2	2:B:1128:LEU:HB2	1.90	0.51
1:A:50:ILE:C	1:A:52:GLY:N	2.62	0.51
1:A:648:ASN:O	1:A:649:ILE:C	2.47	0.51
2:B:758:PHE:CE1	2:B:1027:ILE:CG2	2.94	0.51
2:B:62:ILE:HG23	2:B:418:LYS:HG2	1.92	0.51
2:B:879:ARG:O	2:B:880:THR:CB	2.58	0.51
3:C:31:ASN:O	3:C:34:ARG:HB3	2.10	0.51
9:I:100:PHE:N	9:I:100:PHE:HD1	2.08	0.51
11:K:65:HIS:CD2	11:K:66:PRO:HD2	2.46	0.51
11:K:67:PHE:O	11:K:68:PHE:HD2	1.93	0.51
12:L:25:ALA:O	12:L:26:THR:HB	2.10	0.51
1:A:1005:GLU:O	1:A:1006:ILE:C	2.49	0.51
1:A:1242:VAL:HG12	1:A:1243:VAL:N	2.25	0.51
1:A:602:ASP:OD2	1:A:616:VAL:HG23	2.11	0.51
1:A:898:ARG:HB2	1:A:933:TYR:HE1	1.75	0.51
2:B:298:LEU:N	2:B:298:LEU:HD22	2.24	0.51
2:B:38:PHE:CD1	2:B:811:TYR:CD2	2.98	0.51
2:B:46:GLN:CG	2:B:47:GLN:H	2.22	0.51
3:C:44:LEU:HB2	3:C:77:ILE:HD11	1.92	0.51
3:C:80:LEU:CD1	3:C:95:CYS:HA	2.40	0.51
8:H:62:SER:O	8:H:63:LEU:C	2.48	0.51
9:I:95:THR:HG22	9:I:96:SER:N	2.25	0.51
11:K:87:LEU:O	11:K:87:LEU:HD12	2.09	0.51
1:A:1134:ILE:O	1:A:1135:ARG:C	2.49	0.51
1:A:56:PRO:O	1:A:57:ARG:CG	2.57	0.51
1:A:78:PRO:HA	2:B:1201:LYS:HZ1	1.75	0.51
2:B:525:ALA:O	2:B:768:THR:HG23	2.11	0.51
2:B:843:GLN:O	2:B:846:ILE:HB	2.11	0.51
3:C:51:VAL:HG22	3:C:155:LEU:HD21	1.93	0.51
5:E:124:VAL:HG13	5:E:132:ILE:CB	2.39	0.51
1:A:1339:LEU:HD13	5:E:147:HIS:CD2	2.45	0.51
7:G:123:ALA:O	7:G:125:SER:N	2.43	0.51
8:H:143:LEU:N	8:H:143:LEU:HD12	2.25	0.51
11:K:35:PHE:CD1	11:K:35:PHE:N	2.79	0.51
1:A:1369:ALA:O	1:A:1372:VAL:HG12	2.11	0.51
1:A:516:SER:O	1:A:517:ASN:C	2.47	0.51
1:A:901:LEU:HD22	1:A:919:ILE:HG21	1.91	0.51
1:A:986:ILE:CD1	1:A:1032:LEU:HD11	2.40	0.51
2:B:97:VAL:HG12	2:B:178:ASN:HD21	1.74	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:424:LEU:HD22	2:B:453:ILE:HD11	1.92	0.51
2:B:446:LEU:HD23	2:B:446:LEU:N	2.26	0.51
2:B:44:VAL:O	2:B:45:SER:C	2.49	0.51
2:B:496:ARG:HH12	2:B:539:LEU:HB2	1.74	0.51
2:B:59:LEU:HD12	2:B:417:PHE:CE2	2.46	0.51
2:B:708:GLU:HG3	2:B:709:ASP:H	1.76	0.51
3:C:213:PRO:O	3:C:214:ASN:CB	2.55	0.51
5:E:144:ILE:HG13	5:E:145:THR:N	2.26	0.51
10:J:60:PHE:O	10:J:63:TYR:HD1	1.94	0.51
11:K:50:LEU:HD11	11:K:75:ILE:HD13	1.92	0.51
1:A:877:HIS:CG	1:A:1056:SER:HA	2.46	0.51
1:A:1090:ALA:O	1:A:1091:SER:OG	2.28	0.51
1:A:1323:ASP:C	1:A:1325:THR:H	2.14	0.51
1:A:311:GLN:O	1:A:312:PRO:C	2.49	0.51
1:A:470:LEU:CD2	1:A:487:MET:HE3	2.41	0.51
1:A:770:VAL:O	1:A:771:GLU:HB2	2.11	0.51
1:A:93:VAL:CG2	1:A:301:ALA:HA	2.40	0.51
2:B:1065:GLN:NE2	2:B:1067:ARG:HG2	2.25	0.51
2:B:102:VAL:HG22	2:B:112:LEU:HD22	1.92	0.51
2:B:726:ALA:HB1	2:B:1051:THR:HG21	1.91	0.51
5:E:79:TRP:HE1	5:E:81:GLU:HB2	1.76	0.51
9:I:43:VAL:HG12	9:I:43:VAL:O	2.09	0.51
1:A:1191:TRP:HD1	1:A:1256:GLU:HB2	1.76	0.51
1:A:1349:TYR:CD2	1:A:1349:TYR:C	2.84	0.51
1:A:1372:VAL:HG12	1:A:1373:ASP:N	2.25	0.51
1:A:34:LYS:HG2	1:A:36:ARG:NH2	2.26	0.51
1:A:899:VAL:HG22	1:A:908:LEU:HD21	1.93	0.51
2:B:1162:ILE:HG22	2:B:1163:CYS:N	2.25	0.51
2:B:575:PRO:C	2:B:577:ALA:H	2.13	0.51
1:A:472:LEU:CD1	2:B:835:GLN:NE2	2.69	0.51
2:B:857:ARG:HG2	2:B:858:SER:N	2.24	0.51
3:C:60:ASP:OD2	12:L:60:ARG:NH2	2.44	0.51
7:G:6:ASP:HB3	7:G:73:LYS:NZ	2.25	0.51
8:H:40:LEU:HG	8:H:41:ASP:O	2.11	0.51
10:J:5:VAL:O	10:J:6:ARG:O	2.28	0.51
1:A:1030:ARG:CG	1:A:1034:GLU:OE2	2.59	0.51
1:A:14:VAL:H	1:A:1432:GLN:NE2	1.89	0.51
1:A:172:PRO:HB3	1:A:185:TRP:CE2	2.46	0.51
1:A:391:LEU:O	1:A:392:VAL:C	2.49	0.51
1:A:525:GLN:HB3	2:B:1015:HIS:HD2	1.74	0.51
1:A:556:TRP:O	1:A:558:GLY:N	2.44	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:705:LYS:C	1:A:707:GLY:N	2.62	0.51
1:A:798:GLY:HA2	1:A:815:PHE:HD1	1.75	0.51
1:A:852:TYR:CD2	1:A:1060:PRO:HB2	2.45	0.51
1:A:92:HIS:O	1:A:93:VAL:C	2.48	0.51
2:B:1202:LEU:O	2:B:1203:LEU:C	2.49	0.51
2:B:209:GLU:CD	2:B:485:ARG:HE	2.14	0.51
2:B:334:ILE:O	2:B:334:ILE:HG22	2.09	0.51
2:B:429:PHE:HA	2:B:432:MET:CE	2.40	0.51
2:B:69:LEU:HD22	2:B:429:PHE:HE1	1.74	0.51
5:E:100:ILE:CG2	5:E:105:PHE:HB2	2.40	0.51
7:G:114:LEU:HG	7:G:162:SER:HB3	1.93	0.51
12:L:49:LYS:O	12:L:50:ASP:CB	2.59	0.51
1:A:1230:GLU:C	1:A:1232:ASN:H	2.14	0.51
1:A:1277:GLU:O	1:A:1278:ASN:HB2	2.11	0.51
1:A:1290:LYS:O	1:A:1291:VAL:HG23	2.11	0.51
1:A:1364:ASN:O	1:A:1365:TYR:C	2.49	0.51
1:A:335:ARG:NE	1:A:339:ASN:HD22	2.09	0.51
1:A:384:ASN:O	1:A:385:ILE:C	2.49	0.51
1:A:474:VAL:HG22	1:A:474:VAL:O	2.10	0.51
2:B:1102:LYS:O	2:B:1103:ILE:O	2.29	0.51
2:B:798:TYR:CD1	10:J:4:PRO:HG3	2.45	0.51
2:B:911:ILE:HG22	2:B:912:ILE:HG13	1.93	0.51
2:B:936:ASP:OD1	2:B:938:SER:N	2.42	0.51
3:C:35:ARG:HD3	11:K:41:THR:HA	1.93	0.51
1:A:496:GLU:OE1	7:G:64:THR:HA	2.11	0.51
8:H:25:ARG:HA	8:H:41:ASP:HA	1.93	0.51
10:J:46:CYS:O	10:J:49:MET:N	2.44	0.51
10:J:7:CYS:CA	10:J:49:MET:HE3	2.40	0.51
1:A:1168:GLU:OE1	13:S:208:SER:CA	2.59	0.51
1:A:1167:GLU:O	1:A:1169:ILE:N	2.44	0.50
1:A:167:CYS:SG	1:A:167:CYS:O	2.69	0.50
1:A:42:ASP:C	1:A:44:THR:N	2.64	0.50
1:A:774:ARG:O	1:A:775:ILE:C	2.49	0.50
1:A:992:ASP:O	1:A:995:GLU:HB2	2.11	0.50
2:B:212:LEU:HD21	2:B:466:TRP:CH2	2.47	0.50
2:B:763:GLN:C	2:B:765:PRO:HD2	2.32	0.50
2:B:197:PHE:CZ	2:B:816:GLU:HG2	2.46	0.50
3:C:168:ALA:O	3:C:170:TRP:N	2.44	0.50
4:D:47:LEU:HD13	4:D:48:ILE:N	2.25	0.50
4:D:52:LEU:C	4:D:54:GLU:H	2.14	0.50
5:E:10:SER:O	5:E:13:TRP:HB3	2.10	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:49:LEU:N	7:G:49:LEU:HD23	2.25	0.50
9:I:58:VAL:HG12	9:I:60:GLN:N	2.20	0.50
12:L:30:ILE:HG22	12:L:31:CYS:O	2.10	0.50
1:A:115:LEU:HB2	1:A:122:MET:CE	2.40	0.50
1:A:1208:THR:O	1:A:1209:MET:C	2.48	0.50
1:A:1385:THR:HG22	1:A:1386:ARG:N	2.26	0.50
1:A:996:ASN:HA	1:A:998:LEU:HD12	1.92	0.50
2:B:242:SER:HB2	2:B:362:PRO:HG2	1.93	0.50
2:B:546:SER:HA	2:B:612:GLU:OE2	2.11	0.50
2:B:488:TYR:HE2	2:B:813:LYS:HB2	1.75	0.50
4:D:51:ASN:O	4:D:52:LEU:C	2.48	0.50
2:B:377:PHE:O	2:B:378:LEU:C	2.50	0.50
2:B:240:ILE:HG21	2:B:381:MET:HE1	1.92	0.50
2:B:510:LYS:O	2:B:513:GLN:HB2	2.11	0.50
7:G:70:PHE:N	7:G:70:PHE:CD1	2.79	0.50
10:J:52:THR:O	10:J:53:HIS:O	2.30	0.50
11:K:68:PHE:N	11:K:68:PHE:CD2	2.77	0.50
1:A:1038:THR:O	1:A:1039:LYS:C	2.49	0.50
1:A:1199:ARG:HG3	1:A:1236:LEU:HD11	1.93	0.50
1:A:1424:VAL:CG2	1:A:1436:ILE:HD11	2.32	0.50
1:A:335:ARG:HA	1:A:339:ASN:ND2	2.26	0.50
1:A:406:ILE:HG22	1:A:411:ASP:O	2.11	0.50
1:A:519:PRO:HG3	1:A:625:SER:O	2.12	0.50
1:A:858:ASN:HD21	1:A:860:LEU:HB2	1.75	0.50
2:B:1145:SER:C	2:B:1147:LEU:H	2.14	0.50
2:B:269:ILE:HG22	2:B:282:ILE:HG23	1.94	0.50
2:B:303:TYR:N	2:B:303:TYR:CD2	2.80	0.50
2:B:996:ARG:HH22	3:C:175:ALA:HA	1.75	0.50
3:C:239:PRO:HB2	3:C:241:ASP:OD1	2.12	0.50
3:C:33:LEU:HG	3:C:37:MET:HE2	1.92	0.50
3:C:53:THR:O	3:C:153:LEU:HA	2.10	0.50
3:C:88:CYS:O	3:C:88:CYS:SG	2.70	0.50
5:E:42:PHE:O	5:E:43:LYS:C	2.50	0.50
6:F:119:ARG:HH11	6:F:119:ARG:CG	2.25	0.50
9:I:58:VAL:HG13	9:I:62:ILE:HD12	1.93	0.50
10:J:64:ASN:HB3	10:J:65:PRO:HD2	1.84	0.50
1:A:590:ARG:O	1:A:591:PHE:HB2	2.12	0.50
1:A:864:ILE:HG22	1:A:864:ILE:O	2.10	0.50
1:A:902:LEU:HG	1:A:926:GLN:HG3	1.93	0.50
2:B:1029:CYS:SG	2:B:1086:PHE:CE2	3.05	0.50
2:B:1074:ASN:O	2:B:1078:GLY:N	2.44	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:48:LEU:O	2:B:51:PHE:N	2.44	0.50
2:B:681:TRP:C	2:B:683:SER:H	2.14	0.50
2:B:809:MET:O	2:B:812:LEU:N	2.37	0.50
1:A:472:LEU:CD1	2:B:835:GLN:CD	2.79	0.50
2:B:839:MET:N	2:B:989:THR:O	2.44	0.50
3:C:235:VAL:HG13	10:J:13:VAL:CG2	2.40	0.50
3:C:43:THR:CG2	3:C:44:LEU:N	2.74	0.50
10:J:1:MET:HE2	10:J:60:PHE:CE2	2.46	0.50
1:A:1308:THR:HG23	1:A:1309:ASP:N	2.26	0.50
1:A:1341:ILE:O	1:A:1344:GLY:N	2.45	0.50
1:A:1344:GLY:O	1:A:1345:ARG:C	2.50	0.50
1:A:148:CYS:O	1:A:168:GLY:HA2	2.12	0.50
1:A:50:ILE:O	1:A:52:GLY:N	2.39	0.50
2:B:758:PHE:HE2	2:B:1044:ALA:HA	1.73	0.50
2:B:1149:GLU:O	2:B:1150:ARG:C	2.47	0.50
4:D:26:THR:O	4:D:28:GLN:HG3	2.11	0.50
7:G:91:VAL:HA	7:G:101:VAL:HA	1.94	0.50
10:J:1:MET:HA	10:J:57:ILE:H	1.76	0.50
10:J:21:TYR:O	10:J:23:ASN:N	2.44	0.50
1:A:547:LEU:HD22	11:K:58:PHE:CE1	2.46	0.50
1:A:1114:PRO:O	1:A:1311:VAL:HG21	2.11	0.50
1:A:1398:MET:HB2	1:A:1426:GLU:OE2	2.11	0.50
1:A:265:LYS:NZ	1:A:322:VAL:HG22	2.27	0.50
1:A:719:VAL:O	1:A:721:PHE:N	2.45	0.50
1:A:744:LYS:HG2	1:A:748:MET:CE	2.41	0.50
2:B:851:PHE:CD2	2:B:1094:ARG:HB2	2.46	0.50
5:E:3:GLN:HG3	5:E:4:GLU:N	2.27	0.50
10:J:21:TYR:C	10:J:23:ASN:H	2.15	0.50
11:K:84:LYS:O	11:K:87:LEU:HB3	2.12	0.50
1:A:1053:PHE:O	1:A:1056:SER:N	2.44	0.50
1:A:1410:PHE:C	1:A:1412:ALA:H	2.15	0.50
1:A:208:LEU:HG	1:A:235:ILE:HG21	1.93	0.50
1:A:556:TRP:C	1:A:558:GLY:N	2.65	0.50
1:A:709:THR:CG2	1:A:712:GLU:H	2.23	0.50
2:B:1022:THR:HG23	2:B:1022:THR:O	2.12	0.50
2:B:1060:ARG:NH1	2:B:1060:ARG:HG2	2.27	0.50
1:A:22:PHE:CE1	2:B:1213:THR:HG22	2.47	0.50
2:B:196:PRO:HG2	2:B:197:PHE:H	1.77	0.50
2:B:376:PHE:HB3	2:B:586:TRP:CZ3	2.46	0.50
2:B:800:GLN:HB3	10:J:52:THR:CG2	2.35	0.50
2:B:980:PHE:CE2	2:B:1094:ARG:HG3	2.46	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:53:SER:HB3	4:D:152:SER:CB	2.42	0.50
5:E:7:ARG:C	5:E:9:ILE:N	2.65	0.50
6:F:127:GLU:O	6:F:129:LYS:HG3	2.12	0.50
1:A:1125:ALA:O	1:A:1127:ASP:N	2.45	0.50
1:A:1213:GLY:HA2	1:A:1216:ILE:CD1	2.42	0.50
1:A:12:ARG:CZ	2:B:1192:TYR:HE2	2.25	0.50
1:A:726:ARG:O	1:A:727:ASP:C	2.50	0.50
2:B:210:LYS:HE2	2:B:462:ALA:O	2.11	0.50
2:B:218:SER:O	2:B:219:ALA:O	2.29	0.50
2:B:578:THR:HA	2:B:622:LYS:HB3	1.94	0.50
2:B:806:THR:O	2:B:807:ARG:C	2.50	0.50
2:B:843:GLN:O	2:B:846:ILE:N	2.44	0.50
2:B:877:PRO:C	2:B:878:GLN:HG3	2.31	0.50
2:B:91:SER:OG	2:B:133:LYS:HB2	2.11	0.50
6:F:103:MET:O	6:F:104:ASN:HB2	2.11	0.50
8:H:81:PRO:HB3	8:H:82:PRO:HD2	1.92	0.50
12:L:28:LYS:HB2	12:L:39:SER:CA	2.42	0.50
12:L:60:ARG:HG2	12:L:61:THR:N	2.27	0.50
1:A:416:ARG:O	1:A:417:TYR:HD2	1.94	0.49
1:A:541:ILE:HD12	1:A:577:ILE:HD11	1.94	0.49
1:A:809:THR:OG1	1:A:812:GLU:HG3	2.12	0.49
1:A:853:ASP:C	1:A:853:ASP:OD1	2.51	0.49
1:A:863:VAL:HG12	1:A:865:GLN:H	1.76	0.49
2:B:984:HIS:CD2	2:B:1025:HIS:HB2	2.47	0.49
1:A:347:PHE:N	2:B:1107:ALA:HA	2.26	0.49
2:B:1131:GLY:O	2:B:1132:GLU:C	2.50	0.49
2:B:117:ALA:HA	2:B:122:LEU:HB2	1.94	0.49
2:B:763:GLN:HG2	2:B:765:PRO:CD	2.38	0.49
2:B:999:MET:HA	2:B:999:MET:CE	2.42	0.49
3:C:63:ILE:O	3:C:64:ALA:C	2.50	0.49
4:D:134:THR:CG2	4:D:135:GLY:N	2.75	0.49
6:F:93:ILE:O	6:F:94:LEU:C	2.49	0.49
7:G:96:GLN:HG3	7:G:97:HIS:HD2	1.76	0.49
8:H:93:TYR:N	8:H:93:TYR:CD1	2.80	0.49
3:C:84:ARG:NH2	11:K:11:LEU:HD21	2.27	0.49
1:A:1019:CYS:O	1:A:1022:LEU:N	2.45	0.49
1:A:1161:THR:O	1:A:1163:ILE:N	2.45	0.49
1:A:1364:ASN:HD22	1:A:1365:TYR:N	2.10	0.49
1:A:340:LEU:HD13	1:A:1429:ILE:HG23	1.93	0.49
1:A:14:VAL:CG2	1:A:1430:LEU:HD13	2.42	0.49
1:A:254:GLU:HB2	2:B:935:ARG:NH2	2.25	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:755:PHE:HA	1:A:758:ILE:HG13	1.94	0.49
1:A:989:GLY:O	1:A:992:ASP:N	2.44	0.49
2:B:215:GLN:OE1	2:B:215:GLN:HA	2.12	0.49
2:B:25:ILE:HG23	2:B:29:ASP:CB	2.42	0.49
2:B:314:LEU:O	2:B:317:CYS:HB3	2.12	0.49
2:B:459:TYR:CD2	2:B:459:TYR:C	2.85	0.49
2:B:526:GLU:HG2	2:B:538:ASN:HD22	1.77	0.49
2:B:850:LEU:HD12	2:B:851:PHE:H	1.77	0.49
3:C:143:LEU:HD21	3:C:146:LYS:HE2	1.94	0.49
3:C:86:CYS:SG	3:C:95:CYS:HB3	2.52	0.49
4:D:144:THR:OG1	7:G:105:PRO:HD3	2.12	0.49
4:D:48:ILE:HG21	7:G:4:ILE:CD1	2.41	0.49
6:F:72:LYS:HB2	6:F:142:SER:HB3	1.94	0.49
7:G:25:TYR:HE2	7:G:29:LYS:HD2	1.77	0.49
8:H:58:THR:HB	8:H:143:LEU:HD13	1.94	0.49
9:I:113:ASP:O	9:I:114:GLN:CG	2.61	0.49
13:S:269:PHE:HE2	13:S:306:TRP:CZ2	2.30	0.49
1:A:1041:ALA:O	1:A:1044:TRP:HB3	2.12	0.49
1:A:1048:ASN:HD22	1:A:1048:ASN:N	2.10	0.49
1:A:838:GLN:O	1:A:842:VAL:HG23	2.13	0.49
1:A:903:ASN:C	1:A:903:ASN:ND2	2.65	0.49
1:A:90:VAL:CG1	1:A:91:PHE:H	2.23	0.49
1:A:898:ARG:HB2	1:A:933:TYR:CE1	2.47	0.49
2:B:261:ARG:HH11	2:B:261:ARG:HB3	1.76	0.49
2:B:882:THR:HB	2:B:934:LYS:O	2.11	0.49
3:C:186:LEU:N	3:C:186:LEU:CD1	2.75	0.49
3:C:69:LEU:HD12	3:C:69:LEU:N	2.27	0.49
5:E:164:LEU:CD2	5:E:211:TYR:CD2	2.95	0.49
5:E:23:VAL:O	5:E:28:TYR:HB2	2.12	0.49
1:A:1127:ASP:O	1:A:1128:GLN:C	2.50	0.49
1:A:1285:MET:HG3	1:A:1307:GLU:OE2	2.12	0.49
1:A:24:PRO:HG2	1:A:25:GLU:OE2	2.11	0.49
1:A:564:ALA:HB2	1:A:576:GLN:OE1	2.12	0.49
1:A:717:ASN:O	1:A:721:PHE:CD1	2.66	0.49
1:A:874:ASP:N	1:A:1058:VAL:HG23	2.27	0.49
1:A:997:LEU:HB3	1:A:1053:PHE:CE2	2.47	0.49
2:B:1165:ILE:HG22	2:B:1185:CYS:HB3	1.94	0.49
2:B:247:GLY:C	2:B:249:ARG:H	2.16	0.49
2:B:583:ASN:HD21	2:B:628:THR:CB	2.13	0.49
2:B:563:MET:HA	2:B:589:VAL:O	2.13	0.49
5:E:124:VAL:CG1	5:E:132:ILE:HD12	2.37	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:4:PHE:CE1	9:I:13:MET:HE1	2.47	0.49
1:A:1360:GLY:HA3	13:S:306:TRP:HA	1.94	0.49
1:A:1444:MET:HG2	7:G:60:ARG:CA	2.40	0.49
1:A:470:LEU:HD11	1:A:482:PHE:CZ	2.46	0.49
1:A:472:LEU:HD13	2:B:835:GLN:CD	2.33	0.49
1:A:821:ARG:HA	1:A:824:LEU:HD12	1.95	0.49
1:A:979:SER:HG	1:A:980:ASP:H	1.58	0.49
2:B:1177:HIS:O	2:B:1179:GLN:N	2.44	0.49
2:B:175:ARG:HH11	2:B:175:ARG:HG2	1.77	0.49
2:B:642:ASP:HA	2:B:649:LYS:HA	1.95	0.49
2:B:526:GLU:CD	2:B:752:ALA:HB2	2.32	0.49
2:B:497:ARG:NH2	2:B:775:LYS:NZ	2.60	0.49
5:E:72:PHE:CD1	5:E:72:PHE:N	2.80	0.49
4:D:147:TYR:CZ	7:G:103:VAL:HG13	2.47	0.49
1:A:37:PHE:N	1:A:37:PHE:CD1	2.81	0.49
1:A:601:LYS:HB2	1:A:603:ASN:ND2	2.27	0.49
1:A:549:MET:HE1	1:A:656:TRP:HD1	1.78	0.49
1:A:869:GLY:O	1:A:870:GLU:HB2	2.11	0.49
2:B:351:TYR:CE1	2:B:355:ILE:HD11	2.47	0.49
3:C:73:GLN:HE21	3:C:74:SER:H	1.60	0.49
7:G:30:LEU:O	7:G:34:VAL:HG23	2.12	0.49
9:I:27:PHE:O	9:I:28:GLU:HB3	2.11	0.49
1:A:1090:ALA:O	1:A:1091:SER:CB	2.60	0.49
1:A:88:LYS:HE3	1:A:280:GLU:OE2	2.12	0.49
1:A:321:PRO:O	1:A:322:VAL:HB	2.13	0.49
1:A:387:ARG:O	1:A:390:GLN:HB3	2.13	0.49
1:A:809:THR:H	1:A:812:GLU:HB2	1.78	0.49
2:B:1002:THR:O	2:B:1005:GLY:N	2.32	0.49
2:B:1106:ARG:HD3	2:B:1126:GLY:O	2.12	0.49
2:B:54:PHE:O	2:B:59:LEU:HB2	2.12	0.49
2:B:693:ILE:HD11	2:B:740:HIS:NE2	2.27	0.49
2:B:757:PRO:O	2:B:758:PHE:HB2	2.13	0.49
2:B:899:ILE:HG22	2:B:900:ALA:H	1.75	0.49
4:D:127:ASP:O	4:D:131:GLU:HG3	2.13	0.49
4:D:56:ARG:NH2	4:D:155:ARG:HA	2.28	0.49
4:D:53:SER:O	4:D:57:LEU:HG	2.12	0.49
8:H:143:LEU:C	8:H:144:ILE:HG13	2.33	0.49
8:H:27:GLU:HA	8:H:38:LEU:O	2.12	0.49
9:I:13:MET:HG3	9:I:14:LEU:N	2.27	0.49
1:A:1086:PHE:HE2	13:S:261:ILE:CD1	2.24	0.49
1:A:3:GLY:O	1:A:4:GLN:O	2.31	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:626:ASN:O	1:A:628:GLY:N	2.42	0.49
1:A:711:ARG:HA	9:I:97:MET:HE1	1.95	0.49
1:A:877:HIS:C	1:A:878:ILE:HG13	2.33	0.49
2:B:1059:LEU:HD23	2:B:1065:GLN:O	2.12	0.49
1:A:433:GLU:OE2	2:B:1108:ARG:NH1	2.45	0.49
2:B:189:LEU:HD13	2:B:196:PRO:HA	1.94	0.49
2:B:247:GLY:H	2:B:418:LYS:NZ	2.10	0.49
2:B:361:LEU:N	2:B:362:PRO:CD	2.75	0.49
2:B:681:TRP:C	2:B:683:SER:N	2.66	0.49
2:B:910:VAL:CG1	2:B:911:ILE:N	2.76	0.49
2:B:97:VAL:CG1	2:B:178:ASN:ND2	2.74	0.49
4:D:170:THR:HG21	4:D:172:LEU:HG	1.94	0.49
4:D:173:HIS:O	4:D:177:VAL:HG23	2.13	0.49
12:L:31:CYS:HB3	12:L:35:SER:CA	2.42	0.49
1:A:1230:GLU:CD	13:S:201:ILE:CA	2.73	0.49
1:A:1161:THR:HG22	1:A:1163:ILE:HG13	1.94	0.49
1:A:1198:ASP:O	1:A:1202:MET:HG2	2.13	0.49
1:A:1342:GLU:HG3	5:E:198:ILE:HG21	1.95	0.49
1:A:154:SER:HB3	1:A:162:VAL:HG21	1.95	0.49
1:A:907:THR:CG2	1:A:908:LEU:N	2.75	0.49
2:B:1034:VAL:HG23	2:B:1059:LEU:HD12	1.95	0.49
2:B:234:ILE:HD12	2:B:234:ILE:N	2.27	0.49
2:B:446:LEU:O	2:B:447:ALA:CB	2.61	0.49
2:B:510:LYS:HG2	2:B:512:ARG:N	2.19	0.49
2:B:992:ILE:CG2	2:B:994:TYR:HE1	2.26	0.49
5:E:136:ASN:OD1	5:E:137:GLU:N	2.46	0.49
5:E:32:GLN:HG3	5:E:36:GLU:OE2	2.12	0.49
8:H:33:GLN:C	8:H:35:GLN:H	2.16	0.49
10:J:37:SER:OG	10:J:47:ARG:NH2	2.46	0.49
11:K:32:VAL:HG22	11:K:74:ARG:HG3	1.95	0.49
1:A:356:ASP:C	1:A:358:ASN:H	2.16	0.49
1:A:481:ASP:O	1:A:485:ASP:HB2	2.13	0.49
1:A:501:LEU:HD11	2:B:1146:PHE:CD2	2.48	0.49
2:B:594:ALA:CA	2:B:617:ARG:HH12	2.25	0.49
3:C:80:LEU:HD22	3:C:129:ILE:HD13	1.94	0.49
3:C:47:ASP:O	3:C:48:SER:HB2	2.13	0.49
5:E:25:ASP:C	5:E:27:GLY:N	2.63	0.49
8:H:142:LEU:C	8:H:143:LEU:HD12	2.33	0.49
1:A:618:GLU:CD	1:A:618:GLU:C	2.71	0.48
1:A:525:GLN:HB3	2:B:1015:HIS:CD2	2.48	0.48
2:B:1201:LYS:HE2	2:B:1205:GLN:CD	2.33	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:760:ASP:O	2:B:761:HIS:CD2	2.66	0.48
6:F:72:LYS:O	6:F:73:ALA:CB	2.61	0.48
7:G:101:VAL:CG1	7:G:102:GLN:N	2.76	0.48
1:A:1329:THR:O	1:A:1330:ASN:C	2.50	0.48
2:B:102:VAL:CG2	2:B:112:LEU:HD22	2.43	0.48
2:B:115:GLN:HG2	2:B:193:LYS:HB2	1.95	0.48
2:B:498:THR:HG22	2:B:537:LYS:H	1.78	0.48
2:B:811:TYR:N	2:B:811:TYR:CD1	2.80	0.48
2:B:845:SER:HB3	10:J:8:PHE:O	2.13	0.48
3:C:136:ASP:OD1	3:C:138:GLU:N	2.45	0.48
3:C:111:THR:O	3:C:147:LEU:HD23	2.12	0.48
3:C:168:ALA:C	3:C:170:TRP:H	2.17	0.48
5:E:17:ARG:O	5:E:20:LYS:HB2	2.13	0.48
1:A:852:TYR:CE1	6:F:136:ARG:HB3	2.48	0.48
7:G:15:PRO:O	7:G:18:PHE:HB2	2.12	0.48
12:L:30:ILE:CG2	12:L:31:CYS:N	2.75	0.48
1:A:1263:ILE:O	1:A:1263:ILE:HG22	2.14	0.48
1:A:1308:THR:O	1:A:1309:ASP:HB2	2.12	0.48
1:A:503:GLN:O	1:A:504:LEU:HD12	2.13	0.48
1:A:543:LEU:O	1:A:544:ASP:C	2.52	0.48
1:A:348:SER:HB2	2:B:1128:LEU:HD12	1.93	0.48
2:B:1208:MET:HA	2:B:1212:ILE:O	2.13	0.48
2:B:38:PHE:HD1	2:B:811:TYR:CD2	2.31	0.48
1:A:472:LEU:HD13	2:B:835:GLN:OE1	2.13	0.48
2:B:899:ILE:HG23	2:B:903:VAL:HG21	1.95	0.48
4:D:60:LYS:O	4:D:61:GLU:C	2.51	0.48
5:E:204:THR:HG23	5:E:205:SER:N	2.29	0.48
8:H:10:PHE:N	8:H:10:PHE:CD1	2.81	0.48
10:J:36:LEU:HB2	10:J:47:ARG:NH1	2.28	0.48
10:J:61:LEU:C	10:J:63:TYR:H	2.16	0.48
1:A:780:VAL:O	1:A:780:VAL:HG12	2.14	0.48
1:A:877:HIS:O	1:A:878:ILE:CG1	2.61	0.48
1:A:929:LEU:HD23	1:A:983:ILE:HG21	1.95	0.48
2:B:579:ARG:HG2	2:B:579:ARG:HH11	1.79	0.48
2:B:622:LYS:CE	9:I:59:VAL:HG22	2.41	0.48
2:B:616:ILE:N	2:B:625:LYS:O	2.37	0.48
2:B:760:ASP:OD1	2:B:1046:PRO:HA	2.12	0.48
2:B:976:ILE:O	2:B:990:ILE:HB	2.12	0.48
3:C:164:ALA:O	3:C:167:HIS:N	2.43	0.48
6:F:99:LEU:O	6:F:103:MET:HG2	2.14	0.48
10:J:3:VAL:HG12	10:J:4:PRO:N	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:58:PHE:HB3	11:K:76:GLN:HB3	1.96	0.48
13:S:254:TYR:C	13:S:256:ALA:H	2.17	0.48
13:S:274:CYS:O	13:S:276:GLU:HG3	2.13	0.48
1:A:1072:ILE:C	1:A:1075:PRO:HD2	2.33	0.48
1:A:1272:THR:C	1:A:1273:LEU:HD12	2.34	0.48
1:A:1335:ILE:HG23	1:A:1339:LEU:HD12	1.96	0.48
1:A:1372:VAL:HG12	1:A:1373:ASP:H	1.78	0.48
1:A:22:PHE:CD1	2:B:1213:THR:HG22	2.49	0.48
2:B:112:LEU:CD1	2:B:113:TYR:N	2.71	0.48
2:B:293:PRO:C	2:B:294:ASP:O	2.47	0.48
2:B:508:LEU:CA	2:B:510:LYS:H	2.24	0.48
2:B:658:ILE:HG22	2:B:659:ALA:N	2.28	0.48
2:B:806:THR:CG2	2:B:808:ALA:HB3	2.44	0.48
3:C:173:ALA:O	3:C:174:ALA:HB3	2.13	0.48
3:C:8:VAL:HG12	3:C:9:LYS:N	2.28	0.48
4:D:190:GLU:O	4:D:194:LEU:HG	2.14	0.48
4:D:208:GLU:O	4:D:212:LYS:HG3	2.13	0.48
5:E:163:GLU:O	5:E:164:LEU:C	2.51	0.48
5:E:16:PHE:CE2	5:E:20:LYS:HE2	2.48	0.48
7:G:145:VAL:CG1	7:G:146:LYS:H	2.27	0.48
7:G:6:ASP:C	7:G:7:LEU:HD23	2.33	0.48
11:K:47:ARG:HH11	11:K:47:ARG:CB	2.23	0.48
1:A:1029:ARG:HG3	1:A:1029:ARG:NH1	2.17	0.48
1:A:1051:ALA:O	1:A:1054:LEU:N	2.47	0.48
1:A:122:MET:O	1:A:123:ARG:C	2.51	0.48
1:A:228:PHE:CD2	1:A:228:PHE:N	2.81	0.48
1:A:817:ALA:O	1:A:818:MET:C	2.52	0.48
1:A:863:VAL:HG12	1:A:864:ILE:H	1.77	0.48
1:A:873:MET:HG2	1:A:957:PRO:HG3	1.96	0.48
1:A:896:ARG:CD	1:A:897:TYR:HE1	2.12	0.48
1:A:814:PHE:CD1	2:B:519:TRP:HE3	2.32	0.48
2:B:583:ASN:OD1	2:B:628:THR:N	2.47	0.48
2:B:976:ILE:CD1	2:B:992:ILE:HA	2.41	0.48
3:C:116:LYS:HD3	3:C:140:ASN:HB3	1.95	0.48
3:C:263:THR:O	3:C:265:MET:N	2.47	0.48
8:H:83:GLN:O	8:H:85:GLY:N	2.44	0.48
2:B:992:ILE:HD11	11:K:66:PRO:HB2	1.96	0.48
11:K:65:HIS:CD2	11:K:66:PRO:N	2.81	0.48
1:A:1057:VAL:CG1	1:A:1058:VAL:N	2.76	0.48
1:A:1438:THR:HB	2:B:1144:ALA:HB3	1.96	0.48
1:A:335:ARG:NH1	2:B:1206:GLU:CD	2.65	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:42:ASP:OD1	1:A:45:GLN:HA	2.13	0.48
1:A:821:ARG:CB	1:A:821:ARG:HH11	2.25	0.48
1:A:939:ASP:O	1:A:940:ARG:C	2.50	0.48
2:B:371:GLU:H	2:B:371:GLU:CD	2.17	0.48
2:B:525:ALA:O	2:B:527:THR:HG22	2.13	0.48
2:B:764:SER:N	2:B:765:PRO:HD2	2.29	0.48
2:B:797:TYR:HB3	2:B:798:TYR:CD2	2.49	0.48
3:C:168:ALA:C	3:C:170:TRP:N	2.67	0.48
6:F:111:LEU:O	6:F:113:GLY:N	2.47	0.48
8:H:82:PRO:O	8:H:83:GLN:HB2	2.13	0.48
8:H:89:LEU:O	8:H:91:ASP:N	2.39	0.48
11:K:81:TYR:OH	11:K:86:ALA:HA	2.13	0.48
13:S:236:LEU:CA	13:S:242:LYS:NZ	2.77	0.48
13:S:254:TYR:O	13:S:256:ALA:N	2.47	0.48
1:A:1059:HIS:O	1:A:1061:GLY:N	2.46	0.48
1:A:1193:LEU:HD12	1:A:1194:ARG:N	2.29	0.48
1:A:329:LEU:N	1:A:329:LEU:HD23	2.28	0.48
1:A:375:THR:HA	1:A:434:ARG:O	2.14	0.48
1:A:437:MET:O	1:A:438:ASP:C	2.50	0.48
1:A:821:ARG:O	1:A:821:ARG:HG3	2.12	0.48
1:A:901:LEU:HB2	1:A:926:GLN:HG2	1.95	0.48
2:B:1149:GLU:C	2:B:1151:LEU:N	2.67	0.48
2:B:458:LYS:O	2:B:459:TYR:C	2.50	0.48
2:B:509:ALA:O	2:B:510:LYS:O	2.32	0.48
2:B:619:ILE:C	2:B:621:GLU:H	2.17	0.48
