



Full wwPDB EM Validation Report ⓘ

Mar 28, 2026 – 03:03 AM UTC

PDB ID : 7Q55 / pdb_00007q55
EMDB ID : EMD-13826
Title : Single Particle Cryo-EM structure of photosynthetic A8B8 glyceraldehyde
-3-phosphate dehydrogenase hexadecamer (major conformer) from *Spinacia
oleracea*.
Authors : Marotta, R.; Fermani, S.; Sparla, F.; Trost, P.; Del Giudice, A.
Deposited on : 2021-11-02
Resolution : 5.70 Å(reported)

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

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

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

EMDB validation analysis : 0.0.1.dev132
Mogul : 2022.3.0, CSD as543be (2022)
MolProbity : 4-5-2 with Phenix2.0
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

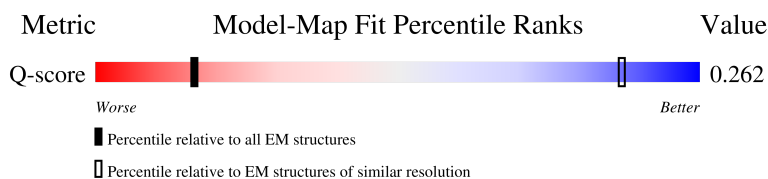
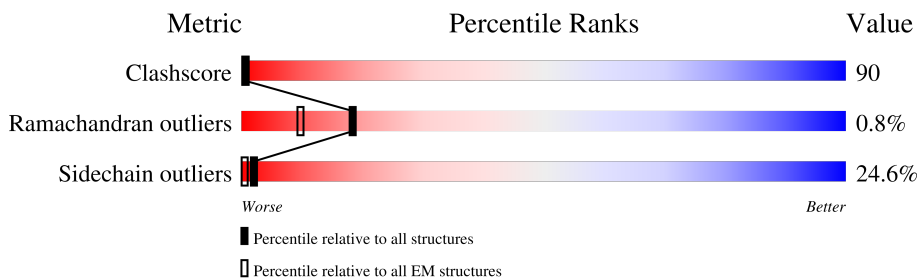
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 5.70 Å.

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



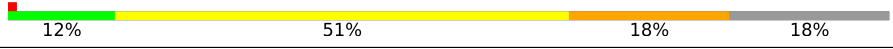
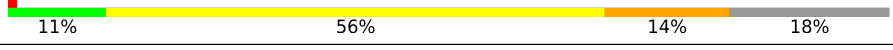
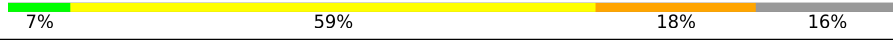
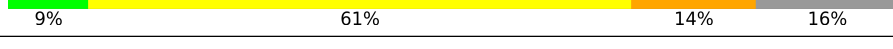
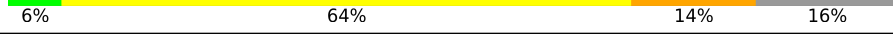
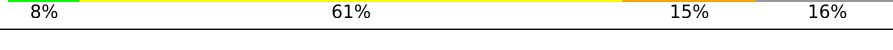
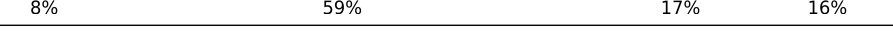
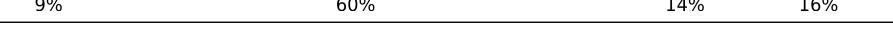
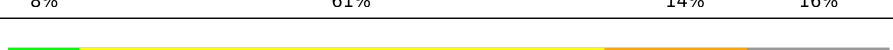
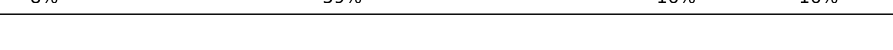
Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	503 (5.20 - 6.20)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	451	
1	C	451	
1	E	451	
1	G	451	

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Mol	Chain	Length	Quality of chain
1	I	451	
1	K	451	
1	O	451	
1	Q	451	
2	B	402	
2	D	402	
2	F	402	
2	H	402	
2	J	402	
2	L	402	
2	P	402	
2	R	402	

2 Entry composition [i](#)

There are 3 unique types of molecules in this entry. The entry contains 42608 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	O	368	Total	C	N	O	S	0	0
			2694	1700	473	510	11		
1	Q	368	Total	C	N	O	S	0	0
			2694	1700	473	510	11		
1	A	368	Total	C	N	O	S	0	0
			2694	1700	473	510	11		
1	C	368	Total	C	N	O	S	0	0
			2694	1700	473	510	11		
1	E	368	Total	C	N	O	S	0	0
			2694	1700	473	510	11		
1	G	368	Total	C	N	O	S	0	0
			2694	1700	473	510	11		
1	I	368	Total	C	N	O	S	0	0
			2694	1700	473	510	11		
1	K	368	Total	C	N	O	S	0	0
			2694	1700	473	510	11		

- Molecule 2 is a protein called Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	P	337	Total	C	N	O	S	0	0
			2544	1600	445	488	11		
2	R	337	Total	C	N	O	S	0	0
			2544	1600	445	488	11		
2	B	337	Total	C	N	O	S	0	0
			2544	1600	445	488	11		
2	D	337	Total	C	N	O	S	0	0
			2544	1600	445	488	11		
2	F	337	Total	C	N	O	S	0	0
			2544	1600	445	488	11		
2	H	337	Total	C	N	O	S	0	0
			2544	1600	445	488	11		
2	J	337	Total	C	N	O	S	0	0
			2544	1600	445	488	11		

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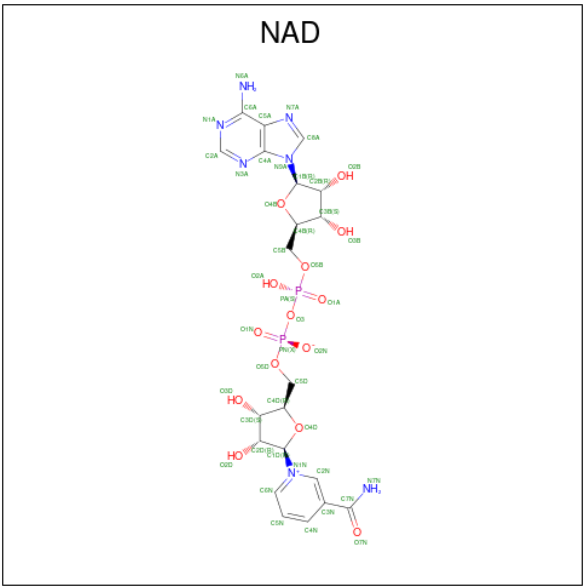
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Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	L	337	2544	1600	445	488	11	0	0

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
P	334	UNK	-	insertion	UNP P19866
R	334	UNK	-	insertion	UNP P19866
B	334	UNK	-	insertion	UNP P19866
D	334	UNK	-	insertion	UNP P19866
F	334	UNK	-	insertion	UNP P19866
H	334	UNK	-	insertion	UNP P19866
J	334	UNK	-	insertion	UNP P19866
L	334	UNK	-	insertion	UNP P19866

- Molecule 3 is NICOTINAMIDE-ADENINE-DINUCLEOTIDE (CCD ID: NAD) (formula: C₂₁H₂₇N₇O₁₄P₂) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	P	
3	O	1	44	21	7	14	2	0
3	P	1	44	21	7	14	2	0
3	Q	1	44	21	7	14	2	0
3	R	1	44	21	7	14	2	0

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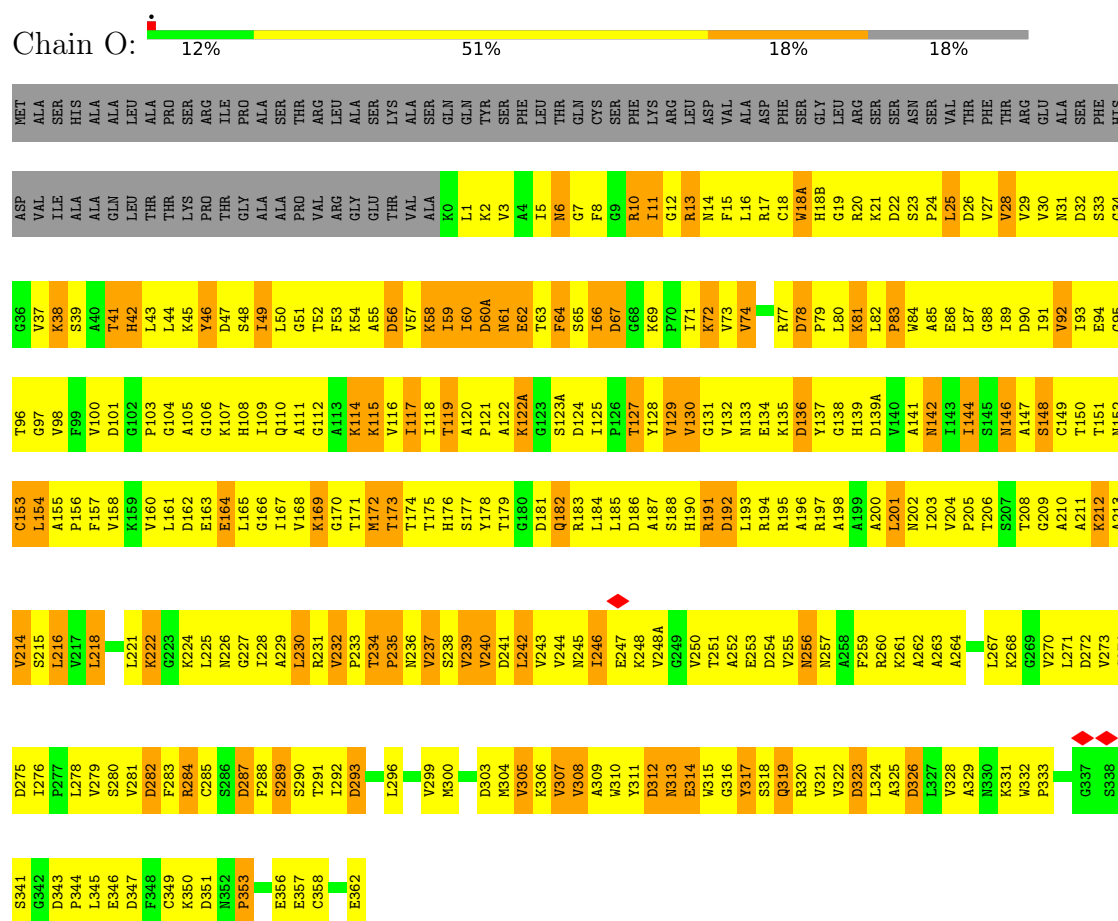
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Mol	Chain	Residues	Atoms					AltConf
3	A	1	Total 44	C 21	N 7	O 14	P 2	0
3	B	1	Total 44	C 21	N 7	O 14	P 2	0
3	C	1	Total 44	C 21	N 7	O 14	P 2	0
3	D	1	Total 44	C 21	N 7	O 14	P 2	0
3	E	1	Total 44	C 21	N 7	O 14	P 2	0
3	F	1	Total 44	C 21	N 7	O 14	P 2	0
3	G	1	Total 44	C 21	N 7	O 14	P 2	0
3	H	1	Total 44	C 21	N 7	O 14	P 2	0
3	I	1	Total 44	C 21	N 7	O 14	P 2	0
3	J	1	Total 44	C 21	N 7	O 14	P 2	0
3	K	1	Total 44	C 21	N 7	O 14	P 2	0
3	L	1	Total 44	C 21	N 7	O 14	P 2	0

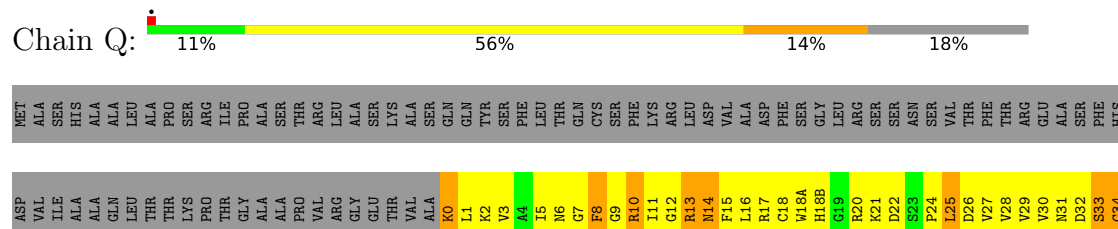
3 Residue-property plots

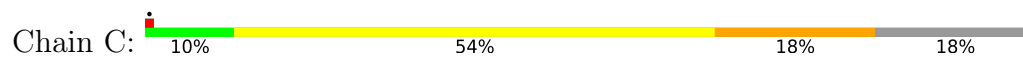
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion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

- Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic



- Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic





MET	ASP	G36	T96	L154	S215	D275	S338
ALA	VAL	V37	G97	A155	L216	I276	V339
SER	ILE	K38	F98	P156	L217	P277	V339
HIS	ALA	S39	F99	F157	L218	L278	V339
ALA	ALA	T41	D101	V158	Q220	V279	A340
LEU	GLN	H42	D101	K159	Q221	S280	S341
ALA	LEU	L43	G102	V160	L221	V281	G342
PRO	THR	L44	P103	L161	K224	D282	P343
SER	THR	L44	G104	L162	L225	P283	P344
ARG	LYS	Y46	A105	E163	L226	R284	L345
ILE	THR	D47	G106	E164	G227	R285	E346
PRO	GLY	S48	K107	L165	D228	S286	D347
ALA	ALA	I49	I108	L167	A229	F287	F348
SER	ALA	L50	Q110	V168	L230	P288	C349
THR	PRO	G51	A111	K169	L231	S289	K350
ARG	VAL	T52	G112	T175	R290	S290	D351
LEU	ARG	F53	G113	G170	V232	T291	N352
ALA	GLY	F53	A114	T171	P233	T292	P353
SER	GLU	D56	K115	M172	T234	D293	E356
LYS	VAL	V57	V116	T173	P235	S294	E357
ALA	VAL	K58	I117	T174	L236	S295	C358
SER	ALA	I59	I118	H176	V237	T297	K359
GLN	KO	I60	T119	S177	M298	M298	L360
THR	L1	D60A	A120	Y178	V240	V299	Y361
GLN	K2	N61	P121	T179	D241	M300	E362
TRP	V3	E62	K122A	G180	L242	G301	
PHE	A4	T63		D181	V243	G302	
LEU	I5	F64	D124	Q182	V244	D303	
THR	N6	S65	I125	R183	N245	M304	
GLN	G7	I66	L126	L184	K305	V305	
CYS	F8	D67	P126	L185	E247	K306	
SER	G9	G68	T127	D186	K248	V307	
PHE	R10	K69	Y128	S188	V248A	V308	
LYS	P70	I11	V129	H190	W310	A309	
ARG	G12	I71	V130	R191	T251	Y311	
LEU	R13	K72	V132	D192	A252	D312	
ASP	N14	V73	N133	L193	E253	N313	
VAL	F15	V74	E134	R194	D254	E314	
ALA	L16	S75	K135	R195	V255	W315	
ASP	R17	N76	D136	A196	N256	G316	
PHE	C18	R77	Y137	R197	N257	Y317	
SER	W18A	D78	G138	A198	A258	S318	
GLY	H18B	P79	H139	A199	F259	Q319	
LEU	G19	L80	D139A	A200	R260	R320	
ARG	R20	K81	V140	L201	K261	V321	
SER	K21	L82	N141	L202	A262	D322	
SER	D22	P83	N142	T203	A263	G323	
ASN	S23	W84	I143	V204	A264	L324	
SER	P24	A85	I144	P205	G265	A325	
VAL	L25	E86	S145	T206	D326	D326	
THR	D26	L87	N146	S207	L327	V328	
PHE	V27	G88	A147	T208	K268	V328	
THR	V28	I89	S148	G209	K269	N330	
THR	V29	D90	C149	A210	V270	K331	
ARG	V30	I91	T150	A211	L271	W332	
GLU	N31	V92	T151	A212	D272	P333	
ALA	D32	I93	N152	A213	V273	G334	
SER	PHE	E94	C153	V214			

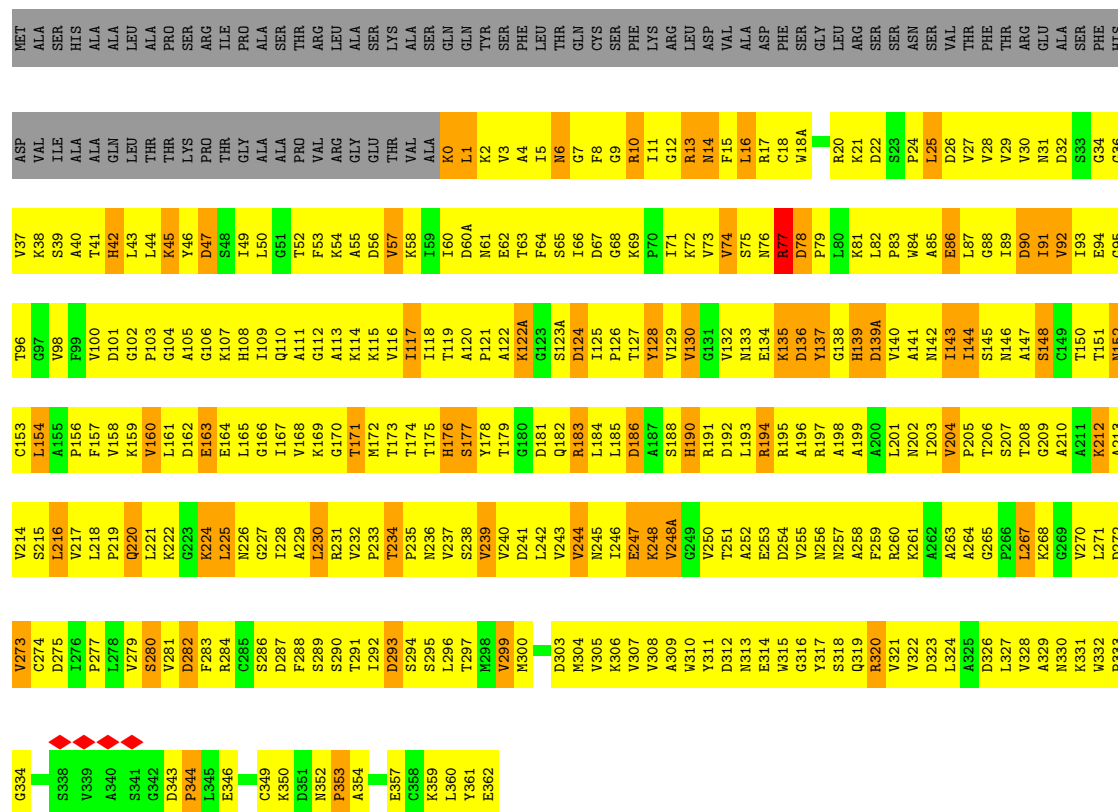
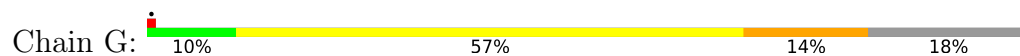
• Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic



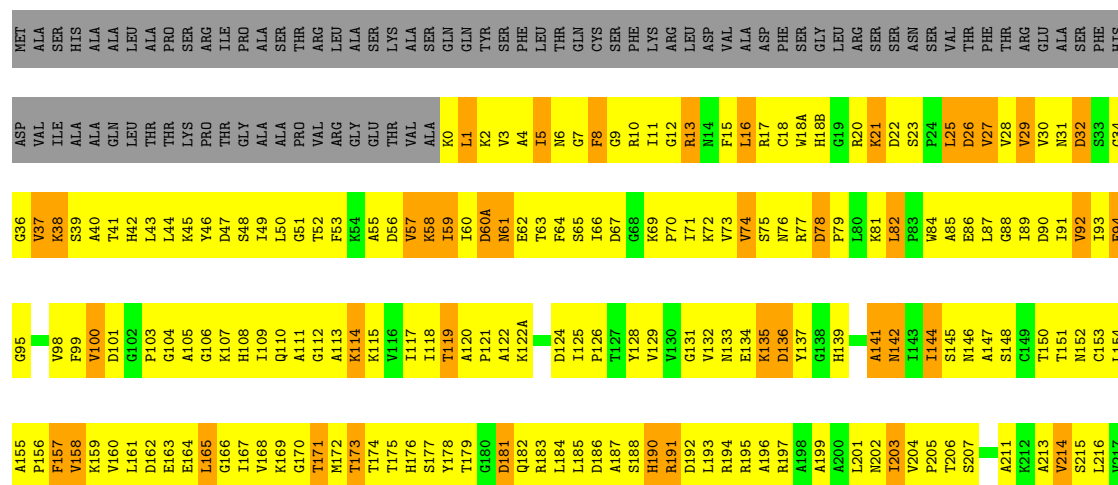
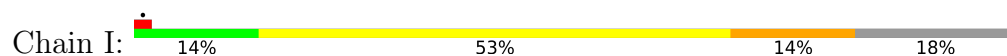
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ALA	VAL	V37	T96	C153	S215	D275
SER	ILE	K38	G97	L154	I276	I276
HIS	ALA	S39	F98	A155	V217	P277
ALA	ALA	T41	F99	P156	L218	L278
LEU	GLN	H42	D101	F157	P219	V279
ALA	LEU	L43	G102	V158	Q220	S280
PRO	THR	L44	D101	K159	L221	V281
SER	THR	L44	P103	L160	K222	D282
ARG	LYS	Y46	G104	L161	G223	F283
ILE	THR	D47	A105	D162	K224	R284
PRO	GLY	S48	G106	E163	L225	D287
ALA	ALA	I49	K107	E164	N226	F288
SER	ALA	L50	H108	L165	I228	S289
THR	PRO	G51	I109	G166	A229	S290
ARG	VAL	T52	Q110	I167	L230	T291
LEU	ARG	F53	A111	V168	R231	T292
ALA	GLY	K54	G112	K169	V232	D293
SER	GLU	A55	A113	G170	P233	S294
LYS	VAL	D56	K114	T171	T234	S295
ALA	VAL	V57	V116	T173	P235	T296
THR	VAL	K58	I117	T174	N236	L297
GLN	KO	I59	I118	H175	V237	M298
THR	L1	I60	T119	H176	S238	V299
GLN	D60A	I60	A120	S177	V239	M300
TRP	K2	D60A	P121	Y178	V240	G301
SER	V3	N61	P121	T179	D241	G302
PHE	A4	E62	A122	K122A	D241	D303
LEU	I5	T63	G123	D181	L242	M304
THR	N6	F64	K123A	Q182	V243	V305
GLN	G7	S65	S123A	R183	V244	K306
CYS	F8	I66	D124	R183	N245	V307
SER	G9	D67	I125	L184	E247	V308
PHE	R10	K69	P126	L185	K248	A309
LYS	I11	G68	T127	D186	V248A	W310
ARG	G12	P70	Y128	A187		Y311
LEU	R13	I71	V129	S188		D312
ASP	N14	K72	V130	H190		N313
VAL	F15	V73	G131	R191		E253
ALA	L16	V74	N132	D192		D254
ASP	R17	S75	N133	L193		V255
PHE	C18	N76	E134	R194		N256
SER	W18A	R77	K135	R195		N257
GLY	H18B	D78	D136	A196		A258
LEU	G19	P79	Y137	R197		F259
ARG	R20	L80	G138	A198		R260
SER	K21	K81	H139	A200		K261
SER	D22	L82	D139A	L201		A262
ASN	S23	P83	V140	N202		A263
SER	P24	W84	A141	T203		A264
VAL	L25	A85	N142	V204		G265
THR	D26	E86	N143	P205		D326
PHE	V27	L87	I144	T206		L327
THR	V28	G88	S145	S207		V328
THR	V29	I89	K146	T208		K268
ARG	V30	D90	A147	G209		V270
GLU	N31	I91	S148	K331		L271
ALA	D32	V92	C149	A211		D272
SER	PHE	I93	N150	A212		V273
THR	G34	E94	T151	A213		

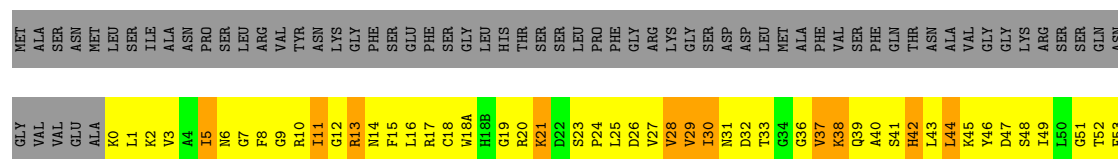


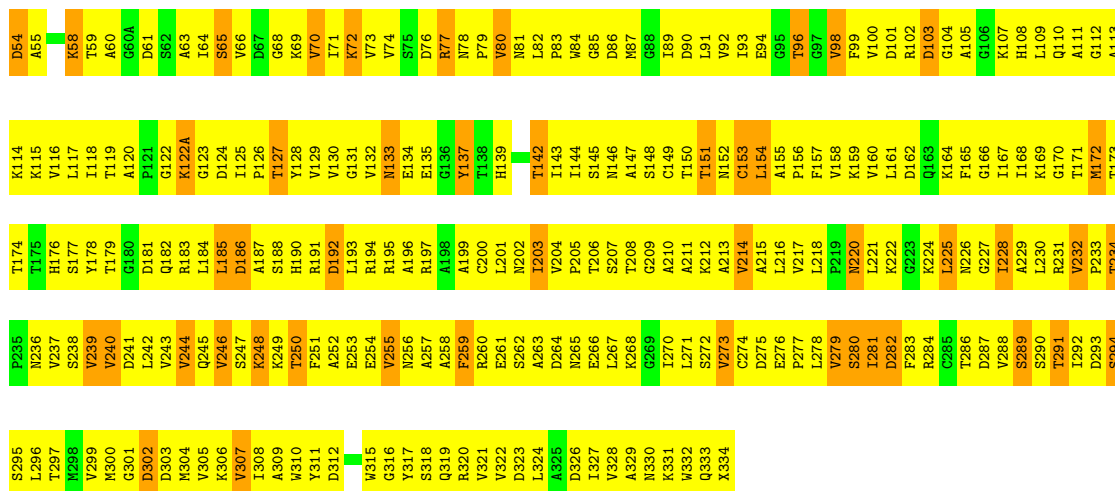
• Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic



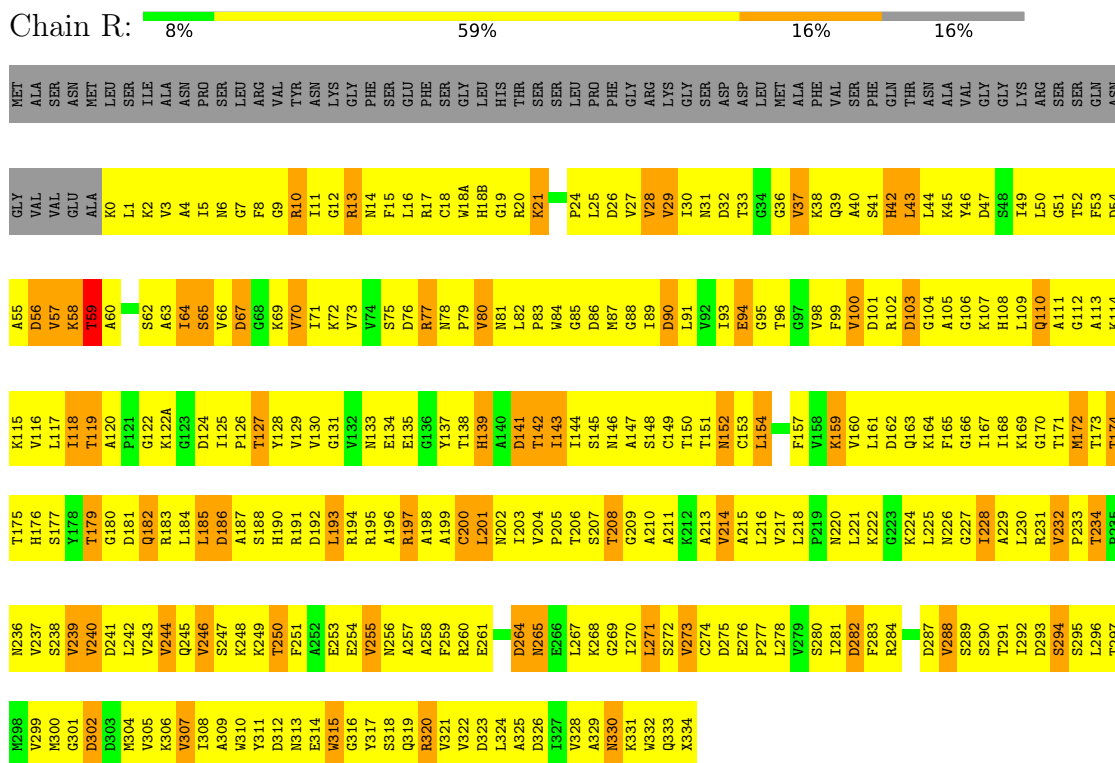
• Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic



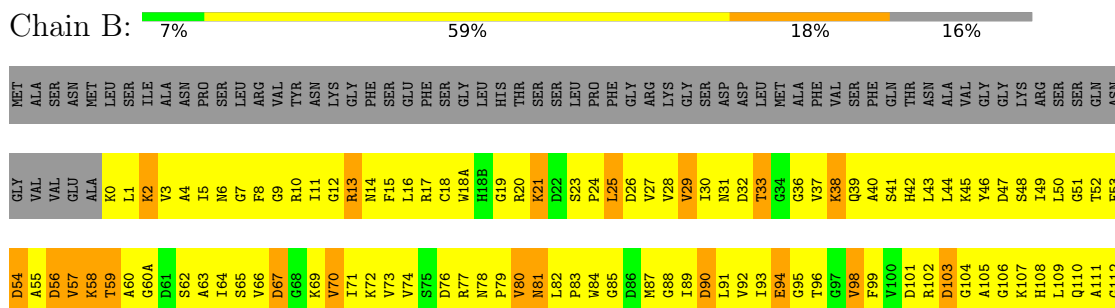


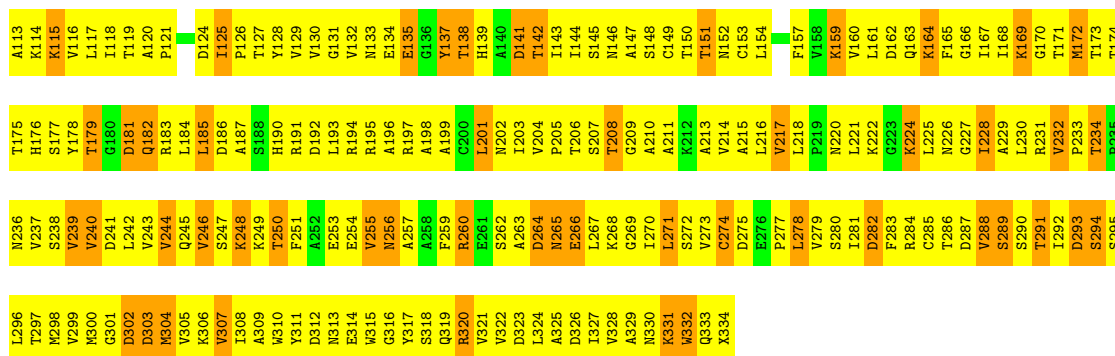


- Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplasic

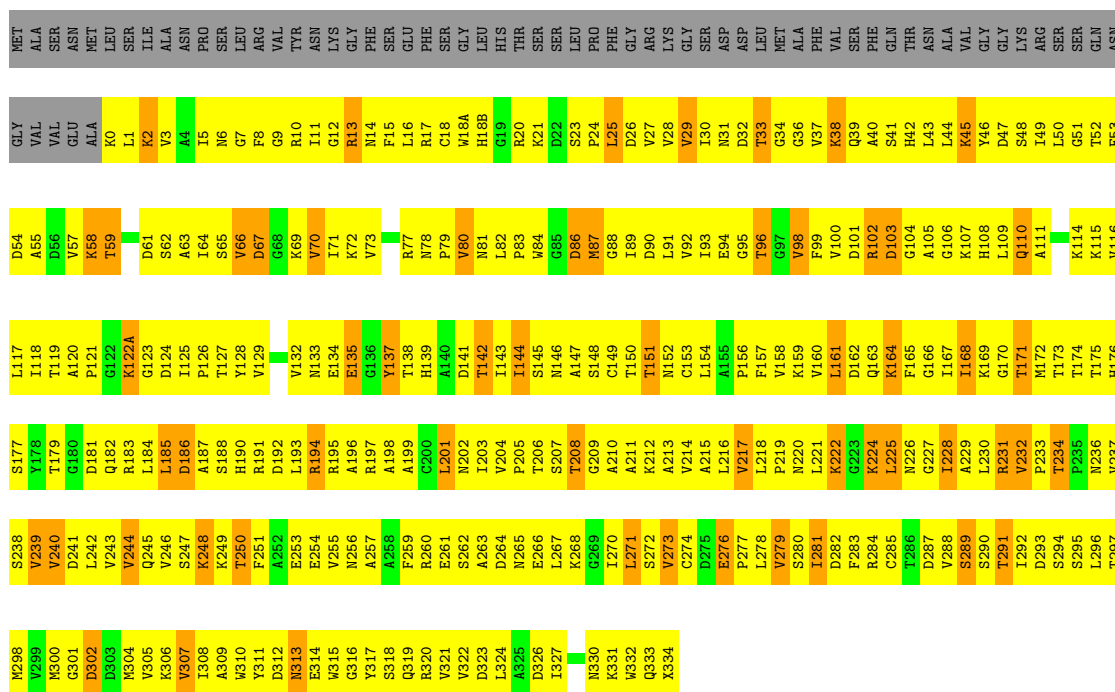
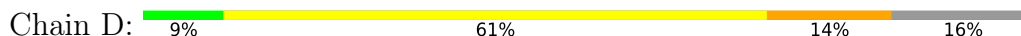


- Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplasic

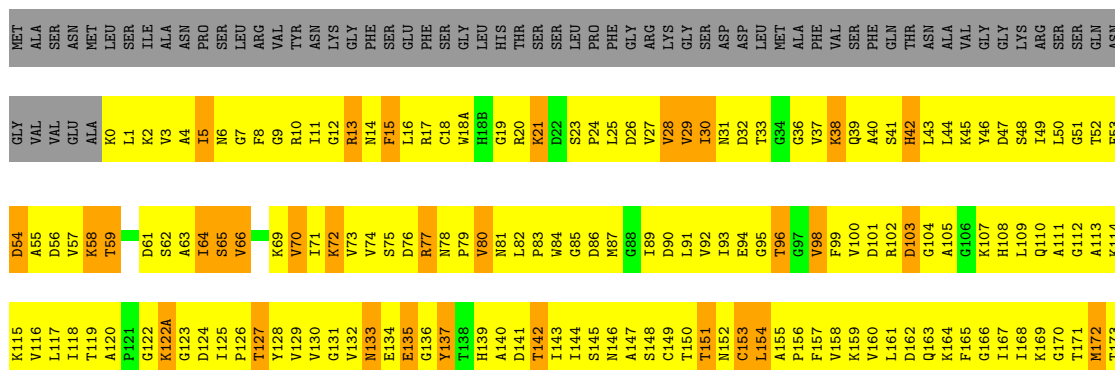
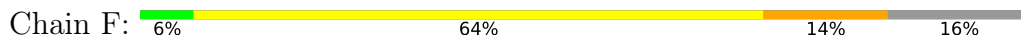




- Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplasic



- Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic



S295	L296	T297	K298	V299	M300	G301	D302	D303	M304	V305	K306	V307	I308	A309	W310	Y311	D312	N313	E314	W315	G316	Y317	S318	Q319	R320	V321	V322	D323	L324	A325	D326	L327	K288	I270	L271	S272	V273	C274	D275	E276	P277	L278	V279	S280	I281	L282	D282	F283	R284	C285	T286	D287	V288	S289	L290	T291	I292	P293	S294
T174	T175	H176	S177	Y178	T179	G180	D181	Q182	R183	L184	L185	D186	A187	S188	H189	R191	D192	L193	R194	R195	A196	R197	A198	A199	C200	L201	N202	T203	V204	P205	T206	S207	T208	G209	A210	A211	K212	V213	A214	A215	L216	V217	L218	P219	N220	L221	K222	G223	K224	L225	N226	G227	V228	A229	L230	R231	V232	P233	T234

• Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplatic

Chain H: 8% 61% 15% 16%

MET	ALA	SER	ASN	LEU	MET	LEU	SER	ILE	ALA	ASN	PRO	SER	ARG	VAL	TYR	ASN	LYS	GLY	PHE	SER	GLY	PHE	SER	GLY	LEU	HIS	THR	SER	SER	LEU	PRO	PHE	GLY	ARG	LYS	GLY	ASP	ASP	LEU	MET	ALA	PHE	VAL	SER	PHE	GLN	THR	ASN	ALA	VAL	GLY	LYS	ARG	SER	SER	GLN	ASN																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
GLY	VAL	VAL	GLU	ALA	KO	L1	K2	V3	A4	I5	N6	G7	F8	G9	R10	I11	I12	R13	N14	F15	L16	R17	C18	W18A	H18B	G19	R20	K21		P24	L25	D26	V27	V28	I29	I30	N31	D32	T33	G34	G35	V37	K38	Q39	A40	S41	H42	L43	R44	K45	Y46	D47	S48	I49	L50	G51	T52	F53	D54																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
A55	D56	V57	K58	T59	A60	G60A	D61	S62	A63	I64	S65	V66	D67	G68	K69	V70	I71	K72	V73	G74	S75	D76	R77	N78	P79	V80	N81	L82	P83	W84	G85	D86	M87	G88	I89	D90	L91	V92	E94	G95	T96	G97	V98	F99	V100	D101	R102	D103	G104	A105	K106	K107	H108	I109	L110	A111	G112	A113																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
K114	K115	V116	L117	T118	T119	A120	P121	G122	K122A	G123	D124	I125	P126	T127	Y128	V129	V130	G131	V132	N133	E134	E135	G136	Y137	T138	H139	A140	D141	T142	P143	I144	S145	M146	A147	S148	C149	T150	T151	N152	C153	G154	F157	V158	K159	V160	L161	D162	Q163	K164	F165	G166	T167	I168	K169	G170	T171	M172	T173																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
T174	T175	H176	S177	Y178	T179	G180	D181	Q182	R183	L184	L185	D186	A187	S188	H190	R191	D192	L193	R194	R195	A196	R197	A198	A199	C200	L201	N202	T203	V204	P205	T206	S207	T208	G209	A210	A211	K212	V213	A214	A215	L216	V217	L218	P219	N220	L221	K222	G223	K224	L225	N226	G227	V228	A229	L230	R231	V232	P233	T234																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
P235	N236	V237	S238	V239	V240	D241	L242	V243	V244	Q245	V246	S247	K248	K249	T250	Y251	A252	E253	E254	V255	N256	A257	S258	F259	R260	S261		D264	N265	E266	L267	K268	G269	L270	K331	L271	S272	V273	C274	D275	E276	P277	L278	V279	S280	I281	L282	D283	F283	R284		D287	V288	S289	L290	T291	I292	P293	S294	L295	L296																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
T297	M298	V299	M300	G301	D302	D303	M304	V305	K306	V307	I308	A309	W310	Y311	D312	N313	E314	W315	G316	Y317	S318	Q319	R320	V321	V322	D323	L324	A325	D326	L327	K328	I329	L330	K331	S332	Q333	X334																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					</

• Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplatic

Chain J: 8% 59% 17% 16%

MET	ALA	SER	ASN	LEU	MET	LEU	SER	ILE	ALA	ASN	PRO	SER	LEU	ARG	VAL	TYR	ASN	LYS	GLY	PHE	SER	GLU	PHE	SER	GLY	HIS	THR	SER	SER	LEU	PRO	PHE	GLY	ARG	LYS	ASP	ASP	LEU	MET	ALA	PHE	VAL	PHE	GLN	THR	ASN	ALA	VAL	GLY	GLY	LYS	ARG	SER	SER	GLN	ASN					
GLY	VAL	VAL	GLU	ALA	K0	L1	K2	K2	V3	A4	I5	N6	G7	F8	G9	R10	I11	G12	R13	N14	F15	L16	R17	C18	W18A	H18B	G19	R20	K21	D22	S23	P24	L25	D26	V27	V28	I29	I30	N31	D32	T33	G34	G35	V36	V37	K38	Q39	A40	S41	H42	L43	L44	K45	Y46	D47	S48	I49	L50	G51	T52	F53
D54	A55	D56	V57	K58	T59	A60	G60A	A63	I64	S65	V66	D67	G68	K69	I70	I71	K72	V73	W74	S75	D76	R77	N78	P79	V80	N81	L82	P83	W84	G85	D86	M87	I89	D90	L91	V92	I93	E94	G95	T96	G97	V98	F99	V100	D101	R102	D103	G104	A105	K106	K107	H108	I109	L110	A111	G112	A113				
K114	K115	V116	L117	I118	T119	A120	P121	D124	I125	P126	T127	Y128	V129	V130	G131	V132	N133	E134	E135	G136	Y137	T138	H139	A140	D141	T142	I143	I144	S145	M146	A147	S148	C149	T150	T151	N152	C153	L154	F157	V158	K159	V160	L161	D162	Q163	K164	F165	G166	T167	I168	K169	G170	T171	M172	T173	T174	T175				
H176	S177	Y178	T179	G180	D181	L185	D186	A187	S188	H189	R191	D192	L193	R194	R195	A196	R197	A198	A199	C200	L201	N202	I203	V204	P205	T206	S207	T208	G209	A210	A211	K212	V213	A214	A215	L216	V217	L218	P219	N220	L221	K222	G223	K224	L225	N226	G227	V228	A229	L230	R231	V232	P233	T234	N236						

4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C2	Depositor
Number of particles used	23611	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI POLARA 300	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	42	Depositor
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	3500	Depositor
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.050	Depositor
Minimum map value	-0.016	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.003	Depositor
Recommended contour level	0.012	Depositor
Map size (Å)	363.0, 363.0, 363.0	wwPDB
Map dimensions	300, 300, 300	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.21, 1.21, 1.21	Depositor

5 Model quality [i](#)

5.1 Standard geometry [i](#)

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

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	0.38	0/2739	0.64	2/3726 (0.1%)
1	C	0.48	0/2739	0.72	2/3726 (0.1%)
1	E	0.48	0/2739	0.71	2/3726 (0.1%)
1	G	0.48	0/2739	0.70	4/3726 (0.1%)
1	I	0.45	0/2739	0.67	2/3726 (0.1%)
1	K	0.45	0/2739	0.71	4/3726 (0.1%)
1	O	0.46	0/2739	0.66	2/3726 (0.1%)
1	Q	0.48	0/2739	0.67	2/3726 (0.1%)
2	B	0.39	0/2579	0.58	1/3502 (0.0%)
2	D	0.40	0/2579	0.59	0/3502
2	F	0.39	0/2579	0.57	0/3502
2	H	0.40	0/2579	0.58	0/3502
2	J	0.38	0/2579	0.57	1/3502 (0.0%)
2	L	0.39	0/2579	0.59	0/3502
2	P	0.39	0/2579	0.59	0/3502
2	R	0.41	0/2579	0.59	0/3502
All	All	0.43	0/42544	0.64	22/57824 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	G	0	1

There are no bond length outliers.

All (22) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	344	PRO	N-CA-CB	8.20	111.86	103.25
1	A	344	PRO	N-CA-CB	7.72	111.36	103.25
1	I	344	PRO	N-CA-CB	7.70	111.34	103.25
1	K	353	PRO	N-CA-CB	7.20	110.81	103.25
1	E	344	PRO	N-CA-CB	7.02	110.62	103.25
1	Q	344	PRO	N-CA-CB	6.99	110.59	103.25
1	C	344	PRO	N-CA-CB	6.90	110.50	103.25
1	I	353	PRO	N-CA-CB	6.90	109.89	103.41
1	G	353	PRO	N-CA-CB	6.72	109.91	103.19
1	O	353	PRO	N-CA-CB	6.62	110.10	103.48
1	O	344	PRO	N-CA-CB	6.39	109.95	103.25
1	G	344	PRO	N-CA-CB	6.36	109.92	103.25
1	A	353	PRO	N-CA-CB	6.17	110.12	103.33
1	C	353	PRO	N-CA-CB	6.17	109.87	103.15
1	E	353	PRO	N-CA-CB	6.11	110.05	103.33
2	J	60(A)	GLY	CA-C-O	-5.83	118.11	122.37
2	B	60(A)	GLY	CA-C-O	-5.80	118.14	122.37
1	Q	353	PRO	N-CA-CB	5.73	109.72	103.30
1	G	77	ARG	CA-C-N	-5.71	111.92	121.17
1	G	77	ARG	C-N-CA	-5.71	111.92	121.17
1	K	336	GLU	N-CA-C	-5.10	108.09	114.56
1	K	324	LEU	N-CA-C	-5.07	105.76	111.28

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	G	248	LYS	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	2694	0	2681	496	0
1	C	2694	0	2681	550	0
1	E	2694	0	2681	534	0
1	G	2694	0	2681	562	0
1	I	2694	0	2681	483	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	K	2694	0	2681	498	0
1	O	2694	0	2681	579	0
1	Q	2694	0	2681	487	0
2	B	2544	0	2577	506	0
2	D	2544	0	2577	470	0
2	F	2544	0	2577	513	0
2	H	2544	0	2577	498	0
2	J	2544	0	2577	498	0
2	L	2544	0	2577	471	0
2	P	2544	0	2577	463	0
2	R	2544	0	2577	490	0
3	A	44	0	26	7	0
3	B	44	0	25	11	0
3	C	44	0	25	12	0
3	D	44	0	25	12	0
3	E	44	0	25	9	0
3	F	44	0	25	10	0
3	G	44	0	25	16	0
3	H	44	0	25	10	0
3	I	44	0	26	9	0
3	J	44	0	26	9	0
3	K	44	0	26	11	0
3	L	44	0	25	10	0
3	O	44	0	26	10	0
3	P	44	0	26	14	0
3	Q	44	0	25	12	0
3	R	44	0	26	13	0
All	All	42608	0	42471	7684	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 90.

All (7684) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:37:VAL:HB	1:O:59:ILE:CG2	1.27	1.55
2:F:10:ARG:NH2	1:G:185:LEU:HD13	1.32	1.42
1:Q:37:VAL:CG1	1:Q:59:ILE:HG23	1.55	1.35
2:F:10:ARG:CZ	1:G:185:LEU:HD13	1.58	1.33
1:E:17:ARG:CD	1:E:44:LEU:HG	1.60	1.32
1:O:13:ARG:CA	1:O:44:LEU:HD13	1.60	1.27

