



Full wwPDB EM Validation Report ⓘ

Nov 11, 2024 – 12:54 AM EST

PDB ID : 7UA4
EMDB ID : EMD-26414
Title : Structure of PKA phosphorylated human RyR2-R2474S in the open state in the presence of Calmodulin
Authors : Miotto, M.C.; Marks, A.R.
Deposited on : 2022-03-11
Resolution : 2.93 Å (reported)
Based on initial model : 7UA3

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

EMDB validation analysis : 0.0.1.dev113
Mogul : 2022.3.0, CSD as543be (2022)
MolProbity : 4.02b-467
buster-report : 1.1.7 (2018)
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.39

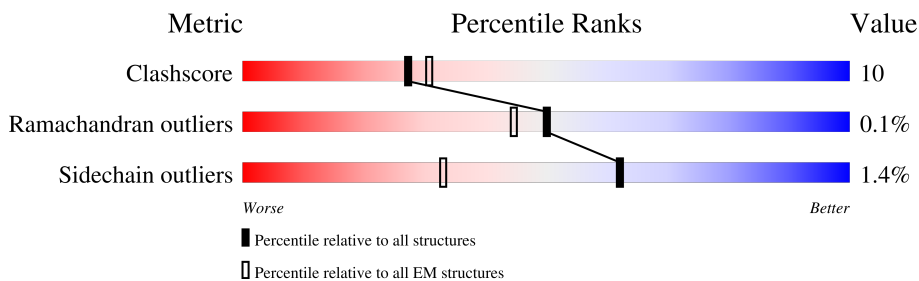
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 2.93 Å.

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



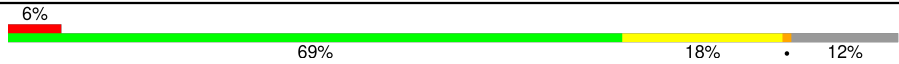

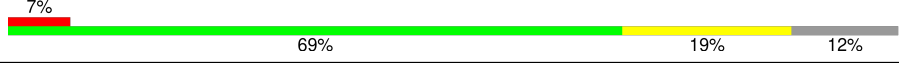
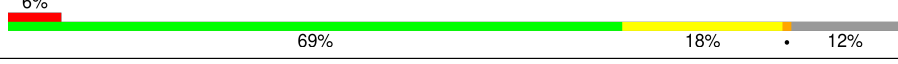
Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

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

Mol	Chain	Length	Quality of chain
1	E	108	
1	F	108	
1	G	108	
1	H	108	
2	I	149	
2	J	149	
2	K	149	
2	L	149	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	A	4967	
3	B	4967	
3	C	4967	
3	D	4967	

2 Entry composition [i](#)

There are 8 unique types of molecules in this entry. The entry contains 147868 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 Peptidyl-prolyl cis-trans isomerase FKBP1B.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	E	107	818	516	144	154	4	0	0
1	F	107	818	516	144	154	4	0	0
1	G	107	818	516	144	154	4	0	0
1	H	107	818	516	144	154	4	0	0

- Molecule 2 is a protein called Calmodulin-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	I	142	1112	687	181	234	10	0	0
2	J	142	1112	687	181	234	10	0	0
2	K	142	1112	687	181	234	10	0	0
2	L	142	1112	687	181	234	10	0	0

- Molecule 3 is a protein called Ryanodine receptor 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	A	4369	34959	22247	5957	6525	230	2	0
3	B	4369	34959	22247	5957	6525	230	2	0
3	C	4369	34959	22247	5957	6525	230	2	0
3	D	4369	34959	22247	5957	6525	230	2	0

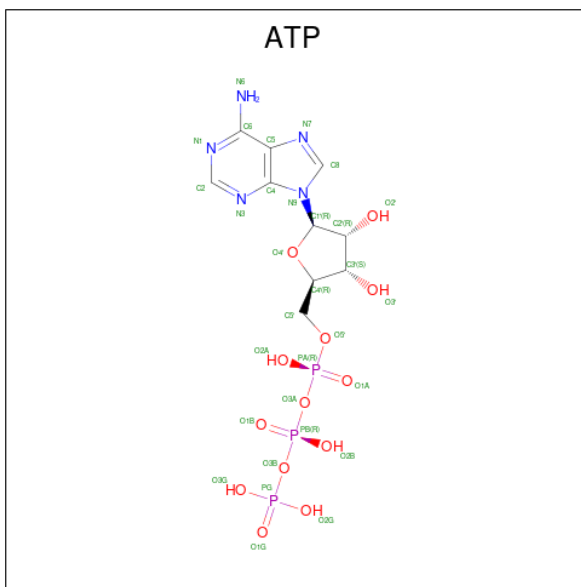
There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	2474	SER	ARG	variant	UNP Q92736
B	2474	SER	ARG	variant	UNP Q92736
C	2474	SER	ARG	variant	UNP Q92736
D	2474	SER	ARG	variant	UNP Q92736

- Molecule 4 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		AltConf
4	A	1	Total	Zn	0
			1	1	
4	B	1	Total	Zn	0
			1	1	
4	C	1	Total	Zn	0
			1	1	
4	D	1	Total	Zn	0
			1	1	

- Molecule 5 is ADENOSINE-5'-TRIPHOSPHATE (three-letter code: ATP) (formula: C₁₀H₁₆N₅O₁₃P₃).



Mol	Chain	Residues	Atoms				AltConf	
5	A	1	Total	C	N	O	P	0
			31	10	5	13	3	
5	A	1	Total	C	N	O	P	0
			31	10	5	13	3	
5	B	1	Total	C	N	O	P	0
			31	10	5	13	3	

Continued on next page...

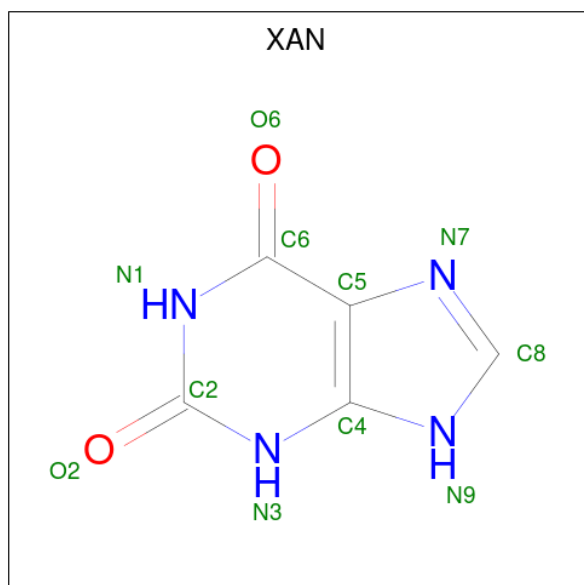
Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	P	
5	B	1	Total 31	C 10	N 5	O 13	P 3	0
5	C	1	Total 31	C 10	N 5	O 13	P 3	0
5	C	1	Total 31	C 10	N 5	O 13	P 3	0
5	D	1	Total 31	C 10	N 5	O 13	P 3	0
5	D	1	Total 31	C 10	N 5	O 13	P 3	0

- Molecule 6 is CALCIUM ION (three-letter code: CA) (formula: Ca).

Mol	Chain	Residues	Atoms		AltConf
			Total	Ca	
6	A	1	Total 1	Ca 1	0
6	B	1	Total 1	Ca 1	0
6	C	1	Total 1	Ca 1	0
6	D	1	Total 1	Ca 1	0

- Molecule 7 is XANTHINE (three-letter code: XAN) (formula: C₅H₄N₄O₂) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf
7	A	1	Total	C	N	O	0
			11	5	4	2	
7	B	1	Total	C	N	O	0
			11	5	4	2	
7	C	1	Total	C	N	O	0
			11	5	4	2	
7	D	1	Total	C	N	O	0
			11	5	4	2	


- Molecule 8 is water.

Mol	Chain	Residues	Atoms		AltConf
8	A	3	Total	O	0
			3	3	
8	B	3	Total	O	0
			3	3	
8	C	3	Total	O	0
			3	3	
8	D	3	Total	O	0
			3	3	

3 Residue-property plots [i](#)


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: Peptidyl-prolyl cis-trans isomerase FKBP1B

Chain E: 



- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B

Chain F: 




- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B

Chain G: 



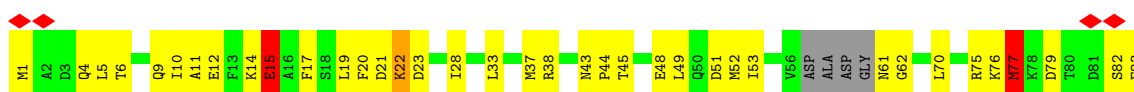
- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B

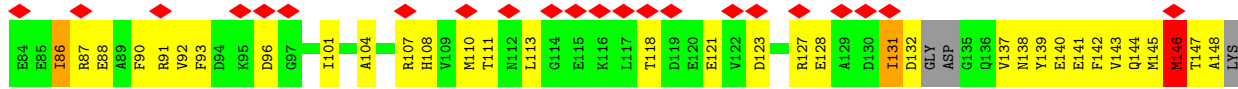
Chain H: 