2:B:825:VAL:CG1	2:B:826:ALA:N	2.77	0.48
3:C:22:LEU:HD13	3:C:230:MET:CE	2.44	0.48
4:D:196:PRO:C	4:D:198:LEU:N	2.67	0.48
5:E:46:TYR:CD2	5:E:58:MET:HG2	2.48	0.48
1:A:1265:ASN:O	1:A:1267:MET:N	2.47	0.48
1:A:1313:LEU:O	1:A:1314:SER:C	2.52	0.48
1:A:14:VAL:HG21	1:A:1430:LEU:HD13	1.96	0.48
1:A:590:ARG:HD3	1:A:604:GLY:CA	2.41	0.48
1:A:68:GLN:NE2	1:A:80:HIS:CD2	2.79	0.48
1:A:823:GLY:C	1:A:825:ILE:N	2.66	0.48
2:B:1135:ARG:NH2	2:B:1136:ASP:OD1	2.38	0.48
2:B:294:ASP:C	2:B:296:GLU:N	2.68	0.48
2:B:295:GLY:H	2:B:298:LEU:CD2	2.13	0.48
2:B:273:LEU:HD21	2:B:360:PHE:CD1	2.48	0.48
2:B:617:ARG:NE	2:B:619:ILE:HG12	2.29	0.48
2:B:681:TRP:O	2:B:683:SER:N	2.46	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:67:LEU:HD11	3:C:155:LEU:CD1	2.44	0.48
6:F:109:VAL:HG12	6:F:110:ASP:N	2.29	0.48
8:H:106:GLU:HG2	8:H:112:ILE:HG12	1.96	0.48
11:K:21:ILE:HG23	11:K:31:VAL:CG1	2.44	0.48
12:L:39:SER:O	12:L:40:LEU:HG	2.14	0.48
1:A:1293:SER:OG	1:A:1295:THR:CG2	2.62	0.48
1:A:315:LEU:HD22	1:A:319:GLY:O	2.13	0.48
1:A:779:PHE:O	1:A:780:VAL:C	2.52	0.48
2:B:1002:THR:HG22	2:B:1006:ILE:O	2.14	0.48
2:B:223:VAL:HG11	2:B:381:MET:HG2	1.96	0.48
2:B:465:ASN:HD22	2:B:465:ASN:N	2.12	0.48
2:B:910:VAL:HG12	2:B:911:ILE:H	1.79	0.48
3:C:143:LEU:HD21	3:C:146:LYS:CE	2.43	0.48
4:D:185:CYS:HB3	4:D:211:LEU:HD13	1.95	0.48
7:G:88:ASP:HB3	7:G:144:ARG:HB2	1.95	0.48
10:J:7:CYS:HA	10:J:49:MET:HE3	1.95	0.48
13:S:253:LEU:O	13:S:256:ALA:HB3	2.14	0.48
1:A:1293:SER:OG	1:A:1294:PRO:HD2	2.14	0.47
1:A:261:ASP:O	1:A:264:PHE:HB2	2.13	0.47
1:A:393:ARG:O	1:A:395:GLY:N	2.47	0.47
1:A:418:SER:O	1:A:421:ALA:N	2.46	0.47
1:A:356:ASP:HB2	1:A:469:ARG:HG2	1.96	0.47
2:B:393:LYS:HA	2:B:393:LYS:HE3	1.96	0.47
2:B:540:SER:HA	2:B:749:LEU:O	2.14	0.47
2:B:806:THR:HG22	2:B:808:ALA:HB3	1.94	0.47
3:C:42:PRO:HA	3:C:163:ILE:CG2	2.44	0.47
5:E:44:ALA:O	5:E:45:LYS:HB2	2.13	0.47
6:F:132:LEU:O	6:F:148:VAL:HG22	2.14	0.47
10:J:57:ILE:CA	10:J:60:PHE:CD2	2.90	0.47
1:A:1116:LEU:HA	1:A:1329:THR:HA	1.96	0.47
1:A:1283:VAL:CG1	1:A:1284:MET:H	2.24	0.47
1:A:768:GLN:HG2	1:A:816:HIS:CA	2.27	0.47
1:A:928:LEU:O	1:A:931:GLU:N	2.47	0.47
2:B:1017:ILE:HG22	2:B:1018:PRO:CD	2.44	0.47
2:B:486:TYR:CG	2:B:1096:ARG:NH2	2.82	0.47
2:B:1150:ARG:HE	2:B:1150:ARG:HA	1.79	0.47
2:B:1159:ARG:CD	2:B:1193:GLN:HE21	2.26	0.47
2:B:259:TYR:HB2	2:B:268:THR:HG23	1.95	0.47
2:B:457:LEU:O	2:B:461:LEU:CD1	2.61	0.47
2:B:689:LEU:O	2:B:690:VAL:HG23	2.14	0.47
2:B:810:GLU:HG3	2:B:815:ARG:HH22	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:942:ARG:O	2:B:944:THR:N	2.48	0.47
3:C:79:GLN:O	3:C:127:ARG:NH1	2.46	0.47
3:C:242:GLN:CA	3:C:245:VAL:HG23	2.43	0.47
3:C:27:LEU:O	3:C:30:ALA:N	2.47	0.47
5:E:157:SER:C	5:E:159:ASP:N	2.68	0.47
8:H:84:ALA:HB2	8:H:87:ARG:HD2	1.96	0.47
9:I:2:THR:HG22	9:I:2:THR:O	2.14	0.47
1:A:1104:ILE:O	1:A:1105:LEU:C	2.53	0.47
1:A:81:PHE:CE2	1:A:242:PRO:HA	2.48	0.47
1:A:381:THR:HG21	1:A:383:TYR:CD1	2.50	0.47
1:A:419:LYS:HG3	1:A:420:ARG:N	2.28	0.47
1:A:993:LEU:HD11	1:A:997:LEU:HD21	1.96	0.47
2:B:168:GLY:N	2:B:450:ALA:HB1	2.14	0.47
2:B:510:LYS:HD3	2:B:510:LYS:O	2.13	0.47
2:B:846:ILE:HG23	2:B:974:PRO:CG	2.36	0.47
2:B:992:ILE:HG21	2:B:994:TYR:HE1	1.79	0.47
3:C:191:TYR:CD2	3:C:201:TRP:CD1	2.97	0.47
7:G:1:MET:HE1	7:G:80:LYS:H	1.79	0.47
1:A:1090:ALA:CB	1:A:1093:LYS:HE3	2.43	0.47
1:A:1263:ILE:O	1:A:1267:MET:HG3	2.15	0.47
1:A:789:LYS:HE3	9:I:67:THR:HB	1.97	0.47
1:A:852:TYR:CD2	1:A:1060:PRO:CB	2.97	0.47
1:A:944:ARG:NE	1:A:1298:TYR:HE1	2.12	0.47
2:B:413:LEU:O	2:B:414:ALA:C	2.52	0.47
1:A:1006:ILE:HD11	5:E:163:GLU:CG	2.44	0.47
8:H:128:ASN:CG	8:H:128:ASN:O	2.52	0.47
1:A:1118:VAL:HG23	1:A:1306:LEU:HB2	1.94	0.47
1:A:1157:ASP:C	1:A:1159:ARG:H	2.18	0.47
1:A:1193:LEU:HD12	1:A:1193:LEU:C	2.35	0.47
1:A:125:ALA:O	1:A:127:ALA:N	2.48	0.47
1:A:1335:ILE:O	1:A:1335:ILE:CG2	2.63	0.47
2:B:1033:LYS:HB2	2:B:1089:PRO:HD2	1.97	0.47
4:D:51:ASN:O	4:D:52:LEU:O	2.33	0.47
6:F:93:ILE:HD11	6:F:134:ILE:HD11	1.96	0.47
10:J:48:ARG:HE	10:J:49:MET:CE	2.28	0.47
11:K:65:HIS:CD2	11:K:65:HIS:C	2.87	0.47
12:L:27:LEU:HD13	12:L:37:LYS:HE2	1.96	0.47
12:L:58:LYS:HG2	12:L:58:LYS:O	2.15	0.47
1:A:1051:ALA:C	1:A:1053:PHE:N	2.67	0.47
1:A:1057:VAL:CG1	1:A:1058:VAL:H	2.26	0.47
1:A:1216:ILE:O	1:A:1219:THR:HB	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1280:GLU:O	1:A:1281:ARG:C	2.52	0.47
1:A:399:HIS:CB	1:A:400:PRO:CD	2.87	0.47
1:A:447:GLN:HB3	1:A:448:PRO:HA	1.97	0.47
1:A:535:THR:HG23	1:A:575:LYS:HG2	1.96	0.47
1:A:606:LEU:CB	1:A:614:PHE:CE2	2.97	0.47
1:A:814:PHE:C	1:A:814:PHE:CD2	2.88	0.47
1:A:962:ARG:O	1:A:964:ILE:N	2.47	0.47
2:B:1210:MET:O	2:B:1212:ILE:N	2.47	0.47
2:B:314:LEU:O	2:B:315:LYS:C	2.53	0.47
2:B:363:HIS:NE2	2:B:364:ILE:HG13	2.29	0.47
2:B:619:ILE:O	2:B:621:GLU:N	2.47	0.47
2:B:752:ALA:HB1	2:B:771:SER:HB3	1.96	0.47
2:B:798:TYR:CD2	2:B:798:TYR:N	2.83	0.47
2:B:903:VAL:CG1	2:B:904:ARG:N	2.76	0.47
3:C:227:THR:C	3:C:228:PHE:CD1	2.87	0.47
9:I:58:VAL:HG13	9:I:62:ILE:CD1	2.44	0.47
1:A:711:ARG:HA	9:I:97:MET:CE	2.44	0.47
1:A:1102:LYS:C	1:A:1106:ASN:HD22	2.18	0.47
1:A:1129:GLU:C	1:A:1131:ALA:N	2.67	0.47
1:A:1330:ASN:C	1:A:1330:ASN:OD1	2.52	0.47
1:A:650:GLN:O	1:A:654:ASN:HB2	2.14	0.47
2:B:221:ASN:OD1	2:B:242:SER:HA	2.14	0.47
2:B:298:LEU:H	2:B:298:LEU:CD2	2.27	0.47
2:B:371:GLU:OE1	2:B:371:GLU:N	2.48	0.47
2:B:544:CYS:O	2:B:545:ILE:HG13	2.15	0.47
1:A:253:ASN:OD1	2:B:884:ARG:HD2	2.14	0.47
3:C:206:ASN:OD1	3:C:229:TYR:CD2	2.67	0.47
5:E:167:ARG:O	5:E:168:TYR:HD2	1.97	0.47
7:G:62:LEU:HB3	7:G:63:PRO:HD2	1.95	0.47
8:H:102:TYR:HD2	8:H:102:TYR:H	1.51	0.47
9:I:5:ARG:O	9:I:14:LEU:HD12	2.13	0.47
1:A:1081:LEU:HD21	1:A:1098:VAL:CB	2.44	0.47
1:A:1227:ILE:O	1:A:1228:TRP:HB3	2.14	0.47
1:A:1311:VAL:HG21	1:A:1329:THR:HG23	1.96	0.47
1:A:1388:GLY:O	1:A:1391:ARG:HG2	2.15	0.47
1:A:302:THR:HA	1:A:305:ASP:O	2.14	0.47
1:A:53:LEU:HD23	1:A:54:ASN:CB	2.45	0.47
1:A:794:PRO:C	1:A:796:SER:H	2.18	0.47
1:A:814:PHE:O	1:A:817:ALA:HB3	2.15	0.47
1:A:897:TYR:HD2	1:A:936:LEU:CD1	2.28	0.47
1:A:451:HIS:O	2:B:1137:CYS:SG	2.73	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1191:ILE:C	2:B:1192:TYR:CD1	2.88	0.47
2:B:847:ASP:OD2	11:K:6:ARG:NH2	2.48	0.47
4:D:220:LEU:O	4:D:221:TYR:HD1	1.97	0.47
6:F:124:GLU:HB3	6:F:130:ILE:HG12	1.95	0.47
6:F:124:GLU:O	6:F:130:ILE:HG13	2.14	0.47
8:H:39:THR:HB	8:H:124:ARG:HB3	1.97	0.47
11:K:113:THR:O	11:K:114:LEU:CB	2.58	0.47
1:A:795:GLU:CD	1:A:795:GLU:N	2.59	0.47
1:A:937:VAL:C	1:A:939:ASP:N	2.68	0.47
1:A:95:PHE:HD1	1:A:234:MET:CG	2.25	0.47
2:B:1155:SER:OG	2:B:1156:ASP:N	2.47	0.47
2:B:51:PHE:O	2:B:52:ASN:C	2.53	0.47
2:B:831:SER:HB2	2:B:833:TYR:HD1	1.79	0.47
2:B:899:ILE:HG22	2:B:903:VAL:HG21	1.95	0.47
1:A:254:GLU:H	2:B:935:ARG:HH12	1.63	0.47
3:C:109:SER:O	3:C:110:THR:O	2.32	0.47
5:E:143:ASN:OD1	5:E:187:TYR:CE1	2.68	0.47
5:E:177:ARG:O	5:E:212:ARG:HD3	2.15	0.47
5:E:93:MET:C	5:E:95:THR:N	2.68	0.47
6:F:128:LYS:HD3	6:F:149:GLU:O	2.15	0.47
9:I:65:ASP:OD1	9:I:67:THR:OG1	2.21	0.47
10:J:8:PHE:CE1	10:J:49:MET:SD	3.08	0.47
11:K:12:LEU:HD23	11:K:16:GLU:O	2.14	0.47
1:A:1282:VAL:O	1:A:1283:VAL:HG22	2.14	0.47
1:A:254:GLU:O	2:B:935:ARG:NH1	2.45	0.47
1:A:543:LEU:HD11	1:A:547:LEU:HD11	1.96	0.47
1:A:759:ALA:O	1:A:761:MET:N	2.47	0.47
1:A:7:SER:O	1:A:8:SER:C	2.54	0.47
2:B:781:PHE:CD1	2:B:781:PHE:C	2.88	0.47
2:B:839:MET:HE2	2:B:1010:LEU:HD21	1.95	0.47
2:B:850:LEU:HD12	2:B:851:PHE:N	2.30	0.47
4:D:51:ASN:C	4:D:52:LEU:O	2.52	0.47
5:E:124:VAL:CG1	5:E:132:ILE:HB	2.43	0.47
6:F:77:ASP:O	6:F:79:ARG:N	2.47	0.47
6:F:90:ARG:CG	6:F:91:ALA:N	2.78	0.47
6:F:94:LEU:HD23	6:F:94:LEU:HA	1.64	0.47
1:A:1162:VAL:HG12	1:A:1162:VAL:O	2.15	0.47
1:A:1398:MET:O	1:A:1401:SER:OG	2.22	0.47
1:A:1402:PHE:CD1	1:A:1403:GLU:HG3	2.50	0.47
1:A:222:LEU:O	1:A:224:PHE:N	2.48	0.47
1:A:335:ARG:NE	1:A:339:ASN:ND2	2.57	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:946:VAL:HG12	1:A:947:PHE:N	2.29	0.47
2:B:1103:ILE:O	2:B:1122:ARG:NH1	2.48	0.47
2:B:834:ASN:HA	2:B:838:SER:O	2.15	0.47
2:B:95:ILE:HG13	2:B:130:VAL:CG2	2.44	0.47
2:B:97:VAL:CG1	2:B:178:ASN:HD21	2.28	0.47
3:C:107:SER:C	3:C:109:SER:N	2.69	0.47
3:C:112:ASN:CB	3:C:114:TYR:CE1	2.98	0.47
4:D:130:LEU:O	4:D:132:GLN:N	2.48	0.47
4:D:189:ASP:O	4:D:193:THR:HB	2.14	0.47
5:E:192:ARG:NH1	5:E:192:ARG:HG3	2.26	0.47
6:F:103:MET:CE	7:G:65:ASP:HB2	2.44	0.47
10:J:14:VAL:O	10:J:16:ASP:N	2.48	0.47
10:J:18:TRP:HA	10:J:18:TRP:CE3	2.49	0.47
10:J:23:ASN:C	10:J:25:LEU:N	2.68	0.47
1:A:551:TYR:CE2	11:K:62:LYS:HE2	2.50	0.47
11:K:78:THR:O	11:K:79:GLU:C	2.53	0.47
1:A:1283:VAL:CG1	1:A:1284:MET:N	2.78	0.46
1:A:1342:GLU:CG	5:E:198:ILE:HG21	2.45	0.46
1:A:24:PRO:HG2	1:A:25:GLU:CD	2.35	0.46
1:A:500:GLU:O	1:A:504:LEU:HB2	2.15	0.46
1:A:548:ASN:HA	11:K:60:ALA:HB1	1.97	0.46
1:A:626:ASN:O	1:A:631:HIS:CB	2.63	0.46
1:A:809:THR:HG23	1:A:812:GLU:OE1	2.15	0.46
1:A:830:LYS:HB2	1:A:1081:LEU:CD2	2.43	0.46
1:A:928:LEU:O	1:A:929:LEU:C	2.53	0.46
1:A:936:LEU:H	1:A:936:LEU:HD23	1.78	0.46
2:B:1204:PHE:CE1	2:B:1216:LEU:HD11	2.50	0.46
2:B:202:TYR:CE1	2:B:209:GLU:HG2	2.50	0.46
2:B:285:ILE:O	2:B:288:ALA:HB3	2.15	0.46
2:B:43:LEU:HD11	2:B:811:TYR:O	2.15	0.46
2:B:654:ARG:H	2:B:657:HIS:CD2	2.28	0.46
5:E:7:ARG:CG	5:E:8:ASN:N	2.76	0.46
5:E:90:VAL:HG23	5:E:120:ALA:HA	1.97	0.46
6:F:135:ARG:HD3	6:F:143:PHE:CD2	2.51	0.46
6:F:85:MET:HE1	6:F:148:VAL:CG1	2.45	0.46
13:S:269:PHE:CZ	13:S:308:PHE:CE1	3.03	0.46
1:A:1327:ILE:HG22	5:E:147:HIS:CE1	2.51	0.46
1:A:370:ILE:HG23	2:B:1105:ALA:CB	2.41	0.46
1:A:535:THR:O	1:A:536:LEU:O	2.34	0.46
1:A:549:MET:O	1:A:550:LEU:C	2.53	0.46
1:A:647:GLY:O	1:A:650:GLN:HB2	2.14	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:696:GLU:HG2	1:A:696:GLU:O	2.15	0.46
1:A:808:LEU:N	1:A:808:LEU:CD1	2.78	0.46
1:A:80:HIS:O	1:A:243:PRO:HB3	2.16	0.46
1:A:863:VAL:O	1:A:864:ILE:CG1	2.63	0.46
1:A:894:GLU:C	1:A:896:ARG:H	2.18	0.46
1:A:881:GLN:NE2	1:A:958:VAL:O	2.42	0.46
2:B:1034:VAL:CG1	2:B:1035:ALA:N	2.78	0.46
2:B:58:THR:O	2:B:62:ILE:HG13	2.14	0.46
2:B:785:TYR:HA	2:B:788:ARG:HG3	1.97	0.46
8:H:89:LEU:C	8:H:91:ASP:N	2.68	0.46
9:I:99:LEU:C	9:I:100:PHE:HD1	2.18	0.46
9:I:83:ASN:HA	9:I:102:VAL:O	2.16	0.46
11:K:83:PRO:O	11:K:86:ALA:HB3	2.15	0.46
13:S:236:LEU:CA	13:S:242:LYS:CE	2.93	0.46
1:A:1220:PHE:CE2	1:A:1263:ILE:HG23	2.50	0.46
1:A:1311:VAL:HG11	1:A:1329:THR:HG21	1.96	0.46
1:A:317:LYS:O	1:A:318:SER:HB3	2.14	0.46
1:A:43:GLU:O	1:A:44:THR:HB	2.15	0.46
1:A:344:ARG:HA	2:B:1129:ARG:HA	1.98	0.46
2:B:27:ALA:O	2:B:30:SER:OG	2.29	0.46
2:B:753:ALA:O	2:B:756:ILE:N	2.46	0.46
2:B:834:ASN:O	2:B:838:SER:O	2.34	0.46
3:C:95:CYS:O	3:C:96:SER:HB3	2.15	0.46
5:E:144:ILE:C	5:E:146:HIS:H	2.19	0.46
5:E:7:ARG:C	5:E:9:ILE:H	2.19	0.46
7:G:81:PRO:HA	7:G:85:GLU:OE1	2.15	0.46
1:A:567:LYS:HZ1	8:H:46:LEU:HB2	1.77	0.46
9:I:73:ARG:HD2	9:I:101:PHE:CE2	2.50	0.46
10:J:36:LEU:HB2	10:J:47:ARG:HH12	1.81	0.46
12:L:48:CYS:O	12:L:50:ASP:N	2.47	0.46
13:S:269:PHE:CE2	13:S:297:CYS:CB	2.96	0.46
1:A:100:LYS:O	1:A:101:LYS:C	2.54	0.46
1:A:103:CYS:SG	1:A:108:MET:CE	3.04	0.46
1:A:1102:LYS:O	1:A:1106:ASN:ND2	2.46	0.46
1:A:414:ASP:O	1:A:416:ARG:N	2.48	0.46
1:A:618:GLU:O	1:A:621:THR:N	2.46	0.46
2:B:1079:LYS:HE3	3:C:188:HIS:CE1	2.51	0.46
2:B:281:PRO:O	2:B:283:VAL:N	2.48	0.46
2:B:293:PRO:O	2:B:294:ASP:O	2.33	0.46
2:B:313:MET:HE2	2:B:390:LEU:HD21	1.96	0.46
2:B:378:LEU:HD12	2:B:378:LEU:C	2.35	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:579:ARG:HA	2:B:589:VAL:HG13	1.96	0.46
2:B:788:ARG:HE	2:B:788:ARG:HB3	1.52	0.46
2:B:871:THR:HG22	2:B:872:GLU:N	2.31	0.46
2:B:956:THR:CG2	2:B:960:GLY:HA2	2.45	0.46
2:B:789:MET:CE	2:B:965:LYS:HB3	2.46	0.46
4:D:29:LEU:N	4:D:29:LEU:HD23	2.30	0.46
7:G:1:MET:HE3	7:G:80:LYS:O	2.14	0.46
11:K:63:VAL:O	11:K:63:VAL:HG23	2.15	0.46
1:A:1169:ILE:O	1:A:1170:ILE:C	2.54	0.46
1:A:563:PRO:HB2	1:A:565:ILE:O	2.16	0.46
1:A:645:LEU:O	1:A:646:PHE:C	2.54	0.46
1:A:647:GLY:O	1:A:648:ASN:C	2.54	0.46
2:B:118:ARG:HH22	2:B:194:GLU:CD	2.18	0.46
2:B:760:ASP:O	2:B:761:HIS:CG	2.69	0.46
2:B:770:GLN:CD	2:B:983:ARG:HA	2.36	0.46
3:C:228:PHE:N	3:C:228:PHE:CD1	2.83	0.46
4:D:154:PHE:HB2	4:D:160:VAL:HG22	1.97	0.46
5:E:16:PHE:O	5:E:17:ARG:C	2.54	0.46
5:E:197:LYS:O	5:E:199:ILE:HG13	2.16	0.46
5:E:24:LYS:HG3	5:E:25:ASP:N	2.30	0.46
6:F:87:LYS:HG3	6:F:88:TYR:CD1	2.51	0.46
1:A:567:LYS:HE3	8:H:46:LEU:HD12	1.97	0.46
8:H:76:THR:HG22	8:H:76:THR:O	2.14	0.46
9:I:99:LEU:HB2	9:I:101:PHE:CE1	2.50	0.46
10:J:61:LEU:O	10:J:63:TYR:N	2.48	0.46
11:K:55:LYS:HB3	11:K:81:TYR:HD1	1.80	0.46
12:L:30:ILE:O	12:L:56:LEU:HD23	2.15	0.46
1:A:460:VAL:CG1	1:A:461:LYS:N	2.79	0.46
1:A:541:ILE:HG22	1:A:546:VAL:HG23	1.97	0.46
1:A:715:GLU:O	1:A:718:VAL:N	2.48	0.46
1:A:867:ILE:CG2	1:A:872:GLY:H	2.29	0.46
1:A:896:ARG:CD	1:A:897:TYR:CE1	2.93	0.46
1:A:897:TYR:HB3	1:A:936:LEU:CD1	2.45	0.46
2:B:999:MET:HB3	2:B:1007:VAL:CG2	2.45	0.46
2:B:1023:VAL:HG12	2:B:1027:ILE:HG13	1.97	0.46
2:B:229:ALA:HB1	2:B:231:PRO:HD2	1.98	0.46
2:B:281:PRO:HG2	2:B:284:ILE:CG1	2.44	0.46
2:B:510:LYS:HD3	2:B:513:GLN:H	1.80	0.46
2:B:577:ALA:HB1	2:B:589:VAL:HG11	1.96	0.46
2:B:863:GLU:O	2:B:961:LEU:HD22	2.15	0.46
1:A:738:LYS:HZ1	3:C:194:GLU:C	2.18	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:251:LEU:O	3:C:254:LYS:N	2.49	0.46
5:E:22:MET:HE3	5:E:26:ARG:CZ	2.42	0.46
8:H:31:THR:O	8:H:31:THR:HG22	2.15	0.46
12:L:54:ARG:HG3	12:L:54:ARG:NH1	2.29	0.46
1:A:351:THR:HB	2:B:1103:ILE:CD1	2.43	0.46
1:A:399:HIS:O	1:A:400:PRO:C	2.54	0.46
1:A:550:LEU:HD11	1:A:561:PRO:HD2	1.98	0.46
1:A:907:THR:HG22	1:A:908:LEU:N	2.30	0.46
2:B:20:ASP:C	2:B:22:SER:H	2.19	0.46
2:B:69:LEU:HD13	2:B:429:PHE:HD1	1.80	0.46
2:B:63:ILE:HD12	2:B:421:PHE:CE2	2.51	0.46
2:B:994:TYR:HB2	2:B:999:MET:CE	2.46	0.46
4:D:53:SER:HB3	4:D:153:ARG:H	1.81	0.46
6:F:132:LEU:HD22	7:G:61:ILE:HD11	1.97	0.46
7:G:27:LYS:O	7:G:31:LEU:HG	2.16	0.46
8:H:143:LEU:O	8:H:144:ILE:HG13	2.16	0.46
9:I:11:ASN:O	9:I:12:ASN:ND2	2.48	0.46
9:I:69:PRO:O	9:I:84:VAL:HA	2.14	0.46
1:A:100:LYS:O	1:A:103:CYS:N	2.49	0.46
1:A:1063:MET:SD	1:A:1436:ILE:HG12	2.56	0.46
1:A:1083:THR:O	1:A:1084:PHE:O	2.34	0.46
1:A:1116:LEU:HB2	1:A:1329:THR:OG1	2.16	0.46
1:A:285:PRO:CG	1:A:288:ALA:HB3	2.40	0.46
1:A:443:LEU:HD23	1:A:443:LEU:HA	1.72	0.46
1:A:707:GLY:O	1:A:708:MET:O	2.34	0.46
1:A:76:GLU:O	1:A:76:GLU:CG	2.63	0.46
2:B:189:LEU:O	2:B:192:LEU:HB2	2.15	0.46
2:B:558:LEU:C	2:B:560:GLU:N	2.70	0.46
2:B:683:SER:O	2:B:687:GLU:HB2	2.16	0.46
2:B:882:THR:O	2:B:883:LEU:CB	2.63	0.46
2:B:992:ILE:HD13	2:B:994:TYR:HE1	1.81	0.46
3:C:114:TYR:CD1	3:C:114:TYR:N	2.83	0.46
3:C:147:LEU:N	3:C:147:LEU:HD23	2.31	0.46
4:D:33:PHE:CZ	7:G:80:LYS:NZ	2.84	0.46
5:E:90:VAL:HB	5:E:119:SER:HB2	1.98	0.46
1:A:1100:ARG:NH2	1:A:1351:GLU:HG2	2.19	0.46
1:A:1385:THR:CG2	1:A:1386:ARG:N	2.79	0.46
1:A:385:ILE:HG22	1:A:386:ASP:N	2.29	0.46
1:A:63:ARG:HA	1:A:74:MET:CE	2.45	0.46
1:A:646:PHE:O	1:A:647:GLY:C	2.55	0.46
1:A:697:ALA:HB2	1:A:702:LEU:CD1	2.46	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:983:ILE:HG22	1:A:983:ILE:O	2.15	0.46
2:B:274:PRO:O	2:B:275:TYR:HB2	2.16	0.46
2:B:385:LEU:O	2:B:385:LEU:HD12	2.15	0.46
2:B:510:LYS:HD3	2:B:513:GLN:N	2.31	0.46
2:B:613:VAL:HG22	2:B:628:THR:HA	1.98	0.46
3:C:163:ILE:O	3:C:164:ALA:C	2.54	0.46
3:C:15:LYS:O	3:C:240:VAL:HG22	2.16	0.46
5:E:153:HIS:C	5:E:154:ILE:HG13	2.34	0.46
7:G:18:PHE:HA	7:G:22:MET:CE	2.45	0.46
7:G:56:ILE:O	7:G:57:GLN:HB2	2.15	0.46
8:H:98:TYR:HE1	8:H:139:ASN:HA	1.80	0.46
9:I:34:TYR:C	9:I:34:TYR:CD2	2.90	0.46
1:A:1067:LEU:O	1:A:1068:ALA:C	2.54	0.46
1:A:1119:TYR:CD2	1:A:1305:VAL:HG21	2.51	0.46
1:A:1129:GLU:HG3	1:A:1132:LYS:HE3	1.97	0.46
1:A:1227:ILE:CG2	1:A:1228:TRP:N	2.78	0.46
1:A:243:PRO:CB	1:A:244:PRO:HD2	2.46	0.46
1:A:566:ILE:O	1:A:567:LYS:O	2.34	0.46
1:A:642:CYS:O	1:A:643:ALA:C	2.54	0.46
1:A:695:LYS:C	1:A:697:ALA:N	2.69	0.46
1:A:809:THR:HB	1:A:810:PRO:HD2	1.97	0.46
1:A:921:GLY:O	1:A:922:ASP:C	2.55	0.46
2:B:546:SER:HA	2:B:612:GLU:CD	2.35	0.46
3:C:80:LEU:O	3:C:80:LEU:HG	2.16	0.46
7:G:80:LYS:HA	7:G:81:PRO:HD2	1.74	0.46
9:I:15:TYR:O	9:I:28:GLU:HG2	2.16	0.46
11:K:10:PHE:CD2	11:K:10:PHE:N	2.84	0.46
1:A:1081:LEU:CD1	1:A:1099:PRO:HD3	2.46	0.45
1:A:1170:ILE:HG23	1:A:1174:PHE:HE1	1.77	0.45
1:A:1191:TRP:HB3	1:A:1260:LEU:HD23	1.97	0.45
1:A:1330:ASN:OD1	1:A:1331:SER:N	2.49	0.45
1:A:871:ASP:CG	1:A:1366:ARG:HH22	2.19	0.45
1:A:1437:GLY:CA	6:F:88:TYR:CD2	2.97	0.45
1:A:811:GLN:O	1:A:812:GLU:C	2.55	0.45
1:A:512:VAL:HG11	1:A:876:ALA:O	2.16	0.45
2:B:1020:ARG:HH12	13:S:291:GLU:HA	1.81	0.45
2:B:1111:MET:O	2:B:1112:GLN:C	2.54	0.45
2:B:1182:CYS:O	2:B:1183:LYS:C	2.53	0.45
1:A:18:GLN:CB	2:B:1215:ARG:HB2	2.45	0.45
2:B:570:VAL:HG21	2:B:573:GLN:CD	2.36	0.45
3:C:94:LYS:HB2	3:C:94:LYS:HE3	1.67	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:48:ILE:CG2	7:G:4:ILE:HB	2.46	0.45
11:K:21:ILE:HG12	11:K:33:ILE:HG12	1.99	0.45
11:K:70:ARG:HG3	11:K:70:ARG:O	2.16	0.45
1:A:321:PRO:O	1:A:322:VAL:CG2	2.63	0.45
1:A:33:ALA:O	1:A:83:HIS:HD2	1.99	0.45
1:A:353:ILE:HG13	1:A:482:PHE:CD2	2.51	0.45
1:A:915:SER:O	1:A:919:ILE:HG13	2.16	0.45
2:B:172:ILE:CG2	2:B:173:MET:N	2.79	0.45
2:B:313:MET:CE	2:B:390:LEU:HD21	2.46	0.45
2:B:386:LEU:O	2:B:388:CYS:N	2.50	0.45
2:B:838:SER:HA	2:B:989:THR:O	2.17	0.45
2:B:880:THR:HB	2:B:934:LYS:CD	2.36	0.45
2:B:906:SER:O	2:B:907:GLY:O	2.34	0.45
3:C:43:THR:HG22	3:C:44:LEU:H	1.81	0.45
3:C:46:ILE:HD13	3:C:157:CYS:CB	2.46	0.45
5:E:202:SER:HB3	5:E:205:SER:O	2.15	0.45
5:E:25:ASP:C	5:E:27:GLY:H	2.17	0.45
8:H:91:ASP:C	8:H:93:TYR:N	2.70	0.45
1:A:1213:GLY:O	1:A:1214:GLU:C	2.54	0.45
1:A:44:THR:HG22	1:A:44:THR:O	2.16	0.45
1:A:515:GLN:O	1:A:516:SER:CB	2.58	0.45
1:A:556:TRP:CE2	1:A:558:GLY:HA2	2.51	0.45
1:A:590:ARG:HH11	1:A:590:ARG:CG	2.29	0.45
1:A:791:ASP:C	1:A:791:ASP:OD1	2.55	0.45
2:B:551:PRO:HG2	2:B:552:MET:H	1.81	0.45
2:B:520:GLY:H	2:B:748:ILE:HG22	1.81	0.45
2:B:806:THR:HG22	2:B:808:ALA:CB	2.46	0.45
3:C:22:LEU:CD2	3:C:25:VAL:HG21	2.47	0.45
10:J:21:TYR:C	10:J:23:ASN:N	2.70	0.45
3:C:35:ARG:NH1	11:K:41:THR:OG1	2.50	0.45
11:K:88:LYS:O	11:K:91:CYS:N	2.49	0.45
12:L:59:ALA:O	12:L:60:ARG:O	2.34	0.45
1:A:1210:GLY:O	1:A:1214:GLU:HB2	2.16	0.45
1:A:1329:THR:O	1:A:1331:SER:N	2.49	0.45
1:A:1359:ASP:HB2	1:A:1361:SER:OG	2.16	0.45
1:A:1451:VAL:C	1:A:1453:TYR:H	2.19	0.45
1:A:269:ILE:HG12	1:A:299:HIS:HB3	1.99	0.45
1:A:362:ASP:N	1:A:362:ASP:OD2	2.48	0.45
2:B:1026:LEU:HD23	2:B:1086:PHE:CE2	2.52	0.45
2:B:1115:THR:HG22	2:B:1117:GLN:CG	2.46	0.45
2:B:1164:GLY:HA3	2:B:1190:ASP:OD2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1169:MET:CE	2:B:1201:LYS:CA	2.89	0.45
2:B:170:LEU:HG	2:B:170:LEU:O	2.14	0.45
2:B:202:TYR:N	2:B:202:TYR:CD2	2.84	0.45
2:B:284:ILE:HG12	2:B:324:ILE:HD12	1.98	0.45
2:B:995:ARG:HB3	2:B:997:GLU:OE2	2.16	0.45
3:C:118:LEU:HB2	3:C:132:PRO:HG2	1.97	0.45
11:K:33:ILE:HB	11:K:35:PHE:HE1	1.81	0.45
1:A:1115:SER:OG	1:A:1116:LEU:N	2.49	0.45
1:A:1242:VAL:O	1:A:1243:VAL:HB	2.17	0.45
1:A:19:PHE:O	1:A:1416:ALA:HA	2.17	0.45
1:A:298:PHE:HZ	1:A:314:ALA:HB2	1.80	0.45
1:A:777:PHE:CE2	1:A:782:ARG:HA	2.51	0.45
1:A:937:VAL:HG12	1:A:938:LYS:N	2.30	0.45
2:B:255:GLN:O	2:B:271:ALA:HB1	2.17	0.45
2:B:293:PRO:HG2	2:B:296:GLU:OE1	2.16	0.45
2:B:615:MET:HA	2:B:625:LYS:O	2.16	0.45
2:B:816:GLU:O	2:B:817:LEU:CD2	2.59	0.45
3:C:158:VAL:O	3:C:158:VAL:HG12	2.17	0.45
5:E:135:PHE:HB3	5:E:140:LEU:HD11	1.98	0.45
6:F:143:PHE:C	6:F:143:PHE:CD1	2.90	0.45
7:G:126:ASN:HA	7:G:127:PRO:C	2.36	0.45
1:A:560:ILE:CG1	8:H:78:SER:HB2	2.36	0.45
12:L:28:LYS:HG3	12:L:39:SER:OG	2.15	0.45
12:L:52:GLY:O	12:L:53:HIS:C	2.54	0.45
1:A:1016:THR:O	1:A:1018:PHE:N	2.49	0.45
1:A:834:THR:CG2	1:A:1077:THR:HA	2.46	0.45
1:A:1122:PRO:O	1:A:1123:GLY:C	2.54	0.45
1:A:1151:GLU:HB3	1:A:1153:TYR:CE1	2.50	0.45
1:A:1173:HIS:CG	1:A:1227:ILE:HG23	2.51	0.45
1:A:42:ASP:CG	1:A:45:GLN:HA	2.37	0.45
1:A:688:LYS:O	1:A:690:VAL:N	2.50	0.45
1:A:95:PHE:CD1	1:A:234:MET:CG	2.96	0.45
2:B:1181:GLU:OE1	2:B:1183:LYS:HG3	2.17	0.45
2:B:217:ARG:C	2:B:217:ARG:HD2	2.37	0.45
2:B:901:PRO:O	2:B:902:GLY:C	2.53	0.45
2:B:984:HIS:CD2	2:B:1025:HIS:HA	2.51	0.45
3:C:46:ILE:HD13	3:C:157:CYS:HB3	1.99	0.45
4:D:122:GLU:HA	4:D:125:SER:OG	2.17	0.45
5:E:135:PHE:CB	5:E:140:LEU:HD11	2.47	0.45
7:G:132:SER:HB3	7:G:135:ASP:HB2	1.97	0.45
9:I:88:SER:C	9:I:90:GLN:N	2.70	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1115:SER:O	1:A:1329:THR:HG23	2.17	0.45
1:A:1121:GLU:O	1:A:1122:PRO:O	2.35	0.45
1:A:1271:ILE:CG2	1:A:1271:ILE:O	2.65	0.45
1:A:1293:SER:OG	1:A:1295:THR:HG23	2.17	0.45
1:A:760:GLN:O	1:A:804:TYR:CD1	2.70	0.45
1:A:849:MET:O	1:A:851:HIS:HD2	1.99	0.45