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:10:ARG:HB2	3:B:401:NAD:O1N	1.38	1.24
1:G:199:ALA:HB1	1:G:231:ARG:NH1	1.52	1.24
1:O:37:VAL:CB	1:O:59:ILE:HG22	1.68	1.23
1:O:37:VAL:CB	1:O:59:ILE:CG2	2.15	1.23
2:F:10:ARG:HH22	1:G:185:LEU:CD1	1.53	1.20
1:G:199:ALA:CB	1:G:231:ARG:NH1	2.02	1.20
1:E:37:VAL:CG1	1:E:59:ILE:HB	1.73	1.18
1:Q:8:PHE:HB2	1:Q:32:ASP:OD2	1.38	1.17
2:H:10:ARG:HB2	3:H:401:NAD:O1N	1.42	1.17
2:R:59:THR:HA	2:R:64:ILE:HA	1.16	1.16
1:E:17:ARG:HD2	1:E:44:LEU:CD2	1.78	1.14
1:E:17:ARG:CD	1:E:44:LEU:CG	2.26	1.13
1:O:13:ARG:CA	1:O:44:LEU:CD1	2.26	1.13
1:E:37:VAL:HG11	1:E:59:ILE:HB	1.23	1.12
2:F:10:ARG:HH12	1:G:185:LEU:CD1	1.62	1.11
1:O:13:ARG:HB3	1:O:44:LEU:HD12	1.32	1.10
1:O:13:ARG:HA	1:O:44:LEU:CD1	1.82	1.10
2:R:120:ALA:HB2	3:R:401:NAD:H1D	1.31	1.10
1:C:249:GLY:HA2	1:C:302:GLY:CA	1.82	1.09
2:F:10:ARG:NH2	1:G:185:LEU:CD1	2.14	1.08
1:Q:37:VAL:HG12	1:Q:59:ILE:HG23	1.15	1.08
1:O:37:VAL:HG13	1:O:62:GLU:CA	1.85	1.06
1:E:16:LEU:HD23	1:E:44:LEU:HD13	1.38	1.05
1:C:237:VAL:HG11	1:C:280:SER:HB3	1.38	1.04
2:F:10:ARG:NH1	1:G:185:LEU:HD13	1.71	1.04
1:O:13:ARG:CB	1:O:44:LEU:CD1	2.36	1.04
2:F:10:ARG:NH1	1:G:185:LEU:CB	2.21	1.04
2:F:10:ARG:HB2	3:F:401:NAD:O1N	1.57	1.04
2:F:10:ARG:NH1	1:G:185:LEU:CD1	2.21	1.04
1:O:13:ARG:CB	1:O:44:LEU:HD13	1.86	1.03
1:C:249:GLY:HA2	1:C:302:GLY:HA3	1.37	1.03
2:H:10:ARG:CB	3:H:401:NAD:O1N	2.05	1.03
1:O:37:VAL:CG1	1:O:62:GLU:CA	2.36	1.03
1:E:17:ARG:CD	1:E:44:LEU:CD2	2.37	1.02
1:O:13:ARG:HA	1:O:44:LEU:HD13	1.04	1.01
1:E:17:ARG:NE	1:E:44:LEU:HG	1.74	1.01
1:I:188:SER:HB3	1:I:196:ALA:HA	1.41	1.01
1:O:13:ARG:HB3	1:O:44:LEU:CD1	1.91	1.00
1:O:37:VAL:HG13	1:O:62:GLU:HA	1.42	1.00
1:Q:37:VAL:HG12	1:Q:59:ILE:CG2	1.91	1.00
1:E:17:ARG:HD2	1:E:44:LEU:CG	1.90	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:17:ARG:HD2	1:E:44:LEU:HG	1.42	0.99
1:E:16:LEU:HD23	1:E:44:LEU:CD1	1.93	0.99
2:F:59:THR:HA	2:F:64:ILE:HA	1.42	0.98
2:F:10:ARG:NH1	1:G:185:LEU:HB3	1.77	0.98
1:O:37:VAL:CG1	1:O:62:GLU:C	2.36	0.98
2:B:10:ARG:CB	3:B:401:NAD:O1N	2.10	0.98
1:A:202:ASN:HD22	1:C:279:VAL:HG23	1.29	0.97
1:Q:37:VAL:CG1	1:Q:59:ILE:CG2	2.43	0.97
1:O:37:VAL:HG12	1:O:62:GLU:C	1.91	0.96
1:Q:37:VAL:HG11	1:Q:59:ILE:HG23	1.45	0.95
1:C:204:VAL:HB	1:C:231:ARG:HB3	1.46	0.95
1:C:249:GLY:CA	1:C:302:GLY:HA3	1.96	0.95
1:E:41:THR:OG1	1:E:59:ILE:CG2	2.15	0.95
1:O:165:LEU:HB3	1:O:246:ILE:HD11	1.47	0.95
1:E:41:THR:OG1	1:E:59:ILE:HG21	1.67	0.94
1:G:299:VAL:HA	1:G:305:VAL:HA	1.46	0.94
1:E:59:ILE:HD12	1:E:59:ILE:O	1.68	0.94
2:H:116:VAL:HB	2:H:143:ILE:HA	1.49	0.94
1:Q:8:PHE:CB	1:Q:32:ASP:OD2	2.15	0.94
1:A:185:LEU:HD12	2:D:10:ARG:NH1	1.83	0.94
1:C:6:ASN:HD21	1:C:96:THR:HG23	1.30	0.94
1:G:7:GLY:H	1:G:31:ASN:HB3	1.32	0.94
2:J:0:LYS:HZ1	2:J:329:ALA:HA	1.34	0.93
1:G:8:PHE:O	1:G:13:ARG:NH1	2.01	0.93
2:F:281:ILE:HG22	2:H:202:ASN:HD21	1.34	0.93
1:I:239:VAL:HA	1:I:310:TRP:HA	1.48	0.93
2:B:250:THR:H	2:B:302:ASP:HB3	1.33	0.93
2:R:77:ARG:HB3	3:R:401:NAD:H62A	1.33	0.92
2:D:250:THR:H	2:D:302:ASP:HB3	1.33	0.92
1:O:37:VAL:CG1	1:O:62:GLU:N	2.33	0.92
1:O:128:TYR:H	1:O:146:ASN:HA	1.35	0.91
2:R:116:VAL:HB	2:R:143:ILE:HA	1.49	0.91
1:I:186:ASP:HB3	2:L:43:LEU:HD22	1.53	0.91
2:P:177:SER:HA	2:P:234:THR:HG23	1.53	0.91
1:G:199:ALA:HB1	1:G:231:ARG:HH11	1.21	0.91
1:Q:246:ILE:HG22	1:Q:303:ASP:HA	1.54	0.90
1:E:59:ILE:HA	1:E:64:PHE:HA	1.54	0.90
2:J:174:THR:HG1	2:J:311:TYR:HH	1.14	0.90
2:F:177:SER:HA	2:F:234:THR:HG23	1.53	0.90
1:I:21:LYS:H	1:I:21:LYS:HZ2	1.18	0.90
2:H:46:TYR:HA	2:H:52:THR:HA	1.54	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:323:ASP:HA	1:K:326:ASP:HB2	1.54	0.90
2:B:282:ASP:OD1	2:B:282:ASP:N	2.04	0.89
1:E:239:VAL:HA	1:E:310:TRP:HA	1.55	0.89
1:A:218:LEU:HB3	1:A:220:GLN:HE22	1.36	0.89
2:J:177:SER:HA	2:J:234:THR:HG23	1.53	0.89
2:L:46:TYR:HA	2:L:52:THR:HA	1.54	0.89
2:J:250:THR:H	2:J:302:ASP:HB3	1.37	0.89
2:L:250:THR:H	2:L:302:ASP:HB3	1.38	0.89
1:Q:31:ASN:HA	1:Q:74:VAL:HG12	1.54	0.89
1:G:282:ASP:OD1	1:G:282:ASP:N	2.05	0.88
2:R:46:TYR:HA	2:R:52:THR:HA	1.53	0.88
1:I:296:LEU:HB3	1:I:308:VAL:HB	1.54	0.88
1:G:82:LEU:HB2	1:G:84:TRP:HE1	1.38	0.88
2:B:174:THR:HG1	2:B:311:TYR:HH	1.19	0.88
1:E:37:VAL:CG1	1:E:59:ILE:CB	2.52	0.88
1:O:37:VAL:HB	1:O:59:ILE:HG21	1.54	0.88
1:E:312:ASP:OD2	1:E:315:TRP:N	2.06	0.88
1:O:177:SER:HA	1:O:234:THR:HG23	1.55	0.88
1:Q:191:ARG:HB2	1:I:358:CYS:HA	1.56	0.88
2:F:8:PHE:O	2:F:13:ARG:NH2	2.06	0.88
1:G:199:ALA:CB	1:G:231:ARG:HH12	1.82	0.88
1:K:46:TYR:HA	1:K:52:THR:HA	1.53	0.87
1:O:37:VAL:HB	1:O:59:ILE:HG23	1.52	0.87
1:O:37:VAL:HB	1:O:59:ILE:HG22	0.88	0.87
1:O:282:ASP:OD1	1:O:282:ASP:N	2.08	0.87
1:K:137:TYR:O	1:K:331:LYS:NZ	2.07	0.87
2:L:13:ARG:HH11	2:L:13:ARG:H	1.23	0.86
1:C:237:VAL:HG21	1:C:280:SER:HA	1.57	0.86
2:D:46:TYR:HA	2:D:52:THR:HA	1.55	0.86
1:I:183:ARG:HB2	1:I:188:SER:HB2	1.57	0.86
1:O:37:VAL:HG11	1:O:62:GLU:N	1.90	0.86
1:O:174:THR:HG22	1:O:229:ALA:HB1	1.57	0.86
1:E:17:ARG:HD3	1:E:44:LEU:CG	2.06	0.86
2:F:261:GLU:OE1	2:F:265:ASN:ND2	2.09	0.86
1:Q:157:PHE:HA	1:Q:160:VAL:HB	1.57	0.86
2:J:202:ASN:HD21	2:L:281:ILE:H	1.23	0.85
2:P:261:GLU:OE1	2:P:265:ASN:ND2	2.09	0.85
2:F:41:SER:O	2:F:45:LYS:N	2.09	0.85
2:L:167:ILE:HA	2:L:246:VAL:HA	1.58	0.85
1:Q:139:HIS:HB2	1:Q:331:LYS:HD2	1.58	0.85
1:O:239:VAL:HA	1:O:310:TRP:HA	1.59	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:136:ASP:OD1	1:A:136:ASP:N	2.06	0.85
2:L:116:VAL:HB	2:L:143:ILE:HA	1.59	0.85
1:C:41:THR:O	1:C:45:LYS:N	2.10	0.84
2:B:318:SER:O	2:B:322:VAL:N	2.10	0.84
2:R:177:SER:HA	2:R:234:THR:HG23	1.59	0.84
1:I:270:VAL:O	1:I:320:ARG:NH2	2.11	0.84
1:I:262:ALA:HA	1:I:266:PRO:HD2	1.59	0.84
1:Q:89:ILE:O	1:Q:114:LYS:NZ	2.11	0.84
2:P:148:SER:HA	3:P:401:NAD:H5N	1.58	0.84
1:E:244:VAL:H	1:E:305:VAL:HG22	1.40	0.84
2:L:10:ARG:N	3:L:401:NAD:O1N	2.11	0.84
1:Q:293:ASP:OD2	1:Q:296:LEU:N	2.11	0.84
2:L:218:LEU:HB3	2:L:221:LEU:HD13	1.59	0.83
2:L:263:ALA:HA	2:L:267:LEU:HB2	1.60	0.83
2:D:10:ARG:N	3:D:401:NAD:O1N	2.10	0.83
2:D:13:ARG:HH11	2:D:13:ARG:H	1.26	0.83
1:E:17:ARG:HD2	1:E:44:LEU:HD23	1.59	0.83
2:J:281:ILE:HG13	2:J:284:ARG:HE	1.43	0.83
2:H:177:SER:HA	2:H:234:THR:HG23	1.58	0.83
2:D:167:ILE:HA	2:D:246:VAL:HA	1.59	0.83
2:J:54:ASP:OD1	2:J:54:ASP:N	2.08	0.83
1:O:16:LEU:HD23	1:O:44:LEU:HD21	1.60	0.83
1:C:246:ILE:HG22	1:C:248:LYS:H	1.41	0.83
2:J:318:SER:O	2:J:322:VAL:N	2.10	0.83
2:F:10:ARG:HH22	1:G:185:LEU:HD13	1.07	0.83
1:K:127:THR:O	1:K:133:ASN:ND2	2.12	0.83
2:D:116:VAL:HB	2:D:143:ILE:HA	1.60	0.83
1:K:41:THR:O	1:K:45:LYS:N	2.12	0.83
1:K:118:ILE:H	1:K:145:SER:HA	1.42	0.83
1:Q:183:ARG:NH1	1:Q:188:SER:O	2.12	0.83
1:Q:191:ARG:N	1:I:357:GLU:O	2.11	0.83
2:D:218:LEU:HB3	2:D:221:LEU:HD13	1.60	0.83
1:K:137:TYR:HE2	1:K:331:LYS:HB3	1.43	0.83
2:B:176:HIS:O	2:B:232:VAL:N	2.11	0.83
1:G:2:LYS:HB3	1:G:89:ILE:HA	1.59	0.83
1:A:90:ASP:HA	1:A:114:LYS:HB2	1.61	0.83
1:I:253:GLU:O	1:I:256:ASN:ND2	2.12	0.83
2:P:119:THR:HB	3:P:401:NAD:H1D	1.61	0.82
2:R:18:CYS:O	2:R:20:ARG:N	2.10	0.82
1:A:204:VAL:HB	1:A:231:ARG:HB2	1.61	0.82
1:E:8:PHE:HZ	1:E:16:LEU:HD23	1.43	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:202:ASN:ND2	2:L:280:SER:OG	2.12	0.82
1:O:256:ASN:HA	1:O:259:PHE:HB2	1.61	0.82
2:P:41:SER:O	2:P:45:LYS:N	2.12	0.82
1:C:274:CYS:N	1:C:292:ILE:O	2.12	0.82
1:O:157:PHE:HA	1:O:160:VAL:HB	1.61	0.82
1:C:177:SER:HA	1:C:234:THR:HG23	1.61	0.82
2:H:300:MET:HB2	2:H:304:MET:HB3	1.62	0.82
2:J:264:ASP:OD1	2:J:264:ASP:N	2.11	0.82
2:R:59:THR:CA	2:R:64:ILE:HA	2.05	0.82
1:C:177:SER:O	1:C:231:ARG:NH1	2.12	0.82
1:E:236:ASN:ND2	1:E:312:ASP:OD1	2.12	0.82
1:G:199:ALA:CA	1:G:231:ARG:HH12	1.91	0.82
1:O:182:GLN:HA	1:O:195:ARG:HB3	1.62	0.82
1:E:137:TYR:O	1:E:331:LYS:NZ	2.12	0.82
2:D:88:GLY:O	2:D:114:LYS:NZ	2.13	0.82
1:K:253:GLU:O	1:K:257:ASN:ND2	2.12	0.82
1:A:237:VAL:HG11	1:A:280:SER:HB2	1.62	0.82
1:Q:14:ASN:O	1:Q:18:CYS:N	2.10	0.82
1:A:83:PRO:HB2	1:A:86:GLU:HB3	1.60	0.82
2:F:10:ARG:HH12	1:G:185:LEU:CB	1.86	0.82
2:R:64:ILE:H	2:R:71:ILE:H	1.26	0.82
2:B:177:SER:HA	2:B:234:THR:HG23	1.62	0.82
1:E:16:LEU:CD2	1:E:44:LEU:HD13	2.09	0.82
1:G:121:PRO:HA	1:G:147:ALA:HA	1.62	0.82
2:P:169:LYS:HE2	2:R:301:GLY:HA3	1.62	0.81
2:B:38:LYS:O	2:B:42:HIS:ND1	2.12	0.81
2:B:264:ASP:OD1	2:B:264:ASP:N	2.11	0.81
1:C:0:LYS:NZ	1:C:24:PRO:O	2.13	0.81
2:D:41:SER:O	2:D:45:LYS:N	2.12	0.81
2:D:263:ALA:HA	2:D:267:LEU:HB2	1.61	0.81
2:R:282:ASP:OD1	2:R:282:ASP:N	2.12	0.81
1:O:1:LEU:HD22	1:O:333:PRO:HG3	1.60	0.81
2:R:300:MET:HB2	2:R:304:MET:HB3	1.62	0.81
2:F:13:ARG:H	2:F:13:ARG:HH11	1.27	0.81
1:O:17:ARG:NH1	1:O:44:LEU:O	2.13	0.81
1:E:118:ILE:O	1:E:146:ASN:ND2	2.14	0.81
1:G:291:THR:O	1:G:310:TRP:N	2.13	0.81
2:H:18:CYS:O	2:H:20:ARG:N	2.10	0.81
2:H:282:ASP:N	2:H:282:ASP:OD1	2.11	0.81
1:A:45:LYS:NZ	1:A:53:PHE:O	2.13	0.81
1:A:239:VAL:HA	1:A:310:TRP:HA	1.61	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:202:ASN:HD21	1:G:281:VAL:HG13	1.45	0.81
1:E:289:SER:OG	1:E:320:ARG:NH1	2.14	0.81
1:O:33:SER:CB	1:O:77:ARG:HH11	1.93	0.81
2:B:202:ASN:ND2	2:D:280:SER:OG	2.13	0.81
1:I:226:ASN:ND2	1:K:300:MET:SD	2.54	0.81
1:O:273:VAL:HG12	1:O:292:ILE:HB	1.63	0.81
2:P:28:VAL:HA	2:P:71:ILE:HG12	1.62	0.81
1:A:10:ARG:HH12	2:D:185:LEU:HB3	1.42	0.81
2:D:300:MET:HB2	2:D:304:MET:HB3	1.62	0.81
2:J:176:HIS:O	2:J:232:VAL:N	2.12	0.81
2:R:49:ILE:HG23	2:R:284:ARG:HH11	1.45	0.80
2:B:256:ASN:O	2:B:260:ARG:N	2.13	0.80
1:C:274:CYS:SG	1:C:275:ASP:N	2.54	0.80
2:L:88:GLY:O	2:L:114:LYS:NZ	2.13	0.80
2:L:300:MET:HB2	2:L:304:MET:HB3	1.61	0.80
2:F:306:LYS:HE3	2:H:171:THR:HB	1.64	0.80
2:J:256:ASN:O	2:J:260:ARG:N	2.14	0.80
1:A:118:ILE:HB	1:A:145:SER:HA	1.63	0.80
2:F:169:LYS:HE2	2:H:301:GLY:HA3	1.61	0.80
2:F:170:GLY:HA3	2:F:225:LEU:HD13	1.63	0.80
2:H:8:PHE:O	2:H:13:ARG:NH2	2.10	0.80
1:I:291:THR:H	1:I:310:TRP:HB2	1.46	0.80
1:O:37:VAL:CB	1:O:59:ILE:HG21	2.08	0.80
1:C:249:GLY:CA	1:C:302:GLY:CA	2.57	0.80
2:B:116:VAL:HB	2:B:143:ILE:HA	1.64	0.80
2:J:8:PHE:O	2:J:13:ARG:NH2	2.12	0.80
1:K:212:LYS:HZ1	1:K:226:ASN:HA	1.44	0.80
2:B:306:LYS:NZ	2:D:172:MET:O	2.14	0.80
1:G:188:SER:HB3	1:G:196:ALA:HA	1.63	0.80
2:D:63:ALA:HB1	2:D:70:VAL:HG23	1.63	0.80
2:F:10:ARG:CB	3:F:401:NAD:O1N	2.29	0.80
1:I:238:SER:N	1:I:311:TYR:O	2.12	0.80
2:L:239:VAL:HA	2:L:310:TRP:HA	1.64	0.80
1:E:33:SER:HA	1:E:75:SER:HB3	1.63	0.80
2:B:202:ASN:HD21	2:D:281:ILE:H	1.27	0.80
1:I:136:ASP:OD1	1:I:136:ASP:N	2.04	0.80
1:I:194:ARG:HD2	1:I:205:PRO:HD2	1.63	0.80
2:J:103:ASP:OD1	2:J:103:ASP:N	2.14	0.80
2:R:8:PHE:O	2:R:13:ARG:NH2	2.11	0.79
2:P:8:PHE:O	2:P:13:ARG:NH2	2.11	0.79
2:P:170:GLY:HA3	2:P:225:LEU:HD13	1.62	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:244:VAL:HG13	1:Q:305:VAL:HG23	1.65	0.79
1:A:171:THR:HG21	1:C:243:VAL:HG21	1.64	0.79
1:O:165:LEU:HA	1:O:248:LYS:HD2	1.64	0.79
2:J:137:TYR:O	2:J:331:LYS:NZ	2.16	0.79
1:Q:238:SER:HB2	1:Q:311:TYR:CE2	2.17	0.79
1:Q:291:THR:O	1:Q:310:TRP:N	2.15	0.79
1:C:192:ASP:OD2	1:C:195:ARG:N	2.16	0.79
1:E:33:SER:CB	1:E:77:ARG:HH11	1.94	0.79
1:O:246:ILE:HG13	1:O:248:LYS:H	1.47	0.79
1:O:326:ASP:OD1	1:O:326:ASP:N	2.12	0.79
1:Q:257:ASN:HA	1:Q:260:ARG:HB2	1.63	0.79
1:A:240:VAL:O	1:A:309:ALA:N	2.16	0.79
2:B:137:TYR:O	2:B:331:LYS:NZ	2.15	0.79
2:B:172:MET:N	2:B:172:MET:SD	2.56	0.79
1:E:167:ILE:HG13	1:E:244:VAL:HG21	1.63	0.79
2:F:10:ARG:N	3:F:401:NAD:O1N	2.16	0.79
2:P:281:ILE:H	2:R:202:ASN:HD21	1.29	0.79
1:A:234:THR:HG21	1:A:237:VAL:HG12	1.64	0.79
1:C:257:ASN:HA	1:C:260:ARG:HB2	1.64	0.79
1:G:248:LYS:HA	1:G:248(A):VAL:HG13	1.64	0.79
2:J:172:MET:N	2:J:172:MET:SD	2.56	0.79
1:E:257:ASN:O	1:E:261:LYS:N	2.16	0.79
2:R:239:VAL:HA	2:R:310:TRP:HA	1.64	0.79
1:A:270:VAL:O	1:A:289:SER:N	2.16	0.79
1:C:2:LYS:NZ	1:C:87:LEU:O	2.16	0.79
2:F:10:ARG:HH12	1:G:185:LEU:HD12	1.47	0.79
2:F:215:ALA:O	2:F:222:LYS:NZ	2.15	0.79
2:H:239:VAL:HA	2:H:310:TRP:HA	1.65	0.79
2:L:41:SER:O	2:L:45:LYS:N	2.11	0.79
2:L:270:ILE:O	2:L:289:SER:N	2.15	0.79
1:O:117:ILE:HD11	1:O:146:ASN:HB3	1.65	0.79
1:C:179:THR:OG1	1:C:182:GLN:NE2	2.16	0.79
1:C:312:ASP:OD1	1:C:316:GLY:N	2.16	0.79
1:E:17:ARG:CD	1:E:44:LEU:HD21	2.11	0.79
1:E:120:ALA:H	1:E:146:ASN:HD21	1.31	0.79
1:G:316:GLY:O	1:G:320:ARG:N	2.15	0.79
2:L:8:PHE:O	2:L:13:ARG:NH2	2.13	0.79
1:Q:8:PHE:O	1:Q:13:ARG:NH2	2.16	0.79
1:I:185:LEU:CD1	2:L:10:ARG:NH1	2.46	0.79
1:K:312:ASP:OD1	1:K:316:GLY:N	2.16	0.79
2:P:306:LYS:HE3	2:R:171:THR:HB	1.65	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:190:HIS:ND1	1:Q:192:ASP:O	2.16	0.78
1:A:165:LEU:HG	1:A:248:LYS:HZ3	1.49	0.78
1:A:185:LEU:HD12	2:D:10:ARG:CZ	2.12	0.78
2:F:28:VAL:HA	2:F:71:ILE:HG12	1.63	0.78
1:A:238:SER:N	1:A:311:TYR:O	2.13	0.78
1:C:256:ASN:O	1:C:260:ARG:N	2.14	0.78
1:K:47:ASP:HB3	1:K:51:GLY:H	1.49	0.78
1:O:18:CYS:O	1:O:20:ARG:N	2.16	0.78
2:R:186:ASP:OD1	2:R:186:ASP:N	2.15	0.78
2:H:10:ARG:N	3:H:401:NAD:O1N	2.16	0.78
1:K:136:ASP:N	1:K:136:ASP:OD1	2.16	0.78
1:A:135:LYS:NZ	1:A:136:ASP:OD1	2.16	0.78
2:D:186:ASP:OD1	2:D:186:ASP:N	2.11	0.78
1:G:82:LEU:HB2	1:G:84:TRP:NE1	1.98	0.78
2:J:306:LYS:NZ	2:L:172:MET:O	2.16	0.78
1:Q:184:LEU:HG	1:Q:185:LEU:HG	1.65	0.78
1:A:274:CYS:SG	1:A:275:ASP:N	2.56	0.78
1:G:182:GLN:NE2	1:G:194:ARG:O	2.15	0.78
1:K:3:VAL:HG21	1:K:25:LEU:HG	1.65	0.78
2:L:5:ILE:HB	2:L:30:ILE:HG23	1.65	0.78
1:O:38:LYS:HG3	1:O:39:SER:H	1.49	0.78
1:O:173:THR:HA	1:O:229:ALA:HA	1.64	0.78
2:B:81:ASN:OD1	2:B:81:ASN:N	2.15	0.78
1:E:33:SER:OG	1:E:77:ARG:NH1	2.14	0.78
2:H:49:ILE:HG23	2:H:284:ARG:HH11	1.48	0.78
1:K:282:ASP:N	1:K:282:ASP:OD1	2.13	0.78
1:O:18(A):TRP:O	1:O:20:ARG:HB3	1.83	0.78
2:D:239:VAL:HA	2:D:310:TRP:HA	1.64	0.78
1:O:170:GLY:HA3	1:O:244:VAL:HG12	1.66	0.78
2:B:149:CYS:SG	3:B:401:NAD:N7N	2.56	0.78
2:D:118:ILE:H	2:D:145:SER:HA	1.49	0.78
1:I:312:ASP:OD1	1:I:316:GLY:N	2.13	0.78
2:P:3:VAL:HB	2:P:27:VAL:HG22	1.65	0.78
2:P:20:ARG:HG3	2:P:322:VAL:HG11	1.65	0.78
1:A:106:GLY:O	1:A:110:GLN:N	2.12	0.78
2:D:270:ILE:O	2:D:289:SER:N	2.16	0.78
2:R:41:SER:O	2:R:45:LYS:N	2.15	0.78
1:A:253:GLU:O	1:A:256:ASN:ND2	2.16	0.78
1:C:10:ARG:O	1:C:14:ASN:ND2	2.17	0.78
1:E:17:ARG:HD3	1:E:44:LEU:CD2	2.14	0.78
1:G:182:GLN:OE1	1:G:183:ARG:N	2.18	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:172:MET:HA	1:K:242:LEU:HA	1.65	0.77
2:L:28:VAL:O	2:L:72:LYS:N	2.17	0.77
1:G:205:PRO:HG3	1:G:230:LEU:HD22	1.66	0.77
2:J:233:PRO:HB2	2:L:233:PRO:HB2	1.65	0.77
1:A:226:ASN:N	1:C:300:MET:SD	2.58	0.77
2:B:8:PHE:O	2:B:13:ARG:NH2	2.11	0.77
2:B:103:ASP:OD1	2:B:103:ASP:N	2.14	0.77
2:H:41:SER:O	2:H:45:LYS:N	2.12	0.77
1:Q:2:LYS:NZ	1:Q:87:LEU:O	2.17	0.77
1:Q:209:GLY:HA2	1:Q:212:LYS:HD2	1.67	0.77
2:H:10:ARG:HH22	2:H:179:THR:HB	1.47	0.77
1:O:128:TYR:HA	1:O:133:ASN:HD21	1.49	0.77
2:R:21:LYS:HZ2	2:R:21:LYS:H	1.31	0.77
1:E:253:GLU:O	1:E:257:ASN:N	2.14	0.77
1:K:221:LEU:HD13	1:K:224:LYS:HB3	1.66	0.77
1:Q:47:ASP:OD1	1:Q:49:ILE:N	2.18	0.77
2:R:59:THR:HA	2:R:64:ILE:CA	2.07	0.77
2:H:21:LYS:HZ2	2:H:21:LYS:H	1.31	0.77
1:I:297:THR:HG22	1:I:308:VAL:H	1.48	0.77
1:Q:177:SER:HA	1:Q:234:THR:HG23	1.67	0.77
2:B:41:SER:O	2:B:45:LYS:N	2.16	0.77
1:G:10:ARG:N	3:G:401:NAD:O2A	2.16	0.77
1:I:274:CYS:SG	1:I:275:ASP:N	2.56	0.77
2:J:263:ALA:O	2:J:268:LYS:NZ	2.18	0.77
1:G:116:VAL:HB	1:G:144:ILE:H	1.49	0.77
1:O:2:LYS:HB3	1:O:89:ILE:HD13	1.65	0.77
2:B:10:ARG:N	3:B:401:NAD:O1N	2.18	0.77
2:P:165:PHE:HA	2:P:248:LYS:HD3	1.67	0.76
2:P:172:MET:N	2:P:172:MET:SD	2.58	0.76
1:Q:191:ARG:NH2	1:I:349:CYS:SG	2.58	0.76
2:R:176:HIS:HB3	2:R:231:ARG:HA	1.67	0.76
1:A:164:GLU:O	1:A:248:LYS:NZ	2.18	0.76
1:O:118:ILE:O	1:O:146:ASN:ND2	2.19	0.76
2:B:54:ASP:OD1	2:B:54:ASP:N	2.09	0.76
1:C:27:VAL:HG22	1:C:29:VAL:H	1.50	0.76
1:G:183:ARG:HE	1:G:188:SER:HB2	1.50	0.76
1:I:191:ARG:HE	1:I:192:ASP:H	1.33	0.76
2:R:172:MET:HB3	2:R:242:LEU:HB2	1.67	0.76
2:B:102:ARG:NH2	2:B:143:ILE:O	2.17	0.76
1:E:38:LYS:HG3	1:E:39:SER:H	1.49	0.76
2:F:3:VAL:HB	2:F:27:VAL:HG22	1.67	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:5:ILE:HB	2:H:30:ILE:HG23	1.67	0.76
1:I:118:ILE:HB	1:I:145:SER:HA	1.67	0.76
2:J:84:TRP:HB3	2:J:113:ALA:HB2	1.67	0.76
2:J:102:ARG:NH2	2:J:143:ILE:O	2.18	0.76
1:O:177:SER:OG	1:O:234:THR:O	2.02	0.76
2:R:13:ARG:HH11	2:R:13:ARG:H	1.33	0.76
1:A:149:CYS:SG	3:A:401:NAD:H4N	2.25	0.76
1:A:192:ASP:HB2	1:A:195:ARG:HB2	1.68	0.76
1:C:186:ASP:N	1:C:186:ASP:OD1	2.17	0.76
1:C:253:GLU:O	1:C:257:ASN:N	2.18	0.76
1:E:261:LYS:O	1:E:265:GLY:N	2.18	0.76
2:H:126:PRO:HD2	2:H:144:ILE:HA	1.68	0.76
1:I:278:LEU:O	1:K:194:ARG:NH1	2.17	0.76
1:O:18(B):HIS:CG	1:O:69:LYS:HZ1	2.03	0.76
2:R:20:ARG:HG3	2:R:322:VAL:HG11	1.68	0.76
1:G:139:HIS:HB2	1:G:331:LYS:HB3	1.67	0.76
1:I:174:THR:HG1	1:I:238:SER:HG	1.27	0.76
2:J:269:GLY:O	2:J:320:ARG:NH1	2.17	0.76
2:F:137:TYR:O	2:F:331:LYS:NZ	2.18	0.76
1:I:183:ARG:HG3	1:I:185:LEU:H	1.49	0.76
2:J:13:ARG:HH11	2:J:13:ARG:H	1.34	0.76
2:L:118:ILE:H	2:L:145:SER:HA	1.49	0.76
2:B:78:ASN:HD21	2:B:80:VAL:HG22	1.51	0.76
2:D:312:ASP:OD1	2:D:315:TRP:N	2.18	0.76
1:E:17:ARG:HD3	1:E:44:LEU:HD21	1.66	0.76
1:O:7:GLY:H	1:O:31:ASN:HB3	1.51	0.76
1:O:66:ILE:HG13	1:O:69:LYS:HB2	1.66	0.76
1:Q:154:LEU:HA	1:Q:157:PHE:CZ	2.21	0.76
1:Q:360:LEU:HA	1:I:190:HIS:CD2	2.20	0.76
2:R:3:VAL:HB	2:R:27:VAL:HG22	1.68	0.76
2:R:90:ASP:O	2:R:115:LYS:N	2.17	0.76
1:A:176:HIS:O	1:A:232:VAL:N	2.17	0.76
1:C:237:VAL:HG21	1:C:280:SER:CA	2.16	0.76
2:D:45:LYS:NZ	2:D:55:ALA:O	2.16	0.76
1:E:183:ARG:NH1	1:E:188:SER:O	2.17	0.76
2:F:20:ARG:HG3	2:F:322:VAL:HG11	1.68	0.76
2:L:218:LEU:O	2:L:222:LYS:NZ	2.18	0.76
2:P:184:LEU:HB2	1:Q:184:LEU:HB2	1.68	0.76
1:Q:280:SER:HA	1:Q:310:TRP:HZ3	1.51	0.76
2:D:33:THR:OG1	2:D:77:ARG:NH1	2.19	0.76
2:J:8:PHE:H	2:J:32:ASP:HB2	1.51	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:33:THR:OG1	2:L:77:ARG:NH1	2.19	0.76
2:L:164:LYS:O	2:L:248:LYS:NZ	2.19	0.76
2:P:137:TYR:O	2:P:331:LYS:NZ	2.19	0.75
1:A:282:ASP:OD1	1:A:282:ASP:N	2.17	0.75
2:B:263:ALA:O	2:B:268:LYS:NZ	2.18	0.75
1:E:257:ASN:HA	1:E:260:ARG:HD2	1.65	0.75
1:I:316:GLY:O	1:I:320:ARG:N	2.20	0.75
1:O:257:ASN:OD1	1:O:260:ARG:NH1	2.18	0.75
1:Q:261:LYS:O	1:Q:265:GLY:N	2.19	0.75
1:A:102:GLY:O	1:A:106:GLY:N	2.13	0.75
2:D:28:VAL:O	2:D:72:LYS:N	2.18	0.75
2:D:177:SER:HA	2:D:234:THR:HG23	1.67	0.75
1:I:132:VAL:O	1:I:135:LYS:NZ	2.19	0.75
2:P:214:VAL:HG23	2:P:218:LEU:HD12	1.68	0.75
2:R:126:PRO:HD2	2:R:144:ILE:HA	1.67	0.75
2:H:172:MET:HB3	2:H:242:LEU:HB2	1.67	0.75
1:I:185:LEU:HD12	2:L:10:ARG:NH1	2.01	0.75
2:J:116:VAL:HB	2:J:143:ILE:HA	1.66	0.75
1:A:18:CYS:O	1:A:20:ARG:N	2.20	0.75
2:F:165:PHE:HA	2:F:248:LYS:HD3	1.67	0.75
2:H:13:ARG:HH11	2:H:13:ARG:H	1.31	0.75
2:B:269:GLY:O	2:B:320:ARG:NH1	2.19	0.75
1:E:41:THR:C	1:E:45:LYS:HG2	2.11	0.75
1:G:5:ILE:HA	1:G:93:ILE:HB	1.66	0.75
1:I:179:THR:O	1:I:182:GLN:NE2	2.18	0.75
1:K:30:VAL:HG22	1:K:73:VAL:HG22	1.69	0.75
1:O:63:THR:HA	1:O:72:LYS:HA	1.68	0.75
1:O:274:CYS:SG	1:O:275:ASP:N	2.59	0.75
1:A:52:THR:O	1:A:54:LYS:NZ	2.20	0.75
1:A:238:SER:HB3	1:A:311:TYR:CZ	2.22	0.75
2:F:28:VAL:O	2:F:72:LYS:N	2.19	0.75
2:H:172:MET:N	2:H:172:MET:SD	2.60	0.75
1:Q:345:LEU:O	1:Q:349:CYS:N	2.16	0.75
2:R:5:ILE:O	2:R:31:ASN:N	2.20	0.75
1:A:194:ARG:NH1	1:A:205:PRO:O	2.20	0.75
1:A:306:LYS:NZ	1:C:172:MET:O	2.20	0.75
1:G:199:ALA:HA	1:G:231:ARG:HH12	1.51	0.75
1:E:169:LYS:NZ	1:G:300:MET:O	2.19	0.75
2:H:20:ARG:HG3	2:H:322:VAL:HG11	1.68	0.75
2:H:148:SER:OG	2:H:150:THR:OG1	2.04	0.75
1:I:99:PHE:HB3	1:I:104:GLY:HA3	1.69	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:209:GLY:O	1:K:213:ALA:N	2.18	0.75
1:O:16:LEU:HD23	1:O:44:LEU:CD2	2.17	0.75
1:A:146:ASN:OD1	1:A:152:ASN:ND2	2.20	0.75
1:K:212:LYS:O	1:K:215:SER:OG	2.05	0.75
1:O:151:THR:HG22	1:O:210:ALA:HA	1.69	0.74
2:P:202:ASN:ND2	2:R:281:ILE:H	1.84	0.74
2:F:202:ASN:ND2	2:H:281:ILE:H	1.85	0.74
1:G:186:ASP:OD1	1:G:198:ALA:N	2.17	0.74
1:G:205:PRO:HB3	1:G:231:ARG:H	1.51	0.74
2:J:293:ASP:HB3	2:J:308:ILE:HG13	1.67	0.74
2:B:233:PRO:HB2	2:D:233:PRO:HB2	1.67	0.74
1:G:14:ASN:O	1:G:18:CYS:N	2.15	0.74
1:G:89:ILE:O	1:G:114:LYS:NZ	2.18	0.74
2:H:176:HIS:HB3	2:H:231:ARG:HA	1.69	0.74
2:L:312:ASP:OD1	2:L:315:TRP:N	2.19	0.74
1:C:150:THR:O	1:C:154:LEU:N	2.21	0.74
1:E:72:LYS:NZ	1:E:73:VAL:O	2.20	0.74
1:I:245:ASN:HA	1:I:304:MET:HA	1.67	0.74
2:J:293:ASP:OD1	2:J:296:LEU:N	2.20	0.74
1:Q:146:ASN:OD1	1:Q:152:ASN:ND2	2.20	0.74
1:Q:253:GLU:O	1:Q:257:ASN:N	2.18	0.74
1:A:128:TYR:O	1:A:146:ASN:ND2	2.18	0.74
2:B:2:LYS:NZ	2:B:26:ASP:O	2.21	0.74
1:G:182:GLN:HE22	1:G:197:ARG:H	1.35	0.74
2:R:157:PHE:O	2:R:161:LEU:N	2.18	0.74
2:R:181:ASP:HB3	2:R:182:GLN:HE21	1.52	0.74
1:C:136:ASP:OD1	1:C:136:ASP:N	2.19	0.74
2:D:314:GLU:OE2	3:D:401:NAD:N7N	2.21	0.74
2:F:214:VAL:HG23	2:F:218:LEU:HD12	1.68	0.74
1:G:17:ARG:NH1	1:G:44:LEU:O	2.19	0.74
2:H:157:PHE:O	2:H:161:LEU:N	2.17	0.74
1:I:49:ILE:O	1:I:284:ARG:NH2	2.20	0.74
2:L:317:TYR:O	2:L:321:VAL:N	2.18	0.74
1:C:179:THR:N	1:C:182:GLN:OE1	2.18	0.74
2:D:206:THR:HG21	2:D:231:ARG:HE	1.51	0.74
1:E:177:SER:OG	1:E:234:THR:O	2.04	0.74
2:F:115:LYS:HD3	2:F:142:THR:HA	1.70	0.74
1:I:2:LYS:HA	1:I:26:ASP:HB2	1.69	0.74
1:K:274:CYS:N	1:K:292:ILE:O	2.18	0.74
1:Q:127:THR:O	1:Q:133:ASN:ND2	2.20	0.74
1:E:130:VAL:HA	1:E:134:GLU:HB3	1.69	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:5:ILE:HG13	1:G:27:VAL:HG21	1.69	0.74
1:K:96:THR:HA	3:K:401:NAD:H52A	1.70	0.74
2:P:194:ARG:HD3	2:P:205:PRO:HD2	1.70	0.74
1:K:183:ARG:HG3	1:K:188:SER:H	1.52	0.74
2:D:8:PHE:O	2:D:13:ARG:NH2	2.14	0.74
2:F:174:THR:HG1	2:F:311:TYR:HH	1.26	0.74
2:L:49:ILE:HG23	2:L:284:ARG:HH11	1.53	0.74
2:L:103:ASP:OD1	2:L:103:ASP:N	2.20	0.74
2:R:32:ASP:HA	3:R:401:NAD:H2A	1.70	0.74
1:A:11:ILE:O	1:A:15:PHE:N	2.15	0.74
2:B:161:LEU:HB3	2:B:167:ILE:HD11	1.70	0.74
1:C:21:LYS:HD3	1:C:21:LYS:H	1.53	0.74
1:O:253:GLU:OE1	1:O:257:ASN:ND2	2.21	0.73
2:R:186:ASP:OD2	2:R:197:ARG:NH1	2.20	0.73
2:B:293:ASP:HB3	2:B:308:ILE:HG13	1.68	0.73
2:D:5:ILE:HB	2:D:30:ILE:HG23	1.70	0.73
1:E:221:LEU:HD12	1:E:224:LYS:HD2	1.70	0.73
1:E:267:LEU:HB3	1:E:271:LEU:HB2	1.70	0.73
2:F:244:VAL:HG23	2:F:305:VAL:HB	1.69	0.73
2:H:174:THR:HA	2:H:240:VAL:HA	1.69	0.73
1:O:176:HIS:HB3	1:O:231:ARG:HA	1.70	0.73
2:R:25:LEU:HB3	2:R:27:VAL:HG23	1.70	0.73
2:R:148:SER:OG	2:R:150:THR:OG1	2.04	0.73
1:G:29:VAL:HB	1:G:72:LYS:HB2	1.71	0.73
2:J:167:ILE:HA	2:J:246:VAL:HA	1.69	0.73
2:P:116:VAL:HB	2:P:143:ILE:HA	1.69	0.73
2:D:176:HIS:N	2:D:230:LEU:O	2.21	0.73
1:E:33:SER:CB	1:E:77:ARG:NH1	2.50	0.73
2:H:90:ASP:O	2:H:115:LYS:N	2.18	0.73
1:O:176:HIS:O	1:O:232:VAL:N	2.18	0.73
1:O:179:THR:OG1	1:O:181:ASP:OD1	2.07	0.73
1:O:289:SER:OG	1:O:320:ARG:NH1	2.21	0.73
2:P:233:PRO:HB2	2:R:233:PRO:HB2	1.71	0.73
2:B:0:LYS:HZ1	2:B:329:ALA:HA	1.51	0.73
2:B:293:ASP:OD1	2:B:296:LEU:N	2.20	0.73
1:E:184:LEU:HG	1:E:185:LEU:HD22	1.69	0.73
1:G:41:THR:O	1:G:45:LYS:N	2.17	0.73
1:K:165:LEU:HB3	1:K:246:ILE:HD11	1.70	0.73
2:R:244:VAL:HG23	2:R:305:VAL:HB	1.71	0.73
1:C:17:ARG:NH1	1:C:45:LYS:O	2.21	0.73
2:F:18:CYS:O	2:F:20:ARG:N	2.13	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:12:GLY:O	1:I:16:LEU:N	2.20	0.73
2:J:161:LEU:HB3	2:J:167:ILE:HD11	1.70	0.73
2:P:215:ALA:O	2:P:222:LYS:NZ	2.15	0.73
2:P:318:SER:O	2:P:322:VAL:N	2.16	0.73
2:R:174:THR:HA	2:R:240:VAL:HA	1.70	0.73
1:A:2:LYS:HB2	1:A:90:ASP:H	1.51	0.73
1:A:257:ASN:HA	1:A:260:ARG:HD2	1.70	0.73
1:E:314:GLU:O	1:E:318:SER:N	2.16	0.73
2:F:233:PRO:HB2	2:H:233:PRO:HB2	1.70	0.73
2:H:5:ILE:O	2:H:31:ASN:N	2.21	0.73
1:Q:298:MET:HB3	1:Q:306:LYS:HB3	1.70	0.73
1:A:279:VAL:HB	1:C:202:ASN:HB3	1.69	0.73
2:H:244:VAL:HG23	2:H:305:VAL:HB	1.70	0.73
1:O:157:PHE:O	1:O:161:LEU:N	2.19	0.73
1:O:232:VAL:HG22	1:O:234:THR:HG22	1.70	0.73
2:P:244:VAL:HG23	2:P:305:VAL:HB	1.69	0.73
1:Q:129:VAL:N	1:Q:133:ASN:OD1	2.17	0.73
1:C:132:VAL:N	1:C:134:GLU:OE2	2.22	0.73
1:E:117:ILE:HD11	1:E:146:ASN:HB3	1.71	0.73
2:F:249:LYS:HD2	2:F:302:ASP:HB2	1.69	0.73
2:H:238:SER:O	2:H:311:TYR:N	2.21	0.73
2:P:249:LYS:HD2	2:P:302:ASP:HB2	1.69	0.73
2:R:28:VAL:HA	2:R:71:ILE:HG12	1.71	0.73
1:E:277:PRO:HG2	1:G:193:LEU:HD22	1.69	0.73
2:H:149:CYS:SG	3:H:401:NAD:N7N	2.57	0.73
1:I:18:CYS:O	1:I:20:ARG:N	2.16	0.73
1:O:37:VAL:HG12	1:O:62:GLU:O	1.88	0.73
2:P:28:VAL:O	2:P:72:LYS:N	2.22	0.73
1:A:30:VAL:O	1:A:74:VAL:N	2.21	0.73
2:B:83:PRO:HB2	2:B:87:MET:HE1	1.70	0.73
2:B:167:ILE:HA	2:B:246:VAL:HA	1.70	0.73
2:D:158:VAL:HA	2:D:161:LEU:HB3	1.70	0.73
1:I:125:ILE:HG21	1:I:144:ILE:HA	1.71	0.73
2:J:83:PRO:HB2	2:J:87:MET:HE1	1.69	0.73
2:L:65:SER:HA	2:L:70:VAL:HA	1.70	0.73
1:O:92:VAL:N	1:O:115:LYS:O	2.22	0.72
2:P:154:LEU:HD21	2:P:210:ALA:HB1	1.71	0.72
1:Q:11:ILE:O	1:Q:14:ASN:ND2	2.21	0.72
2:B:13:ARG:HH11	2:B:13:ARG:H	1.35	0.72
1:C:18(B):HIS:NE2	1:C:67:ASP:OD2	2.22	0.72
2:D:65:SER:HA	2:D:70:VAL:HA	1.69	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:46:TYR:HA	2:F:52:THR:HA	1.71	0.72
1:G:199:ALA:HB2	1:G:231:ARG:NH1	2.02	0.72
2:H:165:PHE:O	2:H:247:SER:OG	2.06	0.72
2:J:2:LYS:NZ	2:J:26:ASP:O	2.22	0.72
2:J:13:ARG:O	2:J:17:ARG:N	2.20	0.72
2:L:9:GLY:O	2:L:13:ARG:NH1	2.22	0.72
2:L:244:VAL:HG23	2:L:305:VAL:HB	1.70	0.72
2:R:238:SER:O	2:R:311:TYR:N	2.21	0.72
1:C:177:SER:OG	1:C:234:THR:O	2.05	0.72
2:D:209:GLY:O	2:D:213:ALA:N	2.21	0.72
2:F:109:LEU:HD21	2:F:116:VAL:HG23	1.71	0.72
1:G:346:GLU:HA	1:G:349:CYS:HB2	1.71	0.72
3:G:401:NAD:N7N	3:G:401:NAD:O1N	2.22	0.72
1:I:45:LYS:NZ	1:I:53:PHE:O	2.21	0.72
2:L:17:ARG:NH2	2:L:54:ASP:OD1	2.23	0.72
2:L:45:LYS:NZ	2:L:55:ALA:O	2.21	0.72
2:P:109:LEU:HD21	2:P:116:VAL:HG23	1.71	0.72
1:Q:137:TYR:O	1:Q:331:LYS:NZ	2.22	0.72
1:Q:165:LEU:HG	1:Q:248:LYS:HD2	1.70	0.72
1:E:8:PHE:CZ	1:E:16:LEU:HD23	2.25	0.72
1:I:238:SER:HB3	1:I:311:TYR:CZ	2.24	0.72
2:J:184:LEU:HB2	1:K:184:LEU:HB2	1.69	0.72
1:O:318:SER:OG	1:O:319:GLN:OE1	2.06	0.72
1:Q:148:SER:O	1:Q:152:ASN:ND2	2.22	0.72
1:A:202:ASN:HD21	1:C:281:VAL:HG12	1.53	0.72
1:C:346:GLU:O	1:C:350:LYS:N	2.18	0.72
1:E:112:GLY:O	1:E:114:LYS:NZ	2.22	0.72
1:G:261:LYS:O	1:G:265:GLY:N	2.21	0.72
1:I:29:VAL:HG22	1:I:72:LYS:HB2	1.72	0.72
1:I:158:VAL:HA	1:I:161:LEU:HB2	1.70	0.72
2:J:282:ASP:OD1	2:J:282:ASP:N	2.14	0.72
1:K:28:VAL:HG13	1:K:29:VAL:HG12	1.70	0.72
2:P:179:THR:OG1	2:P:182:GLN:NE2	2.23	0.72
1:Q:72:LYS:NZ	1:Q:73:VAL:O	2.22	0.72
2:R:5:ILE:HB	2:R:30:ILE:HG23	1.71	0.72
1:A:259:PHE:O	1:A:263:ALA:N	2.20	0.72
2:B:84:TRP:HB3	2:B:113:ALA:HB2	1.70	0.72
2:H:273:VAL:HA	2:H:292:ILE:H	1.53	0.72
1:O:37:VAL:HG13	1:O:62:GLU:N	2.00	0.72
1:A:2:LYS:NZ	1:A:87:LEU:O	2.23	0.72
1:C:315:TRP:O	1:C:318:SER:OG	2.05	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:103:ASP:OD1	2:D:103:ASP:N	2.20	0.72
2:F:116:VAL:HB	2:F:143:ILE:HA	1.72	0.72
2:F:172:MET:SD	2:F:172:MET:N	2.58	0.72
2:F:202:ASN:HD21	2:H:281:ILE:HG22	1.54	0.72
1:G:94:GLU:HB3	1:G:118:ILE:HG23	1.71	0.72
1:O:293:ASP:OD2	1:O:296:LEU:N	2.23	0.72
1:Q:6:ASN:HB3	1:Q:94:GLU:HA	1.72	0.72
1:Q:289:SER:HB2	1:Q:320:ARG:HD2	1.71	0.72
2:R:165:PHE:O	2:R:247:SER:OG	2.06	0.72
2:R:231:ARG:HH12	3:R:401:NAD:H5N	1.54	0.72
1:A:185:LEU:CD1	2:D:10:ARG:CZ	2.67	0.72
1:G:137:TYR:O	1:G:331:LYS:NZ	2.19	0.72
1:G:138:GLY:HA3	1:G:140:VAL:HB	1.72	0.72
1:G:253:GLU:O	1:G:257:ASN:N	2.20	0.72
1:O:82:LEU:HB3	1:O:84:TRP:CZ2	2.24	0.72
1:A:172:MET:HA	1:A:242:LEU:HA	1.72	0.72
1:C:6:ASN:N	1:C:93:ILE:O	2.18	0.72
1:C:282:ASP:N	1:C:282:ASP:OD1	2.21	0.72
2:H:299:VAL:HG13	2:H:305:VAL:HG22	1.71	0.72
1:I:251:THR:OG1	1:I:253:GLU:OE1	2.07	0.72
1:O:178:TYR:HD2	1:O:233:PRO:HA	1.55	0.72
2:D:9:GLY:O	2:D:13:ARG:NH1	2.23	0.72
1:E:177:SER:HA	1:E:234:THR:HG23	1.70	0.72
1:E:194:ARG:NH1	1:E:205:PRO:O	2.22	0.72
2:F:154:LEU:HD21	2:F:210:ALA:HB1	1.70	0.72
2:P:281:ILE:HG22	2:R:202:ASN:HD21	1.55	0.72
2:R:9:GLY:O	2:R:13:ARG:NH1	2.23	0.72
2:R:172:MET:N	2:R:172:MET:SD	2.60	0.72
2:R:183:ARG:HD2	2:R:187:ALA:HB3	1.72	0.72
2:R:186:ASP:HB3	2:R:197:ARG:HA	1.72	0.72
1:E:47:ASP:OD2	1:E:50:LEU:N	2.18	0.72
1:G:174:THR:HA	1:G:240:VAL:HA	1.71	0.72
1:K:13:ARG:O	1:K:17:ARG:N	2.16	0.72
1:Q:238:SER:OG	1:Q:311:TYR:O	2.03	0.71
1:A:1:LEU:O	1:A:26:ASP:N	2.22	0.71
1:A:19:GLY:O	1:A:21:LYS:NZ	2.23	0.71
2:B:5:ILE:HB	2:B:30:ILE:HG23	1.72	0.71
1:E:134:GLU:H	1:E:134:GLU:CD	1.97	0.71
2:J:165:PHE:O	2:J:247:SER:OG	2.08	0.71
2:P:6:ASN:OD1	2:P:31:ASN:ND2	2.23	0.71
1:Q:37:VAL:HG11	1:Q:59:ILE:CG2	2.16	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:13:ARG:O	1:C:17:ARG:N	2.22	0.71
1:E:271:LEU:HD22	1:E:290:SER:HB3	1.72	0.71
1:Q:57:VAL:HG22	1:Q:66:ILE:HG23	1.70	0.71
2:R:30:ILE:N	2:R:72:LYS:O	2.23	0.71
1:A:358:CYS:SG	1:G:191:ARG:NH2	2.63	0.71
2:B:281:ILE:H	2:D:202:ASN:ND2	1.88	0.71
2:F:38:LYS:O	2:F:41:SER:OG	2.08	0.71
1:G:37:VAL:O	1:G:41:THR:N	2.19	0.71
2:H:118:ILE:H	2:H:145:SER:HA	1.56	0.71
2:J:90:ASP:OD1	2:J:90:ASP:N	2.24	0.71
1:K:278:LEU:HB3	1:K:282:ASP:HB2	1.72	0.71
2:L:149:CYS:O	2:L:153:CYS:N	2.20	0.71
1:Q:194:ARG:HH21	1:Q:204:VAL:HA	1.55	0.71
2:R:273:VAL:HA	2:R:292:ILE:H	1.54	0.71
1:A:134:GLU:HG2	1:A:135:LYS:HD3	1.72	0.71
2:B:176:HIS:ND1	2:B:177:SER:O	2.22	0.71
2:D:218:LEU:O	2:D:222:LYS:NZ	2.22	0.71
1:E:25:LEU:HD11	1:E:329:ALA:HB2	1.71	0.71
1:E:136:ASP:N	1:E:136:ASP:OD1	2.20	0.71
2:F:194:ARG:NH1	2:H:278:LEU:O	2.24	0.71
1:G:129:VAL:N	1:G:133:ASN:OD1	2.19	0.71
1:K:182:GLN:OE1	1:K:231:ARG:NH2	2.23	0.71
2:L:264:ASP:O	2:L:268:LYS:NZ	2.17	0.71
1:Q:355:ASP:O	1:Q:359:LYS:N	2.24	0.71
2:R:109:LEU:HA	2:R:113:ALA:HB3	1.72	0.71
2:B:63:ALA:HB1	2:B:70:VAL:HG23	1.73	0.71
1:E:203:ILE:HA	1:E:232:VAL:HG12	1.71	0.71
1:E:236:ASN:H	1:E:284:ARG:HH22	1.36	0.71
2:F:252:ALA:O	2:F:256:ASN:N	2.24	0.71
2:H:25:LEU:HB3	2:H:27:VAL:HG23	1.72	0.71
2:H:103:ASP:N	2:H:103:ASP:OD1	2.24	0.71
1:I:38:LYS:O	1:I:42:HIS:ND1	2.23	0.71
2:J:281:ILE:HG22	2:L:202:ASN:HD21	1.55	0.71
1:K:149:CYS:O	1:K:153:CYS:N	2.22	0.71
1:A:257:ASN:OD1	1:A:260:ARG:NH1	2.23	0.71
1:C:0:LYS:HZ3	1:C:1:LEU:HB2	1.55	0.71
1:C:30:VAL:O	1:C:74:VAL:N	2.23	0.71
2:D:49:ILE:HG23	2:D:284:ARG:HH11	1.54	0.71
2:F:148:SER:HA	3:F:401:NAD:H4N	1.71	0.71
2:L:242:LEU:O	2:L:307:VAL:N	2.23	0.71
1:O:162:ASP:OD1	1:O:167:ILE:N	2.20	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:46:TYR:HA	2:P:52:THR:HA	1.71	0.71
1:Q:212:LYS:HZ2	1:Q:212:LYS:H	1.38	0.71
2:R:250:THR:H	2:R:302:ASP:HB3	1.56	0.71
2:D:149:CYS:SG	2:D:150:THR:N	2.63	0.71
2:D:164:LYS:O	2:D:248:LYS:NZ	2.24	0.71
1:G:112:GLY:O	1:G:114:LYS:NZ	2.24	0.71
2:H:3:VAL:HB	2:H:27:VAL:HG22	1.71	0.71
2:J:80:VAL:HA	2:J:111:ALA:HB2	1.72	0.71
1:K:346:GLU:O	1:K:350:LYS:N	2.20	0.71
2:L:158:VAL:HA	2:L:161:LEU:HB3	1.72	0.71
1:O:153:CYS:SG	1:O:154:LEU:N	2.64	0.71
1:C:321:VAL:HA	1:C:324:LEU:HB2	1.73	0.71
2:D:244:VAL:HG23	2:D:305:VAL:HB	1.70	0.71
2:F:194:ARG:HD3	2:F:205:PRO:HD2	1.72	0.71
1:I:323:ASP:OD1	1:I:323:ASP:N	2.23	0.71
1:K:84:TRP:O	1:K:88:GLY:N	2.24	0.71
2:L:13:ARG:O	2:L:17:ARG:N	2.22	0.71
1:Q:315:TRP:NE1	1:Q:319:GLN:OE1	2.23	0.71
2:F:176:HIS:N	2:F:230:LEU:O	2.24	0.71
1:I:202:ASN:ND2	1:I:203:ILE:O	2.23	0.71
1:O:3:VAL:HG21	1:O:25:LEU:HB3	1.71	0.71
1:A:195:ARG:HH12	1:G:361:TYR:HA	1.55	0.71
1:C:358:CYS:SG	1:C:359:LYS:N	2.62	0.71
2:D:139:HIS:HB3	2:D:333:GLN:HB2	1.73	0.71
1:E:256:ASN:ND2	1:E:294:SER:OG	2.24	0.71
1:G:136:ASP:N	1:G:136:ASP:OD1	2.23	0.71
1:K:13:ARG:H	1:K:13:ARG:CZ	2.03	0.71
1:K:179:THR:OG1	1:K:231:ARG:NH2	2.24	0.71
1:K:349:CYS:O	1:K:353:PRO:N	2.24	0.71
2:L:176:HIS:N	2:L:230:LEU:O	2.24	0.71
1:O:293:ASP:HB3	1:O:308:VAL:HG21	1.73	0.70
2:P:267:LEU:HD22	2:P:271:LEU:HD23	1.73	0.70
1:G:319:GLN:O	1:G:323:ASP:N	2.21	0.70
2:L:38:LYS:O	2:L:42:HIS:ND1	2.24	0.70
1:A:26:ASP:N	1:A:26:ASP:OD1	2.23	0.70
1:A:190:HIS:HE1	1:A:191:ARG:HH21	1.39	0.70
1:A:255:VAL:O	1:A:259:PHE:N	2.23	0.70
1:A:272:ASP:OD1	1:A:273:VAL:N	2.24	0.70
2:B:164:LYS:O	2:B:248:LYS:NZ	2.22	0.70
1:E:292:ILE:HG13	1:E:309:ALA:HB2	1.73	0.70
1:E:293:ASP:OD1	1:E:296:LEU:N	2.16	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:257:ASN:HA	1:G:260:ARG:HB2	1.73	0.70
2:H:184:LEU:HG	2:H:185:LEU:HD22	1.72	0.70
1:K:169:LYS:HA	1:K:224:LYS:HE3	1.72	0.70
2:P:64:ILE:H	2:P:71:ILE:H	1.38	0.70
1:C:6:ASN:HB3	1:C:94:GLU:HA	1.71	0.70
1:C:31:ASN:ND2	1:C:76:ASN:O	2.22	0.70
2:F:222:LYS:H	2:F:224:LYS:HZ3	1.40	0.70
1:K:41:THR:HA	1:K:44:LEU:HD23	1.73	0.70
2:L:149:CYS:SG	2:L:150:THR:N	2.63	0.70
2:P:18:CYS:O	2:P:20:ARG:N	2.14	0.70
2:P:118:ILE:HG22	2:P:120:ALA:H	1.56	0.70
2:P:204:VAL:HB	2:P:231:ARG:HB2	1.72	0.70
2:B:183:ARG:HG3	2:B:187:ALA:HB3	1.71	0.70
2:F:209:GLY:O	2:F:213:ALA:N	2.21	0.70
1:K:101:ASP:HB2	1:K:103:PRO:HG2	1.73	0.70
1:K:107:LYS:O	1:K:111:ALA:N	2.25	0.70
2:L:314:GLU:OE2	3:L:401:NAD:N7N	2.23	0.70
2:B:165:PHE:O	2:B:247:SER:OG	2.09	0.70
1:C:149:CYS:HA	1:C:152:ASN:HB3	1.74	0.70
1:C:149:CYS:O	1:C:153:CYS:N	2.23	0.70
2:F:8:PHE:H	2:F:32:ASP:HB2	1.57	0.70
2:F:148:SER:OG	2:F:150:THR:OG1	2.08	0.70
2:F:173:THR:OG1	2:H:306:LYS:NZ	2.24	0.70
1:G:168:VAL:O	1:G:169:LYS:NZ	2.24	0.70
2:J:220:ASN:O	2:J:224:LYS:NZ	2.25	0.70
2:R:2:LYS:NZ	2:R:26:ASP:OD2	2.23	0.70
2:B:46:TYR:HA	2:B:52:THR:HA	1.71	0.70
2:D:264:ASP:O	2:D:268:LYS:NZ	2.16	0.70
1:E:30:VAL:HB	1:E:73:VAL:HG12	1.72	0.70
1:G:181:ASP:OD2	1:G:195:ARG:NH1	2.24	0.70
1:I:237:VAL:HA	1:I:312:ASP:HA	1.73	0.70
2:J:148:SER:OG	2:J:150:THR:OG1	2.07	0.70
2:D:13:ARG:O	2:D:17:ARG:N	2.22	0.70
2:F:318:SER:O	2:F:322:VAL:N	2.17	0.70
1:G:188:SER:OG	1:G:190:HIS:N	2.22	0.70
2:H:38:LYS:O	2:H:42:HIS:ND1	2.25	0.70
2:H:293:ASP:OD1	2:H:295:SER:OG	2.10	0.70
1:O:312:ASP:OD2	1:O:315:TRP:N	2.18	0.70
1:A:243:VAL:HG22	1:A:306:LYS:HG3	1.74	0.70
2:B:170:GLY:HA3	2:B:225:LEU:HD13	1.74	0.70
1:E:25:LEU:HG	1:E:325:ALA:HB1	1.72	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:176:HIS:ND1	2:F:177:SER:O	2.25	0.70
2:H:8:PHE:H	2:H:32:ASP:HB2	1.56	0.70
1:O:18(A):TRP:C	1:O:20:ARG:HB3	2.17	0.70
2:P:115:LYS:HD3	2:P:142:THR:HA	1.74	0.70
1:A:158:VAL:HA	1:A:161:LEU:HB2	1.72	0.70
2:F:204:VAL:HB	2:F:231:ARG:HB2	1.73	0.70
2:J:9:GLY:O	2:J:13:ARG:NH1	2.25	0.70
2:L:209:GLY:O	2:L:213:ALA:N	2.19	0.70
1:O:137:TYR:O	1:O:331:LYS:NZ	2.25	0.70
2:P:176:HIS:ND1	2:P:177:SER:O	2.25	0.70
2:R:127:THR:OG1	2:R:133:ASN:ND2	2.25	0.70
1:C:232:VAL:HG22	1:C:234:THR:HG22	1.73	0.70
1:C:249:GLY:HA2	1:C:302:GLY:C	2.16	0.70
2:F:20:ARG:NH2	2:F:323:ASP:OD1	2.22	0.70
1:I:167:ILE:N	1:I:247:GLU:OE1	2.24	0.70
1:I:271:LEU:HD22	1:I:289:SER:HB3	1.73	0.70
2:P:13:ARG:HH11	2:P:13:ARG:H	1.39	0.69
2:P:176:HIS:N	2:P:230:LEU:O	2.24	0.69
1:Q:208:THR:O	1:Q:212:LYS:NZ	2.25	0.69
2:R:256:ASN:HB3	2:R:294:SER:HB2	1.74	0.69
1:C:13:ARG:H	1:C:13:ARG:CZ	2.04	0.69
1:C:106:GLY:HA2	1:C:109:ILE:HB	1.74	0.69
1:E:246:ILE:H	1:E:304:MET:HA	1.56	0.69
2:F:176:HIS:O	2:F:232:VAL:N	2.16	0.69
2:F:179:THR:OG1	2:F:182:GLN:NE2	2.25	0.69
2:F:240:VAL:N	2:F:309:ALA:O	2.25	0.69
1:G:60(A):ASP:OD1	1:G:61:ASN:ND2	2.25	0.69
1:G:238:SER:HB3	1:G:311:TYR:CD2	2.27	0.69
2:H:109:LEU:HA	2:H:113:ALA:HB3	1.74	0.69
1:I:291:THR:HG1	1:I:310:TRP:CD1	2.09	0.69
2:J:47:ASP:CG	2:J:49:ILE:H	2.00	0.69
1:K:252:ALA:O	1:K:256:ASN:ND2	2.25	0.69
2:R:118:ILE:H	2:R:145:SER:HA	1.56	0.69
2:R:299:VAL:HG13	2:R:305:VAL:HG22	1.72	0.69
2:B:2:LYS:O	2:B:90:ASP:N	2.25	0.69
2:B:9:GLY:O	2:B:13:ARG:NH1	2.25	0.69
1:C:8:PHE:CZ	1:C:13:ARG:HB3	2.27	0.69
1:C:261:LYS:O	1:C:261:LYS:NZ	2.22	0.69
2:P:172:MET:O	2:R:306:LYS:NZ	2.26	0.69
1:Q:171:THR:N	1:Q:243:VAL:O	2.24	0.69
1:Q:174:THR:HA	1:Q:240:VAL:HA	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:10:ARG:N	3:E:401:NAD:O2N	2.25	0.69
1:E:20:ARG:HH21	1:E:21:LYS:HB2	1.57	0.69
1:I:221:LEU:HA	1:I:224:LYS:HD2	1.74	0.69
2:J:17:ARG:NH1	2:J:51:GLY:O	2.24	0.69
2:L:206:THR:HG21	2:L:231:ARG:HE	1.58	0.69
2:P:20:ARG:NH2	2:P:323:ASP:OD1	2.22	0.69
2:D:318:SER:O	2:D:322:VAL:N	2.18	0.69
1:E:162:ASP:OD1	1:E:167:ILE:N	2.21	0.69
2:F:172:MET:O	2:H:306:LYS:NZ	2.25	0.69
2:J:179:THR:OG1	2:J:182:GLN:NE2	2.22	0.69
1:K:244:VAL:HG23	1:K:305:VAL:HG13	1.74	0.69
1:O:161:LEU:O	1:O:165:LEU:N	2.25	0.69
1:O:162:ASP:O	1:O:166:GLY:N	2.26	0.69
2:P:172:MET:HA	2:P:242:LEU:HA	1.74	0.69
2:P:222:LYS:H	2:P:224:LYS:HZ3	1.38	0.69
2:B:13:ARG:O	2:B:17:ARG:N	2.20	0.69
1:I:293:ASP:OD2	1:I:296:LEU:N	2.25	0.69
1:K:10:ARG:O	1:K:14:ASN:ND2	2.25	0.69
1:O:172:MET:HB2	1:O:242:LEU:HB2	1.75	0.69
2:P:9:GLY:O	2:P:13:ARG:NH1	2.25	0.69
1:A:129:VAL:HG12	1:A:133:ASN:HD21	1.57	0.69
2:B:47:ASP:CG	2:B:49:ILE:H	2.00	0.69
2:B:90:ASP:N	2:B:90:ASP:OD1	2.24	0.69
2:B:115:LYS:NZ	2:B:141:ASP:O	2.22	0.69
2:B:117:LEU:HG	2:B:145:SER:HA	1.75	0.69
1:C:297:THR:HA	1:C:306:LYS:HZ1	1.57	0.69
2:D:242:LEU:O	2:D:307:VAL:N	2.23	0.69
1:E:8:PHE:CZ	1:E:44:LEU:HD12	2.28	0.69
1:G:46:TYR:HA	1:G:52:THR:HA	1.75	0.69
2:H:8:PHE:CZ	2:H:13:ARG:HG3	2.28	0.69
2:H:104:GLY:O	2:H:108:HIS:N	2.24	0.69
1:O:141:ALA:HB2	1:C:103:PRO:HG3	1.75	0.69
1:O:325:ALA:O	1:O:329:ALA:N	2.21	0.69
2:P:306:LYS:NZ	2:R:172:MET:O	2.26	0.69
1:Q:294:SER:O	1:Q:297:THR:OG1	2.10	0.69
2:B:80:VAL:HA	2:B:111:ALA:HB2	1.73	0.69
1:E:236:ASN:ND2	1:E:236:ASN:O	2.25	0.69
2:H:209:GLY:O	2:H:213:ALA:N	2.18	0.69
2:J:164:LYS:O	2:J:248:LYS:NZ	2.22	0.69
2:L:174:THR:HA	2:L:240:VAL:HA	1.75	0.69
2:L:279:VAL:HA	2:L:310:TRP:CH2	2.28	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:136:ASP:OD1	1:O:136:ASP:N	2.24	0.69
1:O:181:ASP:OD2	1:O:231:ARG:NH1	2.24	0.69
2:P:89:ILE:O	2:P:114:LYS:NZ	2.26	0.69
2:P:202:ASN:HD21	2:R:281:ILE:HG22	1.58	0.69
2:P:227:GLY:HA3	2:R:306:LYS:HZ2	1.58	0.69
1:Q:248(A):VAL:HG22	1:Q:250:VAL:HG13	1.74	0.69
2:R:148:SER:O	2:R:152:ASN:N	2.20	0.69
1:A:186:ASP:OD1	1:A:198:ALA:N	2.24	0.69
2:B:17:ARG:NH1	2:B:51:GLY:O	2.26	0.69
1:C:348:PHE:O	1:C:352:ASN:N	2.24	0.69
2:D:148:SER:OG	2:D:150:THR:OG1	2.10	0.69
2:D:174:THR:HA	2:D:240:VAL:HA	1.75	0.69
2:F:253:GLU:OE2	2:F:260:ARG:NH1	2.22	0.69
2:F:267:LEU:HD22	2:F:271:LEU:HD23	1.74	0.69
2:H:28:VAL:O	2:H:72:LYS:N	2.18	0.69
2:H:45:LYS:NZ	2:H:55:ALA:O	2.25	0.69
2:H:148:SER:O	2:H:152:ASN:N	2.20	0.69
1:I:47:ASP:CG	1:I:49:ILE:H	2.01	0.69
1:Q:312:ASP:OD1	1:Q:315:TRP:N	2.26	0.69
2:R:197:ARG:HH21	2:R:199:ALA:H	1.41	0.69
2:D:78:ASN:HB3	2:D:81:ASN:HB2	1.75	0.69
1:E:5:ILE:HB	1:E:30:VAL:HG13	1.75	0.69
2:F:6:ASN:OD1	2:F:31:ASN:ND2	2.24	0.69
2:F:306:LYS:HZ2	2:H:228:ILE:H	1.40	0.69
1:G:255:VAL:O	1:G:259:PHE:N	2.23	0.69
1:G:293:ASP:OD2	1:G:296:LEU:N	2.16	0.69
2:H:9:GLY:O	2:H:13:ARG:NH1	2.25	0.69
1:O:37:VAL:CG2	1:O:59:ILE:CG2	2.71	0.69
2:P:10:ARG:NH1	1:Q:185:LEU:HD22	2.07	0.69
2:P:148:SER:OG	2:P:150:THR:OG1	2.08	0.69
2:P:214:VAL:O	2:P:218:LEU:N	2.25	0.69
2:P:242:LEU:O	2:P:307:VAL:N	2.26	0.69
2:R:102:ARG:HH22	2:R:126:PRO:HD3	1.57	0.69
2:R:183:ARG:NE	2:R:188:SER:O	2.26	0.69
1:A:99:PHE:HB3	1:A:104:GLY:HA3	1.75	0.69
1:C:90:ASP:O	1:C:114:LYS:N	2.16	0.69
2:D:18(A):TRP:NE1	2:D:23:SER:OG	2.26	0.69
2:D:279:VAL:HA	2:D:310:TRP:CH2	2.27	0.69
2:F:197:ARG:NH1	1:G:46:TYR:O	2.19	0.69
1:G:154:LEU:HA	1:G:157:PHE:CZ	2.27	0.69
2:H:236:ASN:OD1	2:H:284:ARG:NH1	2.26	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:249:LYS:HD2	2:L:302:ASP:HB2	1.75	0.69
1:O:346:GLU:O	1:O:350:LYS:N	2.18	0.68
1:C:28:VAL:O	1:C:72:LYS:N	2.17	0.68
1:C:64:PHE:HE1	1:C:73:VAL:HG23	1.56	0.68
1:E:8:PHE:HZ	1:E:44:LEU:HD12	1.58	0.68
1:G:4:ALA:HA	1:G:27:VAL:HG13	1.74	0.68
2:H:102:ARG:HH22	2:H:126:PRO:HD3	1.56	0.68
2:J:32:ASP:OD2	3:J:401:NAD:H1B	1.92	0.68
2:L:18(A):TRP:NE1	2:L:23:SER:OG	2.26	0.68
2:L:139:HIS:HB3	2:L:333:GLN:HB2	1.74	0.68
2:P:173:THR:OG1	2:R:306:LYS:NZ	2.25	0.68
2:R:293:ASP:OD1	2:R:295:SER:OG	2.10	0.68
2:D:176:HIS:O	2:D:232:VAL:N	2.26	0.68
1:E:94:GLU:OE2	1:E:96:THR:OG1	2.10	0.68
1:E:211:ALA:HB3	1:E:212:LYS:HZ1	1.58	0.68
2:F:172:MET:HA	2:F:242:LEU:HA	1.74	0.68
1:G:47:ASP:OD2	1:G:50:LEU:N	2.18	0.68
1:K:60:ILE:H	1:K:64:PHE:HA	1.59	0.68
1:Q:5:ILE:HB	1:Q:30:VAL:HA	1.74	0.68
2:R:41:SER:HB2	2:R:57:VAL:HG13	1.75	0.68
1:C:115:LYS:HE2	1:C:142:ASN:HA	1.74	0.68
2:D:103:ASP:O	2:D:107:LYS:N	2.25	0.68
1:E:215:SER:O	1:E:222:LYS:NZ	2.27	0.68
2:F:89:ILE:O	2:F:114:LYS:NZ	2.24	0.68
2:F:117:LEU:HD21	2:F:146:ASN:HB2	1.75	0.68
2:F:281:ILE:H	2:H:202:ASN:HD21	1.41	0.68
2:H:2:LYS:NZ	2:H:26:ASP:OD2	2.24	0.68
1:I:239:VAL:HB	1:I:310:TRP:CD2	2.27	0.68
2:J:115:LYS:NZ	2:J:141:ASP:O	2.23	0.68
2:P:38:LYS:O	2:P:41:SER:OG	2.07	0.68
1:E:206:THR:H	1:E:228:ILE:HD12	1.58	0.68
1:G:64:PHE:O	1:G:71:ILE:N	2.17	0.68
1:G:237:VAL:O	1:G:313:ASN:ND2	2.26	0.68
1:G:239:VAL:HA	1:G:310:TRP:HA	1.75	0.68
1:I:314:GLU:HG2	3:I:401:NAD:H72N	1.59	0.68
1:K:275:ASP:N	1:K:275:ASP:OD1	2.25	0.68
2:L:148:SER:OG	2:L:150:THR:OG1	2.06	0.68
1:E:274:CYS:SG	1:E:275:ASP:N	2.66	0.68
1:E:278:LEU:O	1:G:194:ARG:NH2	2.27	0.68
2:F:32:ASP:OD2	3:F:401:NAD:O3B	2.12	0.68
2:F:122:GLY:HA3	2:F:125:ILE:HG12	1.73	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:110:GLN:OE1	2:H:111:ALA:N	2.27	0.68
1:I:257:ASN:OD1	1:I:260:ARG:NH1	2.26	0.68
2:L:86:ASP:OD1	2:L:86:ASP:N	2.25	0.68
2:L:238:SER:O	2:L:311:TYR:N	2.27	0.68
1:O:218:LEU:HB3	1:O:221:LEU:HD23	1.76	0.68
2:P:2:LYS:O	2:P:90:ASP:N	2.24	0.68
2:P:190:HIS:HB3	2:P:196:ALA:HB2	1.74	0.68
1:Q:9:GLY:C	1:Q:13:ARG:HE	2.01	0.68
1:Q:192:ASP:OD1	1:Q:194:ARG:N	2.25	0.68
1:Q:259:PHE:O	1:Q:263:ALA:N	2.19	0.68
2:R:141:ASP:OD1	2:R:141:ASP:N	2.24	0.68
2:R:176:HIS:O	2:R:232:VAL:N	2.19	0.68
2:B:220:ASN:O	2:B:224:LYS:NZ	2.24	0.68
1:G:31:ASN:ND2	1:G:76:ASN:O	2.26	0.68
1:G:36:GLY:O	1:G:39:SER:OG	2.11	0.68
2:H:220:ASN:O	2:H:224:LYS:NZ	2.23	0.68
2:J:183:ARG:NE	2:J:188:SER:O	2.26	0.68
1:K:127:THR:OG1	1:K:146:ASN:OD1	2.12	0.68
1:K:157:PHE:O	1:K:161:LEU:N	2.26	0.68
1:O:287:ASP:N	1:O:287:ASP:OD1	2.23	0.68
2:P:240:VAL:N	2:P:309:ALA:O	2.25	0.68
1:Q:1:LEU:N	1:Q:24:PRO:O	2.26	0.68
1:Q:82:LEU:HD13	1:Q:84:TRP:CZ2	2.28	0.68
2:R:192:ASP:HB3	2:R:195:ARG:HB2	1.76	0.68
1:C:36:GLY:O	1:C:39:SER:OG	2.10	0.68
2:D:317:TYR:O	2:D:321:VAL:N	2.19	0.68
1:E:157:PHE:O	1:E:161:LEU:N	2.25	0.68
1:E:163:GLU:HG2	1:E:164:GLU:HG3	1.74	0.68
1:E:241:ASP:HA	1:E:308:VAL:HA	1.76	0.68
2:F:190:HIS:HB3	2:F:196:ALA:HB2	1.76	0.68
2:F:220:ASN:O	2:F:224:LYS:NZ	2.26	0.68
2:F:306:LYS:NZ	2:H:172:MET:O	2.27	0.68
1:G:105:ALA:O	1:G:109:ILE:N	2.21	0.68
2:J:117:LEU:HG	2:J:145:SER:HA	1.75	0.68
1:K:183:ARG:NH2	1:K:188:SER:OG	2.27	0.68
1:O:303:ASP:OD2	1:Q:245:ASN:ND2	2.27	0.68
1:Q:80:LEU:H	1:Q:107:LYS:HZ2	1.41	0.68
1:Q:361:TYR:O	1:I:195:ARG:NH2	2.26	0.68
1:A:174:THR:HG1	1:A:238:SER:HG	1.39	0.68
2:B:186:ASP:OD2	2:B:197:ARG:NE	2.22	0.68
2:D:94:GLU:OE2	2:D:96:THR:OG1	2.12	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:54:ASP:OD1	2:F:54:ASP:N	2.21	0.68
2:H:250:THR:H	2:H:302:ASP:HB3	1.58	0.68
2:H:256:ASN:HB3	2:H:294:SER:HB2	1.74	0.68
1:K:8:PHE:CZ	1:K:13:ARG:HB3	2.29	0.68
2:P:8:PHE:H	2:P:32:ASP:HB2	1.59	0.68
2:P:77:ARG:HB3	3:P:401:NAD:H62A	1.58	0.68
2:P:220:ASN:O	2:P:224:LYS:NZ	2.27	0.68
2:R:1:LEU:N	2:R:26:ASP:H	1.92	0.68
1:E:192:ASP:OD2	1:E:195:ARG:N	2.22	0.68
1:K:167:ILE:O	1:K:224:LYS:NZ	2.23	0.68
2:L:119:THR:O	2:L:317:TYR:OH	2.12	0.68
2:P:251:PHE:HA	2:P:299:VAL:HG21	1.75	0.68
2:R:104:GLY:O	2:R:108:HIS:N	2.27	0.68
1:A:12:GLY:HA2	1:A:15:PHE:HB3	1.76	0.68
2:B:38:LYS:HZ3	2:B:39:GLN:HG3	1.59	0.68
1:C:50:LEU:HA	1:C:284:ARG:HH22	1.58	0.68
2:D:224:LYS:HZ3	2:D:225:LEU:HB2	1.59	0.68
1:E:18(B):HIS:HA	1:E:69:LYS:NZ	2.09	0.68
2:F:15:PHE:HE2	2:F:321:VAL:HB	1.59	0.68
2:F:251:PHE:HA	2:F:299:VAL:HG21	1.76	0.68
1:G:312:ASP:HB3	1:G:316:GLY:H	1.58	0.68
2:J:46:TYR:HA	2:J:52:THR:HA	1.74	0.68
2:L:90:ASP:O	2:L:115:LYS:N	2.23	0.68
2:L:103:ASP:O	2:L:107:LYS:N	2.25	0.68
1:O:139:HIS:HA	1:O:332:TRP:NE1	2.10	0.67
1:E:90:ASP:HA	1:E:114:LYS:HZ3	1.59	0.67
1:E:179:THR:O	1:E:182:GLN:NE2	2.25	0.67
1:G:157:PHE:O	1:G:161:LEU:N	2.24	0.67
1:G:193:LEU:HA	1:G:196:ALA:HB3	1.75	0.67
2:H:127:THR:OG1	2:H:133:ASN:ND2	2.25	0.67
1:I:135:LYS:NZ	1:I:136:ASP:OD1	2.23	0.67
1:I:222:LYS:O	1:I:224:LYS:NZ	2.27	0.67
1:K:148:SER:O	1:K:151:THR:OG1	2.09	0.67
2:L:94:GLU:OE2	2:L:96:THR:OG1	2.12	0.67
1:O:13:ARG:C	1:O:44:LEU:CD1	2.67	0.67
2:D:17:ARG:NH2	2:D:54:ASP:OD1	2.27	0.67
2:D:203:ILE:HD11	2:D:230:LEU:HB3	1.76	0.67
1:I:20:ARG:HE	1:I:322:VAL:HG11	1.58	0.67
2:J:170:GLY:HA3	2:J:225:LEU:HD13	1.74	0.67
2:P:209:GLY:O	2:P:213:ALA:N	2.20	0.67
2:R:8:PHE:CZ	2:R:13:ARG:HG3	2.29	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:192:ASP:O	2:B:196:ALA:N	2.27	0.67
2:B:204:VAL:HB	2:B:231:ARG:HB2	1.75	0.67
2:D:203:ILE:HG13	2:D:232:VAL:HG12	1.76	0.67
2:F:45:LYS:HD3	2:F:57:VAL:HB	1.77	0.67
1:I:103:PRO:O	1:I:107:LYS:N	2.23	0.67
1:I:118:ILE:O	1:I:146:ASN:N	2.27	0.67
1:I:259:PHE:O	1:I:263:ALA:N	2.19	0.67
2:J:77:ARG:HB3	3:J:401:NAD:H62A	1.58	0.67
2:L:168:ILE:HB	2:L:245:GLN:HG2	1.76	0.67
1:O:183:ARG:HG2	1:O:187:ALA:HB3	1.75	0.67
1:Q:46:TYR:HA	1:Q:52:THR:HA	1.77	0.67
1:Q:317:TYR:O	1:Q:321:VAL:N	2.20	0.67
2:R:110:GLN:OE1	2:R:111:ALA:N	2.27	0.67
2:B:139:HIS:CD2	2:B:334:UNK:H	2.13	0.67
2:B:162:ASP:OD1	2:B:167:ILE:N	2.25	0.67
1:C:16:LEU:HA	1:C:18(A):TRP:HD1	1.59	0.67
2:D:168:ILE:HB	2:D:245:GLN:HG2	1.76	0.67
2:F:306:LYS:NZ	2:H:173:THR:OG1	2.27	0.67
1:I:148:SER:O	1:I:151:THR:OG1	2.07	0.67
1:I:158:VAL:O	1:I:162:ASP:N	2.28	0.67
1:K:36:GLY:O	1:K:39:SER:OG	2.11	0.67
1:O:259:PHE:HB3	1:O:273:VAL:HG11	1.77	0.67
2:P:306:LYS:HZ2	2:R:228:ILE:H	1.42	0.67
1:Q:139:HIS:ND1	1:Q:331:LYS:O	2.27	0.67
1:Q:209:GLY:O	1:Q:213:ALA:N	2.19	0.67
2:R:186:ASP:HB3	2:R:197:ARG:HD2	1.75	0.67
1:A:171:THR:HG23	1:A:243:VAL:HB	1.75	0.67
1:E:33:SER:HA	1:E:75:SER:CB	2.24	0.67
1:E:193:LEU:O	1:E:197:ARG:N	2.28	0.67
1:E:236:ASN:ND2	1:E:313:ASN:OD1	2.27	0.67
1:I:317:TYR:O	1:I:321:VAL:N	2.24	0.67
1:O:280:SER:OG	1:Q:203:ILE:N	2.27	0.67
2:P:174:THR:OG1	2:P:311:TYR:OH	2.12	0.67
2:P:306:LYS:NZ	2:R:173:THR:OG1	2.27	0.67
1:Q:17:ARG:HH12	1:Q:50:LEU:HD22	1.59	0.67
2:R:6:ASN:OD1	2:R:31:ASN:ND2	2.27	0.67
2:R:249:LYS:NZ	2:R:301:GLY:O	2.28	0.67
1:A:115:LYS:HA	1:A:142:ASN:HB3	1.76	0.67
1:A:293:ASP:OD2	1:A:296:LEU:N	2.28	0.67
2:B:47:ASP:OD1	2:B:48:SER:N	2.27	0.67
2:H:183:ARG:NE	2:H:188:SER:O	2.24	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:5:ILE:HB	2:J:30:ILE:HG23	1.76	0.67
1:K:78:ASP:OD2	1:K:81:LYS:N	2.17	0.67
1:O:7:GLY:N	1:O:31:ASN:HB3	2.10	0.67
1:O:186:ASP:O	2:R:10:ARG:NH1	2.28	0.67
1:Q:107:LYS:O	1:Q:111:ALA:N	2.27	0.67
2:R:236:ASN:OD1	2:R:284:ARG:NH1	2.28	0.67
1:A:45:LYS:NZ	1:A:55:ALA:O	2.26	0.67
1:A:147:ALA:O	1:A:152:ASN:ND2	2.22	0.67
2:B:253:GLU:O	2:B:257:ALA:N	2.23	0.67
1:C:47:ASP:CG	1:C:49:ILE:H	2.03	0.67
1:E:153:CYS:HA	1:E:289:SER:HB3	1.76	0.67
2:F:214:VAL:O	2:F:218:LEU:N	2.25	0.67
1:G:177:SER:OG	1:G:237:VAL:N	2.23	0.67
1:I:101:ASP:HB3	1:I:122(A):LYS:HD2	1.75	0.67
1:I:283:PHE:O	1:I:286:SER:OG	2.09	0.67
2:J:260:ARG:NH2	2:J:294:SER:OG	2.28	0.67
1:K:148:SER:OG	1:K:150:THR:OG1	2.12	0.67
2:L:165:PHE:O	2:L:247:SER:OG	2.13	0.67
1:O:137:TYR:HH	1:O:332:TRP:CD1	2.13	0.67
2:P:102:ARG:NH2	2:P:124:ASP:O	2.27	0.67
1:Q:78:ASP:OD1	1:Q:107:LYS:NZ	2.28	0.67
1:A:39:SER:O	1:A:43:LEU:N	2.20	0.67
1:A:191:ARG:NH2	1:G:360:LEU:H	1.93	0.67
1:A:195:ARG:HH22	1:G:361:TYR:HA	1.59	0.67
2:B:172:MET:O	2:D:306:LYS:NZ	2.27	0.67
2:B:260:ARG:NH2	2:B:294:SER:OG	2.27	0.67
1:C:34:GLY:O	1:C:39:SER:OG	2.10	0.67
1:K:34:GLY:O	1:K:39:SER:OG	2.13	0.67
1:K:348:PHE:O	1:K:352:ASN:N	2.27	0.67
2:L:47:ASP:CG	2:L:49:ILE:H	2.03	0.67
2:P:194:ARG:NH1	2:R:278:LEU:O	2.27	0.67
2:P:252:ALA:O	2:P:256:ASN:N	2.24	0.67
1:Q:3:VAL:HG13	1:Q:93:ILE:HG13	1.77	0.67
1:A:134:GLU:CD	1:A:134:GLU:H	2.03	0.67
2:D:165:PHE:O	2:D:247:SER:OG	2.12	0.67
1:G:57:VAL:HA	1:G:66:ILE:HA	1.76	0.67
2:H:82:LEU:HB2	2:H:84:TRP:NE1	2.10	0.67
2:J:139:HIS:CD2	2:J:334:UNK:H	2.12	0.67
1:O:240:VAL:HG22	1:O:309:ALA:HB3	1.75	0.67
1:O:253:GLU:O	1:O:256:ASN:ND2	2.28	0.67
1:E:37:VAL:CG1	1:E:59:ILE:CG2	2.72	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:246:ILE:HB	1:E:305:VAL:HG12	1.76	0.67
2:F:10:ARG:HH12	1:G:185:LEU:CG	2.07	0.67
2:H:215:ALA:HB1	2:H:222:LYS:HD3	1.76	0.67
2:J:176:HIS:ND1	2:J:177:SER:O	2.28	0.67
2:B:59:THR:HA	2:B:64:ILE:HG23	1.75	0.66
2:D:249:LYS:HD2	2:D:302:ASP:HB2	1.76	0.66
1:E:8:PHE:HZ	1:E:44:LEU:CD1	2.09	0.66
1:E:318:SER:O	1:E:322:VAL:N	2.23	0.66
1:G:177:SER:HG	1:G:234:THR:HG1	1.41	0.66
1:I:255:VAL:O	1:I:259:PHE:N	2.25	0.66
1:I:287:ASP:OD1	1:I:315:TRP:NE1	2.26	0.66
2:J:162:ASP:OD1	2:J:167:ILE:N	2.25	0.66
1:O:240:VAL:N	1:O:309:ALA:O	2.25	0.66
3:O:401:NAD:H1D	1:C:362:GLU:C	2.20	0.66
1:Q:148:SER:O	1:Q:151:THR:OG1	2.10	0.66
1:Q:172:MET:HG3	1:Q:225:LEU:HD11	1.77	0.66
1:E:45:LYS:HD3	1:E:57:VAL:HB	1.76	0.66
1:E:151:THR:HG22	1:E:214:VAL:HG13	1.77	0.66
1:E:327:LEU:HD23	1:E:330:ASN:HD22	1.60	0.66
2:F:118:ILE:HG22	2:F:120:ALA:H	1.59	0.66
2:H:176:HIS:O	2:H:232:VAL:N	2.21	0.66
2:J:172:MET:O	2:L:306:LYS:NZ	2.28	0.66
2:J:199:ALA:HA	2:J:202:ASN:HB2	1.78	0.66
1:K:134:GLU:HB2	1:K:135:LYS:HZ3	1.60	0.66
1:K:176:HIS:O	1:K:232:VAL:N	2.26	0.66
1:O:33:SER:HB2	1:O:77:ARG:NH1	2.10	0.66
2:P:250:THR:OG1	2:P:251:PHE:N	2.29	0.66
1:Q:125:ILE:HG23	1:Q:143:ILE:HG22	1.76	0.66
1:Q:315:TRP:O	1:Q:318:SER:OG	2.12	0.66
1:A:151:THR:HG22	1:A:210:ALA:HA	1.76	0.66
1:A:315:TRP:O	1:A:318:SER:OG	2.11	0.66
2:B:72:LYS:NZ	2:B:87:MET:SD	2.63	0.66
1:C:49:ILE:O	1:C:284:ARG:NH1	2.27	0.66
1:C:162:ASP:OD1	1:C:167:ILE:N	2.20	0.66
1:E:83:PRO:HA	1:E:86:GLU:CD	2.20	0.66
1:G:118:ILE:HG22	1:G:120:ALA:H	1.59	0.66
1:G:240:VAL:O	1:G:309:ALA:N	2.28	0.66
2:H:287:ASP:O	2:H:320:ARG:NH2	2.29	0.66
1:I:139:HIS:CD2	1:I:332:TRP:HA	2.30	0.66
1:I:155:ALA:O	1:I:159:LYS:N	2.26	0.66
2:J:2:LYS:O	2:J:90:ASP:N	2.25	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:179:THR:OG1	1:O:182:GLN:NE2	2.28	0.66
1:Q:112:GLY:O	1:Q:114:LYS:NZ	2.27	0.66
2:R:8:PHE:H	2:R:32:ASP:HB2	1.61	0.66
1:A:162:ASP:OD1	1:A:167:ILE:N	2.29	0.66
1:E:173:THR:OG1	1:E:228:ILE:O	2.11	0.66
2:F:179:THR:N	2:F:182:GLN:OE1	2.24	0.66
2:H:249:LYS:NZ	2:H:301:GLY:O	2.29	0.66
1:I:184:LEU:HB3	2:L:184:LEU:HB2	1.78	0.66
1:K:0:LYS:HZ3	1:K:1:LEU:HD13	1.60	0.66
1:K:198:ALA:HB1	1:K:201:LEU:HD23	1.76	0.66
1:K:297:THR:HG22	1:K:308:VAL:H	1.60	0.66
2:L:137:TYR:O	2:L:331:LYS:NZ	2.22	0.66
2:P:47:ASP:CG	2:P:49:ILE:H	2.02	0.66
1:C:275:ASP:N	1:C:275:ASP:OD1	2.27	0.66
2:F:256:ASN:O	2:F:260:ARG:N	2.27	0.66
1:G:3:VAL:HG13	1:G:91:ILE:HG13	1.77	0.66
1:I:183:ARG:CB	1:I:188:SER:HB2	2.24	0.66
1:K:157:PHE:HA	1:K:160:VAL:HB	1.77	0.66
2:L:0:LYS:O	2:L:2:LYS:NZ	2.29	0.66
2:L:183:ARG:HH22	2:L:191:ARG:HH22	1.42	0.66
2:R:190:HIS:HB3	2:R:196:ALA:HB2	1.78	0.66
2:R:209:GLY:O	2:R:213:ALA:N	2.18	0.66
1:A:126:PRO:O	1:A:145:SER:OG	2.12	0.66
2:D:8:PHE:H	2:D:32:ASP:HB2	1.60	0.66
1:E:182:GLN:OE1	1:E:182:GLN:N	2.27	0.66
1:E:273:VAL:HA	1:E:292:ILE:H	1.59	0.66
2:F:281:ILE:HG22	2:H:202:ASN:ND2	2.08	0.66
1:G:135:LYS:NZ	1:G:136:ASP:OD1	2.27	0.66
1:G:238:SER:OG	1:G:313:ASN:ND2	2.29	0.66
2:H:134:GLU:OE1	2:H:134:GLU:N	2.28	0.66
2:J:154:LEU:HD21	2:J:210:ALA:HB1	1.78	0.66
1:K:320:ARG:O	1:K:324:LEU:N	2.25	0.66
1:O:356:GLU:O	1:C:183:ARG:NH2	2.28	0.66
1:Q:44:LEU:HG	1:Q:57:VAL:HG21	1.77	0.66
2:R:20:ARG:NH2	2:R:323:ASP:OD1	2.28	0.66
2:R:82:LEU:HB2	2:R:84:TRP:NE1	2.10	0.66
2:R:287:ASP:O	2:R:320:ARG:NH2	2.29	0.66
1:C:92:VAL:HB	1:C:116:VAL:HG13	1.77	0.66
2:D:36:GLY:O	2:D:40:ALA:N	2.19	0.66
2:D:102:ARG:NH2	2:D:143:ILE:O	2.29	0.66
2:H:168:ILE:HD12	2:H:245:GLN:HG2	1.78	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:193:LEU:H	1:K:193:LEU:HD12	1.60	0.66
2:L:174:THR:OG1	2:L:311:TYR:OH	2.10	0.66
2:L:220:ASN:O	2:L:224:LYS:NZ	2.25	0.66
1:O:272:ASP:N	1:O:290:SER:O	2.25	0.66
1:Q:11:ILE:H	3:Q:401:NAD:PN	2.17	0.66
2:B:148:SER:OG	2:B:150:THR:OG1	2.07	0.66
1:C:279:VAL:H	1:C:282:ASP:CG	2.04	0.66
2:F:177:SER:OG	2:F:234:THR:O	2.14	0.66
1:G:128:TYR:O	1:G:146:ASN:ND2	2.26	0.66
1:I:328:VAL:HA	1:I:331:LYS:HD3	1.77	0.66
2:J:224:LYS:HG3	2:J:225:LEU:HD23	1.78	0.66
2:P:176:HIS:O	2:P:232:VAL:N	2.16	0.66
2:R:134:GLU:OE1	2:R:134:GLU:N	2.28	0.66
2:B:45:LYS:NZ	2:B:53:PHE:O	2.28	0.66
2:B:154:LEU:HD21	2:B:210:ALA:HB1	1.78	0.66
2:D:183:ARG:HH22	2:D:191:ARG:HH22	1.44	0.66
2:D:238:SER:O	2:D:311:TYR:N	2.27	0.66
2:H:173:THR:O	2:H:241:ASP:N	2.29	0.66
2:J:9:GLY:O	2:J:12:GLY:N	2.25	0.66
1:K:176:HIS:N	1:K:230:LEU:O	2.28	0.66
1:O:18(A):TRP:HE1	1:O:25:LEU:HB2	1.60	0.66
1:O:60(A):ASP:C	1:O:62:GLU:H	2.03	0.66
1:O:341:SER:O	1:C:191:ARG:NH1	2.29	0.66
2:P:282:ASP:N	2:P:282:ASP:OD1	2.26	0.66
2:R:2:LYS:HE3	2:R:87:MET:HB3	1.78	0.66
1:A:46:TYR:O	2:D:197:ARG:NH1	2.29	0.66
2:B:270:ILE:O	2:B:289:SER:OG	2.11	0.66
2:D:148:SER:O	2:D:152:ASN:N	2.22	0.66
1:E:172:MET:SD	1:E:173:THR:N	2.69	0.66
1:E:347:ASP:O	1:E:351:ASP:N	2.28	0.66
2:F:66:VAL:N	2:F:69:LYS:O	2.24	0.66
1:G:28:VAL:O	1:G:72:LYS:N	2.26	0.66
2:L:59:THR:HA	2:L:64:ILE:HG23	1.78	0.66
2:L:102:ARG:NH2	2:L:143:ILE:O	2.29	0.66
1:O:6:ASN:HD22	1:O:94:GLU:HA	1.59	0.65
1:O:257:ASN:HA	1:O:260:ARG:HD2	1.76	0.65
2:P:300:MET:HB2	2:P:304:MET:HB3	1.77	0.65
1:Q:240:VAL:HG12	1:Q:309:ALA:HB3	1.78	0.65
2:B:90:ASP:O	2:B:115:LYS:N	2.15	0.65
2:D:90:ASP:O	2:D:115:LYS:N	2.25	0.65
1:I:188:SER:CB	1:I:196:ALA:HA	2.23	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:139:HIS:NE2	2:J:334:UNK:O	2.27	0.65
1:O:47:ASP:CG	1:O:49:ILE:H	2.04	0.65
1:Q:213:ALA:O	1:Q:217:VAL:N	2.28	0.65
2:B:287:ASP:O	2:B:320:ARG:NH2	2.28	0.65
1:C:142:ASN:HD22	1:C:143:ILE:H	1.44	0.65
2:D:18(B):HIS:NE2	2:D:67:ASP:OD2	2.27	0.65
1:E:174:THR:O	1:E:230:LEU:N	2.26	0.65
2:F:282:ASP:N	2:F:282:ASP:OD1	2.25	0.65
1:G:62:GLU:O	1:G:73:VAL:N	2.28	0.65
1:G:176:HIS:O	1:G:232:VAL:N	2.29	0.65
2:H:1:LEU:N	2:H:26:ASP:H	1.94	0.65
1:I:6:ASN:HA	1:I:31:ASN:HB3	1.78	0.65
1:I:90:ASP:HA	1:I:114:LYS:HB2	1.78	0.65
1:O:33:SER:HB2	1:O:77:ARG:HH11	1.62	0.65
1:O:190:HIS:CE1	1:O:196:ALA:H	2.14	0.65
1:O:221:LEU:HA	1:O:224:LYS:HD3	1.78	0.65
2:P:253:GLU:OE2	2:P:260:ARG:NH1	2.22	0.65
1:Q:326:ASP:O	1:Q:330:ASN:ND2	2.29	0.65
2:D:6:ASN:O	2:D:95:GLY:N	2.29	0.65
2:D:179:THR:OG1	2:D:182:GLN:NE2	2.26	0.65
1:E:90:ASP:HB3	1:E:114:LYS:HB2	1.78	0.65
1:G:181:ASP:OD1	1:G:182:GLN:N	2.29	0.65
1:G:242:LEU:N	1:G:307:VAL:O	2.29	0.65
2:H:64:ILE:N	2:H:71:ILE:O	2.29	0.65
2:H:222:LYS:H	2:H:224:LYS:HZ3	1.45	0.65
1:K:9:GLY:O	1:K:13:ARG:NH2	2.28	0.65
1:K:105:ALA:O	1:K:109:ILE:N	2.21	0.65
2:L:18(B):HIS:NE2	2:L:67:ASP:OD2	2.28	0.65
1:O:231:ARG:NH2	1:C:361:TYR:O	2.28	0.65
1:O:272:ASP:HB3	1:O:291:THR:HG22	1.78	0.65
2:P:190:HIS:CE1	2:P:192:ASP:H	2.15	0.65
1:A:37:VAL:O	1:A:41:THR:N	2.23	0.65
1:A:213:ALA:HA	1:A:216:LEU:HD23	1.78	0.65
1:C:151:THR:HA	1:C:154:LEU:HB2	1.78	0.65
1:C:194:ARG:HD2	1:C:205:PRO:HD2	1.78	0.65
2:F:190:HIS:CE1	2:F:192:ASP:H	2.15	0.65
2:H:167:ILE:HA	2:H:246:VAL:HA	1.79	0.65
1:I:169:LYS:HD2	1:K:300:MET:HE2	1.79	0.65
1:I:179:THR:OG1	1:I:182:GLN:OE1	2.12	0.65
1:O:13:ARG:C	1:O:44:LEU:HD11	2.22	0.65
1:Q:11:ILE:HA	1:Q:14:ASN:HD21	1.61	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:162:ASP:OD2	1:Q:162:ASP:N	2.30	0.65
2:R:103:ASP:OD1	2:R:103:ASP:N	2.28	0.65
1:C:57:VAL:HG22	1:C:66:ILE:HA	1.78	0.65
2:D:107:LYS:O	2:D:111:ALA:N	2.30	0.65
2:F:9:GLY:O	2:F:13:ARG:NH1	2.28	0.65
2:F:47:ASP:CG	2:F:49:ILE:H	2.04	0.65
1:I:176:HIS:HB3	1:I:231:ARG:HG2	1.79	0.65
1:I:257:ASN:HA	1:I:260:ARG:HD2	1.77	0.65
2:J:72:LYS:NZ	2:J:87:MET:SD	2.63	0.65
1:K:106:GLY:O	1:K:110:GLN:N	2.24	0.65
1:O:8:PHE:O	1:O:13:ARG:NH1	2.30	0.65
1:O:138:GLY:O	1:O:332:TRP:NE1	2.28	0.65
1:O:173:THR:OG1	1:O:174:THR:N	2.29	0.65
1:O:211:ALA:HB3	1:O:212:LYS:HZ1	1.61	0.65
2:R:222:LYS:H	2:R:224:LYS:HZ3	1.45	0.65
1:A:5:ILE:HG12	1:A:93:ILE:HB	1.79	0.65
1:A:14:ASN:O	1:A:18:CYS:N	2.27	0.65
1:A:155:ALA:O	1:A:159:LYS:N	2.19	0.65
2:B:49:ILE:HG23	2:B:284:ARG:HH11	1.60	0.65
2:B:281:ILE:HG22	2:D:202:ASN:HD21	1.62	0.65
2:D:20:ARG:HG3	2:D:322:VAL:HG11	1.79	0.65
2:D:179:THR:N	2:D:182:GLN:OE1	2.28	0.65
2:D:220:ASN:O	2:D:224:LYS:NZ	2.25	0.65
1:E:20:ARG:HD2	1:E:322:VAL:HG13	1.78	0.65
2:F:242:LEU:O	2:F:307:VAL:N	2.27	0.65
1:G:148:SER:O	1:G:151:THR:OG1	2.10	0.65
1:I:28:VAL:HG23	1:I:29:VAL:HG23	1.77	0.65
2:J:90:ASP:O	2:J:115:LYS:N	2.15	0.65
2:P:13:ARG:O	2:P:17:ARG:N	2.22	0.65
2:P:197:ARG:NH1	1:Q:46:TYR:O	2.28	0.65
2:P:224:LYS:HG3	2:P:225:LEU:HD23	1.79	0.65
1:Q:8:PHE:HB2	1:Q:32:ASP:CG	2.21	0.65
1:A:2:LYS:HA	1:A:26:ASP:HB2	1.78	0.65
2:D:250:THR:OG1	2:D:251:PHE:N	2.29	0.65
1:E:321:VAL:HA	1:E:324:LEU:HG	1.78	0.65
2:H:176:HIS:N	2:H:230:LEU:O	2.29	0.65
1:I:139:HIS:CD2	1:I:333:PRO:HD3	2.32	0.65
2:J:64:ILE:N	2:J:71:ILE:O	2.29	0.65
1:K:31:ASN:O	3:K:401:NAD:H2A	1.97	0.65
1:K:261:LYS:O	1:K:265:GLY:N	2.29	0.65
2:L:7:GLY:HA3	2:L:96:THR:HG22	1.78	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:315:TRP:O	1:O:319:GLN:N	2.20	0.65
2:F:28:VAL:O	2:F:72:LYS:NZ	2.19	0.65
1:G:328:VAL:O	1:G:332:TRP:N	2.30	0.65
2:H:20:ARG:NH2	2:H:323:ASP:OD1	2.28	0.65
2:H:30:ILE:N	2:H:72:LYS:O	2.30	0.65
1:I:17:ARG:NH1	1:I:51:GLY:O	2.27	0.65
1:I:175:THR:HA	1:I:230:LEU:HB2	1.78	0.65
1:O:259:PHE:O	1:O:263:ALA:N	2.18	0.65
2:R:9:GLY:O	2:R:12:GLY:N	2.22	0.65
1:A:148:SER:O	1:A:151:THR:OG1	2.15	0.65
1:A:181:ASP:OD1	1:A:182:GLN:NE2	2.30	0.65
1:C:18:CYS:O	1:C:20:ARG:N	2.30	0.65
2:D:0:LYS:O	2:D:2:LYS:NZ	2.30	0.65
2:D:293:ASP:HB3	2:D:308:ILE:HG13	1.78	0.65
2:F:15:PHE:HD2	2:F:318:SER:HB2	1.62	0.65
2:H:9:GLY:O	2:H:12:GLY:N	2.22	0.65
2:H:325:ALA:O	2:H:329:ALA:N	2.23	0.65
1:K:48:SER:HA	2:L:281:ILE:HG12	1.78	0.65
2:L:78:ASN:HB3	2:L:81:ASN:HB2	1.78	0.65
2:L:250:THR:OG1	2:L:251:PHE:N	2.30	0.65
2:L:293:ASP:HB3	2:L:308:ILE:HG13	1.78	0.65
2:R:167:ILE:HA	2:R:246:VAL:HA	1.77	0.65
2:R:168:ILE:HD12	2:R:245:GLN:HG2	1.79	0.65
1:A:185:LEU:CD1	2:D:10:ARG:NH1	2.59	0.65
1:A:358:CYS:HA	1:G:190:HIS:CD2	2.32	0.65
2:B:242:LEU:O	2:B:307:VAL:N	2.30	0.65
2:D:28:VAL:HG13	2:D:70:VAL:O	1.97	0.65
1:E:259:PHE:HB3	1:E:273:VAL:HG11	1.77	0.65
2:F:224:LYS:HG3	2:F:225:LEU:HD23	1.79	0.65
1:G:78:ASP:OD2	1:G:81:LYS:N	2.30	0.65
2:H:192:ASP:O	2:H:196:ALA:N	2.24	0.65
2:H:242:LEU:O	2:H:307:VAL:N	2.29	0.65
1:I:26:ASP:N	1:I:26:ASP:OD1	2.29	0.65
1:I:187:ALA:HA	2:L:43:LEU:HD11	1.79	0.65
2:J:176:HIS:HB3	2:J:231:ARG:HA	1.78	0.65
1:K:107:LYS:HA	1:K:110:GLN:HE21	1.61	0.65
2:L:28:VAL:HG13	2:L:70:VAL:O	1.96	0.65
1:O:57:VAL:HA	1:O:64:PHE:HE2	1.62	0.64
1:Q:298:MET:O	1:Q:306:LYS:N	2.28	0.64
2:R:215:ALA:HB1	2:R:222:LYS:HD3	1.78	0.64
1:A:132:VAL:O	1:A:135:LYS:NZ	2.26	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4:ALA:HA	1:E:27:VAL:HG13	1.79	0.64
2:F:10:ARG:NH1	1:G:185:LEU:HB2	2.12	0.64
1:G:132:VAL:O	1:G:135:LYS:NZ	2.28	0.64
2:H:2:LYS:N	2:H:90:ASP:OD2	2.30	0.64
2:H:129:VAL:N	2:H:133:ASN:OD1	2.30	0.64
2:H:145:SER:OG	2:H:146:ASN:N	2.27	0.64
1:I:29:VAL:HG21	1:I:87:LEU:HD22	1.79	0.64
1:I:134:GLU:CD	1:I:134:GLU:H	2.06	0.64
1:K:2:LYS:N	1:K:90:ASP:OD2	2.30	0.64
2:L:217:VAL:HG23	2:L:218:LEU:HG	1.79	0.64
1:O:306:LYS:NZ	1:Q:173:THR:OG1	2.30	0.64
2:P:280:SER:OG	2:R:202:ASN:ND2	2.29	0.64
1:Q:160:VAL:HG13	1:Q:164:GLU:HG3	1.78	0.64
1:Q:215:SER:O	1:Q:222:LYS:NZ	2.30	0.64
1:A:22:ASP:N	1:A:22:ASP:OD1	2.30	0.64
2:B:179:THR:OG1	2:B:231:ARG:NH1	2.30	0.64
2:B:224:LYS:HG3	2:B:225:LEU:HD23	1.78	0.64
1:C:170:GLY:HA3	1:C:244:VAL:HG12	1.78	0.64
1:E:13:ARG:C	1:E:17:ARG:HE	2.05	0.64
1:G:319:GLN:OE1	1:G:320:ARG:NH2	2.30	0.64
2:L:177:SER:HA	2:L:234:THR:HG23	1.79	0.64
1:O:130:VAL:HA	1:O:134:GLU:HB3	1.78	0.64
1:O:148:SER:O	1:O:152:ASN:N	2.19	0.64
1:O:240:VAL:O	1:O:309:ALA:N	2.31	0.64
2:P:31:ASN:ND2	2:P:76:ASP:O	2.25	0.64
2:P:239:VAL:HA	2:P:310:TRP:HA	1.78	0.64
1:C:90:ASP:OD1	1:C:91:ILE:N	2.30	0.64
2:D:217:VAL:HG23	2:D:218:LEU:HG	1.78	0.64
2:F:169:LYS:O	2:F:245:GLN:N	2.30	0.64
2:H:181:ASP:HB3	2:H:182:GLN:HE21	1.62	0.64
1:I:106:GLY:O	1:I:110:GLN:N	2.20	0.64
1:I:214:VAL:HG21	1:I:225:LEU:HD23	1.79	0.64
2:J:63:ALA:HB1	2:J:70:VAL:HG23	1.79	0.64
1:O:78:ASP:OD2	1:O:81:LYS:N	2.26	0.64
1:O:129:VAL:HG13	1:O:132:VAL:HB	1.79	0.64
1:O:300:MET:HB2	1:Q:169:LYS:HD2	1.78	0.64
2:P:19:GLY:O	2:P:21:LYS:NZ	2.31	0.64
2:P:242:LEU:HB3	2:P:307:VAL:HG22	1.80	0.64
2:P:290:SER:OG	2:P:310:TRP:O	2.12	0.64
1:A:281:VAL:N	1:C:202:ASN:OD1	2.30	0.64
3:C:401:NAD:O1N	3:C:401:NAD:N7N	2.23	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:183:ARG:NE	2:D:188:SER:O	2.30	0.64
2:D:240:VAL:N	2:D:309:ALA:O	2.21	0.64
1:E:255:VAL:O	1:E:259:PHE:N	2.25	0.64
1:G:174:THR:O	1:G:230:LEU:N	2.31	0.64
2:H:2:LYS:HE3	2:H:87:MET:HB3	1.78	0.64
2:J:287:ASP:O	2:J:320:ARG:NH2	2.28	0.64
1:O:37:VAL:CG1	1:O:61:ASN:C	2.70	0.64
2:P:250:THR:H	2:P:302:ASP:HB3	1.63	0.64
2:P:297:THR:HG22	2:P:308:ILE:H	1.63	0.64
2:R:2:LYS:N	2:R:90:ASP:OD2	2.30	0.64
2:R:148:SER:HG	2:R:151:THR:H	1.45	0.64
2:R:173:THR:O	2:R:241:ASP:N	2.29	0.64
2:R:203:ILE:HG13	2:R:232:VAL:HG12	1.79	0.64
2:B:65:SER:HA	2:B:70:VAL:HA	1.78	0.64
1:E:2:LYS:HB3	1:E:89:ILE:HD13	1.79	0.64
1:E:89:ILE:O	1:E:114:LYS:NZ	2.31	0.64
2:H:192:ASP:HB3	2:H:195:ARG:HB2	1.79	0.64
2:J:134:GLU:OE1	2:J:134:GLU:N	2.31	0.64
1:K:91:ILE:HG23	1:K:116:VAL:HA	1.80	0.64
1:K:137:TYR:CE2	1:K:331:LYS:HB3	2.29	0.64
1:A:47:ASP:CG	1:A:49:ILE:H	2.04	0.64
1:A:182:GLN:HE21	1:A:231:ARG:HD3	1.61	0.64
2:B:159:LYS:O	2:B:163:GLN:N	2.23	0.64
1:E:148:SER:O	1:E:152:ASN:N	2.26	0.64
1:E:190:HIS:CE1	1:E:191:ARG:HG2	2.33	0.64
2:F:270:ILE:O	2:F:289:SER:N	2.26	0.64
1:G:32:ASP:O	1:G:75:SER:OG	2.16	0.64
2:H:10:ARG:NH2	2:H:179:THR:HB	2.12	0.64
2:H:240:VAL:N	2:H:309:ALA:O	2.25	0.64
1:I:101:ASP:H	1:I:122(A):LYS:HZ2	1.45	0.64
1:I:185:LEU:HD13	2:L:10:ARG:NH1	2.11	0.64
1:K:274:CYS:SG	1:K:275:ASP:N	2.70	0.64
2:P:3:VAL:HG22	2:P:91:LEU:HB3	1.80	0.64
1:Q:255:VAL:O	1:Q:259:PHE:N	2.28	0.64
2:R:220:ASN:O	2:R:224:LYS:NZ	2.23	0.64
1:A:195:ARG:HH22	1:G:361:TYR:CA	2.11	0.64
2:D:118:ILE:HG22	2:D:120:ALA:H	1.63	0.64
2:D:139:HIS:CE1	2:D:332:TRP:HA	2.33	0.64
2:D:253:GLU:OE2	2:D:260:ARG:NH1	2.31	0.64
1:E:78:ASP:OD2	1:E:81:LYS:NZ	2.26	0.64
2:F:239:VAL:HA	2:F:310:TRP:HA	1.80	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:6:ASN:HA	2:H:31:ASN:HB3	1.79	0.64
1:I:84:TRP:HA	1:I:87:LEU:HB2	1.80	0.64
1:I:185:LEU:HD13	2:L:10:ARG:CZ	2.28	0.64
2:J:203:ILE:HG23	2:J:205:PRO:HD3	1.80	0.64
1:O:85:ALA:HB2	1:O:112:GLY:HA3	1.80	0.64
1:O:132:VAL:N	1:O:134:GLU:OE1	2.31	0.64
2:B:0:LYS:N	2:B:26:ASP:OD1	2.29	0.64
2:B:149:CYS:O	2:B:153:CYS:N	2.23	0.64
1:C:6:ASN:ND2	1:C:96:THR:HG23	2.06	0.64
1:C:163:GLU:OE1	1:C:163:GLU:N	2.30	0.64
1:G:253:GLU:OE1	1:G:253:GLU:N	2.25	0.64
2:L:162:ASP:O	2:L:166:GLY:N	2.31	0.64
1:O:18(B):HIS:CD2	1:O:19:GLY:N	2.65	0.64
2:P:169:LYS:O	2:P:245:GLN:N	2.31	0.64
2:R:129:VAL:N	2:R:133:ASN:OD1	2.30	0.64
2:R:211:ALA:O	2:R:226:ASN:ND2	2.31	0.64
1:A:82:LEU:HD22	1:A:84:TRP:CD2	2.32	0.64
2:B:102:ARG:HH22	2:B:126:PRO:HD3	1.63	0.64
2:B:240:VAL:HG13	2:B:309:ALA:HB3	1.80	0.64
1:C:3:VAL:HG21	1:C:25:LEU:HB3	1.78	0.64
1:C:148:SER:OG	1:C:150:THR:OG1	2.14	0.64
2:F:250:THR:OG1	2:F:254:GLU:OE1	2.16	0.64
2:H:6:ASN:OD1	2:H:31:ASN:ND2	2.27	0.64
1:I:77:ARG:HH12	3:I:401:NAD:H2B	1.62	0.64
1:I:260:ARG:HA	1:I:263:ALA:HB3	1.79	0.64
1:O:82:LEU:HD12	1:O:108:HIS:CE1	2.33	0.64
1:O:245:ASN:ND2	1:Q:304:MET:SD	2.71	0.64
2:P:281:ILE:HG22	2:R:202:ASN:ND2	2.13	0.64
1:Q:47:ASP:OD1	1:Q:50:LEU:N	2.20	0.64
2:D:17:ARG:HD3	2:D:50:LEU:HD12	1.78	0.64
2:D:137:TYR:OH	2:D:139:HIS:ND1	2.29	0.64
1:E:106:GLY:O	1:E:110:GLN:N	2.22	0.64
2:F:176:HIS:HB3	2:F:231:ARG:HA	1.80	0.64
2:F:190:HIS:CE1	2:F:195:ARG:HB2	2.33	0.64
2:F:250:THR:OG1	2:F:251:PHE:N	2.29	0.64
1:I:185:LEU:HD12	2:L:10:ARG:HH12	1.62	0.64
2:J:92:VAL:HB	2:J:116:VAL:HG22	1.80	0.64
2:P:176:HIS:HB3	2:P:231:ARG:HA	1.80	0.63
2:D:1:LEU:HB3	2:D:25:LEU:HD13	1.79	0.63
2:D:47:ASP:CG	2:D:49:ILE:H	2.06	0.63
2:F:64:ILE:H	2:F:71:ILE:H	1.46	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:149:CYS:O	2:F:153:CYS:N	2.28	0.63
2:F:203:ILE:HD11	2:F:230:LEU:HB3	1.79	0.63
2:F:240:VAL:HG13	2:F:309:ALA:HB3	1.80	0.63
1:I:128:TYR:O	1:I:146:ASN:ND2	2.30	0.63
1:K:132:VAL:HG21	1:K:155:ALA:HB1	1.79	0.63
2:L:62:SER:O	2:L:73:VAL:HG12	1.97	0.63
1:O:19:GLY:O	1:O:21:LYS:HD3	1.98	0.63
2:P:5:ILE:HG23	2:P:93:ILE:HB	1.79	0.63
1:Q:38:LYS:HG3	1:Q:39:SER:H	1.62	0.63
1:Q:181:ASP:OD2	1:I:362:GLU:N	2.26	0.63
1:A:5:ILE:O	1:A:31:ASN:N	2.27	0.63
1:A:256:ASN:O	1:A:260:ARG:N	2.27	0.63
1:A:316:GLY:O	1:A:320:ARG:N	2.23	0.63
1:A:332:TRP:CD2	1:A:333:PRO:HD2	2.33	0.63
2:F:156:PRO:HA	2:F:159:LYS:HE3	1.79	0.63
2:H:211:ALA:O	2:H:226:ASN:ND2	2.32	0.63
1:I:67:ASP:O	1:I:69:LYS:NZ	2.32	0.63
1:I:173:THR:HG23	1:I:228:ILE:H	1.62	0.63
2:J:65:SER:HA	2:J:70:VAL:HA	1.80	0.63
2:R:214:VAL:HG23	2:R:218:LEU:HD12	1.81	0.63
2:R:267:LEU:HD13	2:R:271:LEU:HB2	1.80	0.63
1:A:57:VAL:HG22	1:A:59:ILE:HG13	1.80	0.63
2:B:173:THR:OG1	2:D:306:LYS:NZ	2.25	0.63
2:B:270:ILE:HA	2:B:320:ARG:HH11	1.63	0.63
1:C:220:GLN:H	1:C:220:GLN:CD	2.04	0.63
1:E:122:ALA:O	1:E:122(A):LYS:NZ	2.31	0.63
1:G:37:VAL:HG12	1:G:41:THR:HG23	1.80	0.63
2:H:148:SER:HG	2:H:151:THR:H	1.45	0.63
2:J:240:VAL:HG13	2:J:309:ALA:HB3	1.81	0.63
2:L:94:GLU:OE2	2:L:99:PHE:N	2.26	0.63
1:O:37:VAL:HG13	1:O:61:ASN:C	2.23	0.63
1:O:192:ASP:OD1	1:O:193:LEU:N	2.31	0.63
2:R:176:HIS:N	2:R:230:LEU:O	2.28	0.63
2:R:199:ALA:HA	2:R:202:ASN:HB2	1.79	0.63
2:B:134:GLU:OE1	2:B:134:GLU:N	2.31	0.63
1:E:186:ASP:OD1	1:E:198:ALA:N	2.30	0.63
1:E:326:ASP:O	1:E:330:ASN:N	2.24	0.63
3:E:401:NAD:O1N	3:E:401:NAD:N7N	2.23	0.63
2:F:289:SER:OG	2:F:320:ARG:NH1	2.31	0.63
2:J:102:ARG:HH22	2:J:126:PRO:HD3	1.63	0.63
2:J:194:ARG:NH1	2:L:278:LEU:O	2.23	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:253:GLU:O	2:J:257:ALA:N	2.23	0.63
1:K:135:LYS:O	1:K:331:LYS:NZ	2.31	0.63
1:O:139:HIS:HA	1:O:332:TRP:CE2	2.34	0.63
2:P:156:PRO:HA	2:P:159:LYS:HE3	1.79	0.63
2:P:242:LEU:HD11	2:P:244:VAL:HG13	1.80	0.63
1:Q:18:CYS:O	1:Q:20:ARG:N	2.30	0.63
1:Q:65:SER:OG	1:Q:69:LYS:N	2.30	0.63
2:R:145:SER:OG	2:R:146:ASN:N	2.27	0.63
2:R:193:LEU:O	2:R:197:ARG:N	2.32	0.63
2:R:242:LEU:O	2:R:307:VAL:N	2.29	0.63
2:B:218:LEU:HB3	2:B:221:LEU:HD13	1.80	0.63
2:F:250:THR:H	2:F:302:ASP:HB3	1.63	0.63
1:G:28:VAL:HA	1:G:71:ILE:HG12	1.79	0.63
1:G:93:ILE:HA	1:G:117:ILE:HB	1.79	0.63
2:H:204:VAL:N	2:H:231:ARG:O	2.32	0.63
2:H:267:LEU:HD13	2:H:271:LEU:HB2	1.81	0.63
1:I:194:ARG:HH11	1:I:194:ARG:HG3	1.62	0.63
2:J:270:ILE:O	2:J:289:SER:OG	2.16	0.63
2:L:64:ILE:H	2:L:71:ILE:H	1.45	0.63
2:L:107:LYS:O	2:L:111:ALA:N	2.31	0.63
1:O:83:PRO:HA	1:O:86:GLU:CD	2.24	0.63
1:Q:161:LEU:O	1:Q:165:LEU:N	2.28	0.63
1:Q:260:ARG:HD3	1:Q:273:VAL:HG11	1.81	0.63
1:A:18(A):TRP:NE1	1:A:23:SER:OG	2.32	0.63
2:B:6:ASN:HB3	2:B:94:GLU:HA	1.79	0.63
1:C:121:PRO:HG3	1:C:148:SER:H	1.63	0.63
2:D:7:GLY:HA3	2:D:96:THR:HG22	1.80	0.63
2:D:261:GLU:O	2:D:265:ASN:ND2	2.32	0.63
1:E:41:THR:HG1	1:E:59:ILE:HG21	1.61	0.63
2:H:117:LEU:HD21	2:H:146:ASN:HB2	1.80	0.63
2:J:218:LEU:HB3	2:J:221:LEU:HD13	1.80	0.63
2:L:118:ILE:HG22	2:L:120:ALA:H	1.63	0.63
2:L:290:SER:OG	2:L:291:THR:N	2.30	0.63
1:O:190:HIS:NE2	1:O:192:ASP:OD2	2.32	0.63
1:O:346:GLU:HA	1:O:349:CYS:HB3	1.81	0.63
2:R:3:VAL:HG22	2:R:91:LEU:HB3	1.81	0.63
1:E:124:ASP:HB3	1:K:143:ILE:HD12	1.81	0.63
2:H:213:ALA:HA	2:H:216:LEU:HB2	1.81	0.63
1:I:18(A):TRP:NE1	1:I:23:SER:OG	2.32	0.63
1:I:173:THR:OG1	1:K:306:LYS:NZ	2.32	0.63
1:I:241:ASP:HA	1:I:308:VAL:HA	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:10:ARG:HB2	3:L:401:NAD:O1N	1.99	0.63
1:O:37:VAL:CG2	1:O:59:ILE:HG22	2.29	0.63
1:O:203:ILE:HG12	1:O:230:LEU:HD12	1.80	0.63
2:P:63:ALA:HA	2:P:72:LYS:HA	1.80	0.63
1:C:6:ASN:HD22	1:C:94:GLU:HG2	1.64	0.63
1:C:79:PRO:HB3	1:C:108:HIS:CE1	2.34	0.63
1:C:178:TYR:HA	1:C:231:ARG:HD2	1.81	0.63
2:D:78:ASN:HD22	2:D:81:ASN:CG	2.07	0.63
2:D:279:VAL:O	2:D:282:ASP:N	2.30	0.63
2:F:3:VAL:HG22	2:F:91:LEU:HB3	1.80	0.63
1:G:259:PHE:O	1:G:263:ALA:N	2.25	0.63
2:H:15:PHE:O	2:H:18(A):TRP:N	2.18	0.63
2:H:37:VAL:HG23	2:H:38:LYS:H	1.64	0.63
2:J:3:VAL:HG22	2:J:91:LEU:HB3	1.81	0.63
2:L:1:LEU:HB3	2:L:25:LEU:HD13	1.81	0.63
1:O:37:VAL:CG2	1:O:59:ILE:HG21	2.28	0.63
1:O:94:GLU:OE2	1:O:96:THR:OG1	2.15	0.63
2:R:149:CYS:SG	2:R:150:THR:N	2.72	0.63
1:A:92:VAL:HB	1:A:116:VAL:HG13	1.81	0.63
1:C:170:GLY:HA3	1:C:244:VAL:HA	1.79	0.63
1:C:272:ASP:HB2	1:C:288:PHE:CG	2.34	0.63
1:E:86:GLU:OE1	1:E:86:GLU:N	2.26	0.63
1:E:94:GLU:OE2	1:E:98:VAL:N	2.32	0.63
1:G:5:ILE:HB	1:G:30:VAL:HG22	1.80	0.63
2:H:1:LEU:HD22	2:H:329:ALA:HA	1.80	0.63
2:J:126:PRO:HD2	2:J:144:ILE:HA	1.80	0.63
1:K:0:LYS:NZ	1:K:24:PRO:O	2.24	0.63
1:K:9:GLY:HA2	3:K:401:NAD:H4B	1.80	0.63
1:O:41:THR:OG1	1:O:57:VAL:HG22	1.98	0.62
1:Q:7:GLY:H	1:Q:31:ASN:HB3	1.63	0.62
2:R:203:ILE:HD11	2:R:230:LEU:HB3	1.81	0.62
2:D:219:PRO:HA	2:D:222:LYS:HZ3	1.64	0.62
2:D:290:SER:OG	2:D:291:THR:N	2.29	0.62
2:F:300:MET:HB2	2:F:304:MET:HB3	1.79	0.62
2:H:101:ASP:OD2	2:H:104:GLY:N	2.20	0.62
1:I:120:ALA:N	1:I:146:ASN:O	2.32	0.62
1:I:165:LEU:HD13	1:I:248:LYS:HD2	1.80	0.62
2:J:2:LYS:HB3	2:J:89:ILE:HD13	1.80	0.62
2:J:77:ARG:HD2	3:J:401:NAD:N6A	2.13	0.62
1:K:316:GLY:O	1:K:320:ARG:NE	2.32	0.62
2:L:183:ARG:NE	2:L:188:SER:O	2.32	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:178:TYR:CD2	1:O:233:PRO:HA	2.34	0.62
2:P:190:HIS:CE1	2:P:195:ARG:HB2	2.34	0.62
1:Q:226:ASN:OD1	1:Q:227:GLY:N	2.31	0.62
1:Q:281:VAL:HA	1:Q:284:ARG:HH21	1.64	0.62
1:A:82:LEU:HB3	1:A:84:TRP:CE2	2.34	0.62
2:F:14:ASN:HD21	2:F:315:TRP:HA	1.65	0.62
1:G:240:VAL:N	1:G:309:ALA:O	2.25	0.62
2:H:214:VAL:HG23	2:H:218:LEU:HD12	1.81	0.62
1:I:89:ILE:O	1:I:114:LYS:NZ	2.30	0.62
1:K:18:CYS:O	1:K:20:ARG:N	2.32	0.62
2:P:149:CYS:O	2:P:153:CYS:N	2.27	0.62
2:P:256:ASN:O	2:P:260:ARG:N	2.27	0.62
1:A:172:MET:H	1:A:227:GLY:HA3	1.64	0.62
2:B:199:ALA:HA	2:B:202:ASN:HB2	1.81	0.62
1:C:63:THR:HA	1:C:72:LYS:HA	1.82	0.62
1:C:65:SER:HA	1:C:70:PRO:HA	1.80	0.62
2:H:312:ASP:OD1	2:H:315:TRP:N	2.26	0.62
1:I:57:VAL:HG22	1:I:59:ILE:HG12	1.81	0.62
2:J:0:LYS:N	2:J:26:ASP:OD1	2.29	0.62
2:J:118:ILE:H	2:J:145:SER:HA	1.65	0.62
2:J:296:LEU:HB2	2:J:308:ILE:HD11	1.81	0.62
2:P:76:ASP:OD1	2:P:77:ARG:N	2.33	0.62
2:P:161:LEU:O	2:P:165:PHE:N	2.33	0.62
2:R:240:VAL:N	2:R:309:ALA:O	2.25	0.62
2:B:2:LYS:HB3	2:B:89:ILE:HD13	1.80	0.62
2:B:296:LEU:HB2	2:B:308:ILE:HD11	1.80	0.62
1:C:9:GLY:O	1:C:12:GLY:N	2.25	0.62
1:E:184:LEU:HB3	2:H:184:LEU:HB2	1.80	0.62
1:G:37:VAL:HG22	1:G:73:VAL:HG11	1.81	0.62
2:P:120:ALA:O	2:P:145:SER:OG	2.16	0.62
2:R:59:THR:HB	2:R:64:ILE:HD13	1.81	0.62
2:B:116:VAL:N	2:B:142:THR:O	2.27	0.62
2:B:240:VAL:N	2:B:309:ALA:O	2.33	0.62
2:D:0:LYS:N	2:D:24:PRO:O	2.33	0.62
2:D:115:LYS:NZ	2:D:139:HIS:O	2.31	0.62
2:D:149:CYS:O	2:D:153:CYS:N	2.26	0.62
1:E:11:ILE:HG12	3:E:401:NAD:C2N	2.29	0.62
2:F:12:GLY:O	2:F:16:LEU:N	2.24	0.62
2:F:76:ASP:OD1	2:F:77:ARG:N	2.31	0.62
2:F:228:ILE:H	2:H:306:LYS:HZ2	1.47	0.62
1:G:168:VAL:HG23	1:G:247:GLU:HG3	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:316:GLY:HA2	2:H:319:GLN:HB2	1.80	0.62
1:I:115:LYS:HG3	1:I:142:ASN:HA	1.80	0.62
2:J:0:LYS:HZ2	2:J:1:LEU:HD13	1.65	0.62
2:J:116:VAL:N	2:J:142:THR:O	2.27	0.62
1:K:18(B):HIS:NE2	1:K:67:ASP:OD2	2.33	0.62
1:K:156:PRO:HB3	1:K:267:LEU:HD22	1.82	0.62
1:K:241:ASP:OD1	1:K:307:VAL:N	2.33	0.62
1:O:171:THR:OG1	1:O:172:MET:N	2.29	0.62
2:P:8:PHE:CZ	2:P:13:ARG:HG3	2.35	0.62
2:P:14:ASN:HD21	2:P:315:TRP:HA	1.65	0.62
2:P:218:LEU:O	2:P:222:LYS:NZ	2.30	0.62
2:P:289:SER:OG	2:P:320:ARG:NH1	2.32	0.62
1:Q:10:ARG:NH1	1:Q:47:ASP:OD2	2.26	0.62
2:R:204:VAL:N	2:R:231:ARG:O	2.30	0.62
1:A:62:GLU:O	1:A:73:VAL:N	2.33	0.62
1:A:194:ARG:HH11	1:A:205:PRO:HD2	1.64	0.62
2:B:76:ASP:HB3	2:B:82:LEU:HD21	1.81	0.62
2:B:139:HIS:NE2	2:B:334:UNK:O	2.27	0.62
1:E:115:LYS:HE2	1:E:137:TYR:HE1	1.65	0.62
1:G:192:ASP:O	1:G:196:ALA:N	2.33	0.62
2:H:3:VAL:HG22	2:H:91:LEU:HB3	1.82	0.62
1:I:18(B):HIS:NE2	1:I:67:ASP:OD2	2.33	0.62
1:I:304:MET:SD	1:K:245:ASN:ND2	2.73	0.62
2:J:242:LEU:O	2:J:307:VAL:N	2.29	0.62
1:K:182:GLN:OE1	1:K:182:GLN:N	2.32	0.62
1:O:345:LEU:O	1:O:349:CYS:N	2.29	0.62
1:Q:37:VAL:HG22	1:Q:73:VAL:HG21	1.82	0.62
2:R:325:ALA:O	2:R:329:ALA:N	2.23	0.62
1:A:108:HIS:CD2	1:A:108:HIS:H	2.16	0.62
1:A:205:PRO:HA	1:A:230:LEU:HA	1.82	0.62
1:C:118:ILE:O	1:C:145:SER:OG	2.18	0.62
1:G:107:LYS:O	1:G:111:ALA:N	2.31	0.62
2:H:38:LYS:N	2:H:38:LYS:HZ2	1.98	0.62
2:L:17:ARG:HD3	2:L:50:LEU:HD12	1.82	0.62
2:L:261:GLU:O	2:L:265:ASN:ND2	2.32	0.62
2:P:183:ARG:HH22	2:P:191:ARG:HH22	1.47	0.62
2:P:293:ASP:OD1	2:P:296:LEU:N	2.26	0.62
1:Q:33:SER:OG	3:Q:401:NAD:H2A	2.00	0.62
1:Q:90:ASP:HA	1:Q:114:LYS:HE2	1.82	0.62
2:R:167:ILE:HG21	2:R:225:LEU:HD11	1.82	0.62
2:R:265:ASN:OD1	2:R:265:ASN:N	2.33	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:190:HIS:CE1	1:A:191:ARG:HH21	2.18	0.62
2:D:9:GLY:O	2:D:12:GLY:N	2.31	0.62
2:D:162:ASP:O	2:D:166:GLY:N	2.30	0.62
2:F:242:LEU:HB3	2:F:307:VAL:HG22	1.81	0.62
1:G:293:ASP:CG	1:G:295:SER:HG	2.07	0.62
1:I:234:THR:HG21	1:I:237:VAL:HG12	1.81	0.62
2:J:20:ARG:NH2	2:J:319:GLN:O	2.33	0.62
1:K:260:ARG:HG2	1:K:273:VAL:HG11	1.81	0.62
1:O:37:VAL:C	1:O:59:ILE:HG21	2.25	0.62
2:P:9:GLY:O	2:P:12:GLY:N	2.26	0.62
1:Q:135:LYS:H	1:Q:135:LYS:HE3	1.64	0.62
1:A:220:GLN:O	1:A:224:LYS:NZ	2.23	0.62
2:B:3:VAL:HG22	2:B:91:LEU:HB3	1.80	0.62
2:B:20:ARG:NH2	2:B:319:GLN:O	2.32	0.62
1:C:157:PHE:O	1:C:161:LEU:N	2.30	0.62
2:D:139:HIS:ND1	2:D:331:LYS:O	2.32	0.62
2:D:157:PHE:O	2:D:161:LEU:N	2.23	0.62
1:E:303:ASP:OD2	1:G:245:ASN:ND2	2.33	0.62
2:H:167:ILE:HG21	2:H:225:LEU:HD11	1.82	0.62
1:I:7:GLY:HA2	1:I:32:ASP:HA	1.80	0.62
1:K:256:ASN:OD1	1:K:260:ARG:NH2	2.33	0.62
1:K:287:ASP:HA	1:K:319:GLN:HG3	1.82	0.62
2:L:78:ASN:HD22	2:L:81:ASN:CG	2.08	0.62
1:O:90:ASP:O	1:O:115:LYS:N	2.23	0.62
1:O:121:PRO:O	1:O:122(A):LYS:NZ	2.32	0.62
1:Q:312:ASP:HB3	1:Q:316:GLY:H	1.65	0.62
1:A:31:ASN:OD1	1:A:76:ASN:N	2.33	0.62
1:C:179:THR:OG1	1:C:181:ASP:OD1	2.12	0.62
2:D:297:THR:HG22	2:D:308:ILE:H	1.65	0.62
1:E:47:ASP:OD1	1:E:48:SER:N	2.33	0.62
2:F:5:ILE:HG23	2:F:93:ILE:HB	1.80	0.62
2:F:77:ARG:HD2	3:F:401:NAD:N1A	2.15	0.62
2:F:242:LEU:HD11	2:F:244:VAL:HG13	1.81	0.62
1:G:173:THR:HA	1:G:228:ILE:O	2.00	0.62
2:L:20:ARG:HG3	2:L:322:VAL:HG11	1.82	0.62
1:O:106:GLY:O	1:O:110:GLN:N	2.21	0.61
1:O:148:SER:O	1:O:151:THR:OG1	2.10	0.61
1:Q:194:ARG:HE	1:Q:204:VAL:HG13	1.64	0.61
2:R:1:LEU:HD22	2:R:329:ALA:HA	1.81	0.61
1:A:41:THR:O	1:A:45:LYS:N	2.18	0.61
1:C:186:ASP:OD2	1:C:197:ARG:NH2	2.33	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:10:ARG:CB	3:D:401:NAD:O1N	2.47	0.61
1:E:59:ILE:HA	1:E:64:PHE:CA	2.28	0.61
1:G:84:TRP:CD1	1:G:84:TRP:H	2.17	0.61
1:I:176:HIS:N	1:I:230:LEU:O	2.33	0.61
1:K:317:TYR:O	1:K:320:ARG:NH2	2.23	0.61
2:L:139:HIS:CE1	2:L:332:TRP:HA	2.35	0.61
2:L:139:HIS:ND1	2:L:331:LYS:O	2.33	0.61
2:L:253:GLU:OE2	2:L:260:ARG:NH1	2.33	0.61
2:P:270:ILE:O	2:P:289:SER:N	2.27	0.61
1:Q:177:SER:OG	1:Q:234:THR:OG1	2.16	0.61
2:R:6:ASN:HA	2:R:31:ASN:HB3	1.82	0.61
2:R:117:LEU:HD21	2:R:146:ASN:HB2	1.80	0.61
1:A:120:ALA:N	1:A:146:ASN:O	2.33	0.61
1:A:174:THR:OG1	1:A:238:SER:OG	2.11	0.61
1:C:142:ASN:HD22	1:C:143:ILE:HD12	1.64	0.61
2:F:89:ILE:N	2:F:112:GLY:O	2.32	0.61
2:F:131:GLY:N	2:F:134:GLU:OE2	2.33	0.61
2:F:186:ASP:OD2	1:G:10:ARG:NH1	2.32	0.61
1:G:159:LYS:NZ	1:G:163:GLU:OE2	2.32	0.61
2:H:149:CYS:O	2:H:153:CYS:N	2.32	0.61
2:H:203:ILE:HG13	2:H:232:VAL:HG12	1.81	0.61
2:H:240:VAL:HG13	2:H:309:ALA:HB3	1.82	0.61
1:I:270:VAL:O	1:I:289:SER:N	2.33	0.61
2:J:149:CYS:O	2:J:153:CYS:N	2.23	0.61
1:K:20:ARG:HA	1:K:21:LYS:HZ3	1.65	0.61
1:K:213:ALA:HA	1:K:216:LEU:HD23	1.82	0.61
1:K:299:VAL:HG22	1:K:305:VAL:HB	1.81	0.61
2:L:224:LYS:HZ3	2:L:225:LEU:HB2	1.63	0.61
1:O:47:ASP:OD2	1:O:50:LEU:N	2.22	0.61
2:P:122:GLY:HA3	2:P:125:ILE:HG12	1.81	0.61
2:P:240:VAL:HG13	2:P:309:ALA:HB3	1.81	0.61
2:P:312:ASP:OD1	2:P:315:TRP:N	2.29	0.61
2:R:166:GLY:O	2:R:247:SER:N	2.24	0.61
2:R:192:ASP:O	2:R:196:ALA:N	2.24	0.61
2:B:9:GLY:O	2:B:12:GLY:N	2.28	0.61
1:C:167:ILE:HA	1:C:246:ILE:HD13	1.83	0.61
1:E:28:VAL:O	1:E:72:LYS:N	2.32	0.61
1:E:33:SER:HB2	1:E:77:ARG:NH1	2.14	0.61
1:G:116:VAL:CG2	1:G:143:ILE:HA	2.30	0.61
1:K:162:ASP:OD1	1:K:167:ILE:N	2.34	0.61
1:O:271:LEU:HA	1:O:288:PHE:HB3	1.83	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:272:SER:N	2:P:290:SER:O	2.33	0.61
2:P:273:VAL:HA	2:P:292:ILE:H	1.66	0.61
1:Q:240:VAL:O	1:Q:309:ALA:N	2.33	0.61
1:Q:253:GLU:OE1	1:Q:253:GLU:N	2.22	0.61
2:R:137:TYR:O	2:R:331:LYS:NZ	2.31	0.61
2:R:213:ALA:HA	2:R:216:LEU:HB2	1.81	0.61
1:A:64:PHE:O	1:A:71:ILE:N	2.33	0.61
1:A:241:ASP:HA	1:A:308:VAL:HA	1.83	0.61
2:B:193:LEU:O	2:B:197:ARG:N	2.33	0.61
2:F:13:ARG:HH21	2:F:43:LEU:HD13	1.65	0.61
2:H:172:MET:HG3	2:H:242:LEU:HD13	1.83	0.61
1:I:184:LEU:HG	1:I:185:LEU:HG	1.83	0.61
1:K:162:ASP:HB2	1:K:167:ILE:HD12	1.82	0.61
2:L:6:ASN:O	2:L:95:GLY:N	2.31	0.61
1:O:14:ASN:O	1:O:18:CYS:N	2.34	0.61
2:D:204:VAL:N	2:D:231:ARG:O	2.34	0.61
1:E:211:ALA:HB1	1:E:226:ASN:HA	1.82	0.61
2:F:66:VAL:HB	2:F:69:LYS:HB3	1.81	0.61
1:G:42:HIS:HA	1:G:45:LYS:HB3	1.82	0.61
1:O:18:CYS:O	1:O:18(B):HIS:N	2.34	0.61
1:O:29:VAL:HA	1:O:72:LYS:O	1.99	0.61
2:P:42:HIS:O	2:P:46:TYR:N	2.33	0.61
2:P:134:GLU:OE1	2:P:134:GLU:N	2.34	0.61
1:Q:3:VAL:HG21	1:Q:25:LEU:HB3	1.83	0.61
2:R:54:ASP:OD1	2:R:54:ASP:N	2.34	0.61
2:R:149:CYS:O	2:R:153:CYS:N	2.32	0.61
1:A:0:LYS:HD2	1:A:1:LEU:HD13	1.81	0.61
1:C:118:ILE:H	1:C:145:SER:HA	1.64	0.61
1:C:183:ARG:HE	1:C:187:ALA:HB3	1.64	0.61
1:C:284:ARG:NH2	1:C:285:CYS:SG	2.61	0.61
1:E:16:LEU:CD2	1:E:44:LEU:CD1	2.70	0.61
1:E:132:VAL:N	1:E:134:GLU:OE1	2.34	0.61
1:G:220:GLN:H	1:G:220:GLN:CD	2.05	0.61
1:G:312:ASP:OD1	1:G:315:TRP:N	2.29	0.61
2:H:149:CYS:SG	2:H:150:THR:N	2.72	0.61
2:J:203:ILE:HG13	2:J:232:VAL:HG12	1.83	0.61
2:J:270:ILE:HA	2:J:320:ARG:HH11	1.64	0.61
2:L:137:TYR:OH	2:L:139:HIS:ND1	2.34	0.61
2:L:298:MET:HG2	2:L:306:LYS:HB3	1.83	0.61
2:P:79:PRO:HA	2:P:82:LEU:HD12	1.83	0.61
2:P:117:LEU:HD21	2:P:146:ASN:HB2	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:157:PHE:O	1:Q:160:VAL:N	2.33	0.61
2:R:17:ARG:NH2	2:R:54:ASP:OD1	2.33	0.61
2:R:204:VAL:HB	2:R:231:ARG:HB2	1.83	0.61
1:A:0:LYS:N	1:A:26:ASP:OD1	2.30	0.61
1:A:281:VAL:H	1:C:202:ASN:CG	2.09	0.61
2:B:126:PRO:HD2	2:B:144:ILE:HA	1.81	0.61
1:C:167:ILE:HD12	1:C:221:LEU:HD21	1.83	0.61
2:F:31:ASN:ND2	2:F:76:ASP:O	2.29	0.61
2:F:134:GLU:N	2:F:134:GLU:OE1	2.33	0.61
2:F:297:THR:HG22	2:F:308:ILE:H	1.65	0.61
1:K:170:GLY:HA3	1:K:244:VAL:HA	1.83	0.61
2:L:100:VAL:HG13	2:L:122(A):LYS:HB2	1.81	0.61
2:L:126:PRO:HD2	2:L:144:ILE:HA	1.82	0.61
1:O:1:LEU:O	1:O:3:VAL:HG23	2.01	0.61
1:O:41:THR:CB	1:O:59:ILE:HG12	2.31	0.61
1:O:62:GLU:HB3	1:O:72:LYS:HE3	1.82	0.61
1:O:169:LYS:HG3	1:Q:301:GLY:HA3	1.82	0.61
2:D:86:ASP:OD1	2:D:86:ASP:N	2.24	0.61
2:D:134:GLU:OE1	2:D:134:GLU:N	2.33	0.61
2:D:147:ALA:O	2:D:317:TYR:OH	2.19	0.61
1:E:222:LYS:O	1:E:224:LYS:NZ	2.32	0.61
2:F:10:ARG:NH1	1:G:185:LEU:CG	2.64	0.61
2:F:42:HIS:HA	2:F:46:TYR:HD2	1.65	0.61
2:F:94:GLU:O	2:F:119:THR:OG1	2.17	0.61
2:F:186:ASP:N	2:F:186:ASP:OD1	2.33	0.61
2:F:265:ASN:OD1	2:F:266:GLU:N	2.34	0.61
1:G:220:GLN:HG2	1:G:221:LEU:HD12	1.83	0.61
1:I:29:VAL:HA	1:I:72:LYS:O	1.98	0.61
1:I:256:ASN:ND2	1:I:257:ASN:OD1	2.33	0.61
1:I:275:ASP:HA	1:I:293:ASP:HB2	1.82	0.61
1:I:281:VAL:HA	1:I:284:ARG:HG3	1.83	0.61
2:J:159:LYS:O	2:J:163:GLN:N	2.23	0.61
2:J:249:LYS:HD2	2:J:302:ASP:HB2	1.83	0.61
1:K:6:ASN:N	1:K:93:ILE:O	2.26	0.61
1:K:16:LEU:O	1:K:18(B):HIS:N	2.21	0.61
1:K:84:TRP:CD2	1:K:89:ILE:HD12	2.36	0.61
2:L:134:GLU:OE1	2:L:134:GLU:N	2.33	0.61
1:O:195:ARG:NH2	1:C:361:TYR:O	2.33	0.61
1:O:272:ASP:HB2	1:O:288:PHE:CG	2.35	0.61
1:O:347:ASP:O	1:O:351:ASP:N	2.33	0.61
2:P:131:GLY:N	2:P:134:GLU:OE2	2.33	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:170:GLY:HA3	2:R:225:LEU:HD13	1.83	0.61
2:R:315:TRP:O	2:R:318:SER:OG	2.18	0.61
1:A:47:ASP:OD2	1:A:50:LEU:N	2.24	0.61
1:A:60:ILE:HG22	1:A:60(A):ASP:H	1.65	0.61
1:C:5:ILE:HG23	1:C:30:VAL:HG13	1.83	0.61
1:C:9:GLY:HA2	3:C:401:NAD:H4B	1.83	0.61
1:C:150:THR:OG1	1:C:151:THR:N	2.33	0.61
2:D:154:LEU:HD21	2:D:210:ALA:HB1	1.83	0.61
1:E:301:GLY:N	1:E:303:ASP:OD1	2.34	0.61
2:F:84:TRP:HD1	2:F:111:ALA:HB3	1.66	0.61
2:F:161:LEU:O	2:F:165:PHE:N	2.32	0.61
2:F:179:THR:H	2:F:182:GLN:CD	2.07	0.61
2:H:54:ASP:OD1	2:H:54:ASP:N	2.33	0.61
2:H:118:ILE:O	2:H:145:SER:OG	2.19	0.61
2:J:324:LEU:HA	2:J:327:ILE:HD12	1.83	0.61
1:K:47:ASP:CG	1:K:50:LEU:H	2.09	0.61
1:K:179:THR:O	1:K:182:GLN:NE2	2.34	0.61
3:K:401:NAD:H2N	3:K:401:NAD:H52N	1.82	0.61
2:L:203:ILE:HG13	2:L:232:VAL:HG12	1.83	0.61
1:O:94:GLU:OE1	1:O:97:GLY:N	2.27	0.61
1:O:256:ASN:O	1:O:260:ARG:N	2.21	0.61
1:A:7:GLY:N	1:A:31:ASN:O	2.27	0.61
1:A:176:HIS:NE2	1:A:179:THR:OG1	2.25	0.61
1:A:184:LEU:HA	2:D:184:LEU:HD13	1.83	0.61
2:B:102:ARG:NH2	2:B:126:PRO:HD3	2.16	0.61
2:B:290:SER:OG	2:B:310:TRP:O	2.15	0.61
2:D:18:CYS:O	2:D:20:ARG:N	2.34	0.61
2:D:79:PRO:HB3	2:D:108:HIS:CE1	2.36	0.61
1:E:317:TYR:O	1:E:321:VAL:HG13	2.01	0.61
2:F:79:PRO:HA	2:F:82:LEU:HD12	1.81	0.61
1:G:90:ASP:HB2	1:G:91:ILE:HD13	1.82	0.61
1:G:209:GLY:O	1:G:213:ALA:N	2.25	0.61
1:G:226:ASN:OD1	1:G:227:GLY:N	2.30	0.61
2:H:253:GLU:O	2:H:257:ALA:N	2.21	0.61
2:J:290:SER:OG	2:J:310:TRP:O	2.15	0.61
1:K:186:ASP:OD1	1:K:198:ALA:N	2.32	0.61
2:L:10:ARG:CB	3:L:401:NAD:O1N	2.48	0.61
1:O:191:ARG:NH2	1:C:358:CYS:O	2.23	0.60
2:P:203:ILE:HG13	2:P:232:VAL:HG12	1.83	0.60
1:Q:60(A):ASP:HB3	1:Q:62:GLU:O	2.01	0.60
2:R:45:LYS:HB2	2:R:57:VAL:HG21	1.81	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:240:VAL:HG13	2:R:309:ALA:HB3	1.83	0.60
1:A:100:VAL:HB	1:A:122(A):LYS:HG2	1.82	0.60
2:B:147:ALA:O	2:B:317:TYR:OH	2.15	0.60
1:C:156:PRO:HB3	1:C:267:LEU:HD13	1.83	0.60
1:E:238:SER:O	1:E:311:TYR:N	2.32	0.60
1:G:63:THR:HA	1:G:72:LYS:HA	1.83	0.60
1:G:134:GLU:H	1:G:135:LYS:HZ1	1.48	0.60
1:I:244:VAL:O	1:I:305:VAL:N	2.27	0.60
2:J:214:VAL:HA	2:J:217:VAL:HG22	1.82	0.60
1:K:177:SER:HA	1:K:234:THR:HG23	1.82	0.60
2:L:18:CYS:O	2:L:20:ARG:N	2.34	0.60
2:L:33:THR:HG23	2:L:77:ARG:HD3	1.83	0.60
2:L:181:ASP:HB3	2:L:182:GLN:HE21	1.66	0.60
1:Q:159:LYS:HZ1	1:Q:267:LEU:HD21	1.66	0.60
1:Q:293:ASP:CG	1:Q:295:SER:HG	2.09	0.60
2:R:101:ASP:OD2	2:R:104:GLY:N	2.21	0.60
1:C:9:GLY:O	1:C:13:ARG:NH2	2.33	0.60
2:D:10:ARG:HB2	3:D:401:NAD:O1N	2.00	0.60
2:D:298:MET:HG2	2:D:306:LYS:HB3	1.82	0.60
1:E:315:TRP:O	1:E:318:SER:OG	2.18	0.60
2:F:19:GLY:O	2:F:21:LYS:NZ	2.32	0.60
2:F:204:VAL:N	2:F:231:ARG:O	2.25	0.60
1:G:60:ILE:HB	1:G:64:PHE:HA	1.82	0.60
1:G:104:GLY:HA2	1:G:107:LYS:HE2	1.82	0.60
1:G:236:ASN:HD21	1:G:314:GLU:H	1.49	0.60
1:I:178:TYR:HD2	1:I:233:PRO:HA	1.66	0.60
1:I:183:ARG:HB2	1:I:188:SER:CB	2.29	0.60
2:J:63:ALA:HA	2:J:72:LYS:HA	1.83	0.60
2:J:279:VAL:HB	2:L:202:ASN:HB3	1.83	0.60
1:K:6:ASN:HD22	1:K:95:GLY:H	1.47	0.60
1:K:194:ARG:HB3	1:K:204:VAL:HG23	1.83	0.60
1:K:256:ASN:HA	1:K:259:PHE:HD2	1.65	0.60
2:L:240:VAL:N	2:L:309:ALA:O	2.21	0.60
2:L:293:ASP:OD1	2:L:296:LEU:N	2.28	0.60
1:O:183:ARG:HH12	1:C:357:GLU:H	1.48	0.60
1:Q:0:LYS:H1	1:Q:0:LYS:HD3	1.67	0.60
1:Q:6:ASN:ND2	1:Q:6:ASN:O	2.34	0.60
1:A:58:LYS:HZ2	1:A:58:LYS:HA	1.65	0.60
2:B:10:ARG:CA	3:B:401:NAD:O1N	2.50	0.60
1:C:37:VAL:HG12	1:C:59:ILE:HG23	1.84	0.60
1:C:45:LYS:NZ	1:C:53:PHE:O	2.32	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:256:ASN:HA	1:E:259:PHE:HB2	1.83	0.60
2:F:183:ARG:HH22	2:F:191:ARG:HH12	1.49	0.60
1:I:124:ASP:OD1	1:I:125:ILE:N	2.31	0.60
1:I:192:ASP:HB3	1:I:195:ARG:HB2	1.83	0.60
1:K:320:ARG:NH2	1:K:321:VAL:HG13	2.15	0.60
2:L:242:LEU:HD11	2:L:244:VAL:HG13	1.84	0.60
1:O:168:VAL:N	1:O:245:ASN:OD1	2.34	0.60
2:P:164:LYS:O	2:P:248:LYS:NZ	2.27	0.60
2:R:316:GLY:HA2	2:R:319:GLN:HB2	1.81	0.60
2:B:194:ARG:NH1	2:D:278:LEU:O	2.24	0.60
1:C:28:VAL:C	1:C:71:ILE:HG23	2.26	0.60
1:C:257:ASN:O	1:C:261:LYS:N	2.26	0.60
2:D:38:LYS:O	2:D:41:SER:OG	2.08	0.60
2:D:80:VAL:HG22	2:D:107:LYS:HD2	1.83	0.60
1:E:63:THR:HA	1:E:72:LYS:HA	1.84	0.60
1:E:188:SER:OG	2:H:39:GLN:OE1	2.20	0.60
2:F:157:PHE:O	2:F:161:LEU:N	2.28	0.60
2:F:301:GLY:HA3	2:H:169:LYS:HE2	1.83	0.60
2:H:217:VAL:HG23	2:H:218:LEU:HG	1.83	0.60
1:I:45:LYS:HG3	1:I:52:THR:HG23	1.83	0.60
1:K:176:HIS:HB3	1:K:231:ARG:HA	1.82	0.60
2:L:115:LYS:NZ	2:L:139:HIS:O	2.31	0.60
2:L:154:LEU:HD21	2:L:210:ALA:HB1	1.82	0.60
2:L:279:VAL:O	2:L:282:ASP:N	2.31	0.60
2:L:297:THR:HG22	2:L:308:ILE:H	1.65	0.60
2:P:203:ILE:HD11	2:P:230:LEU:HB3	1.81	0.60
1:Q:356:GLU:O	1:I:183:ARG:NH2	2.34	0.60
1:A:41:THR:HG23	1:A:57:VAL:HG11	1.82	0.60
1:A:236:ASN:HA	1:A:313:ASN:HD21	1.66	0.60
2:B:273:VAL:HG23	2:B:292:ILE:HB	1.83	0.60
2:D:161:LEU:O	2:D:165:PHE:N	2.34	0.60
2:D:186:ASP:OD2	2:D:197:ARG:NH2	2.35	0.60
2:F:160:VAL:O	2:F:164:LYS:N	2.33	0.60
2:H:42:HIS:O	2:H:46:TYR:N	2.31	0.60
2:H:203:ILE:HD11	2:H:230:LEU:HB3	1.83	0.60
2:H:315:TRP:O	2:H:318:SER:OG	2.19	0.60
2:R:217:VAL:HG23	2:R:218:LEU:HG	1.82	0.60
1:C:183:ARG:NH1	1:C:183:ARG:HA	2.17	0.60
1:E:1:LEU:O	1:E:26:ASP:N	2.34	0.60
1:E:59:ILE:O	1:E:59:ILE:CD1	2.45	0.60
2:F:183:ARG:HH22	2:F:191:ARG:HH22	1.50	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:204:VAL:HB	2:J:231:ARG:HB2	1.83	0.60
2:J:211:ALA:O	2:J:226:ASN:ND2	2.35	0.60
1:K:40:ALA:HA	1:K:43:LEU:HB2	1.84	0.60
1:K:94:GLU:OE2	1:K:96:THR:OG1	2.19	0.60
1:K:299:VAL:HA	1:K:305:VAL:HA	1.83	0.60
1:O:243:VAL:HB	1:O:306:LYS:HG3	1.84	0.60
2:P:54:ASP:OD1	2:P:54:ASP:N	2.22	0.60
1:Q:170:GLY:HA2	1:Q:244:VAL:HA	1.83	0.60
1:A:137:TYR:HD2	1:A:331:LYS:HZ3	1.49	0.60
2:B:179:THR:N	2:B:182:GLN:OE1	2.34	0.60
2:B:324:LEU:HA	2:B:327:ILE:HD12	1.84	0.60
2:D:8:PHE:CZ	2:D:13:ARG:HG3	2.37	0.60
1:E:128:TYR:N	1:E:145:SER:O	2.35	0.60
2:F:203:ILE:HG13	2:F:232:VAL:HG12	1.82	0.60
2:F:312:ASP:OD1	2:F:315:TRP:N	2.27	0.60
1:I:161:LEU:HD23	1:I:165:LEU:HD23	1.83	0.60
1:I:240:VAL:O	1:I:309:ALA:N	2.22	0.60
2:J:1:LEU:HB3	2:J:25:LEU:HA	1.83	0.60
2:J:102:ARG:NH2	2:J:126:PRO:HD3	2.17	0.60
1:K:292:ILE:HG13	1:K:309:ALA:HA	1.84	0.60
2:L:0:LYS:N	2:L:24:PRO:O	2.32	0.60
1:O:31:ASN:HA	1:O:74:VAL:HG12	1.83	0.60
2:R:118:ILE:O	2:R:145:SER:OG	2.19	0.60
2:B:28:VAL:HA	2:B:71:ILE:HG12	1.84	0.60
1:C:47:ASP:HB3	1:C:51:GLY:N	2.17	0.60
1:C:234:THR:OG1	1:C:237:VAL:HG12	2.02	0.60
1:E:23:SER:C	1:E:25:LEU:H	2.09	0.60
2:F:105:ALA:HB1	2:F:116:VAL:HG11	1.84	0.60
2:F:273:VAL:HA	2:F:292:ILE:H	1.65	0.60
1:G:167:ILE:N	1:G:247:GLU:OE2	2.35	0.60
2:H:76:ASP:OD1	2:H:78:ASN:N	2.35	0.60
1:I:325:ALA:O	1:I:329:ALA:N	2.34	0.60
2:L:318:SER:O	2:L:322:VAL:N	2.19	0.60
1:O:129:VAL:N	1:O:133:ASN:OD1	2.31	0.60
1:O:362:GLU:N	1:C:181:ASP:OD2	2.34	0.60
1:Q:299:VAL:HA	1:Q:305:VAL:HG12	1.82	0.60
2:R:206:THR:OG1	2:R:207:SER:N	2.35	0.60
1:A:124:ASP:H	1:G:143:ILE:HD12	1.67	0.60
2:B:13:ARG:HB3	2:B:44:LEU:HA	1.84	0.60
2:B:94:GLU:OE2	2:B:96:THR:OG1	2.18	0.60
2:B:118:ILE:H	2:B:145:SER:HA	1.67	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:228:ILE:H	2:D:306:LYS:HZ2	1.48	0.60
1:E:18:CYS:O	1:E:20:ARG:HB2	2.02	0.60
2:F:10:ARG:HH22	1:G:185:LEU:HD11	1.61	0.60
1:G:32:ASP:N	1:G:74:VAL:O	2.20	0.60
1:K:37:VAL:HG12	1:K:59:ILE:HG12	1.84	0.60
2:P:58:LYS:HE2	2:P:59:THR:H	1.67	0.60
2:P:265:ASN:OD1	2:P:266:GLU:N	2.35	0.60
1:Q:242:LEU:HB3	1:Q:307:VAL:HG13	1.83	0.60
2:R:218:LEU:O	2:R:222:LYS:NZ	2.31	0.60
2:R:253:GLU:O	2:R:257:ALA:N	2.22	0.60
1:C:101:ASP:CG	1:C:104:GLY:H	2.10	0.60
2:D:129:VAL:N	2:D:133:ASN:OD1	2.35	0.60
2:D:242:LEU:HD11	2:D:244:VAL:HG13	1.83	0.60
2:F:10:ARG:HA	2:F:13:ARG:HD2	1.82	0.60
1:G:2:LYS:NZ	1:G:87:LEU:O	2.27	0.60
1:I:36:GLY:O	1:I:39:SER:OG	2.20	0.60
1:I:104:GLY:HA2	1:I:107:LYS:HD2	1.84	0.60
1:I:240:VAL:N	1:I:309:ALA:O	2.32	0.60
1:K:86:GLU:OE1	1:K:86:GLU:N	2.19	0.60
2:L:287:ASP:OD1	2:L:315:TRP:NE1	2.34	0.60
1:O:60:ILE:HB	1:O:63:THR:HB	1.84	0.59
2:P:179:THR:H	2:P:182:GLN:CD	2.09	0.59
2:P:301:GLY:HA3	2:R:169:LYS:HE2	1.83	0.59
1:Q:147:ALA:O	1:Q:317:TYR:OH	2.10	0.59
2:R:7:GLY:O	2:R:9:GLY:N	2.34	0.59
2:R:192:ASP:CG	2:R:195:ARG:H	2.10	0.59
2:B:3:VAL:HB	2:B:27:VAL:HG22	1.82	0.59
2:B:172:MET:HG3	2:B:242:LEU:HD13	1.83	0.59
1:C:107:LYS:O	1:C:111:ALA:N	2.34	0.59
1:C:133:ASN:HA	1:C:136:ASP:CG	2.27	0.59
2:D:30:ILE:HG22	2:D:31:ASN:H	1.67	0.59
2:D:126:PRO:HD2	2:D:144:ILE:HA	1.83	0.59
1:E:101:ASP:HB2	1:E:103:PRO:HD2	1.84	0.59
1:E:162:ASP:HA	1:E:166:GLY:H	1.67	0.59
1:E:203:ILE:HG12	1:E:204:VAL:N	2.15	0.59
1:G:18:CYS:O	1:G:20:ARG:N	2.35	0.59
1:G:156:PRO:HG2	1:G:290:SER:OG	2.02	0.59
1:G:174:THR:HG22	1:G:229:ALA:HB1	1.83	0.59
2:H:206:THR:OG1	2:H:207:SER:N	2.35	0.59
1:I:60(A):ASP:OD2	1:I:61:ASN:ND2	2.35	0.59
2:J:18:CYS:O	2:J:20:ARG:N	2.35	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:279:VAL:H	1:K:282:ASP:CG	2.10	0.59
1:O:64:PHE:N	1:O:71:ILE:O	2.35	0.59
2:P:213:ALA:HA	2:P:216:LEU:HB2	1.84	0.59
2:R:203:ILE:HG23	2:R:205:PRO:HD3	1.84	0.59
1:A:56:ASP:N	1:A:67:ASP:OD2	2.35	0.59
1:A:127:THR:O	1:A:133:ASN:ND2	2.35	0.59
2:B:1:LEU:HB3	2:B:25:LEU:HA	1.82	0.59
2:B:319:GLN:O	2:B:323:ASP:N	2.26	0.59
1:C:119:THR:O	1:C:119:THR:OG1	2.18	0.59
2:D:324:LEU:HA	2:D:327:ILE:HD12	1.83	0.59
1:G:178:TYR:HD2	1:G:233:PRO:HA	1.66	0.59
1:I:37:VAL:O	1:I:41:THR:N	2.23	0.59
1:I:182:GLN:HB3	1:I:195:ARG:HH11	1.68	0.59
1:K:192:ASP:OD2	1:K:195:ARG:N	2.23	0.59
1:K:206:THR:N	1:K:229:ALA:O	2.34	0.59
2:L:94:GLU:OE2	2:L:98:VAL:N	2.36	0.59
1:O:45:LYS:NZ	1:O:53:PHE:HB3	2.17	0.59
1:O:209:GLY:O	1:O:212:LYS:HG2	2.01	0.59
1:O:272:ASP:OD1	1:O:273:VAL:N	2.31	0.59
2:P:116:VAL:N	2:P:142:THR:O	2.25	0.59
1:Q:11:ILE:HG22	3:Q:401:NAD:O2N	2.01	0.59
1:A:251:THR:OG1	1:A:253:GLU:OE1	2.12	0.59
2:B:197:ARG:NH1	1:C:46:TYR:O	2.33	0.59
1:C:105:ALA:HA	1:C:108:HIS:CD2	2.38	0.59
1:C:209:GLY:O	1:C:213:ALA:N	2.20	0.59
1:I:17:ARG:NH2	1:I:50:LEU:O	2.35	0.59
1:I:21:LYS:H	1:I:21:LYS:NZ	1.95	0.59
2:J:15:PHE:HZ	2:J:325:ALA:HB2	1.66	0.59
2:J:30:ILE:O	2:J:73:VAL:HA	2.02	0.59
2:J:38:LYS:N	2:J:38:LYS:HZ2	2.00	0.59
2:J:91:LEU:HD21	2:J:93:ILE:HD11	1.84	0.59
2:J:204:VAL:O	2:J:230:LEU:HA	2.01	0.59
1:K:315:TRP:O	1:K:318:SER:OG	2.10	0.59
2:L:115:LYS:HD3	2:L:142:THR:HA	1.85	0.59
2:L:147:ALA:O	2:L:317:TYR:OH	2.20	0.59
1:O:13:ARG:O	1:O:44:LEU:HD11	2.01	0.59
1:A:172:MET:SD	1:A:173:THR:N	2.75	0.59
2:B:214:VAL:HA	2:B:217:VAL:HG22	1.82	0.59
1:C:162:ASP:HA	1:C:166:GLY:H	1.66	0.59
1:C:263:ALA:O	1:C:268:LYS:NZ	2.28	0.59
2:D:312:ASP:OD2	2:D:315:TRP:HB3	2.03	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:83:PRO:HB3	1:E:86:GLU:HB2	1.84	0.59
1:E:103:PRO:O	1:E:107:LYS:N	2.25	0.59
1:E:139:HIS:CE1	1:E:332:TRP:HA	2.37	0.59
2:H:250:THR:OG1	2:H:251:PHE:N	2.36	0.59
2:H:265:ASN:N	2:H:265:ASN:OD1	2.33	0.59
1:K:246:ILE:HG13	1:K:248:LYS:H	1.67	0.59
1:O:127:THR:OG1	1:O:128:TYR:N	2.34	0.59
2:P:281:ILE:HG23	2:P:282:ASP:OD1	2.03	0.59
2:R:331:LYS:HB2	2:R:333:GLN:HE22	1.67	0.59
1:C:251:THR:HA	1:C:299:VAL:HG11	1.85	0.59
1:E:193:LEU:HD22	1:G:277:PRO:HG2	1.84	0.59
2:F:13:ARG:O	2:F:17:ARG:N	2.29	0.59
2:F:27:VAL:O	2:F:69:LYS:NZ	2.35	0.59
2:F:174:THR:HA	2:F:240:VAL:HB	1.84	0.59
2:F:182:GLN:HA	2:F:195:ARG:HB3	1.84	0.59
2:F:290:SER:OG	2:F:310:TRP:O	2.12	0.59
1:G:145:SER:OG	1:G:146:ASN:N	2.36	0.59
1:G:220:GLN:OE1	1:G:220:GLN:N	2.34	0.59
2:H:104:GLY:HA2	2:H:107:LYS:HB2	1.84	0.59
2:H:139:HIS:NE2	2:H:334:UNK:O	2.35	0.59
2:H:331:LYS:HB2	2:H:333:GLN:HE22	1.67	0.59
1:K:29:VAL:HA	1:K:72:LYS:O	2.03	0.59
1:K:47:ASP:CG	1:K:49:ILE:H	2.11	0.59
1:K:220:GLN:OE1	1:K:221:LEU:N	2.36	0.59
2:P:206:THR:OG1	2:P:207:SER:N	2.35	0.59
1:Q:192:ASP:OD2	1:Q:195:ARG:NH1	2.35	0.59
1:A:32:ASP:O	1:A:75:SER:OG	2.20	0.59
1:A:34:GLY:O	1:A:39:SER:OG	2.19	0.59
1:A:342:GLY:O	2:F:75:SER:N	2.35	0.59
2:B:92:VAL:HB	2:B:116:VAL:HG22	1.84	0.59
1:C:356:GLU:O	1:C:358:CYS:N	2.35	0.59
2:D:105:ALA:HB1	2:D:116:VAL:HG11	1.85	0.59
1:G:171:THR:O	1:G:243:VAL:N	2.35	0.59
2:H:33:THR:H	3:H:401:NAD:C2A	2.16	0.59
2:H:253:GLU:HA	2:H:256:ASN:HB2	1.83	0.59
1:I:84:TRP:O	1:I:88:GLY:N	2.36	0.59
1:I:213:ALA:HA	1:I:216:LEU:HD23	1.84	0.59
2:J:191:ARG:NH1	2:J:191:ARG:H	2.00	0.59
1:K:64:PHE:HE1	1:K:73:VAL:HB	1.66	0.59
1:K:74:VAL:HG12	1:K:75:SER:H	1.67	0.59
1:K:118:ILE:O	1:K:145:SER:OG	2.20	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:60(A):ASP:O	1:O:62:GLU:N	2.35	0.59
1:O:66:ILE:HD12	1:O:69:LYS:HD2	1.85	0.59
1:Q:10:ARG:N	3:Q:401:NAD:O2N	2.35	0.59
2:R:253:GLU:HA	2:R:256:ASN:HB2	1.83	0.59
2:R:318:SER:O	2:R:322:VAL:HG23	2.03	0.59
2:F:103:ASP:HB2	2:F:107:LYS:HZ3	1.67	0.59
1:G:84:TRP:HB3	1:G:89:ILE:HB	1.83	0.59
1:G:127:THR:O	1:G:133:ASN:ND2	2.35	0.59
2:H:79:PRO:HB3	2:H:108:HIS:CE1	2.38	0.59
1:I:4:ALA:O	1:I:93:ILE:N	2.33	0.59
1:I:115:LYS:HA	1:I:142:ASN:HB3	1.85	0.59
1:K:5:ILE:HA	1:K:93:ILE:H	1.68	0.59
1:K:161:LEU:O	1:K:165:LEU:N	2.30	0.59
1:K:312:ASP:OD2	1:K:315:TRP:N	2.36	0.59
2:L:79:PRO:HB3	2:L:108:HIS:CE1	2.37	0.59
2:L:115:LYS:NZ	2:L:141:ASP:O	2.35	0.59
1:O:169:LYS:HA	1:O:224:LYS:HB2	1.85	0.59
1:O:204:VAL:N	1:O:231:ARG:O	2.34	0.59
2:R:28:VAL:O	2:R:72:LYS:N	2.21	0.59
2:R:147:ALA:HB1	2:R:151:THR:HB	1.85	0.59
1:C:74:VAL:HG12	1:C:75:SER:H	1.67	0.59
1:C:256:ASN:HA	1:C:259:PHE:HB2	1.85	0.59
2:D:237:VAL:HG22	2:D:312:ASP:HA	1.85	0.59
2:F:213:ALA:HA	2:F:216:LEU:HB2	1.84	0.59
2:H:299:VAL:HG22	2:H:305:VAL:HG13	1.83	0.59
2:J:11:ILE:HG12	3:J:401:NAD:PN	2.42	0.59
2:J:17:ARG:CZ	2:J:53:PHE:HA	2.32	0.59
2:J:280:SER:OG	2:L:202:ASN:ND2	2.34	0.59
2:L:132:VAL:HG22	2:L:159:LYS:HE2	1.85	0.59
1:Q:184:LEU:O	1:Q:198:ALA:HA	2.02	0.59
2:R:4:ALA:HB3	2:R:84:TRP:CZ3	2.38	0.59
2:R:104:GLY:HA2	2:R:107:LYS:HB2	1.84	0.59
1:A:9:GLY:O	1:A:13:ARG:N	2.27	0.59
2:B:42:HIS:O	2:B:46:TYR:N	2.32	0.59
2:D:42:HIS:HA	2:D:45:LYS:HB3	1.84	0.59
2:F:164:LYS:O	2:F:248:LYS:NZ	2.27	0.59
1:G:7:GLY:N	1:G:31:ASN:HB3	2.13	0.59
1:G:194:ARG:HG2	1:G:206:THR:HB	1.84	0.59
1:I:312:ASP:OD2	1:I:315:TRP:N	2.34	0.59
2:J:8:PHE:CZ	2:J:13:ARG:HG3	2.38	0.59
2:J:56:ASP:N	2:J:67:ASP:OD2	2.36	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:106:GLY:O	2:J:110:GLN:N	2.25	0.59
2:J:251:PHE:HE2	2:J:253:GLU:HB3	1.67	0.59
1:K:72:LYS:NZ	1:K:73:VAL:O	2.31	0.59
2:L:8:PHE:CZ	2:L:13:ARG:HG3	2.37	0.59
1:O:184:LEU:HB3	2:R:184:LEU:HB2	1.83	0.59
2:P:167:ILE:HG21	2:P:225:LEU:HD11	1.85	0.59
1:Q:238:SER:HB2	1:Q:311:TYR:CZ	2.37	0.59
2:R:176:HIS:ND1	2:R:177:SER:O	2.31	0.59
2:R:179:THR:H	2:R:182:GLN:HE22	1.51	0.59
2:R:299:VAL:HG22	2:R:305:VAL:HG13	1.84	0.59
1:A:3:VAL:N	1:A:26:ASP:O	2.35	0.59
1:A:18(A):TRP:NE1	1:A:25:LEU:O	2.34	0.59
1:C:213:ALA:HA	1:C:216:LEU:HD23	1.85	0.59
1:C:297:THR:HA	1:C:306:LYS:NZ	2.18	0.59
2:D:100:VAL:HG13	2:D:122(A):LYS:HB2	1.84	0.59
1:E:281:VAL:O	1:E:284:ARG:N	2.33	0.59
2:F:10:ARG:HH12	1:G:185:LEU:HB2	1.65	0.59
2:F:10:ARG:HH11	1:G:185:LEU:HB3	1.64	0.59
2:F:133:ASN:OD1	2:F:133:ASN:N	2.35	0.59
2:F:181:ASP:OD1	2:F:195:ARG:NH1	2.36	0.59
1:G:315:TRP:O	1:G:318:SER:OG	2.21	0.59
1:I:315:TRP:O	1:I:318:SER:OG	2.20	0.59
2:J:172:MET:HG3	2:J:242:LEU:HD13	1.85	0.59
2:J:215:ALA:C	2:J:222:LYS:HZ3	2.11	0.59
2:J:318:SER:O	2:J:322:VAL:HG23	2.03	0.59
1:K:93:ILE:HA	1:K:117:ILE:O	2.02	0.59
2:L:206:THR:HG23	2:L:229:ALA:HB3	1.85	0.59
2:L:272:SER:OG	2:L:273:VAL:N	2.35	0.59
1:O:28:VAL:O	1:O:72:LYS:N	2.35	0.58
2:P:174:THR:HA	2:P:240:VAL:HB	1.85	0.58
1:Q:204:VAL:O	1:Q:231:ARG:N	2.32	0.58
2:R:162:ASP:OD1	2:R:167:ILE:N	2.30	0.58
1:A:20:ARG:HE	1:A:322:VAL:HG11	1.68	0.58
1:A:253:GLU:OE1	1:A:253:GLU:N	2.28	0.58
1:A:301:GLY:HA3	1:A:304:MET:HB3	1.84	0.58
2:D:115:LYS:NZ	2:D:141:ASP:O	2.35	0.58
2:D:204:VAL:O	2:D:230:LEU:HA	2.03	0.58
2:D:318:SER:HA	2:D:321:VAL:HB	1.85	0.58
1:E:195:ARG:HH22	1:E:231:ARG:NH1	2.00	0.58
1:E:215:SER:OG	1:E:218:LEU:O	2.18	0.58
1:I:87:LEU:HB3	1:I:89:ILE:HG12	1.84	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:129:VAL:HG12	1:I:133:ASN:HD21	1.68	0.58
2:L:169:LYS:O	2:L:245:GLN:N	2.36	0.58
1:Q:251:THR:OG1	1:Q:253:GLU:OE1	2.14	0.58
1:Q:254:ASP:OD1	1:Q:255:VAL:N	2.33	0.58
2:R:115:LYS:NZ	2:R:141:ASP:O	2.36	0.58
2:R:129:VAL:HA	2:R:324:LEU:HD11	1.85	0.58
1:A:275:ASP:HA	1:A:293:ASP:HB2	1.83	0.58
2:D:65:SER:HA	2:D:70:VAL:CA	2.32	0.58
1:E:18(A):TRP:CZ3	1:E:69:LYS:HD3	2.38	0.58
2:H:318:SER:O	2:H:322:VAL:HG23	2.03	0.58
1:I:107:LYS:O	1:I:111:ALA:N	2.35	0.58
2:J:177:SER:OG	2:J:234:THR:O	2.14	0.58
2:J:193:LEU:H	2:J:193:LEU:HD12	1.68	0.58
2:J:275:ASP:OD1	2:J:294:SER:N	2.36	0.58
1:K:281:VAL:HG12	1:K:284:ARG:HH11	1.68	0.58
1:O:176:HIS:N	1:O:230:LEU:O	2.32	0.58
1:Q:12:GLY:HA2	1:Q:15:PHE:HB3	1.84	0.58
1:Q:60:ILE:HG12	1:Q:64:PHE:HA	1.85	0.58
2:B:8:PHE:CZ	2:B:13:ARG:HG3	2.39	0.58
2:B:56:ASP:N	2:B:67:ASP:OD2	2.36	0.58
1:C:94:GLU:CD	1:C:97:GLY:H	2.10	0.58
1:C:249:GLY:HA3	1:C:302:GLY:HA3	1.83	0.58
2:D:84:TRP:O	2:D:88:GLY:N	2.36	0.58
1:E:3:VAL:N	1:E:26:ASP:O	2.30	0.58
1:E:232:VAL:HG23	1:E:234:THR:HG22	1.85	0.58
1:G:218:LEU:HD23	1:G:220:GLN:HE21	1.67	0.58
1:G:254:ASP:OD1	1:G:255:VAL:N	2.33	0.58
1:K:118:ILE:N	1:K:145:SER:HA	2.15	0.58
2:L:161:LEU:O	2:L:165:PHE:N	2.34	0.58
2:L:203:ILE:HD11	2:L:230:LEU:HB3	1.85	0.58
1:O:18(B):HIS:HD2	1:O:19:GLY:N	2.00	0.58
2:P:267:LEU:HB3	2:P:271:LEU:HB2	1.86	0.58
1:Q:236:ASN:HD21	1:Q:314:GLU:H	1.51	0.58
1:Q:291:THR:HB	1:Q:310:TRP:HB2	1.85	0.58
1:A:28:VAL:HG23	1:A:29:VAL:HG23	1.86	0.58
1:A:47:ASP:OD1	1:A:48:SER:N	2.36	0.58
1:A:65:SER:OG	1:A:69:LYS:N	2.35	0.58
1:A:139:HIS:CD2	1:A:333:PRO:HD3	2.39	0.58
1:A:287:ASP:O	1:A:320:ARG:NH1	2.34	0.58
2:B:251:PHE:HE2	2:B:253:GLU:HB3	1.68	0.58
1:C:14:ASN:ND2	1:C:14:ASN:H	2.00	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:32:ASP:OD2	3:D:401:NAD:O3B	2.18	0.58
2:D:45:LYS:HZ2	2:D:53:PHE:HB3	1.67	0.58
1:G:317:TYR:O	1:G:321:VAL:N	2.29	0.58
2:J:90:ASP:HA	2:J:114:LYS:HB2	1.86	0.58
1:K:41:THR:HG21	1:K:59:ILE:HG13	1.84	0.58
2:L:179:THR:H	2:L:182:GLN:CD	2.11	0.58
2:L:271:LEU:HD21	2:L:290:SER:HB3	1.86	0.58
1:O:194:ARG:NH1	1:Q:278:LEU:O	2.36	0.58
2:P:89:ILE:N	2:P:112:GLY:O	2.35	0.58
2:P:257:ALA:HA	2:P:260:ARG:HB2	1.86	0.58
1:Q:47:ASP:H	1:Q:51:GLY:C	2.12	0.58
1:Q:186:ASP:OD1	1:Q:198:ALA:N	2.36	0.58
2:B:249:LYS:HD2	2:B:302:ASP:HB2	1.84	0.58
2:B:318:SER:O	2:B:322:VAL:HG23	2.03	0.58
1:C:62:GLU:HB2	1:C:72:LYS:HE3	1.85	0.58
2:D:169:LYS:O	2:D:245:GLN:N	2.37	0.58
1:E:168:VAL:HG23	1:E:247:GLU:HB3	1.84	0.58
2:F:30:ILE:O	2:F:73:VAL:HA	2.03	0.58
2:F:102:ARG:NH2	2:F:124:ASP:O	2.37	0.58
2:F:102:ARG:HH22	2:F:126:PRO:HD2	1.68	0.58
2:F:202:ASN:HD21	2:H:281:ILE:H	1.51	0.58
1:G:0:LYS:H3	1:G:24:PRO:C	2.11	0.58
1:G:165:LEU:HD21	1:G:305:VAL:HG21	1.85	0.58
1:G:287:ASP:OD1	1:G:319:GLN:NE2	2.23	0.58
2:H:115:LYS:NZ	2:H:141:ASP:O	2.36	0.58
2:H:166:GLY:O	2:H:247:SER:N	2.22	0.58
1:I:2:LYS:HB2	1:I:89:ILE:HA	1.83	0.58
1:I:220:GLN:HG2	1:I:221:LEU:HD23	1.84	0.58
1:I:290:SER:OG	1:I:291:THR:N	2.37	0.58
1:K:72:LYS:HZ2	1:K:74:VAL:HG22	1.67	0.58
1:K:184:LEU:HG	1:K:185:LEU:HG	1.86	0.58
2:L:80:VAL:HG22	2:L:107:LYS:HD2	1.86	0.58
2:R:172:MET:HG3	2:R:242:LEU:HD13	1.86	0.58
2:R:326:ASP:O	2:R:330:ASN:N	2.35	0.58
1:A:151:THR:OG1	1:A:152:ASN:OD1	2.21	0.58
2:B:40:ALA:HA	2:B:43:LEU:HD12	1.84	0.58
2:B:44:LEU:HD23	2:B:57:VAL:HB	1.86	0.58
2:B:204:VAL:O	2:B:230:LEU:HA	2.03	0.58
2:B:217:VAL:HG23	2:B:218:LEU:HG	1.86	0.58
1:C:47:ASP:OD1	1:C:48:SER:N	2.35	0.58
1:C:83:PRO:HA	1:C:86:GLU:CD	2.29	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:94:GLU:OE2	2:D:98:VAL:N	2.36	0.58
1:E:262:ALA:HB1	1:E:267:LEU:HD12	1.85	0.58
2:F:38:LYS:N	2:F:38:LYS:HZ2	2.02	0.58
2:F:40:ALA:HA	2:F:43:LEU:HD12	1.86	0.58
2:H:38:LYS:HZ3	2:H:39:GLN:HG3	1.69	0.58
2:H:176:HIS:ND1	2:H:177:SER:O	2.32	0.58
2:H:204:VAL:HB	2:H:231:ARG:HB2	1.84	0.58
1:I:5:ILE:HB	1:I:30:VAL:HG13	1.86	0.58
1:I:298:MET:HG2	1:I:306:LYS:HB3	1.86	0.58
2:J:2:LYS:HA	2:J:2:LYS:HZ2	1.68	0.58
2:J:3:VAL:HB	2:J:27:VAL:HG22	1.86	0.58
2:J:6:ASN:HB3	2:J:94:GLU:HA	1.84	0.58
1:O:62:GLU:HB3	1:O:72:LYS:CE	2.33	0.58
2:P:182:GLN:HA	2:P:195:ARG:HB3	1.86	0.58
1:Q:20:ARG:HA	1:Q:20:ARG:NE	2.19	0.58
1:A:107:LYS:O	1:A:111:ALA:N	2.33	0.58
1:A:177:SER:HB3	1:A:234:THR:O	2.04	0.58
2:B:15:PHE:HZ	2:B:325:ALA:HB2	1.67	0.58
2:B:173:THR:N	2:B:241:ASP:OD1	2.37	0.58
2:B:211:ALA:O	2:B:226:ASN:ND2	2.36	0.58
1:C:85:ALA:H	1:C:112:GLY:HA3	1.67	0.58
1:C:184:LEU:H	1:C:184:LEU:HD23	1.68	0.58
1:E:257:ASN:O	1:E:261:LYS:NZ	2.33	0.58
2:F:206:THR:OG1	2:F:207:SER:N	2.35	0.58
1:G:168:VAL:O	1:G:224:LYS:NZ	2.28	0.58
1:K:5:ILE:HG23	1:K:30:VAL:HG12	1.86	0.58
1:K:80:LEU:HG	1:K:107:LYS:HZ1	1.68	0.58
1:K:321:VAL:HA	1:K:324:LEU:HB2	1.84	0.58
2:L:8:PHE:H	2:L:32:ASP:HB2	1.69	0.58
1:O:151:THR:OG1	1:O:152:ASN:N	2.36	0.58
1:O:313:ASN:N	1:O:313:ASN:OD1	2.36	0.58
2:P:78:ASN:O	2:P:82:LEU:HG	2.03	0.58
2:P:179:THR:N	2:P:182:GLN:OE1	2.24	0.58
1:Q:132:VAL:N	1:Q:134:GLU:OE1	2.37	0.58
1:Q:139(A):ASP:OD1	1:Q:139(A):ASP:N	2.35	0.58
1:Q:319:GLN:O	1:Q:323:ASP:N	2.34	0.58
1:A:28:VAL:HA	1:A:71:ILE:HG12	1.86	0.58
1:A:48:SER:N	2:D:197:ARG:HH22	2.02	0.58
1:A:60:ILE:HB	1:A:64:PHE:HA	1.85	0.58
1:A:182:GLN:HG2	1:A:204:VAL:HG21	1.83	0.58
1:A:254:ASP:OD1	1:A:255:VAL:N	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:202:ASN:HD22	2:D:279:VAL:HB	1.68	0.58
2:B:281:ILE:HG13	2:B:284:ARG:HE	1.67	0.58
1:C:86:GLU:OE1	1:C:86:GLU:N	2.19	0.58
1:C:212:LYS:O	1:C:215:SER:OG	2.14	0.58
2:D:132:VAL:HG22	2:D:159:LYS:HE2	1.86	0.58
1:E:120:ALA:O	1:E:146:ASN:ND2	2.36	0.58
1:E:361:TYR:H	1:K:195:ARG:HH12	1.52	0.58
2:F:10:ARG:CA	3:F:401:NAD:O1N	2.51	0.58
1:I:65:SER:OG	1:I:66:ILE:N	2.35	0.58
1:I:203:ILE:O	1:I:205:PRO:HD3	2.03	0.58
2:J:47:ASP:OD1	2:J:48:SER:N	2.37	0.58
2:J:228:ILE:H	2:L:306:LYS:HZ2	1.51	0.58
1:K:102:GLY:O	1:K:106:GLY:N	2.27	0.58
1:O:241:ASP:OD1	1:O:307:VAL:N	2.36	0.58
1:Q:145:SER:OG	1:Q:146:ASN:N	2.37	0.58
2:R:250:THR:OG1	2:R:251:PHE:N	2.36	0.58
1:A:3:VAL:HB	1:A:27:VAL:HA	1.86	0.58
2:B:250:THR:N	2:B:302:ASP:HB3	2.13	0.58
1:C:25:LEU:HD11	1:C:329:ALA:HB2	1.84	0.58
1:G:60(A):ASP:OD1	1:G:61:ASN:N	2.32	0.58
2:H:65:SER:HA	2:H:70:VAL:HA	1.84	0.58
2:H:129:VAL:HA	2:H:324:LEU:HD11	1.85	0.58
2:J:281:ILE:H	2:L:202:ASN:HD21	1.50	0.58
1:K:31:ASN:ND2	1:K:76:ASN:O	2.37	0.58
1:K:217:VAL:HG23	1:K:218:LEU:HD22	1.85	0.58
1:K:264:ALA:HA	1:K:268:LYS:NZ	2.19	0.58
2:L:6:ASN:N	2:L:93:ILE:O	2.36	0.58
2:L:270:ILE:HG23	2:L:320:ARG:HD2	1.86	0.58
2:P:38:LYS:N	2:P:38:LYS:HZ2	2.02	0.58
1:Q:258:ALA:O	1:Q:262:ALA:N	2.33	0.58
2:R:13:ARG:O	2:R:17:ARG:N	2.26	0.58
1:A:65:SER:HA	1:A:69:LYS:O	2.04	0.58
1:C:6:ASN:ND2	1:C:95:GLY:H	2.02	0.58
1:E:47:ASP:H	1:E:51:GLY:C	2.12	0.58
1:E:310:TRP:HH2	1:G:204:VAL:HG22	1.69	0.58
1:E:361:TYR:H	1:K:195:ARG:NH1	2.01	0.58
2:F:36:GLY:HA3	2:F:38:LYS:HZ1	1.69	0.58
1:G:10:ARG:CZ	1:G:13:ARG:HE	2.17	0.58
1:G:132:VAL:HG11	1:G:218:LEU:HD11	1.86	0.58
2:H:24:PRO:HB2	2:H:329:ALA:HB1	1.86	0.58
2:J:14:ASN:HD21	2:J:315:TRP:HA	1.69	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:237:VAL:HG21	2:J:284:ARG:HA	1.84	0.58
1:K:142:ASN:HD22	1:K:143:ILE:HG13	1.69	0.58
1:K:318:SER:OG	1:K:319:GLN:OE1	2.21	0.58
1:O:147:ALA:O	1:O:152:ASN:ND2	2.35	0.57
1:O:238:SER:O	1:O:311:TYR:N	2.37	0.57
2:P:133:ASN:OD1	2:P:133:ASN:N	2.34	0.57
2:R:157:PHE:HA	2:R:160:VAL:HB	1.86	0.57
1:A:312:ASP:OD2	1:A:315:TRP:N	2.35	0.57
1:C:21:LYS:HZ2	1:C:22:ASP:H	1.52	0.57
1:C:29:VAL:HA	1:C:72:LYS:O	2.03	0.57
1:C:129:VAL:HG13	1:C:132:VAL:HB	1.86	0.57
1:C:134:GLU:CD	1:C:134:GLU:H	2.12	0.57
2:D:39:GLN:O	2:D:43:LEU:HG	2.03	0.57
2:D:287:ASP:OD1	2:D:315:TRP:NE1	2.31	0.57
1:E:242:LEU:HB3	1:E:307:VAL:HG13	1.86	0.57
1:G:37:VAL:HA	1:G:40:ALA:HB3	1.86	0.57
1:G:332:TRP:O	1:G:334:GLY:N	2.32	0.57
1:I:328:VAL:O	1:I:331:LYS:HG2	2.04	0.57
2:J:263:ALA:HA	2:J:267:LEU:HB2	1.85	0.57
2:L:42:HIS:HA	2:L:45:LYS:HB3	1.86	0.57
2:L:63:ALA:HB1	2:L:70:VAL:HG23	1.86	0.57
2:P:271:LEU:HD12	2:P:290:SER:HB3	1.86	0.57
2:R:85:GLY:N	2:R:111:ALA:O	2.37	0.57
2:R:139:HIS:NE2	2:R:334:UNK:O	2.36	0.57
1:A:173:THR:HA	1:A:228:ILE:O	2.04	0.57
1:A:184:LEU:HB2	2:D:184:LEU:HB2	1.87	0.57
2:B:20:ARG:HG3	2:B:322:VAL:HG11	1.86	0.57
2:B:166:GLY:O	2:B:247:SER:N	2.30	0.57
2:B:215:ALA:C	2:B:222:LYS:HZ3	2.11	0.57
2:D:203:ILE:HG23	2:D:205:PRO:HD3	1.85	0.57
1:E:124:ASP:OD1	1:E:124:ASP:N	2.37	0.57
1:E:151:THR:HG21	1:E:213:ALA:HB3	1.85	0.57
1:G:114:LYS:O	1:G:142:ASN:HB2	2.03	0.57
2:H:147:ALA:HB1	2:H:151:THR:HB	1.85	0.57
1:I:177:SER:OG	1:I:313:ASN:ND2	2.37	0.57
1:I:257:ASN:O	1:I:261:LYS:N	2.25	0.57
2:J:217:VAL:HG23	2:J:218:LEU:HG	1.86	0.57
1:K:42:HIS:NE2	2:L:277:PRO:O	2.32	0.57
2:L:84:TRP:O	2:L:88:GLY:N	2.38	0.57
1:O:318:SER:O	1:O:322:VAL:N	2.19	0.57
1:Q:24:PRO:HB2	1:Q:329:ALA:HB1	1.87	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:177:SER:OG	1:Q:237:VAL:N	2.26	0.57
2:R:24:PRO:HB2	2:R:329:ALA:HB1	1.87	0.57
1:A:176:HIS:N	1:A:230:LEU:O	2.37	0.57
1:A:272:ASP:O	1:A:291:THR:HA	2.04	0.57
2:B:90:ASP:HA	2:B:114:LYS:HB2	1.85	0.57
2:B:203:ILE:HG13	2:B:232:VAL:HG12	1.86	0.57
1:C:176:HIS:O	1:C:232:VAL:N	2.32	0.57
2:D:270:ILE:HG23	2:D:320:ARG:HD2	1.85	0.57
1:E:176:HIS:HB3	1:E:231:ARG:HG3	1.86	0.57
1:E:267:LEU:HD13	1:E:271:LEU:HD12	1.86	0.57
2:F:47:ASP:OD1	2:F:48:SER:N	2.37	0.57
2:F:167:ILE:HG21	2:F:225:LEU:HD11	1.85	0.57
1:G:248:LYS:C	1:G:248(A):VAL:HG22	2.29	0.57
2:H:242:LEU:HB3	2:H:307:VAL:HG22	1.87	0.57
1:I:181:ASP:OD1	1:I:181:ASP:N	2.35	0.57
1:K:14:ASN:ND2	1:K:14:ASN:H	2.03	0.57
1:K:105:ALA:HA	1:K:108:HIS:CD2	2.39	0.57
2:L:1:LEU:N	2:L:24:PRO:O	2.25	0.57
2:L:255:VAL:O	2:L:259:PHE:N	2.34	0.57
1:A:171:THR:C	1:A:242:LEU:HD12	2.29	0.57
1:A:183:ARG:HH21	1:A:190:HIS:HB3	1.69	0.57
2:B:18:CYS:O	2:B:20:ARG:N	2.37	0.57
2:B:183:ARG:HH12	2:B:190:HIS:CD2	2.22	0.57
2:B:249:LYS:NZ	2:B:301:GLY:O	2.31	0.57
1:E:190:HIS:O	2:H:39:GLN:NE2	2.37	0.57
1:E:312:ASP:CG	1:E:314:GLU:H	2.13	0.57
2:F:162:ASP:OD1	2:F:167:ILE:N	2.30	0.57
1:G:20:ARG:NE	1:G:20:ARG:HA	2.18	0.57
1:G:40:ALA:HA	1:G:43:LEU:HD12	1.85	0.57
1:G:126:PRO:HD2	1:G:144:ILE:HA	1.86	0.57
2:H:56:ASP:OD2	2:H:67:ASP:N	2.37	0.57
2:H:205:PRO:HA	2:H:230:LEU:HD23	1.86	0.57
1:I:112:GLY:O	1:I:114:LYS:NZ	2.32	0.57
1:I:176:HIS:C	1:I:231:ARG:HA	2.29	0.57
1:K:85:ALA:H	1:K:112:GLY:HA3	1.68	0.57
1:K:115:LYS:NZ	1:K:332:TRP:HE1	2.03	0.57
1:K:132:VAL:N	1:K:134:GLU:OE1	2.38	0.57
1:K:214:VAL:O	1:K:218:LEU:N	2.37	0.57
2:L:18(A):TRP:NE1	2:L:25:LEU:O	2.35	0.57
2:L:65:SER:HA	2:L:70:VAL:CA	2.35	0.57
2:L:312:ASP:OD2	2:L:315:TRP:HB3	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:315:TRP:O	2:L:318:SER:OG	2.22	0.57
1:Q:31:ASN:HA	1:Q:74:VAL:CG1	2.32	0.57
1:Q:114:LYS:O	1:Q:142:ASN:ND2	2.28	0.57
1:Q:358:CYS:HB2	1:I:190:HIS:CE1	2.39	0.57
2:R:205:PRO:HA	2:R:230:LEU:HD23	1.87	0.57
1:A:240:VAL:HG22	1:A:309:ALA:HB3	1.84	0.57
2:B:17:ARG:CZ	2:B:53:PHE:HA	2.34	0.57
2:B:28:VAL:O	2:B:72:LYS:N	2.27	0.57
1:C:240:VAL:N	1:C:309:ALA:O	2.32	0.57
1:E:41:THR:HG22	1:E:45:LYS:CG	2.34	0.57
1:E:253:GLU:OE1	1:E:253:GLU:N	2.23	0.57
1:G:272:ASP:O	1:G:291:THR:HA	2.04	0.57
2:H:186:ASP:OD2	2:H:197:ARG:NH1	2.38	0.57
2:J:30:ILE:N	2:J:72:LYS:O	2.38	0.57
1:K:49:ILE:O	1:K:284:ARG:NH2	2.37	0.57
2:L:30:ILE:HG22	2:L:31:ASN:H	1.68	0.57
1:O:316:GLY:O	1:O:320:ARG:HG2	2.04	0.57
1:Q:248(A):VAL:O	1:Q:250:VAL:N	2.34	0.57
1:A:267:LEU:HB3	1:A:271:LEU:HG	1.86	0.57
2:B:173:THR:HG1	2:D:306:LYS:HZ3	1.48	0.57
1:E:59:ILE:HG22	1:E:64:PHE:HB3	1.86	0.57
1:E:190:HIS:CE1	1:K:360:LEU:H	2.23	0.57
1:E:313:ASN:HB2	3:E:401:NAD:H4N	1.86	0.57
1:E:318:SER:OG	1:E:319:GLN:OE1	2.23	0.57
2:F:165:PHE:O	2:F:247:SER:OG	2.22	0.57
2:F:271:LEU:HD12	2:F:290:SER:HB3	1.86	0.57
1:I:260:ARG:O	1:I:264:ALA:N	2.37	0.57
2:J:66:VAL:HB	2:J:69:LYS:HB3	1.86	0.57
2:J:186:ASP:CG	2:J:198:ALA:H	2.13	0.57
1:K:83:PRO:HA	1:K:86:GLU:CD	2.29	0.57
1:K:320:ARG:CZ	1:K:320:ARG:HB2	2.33	0.57
1:O:5:ILE:HG12	1:O:93:ILE:HB	1.87	0.57
1:O:11:ILE:HA	1:O:14:ASN:HD21	1.68	0.57
1:O:125:ILE:HG23	1:O:141:ALA:HB1	1.87	0.57
1:O:183:ARG:NH2	1:O:188:SER:O	2.38	0.57
2:P:170:GLY:HA2	2:P:244:VAL:HA	1.87	0.57
2:P:204:VAL:N	2:P:231:ARG:O	2.25	0.57
1:Q:1:LEU:O	1:Q:26:ASP:N	2.38	0.57
1:Q:57:VAL:HG13	1:Q:66:ILE:HG12	1.87	0.57
1:A:2:LYS:O	1:A:91:ILE:N	2.37	0.57
1:A:47:ASP:HA	2:D:197:ARG:HH12	1.69	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:38:LYS:N	2:B:38:LYS:HZ2	2.02	0.57
2:B:176:HIS:HB3	2:B:231:ARG:HA	1.85	0.57
1:C:105:ALA:HA	1:C:108:HIS:HD2	1.68	0.57
1:C:312:ASP:OD2	1:C:315:TRP:N	2.38	0.57
1:E:28:VAL:C	1:E:71:ILE:HG23	2.30	0.57
2:F:257:ALA:HA	2:F:260:ARG:HB2	1.86	0.57
1:G:0:LYS:NZ	1:G:22:ASP:O	2.37	0.57
1:G:91:ILE:HG22	1:G:117:ILE:HD11	1.86	0.57
1:I:283:PHE:CG	1:I:291:THR:HG21	2.40	0.57
2:J:319:GLN:O	2:J:323:ASP:N	2.25	0.57
1:K:115:LYS:HZ1	1:K:332:TRP:HE1	1.52	0.57
2:L:105:ALA:HB1	2:L:116:VAL:HG11	1.85	0.57
2:P:183:ARG:HH22	2:P:191:ARG:HH12	1.52	0.57
2:P:278:LEU:O	2:R:194:ARG:NH2	2.33	0.57
1:Q:78:ASP:OD2	1:Q:81:LYS:N	2.37	0.57
2:R:47:ASP:OD2	2:R:50:LEU:N	2.28	0.57
2:B:42:HIS:CG	1:C:193:LEU:HD21	2.40	0.57
2:B:242:LEU:HD11	2:B:244:VAL:HG13	1.86	0.57
1:C:66:ILE:HB	1:C:69:LYS:HB3	1.87	0.57
1:C:293:ASP:HB3	1:C:296:LEU:HB2	1.86	0.57
2:D:13:ARG:HB3	2:D:44:LEU:HD12	1.87	0.57
1:E:238:SER:HB2	1:E:311:TYR:CE1	2.40	0.57
1:G:273:VAL:HA	1:G:292:ILE:H	1.70	0.57
2:H:7:GLY:O	2:H:9:GLY:N	2.37	0.57
2:H:28:VAL:HG22	2:H:69:LYS:HZ1	1.69	0.57
2:H:100:VAL:HG22	2:H:122(A):LYS:N	2.20	0.57
2:H:170:GLY:HA3	2:H:225:LEU:HD13	1.87	0.57
1:I:150:THR:O	1:I:154:LEU:HG	2.03	0.57
2:J:315:TRP:O	2:J:318:SER:OG	2.22	0.57
1:K:47:ASP:HB3	1:K:51:GLY:N	2.19	0.57
1:K:171:THR:O	1:K:243:VAL:N	2.38	0.57
2:L:176:HIS:O	2:L:232:VAL:N	2.30	0.57
2:L:293:ASP:OD1	2:L:295:SER:OG	2.22	0.57
2:P:250:THR:HG1	2:P:254:GLU:CD	2.09	0.57
1:Q:116:VAL:HB	1:Q:143:ILE:HA	1.86	0.57
1:Q:240:VAL:N	1:Q:309:ALA:O	2.37	0.57
2:R:15:PHE:O	2:R:18(A):TRP:N	2.18	0.57
2:R:30:ILE:O	2:R:73:VAL:HA	2.05	0.57
1:A:6:ASN:O	1:A:95:GLY:N	2.37	0.57
1:A:280:SER:HA	1:A:310:TRP:HZ3	1.70	0.57
1:E:78:ASP:OD2	1:E:81:LYS:N	2.37	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:274:CYS:N	1:E:292:ILE:O	2.36	0.57
2:F:272:SER:N	2:F:290:SER:O	2.36	0.57
1:G:60:ILE:HG22	1:G:60(A):ASP:H	1.70	0.57
2:J:28:VAL:HA	2:J:71:ILE:HG12	1.87	0.57
2:J:173:THR:N	2:J:241:ASP:OD1	2.37	0.57
1:A:274:CYS:O	1:A:293:ASP:HA	2.05	0.57
2:B:14:ASN:HD21	2:B:315:TRP:HA	1.70	0.57
1:C:8:PHE:HZ	1:C:44:LEU:HB2	1.70	0.57
1:C:63:THR:HA	1:C:72:LYS:HG2	1.86	0.57
1:C:94:GLU:OE2	1:C:97:GLY:N	2.37	0.57
1:C:126:PRO:HD2	1:C:144:ILE:HG22	1.86	0.57
1:C:160:VAL:O	1:C:164:GLU:HG3	2.05	0.57
1:C:248(A):VAL:HG22	1:C:249:GLY:H	1.70	0.57
1:C:258:ALA:O	1:C:262:ALA:N	2.29	0.57
2:D:65:SER:CA	2:D:70:VAL:HA	2.34	0.57
2:D:179:THR:H	2:D:182:GLN:CD	2.11	0.57
2:D:315:TRP:O	2:D:318:SER:OG	2.23	0.57
1:E:18(B):HIS:HA	1:E:69:LYS:HZ2	1.70	0.57
2:F:146:ASN:HD22	2:F:321:VAL:HG13	1.70	0.57
2:F:281:ILE:HG23	2:F:282:ASP:OD1	2.05	0.57
1:G:0:LYS:HD3	1:G:24:PRO:HA	1.87	0.57
1:G:90:ASP:HA	1:G:114:LYS:HE2	1.87	0.57
1:G:289:SER:HB2	1:G:320:ARG:HD2	1.86	0.57
1:I:3:VAL:HG22	1:I:91:ILE:HB	1.87	0.57
1:I:150:THR:HG22	1:I:154:LEU:HD11	1.86	0.57
1:I:314:GLU:HG2	3:I:401:NAD:N7N	2.19	0.57
1:K:121:PRO:O	1:K:122(A):LYS:NZ	2.30	0.57
2:L:129:VAL:N	2:L:133:ASN:OD1	2.35	0.57
2:P:103:ASP:O	2:P:107:LYS:N	2.34	0.56
1:Q:76:ASN:OD1	1:Q:78:ASP:N	2.36	0.56
1:Q:201:LEU:HG	1:Q:202:ASN:HD22	1.70	0.56
2:R:242:LEU:HB3	2:R:307:VAL:HG22	1.86	0.56
1:C:40:ALA:HA	1:C:43:LEU:HB2	1.87	0.56
1:C:175:THR:OG1	1:C:239:VAL:N	2.36	0.56