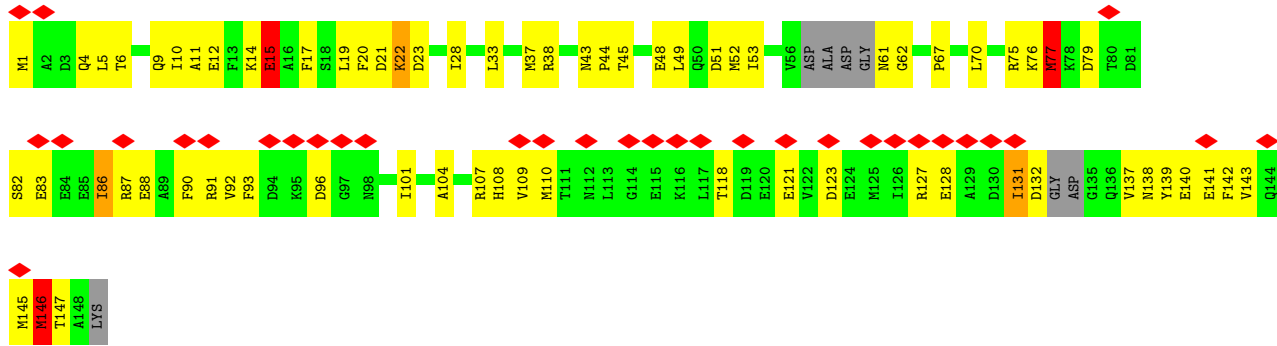
- Molecule 2: Calmodulin-1

Chain I: 