1:A:70:CYS:HA	2:B:1174:LYS:HG2	1.98	0.45
2:B:280:ILE:HG23	2:B:281:PRO:HD2	1.99	0.45
2:B:578:THR:HG23	2:B:622:LYS:CA	2.47	0.45
2:B:638:PHE:HD2	2:B:690:VAL:HG22	1.82	0.45
2:B:975:GLN:HG2	2:B:976:ILE:H	1.82	0.45
4:D:176:GLU:O	4:D:180:LEU:HB2	2.17	0.45
5:E:117:THR:O	5:E:120:ALA:N	2.45	0.45
5:E:171:LYS:O	5:E:172:GLU:C	2.55	0.45
7:G:1:MET:HE3	7:G:80:LYS:H	1.81	0.45
7:G:82:PHE:O	7:G:84:GLY:N	2.50	0.45
3:C:66:ARG:HH21	10:J:5:VAL:HG23	1.80	0.45
11:K:90:ALA:O	11:K:94:ILE:HG13	2.17	0.45
13:S:273:LYS:C	13:S:275:LYS:H	2.18	0.45
1:A:1011:GLN:NE2	1:A:1015:VAL:CG2	2.65	0.45
1:A:1143:LEU:HD12	1:A:1146:VAL:HG23	1.99	0.45
1:A:1313:LEU:HD11	1:A:1327:ILE:HD13	1.99	0.45
1:A:30:ILE:HD11	2:B:1168:LEU:HD13	1.99	0.45
1:A:353:ILE:HG23	1:A:485:ASP:O	2.16	0.45
1:A:52:GLY:O	1:A:56:PRO:HG2	2.17	0.45
1:A:668:ASP:HA	1:A:741:ASN:OD1	2.17	0.45
1:A:783:THR:O	1:A:784:LEU:HD23	2.16	0.45
2:B:1178:ASN:O	2:B:1179:GLN:C	2.55	0.45
2:B:489:SER:OG	2:B:490:SER:N	2.49	0.45
2:B:550:ASP:OD1	2:B:551:PRO:HD2	2.17	0.45
2:B:958:GLN:C	2:B:960:GLY:H	2.19	0.45
3:C:214:ASN:HB3	3:C:217:ASP:OD2	2.16	0.45
3:C:44:LEU:HG	3:C:159:ALA:HB1	1.99	0.45
3:C:88:CYS:SG	3:C:91:HIS:N	2.90	0.45
5:E:117:THR:HG22	5:E:119:SER:N	2.20	0.45
5:E:198:ILE:CD1	5:E:212:ARG:NH1	2.78	0.45
8:H:95:TYR:HE2	8:H:97:MET:CG	2.29	0.45
11:K:35:PHE:HD1	11:K:35:PHE:N	2.15	0.45
11:K:7:PHE:HA	11:K:10:PHE:CE2	2.51	0.45
1:A:244:PRO:CG	1:A:245:PRO:HD3	2.47	0.45
1:A:324:SER:O	1:A:325:ILE:C	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:925:LEU:C	1:A:927:VAL:H	2.20	0.45
2:B:1006:ILE:HG13	2:B:1006:ILE:H	1.19	0.45
2:B:710:LEU:O	2:B:711:GLU:HG2	2.17	0.45
2:B:851:PHE:O	2:B:974:PRO:HD3	2.17	0.45
2:B:855:PHE:CD1	2:B:856:PHE:N	2.85	0.45
2:B:964:VAL:HG12	2:B:965:LYS:N	2.32	0.45
6:F:135:ARG:HG2	6:F:137:TYR:CE1	2.52	0.45
7:G:39:THR:C	7:G:41:LYS:N	2.70	0.45
8:H:100:THR:HG22	8:H:101:ALA:H	1.79	0.45
8:H:23:VAL:HG22	8:H:43:ASN:HA	1.99	0.45
9:I:55:THR:HG22	9:I:56:ALA:N	2.32	0.45
11:K:53:ASP:OD1	11:K:55:LYS:HB2	2.17	0.45
13:S:260:THR:CA	13:S:260:THR:HB	2.20	0.45
1:A:1081:LEU:CD2	1:A:1098:VAL:HG21	2.45	0.45
1:A:1261:LYS:C	1:A:1264:GLU:H	2.20	0.45
1:A:125:ALA:C	1:A:127:ALA:H	2.20	0.45
1:A:1115:SER:HA	1:A:1308:THR:HG23	1.99	0.45
1:A:563:PRO:HB3	1:A:571:LEU:O	2.17	0.45
2:B:1183:LYS:CE	2:B:1183:LYS:H	2.27	0.45
2:B:563:MET:HE3	2:B:580:VAL:HB	1.99	0.45
2:B:598:GLU:HG2	2:B:598:GLU:O	2.17	0.45
2:B:745:PRO:O	2:B:748:ILE:CG1	2.61	0.45
2:B:758:PHE:O	2:B:760:ASP:N	2.49	0.45
2:B:800:GLN:HB2	2:B:821:GLN:HA	1.99	0.45
2:B:824:ILE:CD1	10:J:48:ARG:NH1	2.80	0.45
2:B:843:GLN:O	2:B:844:SER:C	2.56	0.45
2:B:975:GLN:HG2	2:B:976:ILE:N	2.32	0.45
2:B:990:ILE:HG22	2:B:992:ILE:H	1.81	0.45
3:C:170:TRP:O	3:C:171:GLY:C	2.54	0.45
4:D:51:ASN:OD1	4:D:52:LEU:O	2.34	0.45
1:A:866:PHE:HD2	5:E:168:TYR:CE1	2.33	0.45
8:H:95:TYR:CE2	8:H:97:MET:CG	3.00	0.45
9:I:15:TYR:CD1	9:I:15:TYR:N	2.85	0.45
1:A:789:LYS:HD2	9:I:67:THR:OG1	2.17	0.45
10:J:2:ILE:HG12	10:J:57:ILE:CD1	2.46	0.45
11:K:55:LYS:HB3	11:K:81:TYR:CD1	2.52	0.45
1:A:706:HIS:ND1	13:S:257:GLN:HB2	2.32	0.45
1:A:1097:GLY:C	1:A:1099:PRO:HD2	2.37	0.44
1:A:1101:LEU:HD12	1:A:1101:LEU:O	2.17	0.44
1:A:384:ASN:O	1:A:386:ASP:N	2.50	0.44
1:A:51:GLY:HA2	1:A:56:PRO:HA	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:673:GLY:O	1:A:676:MET:HB2	2.16	0.44
2:B:828:ALA:HB2	2:B:1085:ILE:HG21	2.00	0.44
2:B:977:GLY:CA	2:B:1099:VAL:HB	2.44	0.44
2:B:1160:VAL:CG1	2:B:1161:HIS:H	2.30	0.44
2:B:390:LEU:O	2:B:391:ASP:C	2.54	0.44
2:B:615:MET:C	2:B:616:ILE:HD12	2.36	0.44
2:B:753:ALA:HA	2:B:756:ILE:HG13	1.99	0.44
3:C:77:ILE:HG23	3:C:161:LYS:HE3	2.00	0.44
4:D:141:LEU:O	4:D:144:THR:HB	2.16	0.44
4:D:40:HIS:CE1	4:D:41:GLN:HE21	2.34	0.44
6:F:88:TYR:N	6:F:88:TYR:CD1	2.85	0.44
2:B:785:TYR:CE2	10:J:60:PHE:CE1	3.04	0.44
1:A:465:TYR:N	11:K:2:ASN:HB3	2.32	0.44
3:C:52:GLU:HA	12:L:64:LEU:HD22	1.99	0.44
1:A:108:MET:O	1:A:109:HIS:HB2	2.16	0.44
1:A:1170:ILE:O	1:A:1174:PHE:HD1	2.00	0.44
1:A:1226:VAL:C	1:A:1227:ILE:HG13	2.37	0.44
1:A:576:GLN:O	1:A:579:SER:HB2	2.18	0.44
1:A:78:PRO:O	1:A:78:PRO:HG2	2.17	0.44
2:B:186:GLU:O	2:B:187:SER:C	2.55	0.44
1:A:814:PHE:CD1	2:B:519:TRP:CE3	3.05	0.44
2:B:642:ASP:HB3	2:B:649:LYS:CG	2.47	0.44
2:B:981:ALA:CB	2:B:987:LYS:HA	2.46	0.44
3:C:73:GLN:NE2	3:C:75:MET:N	2.54	0.44
1:A:1132:LYS:CE	13:S:253:LEU:HD21	2.43	0.44
1:A:1161:THR:HG1	1:A:1170:ILE:HD11	1.82	0.44
1:A:1436:ILE:HD13	2:B:1139:ILE:CG2	2.45	0.44
1:A:381:THR:O	1:A:384:ASN:N	2.45	0.44
1:A:470:LEU:HD11	1:A:482:PHE:CE2	2.52	0.44
1:A:573:SER:CB	8:H:119:GLY:O	2.65	0.44
2:B:1073:TYR:CE2	2:B:1080:LYS:HG2	2.53	0.44
2:B:373:ARG:HG3	2:B:566:LEU:HD23	2.00	0.44
2:B:408:LEU:HA	2:B:408:LEU:HD12	1.76	0.44
2:B:555:ILE:HD11	2:B:587:HIS:NE2	2.32	0.44
2:B:542:MET:CG	2:B:747:MET:HB3	2.48	0.44
4:D:147:TYR:CE1	7:G:103:VAL:HG13	2.53	0.44
7:G:14:HIS:CG	7:G:15:PRO:HD2	2.53	0.44
10:J:3:VAL:CG2	10:J:18:TRP:CG	2.99	0.44
13:S:283:GLN:HG2	13:S:295:THR:OG1	2.17	0.44
1:A:1209:MET:O	1:A:1210:GLY:C	2.55	0.44
1:A:1354:ASN:O	1:A:1355:VAL:C	2.54	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1437:GLY:O	1:A:1438:THR:C	2.56	0.44
1:A:458:HIS:CE1	1:A:507:VAL:HG21	2.53	0.44
1:A:666:ILE:N	2:B:1026:LEU:HD22	2.32	0.44
2:B:1150:ARG:NE	2:B:1150:ARG:HA	2.33	0.44
2:B:287:ARG:NH1	2:B:324:ILE:O	2.50	0.44
2:B:372:SER:O	2:B:376:PHE:HD1	2.00	0.44
2:B:604:ARG:O	2:B:606:LYS:N	2.50	0.44
2:B:806:THR:C	2:B:808:ALA:N	2.68	0.44
3:C:178:PHE:O	3:C:179:GLU:HB2	2.16	0.44
3:C:91:HIS:HB2	3:C:96:SER:OG	2.18	0.44
8:H:24:CYS:CB	8:H:44:VAL:HG21	2.46	0.44
1:A:967:ALA:N	1:A:1044:TRP:HZ3	2.16	0.44
1:A:12:ARG:NE	2:B:1192:TYR:HE2	2.15	0.44
1:A:1434:ALA:HA	1:A:1435:PRO:HD3	1.91	0.44
1:A:786:HIS:CE1	2:B:519:TRP:CZ2	3.05	0.44
1:A:843:LYS:HD2	1:A:843:LYS:HA	1.89	0.44
2:B:1107:ALA:O	2:B:1108:ARG:O	2.36	0.44
2:B:95:ILE:CG1	2:B:130:VAL:HG22	2.44	0.44
2:B:233:PRO:HG2	2:B:234:ILE:CD1	2.47	0.44
2:B:371:GLU:N	2:B:371:GLU:CD	2.70	0.44
2:B:642:ASP:C	2:B:644:GLU:H	2.19	0.44
2:B:806:THR:O	2:B:808:ALA:N	2.51	0.44
2:B:821:GLN:HE22	2:B:851:PHE:N	2.09	0.44
1:A:483:ASP:HB2	2:B:987:LYS:HG3	1.99	0.44
3:C:80:LEU:HD11	3:C:95:CYS:CA	2.47	0.44
7:G:101:VAL:HG12	7:G:102:GLN:N	2.32	0.44
7:G:96:GLN:HA	7:G:121:PHE:CD2	2.52	0.44
2:B:394:ASP:OD2	9:I:91:ARG:HD2	2.17	0.44
10:J:1:MET:N	10:J:56:LEU:N	2.65	0.44
13:S:269:PHE:HZ	13:S:308:PHE:CE1	2.35	0.44
1:A:896:ARG:NH2	1:A:1030:ARG:NH2	2.66	0.44
1:A:834:THR:CG2	1:A:1077:THR:HG23	2.29	0.44
1:A:1099:PRO:O	1:A:1102:LYS:HB3	2.17	0.44
1:A:384:ASN:CG	1:A:388:LEU:HD12	2.37	0.44
1:A:76:GLU:O	1:A:76:GLU:HG3	2.18	0.44
1:A:847:ASP:N	1:A:847:ASP:OD1	2.48	0.44
2:B:1069:PHE:HA	2:B:1085:ILE:O	2.17	0.44
2:B:1182:CYS:O	2:B:1183:LYS:O	2.36	0.44
2:B:324:ILE:CG2	2:B:325:GLN:N	2.81	0.44
2:B:360:PHE:CD2	2:B:360:PHE:C	2.91	0.44
2:B:67:SER:O	2:B:68:THR:C	2.56	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:798:TYR:HD2	2:B:798:TYR:N	2.16	0.44
2:B:882:THR:O	2:B:883:LEU:HB2	2.17	0.44
2:B:874:PHE:HA	2:B:913:GLY:O	2.17	0.44
2:B:999:MET:HE3	2:B:999:MET:HA	2.00	0.44
3:C:50:GLU:HB3	3:C:156:THR:HB	1.98	0.44
3:C:21:ILE:HG22	3:C:21:ILE:O	2.17	0.44
3:C:75:MET:HE2	3:C:239:PRO:HD3	1.99	0.44
4:D:47:LEU:CD1	4:D:48:ILE:N	2.81	0.44
1:A:164:ARG:CG	1:A:165:GLY:H	2.01	0.44
1:A:475:THR:CG2	1:A:476:SER:N	2.81	0.44
2:B:129:PHE:CD2	2:B:166:PHE:HA	2.53	0.44
2:B:230:ALA:N	2:B:231:PRO:CD	2.81	0.44
2:B:293:PRO:O	2:B:296:GLU:HB3	2.18	0.44
3:C:183:TRP:CZ2	3:C:207:CYS:HB3	2.52	0.44
3:C:44:LEU:HD23	3:C:72:LEU:CB	2.48	0.44
1:A:1343:ALA:HB2	5:E:150:VAL:HG22	1.98	0.44
1:A:1342:GLU:HG2	5:E:198:ILE:HD13	1.99	0.44
5:E:177:ARG:HD3	5:E:215:MET:HG3	1.99	0.44
7:G:14:HIS:CD2	7:G:16:SER:H	2.34	0.44
8:H:38:LEU:HD12	8:H:39:THR:H	1.82	0.44
1:A:1206:ASP:HB2	1:A:1274:ARG:HH22	1.83	0.44
1:A:1210:GLY:O	1:A:1211:GLN:C	2.56	0.44
1:A:1312:ASN:O	1:A:1316:VAL:HG23	2.18	0.44
1:A:1313:LEU:HD12	1:A:1327:ILE:HD13	1.99	0.44
1:A:43:GLU:O	1:A:44:THR:CB	2.66	0.44
1:A:525:GLN:O	1:A:526:ASP:C	2.56	0.44
1:A:718:VAL:O	1:A:721:PHE:HB2	2.18	0.44
1:A:890:ASP:H	1:A:1296:GLY:HA3	1.83	0.44
3:C:175:ALA:HB3	10:J:43:ARG:NH2	2.33	0.44
5:E:117:THR:C	5:E:119:SER:H	2.21	0.44
7:G:1:MET:CE	7:G:80:LYS:O	2.66	0.44
10:J:45:CYS:SG	10:J:46:CYS:N	2.91	0.44
12:L:47:ARG:NH2	12:L:54:ARG:HE	2.16	0.44
1:A:1104:ILE:C	1:A:1106:ASN:N	2.71	0.44
1:A:55:ASP:O	1:A:57:ARG:N	2.51	0.44
1:A:668:ASP:CG	1:A:742:ASN:HD22	2.19	0.44
2:B:952:VAL:CG1	2:B:953:LEU:N	2.79	0.44
3:C:211:ASP:HA	3:C:212:PRO:HD3	1.84	0.44
3:C:247:GLY:C	3:C:249:ASP:N	2.72	0.44
3:C:80:LEU:HD11	3:C:96:SER:N	2.33	0.44
4:D:146:GLN:O	4:D:150:ASN:N	2.51	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:207:ARG:NH1	5:E:207:ARG:HB3	2.28	0.44
5:E:80:VAL:HG12	5:E:81:GLU:N	2.33	0.44
11:K:7:PHE:O	11:K:11:LEU:HB2	2.18	0.44
12:L:40:LEU:HD22	12:L:44:ASP:CB	2.47	0.44
1:A:135:PHE:CE1	1:A:222:LEU:HD22	2.53	0.43
1:A:185:TRP:O	1:A:197:PRO:HA	2.18	0.43
1:A:449:SER:O	2:B:1133:MET:HB3	2.18	0.43
1:A:49:LYS:HZ1	1:A:60:SER:CA	2.31	0.43
1:A:64:ASN:O	1:A:65:LEU:C	2.56	0.43
1:A:814:PHE:CE1	2:B:519:TRP:HA	2.52	0.43
1:A:98:LYS:O	1:A:99:ILE:C	2.56	0.43
2:B:1085:ILE:CG2	2:B:1086:PHE:N	2.80	0.43
2:B:781:PHE:HD1	2:B:782:LEU:HG	1.83	0.43
2:B:1084:GLN:OE1	3:C:191:TYR:HA	2.17	0.43
3:C:98:VAL:O	3:C:99:LEU:HD23	2.18	0.43
5:E:138:ALA:HA	5:E:141:VAL:CG2	2.47	0.43
8:H:38:LEU:HD12	8:H:124:ARG:O	2.18	0.43
1:A:1152:ILE:HG13	9:I:44:TYR:HD2	1.83	0.43
9:I:71:SER:O	9:I:83:ASN:ND2	2.51	0.43
11:K:88:LYS:O	11:K:89:ASN:C	2.56	0.43
12:L:30:ILE:CD1	12:L:59:ALA:HB2	2.42	0.43
1:A:708:MET:HE3	1:A:1090:ALA:O	2.18	0.43
1:A:1189:SER:OG	1:A:1190:PRO:HD2	2.18	0.43
1:A:1329:THR:C	1:A:1331:SER:N	2.71	0.43
1:A:1406:VAL:HG12	1:A:1410:PHE:CD1	2.52	0.43
1:A:396:PRO:HB3	1:A:402:ALA:O	2.18	0.43
1:A:693:VAL:O	1:A:693:VAL:HG12	2.18	0.43
1:A:877:HIS:C	1:A:878:ILE:CG1	2.86	0.43
2:B:39:ARG:HG2	2:B:39:ARG:NH1	2.34	0.43
2:B:546:SER:HG	2:B:631:GLY:H	1.56	0.43
3:C:62:PHE:O	3:C:65:HIS:HB3	2.17	0.43
5:E:21:GLU:O	5:E:24:LYS:HG2	2.19	0.43
5:E:92:THR:HG22	5:E:92:THR:O	2.18	0.43
7:G:47:CYS:O	7:G:76:ALA:HB1	2.19	0.43
1:A:971:PHE:CE2	1:A:1040:GLN:HG2	2.53	0.43
1:A:1116:LEU:HD12	1:A:1116:LEU:C	2.38	0.43
1:A:1239:ARG:HB3	1:A:1239:ARG:NH1	2.33	0.43
1:A:218:ASP:HA	1:A:221:SER:HG	1.83	0.43
1:A:43:GLU:HB2	1:A:46:THR:HB	2.00	0.43
1:A:814:PHE:HE1	2:B:519:TRP:HA	1.83	0.43
2:B:1202:LEU:HD22	2:B:1206:GLU:CD	2.39	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:395:GLN:HG2	2:B:396:ASP:H	1.83	0.43
2:B:465:ASN:N	2:B:465:ASN:ND2	2.65	0.43
2:B:482:VAL:O	2:B:483:LEU:C	2.57	0.43
2:B:789:MET:CE	2:B:965:LYS:O	2.65	0.43
2:B:911:ILE:HG23	2:B:966:VAL:HG11	2.00	0.43
2:B:987:LYS:HG2	2:B:987:LYS:O	2.18	0.43
5:E:29:PHE:O	5:E:30:ILE:HG13	2.18	0.43
7:G:119:LEU:HD12	7:G:131:GLN:O	2.18	0.43
11:K:32:VAL:HA	11:K:73:LEU:O	2.18	0.43
11:K:30:ALA:HA	11:K:75:ILE:O	2.18	0.43
12:L:38:LEU:O	12:L:39:SER:CB	2.58	0.43
2:B:901:PRO:HB2	12:L:60:ARG:HA	2.00	0.43
3:C:169:LYS:NZ	12:L:69:ALA:CB	2.81	0.43
1:A:720:ARG:HD2	13:S:262:GLU:HB3	1.99	0.43
13:S:293:LEU:CD2	13:S:293:LEU:N	2.81	0.43
1:A:353:ILE:HD13	1:A:487:MET:HG3	2.00	0.43
1:A:477:PRO:HG2	1:A:521:MET:HG2	1.99	0.43
1:A:962:ARG:O	1:A:965:GLN:N	2.51	0.43
2:B:214:ALA:HA	2:B:408:LEU:HD12	2.00	0.43
2:B:59:LEU:CD1	2:B:417:PHE:CE2	3.01	0.43
2:B:215:GLN:OE1	2:B:499:ASN:HB3	2.18	0.43
3:C:144:ILE:O	3:C:145:CYS:CB	2.66	0.43
7:G:1:MET:HE3	7:G:80:LYS:N	2.33	0.43
8:H:12:VAL:HA	8:H:28:ALA:HB2	1.99	0.43
8:H:38:LEU:HD13	8:H:125:LEU:HD13	2.00	0.43
1:A:567:LYS:HD3	8:H:95:TYR:HA	1.99	0.43
10:J:25:LEU:O	10:J:29:GLU:HA	2.18	0.43
10:J:7:CYS:SG	10:J:49:MET:CE	3.01	0.43
11:K:106:GLU:O	11:K:107:THR:C	2.56	0.43
13:S:296:PHE:CD1	13:S:296:PHE:N	2.86	0.43
1:A:1001:ARG:HH11	1:A:1001:ARG:HG2	1.83	0.43
1:A:1121:GLU:O	1:A:1122:PRO:C	2.57	0.43
1:A:1202:MET:HE1	1:A:1212:VAL:HG21	2.00	0.43
1:A:108:MET:SD	1:A:210:ILE:HD13	2.59	0.43
1:A:42:ASP:HB3	1:A:45:GLN:N	2.33	0.43
1:A:540:PHE:CB	1:A:571:LEU:HD23	2.39	0.43
1:A:58:LEU:O	1:A:59:GLY:O	2.36	0.43
1:A:706:HIS:C	1:A:708:MET:H	2.22	0.43
1:A:735:VAL:HG12	1:A:735:VAL:O	2.18	0.43
1:A:845:LEU:HD22	1:A:1374:VAL:HG21	2.00	0.43
1:A:88:LYS:HA	1:A:89:PRO:HD2	1.72	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1145:SER:O	2:B:1147:LEU:N	2.51	0.43
2:B:258:LEU:HG	2:B:258:LEU:O	2.18	0.43
2:B:509:ALA:C	2:B:510:LYS:HD2	2.36	0.43
2:B:591:ARG:O	2:B:592:ASN:C	2.57	0.43
2:B:634:TYR:CE1	2:B:692:TYR:CD1	3.06	0.43
2:B:695:ALA:O	2:B:698:GLU:HB3	2.18	0.43
2:B:540:SER:HB3	2:B:747:MET:O	2.18	0.43
2:B:787:VAL:HG12	2:B:787:VAL:O	2.19	0.43
2:B:847:ASP:C	2:B:849:GLY:N	2.72	0.43
2:B:976:ILE:HG22	2:B:977:GLY:N	2.34	0.43
3:C:237:SER:O	3:C:238:ILE:HG13	2.18	0.43
3:C:242:GLN:HA	3:C:245:VAL:CG2	2.45	0.43
3:C:44:LEU:HG	3:C:45:ALA:N	2.34	0.43
4:D:56:ARG:CB	4:D:148:LEU:HD22	2.37	0.43
7:G:1:MET:SD	7:G:79:PHE:CD1	3.12	0.43
1:A:1080:THR:HG22	1:A:1081:LEU:H	1.81	0.43
1:A:1101:LEU:HD11	1:A:1105:LEU:HD11	2.00	0.43
1:A:1192:LEU:CG	1:A:1193:LEU:N	2.81	0.43
2:B:287:ARG:NH2	2:B:325:GLN:HE22	2.16	0.43
2:B:390:LEU:O	2:B:392:ARG:N	2.51	0.43
2:B:460:ALA:HB1	2:B:466:TRP:CE3	2.52	0.43
2:B:508:LEU:O	2:B:509:ALA:C	2.51	0.43
2:B:644:GLU:C	2:B:646:LEU:N	2.71	0.43
2:B:777:ALA:HA	2:B:1095:LEU:CA	2.45	0.43
2:B:780:VAL:HG21	10:J:56:LEU:HD11	1.99	0.43
2:B:952:VAL:CG1	2:B:953:LEU:H	2.31	0.43
3:C:242:GLN:HB3	3:C:246:ARG:HG3	1.99	0.43
1:A:1006:ILE:HD11	5:E:163:GLU:HG3	2.00	0.43
1:A:862:ASN:HA	5:E:174:GLN:O	2.19	0.43
5:E:198:ILE:HD11	5:E:212:ARG:HH11	1.84	0.43
12:L:63:ARG:O	12:L:63:ARG:HG3	2.19	0.43
1:A:115:LEU:O	1:A:122:MET:HE2	2.18	0.43
1:A:224:PHE:CD2	1:A:231:PRO:HG3	2.54	0.43
1:A:416:ARG:C	1:A:417:TYR:CD2	2.92	0.43
1:A:464:PRO:HG2	1:A:465:TYR:HD1	1.83	0.43
1:A:353:ILE:HG13	1:A:482:PHE:HD2	1.83	0.43
1:A:703:THR:HB	1:A:705:LYS:HE2	2.01	0.43
1:A:989:GLY:C	1:A:991:LYS:N	2.69	0.43
2:B:1099:VAL:CG1	2:B:1100:ASP:H	2.24	0.43
1:A:2:VAL:HG21	2:B:1158:PHE:N	2.34	0.43
2:B:597:MET:O	2:B:599:THR:N	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:758:PHE:C	2:B:760:ASP:N	2.72	0.43
1:A:525:GLN:CD	2:B:836:GLU:HG2	2.39	0.43
6:F:86:THR:O	6:F:89:GLU:HB2	2.18	0.43
8:H:145:ARG:O	8:H:146:ARG:HB2	2.18	0.43
11:K:62:LYS:O	11:K:62:LYS:HG3	2.19	0.43
1:A:1064:VAL:O	1:A:1065:GLY:C	2.55	0.43
1:A:1208:THR:O	1:A:1211:GLN:N	2.52	0.43
1:A:1319:VAL:O	1:A:1322:ILE:HG12	2.19	0.43
1:A:157:ASP:C	1:A:159:THR:H	2.22	0.43
1:A:231:PRO:C	1:A:233:TRP:N	2.72	0.43
1:A:79:GLY:HA3	1:A:243:PRO:CG	2.49	0.43
1:A:426:LEU:O	1:A:427:GLN:HG2	2.19	0.43
1:A:49:LYS:NZ	1:A:60:SER:CA	2.81	0.43
1:A:722:LEU:O	1:A:725:ALA:HB3	2.19	0.43
2:B:486:TYR:CD1	2:B:1096:ARG:NH2	2.86	0.43
2:B:114:PRO:O	2:B:115:GLN:C	2.57	0.43
2:B:20:ASP:O	2:B:22:SER:N	2.48	0.43
2:B:376:PHE:HE2	2:B:569:TYR:HD2	1.65	0.43
2:B:545:ILE:C	2:B:634:TYR:HE2	2.22	0.43
2:B:624:LEU:HA	2:B:624:LEU:HD12	1.79	0.43
2:B:872:GLU:CD	2:B:914:LYS:HE2	2.39	0.43
3:C:97:VAL:HG12	3:C:98:VAL:H	1.84	0.43
6:F:134:ILE:N	6:F:146:TRP:O	2.50	0.43
2:B:1076:HIS:CD2	11:K:40:HIS:NE2	2.86	0.43
11:K:55:LYS:HB2	11:K:81:TYR:HE1	1.84	0.43
1:A:1051:ALA:O	1:A:1052:GLN:C	2.56	0.43
1:A:1230:GLU:C	1:A:1232:ASN:N	2.71	0.43
1:A:1373:ASP:HA	1:A:1376:THR:CG2	2.49	0.43
1:A:253:ASN:HB2	2:B:935:ARG:NH1	2.34	0.43
1:A:496:GLU:OE1	7:G:63:PRO:O	2.37	0.43
1:A:582:ILE:O	1:A:583:PRO:O	2.36	0.43
1:A:858:ASN:O	1:A:860:LEU:N	2.52	0.43
1:A:955:PRO:HG2	1:A:955:PRO:O	2.18	0.43
2:B:236:HIS:O	2:B:237:VAL:HG23	2.18	0.43
2:B:485:ARG:HH11	2:B:485:ARG:HG3	1.83	0.43
2:B:526:GLU:HG2	2:B:538:ASN:HB2	2.01	0.43
2:B:758:PHE:HB2	2:B:1024:ALA:HB1	2.00	0.43
2:B:995:ARG:O	2:B:997:GLU:N	2.52	0.43
2:B:798:TYR:HE2	3:C:62:PHE:CE2	2.37	0.43
1:A:1450:LEU:HD11	6:F:108:PHE:CZ	2.54	0.43
9:I:111:THR:CG2	9:I:112:SER:N	2.74	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:54:VAL:HG12	10:J:56:LEU:HD23	2.00	0.43
1:A:1021:LEU:O	1:A:1024:SER:HB3	2.19	0.43
1:A:841:LEU:HD13	1:A:1072:ILE:HB	2.00	0.43
1:A:1074:GLU:N	1:A:1075:PRO:CD	2.82	0.43
1:A:1098:VAL:N	1:A:1099:PRO:CD	2.81	0.43
1:A:1348:LEU:HG	1:A:1372:VAL:HG23	2.01	0.43
1:A:536:LEU:HG	1:A:536:LEU:H	1.51	0.43
1:A:919:ILE:O	1:A:920:LEU:C	2.57	0.43
1:A:751:SER:OG	2:B:1015:HIS:CE1	2.72	0.43
2:B:166:PHE:C	2:B:167:ILE:HG13	2.39	0.43
2:B:63:ILE:O	2:B:67:SER:HB3	2.19	0.43
2:B:936:ASP:CG	2:B:938:SER:H	2.23	0.43
3:C:76:ASP:HB2	3:C:128:ASN:O	2.18	0.43
3:C:41:ILE:HD11	3:C:247:GLY:CA	2.49	0.43
3:C:59:ALA:O	3:C:62:PHE:CB	2.67	0.43
4:D:26:THR:O	4:D:28:GLN:N	2.52	0.43
5:E:129:PRO:O	5:E:130:ALA:C	2.57	0.43
8:H:97:MET:SD	8:H:121:LEU:HD12	2.59	0.43
8:H:115:TYR:CE2	8:H:124:ARG:HG3	2.54	0.43
12:L:32:ALA:CB	12:L:55:ILE:HG13	2.49	0.43
12:L:50:ASP:O	12:L:52:GLY:N	2.52	0.43
13:S:281:TYR:CD1	13:S:281:TYR:C	2.93	0.43
1:A:1169:ILE:HD11	1:A:1229:SER:HB3	2.01	0.42
1:A:1384:VAL:O	1:A:1384:VAL:HG12	2.19	0.42
1:A:1444:MET:HG2	7:G:59:GLY:O	2.19	0.42
1:A:1446:ASP:HB3	1:A:1449:SER:HG	1.84	0.42
1:A:261:ASP:O	1:A:264:PHE:N	2.51	0.42
1:A:343:LYS:HE2	2:B:1156:ASP:HB2	2.01	0.42
1:A:366:VAL:O	1:A:463:ILE:HG12	2.19	0.42
1:A:715:GLU:C	1:A:717:ASN:N	2.71	0.42
1:A:727:ASP:O	1:A:731:ARG:HG3	2.18	0.42
1:A:784:LEU:HD11	1:A:815:PHE:CE2	2.54	0.42
1:A:996:ASN:C	1:A:998:LEU:H	2.22	0.42
2:B:1017:ILE:HG22	2:B:1018:PRO:HD3	2.01	0.42
2:B:1106:ARG:HD3	2:B:1126:GLY:C	2.39	0.42
2:B:1159:ARG:CD	2:B:1193:GLN:HG3	2.31	0.42
2:B:324:ILE:HG22	2:B:325:GLN:N	2.34	0.42
3:C:241:ASP:O	3:C:244:VAL:HB	2.19	0.42
5:E:154:ILE:HG22	5:E:155:ARG:O	2.19	0.42
8:H:27:GLU:HG2	8:H:39:THR:HG23	2.00	0.42
10:J:64:ASN:CB	10:J:65:PRO:CD	2.74	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:35:PHE:HD1	11:K:35:PHE:H	1.67	0.42
1:A:1129:GLU:O	1:A:1131:ALA:N	2.52	0.42
1:A:1282:VAL:C	1:A:1283:VAL:CG2	2.88	0.42
1:A:304:MET:O	1:A:326:ARG:HB3	2.19	0.42
1:A:533:LYS:HE3	1:A:745:GLN:NE2	2.34	0.42
1:A:600:PRO:HA	8:H:25:ARG:NH2	2.34	0.42
1:A:705:LYS:C	1:A:707:GLY:H	2.23	0.42
1:A:8:SER:O	1:A:9:ALA:C	2.57	0.42
2:B:1073:TYR:N	2:B:1073:TYR:CD1	2.87	0.42
2:B:1076:HIS:ND1	2:B:1076:HIS:N	2.66	0.42
2:B:1085:ILE:HD12	2:B:1085:ILE:N	2.34	0.42
2:B:176:SER:O	2:B:182:SER:HB3	2.19	0.42
2:B:292:ILE:N	2:B:293:PRO:HD2	2.34	0.42
2:B:597:MET:C	2:B:599:THR:H	2.22	0.42
3:C:197:SER:O	3:C:198:ALA:C	2.58	0.42
3:C:63:ILE:O	3:C:67:LEU:HG	2.19	0.42
5:E:182:ASP:O	5:E:185:ALA:HB3	2.19	0.42
5:E:205:SER:O	5:E:206:GLY:C	2.56	0.42
6:F:100:GLN:HG2	7:G:66:GLY:HA3	2.01	0.42
9:I:111:THR:HG21	9:I:113:ASP:HB2	2.00	0.42
1:A:1272:THR:HG22	1:A:1273:LEU:N	2.34	0.42
1:A:107:CYS:HB2	1:A:171:GLN:HG2	2.01	0.42
1:A:47:ARG:CZ	1:A:255:SER:H	2.31	0.42
1:A:472:LEU:O	1:A:475:THR:HG22	2.19	0.42
1:A:515:GLN:HB3	1:A:1071:SER:OG	2.20	0.42
1:A:526:ASP:HB3	1:A:657:LEU:HD23	2.01	0.42
1:A:527:THR:O	1:A:653:VAL:HG11	2.19	0.42
1:A:783:THR:HG21	1:A:815:PHE:CE2	2.53	0.42
2:B:222:ILE:O	2:B:240:ILE:HA	2.19	0.42
2:B:431:TYR:CD2	2:B:447:ALA:HB2	2.54	0.42
2:B:549:THR:CG2	2:B:550:ASP:H	2.17	0.42
2:B:912:ILE:HD11	2:B:966:VAL:HG23	1.99	0.42
1:A:483:ASP:HB2	2:B:987:LYS:CG	2.48	0.42
2:B:1003:ALA:HA	3:C:178:PHE:O	2.19	0.42
8:H:58:THR:HG22	8:H:59:ILE:N	2.35	0.42
13:S:254:TYR:C	13:S:256:ALA:N	2.73	0.42
1:A:1067:LEU:O	1:A:1067:LEU:HD12	2.20	0.42
1:A:370:ILE:O	1:A:371:ALA:C	2.57	0.42
1:A:608:ILE:O	1:A:609:ASP:C	2.58	0.42
1:A:928:LEU:C	1:A:930:ASP:N	2.70	0.42
2:B:295:GLY:HA2	2:B:298:LEU:HB2	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:546:SER:HG	2:B:630:ALA:CA	2.33	0.42
2:B:702:LEU:C	2:B:703:ILE:HG13	2.39	0.42
2:B:949:VAL:HG12	2:B:950:ASP:N	2.34	0.42
4:D:63:LEU:HD13	4:D:133:THR:OG1	2.19	0.42
5:E:147:HIS:HD2	5:E:149:LEU:H	1.67	0.42
5:E:25:ASP:O	5:E:27:GLY:N	2.52	0.42
10:J:52:THR:O	10:J:53:HIS:C	2.57	0.42
12:L:32:ALA:CB	12:L:55:ILE:HD12	2.48	0.42
1:A:1007:ILE:C	1:A:1009:ASN:N	2.71	0.42
1:A:1213:GLY:O	1:A:1215:ARG:N	2.53	0.42
1:A:1453:TYR:CE2	6:F:129:LYS:HA	2.54	0.42
1:A:40:THR:CG2	1:A:259:GLU:OE2	2.65	0.42
1:A:52:GLY:N	1:A:56:PRO:HG3	2.35	0.42
2:B:235:SER:OG	2:B:236:HIS:CD2	2.72	0.42
2:B:259:TYR:N	2:B:259:TYR:CD1	2.88	0.42
2:B:603:LEU:HD13	2:B:608:ASP:HB2	2.00	0.42
2:B:615:MET:HA	2:B:626:ILE:HA	2.01	0.42
2:B:744:HIS:HD2	2:B:746:SER:CB	2.32	0.42
3:C:236:GLY:C	3:C:238:ILE:N	2.73	0.42
3:C:245:VAL:C	3:C:247:GLY:N	2.73	0.42
3:C:258:ILE:N	3:C:258:ILE:HD12	2.35	0.42
6:F:103:MET:CE	7:G:66:GLY:H	2.32	0.42
9:I:73:ARG:HH12	9:I:112:SER:HB2	1.83	0.42
10:J:6:ARG:HB3	10:J:11:GLY:O	2.20	0.42
11:K:105:PHE:O	11:K:106:GLU:C	2.57	0.42
1:A:873:MET:C	1:A:1058:VAL:HG23	2.40	0.42
1:A:1081:LEU:HA	1:A:1081:LEU:HD13	1.84	0.42
1:A:1164:PRO:O	1:A:1167:GLU:HG3	2.19	0.42
1:A:1220:PHE:O	1:A:1221:LYS:HB2	2.18	0.42