2:D:6:ASN:N	2:D:93:ILE:O	2.38	0.56
2:D:67:ASP:OD1	2:D:67:ASP:N	2.35	0.56
1:E:7:GLY:HA3	1:E:96:THR:HG22	1.86	0.56
1:G:11:ILE:O	1:G:15:PHE:N	2.21	0.56
1:G:76:ASN:OD1	1:G:78:ASP:N	2.37	0.56
1:G:256:ASN:HA	1:G:259:PHE:CD2	2.40	0.56
1:I:40:ALA:O	1:I:44:LEU:N	2.24	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:226:ASN:OD1	1:K:227:GLY:N	2.32	0.56
2:L:190:HIS:CE1	2:L:192:ASP:H	2.23	0.56
2:L:204:VAL:N	2:L:231:ARG:O	2.38	0.56
1:O:251:THR:HG23	1:O:254:ASP:H	1.69	0.56
2:P:131:GLY:HA3	2:P:156:PRO:HB3	1.87	0.56
2:P:184:LEU:HG	2:P:185:LEU:HD13	1.86	0.56
2:P:324:LEU:HD12	2:P:327:ILE:HB	1.87	0.56
1:Q:101:ASP:OD2	1:Q:104:GLY:N	2.32	0.56
1:Q:316:GLY:O	1:Q:320:ARG:HG2	2.05	0.56
1:A:58:LYS:HB3	1:A:65:SER:HB3	1.87	0.56
1:A:82:LEU:HD13	1:A:84:TRP:CH2	2.40	0.56
2:B:91:LEU:HD21	2:B:93:ILE:HD11	1.87	0.56
2:B:300:MET:HG3	2:B:304:MET:HE2	1.87	0.56
2:B:315:TRP:O	2:B:318:SER:OG	2.22	0.56
1:C:169:LYS:H	1:C:245:ASN:CG	2.13	0.56
2:D:119:THR:O	2:D:317:TYR:OH	2.10	0.56
2:D:176:HIS:HB3	2:D:231:ARG:HA	1.86	0.56
2:D:206:THR:HG23	2:D:229:ALA:HB3	1.87	0.56
1:E:244:VAL:N	1:E:305:VAL:HG22	2.16	0.56
1:E:357:GLU:O	1:K:191:ARG:N	2.35	0.56
2:F:104:GLY:HA2	2:F:107:LYS:HB2	1.87	0.56
2:H:10:ARG:CA	3:H:401:NAD:O1N	2.52	0.56
2:H:60:ALA:HB2	2:H:65:SER:HB3	1.86	0.56
2:H:103:ASP:HB2	2:H:107:LYS:HZ3	1.70	0.56
2:H:131:GLY:O	2:H:159:LYS:NZ	2.38	0.56
1:I:77:ARG:HA	3:I:401:NAD:N1A	2.19	0.56
2:J:84:TRP:HB2	2:J:111:ALA:HB3	1.87	0.56
1:K:2:LYS:HG2	1:K:89:ILE:HA	1.87	0.56
1:K:124:ASP:OD1	1:K:124:ASP:N	2.37	0.56
1:O:128:TYR:HA	1:O:133:ASN:ND2	2.18	0.56
2:P:47:ASP:OD1	2:P:48:SER:N	2.38	0.56
2:P:128:TYR:HD1	2:P:133:ASN:HB2	1.70	0.56
1:Q:18:CYS:O	1:Q:20:ARG:HG2	2.04	0.56
1:Q:94:GLU:HB3	1:Q:118:ILE:HG23	1.86	0.56
1:Q:194:ARG:NH2	1:Q:205:PRO:HD2	2.21	0.56
1:Q:326:ASP:HA	1:Q:329:ALA:HB3	1.88	0.56
2:R:47:ASP:CG	2:R:50:LEU:H	2.13	0.56
1:A:40:ALA:HA	1:A:43:LEU:HD12	1.87	0.56
1:A:150:THR:O	1:A:154:LEU:HG	2.05	0.56
1:A:292:ILE:HG13	1:A:309:ALA:HA	1.87	0.56
2:B:139:HIS:CD2	2:B:333:GLN:H	2.22	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:275:ASP:OD1	2:B:294:SER:N	2.38	0.56
1:C:221:LEU:HA	1:C:224:LYS:HD3	1.87	0.56
1:C:303:ASP:OD1	1:C:304:MET:N	2.35	0.56
2:D:80:VAL:HA	2:D:111:ALA:HB2	1.88	0.56
2:D:255:VAL:O	2:D:259:PHE:N	2.34	0.56
1:E:296:LEU:HB3	1:E:308:VAL:HG11	1.85	0.56
2:F:9:GLY:O	2:F:12:GLY:N	2.35	0.56
1:G:65:SER:OG	1:G:69:LYS:N	2.25	0.56
1:G:156:PRO:HB3	1:G:267:LEU:HG	1.87	0.56
1:G:157:PHE:O	1:G:160:VAL:N	2.38	0.56
1:G:168:VAL:HG23	1:G:247:GLU:N	2.21	0.56
1:G:241:ASP:HA	1:G:308:VAL:HA	1.86	0.56
2:H:89:ILE:N	2:H:112:GLY:O	2.38	0.56
2:H:157:PHE:HA	2:H:160:VAL:HB	1.88	0.56
2:H:206:THR:HG23	2:H:229:ALA:HB3	1.86	0.56
2:H:249:LYS:HA	2:H:302:ASP:HB3	1.88	0.56
1:I:46:TYR:C	2:L:197:ARG:HH12	2.14	0.56
1:I:134:GLU:HG2	1:I:135:LYS:HG3	1.88	0.56
1:K:57:VAL:HG12	1:K:64:PHE:HB2	1.87	0.56
1:K:82:LEU:HD13	1:K:84:TRP:CZ2	2.40	0.56
1:K:203:ILE:HG12	1:K:231:ARG:O	2.03	0.56
1:K:236:ASN:ND2	1:K:312:ASP:OD2	2.39	0.56
1:K:272:ASP:HB2	1:K:288:PHE:CG	2.40	0.56
2:L:13:ARG:HB3	2:L:44:LEU:HD12	1.85	0.56
1:O:72:LYS:HB3	1:O:72:LYS:HZ3	1.70	0.56
1:O:121:PRO:HG3	1:O:148:SER:H	1.71	0.56
1:O:179:THR:N	1:O:182:GLN:OE1	2.23	0.56
2:R:312:ASP:OD1	2:R:315:TRP:N	2.26	0.56
2:B:85:GLY:N	2:B:111:ALA:O	2.39	0.56
2:B:174:THR:OG1	2:B:311:TYR:OH	2.06	0.56
1:C:17:ARG:NH1	1:C:51:GLY:O	2.34	0.56
1:C:31:ASN:HD21	1:C:76:ASN:C	2.12	0.56
2:D:64:ILE:N	2:D:71:ILE:O	2.39	0.56
2:D:115:LYS:HD3	2:D:142:THR:HA	1.87	0.56
2:D:139:HIS:NE2	2:D:334:UNK:O	2.38	0.56
2:D:148:SER:HB2	3:D:401:NAD:H5N	1.87	0.56
1:E:44:LEU:HD23	1:E:44:LEU:O	2.06	0.56
2:H:192:ASP:CG	2:H:195:ARG:H	2.13	0.56
2:J:28:VAL:O	2:J:72:LYS:N	2.29	0.56
2:J:40:ALA:HA	2:J:43:LEU:HD12	1.88	0.56
2:J:45:LYS:HZ3	2:J:55:ALA:C	2.14	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:169:LYS:O	2:J:245:GLN:N	2.39	0.56
2:J:176:HIS:N	2:J:230:LEU:O	2.36	0.56
2:J:273:VAL:HG23	2:J:292:ILE:HB	1.86	0.56
1:K:121:PRO:HG3	1:K:148:SER:N	2.21	0.56
1:K:126:PRO:HD2	1:K:144:ILE:HG22	1.86	0.56
1:K:150:THR:O	1:K:154:LEU:N	2.34	0.56
1:K:178:TYR:HD2	1:K:233:PRO:HA	1.71	0.56
2:L:175:THR:OG1	2:L:239:VAL:N	2.32	0.56
2:L:186:ASP:OD2	2:L:197:ARG:NE	2.38	0.56
1:Q:17:ARG:CZ	1:Q:53:PHE:HB2	2.36	0.56
2:B:6:ASN:O	2:B:95:GLY:N	2.30	0.56
1:C:117:ILE:HA	1:C:144:ILE:O	2.05	0.56
1:C:267:LEU:HB3	1:C:270:VAL:HB	1.86	0.56
2:D:176:HIS:NE2	3:D:401:NAD:O7N	2.37	0.56
1:E:41:THR:O	1:E:45:LYS:HG2	2.06	0.56
1:E:84:TRP:O	1:E:88:GLY:N	2.37	0.56
2:F:324:LEU:HD12	2:F:327:ILE:HB	1.87	0.56
1:G:178:TYR:CD2	1:G:233:PRO:HA	2.40	0.56
1:G:206:THR:OG1	1:G:207:SER:N	2.37	0.56
2:H:190:HIS:HB3	2:H:196:ALA:HB2	1.87	0.56
1:K:137:TYR:CZ	1:K:328:VAL:HA	2.41	0.56
1:K:300:MET:N	1:K:304:MET:O	2.38	0.56
2:L:289:SER:OG	2:L:320:ARG:NH1	2.34	0.56
1:O:6:ASN:HD21	1:O:96:THR:HG23	1.70	0.56
1:O:20:ARG:HA	1:O:21:LYS:HZ3	1.71	0.56
1:O:291:THR:OG1	1:O:310:TRP:HB2	2.05	0.56
2:P:127:THR:O	2:P:133:ASN:ND2	2.37	0.56
2:P:172:MET:HB3	2:P:242:LEU:HB2	1.86	0.56
2:P:246:VAL:N	2:P:303:ASP:O	2.37	0.56
1:A:10:ARG:NH1	2:D:186:ASP:OD1	2.39	0.56
2:B:105:ALA:HB1	2:B:116:VAL:HG11	1.88	0.56
2:B:174:THR:HA	2:B:240:VAL:HA	1.87	0.56
1:C:28:VAL:HA	1:C:71:ILE:HG13	1.88	0.56
1:C:101:ASP:OD2	1:C:103:PRO:HB2	2.05	0.56
1:E:154:LEU:O	1:E:158:VAL:HG13	2.05	0.56
2:F:42:HIS:HA	2:F:46:TYR:CD2	2.41	0.56
2:F:63:ALA:HA	2:F:71:ILE:C	2.31	0.56
2:H:30:ILE:O	2:H:73:VAL:HA	2.06	0.56
2:H:30:ILE:HB	2:H:73:VAL:HB	1.86	0.56
2:H:137:TYR:HE2	2:H:331:LYS:HG3	1.71	0.56
2:J:20:ARG:HG3	2:J:322:VAL:HG11	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:179:THR:H	2:J:182:GLN:CD	2.12	0.56
1:K:178:TYR:CD2	1:K:233:PRO:HA	2.41	0.56
1:K:303:ASP:OD1	1:K:304:MET:N	2.38	0.56
2:L:67:ASP:OD1	2:L:67:ASP:N	2.37	0.56
2:L:80:VAL:HA	2:L:111:ALA:HB2	1.88	0.56
1:O:58:LYS:HZ3	1:O:60:ILE:HD13	1.71	0.56
2:P:165:PHE:O	2:P:247:SER:OG	2.23	0.56
2:P:181:ASP:OD1	2:P:195:ARG:NH1	2.39	0.56
1:Q:63:THR:HA	1:Q:72:LYS:HA	1.87	0.56
2:R:42:HIS:O	2:R:46:TYR:N	2.34	0.56
1:A:94:GLU:HG2	1:A:97:GLY:H	1.71	0.56
1:A:202:ASN:ND2	1:C:281:VAL:H	2.04	0.56
2:B:84:TRP:HB2	2:B:111:ALA:HB3	1.88	0.56
2:B:194:ARG:HD3	2:B:205:PRO:HD2	1.88	0.56
2:D:172:MET:HA	2:D:242:LEU:HA	1.88	0.56
1:E:356:GLU:HA	1:K:183:ARG:HH22	1.71	0.56
2:F:120:ALA:O	2:F:145:SER:OG	2.19	0.56
1:G:96:THR:O	3:G:401:NAD:H8A	2.06	0.56
1:G:205:PRO:HG3	1:G:230:LEU:HA	1.86	0.56
2:H:85:GLY:N	2:H:111:ALA:O	2.38	0.56
2:H:326:ASP:O	2:H:330:ASN:N	2.35	0.56
1:I:11:ILE:HD13	3:I:401:NAD:N7N	2.21	0.56
2:L:9:GLY:O	2:L:12:GLY:N	2.32	0.56
2:L:157:PHE:O	2:L:161:LEU:N	2.24	0.56
2:L:168:ILE:N	2:L:245:GLN:O	2.39	0.56
1:O:149:CYS:HB3	1:O:317:TYR:HD1	1.71	0.56
2:P:40:ALA:HA	2:P:43:LEU:HD12	1.86	0.56
2:P:119:THR:O	2:P:317:TYR:OH	2.21	0.56
1:Q:212:LYS:O	1:Q:216:LEU:N	2.23	0.56
1:Q:214:VAL:O	1:Q:218:LEU:N	2.30	0.56
1:A:166:GLY:HA3	1:A:247:GLU:HB2	1.87	0.56
2:B:25:LEU:HD22	2:B:25:LEU:H	1.71	0.56
2:B:130:VAL:HG21	2:B:320:ARG:HG3	1.88	0.56
2:B:203:ILE:HD11	2:B:230:LEU:HB3	1.88	0.56
1:C:158:VAL:HA	1:C:161:LEU:HB3	1.87	0.56
1:C:172:MET:SD	1:C:173:THR:N	2.79	0.56
2:D:194:ARG:NH1	2:D:205:PRO:HD2	2.20	0.56
1:E:203:ILE:HD11	1:E:230:LEU:HD12	1.88	0.56
1:E:253:GLU:H	1:E:253:GLU:CD	2.13	0.56
2:F:13:ARG:H	2:F:13:ARG:NH1	2.01	0.56
2:F:170:GLY:HA2	2:F:244:VAL:HA	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:4:ALA:HB3	2:H:84:TRP:CZ3	2.39	0.56
1:I:264:ALA:O	1:I:268:LYS:NZ	2.39	0.56
2:J:139:HIS:CD2	2:J:333:GLN:H	2.23	0.56
1:K:316:GLY:HA2	1:K:319:GLN:HG2	1.86	0.56
2:L:57:VAL:HA	2:L:66:VAL:HG13	1.87	0.56
2:L:148:SER:HB2	3:L:401:NAD:H5N	1.88	0.56
1:O:105:ALA:O	1:O:109:ILE:HG12	2.06	0.56
2:P:146:ASN:HD22	2:P:321:VAL:HG13	1.70	0.56
2:P:177:SER:OG	2:P:234:THR:O	2.15	0.56
2:R:137:TYR:HE2	2:R:331:LYS:HG3	1.71	0.56
1:A:11:ILE:HB	3:A:401:NAD:H72N	1.70	0.56
2:B:6:ASN:HD22	2:B:108:HIS:HE1	1.54	0.56
2:B:30:ILE:O	2:B:73:VAL:HA	2.04	0.56
2:B:78:ASN:ND2	2:B:80:VAL:HG22	2.20	0.56
2:B:149:CYS:SG	2:B:150:THR:N	2.79	0.56
1:C:329:ALA:O	1:C:332:TRP:HB2	2.06	0.56
2:D:193:LEU:HD12	2:D:193:LEU:H	1.71	0.56
1:E:179:THR:OG1	1:E:181:ASP:N	2.39	0.56
2:F:177:SER:OG	2:F:178:TYR:N	2.38	0.56
1:G:294:SER:O	1:G:297:THR:OG1	2.18	0.56
2:H:105:ALA:HB1	2:H:116:VAL:HG21	1.88	0.56
1:I:34:GLY:O	1:I:38:LYS:NZ	2.39	0.56
1:I:60:ILE:HB	1:I:64:PHE:HA	1.88	0.56
2:J:78:ASN:HD21	2:J:80:VAL:HG22	1.70	0.56
2:J:173:THR:OG1	2:L:306:LYS:NZ	2.26	0.56
1:K:128:TYR:HA	1:K:133:ASN:ND2	2.20	0.56
1:K:164:GLU:HG3	1:K:165:LEU:HD13	1.88	0.56
1:K:166:GLY:C	1:K:247:GLU:HB3	2.31	0.56
1:K:186:ASP:OD1	1:K:197:ARG:NE	2.38	0.56
1:K:240:VAL:O	1:K:309:ALA:N	2.38	0.56
2:L:318:SER:HA	2:L:321:VAL:HB	1.86	0.56
1:O:13:ARG:CG	1:O:44:LEU:HD13	2.35	0.56
1:O:37:VAL:HG21	1:O:61:ASN:HA	1.87	0.56
1:O:60(A):ASP:C	1:O:62:GLU:N	2.64	0.56
1:O:255:VAL:O	1:O:259:PHE:N	2.30	0.56
2:R:94:GLU:HG3	2:R:99:PHE:CD2	2.41	0.56
2:R:181:ASP:OD2	2:R:195:ARG:NE	2.39	0.56
2:B:0:LYS:NZ	2:B:329:ALA:HA	2.21	0.56
1:C:168:VAL:HB	1:C:245:ASN:CG	2.30	0.56
1:C:291:THR:HB	1:C:310:TRP:HB2	1.87	0.56
1:E:85:ALA:HB2	1:E:112:GLY:HA3	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:193:LEU:O	2:H:197:ARG:N	2.38	0.56
1:I:293:ASP:O	1:I:296:LEU:HB2	2.06	0.56
1:K:312:ASP:CG	1:K:316:GLY:H	2.14	0.56
1:O:191:ARG:N	2:R:39:GLN:OE1	2.40	0.55
1:Q:92:VAL:HB	1:Q:117:ILE:H	1.69	0.55
2:R:58:LYS:O	2:R:65:SER:HB3	2.06	0.55
2:R:179:THR:H	2:R:182:GLN:NE2	2.03	0.55
2:B:186:ASP:CG	2:B:198:ALA:H	2.13	0.55
1:C:4:ALA:HB3	1:C:92:VAL:HG22	1.88	0.55
1:C:346:GLU:HA	1:C:349:CYS:HB3	1.87	0.55
2:D:236:ASN:O	2:D:313:ASN:ND2	2.30	0.55
1:E:272:ASP:OD1	1:E:273:VAL:N	2.39	0.55
2:H:186:ASP:HB3	2:H:198:ALA:H	1.70	0.55
1:I:240:VAL:HG22	1:I:309:ALA:HB3	1.88	0.55
2:J:15:PHE:CZ	2:J:322:VAL:HA	2.41	0.55
2:J:25:LEU:HD22	2:J:25:LEU:H	1.71	0.55
2:J:85:GLY:N	2:J:111:ALA:O	2.39	0.55
2:L:47:ASP:CG	2:L:50:LEU:H	2.13	0.55
1:O:60:ILE:O	1:O:63:THR:N	2.40	0.55
2:P:162:ASP:OD1	2:P:167:ILE:N	2.30	0.55
1:Q:160:VAL:O	1:Q:163:GLU:HG2	2.06	0.55
2:B:191:ARG:NH1	2:B:191:ARG:H	2.04	0.55
1:C:100:VAL:HB	1:C:122(A):LYS:H	1.71	0.55
1:C:172:MET:HA	1:C:242:LEU:HA	1.87	0.55
2:D:211:ALA:HB1	2:D:227:GLY:H	1.71	0.55
2:D:271:LEU:HD21	2:D:290:SER:HB3	1.86	0.55
1:E:92:VAL:N	1:E:116:VAL:HG22	2.21	0.55
2:F:246:VAL:N	2:F:303:ASP:O	2.36	0.55
2:F:278:LEU:HD23	2:F:282:ASP:HB3	1.88	0.55
1:G:124:ASP:O	1:G:125:ILE:C	2.48	0.55
1:G:134:GLU:H	1:G:134:GLU:CD	2.14	0.55
1:I:141:ALA:O	1:I:144:ILE:HG23	2.06	0.55
1:I:239:VAL:HB	1:I:310:TRP:CE2	2.41	0.55
2:J:147:ALA:O	2:J:317:TYR:OH	2.14	0.55
1:K:291:THR:O	1:K:310:TRP:N	2.26	0.55
2:L:32:ASP:OD2	3:L:401:NAD:O3B	2.19	0.55
2:L:166:GLY:O	2:L:247:SER:N	2.28	0.55
3:O:401:NAD:H2N	3:O:401:NAD:O1N	2.05	0.55
2:P:147:ALA:O	2:P:317:TYR:OH	2.25	0.55
2:B:265:ASN:C	2:B:268:LYS:HZ2	2.14	0.55
2:B:267:LEU:HB3	2:B:271:LEU:H	1.71	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:58:LYS:NZ	1:C:59:ILE:O	2.39	0.55
1:C:96:THR:HG22	3:C:401:NAD:C4A	2.35	0.55
1:C:183:ARG:HG2	1:C:187:ALA:N	2.21	0.55
2:D:138:THR:HA	2:D:331:LYS:NZ	2.22	0.55
2:F:148:SER:O	2:F:152:ASN:N	2.30	0.55
1:G:10:ARG:N	3:G:401:NAD:O2N	2.39	0.55
2:H:11:ILE:O	2:H:15:PHE:N	2.31	0.55
1:O:213:ALA:O	1:O:216:LEU:HB2	2.06	0.55
2:P:45:LYS:NZ	2:P:55:ALA:O	2.31	0.55
2:P:157:PHE:O	2:P:161:LEU:N	2.28	0.55
2:P:177:SER:OG	2:P:178:TYR:N	2.40	0.55
2:R:28:VAL:HG22	2:R:69:LYS:HZ1	1.72	0.55
2:R:100:VAL:HG22	2:R:122(A):LYS:N	2.20	0.55
2:R:206:THR:HG23	2:R:229:ALA:HB3	1.87	0.55
2:B:263:ALA:HA	2:B:267:LEU:HB2	1.88	0.55
2:B:278:LEU:O	2:D:194:ARG:NH1	2.31	0.55
2:F:190:HIS:HD2	2:F:191:ARG:NH2	2.05	0.55
1:G:45:LYS:HE2	1:G:56:ASP:HA	1.88	0.55
2:H:169:LYS:NZ	2:H:245:GLN:OE1	2.32	0.55
1:I:90:ASP:HA	1:I:114:LYS:HE2	1.89	0.55
2:J:202:ASN:ND2	2:L:281:ILE:HG22	2.22	0.55
1:O:169:LYS:HE2	1:Q:301:GLY:HA3	1.88	0.55
1:Q:178:TYR:CD2	1:Q:233:PRO:HA	2.42	0.55
2:R:17:ARG:CZ	2:R:53:PHE:HA	2.36	0.55
1:A:12:GLY:O	1:A:16:LEU:N	2.29	0.55
1:A:104:GLY:HA2	1:A:107:LYS:HD2	1.89	0.55
1:A:221:LEU:HD22	1:A:224:LYS:HE2	1.88	0.55
1:A:256:ASN:ND2	1:A:257:ASN:OD1	2.40	0.55
1:A:358:CYS:O	1:G:191:ARG:NH2	2.39	0.55
2:B:165:PHE:HE2	2:B:250:THR:HB	1.70	0.55
2:B:192:ASP:HB3	2:B:195:ARG:HB2	1.89	0.55
1:C:186:ASP:HB3	1:C:197:ARG:HA	1.88	0.55
1:C:243:VAL:HA	1:C:306:LYS:HA	1.87	0.55
1:E:240:VAL:N	1:E:309:ALA:O	2.24	0.55
2:F:6:ASN:HB2	2:F:84:TRP:HH2	1.71	0.55
2:F:205:PRO:HA	2:F:230:LEU:HD23	1.88	0.55
2:F:267:LEU:HB3	2:F:271:LEU:HB2	1.88	0.55
1:G:11:ILE:H	3:G:401:NAD:PN	2.30	0.55
1:G:139:HIS:C	1:G:140:VAL:H	2.15	0.55
2:H:47:ASP:OD2	2:H:50:LEU:N	2.19	0.55
2:H:94:GLU:HG3	2:H:99:PHE:CD2	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:237:VAL:HG22	2:H:312:ASP:HA	1.88	0.55
1:I:191:ARG:NE	1:I:192:ASP:H	2.03	0.55
1:I:257:ASN:HA	1:I:260:ARG:HB2	1.88	0.55
1:I:282:ASP:OD2	1:K:197:ARG:NH2	2.40	0.55
1:I:299:VAL:HG13	1:I:305:VAL:HG12	1.88	0.55
2:J:174:THR:HA	2:J:240:VAL:HA	1.88	0.55
2:J:250:THR:N	2:J:302:ASP:HB3	2.16	0.55
1:K:150:THR:OG1	1:K:151:THR:N	2.40	0.55
2:L:179:THR:N	2:L:182:GLN:OE1	2.35	0.55
2:L:211:ALA:HB1	2:L:227:GLY:H	1.72	0.55
1:O:6:ASN:N	1:O:93:ILE:O	2.39	0.55
2:P:28:VAL:C	2:P:71:ILE:HG23	2.32	0.55
2:P:190:HIS:HD2	2:P:191:ARG:NH2	2.05	0.55
1:Q:0:LYS:NZ	1:Q:22:ASP:O	2.40	0.55
1:Q:11:ILE:N	3:Q:401:NAD:O2N	2.33	0.55
1:Q:124:ASP:HB3	1:I:216:LEU:HD11	1.89	0.55
1:Q:134:GLU:CD	1:Q:134:GLU:H	2.15	0.55
1:C:4:ALA:HA	1:C:27:VAL:HG23	1.87	0.55
1:C:255:VAL:O	1:C:259:PHE:N	2.37	0.55
2:D:94:GLU:OE2	2:D:99:PHE:N	2.27	0.55
2:D:312:ASP:CG	2:D:316:GLY:H	2.15	0.55
2:F:270:ILE:O	2:F:289:SER:OG	2.24	0.55
1:G:132:VAL:HG22	1:G:159:LYS:HD3	1.87	0.55
2:H:40:ALA:O	2:H:44:LEU:N	2.31	0.55
2:H:222:LYS:H	2:H:224:LYS:NZ	2.04	0.55
1:I:21:LYS:NZ	1:I:22:ASP:OD1	2.39	0.55
2:J:182:GLN:N	2:J:182:GLN:HE21	2.05	0.55
2:J:300:MET:HG3	2:J:304:MET:HE2	1.89	0.55
2:L:47:ASP:N	2:L:51:GLY:O	2.40	0.55
1:O:19:GLY:O	1:O:20:ARG:C	2.49	0.55
1:O:179:THR:H	1:O:182:GLN:CD	2.11	0.55
1:O:253:GLU:OE2	1:O:260:ARG:NH1	2.36	0.55
2:P:160:VAL:O	2:P:164:LYS:N	2.34	0.55
1:A:29:VAL:HG21	1:A:87:LEU:HD13	1.87	0.55
1:A:29:VAL:HG22	1:A:72:LYS:HB2	1.89	0.55
1:A:242:LEU:O	1:A:307:VAL:N	2.34	0.55
2:B:19:GLY:O	2:B:21:LYS:NZ	2.39	0.55
2:B:176:HIS:N	2:B:230:LEU:O	2.38	0.55
1:C:91:ILE:HD13	1:C:328:VAL:HG11	1.88	0.55
2:D:206:THR:OG1	2:D:207:SER:N	2.39	0.55
1:E:252:ALA:O	1:E:256:ASN:N	2.32	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:211:ALA:O	2:F:226:ASN:ND2	2.40	0.55
2:F:263:ALA:HA	2:F:267:LEU:HB2	1.88	0.55
2:F:281:ILE:H	2:H:202:ASN:ND2	2.04	0.55
1:G:237:VAL:HG23	1:G:280:SER:HB3	1.88	0.55
2:H:10:ARG:CG	3:H:401:NAD:O1N	2.54	0.55
1:I:128:TYR:N	1:I:145:SER:O	2.39	0.55
2:J:192:ASP:O	2:J:196:ALA:N	2.34	0.55
2:J:279:VAL:O	2:J:283:PHE:HD1	1.89	0.55
1:K:90:ASP:N	1:K:90:ASP:OD1	2.39	0.55
2:L:148:SER:O	2:L:152:ASN:N	2.25	0.55
2:L:160:VAL:O	2:L:164:LYS:N	2.40	0.55
1:O:16:LEU:O	1:O:18(B):HIS:N	2.30	0.55
1:O:43:LEU:HD22	2:R:186:ASP:HB2	1.88	0.55
1:O:184:LEU:HG	1:O:185:LEU:HG	1.87	0.55
1:Q:79:PRO:HA	1:Q:82:LEU:HG	1.87	0.55
1:Q:80:LEU:HG	1:Q:107:LYS:HD2	1.88	0.55
1:Q:106:GLY:O	1:Q:110:GLN:NE2	2.40	0.55
2:R:30:ILE:HB	2:R:73:VAL:HB	1.87	0.55
2:R:222:LYS:H	2:R:224:LYS:NZ	2.04	0.55
1:A:15:PHE:O	1:A:18(A):TRP:N	2.28	0.55
1:A:244:VAL:HB	1:A:305:VAL:HG22	1.89	0.55
2:B:60:ALA:H	2:B:64:ILE:HA	1.71	0.55
2:B:106:GLY:O	2:B:110:GLN:N	2.25	0.55
2:B:253:GLU:CD	2:B:256:ASN:HB2	2.32	0.55
1:E:92:VAL:HG12	1:E:93:ILE:H	1.71	0.55
2:F:193:LEU:HD22	2:H:277:PRO:HG2	1.89	0.55
1:G:39:SER:HA	1:G:42:HIS:HD2	1.72	0.55
2:H:149:CYS:HB3	2:H:317:TYR:CG	2.42	0.55
2:J:36:GLY:HA3	2:J:38:LYS:HZ1	1.72	0.55
2:J:94:GLU:OE2	2:J:96:THR:OG1	2.18	0.55
1:K:160:VAL:O	1:K:164:GLU:N	2.22	0.55
1:K:172:MET:HB2	1:K:242:LEU:HB2	1.89	0.55
2:L:174:THR:O	2:L:230:LEU:HB2	2.06	0.55
1:O:15:PHE:O	1:O:18(A):TRP:N	2.40	0.55
1:O:160:VAL:HG11	1:O:262:ALA:HB2	1.88	0.55
2:P:30:ILE:O	2:P:73:VAL:HA	2.07	0.55
2:P:202:ASN:HD21	2:R:281:ILE:H	1.53	0.55
2:P:270:ILE:O	2:P:289:SER:OG	2.25	0.55
1:Q:14:ASN:HA	1:Q:17:ARG:HB2	1.89	0.55
1:Q:115:LYS:HA	1:Q:142:ASN:HB3	1.89	0.55
1:A:2:LYS:N	1:A:90:ASP:OD2	2.33	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:91:ILE:HG12	1:C:115:LYS:H	1.71	0.55
1:C:101:ASP:OD2	1:C:104:GLY:N	2.38	0.55
2:F:119:THR:O	2:F:317:TYR:OH	2.20	0.55
2:F:293:ASP:OD1	2:F:296:LEU:N	2.30	0.55
1:G:256:ASN:O	1:G:260:ARG:NE	2.34	0.55
1:G:292:ILE:HG13	1:G:309:ALA:HA	1.87	0.55
2:H:45:LYS:NZ	2:H:53:PHE:O	2.31	0.55
2:H:47:ASP:OD1	2:H:49:ILE:N	2.38	0.55
2:H:179:THR:H	2:H:182:GLN:NE2	2.05	0.55
2:H:256:ASN:O	2:H:260:ARG:N	2.33	0.55
1:I:178:TYR:CD2	1:I:233:PRO:HA	2.41	0.55
2:J:149:CYS:HA	2:J:152:ASN:HB3	1.88	0.55
2:J:250:THR:OG1	2:J:251:PHE:N	2.39	0.55
1:K:13:ARG:HA	1:K:16:LEU:HB2	1.87	0.55
1:O:47:ASP:OD1	1:O:48:SER:N	2.40	0.55
1:O:79:PRO:HB3	1:O:108:HIS:CE1	2.42	0.55
1:O:84:TRP:O	1:O:88:GLY:N	2.40	0.55
1:Q:120:ALA:N	1:Q:146:ASN:O	2.40	0.55
1:Q:156:PRO:O	1:Q:160:VAL:N	2.39	0.55
2:R:62:SER:HA	2:R:73:VAL:O	2.07	0.55
2:R:224:LYS:HG3	2:R:225:LEU:HD23	1.89	0.55
1:A:38:LYS:HA	1:A:41:THR:HB	1.88	0.55
1:A:156:PRO:HB2	1:A:271:LEU:HD11	1.88	0.55
1:A:242:LEU:N	1:A:307:VAL:O	2.32	0.55
1:A:272:ASP:N	1:A:290:SER:O	2.40	0.55
1:C:270:VAL:HG13	1:C:320:ARG:HD2	1.88	0.55
2:F:116:VAL:N	2:F:142:THR:O	2.25	0.55
1:G:10:ARG:NE	1:G:14:ASN:OD1	2.28	0.55
1:I:79:PRO:HB3	1:I:108:HIS:CE1	2.42	0.55
1:I:278:LEU:HB2	1:I:283:PHE:CE1	2.42	0.55
2:J:1:LEU:N	2:J:24:PRO:O	2.35	0.55
2:J:194:ARG:HD3	2:J:205:PRO:HD2	1.88	0.55
2:L:312:ASP:CG	2:L:316:GLY:H	2.15	0.55
1:O:160:VAL:O	1:O:163:GLU:HG2	2.07	0.54
1:O:190:HIS:CD2	1:O:195:ARG:HB2	2.42	0.54
1:O:358:CYS:HA	1:C:190:HIS:ND1	2.23	0.54
1:Q:215:SER:HB3	1:Q:222:LYS:HA	1.89	0.54
1:Q:249:GLY:HA3	1:Q:302:GLY:HA3	1.88	0.54
2:R:76:ASP:OD1	2:R:78:ASN:N	2.39	0.54
1:C:238:SER:HB3	1:C:311:TYR:CZ	2.42	0.54
2:D:168:ILE:N	2:D:245:GLN:O	2.40	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:55:ALA:HB1	1:E:67:ASP:OD2	2.06	0.54
1:E:242:LEU:N	1:E:307:VAL:O	2.29	0.54
1:E:280:SER:OG	1:G:203:ILE:N	2.40	0.54
2:F:127:THR:O	2:F:133:ASN:ND2	2.41	0.54
2:H:15:PHE:HA	2:H:18:CYS:HB2	1.89	0.54
2:J:197:ARG:HH21	1:K:48:SER:HB3	1.72	0.54
2:L:64:ILE:N	2:L:71:ILE:O	2.40	0.54
2:P:64:ILE:N	2:P:71:ILE:O	2.39	0.54
2:R:249:LYS:HA	2:R:302:ASP:HB3	1.89	0.54
2:B:15:PHE:CZ	2:B:322:VAL:HA	2.42	0.54
2:D:54:ASP:OD1	2:D:54:ASP:N	2.28	0.54
1:E:46:TYR:HA	1:E:52:THR:HA	1.89	0.54
1:E:176:HIS:N	1:E:230:LEU:O	2.39	0.54
2:F:59:THR:HB	2:F:64:ILE:HG23	1.89	0.54
1:G:57:VAL:HA	1:G:66:ILE:HG23	1.89	0.54
1:G:151:THR:OG1	1:G:152:ASN:N	2.39	0.54
1:I:179:THR:H	1:I:182:GLN:NE2	2.05	0.54
2:J:105:ALA:HB1	2:J:116:VAL:HG11	1.89	0.54
1:K:32:ASP:OD1	1:K:77:ARG:NH1	2.40	0.54
1:K:236:ASN:HA	1:K:313:ASN:HD21	1.71	0.54
1:K:256:ASN:OD1	1:K:257:ASN:ND2	2.41	0.54
2:L:302:ASP:OD1	2:L:302:ASP:N	2.41	0.54
1:O:190:HIS:N	2:R:39:GLN:OE1	2.40	0.54
2:P:17:ARG:HG2	2:P:53:PHE:CE2	2.42	0.54
1:Q:6:ASN:ND2	1:Q:96:THR:H	2.05	0.54
1:Q:211:ALA:HB3	1:Q:212:LYS:HZ1	1.72	0.54
2:R:172:MET:HA	2:R:242:LEU:HA	1.89	0.54
2:R:276:GLU:OE1	2:R:276:GLU:N	2.33	0.54
1:C:32:ASP:OD2	3:C:401:NAD:O2B	2.26	0.54
1:E:37:VAL:HG12	1:E:59:ILE:CB	2.36	0.54
2:F:184:LEU:HG	2:F:185:LEU:HD13	1.87	0.54
2:H:17:ARG:CZ	2:H:53:PHE:HA	2.37	0.54
2:H:203:ILE:HG23	2:H:205:PRO:HD3	1.87	0.54
1:I:76:ASN:OD1	1:I:77:ARG:N	2.40	0.54
2:J:118:ILE:O	2:J:145:SER:OG	2.22	0.54
1:K:211:ALA:HB1	1:K:225:LEU:HG	1.89	0.54
1:K:345:LEU:O	1:K:348:PHE:N	2.39	0.54
2:L:138:THR:HA	2:L:331:LYS:NZ	2.23	0.54
2:L:204:VAL:O	2:L:230:LEU:HA	2.07	0.54
2:L:237:VAL:HG22	2:L:312:ASP:HA	1.88	0.54
1:O:281:VAL:O	1:O:284:ARG:NE	2.41	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:182:GLN:NE2	1:Q:183:ARG:O	2.35	0.54
2:R:83:PRO:HB2	2:R:86:ASP:HB2	1.88	0.54
1:A:79:PRO:HB3	1:A:108:HIS:CE1	2.42	0.54
1:A:169:LYS:HG3	1:C:301:GLY:HA3	1.88	0.54
2:B:7:GLY:O	2:B:9:GLY:N	2.38	0.54
2:B:37:VAL:HG23	2:B:38:LYS:H	1.72	0.54
2:B:148:SER:O	2:B:152:ASN:N	2.21	0.54
1:C:178:TYR:CD2	1:C:233:PRO:HA	2.43	0.54
1:C:256:ASN:HB2	1:C:260:ARG:HH21	1.71	0.54
2:D:5:ILE:HG23	2:D:93:ILE:HB	1.89	0.54
2:F:5:ILE:HB	2:F:30:ILE:HG23	1.88	0.54
2:F:85:GLY:N	2:F:112:GLY:HA3	2.23	0.54
2:F:139:HIS:CD2	2:F:333:GLN:HB2	2.42	0.54
2:F:147:ALA:O	2:F:317:TYR:OH	2.25	0.54
2:F:172:MET:HB3	2:F:242:LEU:HB2	1.87	0.54
1:G:116:VAL:HG21	1:G:143:ILE:HA	1.90	0.54
2:H:94:GLU:CD	2:H:96:THR:HG1	2.15	0.54
1:I:203:ILE:HD11	1:I:230:LEU:HB3	1.89	0.54
2:J:236:ASN:OD1	2:J:284:ARG:NH1	2.40	0.54
1:K:171:THR:C	1:K:242:LEU:HD12	2.33	0.54
1:O:6:ASN:O	1:O:95:GLY:N	2.40	0.54
1:O:256:ASN:HD22	1:O:260:ARG:NH1	2.06	0.54
1:O:271:LEU:HB2	1:O:290:SER:HB2	1.88	0.54
1:O:278:LEU:O	1:Q:194:ARG:NH1	2.27	0.54
2:P:85:GLY:N	2:P:112:GLY:HA3	2.22	0.54
2:P:320:ARG:NE	2:P:323:ASP:OD2	2.37	0.54
2:R:45:LYS:NZ	2:R:53:PHE:O	2.30	0.54
1:A:29:VAL:HA	1:A:72:LYS:O	2.06	0.54
1:A:178:TYR:HD2	1:A:233:PRO:HA	1.72	0.54
1:A:203:ILE:HG23	1:A:205:PRO:HD3	1.89	0.54
1:A:257:ASN:O	1:A:261:LYS:N	2.28	0.54
1:A:323:ASP:OD1	1:A:323:ASP:N	2.40	0.54
1:C:291:THR:O	1:C:310:TRP:N	2.24	0.54
2:D:14:ASN:OD1	2:D:315:TRP:HA	2.07	0.54
1:E:57:VAL:HG22	1:E:66:ILE:HG12	1.88	0.54
1:G:176:HIS:HB3	1:G:231:ARG:HA	1.88	0.54
1:G:213:ALA:HA	1:G:216:LEU:HB2	1.89	0.54
2:H:332:TRP:NE1	2:H:334:UNK:OXT	2.41	0.54
2:J:42:HIS:O	2:J:46:TYR:N	2.37	0.54
2:J:202:ASN:HD22	2:L:279:VAL:HB	1.72	0.54
1:K:79:PRO:HB3	1:K:108:HIS:CD2	2.43	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:255:VAL:HB	2:L:259:PHE:CZ	2.42	0.54
1:O:255:VAL:HG23	1:O:256:ASN:H	1.72	0.54
1:Q:176:HIS:O	1:Q:232:VAL:N	2.41	0.54
2:R:96:THR:HG22	3:R:401:NAD:C4A	2.37	0.54
2:R:99:PHE:CD1	2:R:104:GLY:HA3	2.43	0.54
2:R:127:THR:HG21	2:R:216:LEU:HB3	1.89	0.54
2:R:131:GLY:O	2:R:159:LYS:NZ	2.38	0.54
2:R:218:LEU:HD13	2:R:221:LEU:HD22	1.89	0.54
2:R:296:LEU:HB2	2:R:308:ILE:HG13	1.89	0.54
1:A:261:LYS:O	1:A:265:GLY:N	2.40	0.54
1:C:241:ASP:OD2	1:C:306:LYS:HG2	2.08	0.54
1:C:246:ILE:HG22	1:C:248:LYS:HB2	1.88	0.54
2:D:57:VAL:HA	2:D:66:VAL:HG13	1.90	0.54
2:D:160:VAL:O	2:D:164:LYS:N	2.41	0.54
1:E:176:HIS:C	1:E:231:ARG:HA	2.33	0.54
3:E:401:NAD:O1N	3:E:401:NAD:H2N	2.06	0.54
2:F:17:ARG:HG2	2:F:53:PHE:CE2	2.43	0.54
2:H:47:ASP:OD1	2:H:48:SER:N	2.41	0.54
2:H:62:SER:HA	2:H:73:VAL:O	2.07	0.54
2:H:90:ASP:OD1	2:H:90:ASP:N	2.39	0.54
2:H:138:THR:OG1	2:H:141:ASP:OD1	2.14	0.54
2:H:203:ILE:HD11	2:H:230:LEU:HD13	1.90	0.54
1:I:45:LYS:O	1:I:53:PHE:N	2.41	0.54
2:J:149:CYS:SG	2:J:150:THR:N	2.80	0.54
1:K:9:GLY:O	1:K:12:GLY:N	2.34	0.54
1:K:17:ARG:O	1:K:19:GLY:N	2.34	0.54
1:K:328:VAL:O	1:K:332:TRP:N	2.40	0.54
2:L:42:HIS:HD2	2:L:46:TYR:HE2	1.56	0.54
2:P:211:ALA:O	2:P:226:ASN:ND2	2.39	0.54
2:P:236:ASN:ND2	2:P:237:VAL:H	2.06	0.54
2:P:263:ALA:HA	2:P:267:LEU:HB2	1.90	0.54
1:Q:38:LYS:C	1:Q:42:HIS:CE1	2.86	0.54
1:Q:330:ASN:OD1	1:Q:331:LYS:N	2.38	0.54
2:R:105:ALA:HB1	2:R:116:VAL:HG21	1.90	0.54
2:R:237:VAL:HG22	2:R:312:ASP:HA	1.90	0.54
1:A:28:VAL:O	1:A:72:LYS:N	2.41	0.54
2:B:149:CYS:HA	2:B:152:ASN:HB3	1.88	0.54
1:C:318:SER:HA	1:C:321:VAL:HG22	1.89	0.54
2:D:64:ILE:H	2:D:71:ILE:H	1.56	0.54
1:E:235:PRO:HG2	1:E:284:ARG:NH2	2.23	0.54
2:F:302:ASP:OD1	2:F:302:ASP:N	2.40	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:218:LEU:HD13	2:H:221:LEU:HD22	1.90	0.54
2:H:244:VAL:O	2:H:305:VAL:N	2.39	0.54
2:H:272:SER:O	2:H:292:ILE:HG12	2.07	0.54
1:I:47:ASP:CG	1:I:50:LEU:H	2.15	0.54
2:J:13:ARG:HB3	2:J:44:LEU:HA	1.89	0.54
2:J:174:THR:OG1	2:J:311:TYR:OH	2.03	0.54
2:J:265:ASN:C	2:J:268:LYS:HZ1	2.15	0.54
1:K:45:LYS:HB3	1:K:46:TYR:CE2	2.42	0.54
2:P:65:SER:HA	2:P:70:VAL:HA	1.90	0.54
2:P:84:TRP:CD1	2:P:111:ALA:HB3	2.43	0.54
2:P:317:TYR:O	2:P:321:VAL:HG23	2.08	0.54
2:R:149:CYS:HB3	2:R:317:TYR:CG	2.43	0.54
2:R:272:SER:O	2:R:292:ILE:HG12	2.07	0.54
1:A:49:ILE:HA	1:A:284:ARG:CZ	2.38	0.54
1:A:133:ASN:HA	1:A:136:ASP:CG	2.33	0.54
1:A:133:ASN:O	1:A:137:TYR:N	2.41	0.54
1:A:157:PHE:O	1:A:161:LEU:N	2.39	0.54
1:C:12:GLY:O	1:C:16:LEU:HG	2.07	0.54
1:C:165:LEU:HG	1:C:246:ILE:HG21	1.88	0.54
2:D:78:ASN:ND2	2:D:81:ASN:OD1	2.35	0.54
2:D:276:GLU:H	2:D:276:GLU:CD	2.15	0.54
1:E:169:LYS:HB2	1:G:304:MET:SD	2.48	0.54
1:E:279:VAL:HG21	1:G:197:ARG:HH21	1.73	0.54
2:F:2:LYS:O	2:F:90:ASP:N	2.26	0.54
2:F:78:ASN:O	2:F:82:LEU:HG	2.08	0.54
2:J:193:LEU:HD13	2:L:277:PRO:HG3	1.88	0.54
1:K:0:LYS:N	1:K:24:PRO:O	2.39	0.54
2:L:14:ASN:OD1	2:L:315:TRP:HA	2.08	0.54
2:L:186:ASP:CG	2:L:198:ALA:H	2.16	0.54
1:Q:58:LYS:HD3	1:Q:59:ILE:H	1.73	0.54
2:R:87:MET:N	2:R:87:MET:SD	2.81	0.54
2:R:105:ALA:O	2:R:109:LEU:N	2.38	0.54
1:A:213:ALA:O	1:A:216:LEU:HB2	2.08	0.54
2:D:47:ASP:CG	2:D:50:LEU:H	2.16	0.54
1:E:18:CYS:O	1:E:19:GLY:C	2.51	0.54
1:E:30:VAL:H	1:E:73:VAL:HA	1.72	0.54
1:E:132:VAL:HG13	1:E:156:PRO:HA	1.89	0.54
1:E:175:THR:O	1:E:238:SER:HA	2.08	0.54
1:E:194:ARG:HH21	1:G:277:PRO:HA	1.72	0.54
1:E:220:GLN:HB3	1:E:221:LEU:HD22	1.89	0.54
1:G:101:ASP:CG	1:G:104:GLY:H	2.16	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:157:PHE:O	1:G:161:LEU:HG	2.08	0.54
2:H:191:ARG:H	2:H:191:ARG:NH1	2.05	0.54
1:I:11:ILE:O	1:I:15:PHE:N	2.28	0.54
1:O:299:VAL:HG22	1:O:305:VAL:HG12	1.90	0.54
2:P:250:THR:OG1	2:P:254:GLU:OE1	2.16	0.54
2:R:56:ASP:HB3	2:R:67:ASP:H	1.73	0.54
2:R:138:THR:OG1	2:R:141:ASP:OD1	2.14	0.54
2:R:332:TRP:NE1	2:R:334:UNK:OXT	2.40	0.54
1:A:76:ASN:OD1	1:A:78:ASP:N	2.40	0.54
2:B:2:LYS:HA	2:B:2:LYS:HZ2	1.71	0.54
2:B:79:PRO:HA	2:B:82:LEU:HD12	1.90	0.54
1:C:60:ILE:H	1:C:64:PHE:HA	1.72	0.54
1:C:154:LEU:HA	1:C:157:PHE:CZ	2.43	0.54
1:C:246:ILE:CG2	1:C:248:LYS:HB2	2.38	0.54
2:D:289:SER:OG	2:D:320:ARG:NH1	2.35	0.54
2:F:47:ASP:OD1	2:F:49:ILE:N	2.40	0.54
1:G:31:ASN:HA	1:G:74:VAL:HG12	1.90	0.54
1:G:165:LEU:O	1:G:248:LYS:HB3	2.08	0.54
1:G:251:THR:HG1	1:G:253:GLU:CD	2.14	0.54
1:G:295:SER:OG	1:G:296:LEU:N	2.40	0.54
2:H:179:THR:H	2:H:182:GLN:CD	2.16	0.54
2:J:78:ASN:ND2	2:J:80:VAL:HG22	2.23	0.54
2:J:149:CYS:H	3:J:401:NAD:H72N	1.56	0.54
2:J:209:GLY:O	2:J:213:ALA:N	2.23	0.54
1:O:58:LYS:HG3	1:O:60:ILE:HD13	1.90	0.53
1:O:63:THR:HG22	1:O:64:PHE:H	1.73	0.53
1:O:204:VAL:HB	1:O:231:ARG:HB2	1.89	0.53
2:P:105:ALA:HB1	2:P:116:VAL:HG11	1.91	0.53
1:Q:151:THR:HG22	1:Q:210:ALA:HA	1.89	0.53
2:R:45:LYS:O	2:R:53:PHE:N	2.33	0.53
2:R:89:ILE:N	2:R:112:GLY:O	2.41	0.53
2:B:32:ASP:HA	3:B:401:NAD:H2A	1.90	0.53
1:C:115:LYS:HZ2	1:C:139:HIS:HA	1.73	0.53
1:E:50:LEU:O	1:E:54:LYS:NZ	2.27	0.53
1:E:107:LYS:O	1:E:111:ALA:N	2.35	0.53
2:F:131:GLY:HA3	2:F:156:PRO:HB3	1.90	0.53
2:F:273:VAL:HG23	2:F:292:ILE:HB	1.91	0.53
1:G:181:ASP:O	1:G:183:ARG:NH1	2.32	0.53
1:I:82:LEU:HB2	1:I:84:TRP:CZ2	2.44	0.53
1:I:220:GLN:HE21	1:I:221:LEU:HD23	1.73	0.53
1:I:304:MET:HB2	1:K:169:LYS:HZ3	1.73	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:33:THR:OG1	2:J:77:ARG:NH1	2.41	0.53
2:J:259:PHE:O	2:J:262:SER:OG	2.23	0.53
2:R:174:THR:O	2:R:230:LEU:HB2	2.07	0.53
2:B:18(A):TRP:HA	2:B:20:ARG:HB2	1.90	0.53
2:B:190:HIS:CE1	2:B:195:ARG:HB2	2.42	0.53
1:C:78:ASP:OD2	1:C:81:LYS:HG2	2.08	0.53
1:C:82:LEU:HD13	1:C:84:TRP:CZ2	2.43	0.53
1:C:162:ASP:HB2	1:C:167:ILE:HD12	1.90	0.53
1:C:261:LYS:O	1:C:265:GLY:N	2.42	0.53
2:D:47:ASP:N	2:D:51:GLY:O	2.40	0.53
2:D:326:ASP:O	2:D:330:ASN:N	2.34	0.53
1:E:37:VAL:HG12	1:E:59:ILE:HG21	1.90	0.53
1:E:231:ARG:HD2	1:E:231:ARG:H	1.72	0.53
2:F:63:ALA:HB1	2:F:70:VAL:HB	1.91	0.53
2:F:157:PHE:CD2	2:F:158:VAL:HG13	2.44	0.53
2:F:190:HIS:CE1	2:F:195:ARG:HD2	2.43	0.53
1:G:6:ASN:HD22	1:G:94:GLU:HA	1.73	0.53
2:H:174:THR:O	2:H:230:LEU:HB2	2.08	0.53
1:I:105:ALA:O	1:I:109:ILE:N	2.28	0.53
2:J:38:LYS:NZ	2:J:39:GLN:H	2.06	0.53
2:J:165:PHE:HE2	2:J:250:THR:HB	1.72	0.53
2:J:253:GLU:CD	2:J:256:ASN:HB2	2.33	0.53
2:J:278:LEU:O	2:L:194:ARG:NH1	2.35	0.53
1:O:28:VAL:C	1:O:71:ILE:HG23	2.34	0.53
1:O:281:VAL:HA	1:O:284:ARG:NH2	2.24	0.53
1:O:281:VAL:N	1:Q:202:ASN:OD1	2.32	0.53
1:Q:10:ARG:NH2	1:Q:314:GLU:OE1	2.36	0.53
1:Q:295:SER:OG	1:Q:296:LEU:N	2.41	0.53
2:R:297:THR:HG22	2:R:308:ILE:H	1.73	0.53
1:A:137:TYR:HH	1:A:139:HIS:CE1	2.26	0.53
1:A:160:VAL:HA	1:A:163:GLU:CD	2.33	0.53
2:B:129:VAL:N	2:B:133:ASN:OD1	2.41	0.53
1:C:296:LEU:HB3	1:C:308:VAL:HG11	1.89	0.53
2:D:293:ASP:OD1	2:D:296:LEU:N	2.29	0.53
2:D:302:ASP:OD1	2:D:302:ASP:N	2.40	0.53
1:E:37:VAL:HG21	1:E:60(A):ASP:O	2.08	0.53
2:F:1:LEU:N	2:F:24:PRO:O	2.32	0.53
2:F:162:ASP:OD2	2:F:220:ASN:ND2	2.42	0.53
2:F:172:MET:HG3	2:F:242:LEU:HD13	1.91	0.53
1:G:18(A):TRP:CH2	1:G:69:LYS:HD3	2.43	0.53
2:H:79:PRO:HG2	2:H:107:LYS:HE2	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:127:THR:HG21	2:H:216:LEU:HB3	1.89	0.53
2:H:296:LEU:HB2	2:H:308:ILE:HG13	1.90	0.53
1:I:109:ILE:HD13	1:I:113:ALA:HB3	1.89	0.53
1:I:236:ASN:HA	1:I:313:ASN:HD21	1.72	0.53
2:J:240:VAL:N	2:J:309:ALA:O	2.37	0.53
1:K:134:GLU:H	1:K:134:GLU:CD	2.14	0.53
1:K:153:CYS:SG	1:K:290:SER:OG	2.60	0.53
1:O:318:SER:HA	1:O:321:VAL:HG22	1.90	0.53
1:Q:8:PHE:O	3:Q:401:NAD:O3B	2.25	0.53
1:Q:82:LEU:HB3	1:Q:84:TRP:NE1	2.23	0.53
1:Q:186:ASP:OD1	1:Q:186:ASP:N	2.41	0.53
1:A:5:ILE:HG12	1:A:93:ILE:HD13	1.90	0.53
1:A:7:GLY:O	1:A:9:GLY:N	2.41	0.53
2:B:326:ASP:O	2:B:330:ASN:N	2.40	0.53
2:D:1:LEU:N	2:D:24:PRO:O	2.26	0.53
2:D:104:GLY:HA2	2:D:107:LYS:HE2	1.90	0.53
2:D:183:ARG:HH22	2:D:191:ARG:NH2	2.07	0.53
1:E:20:ARG:HH11	1:E:322:VAL:HG11	1.73	0.53
1:E:254:ASP:O	1:E:258:ALA:N	2.26	0.53
2:F:128:TYR:HD1	2:F:133:ASN:HB2	1.73	0.53
1:I:161:LEU:O	1:I:166:GLY:N	2.41	0.53
1:I:254:ASP:O	1:I:258:ALA:N	2.24	0.53
1:K:60(A):ASP:HB3	1:K:62:GLU:OE2	2.09	0.53
1:K:149:CYS:HB3	1:K:317:TYR:CG	2.44	0.53
1:K:324:LEU:O	1:K:327:LEU:HB2	2.08	0.53
2:L:273:VAL:HA	2:L:292:ILE:H	1.74	0.53
1:O:17:ARG:NH1	1:O:45:LYS:O	2.42	0.53
1:O:41:THR:OG1	1:O:59:ILE:HG12	2.08	0.53
2:P:183:ARG:NE	2:P:188:SER:O	2.41	0.53
1:Q:50:LEU:HD21	1:Q:54:LYS:HZ3	1.72	0.53
1:Q:194:ARG:HB3	1:Q:195:ARG:NH1	2.24	0.53
2:R:79:PRO:HB3	2:R:108:HIS:CE1	2.43	0.53
1:A:59:ILE:H	1:A:59:ILE:HD12	1.73	0.53
1:A:209:GLY:O	1:A:213:ALA:N	2.30	0.53
1:A:236:ASN:OD1	1:A:313:ASN:N	2.41	0.53
2:B:82:LEU:HB2	2:B:84:TRP:NE1	2.23	0.53
2:B:312:ASP:OD1	2:B:315:TRP:N	2.41	0.53
2:D:11:ILE:O	2:D:15:PHE:N	2.38	0.53
2:D:30:ILE:O	2:D:73:VAL:HA	2.08	0.53
2:D:190:HIS:CE1	2:D:192:ASP:H	2.26	0.53
1:E:314:GLU:OE1	1:E:315:TRP:N	2.41	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:64:ILE:N	2:F:71:ILE:H	2.06	0.53
2:F:128:TYR:HA	2:F:133:ASN:CG	2.33	0.53
2:F:192:ASP:OD2	2:F:195:ARG:N	2.32	0.53
1:G:52:THR:O	1:G:54:LYS:NZ	2.27	0.53
2:H:82:LEU:HB2	2:H:84:TRP:CD1	2.44	0.53
2:H:102:ARG:NH2	2:H:124:ASP:O	2.41	0.53
1:I:25:LEU:HG	1:I:325:ALA:HB1	1.91	0.53
2:J:11:ILE:O	2:J:15:PHE:N	2.24	0.53
2:J:82:LEU:HB2	2:J:84:TRP:NE1	2.23	0.53
2:J:243:VAL:HA	2:J:306:LYS:HA	1.90	0.53
2:L:118:ILE:HB	2:L:145:SER:HB2	1.90	0.53
2:L:139:HIS:NE2	2:L:334:UNK:O	2.42	0.53
1:O:10:ARG:N	3:O:401:NAD:O2N	2.41	0.53
1:Q:0:LYS:HD3	1:Q:24:PRO:HA	1.91	0.53
1:Q:77:ARG:HG2	3:Q:401:NAD:N1A	2.24	0.53
1:Q:246:ILE:N	1:Q:303:ASP:O	2.37	0.53
1:Q:327:LEU:HA	1:Q:330:ASN:HD21	1.73	0.53
2:R:236:ASN:O	2:R:313:ASN:ND2	2.30	0.53
1:A:1:LEU:HD11	1:A:332:TRP:CE2	2.44	0.53
1:A:203:ILE:HD11	1:A:230:LEU:HB2	1.91	0.53
2:B:120:ALA:O	2:B:145:SER:OG	2.26	0.53
2:B:169:LYS:HD3	2:D:301:GLY:HA3	1.91	0.53
2:B:280:SER:HA	2:B:310:TRP:HZ3	1.74	0.53
1:C:16:LEU:O	1:C:18(B):HIS:N	2.29	0.53
1:E:84:TRP:HD1	1:E:108:HIS:O	1.91	0.53
1:E:149:CYS:HB3	1:E:317:TYR:HD1	1.72	0.53
2:F:79:PRO:HG3	2:F:108:HIS:CE1	2.43	0.53
2:F:103:ASP:OD1	2:F:103:ASP:N	2.38	0.53
1:G:18:CYS:SG	1:G:318:SER:OG	2.53	0.53
1:G:151:THR:OG1	1:G:152:ASN:OD1	2.26	0.53
1:G:172:MET:HB2	1:G:241:ASP:O	2.09	0.53
1:G:240:VAL:HG22	1:G:241:ASP:O	2.08	0.53
2:H:179:THR:H	2:H:182:GLN:HE22	1.56	0.53
2:H:218:LEU:HB3	2:H:221:LEU:HD13	1.91	0.53
2:H:270:ILE:HG22	2:H:271:LEU:HD22	1.90	0.53
1:I:18(A):TRP:NE1	1:I:25:LEU:O	2.41	0.53
2:J:20:ARG:HA	2:J:21:LYS:HZ3	1.74	0.53
1:K:297:THR:HG22	1:K:308:VAL:N	2.23	0.53
2:L:38:LYS:HB2	2:L:42:HIS:HE1	1.74	0.53
1:O:3:VAL:N	1:O:26:ASP:O	2.20	0.53
2:P:157:PHE:CD2	2:P:158:VAL:HG13	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:47:ASP:CG	1:Q:50:LEU:H	2.14	0.53
1:Q:47:ASP:N	1:Q:51:GLY:O	2.38	0.53
2:R:70:VAL:O	2:R:71:ILE:HG13	2.09	0.53
1:A:84:TRP:CD1	1:A:84:TRP:H	2.27	0.53
1:A:119:THR:O	1:A:119:THR:OG1	2.26	0.53
1:A:124:ASP:HB2	1:G:103:PRO:HA	1.91	0.53
2:B:190:HIS:CE1	2:B:192:ASP:H	2.26	0.53
2:B:292:ILE:HD13	2:B:309:ALA:HA	1.89	0.53
2:D:135:GLU:CD	2:D:135:GLU:H	2.17	0.53
1:E:16:LEU:HG	1:E:44:LEU:HD11	1.91	0.53
1:E:37:VAL:HG12	1:E:59:ILE:CG2	2.37	0.53
1:E:183:ARG:HG3	1:E:187:ALA:O	2.08	0.53
1:E:227:GLY:HA3	1:G:306:LYS:NZ	2.24	0.53
1:G:121:PRO:CA	1:G:147:ALA:HA	2.35	0.53
1:G:192:ASP:OD2	1:G:195:ARG:HG2	2.08	0.53
1:I:0:LYS:HD2	1:I:1:LEU:HD13	1.90	0.53
1:K:45:LYS:NZ	1:K:57:VAL:H	2.06	0.53
1:K:237:VAL:HG21	1:K:280:SER:HA	1.91	0.53
1:K:296:LEU:HB3	1:K:308:VAL:HG11	1.89	0.53
2:L:107:LYS:HA	2:L:110:GLN:HB2	1.90	0.53
2:L:157:PHE:HD2	2:L:158:VAL:HG13	1.74	0.53
2:L:183:ARG:HH22	2:L:191:ARG:NH2	2.06	0.53
1:O:37:VAL:HG23	1:O:59:ILE:HG21	1.89	0.53
1:O:64:PHE:CZ	1:O:66:ILE:HG12	2.43	0.53
2:P:84:TRP:HD1	2:P:111:ALA:HB3	1.72	0.53
2:P:171:THR:O	2:P:243:VAL:N	2.34	0.53
2:P:172:MET:HG3	2:P:242:LEU:HD13	1.90	0.53
1:Q:28:VAL:C	1:Q:71:ILE:HG23	2.33	0.53
2:R:15:PHE:HA	2:R:18:CYS:HB2	1.90	0.53
2:R:160:VAL:O	2:R:164:LYS:N	2.28	0.53
2:R:179:THR:OG1	2:R:180:GLY:N	2.41	0.53
1:A:17:ARG:HH11	1:A:44:LEU:HD12	1.74	0.53
1:A:20:ARG:HG3	1:A:21:LYS:H	1.74	0.53
2:D:62:SER:O	2:D:73:VAL:HG12	2.09	0.53
1:E:17:ARG:HD3	1:E:44:LEU:CD1	2.39	0.53
2:F:83:PRO:HB2	2:F:86:ASP:OD1	2.09	0.53
1:G:171:THR:O	1:G:242:LEU:HD12	2.09	0.53
2:H:13:ARG:O	2:H:17:ARG:N	2.27	0.53
2:H:137:TYR:CE2	2:H:328:VAL:HA	2.44	0.53
2:H:224:LYS:HG3	2:H:225:LEU:HD23	1.91	0.53
1:I:291:THR:OG1	1:I:291:THR:O	2.27	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:6:ASN:HD22	2:J:108:HIS:HE1	1.55	0.53
1:K:91:ILE:HA	1:K:115:LYS:O	2.09	0.53
1:K:128:TYR:HA	1:K:133:ASN:HD21	1.74	0.53
1:O:37:VAL:O	1:O:41:THR:HB	2.09	0.53
1:O:203:ILE:HD11	1:O:230:LEU:HB3	1.91	0.53
2:P:105:ALA:HA	2:P:108:HIS:CD2	2.44	0.53
2:P:150:THR:OG1	2:P:151:THR:N	2.42	0.53
2:P:162:ASP:OD2	2:P:220:ASN:ND2	2.42	0.53
2:P:250:THR:HG1	2:P:251:PHE:H	1.55	0.53
1:Q:126:PRO:HD2	1:Q:144:ILE:HA	1.91	0.53
2:R:18(B):HIS:CE1	2:R:66:VAL:HG12	2.44	0.53
2:R:82:LEU:HB2	2:R:84:TRP:CD1	2.43	0.53
2:R:137:TYR:CE2	2:R:328:VAL:HA	2.44	0.53
2:R:318:SER:HA	2:R:321:VAL:HB	1.91	0.53
2:B:58:LYS:O	2:B:65:SER:N	2.42	0.53
2:B:185:LEU:HB3	1:C:10:ARG:HE	1.74	0.53
2:B:275:ASP:OD1	2:B:295:SER:N	2.41	0.53
1:C:164:GLU:OE1	1:C:165:LEU:N	2.42	0.53
1:E:279:VAL:HG21	1:G:197:ARG:NH2	2.24	0.53
1:G:93:ILE:HD13	1:G:117:ILE:HG13	1.91	0.53
1:I:273:VAL:HG12	1:I:292:ILE:HD12	1.91	0.53
1:I:279:VAL:HG23	1:I:282:ASP:HB2	1.90	0.53
1:I:332:TRP:HE3	1:I:333:PRO:HD2	1.74	0.53
2:J:190:HIS:CE1	2:J:192:ASP:H	2.26	0.53
2:L:224:LYS:NZ	2:L:225:LEU:HB2	2.24	0.53
1:O:18(B):HIS:CD2	1:O:18(B):HIS:C	2.87	0.53
1:O:103:PRO:O	1:O:107:LYS:N	2.30	0.53
1:O:139:HIS:ND1	1:O:139(A):ASP:OD1	2.42	0.53
2:P:78:ASN:HD21	2:P:80:VAL:HG22	1.74	0.53
2:P:281:ILE:H	2:R:202:ASN:ND2	2.00	0.53
2:P:332:TRP:NE1	2:P:334:UNK:OXT	2.42	0.53
1:Q:8:PHE:CE2	1:Q:13:ARG:HD2	2.44	0.53
1:Q:154:LEU:HB3	1:Q:158:VAL:HG11	1.91	0.53
1:Q:162:ASP:O	1:Q:166:GLY:N	2.42	0.53
1:Q:281:VAL:HG23	1:Q:284:ARG:HH21	1.74	0.53
1:Q:332:TRP:CD2	1:Q:333:PRO:HD2	2.43	0.53
2:R:109:LEU:HD21	2:R:116:VAL:HG23	1.91	0.53
2:R:186:ASP:HA	2:R:196:ALA:O	2.09	0.53
1:A:195:ARG:NH1	1:G:361:TYR:HA	2.23	0.53
1:A:293:ASP:H	1:A:296:LEU:HD12	1.73	0.53
2:B:30:ILE:N	2:B:72:LYS:O	2.41	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:177:SER:OG	2:B:234:THR:O	2.13	0.53
2:B:242:LEU:HB3	2:B:307:VAL:HG22	1.91	0.53
1:C:261:LYS:HZ2	1:C:261:LYS:C	2.15	0.53
1:E:6:ASN:HA	1:E:31:ASN:HB3	1.90	0.53
1:E:16:LEU:CG	1:E:44:LEU:HD11	2.39	0.53
1:E:92:VAL:H	1:E:116:VAL:HG22	1.74	0.53
1:E:316:GLY:O	1:E:320:ARG:HG2	2.09	0.53
2:F:218:LEU:O	2:F:222:LYS:NZ	2.30	0.53
1:G:77:ARG:HH11	1:G:77:ARG:N	2.07	0.53
1:G:125:ILE:HG23	1:G:144:ILE:HA	1.90	0.53
1:G:258:ALA:HA	1:G:261:LYS:HE3	1.91	0.53
2:H:109:LEU:HD21	2:H:116:VAL:HG23	1.90	0.53
1:I:41:THR:HG23	1:I:57:VAL:HG21	1.91	0.53
1:I:324:LEU:H	1:I:324:LEU:HD22	1.74	0.53
2:J:117:LEU:HA	2:J:144:ILE:O	2.09	0.53
2:L:242:LEU:HB3	2:L:307:VAL:HG22	1.90	0.53
2:L:249:LYS:NZ	2:L:301:GLY:O	2.30	0.53
1:O:2:LYS:HA	1:O:26:ASP:HB3	1.92	0.52
3:O:401:NAD:O1N	3:O:401:NAD:H2D	2.09	0.52
2:P:79:PRO:HG3	2:P:108:HIS:HE1	1.74	0.52
2:P:149:CYS:SG	2:P:150:THR:N	2.82	0.52
1:Q:190:HIS:HD1	1:Q:196:ALA:HB2	1.75	0.52
1:Q:264:ALA:HA	1:Q:268:LYS:NZ	2.25	0.52
2:R:191:ARG:NH1	2:R:191:ARG:H	2.07	0.52
2:R:218:LEU:HB3	2:R:221:LEU:HD13	1.90	0.52
1:A:190:HIS:ND1	1:G:357:GLU:O	2.42	0.52
2:B:20:ARG:HA	2:B:21:LYS:HZ3	1.74	0.52
2:B:118:ILE:O	2:B:145:SER:OG	2.21	0.52
2:B:286:THR:HG22	2:B:288:VAL:HG13	1.90	0.52
1:C:40:ALA:O	1:C:44:LEU:N	2.34	0.52
1:C:84:TRP:HB2	1:C:111:ALA:O	2.09	0.52
2:F:168:ILE:HB	2:F:245:GLN:HG2	1.92	0.52
1:G:160:VAL:O	1:G:163:GLU:HG2	2.09	0.52
1:G:165:LEU:HG	1:G:246:ILE:HG21	1.90	0.52
1:G:170:GLY:HA2	1:G:244:VAL:HA	1.90	0.52
2:H:63:ALA:HA	2:H:72:LYS:HA	1.90	0.52
2:H:141:ASP:OD1	2:H:141:ASP:N	2.24	0.52
2:H:232:VAL:O	2:H:234:THR:N	2.40	0.52
2:H:288:VAL:HA	2:H:320:ARG:HH12	1.74	0.52
1:I:38:LYS:HA	1:I:41:THR:HB	1.91	0.52
2:J:88:GLY:O	2:J:114:LYS:NZ	2.41	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:173:THR:HG1	2:L:306:LYS:HZ3	1.49	0.52
2:J:192:ASP:HB3	2:J:195:ARG:HB2	1.90	0.52
1:K:28:VAL:O	1:K:71:ILE:HG23	2.08	0.52
1:K:101:ASP:OD2	1:K:103:PRO:HB2	2.09	0.52
1:K:344:PRO:O	1:K:346:GLU:N	2.42	0.52
2:L:206:THR:OG1	2:L:207:SER:N	2.42	0.52
2:P:104:GLY:HA2	2:P:107:LYS:HB2	1.92	0.52
2:P:167:ILE:HA	2:P:246:VAL:HA	1.91	0.52
1:Q:118:ILE:C	1:Q:145:SER:HG	2.12	0.52
1:Q:236:ASN:HB3	1:Q:284:ARG:HH12	1.73	0.52
1:A:270:VAL:O	1:A:289:SER:OG	2.27	0.52
2:B:169:LYS:O	2:B:245:GLN:N	2.42	0.52
1:C:10:ARG:HB2	3:C:401:NAD:O3	2.09	0.52
1:C:240:VAL:HG12	1:C:311:TYR:CE1	2.45	0.52
1:C:256:ASN:C	1:C:260:ARG:HE	2.17	0.52
2:D:255:VAL:HB	2:D:259:PHE:CZ	2.44	0.52
1:E:10:ARG:HH22	2:H:185:LEU:HD12	1.74	0.52
2:F:20:ARG:HA	2:F:21:LYS:HZ3	1.73	0.52
2:F:270:ILE:O	2:F:320:ARG:NH1	2.42	0.52
1:G:165:LEU:HD12	1:G:248:LYS:O	2.09	0.52
2:H:1:LEU:HB3	2:H:25:LEU:HD13	1.91	0.52
1:I:45:LYS:NZ	1:I:55:ALA:O	2.27	0.52
1:I:47:ASP:OD1	1:I:48:SER:N	2.43	0.52
1:I:49:ILE:HG23	1:I:284:ARG:CZ	2.39	0.52
2:J:206:THR:OG1	2:J:207:SER:N	2.42	0.52
1:O:132:VAL:O	1:O:135:LYS:NZ	2.25	0.52
1:Q:64:PHE:O	1:Q:71:ILE:N	2.30	0.52
1:Q:249:GLY:HA2	1:Q:302:GLY:CA	2.40	0.52
1:A:103:PRO:O	1:A:107:LYS:N	2.42	0.52
1:A:126:PRO:HG3	1:A:144:ILE:HG22	1.91	0.52
1:A:190:HIS:HD1	1:A:191:ARG:HB3	1.73	0.52
2:B:13:ARG:HG2	2:B:43:LEU:C	2.34	0.52
1:C:203:ILE:O	1:C:205:PRO:HD3	2.09	0.52
1:C:270:VAL:O	1:C:289:SER:N	2.39	0.52
2:D:89:ILE:O	2:D:114:LYS:N	2.42	0.52
2:D:107:LYS:HA	2:D:110:GLN:HB2	1.92	0.52
1:E:310:TRP:N	1:E:310:TRP:CD1	2.77	0.52
2:F:150:THR:OG1	2:F:151:THR:N	2.43	0.52
2:F:320:ARG:NE	2:F:323:ASP:OD2	2.39	0.52
1:G:177:SER:OG	1:G:234:THR:OG1	2.16	0.52
1:I:167:ILE:HB	1:I:221:LEU:HD11	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:6:ASN:O	1:K:6:ASN:ND2	2.43	0.52
1:K:18(A):TRP:NE1	1:K:26:ASP:HA	2.24	0.52
1:K:37:VAL:HA	1:K:40:ALA:HB3	1.91	0.52
1:O:101:ASP:HB2	1:O:103:PRO:HD2	1.90	0.52
1:O:315:TRP:O	1:O:318:SER:OG	2.27	0.52
2:P:100:VAL:HG13	2:P:122(A):LYS:HB2	1.90	0.52
1:Q:103:PRO:O	1:Q:107:LYS:N	2.37	0.52
1:Q:105:ALA:HA	1:Q:108:HIS:HD2	1.75	0.52
2:R:84:TRP:HB2	2:R:111:ALA:C	2.34	0.52
2:R:218:LEU:HD22	2:R:221:LEU:HD13	1.92	0.52
2:R:256:ASN:O	2:R:260:ARG:N	2.32	0.52
1:A:128:TYR:HB2	1:A:145:SER:O	2.09	0.52
1:A:176:HIS:HA	1:A:238:SER:HB2	1.91	0.52
2:B:6:ASN:HB2	2:B:84:TRP:CZ2	2.44	0.52
2:B:127:THR:HG23	2:B:133:ASN:ND2	2.24	0.52
2:B:206:THR:OG1	2:B:207:SER:N	2.40	0.52
1:C:254:ASP:HA	1:C:257:ASN:HD22	1.75	0.52
1:C:298:MET:HG2	1:C:306:LYS:HE3	1.91	0.52
2:D:205:PRO:HA	2:D:230:LEU:HD23	1.91	0.52
1:E:170:GLY:O	1:E:225:LEU:HA	2.09	0.52
2:F:194:ARG:NE	2:F:205:PRO:O	2.42	0.52
1:G:45:LYS:HG2	1:G:46:TYR:CZ	2.44	0.52
1:G:132:VAL:N	1:G:134:GLU:OE1	2.42	0.52
1:G:134:GLU:N	1:G:135:LYS:HZ1	2.07	0.52
1:G:168:VAL:H	1:G:246:ILE:HA	1.73	0.52
1:G:248:LYS:HG2	1:G:248(A):VAL:HG22	1.91	0.52
1:G:256:ASN:O	1:G:259:PHE:HB2	2.09	0.52
2:H:17:ARG:NH2	2:H:54:ASP:OD1	2.42	0.52
2:H:83:PRO:HB2	2:H:86:ASP:HB2	1.90	0.52
2:H:106:GLY:HA2	2:H:109:LEU:HB2	1.90	0.52
1:I:243:VAL:HG21	1:K:243:VAL:HG11	1.91	0.52
2:J:6:ASN:O	2:J:95:GLY:N	2.41	0.52
2:J:279:VAL:HA	2:J:310:TRP:CH2	2.44	0.52
2:J:292:ILE:HD13	2:J:309:ALA:HA	1.90	0.52
1:K:79:PRO:HB2	1:K:107:LYS:HB2	1.90	0.52
1:K:219:PRO:HA	1:K:222:LYS:HD3	1.90	0.52
2:L:91:LEU:HA	2:L:115:LYS:O	2.10	0.52
1:O:134:GLU:OE1	1:O:134:GLU:N	2.41	0.52
1:O:321:VAL:HA	1:O:324:LEU:HG	1.91	0.52
2:P:128:TYR:HA	2:P:133:ASN:CG	2.34	0.52
1:Q:256:ASN:O	1:Q:260:ARG:N	2.31	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:Q:401:NAD:N7N	3:Q:401:NAD:O1N	2.42	0.52
2:R:106:GLY:HA2	2:R:109:LEU:HB2	1.91	0.52
2:R:203:ILE:HD11	2:R:230:LEU:HD13	1.92	0.52
2:R:251:PHE:CZ	2:R:253:GLU:HB3	2.44	0.52
2:R:274:CYS:HB3	2:R:276:GLU:CD	2.35	0.52
1:A:14:ASN:ND2	1:A:314:GLU:OE1	2.43	0.52
1:A:16:LEU:HD22	1:A:44:LEU:HD13	1.91	0.52
1:A:53:PHE:HA	1:A:54:LYS:HZ3	1.75	0.52
2:B:8:PHE:H	2:B:32:ASP:HB2	1.74	0.52
2:B:64:ILE:H	2:B:71:ILE:H	1.55	0.52
2:B:184:LEU:HG	2:B:185:LEU:HD13	1.91	0.52
2:B:202:ASN:ND2	2:D:281:ILE:HG22	2.24	0.52
1:C:148:SER:O	1:C:152:ASN:N	2.31	0.52
2:D:94:GLU:HG2	2:D:96:THR:HG23	1.92	0.52
2:D:157:PHE:HD2	2:D:158:VAL:HG13	1.74	0.52
1:E:267:LEU:HA	1:E:270:VAL:HB	1.91	0.52
2:F:115:LYS:NZ	2:F:139:HIS:O	2.33	0.52
1:G:102:GLY:N	1:G:103:PRO:HD2	2.25	0.52
2:H:77:ARG:HB3	3:H:401:NAD:H62A	1.74	0.52
1:I:58:LYS:HZ2	1:I:58:LYS:HA	1.75	0.52
2:J:19:GLY:O	2:J:21:LYS:NZ	2.43	0.52
2:J:281:ILE:H	2:L:202:ASN:ND2	2.07	0.52
1:K:1:LEU:HG	1:K:90:ASP:OD2	2.09	0.52
1:K:332:TRP:CH2	1:K:334:GLY:HA3	2.44	0.52
2:L:30:ILE:O	2:L:73:VAL:HA	2.09	0.52
2:P:7:GLY:HA2	3:P:401:NAD:N3A	2.25	0.52
2:P:42:HIS:HA	2:P:45:LYS:HB3	1.90	0.52
2:P:83:PRO:HB2	2:P:86:ASP:OD1	2.09	0.52
2:P:244:VAL:O	2:P:305:VAL:N	2.43	0.52
1:Q:236:ASN:ND2	1:Q:312:ASP:OD1	2.42	0.52
2:R:40:ALA:O	2:R:44:LEU:N	2.38	0.52
2:R:45:LYS:O	2:R:52:THR:OG1	2.22	0.52
2:R:146:ASN:OD1	2:R:147:ALA:N	2.43	0.52
1:A:10:ARG:NH1	2:D:185:LEU:HB3	2.17	0.52
1:A:202:ASN:ND2	1:C:281:VAL:HG12	2.24	0.52
1:A:293:ASP:HB3	1:A:296:LEU:HG	1.90	0.52
2:B:213:ALA:HA	2:B:216:LEU:HD13	1.91	0.52
2:B:239:VAL:HA	2:B:310:TRP:HA	1.90	0.52
1:C:30:VAL:HB	1:C:73:VAL:HG13	1.89	0.52
1:C:178:TYR:HD2	1:C:233:PRO:HA	1.73	0.52
1:C:214:VAL:O	1:C:218:LEU:N	2.43	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:8:PHE:HB3	2:D:32:ASP:HB2	1.91	0.52
2:D:224:LYS:NZ	2:D:225:LEU:HB2	2.24	0.52
1:E:94:GLU:CD	1:E:96:THR:HG1	2.18	0.52
2:F:161:LEU:HD22	2:F:167:ILE:HD11	1.92	0.52
1:G:6:ASN:ND2	1:G:96:THR:OG1	2.34	0.52
1:G:126:PRO:O	1:G:127:THR:C	2.52	0.52
2:H:146:ASN:OD1	2:H:147:ALA:N	2.43	0.52
1:K:240:VAL:HG13	1:K:311:TYR:CE1	2.45	0.52
2:L:8:PHE:HB3	2:L:32:ASP:HB2	1.91	0.52
2:L:41:SER:OG	2:L:42:HIS:N	2.43	0.52
2:L:172:MET:HA	2:L:242:LEU:HA	1.91	0.52
1:O:8:PHE:CZ	1:O:13:ARG:HG3	2.44	0.52
2:P:270:ILE:O	2:P:320:ARG:NH1	2.42	0.52
1:Q:172:MET:HA	1:Q:242:LEU:HA	1.91	0.52
1:Q:186:ASP:CG	1:Q:197:ARG:HE	2.17	0.52
1:Q:256:ASN:C	1:Q:260:ARG:HE	2.17	0.52
2:R:47:ASP:CG	2:R:49:ILE:H	2.15	0.52
2:R:94:GLU:HB3	2:R:118:ILE:HD11	1.92	0.52
2:R:197:ARG:NH2	2:R:198:ALA:HB3	2.24	0.52
2:R:243:VAL:HG22	2:R:306:LYS:HA	1.92	0.52
1:A:239:VAL:HB	1:A:310:TRP:CD2	2.44	0.52
2:B:41:SER:OG	2:B:42:HIS:N	2.41	0.52
2:B:209:GLY:O	2:B:213:ALA:N	2.23	0.52
1:C:21:LYS:NZ	1:C:22:ASP:H	2.08	0.52
1:C:45:LYS:HZ2	1:C:53:PHE:C	2.18	0.52
1:C:46:TYR:HA	1:C:52:THR:HA	1.91	0.52
1:C:85:ALA:C	1:C:88:GLY:H	2.17	0.52
1:C:109:ILE:HG12	1:C:143:ILE:HD11	1.92	0.52
1:C:267:LEU:HB2	1:C:271:LEU:HB3	1.91	0.52
1:E:17:ARG:HD2	1:E:44:LEU:O	2.10	0.52
2:F:8:PHE:CZ	2:F:13:ARG:HG3	2.45	0.52
2:F:149:CYS:SG	2:F:150:THR:N	2.83	0.52
2:F:236:ASN:ND2	2:F:237:VAL:H	2.08	0.52
1:G:171:THR:N	1:G:243:VAL:O	2.40	0.52
2:H:318:SER:HA	2:H:321:VAL:HB	1.91	0.52
2:J:213:ALA:HA	2:J:216:LEU:HD13	1.91	0.52
2:J:242:LEU:HD11	2:J:244:VAL:HG13	1.91	0.52
1:K:11:ILE:C	1:K:14:ASN:HD22	2.17	0.52
1:K:29:VAL:HG23	1:K:73:VAL:HA	1.91	0.52
1:K:150:THR:O	1:K:154:LEU:HG	2.10	0.52
1:O:101:ASP:OD2	1:O:103:PRO:HB2	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:166:GLY:HA3	1:O:247:GLU:HG3	1.92	0.52
1:O:346:GLU:N	1:C:191:ARG:HD2	2.25	0.52
2:P:2:LYS:NZ	2:P:26:ASP:OD2	2.40	0.52
2:P:183:ARG:NH2	2:P:191:ARG:HH12	2.08	0.52
1:Q:213:ALA:HA	1:Q:216:LEU:HB2	1.92	0.52
2:R:102:ARG:NH2	2:R:124:ASP:O	2.42	0.52
1:A:187:ALA:HA	2:D:43:LEU:HD13	1.91	0.52
2:B:215:ALA:HB1	2:B:222:LYS:HG2	1.92	0.52
1:C:186:ASP:HB3	1:C:197:ARG:HE	1.74	0.52
1:C:251:THR:OG1	1:C:252:ALA:N	2.41	0.52
2:D:242:LEU:HB3	2:D:307:VAL:HG22	1.92	0.52
2:F:17:ARG:HD3	2:F:50:LEU:HD12	1.90	0.52
2:F:84:TRP:CD1	2:F:111:ALA:HB3	2.44	0.52
2:F:132:VAL:HG11	2:F:217:VAL:HB	1.92	0.52
2:F:244:VAL:O	2:F:305:VAL:N	2.42	0.52
1:G:167:ILE:HA	1:G:246:ILE:HD12	1.92	0.52
1:G:236:ASN:OD1	1:G:313:ASN:ND2	2.43	0.52
2:H:274:CYS:HB3	2:H:276:GLU:CD	2.35	0.52
1:K:159:LYS:HG2	1:K:163:GLU:CD	2.34	0.52
1:K:164:GLU:HG3	1:K:165:LEU:HD22	1.92	0.52
1:O:13:ARG:H	1:O:13:ARG:HD2	1.75	0.52
1:O:156:PRO:O	1:O:160:VAL:N	2.34	0.52
2:P:20:ARG:HA	2:P:21:LYS:HZ3	1.75	0.52
1:Q:151:THR:OG1	1:Q:152:ASN:N	2.41	0.52
1:Q:249:GLY:CA	1:Q:302:GLY:CA	2.88	0.52
2:R:1:LEU:H	2:R:26:ASP:H	1.57	0.52
2:R:244:VAL:O	2:R:305:VAL:N	2.38	0.52
2:R:270:ILE:HG22	2:R:271:LEU:HD22	1.90	0.52
1:A:262:ALA:C	1:A:265:GLY:H	2.17	0.52
2:B:236:ASN:OD1	2:B:284:ARG:NH1	2.43	0.52
1:C:293:ASP:OD1	1:C:295:SER:OG	2.16	0.52
2:D:10:ARG:HG3	3:D:401:NAD:O1N	2.10	0.52
2:D:137:TYR:O	2:D:331:LYS:NZ	2.23	0.52
1:E:139:HIS:ND1	1:E:332:TRP:HA	2.25	0.52
1:E:213:ALA:O	1:E:216:LEU:HB2	2.10	0.52
2:F:37:VAL:HG23	2:F:38:LYS:H	1.75	0.52
2:F:103:ASP:O	2:F:107:LYS:N	2.32	0.52
2:F:239:VAL:HG12	2:F:309:ALA:O	2.10	0.52
1:G:205:PRO:HD3	1:G:230:LEU:HD13	1.92	0.52
2:H:172:MET:HA	2:H:242:LEU:HA	1.91	0.52
2:H:186:ASP:HA	2:H:196:ALA:O	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:267:LEU:HD22	2:H:271:LEU:HD23	1.92	0.52
2:H:318:SER:O	2:H:322:VAL:N	2.31	0.52
1:I:9:GLY:HA2	3:I:401:NAD:H4B	1.90	0.52
1:I:183:ARG:NH1	1:I:187:ALA:O	2.43	0.52
1:I:318:SER:OG	1:I:319:GLN:N	2.41	0.52
2:J:5:ILE:O	2:J:31:ASN:N	2.40	0.52
2:J:6:ASN:OD1	2:J:7:GLY:N	2.42	0.52
2:J:157:PHE:HA	2:J:160:VAL:HB	1.92	0.52
2:J:181:ASP:OD1	2:J:195:ARG:NH1	2.42	0.52
2:L:5:ILE:HG23	2:L:93:ILE:HB	1.91	0.52
2:L:292:ILE:HG23	2:L:308:ILE:O	2.10	0.52
1:O:176:HIS:HB3	1:O:231:ARG:CA	2.39	0.52
2:P:14:ASN:OD1	2:P:318:SER:OG	2.14	0.52
2:P:205:PRO:HA	2:P:230:LEU:HD23	1.91	0.52
2:R:102:ARG:HH22	2:R:125:ILE:HA	1.74	0.52
2:R:288:VAL:HA	2:R:320:ARG:HH12	1.74	0.52
1:A:190:HIS:O	2:D:39:GLN:NE2	2.42	0.52
1:C:248(A):VAL:HG13	1:C:249:GLY:H	1.74	0.52
1:C:285:CYS:HA	1:C:315:TRP:CG	2.45	0.52
2:D:18(A):TRP:NE1	2:D:25:LEU:O	2.40	0.52
2:D:118:ILE:HB	2:D:145:SER:HB2	1.91	0.52
2:D:273:VAL:HA	2:D:292:ILE:H	1.73	0.52
1:E:232:VAL:O	1:E:234:THR:N	2.42	0.52
2:F:157:PHE:CE1	2:F:271:LEU:HG	2.45	0.52
1:G:18(A):TRP:NE1	1:G:25:LEU:O	2.43	0.52
1:G:96:THR:HB	1:G:98:VAL:HG22	1.92	0.52
1:G:255:VAL:HA	1:G:258:ALA:HB3	1.92	0.52
1:I:134:GLU:HG2	1:I:135:LYS:H	1.74	0.52
1:I:290:SER:OG	1:I:310:TRP:N	2.42	0.52
2:J:37:VAL:HG23	2:J:38:LYS:H	1.75	0.52
2:J:41:SER:O	2:J:45:LYS:N	2.19	0.52
2:J:130:VAL:HG21	2:J:320:ARG:HG3	1.90	0.52
2:J:237:VAL:HG13	2:J:312:ASP:HA	1.90	0.52
1:K:69:LYS:HB3	1:K:71:ILE:HD13	1.91	0.52
2:L:42:HIS:CD2	2:L:46:TYR:HE2	2.28	0.52
2:L:65:SER:CA	2:L:70:VAL:HA	2.38	0.52
2:P:168:ILE:HB	2:P:245:GLN:HG2	1.91	0.51
1:Q:28:VAL:O	1:Q:72:LYS:N	2.29	0.51
1:Q:171:THR:HA	1:Q:225:LEU:HD12	1.93	0.51
2:R:10:ARG:N	3:R:401:NAD:O2N	2.43	0.51
2:R:267:LEU:HD22	2:R:271:LEU:HD23	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:168:VAL:HB	1:A:245:ASN:CG	2.36	0.51
1:A:221:LEU:C	1:A:224:LYS:HD3	2.35	0.51
1:A:361:TYR:H	1:G:195:ARG:CZ	2.23	0.51
2:B:273:VAL:HA	2:B:292:ILE:H	1.74	0.51
1:C:62:GLU:O	1:C:73:VAL:N	2.41	0.51
1:C:107:LYS:O	1:C:110:GLN:HG2	2.09	0.51
1:C:248(A):VAL:HG13	1:C:249:GLY:N	2.25	0.51
2:D:91:LEU:HA	2:D:115:LYS:O	2.10	0.51
2:D:292:ILE:HG23	2:D:308:ILE:O	2.10	0.51
1:E:94:GLU:O	1:E:119:THR:OG1	2.17	0.51
1:E:229:ALA:O	1:E:230:LEU:HD13	2.10	0.51
1:E:294:SER:O	1:E:297:THR:OG1	2.20	0.51
2:F:8:PHE:HB3	2:F:32:ASP:HB2	1.90	0.51
2:F:38:LYS:NZ	2:F:39:GLN:H	2.07	0.51
2:F:100:VAL:HG13	2:F:122(A):LYS:HB2	1.92	0.51
2:F:167:ILE:HA	2:F:246:VAL:HA	1.91	0.51
2:F:174:THR:O	2:F:230:LEU:HB2	2.10	0.51
2:F:332:TRP:NE1	2:F:334:UNK:OXT	2.43	0.51
1:G:12:GLY:HA2	1:G:15:PHE:HB3	1.92	0.51
2:H:79:PRO:HB3	2:H:108:HIS:ND1	2.24	0.51
2:H:105:ALA:O	2:H:109:LEU:N	2.40	0.51
2:H:162:ASP:OD1	2:H:167:ILE:N	2.31	0.51
2:H:243:VAL:HG22	2:H:306:LYS:HA	1.92	0.51
2:J:157:PHE:O	2:J:161:LEU:N	2.26	0.51
2:J:215:ALA:HB1	2:J:222:LYS:HG2	1.92	0.51
2:L:94:GLU:HG2	2:L:96:THR:HG23	1.92	0.51
2:P:38:LYS:HZ3	2:P:39:GLN:HG3	1.75	0.51
2:P:157:PHE:CE1	2:P:271:LEU:HG	2.46	0.51
1:Q:2:LYS:N	1:Q:90:ASP:OD2	2.42	0.51
1:Q:94:GLU:OE2	1:Q:96:THR:OG1	2.16	0.51
1:Q:175:THR:O	1:Q:238:SER:HA	2.09	0.51
1:A:293:ASP:O	1:A:296:LEU:HB2	2.10	0.51
2:B:2:LYS:HD3	2:B:87:MET:O	2.09	0.51
2:D:105:ALA:HA	2:D:108:HIS:CD2	2.46	0.51
2:F:2:LYS:HA	2:F:26:ASP:O	2.10	0.51
1:G:161:LEU:HB2	1:G:167:ILE:HD11	1.91	0.51
2:J:127:THR:HG23	2:J:133:ASN:ND2	2.24	0.51
2:J:129:VAL:N	2:J:133:ASN:OD1	2.41	0.51
2:J:281:ILE:O	2:J:284:ARG:HB3	2.10	0.51
2:L:104:GLY:HA2	2:L:107:LYS:HE2	1.91	0.51
1:O:41:THR:HG23	1:O:57:VAL:CG1	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:123(A):SER:OG	1:C:142:ASN:ND2	2.44	0.51
1:O:200:ALA:HB3	1:O:201:LEU:HD23	1.93	0.51
1:O:253:GLU:HA	1:O:256:ASN:HD21	1.75	0.51
2:P:302:ASP:N	2:P:302:ASP:OD1	2.40	0.51
1:Q:85:ALA:N	1:Q:111:ALA:O	2.32	0.51
1:Q:156:PRO:HB3	1:Q:267:LEU:HG	1.93	0.51
1:Q:256:ASN:HA	1:Q:259:PHE:HB2	1.92	0.51
1:Q:324:LEU:HA	1:Q:327:LEU:HB3	1.92	0.51
1:A:127:THR:HG21	1:A:216:LEU:HB3	1.93	0.51
1:A:214:VAL:O	1:A:217:VAL:HG22	2.11	0.51
2:B:237:VAL:HG13	2:B:312:ASP:HA	1.92	0.51
1:C:239:VAL:HA	1:C:310:TRP:HA	1.91	0.51
2:D:141:ASP:OD1	2:D:141:ASP:N	2.43	0.51
2:D:240:VAL:HG13	2:D:309:ALA:HB3	1.93	0.51
1:E:219:PRO:HA	1:E:222:LYS:HZ1	1.75	0.51
2:F:78:ASN:HD22	2:F:81:ASN:CG	2.19	0.51
1:G:62:GLU:OE1	1:G:62:GLU:N	2.43	0.51
1:I:95:GLY:O	3:I:401:NAD:H1B	2.10	0.51
1:I:280:SER:HA	1:I:283:PHE:HB2	1.92	0.51
2:J:102:ARG:HH21	2:J:125:ILE:HA	1.76	0.51
2:P:38:LYS:NZ	2:P:39:GLN:H	2.08	0.51
2:P:94:GLU:O	2:P:119:THR:OG1	2.18	0.51
2:P:102:ARG:HH22	2:P:126:PRO:HD2	1.76	0.51
2:P:148:SER:O	2:P:152:ASN:N	2.30	0.51
2:P:161:LEU:HD22	2:P:167:ILE:HD11	1.92	0.51
2:P:190:HIS:CE1	2:P:195:ARG:HD2	2.45	0.51
2:P:237:VAL:HG22	2:P:312:ASP:HA	1.92	0.51
1:Q:164:GLU:CD	1:Q:258:ALA:HB1	2.36	0.51
2:R:90:ASP:OD1	2:R:90:ASP:N	2.40	0.51
2:R:179:THR:H	2:R:182:GLN:CD	2.18	0.51
1:A:221:LEU:HD13	1:A:224:LYS:HB2	1.93	0.51
1:A:297:THR:OG1	1:A:298:MET:N	2.43	0.51
2:B:0:LYS:HZ1	2:B:332:TRP:HB2	1.75	0.51
2:B:203:ILE:O	2:D:279:VAL:HG11	2.10	0.51
1:C:82:LEU:HB3	1:C:84:TRP:CD2	2.45	0.51
1:C:169:LYS:N	1:C:245:ASN:OD1	2.39	0.51
1:C:176:HIS:HB3	1:C:231:ARG:CZ	2.40	0.51
2:D:58:LYS:O	2:D:65:SER:N	2.44	0.51
1:E:29:VAL:HA	1:E:72:LYS:O	2.09	0.51
1:E:30:VAL:HB	1:E:73:VAL:CG1	2.40	0.51
1:E:155:ALA:HA	1:E:158:VAL:HG22	1.91	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:13:ARG:HE	2:F:43:LEU:HB3	1.75	0.51
2:F:49:ILE:HG23	2:F:284:ARG:HH11	1.75	0.51
1:G:77:ARG:HH11	1:G:77:ARG:H	1.59	0.51
1:G:170:GLY:O	1:G:225:LEU:HA	2.10	0.51
2:H:17:ARG:HD3	2:H:50:LEU:HD12	1.92	0.51
2:H:251:PHE:CZ	2:H:253:GLU:HB3	2.45	0.51
1:I:60:ILE:HG22	1:I:60(A):ASP:H	1.74	0.51
1:I:128:TYR:HA	1:I:133:ASN:ND2	2.26	0.51
1:I:172:MET:HA	1:I:242:LEU:HA	1.90	0.51
1:I:246:ILE:HG23	1:I:248:LYS:N	2.25	0.51
2:J:102:ARG:HH21	2:J:125:ILE:HG13	1.75	0.51
2:J:166:GLY:O	2:J:247:SER:N	2.29	0.51
2:R:58:LYS:O	2:R:59:THR:C	2.52	0.51
1:A:182:GLN:NE2	1:A:231:ARG:HD3	2.25	0.51
1:A:296:LEU:HB3	1:A:308:VAL:HB	1.93	0.51
2:B:78:ASN:ND2	2:B:81:ASN:OD1	2.44	0.51
2:D:2:LYS:O	2:D:90:ASP:N	2.32	0.51
1:E:244:VAL:O	1:E:305:VAL:N	2.37	0.51
1:E:315:TRP:O	1:E:319:GLN:N	2.27	0.51
2:F:107:LYS:HA	2:F:110:GLN:CD	2.36	0.51
2:F:139:HIS:HB3	2:F:333:GLN:CD	2.35	0.51
1:G:18:CYS:O	1:G:20:ARG:HG2	2.10	0.51
2:H:58:LYS:O	2:H:65:SER:N	2.43	0.51
2:J:267:LEU:HB3	2:J:271:LEU:H	1.74	0.51
2:L:89:ILE:O	2:L:114:LYS:N	2.43	0.51
1:O:5:ILE:HB	1:O:30:VAL:HG13	1.93	0.51
1:O:18:CYS:O	1:O:18(A):TRP:C	2.54	0.51
1:O:53:PHE:HD1	1:O:54:LYS:HZ1	1.58	0.51
2:P:7:GLY:HA3	2:P:96:THR:HA	1.92	0.51
1:Q:205:PRO:HB2	1:Q:228:ILE:HD12	1.92	0.51
1:Q:212:LYS:H	1:Q:212:LYS:NZ	2.06	0.51
2:R:135:GLU:H	2:R:135:GLU:CD	2.17	0.51
2:B:102:ARG:HH21	2:B:125:ILE:HA	1.76	0.51
2:B:190:HIS:HB3	2:B:196:ALA:HB2	1.91	0.51
1:C:18(A):TRP:O	1:C:20:ARG:HB3	2.10	0.51
1:C:249:GLY:O	1:C:250:VAL:C	2.53	0.51
1:C:287:ASP:HA	1:C:319:GLN:HG3	1.91	0.51
2:D:6:ASN:HB3	2:D:94:GLU:HA	1.91	0.51
2:D:20:ARG:HH22	2:D:323:ASP:CG	2.19	0.51
2:F:63:ALA:HA	2:F:71:ILE:O	2.10	0.51
1:G:141:ALA:O	1:G:144:ILE:HG23	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:260:ARG:HD3	1:G:273:VAL:HG11	1.93	0.51
2:H:84:TRP:HB2	2:H:111:ALA:C	2.35	0.51
2:J:4:ALA:HA	2:J:29:VAL:O	2.11	0.51
2:J:107:LYS:HA	2:J:110:GLN:CD	2.36	0.51
2:J:236:ASN:ND2	2:J:237:VAL:H	2.09	0.51
2:J:260:ARG:HE	2:J:273:VAL:HG13	1.76	0.51
1:K:104:GLY:O	1:K:108:HIS:HD2	1.93	0.51
1:K:177:SER:OG	1:K:234:THR:O	2.28	0.51
1:K:214:VAL:HB	1:K:218:LEU:HD23	1.93	0.51
1:O:55:ALA:HB1	1:O:67:ASP:OD2	2.11	0.51
1:O:124:ASP:N	1:O:124:ASP:OD1	2.44	0.51
2:P:186:ASP:OD1	2:P:186:ASP:N	2.40	0.51
2:P:206:THR:HG21	2:P:231:ARG:HE	1.76	0.51
2:P:273:VAL:HG23	2:P:292:ILE:HB	1.93	0.51
2:P:281:ILE:HD12	2:P:284:ARG:HE	1.76	0.51
1:Q:168:VAL:N	1:Q:247:GLU:OE1	2.44	0.51
2:R:179:THR:HG23	2:R:182:GLN:HE22	1.75	0.51
1:A:1:LEU:N	1:A:26:ASP:OD1	2.44	0.51
1:A:117:ILE:HD11	1:A:324:LEU:HB3	1.93	0.51
1:A:168:VAL:N	1:A:247:GLU:HG3	2.26	0.51
2:B:1:LEU:N	2:B:24:PRO:O	2.35	0.51
2:B:88:GLY:O	2:B:114:LYS:NZ	2.43	0.51
2:B:179:THR:OG1	2:B:182:GLN:NE2	2.42	0.51
1:C:133:ASN:N	1:C:133:ASN:OD1	2.44	0.51
1:C:145:SER:OG	1:C:146:ASN:N	2.42	0.51
2:D:279:VAL:N	2:D:282:ASP:OD2	2.25	0.51
2:F:157:PHE:HB2	2:F:259:PHE:CZ	2.46	0.51
1:G:177:SER:HG	1:G:234:THR:C	2.18	0.51
1:G:192:ASP:OD1	1:G:194:ARG:HB2	2.10	0.51
2:H:91:LEU:HD21	2:H:93:ILE:HD11	1.93	0.51
2:J:45:LYS:NZ	2:J:53:PHE:O	2.34	0.51
1:K:23:SER:OG	1:K:25:LEU:O	2.28	0.51
2:L:2:LYS:O	2:L:90:ASP:N	2.31	0.51
2:L:29:VAL:HG11	2:L:89:ILE:HD11	1.93	0.51
2:L:123:GLY:O	2:L:125:ILE:N	2.44	0.51
2:L:326:ASP:O	2:L:330:ASN:N	2.35	0.51
1:O:191:ARG:HB3	1:C:358:CYS:HB2	1.93	0.51
1:O:238:SER:HB2	1:O:311:TYR:CE1	2.46	0.51
2:P:90:ASP:HA	2:P:114:LYS:HE2	1.93	0.51
2:P:239:VAL:HG12	2:P:309:ALA:O	2.10	0.51
1:Q:152:ASN:ND2	1:Q:152:ASN:H	2.07	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:169:LYS:O	1:Q:244:VAL:HG23	2.10	0.51
2:R:17:ARG:HG2	2:R:53:PHE:CE2	2.46	0.51
2:R:117:LEU:HA	2:R:144:ILE:O	2.11	0.51
2:B:115:LYS:HD2	2:B:142:THR:HA	1.93	0.51
2:B:157:PHE:HA	2:B:160:VAL:HB	1.92	0.51
2:B:203:ILE:HG12	2:B:204:VAL:H	1.76	0.51
1:C:161:LEU:HB2	1:C:259:PHE:HZ	1.75	0.51
1:C:259:PHE:HA	1:C:262:ALA:HB3	1.92	0.51
2:D:184:LEU:HG	2:D:185:LEU:HD22	1.93	0.51
2:D:272:SER:OG	2:D:273:VAL:N	2.34	0.51
1:E:139(A):ASP:N	1:E:139(A):ASP:OD1	2.41	0.51
2:F:15:PHE:CD2	2:F:318:SER:HB2	2.44	0.51
2:F:78:ASN:HD21	2:F:80:VAL:HG22	1.75	0.51
1:G:109:ILE:HA	1:G:113:ALA:HB3	1.92	0.51
1:G:246:ILE:O	1:G:303:ASP:HA	2.11	0.51
1:I:293:ASP:OD1	1:I:295:SER:N	2.43	0.51
2:J:7:GLY:O	2:J:9:GLY:N	2.42	0.51
2:J:15:PHE:HE2	2:J:321:VAL:HG12	1.76	0.51
2:J:139:HIS:CG	2:J:333:GLN:H	2.29	0.51
2:J:151:THR:HG23	2:J:210:ALA:HA	1.93	0.51
2:J:182:GLN:NE2	2:J:182:GLN:H	2.09	0.51
1:K:62:GLU:CG	1:K:72:LYS:HE2	2.40	0.51
2:L:262:SER:HA	2:L:265:ASN:HD21	1.76	0.51
1:O:82:LEU:HB3	1:O:84:TRP:CE2	2.45	0.51
1:O:167:ILE:HG23	1:O:244:VAL:HB	1.93	0.51
1:O:169:LYS:HG2	1:Q:304:MET:SD	2.51	0.51
2:P:78:ASN:HD22	2:P:81:ASN:CG	2.18	0.51
2:P:107:LYS:HA	2:P:110:GLN:CD	2.36	0.51
2:P:174:THR:O	2:P:230:LEU:HB2	2.10	0.51
2:R:317:TYR:O	2:R:321:VAL:N	2.30	0.51
1:A:87:LEU:HB2	1:A:89:ILE:HG12	1.92	0.51
2:B:157:PHE:O	2:B:161:LEU:N	2.26	0.51
2:B:186:ASP:HA	2:B:196:ALA:O	2.11	0.51
1:C:94:GLU:HB3	1:C:118:ILE:HA	1.93	0.51
1:C:256:ASN:N	1:C:256:ASN:OD1	2.44	0.51
2:D:174:THR:O	2:D:230:LEU:HB2	2.11	0.51
2:F:105:ALA:HA	2:F:108:HIS:HD2	1.75	0.51
2:F:203:ILE:O	2:F:205:PRO:HD3	2.10	0.51
1:G:199:ALA:O	1:G:233:PRO:HG3	2.10	0.51
2:H:137:TYR:O	2:H:331:LYS:NZ	2.31	0.51
2:J:149:CYS:HB3	2:J:317:TYR:CD2	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:275:ASP:OD1	2:J:295:SER:N	2.43	0.51
1:O:65:SER:HA	1:O:69:LYS:O	2.09	0.51
2:P:2:LYS:HA	2:P:26:ASP:O	2.11	0.51
2:P:203:ILE:O	2:P:205:PRO:HD3	2.10	0.51
2:P:277:PRO:HB2	2:R:194:ARG:HG3	1.92	0.51
1:Q:8:PHE:CZ	1:Q:13:ARG:HD2	2.46	0.51
2:R:17:ARG:O	2:R:19:GLY:N	2.31	0.51
2:R:242:LEU:HD11	2:R:244:VAL:HG13	1.93	0.51
1:A:182:GLN:HA	1:A:195:ARG:HB3	1.92	0.51
1:A:195:ARG:HH22	1:G:361:TYR:N	2.08	0.51
1:A:273:VAL:HG12	1:A:292:ILE:HB	1.92	0.51
2:B:121:PRO:HG3	2:B:148:SER:N	2.26	0.51
1:C:278:LEU:HB3	1:C:282:ASP:HB2	1.91	0.51
2:D:262:SER:HA	2:D:265:ASN:HD21	1.76	0.51
1:E:156:PRO:HG2	1:E:271:LEU:HD11	1.91	0.51
1:E:203:ILE:O	1:E:205:PRO:HD3	2.12	0.51
2:F:237:VAL:HG22	2:F:312:ASP:HA	1.93	0.51
2:F:306:LYS:HZ2	2:H:228:ILE:N	2.08	0.51
2:H:87:MET:N	2:H:87:MET:SD	2.84	0.51
2:H:116:VAL:O	2:H:144:ILE:HG12	2.10	0.51
2:H:179:THR:HG23	2:H:182:GLN:HE22	1.75	0.51
1:I:168:VAL:N	1:I:247:GLU:HG3	2.26	0.51
2:J:177:SER:OG	2:J:178:TYR:N	2.43	0.51
2:J:203:ILE:O	2:L:279:VAL:HG11	2.10	0.51
1:K:190:HIS:ND1	1:K:195:ARG:HB2	2.25	0.51
2:P:63:ALA:HA	2:P:71:ILE:C	2.36	0.50
2:P:172:MET:SD	2:P:227:GLY:N	2.84	0.50
1:Q:5:ILE:O	1:Q:31:ASN:N	2.32	0.50
1:Q:355:ASP:O	1:Q:358:CYS:N	2.44	0.50
2:R:63:ALA:HB1	2:R:70:VAL:HB	1.93	0.50
2:R:149:CYS:HA	2:R:152:ASN:HD22	1.75	0.50
1:A:185:LEU:HD13	2:D:10:ARG:CZ	2.41	0.50
1:A:216:LEU:CD1	1:G:124:ASP:HB2	2.40	0.50
1:A:281:VAL:HB	1:C:202:ASN:HD21	1.75	0.50
2:B:47:ASP:CG	2:B:50:LEU:H	2.19	0.50
2:B:107:LYS:HA	2:B:110:GLN:CD	2.35	0.50
2:B:151:THR:HG23	2:B:210:ALA:HA	1.93	0.50
1:C:172:MET:SD	1:C:240:VAL:HB	2.52	0.50
1:C:300:MET:HG2	1:C:304:MET:SD	2.51	0.50
1:E:20:ARG:NH1	1:E:322:VAL:HG11	2.26	0.50
1:E:32:ASP:O	1:E:34:GLY:N	2.44	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:401:NAD:O2D	1:K:362:GLU:O	2.28	0.50
2:F:18(A):TRP:NE1	2:F:23:SER:OG	2.44	0.50
2:F:172:MET:SD	2:F:227:GLY:N	2.84	0.50
1:G:85:ALA:N	1:G:111:ALA:O	2.40	0.50
1:G:156:PRO:O	1:G:160:VAL:N	2.36	0.50
2:H:218:LEU:HD22	2:H:221:LEU:HD13	1.92	0.50
2:H:276:GLU:OE1	2:H:276:GLU:N	2.33	0.50
1:I:78:ASP:OD1	1:I:81:LYS:N	2.36	0.50
1:I:142:ASN:OD1	1:I:142:ASN:N	2.43	0.50
2:J:148:SER:O	2:J:152:ASN:N	2.21	0.50
2:J:312:ASP:CG	2:J:315:TRP:HB3	2.36	0.50
1:K:313:ASN:O	1:K:317:TYR:HB2	2.11	0.50
2:L:135:GLU:CD	2:L:135:GLU:H	2.18	0.50
2:P:7:GLY:O	2:P:9:GLY:N	2.44	0.50
2:P:221:LEU:H	2:P:221:LEU:HD12	1.76	0.50
1:Q:174:THR:HB	1:Q:240:VAL:HG23	1.93	0.50
1:Q:186:ASP:HA	1:Q:197:ARG:HA	1.94	0.50
2:B:27:VAL:O	2:B:69:LYS:NZ	2.32	0.50
2:B:64:ILE:N	2:B:71:ILE:O	2.44	0.50
2:B:117:LEU:HA	2:B:144:ILE:O	2.10	0.50
2:B:134:GLU:HG3	2:B:327:ILE:HD13	1.94	0.50
1:C:20:ARG:CZ	1:C:20:ARG:HA	2.41	0.50
2:D:123:GLY:O	2:D:125:ILE:N	2.44	0.50
2:D:293:ASP:H	2:D:308:ILE:HB	1.76	0.50
2:F:7:GLY:HA3	2:F:96:THR:HA	1.92	0.50
2:F:30:ILE:N	2:F:72:LYS:O	2.42	0.50
1:G:169:LYS:HB2	1:G:245:ASN:HD21	1.77	0.50
1:G:183:ARG:NE	1:G:188:SER:HB2	2.21	0.50
2:H:139:HIS:CE1	2:H:334:UNK:H	2.29	0.50
1:I:13:ARG:HA	1:I:16:LEU:HB3	1.93	0.50
1:I:194:ARG:NH1	1:I:205:PRO:O	2.45	0.50
2:J:312:ASP:OD1	2:J:315:TRP:N	2.43	0.50
1:K:17:ARG:HD2	1:K:44:LEU:HD12	1.93	0.50
1:K:39:SER:O	1:K:43:LEU:N	2.26	0.50
1:K:203:ILE:O	1:K:205:PRO:HD3	2.11	0.50
1:K:281:VAL:HG12	1:K:284:ARG:HD3	1.92	0.50
2:L:44:LEU:HD23	2:L:57:VAL:HG23	1.93	0.50
2:L:132:VAL:HG11	2:L:217:VAL:HG23	1.93	0.50
2:L:173:THR:HA	2:L:228:ILE:O	2.11	0.50
1:O:22:ASP:O	1:O:24:PRO:HD3	2.11	0.50
1:O:202:ASN:OD1	1:Q:281:VAL:N	2.31	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:O:401:NAD:H52N	3:O:401:NAD:O5B	2.11	0.50
2:P:102:ARG:NH2	2:P:125:ILE:HA	2.27	0.50
1:Q:13:ARG:HH12	1:Q:43:LEU:HD13	1.77	0.50
1:Q:82:LEU:HD12	1:Q:108:HIS:CE1	2.46	0.50
1:Q:238:SER:HB3	1:Q:313:ASN:HB3	1.94	0.50
1:Q:279:VAL:HG12	1:Q:282:ASP:OD1	2.12	0.50
2:R:7:GLY:N	2:R:31:ASN:O	2.45	0.50
2:B:60:ALA:O	2:B:63:ALA:HB3	2.10	0.50
2:B:236:ASN:CG	2:B:237:VAL:H	2.17	0.50
2:B:292:ILE:HG23	2:B:308:ILE:O	2.12	0.50
1:C:248(A):VAL:HG22	1:C:249:GLY:N	2.25	0.50
2:D:173:THR:HA	2:D:228:ILE:O	2.12	0.50
1:E:3:VAL:O	1:E:27:VAL:HA	2.12	0.50
1:E:194:ARG:NH1	1:E:205:PRO:HB2	2.27	0.50
1:E:246:ILE:HG22	1:E:303:ASP:C	2.35	0.50
2:F:126:PRO:HB2	2:F:128:TYR:CE2	2.46	0.50
2:F:258:ALA:O	2:F:262:SER:OG	2.16	0.50
1:G:147:ALA:O	1:G:317:TYR:OH	2.20	0.50
2:H:17:ARG:HG2	2:H:53:PHE:CE2	2.46	0.50
2:H:242:LEU:HD11	2:H:244:VAL:HG13	1.94	0.50
2:H:297:THR:HG22	2:H:308:ILE:H	1.76	0.50
2:H:317:TYR:O	2:H:321:VAL:N	2.31	0.50
1:I:5:ILE:HA	1:I:93:ILE:HB	1.93	0.50
1:I:84:TRP:HB2	1:I:112:GLY:C	2.36	0.50
1:I:262:ALA:C	1:I:265:GLY:H	2.20	0.50
1:I:301:GLY:N	1:I:304:MET:O	2.41	0.50
2:J:302:ASP:N	2:J:302:ASP:OD1	2.43	0.50
1:K:229:ALA:O	1:K:230:LEU:HD13	2.11	0.50
2:L:1:LEU:HD11	2:L:332:TRP:CE3	2.47	0.50
2:L:236:ASN:ND2	2:L:237:VAL:H	2.09	0.50
1:O:149:CYS:SG	1:O:150:THR:N	2.84	0.50
1:O:358:CYS:HA	1:C:190:HIS:CE1	2.47	0.50
2:P:11:ILE:HD11	3:P:401:NAD:H2N	1.92	0.50
1:Q:190:HIS:CE1	1:Q:195:ARG:HH11	2.28	0.50
1:A:63:THR:OG1	1:A:72:LYS:HD3	2.11	0.50
2:B:277:PRO:HB2	2:D:194:ARG:CG	2.42	0.50
1:C:13:ARG:HB2	1:C:44:LEU:HD12	1.93	0.50
1:C:184:LEU:HG	1:C:185:LEU:HG	1.94	0.50
1:C:237:VAL:CG1	1:C:280:SER:HB3	2.25	0.50
2:D:115:LYS:HE2	2:D:142:THR:HB	1.94	0.50
2:D:117:LEU:HD12	2:D:144:ILE:HD11	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:137:TYR:OH	1:E:328:VAL:HA	2.11	0.50
1:E:192:ASP:O	1:E:196:ALA:N	2.31	0.50
2:F:28:VAL:C	2:F:71:ILE:HG23	2.35	0.50
2:F:58:LYS:O	2:F:65:SER:N	2.44	0.50
1:G:105:ALA:HA	1:G:108:HIS:CD2	2.46	0.50
1:G:145:SER:HG	1:G:146:ASN:H	1.57	0.50
1:I:28:VAL:O	1:I:72:LYS:N	2.44	0.50
1:I:246:ILE:HG22	1:I:303:ASP:OD1	2.11	0.50
2:J:6:ASN:HB2	2:J:84:TRP:CZ2	2.45	0.50
2:J:173:THR:HA	2:J:228:ILE:O	2.11	0.50
1:K:134:GLU:HG2	1:K:135:LYS:H	1.76	0.50
2:L:105:ALA:HA	2:L:108:HIS:CD2	2.46	0.50
2:L:120:ALA:O	2:L:145:SER:OG	2.26	0.50
2:L:177:SER:OG	2:L:234:THR:O	2.23	0.50
1:O:190:HIS:C	1:O:192:ASP:H	2.19	0.50
2:P:15:PHE:HE2	2:P:321:VAL:HB	1.76	0.50
2:R:116:VAL:O	2:R:144:ILE:HG12	2.10	0.50
2:R:139:HIS:CE1	2:R:334:UNK:H	2.29	0.50
1:A:8:PHE:CD1	1:A:13:ARG:HG2	2.46	0.50
1:C:17:ARG:HG2	1:C:53:PHE:CD2	2.46	0.50
1:C:37:VAL:HA	1:C:40:ALA:HB3	1.93	0.50
1:C:78:ASP:HB3	1:C:81:LYS:HE2	1.93	0.50
1:C:128:TYR:HE2	1:C:144:ILE:HG21	1.76	0.50
1:C:148:SER:O	1:C:151:THR:OG1	2.20	0.50
1:C:213:ALA:O	1:C:216:LEU:HB2	2.11	0.50
1:E:57:VAL:HG13	1:E:64:PHE:HB2	1.94	0.50
2:F:105:ALA:HA	2:F:108:HIS:CD2	2.47	0.50
1:G:2:LYS:HB2	1:G:90:ASP:OD1	2.11	0.50
1:G:239:VAL:HB	1:G:310:TRP:CD2	2.47	0.50
1:I:13:ARG:NE	1:I:43:LEU:HB3	2.26	0.50
1:I:213:ALA:O	1:I:216:LEU:HB2	2.12	0.50
1:K:142:ASN:ND2	1:K:143:ILE:H	2.09	0.50
2:L:7:GLY:O	2:L:9:GLY:N	2.45	0.50
2:L:141:ASP:OD1	2:L:141:ASP:N	2.42	0.50
2:P:32:ASP:OD1	2:P:33:THR:N	2.44	0.50
2:P:84:TRP:CD1	2:P:84:TRP:H	2.29	0.50
2:P:99:PHE:CD1	2:P:104:GLY:HA3	2.46	0.50
2:P:139:HIS:CD2	2:P:333:GLN:HB2	2.47	0.50
2:P:149:CYS:HA	2:P:152:ASN:HB3	1.93	0.50
1:Q:2:LYS:HB2	1:Q:90:ASP:N	2.27	0.50
2:R:2:LYS:HA	2:R:26:ASP:O	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:0:LYS:N	1:A:24:PRO:O	2.36	0.50
1:A:60:ILE:H	1:A:64:PHE:HB2	1.76	0.50
1:A:215:SER:HB2	1:A:221:LEU:HB3	1.94	0.50
1:A:220:GLN:OE1	1:A:220:GLN:N	2.45	0.50
2:B:36:GLY:HA3	2:B:38:LYS:HZ1	1.76	0.50
2:B:300:MET:HB2	2:B:304:MET:HG2	1.94	0.50
1:C:160:VAL:HG22	1:C:259:PHE:HE1	1.76	0.50
2:D:293:ASP:OD1	2:D:295:SER:OG	2.21	0.50
1:E:41:THR:O	1:E:45:LYS:N	2.42	0.50
1:E:127:THR:OG1	1:E:128:TYR:N	2.44	0.50
1:E:156:PRO:O	1:E:159:LYS:HB3	2.12	0.50
2:F:30:ILE:HG22	2:F:31:ASN:H	1.76	0.50
2:F:120:ALA:HA	3:F:401:NAD:H5N	1.93	0.50
1:G:161:LEU:O	1:G:166:GLY:N	2.45	0.50
2:H:102:ARG:HH22	2:H:125:ILE:HA	1.77	0.50
2:H:135:GLU:H	2:H:135:GLU:CD	2.17	0.50
1:I:62:GLU:O	1:I:73:VAL:N	2.43	0.50
1:I:238:SER:HB3	1:I:311:TYR:CE2	2.45	0.50
2:J:120:ALA:O	2:J:145:SER:OG	2.30	0.50
2:J:269:GLY:O	2:J:288:VAL:HA	2.12	0.50
2:J:278:LEU:C	2:L:194:ARG:HH12	2.19	0.50
2:L:240:VAL:HG13	2:L:309:ALA:HB3	1.93	0.50
2:L:318:SER:O	2:L:322:VAL:HG23	2.11	0.50
1:O:1:LEU:HD21	1:O:90:ASP:HB2	1.92	0.50
2:P:190:HIS:ND1	2:P:195:ARG:HB2	2.26	0.50
2:P:258:ALA:O	2:P:262:SER:OG	2.17	0.50
1:Q:114:LYS:HB3	1:Q:115:LYS:HD2	1.93	0.50
2:R:106:GLY:O	2:R:109:LEU:N	2.44	0.50
2:R:312:ASP:HB3	2:R:316:GLY:H	1.76	0.50
1:A:195:ARG:NH2	1:G:361:TYR:HA	2.26	0.50
1:A:237:VAL:HA	1:A:312:ASP:HA	1.94	0.50
2:B:5:ILE:HD12	2:B:93:ILE:HB	1.94	0.50
2:B:102:ARG:HG3	2:B:143:ILE:HD12	1.93	0.50
2:D:2:LYS:N	2:D:90:ASP:OD2	2.45	0.50
2:D:38:LYS:HZ2	2:D:38:LYS:H	1.58	0.50
1:E:116:VAL:C	1:E:144:ILE:HG23	2.37	0.50
1:E:291:THR:O	1:E:310:TRP:HD1	1.95	0.50
1:E:316:GLY:O	1:E:320:ARG:N	2.37	0.50
2:F:304:MET:HE1	2:H:170:GLY:HA2	1.94	0.50
2:H:106:GLY:O	2:H:109:LEU:N	2.45	0.50
2:H:122:GLY:C	2:H:125:ILE:HG12	2.37	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:66:VAL:N	2:J:69:LYS:O	2.43	0.50
2:J:280:SER:N	2:L:202:ASN:HD22	2.09	0.50
1:K:38:LYS:O	1:K:41:THR:OG1	2.29	0.50
1:K:78:ASP:HB3	1:K:81:LYS:HZ3	1.77	0.50
1:K:168:VAL:HG23	1:K:247:GLU:HA	1.93	0.50
2:L:208:THR:HG22	2:L:229:ALA:HB2	1.93	0.50
2:P:157:PHE:HB2	2:P:259:PHE:CZ	2.46	0.50
1:Q:251:THR:OG1	1:Q:252:ALA:N	2.45	0.50
2:R:120:ALA:HB2	3:R:401:NAD:C1D	2.22	0.50
2:R:154:LEU:HA	2:R:157:PHE:CZ	2.47	0.50
1:A:236:ASN:ND2	1:A:312:ASP:OD2	2.43	0.50
2:B:45:LYS:HG3	2:B:46:TYR:CZ	2.47	0.50
2:B:316:GLY:HA2	2:B:319:GLN:HB2	1.92	0.50
2:D:177:SER:OG	2:D:234:THR:O	2.19	0.50
1:E:32:ASP:O	1:E:75:SER:OG	2.30	0.50
1:E:274:CYS:SG	1:E:276:ILE:N	2.84	0.50
1:E:298:MET:SD	1:G:226:ASN:ND2	2.85	0.50
1:E:313:ASN:OD1	1:E:313:ASN:N	2.44	0.50
2:F:17:ARG:NH2	2:F:53:PHE:HA	2.26	0.50
1:G:157:PHE:HA	1:G:160:VAL:HB	1.93	0.50
1:G:182:GLN:O	1:G:183:ARG:NH2	2.45	0.50
1:I:173:THR:HA	1:I:228:ILE:O	2.11	0.50
1:I:274:CYS:O	1:I:293:ASP:HA	2.12	0.50
1:I:282:ASP:CG	2:J:46:TYR:HB3	2.36	0.50
2:J:94:GLU:OE2	2:J:98:VAL:N	2.43	0.50
2:J:134:GLU:HG3	2:J:327:ILE:HD13	1.94	0.50
1:K:161:LEU:HD23	1:K:165:LEU:HB2	1.94	0.50
2:L:11:ILE:O	2:L:15:PHE:N	2.39	0.50
1:O:118:ILE:O	1:O:317:TYR:OH	2.21	0.50
1:O:149:CYS:O	1:O:153:CYS:N	2.45	0.50
2:P:126:PRO:HB2	2:P:128:TYR:CZ	2.47	0.50
1:Q:178:TYR:HD2	1:Q:233:PRO:HA	1.77	0.50
1:Q:328:VAL:HG12	1:Q:332:TRP:HD1	1.77	0.50
1:Q:360:LEU:HA	1:I:190:HIS:HD2	1.69	0.50
1:A:9:GLY:O	1:A:12:GLY:N	2.45	0.50
2:B:149:CYS:HB3	2:B:317:TYR:CD2	2.46	0.50
2:B:243:VAL:HA	2:B:306:LYS:HA	1.93	0.50
1:C:125:ILE:HG23	1:C:144:ILE:HA	1.93	0.50
1:C:128:TYR:HA	1:C:133:ASN:ND2	2.27	0.50
1:C:246:ILE:N	1:C:303:ASP:O	2.44	0.50
1:C:270:VAL:HG13	1:C:320:ARG:CD	2.42	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:329:ALA:HA	1:C:332:TRP:CD1	2.47	0.50
1:C:329:ALA:HA	1:C:332:TRP:HD1	1.77	0.50
2:D:291:THR:HG1	2:D:310:TRP:CD1	2.30	0.50
1:E:15:PHE:O	1:E:18(A):TRP:N	2.42	0.50
1:E:204:VAL:N	1:E:231:ARG:O	2.44	0.50
1:E:248:LYS:HG2	1:E:248(A):VAL:H	1.77	0.50
1:E:272:ASP:O	1:E:290:SER:OG	2.24	0.50
1:E:287:ASP:OD1	1:E:287:ASP:N	2.33	0.50
2:F:151:THR:HG23	2:F:210:ALA:HA	1.94	0.50
1:G:82:LEU:HD12	1:G:108:HIS:CE1	2.47	0.50
1:G:82:LEU:HD12	1:G:108:HIS:HE1	1.75	0.50
1:G:123(A):SER:O	1:G:124:ASP:C	2.54	0.50
1:G:251:THR:OG1	1:G:253:GLU:OE1	2.19	0.50
1:G:297:THR:HA	1:G:307:VAL:HG23	1.94	0.50
2:H:38:LYS:NZ	2:H:39:GLN:H	2.10	0.50
2:H:193:LEU:HA	2:H:196:ALA:HB3	1.93	0.50
1:I:100:VAL:HG11	1:I:121:PRO:O	2.12	0.50
1:I:170:GLY:O	1:I:225:LEU:HA	2.12	0.50
1:I:314:GLU:HA	3:I:401:NAD:H72N	1.77	0.50
1:I:328:VAL:HG22	1:I:331:LYS:HZ3	1.75	0.50
2:J:60:ALA:O	2:J:63:ALA:HB3	2.12	0.50
2:J:76:ASP:HB3	2:J:82:LEU:HD21	1.94	0.50
2:J:109:LEU:HD21	2:J:116:VAL:HG23	1.93	0.50
2:J:124:ASP:O	2:J:125:ILE:HD12	2.12	0.50
1:K:117:ILE:HG23	1:K:144:ILE:HG13	1.94	0.50
1:K:281:VAL:HG23	1:K:282:ASP:OD1	2.11	0.50
2:L:15:PHE:CD1	2:L:322:VAL:HG22	2.47	0.50
2:L:179:THR:HG23	2:L:182:GLN:HE22	1.76	0.50
1:O:11:ILE:HD12	1:O:14:ASN:HD21	1.77	0.49
1:O:45:LYS:HZ2	1:O:53:PHE:HB3	1.76	0.49
1:O:103:PRO:O	1:O:107:LYS:HG3	2.12	0.49
1:O:357:GLU:O	1:C:190:HIS:HA	2.12	0.49
2:P:18:CYS:HB3	2:P:322:VAL:HG21	1.94	0.49
2:P:117:LEU:HG	2:P:145:SER:HA	1.94	0.49
1:A:5:ILE:HB	1:A:30:VAL:HG22	1.93	0.49
1:A:6:ASN:N	1:A:93:ILE:O	2.36	0.49
1:A:162:ASP:HA	1:A:166:GLY:H	1.77	0.49
2:B:14:ASN:HD21	2:B:314:GLU:C	2.20	0.49
1:C:82:LEU:HB3	1:C:84:TRP:CE2	2.47	0.49
2:D:174:THR:HG23	2:D:230:LEU:H	1.76	0.49
2:D:190:HIS:HB3	2:D:196:ALA:HB2	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:0:LYS:N	2:F:24:PRO:O	2.45	0.49
2:F:18:CYS:HB3	2:F:322:VAL:HG21	1.94	0.49
2:F:131:GLY:O	2:F:159:LYS:NZ	2.33	0.49
2:F:236:ASN:OD1	2:F:284:ARG:NH1	2.45	0.49
2:F:239:VAL:HG13	2:F:310:TRP:CD2	2.47	0.49
1:G:280:SER:O	1:G:283:PHE:N	2.32	0.49
2:H:149:CYS:HA	2:H:152:ASN:HD22	1.75	0.49
2:H:294:SER:O	2:H:297:THR:OG1	2.30	0.49
2:J:66:VAL:H	2:J:69:LYS:C	2.20	0.49
2:J:127:THR:HG23	2:J:133:ASN:HD22	1.77	0.49
2:J:132:VAL:HG11	2:J:217:VAL:HB	1.93	0.49
2:J:326:ASP:O	2:J:330:ASN:N	2.39	0.49
1:K:5:ILE:HD12	1:K:93:ILE:O	2.12	0.49
1:K:62:GLU:HG2	1:K:72:LYS:HE2	1.94	0.49
1:K:100:VAL:O	1:K:122:ALA:HB1	2.12	0.49
2:L:20:ARG:HH22	2:L:323:ASP:CG	2.20	0.49
1:O:33:SER:OG	1:O:77:ARG:HD3	2.11	0.49
1:O:318:SER:OG	1:O:319:GLN:N	2.44	0.49
2:R:1:LEU:HB3	2:R:25:LEU:HD13	1.93	0.49
2:R:102:ARG:NH2	2:R:125:ILE:HA	2.27	0.49
2:B:124:ASP:O	2:B:125:ILE:HD12	2.12	0.49
2:B:197:ARG:HH11	1:C:42:HIS:HE1	1.60	0.49
2:B:250:THR:OG1	2:B:251:PHE:N	2.45	0.49
1:E:8:PHE:CB	1:E:32:ASP:OD2	2.60	0.49
1:G:82:LEU:O	1:G:84:TRP:HD1	1.95	0.49
2:H:99:PHE:CD1	2:H:104:GLY:HA3	2.46	0.49
2:H:117:LEU:HA	2:H:144:ILE:O	2.11	0.49
2:H:312:ASP:HB3	2:H:316:GLY:H	1.76	0.49
1:I:177:SER:HB3	1:I:237:VAL:H	1.78	0.49
1:I:203:ILE:CD1	1:I:230:LEU:HB3	2.43	0.49
1:I:246:ILE:HG23	1:I:248:LYS:H	1.78	0.49
2:J:60:ALA:HB2	2:J:65:SER:HB3	1.94	0.49
2:J:146:ASN:HD22	2:J:321:VAL:HG22	1.77	0.49
2:J:316:GLY:HA2	2:J:319:GLN:HB2	1.94	0.49
1:K:102:GLY:N	1:K:103:PRO:HD2	2.28	0.49
1:K:241:ASP:HA	1:K:307:VAL:O	2.12	0.49
2:L:0:LYS:N	2:L:26:ASP:HB2	2.27	0.49
2:L:126:PRO:HG2	2:L:144:ILE:HG22	1.93	0.49
1:O:238:SER:OG	1:O:311:TYR:O	2.14	0.49
2:P:173:THR:OG1	2:P:228:ILE:HG13	2.13	0.49
1:Q:256:ASN:HA	1:Q:259:PHE:CD2	2.48	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:190:HIS:CE1	1:A:191:ARG:HE	2.30	0.49
1:A:190:HIS:CE1	1:G:359:LYS:H	2.30	0.49
2:B:44:LEU:O	2:B:53:PHE:HB2	2.12	0.49
2:B:283:PHE:N	2:B:283:PHE:CD1	2.80	0.49
1:C:172:MET:HG2	1:C:242:LEU:HB2	1.94	0.49
1:E:20:ARG:HD2	1:E:322:VAL:CG1	2.41	0.49
1:E:118:ILE:HD12	1:E:122:ALA:HB2	1.94	0.49
2:F:102:ARG:NH2	2:F:125:ILE:HA	2.26	0.49
2:F:221:LEU:HD12	2:F:221:LEU:H	1.76	0.49
2:H:17:ARG:O	2:H:19:GLY:N	2.32	0.49
2:H:281:ILE:O	2:H:283:PHE:N	2.44	0.49
1:I:242:LEU:N	1:I:307:VAL:O	2.30	0.49
2:J:139:HIS:HB3	2:J:333:GLN:CD	2.37	0.49
2:J:255:VAL:O	2:J:259:PHE:N	2.31	0.49
2:J:279:VAL:H	2:J:282:ASP:CG	2.18	0.49
1:K:238:SER:O	1:K:311:TYR:N	2.42	0.49
2:L:139:HIS:CG	2:L:333:GLN:H	2.29	0.49
1:O:3:VAL:HG22	1:O:91:ILE:HB	1.94	0.49
1:O:226:ASN:ND2	1:O:227:GLY:H	2.11	0.49
1:O:238:SER:HB2	1:O:311:TYR:CZ	2.46	0.49
2:P:18(A):TRP:NE1	2:P:23:SER:OG	2.45	0.49
2:P:197:ARG:HH22	1:Q:46:TYR:C	2.20	0.49
1:Q:92:VAL:HB	1:Q:116:VAL:HA	1.95	0.49
1:Q:234:THR:OG1	1:Q:237:VAL:N	2.44	0.49
2:R:302:ASP:N	2:R:302:ASP:OD1	2.45	0.49
1:A:17:ARG:HH21	1:A:50:LEU:HB3	1.78	0.49
1:A:178:TYR:CD2	1:A:233:PRO:HA	2.47	0.49
2:B:17:ARG:NH2	2:B:52:THR:O	2.44	0.49
2:B:109:LEU:HD21	2:B:116:VAL:HG23	1.93	0.49
2:B:125:ILE:HD11	2:B:143:ILE:HG22	1.95	0.49
2:B:139:HIS:HB3	2:B:333:GLN:CD	2.37	0.49
2:B:181:ASP:OD2	2:B:182:GLN:NE2	2.46	0.49
2:B:312:ASP:CG	2:B:316:GLY:H	2.20	0.49
2:D:15:PHE:CZ	2:D:322:VAL:HA	2.47	0.49
2:D:45:LYS:HB2	2:D:57:VAL:HG11	1.94	0.49
2:D:170:GLY:HA2	2:D:244:VAL:HA	1.94	0.49
2:F:317:TYR:O	2:F:321:VAL:HG23	2.12	0.49
1:G:10:ARG:HA	1:G:13:ARG:NE	2.27	0.49
1:G:176:HIS:N	1:G:230:LEU:O	2.39	0.49
2:H:204:VAL:O	2:H:230:LEU:HA	2.13	0.49
1:I:8:PHE:CD1	1:I:13:ARG:HG2	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:270:VAL:HG13	1:I:320:ARG:HH12	1.76	0.49
2:J:96:THR:HG22	3:J:401:NAD:C4A	2.42	0.49
2:J:115:LYS:HD2	2:J:142:THR:HA	1.94	0.49
1:K:50:LEU:HD12	1:K:285:CYS:SG	2.52	0.49
1:K:276:ILE:O	1:K:278:LEU:HD22	2.11	0.49
2:L:276:GLU:H	2:L:276:GLU:CD	2.15	0.49
1:O:103:PRO:HG3	1:C:110:GLN:HA	1.94	0.49
1:O:105:ALA:HA	1:O:108:HIS:HD2	1.78	0.49
2:P:109:LEU:HD22	2:P:114:LYS:C	2.37	0.49
1:Q:9:GLY:O	1:Q:13:ARG:N	2.39	0.49
1:Q:32:ASP:O	1:Q:34:GLY:N	2.45	0.49
1:Q:107:LYS:HD3	1:I:141:ALA:HA	1.94	0.49
1:Q:154:LEU:HB2	1:Q:214:VAL:HG11	1.93	0.49
1:Q:256:ASN:HB2	1:Q:260:ARG:HH21	1.77	0.49
1:Q:283:PHE:CD1	1:Q:283:PHE:N	2.81	0.49
2:R:79:PRO:HB3	2:R:108:HIS:ND1	2.28	0.49
2:B:139:HIS:CG	2:B:333:GLN:H	2.30	0.49
2:B:173:THR:HA	2:B:228:ILE:O	2.12	0.49
2:B:193:LEU:HD13	2:D:277:PRO:HG3	1.94	0.49
2:B:281:ILE:HG13	2:B:284:ARG:HH21	1.77	0.49
2:D:126:PRO:HG2	2:D:144:ILE:HG22	1.93	0.49
2:D:139:HIS:CG	2:D:333:GLN:H	2.30	0.49
2:F:44:LEU:HG	2:F:53:PHE:HD2	1.78	0.49
2:F:94:GLU:OE2	2:F:96:THR:OG1	2.22	0.49
2:F:184:LEU:HD13	1:G:184:LEU:HA	1.93	0.49
2:F:190:HIS:ND1	2:F:195:ARG:HB2	2.27	0.49
1:G:175:THR:HG21	1:G:239:VAL:HG13	1.93	0.49
1:G:287:ASP:HA	1:G:319:GLN:OE1	2.13	0.49
2:J:257:ALA:O	2:J:260:ARG:HB2	2.13	0.49
2:J:277:PRO:HB2	2:L:194:ARG:HG2	1.95	0.49
2:J:312:ASP:CG	2:J:316:GLY:H	2.21	0.49
1:K:82:LEU:O	1:K:84:TRP:N	2.44	0.49
1:K:272:ASP:O	1:K:292:ILE:N	2.41	0.49
1:O:41:THR:HG21	1:O:59:ILE:HD11	1.93	0.49
1:O:90:ASP:HA	1:O:114:LYS:HZ2	1.77	0.49
1:O:172:MET:O	1:Q:306:LYS:NZ	2.46	0.49
1:O:280:SER:HA	1:O:310:TRP:HZ3	1.77	0.49
1:O:349:CYS:SG	1:O:353:PRO:HA	2.53	0.49
2:P:5:ILE:HB	2:P:30:ILE:HG23	1.93	0.49
2:P:115:LYS:HE3	2:P:139:HIS:CE1	2.47	0.49
1:Q:37:VAL:HG23	1:Q:61:ASN:O	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:100:VAL:HG12	1:Q:120:ALA:HB1	1.93	0.49
1:Q:176:HIS:HB3	1:Q:231:ARG:HD3	1.95	0.49
1:A:186:ASP:CG	1:A:197:ARG:HE	2.20	0.49
2:B:77:ARG:HD2	3:B:401:NAD:N6A	2.28	0.49
2:B:94:GLU:HB3	2:B:118:ILE:HD12	1.95	0.49
2:B:127:THR:HG23	2:B:133:ASN:HD22	1.77	0.49
2:B:259:PHE:O	2:B:262:SER:OG	2.23	0.49
1:C:79:PRO:HA	1:C:82:LEU:HD11	1.93	0.49
1:C:82:LEU:O	1:C:84:TRP:N	2.43	0.49
2:D:7:GLY:O	2:D:9:GLY:N	2.45	0.49
2:D:42:HIS:O	2:D:46:TYR:N	2.39	0.49
2:D:132:VAL:HG11	2:D:217:VAL:HG23	1.92	0.49
2:D:173:THR:O	2:D:241:ASP:N	2.45	0.49
1:E:221:LEU:C	1:E:224:LYS:HZ2	2.20	0.49
2:F:183:ARG:NH2	2:F:191:ARG:HH12	2.08	0.49
1:G:12:GLY:O	1:G:16:LEU:N	2.22	0.49
1:G:272:ASP:HB2	1:G:288:PHE:CD2	2.47	0.49
1:I:2:LYS:HB2	1:I:90:ASP:H	1.77	0.49
1:I:129:VAL:N	1:I:133:ASN:OD1	2.25	0.49
1:I:156:PRO:HB3	1:I:271:LEU:HD21	1.93	0.49
1:K:80:LEU:HD23	1:K:107:LYS:HB3	1.95	0.49
1:O:45:LYS:O	1:O:53:PHE:N	2.45	0.49
1:O:123(A):SER:N	1:C:142:ASN:OD1	2.26	0.49
1:O:165:LEU:O	1:O:248:LYS:HB2	2.13	0.49
1:O:178:TYR:CE1	1:O:235:PRO:HA	2.48	0.49
2:P:132:VAL:HG11	2:P:217:VAL:HB	1.93	0.49
2:P:251:PHE:N	2:P:254:GLU:OE1	2.23	0.49
1:Q:37:VAL:CG2	1:Q:61:ASN:O	2.61	0.49
1:Q:54:LYS:H	1:Q:54:LYS:HD2	1.76	0.49
1:Q:280:SER:HA	1:Q:310:TRP:CZ3	2.41	0.49
2:R:15:PHE:CE1	2:R:322:VAL:HG22	2.47	0.49
2:R:16:LEU:HD13	2:R:44:LEU:HD13	1.95	0.49
1:A:89:ILE:O	1:A:114:LYS:NZ	2.35	0.49
1:A:139:HIS:CE1	1:A:332:TRP:HA	2.48	0.49
2:B:11:ILE:O	2:B:15:PHE:N	2.25	0.49
2:B:157:PHE:HB2	2:B:259:PHE:CZ	2.48	0.49
2:B:251:PHE:N	2:B:254:GLU:OE1	2.43	0.49
2:B:327:ILE:HA	2:B:330:ASN:ND2	2.28	0.49
1:C:41:THR:HG21	1:C:59:ILE:HG12	1.95	0.49
1:C:66:ILE:N	1:C:69:LYS:O	2.34	0.49
2:D:15:PHE:CD1	2:D:322:VAL:HG22	2.48	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:236:ASN:ND2	2:D:237:VAL:H	2.09	0.49
1:E:243:VAL:HG12	1:E:306:LYS:HA	1.95	0.49
1:E:297:THR:HG22	1:E:308:VAL:H	1.77	0.49
2:F:8:PHE:N	2:F:32:ASP:OD2	2.45	0.49
2:F:46:TYR:O	1:G:197:ARG:NH1	2.45	0.49
2:F:154:LEU:HD12	2:F:155:ALA:N	2.28	0.49
2:F:173:THR:OG1	2:F:228:ILE:HG13	2.13	0.49
1:G:11:ILE:HA	1:G:14:ASN:ND2	2.28	0.49
1:G:58:LYS:N	1:G:65:SER:O	2.45	0.49
1:G:84:TRP:CH2	1:G:92:VAL:HG23	2.47	0.49
1:G:279:VAL:HG23	1:G:282:ASP:OD1	2.13	0.49
1:I:325:ALA:HA	1:I:328:VAL:HB	1.94	0.49
1:K:32:ASP:OD1	1:K:33:SER:N	2.44	0.49
1:K:57:VAL:HG13	1:K:66:ILE:HA	1.93	0.49
1:K:241:ASP:OD1	1:K:242:LEU:N	2.46	0.49
1:K:293:ASP:O	1:K:297:THR:HG23	2.13	0.49
2:L:117:LEU:HD11	2:L:146:ASN:HB2	1.95	0.49
1:O:14:ASN:HA	1:O:17:ARG:HB2	1.95	0.49
1:O:139:HIS:CD2	1:O:332:TRP:HA	2.47	0.49
1:O:174:THR:HG23	1:O:176:HIS:N	2.27	0.49
1:O:193:LEU:HD11	2:R:42:HIS:ND1	2.28	0.49
2:P:49:ILE:HG23	2:P:284:ARG:HH11	1.78	0.49
2:P:66:VAL:C	2:P:68:GLY:N	2.70	0.49
1:Q:29:VAL:HA	1:Q:72:LYS:O	2.11	0.49
1:Q:270:VAL:O	1:Q:289:SER:N	2.46	0.49
2:R:215:ALA:O	2:R:222:LYS:NZ	2.43	0.49
2:B:4:ALA:HA	2:B:29:VAL:O	2.13	0.49
2:B:15:PHE:HE2	2:B:321:VAL:HG12	1.78	0.49
2:B:132:VAL:HG11	2:B:217:VAL:HB	1.94	0.49
2:B:160:VAL:HA	2:B:163:GLN:HB2	1.95	0.49
2:B:285:CYS:HA	2:B:315:TRP:CD1	2.48	0.49
2:B:312:ASP:CG	2:B:315:TRP:HB3	2.38	0.49
1:C:91:ILE:HG12	1:C:115:LYS:N	2.28	0.49
2:D:243:VAL:HA	2:D:306:LYS:HA	1.94	0.49
1:E:21:LYS:O	1:E:22:ASP:C	2.55	0.49
1:E:178:TYR:CD2	1:E:233:PRO:HA	2.47	0.49
1:E:356:GLU:C	1:K:183:ARG:HH22	2.20	0.49
2:F:36:GLY:H	2:F:39:GLN:NE2	2.11	0.49
1:G:280:SER:HA	1:G:310:TRP:HZ3	1.76	0.49
2:H:15:PHE:CZ	2:H:322:VAL:HA	2.48	0.49
2:H:160:VAL:O	2:H:164:LYS:N	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:194:ARG:HD3	2:H:205:PRO:HD2	1.94	0.49
1:I:139:HIS:HB2	1:I:331:LYS:HB2	1.95	0.49
2:J:13:ARG:HG2	2:J:43:LEU:C	2.38	0.49
2:J:94:GLU:HG2	2:J:96:THR:H	1.77	0.49
2:J:116:VAL:HB	2:J:143:ILE:HG12	1.95	0.49
2:J:129:VAL:HG13	2:J:132:VAL:HB	1.95	0.49
2:J:157:PHE:HB2	2:J:259:PHE:CZ	2.48	0.49
2:J:183:ARG:NH2	2:J:191:ARG:HH12	2.10	0.49
1:K:31:ASN:HA	1:K:74:VAL:O	2.13	0.49
1:K:121:PRO:HG3	1:K:148:SER:H	1.78	0.49
2:L:29:VAL:HG21	2:L:87:MET:HE3	1.95	0.49
1:O:3:VAL:O	1:O:27:VAL:HA	2.13	0.49
1:O:17:ARG:CZ	1:O:53:PHE:HB2	2.42	0.49
1:O:149:CYS:HA	1:O:152:ASN:HB2	1.94	0.49
1:O:243:VAL:HA	1:O:305:VAL:O	2.13	0.49
1:O:254:ASP:HA	1:O:257:ASN:ND2	2.28	0.49
2:P:1:LEU:N	2:P:24:PRO:O	2.33	0.49
2:P:151:THR:HG23	2:P:210:ALA:HA	1.94	0.49
1:Q:57:VAL:HA	1:Q:66:ILE:HA	1.94	0.49
1:Q:62:GLU:O	1:Q:63:THR:HB	2.12	0.49
1:Q:238:SER:OG	1:Q:313:ASN:N	2.42	0.49
1:Q:282:ASP:OD1	1:Q:282:ASP:N	2.44	0.49
1:Q:291:THR:O	1:Q:310:TRP:HD1	1.96	0.49
2:R:37:VAL:HG23	2:R:38:LYS:H	1.78	0.49
2:R:149:CYS:HB3	2:R:317:TYR:CD2	2.48	0.49
1:A:28:VAL:C	1:A:71:ILE:HG23	2.38	0.49
1:A:49:ILE:HG23	1:A:284:ARG:NE	2.28	0.49
1:A:129:VAL:H	1:A:133:ASN:CG	2.19	0.49
1:A:207:SER:HB3	1:A:228:ILE:HG22	1.95	0.49
1:A:226:ASN:HB3	1:C:300:MET:HB2	1.94	0.49
1:A:312:ASP:OD1	1:A:316:GLY:N	2.25	0.49
2:B:101:ASP:CG	2:B:104:GLY:H	2.21	0.49
2:B:255:VAL:O	2:B:259:PHE:N	2.33	0.49
2:B:269:GLY:O	2:B:288:VAL:HA	2.13	0.49
2:D:17:ARG:HG2	2:D:53:PHE:HE2	1.78	0.49
2:D:41:SER:OG	2:D:42:HIS:N	2.46	0.49
2:D:166:GLY:O	2:D:247:SER:N	2.29	0.49
2:D:250:THR:N	2:D:302:ASP:HB3	2.16	0.49
1:E:319:GLN:O	1:E:322:VAL:HB	2.13	0.49
2:F:99:PHE:CD1	2:F:104:GLY:HA3	2.48	0.49
1:G:242:LEU:HD11	1:G:244:VAL:HG13	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:169:LYS:O	2:H:245:GLN:N	2.36	0.49
2:H:181:ASP:OD2	2:H:195:ARG:NE	2.45	0.49
1:I:10:ARG:HA	1:I:13:ARG:HG3	1.95	0.49
1:I:332:TRP:CE3	1:I:333:PRO:HD2	2.48	0.49
2:J:171:THR:HB	2:L:306:LYS:HE3	1.94	0.49
1:K:101:ASP:CG	1:K:104:GLY:H	2.20	0.49
1:K:118:ILE:O	1:K:146:ASN:N	2.35	0.49
2:P:30:ILE:HG22	2:P:31:ASN:H	1.77	0.49
2:P:44:LEU:HD21	2:P:53:PHE:HD2	1.78	0.49
2:P:79:PRO:HG3	2:P:108:HIS:CE1	2.47	0.49
1:Q:80:LEU:H	1:Q:107:LYS:NZ	2.10	0.49
1:Q:185:LEU:HA	1:Q:198:ALA:HB2	1.94	0.49
1:Q:220:GLN:OE1	1:Q:220:GLN:N	2.35	0.49
1:A:147:ALA:O	1:A:317:TYR:OH	2.24	0.49
1:A:219:PRO:O	1:A:222:LYS:HD3	2.13	0.49
2:B:138:THR:OG1	2:B:141:ASP:OD1	2.26	0.49
1:C:16:LEU:HA	1:C:18(A):TRP:CD1	2.46	0.49
1:C:21:LYS:HG2	1:C:22:ASP:N	2.28	0.49
1:C:99:PHE:C	1:C:101:ASP:H	2.21	0.49
1:C:256:ASN:ND2	1:C:297:THR:OG1	2.45	0.49
2:H:84:TRP:HA	2:H:89:ILE:HG12	1.95	0.49
2:H:94:GLU:HB3	2:H:118:ILE:HD11	1.94	0.49
2:H:139:HIS:HB2	2:H:333:GLN:HB2	1.95	0.49
2:H:149:CYS:HB3	2:H:317:TYR:CD2	2.48	0.49
2:H:222:LYS:O	2:H:224:LYS:HG2	2.13	0.49
1:I:32:ASP:O	1:I:75:SER:OG	2.16	0.49
1:I:135:LYS:NZ	1:I:135:LYS:H	2.11	0.49
1:I:203:ILE:HG13	1:I:231:ARG:C	2.38	0.49
1:I:256:ASN:O	1:I:260:ARG:N	2.28	0.49
2:J:17:ARG:NH2	2:J:52:THR:O	2.46	0.49
2:J:242:LEU:HB3	2:J:307:VAL:HG22	1.95	0.49
2:J:292:ILE:HG23	2:J:308:ILE:O	2.12	0.49
2:J:316:GLY:HA2	2:J:320:ARG:HH21	1.78	0.49
1:K:103:PRO:O	1:K:107:LYS:HG3	2.12	0.49
1:K:171:THR:HG1	1:K:226:ASN:C	2.20	0.49
2:L:84:TRP:HD1	2:L:108:HIS:O	1.95	0.49
1:O:18(B):HIS:CD2	1:O:53:PHE:CZ	3.01	0.48
1:O:303:ASP:OD1	1:O:303:ASP:N	2.46	0.48
2:P:109:LEU:HD23	2:P:113:ALA:HB3	1.95	0.48
1:Q:114:LYS:HB3	1:Q:115:LYS:HZ3	1.77	0.48
1:Q:130:VAL:HA	1:Q:134:GLU:HB3	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:139(A):ASP:CG	1:Q:333:PRO:HG3	2.38	0.48
1:Q:274:CYS:O	1:Q:294:SER:N	2.46	0.48
2:R:56:ASP:O	2:R:66:VAL:HA	2.12	0.48
2:R:318:SER:O	2:R:322:VAL:N	2.31	0.48
1:A:108:HIS:O	1:A:113:ALA:N	2.45	0.48
2:B:0:LYS:HZ2	2:B:1:LEU:HD22	1.77	0.48
2:B:102:ARG:O	2:B:106:GLY:N	2.35	0.48
2:B:302:ASP:N	2:B:302:ASP:OD1	2.44	0.48
1:C:161:LEU:HA	1:C:164:GLU:OE2	2.13	0.48
1:C:239:VAL:HA	1:C:309:ALA:O	2.13	0.48
1:C:272:ASP:N	1:C:290:SER:O	2.32	0.48
1:E:121:PRO:HB3	1:E:147:ALA:HA	1.94	0.48
1:E:162:ASP:OD1	1:E:221:LEU:HD11	2.13	0.48
1:E:166:GLY:HA3	1:E:247:GLU:OE2	2.13	0.48
2:F:117:LEU:HG	2:F:145:SER:HA	1.95	0.48
2:H:15:PHE:CE1	2:H:322:VAL:HG22	2.48	0.48
2:H:272:SER:N	2:H:290:SER:O	2.46	0.48
1:I:132:VAL:HA	1:I:159:LYS:NZ	2.28	0.48
1:I:232:VAL:HG22	1:I:234:THR:HB	1.93	0.48
2:J:193:LEU:O	2:J:197:ARG:N	2.45	0.48
1:K:79:PRO:HD2	1:K:107:LYS:HZ2	1.77	0.48
1:K:238:SER:HB3	1:K:311:TYR:CE2	2.47	0.48
2:L:270:ILE:HA	2:L:320:ARG:NH1	2.28	0.48
1:O:114:LYS:HZ2	1:O:114:LYS:N	2.11	0.48
1:O:154:LEU:HD12	1:O:155:ALA:N	2.27	0.48
1:O:264:ALA:O	1:O:268:LYS:HE2	2.13	0.48
1:O:272:ASP:HB2	1:O:288:PHE:CD2	2.47	0.48
2:P:0:LYS:N	2:P:24:PRO:O	2.45	0.48
2:P:94:GLU:OE2	2:P:96:THR:OG1	2.24	0.48
2:P:100:VAL:HG22	2:P:122(A):LYS:N	2.28	0.48
2:P:126:PRO:HB2	2:P:128:TYR:CE2	2.48	0.48
1:Q:272:ASP:O	1:Q:291:THR:HA	2.12	0.48
2:R:36:GLY:H	2:R:39:GLN:HE21	1.60	0.48
2:R:84:TRP:CD1	2:R:111:ALA:HB3	2.48	0.48
2:R:147:ALA:O	2:R:317:TYR:OH	2.31	0.48
1:A:36:GLY:HA3	1:A:38:LYS:HZ1	1.78	0.48
1:A:40:ALA:HA	1:A:43:LEU:HB2	1.95	0.48
2:B:177:SER:OG	2:B:178:TYR:N	2.44	0.48
2:B:193:LEU:H	2:B:193:LEU:HD12	1.77	0.48
1:C:38:LYS:O	1:C:41:THR:OG1	2.31	0.48
1:C:121:PRO:O	1:C:122(A):LYS:NZ	2.34	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:133:ASN:N	1:C:134:GLU:OE2	2.45	0.48
1:C:178:TYR:CE1	1:C:235:PRO:HA	2.48	0.48
2:D:29:VAL:HG21	2:D:87:MET:HE3	1.94	0.48
2:D:121:PRO:HD3	2:D:148:SER:N	2.28	0.48
2:D:251:PHE:CE1	2:D:254:GLU:HB2	2.48	0.48
2:D:280:SER:HA	2:D:283:PHE:HD1	1.78	0.48
1:E:142:ASN:O	1:E:144:ILE:HG22	2.13	0.48
2:F:173:THR:HA	2:F:228:ILE:O	2.13	0.48
1:G:272:ASP:OD2	1:G:273:VAL:N	2.45	0.48
1:G:314:GLU:HG2	3:G:401:NAD:H72N	1.77	0.48
2:H:16:LEU:HD13	2:H:44:LEU:HD13	1.94	0.48
2:H:127:THR:OG1	2:H:217:VAL:HA	2.14	0.48
2:H:130:VAL:HG13	2:H:324:LEU:HD12	1.95	0.48
2:J:121:PRO:HG3	2:J:148:SER:N	2.28	0.48
1:K:31:ASN:HD21	1:K:76:ASN:C	2.21	0.48
1:K:133:ASN:N	1:K:133:ASN:OD1	2.43	0.48
1:K:219:PRO:HD2	1:K:220:GLN:HE22	1.79	0.48
2:L:24:PRO:HB2	2:L:329:ALA:HB1	1.95	0.48
1:O:130:VAL:O	1:O:132:VAL:HG23	2.13	0.48
1:O:293:ASP:H	1:O:308:VAL:HG22	1.78	0.48
2:P:236:ASN:OD1	2:P:284:ARG:NH1	2.46	0.48
1:Q:220:GLN:H	1:Q:220:GLN:CD	2.12	0.48
1:Q:236:ASN:HB3	1:Q:284:ARG:NH1	2.27	0.48
1:A:76:ASN:OD1	1:A:77:ARG:N	2.47	0.48
1:A:280:SER:OG	1:A:281:VAL:N	2.46	0.48
2:B:65:SER:HA	2:B:70:VAL:CA	2.41	0.48
2:B:244:VAL:O	2:B:304:MET:HA	2.13	0.48
1:C:171:THR:OG1	1:C:226:ASN:O	2.27	0.48
1:C:190:HIS:ND1	1:C:191:ARG:N	2.61	0.48
1:C:291:THR:O	1:C:310:TRP:HD1	1.96	0.48
1:E:184:LEU:HD22	2:H:184:LEU:HB2	1.95	0.48
1:E:245:ASN:HA	1:E:304:MET:HG2	1.95	0.48
1:E:258:ALA:HA	1:E:261:LYS:HB2	1.95	0.48
2:F:173:THR:HG1	2:H:306:LYS:NZ	2.11	0.48
2:H:154:LEU:HA	2:H:157:PHE:CZ	2.47	0.48
1:K:161:LEU:HD22	1:K:167:ILE:HD11	1.94	0.48
2:L:18:CYS:O	2:L:20:ARG:HG2	2.13	0.48
2:L:121:PRO:HD3	2:L:148:SER:N	2.29	0.48
2:L:199:ALA:HA	2:L:202:ASN:HB2	1.93	0.48
1:O:11:ILE:HG22	3:O:401:NAD:O2N	2.12	0.48
1:O:64:PHE:O	1:O:71:ILE:N	2.43	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:66:ILE:O	1:O:69:LYS:HG3	2.14	0.48
2:P:173:THR:HA	2:P:228:ILE:O	2.13	0.48
2:P:306:LYS:NZ	2:R:173:THR:HG1	2.11	0.48
1:Q:22:ASP:N	1:Q:22:ASP:OD1	2.44	0.48
2:R:7:GLY:HA2	3:R:401:NAD:N3A	2.28	0.48
2:R:94:GLU:OE2	2:R:96:THR:OG1	2.31	0.48
1:A:322:VAL:O	1:A:326:ASP:N	2.47	0.48
1:C:2:LYS:N	1:C:90:ASP:OD2	2.47	0.48
1:C:64:PHE:CZ	1:C:71:ILE:HG22	2.47	0.48
1:C:240:VAL:O	1:C:309:ALA:N	2.46	0.48
2:D:18:CYS:O	2:D:20:ARG:HG2	2.13	0.48
2:D:253:GLU:HA	2:D:256:ASN:OD1	2.14	0.48
2:D:297:THR:HG22	2:D:307:VAL:HA	1.95	0.48
2:F:126:PRO:HB2	2:F:128:TYR:CZ	2.49	0.48
2:H:302:ASP:N	2:H:302:ASP:OD1	2.44	0.48
1:I:13:ARG:NH2	1:I:43:LEU:O	2.38	0.48
1:I:218:LEU:O	1:I:220:GLN:NE2	2.47	0.48
1:I:293:ASP:HB3	1:I:296:LEU:HG	1.95	0.48
2:J:58:LYS:O	2:J:65:SER:N	2.47	0.48
2:J:102:ARG:HG3	2:J:143:ILE:HD12	1.95	0.48
1:K:176:HIS:CD2	1:K:231:ARG:HG2	2.48	0.48
1:K:186:ASP:HA	1:K:197:ARG:HA	1.96	0.48
1:O:57:VAL:HA	1:O:64:PHE:CE2	2.44	0.48
1:O:92:VAL:HG12	1:O:93:ILE:H	1.78	0.48
1:O:169:LYS:N	1:O:245:ASN:HD21	2.12	0.48
2:P:96:THR:O	3:P:401:NAD:H52A	2.13	0.48
1:Q:236:ASN:OD1	1:Q:313:ASN:ND2	2.47	0.48
2:R:11:ILE:O	2:R:15:PHE:N	2.33	0.48
2:B:146:ASN:HD22	2:B:321:VAL:HG22	1.77	0.48
2:B:260:ARG:NH2	2:B:273:VAL:HG22	2.28	0.48
1:C:37:VAL:O	1:C:41:THR:N	2.28	0.48
1:C:60(A):ASP:OD1	1:C:63:THR:HG23	2.12	0.48
1:C:149:CYS:HB3	1:C:317:TYR:CG	2.48	0.48
2:D:3:VAL:O	2:D:27:VAL:HG13	2.14	0.48
1:E:11:ILE:HA	1:E:14:ASN:OD1	2.13	0.48
1:E:226:ASN:OD1	1:E:227:GLY:N	2.35	0.48
2:F:36:GLY:H	2:F:39:GLN:CD	2.21	0.48
2:F:101:ASP:HB2	2:F:103:ASP:OD1	2.12	0.48
2:F:237:VAL:HG13	2:F:312:ASP:HA	1.96	0.48
2:F:281:ILE:HD12	2:F:284:ARG:HE	1.79	0.48
1:G:3:VAL:O	1:G:27:VAL:HA	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:34:GLY:O	1:G:39:SER:OG	2.31	0.48
1:G:172:MET:HE1	1:G:225:LEU:HB3	1.95	0.48
1:G:251:THR:HA	1:G:299:VAL:HG11	1.96	0.48
2:H:102:ARG:NH2	2:H:125:ILE:HA	2.28	0.48
2:H:179:THR:OG1	2:H:180:GLY:N	2.41	0.48
1:I:85:ALA:N	1:I:112:GLY:HA3	2.28	0.48
1:I:290:SER:HG	1:I:292:ILE:HG12	1.78	0.48
2:J:104:GLY:HA2	2:J:107:LYS:HD2	1.96	0.48
2:J:327:ILE:HA	2:J:330:ASN:ND2	2.28	0.48
2:L:117:LEU:HD12	2:L:144:ILE:HD11	1.94	0.48
2:L:297:THR:HG22	2:L:307:VAL:HA	1.96	0.48
2:L:323:ASP:O	2:L:327:ILE:HG13	2.14	0.48
1:O:86:GLU:OE1	1:O:86:GLU:N	2.31	0.48
2:P:154:LEU:HD12	2:P:155:ALA:N	2.28	0.48
2:P:206:THR:HG23	2:P:229:ALA:HB3	1.96	0.48
1:Q:82:LEU:HB3	1:Q:84:TRP:CE2	2.48	0.48
1:Q:176:HIS:HD2	1:Q:177:SER:O	1.97	0.48
2:R:183:ARG:HE	2:R:190:HIS:HB2	1.78	0.48
1:A:148:SER:OG	1:A:151:THR:HG23	2.14	0.48
1:A:174:THR:O	1:A:230:LEU:HD23	2.13	0.48
2:B:280:SER:H	2:D:202:ASN:HB3	1.78	0.48
1:C:0:LYS:HG3	1:C:24:PRO:O	2.14	0.48
1:C:341:SER:C	1:C:343:ASP:H	2.21	0.48
2:D:208:THR:HG22	2:D:229:ALA:HB2	1.96	0.48
1:E:91:ILE:HD11	1:E:328:VAL:HG11	1.95	0.48
1:E:154:LEU:HD13	1:E:157:PHE:CZ	2.47	0.48
1:E:184:LEU:HD23	1:E:184:LEU:H	1.78	0.48
1:E:238:SER:OG	1:E:311:TYR:O	2.20	0.48
2:F:206:THR:HG23	2:F:229:ALA:HB3	1.95	0.48
2:F:218:LEU:HB3	2:F:221:LEU:HD13	1.96	0.48
1:G:150:THR:O	1:G:154:LEU:N	2.39	0.48
1:I:20:ARG:HG3	1:I:21:LYS:HZ2	1.78	0.48
1:I:76:ASN:HB3	1:I:82:LEU:HD21	1.95	0.48
1:I:251:THR:HA	1:I:299:VAL:HG21	1.95	0.48
1:I:300:MET:SD	1:K:226:ASN:N	2.86	0.48
2:J:139:HIS:ND1	2:J:332:TRP:HA	2.28	0.48
2:J:206:THR:HG23	2:J:229:ALA:HB3	1.96	0.48
1:K:62:GLU:O	1:K:72:LYS:HD2	2.14	0.48
2:L:194:ARG:HD3	2:L:205:PRO:HD2	1.96	0.48
2:L:224:LYS:HZ1	2:L:225:LEU:HD23	1.79	0.48
2:L:280:SER:HA	2:L:283:PHE:HD1	1.79	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:94:GLU:HB2	1:O:117:ILE:O	2.14	0.48
2:P:37:VAL:HG23	2:P:38:LYS:H	1.79	0.48
2:P:162:ASP:O	2:P:166:GLY:N	2.46	0.48
2:P:275:ASP:OD1	2:P:295:SER:N	2.41	0.48
1:Q:41:THR:HG21	1:Q:59:ILE:HG13	1.95	0.48
1:Q:84:TRP:HB3	1:Q:89:ILE:HB	1.95	0.48
1:Q:134:GLU:OE1	1:Q:134:GLU:N	2.47	0.48
2:R:204:VAL:O	2:R:230:LEU:HA	2.14	0.48
2:R:214:VAL:HG13	2:R:215:ALA:H	1.78	0.48
2:B:11:ILE:HA	2:B:14:ASN:HB3	1.95	0.48
2:B:33:THR:OG1	2:B:77:ARG:NH1	2.47	0.48
2:B:184:LEU:HB2	1:C:184:LEU:HB3	1.96	0.48
1:C:10:ARG:HB3	1:C:314:GLU:OE2	2.14	0.48
1:C:73:VAL:HG12	1:C:74:VAL:O	2.13	0.48
1:C:107:LYS:HA	1:C:110:GLN:CD	2.39	0.48
2:D:256:ASN:HA	2:D:259:PHE:CD2	2.49	0.48
1:E:42:HIS:O	1:E:45:LYS:HB2	2.14	0.48
1:E:115:LYS:HG2	1:E:142:ASN:HA	1.94	0.48
1:E:161:LEU:O	1:E:165:LEU:N	2.45	0.48
2:H:171:THR:O	2:H:242:LEU:HD12	2.14	0.48
2:H:214:VAL:HG13	2:H:215:ALA:H	1.78	0.48
2:H:215:ALA:O	2:H:222:LYS:NZ	2.47	0.48
2:H:270:ILE:O	2:H:289:SER:N	2.35	0.48
2:H:326:ASP:HA	2:H:329:ALA:HB3	1.95	0.48
1:I:64:PHE:O	1:I:71:ILE:N	2.42	0.48
2:J:2:LYS:HD3	2:J:87:MET:O	2.14	0.48
2:J:18(A):TRP:HA	2:J:20:ARG:HB2	1.95	0.48
2:J:39:GLN:HE21	1:K:191:ARG:HG3	1.78	0.48
1:K:9:GLY:CA	3:K:401:NAD:H4B	2.43	0.48
1:K:199:ALA:O	1:K:201:LEU:N	2.46	0.48
2:L:0:LYS:H1	2:L:26:ASP:HB2	1.79	0.48
2:L:15:PHE:CZ	2:L:322:VAL:HA	2.49	0.48
1:O:3:VAL:HA	1:O:91:ILE:O	2.13	0.48
1:O:162:ASP:HA	1:O:166:GLY:H	1.78	0.48
1:O:166:GLY:O	1:O:247:GLU:N	2.45	0.48
1:O:192:ASP:CG	1:O:194:ARG:H	2.22	0.48
1:O:246:ILE:HD12	1:O:246:ILE:HA	1.66	0.48
2:R:172:MET:SD	2:R:227:GLY:N	2.87	0.48
2:R:222:LYS:O	2:R:224:LYS:HG2	2.13	0.48
1:A:11:ILE:HG22	3:A:401:NAD:O2N	2.14	0.48
1:A:54:LYS:CD	1:A:54:LYS:H	2.26	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:137:TYR:HB3	1:A:331:LYS:NZ	2.29	0.48
1:A:211:ALA:O	1:A:225:LEU:HB3	2.13	0.48
1:A:246:ILE:HD13	1:A:305:VAL:HG11	1.96	0.48
2:B:102:ARG:HH21	2:B:125:ILE:HG13	1.78	0.48
2:B:277:PRO:HB2	2:D:194:ARG:HG2	1.95	0.48
1:C:80:LEU:HG	1:C:107:LYS:HZ1	1.77	0.48
1:C:279:VAL:HA	1:C:310:TRP:CH2	2.49	0.48
2:D:0:LYS:N	2:D:26:ASP:HB2	2.29	0.48
1:E:161:LEU:HB3	1:E:165:LEU:HD12	1.96	0.48
1:E:201:LEU:C	1:E:202:ASN:HD22	2.22	0.48
2:F:91:LEU:HD21	2:F:93:ILE:HD11	1.95	0.48
1:G:2:LYS:N	1:G:90:ASP:OD2	2.46	0.48
2:H:29:VAL:N	2:H:71:ILE:HG23	2.29	0.48
2:H:45:LYS:O	2:H:52:THR:OG1	2.18	0.48
1:I:202:ASN:HB2	1:K:280:SER:OG	2.14	0.48
2:L:173:THR:O	2:L:241:ASP:N	2.46	0.48
1:O:151:THR:HA	1:O:154:LEU:HD11	1.95	0.48
1:O:201:LEU:HD12	1:O:202:ASN:HD21	1.79	0.48
2:P:38:LYS:HZ3	2:P:39:GLN:H	1.61	0.48
2:P:92:VAL:HB	2:P:116:VAL:HG22	1.96	0.48
2:P:118:ILE:HB	2:P:145:SER:HB2	1.96	0.48
2:P:304:MET:HE1	2:R:170:GLY:HA2	1.95	0.48
2:R:15:PHE:CZ	2:R:322:VAL:HA	2.48	0.48
1:A:32:ASP:N	1:A:74:VAL:O	2.37	0.48
1:A:37:VAL:HG13	1:A:38:LYS:H	1.78	0.48
1:A:45:LYS:O	1:A:52:THR:HA	2.14	0.48
2:B:82:LEU:HB2	2:B:84:TRP:CD1	2.49	0.48
2:B:173:THR:HG1	2:D:306:LYS:NZ	2.09	0.48
2:B:213:ALA:O	2:B:217:VAL:HG13	2.14	0.48
2:B:250:THR:OG1	2:B:251:PHE:O	2.30	0.48
1:C:49:ILE:HG22	1:C:284:ARG:CZ	2.43	0.48
1:C:177:SER:O	1:C:179:THR:HG23	2.12	0.48
1:C:238:SER:HB3	1:C:311:TYR:CE1	2.49	0.48
1:C:313:ASN:O	1:C:317:TYR:HB2	2.14	0.48
2:D:29:VAL:HG11	2:D:89:ILE:HD11	1.95	0.48
1:E:65:SER:HA	1:E:69:LYS:O	2.13	0.48
1:E:94:GLU:OE2	1:E:99:PHE:N	2.28	0.48
2:F:1:LEU:O	2:F:3:VAL:N	2.47	0.48
2:F:218:LEU:HB3	2:F:221:LEU:HB2	1.96	0.48
1:I:175:THR:OG1	1:I:239:VAL:HG13	2.14	0.48
1:I:185:LEU:CD1	2:L:10:ARG:CZ	2.91	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:5:ILE:HD12	2:J:93:ILE:HB	1.95	0.48
2:J:49:ILE:HG23	2:J:284:ARG:HH11	1.78	0.48
2:J:63:ALA:O	2:J:64:ILE:HD13	2.13	0.48
2:J:174:THR:O	2:J:230:LEU:HB2	2.14	0.48
2:J:277:PRO:HG3	2:L:193:LEU:HD13	1.95	0.48
1:K:161:LEU:HA	1:K:164:GLU:HG2	1.96	0.48
1:K:176:HIS:C	1:K:231:ARG:HA	2.39	0.48
2:L:243:VAL:HA	2:L:306:LYS:HA	1.95	0.48
2:L:253:GLU:HA	2:L:256:ASN:OD1	2.13	0.48
2:L:293:ASP:H	2:L:308:ILE:HB	1.78	0.48
1:O:32:ASP:HB3	1:O:73:VAL:CG1	2.43	0.48
1:O:202:ASN:O	1:O:233:PRO:HD3	2.14	0.48
1:Q:24:PRO:HD2	1:Q:326:ASP:OD1	2.14	0.48
1:Q:270:VAL:HA	1:Q:288:PHE:HA	1.96	0.48
2:R:62:SER:O	2:R:73:VAL:HG12	2.14	0.48
2:R:122:GLY:C	2:R:125:ILE:HG12	2.38	0.48
2:R:169:LYS:O	2:R:245:GLN:N	2.37	0.48
2:R:210:ALA:O	2:R:214:VAL:HG12	2.14	0.48
2:R:272:SER:N	2:R:290:SER:O	2.47	0.48
1:A:54:LYS:H	1:A:54:LYS:HD2	1.77	0.48
1:A:109:ILE:HD13	1:A:113:ALA:HB3	1.96	0.48
1:A:139:HIS:NE2	1:A:333:PRO:HD3	2.29	0.48
1:A:169:LYS:HB3	1:C:300:MET:HG2	1.96	0.48
1:A:203:ILE:HD12	1:A:231:ARG:O	2.14	0.48
2:B:129:VAL:HG13	2:B:132:VAL:HB	1.95	0.48
2:B:139:HIS:ND1	2:B:332:TRP:HA	2.29	0.48
2:B:181:ASP:O	2:B:183:ARG:NH1	2.47	0.48
1:C:47:ASP:OD2	1:C:50:LEU:N	2.25	0.48
2:D:237:VAL:HG13	2:D:311:TYR:O	2.14	0.48
1:E:41:THR:O	1:E:42:HIS:C	2.57	0.48
1:E:255:VAL:HA	1:E:258:ALA:HB3	1.96	0.48
1:E:318:SER:HA	1:E:321:VAL:HG22	1.95	0.48
1:G:49:ILE:O	1:G:284:ARG:NH2	2.36	0.48
1:G:137:TYR:CE2	1:G:331:LYS:HE3	2.49	0.48
1:G:219:PRO:HA	1:G:222:LYS:HD3	1.95	0.48
1:G:346:GLU:O	1:G:350:LYS:N	2.41	0.48
2:H:37:VAL:HG11	2:H:61:ASP:O	2.13	0.48
2:H:60:ALA:O	2:H:63:ALA:HB3	2.14	0.48
2:H:122(A):LYS:HD2	2:H:122(A):LYS:HA	1.64	0.48
2:H:267:LEU:HA	2:H:270:ILE:HB	1.95	0.48
2:H:275:ASP:OD1	2:H:295:SER:N	2.27	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:42:HIS:HA	1:I:46:TYR:CE1	2.48	0.48
2:J:11:ILE:HG12	3:J:401:NAD:O1N	2.14	0.48
2:J:203:ILE:HD11	2:J:230:LEU:HB3	1.96	0.48
1:K:29:VAL:HB	1:K:72:LYS:HB3	1.95	0.48
2:L:118:ILE:O	2:L:145:SER:OG	2.31	0.48
2:L:313:ASN:N	2:L:313:ASN:OD1	2.45	0.48
1:O:236:ASN:HD21	1:O:312:ASP:CG	2.22	0.47
1:Q:56:ASP:CG	1:Q:58:LYS:HZ3	2.22	0.47
2:R:173:THR:OG1	2:R:228:ILE:HG13	2.14	0.47
2:R:258:ALA:HA	2:R:261:GLU:HG3	1.96	0.47
1:A:31:ASN:ND2	1:A:76:ASN:O	2.47	0.47
1:A:195:ARG:HH22	1:G:361:TYR:H	1.61	0.47
2:B:6:ASN:OD1	2:B:7:GLY:N	2.47	0.47
2:B:39:GLN:NE2	1:C:191:ARG:HA	2.29	0.47
2:B:281:ILE:H	2:D:202:ASN:HD22	1.57	0.47
2:B:298:MET:HG3	2:B:306:LYS:HB3	1.96	0.47
1:C:4:ALA:HA	1:C:27:VAL:CG2	2.44	0.47
1:C:30:VAL:H	1:C:73:VAL:HA	1.79	0.47
1:C:58:LYS:O	1:C:64:PHE:HB2	2.14	0.47
1:C:203:ILE:HD12	1:C:231:ARG:O	2.14	0.47
1:E:46:TYR:CE1	2:F:278:LEU:HD21	2.49	0.47
1:E:74:VAL:HG22	1:E:75:SER:H	1.79	0.47
1:E:172:MET:SD	1:E:240:VAL:HB	2.54	0.47
2:F:62:SER:O	2:F:73:VAL:HG12	2.14	0.47
2:F:89:ILE:O	2:F:113:ALA:HA	2.14	0.47
2:F:102:ARG:HH21	2:F:125:ILE:HG13	1.77	0.47
2:F:183:ARG:NE	2:F:188:SER:O	2.46	0.47
1:G:8:PHE:HZ	1:G:44:LEU:HB2	1.79	0.47
1:G:105:ALA:O	1:G:109:ILE:HG12	2.14	0.47
2:H:199:ALA:O	2:H:202:ASN:N	2.47	0.47
2:H:236:ASN:O	2:H:313:ASN:ND2	2.31	0.47
2:H:330:ASN:N	2:H:330:ASN:OD1	2.47	0.47
2:J:182:GLN:HE21	2:J:182:GLN:H	1.60	0.47
2:J:260:ARG:NH2	2:J:273:VAL:HG22	2.29	0.47
2:J:279:VAL:HA	2:J:310:TRP:HH2	1.79	0.47
1:K:17:ARG:HG2	1:K:53:PHE:CE2	2.49	0.47
1:K:84:TRP:N	1:K:86:GLU:OE1	2.46	0.47
1:K:134:GLU:OE1	1:K:134:GLU:N	2.36	0.47
2:L:3:VAL:HG13	2:L:91:LEU:O	2.14	0.47
2:L:38:LYS:HB2	2:L:42:HIS:CE1	2.49	0.47
2:L:100:VAL:O	2:L:122(A):LYS:N	2.35	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:56:ASP:N	1:O:67:ASP:OD1	2.47	0.47
1:O:198:ALA:O	1:O:201:LEU:HG	2.14	0.47
1:O:212:LYS:HZ2	1:O:212:LYS:H	1.62	0.47
2:P:9:GLY:HA3	3:P:401:NAD:O2N	2.14	0.47
2:P:76:ASP:OD1	2:P:78:ASN:N	2.47	0.47
1:Q:190:HIS:CE1	1:Q:195:ARG:N	2.82	0.47
1:Q:298:MET:SD	1:Q:299:VAL:N	2.87	0.47
2:R:127:THR:OG1	2:R:217:VAL:HA	2.14	0.47
1:A:4:ALA:HA	1:A:29:VAL:O	2.15	0.47
1:A:142:ASN:H	1:A:142:ASN:ND2	2.11	0.47
1:A:149:CYS:O	1:A:153:CYS:N	2.47	0.47
1:A:226:ASN:HD22	1:C:300:MET:HA	1.79	0.47
1:C:47:ASP:HB3	1:C:51:GLY:H	1.78	0.47
1:C:151:THR:O	1:C:154:LEU:N	2.47	0.47
1:C:217:VAL:HG23	1:C:218:LEU:HD22	1.95	0.47
1:C:298:MET:N	1:C:306:LYS:HE3	2.30	0.47
2:D:118:ILE:O	2:D:145:SER:OG	2.32	0.47
2:D:150:THR:OG1	2:D:151:THR:N	2.44	0.47
2:D:318:SER:O	2:D:322:VAL:HG23	2.14	0.47
1:E:17:ARG:HD3	1:E:44:LEU:HD11	1.96	0.47
1:E:105:ALA:O	1:E:109:ILE:HG12	2.14	0.47
2:F:47:ASP:C	1:G:197:ARG:HH22	2.22	0.47
2:F:92:VAL:HB	2:F:116:VAL:HG22	1.96	0.47
2:F:109:LEU:HD23	2:F:113:ALA:HB3	1.95	0.47
2:F:149:CYS:HA	2:F:152:ASN:HB3	1.95	0.47
1:G:194:ARG:NH2	1:G:204:VAL:HG11	2.28	0.47
2:H:18(A):TRP:HZ3	2:H:18(B):HIS:CE1	2.33	0.47
2:H:122:GLY:HA3	2:H:125:ILE:HG12	1.96	0.47
2:H:174:THR:OG1	2:H:175:THR:N	2.47	0.47
2:H:242:LEU:HD23	2:H:307:VAL:HG21	1.96	0.47
2:J:15:PHE:CG	2:J:322:VAL:HG22	2.49	0.47
2:J:250:THR:OG1	2:J:251:PHE:O	2.31	0.47
1:K:80:LEU:HG	1:K:107:LYS:NZ	2.28	0.47
2:P:17:ARG:NH2	2:P:53:PHE:HA	2.29	0.47
2:P:193:LEU:HD22	2:R:277:PRO:HG2	1.97	0.47
1:Q:186:ASP:OD2	1:Q:197:ARG:NE	2.42	0.47
2:R:29:VAL:N	2:R:71:ILE:HG23	2.29	0.47
2:R:171:THR:O	2:R:242:LEU:HD12	2.14	0.47
1:A:76:ASN:ND2	1:A:81:LYS:HG3	2.29	0.47
1:A:123(A):SER:HB2	1:G:124:ASP:HB3	1.95	0.47
2:B:174:THR:O	2:B:230:LEU:HB2	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:11:ILE:HG21	1:C:119:THR:HG21	1.97	0.47
1:C:84:TRP:N	1:C:86:GLU:OE1	2.47	0.47
1:C:105:ALA:O	1:C:108:HIS:N	2.47	0.47
2:D:270:ILE:HA	2:D:320:ARG:NH1	2.28	0.47
1:E:7:GLY:O	1:E:95:GLY:HA3	2.14	0.47
1:E:246:ILE:HG22	1:E:304:MET:N	2.30	0.47
2:F:190:HIS:CG	2:F:191:ARG:N	2.83	0.47
2:F:303:ASP:OD1	2:F:303:ASP:N	2.47	0.47
1:G:116:VAL:HG21	1:G:143:ILE:HG23	1.96	0.47
1:G:332:TRP:CG	1:G:333:PRO:HD2	2.48	0.47
2:H:28:VAL:HG13	2:H:70:VAL:O	2.14	0.47
2:H:275:ASP:OD2	2:H:294:SER:OG	2.27	0.47
1:I:60:ILE:HB	1:I:63:THR:O	2.15	0.47
1:I:114:LYS:O	1:I:142:ASN:ND2	2.32	0.47
1:I:129:VAL:HG12	1:I:133:ASN:ND2	2.28	0.47
1:I:133:ASN:HA	1:I:136:ASP:OD2	2.15	0.47
1:I:221:LEU:HD13	1:I:224:LYS:HB2	1.96	0.47
2:J:44:LEU:O	2:J:53:PHE:HB2	2.14	0.47
2:J:213:ALA:O	2:J:217:VAL:HG13	2.14	0.47
2:J:237:VAL:HG22	2:J:312:ASP:HA	1.96	0.47
2:J:272:SER:O	2:J:291:THR:HA	2.13	0.47
1:O:46:TYR:CD1	2:P:278:LEU:HD21	2.48	0.47
1:O:63:THR:HG22	1:O:64:PHE:N	2.29	0.47
1:O:292:ILE:HG13	1:O:309:ALA:HA	1.97	0.47
2:P:12:GLY:O	2:P:16:LEU:N	2.32	0.47
2:P:173:THR:N	2:P:241:ASP:OD1	2.47	0.47
2:P:184:LEU:HD13	1:Q:184:LEU:HD13	1.96	0.47
1:Q:121:PRO:HG3	1:Q:148:SER:H	1.79	0.47
1:A:178:TYR:CE1	1:A:235:PRO:HA	2.49	0.47
1:C:4:ALA:N	1:C:91:ILE:O	2.47	0.47
1:C:106:GLY:O	1:C:110:GLN:N	2.25	0.47
1:C:142:ASN:ND2	1:C:143:ILE:H	2.10	0.47
1:C:236:ASN:HD21	1:C:314:GLU:H	1.63	0.47
2:D:84:TRP:HD1	2:D:108:HIS:O	1.96	0.47
2:D:87:MET:N	2:D:87:MET:SD	2.86	0.47
1:E:18(A):TRP:HZ3	1:E:69:LYS:HD3	1.79	0.47
1:E:18(B):HIS:ND1	1:E:69:LYS:HD2	2.30	0.47
1:E:101:ASP:OD1	1:E:104:GLY:N	2.24	0.47
1:E:118:ILE:HG22	1:E:145:SER:HA	1.96	0.47
1:E:120:ALA:N	1:E:146:ASN:HD21	2.07	0.47
1:E:139:HIS:HE1	1:E:332:TRP:CD1	2.31	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:173:THR:N	2:F:241:ASP:OD1	2.47	0.47
1:G:22:ASP:OD1	1:G:22:ASP:N	2.47	0.47
1:G:53:PHE:CE2	1:G:55:ALA:HB3	2.49	0.47
1:G:154:LEU:HA	1:G:154:LEU:HD12	1.68	0.47
2:H:210:ALA:O	2:H:214:VAL:HG12	2.14	0.47
1:I:165:LEU:HB3	1:I:246:ILE:HG13	1.97	0.47
1:I:193:LEU:O	1:I:197:ARG:N	2.48	0.47
1:I:321:VAL:HA	1:I:324:LEU:HD23	1.95	0.47
2:J:31:ASN:OD1	2:J:74:VAL:HG23	2.15	0.47
1:K:57:VAL:HG22	1:K:66:ILE:HG23	1.96	0.47
1:K:122(A):LYS:HA	1:K:122(A):LYS:HD3	1.72	0.47
2:L:25:LEU:HD22	2:L:329:ALA:HB2	1.96	0.47
2:L:170:GLY:HA2	2:L:244:VAL:HA	1.95	0.47
2:L:171:THR:O	2:L:242:LEU:HD12	2.15	0.47
2:L:190:HIS:CG	2:L:191:ARG:N	2.81	0.47
2:L:192:ASP:OD2	2:L:194:ARG:HB2	2.14	0.47
1:O:103:PRO:HA	1:C:110:GLN:HB2	1.96	0.47
1:O:142:ASN:O	1:O:144:ILE:HG22	2.14	0.47
1:O:306:LYS:HZ3	1:Q:228:ILE:HG12	1.80	0.47
1:Q:312:ASP:OD2	1:Q:315:TRP:HB3	2.13	0.47
2:R:91:LEU:HD21	2:R:93:ILE:HD11	1.96	0.47
2:R:326:ASP:HA	2:R:329:ALA:HB3	1.95	0.47
1:A:125:ILE:HG22	1:A:126:PRO:HD2	1.95	0.47
1:A:236:ASN:HD21	1:A:314:GLU:H	1.62	0.47
2:B:0:LYS:NZ	2:B:1:LEU:HD13	2.29	0.47
2:B:203:ILE:HG23	2:B:205:PRO:HD3	1.97	0.47
2:B:268:LYS:HE2	2:B:268:LYS:HB2	1.81	0.47
1:C:40:ALA:HA	1:C:43:LEU:HD12	1.96	0.47
1:C:122(A):LYS:HD3	1:C:122(A):LYS:HA	1.60	0.47
1:C:292:ILE:HG13	1:C:309:ALA:HA	1.95	0.47
1:C:318:SER:OG	1:C:319:GLN:OE1	2.32	0.47
1:E:37:VAL:HG13	1:E:59:ILE:CG2	2.44	0.47
1:E:96:THR:OG1	1:E:98:VAL:HG22	2.13	0.47
1:E:227:GLY:HA3	1:G:306:LYS:HZ3	1.79	0.47
2:F:227:GLY:HA3	2:H:306:LYS:HZ2	1.80	0.47
1:G:90:ASP:HB3	1:G:115:LYS:HZ3	1.79	0.47
1:G:210:ALA:HA	1:G:213:ALA:HB3	1.96	0.47
2:H:85:GLY:N	2:H:112:GLY:HA3	2.30	0.47
2:H:168:ILE:N	2:H:245:GLN:O	2.48	0.47
2:H:317:TYR:O	2:H:321:VAL:HG23	2.15	0.47
1:I:187:ALA:CA	2:L:43:LEU:HD11	2.45	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:272:ASP:HB3	1:I:290:SER:O	2.14	0.47
1:I:349:CYS:SG	1:I:353:PRO:HA	2.55	0.47
2:J:293:ASP:OD2	2:J:295:SER:OG	2.25	0.47
1:K:201:LEU:N	1:K:201:LEU:HD22	2.29	0.47
2:L:63:ALA:HA	2:L:72:LYS:HA	1.97	0.47
2:L:236:ASN:OD1	2:L:284:ARG:NH1	2.48	0.47
1:O:47:ASP:H	1:O:51:GLY:C	2.23	0.47
1:O:135:LYS:HG3	1:O:136:ASP:OD1	2.13	0.47
1:O:183:ARG:HH21	1:O:190:HIS:HA	1.79	0.47
1:O:274:CYS:N	1:O:292:ILE:O	2.33	0.47
2:P:8:PHE:H	2:P:32:ASP:CB	2.27	0.47
2:P:101:ASP:HB2	2:P:103:ASP:OD1	2.14	0.47
2:P:239:VAL:HG13	2:P:310:TRP:CD2	2.49	0.47
1:Q:72:LYS:HG2	1:Q:73:VAL:N	2.28	0.47
1:Q:190:HIS:CE1	1:Q:195:ARG:H	2.32	0.47
2:R:130:VAL:HG13	2:R:324:LEU:HD12	1.96	0.47
2:R:177:SER:OG	2:R:234:THR:O	2.18	0.47
2:R:281:ILE:O	2:R:283:PHE:N	2.46	0.47
2:R:294:SER:O	2:R:297:THR:OG1	2.28	0.47
1:A:28:VAL:O	1:A:71:ILE:HG23	2.15	0.47
1:A:316:GLY:O	1:A:320:ARG:HG2	2.15	0.47
1:A:349:CYS:SG	1:A:353:PRO:HA	2.55	0.47
2:B:3:VAL:HG13	2:B:91:LEU:O	2.15	0.47
2:B:25:LEU:HD11	2:B:326:ASP:HA	1.96	0.47
2:B:32:ASP:OD1	2:B:33:THR:N	2.48	0.47
1:C:176:HIS:N	1:C:230:LEU:O	2.48	0.47
1:C:253:GLU:OE1	1:C:254:ASP:N	2.48	0.47
2:D:169:LYS:HB2	2:D:245:GLN:HB3	1.96	0.47
2:D:190:HIS:CG	2:D:191:ARG:N	2.82	0.47
2:F:7:GLY:N	2:F:31:ASN:O	2.47	0.47
2:F:59:THR:CA	2:F:64:ILE:HA	2.30	0.47
2:F:100:VAL:HG22	2:F:122(A):LYS:N	2.29	0.47
2:F:109:LEU:HD22	2:F:114:LYS:C	2.39	0.47
2:F:270:ILE:O	2:F:271:LEU:HD13	2.14	0.47
1:G:177:SER:HA	1:G:234:THR:HG23	1.96	0.47
1:G:323:ASP:O	1:G:327:LEU:HG	2.13	0.47
2:H:1:LEU:H	2:H:26:ASP:H	1.63	0.47
2:H:45:LYS:HG2	2:H:57:VAL:HG11	1.96	0.47
1:I:271:LEU:HA	1:I:289:SER:HB3	1.97	0.47
1:K:204:VAL:HG13	1:K:231:ARG:HB2	1.95	0.47
1:K:253:GLU:HA	1:K:256:ASN:HD21	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:87:MET:N	2:L:87:MET:SD	2.87	0.47
2:L:115:LYS:HA	2:L:142:THR:OG1	2.14	0.47
2:L:256:ASN:HA	2:L:259:PHE:CD2	2.50	0.47
1:O:175:THR:HG23	1:O:239:VAL:O	2.15	0.47
1:O:214:VAL:HG21	1:O:225:LEU:HD12	1.96	0.47
1:O:226:ASN:HD22	1:Q:298:MET:HG2	1.78	0.47
1:O:264:ALA:HA	1:O:268:LYS:NZ	2.30	0.47
2:P:1:LEU:HD13	2:P:329:ALA:HA	1.96	0.47
2:P:31:ASN:HA	2:P:73:VAL:HG23	1.96	0.47
2:P:77:ARG:HB3	3:P:401:NAD:N6A	2.28	0.47
2:P:102:ARG:HH21	2:P:125:ILE:HG13	1.80	0.47
1:Q:147:ALA:O	1:Q:152:ASN:ND2	2.48	0.47
1:Q:190:HIS:NE2	1:Q:195:ARG:HB2	2.30	0.47
1:Q:201:LEU:HD23	1:Q:201:LEU:H	1.79	0.47
2:R:116:VAL:HG12	2:R:144:ILE:O	2.15	0.47
2:R:122(A):LYS:HD2	2:R:122(A):LYS:HA	1.62	0.47
2:R:293:ASP:O	2:R:297:THR:HG23	2.15	0.47
1:A:10:ARG:N	3:A:401:NAD:O2N	2.48	0.47
1:A:27:VAL:HG23	1:A:71:ILE:HD11	1.96	0.47
1:A:169:LYS:N	1:A:245:ASN:OD1	2.47	0.47
2:B:104:GLY:HA2	2:B:107:LYS:HD2	1.95	0.47
2:B:161:LEU:O	2:B:165:PHE:N	2.45	0.47
2:B:274:CYS:O	2:B:294:SER:N	2.39	0.47
1:C:139:HIS:HB3	1:C:331:LYS:HE2	1.96	0.47
2:D:1:LEU:HD11	2:D:332:TRP:CE3	2.50	0.47
2:D:82:LEU:O	2:D:111:ALA:HB1	2.15	0.47
2:D:128:TYR:HA	2:D:133:ASN:ND2	2.30	0.47
2:D:236:ASN:OD1	2:D:284:ARG:NH1	2.48	0.47
1:E:11:ILE:HD11	3:E:401:NAD:O5D	2.15	0.47
1:E:57:VAL:HG13	1:E:64:PHE:CD1	2.49	0.47
1:E:79:PRO:HB3	1:E:108:HIS:CE1	2.50	0.47
1:E:103:PRO:O	1:E:107:LYS:HG3	2.15	0.47
1:E:214:VAL:HG23	1:E:215:SER:H	1.79	0.47
2:F:1:LEU:HD13	2:F:329:ALA:HA	1.97	0.47
2:F:11:ILE:HG12	3:F:401:NAD:PN	2.55	0.47
2:F:90:ASP:HA	2:F:114:LYS:HE2	1.97	0.47
2:F:162:ASP:O	2:F:166:GLY:N	2.47	0.47
1:G:44:LEU:HD21	1:G:66:ILE:HG12	1.96	0.47
1:G:134:GLU:HB2	1:G:327:LEU:HD13	1.97	0.47
1:G:139:HIS:HB2	1:G:331:LYS:CB	2.41	0.47
1:G:162:ASP:O	1:G:166:GLY:HA2	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:57:VAL:HA	2:H:66:VAL:HG22	1.97	0.47
2:H:116:VAL:HG12	2:H:144:ILE:O	2.15	0.47
2:H:173:THR:OG1	2:H:228:ILE:HG13	2.15	0.47
2:H:221:LEU:HA	2:H:224:LYS:HE2	1.97	0.47
1:I:101:ASP:N	1:I:122(A):LYS:HZ2	2.11	0.47
1:I:236:ASN:OD1	1:I:313:ASN:N	2.48	0.47
2:J:20:ARG:HE	2:J:319:GLN:HE22	1.63	0.47
2:J:48:SER:OG	1:K:186:ASP:OD2	2.31	0.47
2:J:49:ILE:HG23	2:J:284:ARG:NH1	2.30	0.47
2:J:115:LYS:HA	2:J:142:THR:OG1	2.15	0.47
2:J:139:HIS:CE1	2:J:332:TRP:HA	2.50	0.47
2:J:160:VAL:HA	2:J:163:GLN:HB2	1.95	0.47
2:J:170:GLY:HA2	2:J:244:VAL:HA	1.97	0.47
2:J:239:VAL:HA	2:J:310:TRP:HA	1.97	0.47
1:K:2:LYS:HB3	1:K:90:ASP:OD1	2.15	0.47
1:K:10:ARG:HG2	3:K:401:NAD:O2A	2.15	0.47
1:K:96:THR:OG1	1:K:97:GLY:N	2.47	0.47
2:L:192:ASP:HB3	2:L:195:ARG:HB2	1.96	0.47
1:Q:5:ILE:HD12	1:Q:30:VAL:HG22	1.97	0.47
1:Q:199:ALA:O	1:Q:233:PRO:HG3	2.14	0.47
1:Q:242:LEU:N	1:Q:307:VAL:O	2.48	0.47
2:R:247:SER:OG	2:R:248:LYS:N	2.48	0.47
2:R:267:LEU:HA	2:R:270:ILE:HB	1.96	0.47
1:A:84:TRP:HE3	1:A:89:ILE:HG21	1.79	0.47
1:A:149:CYS:HB3	1:A:317:TYR:CG	2.50	0.47
1:A:191:ARG:C	2:D:39:GLN:HE22	2.22	0.47
2:B:135:GLU:H	2:B:135:GLU:CD	2.21	0.47
2:B:139:HIS:CE1	2:B:332:TRP:HA	2.50	0.47
2:B:320:ARG:HE	2:B:320:ARG:N	2.11	0.47
1:C:229:ALA:C	1:C:230:LEU:HD22	2.40	0.47
1:E:46:TYR:CD1	2:F:278:LEU:HD21	2.50	0.47
2:F:176:HIS:CG	2:F:177:SER:N	2.83	0.47
1:G:202:ASN:ND2	1:G:204:VAL:HG23	2.30	0.47
2:H:18(B):HIS:CE1	2:H:66:VAL:HG12	2.50	0.47
1:I:236:ASN:HD21	1:I:314:GLU:H	1.63	0.47
2:J:102:ARG:NH2	2:J:125:ILE:HA	2.30	0.47
2:J:244:VAL:O	2:J:304:MET:HA	2.15	0.47
2:J:312:ASP:OD2	2:J:315:TRP:HB3	2.15	0.47
2:J:320:ARG:HE	2:J:320:ARG:N	2.12	0.47
1:K:11:ILE:HG21	1:K:119:THR:HG21	1.96	0.47
1:K:94:GLU:OE2	1:K:99:PHE:N	2.38	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:126:PRO:HD2	2:L:143:ILE:O	2.14	0.47
2:L:199:ALA:C	2:L:201:LEU:N	2.73	0.47
2:L:324:LEU:HA	2:L:327:ILE:HD12	1.97	0.47
1:O:18(B):HIS:O	1:O:19:GLY:C	2.57	0.47
2:P:173:THR:HB	2:P:241:ASP:OD2	2.15	0.47
2:R:139:HIS:HB2	2:R:333:GLN:HB2	1.95	0.47
2:R:174:THR:OG1	2:R:175:THR:N	2.47	0.47
2:R:330:ASN:N	2:R:330:ASN:OD1	2.47	0.47
1:A:49:ILE:HG13	1:A:284:ARG:NH2	2.29	0.47
1:A:204:VAL:HB	1:A:231:ARG:CB	2.38	0.47
1:A:256:ASN:HA	1:A:259:PHE:HB2	1.97	0.47
2:B:194:ARG:NH2	2:D:278:LEU:H	2.13	0.47
2:B:237:VAL:HG22	2:B:312:ASP:HA	1.96	0.47
2:B:257:ALA:O	2:B:260:ARG:HB2	2.14	0.47
2:B:260:ARG:HE	2:B:273:VAL:HG13	1.80	0.47
2:D:115:LYS:HA	2:D:142:THR:OG1	2.14	0.47
2:D:126:PRO:HD2	2:D:143:ILE:O	2.14	0.47
2:D:219:PRO:CA	2:D:222:LYS:HZ3	2.27	0.47
1:E:193:LEU:HD21	2:H:42:HIS:CE1	2.50	0.47
2:F:64:ILE:N	2:F:71:ILE:O	2.48	0.47
1:G:45:LYS:HG3	1:G:52:THR:HG23	1.97	0.47
1:G:190:HIS:HE1	1:G:195:ARG:HB2	1.80	0.47
1:G:290:SER:HA	1:G:310:TRP:O	2.15	0.47
2:H:2:LYS:HA	2:H:26:ASP:O	2.14	0.47
2:H:59:THR:HA	2:H:64:ILE:HG23	1.97	0.47
2:H:292:ILE:HG23	2:H:308:ILE:O	2.15	0.47
1:I:184:LEU:HD23	1:I:184:LEU:H	1.79	0.47
2:J:259:PHE:HA	2:J:262:SER:HB3	1.96	0.47
1:K:56:ASP:OD1	1:K:57:VAL:N	2.48	0.47
1:K:259:PHE:HA	1:K:262:ALA:HB3	1.97	0.47
2:L:90:ASP:OD1	2:L:114:LYS:NZ	2.30	0.47
1:O:13:ARG:CA	1:O:44:LEU:HD11	2.35	0.47
1:O:154:LEU:HA	1:O:157:PHE:CZ	2.49	0.47
1:O:208:THR:OG1	1:O:209:GLY:N	2.47	0.47
1:O:281:VAL:O	1:O:284:ARG:HB2	2.14	0.47
1:Q:16:LEU:HD21	1:Q:66:ILE:HD11	1.97	0.47
1:Q:176:HIS:N	1:Q:230:LEU:O	2.43	0.47
1:Q:248:LYS:HD3	1:Q:250:VAL:CG2	2.45	0.47
2:R:90:ASP:HA	2:R:114:LYS:HE2	1.97	0.47
2:B:272:SER:OG	2:B:290:SER:O	2.23	0.47
1:C:272:ASP:HB2	1:C:288:PHE:CD1	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:47:ASP:OD1	2:D:48:SER:N	2.48	0.47
2:D:122(A):LYS:HA	2:D:122(A):LYS:HZ2	1.80	0.47
2:D:149:CYS:HA	2:D:152:ASN:HB3	1.95	0.47
2:D:159:LYS:HB2	2:D:218:LEU:HD13	1.97	0.47
1:E:171:THR:O	1:E:242:LEU:HD12	2.15	0.47
2:F:287:ASP:OD1	2:F:315:TRP:NE1	2.44	0.47
1:G:11:ILE:N	3:G:401:NAD:O2N	2.45	0.47
1:G:101:ASP:OD2	1:G:104:GLY:N	2.48	0.47
1:G:122(A):LYS:C	1:G:123(A):SER:H	2.23	0.47
1:G:126:PRO:CG	1:G:144:ILE:HG22	2.44	0.47
1:G:234:THR:HG21	1:G:237:VAL:HB	1.97	0.47
1:G:252:ALA:O	1:G:255:VAL:N	2.48	0.47
2:H:77:ARG:H	2:H:77:ARG:HG2	1.55	0.47
2:H:147:ALA:O	2:H:317:TYR:OH	2.33	0.47
1:I:100:VAL:HB	1:I:122(A):LYS:HE3	1.96	0.47
1:K:25:LEU:HD13	1:K:329:ALA:HB2	1.96	0.47
1:K:92:VAL:H	1:K:116:VAL:HG22	1.79	0.47
1:K:145:SER:OG	1:K:146:ASN:N	2.47	0.47
2:L:2:LYS:N	2:L:90:ASP:OD2	2.48	0.47
1:O:50:LEU:HD21	1:O:315:TRP:CH2	2.50	0.46
1:O:312:ASP:OD1	1:O:314:GLU:N	2.45	0.46
2:P:84:TRP:NE1	2:P:108:HIS:HA	2.29	0.46
2:P:218:LEU:HB3	2:P:221:LEU:HB2	1.96	0.46
2:P:226:ASN:HB3	2:R:300:MET:HE1	1.97	0.46
1:A:95:GLY:O	3:A:401:NAD:H4D	2.15	0.46
1:A:188:SER:HB2	1:A:196:ALA:HA	1.97	0.46
2:B:0:LYS:H2	2:B:26:ASP:CG	2.19	0.46
2:B:239:VAL:HG13	2:B:310:TRP:CG	2.50	0.46
2:B:259:PHE:HA	2:B:262:SER:HB3	1.97	0.46
1:E:116:VAL:O	1:E:144:ILE:HG23	2.15	0.46
1:E:139:HIS:CG	1:E:333:PRO:HD3	2.50	0.46
1:E:279:VAL:HB	1:G:202:ASN:ND2	2.30	0.46
1:E:298:MET:HE2	1:E:298:MET:HB3	1.81	0.46
2:F:199:ALA:O	2:F:202:ASN:N	2.46	0.46
1:G:256:ASN:C	1:G:260:ARG:HE	2.19	0.46
2:H:80:VAL:HA	2:H:111:ALA:HB2	1.98	0.46
1:I:34:GLY:O	1:I:39:SER:OG	2.22	0.46
1:I:176:HIS:CD2	1:I:231:ARG:HG2	2.50	0.46
2:J:39:GLN:O	2:J:43:LEU:HG	2.16	0.46
2:J:101:ASP:CG	2:J:104:GLY:H	2.22	0.46
1:K:139:HIS:HB3	1:K:333:PRO:HD2	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:10:ARG:HG3	3:L:401:NAD:O1N	2.15	0.46
2:L:78:ASN:ND2	2:L:81:ASN:OD1	2.37	0.46
2:L:236:ASN:O	2:L:313:ASN:ND2	2.33	0.46
1:O:58:LYS:HA	1:O:58:LYS:HD2	1.70	0.46
2:P:11:ILE:HG22	2:P:318:SER:HB3	1.97	0.46
2:P:28:VAL:O	2:P:72:LYS:NZ	2.24	0.46
2:P:190:HIS:CG	2:P:191:ARG:N	2.82	0.46
1:Q:124:ASP:HA	1:I:222:LYS:HZ1	1.79	0.46
1:Q:252:ALA:HB1	1:Q:297:THR:HB	1.97	0.46
2:R:122:GLY:HA3	2:R:125:ILE:HG12	1.97	0.46
2:R:183:ARG:HH21	2:R:190:HIS:HA	1.80	0.46
2:R:281:ILE:C	2:R:283:PHE:H	2.24	0.46
1:A:190:HIS:HE1	1:A:191:ARG:NH2	2.09	0.46
1:A:202:ASN:HD21	1:C:281:VAL:H	1.63	0.46