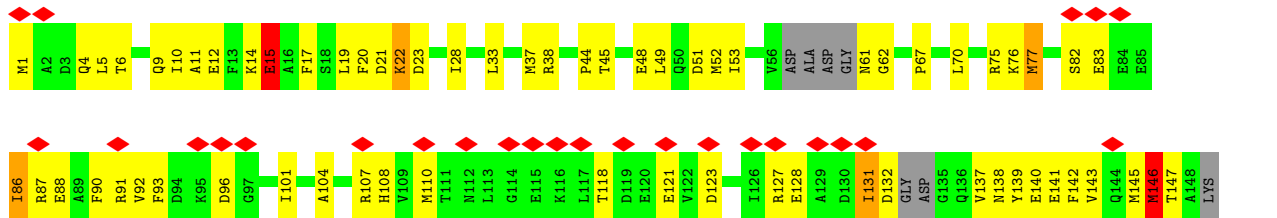




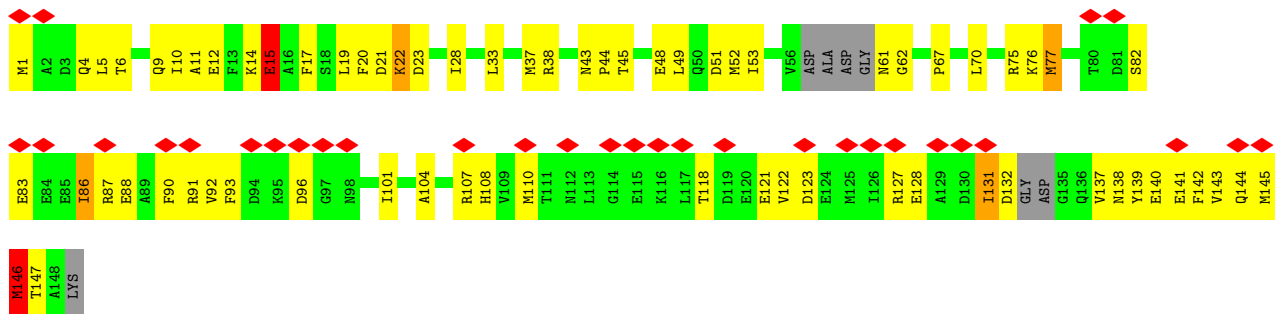
• Molecule 2: Calmodulin-1



• Molecule 2: Calmodulin-1

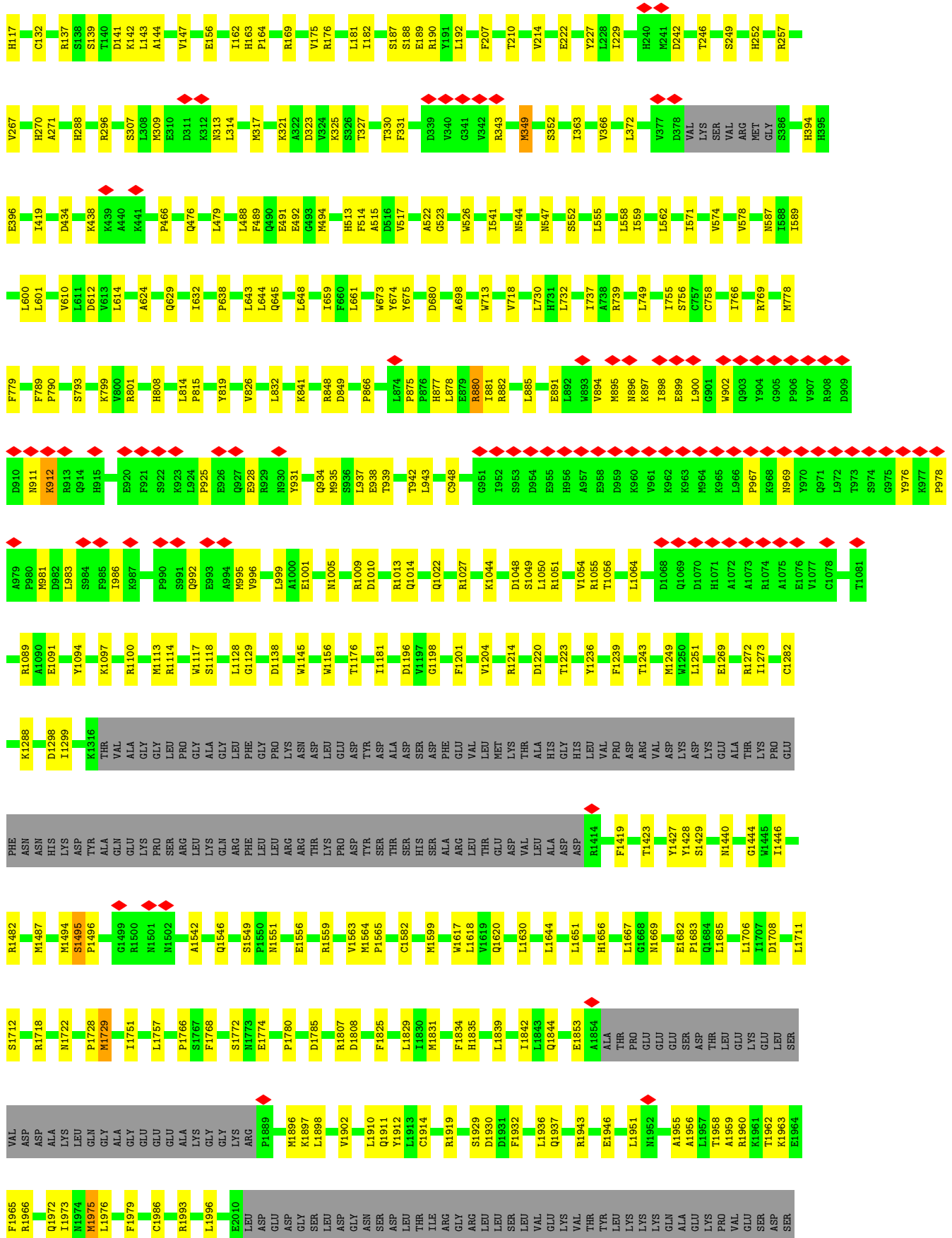


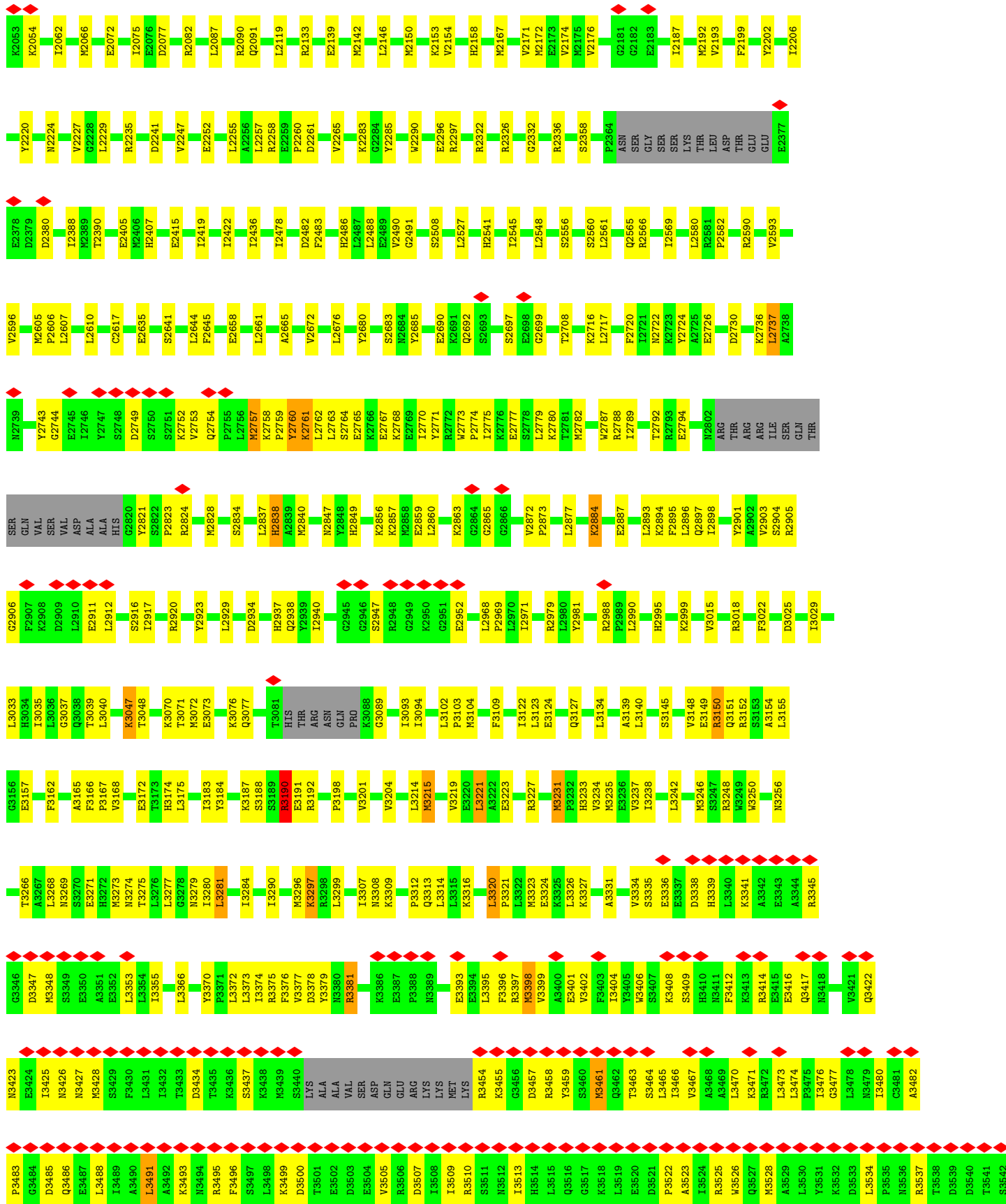
• Molecule 2: Calmodulin-1

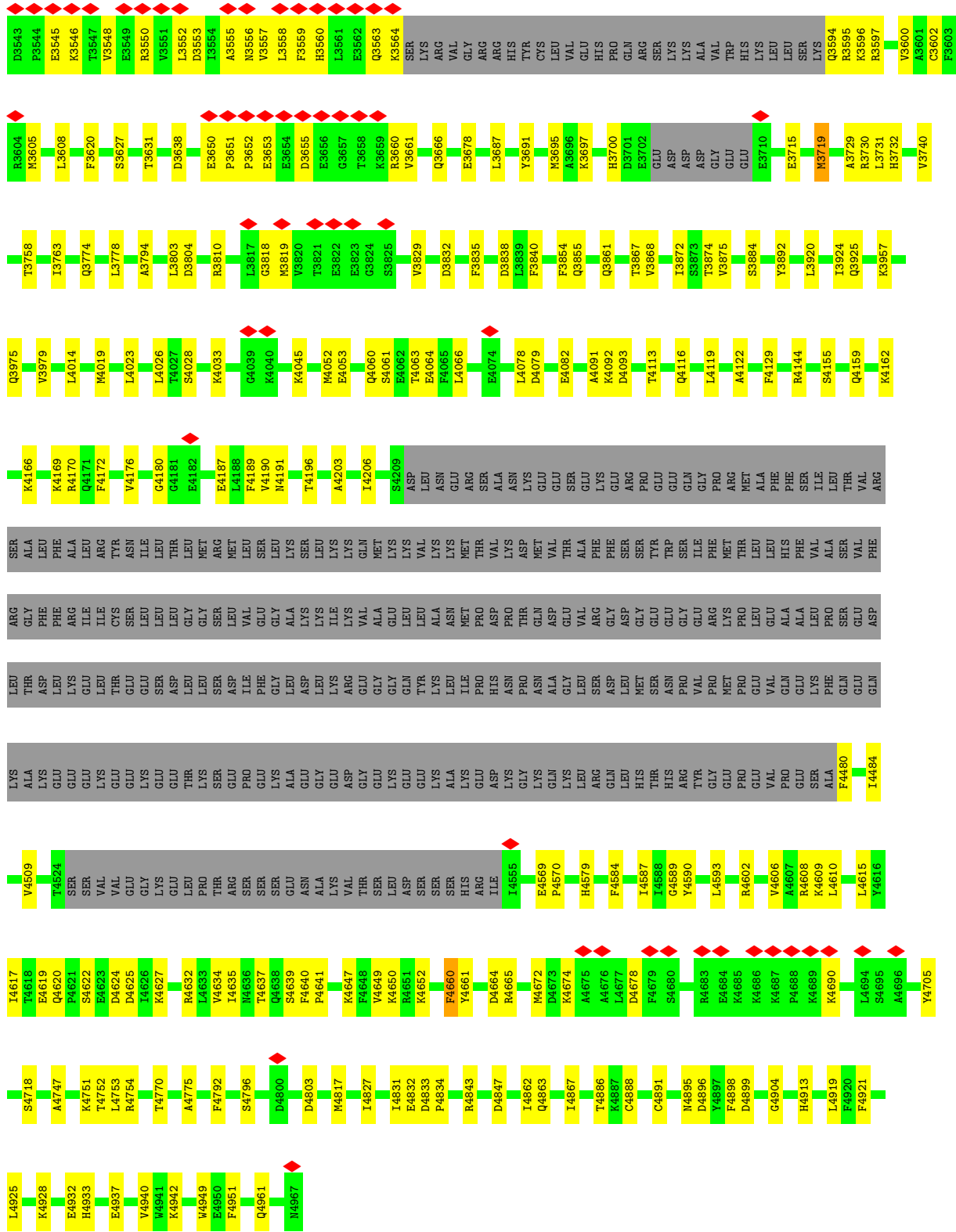


• Molecule 3: Ryanodine receptor 2



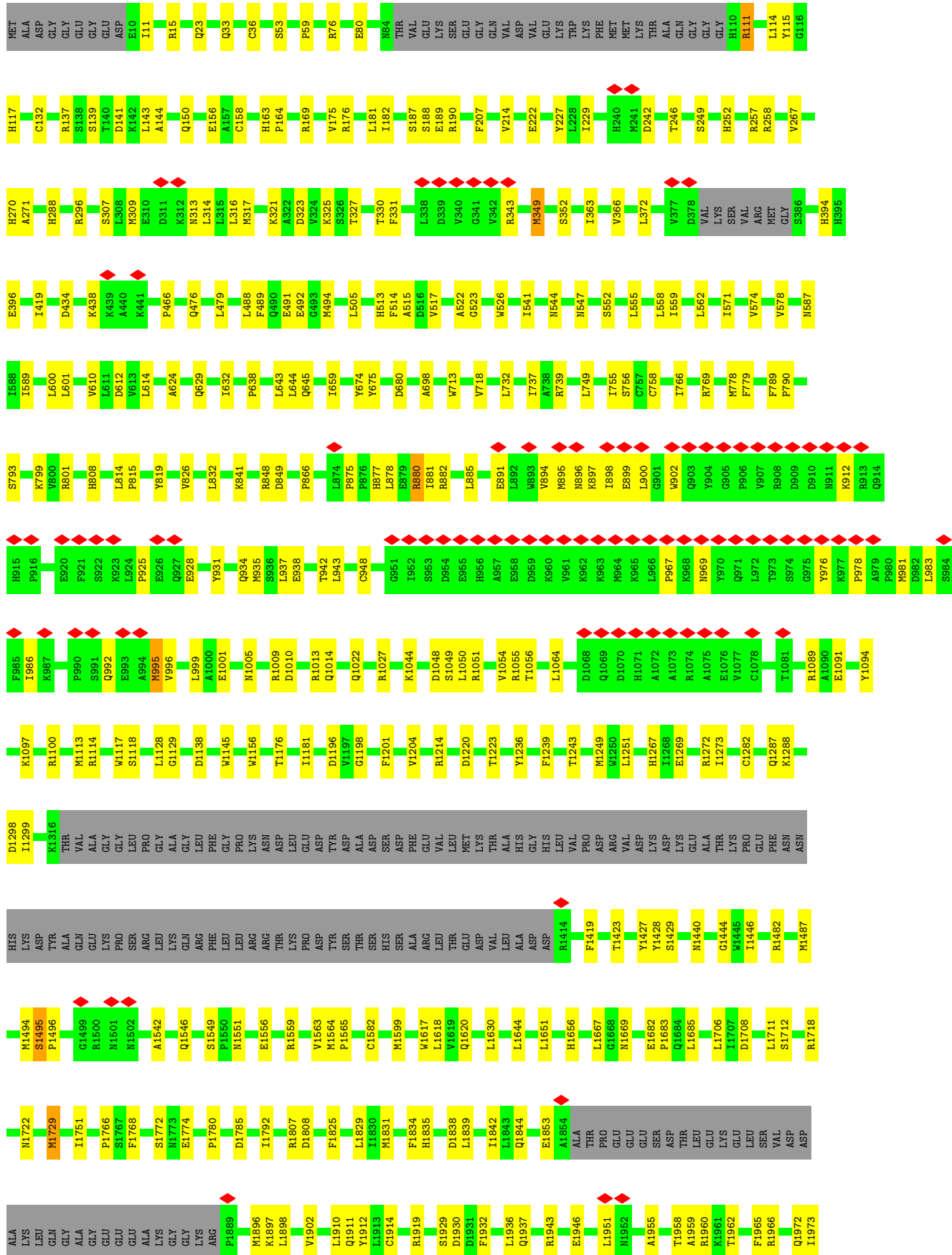






- Molecule 3: Ryanodine receptor 2

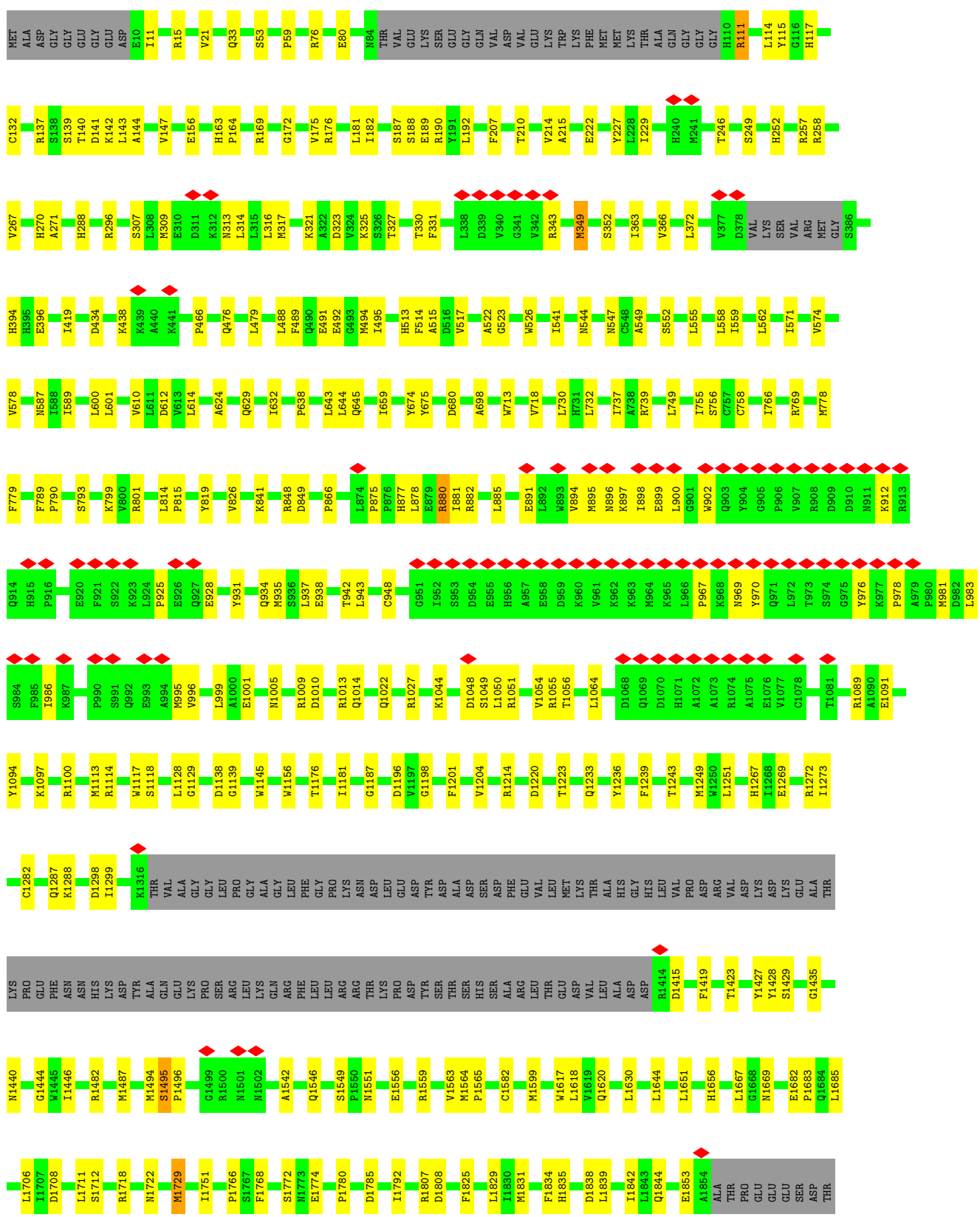


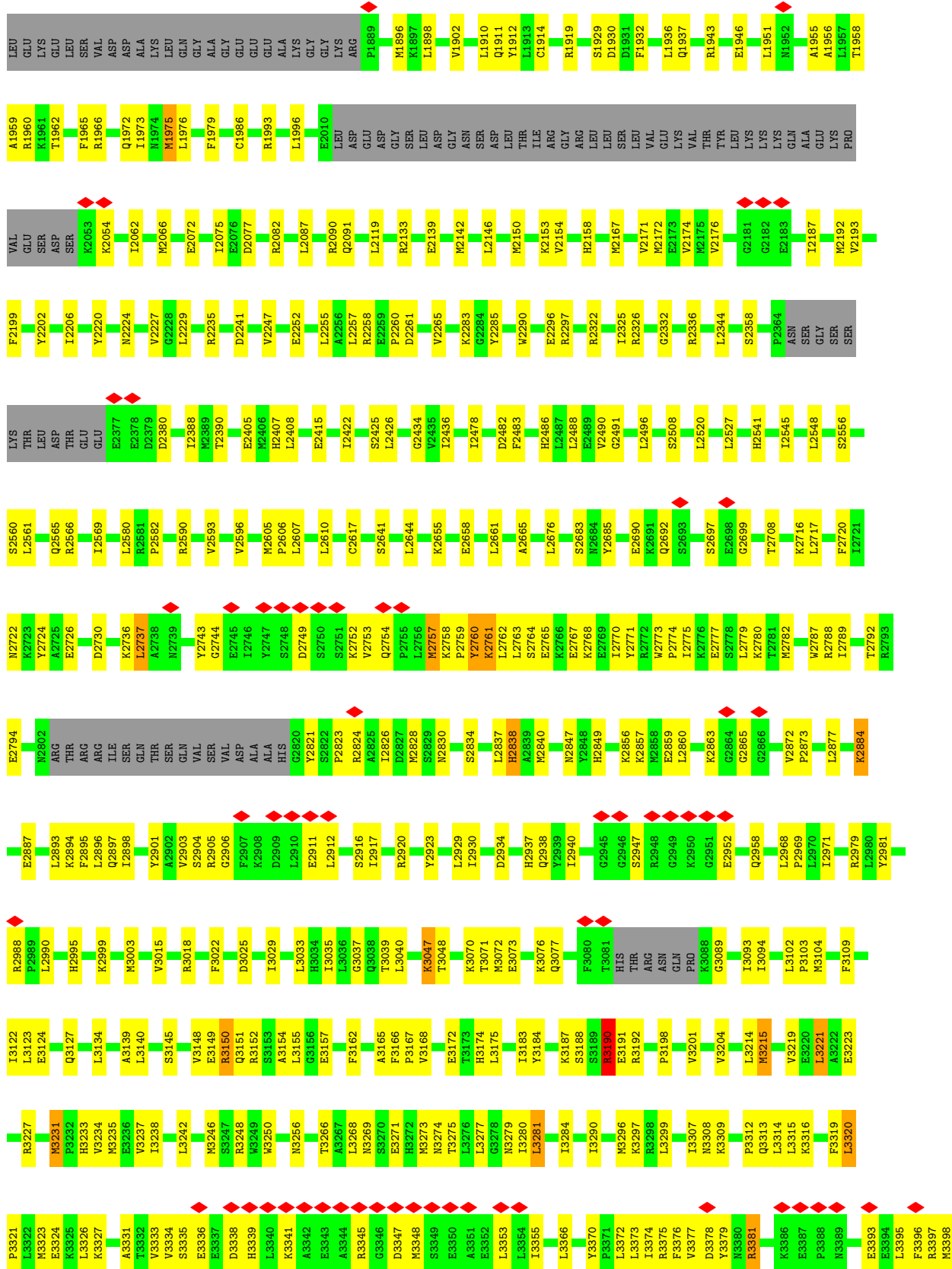


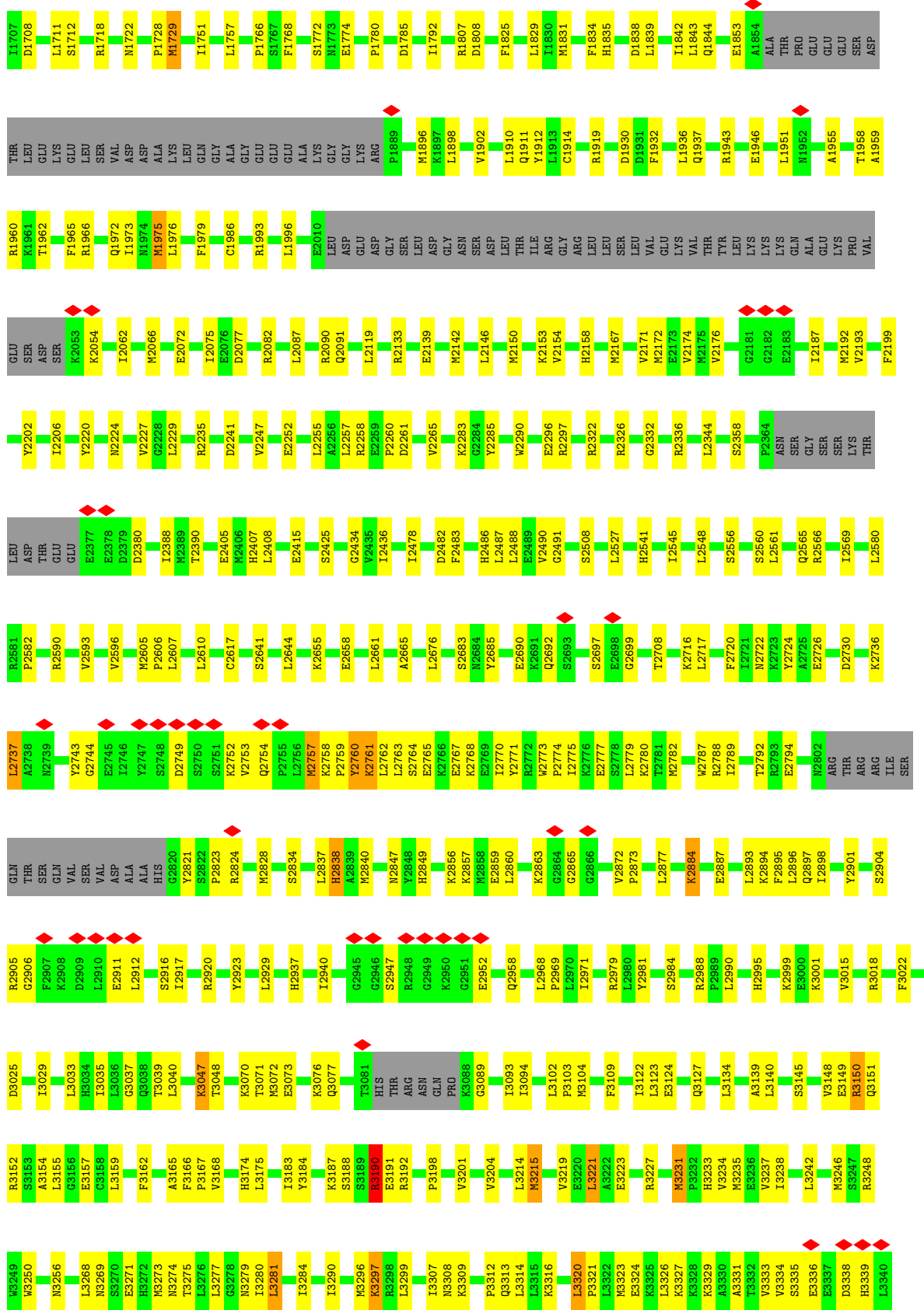
I3425	M3348	A3154	I3029	G2906	V2743	V2596	E2377	L2222	I1974
N3426	S3349	L3155	L5033	F2907	G2744	M2605	E2378	E2223	M1975
N3427	E3350	S3270	H3034	K2908	E2745	P2606	D3379	M2224	L1976
N3428	A3351	E3271	I3035	D2909	I2746	L2607	D2380	V2227	F1979
S3429	E3352	H3272	L3036	L2910	Y2747	L2610	M2389	G2228	C1986
F3430	L3353	M3273	G3037	E2911	S2748	L2810	T2390	L2229	C1987
L3431	F3166	N3274	Q3038	L2912	D2749	C2617	E2405	R2235	C1988
L3432	F3167	F3167	L3040	S2916	S2750	S2641	M2406	D2077	P1989
L3433	V3168	V3168	K3047	R2920	K2752	L2644	H2407	R2082	R1993
F3434	H3174	L3175	T3048	R2923	Q2753	F2645	L2644	L2087	L1996
D3434	L3175	L3175	K3070	Y2923	Q2754	K2655	L2644	R2080	E2010
T3435	L3183	L3183	T3071	L2929	P2755	K2655	L2644	R2090	LEU
K3436	Y3184	Y3184	M3072	L2930	L2756	E2658	L2644	Q2091	ASP