1:A:231:PRO:O	1:A:233:TRP:N	2.52	0.42
1:A:252:PHE:HB2	1:A:256:GLN:HB3	2.01	0.42
1:A:695:LYS:O	1:A:697:ALA:N	2.53	0.42
1:A:929:LEU:HD13	1:A:929:LEU:O	2.19	0.42
2:B:1162:ILE:HG22	2:B:1163:CYS:O	2.19	0.42
2:B:283:VAL:O	2:B:284:ILE:C	2.57	0.42
2:B:533:CYS:C	2:B:535:LEU:N	2.72	0.42
2:B:843:GLN:HA	2:B:846:ILE:HG13	2.02	0.42
3:C:86:CYS:C	3:C:88:CYS:N	2.72	0.42
6:F:97:ARG:O	6:F:98:ALA:C	2.57	0.42
7:G:30:LEU:HD13	7:G:72:VAL:HG11	2.01	0.42
9:I:26:LEU:CD2	9:I:37:GLU:HA	2.41	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1017:LEU:HD23	5:E:204:THR:O	2.18	0.42
1:A:1134:ILE:O	1:A:1137:ALA:N	2.48	0.42
1:A:282:ASN:O	1:A:284:ALA:N	2.53	0.42
1:A:325:ILE:O	1:A:328:ARG:HB2	2.20	0.42
1:A:532:ARG:HD3	1:A:749:ALA:HB2	2.00	0.42
1:A:900:ASP:HA	1:A:926:GLN:HE22	1.84	0.42
1:A:962:ARG:O	1:A:963:ILE:C	2.58	0.42
2:B:1031:LEU:HD13	2:B:1055:ILE:HD11	2.00	0.42
2:B:1065:GLN:HG3	2:B:1067:ARG:H	1.83	0.42
2:B:582:VAL:HG23	2:B:626:ILE:CB	2.39	0.42
2:B:680:THR:HB	2:B:681:TRP:H	1.58	0.42
2:B:634:TYR:HE1	2:B:692:TYR:CD1	2.38	0.42
1:A:526:ASP:OD2	2:B:829:CYS:HB3	2.20	0.42
4:D:146:GLN:O	4:D:147:TYR:C	2.58	0.42
5:E:135:PHE:CD1	5:E:135:PHE:N	2.88	0.42
5:E:147:HIS:O	5:E:148:GLU:C	2.57	0.42
5:E:162:ARG:CG	5:E:162:ARG:HH11	2.32	0.42
5:E:185:ALA:O	5:E:190:LEU:HG	2.18	0.42
7:G:106:MET:HG2	7:G:107:LYS:N	2.34	0.42
7:G:145:VAL:HG12	7:G:146:LYS:H	1.82	0.42
11:K:65:HIS:CD2	11:K:67:PHE:HB2	2.54	0.42
1:A:1080:THR:C	1:A:1081:LEU:HD22	2.40	0.42
1:A:117:GLU:H	1:A:117:GLU:CD	2.23	0.42
1:A:16:GLU:HB3	1:A:1418:LEU:HD11	2.02	0.42
1:A:322:VAL:CG1	1:A:323:LYS:N	2.82	0.42
1:A:523:ILE:HD12	1:A:622:VAL:CG2	2.49	0.42
1:A:566:ILE:O	1:A:567:LYS:C	2.57	0.42
1:A:605:MET:HE2	1:A:605:MET:HB2	1.78	0.42
1:A:853:ASP:OD2	1:A:857:ARG:NH2	2.52	0.42
1:A:893:PHE:CD2	1:A:893:PHE:C	2.92	0.42
1:A:933:TYR:C	1:A:935:GLN:N	2.72	0.42
2:B:315:LYS:HE2	9:I:4:PHE:CD2	2.55	0.42
2:B:515:HIS:HD2	2:B:517:THR:OG1	2.03	0.42
2:B:730:ARG:O	2:B:731:VAL:O	2.38	0.42
2:B:865:LYS:HZ2	2:B:869:SER:HA	1.84	0.42
3:C:183:TRP:O	3:C:184:ASN:C	2.58	0.42
3:C:91:HIS:O	3:C:91:HIS:CD2	2.73	0.42
5:E:144:ILE:C	5:E:146:HIS:N	2.72	0.42
6:F:138:LEU:O	6:F:140:ASP:N	2.52	0.42
7:G:21:ARG:HD3	7:G:21:ARG:HA	1.92	0.42
11:K:40:HIS:O	11:K:41:THR:C	2.58	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1116:LEU:O	1:A:1308:THR:HG22	2.19	0.42
1:A:1348:LEU:HG	1:A:1372:VAL:CG2	2.50	0.42
1:A:542:GLU:HG2	1:A:542:GLU:H	1.66	0.42
1:A:870:GLU:HG2	5:E:208:TYR:CE2	2.55	0.42
1:A:886:ILE:HG13	1:A:943:LEU:HD13	2.00	0.42
1:A:900:ASP:HA	1:A:926:GLN:NE2	2.35	0.42
1:A:92:HIS:HB3	1:A:95:PHE:HB2	2.02	0.42
2:B:1090:THR:O	2:B:1091:TYR:C	2.57	0.42
2:B:23:ALA:CB	2:B:24:PRO:CD	2.95	0.42
2:B:515:HIS:CD2	2:B:517:THR:HG23	2.54	0.42
2:B:628:THR:O	2:B:629:ASP:O	2.38	0.42
2:B:642:ASP:HB3	2:B:649:LYS:CE	2.49	0.42
2:B:644:GLU:O	2:B:646:LEU:N	2.53	0.42
3:C:181:ASP:N	3:C:182:PRO:CD	2.83	0.42
7:G:44:TYR:HE1	7:G:157:ILE:HB	1.83	0.42
8:H:95:TYR:HB3	8:H:144:ILE:HB	2.00	0.42
1:A:598:LEU:CD2	8:H:25:ARG:NH1	2.83	0.42
11:K:58:PHE:CB	11:K:76:GLN:HE21	2.32	0.42
12:L:54:ARG:HH11	12:L:54:ARG:HG3	1.85	0.42
1:A:1131:ALA:O	1:A:1132:LYS:C	2.58	0.42
1:A:1215:ARG:HA	1:A:1215:ARG:HD2	1.87	0.42
1:A:216:VAL:O	1:A:219:PHE:HB2	2.20	0.42
1:A:254:GLU:N	2:B:935:ARG:HH22	2.17	0.42
1:A:419:LYS:HG3	1:A:420:ARG:H	1.84	0.42
1:A:483:ASP:OD2	1:A:485:ASP:OD1	2.38	0.42
1:A:552:TRP:O	1:A:554:PRO:HD3	2.20	0.42
1:A:518:LYS:HE2	1:A:624:SER:O	2.20	0.42
1:A:70:CYS:O	1:A:71:GLN:C	2.58	0.42
1:A:716:ASP:O	1:A:716:ASP:OD1	2.37	0.42
1:A:825:ILE:O	1:A:827:THR:N	2.52	0.42
2:B:1115:THR:CG2	2:B:1117:GLN:HB2	2.50	0.42
2:B:591:ARG:O	2:B:593:PRO:HD3	2.19	0.42
2:B:835:GLN:HE21	2:B:835:GLN:HB2	1.57	0.42
2:B:939:THR:HA	2:B:940:PRO:HD2	1.92	0.42
2:B:1073:TYR:HE2	3:C:180:TYR:CE2	2.37	0.42
4:D:33:PHE:CE1	7:G:80:LYS:CE	3.02	0.42
5:E:197:LYS:O	5:E:197:LYS:CG	2.64	0.42
7:G:27:LYS:HE2	7:G:54:ILE:HB	2.02	0.42
12:L:53:HIS:O	12:L:55:ILE:HG12	2.20	0.42
12:L:66:GLN:C	12:L:67:PHE:CD1	2.94	0.42
1:A:874:ASP:HA	1:A:1058:VAL:HG23	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1125:ALA:C	1:A:1127:ASP:N	2.72	0.41
1:A:114:LEU:O	1:A:115:LEU:HG	2.20	0.41
1:A:1143:LEU:HD23	1:A:1267:MET:O	2.19	0.41
1:A:1282:VAL:HG22	1:A:1308:THR:HA	2.01	0.41
1:A:324:SER:O	1:A:327:ALA:HB3	2.19	0.41
1:A:675:THR:O	1:A:675:THR:HG22	2.19	0.41
1:A:726:ARG:O	1:A:729:ALA:N	2.53	0.41
2:B:1098:MET:O	2:B:1099:VAL:C	2.59	0.41
2:B:172:ILE:HG22	2:B:173:MET:N	2.35	0.41
2:B:31:TRP:CE3	2:B:31:TRP:HA	2.55	0.41
2:B:373:ARG:CG	2:B:566:LEU:HD23	2.50	0.41
2:B:419:THR:HG21	2:B:468:GLU:OE2	2.20	0.41
2:B:487:THR:CG2	2:B:488:TYR:N	2.82	0.41
2:B:492:LEU:O	2:B:495:LEU:N	2.42	0.41
2:B:57:TYR:HD1	2:B:57:TYR:H	1.67	0.41
2:B:593:PRO:O	2:B:594:ALA:C	2.59	0.41
2:B:616:ILE:CD1	2:B:616:ILE:N	2.81	0.41
2:B:637:LEU:HD21	2:B:742:GLU:OE2	2.20	0.41
2:B:785:TYR:HE2	10:J:60:PHE:CZ	2.38	0.41
3:C:249:ASP:O	3:C:252:GLN:N	2.53	0.41
3:C:75:MET:O	3:C:246:ARG:NH2	2.31	0.41
6:F:86:THR:O	6:F:89:GLU:N	2.51	0.41
12:L:62:LYS:O	12:L:63:ARG:C	2.58	0.41
1:A:1092:LYS:HD2	1:A:1092:LYS:HA	1.82	0.41
1:A:1450:LEU:HD21	7:G:19:GLY:O	2.20	0.41
1:A:209:ASN:O	1:A:210:ILE:C	2.58	0.41
1:A:320:ARG:HH21	1:A:323:LYS:NZ	2.17	0.41
1:A:408:ASP:C	1:A:410:GLY:H	2.23	0.41
1:A:546:VAL:HG21	1:A:572:TRP:CD2	2.55	0.41
1:A:901:LEU:CG	1:A:926:GLN:HE21	2.28	0.41
2:B:1098:MET:O	2:B:1101:ASP:HB2	2.20	0.41
2:B:510:LYS:HE2	2:B:513:GLN:OE1	2.21	0.41
2:B:544:CYS:O	2:B:545:ILE:CG1	2.68	0.41
2:B:806:THR:N	2:B:809:MET:HE3	2.35	0.41
2:B:866:TYR:O	2:B:868:MET:N	2.53	0.41
3:C:164:ALA:O	3:C:165:LYS:C	2.57	0.41
3:C:18:VAL:O	3:C:20:PHE:CD2	2.73	0.41
1:A:567:LYS:CE	8:H:46:LEU:HB2	2.50	0.41
9:I:16:PRO:HA	9:I:26:LEU:O	2.21	0.41
9:I:55:THR:HG22	9:I:56:ALA:H	1.84	0.41
1:A:1397:LEU:HA	1:A:1400:CYS:HB2	1.99	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:606:LEU:HB3	1:A:614:PHE:CD2	2.55	0.41
2:B:1032:SER:O	2:B:1034:VAL:N	2.53	0.41
2:B:1102:LYS:C	2:B:1103:ILE:O	2.58	0.41
1:A:7:SER:HB2	2:B:1175:LEU:CD2	2.49	0.41
2:B:1201:LYS:HE2	2:B:1205:GLN:NE2	2.35	0.41
2:B:170:LEU:HA	2:B:171:PRO:HD2	1.87	0.41
2:B:174:LEU:HD11	2:B:204:ILE:CD1	2.49	0.41
2:B:233:PRO:HG2	2:B:234:ILE:HD12	2.02	0.41
2:B:303:TYR:HD2	2:B:303:TYR:N	2.18	0.41
2:B:45:SER:O	2:B:46:GLN:C	2.58	0.41
2:B:849:GLY:O	2:B:852:ARG:HG3	2.20	0.41
3:C:8:VAL:CG1	3:C:9:LYS:N	2.83	0.41
4:D:149:THR:O	4:D:149:THR:HG23	2.20	0.41
4:D:151:PHE:O	4:D:152:SER:O	2.38	0.41
4:D:195:ILE:O	4:D:198:LEU:HG	2.21	0.41
4:D:217:LEU:O	4:D:219:THR:N	2.54	0.41
5:E:117:THR:C	5:E:119:SER:N	2.73	0.41
5:E:16:PHE:CD1	5:E:58:MET:HE2	2.55	0.41
11:K:12:LEU:HD11	11:K:18:LYS:HE2	2.02	0.41
1:A:1260:LEU:HG	1:A:1260:LEU:O	2.20	0.41
1:A:550:LEU:HD22	1:A:556:TRP:CD1	2.55	0.41
1:A:49:LYS:HZ1	1:A:61:ILE:HG13	1.73	0.41
1:A:630:ILE:HG23	1:A:642:CYS:SG	2.60	0.41
1:A:784:LEU:C	1:A:786:HIS:H	2.23	0.41
1:A:809:THR:O	1:A:810:PRO:C	2.58	0.41
2:B:1060:ARG:C	2:B:1062:HIS:H	2.22	0.41
2:B:121:ASN:HA	2:B:207:GLY:HA2	2.02	0.41
2:B:34:ILE:O	2:B:35:SER:C	2.58	0.41
2:B:515:HIS:CG	2:B:516:ASN:N	2.88	0.41
2:B:700:SER:C	2:B:701:ILE:CG2	2.89	0.41
2:B:770:GLN:OE1	2:B:983:ARG:HA	2.20	0.41
2:B:809:MET:O	2:B:811:TYR:N	2.54	0.41
1:A:254:GLU:H	2:B:935:ARG:NH1	2.18	0.41
3:C:187:LYS:HG3	3:C:219:PHE:CE1	2.55	0.41
3:C:255:VAL:HG21	11:K:94:ILE:HG21	2.03	0.41
3:C:80:LEU:HD12	3:C:95:CYS:HA	2.01	0.41
4:D:40:HIS:CG	4:D:41:GLN:N	2.89	0.41
5:E:124:VAL:HG13	5:E:132:ILE:CG1	2.50	0.41
5:E:112:TYR:CE1	5:E:136:ASN:HB2	2.56	0.41
5:E:143:ASN:ND2	5:E:146:HIS:ND1	2.68	0.41
7:G:7:LEU:O	7:G:73:LYS:HD2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:101:PHE:O	9:I:102:VAL:CG2	2.67	0.41
10:J:43:ARG:HG2	10:J:46:CYS:SG	2.61	0.41
11:K:85:ASP:O	11:K:89:ASN:ND2	2.54	0.41
13:S:269:PHE:CE2	13:S:306:TRP:CZ2	3.08	0.41
1:A:1377:THR:O	1:A:1378:GLN:C	2.57	0.41
1:A:266:LEU:O	1:A:267:ALA:C	2.58	0.41
1:A:324:SER:O	1:A:327:ALA:N	2.53	0.41
1:A:44:THR:O	1:A:45:GLN:CB	2.65	0.41
1:A:618:GLU:O	1:A:619:LYS:C	2.59	0.41
1:A:703:THR:O	1:A:704:ALA:C	2.59	0.41
1:A:889:SER:C	1:A:891:ALA:N	2.72	0.41
2:B:365:THR:CG2	2:B:367:LEU:HG	2.38	0.41
2:B:282:ILE:HD13	2:B:382:ILE:HD13	2.01	0.41
2:B:62:ILE:HG23	2:B:418:LYS:CG	2.49	0.41
2:B:575:PRO:HG2	2:B:576:ASP:H	1.84	0.41
2:B:635:ARG:HG3	2:B:635:ARG:NH1	2.35	0.41
2:B:702:LEU:HA	2:B:702:LEU:HD12	1.85	0.41
2:B:952:VAL:O	2:B:953:LEU:HB3	2.20	0.41
2:B:956:THR:HG22	2:B:960:GLY:HA2	2.02	0.41
2:B:995:ARG:O	2:B:996:ARG:C	2.59	0.41
3:C:215:GLU:O	3:C:216:GLY:C	2.59	0.41
3:C:249:ASP:O	3:C:250:THR:C	2.58	0.41
5:E:116:ILE:HG22	5:E:117:THR:N	2.35	0.41
5:E:33:GLU:C	5:E:35:VAL:N	2.72	0.41
6:F:150:GLU:O	6:F:151:LEU:C	2.59	0.41
6:F:75:PRO:C	6:F:77:ASP:N	2.74	0.41
1:A:1260:LEU:CG	1:A:1260:LEU:O	2.68	0.41
1:A:1279:ILE:CD1	1:A:1316:VAL:HG21	2.48	0.41
1:A:1362:TYR:CE1	1:A:1364:ASN:HA	2.56	0.41
1:A:1397:LEU:H	1:A:1397:LEU:HG	1.64	0.41
1:A:151:ASP:OD1	1:A:163:SER:CB	2.68	0.41
1:A:335:ARG:HA	1:A:339:ASN:HD22	1.86	0.41
1:A:361:LEU:HG	1:A:507:VAL:CG1	2.51	0.41
1:A:368:LYS:O	1:A:369:SER:C	2.58	0.41
1:A:445:ASN:ND2	1:A:455:MET:HE3	2.35	0.41
1:A:475:THR:O	1:A:479:ASN:N	2.53	0.41
1:A:598:LEU:O	1:A:599:SER:C	2.58	0.41
1:A:960:ILE:O	1:A:960:ILE:HG22	2.20	0.41
2:B:129:PHE:HE2	2:B:166:PHE:CD1	2.35	0.41
2:B:274:PRO:CG	2:B:359:GLU:HB3	2.51	0.41
2:B:700:SER:O	2:B:701:ILE:HG22	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:830:TYR:HD1	2:B:830:TYR:HA	1.68	0.41
4:D:167:LEU:C	4:D:169:SER:H	2.24	0.41
5:E:114:ASN:O	5:E:115:ASN:CB	2.68	0.41
5:E:165:LEU:O	5:E:166:LYS:C	2.58	0.41
6:F:138:LEU:O	6:F:139:PRO:C	2.59	0.41
7:G:1:MET:SD	7:G:79:PHE:CE1	3.14	0.41
8:H:83:GLN:C	8:H:85:GLY:N	2.74	0.41
9:I:40:SER:HB2	9:I:41:PRO:HD2	2.03	0.41
3:C:241:ASP:HB3	11:K:109:TRP:CH2	2.55	0.41
11:K:55:LYS:O	11:K:77:THR:HG22	2.20	0.41
12:L:31:CYS:SG	12:L:34:CYS:N	2.93	0.41
1:A:1116:LEU:H	1:A:1308:THR:CG2	2.18	0.41
1:A:1120:LEU:N	1:A:1120:LEU:HD12	2.36	0.41
1:A:1187:GLN:HG3	1:A:1188:GLN:H	1.85	0.41
1:A:1419:ASP:OD1	1:A:1426:GLU:OE1	2.39	0.41
1:A:1427:ASN:O	1:A:1430:LEU:N	2.43	0.41
1:A:231:PRO:C	1:A:233:TRP:H	2.23	0.41
1:A:443:LEU:HB2	1:A:501:LEU:HD21	2.03	0.41
1:A:541:ILE:CD1	1:A:577:ILE:HD11	2.51	0.41
1:A:78:PRO:O	1:A:79:GLY:C	2.58	0.41
1:A:825:ILE:O	1:A:828:ALA:N	2.49	0.41
1:A:839:ARG:O	1:A:842:VAL:HB	2.21	0.41
2:B:293:PRO:CG	2:B:296:GLU:OE1	2.68	0.41
2:B:599:THR:O	2:B:603:LEU:HB2	2.20	0.41
2:B:604:ARG:C	2:B:606:LYS:H	2.24	0.41
3:C:8:VAL:HG12	3:C:10:ILE:H	1.86	0.41
3:C:229:TYR:CD1	3:C:229:TYR:N	2.89	0.41
4:D:50:LEU:HD11	7:G:4:ILE:CG1	2.51	0.41
4:D:59:ILE:O	4:D:60:LYS:C	2.58	0.41
5:E:211:TYR:HD1	5:E:211:TYR:N	2.19	0.41
5:E:66:GLU:HA	5:E:69:ILE:HD12	2.02	0.41
7:G:5:LYS:HG3	7:G:7:LEU:HD21	2.02	0.41
9:I:86:PHE:HB2	9:I:87:GLN:H	1.67	0.41
10:J:57:ILE:CG2	10:J:58:GLU:N	2.84	0.41
11:K:71:PHE:C	11:K:71:PHE:CD1	2.94	0.41
1:A:1018:PHE:O	1:A:1019:CYS:C	2.59	0.41
1:A:1167:GLU:O	1:A:1168:GLU:C	2.58	0.41
1:A:135:PHE:O	1:A:137:ALA:N	2.54	0.41
1:A:24:PRO:HG2	1:A:25:GLU:OE1	2.20	0.41
1:A:582:ILE:HA	1:A:583:PRO:HD2	1.84	0.41
1:A:883:LEU:HA	1:A:883:LEU:HD23	1.87	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:824:ILE:HG22	2:B:1087:PHE:CE2	2.55	0.41
2:B:114:PRO:CG	2:B:115:GLN:H	2.25	0.41
1:A:7:SER:HB2	2:B:1175:LEU:HD22	2.02	0.41
2:B:360:PHE:CE2	2:B:361:LEU:HB2	2.55	0.41
2:B:386:LEU:C	2:B:388:CYS:N	2.73	0.41
2:B:401:PHE:C	2:B:403:LYS:H	2.24	0.41
2:B:526:GLU:CD	2:B:752:ALA:CB	2.89	0.41
2:B:543:SER:C	2:B:544:CYS:SG	2.99	0.41
5:E:11:ARG:C	5:E:13:TRP:N	2.74	0.41
7:G:97:HIS:CD2	7:G:97:HIS:N	2.89	0.41
8:H:104:PHE:HZ	8:H:135:LEU:O	2.04	0.41
8:H:96:VAL:HA	8:H:142:LEU:O	2.21	0.41
8:H:3:ASN:HB3	8:H:4:THR:H	1.61	0.41
9:I:45:ARG:HE	9:I:47:GLU:HG3	1.85	0.41
13:S:308:PHE:O	13:S:309:SER:CB	2.69	0.41
1:A:1027:ALA:O	1:A:1030:ARG:N	2.54	0.41
1:A:103:CYS:SG	1:A:108:MET:HE3	2.61	0.41
1:A:1114:PRO:O	1:A:1115:SER:O	2.38	0.41
1:A:1308:THR:OG1	1:A:1309:ASP:N	2.53	0.41
1:A:130:ASP:C	1:A:132:LYS:H	2.24	0.41
1:A:49:LYS:HZ1	1:A:60:SER:C	2.23	0.41
1:A:544:ASP:CG	1:A:545:GLN:N	2.74	0.41
1:A:562:THR:HA	1:A:563:PRO:HD3	1.84	0.41
1:A:73:GLY:O	1:A:74:MET:C	2.59	0.41
1:A:971:PHE:N	1:A:971:PHE:CD1	2.88	0.41
2:B:1004:GLU:CB	2:B:1006:ILE:HD11	2.51	0.41
2:B:1152:MET:O	2:B:1154:ALA:N	2.54	0.41
2:B:23:ALA:CB	2:B:24:PRO:HD2	2.31	0.41
2:B:38:PHE:O	2:B:39:ARG:C	2.59	0.41
2:B:570:VAL:HA	2:B:571:PRO:HD2	1.78	0.41
2:B:857:ARG:O	2:B:858:SER:HB3	2.21	0.41
2:B:90:ILE:HD11	2:B:432:MET:SD	2.60	0.41
5:E:112:TYR:HE1	5:E:136:ASN:HD22	1.69	0.41
6:F:123:LYS:C	6:F:125:LEU:N	2.73	0.41
7:G:18:PHE:HA	7:G:22:MET:HE3	2.03	0.41
7:G:62:LEU:HB3	7:G:63:PRO:CD	2.50	0.41
10:J:18:TRP:HA	10:J:18:TRP:HE3	1.85	0.41
10:J:21:TYR:HB2	10:J:39:LEU:CD1	2.51	0.41
12:L:60:ARG:CG	12:L:61:THR:H	2.29	0.41
1:A:1451:VAL:O	1:A:1453:TYR:N	2.54	0.41
1:A:18:GLN:OE1	1:A:18:GLN:C	2.59	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:218:ASP:HA	1:A:221:SER:OG	2.21	0.41
1:A:35:ILE:HD12	1:A:241:VAL:CG2	2.50	0.41
1:A:393:ARG:C	1:A:395:GLY:N	2.75	0.41
1:A:420:ARG:O	1:A:424:ILE:HG13	2.21	0.41
1:A:556:TRP:CD2	1:A:558:GLY:HA2	2.55	0.41
1:A:996:ASN:CA	1:A:998:LEU:HD12	2.51	0.41
2:B:1064:TYR:O	2:B:1065:GLN:C	2.59	0.41
2:B:1072:MET:CE	2:B:1085:ILE:HB	2.51	0.41
2:B:102:VAL:O	2:B:109:THR:HG23	2.21	0.41
2:B:1142:GLY:O	2:B:1144:ALA:N	2.54	0.41
2:B:408:LEU:O	2:B:412:LEU:HG	2.21	0.41
2:B:535:LEU:HA	2:B:535:LEU:HD23	1.87	0.41
2:B:635:ARG:HH11	2:B:635:ARG:CG	2.33	0.41
2:B:792:MET:O	2:B:793:ALA:HB2	2.20	0.41
3:C:26:ASP:O	3:C:27:LEU:C	2.58	0.41
3:C:61:GLU:HG2	3:C:62:PHE:N	2.36	0.41
3:C:69:LEU:H	3:C:69:LEU:CD1	2.32	0.41
4:D:34:GLN:O	4:D:47:LEU:HD23	2.21	0.41
5:E:24:LYS:CG	5:E:25:ASP:N	2.84	0.41
4:D:47:LEU:CD1	7:G:3:PHE:HD2	2.33	0.41
7:G:39:THR:HB	7:G:42:PHE:H	1.86	0.41
11:K:27:ALA:HB1	11:K:28:PRO:HD2	2.03	0.41
1:A:967:ALA:HA	1:A:1044:TRP:CZ3	2.56	0.41
1:A:1072:ILE:O	1:A:1075:PRO:CG	2.66	0.41
1:A:113:LEU:HA	1:A:113:LEU:HD23	1.96	0.41
1:A:1142:THR:O	1:A:1145:SER:OG	2.27	0.41
1:A:1191:TRP:HA	1:A:1191:TRP:CE3	2.56	0.41
1:A:704:ALA:O	1:A:705:LYS:CB	2.66	0.41
1:A:90:VAL:HG12	1:A:91:PHE:O	2.20	0.41
1:A:922:ASP:OD1	1:A:922:ASP:C	2.60	0.41
1:A:937:VAL:O	1:A:938:LYS:C	2.58	0.41
2:B:1168:LEU:HB2	2:B:1170:THR:OG1	2.21	0.41
1:A:7:SER:CB	2:B:1175:LEU:HD22	2.51	0.41
2:B:212:LEU:HA	2:B:212:LEU:HD23	1.73	0.41
2:B:351:TYR:O	2:B:355:ILE:HG13	2.20	0.41
2:B:483:LEU:HD12	2:B:484:ASN:N	2.35	0.41
3:C:27:LEU:HA	3:C:228:PHE:CE2	2.56	0.41
1:A:1318:THR:HB	5:E:141:VAL:HG11	2.03	0.41
5:E:59:SER:O	5:E:60:PHE:HB3	2.21	0.41
5:E:93:MET:O	5:E:94:LYS:C	2.59	0.41
10:J:48:ARG:C	10:J:48:ARG:HD2	2.41	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:65:HIS:NE2	11:K:67:PHE:CG	2.88	0.41
13:S:258:GLY:O	13:S:259:ALA:O	2.38	0.41
1:A:1037:LEU:HD23	1:A:1037:LEU:N	2.36	0.40
1:A:1147:THR:HG22	1:A:1148:ILE:N	2.36	0.40
1:A:1161:THR:CG2	1:A:1163:ILE:HG13	2.51	0.40
1:A:1165:GLU:H	1:A:1165:GLU:HG3	1.58	0.40
1:A:599:SER:HA	1:A:600:PRO:HD2	1.86	0.40
1:A:706:HIS:CD2	1:A:706:HIS:H	2.38	0.40
1:A:707:GLY:C	1:A:708:MET:HG3	2.41	0.40
1:A:848:ILE:O	1:A:1065:GLY:N	2.39	0.40
1:A:920:LEU:CD2	1:A:920:LEU:C	2.89	0.40
1:A:935:GLN:C	1:A:937:VAL:N	2.71	0.40
2:B:1023:VAL:O	2:B:1027:ILE:N	2.50	0.40
2:B:121:ASN:HA	2:B:207:GLY:CA	2.51	0.40
2:B:222:ILE:O	2:B:240:ILE:HG13	2.21	0.40
2:B:329:THR:O	2:B:332:ASP:HB3	2.21	0.40
2:B:878:GLN:O	2:B:879:ARG:C	2.58	0.40
3:C:22:LEU:HD13	3:C:230:MET:HE1	2.02	0.40
5:E:124:VAL:HA	5:E:132:ILE:CD1	2.47	0.40
5:E:124:VAL:HB	5:E:125:PRO:CD	2.50	0.40
1:A:1211:GLN:O	1:A:1214:GLU:HB2	2.21	0.40
1:A:130:ASP:C	1:A:132:LYS:N	2.75	0.40
1:A:445:ASN:HB2	1:A:455:MET:HG2	2.03	0.40
1:A:477:PRO:HG3	1:A:521:MET:HG2	2.03	0.40
1:A:626:ASN:HB3	1:A:627:GLY:H	1.71	0.40
1:A:639:PRO:HG2	1:A:640:GLN:H	1.85	0.40
1:A:901:LEU:HD22	1:A:919:ILE:HG22	1.99	0.40
1:A:942:PHE:C	1:A:942:PHE:CD2	2.94	0.40
2:B:1187:ASN:HD21	2:B:1190:ASP:HB3	1.86	0.40
2:B:1198:TYR:O	2:B:1199:ALA:C	2.59	0.40
2:B:114:PRO:HG3	2:B:194:GLU:HG3	2.03	0.40
2:B:247:GLY:N	2:B:418:LYS:HZ3	2.17	0.40
2:B:38:PHE:CE2	2:B:43:LEU:HD23	2.57	0.40
2:B:508:LEU:HB3	2:B:510:LYS:N	2.25	0.40
2:B:564:GLU:O	2:B:565:PRO:C	2.58	0.40
2:B:687:GLU:O	2:B:688:GLY:C	2.59	0.40
2:B:796:LEU:HA	2:B:796:LEU:HD12	1.82	0.40
2:B:842:ASN:O	2:B:846:ILE:HG13	2.21	0.40
2:B:847:ASP:O	2:B:849:GLY:N	2.55	0.40
2:B:873:THR:CG2	2:B:874:PHE:N	2.84	0.40
2:B:903:VAL:O	2:B:948:ILE:HG23	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:80:LEU:CD1	3:C:95:CYS:CA	2.99	0.40
5:E:144:ILE:H	5:E:144:ILE:HG12	1.68	0.40
1:A:1327:ILE:HG22	5:E:147:HIS:HE1	1.85	0.40
5:E:153:HIS:HB3	5:E:196:VAL:HG13	1.99	0.40
1:A:1004:ASN:HD22	5:E:167:ARG:HD2	1.78	0.40
6:F:88:TYR:HD1	6:F:88:TYR:H	1.67	0.40
7:G:132:SER:O	7:G:134:GLU:N	2.54	0.40
7:G:22:MET:O	7:G:23:LYS:C	2.59	0.40
8:H:47:PHE:CD2	8:H:95:TYR:HD1	2.39	0.40
9:I:34:TYR:HE2	9:I:36:GLU:CB	2.32	0.40
13:S:282:TYR:O	13:S:282:TYR:CG	2.73	0.40
1:A:1019:CYS:O	1:A:1022:LEU:CB	2.68	0.40
1:A:1435:PRO:C	1:A:1436:ILE:HG13	2.40	0.40
1:A:34:LYS:HD3	1:A:34:LYS:H	1.86	0.40
1:A:515:GLN:HB2	1:A:1071:SER:HB3	2.02	0.40
1:A:532:ARG:NH2	1:A:745:GLN:HG2	2.36	0.40
1:A:933:TYR:C	1:A:935:GLN:H	2.24	0.40
2:B:1039:GLY:HA2	10:J:51:LEU:CD2	2.50	0.40
1:A:1438:THR:CG2	2:B:1144:ALA:HB3	2.51	0.40
2:B:1194:ILE:HD12	2:B:1196:ILE:CG2	2.52	0.40
2:B:213:ILE:HA	2:B:213:ILE:HD13	1.81	0.40
2:B:496:ARG:NH1	2:B:496:ARG:HB3	2.30	0.40
2:B:515:HIS:HD2	2:B:517:THR:N	2.12	0.40
2:B:996:ARG:HH22	3:C:175:ALA:CA	2.34	0.40
3:C:41:ILE:HA	3:C:42:PRO:HD3	1.84	0.40
3:C:43:THR:CG2	3:C:44:LEU:H	2.34	0.40
4:D:188:ALA:O	4:D:191:ALA:N	2.55	0.40
4:D:29:LEU:O	4:D:30:GLY:O	2.39	0.40
5:E:60:PHE:HE2	5:E:80:VAL:CB	2.35	0.40
6:F:82:THR:HA	6:F:83:PRO:HD3	1.82	0.40
7:G:154:VAL:HB	7:G:155:SER:H	1.71	0.40
7:G:5:LYS:CG	7:G:7:LEU:HD21	2.51	0.40
10:J:13:VAL:HG12	10:J:14:VAL:H	1.86	0.40
10:J:47:ARG:HG2	10:J:47:ARG:HH11	1.85	0.40
11:K:101:LEU:O	11:K:102:LYS:C	2.58	0.40
12:L:32:ALA:HB3	12:L:55:ILE:CG1	2.52	0.40
1:A:1129:GLU:O	1:A:1130:GLN:C	2.60	0.40
1:A:1336:MET:CE	1:A:1381:LEU:HG	2.52	0.40
1:A:42:ASP:O	1:A:44:THR:N	2.38	0.40
1:A:493:GLN:HE21	1:A:493:GLN:CA	2.33	0.40
1:A:757:ASN:O	1:A:761:MET:HG3	2.20	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:803:SER:C	1:A:805:LEU:N	2.75	0.40
1:A:899:VAL:HB	1:A:929:LEU:CD1	2.25	0.40
1:A:932:GLU:HG3	1:A:936:LEU:HD21	2.02	0.40
2:B:1013:ASN:OD1	2:B:1014:PRO:HD2	2.21	0.40
2:B:1183:LYS:HA	2:B:1186:ASP:HA	2.04	0.40
2:B:216:GLU:HB2	2:B:406:LEU:CD2	2.51	0.40
2:B:349:ILE:HG22	2:B:349:ILE:O	2.20	0.40
2:B:236:HIS:HE1	2:B:389:ALA:HA	1.83	0.40
2:B:530:GLY:O	2:B:532:ALA:N	2.54	0.40
2:B:661:LEU:C	2:B:663:ALA:N	2.75	0.40
1:A:254:GLU:H	2:B:935:ARG:HH22	1.70	0.40
4:D:52:LEU:O	4:D:54:GLU:N	2.46	0.40
5:E:37:LEU:HA	5:E:38:PRO:HD2	1.94	0.40
6:F:97:ARG:O	6:F:100:GLN:N	2.54	0.40
7:G:13:LEU:HD12	7:G:26:LEU:HD21	2.03	0.40
4:D:50:LEU:HD11	7:G:4:ILE:HG13	2.03	0.40
6:F:99:LEU:HD21	7:G:66:GLY:N	2.37	0.40
10:J:21:TYR:HB2	10:J:39:LEU:HD13	2.02	0.40
2:B:763:GLN:OE1	13:S:292:PRO:HB3	2.21	0.40
1:A:1116:LEU:HG	1:A:1116:LEU:O	2.22	0.40
1:A:1138:ILE:CG2	1:A:1316:VAL:HG13	2.52	0.40
1:A:1347:ALA:O	1:A:1348:LEU:C	2.60	0.40
1:A:461:LYS:O	1:A:463:ILE:HG23	2.22	0.40
1:A:501:LEU:HD11	2:B:1146:PHE:CE2	2.56	0.40
1:A:599:SER:HB2	1:A:603:ASN:H	1.87	0.40
1:A:79:GLY:C	1:A:243:PRO:HG3	2.42	0.40
1:A:867:ILE:HG22	1:A:871:ASP:H	1.85	0.40
2:B:1192:TYR:N	2:B:1192:TYR:CD1	2.89	0.40
2:B:240:ILE:O	2:B:240:ILE:CG2	2.68	0.40
2:B:377:PHE:C	2:B:379:GLY:N	2.71	0.40
2:B:516:ASN:H	2:B:516:ASN:HD22	1.70	0.40
2:B:533:CYS:SG	2:B:534:GLY:N	2.95	0.40
5:E:93:MET:O	5:E:96:PHE:N	2.55	0.40
6:F:103:MET:HE3	7:G:15:PRO:HG2	2.03	0.40
2:B:800:GLN:CB	10:J:52:THR:CG2	2.98	0.40
11:K:20:LYS:HB2	11:K:20:LYS:HE3	1.89	0.40
12:L:61:THR:HG22	12:L:63:ARG:N	2.37	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	1418/1733 (82%)	914 (64%)	316 (22%)	188 (13%)	0	5
2	B	1096/1224 (90%)	726 (66%)	223 (20%)	147 (13%)	0	5
3	C	264/318 (83%)	169 (64%)	62 (24%)	33 (12%)	0	7
4	D	173/221 (78%)	129 (75%)	27 (16%)	17 (10%)	1	12
5	E	212/215 (99%)	141 (66%)	50 (24%)	21 (10%)	1	12
6	F	82/155 (53%)	60 (73%)	15 (18%)	7 (8%)	1	15
7	G	169/171 (99%)	123 (73%)	34 (20%)	12 (7%)	1	20
8	H	129/146 (88%)	93 (72%)	26 (20%)	10 (8%)	1	18
9	I	117/122 (96%)	80 (68%)	22 (19%)	15 (13%)	0	6
10	J	63/70 (90%)	36 (57%)	14 (22%)	13 (21%)	0	2
11	K	112/120 (93%)	82 (73%)	25 (22%)	5 (4%)	3	29
12	L	44/70 (63%)	18 (41%)	14 (32%)	12 (27%)	0	0
13	S	68/179 (38%)	51 (75%)	10 (15%)	7 (10%)	0	11
All	All	3947/4744 (83%)	2622 (66%)	838 (21%)	487 (12%)	0	7