2:B:12:GLY:O	2:B:16:LEU:N	2.38	0.46
2:B:15:PHE:CG	2:B:322:VAL:HG22	2.50	0.46
2:B:29:VAL:N	2:B:71:ILE:HG23	2.31	0.46
2:B:38:LYS:NZ	2:B:39:GLN:HG3	2.30	0.46
2:B:272:SER:O	2:B:291:THR:HA	2.15	0.46
1:C:129:VAL:CA	1:C:324:LEU:HD21	2.45	0.46
1:C:186:ASP:OD1	1:C:198:ALA:HB2	2.15	0.46
2:D:316:GLY:HA2	2:D:319:GLN:HB2	1.96	0.46
1:E:60:ILE:HG12	1:E:60(A):ASP:N	2.31	0.46
1:E:244:VAL:O	1:E:305:VAL:HG13	2.15	0.46
1:E:252:ALA:O	1:E:255:VAL:N	2.48	0.46
1:E:293:ASP:O	1:E:297:THR:HG23	2.14	0.46
2:F:152:ASN:ND2	2:F:317:TYR:HA	2.30	0.46
2:F:190:HIS:CE1	2:F:192:ASP:HB3	2.51	0.46
2:F:228:ILE:HG23	2:H:306:LYS:HD2	1.97	0.46
1:G:38:LYS:O	1:G:41:THR:OG1	2.33	0.46
1:G:274:CYS:SG	1:G:275:ASP:N	2.88	0.46
2:H:41:SER:OG	2:H:42:HIS:N	2.47	0.46
1:I:5:ILE:HG13	1:I:30:VAL:HG22	1.97	0.46
1:I:201:LEU:HD12	1:I:201:LEU:HA	1.64	0.46
2:J:14:ASN:ND2	2:J:314:GLU:HB3	2.30	0.46
2:J:16:LEU:HD13	2:J:44:LEU:HD13	1.96	0.46
2:J:25:LEU:HD11	2:J:326:ASP:HA	1.98	0.46
2:J:249:LYS:NZ	2:J:301:GLY:O	2.31	0.46
2:J:273:VAL:HA	2:J:292:ILE:H	1.80	0.46
2:L:78:ASN:OD1	2:L:80:VAL:HG23	2.14	0.46
2:L:83:PRO:HB2	2:L:86:ASP:OD2	2.14	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:169:LYS:HB2	2:L:245:GLN:HB3	1.97	0.46
1:O:33:SER:OG	1:O:77:ARG:CD	2.63	0.46
1:O:42:HIS:CG	2:R:193:LEU:HD22	2.50	0.46
1:O:186:ASP:OD1	1:O:198:ALA:N	2.48	0.46
1:O:222:LYS:HA	1:O:222:LYS:HD2	1.60	0.46
2:P:14:ASN:ND2	2:P:315:TRP:HA	2.30	0.46
2:P:72:LYS:NZ	2:P:72:LYS:HB2	2.29	0.46
1:Q:54:LYS:N	1:Q:54:LYS:HZ2	2.13	0.46
1:Q:135:LYS:HZ1	1:Q:136:ASP:H	1.62	0.46
1:Q:135:LYS:HG2	1:Q:136:ASP:N	2.29	0.46
2:R:317:TYR:O	2:R:321:VAL:HG23	2.15	0.46
1:A:45:LYS:O	1:A:52:THR:OG1	2.18	0.46
1:A:112:GLY:O	1:A:114:LYS:NZ	2.49	0.46
2:B:102:ARG:NH2	2:B:125:ILE:HA	2.30	0.46
2:B:316:GLY:HA2	2:B:320:ARG:HH21	1.79	0.46
1:C:83:PRO:C	1:C:84:TRP:HE3	2.23	0.46
1:C:202:ASN:HD22	1:C:202:ASN:N	2.14	0.46
2:D:117:LEU:HA	2:D:144:ILE:O	2.14	0.46
2:D:243:VAL:HA	2:D:305:VAL:O	2.15	0.46
1:E:43:LEU:HD22	2:H:186:ASP:HB2	1.95	0.46
1:E:356:GLU:CA	1:K:183:ARG:HH22	2.27	0.46
2:F:168:ILE:N	2:F:245:GLN:O	2.48	0.46
1:G:219:PRO:O	1:G:222:LYS:HG2	2.15	0.46
1:G:238:SER:HB2	1:G:311:TYR:O	2.14	0.46
1:G:299:VAL:HG23	1:G:305:VAL:HG12	1.98	0.46
1:I:4:ALA:HB1	1:I:29:VAL:HB	1.98	0.46
1:I:263:ALA:O	1:I:268:LYS:HB2	2.13	0.46
1:I:301:GLY:HA3	1:K:169:LYS:HE2	1.96	0.46
1:K:40:ALA:O	1:K:44:LEU:N	2.47	0.46
1:K:296:LEU:HA	1:K:296:LEU:HD13	1.79	0.46
2:L:47:ASP:OD1	2:L:48:SER:N	2.48	0.46
2:L:117:LEU:HA	2:L:144:ILE:O	2.15	0.46
2:L:255:VAL:HG23	2:L:256:ASN:ND2	2.30	0.46
1:O:345:LEU:H	1:C:191:ARG:NH1	2.11	0.46
2:P:2:LYS:HE3	2:P:87:MET:HB3	1.98	0.46
2:P:287:ASP:OD1	2:P:315:TRP:NE1	2.40	0.46
1:Q:293:ASP:OD2	1:Q:295:SER:OG	2.31	0.46
1:Q:312:ASP:CG	1:Q:315:TRP:HB3	2.41	0.46
2:R:18(A):TRP:HZ3	2:R:18(B):HIS:CE1	2.33	0.46
2:R:221:LEU:HA	2:R:224:LYS:HE2	1.97	0.46
2:R:232:VAL:O	2:R:234:THR:N	2.41	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:152:ASN:HD21	1:C:320:ARG:HB2	1.80	0.46
1:C:183:ARG:HG2	1:C:187:ALA:H	1.79	0.46
1:C:186:ASP:H	1:C:198:ALA:HB2	1.80	0.46
2:D:83:PRO:HB2	2:D:86:ASP:OD2	2.14	0.46
2:D:100:VAL:HG22	2:D:122(A):LYS:N	2.31	0.46
2:D:124:ASP:OD1	2:D:124:ASP:N	2.48	0.46
2:D:160:VAL:HA	2:D:163:GLN:HB2	1.97	0.46
1:E:122(A):LYS:NZ	1:E:122(A):LYS:HA	2.30	0.46
1:E:154:LEU:HD11	1:E:172:MET:HG3	1.97	0.46
1:E:176:HIS:CD2	1:E:231:ARG:HG3	2.50	0.46
2:F:183:ARG:HH22	2:F:191:ARG:NH1	2.14	0.46
2:F:251:PHE:N	2:F:254:GLU:OE1	2.23	0.46
1:G:1:LEU:HG	1:G:332:TRP:CD2	2.50	0.46
1:G:10:ARG:NH1	1:G:13:ARG:HH21	2.13	0.46
1:G:72:LYS:HD2	1:G:87:LEU:HD11	1.97	0.46
1:G:128:TYR:HB2	1:G:145:SER:O	2.15	0.46
1:G:134:GLU:N	1:G:134:GLU:OE1	2.48	0.46
1:G:270:VAL:HA	1:G:320:ARG:NH1	2.30	0.46
2:H:197:ARG:NH2	2:H:198:ALA:HB3	2.29	0.46
2:H:264:ASP:O	2:H:268:LYS:NZ	2.46	0.46
1:I:228:ILE:HD11	1:I:230:LEU:HD21	1.97	0.46
2:J:79:PRO:HA	2:J:82:LEU:HD12	1.97	0.46
2:J:118:ILE:HD13	2:J:118:ILE:HA	1.69	0.46
1:K:28:VAL:C	1:K:71:ILE:HG23	2.40	0.46
2:L:45:LYS:HZ2	2:L:53:PHE:HB3	1.81	0.46
2:L:181:ASP:HB3	2:L:182:GLN:NE2	2.28	0.46
1:O:66:ILE:CG1	1:O:69:LYS:HB2	2.41	0.46
1:O:171:THR:OG1	1:O:227:GLY:HA3	2.15	0.46
2:P:7:GLY:N	2:P:31:ASN:O	2.48	0.46
2:P:103:ASP:HB2	2:P:107:LYS:HZ3	1.80	0.46
2:P:139:HIS:HB3	2:P:333:GLN:CD	2.40	0.46
2:P:168:ILE:HG22	2:P:169:LYS:HG3	1.95	0.46
2:P:218:LEU:HB3	2:P:221:LEU:HD13	1.96	0.46
2:P:279:VAL:HG23	2:P:282:ASP:OD1	2.14	0.46
2:P:326:ASP:HA	2:P:329:ALA:HB3	1.98	0.46
1:Q:190:HIS:CD2	1:Q:191:ARG:N	2.83	0.46
1:Q:191:ARG:HE	1:I:358:CYS:HB2	1.80	0.46
2:R:13:ARG:HE	2:R:43:LEU:HD22	1.80	0.46
2:R:114:LYS:O	2:R:142:THR:OG1	2.23	0.46
2:R:292:ILE:HG23	2:R:308:ILE:O	2.15	0.46
1:A:129:VAL:HG12	1:A:133:ASN:ND2	2.28	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:176:HIS:ND1	1:A:177:SER:N	2.64	0.46
1:A:179:THR:N	1:A:182:GLN:OE1	2.33	0.46
1:A:238:SER:HB3	1:A:311:TYR:CE1	2.51	0.46
2:B:77:ARG:HH11	3:B:401:NAD:C6A	2.29	0.46
2:B:312:ASP:OD2	2:B:315:TRP:HB3	2.15	0.46
1:C:6:ASN:HD21	1:C:96:THR:H	1.64	0.46
1:C:11:ILE:C	1:C:14:ASN:HD22	2.24	0.46
1:C:128:TYR:HD2	1:C:144:ILE:HD13	1.79	0.46
1:C:150:THR:O	1:C:154:LEU:HG	2.15	0.46
1:C:326:ASP:O	1:C:329:ALA:N	2.48	0.46
2:D:281:ILE:HD12	2:D:284:ARG:HH21	1.79	0.46
1:E:41:THR:HG23	1:E:57:VAL:HG12	1.98	0.46
1:E:264:ALA:HA	1:E:268:LYS:NZ	2.30	0.46
1:E:273:VAL:HA	1:E:292:ILE:N	2.29	0.46
2:F:94:GLU:OE2	2:F:98:VAL:N	2.49	0.46
2:F:118:ILE:HB	2:F:145:SER:HB2	1.96	0.46
2:F:168:ILE:HG22	2:F:169:LYS:HG3	1.97	0.46
2:F:281:ILE:CD1	2:F:284:ARG:HE	2.29	0.46
1:G:6:ASN:N	1:G:93:ILE:O	2.48	0.46
3:G:401:NAD:H3D	3:G:401:NAD:O5B	2.15	0.46
2:H:247:SER:OG	2:H:248:LYS:N	2.49	0.46
1:I:204:VAL:HG11	1:I:231:ARG:NH1	2.30	0.46
1:I:222:LYS:O	1:I:224:LYS:HG3	2.16	0.46
2:J:1:LEU:HD23	2:J:25:LEU:HD12	1.98	0.46
1:K:45:LYS:NZ	1:K:56:ASP:OD1	2.44	0.46
1:K:109:ILE:HD12	1:K:113:ALA:HB3	1.97	0.46
1:K:313:ASN:ND2	1:K:313:ASN:H	2.14	0.46
2:L:6:ASN:HB3	2:L:94:GLU:HA	1.98	0.46
2:L:220:ASN:HD22	2:L:221:LEU:HD12	1.81	0.46
2:L:253:GLU:OE2	2:L:257:ALA:N	2.49	0.46
2:L:316:GLY:HA2	2:L:319:GLN:HB2	1.96	0.46
1:O:81:LYS:HE3	1:O:81:LYS:HB2	1.81	0.46
1:O:90:ASP:HA	1:O:114:LYS:NZ	2.30	0.46
1:O:190:HIS:CE1	1:O:195:ARG:N	2.84	0.46
2:P:168:ILE:N	2:P:245:GLN:O	2.48	0.46
2:P:208:THR:HG22	2:P:229:ALA:HB2	1.97	0.46
1:Q:18(A):TRP:NE1	1:Q:25:LEU:O	2.49	0.46
1:Q:109:ILE:HD13	1:Q:113:ALA:HB3	1.98	0.46
2:R:193:LEU:HA	2:R:196:ALA:HB3	1.97	0.46
1:A:135:LYS:HZ2	1:A:135:LYS:H	1.64	0.46
2:B:115:LYS:HA	2:B:142:THR:OG1	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:137:TYR:OH	2:B:139:HIS:ND1	2.49	0.46
2:B:204:VAL:N	2:B:231:ARG:O	2.48	0.46
1:C:94:GLU:N	1:C:117:ILE:O	2.44	0.46
2:D:190:HIS:ND1	2:D:195:ARG:HB2	2.31	0.46
1:G:29:VAL:HA	1:G:72:LYS:O	2.16	0.46
1:G:159:LYS:HE2	1:G:267:LEU:HD11	1.97	0.46
2:H:185:LEU:O	2:H:187:ALA:N	2.47	0.46
1:I:11:ILE:HB	3:I:401:NAD:H52N	1.96	0.46
1:I:20:ARG:NE	1:I:322:VAL:HG11	2.27	0.46
1:I:47:ASP:OD2	1:I:50:LEU:N	2.27	0.46
1:I:65:SER:HA	1:I:71:ILE:HG13	1.98	0.46
1:I:165:LEU:O	1:I:248:LYS:HG3	2.16	0.46
1:K:240:VAL:HG13	1:K:311:TYR:HE1	1.79	0.46
1:O:211:ALA:HB1	1:O:226:ASN:HA	1.98	0.46
1:O:241:ASP:OD1	1:O:242:LEU:N	2.48	0.46
2:P:11:ILE:CD1	3:P:401:NAD:H2N	2.46	0.46
2:P:176:HIS:CG	2:P:177:SER:N	2.83	0.46
2:P:192:ASP:OD2	2:P:195:ARG:N	2.34	0.46
2:P:270:ILE:O	2:P:271:LEU:HD13	2.15	0.46
1:Q:5:ILE:HG21	1:Q:8:PHE:HD1	1.81	0.46
1:Q:128:TYR:HD2	1:Q:144:ILE:HD12	1.79	0.46
1:Q:241:ASP:HA	1:Q:308:VAL:HA	1.97	0.46
1:Q:298:MET:HE3	1:Q:300:MET:HA	1.96	0.46
2:R:32:ASP:O	2:R:75:SER:HA	2.16	0.46
2:R:218:LEU:HA	2:R:218:LEU:HD23	1.83	0.46
2:R:242:LEU:HD23	2:R:307:VAL:HG21	1.96	0.46
1:A:194:ARG:HH21	1:C:277:PRO:HA	1.80	0.46
2:B:31:ASN:OD1	2:B:74:VAL:HG23	2.16	0.46
2:D:218:LEU:HD23	2:D:218:LEU:HA	1.81	0.46
2:D:313:ASN:N	2:D:313:ASN:OD1	2.48	0.46
1:E:171:THR:HG23	1:E:243:VAL:HG23	1.96	0.46
1:E:175:THR:O	1:E:175:THR:OG1	2.26	0.46
2:F:44:LEU:O	2:F:53:PHE:HB2	2.16	0.46
1:G:130:VAL:HG21	1:G:270:VAL:HG11	1.97	0.46
1:G:169:LYS:HD3	1:G:224:LYS:HB3	1.98	0.46
1:G:247:GLU:OE1	1:G:248:LYS:N	2.38	0.46
1:G:332:TRP:CD1	1:G:333:PRO:HD2	2.50	0.46
1:I:172:MET:SD	1:I:173:THR:N	2.89	0.46
1:K:41:THR:HG21	1:K:59:ILE:CG1	2.46	0.46
1:K:85:ALA:N	1:K:112:GLY:HA3	2.31	0.46
1:K:173:THR:OG1	1:K:228:ILE:HD11	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:17:ARG:HG2	2:L:53:PHE:CE2	2.51	0.46
1:O:41:THR:HG22	1:O:42:HIS:N	2.30	0.46
1:O:83:PRO:HB3	1:O:86:GLU:HB2	1.98	0.46
2:P:173:THR:HG1	2:R:306:LYS:NZ	2.13	0.46
2:P:190:HIS:CE1	2:P:192:ASP:HB3	2.51	0.46
2:P:237:VAL:HG13	2:P:312:ASP:HA	1.97	0.46
1:Q:153:CYS:HB2	1:Q:311:TYR:CD2	2.51	0.46
2:R:36:GLY:H	2:R:39:GLN:NE2	2.14	0.46
2:R:253:GLU:OE2	2:R:257:ALA:N	2.48	0.46
1:A:202:ASN:CG	1:C:281:VAL:H	2.24	0.46
2:B:28:VAL:HG22	2:B:69:LYS:HZ3	1.80	0.46
1:C:89:ILE:HA	1:C:89:ILE:HD13	1.80	0.46
2:D:39:GLN:C	2:D:43:LEU:HG	2.40	0.46
2:D:181:ASP:HB3	2:D:182:GLN:HE21	1.79	0.46
2:D:194:ARG:O	2:D:197:ARG:N	2.49	0.46
2:D:232:VAL:O	2:D:234:THR:N	2.47	0.46
1:E:168:VAL:O	1:E:169:LYS:HD2	2.15	0.46
1:E:297:THR:HG22	1:E:307:VAL:HA	1.96	0.46
1:E:329:ALA:HA	1:E:332:TRP:HD1	1.80	0.46
1:E:346:GLU:HA	1:K:191:ARG:HH12	1.79	0.46
1:G:271:LEU:HA	1:G:290:SER:OG	2.16	0.46
2:H:45:LYS:O	2:H:53:PHE:N	2.39	0.46
1:I:114:LYS:O	1:I:115:LYS:HD3	2.16	0.46
1:I:272:ASP:HB2	1:I:288:PHE:HB2	1.97	0.46
2:J:3:VAL:HG13	2:J:91:LEU:O	2.14	0.46
2:J:82:LEU:HB2	2:J:84:TRP:CD1	2.51	0.46
2:J:183:ARG:CZ	2:J:190:HIS:HB2	2.45	0.46
2:J:286:THR:HG22	2:J:288:VAL:HG13	1.96	0.46
1:O:57:VAL:O	1:O:58:LYS:C	2.58	0.46
1:O:124:ASP:N	1:C:142:ASN:HD21	2.13	0.46
1:O:139:HIS:NE2	1:O:332:TRP:HA	2.31	0.46
1:O:320:ARG:C	1:O:324:LEU:HG	2.41	0.46
2:P:58:LYS:O	2:P:65:SER:N	2.49	0.46
2:P:279:VAL:O	2:P:282:ASP:N	2.48	0.46
2:R:194:ARG:HD3	2:R:205:PRO:HD2	1.97	0.46
1:A:260:ARG:HA	1:A:263:ALA:HB3	1.98	0.46
1:A:293:ASP:OD1	1:A:295:SER:N	2.48	0.46
1:A:346:GLU:O	1:A:350:LYS:N	2.46	0.46
2:B:33:THR:H	3:B:401:NAD:H2A	1.81	0.46
2:B:279:VAL:HB	2:D:202:ASN:HB3	1.97	0.46
1:C:10:ARG:H	3:C:401:NAD:PA	2.39	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:57:VAL:HG22	1:C:66:ILE:HG23	1.98	0.46
1:C:97:GLY:HA3	3:C:401:NAD:O3D	2.16	0.46
1:C:313:ASN:ND2	1:C:313:ASN:H	2.12	0.46
2:D:3:VAL:HG13	2:D:91:LEU:O	2.16	0.46
1:E:169:LYS:HG2	1:E:245:ASN:HD21	1.81	0.46
1:E:194:ARG:HD2	1:E:205:PRO:HD2	1.97	0.46
1:E:314:GLU:O	1:E:317:TYR:HB3	2.16	0.46
2:F:218:LEU:CB	2:F:221:LEU:HB2	2.46	0.46
2:F:293:ASP:HB3	2:F:308:ILE:HG13	1.98	0.46
1:G:4:ALA:O	1:G:93:ILE:HG12	2.16	0.46
1:G:6:ASN:HD22	1:G:95:GLY:N	2.14	0.46
1:G:10:ARG:NH1	1:G:13:ARG:HE	2.12	0.46
1:G:202:ASN:HD21	1:G:204:VAL:HG23	1.81	0.46
2:H:172:MET:SD	2:H:227:GLY:N	2.88	0.46
2:H:183:ARG:HH22	2:H:191:ARG:HH12	1.62	0.46
2:H:215:ALA:HA	2:H:222:LYS:HZ2	1.81	0.46
1:I:31:ASN:HD21	1:I:76:ASN:C	2.23	0.46
1:I:58:LYS:HB3	1:I:65:SER:C	2.40	0.46
1:I:131:GLY:HA2	1:I:267:LEU:HD22	1.98	0.46
1:I:174:THR:HA	1:I:240:VAL:HA	1.97	0.46
2:J:84:TRP:CD1	2:J:111:ALA:HB3	2.50	0.46
2:J:137:TYR:OH	2:J:139:HIS:ND1	2.48	0.46
2:J:154:LEU:HA	2:J:157:PHE:CZ	2.51	0.46
2:J:190:HIS:CE1	2:J:195:ARG:HB2	2.50	0.46
2:J:239:VAL:HG13	2:J:310:TRP:CG	2.51	0.46
2:J:317:TYR:O	2:J:321:VAL:HG23	2.16	0.46
2:L:82:LEU:O	2:L:111:ALA:HB1	2.15	0.46
1:O:148:SER:OG	1:O:151:THR:HG23	2.16	0.46
1:O:276:ILE:O	1:O:278:LEU:HG	2.16	0.46
2:P:64:ILE:N	2:P:71:ILE:H	2.09	0.46
2:P:120:ALA:HA	3:P:401:NAD:H6N	1.96	0.46
2:P:185:LEU:HD11	1:Q:178:TYR:CE1	2.51	0.46
1:Q:3:VAL:N	1:Q:26:ASP:O	2.48	0.46
1:Q:50:LEU:HD21	1:Q:54:LYS:NZ	2.31	0.46
1:Q:274:CYS:N	1:Q:292:ILE:O	2.45	0.46
1:Q:315:TRP:O	1:Q:319:GLN:HG3	2.15	0.46
2:R:32:ASP:OD1	2:R:33:THR:N	2.49	0.46
2:R:287:ASP:OD1	2:R:287:ASP:N	2.49	0.46
1:A:132:VAL:HG22	1:A:159:LYS:HD2	1.98	0.46
1:A:172:MET:HG2	1:A:242:LEU:HB2	1.97	0.46
1:A:202:ASN:ND2	1:C:279:VAL:HG23	2.13	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:287:ASP:OD1	1:A:315:TRP:NE1	2.46	0.46
1:C:214:VAL:HG23	1:C:215:SER:H	1.80	0.46
1:C:294:SER:O	1:C:297:THR:OG1	2.23	0.46
2:D:16:LEU:HD13	2:D:44:LEU:HD13	1.97	0.46
2:D:44:LEU:O	2:D:53:PHE:HB2	2.16	0.46
2:D:285:CYS:O	2:D:315:TRP:NE1	2.49	0.46
1:E:107:LYS:HA	1:E:110:GLN:HB2	1.97	0.46
1:E:137:TYR:CE2	1:E:331:LYS:HD2	2.51	0.46
1:E:222:LYS:HD3	1:E:222:LYS:HA	1.68	0.46
1:E:230:LEU:O	1:E:232:VAL:HG22	2.16	0.46
1:G:174:THR:H	1:G:229:ALA:HA	1.81	0.46
1:G:248:LYS:CA	1:G:248(A):VAL:HG13	2.41	0.46
1:G:248(A):VAL:HG23	1:G:250:VAL:HG22	1.98	0.46
3:G:401:NAD:O2A	3:G:401:NAD:H4B	2.16	0.46
2:H:90:ASP:HA	2:H:114:LYS:HE2	1.97	0.46
2:H:181:ASP:HB3	2:H:182:GLN:NE2	2.31	0.46
2:H:258:ALA:HA	2:H:261:GLU:HG3	1.96	0.46
2:H:297:THR:HG22	2:H:307:VAL:HA	1.98	0.46
1:I:59:ILE:HA	1:I:64:PHE:HB2	1.98	0.46
1:I:132:VAL:N	1:I:134:GLU:OE1	2.49	0.46
1:I:165:LEU:HD21	1:I:255:VAL:HG22	1.98	0.46
1:I:179:THR:HG23	1:I:231:ARG:HD3	1.98	0.46
1:I:291:THR:HG1	1:I:310:TRP:CG	2.33	0.46
1:I:300:MET:HE2	1:K:170:GLY:H	1.81	0.46
2:J:77:ARG:HD2	3:J:401:NAD:H62A	1.78	0.46
2:J:173:THR:OG1	2:J:228:ILE:HG13	2.16	0.46
2:L:55:ALA:HB1	2:L:67:ASP:OD1	2.16	0.46
2:L:149:CYS:HA	2:L:152:ASN:HB3	1.98	0.46
2:L:279:VAL:N	2:L:282:ASP:OD2	2.25	0.46
1:O:2:LYS:HD3	1:O:88:GLY:HA3	1.98	0.45
1:O:10:ARG:CZ	2:R:185:LEU:HB3	2.46	0.45
1:O:46:TYR:HA	1:O:52:THR:HA	1.96	0.45
1:O:77:ARG:HA	3:O:401:NAD:N1A	2.31	0.45
1:O:92:VAL:O	1:O:116:VAL:HA	2.16	0.45
1:O:221:LEU:HA	1:O:221:LEU:HD13	1.80	0.45
1:O:323:ASP:HA	1:O:326:ASP:OD2	2.16	0.45
2:P:183:ARG:HH22	2:P:191:ARG:NH2	2.13	0.45
2:P:194:ARG:NE	2:P:205:PRO:O	2.49	0.45
2:P:218:LEU:CB	2:P:221:LEU:HB2	2.46	0.45
2:P:228:ILE:HG23	2:R:306:LYS:HD2	1.98	0.45
1:A:47:ASP:CG	1:A:50:LEU:H	2.20	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:165:LEU:O	1:A:248:LYS:N	2.49	0.45
2:B:293:ASP:OD2	2:B:295:SER:OG	2.27	0.45
1:C:42:HIS:NE2	2:D:277:PRO:O	2.48	0.45
1:C:230:LEU:O	1:C:232:VAL:HG12	2.16	0.45
1:C:237:VAL:HG11	1:C:280:SER:CB	2.26	0.45
1:C:359:LYS:O	1:C:361:TYR:N	2.49	0.45
2:D:2:LYS:H	2:D:2:LYS:HG2	1.62	0.45
2:D:134:GLU:HB2	2:D:327:ILE:HD13	1.98	0.45
2:D:204:VAL:HB	2:D:231:ARG:HB2	1.98	0.45
1:E:84:TRP:CD1	1:E:111:ALA:HB3	2.51	0.45
1:E:218:LEU:HD13	1:E:219:PRO:HD2	1.99	0.45
2:F:293:ASP:O	2:F:297:THR:HG23	2.16	0.45
1:G:203:ILE:HD12	1:G:233:PRO:HD3	1.97	0.45
2:H:281:ILE:C	2:H:283:PHE:H	2.23	0.45
1:I:18(A):TRP:CE2	1:I:27:VAL:HG12	2.51	0.45
2:J:115:LYS:HE3	2:J:334:UNK:C	2.46	0.45
2:J:121:PRO:HG3	2:J:148:SER:H	1.80	0.45
2:J:154:LEU:HA	2:J:157:PHE:CE1	2.51	0.45
2:J:197:ARG:HD2	2:J:197:ARG:HA	1.76	0.45
1:K:94:GLU:HB3	1:K:118:ILE:HG12	1.98	0.45
1:K:107:LYS:HA	1:K:110:GLN:HB2	1.98	0.45
1:K:134:GLU:CD	1:K:134:GLU:N	2.74	0.45
2:L:44:LEU:HD23	2:L:57:VAL:CG2	2.46	0.45
2:L:115:LYS:HE2	2:L:142:THR:HB	1.97	0.45
2:L:128:TYR:HA	2:L:133:ASN:ND2	2.31	0.45
2:L:157:PHE:CD2	2:L:158:VAL:HG13	2.51	0.45
1:O:253:GLU:C	1:O:255:VAL:H	2.24	0.45
1:O:268:LYS:C	1:O:270:VAL:H	2.25	0.45
2:P:13:ARG:HA	2:P:16:LEU:HB2	1.99	0.45
2:P:246:VAL:HG22	2:P:303:ASP:HA	1.98	0.45
1:Q:256:ASN:O	1:Q:260:ARG:NE	2.34	0.45
2:R:84:TRP:HA	2:R:89:ILE:HG12	1.98	0.45
2:R:85:GLY:N	2:R:112:GLY:HA3	2.31	0.45
2:R:168:ILE:N	2:R:245:GLN:O	2.49	0.45
2:R:243:VAL:HA	2:R:306:LYS:HA	1.99	0.45
2:B:206:THR:HG23	2:B:229:ALA:HB3	1.98	0.45
2:D:20:ARG:NH2	2:D:323:ASP:OD1	2.49	0.45
2:D:215:ALA:HB1	2:D:222:LYS:HD3	1.99	0.45
2:D:253:GLU:CD	2:D:256:ASN:HB2	2.41	0.45
1:E:45:LYS:HB3	1:E:46:TYR:CE1	2.51	0.45
1:E:123(A):SER:HB3	1:K:141:ALA:HA	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:45:LYS:O	2:F:52:THR:OG1	2.24	0.45
2:F:137:TYR:OH	2:F:328:VAL:HA	2.16	0.45
2:F:208:THR:HG22	2:F:229:ALA:HB2	1.99	0.45
1:G:28:VAL:C	1:G:71:ILE:HG23	2.41	0.45
1:G:244:VAL:O	1:G:304:MET:HA	2.16	0.45
2:H:7:GLY:N	2:H:31:ASN:O	2.49	0.45
2:H:84:TRP:CD1	2:H:111:ALA:HB3	2.52	0.45
2:H:253:GLU:OE2	2:H:257:ALA:N	2.50	0.45
2:J:12:GLY:O	2:J:16:LEU:N	2.38	0.45
2:J:135:GLU:H	2:J:135:GLU:CD	2.22	0.45
2:J:193:LEU:HA	2:J:196:ALA:HB3	1.99	0.45
2:L:33:THR:HA	2:L:75:SER:HB3	1.98	0.45
2:L:243:VAL:HA	2:L:305:VAL:O	2.15	0.45
1:O:186:ASP:HA	1:O:196:ALA:O	2.17	0.45
1:O:293:ASP:OD2	1:O:308:VAL:HG11	2.16	0.45
2:P:38:LYS:HZ2	2:P:38:LYS:H	1.63	0.45
2:P:79:PRO:HB3	2:P:108:HIS:ND1	2.31	0.45
2:P:137:TYR:CE2	2:P:327:ILE:HG22	2.52	0.45
2:P:331:LYS:O	2:P:333:GLN:HG3	2.17	0.45
1:Q:148:SER:HA	3:Q:401:NAD:H5N	1.99	0.45
2:R:17:ARG:HD3	2:R:50:LEU:HD12	1.99	0.45
2:R:152:ASN:OD1	2:R:320:ARG:HG3	2.16	0.45
1:A:1:LEU:O	1:A:3:VAL:HG23	2.17	0.45
1:A:123(A):SER:CB	1:G:124:ASP:HB3	2.46	0.45
2:B:115:LYS:HE3	2:B:334:UNK:C	2.46	0.45
2:B:154:LEU:HA	2:B:157:PHE:CE1	2.51	0.45
2:B:167:ILE:HG23	2:B:246:VAL:HG12	1.98	0.45
2:B:298:MET:HE1	2:D:226:ASN:HB3	1.99	0.45
1:C:67:ASP:OD1	1:C:67:ASP:N	2.49	0.45
1:C:77:ARG:HA	3:C:401:NAD:N1A	2.32	0.45
1:C:252:ALA:O	1:C:255:VAL:N	2.50	0.45
2:D:65:SER:HA	2:D:70:VAL:N	2.30	0.45
1:E:206:THR:O	1:E:228:ILE:HB	2.17	0.45
1:E:362:GLU:O	3:K:401:NAD:H2D	2.17	0.45
2:F:47:ASP:HB3	2:F:51:GLY:O	2.17	0.45
2:F:154:LEU:O	2:F:158:VAL:HG22	2.17	0.45
2:F:281:ILE:HD13	2:F:284:ARG:HH21	1.81	0.45
1:G:101:ASP:HB2	1:G:103:PRO:HG2	1.97	0.45
1:G:139(A):ASP:OD2	1:G:139(A):ASP:N	2.49	0.45
1:G:173:THR:C	1:G:240:VAL:HG23	2.42	0.45
1:G:324:LEU:O	1:G:327:LEU:HB2	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:251:PHE:CE2	2:H:253:GLU:HB3	2.51	0.45
2:H:257:ALA:HA	2:H:260:ARG:HB2	1.98	0.45
1:I:8:PHE:CG	1:I:13:ARG:HG2	2.51	0.45
1:I:17:ARG:NH2	1:I:53:PHE:HA	2.31	0.45
1:I:134:GLU:CD	1:I:135:LYS:HZ2	2.25	0.45
1:I:176:HIS:O	1:I:232:VAL:HG13	2.16	0.45
1:K:175:THR:O	1:K:238:SER:OG	2.31	0.45
1:K:236:ASN:HD21	1:K:314:GLU:H	1.64	0.45
2:L:100:VAL:HG22	2:L:122(A):LYS:N	2.31	0.45
2:L:237:VAL:HG13	2:L:311:TYR:O	2.15	0.45
2:L:273:VAL:HG23	2:L:292:ILE:O	2.17	0.45
2:L:291:THR:HG1	2:L:310:TRP:CD1	2.33	0.45
1:O:84:TRP:CD1	1:O:111:ALA:HB3	2.52	0.45
2:P:190:HIS:HE1	2:P:192:ASP:HB3	1.82	0.45
2:R:32:ASP:HA	3:R:401:NAD:C2A	2.44	0.45
1:A:105:ALA:HA	1:A:108:HIS:CD2	2.51	0.45
2:B:131:GLY:N	2:B:134:GLU:OE2	2.49	0.45
2:B:154:LEU:HA	2:B:157:PHE:CZ	2.51	0.45
2:B:170:GLY:HA2	2:B:244:VAL:HA	1.99	0.45
1:C:15:PHE:O	1:C:18(A):TRP:HB3	2.17	0.45
1:C:30:VAL:HG12	1:C:31:ASN:H	1.81	0.45
1:C:278:LEU:HD22	1:C:282:ASP:HB3	1.97	0.45
2:D:17:ARG:CZ	2:D:53:PHE:HA	2.46	0.45
2:D:117:LEU:HD11	2:D:146:ASN:HB2	1.97	0.45
1:E:6:ASN:O	1:E:95:GLY:N	2.49	0.45
1:E:20:ARG:NH2	1:E:21:LYS:HB2	2.30	0.45
1:E:160:VAL:HG12	1:E:164:GLU:OE2	2.17	0.45
2:F:64:ILE:HG12	2:F:71:ILE:O	2.16	0.45
2:F:173:THR:HB	2:F:241:ASP:OD2	2.15	0.45
1:G:316:GLY:HA2	1:G:319:GLN:OE1	2.17	0.45
2:H:36:GLY:HA3	2:H:38:LYS:HZ1	1.81	0.45
2:H:198:ALA:O	2:H:200:CYS:N	2.50	0.45
1:I:37:VAL:HG13	1:I:38:LYS:H	1.81	0.45
1:I:92:VAL:O	1:I:117:ILE:HG22	2.17	0.45
1:I:142:ASN:O	1:I:144:ILE:HG12	2.16	0.45
1:I:279:VAL:O	1:I:283:PHE:N	2.49	0.45
1:I:280:SER:O	1:I:284:ARG:N	2.49	0.45
2:J:297:THR:HA	2:J:307:VAL:HA	1.99	0.45
1:K:320:ARG:HA	1:K:323:ASP:OD2	2.15	0.45
1:O:21:LYS:HB2	1:O:21:LYS:HE2	1.85	0.45
1:O:41:THR:O	1:O:57:VAL:HG21	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:104:GLY:HA2	1:O:107:LYS:HD2	1.99	0.45
1:O:128:TYR:O	1:O:146:ASN:HB2	2.17	0.45
1:O:168:VAL:HB	1:O:245:ASN:ND2	2.31	0.45
1:O:175:THR:N	1:O:239:VAL:O	2.44	0.45
1:O:256:ASN:HD22	1:O:260:ARG:HH12	1.65	0.45
2:P:107:LYS:HA	2:P:110:GLN:HB2	1.99	0.45
2:P:306:LYS:HZ2	2:R:228:ILE:N	2.11	0.45
1:Q:243:VAL:HG22	1:Q:306:LYS:HG3	1.97	0.45
1:Q:248:LYS:HD3	1:Q:250:VAL:HG21	1.97	0.45
1:Q:251:THR:HG1	1:Q:252:ALA:H	1.64	0.45
2:R:251:PHE:CE2	2:R:253:GLU:HB3	2.51	0.45
2:R:257:ALA:HA	2:R:260:ARG:HB2	1.98	0.45
2:R:310:TRP:CD1	2:R:310:TRP:H	2.35	0.45
2:B:94:GLU:OE2	2:B:98:VAL:N	2.50	0.45
2:B:186:ASP:CG	1:C:48:SER:HG	2.24	0.45
2:B:193:LEU:HA	2:B:196:ALA:HB3	1.99	0.45
1:C:107:LYS:HB3	1:C:107:LYS:HE2	1.58	0.45
1:C:173:THR:O	1:C:241:ASP:N	2.42	0.45
1:C:244:VAL:O	1:C:304:MET:HA	2.17	0.45
1:C:323:ASP:HA	1:C:326:ASP:OD2	2.16	0.45
2:D:117:LEU:HG	2:D:145:SER:HA	1.98	0.45
2:D:220:ASN:HD22	2:D:221:LEU:HD12	1.81	0.45
1:E:45:LYS:NZ	1:E:57:VAL:H	2.14	0.45
1:E:132:VAL:HB	1:E:217:VAL:HG21	1.98	0.45
2:F:7:GLY:O	2:F:9:GLY:N	2.49	0.45
2:F:31:ASN:OD1	2:F:74:VAL:HG23	2.16	0.45
2:F:300:MET:HB3	2:H:169:LYS:HD2	1.99	0.45
1:G:11:ILE:HG22	3:G:401:NAD:PN	2.57	0.45
1:G:168:VAL:HB	1:G:245:ASN:O	2.17	0.45
2:H:10:ARG:HD2	2:H:314:GLU:OE2	2.16	0.45
1:I:31:ASN:HA	1:I:74:VAL:C	2.41	0.45
1:I:39:SER:O	1:I:43:LEU:N	2.32	0.45
1:I:106:GLY:HA2	1:I:109:ILE:HB	1.98	0.45
1:I:166:GLY:HA3	1:I:247:GLU:HB2	1.98	0.45
1:I:243:VAL:HG12	1:I:306:LYS:HB2	1.98	0.45
1:I:283:PHE:HD2	1:I:310:TRP:CZ3	2.35	0.45
2:J:29:VAL:N	2:J:71:ILE:HG23	2.31	0.45
2:J:82:LEU:O	2:J:84:TRP:N	2.46	0.45
1:K:179:THR:N	1:K:182:GLN:HE22	2.14	0.45
1:K:293:ASP:OD1	1:K:296:LEU:N	2.33	0.45
2:L:174:THR:HG23	2:L:230:LEU:H	1.80	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:204:VAL:HB	2:L:231:ARG:H	1.82	0.45
1:O:84:TRP:HA	1:O:89:ILE:HB	1.98	0.45
1:O:84:TRP:HD1	1:O:108:HIS:O	2.00	0.45
2:P:58:LYS:HG3	2:P:60:ALA:H	1.82	0.45
2:P:91:LEU:HD21	2:P:93:ILE:HD11	1.99	0.45
1:A:49:ILE:HA	1:A:284:ARG:NH1	2.31	0.45
1:A:184:LEU:HG	1:A:185:LEU:HG	1.97	0.45
1:A:216:LEU:HD11	1:G:124:ASP:HB2	1.97	0.45
1:A:313:ASN:O	1:A:317:TYR:HB2	2.17	0.45
1:A:359:LYS:O	1:G:181:ASP:HB2	2.17	0.45
2:B:18:CYS:O	2:B:20:ARG:HG2	2.17	0.45
2:B:18:CYS:CB	2:B:322:VAL:HG21	2.47	0.45
2:D:1:LEU:HD12	2:D:1:LEU:HA	1.82	0.45
1:E:16:LEU:CG	1:E:44:LEU:CD1	2.94	0.45
1:E:41:THR:HG23	1:E:57:VAL:CG1	2.46	0.45
1:E:77:ARG:HA	3:E:401:NAD:N1A	2.31	0.45
1:E:134:GLU:OE1	1:E:134:GLU:N	2.36	0.45
1:E:155:ALA:O	1:E:158:VAL:HG22	2.16	0.45
1:E:329:ALA:HA	1:E:332:TRP:HB2	1.99	0.45
1:E:329:ALA:HA	1:E:332:TRP:CD1	2.52	0.45
2:F:171:THR:O	2:F:243:VAL:N	2.35	0.45
1:G:18:CYS:O	1:G:20:ARG:NH1	2.50	0.45
1:G:192:ASP:CG	1:G:194:ARG:HB2	2.42	0.45
1:G:194:ARG:CZ	1:G:204:VAL:HG11	2.47	0.45
1:G:212:LYS:H	1:G:212:LYS:HG3	1.63	0.45
2:H:32:ASP:OD1	2:H:33:THR:N	2.49	0.45
2:H:64:ILE:H	2:H:71:ILE:H	1.65	0.45
1:I:225:LEU:C	1:I:226:ASN:HD22	2.25	0.45
2:J:6:ASN:HB2	2:J:84:TRP:HZ2	1.80	0.45
2:J:32:ASP:OD1	2:J:33:THR:N	2.50	0.45
2:J:126:PRO:HG2	2:J:144:ILE:HG22	1.99	0.45
1:K:58:LYS:O	1:K:65:SER:N	2.49	0.45
1:K:79:PRO:HA	1:K:82:LEU:CD1	2.47	0.45
1:K:82:LEU:HB3	1:K:84:TRP:CD2	2.51	0.45
1:K:83:PRO:C	1:K:84:TRP:HE3	2.24	0.45
1:K:125:ILE:HG23	1:K:144:ILE:HA	1.99	0.45
1:K:174:THR:HG22	1:K:228:ILE:O	2.17	0.45
1:K:291:THR:HG23	1:K:310:TRP:HB2	1.99	0.45
2:L:17:ARG:CZ	2:L:53:PHE:HA	2.47	0.45
2:L:156:PRO:HD2	2:L:157:PHE:CE1	2.52	0.45
1:O:107:LYS:HA	1:O:110:GLN:CD	2.42	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:167:ILE:HB	1:O:224:LYS:HZ3	1.80	0.45
2:P:28:VAL:HG22	2:P:69:LYS:HZ3	1.80	0.45
2:P:129:VAL:N	2:P:133:ASN:OD1	2.50	0.45
1:Q:58:LYS:HA	1:Q:58:LYS:NZ	2.31	0.45
1:Q:146:ASN:HD21	1:Q:152:ASN:HB3	1.81	0.45
1:A:13:ARG:NH1	1:A:43:LEU:O	2.49	0.45
1:A:69:LYS:HD3	1:A:69:LYS:HA	1.70	0.45
1:A:154:LEU:HA	1:A:157:PHE:CZ	2.52	0.45
2:B:134:GLU:O	2:B:137:TYR:HB3	2.17	0.45
2:B:173:THR:OG1	2:B:228:ILE:HG13	2.17	0.45
2:D:33:THR:HG23	2:D:77:ARG:HD3	1.99	0.45
2:D:45:LYS:HA	2:D:45:LYS:HD2	1.69	0.45
2:D:94:GLU:HG3	2:D:99:PHE:HD2	1.81	0.45
2:D:287:ASP:O	2:D:320:ARG:NH1	2.50	0.45
1:E:45:LYS:HD2	1:E:45:LYS:HA	1.66	0.45
1:E:94:GLU:HG3	1:E:99:PHE:HB2	1.99	0.45
1:E:118:ILE:HD13	1:E:120:ALA:N	2.32	0.45
1:E:281:VAL:HG23	1:E:284:ARG:HG2	1.98	0.45
2:F:72:LYS:NZ	2:F:72:LYS:HB2	2.32	0.45
2:F:184:LEU:HB2	1:G:184:LEU:HB2	1.98	0.45
2:F:226:ASN:HB3	2:H:300:MET:HE1	1.98	0.45
1:G:11:ILE:HG22	3:G:401:NAD:O2N	2.16	0.45
1:G:42:HIS:O	1:G:46:TYR:N	2.39	0.45
1:I:60:ILE:CB	1:I:64:PHE:HA	2.46	0.45
1:I:128:TYR:HA	1:I:133:ASN:CG	2.42	0.45
1:I:251:THR:HG23	1:I:253:GLU:HB2	1.98	0.45
1:I:261:LYS:O	1:I:265:GLY:N	2.49	0.45
1:I:265:GLY:O	1:I:268:LYS:HE2	2.17	0.45
1:I:322:VAL:HG12	1:I:326:ASP:OD1	2.16	0.45
1:I:327:LEU:HA	1:I:330:ASN:OD1	2.16	0.45
2:J:94:GLU:HG3	2:J:99:PHE:HD2	1.82	0.45
2:J:131:GLY:N	2:J:134:GLU:OE2	2.49	0.45
2:J:198:ALA:C	2:J:200:CYS:H	2.25	0.45
1:K:4:ALA:O	1:K:92:VAL:HA	2.17	0.45
1:K:17:ARG:NH2	1:K:51:GLY:O	2.46	0.45
1:K:156:PRO:O	1:K:160:VAL:N	2.26	0.45
1:K:190:HIS:CE1	1:K:192:ASP:HB3	2.52	0.45
1:K:204:VAL:CG1	1:K:231:ARG:HB2	2.46	0.45
2:L:17:ARG:HG2	2:L:53:PHE:HE2	1.82	0.45
2:L:54:ASP:OD1	2:L:54:ASP:N	2.31	0.45
2:L:204:VAL:CG2	2:L:231:ARG:HB2	2.46	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:122(A):LYS:HD3	1:O:122(A):LYS:HA	1.74	0.45
1:O:154:LEU:HA	1:O:157:PHE:CE1	2.52	0.45
2:P:39:GLN:HA	2:P:42:HIS:ND1	2.30	0.45
2:R:276:GLU:CD	2:R:276:GLU:H	2.16	0.45
2:R:312:ASP:OD2	2:R:315:TRP:HB3	2.17	0.45
1:A:94:GLU:CD	1:A:99:PHE:H	2.20	0.45
1:A:169:LYS:HD2	1:C:300:MET:SD	2.56	0.45
1:A:193:LEU:HD11	1:C:277:PRO:HG3	1.99	0.45
2:B:214:VAL:O	2:B:218:LEU:N	2.49	0.45
2:B:317:TYR:O	2:B:321:VAL:HG23	2.16	0.45
1:C:107:LYS:HA	1:C:110:GLN:NE2	2.32	0.45
1:C:248:LYS:O	1:C:248(A):VAL:C	2.60	0.45
1:C:256:ASN:HB2	1:C:260:ARG:NH2	2.32	0.45
1:C:260:ARG:HD3	1:C:273:VAL:HB	1.98	0.45
2:D:156:PRO:HD2	2:D:157:PHE:CE1	2.51	0.45
2:D:251:PHE:HE2	2:D:253:GLU:HB3	1.81	0.45
1:E:174:THR:HG1	1:E:239:VAL:C	2.19	0.45
2:F:76:ASP:HB3	2:F:82:LEU:HD23	1.97	0.45
2:F:129:VAL:N	2:F:133:ASN:OD1	2.49	0.45
2:F:137:TYR:CE2	2:F:327:ILE:HG22	2.51	0.45
2:F:174:THR:HA	2:F:240:VAL:CB	2.47	0.45
2:F:184:LEU:HD12	2:F:200:CYS:SG	2.57	0.45
2:F:217:VAL:HG23	2:F:218:LEU:HG	1.99	0.45
1:G:177:SER:N	1:G:237:VAL:HG12	2.32	0.45
1:I:269:GLY:O	1:I:288:PHE:HB3	2.17	0.45
1:I:290:SER:HG	1:I:291:THR:N	2.14	0.45
2:J:23:SER:HA	2:J:25:LEU:HD22	1.99	0.45
2:J:125:ILE:HD11	2:J:143:ILE:HG22	1.98	0.45
2:J:190:HIS:HB3	2:J:196:ALA:CA	2.47	0.45
1:K:130:VAL:HA	1:K:134:GLU:HB3	1.98	0.45
1:K:199:ALA:C	1:K:201:LEU:H	2.24	0.45
1:K:239:VAL:HG23	1:K:309:ALA:C	2.42	0.45
2:L:109:LEU:HD21	2:L:116:VAL:HG23	1.99	0.45
2:L:194:ARG:O	2:L:197:ARG:N	2.48	0.45
1:O:17:ARG:NH2	1:O:51:GLY:O	2.34	0.45
2:P:89:ILE:O	2:P:113:ALA:HA	2.16	0.45
2:P:123:GLY:O	2:P:125:ILE:N	2.47	0.45
2:P:243:VAL:HA	2:P:305:VAL:O	2.17	0.45
2:R:118:ILE:HG22	2:R:145:SER:OG	2.17	0.45
1:A:3:VAL:HG22	1:A:91:ILE:HB	1.99	0.45
1:A:172:MET:O	1:A:228:ILE:N	2.46	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:181:ASP:HB3	1:G:362:GLU:CB	2.46	0.45
2:B:16:LEU:HD13	2:B:44:LEU:HD13	1.98	0.45
2:B:20:ARG:HE	2:B:319:GLN:HE22	1.65	0.45
2:B:94:GLU:HG2	2:B:96:THR:H	1.82	0.45
1:C:50:LEU:HD13	1:C:285:CYS:SG	2.57	0.45
1:C:91:ILE:HA	1:C:115:LYS:O	2.16	0.45
1:C:160:VAL:HA	1:C:163:GLU:HB2	1.99	0.45
2:D:120:ALA:O	2:D:145:SER:OG	2.25	0.45
2:D:192:ASP:CG	2:D:195:ARG:H	2.25	0.45
1:E:158:VAL:HA	1:E:161:LEU:HB2	1.99	0.45
1:E:165:LEU:O	1:E:248:LYS:HB2	2.17	0.45
1:E:195:ARG:HD3	1:E:195:ARG:HA	1.79	0.45
2:F:215:ALA:HA	2:F:222:LYS:HG2	1.99	0.45
2:H:114:LYS:O	2:H:142:THR:OG1	2.23	0.45
2:H:173:THR:HA	2:H:228:ILE:O	2.17	0.45
2:H:237:VAL:HG13	2:H:311:TYR:O	2.17	0.45
2:H:293:ASP:O	2:H:297:THR:HG23	2.16	0.45
2:J:0:LYS:NZ	2:J:1:LEU:HD13	2.30	0.45
1:K:58:LYS:HE2	1:K:60:ILE:HA	1.99	0.45
1:K:269:GLY:O	1:K:288:PHE:HA	2.16	0.45
2:L:149:CYS:SG	2:L:176:HIS:HE1	2.40	0.45
2:L:179:THR:H	2:L:182:GLN:NE2	2.15	0.45
1:O:319:GLN:HA	1:O:322:VAL:HB	1.98	0.45
2:P:31:ASN:OD1	2:P:74:VAL:HG23	2.17	0.45
1:Q:157:PHE:HB2	1:Q:161:LEU:HD21	1.98	0.45
1:Q:219:PRO:HB3	1:Q:222:LYS:HZ3	1.81	0.45
2:R:6:ASN:OD1	2:R:7:GLY:N	2.50	0.45
2:R:109:LEU:HD11	2:R:143:ILE:HG23	1.98	0.45
1:A:2:LYS:HB2	1:A:90:ASP:N	2.27	0.45
1:A:58:LYS:NZ	1:A:59:ILE:H	2.15	0.45
1:A:122:ALA:HB1	1:A:125:ILE:HD12	1.99	0.45
1:A:149:CYS:HB3	1:A:317:TYR:HB2	1.99	0.45
2:B:49:ILE:HG23	2:B:284:ARG:NH1	2.31	0.45
2:B:197:ARG:HH11	1:C:42:HIS:CE1	2.35	0.45
2:B:205:PRO:HA	2:B:230:LEU:HD23	1.99	0.45
2:B:257:ALA:HA	2:B:260:ARG:HB2	1.99	0.45
1:C:18(A):TRP:CH2	1:C:26:ASP:HB2	2.52	0.45
1:C:211:ALA:HB1	1:C:226:ASN:HA	1.98	0.45
2:D:239:VAL:HG12	2:D:309:ALA:O	2.16	0.45
1:G:160:VAL:HG22	1:G:164:GLU:HG3	1.99	0.45
1:G:242:LEU:HG	1:G:244:VAL:HG22	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:272:ASP:N	1:G:290:SER:O	2.47	0.45
2:H:13:ARG:NE	2:H:43:LEU:HD22	2.32	0.45
2:H:118:ILE:HG22	2:H:145:SER:OG	2.16	0.45
2:H:159:LYS:O	2:H:163:GLN:N	2.34	0.45
1:I:193:LEU:HD12	1:K:277:PRO:HG2	1.99	0.45
1:K:44:LEU:HG	1:K:45:LYS:N	2.29	0.45
1:K:119:THR:OG1	3:K:401:NAD:O4D	2.35	0.45
1:K:169:LYS:HZ3	1:K:245:ASN:HD21	1.63	0.45
1:K:171:THR:OG1	1:K:172:MET:N	2.50	0.45
1:K:174:THR:CG2	1:K:230:LEU:H	2.30	0.45
1:K:210:ALA:O	1:K:214:VAL:HG13	2.17	0.45
2:L:10:ARG:O	2:L:13:ARG:HD2	2.17	0.45
2:L:38:LYS:O	2:L:41:SER:OG	2.14	0.45
2:L:239:VAL:HG12	2:L:309:ALA:O	2.17	0.45
2:L:251:PHE:CE1	2:L:254:GLU:HB2	2.51	0.45
1:O:118:ILE:HG12	1:O:122:ALA:HB2	1.98	0.44
1:O:328:VAL:O	1:O:333:PRO:HD2	2.17	0.44
2:P:92:VAL:HG11	2:P:108:HIS:CD2	2.52	0.44
2:P:204:VAL:O	2:P:230:LEU:HA	2.17	0.44
2:R:11:ILE:HG12	3:R:401:NAD:PN	2.56	0.44
2:R:204:VAL:O	2:R:206:THR:HG22	2.16	0.44
2:R:249:LYS:HD2	2:R:302:ASP:HB2	1.99	0.44
2:R:297:THR:HG22	2:R:307:VAL:HA	1.99	0.44
2:R:331:LYS:HE3	2:R:333:GLN:HE22	1.82	0.44
1:A:11:ILE:HB	3:A:401:NAD:N7N	2.32	0.44
1:A:160:VAL:O	1:A:163:GLU:HG2	2.16	0.44
1:A:181:ASP:HA	1:G:359:LYS:CB	2.47	0.44
2:B:126:PRO:HG2	2:B:144:ILE:HG22	1.98	0.44
2:B:175:THR:N	2:B:239:VAL:O	2.36	0.44
1:C:281:VAL:HA	1:C:284:ARG:HG3	1.99	0.44
2:D:15:PHE:CE2	2:D:321:VAL:HG12	2.52	0.44
2:D:78:ASN:OD1	2:D:80:VAL:HG23	2.17	0.44
2:D:84:TRP:CE3	2:D:84:TRP:HA	2.53	0.44
1:E:126:PRO:O	1:E:145:SER:OG	2.34	0.44
1:E:261:LYS:HA	1:E:261:LYS:HD3	1.55	0.44
2:F:114:LYS:O	2:F:142:THR:OG1	2.24	0.44
2:F:157:PHE:HB2	2:F:259:PHE:CE1	2.51	0.44
2:F:171:THR:C	2:F:242:LEU:HD12	2.42	0.44
2:F:204:VAL:O	2:F:230:LEU:HA	2.17	0.44
2:F:208:THR:HG23	2:F:210:ALA:HB3	2.00	0.44
2:F:293:ASP:OD1	2:F:295:SER:OG	2.30	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:3:VAL:HA	1:G:91:ILE:HG12	1.99	0.44
1:G:106:GLY:O	1:G:110:GLN:N	2.33	0.44
1:G:121:PRO:O	1:G:122(A):LYS:N	2.41	0.44
1:G:172:MET:O	1:G:227:GLY:HA3	2.17	0.44
1:G:236:ASN:OD1	1:G:238:SER:OG	2.30	0.44
2:H:32:ASP:O	2:H:75:SER:OG	2.15	0.44
2:H:99:PHE:CE1	2:H:104:GLY:HA3	2.52	0.44
2:H:183:ARG:HD2	2:H:187:ALA:HB3	1.99	0.44
2:J:55:ALA:HB1	2:J:67:ASP:OD1	2.17	0.44
2:J:260:ARG:HH21	2:J:273:VAL:C	2.26	0.44
1:K:7:GLY:H	1:K:31:ASN:H	1.64	0.44
1:K:318:SER:O	1:K:320:ARG:N	2.50	0.44
1:K:323:ASP:OD1	1:K:323:ASP:N	2.50	0.44
2:L:124:ASP:OD1	2:L:124:ASP:N	2.49	0.44
2:L:184:LEU:HG	2:L:185:LEU:HD22	1.98	0.44
2:L:192:ASP:CG	2:L:195:ARG:H	2.25	0.44
1:O:82:LEU:HD13	1:O:84:TRP:CZ2	2.52	0.44
1:O:124:ASP:H	1:C:142:ASN:HD21	1.64	0.44
1:O:142:ASN:OD1	1:O:142:ASN:N	2.50	0.44
1:O:174:THR:OG1	1:O:175:THR:N	2.50	0.44
1:O:184:LEU:HD23	1:O:185:LEU:H	1.82	0.44
1:O:216:LEU:HD13	1:C:124:ASP:CG	2.43	0.44
1:O:230:LEU:HD13	1:O:230:LEU:HA	1.78	0.44
2:P:29:VAL:HA	2:P:72:LYS:O	2.17	0.44
2:P:323:ASP:O	2:P:327:ILE:HG13	2.18	0.44
1:Q:89:ILE:O	1:Q:113:ALA:HA	2.17	0.44
1:Q:292:ILE:HG13	1:Q:309:ALA:HA	1.98	0.44
2:R:11:ILE:HG12	3:R:401:NAD:O2N	2.17	0.44
2:R:118:ILE:O	2:R:146:ASN:N	2.39	0.44
1:A:264:ALA:HA	1:A:268:LYS:NZ	2.32	0.44
2:B:218:LEU:HA	2:B:218:LEU:HD23	1.72	0.44
1:C:167:ILE:C	1:C:224:LYS:HZ1	2.25	0.44
2:D:100:VAL:O	2:D:122(A):LYS:N	2.35	0.44
2:D:265:ASN:OD1	2:D:266:GLU:N	2.50	0.44
2:D:277:PRO:C	2:D:278:LEU:HD12	2.42	0.44
1:E:21:LYS:H	1:E:21:LYS:HZ3	1.65	0.44
1:E:37:VAL:CG2	1:E:61:ASN:C	2.91	0.44
1:E:49:ILE:HG22	1:E:50:LEU:HD22	1.99	0.44
1:E:92:VAL:HG12	1:E:93:ILE:N	2.32	0.44
1:E:174:THR:HG1	1:E:175:THR:H	1.66	0.44
2:F:185:LEU:HD11	1:G:178:TYR:CD1	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:202:ASN:HD22	2:H:280:SER:N	2.14	0.44
1:G:115:LYS:HE2	1:G:115:LYS:HB2	1.75	0.44
1:G:300:MET:HB3	1:G:304:MET:HB3	1.99	0.44
2:H:310:TRP:CD1	2:H:310:TRP:H	2.34	0.44
2:H:313:ASN:OD1	2:H:313:ASN:N	2.49	0.44
1:I:160:VAL:HA	1:I:163:GLU:CD	2.42	0.44
1:I:169:LYS:HA	1:I:169:LYS:HD3	1.64	0.44
2:J:169:LYS:HD3	2:L:301:GLY:HA3	1.98	0.44
1:K:291:THR:OG1	1:K:310:TRP:HB2	2.17	0.44
3:L:401:NAD:H2N	3:L:401:NAD:H52N	1.99	0.44
1:O:6:ASN:ND2	1:O:96:THR:HG23	2.32	0.44
1:O:346:GLU:H	1:C:191:ARG:HD2	1.83	0.44
2:P:47:ASP:HB3	2:P:51:GLY:O	2.18	0.44
2:P:78:ASN:OD1	2:P:80:VAL:HG13	2.17	0.44
2:P:148:SER:HA	3:P:401:NAD:C5N	2.38	0.44
2:P:300:MET:HB3	2:R:169:LYS:HD2	2.00	0.44
1:Q:332:TRP:CG	1:Q:333:PRO:HD2	2.52	0.44
2:R:165:PHE:CD2	2:R:248:LYS:HD3	2.52	0.44
2:R:197:ARG:NH2	2:R:199:ALA:H	2.12	0.44
1:A:171:THR:O	1:A:243:VAL:N	2.38	0.44
1:A:192:ASP:OD1	1:A:192:ASP:N	2.50	0.44
2:B:76:ASP:OD1	2:B:78:ASN:N	2.50	0.44
1:C:129:VAL:HA	1:C:324:LEU:HD21	1.98	0.44
2:D:86:ASP:HB2	2:D:87:MET:SD	2.57	0.44
2:D:208:THR:H	2:D:229:ALA:HB2	1.82	0.44
1:E:176:HIS:O	1:E:231:ARG:HA	2.18	0.44
2:F:4:ALA:HB2	2:F:29:VAL:HG13	1.98	0.44
2:F:39:GLN:O	2:F:43:LEU:HG	2.16	0.44
2:F:183:ARG:HH22	2:F:191:ARG:NH2	2.15	0.44
2:F:278:LEU:O	2:H:194:ARG:NH2	2.40	0.44
1:G:10:ARG:NH2	1:G:13:ARG:HE	2.16	0.44
1:G:82:LEU:CB	1:G:84:TRP:NE1	2.77	0.44
1:G:224:LYS:HB3	1:G:224:LYS:HE3	1.53	0.44
1:I:191:ARG:HA	2:L:39:GLN:NE2	2.32	0.44
1:I:193:LEU:O	1:I:197:ARG:HG2	2.17	0.44
1:I:194:ARG:NH2	1:K:277:PRO:HA	2.31	0.44
1:I:207:SER:HA	1:I:228:ILE:HB	1.98	0.44
1:I:226:ASN:CG	1:K:300:MET:HA	2.42	0.44
2:J:14:ASN:HD21	2:J:315:TRP:CA	2.28	0.44
2:J:257:ALA:HA	2:J:260:ARG:HB2	1.98	0.44
1:K:13:ARG:HD3	1:K:43:LEU:O	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:281:VAL:O	1:K:284:ARG:N	2.48	0.44
1:K:293:ASP:OD1	1:K:295:SER:OG	2.22	0.44
1:K:317:TYR:HD1	1:K:320:ARG:NH2	2.14	0.44
2:L:158:VAL:O	2:L:162:ASP:N	2.28	0.44
2:L:161:LEU:HD12	2:L:165:PHE:CD1	2.52	0.44
2:L:208:THR:H	2:L:229:ALA:HB2	1.82	0.44
1:O:239:VAL:HB	1:O:310:TRP:CG	2.53	0.44
2:P:45:LYS:HA	2:P:45:LYS:HD2	1.71	0.44
2:P:133:ASN:O	2:P:137:TYR:N	2.51	0.44
2:P:202:ASN:HD22	2:R:280:SER:N	2.15	0.44
2:P:243:VAL:HG22	2:P:306:LYS:HA	2.00	0.44
2:P:274:CYS:SG	2:P:276:GLU:HG2	2.57	0.44
1:Q:8:PHE:HD1	1:Q:8:PHE:HA	1.61	0.44
1:Q:183:ARG:CZ	1:Q:187:ALA:HB3	2.47	0.44
2:R:117:LEU:HG	2:R:145:SER:C	2.42	0.44
1:A:128:TYR:HA	1:A:133:ASN:CG	2.42	0.44
2:D:247:SER:OG	2:D:248:LYS:N	2.51	0.44
1:E:123(A):SER:H	1:K:142:ASN:CG	2.21	0.44
1:E:236:ASN:H	1:E:284:ARG:NH2	2.09	0.44
1:E:267:LEU:O	1:E:271:LEU:N	2.39	0.44
1:E:282:ASP:OD1	2:F:52:THR:N	2.51	0.44
1:E:318:SER:O	1:E:321:VAL:HG22	2.18	0.44
1:G:105:ALA:HA	1:G:108:HIS:HD2	1.82	0.44
1:G:256:ASN:HB2	1:G:260:ARG:HH21	1.83	0.44
2:H:13:ARG:HE	2:H:43:LEU:HD22	1.81	0.44
2:H:32:ASP:HA	3:H:401:NAD:H2A	1.98	0.44
2:H:204:VAL:O	2:H:206:THR:HG22	2.18	0.44
1:I:238:SER:O	1:I:311:TYR:N	2.50	0.44
2:J:129:VAL:HG21	2:J:152:ASN:HA	2.00	0.44
2:J:268:LYS:HE2	2:J:268:LYS:HB2	1.81	0.44
1:K:84:TRP:O	1:K:89:ILE:N	2.48	0.44
1:K:157:PHE:HD1	1:K:271:LEU:HD12	1.82	0.44
1:K:178:TYR:CE1	1:K:235:PRO:HA	2.53	0.44
2:L:45:LYS:HB2	2:L:57:VAL:HG11	1.99	0.44
2:L:253:GLU:CD	2:L:256:ASN:HB2	2.42	0.44
1:O:153:CYS:O	1:O:290:SER:OG	2.35	0.44
1:O:210:ALA:O	1:O:214:VAL:HG13	2.17	0.44
1:Q:135:LYS:NZ	1:Q:136:ASP:H	2.15	0.44
1:Q:156:PRO:HG2	1:Q:290:SER:OG	2.18	0.44
1:Q:165:LEU:HB3	1:Q:246:ILE:HG12	1.99	0.44
1:Q:195:ARG:HH11	1:Q:195:ARG:H	1.64	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:205:PRO:HA	1:Q:229:ALA:O	2.17	0.44
1:Q:211:ALA:HB3	1:Q:212:LYS:NZ	2.32	0.44
2:R:85:GLY:C	2:R:88:GLY:H	2.24	0.44
1:A:107:LYS:HA	1:A:110:GLN:CD	2.42	0.44
1:A:125:ILE:H	1:A:125:ILE:HG13	1.42	0.44
1:A:179:THR:H	1:A:182:GLN:CD	2.22	0.44
1:A:217:VAL:HG23	1:A:218:LEU:HD23	1.99	0.44
1:A:327:LEU:HA	1:A:330:ASN:ND2	2.32	0.44
2:B:6:ASN:HB2	2:B:84:TRP:HZ2	1.83	0.44
1:C:119:THR:HG23	3:C:401:NAD:H1D	1.99	0.44
1:C:361:TYR:O	1:C:362:GLU:CB	2.65	0.44
2:D:91:LEU:HB2	2:D:115:LYS:HB2	1.99	0.44
2:D:255:VAL:HG23	2:D:256:ASN:ND2	2.31	0.44
1:E:41:THR:HG22	1:E:45:LYS:HG2	1.99	0.44
1:E:125:ILE:H	1:E:125:ILE:HD12	1.82	0.44
1:E:132:VAL:HG11	1:E:155:ALA:HB1	1.98	0.44
1:E:236:ASN:HB3	1:E:284:ARG:CZ	2.48	0.44
2:F:246:VAL:HG22	2:F:303:ASP:HA	1.98	0.44
2:F:272:SER:O	2:F:291:THR:HA	2.18	0.44
1:G:3:VAL:C	1:G:27:VAL:HA	2.42	0.44
1:G:39:SER:O	1:G:43:LEU:HG	2.18	0.44
1:G:193:LEU:HD12	1:G:193:LEU:H	1.82	0.44
1:G:253:GLU:O	1:G:257:ASN:ND2	2.50	0.44
2:H:312:ASP:OD2	2:H:315:TRP:HB3	2.17	0.44
1:I:63:THR:OG1	1:I:72:LYS:HD3	2.17	0.44
1:I:139:HIS:HD2	1:I:333:PRO:HD3	1.80	0.44
1:I:157:PHE:O	1:I:161:LEU:HG	2.18	0.44
2:J:102:ARG:O	2:J:106:GLY:N	2.36	0.44
2:J:134:GLU:O	2:J:137:TYR:HB3	2.17	0.44
2:J:237:VAL:HG13	2:J:311:TYR:O	2.17	0.44
1:K:6:ASN:HB3	1:K:94:GLU:HA	1.98	0.44
2:L:86:ASP:HB2	2:L:87:MET:SD	2.57	0.44
2:L:94:GLU:HG3	2:L:99:PHE:HD2	1.81	0.44
2:L:276:GLU:OE1	2:L:276:GLU:N	2.45	0.44
1:O:114:LYS:O	1:O:115:LYS:NZ	2.41	0.44
1:O:181:ASP:OD2	1:C:362:GLU:CB	2.65	0.44
1:O:239:VAL:HB	1:O:310:TRP:CD2	2.53	0.44
2:P:39:GLN:NE2	1:Q:190:HIS:O	2.48	0.44
2:P:157:PHE:HB2	2:P:259:PHE:CE1	2.52	0.44
2:P:184:LEU:HD12	2:P:200:CYS:SG	2.57	0.44
2:P:278:LEU:HD23	2:P:282:ASP:HB3	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:190:HIS:CE1	1:Q:195:ARG:HB2	2.53	0.44
2:R:4:ALA:HA	2:R:29:VAL:HG13	1.99	0.44
1:A:214:VAL:HG23	1:A:215:SER:H	1.83	0.44
1:A:280:SER:HA	1:A:310:TRP:CZ3	2.52	0.44
2:B:55:ALA:HB1	2:B:67:ASP:OD1	2.18	0.44
2:B:278:LEU:H	2:D:194:ARG:NH2	2.16	0.44
2:B:291:THR:O	2:B:310:TRP:N	2.31	0.44
1:C:116:VAL:HG12	1:C:117:ILE:N	2.33	0.44
1:C:126:PRO:HG2	1:C:128:TYR:OH	2.17	0.44
1:C:174:THR:HA	1:C:240:VAL:HA	1.99	0.44
1:C:264:ALA:HA	1:C:268:LYS:HZ2	1.83	0.44
1:C:347:ASP:O	1:C:351:ASP:N	2.48	0.44
2:D:17:ARG:HG2	2:D:53:PHE:CE2	2.52	0.44
2:D:293:ASP:O	2:D:297:THR:HG23	2.17	0.44
1:E:160:VAL:HA	1:E:163:GLU:OE1	2.17	0.44
1:E:268:LYS:C	1:E:270:VAL:H	2.26	0.44
1:E:280:SER:HG	1:G:203:ILE:H	1.66	0.44
2:F:228:ILE:N	2:H:306:LYS:HZ2	2.15	0.44
2:F:267:LEU:HA	2:F:270:ILE:HB	1.99	0.44
1:G:105:ALA:HA	1:G:108:HIS:HB2	2.00	0.44
1:G:215:SER:OG	1:G:218:LEU:O	2.33	0.44
2:H:62:SER:C	2:H:72:LYS:HA	2.43	0.44
2:H:193:LEU:H	2:H:193:LEU:HD12	1.83	0.44
2:H:331:LYS:HE3	2:H:333:GLN:HE22	1.82	0.44
1:I:218:LEU:HA	1:I:218:LEU:HD12	1.70	0.44
2:J:85:GLY:HA3	2:J:112:GLY:HA3	1.98	0.44
2:J:194:ARG:NH1	2:L:279:VAL:HG13	2.33	0.44
2:J:227:GLY:HA2	2:L:298:MET:SD	2.58	0.44
2:L:20:ARG:NH2	2:L:323:ASP:OD1	2.51	0.44
2:L:237:VAL:HA	2:L:313:ASN:OD1	2.17	0.44
2:L:267:LEU:HA	2:L:270:ILE:HB	1.99	0.44
1:O:82:LEU:HD12	1:O:108:HIS:HE1	1.81	0.44
1:O:134:GLU:N	1:O:134:GLU:CD	2.75	0.44
1:Q:3:VAL:HG11	1:Q:27:VAL:HG12	1.99	0.44
1:Q:56:ASP:OD1	1:Q:58:LYS:NZ	2.47	0.44
1:Q:104:GLY:HA2	1:Q:107:LYS:HG3	2.00	0.44
1:Q:139:HIS:HE1	1:Q:333:PRO:HA	1.81	0.44
1:Q:346:GLU:O	1:Q:350:LYS:N	2.50	0.44
2:R:13:ARG:NE	2:R:43:LEU:HD22	2.33	0.44
1:A:133:ASN:HA	1:A:136:ASP:OD2	2.16	0.44
1:A:154:LEU:HD11	1:A:210:ALA:HB1	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1:LEU:HD23	2:B:25:LEU:HD12	1.98	0.44
2:B:116:VAL:O	2:B:144:ILE:HG12	2.18	0.44
2:B:260:ARG:HH21	2:B:273:VAL:C	2.26	0.44
2:B:305:VAL:HG12	2:B:307:VAL:HG12	1.99	0.44
1:C:94:GLU:CB	1:C:118:ILE:HG13	2.48	0.44
1:C:215:SER:HA	1:C:218:LEU:C	2.42	0.44
1:C:245:ASN:OD1	1:C:245:ASN:N	2.50	0.44
2:D:1:LEU:HG	2:D:3:VAL:HG23	1.98	0.44
2:D:38:LYS:HZ2	2:D:38:LYS:N	2.14	0.44
2:D:165:PHE:HA	2:D:248:LYS:NZ	2.32	0.44
1:E:5:ILE:HG12	1:E:93:ILE:HG13	2.00	0.44
1:E:174:THR:H	1:E:229:ALA:HA	1.83	0.44
2:F:2:LYS:NZ	2:F:26:ASP:OD2	2.44	0.44
2:F:11:ILE:HG12	3:F:401:NAD:O2N	2.18	0.44
2:F:14:ASN:ND2	2:F:315:TRP:HA	2.30	0.44
2:F:99:PHE:HD1	2:F:104:GLY:HA3	1.83	0.44
1:G:39:SER:O	1:G:43:LEU:N	2.29	0.44
1:G:199:ALA:CB	1:G:231:ARG:HH11	1.96	0.44
1:I:1:LEU:HD22	1:I:329:ALA:HA	2.00	0.44
1:I:214:VAL:HG23	1:I:215:SER:H	1.83	0.44
2:J:11:ILE:HA	2:J:14:ASN:HB3	2.00	0.44
2:J:214:VAL:O	2:J:218:LEU:N	2.49	0.44
1:K:28:VAL:O	1:K:72:LYS:N	2.51	0.44
2:L:15:PHE:CE2	2:L:321:VAL:HG12	2.53	0.44
2:L:305:VAL:HG12	2:L:307:VAL:HG12	1.99	0.44
1:O:18(B):HIS:CD2	1:O:53:PHE:HZ	2.36	0.44
1:O:114:LYS:HB3	1:O:115:LYS:HZ2	1.83	0.44
1:O:182:GLN:HG3	1:O:195:ARG:HD3	2.00	0.44
1:O:236:ASN:ND2	1:O:314:GLU:OE1	2.51	0.44
1:O:241:ASP:HA	1:O:307:VAL:O	2.18	0.44
1:O:244:VAL:HG23	1:O:305:VAL:HG23	1.99	0.44
1:O:256:ASN:CA	1:O:259:PHE:HB2	2.41	0.44
2:P:137:TYR:OH	2:P:328:VAL:HA	2.18	0.44
2:P:217:VAL:HG23	2:P:218:LEU:HG	2.00	0.44
1:Q:11:ILE:N	3:Q:401:NAD:O1N	2.51	0.44
1:Q:15:PHE:CD2	1:Q:322:VAL:HG23	2.52	0.44
2:R:181:ASP:HB3	2:R:182:GLN:NE2	2.27	0.44
2:R:312:ASP:CG	2:R:315:TRP:HB3	2.43	0.44
1:A:0:LYS:HG3	1:A:24:PRO:O	2.18	0.44
1:A:129:VAL:N	1:A:133:ASN:OD1	2.32	0.44
1:A:208:THR:HG23	1:A:210:ALA:H	1.82	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:273:VAL:HA	1:A:292:ILE:H	1.81	0.44
1:A:332:TRP:CE3	1:A:333:PRO:HD2	2.53	0.44
2:B:29:VAL:O	2:B:30:ILE:HD13	2.18	0.44
2:B:116:VAL:HB	2:B:143:ILE:HG12	1.99	0.44
2:B:118:ILE:HD13	2:B:118:ILE:HA	1.78	0.44
2:B:119:THR:OG1	2:B:120:ALA:N	2.51	0.44
2:B:193:LEU:HD22	2:D:277:PRO:HG2	1.98	0.44
2:B:266:GLU:C	2:B:268:LYS:HZ1	2.26	0.44
2:D:305:VAL:HG12	2:D:307:VAL:HG12	2.00	0.44
1:E:84:TRP:HB2	1:E:111:ALA:O	2.18	0.44
1:E:183:ARG:CZ	1:E:190:HIS:HB2	2.48	0.44
1:E:218:LEU:HA	1:E:218:LEU:HD22	1.68	0.44
2:F:323:ASP:O	2:F:327:ILE:HG13	2.17	0.44
1:G:14:ASN:HA	1:G:17:ARG:HB2	1.99	0.44
1:G:128:TYR:HD1	1:G:128:TYR:HA	1.50	0.44
1:G:215:SER:OG	1:G:222:LYS:HD2	2.17	0.44
1:G:330:ASN:ND2	1:G:330:ASN:H	2.16	0.44
1:I:1:LEU:O	1:I:3:VAL:HG23	2.18	0.44
1:I:63:THR:HG23	1:I:72:LYS:HA	2.00	0.44
1:I:69:LYS:O	1:I:71:ILE:HG13	2.18	0.44
1:I:91:ILE:HA	1:I:115:LYS:O	2.17	0.44
2:J:14:ASN:HD22	2:J:314:GLU:HB3	1.83	0.44
2:L:160:VAL:HA	2:L:163:GLN:HB2	1.98	0.44
2:L:176:HIS:HB3	2:L:231:ARG:HG2	2.00	0.44
1:O:79:PRO:HG2	1:O:107:LYS:HD2	2.00	0.44
1:O:89:ILE:HG22	1:O:92:VAL:HG22	1.99	0.44
1:O:101:ASP:CG	1:O:104:GLY:H	2.25	0.44
1:O:172:MET:HB2	1:O:242:LEU:HD12	2.00	0.44
1:O:267:LEU:HB3	1:O:271:LEU:HG	2.00	0.44
2:P:1:LEU:O	2:P:3:VAL:N	2.50	0.44
2:P:154:LEU:O	2:P:158:VAL:HG22	2.17	0.44
2:P:208:THR:HG23	2:P:210:ALA:HB3	1.99	0.44
1:Q:72:LYS:HG2	1:Q:72:LYS:HZ3	1.73	0.44
2:R:18:CYS:HB3	2:R:322:VAL:HG21	2.00	0.44
2:R:179:THR:N	2:R:182:GLN:HE22	2.13	0.44
1:A:13:ARG:NE	1:A:43:LEU:HB3	2.32	0.44
2:B:40:ALA:HA	2:B:43:LEU:HB2	2.00	0.44
2:B:44:LEU:HD23	2:B:57:VAL:CB	2.48	0.44
2:B:84:TRP:CD1	2:B:111:ALA:HB3	2.53	0.44
1:C:146:ASN:HD21	1:C:152:ASN:CG	2.26	0.44
1:C:279:VAL:O	1:C:282:ASP:N	2.51	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:59:ILE:O	1:E:59:ILE:CG1	2.65	0.44
1:E:164:GLU:OE1	1:E:165:LEU:HG	2.17	0.44
1:E:204:VAL:HG21	1:E:231:ARG:HB2	2.00	0.44
2:F:78:ASN:OD1	2:F:80:VAL:HG13	2.18	0.44
2:F:183:ARG:NH2	2:F:190:HIS:HA	2.33	0.44
2:F:316:GLY:O	2:F:320:ARG:HG2	2.18	0.44
2:H:160:VAL:HA	2:H:163:GLN:OE1	2.18	0.44
2:H:221:LEU:H	2:H:221:LEU:HD12	1.83	0.44
1:I:176:HIS:HA	1:I:238:SER:HB2	2.00	0.44
2:J:203:ILE:HG12	2:J:204:VAL:H	1.82	0.44
1:K:37:VAL:O	1:K:41:THR:N	2.28	0.44
1:K:79:PRO:CD	1:K:107:LYS:HZ2	2.31	0.44
1:K:154:LEU:HA	1:K:157:PHE:CZ	2.53	0.44
2:L:28:VAL:C	2:L:71:ILE:HG23	2.43	0.44
2:L:109:LEU:HD11	2:L:143:ILE:HG12	2.00	0.44
2:L:232:VAL:O	2:L:234:THR:N	2.49	0.44
1:O:18:CYS:C	1:O:18(B):HIS:N	2.75	0.43
2:P:99:PHE:HD1	2:P:104:GLY:HA3	1.83	0.43
2:P:103:ASP:OD1	2:P:103:ASP:N	2.37	0.43
2:P:151:THR:HG21	2:P:213:ALA:HB3	2.00	0.43
2:P:237:VAL:HG13	2:P:311:TYR:O	2.18	0.43
1:Q:1:LEU:O	1:Q:3:VAL:HG23	2.18	0.43
2:R:119:THR:O	2:R:317:TYR:OH	2.36	0.43
1:A:114:LYS:HB3	1:A:115:LYS:HD2	1.99	0.43
1:A:130:VAL:HG11	1:A:320:ARG:HD3	1.99	0.43
2:B:128:TYR:HD2	2:B:144:ILE:HB	1.83	0.43
2:B:297:THR:HA	2:B:307:VAL:HA	2.00	0.43
1:C:9:GLY:O	1:C:13:ARG:NH1	2.51	0.43
1:C:17:ARG:HG2	1:C:53:PHE:CE2	2.53	0.43
1:C:82:LEU:HB2	1:C:111:ALA:HB1	1.99	0.43
1:C:102:GLY:N	1:C:103:PRO:HD2	2.33	0.43
1:C:298:MET:O	1:C:305:VAL:HG23	2.18	0.43
2:D:171:THR:N	2:D:243:VAL:O	2.40	0.43
2:D:234:THR:OG1	2:D:236:ASN:N	2.49	0.43
2:D:267:LEU:HA	2:D:270:ILE:HB	2.00	0.43
2:D:313:ASN:O	3:D:401:NAD:N7N	2.51	0.43
1:E:52:THR:O	1:E:54:LYS:NZ	2.39	0.43
1:E:197:ARG:HD2	1:E:197:ARG:HA	1.90	0.43
2:F:33:THR:OG1	2:F:77:ARG:NH1	2.51	0.43
2:F:190:HIS:HE1	2:F:192:ASP:HB3	1.83	0.43
2:F:305:VAL:HG12	2:F:307:VAL:HG12	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:77:ARG:HD2	3:G:401:NAD:N1A	2.33	0.43
1:G:324:LEU:HA	1:G:327:LEU:HD12	2.00	0.43
2:H:165:PHE:CD2	2:H:248:LYS:HD3	2.53	0.43
1:I:148:SER:OG	1:I:151:THR:HG23	2.17	0.43
2:J:18:CYS:CB	2:J:322:VAL:HG21	2.47	0.43
2:J:38:LYS:H	2:J:38:LYS:HD3	1.82	0.43
2:J:246:VAL:N	2:J:303:ASP:O	2.35	0.43
1:K:82:LEU:HB3	1:K:84:TRP:CE3	2.53	0.43
1:K:167:ILE:HA	1:K:247:GLU:H	1.83	0.43
1:K:206:THR:C	1:K:229:ALA:HB3	2.43	0.43
1:K:259:PHE:O	1:K:263:ALA:N	2.30	0.43
1:K:298:MET:HE2	1:K:298:MET:HB3	1.84	0.43
2:L:58:LYS:O	2:L:65:SER:N	2.51	0.43
1:O:18(A):TRP:CA	1:O:20:ARG:HB3	2.47	0.43
1:O:28:VAL:HA	1:O:71:ILE:HG12	1.99	0.43
1:O:192:ASP:CG	1:O:193:LEU:N	2.76	0.43
1:O:203:ILE:O	1:O:205:PRO:HD3	2.19	0.43
2:P:152:ASN:ND2	2:P:317:TYR:HA	2.33	0.43
2:P:171:THR:C	2:P:242:LEU:HD12	2.42	0.43
2:P:312:ASP:OD2	2:P:315:TRP:HB3	2.18	0.43
1:Q:3:VAL:HB	1:Q:27:VAL:HA	1.99	0.43
1:Q:17:ARG:NH2	1:Q:53:PHE:HB2	2.33	0.43
1:Q:194:ARG:HH21	1:Q:205:PRO:HD2	1.81	0.43
1:Q:236:ASN:ND2	1:Q:313:ASN:OD1	2.51	0.43
2:R:160:VAL:HA	2:R:163:GLN:OE1	2.18	0.43
2:B:23:SER:HA	2:B:25:LEU:HD22	1.99	0.43
2:B:190:HIS:HB3	2:B:196:ALA:CA	2.48	0.43
2:B:192:ASP:OD2	2:B:194:ARG:HB2	2.18	0.43
2:B:227:GLY:HA2	2:D:298:MET:SD	2.58	0.43
1:C:84:TRP:O	1:C:88:GLY:N	2.51	0.43
2:D:273:VAL:HG23	2:D:292:ILE:O	2.18	0.43
1:E:0:LYS:HB3	1:E:0:LYS:HE3	1.69	0.43
1:E:92:VAL:O	1:E:116:VAL:HG13	2.18	0.43
1:E:139:HIS:HD2	1:E:139(A):ASP:H	1.66	0.43
1:E:156:PRO:O	1:E:160:VAL:HG23	2.18	0.43
1:E:179:THR:OG1	1:E:180:GLY:N	2.46	0.43
1:E:192:ASP:CG	1:E:195:ARG:H	2.17	0.43
1:E:272:ASP:HB2	1:E:288:PHE:CD2	2.53	0.43
2:F:281:ILE:C	2:F:283:PHE:H	2.25	0.43
1:G:133:ASN:ND2	1:G:217:VAL:HG13	2.33	0.43
1:G:263:ALA:O	1:G:268:LYS:HA	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:213:ALA:HA	2:H:216:LEU:HD13	2.00	0.43
2:H:249:LYS:HD2	2:H:302:ASP:HB2	1.99	0.43
1:I:271:LEU:HA	1:I:289:SER:CB	2.49	0.43
1:I:288:PHE:C	1:I:320:ARG:HH21	2.26	0.43
1:I:299:VAL:HA	1:I:305:VAL:HA	2.01	0.43
2:J:171:THR:O	2:J:242:LEU:HD12	2.18	0.43
1:K:6:ASN:HD22	1:K:95:GLY:N	2.14	0.43
1:K:10:ARG:HB3	1:K:314:GLU:OE2	2.17	0.43
1:K:91:ILE:HD11	1:K:115:LYS:HE2	1.98	0.43
1:K:114:LYS:C	1:K:115:LYS:HD3	2.42	0.43
1:K:167:ILE:HB	1:K:224:LYS:HZ1	1.84	0.43
1:K:169:LYS:N	1:K:245:ASN:OD1	2.48	0.43
1:K:281:VAL:HA	1:K:284:ARG:HG3	2.00	0.43
2:L:40:ALA:HA	2:L:43:LEU:HB2	1.99	0.43
2:L:117:LEU:HG	2:L:145:SER:HA	1.99	0.43
2:L:193:LEU:HD12	2:L:193:LEU:H	1.82	0.43
2:L:250:THR:N	2:L:302:ASP:HB3	2.18	0.43
1:O:174:THR:OG1	1:O:239:VAL:O	2.36	0.43
1:O:190:HIS:CE1	1:O:196:ALA:N	2.86	0.43
1:O:191:ARG:HB3	1:O:191:ARG:HE	1.48	0.43
1:O:300:MET:CG	1:O:304:MET:HB2	2.49	0.43
3:O:401:NAD:O3D	1:C:362:GLU:HA	2.18	0.43
2:P:159:LYS:HG3	2:P:218:LEU:HD22	2.00	0.43
1:Q:174:THR:HB	1:Q:240:VAL:CB	2.48	0.43
1:Q:221:LEU:HD13	1:Q:221:LEU:HA	1.85	0.43
2:R:15:PHE:CE2	2:R:321:VAL:HG12	2.53	0.43
2:R:47:ASP:N	2:R:51:GLY:O	2.51	0.43
2:R:102:ARG:NH2	2:R:126:PRO:HD3	2.30	0.43
2:R:104:GLY:HA2	2:R:107:LYS:HE2	2.00	0.43
1:A:3:VAL:HG21	1:A:25:LEU:HB3	2.00	0.43
1:A:117:ILE:HD13	1:A:321:VAL:HG13	1.98	0.43
1:A:135:LYS:HE2	1:A:135:LYS:HB2	1.65	0.43
2:B:1:LEU:O	2:B:3:VAL:HG23	2.18	0.43
2:B:324:LEU:HD12	2:B:327:ILE:HB	2.00	0.43
1:C:76:ASN:CG	1:C:78:ASP:H	2.25	0.43
1:C:239:VAL:CG2	1:C:308:VAL:HG23	2.49	0.43
2:D:134:GLU:O	2:D:137:TYR:HB3	2.19	0.43
1:E:245:ASN:HA	1:E:304:MET:HA	1.99	0.43
2:F:1:LEU:O	2:F:26:ASP:N	2.51	0.43
2:F:78:ASN:ND2	2:F:80:VAL:HG22	2.34	0.43
2:F:191:ARG:H	2:F:191:ARG:CZ	2.32	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:3:VAL:HG22	1:G:91:ILE:HD11	2.00	0.43
1:G:244:VAL:HB	1:G:246:ILE:HD11	2.00	0.43
2:H:18:CYS:HB3	2:H:322:VAL:HG21	2.00	0.43
2:H:152:ASN:OD1	2:H:320:ARG:HG3	2.17	0.43
2:H:177:SER:OG	2:H:234:THR:O	2.18	0.43
2:H:287:ASP:OD1	2:H:287:ASP:N	2.49	0.43
2:H:289:SER:O	2:H:311:TYR:HA	2.18	0.43
1:I:34:GLY:C	1:I:39:SER:HG	2.19	0.43
1:I:186:ASP:HA	1:I:196:ALA:O	2.18	0.43
1:I:218:LEU:HG	1:I:220:GLN:NE2	2.33	0.43
2:J:64:ILE:O	2:J:71:ILE:N	2.51	0.43
2:J:183:ARG:HH22	2:J:191:ARG:HH12	1.65	0.43
2:J:267:LEU:HB3	2:J:271:LEU:HB2	2.00	0.43
2:J:318:SER:O	2:J:319:GLN:C	2.62	0.43
1:K:117:ILE:HA	1:K:144:ILE:O	2.18	0.43
2:L:91:LEU:HB2	2:L:115:LYS:HB2	2.01	0.43
2:L:285:CYS:O	2:L:315:TRP:NE1	2.50	0.43
1:O:139(A):ASP:OD1	1:O:139(A):ASP:N	2.51	0.43
1:O:175:THR:OG1	1:O:239:VAL:HG13	2.18	0.43
1:O:190:HIS:O	1:O:191:ARG:HB3	2.18	0.43
2:P:316:GLY:O	2:P:320:ARG:HG2	2.18	0.43
1:Q:82:LEU:HD12	1:Q:108:HIS:ND1	2.34	0.43
1:Q:138:GLY:HA3	1:Q:140:VAL:HB	2.00	0.43
1:Q:249:GLY:HA3	1:Q:302:GLY:CA	2.48	0.43
1:Q:255:VAL:HA	1:Q:258:ALA:HB3	2.01	0.43
1:Q:324:LEU:HD12	1:Q:325:ALA:N	2.33	0.43
2:R:122:GLY:CA	2:R:125:ILE:HG12	2.49	0.43
2:R:173:THR:HA	2:R:228:ILE:O	2.18	0.43
1:A:31:ASN:HD21	1:A:76:ASN:C	2.27	0.43
1:A:137:TYR:CZ	1:A:139:HIS:HA	2.53	0.43
1:A:254:ASP:OD1	1:A:255:VAL:HG23	2.19	0.43
1:A:330:ASN:OD1	1:A:330:ASN:N	2.51	0.43
2:B:129:VAL:HG21	2:B:152:ASN:HA	1.99	0.43
2:B:318:SER:O	2:B:319:GLN:C	2.61	0.43
1:C:31:ASN:HA	1:C:74:VAL:O	2.18	0.43
1:C:38:LYS:HE3	1:C:38:LYS:HB2	1.79	0.43
1:E:9:GLY:O	1:E:13:ARG:N	2.43	0.43
2:F:13:ARG:HA	2:F:16:LEU:HB2	2.00	0.43
2:F:89:ILE:HB	2:F:113:ALA:HB2	2.00	0.43
2:F:124:ASP:C	2:F:125:ILE:HD12	2.43	0.43
1:G:9:GLY:O	1:G:13:ARG:HG3	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:77:ARG:HG2	3:G:401:NAD:N6A	2.33	0.43
2:H:69:LYS:NZ	2:H:71:ILE:HG13	2.34	0.43
2:H:85:GLY:CA	2:H:112:GLY:HA3	2.48	0.43
2:H:243:VAL:HA	2:H:306:LYS:HA	1.99	0.43
2:H:303:ASP:OD1	2:H:303:ASP:N	2.51	0.43
2:H:312:ASP:CG	2:H:315:TRP:HB3	2.43	0.43
1:I:84:TRP:N	1:I:111:ALA:O	2.51	0.43
1:I:172:MET:O	1:I:227:GLY:HA3	2.18	0.43
1:K:17:ARG:NH1	1:K:44:LEU:O	2.44	0.43
1:K:84:TRP:HD1	1:K:113:ALA:HB2	1.83	0.43
1:K:91:ILE:HG13	1:K:115:LYS:H	1.83	0.43
1:K:120:ALA:O	1:K:145:SER:OG	2.29	0.43
2:L:3:VAL:O	2:L:27:VAL:HG13	2.18	0.43
2:L:16:LEU:HD13	2:L:44:LEU:HD13	2.00	0.43
1:O:56:ASP:O	1:O:66:ILE:HA	2.18	0.43
3:O:401:NAD:H2N	3:O:401:NAD:PN	2.58	0.43
2:P:15:PHE:HD2	2:P:318:SER:HB2	1.83	0.43
1:Q:96:THR:HG22	3:Q:401:NAD:C4A	2.48	0.43
2:R:237:VAL:HG13	2:R:311:TYR:O	2.18	0.43
2:R:253:GLU:CD	2:R:256:ASN:HB2	2.44	0.43
1:A:139:HIS:HD2	1:A:139(A):ASP:OD1	2.02	0.43
1:C:116:VAL:HB	1:C:143:ILE:HG23	2.00	0.43
1:E:18(B):HIS:CG	1:E:66:ILE:HG21	2.53	0.43
1:E:68:GLY:O	1:E:70:PRO:HD3	2.19	0.43
1:E:81:LYS:HD3	1:E:81:LYS:HA	1.65	0.43
1:E:273:VAL:HG12	1:E:292:ILE:HB	2.01	0.43
1:G:1:LEU:HB3	1:G:90:ASP:OD2	2.17	0.43
1:G:81:LYS:HD2	1:G:81:LYS:HA	1.91	0.43
1:G:246:ILE:H	1:G:303:ASP:CA	2.31	0.43
2:H:28:VAL:HG13	2:H:69:LYS:NZ	2.33	0.43
2:H:28:VAL:HA	2:H:71:ILE:HG13	2.00	0.43
2:H:164:LYS:HB3	2:H:165:PHE:CD1	2.53	0.43
2:H:331:LYS:HB2	2:H:333:GLN:NE2	2.32	0.43
1:I:45:LYS:HD2	1:I:53:PHE:H	1.84	0.43
1:I:159:LYS:HG3	1:I:218:LEU:HD21	2.00	0.43
1:I:202:ASN:CG	1:K:280:SER:H	2.26	0.43
1:I:289:SER:OG	1:I:290:SER:N	2.51	0.43
2:J:263:ALA:O	2:J:268:LYS:HG3	2.19	0.43
1:K:18(A):TRP:NE1	1:K:23:SER:OG	2.52	0.43
1:K:66:ILE:HB	1:K:69:LYS:HB2	2.00	0.43
1:K:213:ALA:O	1:K:216:LEU:HB2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:293:ASP:O	2:L:297:THR:HG23	2.17	0.43
2:P:174:THR:HA	2:P:240:VAL:CB	2.47	0.43
1:Q:134:GLU:CD	1:Q:134:GLU:N	2.76	0.43
1:Q:214:VAL:O	1:Q:217:VAL:HB	2.18	0.43
1:Q:245:ASN:OD1	1:Q:245:ASN:N	2.49	0.43
1:Q:349:CYS:O	1:Q:353:PRO:N	2.52	0.43
2:R:45:LYS:NZ	2:R:55:ALA:O	2.50	0.43
2:R:208:THR:HG23	2:R:210:ALA:HB3	2.01	0.43
2:R:213:ALA:HA	2:R:216:LEU:HD13	2.00	0.43
2:R:230:LEU:O	2:R:232:VAL:HG13	2.19	0.43
1:A:45:LYS:NZ	1:A:56:ASP:HA	2.32	0.43
1:A:175:THR:HG22	1:A:230:LEU:HD21	2.00	0.43
1:A:193:LEU:HD21	1:C:277:PRO:HG3	2.01	0.43
1:A:276:ILE:O	1:A:278:LEU:HG	2.19	0.43
1:A:318:SER:O	1:A:322:VAL:HG23	2.19	0.43
2:B:20:ARG:HG3	2:B:322:VAL:CG1	2.49	0.43
2:B:47:ASP:C	1:C:197:ARG:HH22	2.25	0.43
2:B:263:ALA:O	2:B:268:LYS:HG3	2.19	0.43
1:C:31:ASN:OD1	1:C:74:VAL:HB	2.19	0.43
1:C:69:LYS:HD2	1:C:69:LYS:HA	1.82	0.43
1:C:132:VAL:HA	1:C:159:LYS:HD2	2.00	0.43
1:C:176:HIS:H	1:C:232:VAL:CG1	2.31	0.43
1:C:214:VAL:HG21	1:C:225:LEU:HD23	2.00	0.43
1:C:229:ALA:O	1:C:230:LEU:HD13	2.19	0.43
1:C:324:LEU:HD23	1:C:327:LEU:HD11	2.00	0.43
2:D:55:ALA:HB1	2:D:67:ASP:OD1	2.19	0.43
2:D:148:SER:OG	2:D:151:THR:OG1	2.28	0.43
2:D:192:ASP:HB3	2:D:195:ARG:HB2	2.00	0.43
2:D:218:LEU:HA	2:D:219:PRO:HD3	1.91	0.43
1:E:94:GLU:CD	1:E:99:PHE:H	2.21	0.43
1:E:192:ASP:OD2	1:E:194:ARG:HB2	2.19	0.43
2:F:13:ARG:NE	2:F:43:LEU:HB3	2.34	0.43
2:F:117:LEU:HA	2:F:144:ILE:O	2.18	0.43
2:F:326:ASP:HA	2:F:329:ALA:HB3	2.00	0.43
1:G:126:PRO:CD	1:G:144:ILE:HG22	2.49	0.43
1:G:283:PHE:N	1:G:283:PHE:CD1	2.86	0.43
2:H:117:LEU:HG	2:H:145:SER:C	2.43	0.43
1:I:10:ARG:HD2	1:I:13:ARG:HH12	1.83	0.43
1:I:60:ILE:H	1:I:64:PHE:HB2	1.84	0.43
1:I:121:PRO:HG3	1:I:148:SER:H	1.82	0.43
1:I:184:LEU:HB3	2:L:184:LEU:HD13	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:202:ASN:CG	1:I:203:ILE:N	2.76	0.43
2:J:10:ARG:NH1	1:K:186:ASP:O	2.52	0.43
2:J:167:ILE:HG23	2:J:246:VAL:HG12	1.99	0.43
2:J:192:ASP:OD2	2:J:195:ARG:HG3	2.19	0.43
2:J:194:ARG:NH2	2:L:277:PRO:HA	2.34	0.43
2:J:197:ARG:NH2	1:K:46:TYR:O	2.52	0.43
2:J:221:LEU:HG	2:J:225:LEU:HG	2.00	0.43
2:J:311:TYR:CE2	2:J:313:ASN:HB3	2.53	0.43
1:K:55:ALA:HB1	1:K:67:ASP:OD2	2.18	0.43
1:K:84:TRP:HA	1:K:89:ILE:HG13	2.00	0.43
1:K:263:ALA:HB2	1:K:271:LEU:HD22	1.99	0.43
1:O:160:VAL:HA	1:O:163:GLU:OE2	2.18	0.43
1:O:172:MET:HG2	1:O:173:THR:N	2.34	0.43
1:O:274:CYS:SG	1:O:276:ILE:N	2.87	0.43
2:P:124:ASP:C	2:P:125:ILE:HD12	2.43	0.43
2:P:185:LEU:HD12	2:P:185:LEU:HA	1.65	0.43
2:P:185:LEU:O	2:P:187:ALA:N	2.51	0.43
2:P:191:ARG:H	2:P:191:ARG:CZ	2.32	0.43
2:P:267:LEU:HA	2:P:270:ILE:HB	2.01	0.43
2:P:297:THR:HG22	2:P:307:VAL:HA	2.00	0.43
1:Q:2:LYS:O	1:Q:90:ASP:HB2	2.19	0.43
1:Q:31:ASN:CA	1:Q:74:VAL:HG12	2.38	0.43
1:Q:148:SER:HG	1:Q:150:THR:HG1	1.61	0.43
1:Q:168:VAL:HG22	1:Q:169:LYS:HG3	2.01	0.43
1:Q:173:THR:HG23	1:Q:230:LEU:HD23	2.01	0.43
1:Q:256:ASN:O	1:Q:259:PHE:HB2	2.18	0.43
1:Q:281:VAL:HA	1:Q:284:ARG:NH2	2.32	0.43
2:R:7:GLY:O	2:R:95:GLY:HA3	2.18	0.43
1:A:17:ARG:NH1	1:A:44:LEU:O	2.52	0.43
1:A:128:TYR:HA	1:A:128:TYR:HD1	1.62	0.43
1:A:165:LEU:HD23	1:A:248:LYS:HD2	2.00	0.43
1:A:202:ASN:HD22	1:C:279:VAL:CG2	2.15	0.43
1:A:243:VAL:HA	1:A:306:LYS:HA	2.00	0.43
1:A:296:LEU:HD11	1:A:310:TRP:HE1	1.83	0.43
2:B:1:LEU:HD21	2:B:328:VAL:HB	2.01	0.43
2:B:11:ILE:O	2:B:14:ASN:HB3	2.18	0.43
2:B:211:ALA:HB1	2:B:226:ASN:CG	2.44	0.43
1:C:105:ALA:HB1	1:C:143:ILE:HG12	2.00	0.43
1:C:200:ALA:HB3	1:C:201:LEU:HD22	2.01	0.43
2:D:214:VAL:O	2:D:217:VAL:HG22	2.19	0.43
1:E:23:SER:C	1:E:25:LEU:N	2.73	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:62:GLU:HB2	1:E:72:LYS:NZ	2.34	0.43
1:E:89:ILE:O	1:E:113:ALA:HA	2.19	0.43
1:E:254:ASP:OD2	1:E:254:ASP:N	2.49	0.43
1:E:323:ASP:HA	1:E:326:ASP:OD2	2.18	0.43
2:F:42:HIS:O	2:F:46:TYR:N	2.50	0.43
2:F:232:VAL:O	2:F:234:THR:N	2.50	0.43
2:F:264:ASP:HA	2:F:268:LYS:NZ	2.34	0.43
1:G:175:THR:N	1:G:239:VAL:O	2.49	0.43
1:I:3:VAL:HA	1:I:91:ILE:O	2.19	0.43
1:I:84:TRP:HE1	1:I:108:HIS:HA	1.84	0.43
1:I:182:GLN:OE1	1:I:182:GLN:N	2.49	0.43
2:J:161:LEU:O	2:J:165:PHE:N	2.45	0.43
2:J:263:ALA:O	2:J:268:LYS:N	2.51	0.43
1:K:92:VAL:O	1:K:93:ILE:HD13	2.19	0.43
1:K:167:ILE:HD13	1:K:244:VAL:HG11	1.99	0.43
2:L:84:TRP:CE3	2:L:84:TRP:HA	2.53	0.43
2:L:190:HIS:HE1	2:L:195:ARG:HD2	1.83	0.43
1:O:18(A):TRP:HA	1:O:20:ARG:CB	2.48	0.43
1:O:82:LEU:O	1:O:84:TRP:N	2.50	0.43
1:O:190:HIS:CE1	1:O:192:ASP:C	2.97	0.43
2:P:117:LEU:HA	2:P:144:ILE:O	2.18	0.43
2:P:291:THR:HB	2:P:310:TRP:CD1	2.54	0.43
1:Q:279:VAL:HG22	1:Q:280:SER:H	1.84	0.43
1:A:215:SER:OG	1:A:218:LEU:O	2.35	0.43
1:A:221:LEU:HD22	1:A:221:LEU:HA	1.83	0.43
1:A:283:PHE:CD1	1:A:283:PHE:N	2.86	0.43
1:A:320:ARG:HA	1:A:323:ASP:OD2	2.18	0.43
2:B:39:GLN:HE22	1:C:191:ARG:HE	1.67	0.43
1:C:139:HIS:HE2	1:C:333:PRO:HB3	1.84	0.43
1:C:151:THR:HG22	1:C:214:VAL:HG13	2.00	0.43
1:C:312:ASP:CG	1:C:316:GLY:H	2.23	0.43
2:D:171:THR:O	2:D:242:LEU:HD12	2.18	0.43
2:D:237:VAL:HA	2:D:313:ASN:OD1	2.19	0.43
1:E:204:VAL:HB	1:E:231:ARG:HB2	2.00	0.43
2:F:2:LYS:HE3	2:F:87:MET:HB3	2.00	0.43
1:G:10:ARG:HG3	1:G:11:ILE:N	2.31	0.43
2:H:7:GLY:O	2:H:95:GLY:HA3	2.18	0.43
2:H:15:PHE:CE2	2:H:321:VAL:HG12	2.53	0.43
2:H:291:THR:O	2:H:292:ILE:HD13	2.19	0.43
1:I:139:HIS:CE1	1:I:331:LYS:HE3	2.53	0.43
2:J:0:LYS:H2	2:J:26:ASP:CG	2.22	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:29:VAL:O	2:J:30:ILE:HD13	2.18	0.43
2:J:116:VAL:O	2:J:144:ILE:HG12	2.18	0.43
2:J:272:SER:OG	2:J:290:SER:O	2.25	0.43
2:J:300:MET:HB2	2:J:304:MET:HG2	2.01	0.43
3:J:401:NAD:O2N	3:J:401:NAD:H4D	2.18	0.43
1:K:2:LYS:HE3	1:K:2:LYS:HB2	1.74	0.43
1:K:31:ASN:OD1	1:K:76:ASN:N	2.51	0.43
1:K:246:ILE:N	1:K:303:ASP:HB2	2.33	0.43
1:O:23:SER:OG	1:O:25:LEU:O	2.35	0.43
1:O:186:ASP:HB2	2:R:10:ARG:HH12	1.83	0.43
1:O:237:VAL:HG11	1:O:280:SER:HB3	2.00	0.43
2:P:154:LEU:H	2:P:154:LEU:HG	1.60	0.43
1:Q:10:ARG:N	1:Q:13:ARG:HH21	2.17	0.43
1:Q:74:VAL:HG22	1:Q:75:SER:H	1.84	0.43
1:Q:267:LEU:HB3	1:Q:271:LEU:HB3	2.00	0.43
2:R:13:ARG:HB3	2:R:44:LEU:HD12	1.99	0.43
2:R:85:GLY:CA	2:R:112:GLY:HA3	2.49	0.43
2:R:221:LEU:H	2:R:221:LEU:HD12	1.83	0.43
2:R:313:ASN:OD1	2:R:313:ASN:N	2.52	0.43
1:A:132:VAL:N	1:A:134:GLU:OE1	2.52	0.43
1:A:152:ASN:OD1	1:A:152:ASN:N	2.52	0.43
1:A:239:VAL:HB	1:A:310:TRP:CE2	2.53	0.43
1:A:246:ILE:HB	1:A:305:VAL:CG1	2.49	0.43
2:B:6:ASN:ND2	2:B:108:HIS:HE1	2.16	0.43
2:B:38:LYS:HZ2	2:B:38:LYS:H	1.65	0.43
2:B:194:ARG:HH12	2:D:278:LEU:C	2.20	0.43
1:C:242:LEU:O	1:C:306:LYS:HA	2.18	0.43
1:C:332:TRP:CG	1:C:333:PRO:HD2	2.54	0.43
2:D:10:ARG:O	2:D:13:ARG:HD2	2.18	0.43
2:D:161:LEU:HD12	2:D:165:PHE:CD1	2.54	0.43
2:D:181:ASP:HB3	2:D:182:GLN:NE2	2.34	0.43
2:D:182:GLN:HG3	2:D:195:ARG:HG2	2.01	0.43
1:E:71:ILE:HG22	1:E:72:LYS:O	2.19	0.43
1:E:121:PRO:HG3	1:E:148:SER:HB3	2.00	0.43
1:E:134:GLU:HG2	1:E:135:LYS:H	1.84	0.43
1:E:257:ASN:ND2	1:E:260:ARG:HH11	2.16	0.43
2:F:283:PHE:N	2:F:283:PHE:CD1	2.87	0.43
2:F:285:CYS:HG	2:F:315:TRP:CD1	2.36	0.43
1:G:79:PRO:HB3	1:G:108:HIS:CG	2.54	0.43
1:G:100:VAL:CG2	1:G:122(A):LYS:HG2	2.49	0.43
1:G:178:TYR:CE1	1:G:235:PRO:HA	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:267:LEU:O	1:G:271:LEU:HB3	2.19	0.43
2:H:90:ASP:HB3	2:H:332:TRP:CH2	2.53	0.43
2:H:208:THR:HG23	2:H:210:ALA:HB3	2.01	0.43
2:H:237:VAL:HG13	2:H:311:TYR:C	2.44	0.43
1:I:154:LEU:HA	1:I:157:PHE:CZ	2.53	0.43
2:J:79:PRO:HG2	2:J:107:LYS:HB2	2.01	0.43
2:J:211:ALA:HB1	2:J:226:ASN:CG	2.43	0.43
2:J:266:GLU:C	2:J:268:LYS:HZ3	2.27	0.43
1:K:11:ILE:HG22	3:K:401:NAD:O2N	2.18	0.43
1:K:133:ASN:HA	1:K:136:ASP:CG	2.43	0.43
2:L:45:LYS:NZ	2:L:53:PHE:HB3	2.34	0.43
1:O:90:ASP:CG	1:O:114:LYS:HD2	2.44	0.43
1:O:122(A):LYS:HA	1:O:122(A):LYS:HZ2	1.83	0.43
1:O:149:CYS:HB2	1:O:313:ASN:HA	2.01	0.43
1:O:162:ASP:O	1:O:165:LEU:N	2.52	0.43
1:O:170:GLY:O	1:O:225:LEU:HA	2.18	0.43
1:O:197:ARG:HG3	1:Q:279:VAL:HB	2.01	0.43
2:P:1:LEU:O	2:P:26:ASP:N	2.52	0.43
2:P:326:ASP:O	2:P:330:ASN:N	2.29	0.43
1:Q:63:THR:HG23	1:Q:72:LYS:HA	2.01	0.43
1:A:53:PHE:CE2	1:A:55:ALA:HB3	2.54	0.43
2:B:38:LYS:H	2:B:38:LYS:HD3	1.84	0.43
2:B:240:VAL:HG13	2:B:309:ALA:CB	2.48	0.43
1:C:285:CYS:HA	1:C:315:TRP:CD2	2.54	0.43
1:C:293:ASP:O	1:C:297:THR:HG23	2.19	0.43
2:D:109:LEU:HD11	2:D:143:ILE:HG12	2.00	0.43
2:D:172:MET:SD	2:D:227:GLY:HA3	2.59	0.43
2:D:204:VAL:CG2	2:D:231:ARG:HB2	2.48	0.43
1:E:38:LYS:HG3	1:E:39:SER:N	2.27	0.43
1:E:129:VAL:N	1:E:133:ASN:OD1	2.32	0.43
2:F:31:ASN:OD1	2:F:76:ASP:N	2.51	0.43
2:F:237:VAL:HG13	2:F:311:TYR:O	2.18	0.43
2:F:243:VAL:HA	2:F:305:VAL:O	2.18	0.43
1:G:14:ASN:OD1	1:G:14:ASN:N	2.52	0.43
2:H:18:CYS:SG	2:H:318:SER:OG	2.77	0.43
1:I:65:SER:HB2	1:I:70:PRO:HA	2.01	0.43
1:I:89:ILE:HA	1:I:89:ILE:HD13	1.87	0.43
1:I:179:THR:H	1:I:182:GLN:HE22	1.67	0.43
1:I:194:ARG:HG3	1:I:194:ARG:NH1	2.32	0.43
1:I:202:ASN:CB	1:K:279:VAL:HB	2.49	0.43
1:I:270:VAL:HG13	1:I:320:ARG:NH1	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:10:ARG:HH21	1:K:185:LEU:HB3	1.84	0.43
1:K:42:HIS:CG	1:K:46:TYR:HE2	2.36	0.43
1:K:76:ASN:CG	1:K:78:ASP:H	2.26	0.43
1:K:220:GLN:N	1:K:220:GLN:CD	2.77	0.43
1:K:221:LEU:HD22	1:K:221:LEU:HA	1.82	0.43
2:L:92:VAL:HG21	2:L:108:HIS:HB3	1.99	0.43
1:O:82:LEU:HD13	1:O:84:TRP:HZ2	1.84	0.42
1:O:271:LEU:CA	1:O:288:PHE:HB3	2.49	0.42
1:Q:96:THR:HA	3:Q:401:NAD:C1B	2.48	0.42
1:Q:100:VAL:HB	1:Q:122(A):LYS:HB2	2.01	0.42
1:Q:127:THR:HG21	1:Q:216:LEU:HB3	2.01	0.42
1:Q:160:VAL:HA	1:Q:163:GLU:OE2	2.18	0.42
1:Q:242:LEU:O	1:Q:306:LYS:HA	2.19	0.42
2:R:14:ASN:OD1	2:R:315:TRP:HA	2.19	0.42
2:R:117:LEU:HA	2:R:145:SER:HA	2.01	0.42
1:A:258:ALA:HA	1:A:261:LYS:HB2	2.01	0.42
2:B:85:GLY:HA3	2:B:112:GLY:HA3	2.00	0.42
2:B:118:ILE:HG22	2:B:120:ALA:N	2.34	0.42
2:B:221:LEU:HG	2:B:225:LEU:HG	2.00	0.42
2:B:230:LEU:O	2:B:232:VAL:HG13	2.19	0.42
1:C:45:LYS:O	1:C:53:PHE:N	2.52	0.42
1:C:152:ASN:HD21	1:C:320:ARG:CB	2.32	0.42
1:C:161:LEU:O	1:C:165:LEU:N	2.43	0.42
1:C:312:ASP:OD2	1:C:314:GLU:N	2.52	0.42
2:D:28:VAL:C	2:D:71:ILE:HG23	2.44	0.42
1:E:96:THR:O	1:E:98:VAL:HG13	2.19	0.42
1:E:179:THR:OG1	1:E:181:ASP:OD2	2.37	0.42
1:E:232:VAL:HB	1:E:233:PRO:HD2	2.00	0.42
1:E:298:MET:HG2	1:E:306:LYS:HD3	2.00	0.42
1:E:329:ALA:O	1:E:332:TRP:HB2	2.18	0.42
2:F:9:GLY:C	2:F:13:ARG:NH1	2.77	0.42
2:F:29:VAL:HA	2:F:72:LYS:O	2.19	0.42
2:F:29:VAL:O	2:F:30:ILE:HD13	2.19	0.42
2:F:109:LEU:HA	2:F:113:ALA:HB3	2.01	0.42
2:F:129:VAL:HG13	2:F:130:VAL:O	2.19	0.42
2:F:262:SER:HA	2:F:265:ASN:ND2	2.34	0.42
2:F:280:SER:N	2:H:202:ASN:HD22	2.16	0.42
2:F:287:ASP:O	2:F:320:ARG:NH1	2.51	0.42
2:F:297:THR:HG22	2:F:307:VAL:HA	2.00	0.42
1:G:115:LYS:HZ1	1:G:332:TRP:NE1	2.17	0.42
1:G:321:VAL:HA	1:G:324:LEU:HG	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:8:PHE:HZ	1:I:16:LEU:HD13	1.83	0.42
1:I:126:PRO:O	1:I:128:TYR:N	2.51	0.42
1:I:147:ALA:O	1:I:317:TYR:OH	2.31	0.42
1:I:171:THR:HA	1:I:226:ASN:H	1.84	0.42
2:J:20:ARG:HG3	2:J:322:VAL:CG1	2.49	0.42
2:J:194:ARG:NH2	2:L:278:LEU:H	2.17	0.42
2:J:276:GLU:CD	2:J:276:GLU:H	2.26	0.42
1:K:262:ALA:HA	1:K:266:PRO:HD2	2.02	0.42
2:L:89:ILE:HD13	2:L:89:ILE:HA	1.77	0.42
2:L:312:ASP:CG	2:L:315:TRP:HB3	2.44	0.42
1:O:188:SER:OG	2:R:39:GLN:NE2	2.52	0.42
1:O:228:ILE:HG21	1:Q:296:LEU:HD22	2.01	0.42
2:P:77:ARG:CB	3:P:401:NAD:H62A	2.29	0.42
2:P:94:GLU:OE2	2:P:98:VAL:N	2.52	0.42
2:P:159:LYS:HE3	2:P:159:LYS:HB3	1.86	0.42
2:P:193:LEU:HB2	2:R:277:PRO:HG2	1.99	0.42
1:Q:20:ARG:HE	1:Q:21:LYS:HZ2	1.67	0.42
1:Q:37:VAL:CG2	1:Q:62:GLU:HA	2.49	0.42
1:Q:55:ALA:HB1	1:Q:67:ASP:OD1	2.19	0.42
1:A:185:LEU:HD12	2:D:10:ARG:HH12	1.74	0.42
2:B:59:THR:HA	2:B:64:ILE:HA	2.00	0.42
2:B:193:LEU:O	2:B:197:ARG:HG2	2.19	0.42
2:B:278:LEU:HB3	2:B:283:PHE:HE1	1.84	0.42
1:C:6:ASN:ND2	1:C:96:THR:H	2.17	0.42
1:C:70:PRO:C	1:C:71:ILE:HD12	2.44	0.42
1:C:72:LYS:HB3	1:C:72:LYS:HE2	1.36	0.42
2:D:10:ARG:CG	3:D:401:NAD:O1N	2.67	0.42
2:D:92:VAL:HG21	2:D:108:HIS:HB3	2.01	0.42
1:E:139:HIS:CE1	1:E:333:PRO:HD2	2.55	0.42
1:E:149:CYS:HA	1:E:152:ASN:HB2	2.01	0.42
1:E:172:MET:HE1	1:E:174:THR:HG22	2.01	0.42
1:E:300:MET:SD	1:G:171:THR:OG1	2.76	0.42
2:F:95:GLY:HA2	2:F:119:THR:HG21	2.01	0.42
2:F:159:LYS:HG3	2:F:218:LEU:HD22	2.01	0.42
1:G:9:GLY:HA2	3:G:401:NAD:H4B	2.01	0.42
1:G:24:PRO:HB2	1:G:329:ALA:HB1	2.01	0.42
1:G:58:LYS:HE2	1:G:68:GLY:N	2.34	0.42
1:G:79:PRO:HG2	1:G:107:LYS:HB2	2.01	0.42
1:G:281:VAL:HA	1:G:284:ARG:HG3	2.00	0.42
2:H:28:VAL:HG13	2:H:69:LYS:HZ3	1.83	0.42
2:H:172:MET:O	2:H:173:THR:OG1	2.33	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:271:LEU:HD13	2:H:271:LEU:HA	1.84	0.42
1:I:1:LEU:HD21	1:I:332:TRP:NE1	2.33	0.42
2:J:119:THR:OG1	2:J:120:ALA:N	2.52	0.42
2:J:168:ILE:N	2:J:245:GLN:O	2.52	0.42
2:J:176:HIS:CG	2:J:231:ARG:HG2	2.54	0.42
2:J:205:PRO:HA	2:J:230:LEU:HD23	2.01	0.42
1:K:9:GLY:HA2	3:K:401:NAD:O3B	2.19	0.42
1:K:84:TRP:NE1	1:K:92:VAL:HG21	2.35	0.42
1:K:151:THR:HA	1:K:154:LEU:HG	2.01	0.42
2:L:145:SER:OG	2:L:146:ASN:N	2.52	0.42
2:L:162:ASP:OD1	2:L:166:GLY:HA2	2.19	0.42
2:L:190:HIS:HB3	2:L:196:ALA:HB2	2.01	0.42
2:L:190:HIS:ND1	2:L:195:ARG:HB2	2.33	0.42
2:L:253:GLU:O	2:L:256:ASN:N	2.51	0.42
2:P:29:VAL:O	2:P:30:ILE:HD13	2.19	0.42
2:P:283:PHE:N	2:P:283:PHE:CD1	2.87	0.42
1:Q:230:LEU:HD13	1:Q:230:LEU:HA	1.63	0.42
2:R:20:ARG:NH2	2:R:319:GLN:O	2.53	0.42
2:R:195:ARG:HH21	2:R:231:ARG:HH21	1.66	0.42
2:R:289:SER:O	2:R:311:TYR:HA	2.19	0.42
1:A:139:HIS:CE1	1:A:328:VAL:HG13	2.54	0.42
1:A:190:HIS:HE1	1:A:191:ARG:HE	1.67	0.42
2:B:102:ARG:HA	2:B:105:ALA:HB3	2.02	0.42
2:B:171:THR:O	2:B:242:LEU:HD12	2.18	0.42
2:B:234:THR:OG1	2:B:236:ASN:N	2.45	0.42
2:B:277:PRO:HG3	2:D:193:LEU:HD13	2.02	0.42
3:B:401:NAD:H2D	3:B:401:NAD:H6N	1.72	0.42
1:C:77:ARG:CZ	3:C:401:NAD:C4A	2.97	0.42
1:C:134:GLU:HB3	1:C:327:LEU:HD13	2.00	0.42
1:C:271:LEU:HD11	1:C:273:VAL:HG22	2.01	0.42
2:D:84:TRP:HA	2:D:84:TRP:HE3	1.84	0.42
2:D:106:GLY:O	2:D:110:GLN:NE2	2.52	0.42
2:D:165:PHE:HZ	2:D:254:GLU:HG2	1.83	0.42
2:D:192:ASP:OD2	2:D:194:ARG:HB2	2.20	0.42
2:D:204:VAL:HB	2:D:231:ARG:H	1.84	0.42
2:D:240:VAL:HG12	2:D:311:TYR:HD1	1.84	0.42
1:E:202:ASN:OD1	1:G:281:VAL:HG22	2.20	0.42
2:F:6:ASN:HB2	2:F:84:TRP:CH2	2.52	0.42
2:F:45:LYS:HD3	2:F:57:VAL:CB	2.48	0.42
2:F:49:ILE:HG23	2:F:284:ARG:NH1	2.34	0.42
2:F:55:ALA:O	2:F:57:VAL:N	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:296:LEU:HB2	2:F:308:ILE:HG13	2.00	0.42
1:G:17:ARG:CZ	1:G:53:PHE:HB2	2.49	0.42
1:G:154:LEU:HG	1:G:158:VAL:HG11	2.01	0.42
1:G:242:LEU:HB3	1:G:307:VAL:HG12	2.02	0.42
1:G:264:ALA:HA	1:G:268:LYS:NZ	2.35	0.42
1:G:300:MET:N	1:G:304:MET:O	2.52	0.42
2:H:14:ASN:OD1	2:H:315:TRP:HA	2.19	0.42
2:H:109:LEU:HD11	2:H:143:ILE:HG23	2.00	0.42
2:H:119:THR:O	2:H:317:TYR:OH	2.37	0.42
2:H:179:THR:N	2:H:182:GLN:OE1	2.50	0.42
2:H:179:THR:N	2:H:182:GLN:HE22	2.17	0.42
1:I:0:LYS:N	1:I:26:ASP:OD1	2.47	0.42
1:I:280:SER:C	1:I:283:PHE:H	2.28	0.42
2:J:18:CYS:O	2:J:20:ARG:HG2	2.18	0.42
2:J:59:THR:HA	2:J:64:ILE:HG23	2.01	0.42
1:K:70:PRO:C	1:K:71:ILE:HD12	2.44	0.42
1:K:166:GLY:HA3	1:K:247:GLU:OE1	2.19	0.42
1:K:239:VAL:HA	1:K:309:ALA:O	2.19	0.42
1:K:243:VAL:O	1:K:244:VAL:HG13	2.19	0.42
2:L:176:HIS:HB3	2:L:231:ARG:HA	2.01	0.42
1:O:1:LEU:HD23	1:O:91:ILE:HG13	2.00	0.42
1:Q:15:PHE:O	1:Q:18:CYS:HB2	2.19	0.42
1:Q:18(B):HIS:CE1	1:Q:69:LYS:HD2	2.54	0.42
1:Q:58:LYS:HD3	1:Q:59:ILE:N	2.34	0.42
1:Q:256:ASN:C	1:Q:260:ARG:HH21	2.27	0.42
1:A:220:GLN:N	1:A:220:GLN:CD	2.77	0.42
2:B:66:VAL:N	2:B:69:LYS:O	2.38	0.42
2:B:176:HIS:ND1	2:B:231:ARG:HG2	2.34	0.42
1:C:234:THR:CB	1:C:237:VAL:HG12	2.49	0.42
2:D:224:LYS:HZ1	2:D:225:LEU:HD23	1.84	0.42
1:E:0:LYS:HE3	1:E:24:PRO:O	2.19	0.42
1:E:9:GLY:O	1:E:13:ARG:HG3	2.19	0.42
1:E:18(A):TRP:CH2	1:E:71:ILE:HD11	2.55	0.42
2:F:28:VAL:HG13	2:F:70:VAL:O	2.19	0.42
2:F:139:HIS:HD2	2:F:333:GLN:HB2	1.84	0.42
2:F:151:THR:HG21	2:F:213:ALA:HB3	2.01	0.42
2:F:170:GLY:HA2	2:H:304:MET:HE1	2.01	0.42
1:G:300:MET:HB3	1:G:304:MET:CB	2.48	0.42
2:H:85:GLY:C	2:H:88:GLY:H	2.27	0.42
2:H:137:TYR:CZ	2:H:328:VAL:HA	2.55	0.42
2:H:319:GLN:HB3	2:H:320:ARG:HH21	1.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:306:LYS:HD2	1:K:228:ILE:HD13	2.01	0.42
2:J:128:TYR:HD2	2:J:144:ILE:HB	1.84	0.42
2:J:306:LYS:HZ2	2:L:228:ILE:H	1.67	0.42
2:L:84:TRP:HA	2:L:84:TRP:HE3	1.85	0.42
2:L:205:PRO:HA	2:L:230:LEU:HD23	2.00	0.42
1:O:116:VAL:O	1:O:144:ILE:HG23	2.19	0.42
1:O:132:VAL:HG11	1:O:155:ALA:HB1	2.01	0.42
2:P:1:LEU:C	2:P:26:ASP:H	2.28	0.42
2:P:300:MET:HE1	2:R:226:ASN:HB3	2.00	0.42
1:Q:109:ILE:HD12	1:Q:114:LYS:C	2.44	0.42
2:R:251:PHE:CE1	2:R:254:GLU:HB2	2.54	0.42
2:R:291:THR:O	2:R:292:ILE:HD13	2.19	0.42
1:A:5:ILE:HB	1:A:30:VAL:HG13	2.02	0.42
1:A:211:ALA:CB	1:A:227:GLY:H	2.33	0.42
1:A:250:VAL:HG23	1:A:251:THR:O	2.20	0.42
2:B:14:ASN:ND2	2:B:314:GLU:HB3	2.34	0.42
2:B:194:ARG:NH1	2:D:279:VAL:HG13	2.35	0.42
1:C:37:VAL:HG11	1:C:64:PHE:HB3	2.01	0.42
1:C:60(A):ASP:OD1	1:C:62:GLU:HG2	2.19	0.42
1:C:118:ILE:HB	1:C:145:SER:HB2	2.02	0.42
2:D:145:SER:OG	2:D:146:ASN:N	2.51	0.42
2:D:274:CYS:HB3	2:D:276:GLU:CD	2.45	0.42
1:E:53:PHE:CE2	1:E:55:ALA:HB3	2.54	0.42
1:E:90:ASP:OD1	1:E:90:ASP:N	2.52	0.42
1:E:149:CYS:HB3	1:E:317:TYR:CD1	2.54	0.42
1:E:204:VAL:CG2	1:E:231:ARG:HB2	2.49	0.42
1:E:246:ILE:N	1:E:303:ASP:O	2.53	0.42
2:F:31:ASN:HA	2:F:73:VAL:HG23	2.00	0.42
2:F:140:ALA:N	2:F:333:GLN:OE1	2.52	0.42
1:G:21:LYS:HE2	1:G:21:LYS:HB2	1.84	0.42
1:G:83:PRO:HB2	1:G:86:GLU:HB3	2.02	0.42
2:H:53:PHE:HD1	2:H:54:ASP:N	2.18	0.42
2:H:199:ALA:C	2:H:201:LEU:N	2.76	0.42
2:H:255:VAL:O	2:H:258:ALA:HB3	2.20	0.42
2:H:293:ASP:HB3	2:H:308:ILE:HG13	2.00	0.42
1:I:40:ALA:HA	1:I:43:LEU:HD12	2.02	0.42
2:J:94:GLU:HG3	2:J:99:PHE:CD2	2.55	0.42
2:J:208:THR:HG22	2:J:229:ALA:HB2	2.01	0.42
2:J:240:VAL:HG13	2:J:309:ALA:CB	2.48	0.42
1:K:129:VAL:HG13	1:K:132:VAL:HB	2.00	0.42
1:K:276:ILE:HD13	1:K:276:ILE:H	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:172:MET:SD	2:L:227:GLY:HA3	2.60	0.42
1:O:37:VAL:CG1	1:O:62:GLU:HA	2.21	0.42
1:O:166:GLY:O	1:O:246:ILE:HD12	2.19	0.42
1:O:172:MET:HG3	1:O:242:LEU:HB2	2.02	0.42
1:O:186:ASP:H	2:R:10:ARG:NH2	2.17	0.42
1:O:195:ARG:HH21	1:O:231:ARG:CZ	2.33	0.42
1:O:202:ASN:OD1	1:Q:280:SER:HB2	2.19	0.42
2:P:6:ASN:HB2	2:P:84:TRP:HH2	1.84	0.42
2:P:12:GLY:O	2:P:16:LEU:HG	2.20	0.42
2:P:13:ARG:HB3	2:P:44:LEU:HB2	2.01	0.42
2:P:31:ASN:OD1	2:P:76:ASP:N	2.52	0.42
2:P:120:ALA:HB2	3:P:401:NAD:H2D	2.01	0.42
1:Q:20:ARG:HA	1:Q:20:ARG:CZ	2.50	0.42
2:R:60:ALA:H	2:R:64:ILE:HA	1.85	0.42
2:R:99:PHE:HD1	2:R:104:GLY:HA3	1.81	0.42
1:A:186:ASP:CG	1:A:197:ARG:HH21	2.26	0.42
1:A:272:ASP:HB3	1:A:291:THR:OG1	2.20	0.42
1:A:306:LYS:NZ	1:C:228:ILE:HG22	2.35	0.42
2:B:237:VAL:HG13	2:B:311:TYR:O	2.19	0.42
2:B:253:GLU:HA	2:B:256:ASN:OD1	2.19	0.42
1:C:14:ASN:H	1:C:14:ASN:HD22	1.67	0.42
1:C:28:VAL:HA	1:C:71:ILE:CG1	2.49	0.42
1:E:0:LYS:H2	1:E:26:ASP:N	2.17	0.42
1:E:107:LYS:HA	1:E:110:GLN:CD	2.45	0.42
1:E:155:ALA:N	1:E:156:PRO:HD2	2.35	0.42
1:G:57:VAL:HG23	1:G:65:SER:O	2.20	0.42
1:G:248:LYS:HA	1:G:248(A):VAL:CG1	2.44	0.42
2:H:1:LEU:HA	2:H:1:LEU:HD12	1.86	0.42
2:H:38:LYS:H	2:H:38:LYS:HZ2	1.66	0.42
2:H:251:PHE:CE1	2:H:254:GLU:HB2	2.54	0.42
2:H:253:GLU:CD	2:H:256:ASN:HB2	2.44	0.42
2:H:311:TYR:CE2	2:H:313:ASN:HB3	2.54	0.42
1:I:1:LEU:HD21	1:I:332:TRP:HE1	1.85	0.42
1:I:9:GLY:O	1:I:10:ARG:C	2.60	0.42
1:I:220:GLN:CD	1:I:220:GLN:N	2.77	0.42
2:J:1:LEU:O	2:J:3:VAL:HG23	2.19	0.42
2:J:7:GLY:O	2:J:95:GLY:HA3	2.19	0.42
2:J:179:THR:N	2:J:182:GLN:OE1	2.47	0.42
2:J:260:ARG:HH22	2:J:294:SER:HG	1.65	0.42
1:K:81:LYS:HE2	1:K:81:LYS:HB2	1.58	0.42
1:K:89:ILE:O	1:K:113:ALA:HA	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:133:ASN:N	1:K:134:GLU:OE1	2.52	0.42
1:K:279:VAL:N	1:K:282:ASP:OD2	2.41	0.42
2:L:38:LYS:C	2:L:41:SER:HG	2.18	0.42
2:L:247:SER:OG	2:L:248:LYS:N	2.52	0.42
2:L:268:LYS:O	2:L:270:ILE:HG12	2.19	0.42
1:O:83:PRO:HA	1:O:86:GLU:HB2	2.00	0.42
1:O:100:VAL:O	1:O:122:ALA:HB1	2.19	0.42
1:O:139:HIS:ND1	1:O:139(A):ASP:N	2.66	0.42
2:R:199:ALA:C	2:R:201:LEU:N	2.76	0.42
2:R:255:VAL:O	2:R:258:ALA:HB3	2.20	0.42
2:R:293:ASP:HB3	2:R:308:ILE:HG13	2.02	0.42
1:A:29:VAL:HG13	1:A:72:LYS:HB2	2.02	0.42
1:A:155:ALA:O	1:A:156:PRO:C	2.63	0.42
1:A:183:ARG:HH22	1:G:357:GLU:HA	1.85	0.42
1:A:211:ALA:HB1	1:A:227:GLY:H	1.84	0.42
1:C:77:ARG:HA	1:C:77:ARG:HD2	1.87	0.42
1:C:344:PRO:C	1:C:346:GLU:N	2.77	0.42
2:D:29:VAL:HA	2:D:72:LYS:HB2	2.00	0.42
1:E:18(B):HIS:HA	1:E:69:LYS:HZ1	1.81	0.42
1:E:171:THR:OG1	1:G:306:LYS:NZ	2.25	0.42
1:E:246:ILE:N	1:E:304:MET:HA	2.31	0.42
2:F:123:GLY:O	2:F:125:ILE:N	2.48	0.42
1:G:319:GLN:O	1:G:320:ARG:C	2.62	0.42
1:G:327:LEU:HA	1:G:330:ASN:HD21	1.84	0.42
2:H:28:VAL:C	2:H:71:ILE:HG23	2.44	0.42
2:H:30:ILE:HG22	2:H:31:ASN:H	1.85	0.42
2:H:44:LEU:O	2:H:53:PHE:HB2	2.19	0.42
2:H:64:ILE:O	2:H:71:ILE:N	2.53	0.42
2:H:174:THR:HG1	2:H:175:THR:N	2.17	0.42
2:J:183:ARG:HD2	2:J:187:ALA:HB3	2.02	0.42
2:J:190:HIS:HB3	2:J:196:ALA:HB2	2.02	0.42
2:J:285:CYS:HA	2:J:315:TRP:CD1	2.54	0.42
2:J:311:TYR:HE2	2:J:313:ASN:HB3	1.85	0.42
1:K:30:VAL:HG22	1:K:73:VAL:CG2	2.45	0.42
1:K:119:THR:OG1	1:K:119:THR:O	2.34	0.42
2:L:3:VAL:HG22	2:L:91:LEU:HB3	2.00	0.42
2:L:159:LYS:HB2	2:L:218:LEU:HD13	2.00	0.42
2:L:190:HIS:CE1	2:L:195:ARG:HB2	2.55	0.42
1:O:83:PRO:O	1:O:87:LEU:HB2	2.20	0.42
1:O:175:THR:O	1:O:238:SER:HA	2.20	0.42
1:O:204:VAL:CG2	1:O:231:ARG:HB2	2.50	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:11:ILE:H	2:P:11:ILE:HG12	1.45	0.42
2:P:38:LYS:H	2:P:38:LYS:HD3	1.83	0.42
2:P:215:ALA:HA	2:P:222:LYS:HG2	2.01	0.42
2:P:264:ASP:HA	2:P:268:LYS:NZ	2.34	0.42
2:P:267:LEU:HD13	2:P:271:LEU:HB2	2.02	0.42
2:P:281:ILE:HD13	2:P:284:ARG:HH21	1.85	0.42
1:Q:157:PHE:O	1:Q:161:LEU:HG	2.20	0.42
1:Q:215:SER:CB	1:Q:222:LYS:HA	2.49	0.42
2:R:89:ILE:HD13	2:R:89:ILE:HA	1.86	0.42
2:R:164:LYS:HB3	2:R:165:PHE:CD1	2.54	0.42
2:R:275:ASP:OD1	2:R:295:SER:N	2.27	0.42
1:A:194:ARG:C	1:A:196:ALA:H	2.28	0.42
2:B:37:VAL:HG23	2:B:38:LYS:HD3	2.01	0.42
2:B:320:ARG:O	2:B:324:LEU:N	2.42	0.42
1:C:109:ILE:HD12	1:C:113:ALA:HB3	2.01	0.42
1:E:178:TYR:CE1	1:E:235:PRO:HA	2.54	0.42
2:F:118:ILE:HB	2:F:145:SER:CB	2.50	0.42
2:F:135:GLU:OE1	2:F:136:GLY:N	2.44	0.42
1:G:1:LEU:O	1:G:3:VAL:HG23	2.19	0.42
1:G:94:GLU:HB2	1:G:118:ILE:HG12	2.01	0.42
2:H:267:LEU:HA	2:H:267:LEU:HD23	1.82	0.42
1:I:243:VAL:HA	1:I:306:LYS:HA	2.02	0.42
1:I:254:ASP:OD1	1:I:255:VAL:N	2.53	0.42
2:J:1:LEU:HD21	2:J:328:VAL:HB	2.01	0.42
2:J:14:ASN:ND2	2:J:315:TRP:HA	2.35	0.42
2:J:105:ALA:HA	2:J:108:HIS:CD2	2.54	0.42
2:J:159:LYS:HE3	2:J:159:LYS:HB3	1.85	0.42
2:J:324:LEU:HD12	2:J:327:ILE:HB	2.02	0.42
1:K:45:LYS:HZ3	1:K:57:VAL:H	1.67	0.42
1:K:137:TYR:CG	1:K:138:GLY:N	2.87	0.42
1:K:211:ALA:O	1:K:214:VAL:HG22	2.19	0.42
2:L:28:VAL:O	2:L:28:VAL:HG12	2.20	0.42
2:L:183:ARG:CZ	2:L:190:HIS:HB2	2.50	0.42
2:L:239:VAL:HG13	2:L:310:TRP:CD2	2.55	0.42
1:O:93:ILE:HA	1:O:117:ILE:HG22	2.01	0.42
1:O:161:LEU:HD11	1:O:167:ILE:HD11	2.02	0.42
1:O:237:VAL:HG21	1:O:280:SER:HB3	2.02	0.42
2:P:118:ILE:HB	2:P:145:SER:CB	2.50	0.42
2:P:129:VAL:HG13	2:P:130:VAL:O	2.19	0.42
1:Q:109:ILE:HA	1:Q:113:ALA:HB3	2.02	0.42
2:R:76:ASP:OD1	2:R:77:ARG:N	2.53	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:101:ASP:HB2	2:R:103:ASP:OD1	2.20	0.42
2:R:175:THR:O	2:R:238:SER:OG	2.37	0.42
2:R:319:GLN:HB3	2:R:320:ARG:HH21	1.84	0.42
1:A:10:ARG:HD2	1:A:13:ARG:NH2	2.35	0.42
1:A:92:VAL:O	1:A:117:ILE:HG22	2.19	0.42
1:A:192:ASP:O	1:A:196:ALA:HB2	2.20	0.42
1:A:246:ILE:HD12	1:A:246:ILE:HA	1.91	0.42
1:C:1:LEU:O	1:C:3:VAL:HG23	2.20	0.42
1:C:4:ALA:O	1:C:93:ILE:N	2.53	0.42
1:C:23:SER:C	1:C:25:LEU:H	2.27	0.42
1:C:291:THR:CB	1:C:310:TRP:HB2	2.50	0.42
2:D:15:PHE:CE1	2:D:322:VAL:HG22	2.55	0.42
2:D:109:LEU:HD21	2:D:116:VAL:HG23	2.01	0.42
2:D:175:THR:OG1	2:D:239:VAL:N	2.48	0.42
2:D:239:VAL:HG13	2:D:310:TRP:CD2	2.55	0.42
1:E:42:HIS:CG	2:H:193:LEU:HD22	2.54	0.42
1:E:103:PRO:N	1:K:110:GLN:HG2	2.34	0.42
1:E:129:VAL:HG11	1:E:152:ASN:OD1	2.20	0.42
1:E:202:ASN:OD1	1:G:280:SER:N	2.52	0.42
1:E:325:ALA:HA	1:E:328:VAL:HB	2.01	0.42
2:F:300:MET:HE1	2:H:226:ASN:HB3	2.01	0.42
2:F:306:LYS:NZ	2:H:173:THR:HG1	2.15	0.42
2:H:12:GLY:O	2:H:16:LEU:HB2	2.20	0.42
2:H:60:ALA:H	2:H:64:ILE:HA	1.85	0.42
2:H:84:TRP:CE3	2:H:89:ILE:HG21	2.55	0.42
2:H:122:GLY:CA	2:H:125:ILE:HG12	2.49	0.42
1:I:129:VAL:HG21	1:I:152:ASN:HA	2.00	0.42
1:I:137:TYR:OH	1:I:139:HIS:HA	2.19	0.42
2:J:102:ARG:HA	2:J:105:ALA:HB3	2.01	0.42
2:J:218:LEU:HA	2:J:218:LEU:HD23	1.72	0.42
2:J:253:GLU:HA	2:J:256:ASN:OD1	2.19	0.42
1:K:30:VAL:O	1:K:74:VAL:N	2.38	0.42
1:K:62:GLU:HB2	1:K:73:VAL:O	2.20	0.42
1:K:257:ASN:HA	1:K:260:ARG:CD	2.50	0.42
1:K:321:VAL:HA	1:K:324:LEU:HD12	2.01	0.42
2:L:58:LYS:HE2	2:L:59:THR:N	2.35	0.42
2:L:90:ASP:HA	2:L:114:LYS:HE2	2.02	0.42
2:L:169:LYS:HD2	2:L:245:GLN:OE1	2.20	0.42
1:O:78:ASP:CG	1:O:80:LEU:H	2.28	0.42
1:O:246:ILE:HB	1:O:303:ASP:HA	2.02	0.42
1:O:253:GLU:O	1:O:255:VAL:N	2.48	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:254:ASP:HA	1:O:257:ASN:HD22	1.84	0.42
1:O:285:CYS:HB3	1:O:315:TRP:CZ2	2.54	0.42
2:P:170:GLY:HA2	2:R:304:MET:HE1	2.01	0.42
2:P:183:ARG:HH22	2:P:191:ARG:NH1	2.17	0.42
2:P:296:LEU:HB2	2:P:308:ILE:HG13	2.01	0.42
2:P:312:ASP:CG	2:P:315:TRP:HB3	2.44	0.42
1:Q:218:LEU:HD22	1:Q:220:GLN:NE2	2.35	0.42
2:R:90:ASP:HB3	2:R:332:TRP:CH2	2.54	0.42
2:R:237:VAL:HG13	2:R:311:TYR:C	2.45	0.42
2:R:272:SER:O	2:R:291:THR:HA	2.20	0.42
1:A:100:VAL:HG12	1:A:122:ALA:HA	2.01	0.42
1:A:126:PRO:HB2	1:A:128:TYR:CD1	2.55	0.42
1:A:164:GLU:HB3	1:A:165:LEU:HD12	2.01	0.42
2:B:7:GLY:HA3	2:B:96:THR:N	2.34	0.42
2:B:159:LYS:HD2	2:B:160:VAL:HG23	2.02	0.42
1:C:31:ASN:OD1	1:C:76:ASN:N	2.52	0.42
2:D:59:THR:HA	2:D:64:ILE:HA	2.02	0.42
2:D:253:GLU:OE2	2:D:257:ALA:N	2.53	0.42
2:D:291:THR:C	2:D:310:TRP:HD1	2.27	0.42
1:E:105:ALA:O	1:E:109:ILE:N	2.33	0.42
1:E:109:ILE:HD13	1:E:113:ALA:HB3	2.02	0.42
1:E:298:MET:O	1:E:306:LYS:HB3	2.20	0.42
2:F:3:VAL:HA	2:F:91:LEU:H	1.85	0.42
2:F:197:ARG:HH22	1:G:47:ASP:N	2.17	0.42
2:F:312:ASP:CG	2:F:315:TRP:HB3	2.45	0.42
2:F:321:VAL:O	2:F:325:ALA:N	2.46	0.42
1:G:65:SER:HA	1:G:69:LYS:O	2.20	0.42
1:G:114:LYS:C	1:G:115:LYS:HD3	2.45	0.42
1:G:226:ASN:CG	1:G:227:GLY:H	2.23	0.42
1:G:254:ASP:OD1	1:G:255:VAL:HG23	2.20	0.42
2:H:94:GLU:OE1	2:H:118:ILE:HD11	2.19	0.42
2:H:239:VAL:HG13	2:H:310:TRP:HA	2.02	0.42
1:I:38:LYS:O	1:I:41:THR:HB	2.20	0.42
1:I:57:VAL:HG23	1:I:64:PHE:CE2	2.55	0.42
1:I:164:GLU:O	1:I:248:LYS:NZ	2.46	0.42
1:I:221:LEU:HD13	1:I:224:LYS:HD2	2.02	0.42
2:J:2:LYS:HB3	2:J:2:LYS:HE3	1.80	0.42
2:J:89:ILE:O	2:J:114:LYS:HG3	2.20	0.42
2:J:320:ARG:O	2:J:324:LEU:N	2.42	0.42
1:K:10:ARG:C	1:K:13:ARG:HH12	2.28	0.42
1:K:118:ILE:HD12	1:K:144:ILE:O	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:194:ARG:HB3	1:K:204:VAL:CG2	2.49	0.42
1:O:24:PRO:C	1:O:25:LEU:HD13	2.45	0.41
1:O:281:VAL:HG11	2:P:48:SER:HA	2.02	0.41
2:P:20:ARG:HE	2:P:319:GLN:NE2	2.18	0.41
2:P:59:THR:HA	2:P:64:ILE:HG23	2.01	0.41
2:P:187:ALA:O	2:P:196:ALA:HB1	2.19	0.41
2:P:252:ALA:O	2:P:255:VAL:HG22	2.20	0.41
2:P:262:SER:HA	2:P:265:ASN:ND2	2.35	0.41
1:Q:81:LYS:HA	1:Q:81:LYS:HD2	1.85	0.41
1:Q:107:LYS:HA	1:Q:110:GLN:HB2	2.01	0.41
1:Q:139:HIS:CE1	1:Q:333:PRO:HA	2.55	0.41
1:Q:167:ILE:O	1:Q:221:LEU:HD11	2.19	0.41
1:Q:254:ASP:OD1	1:Q:255:VAL:HG23	2.20	0.41
1:Q:329:ALA:O	1:Q:332:TRP:HB2	2.20	0.41
2:R:21:LYS:HZ2	2:R:21:LYS:N	2.09	0.41
2:R:128:TYR:CD2	2:R:144:ILE:HD12	2.55	0.41
2:R:137:TYR:CZ	2:R:328:VAL:HA	2.55	0.41
2:R:159:LYS:O	2:R:163:GLN:N	2.35	0.41
2:R:168:ILE:H	2:R:168:ILE:HG13	1.61	0.41
2:R:331:LYS:HB2	2:R:333:GLN:NE2	2.32	0.41
1:A:124:ASP:O	1:G:103:PRO:HD3	2.20	0.41
1:A:239:VAL:HG23	1:A:309:ALA:O	2.20	0.41
2:B:66:VAL:HB	2:B:69:LYS:HB3	2.02	0.41
2:B:105:ALA:HA	2:B:108:HIS:CD2	2.55	0.41
2:B:194:ARG:NH2	2:D:277:PRO:HA	2.34	0.41
2:B:263:ALA:O	2:B:268:LYS:N	2.52	0.41
1:C:78:ASP:OD2	1:C:81:LYS:N	2.31	0.41
1:C:139:HIS:NE2	1:C:139(A):ASP:OD1	2.53	0.41
1:C:183:ARG:HA	1:C:183:ARG:HH11	1.83	0.41
2:D:183:ARG:CZ	2:D:190:HIS:HB2	2.50	0.41
2:D:265:ASN:OD1	2:D:266:GLU:HG2	2.20	0.41
1:E:37:VAL:HG23	1:E:61:ASN:C	2.45	0.41
1:E:252:ALA:O	1:E:253:GLU:C	2.63	0.41
2:F:150:THR:O	2:F:154:LEU:HG	2.20	0.41
2:F:157:PHE:CE2	2:F:158:VAL:HG13	2.55	0.41
2:F:285:CYS:HA	2:F:315:TRP:CD1	2.55	0.41
1:G:20:ARG:HG2	1:G:20:ARG:HH11	1.85	0.41
1:G:20:ARG:HD3	1:G:21:LYS:HZ3	1.83	0.41
1:G:78:ASP:O	1:G:82:LEU:HG	2.20	0.41
1:G:179:THR:OG1	1:G:181:ASP:OD1	2.25	0.41
1:G:205:PRO:HG2	1:G:228:ILE:HD12	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:222:LYS:HD2	1:G:222:LYS:HA	1.82	0.41
2:H:29:VAL:HA	2:H:72:LYS:O	2.20	0.41
2:H:272:SER:O	2:H:291:THR:HA	2.20	0.41
1:I:5:ILE:O	1:I:31:ASN:N	2.51	0.41
1:I:40:ALA:HA	1:I:43:LEU:HB2	2.02	0.41
1:I:69:LYS:HA	1:I:69:LYS:HD3	1.76	0.41
1:I:153:CYS:O	1:I:156:PRO:HD2	2.20	0.41
1:I:344:PRO:C	1:I:346:GLU:N	2.77	0.41
2:J:165:PHE:CZ	2:J:255:VAL:HB	2.54	0.41
2:J:173:THR:HG1	2:L:306:LYS:NZ	2.14	0.41
1:K:3:VAL:O	1:K:28:VAL:HG12	2.20	0.41
1:K:64:PHE:HE2	1:K:66:ILE:HD11	1.84	0.41
2:L:9:GLY:O	2:L:10:ARG:C	2.63	0.41
2:L:11:ILE:HG12	3:L:401:NAD:O2N	2.20	0.41
2:L:158:VAL:HA	2:L:161:LEU:HD23	2.01	0.41
2:L:274:CYS:HB3	2:L:276:GLU:CD	2.45	0.41
1:O:33:SER:CB	1:O:77:ARG:NH1	2.67	0.41
1:O:46:TYR:HA	1:O:51:GLY:C	2.45	0.41
1:O:154:LEU:HD13	1:O:214:VAL:HG12	2.02	0.41
1:O:214:VAL:HG23	1:O:215:SER:H	1.84	0.41
1:O:252:ALA:HB2	1:O:299:VAL:HG23	2.02	0.41
1:O:285:CYS:HA	1:O:315:TRP:CD2	2.54	0.41
2:P:232:VAL:O	2:P:234:THR:N	2.51	0.41
2:P:303:ASP:OD1	2:P:303:ASP:N	2.48	0.41
1:Q:186:ASP:HA	1:Q:196:ALA:O	2.20	0.41
1:Q:204:VAL:HB	1:Q:231:ARG:HB2	2.01	0.41
1:Q:274:CYS:HB3	1:Q:292:ILE:C	2.45	0.41
1:Q:325:ALA:O	1:Q:329:ALA:N	2.36	0.41
2:R:10:ARG:H	2:R:10:ARG:HG2	1.55	0.41
2:R:12:GLY:O	2:R:16:LEU:HB2	2.20	0.41
2:R:177:SER:CA	2:R:234:THR:HG23	2.42	0.41
3:R:401:NAD:H6N	3:R:401:NAD:H2D	1.81	0.41
1:A:53:PHE:HB3	1:A:55:ALA:O	2.20	0.41
2:B:37:VAL:HG12	2:B:64:ILE:HD11	2.02	0.41
2:B:96:THR:HB	3:B:401:NAD:N7A	2.35	0.41
1:C:0:LYS:H3	1:C:24:PRO:C	2.25	0.41
1:C:20:ARG:HE	1:C:21:LYS:HD3	1.85	0.41
1:C:62:GLU:CD	1:C:62:GLU:N	2.78	0.41
1:C:77:ARG:HD2	3:C:401:NAD:N1A	2.35	0.41
1:C:84:TRP:HB3	1:C:89:ILE:HB	2.00	0.41
1:C:157:PHE:O	1:C:160:VAL:HG13	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:90:ASP:HA	2:D:114:LYS:HE2	2.02	0.41
2:D:173:THR:HG1	2:D:228:ILE:HG13	1.84	0.41
2:D:186:ASP:N	2:D:198:ALA:HB2	2.36	0.41
2:D:199:ALA:HA	2:D:202:ASN:OD1	2.19	0.41
2:D:268:LYS:O	2:D:270:ILE:HG12	2.20	0.41
1:E:79:PRO:HB3	1:E:108:HIS:CG	2.55	0.41
2:F:213:ALA:HA	2:F:216:LEU:HD13	2.02	0.41
2:F:251:PHE:CE2	2:F:253:GLU:HB3	2.55	0.41
1:G:116:VAL:HB	1:G:144:ILE:N	2.27	0.41
1:G:154:LEU:HD23	1:G:214:VAL:HG11	2.01	0.41
1:G:197:ARG:HD2	1:G:197:ARG:HA	1.79	0.41
2:H:94:GLU:OE2	2:H:96:THR:OG1	2.30	0.41
2:H:126:PRO:HG2	2:H:144:ILE:HG22	2.03	0.41
1:I:17:ARG:CZ	1:I:53:PHE:HA	2.50	0.41
1:I:46:TYR:HD2	1:I:52:THR:OG1	2.02	0.41
1:I:193:LEU:HB2	1:K:277:PRO:HG2	2.02	0.41
1:I:316:GLY:O	1:I:320:ARG:HD3	2.20	0.41
2:J:115:LYS:NZ	2:J:139:HIS:O	2.31	0.41
2:J:124:ASP:N	2:J:124:ASP:OD1	2.53	0.41
2:J:194:ARG:HH12	2:L:278:LEU:C	2.20	0.41
1:K:62:GLU:O	1:K:73:VAL:N	2.52	0.41
1:K:347:ASP:O	1:K:351:ASP:N	2.29	0.41
2:L:2:LYS:H	2:L:2:LYS:HG2	1.63	0.41
2:L:101:ASP:CG	2:L:104:GLY:H	2.24	0.41
2:L:106:GLY:O	2:L:110:GLN:NE2	2.53	0.41
2:L:165:PHE:HA	2:L:248:LYS:NZ	2.36	0.41
2:L:244:VAL:O	2:L:246:VAL:HG13	2.20	0.41
2:P:150:THR:O	2:P:154:LEU:HG	2.20	0.41
2:P:183:ARG:NH2	2:P:190:HIS:HA	2.35	0.41
2:P:213:ALA:HA	2:P:216:LEU:HD13	2.02	0.41
2:P:251:PHE:CE2	2:P:253:GLU:HB3	2.55	0.41
1:Q:160:VAL:HA	1:Q:163:GLU:CD	2.45	0.41
2:R:183:ARG:NE	2:R:190:HIS:HB2	2.34	0.41
1:A:10:ARG:O	1:A:14:ASN:ND2	2.23	0.41
1:A:46:TYR:CE2	2:B:278:LEU:HD11	2.55	0.41
1:A:148:SER:OG	1:A:150:THR:HB	2.20	0.41
1:A:195:ARG:C	1:A:197:ARG:H	2.28	0.41
2:B:94:GLU:HG3	2:B:99:PHE:HD2	1.85	0.41
2:B:176:HIS:O	2:B:232:VAL:HG22	2.20	0.41
1:C:57:VAL:HG13	1:C:66:ILE:HA	2.01	0.41
1:C:165:LEU:HD13	1:C:255:VAL:HG13	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:253:GLU:H	1:C:253:GLU:HG3	1.69	0.41
2:D:213:ALA:HA	2:D:216:LEU:HD13	2.02	0.41
2:D:276:GLU:OE1	2:D:276:GLU:N	2.45	0.41
1:E:84:TRP:HA	1:E:89:ILE:HB	2.03	0.41
2:F:37:VAL:HG11	2:F:61:ASP:O	2.19	0.41
2:F:41:SER:OG	2:F:42:HIS:N	2.53	0.41
2:F:84:TRP:CD1	2:F:84:TRP:H	2.37	0.41
2:F:187:ALA:O	2:F:196:ALA:HB1	2.20	0.41
2:F:243:VAL:HG22	2:F:306:LYS:HA	2.01	0.41
1:G:45:LYS:NZ	1:G:53:PHE:HB3	2.35	0.41
1:G:58:LYS:HG3	1:G:67:ASP:H	1.84	0.41
1:G:65:SER:OG	1:G:66:ILE:N	2.53	0.41
1:G:84:TRP:O	1:G:88:GLY:N	2.53	0.41
1:G:272:ASP:HB2	1:G:288:PHE:CG	2.55	0.41
1:G:287:ASP:C	1:G:320:ARG:HH22	2.28	0.41
2:H:20:ARG:NH2	2:H:319:GLN:O	2.53	0.41
2:H:49:ILE:HA	2:H:284:ARG:NH1	2.35	0.41
1:I:100:VAL:HG12	1:I:122:ALA:HA	2.03	0.41
1:I:176:HIS:O	1:I:231:ARG:HA	2.21	0.41
1:I:218:LEU:HB3	1:I:220:GLN:HE22	1.84	0.41
2:J:278:LEU:H	2:L:194:ARG:NH2	2.17	0.41
1:K:193:LEU:O	1:K:197:ARG:HG2	2.20	0.41
1:K:296:LEU:O	1:K:298:MET:HE3	2.20	0.41
2:L:76:ASP:OD1	2:L:77:ARG:N	2.53	0.41
1:O:84:TRP:HE3	1:O:89:ILE:HG13	1.84	0.41
1:O:132:VAL:HG21	1:O:155:ALA:HB3	2.01	0.41
1:O:212:LYS:HZ2	1:O:212:LYS:N	2.17	0.41
1:Q:118:ILE:O	1:Q:145:SER:OG	2.19	0.41
1:Q:176:HIS:O	1:Q:231:ARG:HA	2.20	0.41
2:R:10:ARG:HG2	3:R:401:NAD:O2N	2.20	0.41
2:R:126:PRO:HG2	2:R:144:ILE:HG22	2.02	0.41
2:R:154:LEU:HA	2:R:157:PHE:CE1	2.55	0.41
1:A:1:LEU:HD21	1:A:332:TRP:NE1	2.36	0.41
1:A:175:THR:HB	1:A:232:VAL:HG11	2.02	0.41
1:A:246:ILE:HG13	1:A:248:LYS:H	1.86	0.41
1:A:285:CYS:HA	1:A:315:TRP:CD1	2.55	0.41
2:B:63:ALA:HA	2:B:72:LYS:HA	2.02	0.41
2:B:89:ILE:O	2:B:114:LYS:HG3	2.20	0.41
2:B:150:THR:OG1	2:B:151:THR:N	2.53	0.41
2:B:181:ASP:OD1	2:B:195:ARG:HD3	2.20	0.41
2:B:203:ILE:HG12	2:B:204:VAL:N	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:246:VAL:N	2:B:303:ASP:O	2.35	0.41
2:B:299:VAL:HG13	2:B:305:VAL:HG22	2.03	0.41
1:C:218:LEU:HD12	1:C:220:GLN:HE21	1.85	0.41
1:C:331:LYS:HE2	1:C:331:LYS:HB3	1.78	0.41
1:E:148:SER:O	1:E:151:THR:N	2.54	0.41
1:E:158:VAL:HA	1:E:161:LEU:HG	2.02	0.41
1:E:267:LEU:HB3	1:E:271:LEU:CB	2.46	0.41
1:E:325:ALA:O	1:E:328:VAL:HB	2.20	0.41
1:G:24:PRO:HD2	1:G:326:ASP:CG	2.45	0.41
1:G:58:LYS:HB2	1:G:65:SER:HB3	2.02	0.41
1:G:82:LEU:HA	1:G:83:PRO:HD3	1.84	0.41
1:G:164:GLU:CD	1:G:258:ALA:HB1	2.46	0.41
2:H:287:ASP:OD1	2:H:288:VAL:N	2.51	0.41
1:I:131:GLY:O	1:I:159:LYS:NZ	2.37	0.41
1:I:179:THR:N	1:I:182:GLN:HE22	2.17	0.41
2:J:102:ARG:HE	2:J:102:ARG:HB2	1.55	0.41
2:J:159:LYS:HD2	2:J:160:VAL:HG23	2.02	0.41
2:J:222:LYS:O	2:J:224:LYS:HG2	2.21	0.41
1:K:185:LEU:O	1:K:187:ALA:N	2.53	0.41
1:K:264:ALA:HA	1:K:268:LYS:HZ1	1.83	0.41
2:L:174:THR:OG1	2:L:175:THR:N	2.52	0.41
2:L:240:VAL:HG12	2:L:311:TYR:HD1	1.85	0.41
2:L:277:PRO:C	2:L:278:LEU:HD12	2.45	0.41
1:O:8:PHE:HE1	1:O:12:GLY:C	2.29	0.41
1:O:123(A):SER:CB	1:C:141:ALA:HA	2.50	0.41
1:O:131:GLY:HA3	1:O:270:VAL:HG11	2.02	0.41
1:O:206:THR:H	1:O:228:ILE:HD12	1.84	0.41
1:O:288:PHE:HB2	1:O:291:THR:HG23	2.01	0.41
1:O:310:TRP:CD1	1:O:310:TRP:N	2.88	0.41
2:P:157:PHE:CE2	2:P:158:VAL:HG13	2.55	0.41
2:P:250:THR:N	2:P:302:ASP:HB3	2.34	0.41
1:Q:20:ARG:HE	1:Q:21:LYS:NZ	2.19	0.41
1:Q:60(A):ASP:C	1:Q:62:GLU:N	2.78	0.41
1:Q:257:ASN:N	1:Q:260:ARG:HH21	2.19	0.41
2:R:160:VAL:HA	2:R:163:GLN:HB2	2.02	0.41
2:R:182:GLN:HA	2:R:195:ARG:O	2.20	0.41
1:A:169:LYS:HD3	1:A:169:LYS:HA	1.60	0.41
2:B:208:THR:HG22	2:B:229:ALA:HB2	2.03	0.41
2:B:238:SER:O	2:B:311:TYR:N	2.54	0.41
1:C:171:THR:HA	1:C:225:LEU:HD12	2.03	0.41
2:D:11:ILE:HG12	3:D:401:NAD:O2N	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:172:MET:HB3	2:D:242:LEU:HD13	2.02	0.41
1:E:105:ALA:HA	1:E:108:HIS:HD2	1.84	0.41
1:E:194:ARG:H	1:E:194:ARG:HG2	1.68	0.41
1:G:45:LYS:O	1:G:53:PHE:N	2.39	0.41
1:G:125:ILE:H	1:G:125:ILE:HD12	1.84	0.41
1:G:230:LEU:O	1:G:232:VAL:HG23	2.21	0.41
1:G:238:SER:HB3	1:G:311:TYR:CE2	2.54	0.41
2:H:154:LEU:HA	2:H:157:PHE:CE1	2.55	0.41
2:H:160:VAL:HA	2:H:163:GLN:HB2	2.03	0.41
2:H:315:TRP:O	2:H:319:GLN:N	2.37	0.41
1:I:107:LYS:HA	1:I:110:GLN:CD	2.45	0.41
1:I:176:HIS:HA	1:I:238:SER:CB	2.50	0.41
1:I:190:HIS:O	1:I:196:ALA:HB2	2.20	0.41
2:J:20:ARG:HH21	2:J:319:GLN:NE2	2.19	0.41
2:J:101:ASP:OD1	2:J:101:ASP:N	2.50	0.41
2:J:150:THR:OG1	2:J:151:THR:N	2.53	0.41
2:J:190:HIS:ND1	2:J:192:ASP:N	2.68	0.41
2:J:193:LEU:HB2	2:L:277:PRO:HG2	2.03	0.41
2:J:204:VAL:N	2:J:231:ARG:O	2.54	0.41
2:J:230:LEU:O	2:J:232:VAL:HG13	2.21	0.41
2:J:238:SER:OG	2:J:311:TYR:OH	2.35	0.41
2:J:239:VAL:HG13	2:J:310:TRP:CD2	2.55	0.41
2:J:245:GLN:HG2	2:J:304:MET:HB2	2.03	0.41
1:K:157:PHE:CD2	1:K:158:VAL:HG13	2.56	0.41
1:K:232:VAL:O	1:K:234:THR:N	2.48	0.41
2:L:44:LEU:O	2:L:53:PHE:HB2	2.21	0.41
2:L:118:ILE:HB	2:L:145:SER:CB	2.50	0.41
2:L:176:HIS:O	2:L:231:ARG:HA	2.21	0.41
2:L:218:LEU:HA	2:L:219:PRO:HD3	1.92	0.41
2:L:236:ASN:CG	2:L:237:VAL:H	2.29	0.41
2:L:287:ASP:O	2:L:320:ARG:NH1	2.53	0.41
1:O:5:ILE:HG23	1:O:93:ILE:HB	2.03	0.41
1:O:45:LYS:HZ3	1:O:55:ALA:C	2.29	0.41
1:O:192:ASP:OD1	1:O:194:ARG:HG2	2.20	0.41
1:O:251:THR:C	1:O:253:GLU:H	2.29	0.41
2:P:44:LEU:O	2:P:53:PHE:HB2	2.21	0.41
2:P:92:VAL:HG21	2:P:108:HIS:HB2	2.02	0.41
2:P:305:VAL:HG12	2:P:307:VAL:HG12	2.03	0.41
1:Q:17:ARG:HH21	1:Q:44:LEU:C	2.29	0.41
1:Q:30:VAL:HG12	1:Q:32:ASP:H	1.85	0.41
1:Q:63:THR:OG1	1:Q:72:LYS:HG3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:159:LYS:HG2	1:Q:163:GLU:OE1	2.21	0.41
1:Q:219:PRO:O	1:Q:222:LYS:N	2.43	0.41
1:Q:231:ARG:HD3	1:Q:231:ARG:HA	1.79	0.41
1:Q:267:LEU:H	1:Q:267:LEU:HD22	1.86	0.41
2:R:30:ILE:HG22	2:R:31:ASN:H	1.85	0.41
2:R:127:THR:HG21	2:R:216:LEU:C	2.46	0.41
2:R:192:ASP:OD2	2:R:194:ARG:HB2	2.21	0.41
2:R:256:ASN:HA	2:R:259:PHE:CD2	2.55	0.41
2:R:275:ASP:OD2	2:R:294:SER:OG	2.26	0.41
1:A:1:LEU:HD12	1:A:1:LEU:HA	1.68	0.41
2:B:5:ILE:O	2:B:31:ASN:N	2.49	0.41
2:B:15:PHE:CD2	2:B:322:VAL:HG22	2.56	0.41
1:C:298:MET:HG2	1:C:306:LYS:CE	2.51	0.41
2:D:9:GLY:O	2:D:10:ARG:C	2.62	0.41
2:D:32:ASP:OD1	2:D:34:GLY:N	2.45	0.41
2:D:153:CYS:SG	2:D:311:TYR:HB3	2.60	0.41
1:E:1:LEU:O	1:E:3:VAL:HG23	2.20	0.41
1:E:58:LYS:HD2	1:E:58:LYS:HA	1.84	0.41
1:E:139:HIS:O	1:E:140:VAL:HG23	2.21	0.41
2:F:8:PHE:H	2:F:32:ASP:CB	2.30	0.41
2:F:38:LYS:HZ3	2:F:38:LYS:HG2	1.60	0.41
2:F:331:LYS:O	2:F:333:GLN:HG3	2.20	0.41
1:G:1:LEU:HG	1:G:332:TRP:CE2	2.56	0.41
2:H:268:LYS:HE2	2:H:268:LYS:HB2	1.95	0.41
1:I:11:ILE:HD11	1:I:318:SER:N	2.35	0.41
1:I:94:GLU:OE1	1:I:119:THR:N	2.53	0.41
1:I:184:LEU:HG	1:I:185:LEU:N	2.36	0.41
1:I:211:ALA:O	1:I:225:LEU:HB3	2.20	0.41
2:J:30:ILE:HG22	2:J:31:ASN:N	2.36	0.41
2:J:204:VAL:O	2:J:206:THR:HG22	2.21	0.41
2:J:232:VAL:O	2:J:234:THR:N	2.52	0.41
2:J:277:PRO:HB2	2:L:194:ARG:CG	2.51	0.41
1:K:84:TRP:CE3	1:K:89:ILE:HD12	2.55	0.41
2:L:20:ARG:NH2	2:L:319:GLN:O	2.54	0.41
2:L:139:HIS:CD2	2:L:333:GLN:H	2.38	0.41
2:L:203:ILE:HG23	2:L:205:PRO:HD3	2.02	0.41
2:L:213:ALA:HA	2:L:216:LEU:HD13	2.02	0.41
2:L:312:ASP:HB3	2:L:316:GLY:H	1.86	0.41
1:O:46:TYR:HD1	1:O:52:THR:HG1	1.67	0.41
1:O:115:LYS:HD3	1:O:328:VAL:CG1	2.51	0.41
1:O:171:THR:HG21	1:Q:306:LYS:HD2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:18(A):TRP:CH2	2:P:69:LYS:HG2	2.56	0.41
2:P:293:ASP:O	2:P:297:THR:HG23	2.20	0.41
1:Q:149:CYS:HA	1:Q:152:ASN:OD1	2.20	0.41
1:Q:174:THR:CA	1:Q:240:VAL:HA	2.48	0.41
2:R:190:HIS:HB3	2:R:196:ALA:CB	2.47	0.41
2:R:270:ILE:O	2:R:289:SER:N	2.34	0.41
1:A:203:ILE:HD12	1:A:204:VAL:H	1.86	0.41
2:B:2:LYS:HB2	2:B:90:ASP:OD1	2.20	0.41
2:B:94:GLU:HG2	2:B:96:THR:HG23	2.02	0.41
2:B:267:LEU:HB3	2:B:271:LEU:HB2	2.02	0.41
1:C:24:PRO:O	1:C:25:LEU:HD13	2.20	0.41
1:C:218:LEU:HA	1:C:220:GLN:NE2	2.35	0.41
1:C:253:GLU:HA	1:C:256:ASN:ND2	2.34	0.41
1:C:270:VAL:HA	1:C:320:ARG:NH1	2.36	0.41
1:E:25:LEU:N	1:E:25:LEU:HD22	2.36	0.41
1:E:49:ILE:HD13	1:E:49:ILE:HA	1.89	0.41
1:E:211:ALA:CB	1:E:226:ASN:HA	2.49	0.41
1:E:271:LEU:HD13	1:E:290:SER:HB3	2.03	0.41
1:E:328:VAL:HG12	1:E:332:TRP:CD1	2.56	0.41
2:F:1:LEU:HD12	2:F:1:LEU:HA	1.92	0.41
2:F:20:ARG:HE	2:F:319:GLN:NE2	2.19	0.41
2:F:38:LYS:H	2:F:38:LYS:HD3	1.85	0.41
2:F:58:LYS:HD2	2:F:58:LYS:HA	1.42	0.41
2:F:277:PRO:C	2:F:278:LEU:HD12	2.46	0.41
2:F:292:ILE:HG23	2:F:308:ILE:O	2.20	0.41
1:G:3:VAL:HG21	1:G:25:LEU:HB3	2.03	0.41
1:G:47:ASP:OD1	1:G:49:ILE:HB	2.20	0.41
1:G:216:LEU:HD13	1:G:216:LEU:HA	1.82	0.41
2:H:56:ASP:OD1	2:H:57:VAL:N	2.54	0.41
2:H:139:HIS:CG	2:H:333:GLN:HB2	2.56	0.41
2:H:256:ASN:HA	2:H:259:PHE:CD2	2.55	0.41
1:I:105:ALA:HA	1:I:108:HIS:HD2	1.85	0.41
1:I:328:VAL:HG13	1:I:331:LYS:HE2	2.02	0.41
2:J:291:THR:O	2:J:310:TRP:N	2.33	0.41
1:K:56:ASP:N	1:K:67:ASP:OD1	2.53	0.41
2:L:151:THR:H	2:L:151:THR:HG1	1.48	0.41
2:L:291:THR:C	2:L:310:TRP:HD1	2.29	0.41
1:O:279:VAL:HG23	1:Q:202:ASN:OD1	2.20	0.41
1:O:306:LYS:NZ	1:Q:228:ILE:HG12	2.35	0.41
1:Q:171:THR:O	1:Q:242:LEU:HD12	2.21	0.41
2:R:67:ASP:OD1	2:R:67:ASP:N	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:139:HIS:CG	2:R:333:GLN:HB2	2.56	0.41
2:R:264:ASP:O	2:R:268:LYS:HB2	2.20	0.41
1:A:13:ARG:HH11	1:A:13:ARG:HB3	1.86	0.41
1:A:134:GLU:CD	1:A:134:GLU:N	2.75	0.41
1:A:187:ALA:HA	2:D:43:LEU:HD22	2.01	0.41
1:A:265:GLY:HA3	1:A:266:PRO:HD3	1.87	0.41
2:B:28:VAL:C	2:B:71:ILE:HG23	2.46	0.41
2:B:114:LYS:O	2:B:142:THR:OG1	2.37	0.41
2:B:168:ILE:H	2:B:168:ILE:HG13	1.69	0.41
2:B:171:THR:HB	2:D:306:LYS:HE3	2.02	0.41
1:C:13:ARG:H	1:C:13:ARG:NH1	2.19	0.41
1:C:15:PHE:O	1:C:18(A):TRP:N	2.27	0.41
1:C:279:VAL:O	1:C:280:SER:C	2.63	0.41
2:D:82:LEU:O	2:D:84:TRP:N	2.54	0.41
2:D:101:ASP:HB2	2:D:103:ASP:CG	2.45	0.41
1:E:18(B):HIS:HD2	1:E:53:PHE:CZ	2.38	0.41
1:E:56:ASP:N	1:E:67:ASP:OD1	2.39	0.41
1:E:82:LEU:HA	1:E:83:PRO:HD3	1.78	0.41
1:E:179:THR:C	1:E:182:GLN:HE22	2.24	0.41
1:E:271:LEU:HB3	1:E:290:SER:OG	2.20	0.41
2:F:1:LEU:C	2:F:26:ASP:H	2.28	0.41
2:F:18:CYS:CB	2:F:322:VAL:HG21	2.50	0.41
2:F:28:VAL:HG22	2:F:69:LYS:NZ	2.36	0.41
2:F:63:ALA:HA	2:F:72:LYS:HA	2.02	0.41
1:G:15:PHE:O	1:G:18(A):TRP:N	2.29	0.41
1:G:32:ASP:OD2	1:G:36:GLY:N	2.54	0.41
1:G:84:TRP:CD1	1:G:84:TRP:N	2.88	0.41
1:G:169:LYS:HB2	1:G:245:ASN:ND2	2.36	0.41
1:G:183:ARG:HB3	1:G:185:LEU:O	2.21	0.41
2:H:33:THR:H	3:H:401:NAD:H2A	1.86	0.41
2:H:80:VAL:HG12	2:H:110:GLN:HE22	1.85	0.41
2:H:117:LEU:HA	2:H:145:SER:HA	2.02	0.41
1:I:10:ARG:HB3	1:I:10:ARG:HH11	1.85	0.41
1:I:38:LYS:H	1:I:38:LYS:HG3	1.58	0.41
2:J:41:SER:OG	2:J:42:HIS:N	2.53	0.41
2:J:47:ASP:HB3	2:J:51:GLY:O	2.20	0.41
2:J:114:LYS:O	2:J:142:THR:OG1	2.35	0.41
2:J:320:ARG:HA	2:J:320:ARG:HD3	1.80	0.41
1:K:311:TYR:N	1:K:311:TYR:CD1	2.89	0.41
2:L:204:VAL:HB	2:L:231:ARG:HB2	2.03	0.41
1:O:5:ILE:HB	1:O:30:VAL:HG22	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:20:ARG:HD3	1:O:21:LYS:N	2.35	0.41
1:O:38:LYS:HG3	1:O:39:SER:N	2.27	0.41
1:O:119:THR:O	1:O:119:THR:OG1	2.33	0.41
1:O:166:GLY:HA3	1:O:247:GLU:OE2	2.21	0.41
1:O:174:THR:HG23	1:O:176:HIS:H	1.85	0.41
1:O:358:CYS:O	1:C:190:HIS:NE2	2.54	0.41
2:P:64:ILE:HG12	2:P:71:ILE:O	2.21	0.41
2:P:203:ILE:HD11	2:P:230:LEU:HD22	2.03	0.41
2:P:275:ASP:OD1	2:P:294:SER:N	2.53	0.41
1:Q:8:PHE:CG	1:Q:32:ASP:OD2	2.72	0.41
1:Q:49:ILE:HD12	1:Q:50:LEU:N	2.35	0.41
1:Q:136:ASP:N	1:Q:136:ASP:OD1	2.54	0.41
1:Q:267:LEU:O	1:Q:271:LEU:HB3	2.21	0.41
2:R:29:VAL:HG11	2:R:89:ILE:HD11	2.03	0.41
2:R:47:ASP:OD2	2:R:49:ILE:HB	2.20	0.41
2:R:80:VAL:HG12	2:R:110:GLN:HE22	1.86	0.41
2:R:84:TRP:CE3	2:R:89:ILE:HG21	2.56	0.41
2:R:148:SER:HA	2:R:317:TYR:OH	2.21	0.41
2:R:208:THR:HG22	2:R:229:ALA:HB2	2.02	0.41
2:R:239:VAL:HG13	2:R:310:TRP:HA	2.02	0.41
2:R:264:ASP:O	2:R:268:LYS:NZ	2.47	0.41
1:A:49:ILE:HG22	1:A:50:LEU:HD13	2.02	0.41
1:A:362:GLU:HA	1:G:181:ASP:HB3	2.01	0.41
2:B:14:ASN:ND2	2:B:315:TRP:HA	2.36	0.41
2:B:62:SER:HA	2:B:73:VAL:O	2.20	0.41
2:B:62:SER:C	2:B:72:LYS:HA	2.45	0.41
2:B:94:GLU:HG3	2:B:99:PHE:CD2	2.55	0.41
2:B:121:PRO:HG3	2:B:148:SER:H	1.83	0.41
2:B:192:ASP:OD2	2:B:195:ARG:HG3	2.20	0.41
2:B:222:LYS:O	2:B:224:LYS:HG2	2.21	0.41
2:B:280:SER:HB2	2:D:202:ASN:HD22	1.85	0.41
2:B:320:ARG:HA	2:B:320:ARG:HD3	1.80	0.41
1:C:8:PHE:HZ	1:C:13:ARG:HB3	1.81	0.41
1:C:127:THR:OG1	1:C:128:TYR:N	2.54	0.41
1:C:153:CYS:SG	1:C:311:TYR:HB3	2.61	0.41
1:C:269:GLY:O	1:C:288:PHE:HA	2.21	0.41
3:C:401:NAD:O1N	3:C:401:NAD:H2N	2.20	0.41
2:D:25:LEU:HD13	2:D:25:LEU:HA	1.80	0.41
2:D:39:GLN:HA	2:D:42:HIS:ND1	2.36	0.41
2:D:118:ILE:HB	2:D:145:SER:CB	2.50	0.41
2:D:162:ASP:OD1	2:D:166:GLY:HA2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:167:ILE:HG12	2:D:246:VAL:HG12	2.03	0.41
2:D:185:LEU:O	2:D:187:ALA:N	2.46	0.41
2:D:190:HIS:HD2	2:D:191:ARG:NH2	2.18	0.41
1:E:23:SER:O	1:E:25:LEU:N	2.54	0.41
1:E:72:LYS:NZ	1:E:73:VAL:H	2.18	0.41
1:E:90:ASP:O	1:E:115:LYS:N	2.44	0.41
1:E:209:GLY:O	1:E:212:LYS:HG2	2.21	0.41
1:E:239:VAL:HB	1:E:310:TRP:CE3	2.55	0.41
1:E:251:THR:OG1	1:E:252:ALA:N	2.54	0.41
1:E:270:VAL:O	1:E:271:LEU:HD23	2.21	0.41
2:F:20:ARG:HH21	2:F:319:GLN:NE2	2.19	0.41
2:F:38:LYS:NZ	2:F:39:GLN:HG3	2.36	0.41
2:F:83:PRO:HB2	2:F:86:ASP:CG	2.46	0.41
2:F:185:LEU:O	2:F:187:ALA:N	2.52	0.41
2:F:272:SER:OG	2:F:290:SER:O	2.29	0.41
2:F:274:CYS:SG	2:F:276:GLU:HG2	2.61	0.41
2:F:292:ILE:HD13	2:F:309:ALA:HA	2.03	0.41
2:F:311:TYR:CE2	2:F:313:ASN:HB3	2.56	0.41
2:F:326:ASP:O	2:F:330:ASN:N	2.31	0.41
1:G:90:ASP:CB	1:G:115:LYS:HZ3	2.33	0.41
1:G:167:ILE:HA	1:G:246:ILE:CD1	2.51	0.41
1:G:252:ALA:O	1:G:256:ASN:N	2.41	0.41
1:G:283:PHE:HA	1:G:286:SER:OG	2.21	0.41
1:G:308:VAL:HG22	1:G:309:ALA:H	1.86	0.41
1:G:328:VAL:O	1:G:329:ALA:C	2.63	0.41
2:H:17:ARG:NH2	2:H:53:PHE:HA	2.36	0.41
2:H:82:LEU:HD12	2:H:84:TRP:HE1	1.86	0.41
2:H:118:ILE:O	2:H:146:ASN:N	2.39	0.41
2:H:120:ALA:O	2:H:145:SER:OG	2.38	0.41
2:H:128:TYR:CD2	2:H:144:ILE:HD12	2.56	0.41
1:I:39:SER:HA	2:L:193:LEU:HD23	2.03	0.41
1:I:125:ILE:HA	1:I:126:PRO:HD2	1.94	0.41
1:I:169:LYS:O	1:I:244:VAL:HG13	2.21	0.41
1:I:267:LEU:O	1:I:271:LEU:N	2.52	0.41
1:I:300:MET:HE3	1:I:301:GLY:HA2	2.03	0.41
1:I:306:LYS:HZ1	1:K:228:ILE:HG12	1.85	0.41
1:I:316:GLY:O	1:I:317:TYR:C	2.63	0.41
2:J:2:LYS:HB2	2:J:90:ASP:OD1	2.21	0.41
2:J:11:ILE:O	2:J:14:ASN:HB3	2.21	0.41
2:J:18:CYS:O	2:J:18(A):TRP:C	2.64	0.41
2:J:38:LYS:HZ2	2:J:39:GLN:H	1.67	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:238:SER:OG	2:J:239:VAL:N	2.54	0.41
2:J:245:GLN:HA	2:J:304:MET:HA	2.03	0.41
2:J:289:SER:HB3	2:J:320:ARG:HG2	2.03	0.41
1:K:3:VAL:HG13	1:K:91:ILE:O	2.20	0.41
1:K:47:ASP:OD1	1:K:48:SER:N	2.54	0.41
1:K:57:VAL:HG13	1:K:66:ILE:HG12	2.03	0.41
1:K:94:GLU:O	1:K:118:ILE:HG23	2.20	0.41
1:K:118:ILE:HB	1:K:145:SER:HB2	2.03	0.41
1:K:139:HIS:HB2	1:K:331:LYS:O	2.21	0.41
2:L:29:VAL:O	2:L:30:ILE:HD13	2.21	0.41
2:L:38:LYS:H	2:L:38:LYS:NZ	2.18	0.41
2:L:82:LEU:O	2:L:84:TRP:N	2.54	0.41
2:L:153:CYS:SG	2:L:311:TYR:HB3	2.61	0.41
2:L:214:VAL:O	2:L:217:VAL:HG22	2.20	0.41
2:L:253:GLU:OE2	2:L:256:ASN:HB2	2.21	0.41
2:L:265:ASN:OD1	2:L:266:GLU:N	2.49	0.41
1:O:13:ARG:HG3	1:O:44:LEU:HD13	2.03	0.41
1:O:58:LYS:O	1:O:64:PHE:HA	2.21	0.41
1:O:153:CYS:HB2	1:O:289:SER:O	2.20	0.41
1:O:174:THR:HA	1:O:240:VAL:HA	2.03	0.41
1:O:300:MET:SD	1:Q:169:LYS:HB3	2.61	0.41
2:P:36:GLY:HA3	2:P:38:LYS:HZ1	1.85	0.41
2:P:199:ALA:O	2:P:202:ASN:N	2.47	0.41
2:P:304:MET:HB2	2:R:169:LYS:HZ3	1.85	0.41
1:Q:65:SER:HA	1:Q:69:LYS:O	2.21	0.41
2:R:78:ASN:HB3	2:R:81:ASN:CG	2.46	0.41
2:R:84:TRP:CE3	2:R:113:ALA:HB2	2.56	0.41
2:R:124:ASP:OD1	2:R:124:ASP:N	2.54	0.41
1:A:7:GLY:HA2	3:A:401:NAD:H1B	2.02	0.41
1:A:11:ILE:HG23	1:A:12:GLY:H	1.85	0.41
1:A:84:TRP:CD1	1:A:111:ALA:HB3	2.56	0.41
1:A:203:ILE:N	1:C:280:SER:OG	2.54	0.41
1:A:239:VAL:HB	1:A:310:TRP:CE3	2.56	0.41
2:B:186:ASP:HB3	2:B:197:ARG:HA	2.03	0.41
2:B:199:ALA:C	2:B:201:LEU:N	2.79	0.41
2:B:220:ASN:HD22	2:B:221:LEU:HD12	1.86	0.41
2:B:226:ASN:OD1	2:B:227:GLY:N	2.54	0.41
1:C:83:PRO:CA	1:C:86:GLU:HB2	2.51	0.41
1:C:176:HIS:O	1:C:231:ARG:HD3	2.21	0.41
2:D:158:VAL:O	2:D:162:ASP:N	2.28	0.41
2:D:207:SER:HA	2:D:229:ALA:N	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:148:SER:O	1:E:149:CYS:C	2.63	0.41
2:F:29:VAL:HG11	2:F:89:ILE:HD11	2.02	0.41
2:F:159:LYS:HE3	2:F:159:LYS:HB3	1.87	0.41
2:F:185:LEU:HD12	2:F:185:LEU:HA	1.72	0.41
2:F:197:ARG:HH22	1:G:46:TYR:C	2.29	0.41
2:F:275:ASP:OD1	2:F:295:SER:N	2.41	0.41
2:F:277:PRO:HG2	2:H:193:LEU:HD13	2.02	0.41
1:G:190:HIS:HD1	1:G:190:HIS:H	1.69	0.41
1:G:245:ASN:O	1:G:246:ILE:HD13	2.20	0.41
1:G:257:ASN:N	1:G:260:ARG:HH21	2.19	0.41
2:H:37:VAL:HG23	2:H:38:LYS:HD3	2.02	0.41
2:H:104:GLY:HA2	2:H:107:LYS:HE2	2.03	0.41
2:H:173:THR:HB	2:H:241:ASP:OD2	2.21	0.41
2:H:230:LEU:O	2:H:232:VAL:HG13	2.20	0.41
2:H:250:THR:N	2:H:302:ASP:HB3	2.31	0.41
2:H:253:GLU:OE1	2:H:260:ARG:NH1	2.54	0.41
1:I:191:ARG:H	1:I:191:ARG:HG3	1.48	0.41
1:I:194:ARG:HG2	1:K:277:PRO:HB2	2.03	0.41
2:J:10:ARG:NH2	1:K:186:ASP:H	2.19	0.41
2:J:15:PHE:CD1	2:J:322:VAL:HG22	2.56	0.41
2:J:28:VAL:HG22	2:J:69:LYS:HZ3	1.86	0.41
2:J:220:ASN:HD22	2:J:221:LEU:HD12	1.85	0.41
2:J:298:MET:HE1	2:L:226:ASN:HB3	2.02	0.41
1:K:2:LYS:HD2	1:K:88:GLY:C	2.46	0.41
1:K:203:ILE:HD13	1:K:204:VAL:C	2.46	0.41
1:K:248:LYS:HG2	1:K:248(A):VAL:H	1.86	0.41
1:K:260:ARG:HG2	1:K:273:VAL:HG21	2.03	0.41
1:K:317:TYR:O	1:K:321:VAL:HG22	2.21	0.41
1:K:320:ARG:O	1:K:323:ASP:N	2.54	0.41
2:L:198:ALA:C	2:L:200:CYS:H	2.29	0.41
1:O:119:THR:HG21	3:O:401:NAD:H51N	2.03	0.40
1:O:127:THR:OG1	1:O:147:ALA:N	2.54	0.40
1:O:154:LEU:O	1:O:158:VAL:HG22	2.21	0.40
1:O:175:THR:OG1	1:O:175:THR:O	2.39	0.40
1:O:186:ASP:OD1	1:O:186:ASP:N	2.54	0.40
1:O:190:HIS:CE1	1:O:192:ASP:O	2.75	0.40
1:O:211:ALA:HB1	1:O:226:ASN:CA	2.51	0.40
1:Q:72:LYS:HG2	1:Q:73:VAL:H	1.85	0.40
1:Q:191:ARG:NE	1:I:358:CYS:O	2.54	0.40
1:Q:332:TRP:O	1:Q:334:GLY:N	2.49	0.40
2:R:94:GLU:OE1	2:R:118:ILE:HD11	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:149:CYS:CA	2:R:152:ASN:HD22	2.34	0.40
1:A:13:ARG:O	1:A:16:LEU:HB3	2.21	0.40
1:A:134:GLU:HG2	1:A:135:LYS:H	1.86	0.40
1:A:151:THR:OG1	1:A:152:ASN:N	2.55	0.40
1:A:202:ASN:OD1	1:C:280:SER:HB2	2.21	0.40
1:A:293:ASP:CB	1:A:296:LEU:HG	2.50	0.40
2:B:29:VAL:HA	2:B:72:LYS:O	2.22	0.40
1:C:60:ILE:HB	1:C:64:PHE:HA	2.04	0.40
1:C:137:TYR:OH	1:C:139:HIS:HB2	2.20	0.40
2:D:17:ARG:NH1	2:D:53:PHE:HA	2.37	0.40
2:D:128:TYR:HA	2:D:133:ASN:CG	2.46	0.40
2:D:169:LYS:HD2	2:D:245:GLN:OE1	2.21	0.40
2:F:190:HIS:CD2	2:F:191:ARG:H	2.40	0.40
2:F:252:ALA:O	2:F:255:VAL:HG22	2.20	0.40
1:G:8:PHE:CD2	1:G:13:ARG:HD3	2.55	0.40
1:G:96:THR:HA	3:G:401:NAD:O4B	2.21	0.40
1:G:236:ASN:HD22	1:G:314:GLU:HB2	1.86	0.40
1:G:272:ASP:HB2	1:G:288:PHE:CE2	2.55	0.40
2:H:102:ARG:HD2	2:H:143:ILE:HD12	2.02	0.40
2:H:139:HIS:HE1	2:H:332:TRP:HA	1.86	0.40
2:H:320:ARG:NE	2:H:323:ASP:OD2	2.55	0.40
1:I:39:SER:O	1:I:43:LEU:HG	2.21	0.40
2:J:10:ARG:HB2	2:J:314:GLU:OE1	2.21	0.40
2:J:89:ILE:HD13	2:J:89:ILE:HA	1.90	0.40
2:J:283:PHE:CD1	2:J:283:PHE:N	2.89	0.40
1:K:1:LEU:HD21	1:K:332:TRP:CE3	2.55	0.40
1:K:312:ASP:CG	1:K:315:TRP:N	2.79	0.40
2:L:17:ARG:NH2	2:L:53:PHE:HA	2.36	0.40
2:L:101:ASP:HB2	2:L:103:ASP:CG	2.46	0.40
2:L:261:GLU:O	2:L:264:ASP:HB2	2.21	0.40
2:L:272:SER:O	2:L:291:THR:HA	2.21	0.40
1:O:10:ARG:NH2	2:R:186:ASP:OD1	2.54	0.40
1:O:23:SER:C	1:O:25:LEU:H	2.29	0.40
1:O:206:THR:O	1:O:228:ILE:HB	2.20	0.40
1:O:248:LYS:HG2	1:O:248(A):VAL:H	1.86	0.40
2:P:272:SER:O	2:P:291:THR:HA	2.20	0.40
3:P:401:NAD:H52A	3:P:401:NAD:H8A	2.03	0.40
1:Q:109:ILE:H	1:Q:109:ILE:HG12	1.67	0.40
1:Q:171:THR:O	1:Q:243:VAL:N	2.37	0.40
1:Q:179:THR:OG1	1:Q:182:GLN:HB3	2.22	0.40
2:R:269:GLY:HA2	2:R:288:VAL:HG12	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:311:TYR:CE2	2:R:313:ASN:HB3	2.56	0.40
1:A:47:ASP:HB3	1:A:51:GLY:N	2.35	0.40
1:A:141:ALA:HB2	1:G:107:LYS:NZ	2.36	0.40
1:A:190:HIS:CE1	1:A:192:ASP:H	2.39	0.40
1:A:246:ILE:HG23	1:A:248:LYS:N	2.36	0.40
1:C:47:ASP:O	1:C:51:GLY:HA2	2.21	0.40
1:C:127:THR:HA	1:C:145:SER:O	2.21	0.40
1:C:289:SER:HB3	1:C:320:ARG:HH11	1.86	0.40
2:D:21:LYS:HD2	2:D:21:LYS:H	1.86	0.40
2:D:30:ILE:N	2:D:72:LYS:O	2.51	0.40
2:D:168:ILE:H	2:D:168:ILE:HG13	1.51	0.40
2:D:192:ASP:HB3	2:D:195:ARG:HD2	2.03	0.40
2:D:249:LYS:NZ	2:D:301:GLY:O	2.32	0.40
2:D:323:ASP:O	2:D:327:ILE:HG13	2.20	0.40
1:E:7:GLY:HA2	3:E:401:NAD:N3A	2.36	0.40
1:E:43:LEU:HD23	1:E:43:LEU:HA	1.93	0.40
1:E:47:ASP:HB3	1:E:51:GLY:N	2.35	0.40
1:E:105:ALA:O	1:E:108:HIS:HB2	2.22	0.40
1:E:172:MET:HE3	1:E:172:MET:HB3	1.96	0.40
2:F:1:LEU:HD11	2:F:332:TRP:CE3	2.56	0.40
2:F:159:LYS:O	2:F:163:GLN:HG3	2.21	0.40
1:G:107:LYS:HA	1:G:110:GLN:HB2	2.02	0.40
1:G:219:PRO:HA	1:G:222:LYS:CD	2.52	0.40
1:G:349:CYS:O	1:G:353:PRO:N	2.54	0.40
1:G:352:ASN:C	1:G:354:ALA:H	2.29	0.40
2:H:63:ALA:O	2:H:64:ILE:HD13	2.21	0.40
2:H:78:ASN:OD1	2:H:80:VAL:HG22	2.21	0.40
2:H:115:LYS:HA	2:H:142:THR:OG1	2.21	0.40
2:H:127:THR:HG21	2:H:216:LEU:C	2.46	0.40
2:H:149:CYS:CA	2:H:152:ASN:HD22	2.34	0.40
2:H:257:ALA:O	2:H:261:GLU:HG3	2.22	0.40
1:I:135:LYS:H	1:I:135:LYS:HZ2	1.69	0.40
1:I:139:HIS:HD2	1:I:332:TRP:HA	1.84	0.40
1:I:313:ASN:OD1	1:I:314:GLU:HG3	2.21	0.40
2:J:86:ASP:N	2:J:86:ASP:OD1	2.54	0.40
1:K:84:TRP:HB2	1:K:111:ALA:O	2.22	0.40
1:K:114:LYS:HB3	1:K:115:LYS:NZ	2.37	0.40
2:L:1:LEU:HG	2:L:3:VAL:HG23	2.04	0.40
2:L:41:SER:HG	2:L:42:HIS:H	1.69	0.40
2:L:96:THR:HA	3:L:401:NAD:O4B	2.21	0.40
2:L:165:PHE:HZ	2:L:254:GLU:HG2	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:10:ARG:HA	1:O:13:ARG:HD3	2.03	0.40
1:O:37:VAL:C	1:O:59:ILE:CG2	2.92	0.40
1:O:160:VAL:HG13	1:O:164:GLU:OE1	2.20	0.40
1:O:166:GLY:O	1:O:247:GLU:HG3	2.21	0.40
1:O:190:HIS:O	1:O:190:HIS:CG	2.74	0.40
2:P:20:ARG:HH21	2:P:319:GLN:NE2	2.20	0.40
2:P:228:ILE:H	2:R:306:LYS:NZ	2.19	0.40
1:Q:169:LYS:HG2	1:Q:224:LYS:HE3	2.03	0.40
1:Q:232:VAL:O	1:Q:234:THR:N	2.53	0.40
2:R:198:ALA:O	2:R:200:CYS:N	2.53	0.40
2:R:256:ASN:O	2:R:259:PHE:HB2	2.22	0.40
2:R:287:ASP:OD1	2:R:288:VAL:N	2.51	0.40
1:A:177:SER:OG	1:A:237:VAL:O	2.37	0.40
1:A:321:VAL:HA	1:A:324:LEU:HB2	2.02	0.40
2:B:3:VAL:CG2	2:B:91:LEU:HB3	2.48	0.40
2:B:30:ILE:HG22	2:B:31:ASN:H	1.86	0.40
2:B:321:VAL:O	2:B:325:ALA:N	2.52	0.40
1:C:32:ASP:N	1:C:74:VAL:O	2.45	0.40
1:C:64:PHE:O	1:C:71:ILE:N	2.53	0.40
1:C:175:THR:OG1	1:C:238:SER:HA	2.21	0.40
1:C:190:HIS:CD2	1:C:192:ASP:HB3	2.56	0.40
2:D:96:THR:HB	3:D:401:NAD:C5A	2.51	0.40
1:E:296:LEU:O	1:E:298:MET:HE3	2.22	0.40
2:F:94:GLU:HB2	2:F:118:ILE:HD13	2.03	0.40
1:G:162:ASP:HB3	1:G:167:ILE:HD12	2.03	0.40
1:G:172:MET:SD	1:G:172:MET:N	2.95	0.40
1:G:256:ASN:C	1:G:260:ARG:HH21	2.29	0.40
1:G:320:ARG:HA	1:G:320:ARG:HD3	1.95	0.40
2:H:192:ASP:OD2	2:H:194:ARG:HB2	2.22	0.40
1:I:47:ASP:C	2:L:197:ARG:HH22	2.29	0.40
1:I:182:GLN:HG2	1:I:199:ALA:HB2	2.02	0.40
1:I:193:LEU:CG	1:K:277:PRO:HG2	2.52	0.40
2:J:105:ALA:HA	2:J:108:HIS:HD2	1.86	0.40
2:J:168:ILE:H	2:J:168:ILE:HG13	1.71	0.40
1:K:197:ARG:HA	1:K:197:ARG:HD2	1.83	0.40
1:K:283:PHE:HD1	1:K:291:THR:HG1	1.65	0.40
1:K:323:ASP:HA	1:K:326:ASP:CB	2.37	0.40
2:L:128:TYR:HA	2:L:133:ASN:CG	2.46	0.40
2:L:249:LYS:CD	2:L:302:ASP:HB2	2.49	0.40
2:L:251:PHE:C	2:L:299:VAL:HG21	2.47	0.40
1:O:91:ILE:HD13	1:O:325:ALA:HB1	2.02	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:107:LYS:O	1:O:111:ALA:N	2.49	0.40
1:O:283:PHE:O	1:O:284:ARG:NH2	2.51	0.40
2:P:94:GLU:HB2	2:P:118:ILE:HD13	2.03	0.40
2:P:130:VAL:HG21	2:P:320:ARG:HD3	2.03	0.40
2:P:139:HIS:CD2	2:P:139:HIS:C	2.99	0.40
1:Q:117:ILE:HD13	1:Q:145:SER:HA	2.04	0.40
1:Q:194:ARG:NE	1:Q:204:VAL:HG22	2.36	0.40
1:Q:216:LEU:HA	1:Q:216:LEU:HD13	1.85	0.40
1:Q:259:PHE:HA	1:Q:262:ALA:HB3	2.03	0.40
2:R:139:HIS:HE1	2:R:332:TRP:HA	1.87	0.40
2:R:150:THR:HG1	2:R:151:THR:H	1.70	0.40
1:A:178:TYR:CZ	1:A:234:THR:C	3.00	0.40
1:A:280:SER:N	1:C:202:ASN:OD1	2.54	0.40
1:A:354:ALA:HB2	3:G:401:NAD:N7A	2.36	0.40
2:B:45:LYS:HZ3	2:B:55:ALA:C	2.30	0.40
2:B:176:HIS:CG	2:B:231:ARG:HG2	2.56	0.40
2:B:184:LEU:HD11	1:C:178:TYR:CD1	2.56	0.40
2:B:190:HIS:HB3	2:B:196:ALA:CB	2.51	0.40
2:B:192:ASP:CG	2:B:195:ARG:H	2.29	0.40
1:C:47:ASP:CG	1:C:50:LEU:H	2.22	0.40
1:C:162:ASP:O	1:C:166:GLY:N	2.55	0.40
1:C:281:VAL:C	1:C:283:PHE:H	2.30	0.40
2:D:29:VAL:O	2:D:30:ILE:HD13	2.22	0.40
2:D:30:ILE:HB	2:D:73:VAL:HG23	2.03	0.40
2:D:199:ALA:C	2:D:201:LEU:N	2.78	0.40
2:D:236:ASN:CG	2:D:237:VAL:H	2.30	0.40
1:E:37:VAL:HG23	1:E:61:ASN:O	2.20	0.40
2:F:104:GLY:O	2:F:108:HIS:N	2.47	0.40
2:F:202:ASN:HB3	2:H:279:VAL:HB	2.03	0.40
1:G:76:ASN:OD1	1:G:77:ARG:N	2.55	0.40
2:H:45:LYS:NZ	2:H:55:ALA:H	2.20	0.40
2:H:78:ASN:HB3	2:H:81:ASN:CG	2.46	0.40
2:H:264:ASP:O	2:H:268:LYS:HB2	2.21	0.40
1:I:197:ARG:HH22	2:L:48:SER:HA	1.86	0.40
1:I:280:SER:H	1:K:202:ASN:CG	2.29	0.40
1:I:281:VAL:HG21	2:J:48:SER:HA	2.03	0.40
2:J:15:PHE:CD2	2:J:322:VAL:HG22	2.56	0.40
2:J:29:VAL:HA	2:J:72:LYS:O	2.21	0.40
2:J:93:ILE:HD13	2:J:117:LEU:O	2.21	0.40
2:J:152:ASN:HD22	2:J:317:TYR:HD1	1.69	0.40
1:K:79:PRO:HB2	1:K:107:LYS:NZ	2.36	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:82:LEU:HA	1:K:83:PRO:HD3	1.79	0.40
1:K:83:PRO:CA	1:K:86:GLU:HB2	2.52	0.40
1:K:120:ALA:HA	3:K:401:NAD:O2D	2.22	0.40
1:K:332:TRP:CZ3	1:K:334:GLY:HA3	2.57	0.40
2:L:167:ILE:HG12	2:L:246:VAL:HG12	2.03	0.40
2:L:171:THR:O	2:L:243:VAL:N	2.42	0.40
1:O:20:ARG:HA	1:O:20:ARG:NE	2.36	0.40
1:O:62:GLU:O	1:O:73:VAL:HB	2.21	0.40
1:O:120:ALA:N	1:O:317:TYR:OH	2.55	0.40
1:O:156:PRO:HG2	1:O:271:LEU:HD23	2.03	0.40
1:O:212:LYS:O	1:O:216:LEU:HD23	2.21	0.40
1:O:271:LEU:C	1:O:288:PHE:HB3	2.46	0.40
2:P:39:GLN:O	2:P:43:LEU:HG	2.21	0.40
2:P:49:ILE:HG23	2:P:284:ARG:NH1	2.36	0.40
2:P:150:THR:HG1	2:P:151:THR:H	1.68	0.40
2:P:238:SER:O	2:P:311:TYR:N	2.50	0.40
1:Q:29:VAL:HB	1:Q:72:LYS:HB3	2.02	0.40
1:Q:287:ASP:O	1:Q:320:ARG:NH1	2.51	0.40
2:R:15:PHE:CZ	2:R:322:VAL:HG22	2.56	0.40
2:R:18:CYS:SG	2:R:318:SER:OG	2.78	0.40
2:R:198:ALA:C	2:R:200:CYS:H	2.29	0.40
2:R:320:ARG:NE	2:R:323:ASP:OD2	2.54	0.40
1:A:159:LYS:HE2	1:A:218:LEU:HD21	2.04	0.40
2:B:105:ALA:HA	2:B:108:HIS:HD2	1.87	0.40
2:B:220:ASN:C	2:B:224:LYS:HZ2	2.21	0.40
2:B:298:MET:HE1	2:D:226:ASN:C	2.47	0.40
2:B:322:VAL:O	2:B:325:ALA:HB3	2.22	0.40
1:C:45:LYS:O	1:C:52:THR:HA	2.22	0.40
1:C:177:SER:C	1:C:231:ARG:HH11	2.24	0.40
1:C:204:VAL:HG12	1:C:206:THR:OG1	2.22	0.40
2:D:27:VAL:O	2:D:69:LYS:NZ	2.55	0.40
2:D:69:LYS:NZ	2:D:71:ILE:HG12	2.37	0.40
2:D:182:GLN:HA	2:D:195:ARG:HB3	2.03	0.40
2:D:256:ASN:O	2:D:259:PHE:HB2	2.22	0.40
2:D:312:ASP:CG	2:D:315:TRP:HB3	2.46	0.40
1:E:60:ILE:HG12	1:E:60(A):ASP:H	1.86	0.40
1:E:207:SER:HA	1:E:228:ILE:HG22	2.03	0.40
1:E:251:THR:HG1	1:E:253:GLU:CD	2.19	0.40
2:F:84:TRP:HB3	2:F:89:ILE:HG12	2.04	0.40
2:F:186:ASP:OD2	1:G:10:ARG:HD2	2.22	0.40
2:F:275:ASP:CG	2:F:295:SER:H	2.24	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:10:ARG:NH2	1:G:13:ARG:HB2	2.36	0.40
1:G:77:ARG:H	1:G:77:ARG:NH1	2.18	0.40
1:G:118:ILE:C	1:G:145:SER:HG	2.19	0.40
1:G:139:HIS:C	1:G:140:VAL:N	2.79	0.40
2:H:169:LYS:HG2	2:H:224:LYS:HB2	2.04	0.40
1:I:46:TYR:HA	1:I:52:THR:HA	2.02	0.40
1:I:105:ALA:HA	1:I:108:HIS:CD2	2.56	0.40
1:I:244:VAL:HG12	1:I:245:ASN:C	2.47	0.40
1:I:272:ASP:HB2	1:I:288:PHE:CB	2.52	0.40
1:K:12:GLY:N	1:K:13:ARG:HH12	2.19	0.40
2:L:103:ASP:HB2	2:L:107:LYS:NZ	2.37	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	366/451 (81%)	278 (76%)	85 (23%)	3 (1%)	16	53
1	C	366/451 (81%)	262 (72%)	100 (27%)	4 (1%)	11	45
1	E	366/451 (81%)	286 (78%)	71 (19%)	9 (2%)	4	25
1	G	366/451 (81%)	257 (70%)	104 (28%)	5 (1%)	9	39
1	I	366/451 (81%)	268 (73%)	94 (26%)	4 (1%)	11	45
1	K	366/451 (81%)	264 (72%)	100 (27%)	2 (0%)	24	63
1	O	366/451 (81%)	265 (72%)	94 (26%)	7 (2%)	6	31
1	Q	366/451 (81%)	273 (75%)	87 (24%)	6 (2%)	7	37
2	B	335/402 (83%)	263 (78%)	72 (22%)	0	100	100
2	D	335/402 (83%)	254 (76%)	80 (24%)	1 (0%)	36	72
2	F	335/402 (83%)	251 (75%)	82 (24%)	2 (1%)	21	59