S3437	E3073	E3073	E3073	I2934	M2757	L2658	L2644	L2119	GLU
K3438	K3187	S3188	K3076	D2934	K2758	L2661	L2644	L2119	ASP
M3439	S3189	S3188	Q3077	H2937	F2759	A2665	L2644	R2133	GLY
S3440	R3190	R3190	Q3077	D2938	K2760	L2665	L2644	E2139	LEU
LYS	R3191	R3191	T3081	Y2939	K2761	V2672	L2644	E2139	ASP
ALA	R3192	R3192	HIS	I2940	L2762	L2672	L2644	D2261	LEU
ALA	R3192	R3192	THR	L2940	S2764	E2766	L2644	D2261	GLY
VAL	R3192	R3192	ARG	I2940	E2765	L2876	L2644	V2265	GLY
SER	R3192	R3192	ARG	G2945	E2766	L2876	L2644	V2265	ASN
ASP	R3192	R3192	ARG	G2945	E2766	L2876	L2644	V2265	SER
GLN	R3192	R3192	ASN	G2946	E2767	S2683	L2644	V2265	SER
GLU	R3192	R3192	GLN	K2947	K2768	G2284	L2644	V2265	ASP
ARG	R3192	R3192	PRO	S2947	E2769	Y2684	L2644	V2265	LEU
LYS	R3192	R3192	K3088	K2948	L2770	N2685	L2644	V2265	THR
LYS	R3192	R3192	G3089	K2948	I2771	N2685	L2644	V2265	THR
LYS	R3192	R3192	I3093	G2949	R2772	E2890	L2644	V2265	ILE
LYS	R3192	R3192	I3094	K2950	R2773	R2891	L2644	V2265	ARG
LYS	R3192	R3192	I3094	G2951	P2774	G2892	L2644	V2265	GLY
R3454	R3393	E3394	K3316	G2952	L2775	S2693	L2644	V2265	ARG
K3455	L3395	E3320	F3219	E2952	K2776	S2693	L2644	V2265	LEU
G3456	F3396	E3320	F3319	Q2958	R2776	S2693	L2644	V2265	LEU
D3457	R3397	L3320	L3221	L2968	E2777	S2693	L2644	V2265	LEU
R3458	M3398	A3222	A3222	P2969	S2778	E2698	L2644	V2265	VAL