All (487) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	4	GLN
1	A	48	ALA
1	A	55	ASP
1	A	58	LEU
1	A	62	ASP
1	A	70	CYS
1	A	73	GLY
1	A	76	GLU
1	A	93	VAL
1	A	130	ASP

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Mol	Chain	Res	Type
1	A	286	HIS
1	A	311	GLN
1	A	322	VAL
1	A	385	ILE
1	A	399	HIS
1	A	423	ASP
1	A	516	SER
1	A	525	GLN
1	A	536	LEU
1	A	567	LYS
1	A	583	PRO
1	A	626	ASN
1	A	709	THR
1	A	780	VAL
1	A	821	ARG
1	A	920	LEU
1	A	1002	GLY
1	A	1036	ARG
1	A	1115	SER
1	A	1122	PRO
1	A	1124	HIS
1	A	1165	GLU
1	A	1167	GLU
1	A	1212	VAL
1	A	1223	ASP
1	A	1231	ASP
1	A	1242	VAL
1	A	1281	ARG
1	A	1308	THR
1	A	1309	ASP
1	A	1335	ILE
1	A	1341	ILE
1	A	1366	ARG
1	A	1377	THR
1	A	1378	GLN
1	A	1386	ARG
1	A	1392	SER
1	A	1396	ALA
1	A	1397	LEU
1	A	1403	GLU
1	A	1405	THR
1	A	1424	VAL