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	H	335/402 (83%)	259 (77%)	76 (23%)	0	100	100
2	J	335/402 (83%)	263 (78%)	72 (22%)	0	100	100
2	L	335/402 (83%)	256 (76%)	78 (23%)	1 (0%)	36	72
2	P	335/402 (83%)	248 (74%)	86 (26%)	1 (0%)	36	72
2	R	335/402 (83%)	257 (77%)	77 (23%)	1 (0%)	36	72
All	All	5608/6824 (82%)	4204 (75%)	1358 (24%)	46 (1%)	18	53

All (46) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	O	18(A)	TRP
1	O	61	ASN
1	Q	60	ILE
1	Q	352	ASN
1	A	352	ASN
1	C	352	ASN
1	G	248(A)	VAL
1	G	343	ASP
1	I	344	PRO
1	I	352	ASN
1	K	344	PRO
1	K	353	PRO
1	C	248(A)	VAL
2	D	61	ASP
1	G	344	PRO
2	L	60	ALA
2	P	61	ASP
1	Q	249	GLY
1	E	33	SER
2	F	56	ASP
1	G	122	ALA
1	O	34	GLY
1	Q	33	SER
2	R	59	THR
1	A	60(A)	ASP
1	A	343	ASP
1	E	34	GLY
1	O	38	LYS
1	Q	34	GLY
1	Q	343	ASP