Y3459	F3399	E3223	E3223	L2970	L2779	G2699	L2644	V2265	VAL
S3460	A3400	R3227	R3227	L2970	K2780	G2699	L2644	V2265	LYS
K3461	E3401	F3227	F3227	L2971	L2781	T2708	L2644	V2265	VAL
Q3462	F3402	K3231	K3231	I2971	H2782	L2708	L2644	V2265	THR
T3463	L3404	H3233	H3233	R2979	R2787	K2716	L2644	V2265	THR
S3464	W3405	L3234	L3234	L2980	R2788	L2717	L2644	V2265	LEU
T3466	W3407	V3236	V3236	Y2981	L2789	L2717	L2644	V2265	LEU
V3467	K3408	F3237	F3237	R2981	T2792	F2720	L2644	V2265	VAL
H3410	S3409	E3337	E3337	R2987	R2792	N2722	L2644	V2265	THR
A3468	H3410	D3338	D3338	L2896	E2794	K2723	L2644	V2265	LYS
A3469	N3411	H3339	H3339	L2896	E2794	Y2724	L2644	V2265	GLN
L3470	F3412	L3340	L3340	H2995	R2802	A2725	L2644	V2265	ALA
K3471	K3413	K3341	K3341	K3003	ARG	E2726	L2644	V2265	GLU
R3472	R3414	A3342	A3342	V3015	THR	D2730	L2644	V2265	VAL
L3473	R3415	A3342	A3342	V3015	THR	K2736	L2644	V2265	VAL
L3474	E3416	E3343	E3343	R3018	ARG	R2582	L2644	V2265	GLU
P3475	Q3417	A3344	A3344	R3018	ARG	R2582	L2644	V2265	SER
N3418	N3418	R3345	R3345	F3022	THR	A2738	L2644	V2265	ASP
V3421	V3421	G3346	G3346	D3025	THR	N2739	L2644	V2265	SER
N3478	N3478	D3347	D3347	D3025	GLN	N2739	L2644	V2265	GLU
Q3422	Q3422						L2644	V2265	
N3423	N3423						L2644	V2265	
C3461	C3461						L2644	V2265	
A3462	A3462						L2644	V2265	
P3463	P3463						L2644	V2265	
G3464	G3464						L2644	V2265	