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Mol	Chain	Res	Type
2	B	43	LEU
2	B	45	SER
2	B	58	THR
2	B	67	SER
2	B	108	VAL
2	B	124	TYR
2	B	186	GLU
2	B	219	ALA
2	B	261	ARG
2	B	367	LEU
2	B	391	ASP
2	B	466	TRP
2	B	467	GLY
2	B	468	GLU
2	B	474	SER
2	B	510	LYS
2	B	530	GLY
2	B	531	GLN
2	B	571	PRO
2	B	591	ARG
2	B	620	ARG
2	B	629	ASP
2	B	636	PRO
2	B	643	ASP
2	B	648	HIS
2	B	709	ASP
2	B	727	LYS
2	B	731	VAL
2	B	751	VAL
2	B	752	ALA
2	B	818	PRO
2	B	901	PRO
2	B	943	SER
2	B	958	GLN
2	B	992	ILE
2	B	1046	PRO
2	B	1108	ARG
2	B	1157	ALA
2	B	1167	GLY
2	B	1171	VAL
2	B	1175	LEU
2	B	1181	GLU

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Mol	Chain	Res	Type
2	B	1188	LYS
2	B	1211	ASN
3	C	10	ILE
3	C	60	ASP
3	C	81	GLU
3	C	83	SER
3	C	87	PHE
3	C	110	THR
3	C	149	LYS
3	C	167	HIS
3	C	175	ALA
3	C	184	ASN
3	C	213	PRO
3	C	214	ASN
3	C	215	GLU
3	C	216	GLY
4	D	12	ARG
4	D	15	LEU
4	D	20	GLU
4	D	152	SER
5	E	130	ALA
5	E	158	SER
6	F	81	THR
7	G	118	ASP
8	H	81	PRO
8	H	84	ALA
8	H	140	ALA
9	I	9	ASP
9	I	11	ASN
9	I	84	VAL
10	J	6	ARG
10	J	15	GLY
10	J	53	HIS
10	J	64	ASN
12	L	50	ASP
12	L	53	HIS
12	L	59	ALA
12	L	60	ARG
13	S	275	LYS
13	S	292	PRO
1	A	42	ASP
1	A	44	THR