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Mol	Chain	Res	Type
1	E	24	PRO
1	E	38	LYS
1	E	356	GLU
1	G	124	ASP
1	I	60(A)	ASP
1	I	141	ALA
1	O	83	PRO
1	O	343	ASP
1	E	355	ASP
1	C	237	VAL
1	O	235	PRO
1	C	334	GLY
1	E	344	PRO
2	F	66	VAL
1	E	59	ILE
1	E	339	VAL

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	282/370 (76%)	219 (78%)	63 (22%)	1	6
1	C	282/370 (76%)	197 (70%)	85 (30%)	0	2
1	E	282/370 (76%)	201 (71%)	81 (29%)	0	3
1	G	282/370 (76%)	216 (77%)	66 (23%)	1	5
1	I	282/370 (76%)	218 (77%)	64 (23%)	1	6
1	K	282/370 (76%)	210 (74%)	72 (26%)	0	4
1	O	282/370 (76%)	203 (72%)	79 (28%)	0	3
1	Q	282/370 (76%)	219 (78%)	63 (22%)	1	6
2	B	279/332 (84%)	207 (74%)	72 (26%)	0	3
2	D	279/332 (84%)	216 (77%)	63 (23%)	1	6
2	F	279/332 (84%)	215 (77%)	64 (23%)	1	6