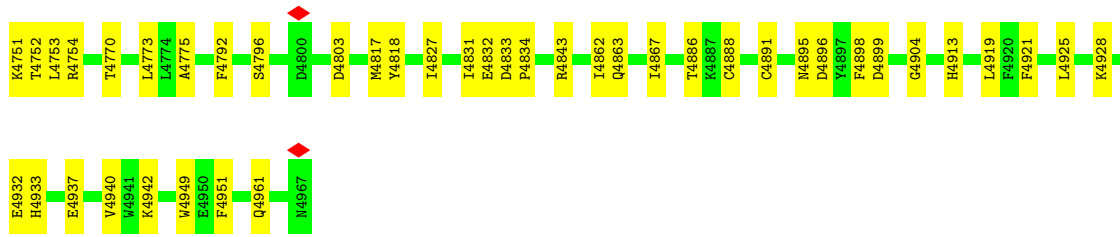
D3485	E3545	F3620	A3794	M4019	F4172	ARG	ILE	LEU	LYS	VAL	G4921	L4753	K4928
Q3486	K3546	D3638	L3803	L4023	V4176	TYR	CYS	THR	GLU	VAL	S4622	R4754	E4928
E3487	T3547	L3804	D3804	L4026	G4180	ASN	LEU	GLU	GLY	GLY	E4623	T4770	E4932
L3488	V3548	E3650	R3810	L4027	E4181	ILE	LEU	GLY	GLY	GLY	D4624	L4773	H4933
I3489	E3549	P3651	G3818	T4028	E4182	THR	LEU	LEU	THR	THR	L4625	L4774	L4937
R3550	R3551	P3652	M3819	S4028	E4187	LEU	GLY	LEU	LYS	PRO	K4627	A4775	E4937
L3491	V3551	E3653	V3820	K4033	F4188	SER	ARG	SER	SER	THR	R4632	F4792	V4940
A3492	L3552	E3654	T3821	K4040	V4189	MET	LEU	ASP	GLU	ARG	L4633	S4796	M4941
R3493	L3553	E3655	E3822	K4045	M4190	THR	VAL	PHE	LYS	SER	V4634	I4951	K4942
R3495	D3553	E3656	G3824	M4052	V4191	SER	ALA	GLY	GLY	GLY	M4636	S4949	L4949
F3496	I3554	E3657	S3825	E4053	M4191	LEU	ALA	LEU	ALA	GLU	T4637	D4800	E4950
S3497	A3555	G3658	V3829	K4045	T4196	LEU	ALA	ASP	GLY	ASN	Q4638	D4800	F4951
L3498	R3556	G3657	E3822	K4045	F4189	THR	ALA	LYS	GLY	ASN	S4639	D4803	Q4961
R3499	N3557	G3658	G3824	M4052	V4190	LEU	ALA	LYS	GLY	ASN	F4640	L4831	I4967
D3500	V3557	L3659	S3825	E4053	M4191	GLY	ALA	ARG	GLY	THR	P4641	M4817	
T3501	F3559	R3660	V3829	Q4060	L4206	GLN	ALA	GLY	GLY	THR	M4642	Y4818	
E3502	H3560	V3661	D3832	S4061	S4209	MET	ALA	GLY	LYS	LEU	M4643	R4822	
D3503	L3561	Q3666	F3835	E4062	ASP	THR	ALA	GLY	LYS	LEU	K4647	I4827	
E3504	E3562	E3678	F3838	T4063	LEU	THR	ALA	GLY	LYS	LEU	K4650	I4831	
V3505	K3564	L3687	L3838	E4064	ASN	THR	ALA	GLY	LYS	LEU	F4660	E4832	
R3506	SER	L3687	F3840	F4065	ASN	THR	ALA	GLY	LYS	LEU	Y4661	D4833	
D3507	LYS	Y3691	F3840	L4066	LEU	THR	ALA	GLY	LYS	LEU	I4555	P4834	
I3508	ARG	M3695	F3854	L4066	GLU	THR	ALA	GLY	LYS	LEU	I4555	R4843	
I3509	HIS	A3696	Q3855	F4066	GLU	THR	ALA	GLY	LYS	LEU	I4555	L4859	
R3510	TYR	K3697	Q3861	L4066	ASN	THR	ALA	GLY	LYS	LEU	I4555	I4862	
S3511	CYS	H3700	T3867	E4074	GLY	THR	ALA	GLY	LYS	LEU	I4555	Q4863	
R3512	LEU	D3701	V3868	E4074	LEU	THR	ALA	GLY	LYS	LEU	I4555	I4867	
I3513	VAL	E3702	I3872	L4078	ASP	THR	ALA	GLY	LYS	LEU	I4555	L4886	
H3514	GLU	ASP	S3873	D4079	GLY	THR	ALA	GLY	LYS	LEU	I4555	K4887	
L3515	HIS	ASP	T3874	E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555	C4888	
Q3516	PRO	ASP	V3875	E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555	C4891	
G3517	GLN	GLY	V3875	E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555	M4895	
R3517	ARG	GLU	S3884	E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555	D4896	
L3519	LYS	E3710	M3890	E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555	F4898	
E3520	ALA	E3715	V3891	E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555	D4899	
D3521	VAL	M3719	V3892	E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555	H4903	
A3523	TRP	A3729	L3920	E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555	G4904	
I3524	HIS	R3730	I3924	E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555	H4913	
R3525	LEU	L3731	Q3925	E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555	L4919	
K3526	LEU	H3732	R3939	E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555	F4920	
Q3527	SER	V3740	K3957	E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555	F4921	
K3528	LYS	T3758	Q3975	E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555	L4925	
A3529	Q3594	I3763	V3979	E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555		
I3530	R3595	Q3774	L4014	E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555		
Y3531	R3596	L3778		E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555		
K3532	K3597			E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555		
D3533	R3597			E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555		
L3534	F3603			E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555		
P3535	R3604			E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555		
R3536	M3605			E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555		
R3537	A3606			E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555		
T3538	P3607			E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555		
D3539	L3608			E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555		
D3540				E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555		
T3541				E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555		
S3542				E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555		
D3543				E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555		
P3544				E4082	GLY	THR	ALA	GLY	LYS	LEU	I4555		

• Molecule 3: Ryanodine receptor 2









4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	102257	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	58	Depositor
Minimum defocus (nm)	400	Depositor
Maximum defocus (nm)	1200	Depositor
Magnification	Not provided	
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	0.728	Depositor
Minimum map value	-0.014	Depositor
Average map value	0.012	Depositor
Map value standard deviation	0.033	Depositor
Recommended contour level	0.1	Depositor
Map size (Å)	425.984, 425.984, 425.984	wwPDB
Map dimensions	512, 512, 512	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.832, 0.832, 0.832	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: ZN, CA, XAN, ATP

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	E	0.30	0/834	0.61	2/1123 (0.2%)
1	F	0.31	0/834	0.61	2/1123 (0.2%)
1	G	0.31	0/834	0.61	2/1123 (0.2%)
1	H	0.31	0/834	0.61	2/1123 (0.2%)
2	I	0.38	0/1122	0.80	6/1504 (0.4%)
2	J	0.38	0/1122	0.79	6/1504 (0.4%)
2	K	0.38	1/1122 (0.1%)	0.80	6/1504 (0.4%)
2	L	0.38	0/1122	0.80	6/1504 (0.4%)
3	A	0.26	0/35720	0.50	7/48254 (0.0%)
3	B	0.26	0/35720	0.50	7/48254 (0.0%)
3	C	0.26	0/35720	0.50	7/48254 (0.0%)
3	D	0.26	0/35720	0.50	7/48254 (0.0%)
All	All	0.27	1/150704 (0.0%)	0.51	60/203524 (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
3	A	0	2
3	B	0	2
3	C	0	2
3	D	0	2
All	All	0	8

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	K	15	GLU	CG-CD	-5.00	1.44	1.51

All (60) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	J	77	MET	CB-CG-SD	8.44	137.71	112.40
2	K	77	MET	CB-CG-SD	8.44	137.72	112.40
2	L	77	MET	CB-CG-SD	8.43	137.69	112.40
2	I	77	MET	CB-CG-SD	8.43	137.68	112.40
3	C	1729	MET	CB-CG-SD	-8.12	88.05	112.40
3	A	1729	MET	CB-CG-SD	-8.11	88.08	112.40
3	B	1729	MET	CB-CG-SD	-8.11	88.08	112.40
3	D	1729	MET	CB-CG-SD	-8.10	88.11	112.40
2	L	15	GLU	CA-CB-CG	7.23	129.30	113.40
2	I	15	GLU	CA-CB-CG	7.21	129.27	113.40
2	J	15	GLU	CA-CB-CG	7.21	129.25	113.40
2	K	15	GLU	CA-CB-CG	7.20	129.24	113.40
3	D	3231	MET	CA-CB-CG	6.69	124.68	113.30
3	B	3231	MET	CA-CB-CG	6.68	124.66	113.30
3	A	3231	MET	CA-CB-CG	6.68	124.65	113.30
3	C	3231	MET	CA-CB-CG	6.66	124.62	113.30
3	B	3461	MET	CB-CG-SD	6.64	132.32	112.40
3	A	3461	MET	CA-CB-CG	6.63	124.58	113.30
3	C	3461	MET	CA-CB-CG	6.63	124.57	113.30
3	A	3461	MET	CB-CG-SD	6.62	132.27	112.40
3	C	3461	MET	CB-CG-SD	6.62	132.28	112.40
3	D	3461	MET	CA-CB-CG	6.62	124.56	113.30
3	D	3461	MET	CB-CG-SD	6.62	132.27	112.40
3	B	3461	MET	CA-CB-CG	6.61	124.54	113.30
2	L	146	MET	CB-CG-SD	6.57	132.12	112.40
2	J	146	MET	CB-CG-SD	6.56	132.08	112.40
2	K	146	MET	CB-CG-SD	6.56	132.07	112.40
2	I	146	MET	CB-CG-SD	6.55	132.06	112.40
1	H	50	ARG	CG-CD-NE	6.22	124.85	111.80
1	F	50	ARG	CG-CD-NE	6.21	124.84	111.80
1	E	50	ARG	CG-CD-NE	6.20	124.82	111.80
1	G	50	ARG	CG-CD-NE	6.19	124.80	111.80
2	I	146	MET	CA-CB-CG	6.12	123.70	113.30
2	K	146	MET	CA-CB-CG	6.12	123.70	113.30
2	L	146	MET	CA-CB-CG	6.11	123.69	113.30
2	J	146	MET	CA-CB-CG	6.10	123.67	113.30
2	I	77	MET	CA-CB-CG	6.07	123.61	113.30
2	J	77	MET	CA-CB-CG	6.06	123.60	113.30
2	L	77	MET	CA-CB-CG	6.06	123.60	113.30
2	K	77	MET	CA-CB-CG	6.03	123.56	113.30
1	E	4	GLU	CA-CB-CG	5.95	126.50	113.40
1	H	4	GLU	CA-CB-CG	5.95	126.50	113.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	4	GLU	CA-CB-CG	5.95	126.49	113.40
1	G	4	GLU	CA-CB-CG	5.93	126.45	113.40
3	D	3320	LEU	CA-CB-CG	5.59	128.17	115.30
3	A	3320	LEU	CA-CB-CG	5.58	128.13	115.30
3	B	3320	LEU	CA-CB-CG	5.57	128.12	115.30
3	C	3320	LEU	CA-CB-CG	5.57	128.11	115.30
3	D	3231	MET	CB-CG-SD	5.55	129.05	112.40
3	A	3231	MET	CB-CG-SD	5.55	129.04	112.40
3	C	3231	MET	CB-CG-SD	5.54	129.03	112.40
3	B	3231	MET	CB-CG-SD	5.54	129.01	112.40
3	D	3491	LEU	CA-CB-CG	5.17	127.19	115.30
3	C	3491	LEU	CA-CB-CG	5.16	127.17	115.30
3	B	3491	LEU	CA-CB-CG	5.16	127.17	115.30
3	A	3491	LEU	CA-CB-CG	5.16	127.16	115.30
2	L	23	ASP	CB-CG-OD1	5.07	122.86	118.30
2	I	23	ASP	CB-CG-OD1	5.05	122.84	118.30
2	K	23	ASP	CB-CG-OD1	5.04	122.84	118.30
2	J	23	ASP	CB-CG-OD1	5.04	122.83	118.30

There are no chirality outliers.