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Mol	Chain	Res	Type
1	A	45	GLN
1	A	54	ASN
1	A	57	ARG
1	A	61	ILE
1	A	74	MET
1	A	79	GLY
1	A	111	GLY
1	A	126	LEU
1	A	131	SER
1	A	154	SER
1	A	219	PHE
1	A	223	GLY
1	A	244	PRO
1	A	290	GLU
1	A	317	LYS
1	A	318	SER
1	A	331	GLY
1	A	332	LYS
1	A	335	ARG
1	A	400	PRO
1	A	415	LEU
1	A	418	SER
1	A	419	LYS
1	A	424	ILE
1	A	473	SER
1	A	557	ASP
1	A	594	GLY
1	A	598	LEU
1	A	619	LYS
1	A	708	MET
1	A	716	ASP
1	A	720	ARG
1	A	738	LYS
1	A	760	GLN
1	A	765	VAL
1	A	775	ILE
1	A	824	LEU
1	A	846	GLU
1	A	847	ASP
1	A	859	SER
1	A	864	ILE
1	A	875	ALA

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Mol	Chain	Res	Type
1	A	929	LEU
1	A	968	GLN
1	A	979	SER
1	A	1006	ILE
1	A	1016	THR
1	A	1052	GLN
1	A	1084	PHE
1	A	1089	VAL
1	A	1104	ILE
1	A	1105	LEU
1	A	1126	ALA
1	A	1128	GLN
1	A	1164	PRO
1	A	1168	GLU
1	A	1169	ILE
1	A	1170	ILE
1	A	1224	LEU
1	A	1314	SER
1	A	1365	TYR
1	A	1376	THR
2	B	21	GLU
2	B	46	GLN
2	B	65	GLU
2	B	68	THR
2	B	114	PRO
2	B	229	ALA
2	B	258	LEU
2	B	260	GLY
2	B	266	ALA
2	B	294	ASP
2	B	322	PHE
2	B	504	ARG
2	B	509	ALA
2	B	526	GLU
2	B	534	GLY
2	B	559	SER
2	B	605	ARG
2	B	613	VAL
2	B	641	GLU
2	B	810	GLU
2	B	867	GLY
2	B	869	SER