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	H	279/332 (84%)	215 (77%)	64 (23%)	1	6
2	J	279/332 (84%)	207 (74%)	72 (26%)	0	3
2	L	279/332 (84%)	218 (78%)	61 (22%)	1	6
2	P	279/332 (84%)	215 (77%)	64 (23%)	1	6
2	R	279/332 (84%)	210 (75%)	69 (25%)	1	4
All	All	4488/5616 (80%)	3386 (75%)	1102 (25%)	2	4

All (1102) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	O	6	ASN
1	O	10	ARG
1	O	11	ILE
1	O	13	ARG
1	O	25	LEU
1	O	28	VAL
1	O	41	THR
1	O	42	HIS
1	O	46	TYR
1	O	49	ILE
1	O	56	ASP
1	O	58	LYS
1	O	59	ILE
1	O	60	ILE
1	O	60(A)	ASP
1	O	62	GLU
1	O	64	PHE
1	O	66	ILE
1	O	67	ASP
1	O	72	LYS
1	O	74	VAL
1	O	78	ASP
1	O	81	LYS
1	O	92	VAL
1	O	98	VAL
1	O	114	LYS
1	O	115	LYS
1	O	117	ILE
1	O	119	THR
1	O	122(A)	LYS

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Mol	Chain	Res	Type
1	O	127	THR
1	O	129	VAL
1	O	130	VAL
1	O	136	ASP
1	O	142	ASN
1	O	144	ILE
1	O	146	ASN
1	O	148	SER
1	O	153	CYS
1	O	154	LEU
1	O	164	GLU
1	O	169	LYS
1	O	172	MET
1	O	173	THR
1	O	182	GLN
1	O	191	ARG
1	O	192	ASP
1	O	201	LEU
1	O	212	LYS
1	O	214	VAL
1	O	216	LEU
1	O	218	LEU
1	O	222	LYS
1	O	230	LEU
1	O	232	VAL
1	O	234	THR
1	O	237	VAL
1	O	239	VAL
1	O	240	VAL
1	O	242	LEU
1	O	246	ILE
1	O	250	VAL
1	O	256	ASN
1	O	261	LYS
1	O	282	ASP
1	O	284	ARG
1	O	287	ASP
1	O	289	SER
1	O	293	ASP
1	O	305	VAL
1	O	307	VAL
1	O	308	VAL

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Mol	Chain	Res	Type
1	O	312	ASP
1	O	313	ASN
1	O	314	GLU
1	O	317	TYR
1	O	319	GLN
1	O	323	ASP
1	O	326	ASP
2	P	5	ILE
2	P	11	ILE
2	P	13	ARG
2	P	21	LYS
2	P	25	LEU
2	P	28	VAL
2	P	29	VAL
2	P	30	ILE
2	P	37	VAL
2	P	38	LYS
2	P	42	HIS
2	P	44	LEU
2	P	54	ASP
2	P	58	LYS
2	P	65	SER
2	P	70	VAL
2	P	72	LYS
2	P	77	ARG
2	P	80	VAL
2	P	96	THR
2	P	98	VAL
2	P	103	ASP
2	P	122(A)	LYS
2	P	127	THR
2	P	133	ASN
2	P	135	GLU
2	P	137	TYR
2	P	142	THR
2	P	151	THR
2	P	153	CYS
2	P	154	LEU
2	P	172	MET
2	P	185	LEU
2	P	186	ASP
2	P	192	ASP

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Mol	Chain	Res	Type
2	P	201	LEU
2	P	203	ILE
2	P	212	LYS
2	P	214	VAL
2	P	220	ASN
2	P	225	LEU
2	P	228	ILE
2	P	232	VAL
2	P	234	THR
2	P	239	VAL
2	P	240	VAL
2	P	244	VAL
2	P	246	VAL
2	P	248	LYS
2	P	250	THR
2	P	255	VAL
2	P	259	PHE
2	P	273	VAL
2	P	279	VAL
2	P	280	SER
2	P	281	ILE
2	P	282	ASP
2	P	286	THR
2	P	288	VAL
2	P	289	SER
2	P	291	THR
2	P	294	SER
2	P	302	ASP
2	P	307	VAL
1	Q	0	LYS
1	Q	8	PHE
1	Q	10	ARG
1	Q	13	ARG
1	Q	14	ASN
1	Q	25	LEU
1	Q	39	SER
1	Q	49	ILE
1	Q	54	LYS
1	Q	56	ASP
1	Q	58	LYS
1	Q	74	VAL
1	Q	78	ASP

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Mol	Chain	Res	Type
1	Q	81	LYS
1	Q	110	GLN
1	Q	117	ILE
1	Q	119	THR
1	Q	125	ILE
1	Q	128	TYR
1	Q	135	LYS
1	Q	137	TYR
1	Q	148	SER
1	Q	152	ASN
1	Q	153	CYS
1	Q	161	LEU
1	Q	162	ASP
1	Q	167	ILE
1	Q	168	VAL
1	Q	173	THR
1	Q	183	ARG
1	Q	185	LEU
1	Q	186	ASP
1	Q	193	LEU
1	Q	195	ARG
1	Q	203	ILE
1	Q	204	VAL
1	Q	208	THR
1	Q	212	LYS
1	Q	216	LEU
1	Q	220	GLN
1	Q	221	LEU
1	Q	228	ILE
1	Q	230	LEU
1	Q	234	THR
1	Q	239	VAL
1	Q	244	VAL
1	Q	248	LYS
1	Q	248(A)	VAL
1	Q	256	ASN
1	Q	261	LYS
1	Q	271	LEU
1	Q	273	VAL
1	Q	279	VAL
1	Q	282	ASP
1	Q	293	ASP

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Mol	Chain	Res	Type
1	Q	305	VAL
1	Q	307	VAL
1	Q	308	VAL
1	Q	322	VAL
1	Q	324	LEU
1	Q	327	LEU
1	Q	331	LYS
1	Q	349	CYS
2	R	0	LYS
2	R	10	ARG
2	R	13	ARG
2	R	21	LYS
2	R	28	VAL
2	R	29	VAL
2	R	37	VAL
2	R	42	HIS
2	R	43	LEU
2	R	56	ASP
2	R	57	VAL
2	R	58	LYS
2	R	59	THR
2	R	64	ILE
2	R	65	SER
2	R	67	ASP
2	R	70	VAL
2	R	77	ARG
2	R	80	VAL
2	R	90	ASP
2	R	94	GLU
2	R	98	VAL
2	R	100	VAL
2	R	103	ASP
2	R	110	GLN
2	R	118	ILE
2	R	119	THR
2	R	127	THR
2	R	139	HIS
2	R	141	ASP
2	R	142	THR
2	R	143	ILE
2	R	152	ASN
2	R	154	LEU

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Mol	Chain	Res	Type
2	R	159	LYS
2	R	172	MET
2	R	174	THR
2	R	179	THR
2	R	182	GLN
2	R	185	LEU
2	R	186	ASP
2	R	193	LEU
2	R	197	ARG
2	R	200	CYS
2	R	201	LEU
2	R	208	THR
2	R	214	VAL
2	R	228	ILE
2	R	232	VAL
2	R	234	THR
2	R	239	VAL
2	R	240	VAL
2	R	244	VAL
2	R	246	VAL
2	R	250	THR
2	R	255	VAL
2	R	264	ASP
2	R	265	ASN
2	R	271	LEU
2	R	273	VAL
2	R	282	ASP
2	R	288	VAL
2	R	294	SER
2	R	302	ASP
2	R	307	VAL
2	R	314	GLU
2	R	315	TRP
2	R	320	ARG
2	R	330	ASN
1	A	1	LEU
1	A	21	LYS
1	A	22	ASP
1	A	25	LEU
1	A	26	ASP
1	A	29	VAL
1	A	37	VAL

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Mol	Chain	Res	Type
1	A	38	LYS
1	A	39	SER
1	A	42	HIS
1	A	52	THR
1	A	54	LYS
1	A	57	VAL
1	A	58	LYS
1	A	59	ILE
1	A	73	VAL
1	A	74	VAL
1	A	78	ASP
1	A	98	VAL
1	A	100	VAL
1	A	108	HIS
1	A	114	LYS
1	A	118	ILE
1	A	119	THR
1	A	125	ILE
1	A	128	TYR
1	A	135	LYS
1	A	136	ASP
1	A	144	ILE
1	A	152	ASN
1	A	157	PHE
1	A	158	VAL
1	A	164	GLU
1	A	171	THR
1	A	179	THR
1	A	182	GLN
1	A	214	VAL
1	A	217	VAL
1	A	218	LEU
1	A	221	LEU
1	A	222	LYS
1	A	228	ILE
1	A	232	VAL
1	A	234	THR
1	A	239	VAL
1	A	240	VAL
1	A	256	ASN
1	A	257	ASN
1	A	273	VAL

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Mol	Chain	Res	Type
1	A	282	ASP
1	A	288	PHE
1	A	289	SER
1	A	290	SER
1	A	293	ASP
1	A	299	VAL
1	A	300	MET
1	A	305	VAL
1	A	307	VAL
1	A	312	ASP
1	A	323	ASP
1	A	327	LEU
1	A	330	ASN
1	A	332	TRP
2	B	2	LYS
2	B	13	ARG
2	B	21	LYS
2	B	25	LEU
2	B	29	VAL
2	B	33	THR
2	B	38	LYS
2	B	54	ASP
2	B	56	ASP
2	B	57	VAL
2	B	58	LYS
2	B	59	THR
2	B	67	ASP
2	B	70	VAL
2	B	80	VAL
2	B	81	ASN
2	B	90	ASP
2	B	94	GLU
2	B	98	VAL
2	B	103	ASP
2	B	115	LYS
2	B	125	ILE
2	B	135	GLU
2	B	137	TYR
2	B	138	THR
2	B	141	ASP
2	B	142	THR
2	B	151	THR

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Mol	Chain	Res	Type
2	B	159	LYS
2	B	164	LYS
2	B	169	LYS
2	B	172	MET
2	B	179	THR
2	B	181	ASP
2	B	182	GLN
2	B	185	LEU
2	B	201	LEU
2	B	208	THR
2	B	217	VAL
2	B	224	LYS
2	B	228	ILE
2	B	232	VAL
2	B	234	THR
2	B	239	VAL
2	B	240	VAL
2	B	244	VAL
2	B	246	VAL
2	B	248	LYS
2	B	250	THR
2	B	255	VAL
2	B	256	ASN
2	B	260	ARG
2	B	264	ASP
2	B	265	ASN
2	B	266	GLU
2	B	271	LEU
2	B	274	CYS
2	B	278	LEU
2	B	282	ASP
2	B	288	VAL
2	B	289	SER
2	B	291	THR
2	B	293	ASP
2	B	294	SER
2	B	302	ASP
2	B	303	ASP
2	B	304	MET
2	B	307	VAL
2	B	313	ASN
2	B	320	ARG

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Mol	Chain	Res	Type
2	B	331	LYS
2	B	332	TRP
1	C	0	LYS
1	C	1	LEU
1	C	5	ILE
1	C	6	ASN
1	C	11	ILE
1	C	13	ARG
1	C	14	ASN
1	C	20	ARG
1	C	21	LYS
1	C	23	SER
1	C	30	VAL
1	C	44	LEU
1	C	56	ASP
1	C	62	GLU
1	C	67	ASP
1	C	71	ILE
1	C	74	VAL
1	C	78	ASP
1	C	84	TRP
1	C	87	LEU
1	C	89	ILE
1	C	98	VAL
1	C	109	ILE
1	C	119	THR
1	C	122(A)	LYS
1	C	125	ILE
1	C	127	THR
1	C	129	VAL
1	C	130	VAL
1	C	133	ASN
1	C	134	GLU
1	C	135	LYS
1	C	136	ASP
1	C	142	ASN
1	C	149	CYS
1	C	150	THR
1	C	158	VAL
1	C	159	LYS
1	C	160	VAL
1	C	164	GLU

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Mol	Chain	Res	Type
1	C	165	LEU
1	C	176	HIS
1	C	186	ASP
1	C	192	ASP
1	C	193	LEU
1	C	202	ASN
1	C	203	ILE
1	C	206	THR
1	C	208	THR
1	C	217	VAL
1	C	220	GLN
1	C	225	LEU
1	C	232	VAL
1	C	234	THR
1	C	238	SER
1	C	239	VAL
1	C	240	VAL
1	C	242	LEU
1	C	244	VAL
1	C	247	GLU
1	C	251	THR
1	C	253	GLU
1	C	254	ASP
1	C	255	VAL
1	C	256	ASN
1	C	261	LYS
1	C	268	LYS
1	C	270	VAL
1	C	271	LEU
1	C	273	VAL
1	C	275	ASP
1	C	282	ASP
1	C	291	THR
1	C	299	VAL
1	C	300	MET
1	C	305	VAL
1	C	306	LYS
1	C	307	VAL
1	C	308	VAL
1	C	312	ASP
1	C	313	ASN
1	C	317	TYR

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Mol	Chain	Res	Type
1	C	327	LEU
1	C	332	TRP
1	C	349	CYS
2	D	2	LYS
2	D	13	ARG
2	D	25	LEU
2	D	29	VAL
2	D	33	THR
2	D	37	VAL
2	D	38	LYS
2	D	45	LYS
2	D	58	LYS
2	D	59	THR
2	D	66	VAL
2	D	67	ASP
2	D	70	VAL
2	D	80	VAL
2	D	86	ASP
2	D	87	MET
2	D	96	THR
2	D	98	VAL
2	D	102	ARG
2	D	103	ASP
2	D	110	GLN
2	D	122(A)	LYS
2	D	127	THR
2	D	135	GLU
2	D	137	TYR
2	D	142	THR
2	D	144	ILE
2	D	151	THR
2	D	161	LEU
2	D	164	LYS
2	D	168	ILE
2	D	171	THR
2	D	185	LEU
2	D	186	ASP
2	D	194	ARG
2	D	201	LEU
2	D	208	THR
2	D	212	LYS
2	D	217	VAL

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Mol	Chain	Res	Type
2	D	222	LYS
2	D	224	LYS
2	D	225	LEU
2	D	228	ILE
2	D	231	ARG
2	D	232	VAL
2	D	234	THR
2	D	239	VAL
2	D	240	VAL
2	D	244	VAL
2	D	248	LYS
2	D	250	THR
2	D	271	LEU
2	D	273	VAL
2	D	276	GLU
2	D	279	VAL
2	D	281	ILE
2	D	288	VAL
2	D	289	SER
2	D	291	THR
2	D	294	SER
2	D	302	ASP
2	D	307	VAL
2	D	313	ASN
1	E	1	LEU
1	E	3	VAL
1	E	6	ASN
1	E	8	PHE
1	E	11	ILE
1	E	14	ASN
1	E	18	CYS
1	E	18(A)	TRP
1	E	18(B)	HIS
1	E	20	ARG
1	E	21	LYS
1	E	22	ASP
1	E	25	LEU
1	E	28	VAL
1	E	46	TYR
1	E	56	ASP
1	E	57	VAL
1	E	58	LYS

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Mol	Chain	Res	Type
1	E	60	ILE
1	E	60(A)	ASP
1	E	62	GLU
1	E	67	ASP
1	E	72	LYS
1	E	73	VAL
1	E	74	VAL
1	E	78	ASP
1	E	81	LYS
1	E	90	ASP
1	E	93	ILE
1	E	96	THR
1	E	100	VAL
1	E	114	LYS
1	E	118	ILE
1	E	122(A)	LYS
1	E	125	ILE
1	E	127	THR
1	E	130	VAL
1	E	132	VAL
1	E	135	LYS
1	E	136	ASP
1	E	144	ILE
1	E	145	SER
1	E	154	LEU
1	E	158	VAL
1	E	163	GLU
1	E	164	GLU
1	E	173	THR
1	E	179	THR
1	E	181	ASP
1	E	185	LEU
1	E	192	ASP
1	E	201	LEU
1	E	203	ILE
1	E	212	LYS
1	E	214	VAL
1	E	217	VAL
1	E	218	LEU
1	E	232	VAL
1	E	234	THR
1	E	236	ASN

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Mol	Chain	Res	Type
1	E	237	VAL
1	E	240	VAL
1	E	244	VAL
1	E	255	VAL
1	E	261	LYS
1	E	270	VAL
1	E	278	LEU
1	E	279	VAL
1	E	284	ARG
1	E	288	PHE
1	E	290	SER
1	E	299	VAL
1	E	305	VAL
1	E	307	VAL
1	E	308	VAL
1	E	310	TRP
1	E	312	ASP
1	E	313	ASN
1	E	314	GLU
1	E	321	VAL
1	E	332	TRP
2	F	5	ILE
2	F	13	ARG
2	F	15	PHE
2	F	21	LYS
2	F	25	LEU
2	F	28	VAL
2	F	29	VAL
2	F	30	ILE
2	F	38	LYS
2	F	42	HIS
2	F	54	ASP
2	F	58	LYS
2	F	59	THR
2	F	64	ILE
2	F	65	SER
2	F	70	VAL
2	F	72	LYS
2	F	77	ARG
2	F	80	VAL
2	F	96	THR
2	F	98	VAL

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Mol	Chain	Res	Type
2	F	103	ASP
2	F	122(A)	LYS
2	F	127	THR
2	F	133	ASN
2	F	135	GLU
2	F	137	TYR
2	F	141	ASP
2	F	142	THR
2	F	151	THR
2	F	153	CYS
2	F	154	LEU
2	F	172	MET
2	F	185	LEU
2	F	192	ASP
2	F	201	LEU
2	F	203	ILE
2	F	208	THR
2	F	212	LYS
2	F	214	VAL
2	F	220	ASN
2	F	225	LEU
2	F	228	ILE
2	F	232	VAL
2	F	234	THR
2	F	239	VAL
2	F	240	VAL
2	F	244	VAL
2	F	246	VAL
2	F	248	LYS
2	F	250	THR
2	F	255	VAL
2	F	259	PHE
2	F	273	VAL
2	F	280	SER
2	F	281	ILE
2	F	282	ASP
2	F	286	THR
2	F	288	VAL
2	F	289	SER
2	F	291	THR
2	F	294	SER
2	F	302	ASP

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Mol	Chain	Res	Type
2	F	307	VAL
1	G	0	LYS
1	G	1	LEU
1	G	6	ASN
1	G	10	ARG
1	G	13	ARG
1	G	14	ASN
1	G	16	LEU
1	G	25	LEU
1	G	26	ASP
1	G	42	HIS
1	G	45	LYS
1	G	47	ASP
1	G	57	VAL
1	G	74	VAL
1	G	77	ARG
1	G	78	ASP
1	G	86	GLU
1	G	90	ASP
1	G	91	ILE
1	G	92	VAL
1	G	117	ILE
1	G	119	THR
1	G	122(A)	LYS
1	G	128	TYR
1	G	130	VAL
1	G	135	LYS
1	G	136	ASP
1	G	137	TYR
1	G	139	HIS
1	G	139(A)	ASP
1	G	143	ILE
1	G	144	ILE
1	G	148	SER
1	G	152	ASN
1	G	153	CYS
1	G	154	LEU
1	G	160	VAL
1	G	163	GLU
1	G	171	THR
1	G	176	HIS
1	G	177	SER

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Mol	Chain	Res	Type
1	G	183	ARG
1	G	186	ASP
1	G	190	HIS
1	G	194	ARG
1	G	201	LEU
1	G	204	VAL
1	G	208	THR
1	G	212	LYS
1	G	216	LEU
1	G	220	GLN
1	G	224	LYS
1	G	225	LEU
1	G	230	LEU
1	G	234	THR
1	G	239	VAL
1	G	244	VAL
1	G	247	GLU
1	G	267	LEU
1	G	273	VAL
1	G	280	SER
1	G	282	ASP
1	G	293	ASP
1	G	299	VAL
1	G	320	ARG
1	G	322	VAL
2	H	0	LYS
2	H	13	ARG
2	H	21	LYS
2	H	29	VAL
2	H	38	LYS
2	H	43	LEU
2	H	56	ASP
2	H	58	LYS
2	H	59	THR
2	H	70	VAL
2	H	71	ILE
2	H	77	ARG
2	H	80	VAL
2	H	86	ASP
2	H	90	ASP
2	H	94	GLU
2	H	98	VAL

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Mol	Chain	Res	Type
2	H	100	VAL
2	H	103	ASP
2	H	110	GLN
2	H	118	ILE
2	H	119	THR
2	H	127	THR
2	H	139	HIS
2	H	141	ASP
2	H	142	THR
2	H	143	ILE
2	H	152	ASN
2	H	154	LEU
2	H	159	LYS
2	H	172	MET
2	H	174	THR
2	H	179	THR
2	H	182	GLN
2	H	185	LEU
2	H	193	LEU
2	H	197	ARG
2	H	200	CYS
2	H	201	LEU
2	H	208	THR
2	H	214	VAL
2	H	222	LYS
2	H	228	ILE
2	H	232	VAL
2	H	234	THR
2	H	239	VAL
2	H	240	VAL
2	H	244	VAL
2	H	246	VAL
2	H	250	THR
2	H	255	VAL
2	H	264	ASP
2	H	265	ASN
2	H	271	LEU
2	H	273	VAL
2	H	282	ASP
2	H	288	VAL
2	H	294	SER
2	H	302	ASP

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Mol	Chain	Res	Type
2	H	307	VAL
2	H	314	GLU
2	H	315	TRP
2	H	320	ARG
2	H	330	ASN
1	I	1	LEU
1	I	5	ILE
1	I	8	PHE
1	I	13	ARG
1	I	16	LEU
1	I	21	LYS
1	I	25	LEU
1	I	26	ASP
1	I	27	VAL
1	I	29	VAL
1	I	32	ASP
1	I	37	VAL
1	I	38	LYS
1	I	56	ASP
1	I	57	VAL
1	I	58	LYS
1	I	59	ILE
1	I	61	ASN
1	I	74	VAL
1	I	78	ASP
1	I	82	LEU
1	I	86	GLU
1	I	92	VAL
1	I	94	GLU
1	I	98	VAL
1	I	100	VAL
1	I	114	LYS
1	I	119	THR
1	I	135	LYS
1	I	136	ASP
1	I	142	ASN
1	I	144	ILE
1	I	157	PHE
1	I	158	VAL
1	I	165	LEU
1	I	171	THR
1	I	173	THR

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Mol	Chain	Res	Type
1	I	181	ASP
1	I	190	HIS
1	I	191	ARG
1	I	203	ILE
1	I	206	THR
1	I	214	VAL
1	I	221	LEU
1	I	232	VAL
1	I	234	THR
1	I	239	VAL
1	I	240	VAL
1	I	246	ILE
1	I	256	ASN
1	I	257	ASN
1	I	268	LYS
1	I	271	LEU
1	I	279	VAL
1	I	281	VAL
1	I	284	ARG
1	I	287	ASP
1	I	288	PHE
1	I	291	THR
1	I	293	ASP
1	I	305	VAL
1	I	307	VAL
1	I	312	ASP
1	I	323	ASP
2	J	2	LYS
2	J	10	ARG
2	J	13	ARG
2	J	21	LYS
2	J	25	LEU
2	J	28	VAL
2	J	29	VAL
2	J	38	LYS
2	J	42	HIS
2	J	54	ASP
2	J	56	ASP
2	J	57	VAL
2	J	58	LYS
2	J	59	THR
2	J	67	ASP

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Mol	Chain	Res	Type
2	J	70	VAL
2	J	80	VAL
2	J	81	ASN
2	J	90	ASP
2	J	94	GLU
2	J	98	VAL
2	J	103	ASP
2	J	115	LYS
2	J	118	ILE
2	J	125	ILE
2	J	135	GLU
2	J	137	TYR
2	J	138	THR
2	J	141	ASP
2	J	142	THR
2	J	151	THR
2	J	159	LYS
2	J	164	LYS
2	J	169	LYS
2	J	172	MET
2	J	181	ASP
2	J	182	GLN
2	J	201	LEU
2	J	208	THR
2	J	217	VAL
2	J	224	LYS
2	J	228	ILE
2	J	232	VAL
2	J	234	THR
2	J	239	VAL
2	J	240	VAL
2	J	244	VAL
2	J	246	VAL
2	J	248	LYS
2	J	250	THR
2	J	255	VAL
2	J	256	ASN
2	J	260	ARG
2	J	264	ASP
2	J	265	ASN
2	J	266	GLU
2	J	271	LEU

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Mol	Chain	Res	Type
2	J	276	GLU
2	J	278	LEU
2	J	280	SER
2	J	282	ASP
2	J	288	VAL
2	J	289	SER
2	J	293	ASP
2	J	294	SER
2	J	302	ASP
2	J	303	ASP
2	J	304	MET
2	J	307	VAL
2	J	320	ARG
2	J	331	LYS
2	J	332	TRP
1	K	0	LYS
1	K	5	ILE
1	K	6	ASN
1	K	13	ARG
1	K	14	ASN
1	K	16	LEU
1	K	25	LEU
1	K	26	ASP
1	K	28	VAL
1	K	30	VAL
1	K	44	LEU
1	K	46	TYR
1	K	58	LYS
1	K	65	SER
1	K	73	VAL
1	K	74	VAL
1	K	78	ASP
1	K	84	TRP
1	K	87	LEU
1	K	90	ASP
1	K	92	VAL
1	K	96	THR
1	K	100	VAL
1	K	107	LYS
1	K	109	ILE
1	K	116	VAL
1	K	117	ILE

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Mol	Chain	Res	Type
1	K	119	THR
1	K	122(A)	LYS
1	K	124	ASP
1	K	125	ILE
1	K	129	VAL
1	K	135	LYS
1	K	136	ASP
1	K	137	TYR
1	K	142	ASN
1	K	148	SER
1	K	149	CYS
1	K	150	THR
1	K	165	LEU
1	K	172	MET
1	K	192	ASP
1	K	203	ILE
1	K	204	VAL
1	K	206	THR
1	K	214	VAL
1	K	218	LEU
1	K	220	GLN
1	K	221	LEU
1	K	228	ILE
1	K	234	THR
1	K	239	VAL
1	K	240	VAL
1	K	242	LEU
1	K	244	VAL
1	K	247	GLU
1	K	251	THR
1	K	261	LYS
1	K	275	ASP
1	K	276	ILE
1	K	278	LEU
1	K	281	VAL
1	K	282	ASP
1	K	289	SER
1	K	291	THR
1	K	307	VAL
1	K	308	VAL
1	K	312	ASP
1	K	313	ASN

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Mol	Chain	Res	Type
1	K	317	TYR
1	K	320	ARG
1	K	323	ASP
2	L	2	LYS
2	L	13	ARG
2	L	25	LEU
2	L	29	VAL
2	L	33	THR
2	L	38	LYS
2	L	45	LYS
2	L	57	VAL
2	L	58	LYS
2	L	59	THR
2	L	67	ASP
2	L	70	VAL
2	L	80	VAL
2	L	86	ASP
2	L	87	MET
2	L	96	THR
2	L	98	VAL
2	L	102	ARG
2	L	103	ASP
2	L	110	GLN
2	L	122(A)	LYS
2	L	127	THR
2	L	135	GLU
2	L	137	TYR
2	L	142	THR
2	L	144	ILE
2	L	151	THR
2	L	161	LEU
2	L	164	LYS
2	L	168	ILE
2	L	171	THR
2	L	176	HIS
2	L	179	THR
2	L	185	LEU
2	L	193	LEU
2	L	201	LEU
2	L	208	THR
2	L	212	LYS
2	L	217	VAL

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Mol	Chain	Res	Type
2	L	222	LYS
2	L	225	LEU
2	L	228	ILE
2	L	232	VAL
2	L	234	THR
2	L	239	VAL
2	L	240	VAL
2	L	244	VAL
2	L	248	LYS
2	L	250	THR
2	L	271	LEU
2	L	273	VAL
2	L	276	GLU
2	L	279	VAL
2	L	281	ILE
2	L	288	VAL
2	L	289	SER
2	L	291	THR
2	L	294	SER
2	L	302	ASP
2	L	307	VAL
2	L	313	ASN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (97) such sidechains are listed below:

Mol	Chain	Res	Type
1	O	6	ASN
1	O	14	ASN
1	O	61	ASN
1	O	108	HIS
1	O	226	ASN
1	O	236	ASN
1	O	256	ASN
2	P	78	ASN
2	P	81	ASN
2	P	108	HIS
2	P	190	HIS
2	P	202	ASN
2	P	256	ASN
2	P	319	GLN
2	P	330	ASN
1	Q	6	ASN

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Mol	Chain	Res	Type
1	Q	14	ASN
1	Q	18(B)	HIS
1	Q	42	HIS
1	Q	108	HIS
1	Q	152	ASN
1	Q	257	ASN
2	R	81	ASN
2	R	182	GLN
2	R	202	ASN
1	A	6	ASN
1	A	61	ASN
1	A	202	ASN
1	A	226	ASN
1	A	319	GLN
2	B	39	GLN
2	B	152	ASN
2	B	190	HIS
2	B	202	ASN
2	B	220	ASN
2	B	319	GLN
1	C	6	ASN
1	C	14	ASN
1	C	142	ASN
1	C	146	ASN
1	C	152	ASN
1	C	257	ASN
2	D	110	GLN
2	D	190	HIS
2	D	202	ASN
2	D	220	ASN
2	D	245	GLN
2	D	319	GLN
2	D	330	ASN
1	E	14	ASN
1	E	139	HIS
1	E	146	ASN
1	E	176	HIS
1	E	190	HIS
1	E	330	ASN
2	F	78	ASN
2	F	81	ASN
2	F	108	HIS

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Mol	Chain	Res	Type
2	F	190	HIS
2	F	202	ASN
2	F	256	ASN
2	F	319	GLN
2	F	330	ASN
1	G	6	ASN
1	G	18(B)	HIS
1	G	61	ASN
1	G	142	ASN
1	G	257	ASN
1	G	330	ASN
2	H	81	ASN
2	H	202	ASN
1	I	14	ASN
1	I	61	ASN
1	I	152	ASN
1	I	176	HIS
1	I	220	GLN
1	I	226	ASN
1	I	313	ASN
2	J	6	ASN
2	J	152	ASN
2	J	202	ASN
2	J	220	ASN
2	J	319	GLN
1	K	6	ASN
1	K	14	ASN
1	K	108	HIS
1	K	110	GLN
1	K	176	HIS
1	K	257	ASN
2	L	108	HIS
2	L	110	GLN
2	L	152	ASN
2	L	190	HIS
2	L	202	ASN
2	L	220	ASN
2	L	319	GLN
2	L	330	ASN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.6 Ligand geometry ⓘ

16 ligands are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
3	NAD	K	401	-	46,48,48	0.62	1 (2%)	64,73,73	0.60	1 (1%)
3	NAD	L	401	-	46,48,48	4.09	22 (47%)	64,73,73	2.18	13 (20%)
3	NAD	P	401	-	46,48,48	0.58	1 (2%)	64,73,73	0.56	1 (1%)
3	NAD	G	401	-	46,48,48	4.06	21 (45%)	64,73,73	2.05	13 (20%)
3	NAD	H	401	-	46,48,48	4.03	21 (45%)	64,73,73	2.19	14 (21%)
3	NAD	Q	401	-	46,48,48	4.01	20 (43%)	64,73,73	2.13	14 (21%)
3	NAD	B	401	-	46,48,48	4.05	22 (47%)	64,73,73	2.20	16 (25%)
3	NAD	R	401	-	46,48,48	0.59	1 (2%)	64,73,73	0.54	1 (1%)
3	NAD	I	401	-	46,48,48	0.58	1 (2%)	64,73,73	0.56	1 (1%)
3	NAD	F	401	-	46,48,48	4.07	21 (45%)	64,73,73	2.22	15 (23%)
3	NAD	O	401	-	46,48,48	0.62	1 (2%)	64,73,73	0.53	1 (1%)
3	NAD	D	401	-	46,48,48	4.09	22 (47%)	64,73,73	2.18	13 (20%)
3	NAD	C	401	-	46,48,48	3.98	21 (45%)	64,73,73	2.23	16 (25%)
3	NAD	J	401	-	46,48,48	0.56	1 (2%)	64,73,73	0.54	1 (1%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
3	NAD	E	401	-	46,48,48	4.00	21 (45%)	64,73,73	2.27	16 (25%)
3	NAD	A	401	-	46,48,48	0.59	1 (2%)	64,73,73	0.55	1 (1%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	NAD	K	401	-	-	14/30/62/62	0/5/5/5
3	NAD	L	401	-	-	12/30/62/62	0/5/5/5
3	NAD	P	401	-	-	13/30/62/62	0/5/5/5
3	NAD	G	401	-	-	12/30/62/62	0/5/5/5
3	NAD	H	401	-	-	14/30/62/62	0/5/5/5
3	NAD	Q	401	-	-	9/30/62/62	0/5/5/5
3	NAD	B	401	-	-	14/30/62/62	0/5/5/5
3	NAD	R	401	-	-	14/30/62/62	0/5/5/5
3	NAD	I	401	-	-	13/30/62/62	0/5/5/5
3	NAD	F	401	-	-	13/30/62/62	0/5/5/5
3	NAD	O	401	-	-	15/30/62/62	0/5/5/5
3	NAD	D	401	-	-	12/30/62/62	0/5/5/5
3	NAD	C	401	-	-	11/30/62/62	0/5/5/5
3	NAD	J	401	-	-	9/30/62/62	0/5/5/5
3	NAD	E	401	-	-	10/30/62/62	0/5/5/5
3	NAD	A	401	-	-	15/30/62/62	0/5/5/5

All (198) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	401	NAD	O4D-C1D	-10.91	1.26	1.40
3	L	401	NAD	O4D-C1D	-10.90	1.26	1.40
3	B	401	NAD	O4D-C1D	-10.70	1.26	1.40
3	F	401	NAD	O4D-C1D	-10.69	1.26	1.40
3	H	401	NAD	O4D-C1D	-10.54	1.27	1.40
3	G	401	NAD	O4D-C1D	-10.51	1.27	1.40
3	Q	401	NAD	O4D-C1D	-10.47	1.27	1.40
3	C	401	NAD	O4D-C1D	-10.36	1.27	1.40
3	E	401	NAD	O4D-C1D	-10.14	1.27	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	F	401	NAD	PN-O3	9.80	1.70	1.59
3	L	401	NAD	PN-O3	9.73	1.70	1.59
3	D	401	NAD	PN-O3	9.70	1.70	1.59
3	G	401	NAD	PN-O3	9.64	1.69	1.59
3	E	401	NAD	C3B-C4B	-9.54	1.28	1.53
3	H	401	NAD	PN-O3	9.51	1.69	1.59
3	G	401	NAD	C3B-C4B	-9.45	1.29	1.53
3	B	401	NAD	PN-O3	9.45	1.69	1.59
3	E	401	NAD	PN-O3	9.44	1.69	1.59
3	L	401	NAD	C3B-C4B	-9.42	1.29	1.53
3	D	401	NAD	C3B-C4B	-9.40	1.29	1.53
3	H	401	NAD	C3B-C4B	-9.33	1.29	1.53
3	B	401	NAD	C3B-C4B	-9.31	1.29	1.53
3	Q	401	NAD	C3B-C4B	-9.21	1.29	1.53
3	C	401	NAD	C3B-C4B	-9.18	1.29	1.53
3	F	401	NAD	C3B-C4B	-9.13	1.29	1.53
3	Q	401	NAD	PN-O3	8.98	1.69	1.59
3	C	401	NAD	C7N-N7N	8.91	1.49	1.33
3	Q	401	NAD	C7N-N7N	8.83	1.49	1.33
3	C	401	NAD	PN-O3	8.82	1.69	1.59
3	H	401	NAD	C7N-N7N	8.75	1.49	1.33
3	G	401	NAD	C7N-N7N	8.74	1.49	1.33
3	D	401	NAD	C3D-C4D	-8.74	1.30	1.53
3	B	401	NAD	C3D-C4D	-8.71	1.30	1.53
3	L	401	NAD	C3D-C4D	-8.70	1.30	1.53
3	F	401	NAD	C7N-N7N	8.70	1.49	1.33
3	E	401	NAD	C7N-N7N	8.67	1.48	1.33
3	E	401	NAD	C3D-C4D	-8.67	1.31	1.53
3	C	401	NAD	C3D-C4D	-8.66	1.31	1.53
3	B	401	NAD	C7N-N7N	8.65	1.48	1.33
3	F	401	NAD	C3D-C4D	-8.63	1.31	1.53
3	L	401	NAD	C7N-N7N	8.58	1.48	1.33
3	D	401	NAD	C7N-N7N	8.56	1.48	1.33
3	G	401	NAD	C3D-C4D	-8.50	1.31	1.53
3	Q	401	NAD	C3D-C4D	-8.43	1.31	1.53
3	H	401	NAD	C3D-C4D	-8.36	1.31	1.53
3	H	401	NAD	O4D-C4D	7.57	1.61	1.45
3	B	401	NAD	O4B-C4B	7.55	1.61	1.45
3	Q	401	NAD	O4D-C4D	7.54	1.61	1.45
3	H	401	NAD	O4B-C4B	7.54	1.61	1.45
3	F	401	NAD	O4B-C4B	7.52	1.61	1.45
3	C	401	NAD	O4D-C4D	7.52	1.61	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	401	NAD	O4D-C4D	7.50	1.61	1.45
3	E	401	NAD	O4B-C4B	7.44	1.61	1.45
3	L	401	NAD	O4D-C4D	7.42	1.61	1.45
3	D	401	NAD	O4B-C4B	7.41	1.61	1.45
3	B	401	NAD	O4D-C4D	7.41	1.61	1.45
3	L	401	NAD	O4B-C4B	7.40	1.61	1.45
3	G	401	NAD	O4B-C4B	7.40	1.61	1.45
3	F	401	NAD	O4D-C4D	7.39	1.61	1.45
3	Q	401	NAD	O4B-C4B	7.38	1.61	1.45
3	D	401	NAD	O4D-C4D	7.38	1.61	1.45
3	C	401	NAD	O4B-C4B	7.35	1.61	1.45
3	E	401	NAD	O4D-C4D	7.31	1.61	1.45
3	B	401	NAD	C6A-N6A	5.90	1.49	1.34
3	H	401	NAD	C6A-N6A	5.88	1.49	1.34
3	F	401	NAD	C6A-N6A	5.86	1.49	1.34
3	L	401	NAD	C6A-N6A	5.86	1.49	1.34
3	D	401	NAD	C6A-N6A	5.84	1.49	1.34
3	E	401	NAD	C6A-N6A	5.81	1.49	1.34
3	C	401	NAD	C6A-N6A	5.81	1.49	1.34
3	G	401	NAD	C6A-N6A	5.78	1.49	1.34
3	Q	401	NAD	C6A-N6A	5.75	1.48	1.34
3	D	401	NAD	C3N-C7N	4.85	1.57	1.50
3	F	401	NAD	PA-O3	4.81	1.64	1.59
3	G	401	NAD	PA-O3	4.78	1.64	1.59
3	B	401	NAD	C3N-C7N	4.76	1.57	1.50
3	L	401	NAD	C3N-C7N	4.75	1.57	1.50
3	G	401	NAD	C3N-C7N	4.65	1.57	1.50
3	F	401	NAD	C3N-C7N	4.62	1.57	1.50
3	Q	401	NAD	C3N-C7N	4.60	1.57	1.50
3	F	401	NAD	O4B-C1B	-4.59	1.31	1.42
3	C	401	NAD	O4B-C1B	-4.59	1.31	1.42
3	D	401	NAD	PA-O3	4.58	1.64	1.59
3	Q	401	NAD	O4B-C1B	-4.58	1.31	1.42
3	H	401	NAD	C3N-C7N	4.55	1.57	1.50
3	Q	401	NAD	PA-O3	4.55	1.64	1.59
3	L	401	NAD	PA-O3	4.53	1.64	1.59
3	L	401	NAD	O4B-C1B	-4.47	1.31	1.42
3	G	401	NAD	O4B-C1B	-4.43	1.31	1.42
3	H	401	NAD	O4B-C1B	-4.43	1.31	1.42
3	E	401	NAD	O4B-C1B	-4.40	1.31	1.42
3	D	401	NAD	O4B-C1B	-4.40	1.31	1.42
3	B	401	NAD	O4B-C1B	-4.40	1.31	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	H	401	NAD	O3D-C3D	4.37	1.53	1.43
3	D	401	NAD	O3D-C3D	4.31	1.53	1.43
3	L	401	NAD	O3D-C3D	4.30	1.53	1.43
3	Q	401	NAD	O3D-C3D	4.30	1.53	1.43
3	E	401	NAD	PA-O3	4.29	1.64	1.59
3	B	401	NAD	PA-O3	4.27	1.64	1.59
3	G	401	NAD	O3D-C3D	4.24	1.53	1.43
3	H	401	NAD	PA-O3	4.23	1.64	1.59
3	F	401	NAD	O3D-C3D	4.23	1.53	1.43
3	C	401	NAD	C3N-C7N	4.20	1.56	1.50
3	E	401	NAD	O3D-C3D	4.19	1.53	1.43
3	B	401	NAD	O3D-C3D	4.17	1.53	1.43
3	C	401	NAD	O3D-C3D	4.15	1.53	1.43
3	E	401	NAD	C3N-C7N	4.08	1.56	1.50
3	C	401	NAD	PA-O3	4.00	1.63	1.59
3	F	401	NAD	C2N-N1N	3.23	1.38	1.35
3	E	401	NAD	C5A-C4A	-3.19	1.33	1.39
3	C	401	NAD	C5A-C4A	-3.13	1.33	1.39
3	Q	401	NAD	C5A-C4A	-3.10	1.33	1.39
3	C	401	NAD	O3B-C3B	3.10	1.50	1.43
3	G	401	NAD	O3B-C3B	3.10	1.50	1.43
3	Q	401	NAD	O3B-C3B	3.09	1.50	1.43
3	B	401	NAD	C5A-C4A	-3.03	1.33	1.39
3	H	401	NAD	C5A-C4A	-3.01	1.33	1.39
3	G	401	NAD	C5A-C4A	-2.99	1.33	1.39
3	G	401	NAD	C8A-N9A	-2.98	1.32	1.37
3	E	401	NAD	C8A-N9A	-2.98	1.32	1.37
3	L	401	NAD	C5A-C4A	-2.98	1.33	1.39
3	D	401	NAD	C2N-N1N	2.96	1.38	1.35
3	D	401	NAD	O3B-C3B	2.95	1.50	1.43
3	B	401	NAD	O3B-C3B	2.95	1.50	1.43
3	D	401	NAD	C5A-C4A	-2.94	1.33	1.39
3	C	401	NAD	C8A-N9A	-2.94	1.32	1.37
3	E	401	NAD	O3B-C3B	2.93	1.50	1.43
3	L	401	NAD	O3B-C3B	2.91	1.50	1.43
3	D	401	NAD	C8A-N9A	-2.91	1.32	1.37
3	L	401	NAD	C2N-N1N	2.90	1.38	1.35
3	L	401	NAD	C8A-N9A	-2.89	1.32	1.37
3	F	401	NAD	C5A-C4A	-2.88	1.34	1.39
3	H	401	NAD	O3B-C3B	2.87	1.50	1.43
3	Q	401	NAD	C2N-N1N	2.85	1.38	1.35
3	H	401	NAD	C8A-N9A	-2.85	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	F	401	NAD	O3B-C3B	2.79	1.49	1.43
3	G	401	NAD	C2N-N1N	2.77	1.38	1.35
3	B	401	NAD	C8A-N9A	-2.75	1.32	1.37
3	F	401	NAD	C8A-N9A	-2.72	1.32	1.37
3	Q	401	NAD	C8A-N9A	-2.72	1.32	1.37
3	D	401	NAD	C2A-N1A	2.71	1.38	1.33
3	E	401	NAD	O2B-C2B	-2.71	1.36	1.43
3	B	401	NAD	O2B-C2B	-2.68	1.36	1.43
3	L	401	NAD	O2B-C2B	-2.68	1.36	1.43
3	F	401	NAD	O2B-C2B	-2.68	1.36	1.43
3	L	401	NAD	C2A-N1A	2.67	1.38	1.33
3	H	401	NAD	O2B-C2B	-2.66	1.36	1.43
3	L	401	NAD	O7N-C7N	-2.62	1.19	1.24
3	Q	401	NAD	O2B-C2B	-2.62	1.36	1.43
3	H	401	NAD	C2N-N1N	2.61	1.37	1.35
3	D	401	NAD	O2B-C2B	-2.61	1.36	1.43
3	B	401	NAD	C2N-N1N	2.61	1.37	1.35
3	B	401	NAD	C2A-N1A	2.60	1.38	1.33
3	G	401	NAD	O2B-C2B	-2.60	1.36	1.43
3	C	401	NAD	O2B-C2B	-2.58	1.36	1.43
3	C	401	NAD	C2A-N1A	2.56	1.38	1.33
3	D	401	NAD	O7N-C7N	-2.56	1.19	1.24
3	F	401	NAD	C2A-N1A	2.55	1.38	1.33
3	K	401	NAD	C2N-N1N	2.54	1.37	1.35
3	H	401	NAD	C2A-N1A	2.52	1.38	1.33
3	E	401	NAD	C2A-N1A	2.52	1.38	1.33
3	E	401	NAD	O7N-C7N	-2.51	1.19	1.24
3	Q	401	NAD	C2A-N1A	2.51	1.38	1.33
3	O	401	NAD	C2N-N1N	2.47	1.37	1.35
3	G	401	NAD	C5A-N7A	-2.45	1.34	1.39
3	G	401	NAD	O7N-C7N	-2.43	1.19	1.24
3	C	401	NAD	O7N-C7N	-2.39	1.19	1.24
3	H	401	NAD	O7N-C7N	-2.36	1.19	1.24
3	G	401	NAD	C2A-N1A	2.36	1.38	1.33
3	P	401	NAD	C2N-N1N	2.35	1.37	1.35
3	F	401	NAD	O7N-C7N	-2.30	1.19	1.24
3	R	401	NAD	C2N-N1N	2.30	1.37	1.35
3	B	401	NAD	O7N-C7N	-2.29	1.19	1.24
3	J	401	NAD	C2N-N1N	2.27	1.37	1.35
3	Q	401	NAD	O7N-C7N	-2.25	1.19	1.24
3	E	401	NAD	C5A-N7A	-2.25	1.35	1.39
3	Q	401	NAD	C5A-N7A	-2.24	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	401	NAD	C5A-N7A	-2.23	1.35	1.39
3	I	401	NAD	C2N-N1N	2.22	1.37	1.35
3	B	401	NAD	C5A-N7A	-2.17	1.35	1.39
3	A	401	NAD	C2N-N1N	2.16	1.37	1.35
3	H	401	NAD	C5A-N7A	-2.15	1.35	1.39
3	F	401	NAD	C8A-N7A	2.15	1.35	1.31
3	D	401	NAD	C5A-N7A	-2.11	1.35	1.39
3	L	401	NAD	C5A-N7A	-2.11	1.35	1.39
3	B	401	NAD	PA-O5B	2.09	1.67	1.59
3	L	401	NAD	C8A-N7A	2.07	1.35	1.31
3	D	401	NAD	C8A-N7A	2.07	1.35	1.31
3	H	401	NAD	C8A-N7A	2.06	1.35	1.31
3	E	401	NAD	C8A-N7A	2.06	1.35	1.31
3	L	401	NAD	PA-O5B	2.04	1.67	1.59
3	C	401	NAD	C2N-N1N	2.04	1.37	1.35
3	F	401	NAD	PA-O5B	2.04	1.67	1.59
3	C	401	NAD	C8A-N7A	2.03	1.35	1.31
3	G	401	NAD	PA-O5B	2.02	1.67	1.59
3	D	401	NAD	PA-O5B	2.01	1.67	1.59
3	E	401	NAD	C2N-N1N	2.01	1.37	1.35
3	B	401	NAD	C8A-N7A	2.01	1.35	1.31

All (137) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	401	NAD	C4A-N9A-C1B	-7.23	109.73	126.63
3	E	401	NAD	C4A-N9A-C1B	-7.13	109.96	126.63
3	L	401	NAD	C4A-N9A-C1B	-7.08	110.06	126.63
3	D	401	NAD	C4A-N9A-C1B	-7.08	110.08	126.63
3	H	401	NAD	C4A-N9A-C1B	-6.91	110.47	126.63
3	F	401	NAD	C4A-N9A-C1B	-6.80	110.72	126.63
3	Q	401	NAD	C4A-N9A-C1B	-6.65	111.08	126.63
3	B	401	NAD	C4A-N9A-C1B	-6.65	111.08	126.63
3	G	401	NAD	N3A-C2A-N1A	-5.94	119.58	128.58
3	B	401	NAD	N3A-C2A-N1A	-5.90	119.65	128.58
3	G	401	NAD	C4A-N9A-C1B	-5.88	112.88	126.63
3	F	401	NAD	N3A-C2A-N1A	-5.76	119.86	128.58
3	C	401	NAD	N9A-C8A-N7A	-5.75	105.77	113.94
3	Q	401	NAD	N3A-C2A-N1A	-5.73	119.92	128.58
3	C	401	NAD	N3A-C2A-N1A	-5.72	119.93	128.58
3	E	401	NAD	N3A-C2A-N1A	-5.70	119.95	128.58
3	L	401	NAD	N3A-C2A-N1A	-5.63	120.05	128.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	E	401	NAD	N9A-C8A-N7A	-5.60	105.99	113.94
3	D	401	NAD	N3A-C2A-N1A	-5.60	120.11	128.58
3	L	401	NAD	N9A-C8A-N7A	-5.55	106.06	113.94
3	D	401	NAD	N9A-C8A-N7A	-5.53	106.09	113.94
3	F	401	NAD	N9A-C8A-N7A	-5.50	106.13	113.94
3	C	401	NAD	C1B-N9A-C8A	5.46	139.22	127.09
3	L	401	NAD	C1B-N9A-C8A	5.46	139.21	127.09
3	E	401	NAD	C1B-N9A-C8A	5.45	139.19	127.09
3	D	401	NAD	C1B-N9A-C8A	5.43	139.16	127.09
3	H	401	NAD	N9A-C8A-N7A	-5.42	106.24	113.94
3	B	401	NAD	N9A-C8A-N7A	-5.35	106.34	113.94
3	H	401	NAD	C1B-N9A-C8A	5.34	138.95	127.09
3	H	401	NAD	N3A-C2A-N1A	-5.30	120.55	128.58
3	F	401	NAD	C1B-N9A-C8A	5.26	138.76	127.09
3	Q	401	NAD	N9A-C8A-N7A	-5.23	106.52	113.94
3	Q	401	NAD	C1B-N9A-C8A	5.22	138.68	127.09
3	B	401	NAD	C1B-N9A-C8A	5.13	138.48	127.09
3	C	401	NAD	C4A-N9A-C8A	5.05	111.04	105.74
3	H	401	NAD	N6A-C6A-N1A	-4.92	107.41	118.38
3	L	401	NAD	N6A-C6A-N1A	-4.91	107.44	118.38
3	G	401	NAD	N9A-C8A-N7A	-4.91	106.97	113.94
3	D	401	NAD	N6A-C6A-N1A	-4.90	107.46	118.38
3	E	401	NAD	C4A-N9A-C8A	4.87	110.85	105.74
3	F	401	NAD	N6A-C6A-N1A	-4.80	107.69	118.38
3	D	401	NAD	C4A-N9A-C8A	4.79	110.77	105.74
3	Q	401	NAD	N6A-C6A-N1A	-4.78	107.74	118.38
3	L	401	NAD	C4A-N9A-C8A	4.75	110.73	105.74
3	C	401	NAD	N6A-C6A-N1A	-4.71	107.89	118.38
3	G	401	NAD	N6A-C6A-N1A	-4.67	107.97	118.38
3	E	401	NAD	N6A-C6A-N1A	-4.65	108.03	118.38
3	F	401	NAD	C5A-C4A-N3A	-4.60	120.38	126.72
3	H	401	NAD	C4A-N9A-C8A	4.58	110.55	105.74
3	B	401	NAD	N6A-C6A-N1A	-4.58	108.18	118.38
3	G	401	NAD	C5A-C4A-N3A	-4.56	120.44	126.72
3	F	401	NAD	C4A-N9A-C8A	4.56	110.52	105.74
3	G	401	NAD	C1B-N9A-C8A	4.50	137.09	127.09
3	B	401	NAD	C5A-C4A-N3A	-4.48	120.54	126.72
3	B	401	NAD	C4A-N9A-C8A	4.48	110.44	105.74
3	H	401	NAD	C5A-C4A-N3A	-4.31	120.79	126.72
3	Q	401	NAD	C5A-C4A-N3A	-4.28	120.82	126.72
3	Q	401	NAD	C4A-N9A-C8A	4.28	110.23	105.74
3	D	401	NAD	C5A-C4A-N3A	-4.27	120.84	126.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	L	401	NAD	C5A-C4A-N3A	-4.26	120.85	126.72
3	E	401	NAD	C5A-C4A-N3A	-4.14	121.02	126.72
3	C	401	NAD	C5A-C4A-N3A	-4.10	121.07	126.72
3	G	401	NAD	C4A-N9A-C8A	4.08	110.02	105.74
3	E	401	NAD	C6N-N1N-C2N	-3.89	118.57	121.88
3	H	401	NAD	C5A-C6A-N6A	3.80	132.69	123.29
3	L	401	NAD	C5A-C6A-N6A	3.77	132.62	123.29
3	D	401	NAD	C5A-C6A-N6A	3.77	132.61	123.29
3	G	401	NAD	N3A-C4A-N9A	3.73	133.51	127.17
3	G	401	NAD	C5A-C6A-N6A	3.66	132.36	123.29
3	Q	401	NAD	C5A-C6A-N6A	3.62	132.25	123.29
3	F	401	NAD	C5A-C6A-N6A	3.61	132.23	123.29
3	C	401	NAD	C5A-C6A-N6A	3.61	132.22	123.29
3	F	401	NAD	N3A-C4A-N9A	3.56	133.23	127.17
3	B	401	NAD	N3A-C4A-N9A	3.54	133.19	127.17
3	E	401	NAD	C4D-O4D-C1D	-3.52	106.70	109.92
3	E	401	NAD	C5A-C6A-N6A	3.51	131.99	123.29
3	B	401	NAD	C5A-C6A-N6A	3.45	131.84	123.29
3	H	401	NAD	C4D-O4D-C1D	-3.40	106.81	109.92
3	D	401	NAD	N3A-C4A-N9A	3.33	132.83	127.17
3	F	401	NAD	C5A-N7A-C8A	3.33	108.68	103.45
3	B	401	NAD	C2A-N3A-C4A	3.30	119.89	111.83
3	C	401	NAD	N3A-C4A-N9A	3.30	132.77	127.17
3	H	401	NAD	N3A-C4A-N9A	3.30	132.77	127.17
3	Q	401	NAD	N3A-C4A-N9A	3.28	132.75	127.17
3	L	401	NAD	N3A-C4A-N9A	3.27	132.74	127.17
3	F	401	NAD	C2A-N3A-C4A	3.26	119.79	111.83
3	C	401	NAD	C5A-N7A-C8A	3.25	108.56	103.45
3	E	401	NAD	N3A-C4A-N9A	3.23	132.67	127.17
3	L	401	NAD	C5A-N7A-C8A	3.23	108.52	103.45
3	G	401	NAD	C2A-N3A-C4A	3.20	119.64	111.83
3	D	401	NAD	C5A-N7A-C8A	3.20	108.47	103.45
3	C	401	NAD	C4D-O4D-C1D	-3.15	107.04	109.92
3	E	401	NAD	C2N-C3N-C4N	3.15	121.92	118.26
3	E	401	NAD	C5N-C4N-C3N	-3.13	117.29	120.36
3	H	401	NAD	C5A-N7A-C8A	3.12	108.36	103.45
3	E	401	NAD	C5A-N7A-C8A	3.11	108.34	103.45
3	B	401	NAD	C5A-N7A-C8A	3.10	108.32	103.45
3	Q	401	NAD	C2A-N3A-C4A	3.09	119.39	111.83
3	E	401	NAD	C2A-N3A-C4A	3.08	119.35	111.83
3	D	401	NAD	C2A-N3A-C4A	3.07	119.33	111.83
3	L	401	NAD	C2A-N3A-C4A	3.07	119.32	111.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	B	401	NAD	C4D-O4D-C1D	-3.06	107.13	109.92
3	C	401	NAD	C2A-N3A-C4A	3.05	119.27	111.83
3	Q	401	NAD	C5A-N7A-C8A	2.98	108.14	103.45
3	H	401	NAD	C2A-N3A-C4A	2.98	119.11	111.83
3	G	401	NAD	C5A-N7A-C8A	2.95	108.09	103.45
3	A	401	NAD	C6N-N1N-C2N	-2.84	119.46	121.88
3	B	401	NAD	C3B-C2B-C1B	2.82	106.81	101.46
3	Q	401	NAD	C6N-N1N-C2N	-2.81	119.49	121.88
3	I	401	NAD	C6N-N1N-C2N	-2.81	119.49	121.88
3	R	401	NAD	C6N-N1N-C2N	-2.78	119.51	121.88
3	H	401	NAD	C2B-C1B-N9A	-2.77	106.42	113.30
3	K	401	NAD	C6N-N1N-C2N	-2.75	119.53	121.88
3	F	401	NAD	C4D-O4D-C1D	-2.71	107.45	109.92
3	J	401	NAD	C6N-N1N-C2N	-2.69	119.59	121.88
3	O	401	NAD	C6N-N1N-C2N	-2.68	119.60	121.88
3	C	401	NAD	C2N-C3N-C4N	2.67	121.36	118.26
3	P	401	NAD	C6N-N1N-C2N	-2.66	119.62	121.88
3	C	401	NAD	C3B-C2B-C1B	2.48	106.14	101.46
3	B	401	NAD	C2B-C3B-C4B	2.43	107.30	102.61
3	D	401	NAD	C4D-O4D-C1D	-2.40	107.73	109.92
3	C	401	NAD	C2B-C3B-C4B	2.35	107.15	102.61
3	E	401	NAD	C2B-C1B-N9A	-2.27	107.67	113.30
3	L	401	NAD	C4D-O4D-C1D	-2.26	107.85	109.92
3	F	401	NAD	C6N-N1N-C2N	-2.13	120.06	121.88
3	G	401	NAD	C2N-C3N-C4N	2.13	120.73	118.26
3	H	401	NAD	C2N-C3N-C4N	2.12	120.73	118.26
3	Q	401	NAD	C2N-C3N-C4N	2.09	120.69	118.26
3	G	401	NAD	C6N-N1N-C2N	-2.09	120.10	121.88
3	B	401	NAD	C6N-N1N-C2N	-2.06	120.12	121.88
3	F	401	NAD	C2B-C3B-C4B	2.06	106.59	102.61
3	C	401	NAD	C6N-N1N-C2N	-2.05	120.14	121.88
3	B	401	NAD	C2N-C3N-C4N	2.02	120.61	118.26
3	D	401	NAD	O7N-C7N-N7N	-2.02	119.70	122.62
3	F	401	NAD	C4A-C5A-N7A	-2.02	108.27	110.58
3	L	401	NAD	C4A-C5A-N7A	-2.01	108.28	110.58
3	Q	401	NAD	C5D-C4D-C3D	-2.01	107.99	115.21

There are no chirality outliers.

All (200) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	O	401	NAD	C5B-O5B-PA-O2A

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Mol	Chain	Res	Type	Atoms
3	O	401	NAD	C5B-O5B-PA-O3
3	O	401	NAD	O4B-C4B-C5B-O5B
3	O	401	NAD	C5D-O5D-PN-O1N
3	O	401	NAD	C5D-O5D-PN-O2N
3	O	401	NAD	O4D-C1D-N1N-C2N
3	O	401	NAD	O4D-C1D-N1N-C6N
3	O	401	NAD	C2D-C1D-N1N-C2N
3	O	401	NAD	C2D-C1D-N1N-C6N
3	P	401	NAD	C5B-O5B-PA-O3
3	P	401	NAD	O4B-C4B-C5B-O5B
3	P	401	NAD	C5D-O5D-PN-O3
3	P	401	NAD	C4D-C5D-O5D-PN
3	Q	401	NAD	C5B-O5B-PA-O3
3	Q	401	NAD	C3B-C4B-C5B-O5B
3	Q	401	NAD	O4D-C1D-N1N-C2N
3	Q	401	NAD	O4D-C1D-N1N-C6N
3	Q	401	NAD	C2D-C1D-N1N-C2N
3	Q	401	NAD	C2D-C1D-N1N-C6N
3	R	401	NAD	C5B-O5B-PA-O1A
3	R	401	NAD	C3B-C4B-C5B-O5B
3	R	401	NAD	C5D-O5D-PN-O1N
3	R	401	NAD	C4D-C5D-O5D-PN
3	R	401	NAD	O4D-C4D-C5D-O5D
3	R	401	NAD	C2D-C1D-N1N-C2N
3	R	401	NAD	C2D-C1D-N1N-C6N
3	R	401	NAD	C2N-C3N-C7N-O7N
3	R	401	NAD	C2N-C3N-C7N-N7N
3	A	401	NAD	C5B-O5B-PA-O2A
3	A	401	NAD	C5B-O5B-PA-O3
3	A	401	NAD	O4D-C1D-N1N-C2N
3	A	401	NAD	O4D-C1D-N1N-C6N
3	B	401	NAD	C4B-C5B-O5B-PA
3	B	401	NAD	C5D-O5D-PN-O2N
3	B	401	NAD	C4D-C5D-O5D-PN
3	B	401	NAD	O4D-C4D-C5D-O5D
3	B	401	NAD	C3D-C4D-C5D-O5D
3	B	401	NAD	C2D-C1D-N1N-C2N
3	B	401	NAD	C2D-C1D-N1N-C6N
3	C	401	NAD	O4D-C4D-C5D-O5D
3	C	401	NAD	C2D-C1D-N1N-C2N
3	C	401	NAD	C2D-C1D-N1N-C6N
3	D	401	NAD	C5B-O5B-PA-O1A

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Mol	Chain	Res	Type	Atoms
3	D	401	NAD	C3B-C4B-C5B-O5B
3	D	401	NAD	C5D-O5D-PN-O2N
3	D	401	NAD	C4D-C5D-O5D-PN
3	E	401	NAD	O4D-C1D-N1N-C2N
3	F	401	NAD	C5B-O5B-PA-O2A
3	F	401	NAD	C5B-O5B-PA-O3
3	F	401	NAD	C5D-O5D-PN-O2N
3	F	401	NAD	C4D-C5D-O5D-PN
3	F	401	NAD	O4D-C1D-N1N-C2N
3	G	401	NAD	C4B-C5B-O5B-PA
3	G	401	NAD	O4D-C1D-N1N-C2N
3	G	401	NAD	O4D-C1D-N1N-C6N
3	G	401	NAD	C2D-C1D-N1N-C2N
3	G	401	NAD	C2D-C1D-N1N-C6N
3	H	401	NAD	C3B-C4B-C5B-O5B
3	H	401	NAD	C5D-O5D-PN-O2N
3	H	401	NAD	C4D-C5D-O5D-PN
3	H	401	NAD	O4D-C4D-C5D-O5D
3	H	401	NAD	C2D-C1D-N1N-C2N
3	H	401	NAD	C2D-C1D-N1N-C6N
3	I	401	NAD	C5B-O5B-PA-O1A
3	I	401	NAD	C5B-O5B-PA-O2A
3	I	401	NAD	C5B-O5B-PA-O3
3	I	401	NAD	C4B-C5B-O5B-PA
3	I	401	NAD	C5D-O5D-PN-O3
3	I	401	NAD	C5D-O5D-PN-O2N
3	I	401	NAD	C4D-C5D-O5D-PN
3	J	401	NAD	O4B-C4B-C5B-O5B
3	J	401	NAD	C4D-C5D-O5D-PN
3	J	401	NAD	C2D-C1D-N1N-C2N
3	J	401	NAD	C2D-C1D-N1N-C6N
3	K	401	NAD	C5D-O5D-PN-O1N
3	K	401	NAD	C2N-C3N-C7N-O7N
3	K	401	NAD	C2N-C3N-C7N-N7N
3	L	401	NAD	C3B-C4B-C5B-O5B
3	L	401	NAD	C5D-O5D-PN-O2N
3	L	401	NAD	C4D-C5D-O5D-PN
3	K	401	NAD	C4N-C3N-C7N-O7N
3	K	401	NAD	C4N-C3N-C7N-N7N
3	R	401	NAD	C4N-C3N-C7N-O7N
3	R	401	NAD	C4N-C3N-C7N-N7N
3	O	401	NAD	C3B-C4B-C5B-O5B

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Mol	Chain	Res	Type	Atoms
3	P	401	NAD	C3B-C4B-C5B-O5B
3	R	401	NAD	C3D-C4D-C5D-O5D
3	B	401	NAD	O4B-C4B-C5B-O5B
3	C	401	NAD	O4B-C4B-C5B-O5B
3	D	401	NAD	C3D-C4D-C5D-O5D
3	E	401	NAD	O4B-C4B-C5B-O5B
3	E	401	NAD	C3B-C4B-C5B-O5B
3	E	401	NAD	O4D-C4D-C5D-O5D
3	G	401	NAD	C3B-C4B-C5B-O5B
3	H	401	NAD	C3D-C4D-C5D-O5D
3	I	401	NAD	C3B-C4B-C5B-O5B
3	J	401	NAD	C3B-C4B-C5B-O5B
3	J	401	NAD	C3D-C4D-C5D-O5D
3	K	401	NAD	C3D-C4D-C5D-O5D
3	L	401	NAD	C3D-C4D-C5D-O5D
3	Q	401	NAD	O4B-C4B-C5B-O5B
3	R	401	NAD	O4B-C4B-C5B-O5B
3	C	401	NAD	C3B-C4B-C5B-O5B
3	D	401	NAD	O4B-C4B-C5B-O5B
3	G	401	NAD	O4B-C4B-C5B-O5B
3	H	401	NAD	O4B-C4B-C5B-O5B
3	J	401	NAD	O4D-C4D-C5D-O5D
3	K	401	NAD	O4B-C4B-C5B-O5B
3	L	401	NAD	O4B-C4B-C5B-O5B
3	B	401	NAD	C3B-C4B-C5B-O5B
3	C	401	NAD	C3D-C4D-C5D-O5D
3	D	401	NAD	O4D-C4D-C5D-O5D
3	K	401	NAD	C3B-C4B-C5B-O5B
3	Q	401	NAD	C4B-C5B-O5B-PA
3	E	401	NAD	C4B-C5B-O5B-PA
3	A	401	NAD	O4B-C4B-C5B-O5B
3	I	401	NAD	O4B-C4B-C5B-O5B
3	I	401	NAD	O4D-C4D-C5D-O5D
3	I	401	NAD	C3D-C4D-C5D-O5D
3	L	401	NAD	O4D-C4D-C5D-O5D
3	C	401	NAD	C4B-C5B-O5B-PA
3	A	401	NAD	C3B-C4B-C5B-O5B
3	K	401	NAD	O4D-C4D-C5D-O5D
3	K	401	NAD	C4B-C5B-O5B-PA
3	Q	401	NAD	PA-O3-PN-O1N
3	H	401	NAD	PN-O3-PA-O1A
3	A	401	NAD	C4B-C5B-O5B-PA

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Mol	Chain	Res	Type	Atoms
3	O	401	NAD	C4B-C5B-O5B-PA
3	R	401	NAD	C4B-C5B-O5B-PA
3	A	401	NAD	C4N-C3N-C7N-N7N
3	P	401	NAD	PN-O3-PA-O5B
3	C	401	NAD	PN-O3-PA-O5B
3	F	401	NAD	PN-O3-PA-O5B
3	I	401	NAD	PN-O3-PA-O5B
3	K	401	NAD	PN-O3-PA-O5B
3	K	401	NAD	PA-O3-PN-O5D
3	A	401	NAD	C4N-C3N-C7N-O7N
3	H	401	NAD	C4B-C5B-O5B-PA
3	B	401	NAD	C2B-C1B-N9A-C8A
3	O	401	NAD	PA-O3-PN-O1N
3	C	401	NAD	PA-O3-PN-O1N
3	G	401	NAD	PN-O3-PA-O1A
3	E	401	NAD	C3D-C4D-C5D-O5D
3	C	401	NAD	C4D-C5D-O5D-PN
3	J	401	NAD	C4B-C5B-O5B-PA
3	A	401	NAD	C2N-C3N-C7N-N7N
3	O	401	NAD	C5D-O5D-PN-O3
3	P	401	NAD	C5B-O5B-PA-O1A
3	P	401	NAD	C5D-O5D-PN-O1N
3	B	401	NAD	C5B-O5B-PA-O3
3	B	401	NAD	C5D-O5D-PN-O3
3	B	401	NAD	C5D-O5D-PN-O1N
3	D	401	NAD	C5D-O5D-PN-O3
3	D	401	NAD	C5D-O5D-PN-O1N
3	E	401	NAD	C5D-O5D-PN-O3
3	E	401	NAD	C5D-O5D-PN-O1N
3	E	401	NAD	C5D-O5D-PN-O2N
3	F	401	NAD	C5D-O5D-PN-O3
3	F	401	NAD	C5D-O5D-PN-O1N
3	H	401	NAD	C5B-O5B-PA-O1A
3	H	401	NAD	C5D-O5D-PN-O3
3	H	401	NAD	C5D-O5D-PN-O1N
3	J	401	NAD	C5B-O5B-PA-O1A
3	K	401	NAD	C5B-O5B-PA-O1A
3	L	401	NAD	C5B-O5B-PA-O1A
3	L	401	NAD	C5D-O5D-PN-O3
3	L	401	NAD	C5D-O5D-PN-O1N
3	O	401	NAD	C4D-C5D-O5D-PN
3	D	401	NAD	C4B-C5B-O5B-PA

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Mol	Chain	Res	Type	Atoms
3	L	401	NAD	C4B-C5B-O5B-PA
3	O	401	NAD	PA-O3-PN-O2N
3	P	401	NAD	PN-O3-PA-O1A
3	D	401	NAD	PN-O3-PA-O1A
3	G	401	NAD	PA-O3-PN-O2N
3	K	401	NAD	PN-O3-PA-O1A
3	A	401	NAD	C2N-C3N-C7N-O7N
3	E	401	NAD	C4D-C5D-O5D-PN
3	A	401	NAD	C2D-C1D-N1N-C6N
3	F	401	NAD	C4B-C5B-O5B-PA
3	F	401	NAD	O4D-C1D-N1N-C6N
3	A	401	NAD	PN-O3-PA-O1A
3	C	401	NAD	PN-O3-PA-O1A
3	G	401	NAD	PN-O3-PA-O2A
3	H	401	NAD	PN-O3-PA-O2A
3	L	401	NAD	PN-O3-PA-O1A
3	B	401	NAD	O4B-C1B-N9A-C8A
3	P	401	NAD	C3D-C4D-C5D-O5D
3	A	401	NAD	PN-O3-PA-O2A
3	A	401	NAD	PA-O3-PN-O2N
3	D	401	NAD	PN-O3-PA-O2A
3	F	401	NAD	PN-O3-PA-O1A
3	F	401	NAD	PA-O3-PN-O2N
3	G	401	NAD	PA-O3-PN-O1N
3	I	401	NAD	PN-O3-PA-O2A
3	L	401	NAD	PN-O3-PA-O2A
3	P	401	NAD	C4B-C5B-O5B-PA
3	P	401	NAD	C4N-C3N-C7N-N7N
3	G	401	NAD	C4D-C5D-O5D-PN
3	P	401	NAD	C4N-C3N-C7N-O7N
3	F	401	NAD	PA-O3-PN-O1N

There are no ring outliers.