All (8) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
3	A	3190	ARG	Sidechain
3	A	3381	ARG	Sidechain
3	B	3190	ARG	Sidechain
3	B	3381	ARG	Sidechain
3	C	3190	ARG	Sidechain
3	C	3381	ARG	Sidechain
3	D	3190	ARG	Sidechain
3	D	3381	ARG	Sidechain

5.2 Too-close contacts [i](#)

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	E	818	0	821	16	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	F	818	0	821	15	0
1	G	818	0	821	18	0
1	H	818	0	821	15	0
2	I	1112	0	1053	84	0
2	J	1112	0	1053	69	0
2	K	1112	0	1053	70	0
2	L	1112	0	1053	72	0
3	A	34959	0	34588	632	0
3	B	34959	0	34588	632	0
3	C	34959	0	34588	644	0
3	D	34959	0	34588	627	0
4	A	1	0	0	0	0
4	B	1	0	0	0	0
4	C	1	0	0	0	0
4	D	1	0	0	0	0
5	A	62	0	24	4	0
5	B	62	0	24	4	0
5	C	62	0	24	4	0
5	D	62	0	24	4	0
6	A	1	0	0	0	0
6	B	1	0	0	0	0
6	C	1	0	0	0	0
6	D	1	0	0	0	0
7	A	11	0	4	0	0
7	B	11	0	4	0	0
7	C	11	0	4	0	0
7	D	11	0	4	0	0
8	A	3	0	0	0	0
8	B	3	0	0	0	0
8	C	3	0	0	0	0
8	D	3	0	0	0	0
All	All	147868	0	145960	2823	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 10.

All (2823) 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)
2:L:128:GLU:CB	2:L:131:ILE:CD1	1.83	1.57
2:L:128:GLU:HB3	2:L:131:ILE:CD1	1.11	1.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:128:GLU:HB3	2:J:131:ILE:CD1	1.11	1.55
2:I:128:GLU:HB3	2:I:131:ILE:CD1	1.11	1.54
2:K:128:GLU:HB3	2:K:131:ILE:CD1	1.11	1.54
2:K:128:GLU:CB	2:K:131:ILE:CD1	1.83	1.54
2:I:128:GLU:CB	2:I:131:ILE:CD1	1.83	1.51
2:J:128:GLU:CB	2:J:131:ILE:CD1	1.83	1.50
3:C:3427:ASN:CB	3:C:3463:THR:HB	1.49	1.43
3:D:3427:ASN:CB	3:D:3463:THR:HB	1.48	1.43
3:A:3427:ASN:CB	3:A:3463:THR:HB	1.49	1.41
3:B:3427:ASN:CB	3:B:3463:THR:HB	1.48	1.41
3:B:3375:ARG:NH2	3:B:3437:SER:OG	1.56	1.37
3:D:3375:ARG:NH2	3:D:3437:SER:OG	1.56	1.33
3:A:3375:ARG:NH2	3:A:3437:SER:OG	1.56	1.33
3:C:3375:ARG:NH2	3:C:3437:SER:OG	1.56	1.33
3:B:3427:ASN:CG	3:B:3463:THR:O	1.68	1.32
3:D:3427:ASN:CG	3:D:3463:THR:O	1.68	1.30
3:A:3427:ASN:CG	3:A:3463:THR:O	1.68	1.29
3:C:3427:ASN:CG	3:C:3463:THR:O	1.68	1.29
3:D:3427:ASN:CB	3:D:3463:THR:CB	2.22	1.18
3:C:3427:ASN:CB	3:C:3463:THR:CB	2.22	1.17
3:B:3427:ASN:ND2	3:B:3463:THR:O	1.77	1.16
3:C:3427:ASN:ND2	3:C:3463:THR:O	1.77	1.16
3:D:3427:ASN:ND2	3:D:3463:THR:O	1.77	1.16
3:A:3427:ASN:CB	3:A:3463:THR:CB	2.22	1.16
3:A:3427:ASN:ND2	3:A:3463:THR:O	1.77	1.15
3:B:3427:ASN:CB	3:B:3463:THR:CB	2.22	1.15
3:D:3427:ASN:HB2	3:D:3463:THR:CB	1.76	1.14
3:A:3427:ASN:HB2	3:A:3463:THR:CB	1.76	1.14
3:B:3427:ASN:HB2	3:B:3463:THR:CB	1.76	1.14
3:C:3427:ASN:HB2	3:C:3463:THR:CB	1.76	1.13
2:K:128:GLU:CB	2:K:131:ILE:HD12	1.63	1.09
3:B:3423:ASN:O	3:B:3425:ILE:HD12	1.55	1.07
3:C:3423:ASN:O	3:C:3425:ILE:HD12	1.55	1.07
2:L:128:GLU:CB	2:L:131:ILE:HD12	1.63	1.06
3:A:3423:ASN:O	3:A:3425:ILE:HD12	1.54	1.06
2:L:128:GLU:HB3	2:L:131:ILE:HD13	1.07	1.06
2:K:128:GLU:HB3	2:K:131:ILE:HD13	1.07	1.06
2:J:132:ASP:O	2:J:137:VAL:HG21	1.56	1.05
2:I:128:GLU:CB	2:I:131:ILE:HD12	1.63	1.05
3:D:3423:ASN:O	3:D:3425:ILE:HD12	1.54	1.05
2:J:128:GLU:HB3	2:J:131:ILE:HD13	1.07	1.04

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:128:GLU:HB3	2:I:131:ILE:HD13	1.07	1.04
2:I:132:ASP:O	2:I:137:VAL:HG21	1.56	1.04
2:J:128:GLU:CB	2:J:131:ILE:HD12	1.63	1.04
2:K:132:ASP:O	2:K:137:VAL:HG21	1.56	1.04
3:C:3375:ARG:CZ	3:C:3437:SER:OG	2.06	1.03
3:B:3375:ARG:CZ	3:B:3437:SER:OG	2.06	1.03
2:L:132:ASP:O	2:L:137:VAL:HG21	1.56	1.02
2:I:128:GLU:CG	2:I:131:ILE:CD1	2.37	1.02
2:J:128:GLU:CG	2:J:131:ILE:CD1	2.37	1.02
3:D:3375:ARG:CZ	3:D:3437:SER:OG	2.06	1.02
3:A:3375:ARG:CZ	3:A:3437:SER:OG	2.06	1.02
2:K:128:GLU:CB	2:K:131:ILE:HD11	1.90	1.01
3:D:3427:ASN:HB2	3:D:3463:THR:OG1	1.59	1.01
2:I:146:MET:CE	3:A:3596:LYS:HB2	1.91	1.01
2:L:128:GLU:CB	2:L:131:ILE:HD11	1.90	1.01
2:L:128:GLU:CG	2:L:131:ILE:CD1	2.37	1.01
3:C:3427:ASN:HB2	3:C:3463:THR:OG1	1.59	1.01
2:J:128:GLU:CB	2:J:131:ILE:HD11	1.90	1.01
2:K:128:GLU:CG	2:K:131:ILE:CD1	2.37	1.01
3:B:3427:ASN:HB2	3:B:3463:THR:OG1	1.59	1.00
3:B:3427:ASN:HB3	3:B:3463:THR:HB	1.01	1.00
3:A:3427:ASN:HB2	3:A:3463:THR:OG1	1.59	1.00
3:A:3427:ASN:HB3	3:A:3463:THR:HB	1.01	1.00
3:D:3427:ASN:HB3	3:D:3463:THR:HB	1.01	0.98
2:I:128:GLU:CB	2:I:131:ILE:HD11	1.90	0.98
2:L:132:ASP:O	2:L:137:VAL:CG2	2.13	0.96
2:K:132:ASP:O	2:K:137:VAL:CG2	2.13	0.96
3:C:3427:ASN:HB3	3:C:3463:THR:HB	1.01	0.96
2:J:132:ASP:O	2:J:137:VAL:CG2	2.13	0.95
2:I:132:ASP:O	2:I:137:VAL:CG2	2.13	0.95
3:C:3427:ASN:HB3	3:C:3463:THR:CB	1.93	0.94
2:I:108:HIS:HB3	3:A:1959:ALA:HB2	1.48	0.93
2:J:128:GLU:HB3	2:J:131:ILE:HD12	0.93	0.93
2:K:128:GLU:HB3	2:K:131:ILE:HD12	0.93	0.93
3:B:3427:ASN:ND2	3:B:3463:THR:C	2.23	0.92
3:C:3427:ASN:ND2	3:C:3463:THR:C	2.23	0.92
3:A:3427:ASN:ND2	3:A:3463:THR:C	2.23	0.92
2:I:128:GLU:HB3	2:I:131:ILE:HD12	0.93	0.92
3:D:3427:ASN:ND2	3:D:3463:THR:C	2.23	0.92
2:J:128:GLU:CA	2:J:131:ILE:HD12	2.00	0.91
2:I:128:GLU:CA	2:I:131:ILE:HD12	2.00	0.91