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Mol	Chain	Res	Type
2	B	880	THR
2	B	881	ASN
2	B	891	ASP
2	B	902	GLY
2	B	903	VAL
2	B	907	GLY
2	B	1018	PRO
2	B	1041	GLU
2	B	1096	ARG
2	B	1099	VAL
2	B	1150	ARG
2	B	1156	ASP
2	B	1170	THR
2	B	1183	LYS
2	B	1186	ASP
2	B	1190	ASP
3	C	74	SER
3	C	141	GLY
3	C	161	LYS
4	D	6	SER
4	D	8	PHE
4	D	16	LYS
4	D	19	GLU
4	D	30	GLY
4	D	199	ASN
4	D	218	GLU
5	E	36	GLU
5	E	45	LYS
5	E	59	SER
5	E	106	GLN
5	E	145	THR
5	E	189	GLY
5	E	206	GLY
6	F	131	PRO
7	G	83	LYS
7	G	154	VAL
8	H	59	ILE
8	H	77	ARG
8	H	82	PRO
8	H	108	SER
8	H	128	ASN
9	I	3	THR

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Mol	Chain	Res	Type
9	I	34	TYR
9	I	62	ILE
9	I	89	GLN
9	I	106	CYS
9	I	107	SER
10	J	2	ILE
10	J	62	ARG
11	K	37	LYS
11	K	103	THR
12	L	43	THR
12	L	51	CYS
12	L	56	LEU
13	S	259	ALA
1	A	59	GLY
1	A	66	LYS
1	A	89	PRO
1	A	124	GLN
1	A	167	CYS
1	A	283	GLY
1	A	394	ASN
1	A	396	PRO
1	A	517	ASN
1	A	543	LEU
1	A	592	ASP
1	A	640	GLN
1	A	647	GLY
1	A	707	GLY
1	A	731	ARG
1	A	774	ARG
1	A	903	ASN
1	A	1017	LEU
1	A	1060	PRO
1	A	1062	GLU
1	A	1131	ALA
1	A	1221	LYS
1	A	1229	SER
1	A	1452	LYS
2	B	115	GLN
2	B	131	ASP
2	B	176	SER
2	B	206	ASN
2	B	295	GLY

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Mol	Chain	Res	Type
2	B	308	TRP
2	B	334	ILE
2	B	365	THR
2	B	369	GLY
2	B	469	GLN
2	B	480	SER
2	B	551	PRO
2	B	598	GLU
2	B	645	SER
2	B	682	SER
2	B	688	GLY
2	B	711	GLU
2	B	712	PRO
2	B	738	PHE
2	B	761	HIS
2	B	792	MET
2	B	822	ASN
2	B	996	ARG
2	B	1017	ILE
2	B	1153	GLU
2	B	1155	SER
2	B	1189	ILE
3	C	6	PRO
3	C	28	ALA
3	C	91	HIS
3	C	169	LYS
3	C	202	PRO
3	C	212	PRO
3	C	218	PRO
3	C	264	GLN
4	D	52	LEU
5	E	8	ASN
5	E	44	ALA
5	E	56	LYS
5	E	74	ASP
5	E	192	ARG
7	G	17	PHE
7	G	139	ILE
7	G	147	ILE
9	I	7	CYS
9	I	113	ASP
10	J	22	LEU

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Mol	Chain	Res	Type
12	L	35	SER
12	L	49	LYS
13	S	295	THR
1	A	35	ILE
1	A	67	CYS
1	A	100	LYS
1	A	196	GLU
1	A	253	ASN
1	A	312	PRO
1	A	465	TYR
1	A	526	ASP
1	A	605	MET
1	A	986	ILE
1	A	1040	GLN
1	A	1139	GLU
1	A	1206	ASP
1	A	1266	THR
1	A	1280	GLU
1	A	1302	PRO
2	B	387	LEU
2	B	409	ALA
2	B	430	ARG
2	B	754	SER
2	B	848	ARG
2	B	884	ARG
2	B	946	ASN
2	B	1029	CYS
2	B	1143	ALA
2	B	1178	ASN
2	B	1202	LEU
3	C	90	ASP
3	C	198	ALA
3	C	227	THR
3	C	240	VAL
4	D	131	GLU
4	D	168	LYS
5	E	73	PRO
5	E	115	ASN
6	F	73	ALA
6	F	112	GLU
7	G	133	SER
8	H	92	ASP

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Mol	Chain	Res	Type
9	I	32	CYS
9	I	73	ARG
9	I	86	PHE
9	I	95	THR
10	J	9	SER
10	J	29	GLU
10	J	51	LEU
10	J	63	TYR
11	K	64	GLU
12	L	42	ARG
13	S	288	SER
1	A	84	ILE
1	A	197	PRO
1	A	696	GLU
1	A	759	ALA
1	A	789	LYS
1	A	795	GLU
1	A	808	LEU
1	A	817	ALA
1	A	958	VAL
1	A	1160	SER
1	A	1188	GLN
1	A	1435	PRO
2	B	22	SER
2	B	56	ASP
2	B	368	GLU
2	B	483	LEU
2	B	490	SER
2	B	565	PRO
2	B	878	GLN
2	B	879	ARG
2	B	883	LEU
2	B	1019	SER
2	B	1100	ASP
3	C	148	ARG
4	D	27	LEU
4	D	142	LYS
5	E	40	GLU
5	E	172	GLU
5	E	183	PRO
6	F	108	PHE
7	G	30	LEU

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Mol	Chain	Res	Type
7	G	124	GLY
7	G	165	GLU
8	H	52	GLN
11	K	70	ARG
13	S	277	LYS
13	S	293	LEU
1	A	599	SER
1	A	641	VAL
1	A	719	VAL
1	A	1162	VAL
1	A	1338	VAL
2	B	171	PRO
2	B	282	ILE
2	B	450	ALA
2	B	543	SER
2	B	694	ASP
2	B	758	PHE
2	B	906	SER
2	B	1103	ILE
2	B	1118	PRO
3	C	126	GLY
3	C	171	GLY
4	D	201	LYS
6	F	139	PRO
10	J	18	TRP
12	L	26	THR
12	L	46	VAL
1	A	507	VAL
1	A	1057	VAL
2	B	635	ARG
3	C	142	VAL
6	F	93	ILE
1	A	9	ALA
1	A	653	VAL
1	A	886	ILE
1	A	963	ILE
1	A	1158	PRO
2	B	985	GLY
5	E	37	LEU
7	G	63	PRO
1	A	392	VAL
1	A	673	GLY

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Mol	Chain	Res	Type
1	A	1379	GLY
2	B	410	GLY
2	B	502	ILE
2	B	552	MET
2	B	974	PRO
1	A	250	ILE
1	A	649	ILE
1	A	1031	VAL
10	J	14	VAL
11	K	43	GLY
1	A	357	PRO
1	A	1061	GLY
2	B	575	PRO
7	G	157	ILE
5	E	129	PRO

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	1246/1520 (82%)	1133 (91%)	113 (9%)	10	42
2	B	964/1061 (91%)	880 (91%)	84 (9%)	11	44
3	C	234/274 (85%)	205 (88%)	29 (12%)	5	28
4	D	140/200 (70%)	126 (90%)	14 (10%)	8	37
5	E	196/197 (100%)	184 (94%)	12 (6%)	20	57
6	F	74/137 (54%)	63 (85%)	11 (15%)	3	22
7	G	152/152 (100%)	143 (94%)	9 (6%)	21	58
8	H	117/128 (91%)	110 (94%)	7 (6%)	21	58
9	I	113/116 (97%)	97 (86%)	16 (14%)	3	25
10	J	60/65 (92%)	55 (92%)	5 (8%)	12	46
11	K	99/102 (97%)	91 (92%)	8 (8%)	13	47
12	L	40/57 (70%)	33 (82%)	7 (18%)	2	15

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
13	S	62/156 (40%)	55 (89%)	7 (11%)	6	32
All	All	3497/4165 (84%)	3175 (91%)	322 (9%)	10	41

All (322) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	2	VAL
1	A	13	THR
1	A	14	VAL
1	A	18	GLN
1	A	34	LYS
1	A	41	MET
1	A	54	ASN
1	A	62	ASP
1	A	83	HIS
1	A	93	VAL
1	A	108	MET
1	A	167	CYS
1	A	195	ASP
1	A	200	ARG
1	A	208	LEU
1	A	215	SER
1	A	220	THR
1	A	270	LEU
1	A	303	TYR
1	A	308	ILE
1	A	326	ARG
1	A	329	LEU
1	A	335	ARG
1	A	354	SER
1	A	362	ASP
1	A	375	THR
1	A	381	THR
1	A	406	ILE
1	A	408	ASP
1	A	425	GLN
1	A	434	ARG
1	A	443	LEU
1	A	445	ASN
1	A	450	LEU
1	A	451	HIS
1	A	453	MET

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Mol	Chain	Res	Type
1	A	454	SER
1	A	466	SER
1	A	469	ARG
1	A	481	ASP
1	A	487	MET
1	A	489	LEU
1	A	493	GLN
1	A	498	ARG
1	A	501	LEU
1	A	503	GLN
1	A	523	ILE
1	A	524	VAL
1	A	560	ILE
1	A	562	THR
1	A	596	THR
1	A	618	GLU
1	A	626	ASN
1	A	629	LEU
1	A	734	GLU
1	A	739	ASP
1	A	754	SER
1	A	762	SER
1	A	774	ARG
1	A	786	HIS
1	A	791	ASP
1	A	816	HIS
1	A	821	ARG
1	A	831	THR
1	A	833	GLU
1	A	845	LEU
1	A	852	TYR
1	A	854	ASN
1	A	858	ASN
1	A	879	GLU
1	A	890	ASP
1	A	897	TYR
1	A	903	ASN
1	A	906	HIS
1	A	920	LEU
1	A	929	LEU
1	A	936	LEU
1	A	949	ASP

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Mol	Chain	Res	Type
1	A	969	GLN
1	A	1029	ARG
1	A	1035	TYR
1	A	1048	ASN
1	A	1050	GLU
1	A	1058	VAL
1	A	1081	LEU
1	A	1082	ASN
1	A	1110	ASN
1	A	1111	MET
1	A	1114	PRO
1	A	1116	LEU
1	A	1122	PRO
1	A	1127	ASP
1	A	1142	THR
1	A	1155	ASP
1	A	1166	ASP
1	A	1236	LEU
1	A	1264	GLU
1	A	1271	ILE
1	A	1274	ARG
1	A	1291	VAL
1	A	1295	THR
1	A	1298	TYR
1	A	1300	LYS
1	A	1325	THR
1	A	1333	ILE
1	A	1353	TYR
1	A	1358	SER
1	A	1362	TYR
1	A	1364	ASN
1	A	1372	VAL
1	A	1376	THR
1	A	1445	ILE
1	A	1447	GLU
2	B	44	VAL
2	B	57	TYR
2	B	128	LEU
2	B	175	ARG
2	B	194	GLU
2	B	217	ARG
2	B	223	VAL

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Mol	Chain	Res	Type
2	B	261	ARG
2	B	268	THR
2	B	286	PHE
2	B	294	ASP
2	B	298	LEU
2	B	365	THR
2	B	371	GLU
2	B	378	LEU
2	B	393	LYS
2	B	401	PHE
2	B	408	LEU
2	B	419	THR
2	B	427	ASP
2	B	429	PHE
2	B	463	THR
2	B	466	TRP
2	B	476	ARG
2	B	485	ARG
2	B	496	ARG
2	B	498	THR
2	B	510	LYS
2	B	511	PRO
2	B	582	VAL
2	B	603	LEU
2	B	615	MET
2	B	629	ASP
2	B	635	ARG
2	B	636	PRO
2	B	644	GLU
2	B	658	ILE
2	B	682	SER
2	B	724	ASP
2	B	737	THR
2	B	742	GLU
2	B	743	ILE
2	B	748	ILE
2	B	751	VAL
2	B	766	ARG
2	B	815	ARG
2	B	830	TYR
2	B	835	GLN
2	B	839	MET

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Mol	Chain	Res	Type
2	B	855	PHE
2	B	856	PHE
2	B	859	TYR
2	B	878	GLN
2	B	895	ASP
2	B	901	PRO
2	B	909	ASP
2	B	939	THR
2	B	953	LEU
2	B	986	GLN
2	B	987	LYS
2	B	993	THR
2	B	997	GLU
2	B	999	MET
2	B	1002	THR
2	B	1006	ILE
2	B	1026	LEU
2	B	1034	VAL
2	B	1047	PHE
2	B	1051	THR
2	B	1076	HIS
2	B	1084	GLN
2	B	1087	PHE
2	B	1092	TYR
2	B	1095	LEU
2	B	1096	ARG
2	B	1104	HIS
2	B	1137	CYS
2	B	1138	MET
2	B	1159	ARG
2	B	1170	THR
2	B	1183	LYS
2	B	1202	LEU
2	B	1212	ILE
2	B	1224	PHE
3	C	23	SER
3	C	44	LEU
3	C	54	ASN
3	C	55	THR
3	C	56	THR
3	C	57	VAL
3	C	58	LEU

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Mol	Chain	Res	Type
3	C	62	PHE
3	C	74	SER
3	C	77	ILE
3	C	86	CYS
3	C	88	CYS
3	C	89	GLU
3	C	91	HIS
3	C	100	THR
3	C	104	PHE
3	C	108	GLU
3	C	129	ILE
3	C	138	GLU
3	C	140	ASN
3	C	143	LEU
3	C	147	LEU
3	C	186	LEU
3	C	193	TYR
3	C	214	ASN
3	C	240	VAL
3	C	245	VAL
3	C	250	THR
3	C	266	ASP
4	D	47	LEU
4	D	63	LEU
4	D	70	PHE
4	D	137	ASN
4	D	139	LYS
4	D	148	LEU
4	D	149	THR
4	D	152	SER
4	D	177	VAL
4	D	182	SER
4	D	187	THR
4	D	193	THR
4	D	197	SER
4	D	206	GLU
5	E	60	PHE
5	E	72	PHE
5	E	83	CYS
5	E	104	ASN
5	E	114	ASN
5	E	135	PHE

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Mol	Chain	Res	Type
5	E	153	HIS
5	E	169	ARG
5	E	183	PRO
5	E	207	ARG
5	E	211	TYR
5	E	212	ARG
6	F	77	ASP
6	F	79	ARG
6	F	81	THR
6	F	84	TYR
6	F	86	THR
6	F	90	ARG
6	F	96	THR
6	F	119	ARG
6	F	143	PHE
6	F	148	VAL
6	F	153	VAL
7	G	1	MET
7	G	38	CYS
7	G	39	THR
7	G	70	PHE
7	G	78	VAL
7	G	80	LYS
7	G	96	GLN
7	G	126	ASN
7	G	171	ILE
8	H	10	PHE
8	H	86	ASP
8	H	95	TYR
8	H	102	TYR
8	H	130	ARG
8	H	134	ASN
8	H	141	TYR
9	I	6	PHE
9	I	8	ARG
9	I	9	ASP
9	I	10	CYS
9	I	13	MET
9	I	32	CYS
9	I	34	TYR
9	I	46	HIS
9	I	75	CYS

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Mol	Chain	Res	Type
9	I	78	CYS
9	I	85	PHE
9	I	86	PHE
9	I	100	PHE
9	I	101	PHE
9	I	106	CYS
9	I	113	ASP
10	J	2	ILE
10	J	28	ASP
10	J	46	CYS
10	J	48	ARG
10	J	55	ASP
11	K	10	PHE
11	K	25	THR
11	K	35	PHE
11	K	47	ARG
11	K	70	ARG
11	K	78	THR
11	K	81	TYR
11	K	114	LEU
12	L	33	GLU
12	L	48	CYS
12	L	51	CYS
12	L	55	ILE
12	L	63	ARG
12	L	65	VAL
12	L	68	GLU
13	S	263	ARG
13	S	266	THR
13	S	267	ASP
13	S	283	GLN
13	S	288	SER
13	S	292	PRO
13	S	293	LEU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (91) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	54	ASN
1	A	80	HIS
1	A	83	HIS
1	A	92	HIS

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Mol	Chain	Res	Type
1	A	213	HIS
1	A	225	ASN
1	A	256	GLN
1	A	299	HIS
1	A	339	ASN
1	A	394	ASN
1	A	435	HIS
1	A	445	ASN
1	A	451	HIS
1	A	493	GLN
1	A	503	GLN
1	A	587	HIS
1	A	603	ASN
1	A	611	GLN
1	A	631	HIS
1	A	654	ASN
1	A	659	HIS
1	A	741	ASN
1	A	757	ASN
1	A	786	HIS
1	A	851	HIS
1	A	858	ASN
1	A	877	HIS
1	A	903	ASN
1	A	926	GLN
1	A	1048	ASN
1	A	1085	HIS
1	A	1106	ASN
1	A	1232	ASN
1	A	1432	GLN
2	B	52	ASN
2	B	60	GLN
2	B	121	ASN
2	B	178	ASN
2	B	236	HIS
2	B	325	GLN
2	B	366	GLN
2	B	465	ASN
2	B	515	HIS
2	B	516	ASN
2	B	518	HIS
2	B	538	ASN

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Mol	Chain	Res	Type
2	B	657	HIS
2	B	744	HIS
2	B	821	GLN
2	B	835	GLN
2	B	957	ASN
2	B	984	HIS
2	B	1015	HIS
2	B	1065	GLN
2	B	1084	GLN
2	B	1117	GLN
2	B	1161	HIS
2	B	1179	GLN
2	B	1193	GLN
3	C	65	HIS
3	C	73	GLN
3	C	79	GLN
3	C	91	HIS
3	C	112	ASN
3	C	123	ASN
3	C	167	HIS
3	C	252	GLN
4	D	28	GLN
4	D	39	ASN
4	D	40	HIS
4	D	51	ASN
4	D	137	ASN
5	E	101	GLN
5	E	104	ASN
5	E	114	ASN
5	E	143	ASN
5	E	147	HIS
7	G	14	HIS
7	G	53	ASN
7	G	97	HIS
7	G	122	ASN
7	G	126	ASN
9	I	12	ASN
9	I	83	ASN
9	I	89	GLN
9	I	90	GLN
11	K	65	HIS
11	K	76	GLN

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Mol	Chain	Res	Type
11	K	89	ASN
13	S	283	GLN
13	S	285	GLN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

5.6 Ligand geometry [i](#)

Of 10 ligands modelled in this entry, 10 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
13	S	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	S	269:PHE	C	270:THR	N	0.95

6 Fit of model and data [i](#)

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

Unable to reproduce the depositors R factor - this section is therefore empty.

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

Unable to reproduce the depositors R factor - this section is therefore empty.

6.3 Carbohydrates [i](#)

Unable to reproduce the depositors R factor - this section is therefore empty.

6.4 Ligands [i](#)

Unable to reproduce the depositors R factor - this section is therefore empty.

6.5 Other polymers [i](#)

Unable to reproduce the depositors R factor - this section is therefore empty.