16 monomers are involved in 175 short contacts:

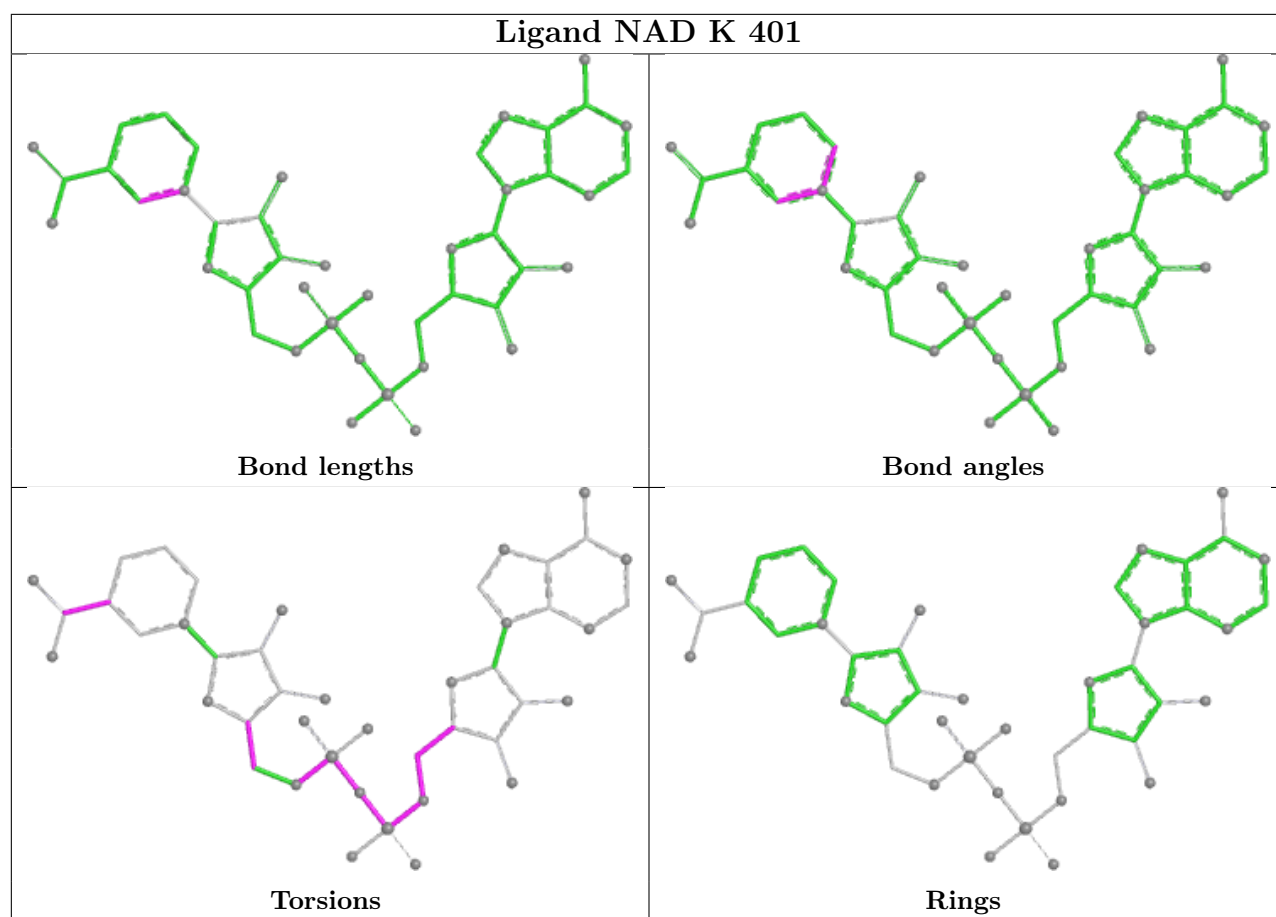
Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	K	401	NAD	11	0
3	L	401	NAD	10	0
3	P	401	NAD	14	0
3	G	401	NAD	16	0
3	H	401	NAD	10	0
3	Q	401	NAD	12	0

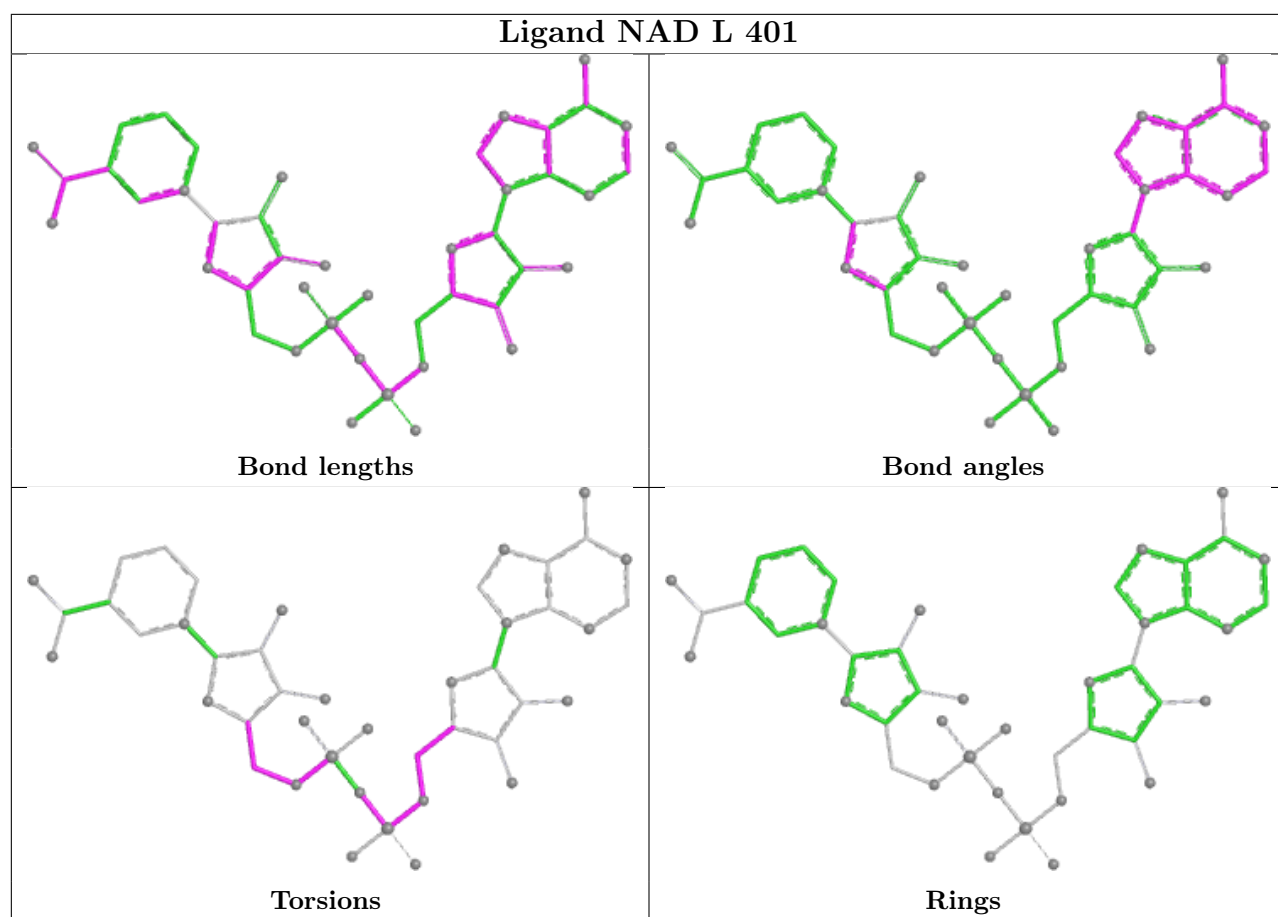
Continued on next page...

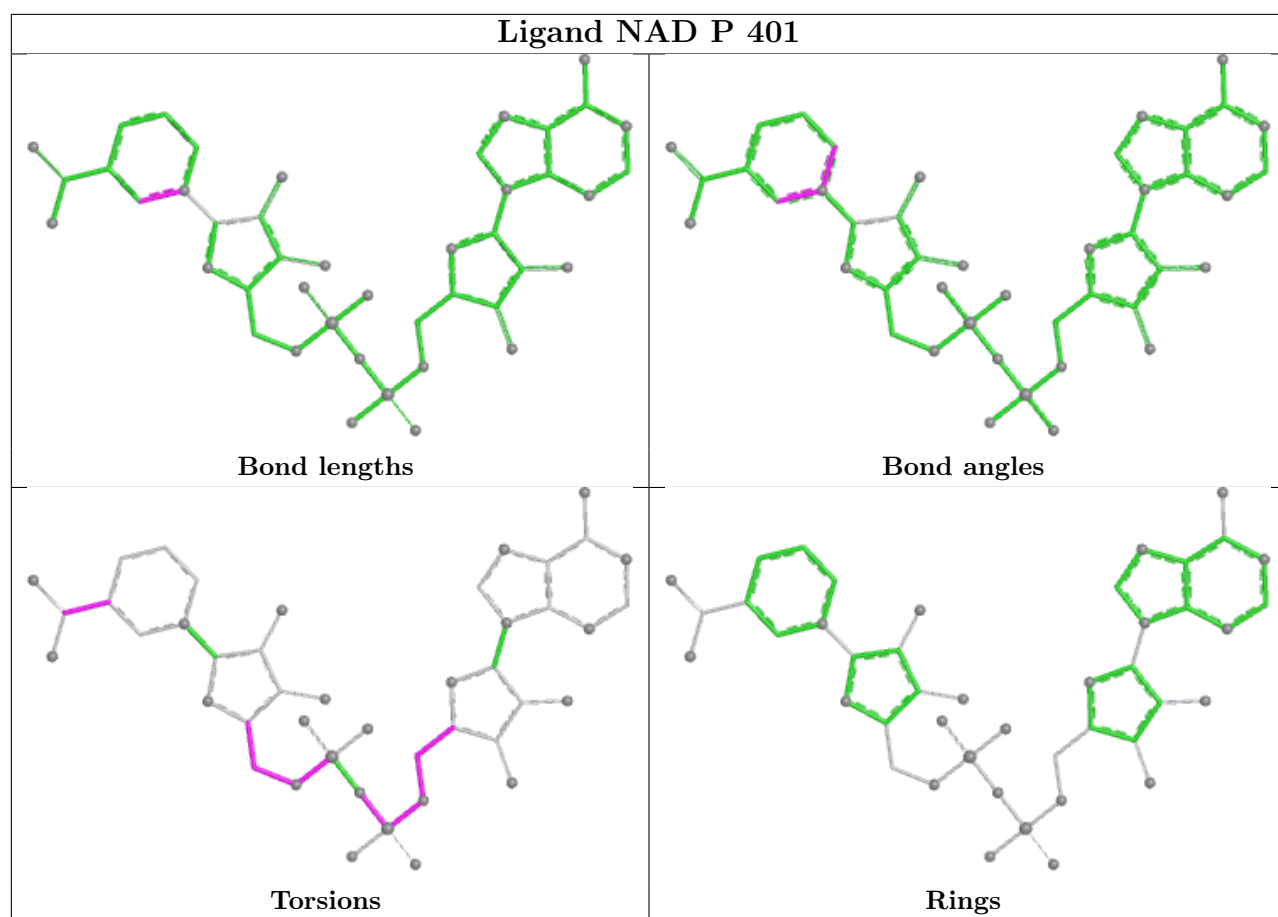
Continued from previous page...

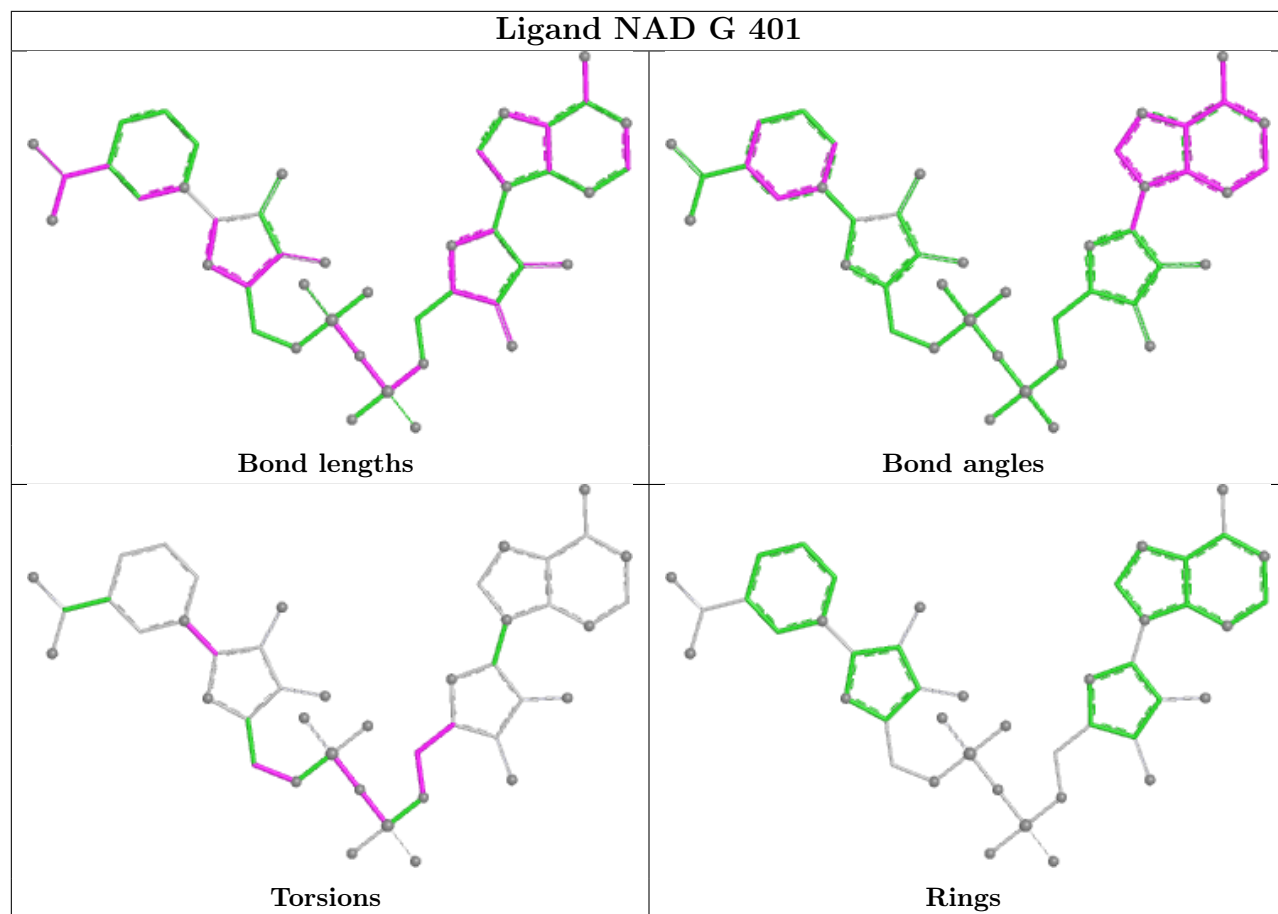
Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	B	401	NAD	11	0
3	R	401	NAD	13	0
3	I	401	NAD	9	0
3	F	401	NAD	10	0
3	O	401	NAD	10	0
3	D	401	NAD	12	0
3	C	401	NAD	12	0
3	J	401	NAD	9	0
3	E	401	NAD	9	0
3	A	401	NAD	7	0

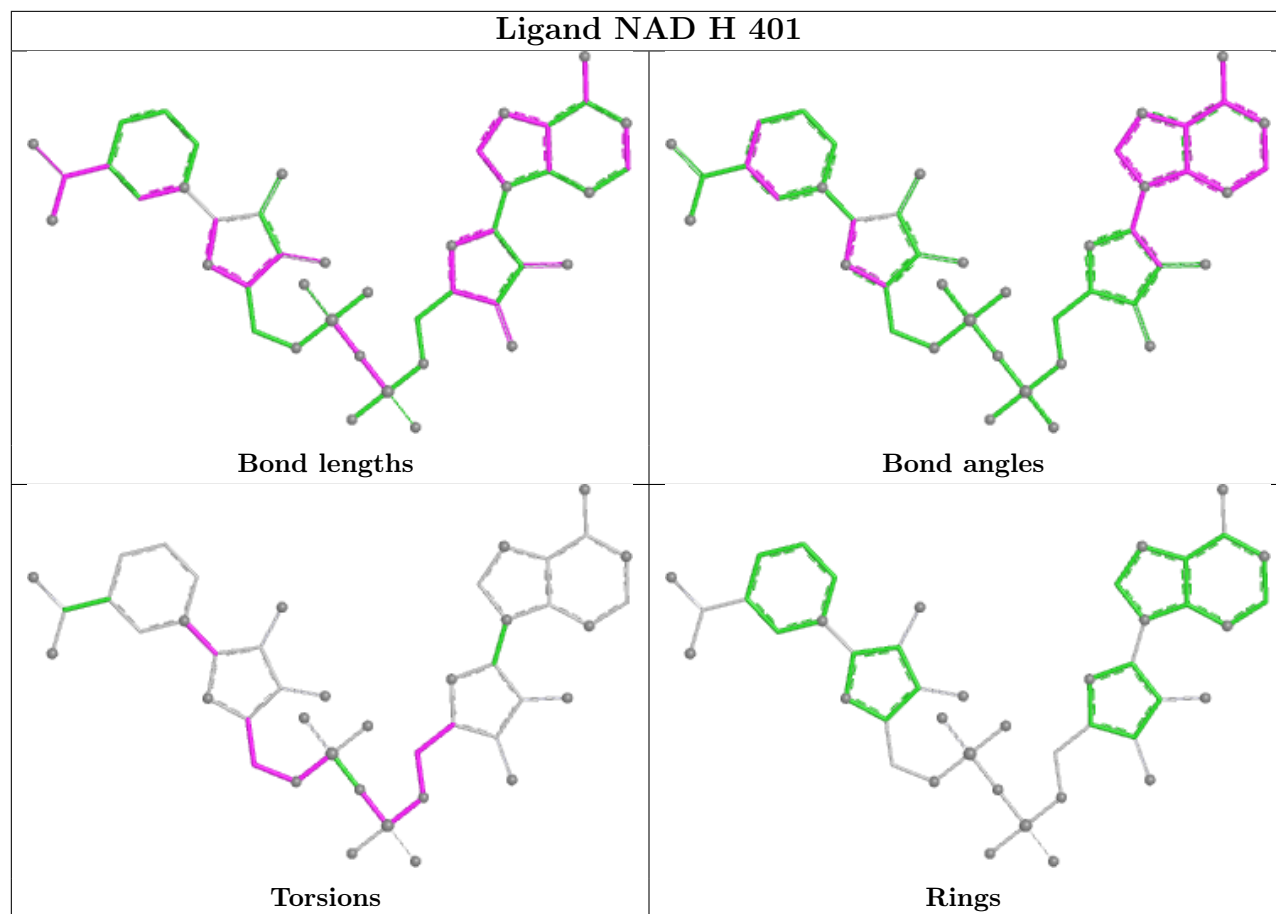
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

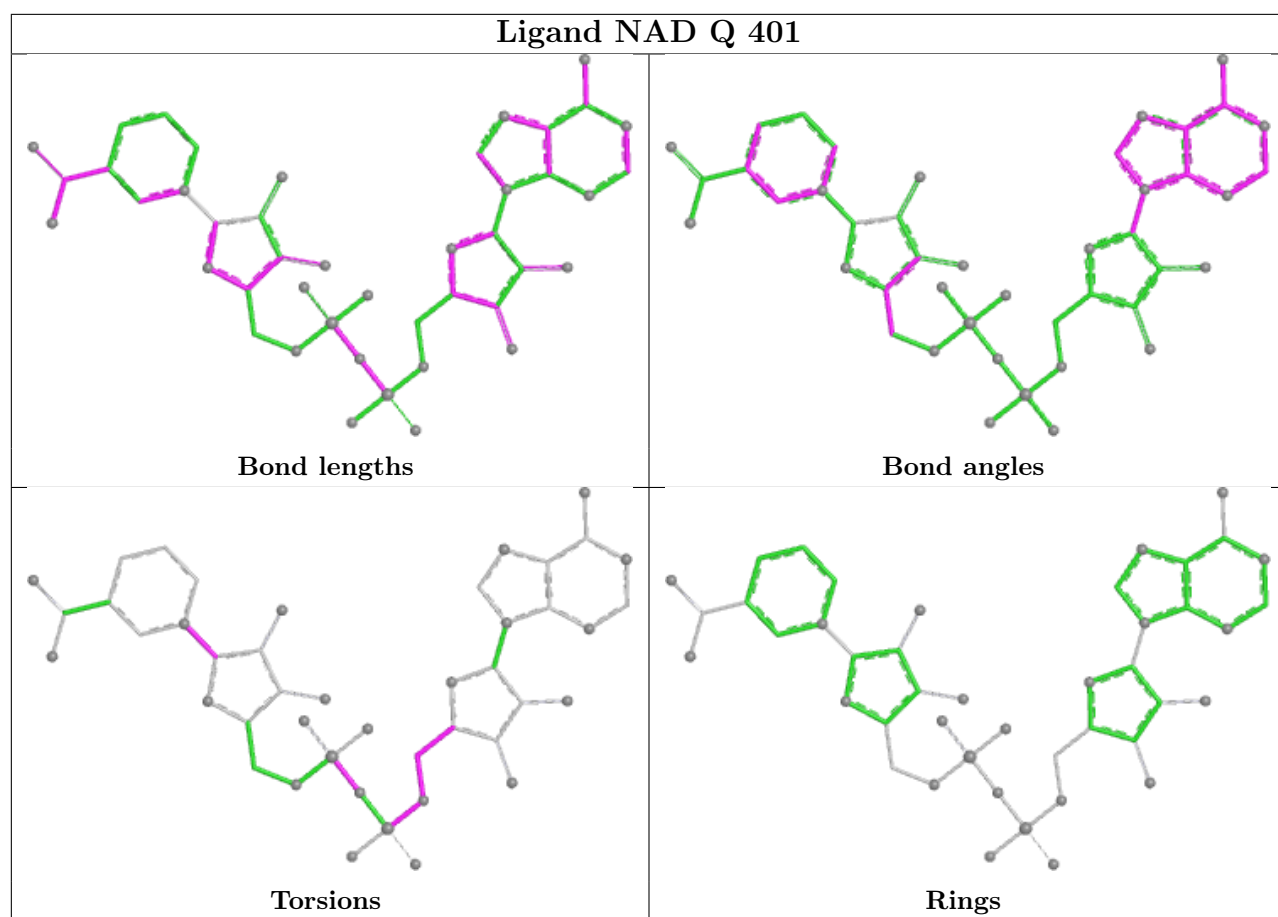


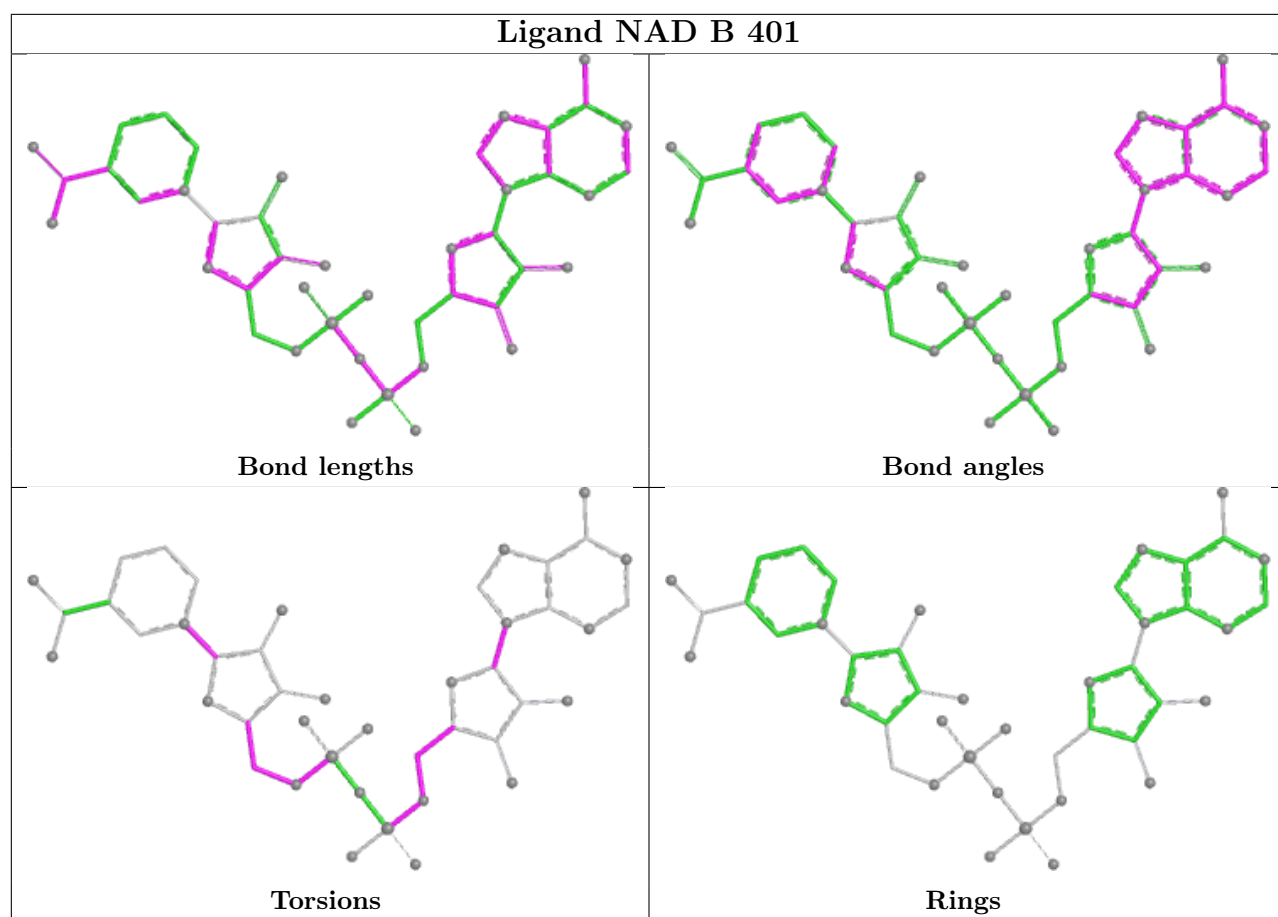


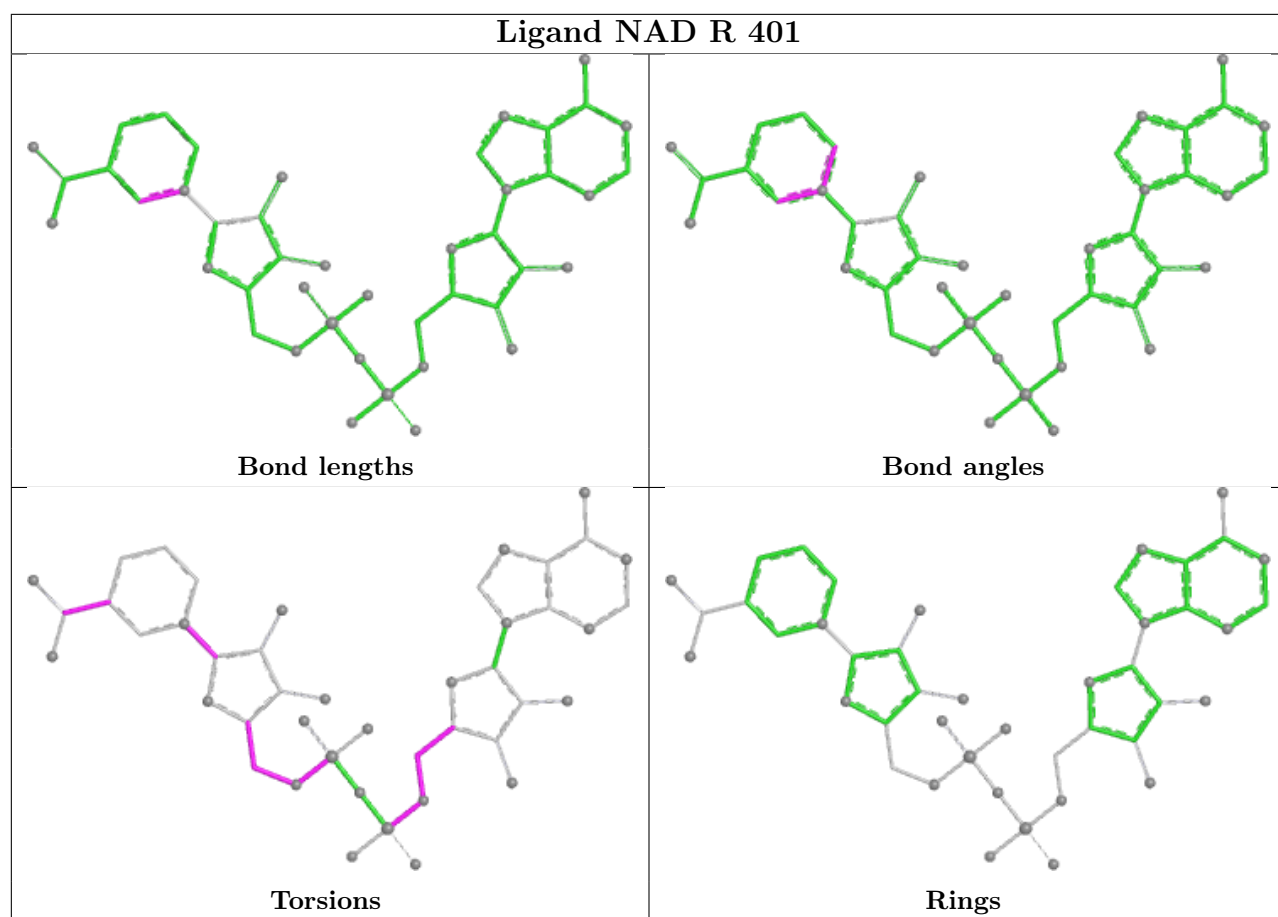


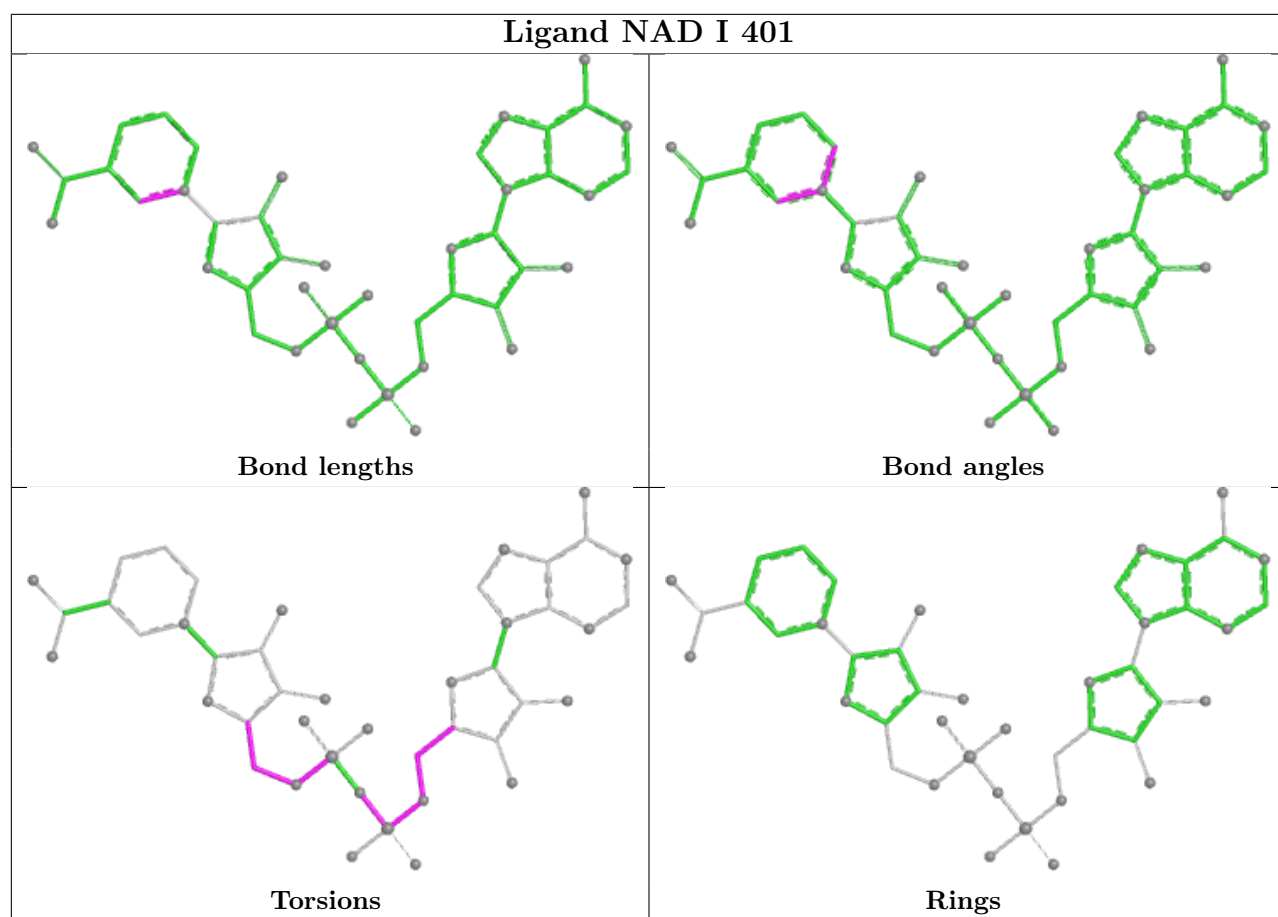


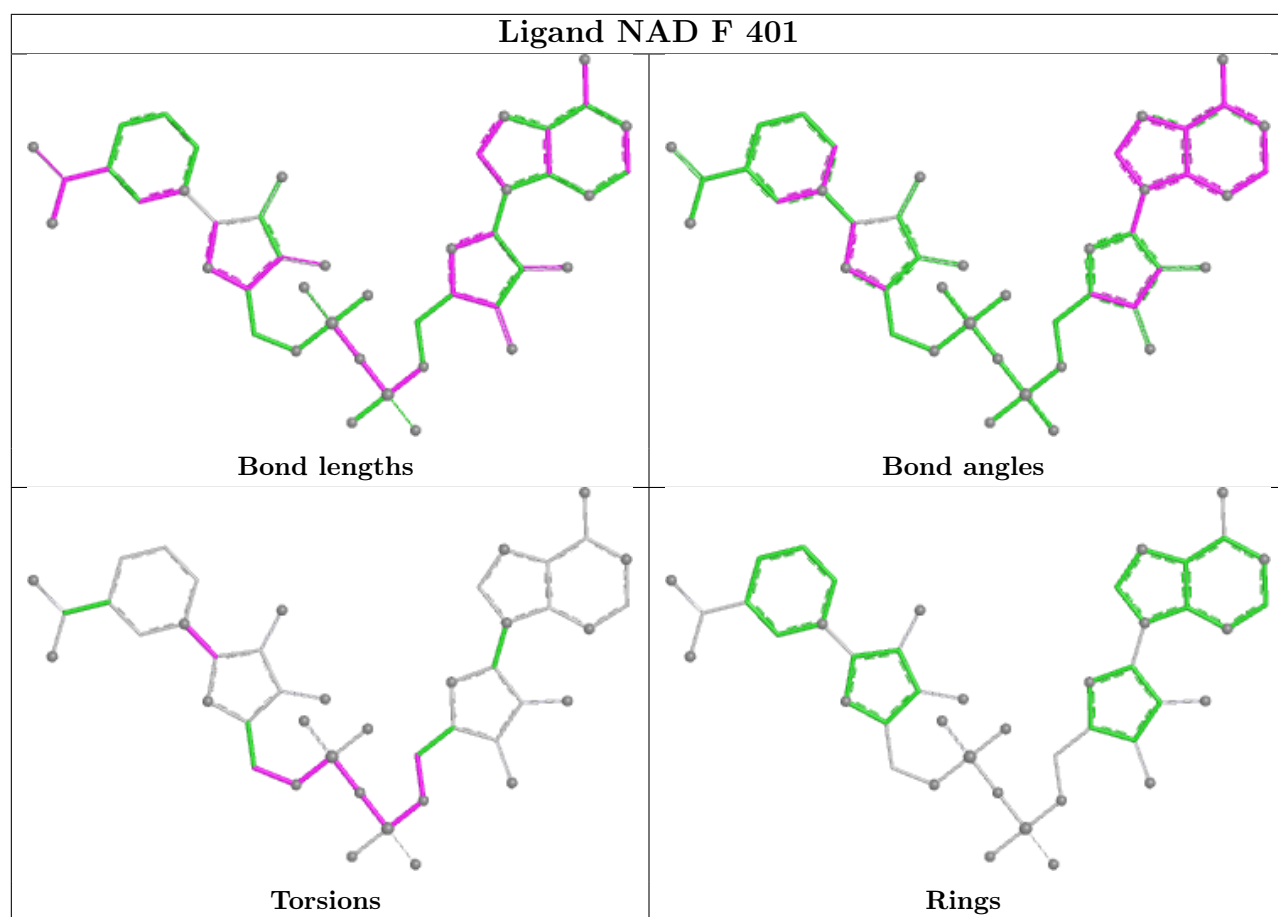


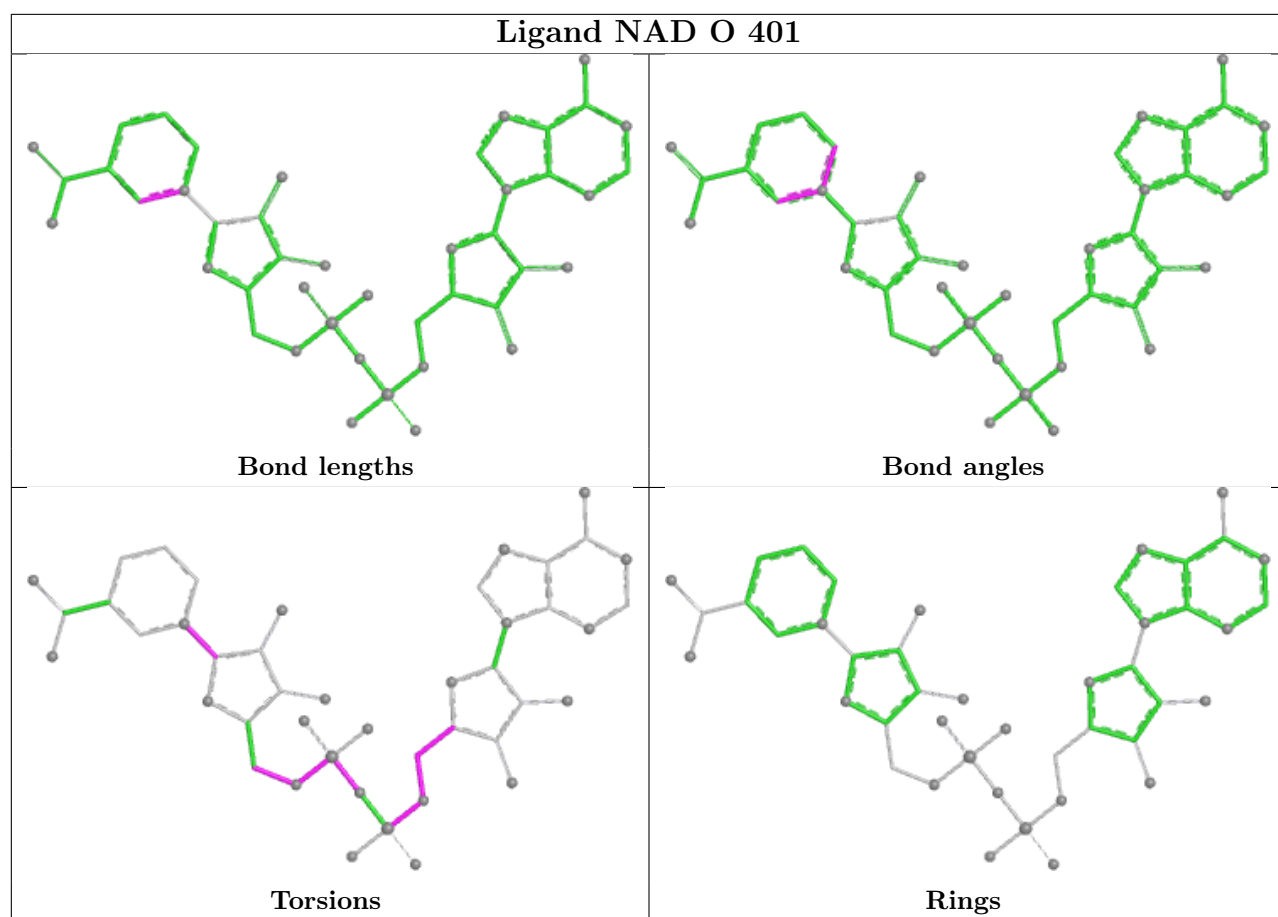


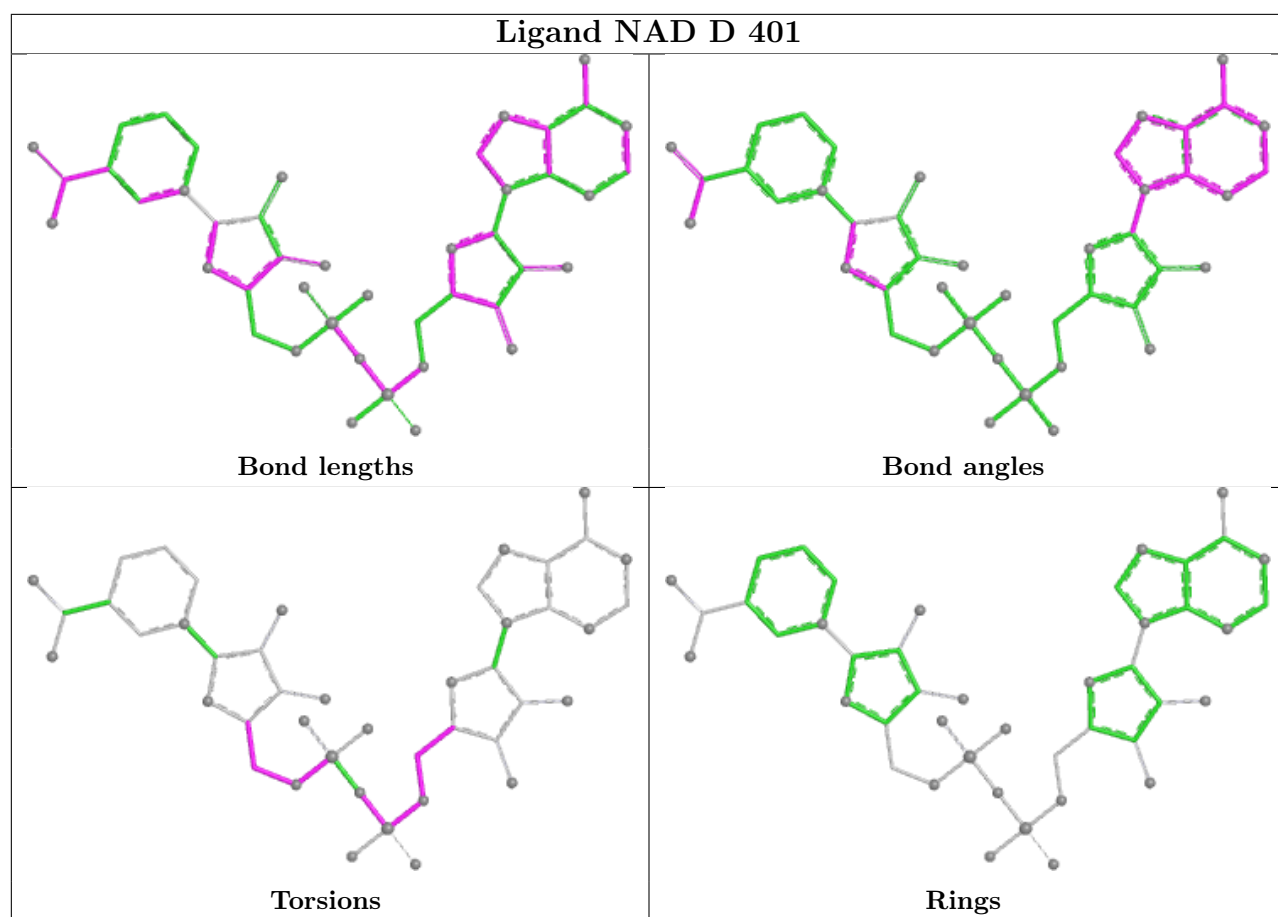


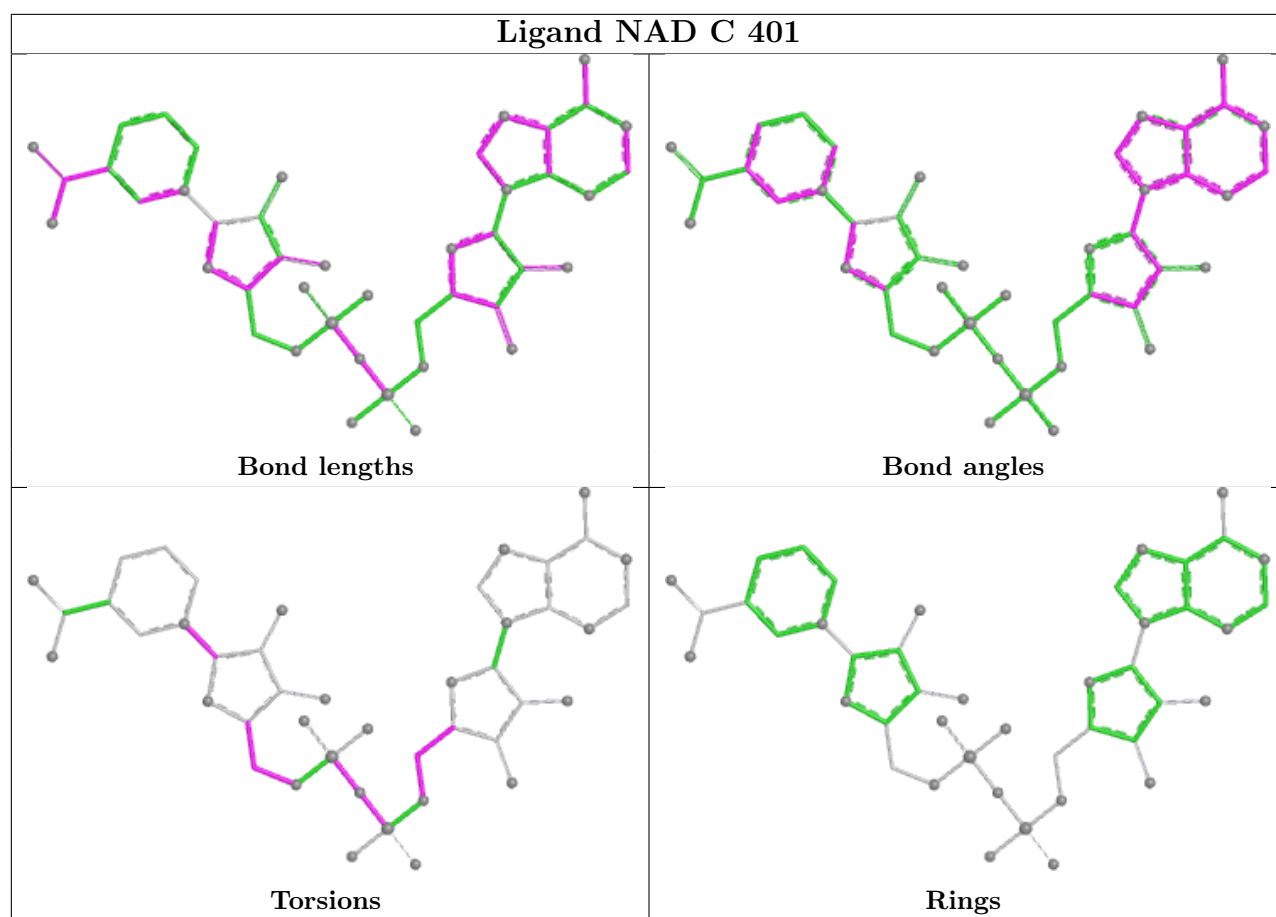


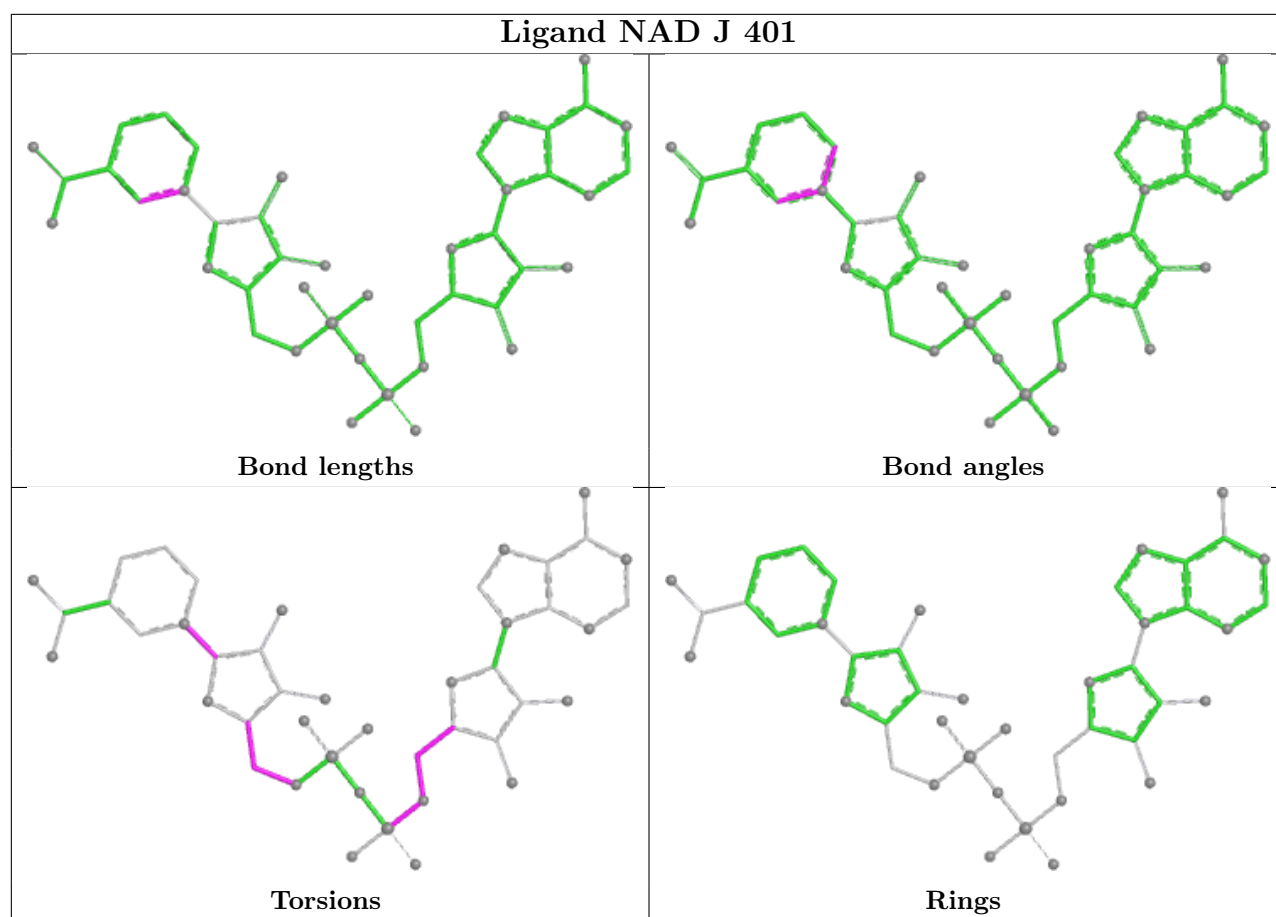


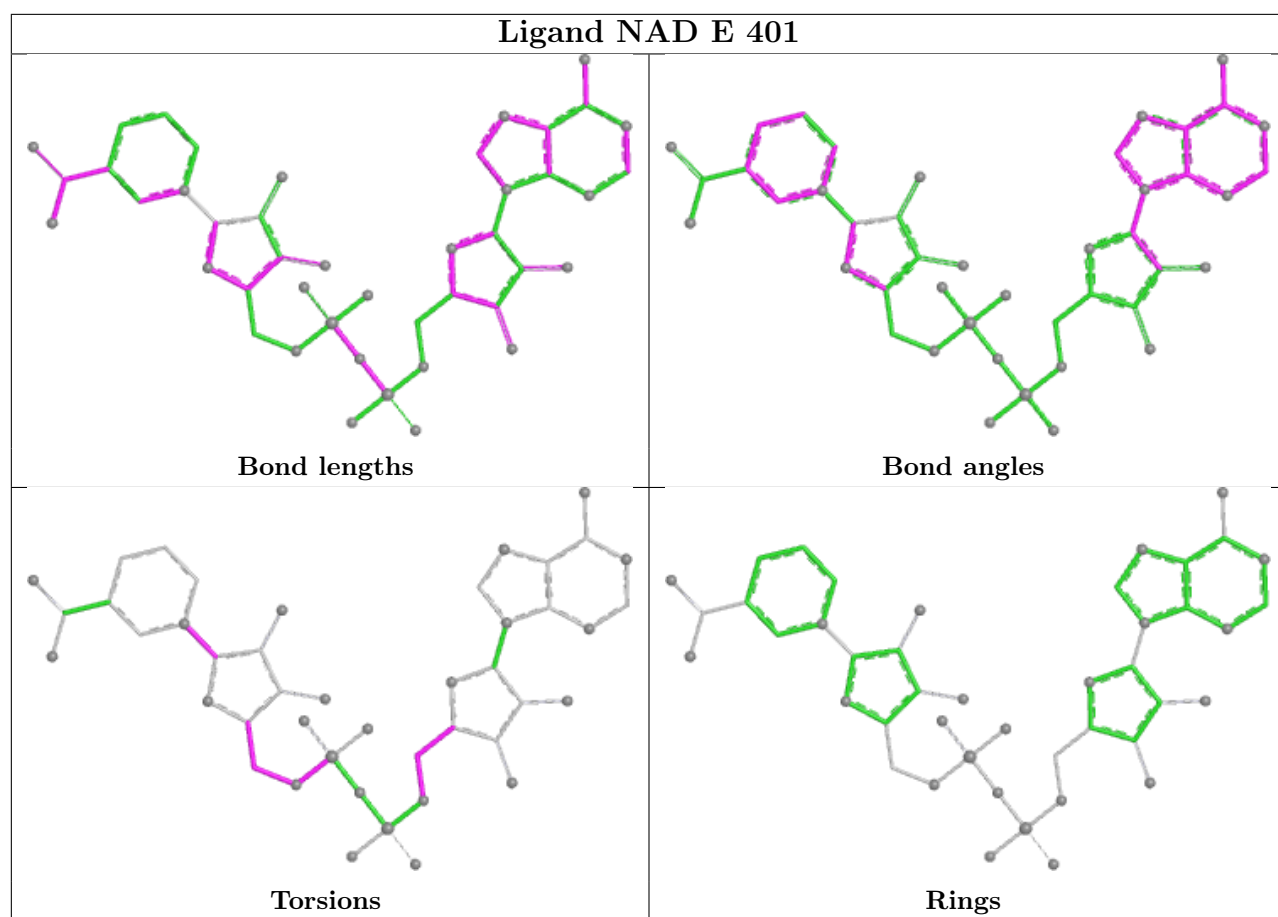


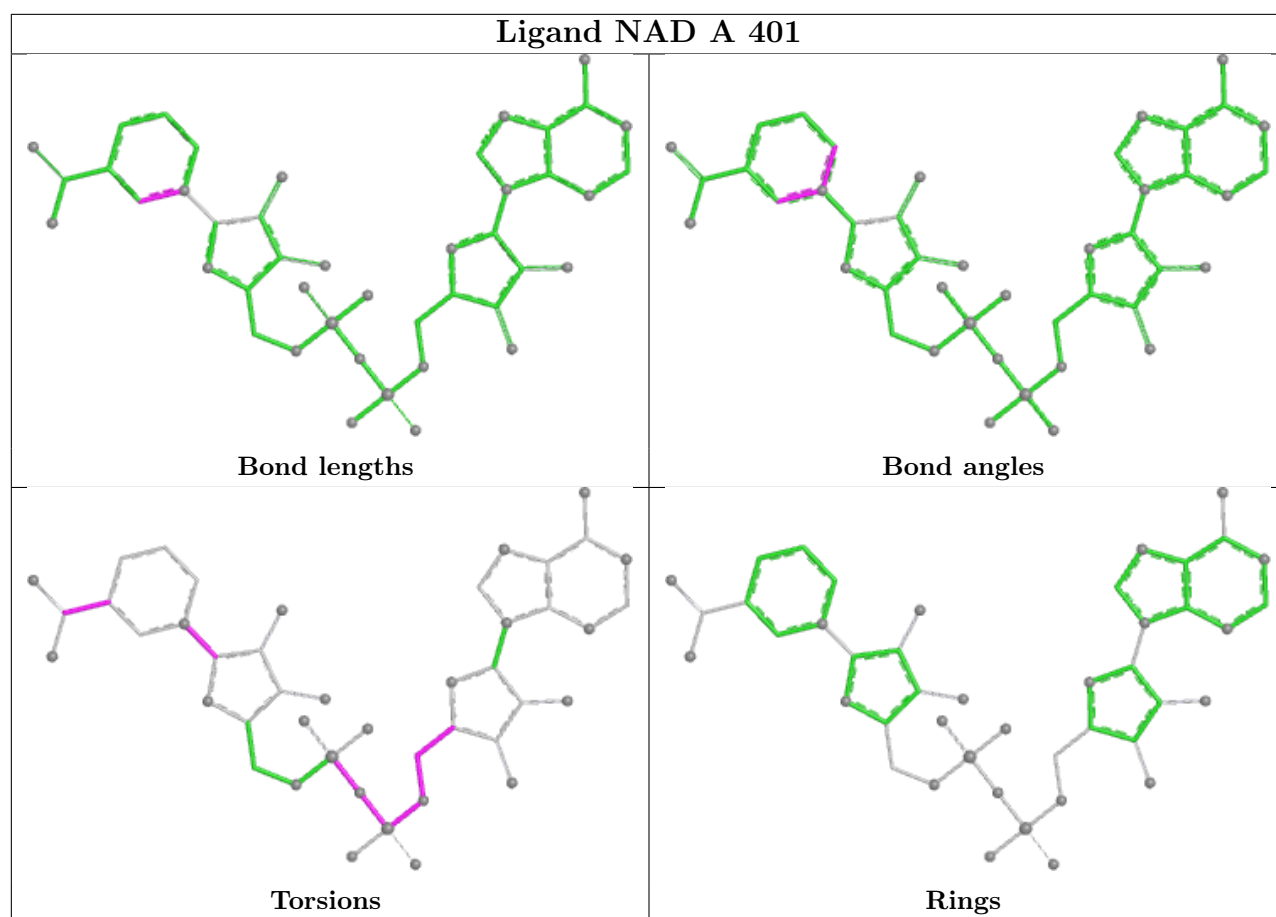












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-13826. These allow visual inspection of the internal detail of the map and identification of artifacts.

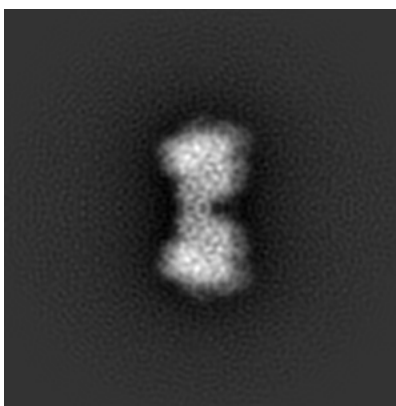
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

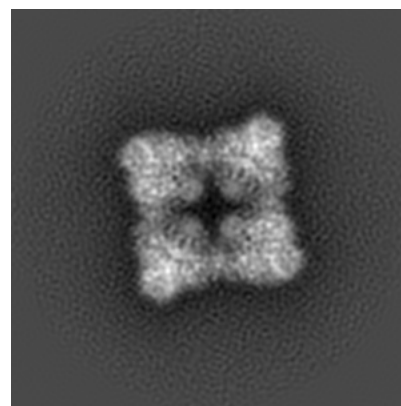
6.1.1 Primary map



X

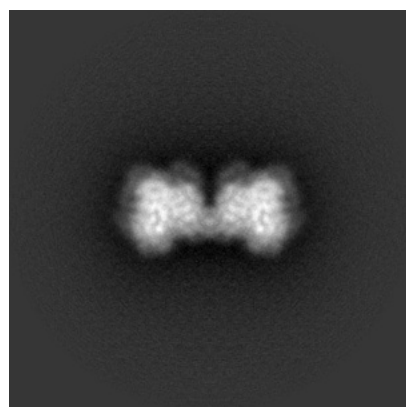


Y

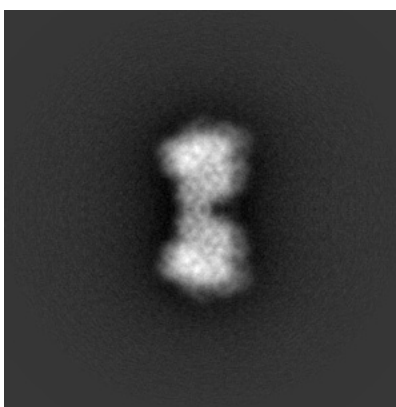


Z

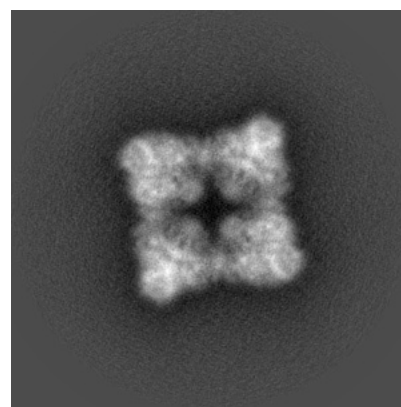
6.1.2 Raw map



X



Y

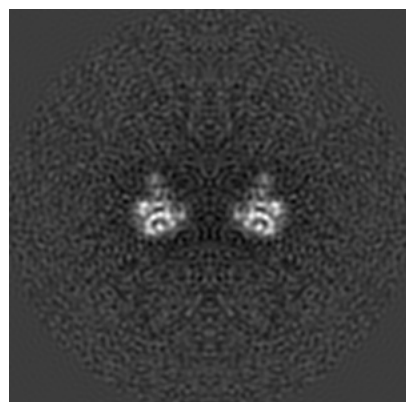


Z

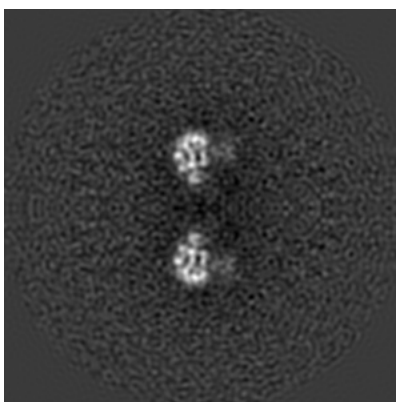
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

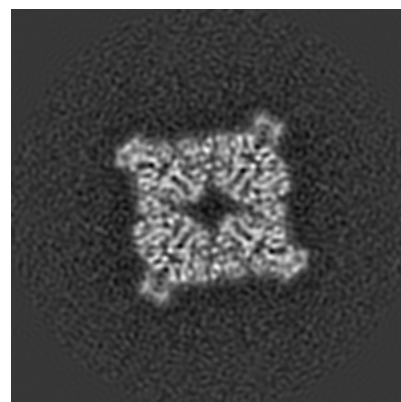
6.2.1 Primary map



X Index: 150

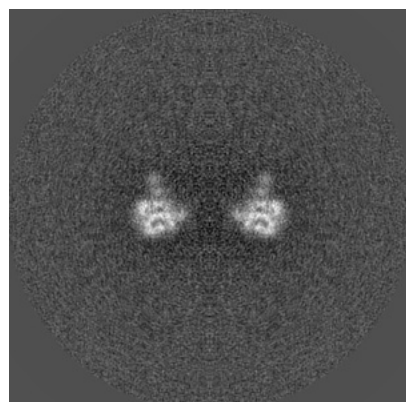


Y Index: 150

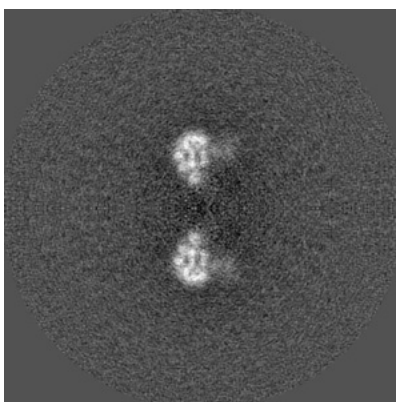


Z Index: 150

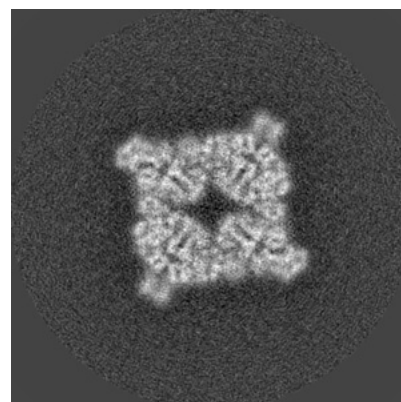
6.2.2 Raw map



X Index: 150



Y Index: 150

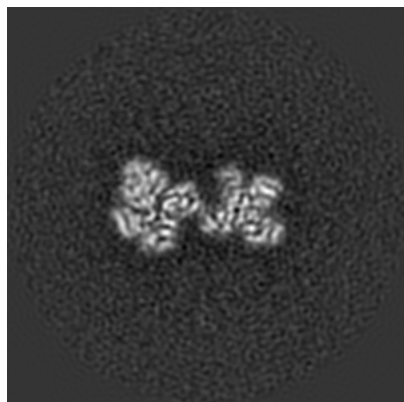


Z Index: 150

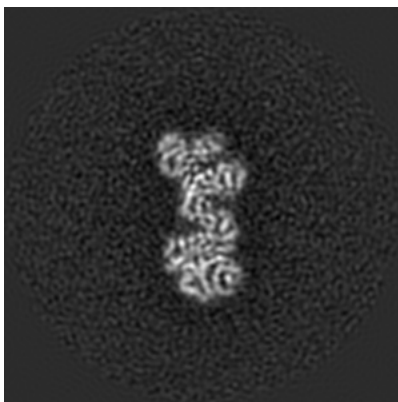
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

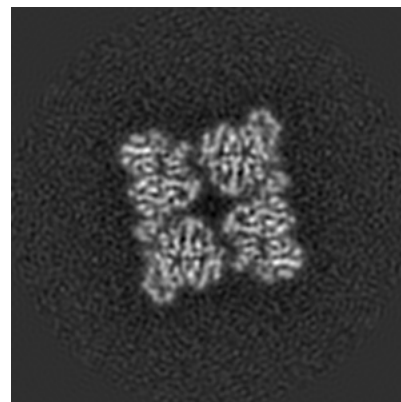
6.3.1 Primary map



X Index: 119

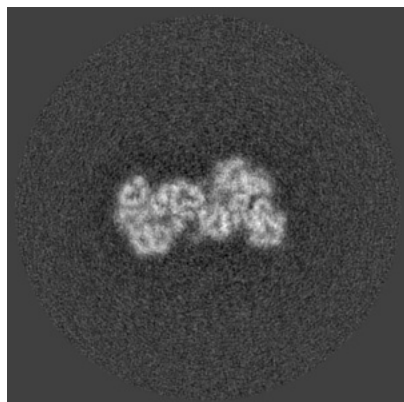


Y Index: 186

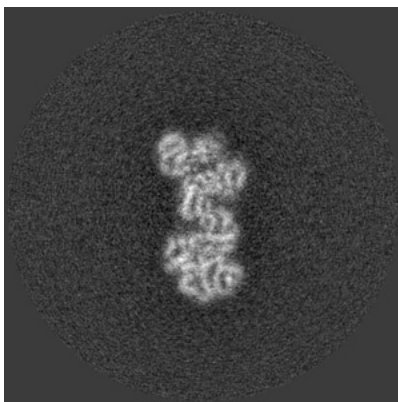


Z Index: 143

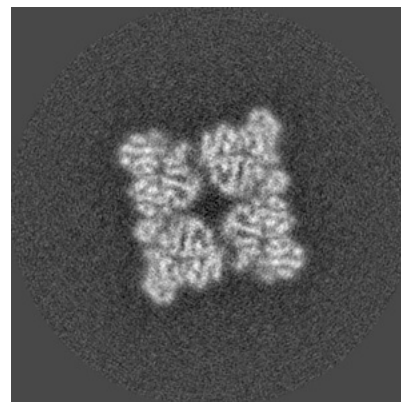
6.3.2 Raw map



X Index: 105



Y Index: 187

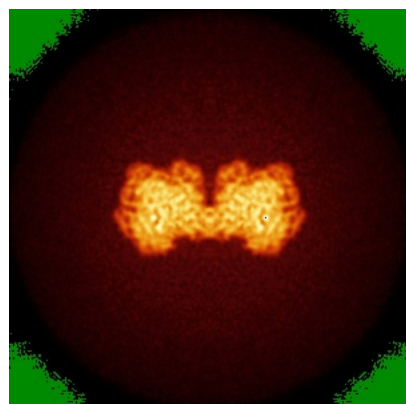


Z Index: 144

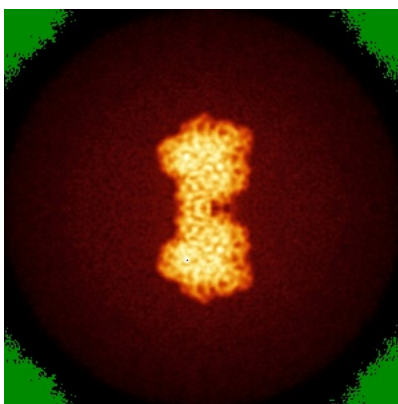
The images above show the largest variance slices of the map in three orthogonal directions.

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

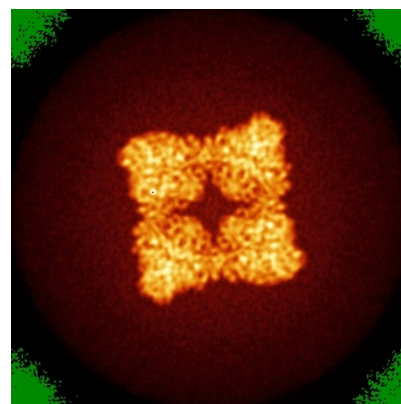
6.4.1 Primary map



X

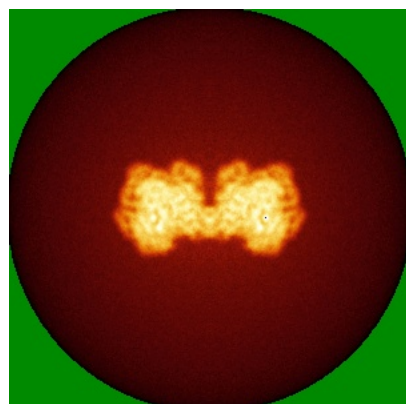


Y

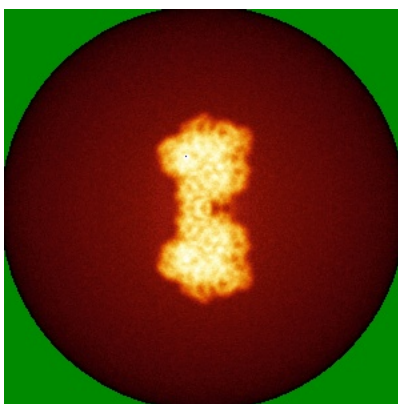


Z

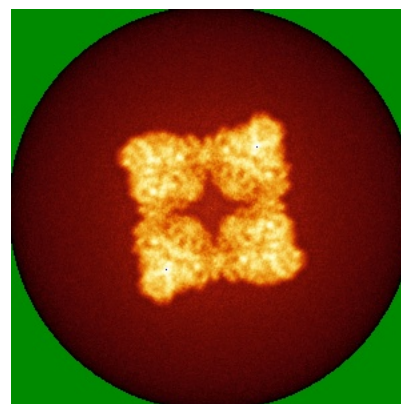
6.4.2 Raw map



X



Y

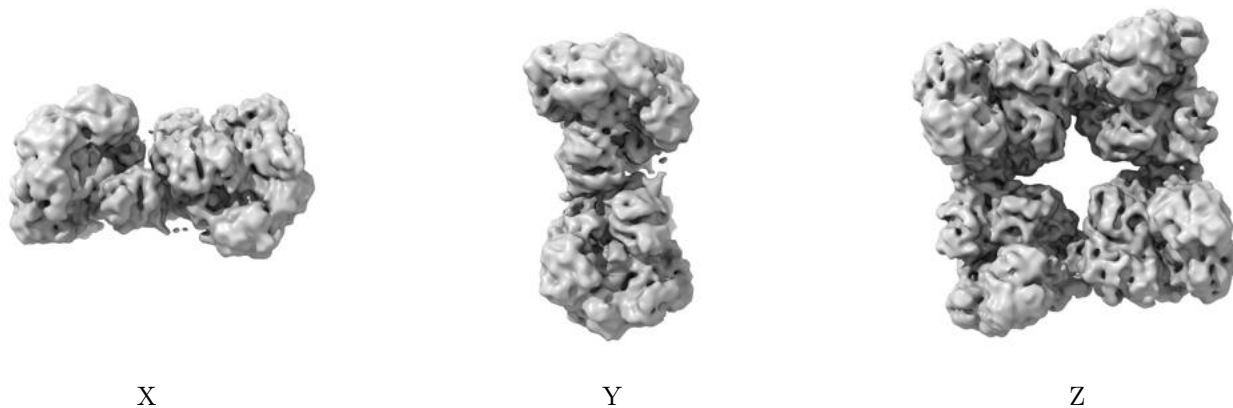


Z

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

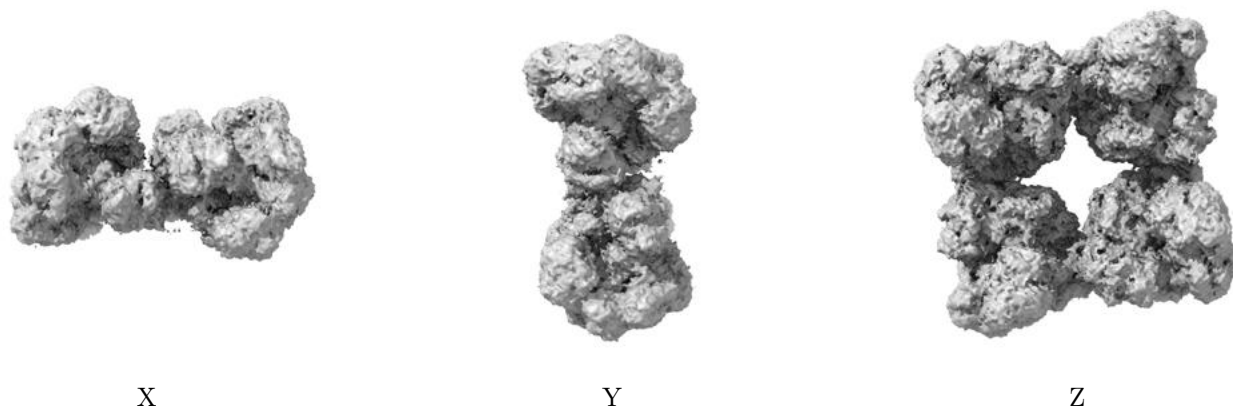
6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.012. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

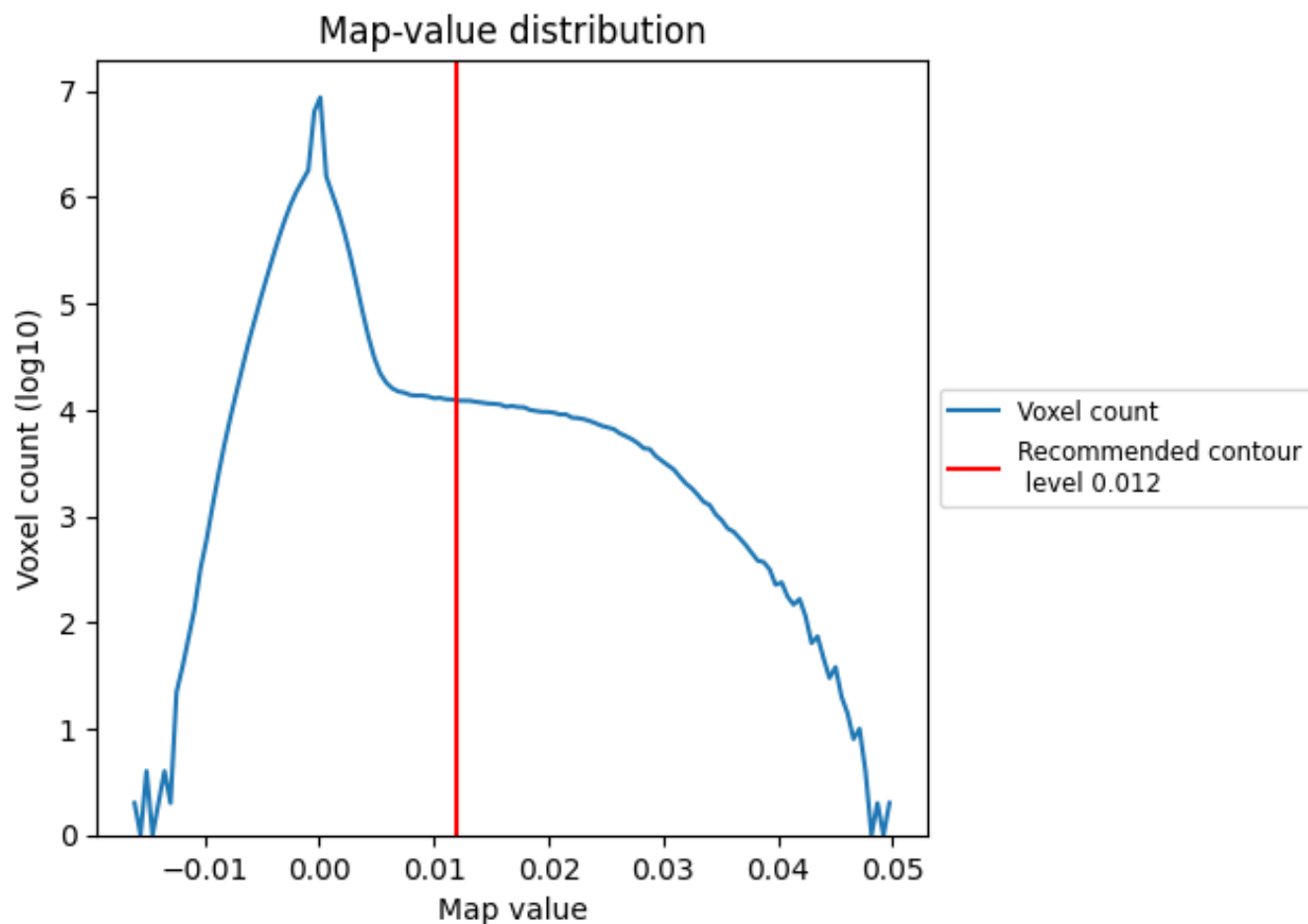
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

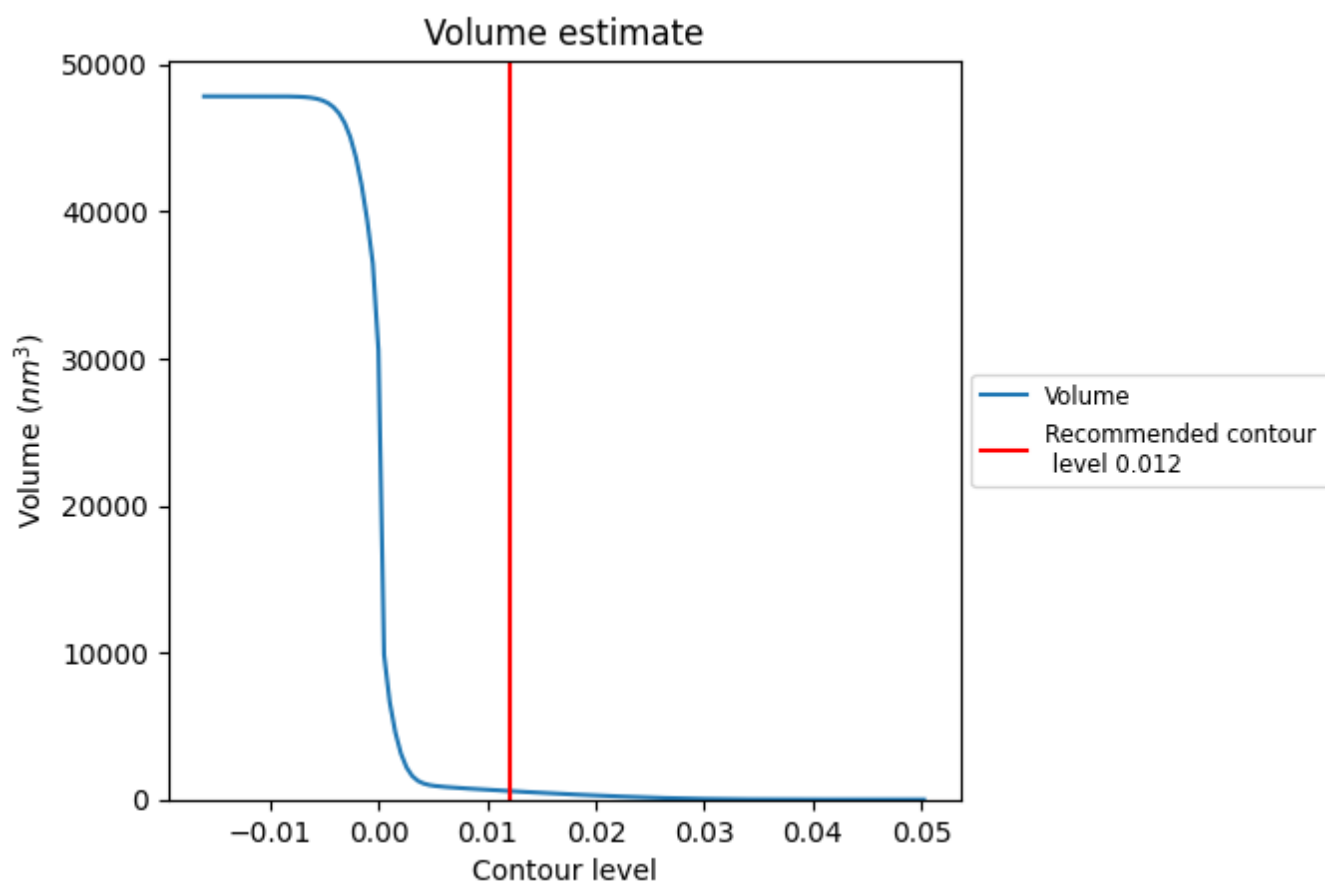
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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

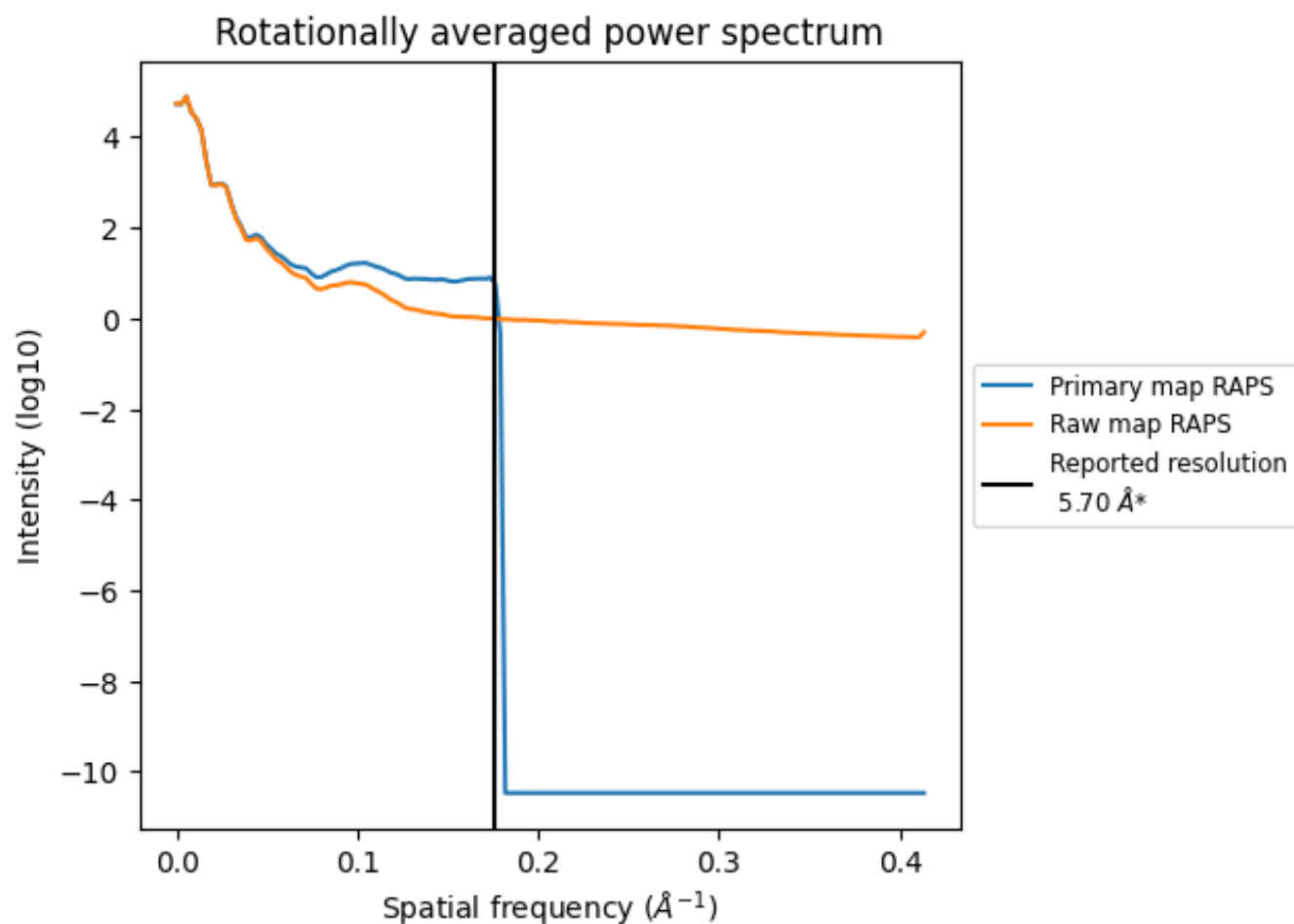
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 581 nm³; this corresponds to an approximate mass of 525 kDa.

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

7.3 Rotationally averaged power spectrum ⓘ

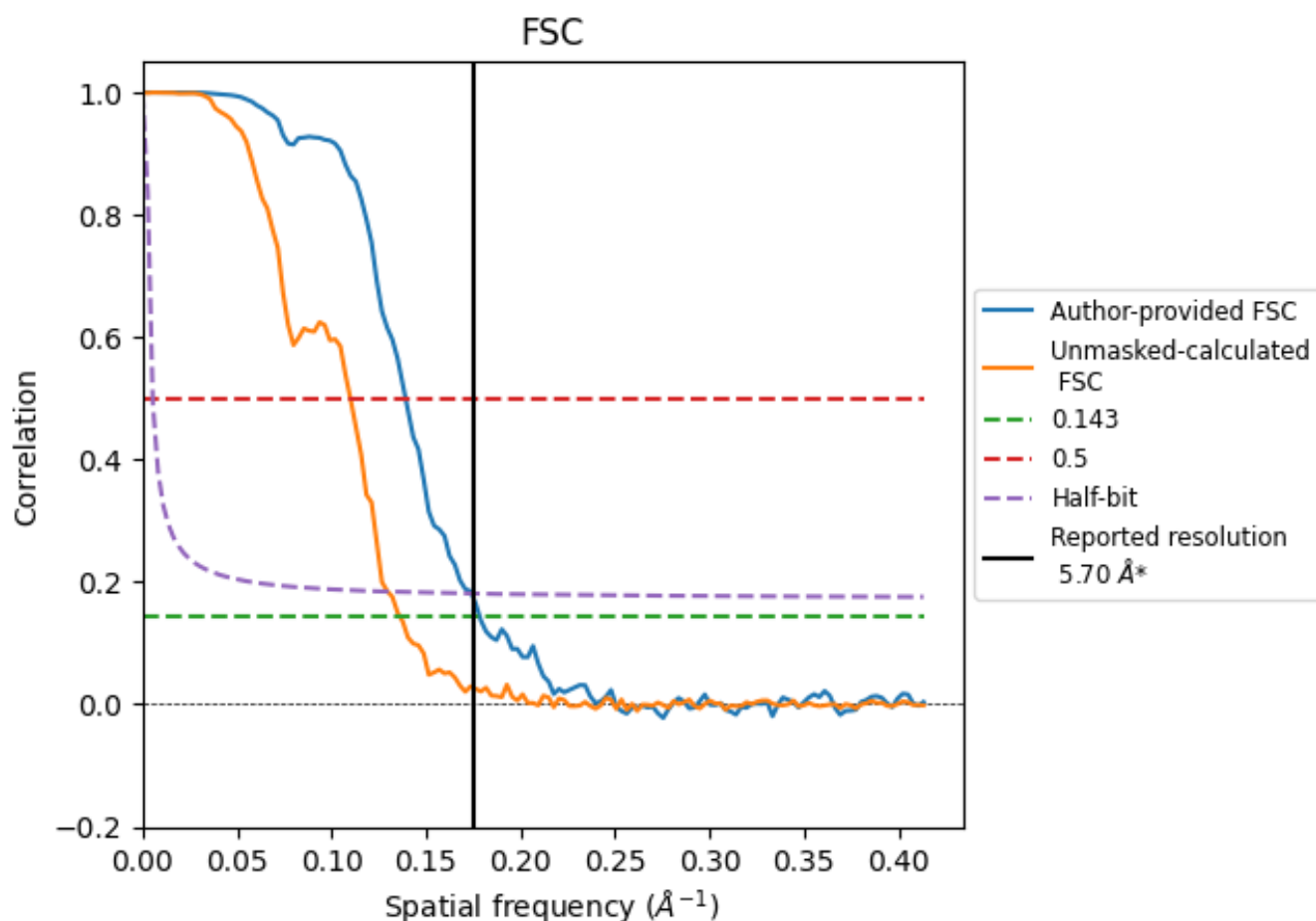


*Reported resolution corresponds to spatial frequency of 0.175 Å⁻¹

8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.175 Å⁻¹

8.2 Resolution estimates [i](#)

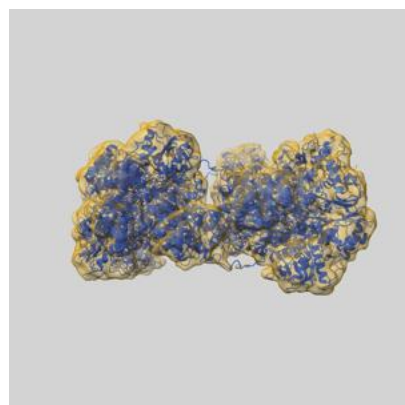
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	5.70	-	-
Author-provided FSC curve	5.61	7.18	5.74
Unmasked-calculated*	7.34	9.09	7.70

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 7.34 differs from the reported value 5.7 by more than 10 %

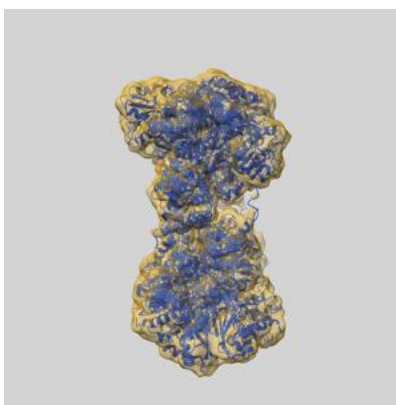
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-13826 and PDB model 7Q55. Per-residue inclusion information can be found in section [3](#) on page [7](#).

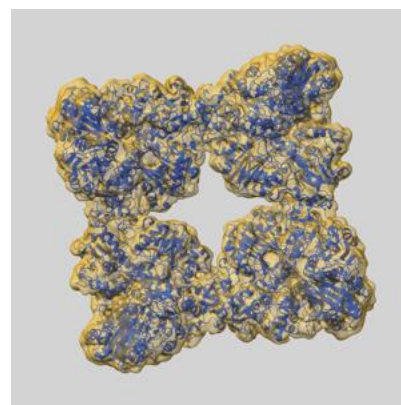
9.1 Map-model overlay [i](#)



X



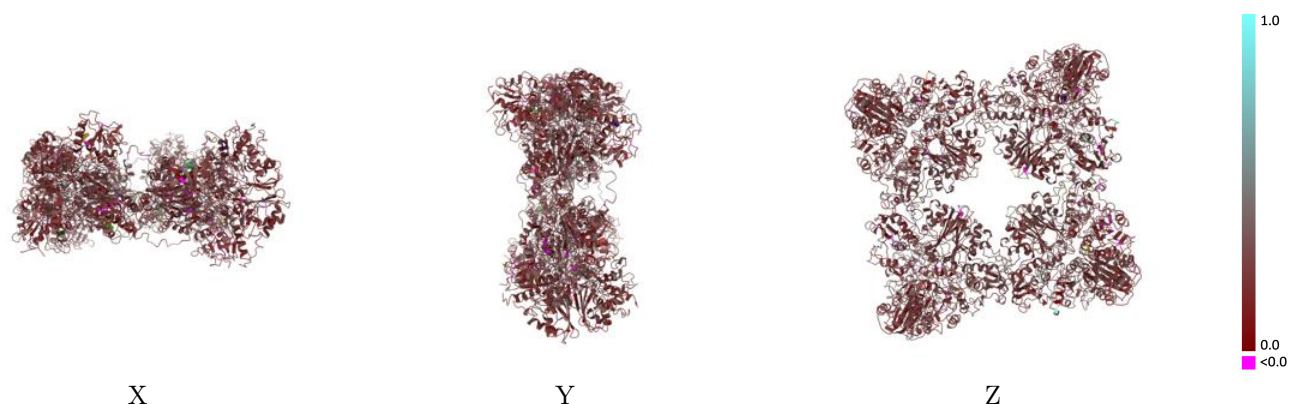
Y



Z

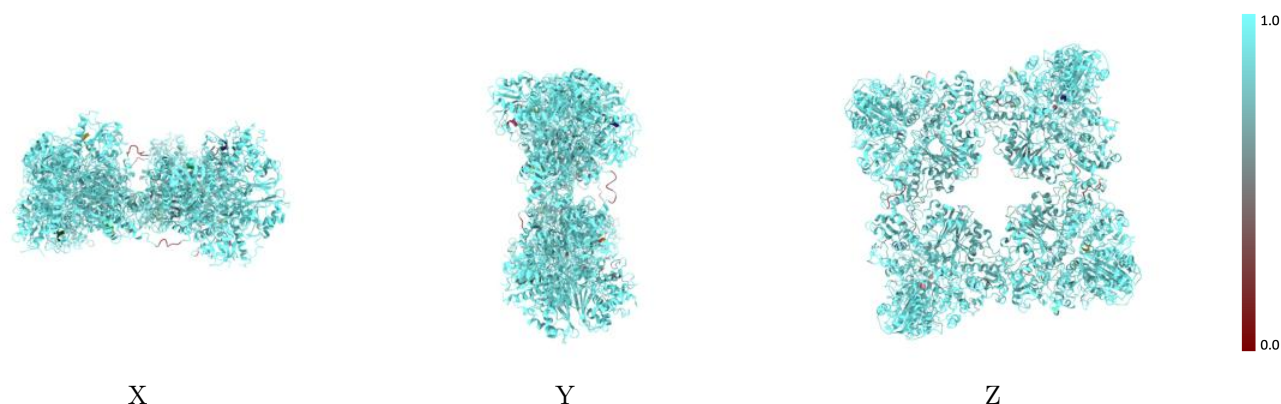
The images above show the 3D surface view of the map at the recommended contour level 0.012 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



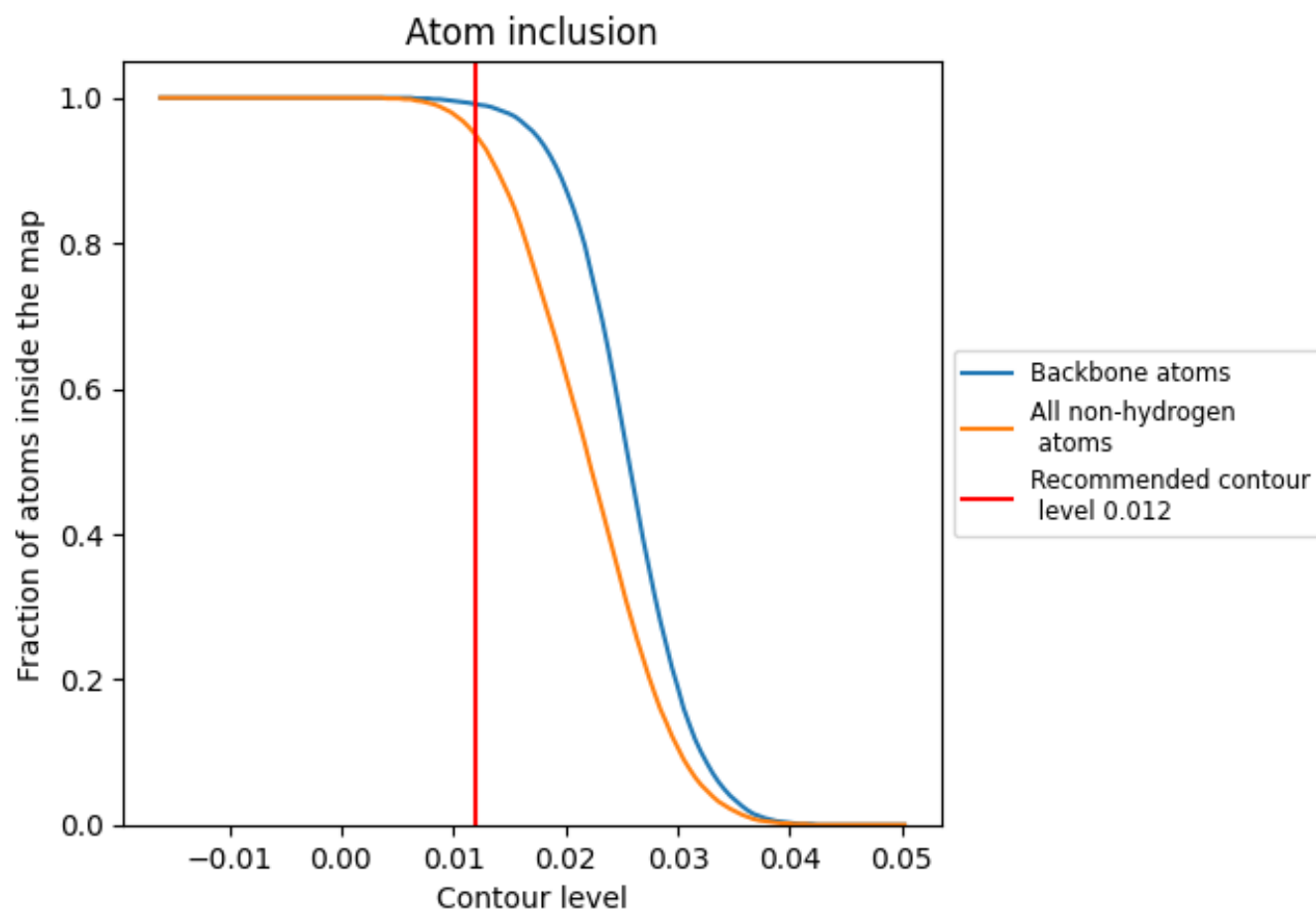
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

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



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.012).

9.4 Atom inclusion [i](#)



At the recommended contour level, 99% of all backbone atoms, 95% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (0.012) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.9490	0.2620
A	0.9370	0.2700
B	0.9660	0.2560
C	0.9330	0.2690
D	0.9670	0.2510
E	0.9310	0.2700
F	0.9620	0.2550
G	0.9380	0.2690
H	0.9630	0.2600
I	0.9300	0.2680
J	0.9680	0.2540
K	0.9360	0.2710
L	0.9680	0.2520
O	0.9320	0.2680
P	0.9650	0.2520
Q	0.9300	0.2670
R	0.9650	0.2610

1.0

0.0

<0.0