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:128:GLU:HB3	2:L:131:ILE:HD12	0.93	0.91
3:C:3650:GLU:HG2	3:C:3651:PRO:HD3	1.53	0.90
3:A:3650:GLU:HG2	3:A:3651:PRO:HD3	1.53	0.90
3:C:3509:ILE:HD12	3:C:3552:LEU:HD21	1.54	0.90
2:K:128:GLU:CA	2:K:131:ILE:HD12	2.01	0.90
2:L:128:GLU:CG	2:L:131:ILE:HD11	2.02	0.90
3:A:3509:ILE:HD12	3:A:3552:LEU:HD21	1.54	0.90
3:B:3650:GLU:HG2	3:B:3651:PRO:HD3	1.53	0.90
3:D:3650:GLU:HG2	3:D:3651:PRO:HD3	1.53	0.90
2:J:128:GLU:CG	2:J:131:ILE:HD11	2.01	0.90
3:D:3509:ILE:HD12	3:D:3552:LEU:HD21	1.54	0.90
3:D:3427:ASN:HB3	3:D:3463:THR:CB	1.93	0.89
2:L:128:GLU:CA	2:L:131:ILE:HD12	2.00	0.89
3:B:3509:ILE:HD12	3:B:3552:LEU:HD21	1.54	0.89
2:K:128:GLU:CG	2:K:131:ILE:HD11	2.02	0.88
2:I:146:MET:HE1	3:A:3596:LYS:HB2	1.53	0.88
2:K:128:GLU:CA	2:K:131:ILE:CD1	2.52	0.88
2:I:132:ASP:C	2:I:137:VAL:CG2	2.43	0.87
2:I:128:GLU:CA	2:I:131:ILE:CD1	2.52	0.87
2:J:132:ASP:C	2:J:137:VAL:CG2	2.43	0.87
2:J:128:GLU:CA	2:J:131:ILE:CD1	2.52	0.87
2:K:132:ASP:C	2:K:137:VAL:CG2	2.43	0.87
2:L:128:GLU:CA	2:L:131:ILE:CD1	2.52	0.87
3:A:3427:ASN:HB3	3:A:3463:THR:CB	1.93	0.87
2:L:132:ASP:C	2:L:137:VAL:CG2	2.43	0.87
2:I:128:GLU:CG	2:I:131:ILE:HD13	2.05	0.85
3:B:3427:ASN:HB3	3:B:3463:THR:CB	1.93	0.85
2:I:128:GLU:CG	2:I:131:ILE:HD11	2.01	0.84
2:L:128:GLU:CG	2:L:131:ILE:HD13	2.05	0.84
2:L:128:GLU:CB	2:L:131:ILE:HD13	1.75	0.84
3:D:3378:ASP:OD2	3:D:3434:ASP:OD2	1.96	0.83
3:D:3427:ASN:HB2	3:D:3463:THR:HB	1.38	0.83
3:B:3378:ASP:OD2	3:B:3434:ASP:OD2	1.96	0.83
3:A:3378:ASP:OD2	3:A:3434:ASP:OD2	1.96	0.83
2:J:128:GLU:CG	2:J:131:ILE:HD13	2.05	0.83
2:K:128:GLU:CG	2:K:131:ILE:HD13	2.05	0.83
3:B:2830:ASN:HD22	3:C:1435:GLY:HA2	1.44	0.83
3:C:3378:ASP:OD2	3:C:3434:ASP:OD2	1.96	0.83
3:B:943:LEU:HD21	3:B:999:LEU:HD22	1.62	0.82
3:A:943:LEU:HD21	3:A:999:LEU:HD22	1.62	0.82
2:I:108:HIS:HE1	3:A:1956:ALA:HA	1.45	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:4834:PRO:HB3	3:C:4843:ARG:HD3	1.62	0.82
3:A:4834:PRO:HB3	3:A:4843:ARG:HD3	1.62	0.81
3:C:3427:ASN:HB2	3:C:3463:THR:HB	1.38	0.81
3:C:3595:ARG:HA	3:C:3818:GLY:HA3	1.62	0.81
2:K:128:GLU:CB	2:K:131:ILE:HD13	1.75	0.81
3:B:4834:PRO:HB3	3:B:4843:ARG:HD3	1.62	0.81
3:C:943:LEU:HD21	3:C:999:LEU:HD22	1.62	0.81
2:I:128:GLU:CB	2:I:131:ILE:HD13	1.75	0.81
3:D:3595:ARG:HA	3:D:3818:GLY:HA3	1.62	0.81
3:D:4834:PRO:HB3	3:D:4843:ARG:HD3	1.62	0.81
3:D:943:LEU:HD21	3:D:999:LEU:HD22	1.62	0.80
3:B:3397:ARG:HH21	3:B:3550:ARG:HD2	1.47	0.80
3:D:3397:ARG:HH21	3:D:3550:ARG:HD2	1.47	0.80
3:B:3595:ARG:HA	3:B:3818:GLY:HA3	1.62	0.80
3:A:3397:ARG:HH21	3:A:3550:ARG:HD2	1.47	0.80
3:A:3595:ARG:HA	3:A:3818:GLY:HA3	1.62	0.80
3:A:996:VAL:HG13	3:A:1050:LEU:HD22	1.64	0.79
3:C:3397:ARG:HH21	3:C:3550:ARG:HD2	1.47	0.79
3:D:996:VAL:HG13	3:D:1050:LEU:HD22	1.64	0.79
3:C:996:VAL:HG13	3:C:1050:LEU:HD22	1.64	0.79
2:K:128:GLU:HG2	2:K:131:ILE:HD13	1.66	0.78
2:K:128:GLU:O	2:K:131:ILE:HD12	1.84	0.77
2:J:128:GLU:CB	2:J:131:ILE:HD13	1.75	0.77
3:B:996:VAL:HG13	3:B:1050:LEU:HD22	1.64	0.77
2:I:128:GLU:HG2	2:I:131:ILE:HD13	1.66	0.77
2:L:128:GLU:O	2:L:131:ILE:HD12	1.84	0.77
3:C:3227:ARG:HH12	3:C:3290:ILE:HD12	1.50	0.77
3:B:3308:ASN:OD1	3:B:3437:SER:HB3	1.85	0.77
3:C:3308:ASN:OD1	3:C:3437:SER:HB3	1.84	0.77
3:D:3373:LEU:HD11	3:D:3395:LEU:HD21	1.67	0.77
3:B:1751:ILE:HG13	3:B:1839:LEU:HD23	1.66	0.76
2:I:128:GLU:O	2:I:131:ILE:HD12	1.84	0.76
3:A:1751:ILE:HG13	3:A:1839:LEU:HD23	1.66	0.76
2:J:128:GLU:HG2	2:J:131:ILE:HD13	1.66	0.76
3:A:3308:ASN:OD1	3:A:3437:SER:HB3	1.84	0.76
3:D:3227:ARG:HH12	3:D:3290:ILE:HD12	1.50	0.76
3:D:3509:ILE:CD1	3:D:3552:LEU:HD21	2.15	0.76
2:J:128:GLU:O	2:J:131:ILE:HD12	1.84	0.76
3:B:3227:ARG:HH12	3:B:3290:ILE:HD12	1.50	0.76
3:C:1751:ILE:HG13	3:C:1839:LEU:HD23	1.66	0.76
3:B:3509:ILE:CD1	3:B:3552:LEU:HD21	2.15	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:3308:ASN:OD1	3:D:3437:SER:HB3	1.85	0.76
3:A:3509:ILE:CD1	3:A:3552:LEU:HD21	2.15	0.76
3:D:1751:ILE:HG13	3:D:1839:LEU:HD23	1.67	0.76
3:C:3509:ILE:CD1	3:C:3552:LEU:HD21	2.15	0.76
2:L:128:GLU:HG2	2:L:131:ILE:HD13	1.66	0.75
3:C:2425:SER:O	3:D:142:LYS:NZ	2.19	0.75
3:B:3832:ASP:HB3	3:B:3835:PHE:HB3	1.69	0.75
3:C:3832:ASP:HB3	3:C:3835:PHE:HB3	1.69	0.75
3:A:3373:LEU:HD11	3:A:3395:LEU:HD21	1.67	0.75
3:D:3832:ASP:HB3	3:D:3835:PHE:HB3	1.69	0.75
3:B:3250:TRP:O	3:B:3256:ASN:ND2	2.20	0.75
3:B:3373:LEU:HD11	3:B:3395:LEU:HD21	1.67	0.75
3:C:3373:LEU:HD11	3:C:3395:LEU:HD21	1.67	0.75
3:A:3227:ARG:HH12	3:A:3290:ILE:HD12	1.50	0.74
2:I:108:HIS:CE1	3:A:1956:ALA:HA	2.22	0.74
3:A:3832:ASP:HB3	3:A:3835:PHE:HB3	1.69	0.74
3:D:3250:TRP:O	3:D:3256:ASN:ND2	2.20	0.74
3:A:2988:ARG:HH12	3:A:2995:HIS:HB2	1.52	0.74
3:D:2988:ARG:HH12	3:D:2995:HIS:HB2	1.52	0.74
3:C:3493:LYS:NZ	3:C:3558:LEU:HB3	2.03	0.74
3:A:3250:TRP:O	3:A:3256:ASN:ND2	2.20	0.74
3:B:2988:ARG:HH12	3:B:2995:HIS:HB2	1.52	0.74
3:C:3250:TRP:O	3:C:3256:ASN:ND2	2.20	0.74
3:B:3493:LYS:NZ	3:B:3558:LEU:HB3	2.03	0.73
2:L:128:GLU:C	2:L:131:ILE:HD12	2.09	0.73
3:C:2988:ARG:HH12	3:C:2995:HIS:HB2	1.52	0.73
2:J:87:ARG:HE	2:J:90:PHE:HE1	1.37	0.73
3:A:3148:VAL:HG12	3:A:3151:GLN:HE21	1.54	0.73
3:D:3493:LYS:NZ	3:D:3558:LEU:HB3	2.03	0.73
2:I:143:VAL:HA	2:I:146:MET:HG3	1.71	0.72
2:J:143:VAL:HA	2:J:146:MET:HG3	1.71	0.72
3:B:3148:VAL:HG12	3:B:3151:GLN:HE21	1.54	0.72
3:D:3022:PHE:HB3	3:D:3025:ASP:HB2	1.71	0.72
2:K:128:GLU:C	2:K:131:ILE:HD12	2.09	0.72
3:A:3493:LYS:NZ	3:A:3558:LEU:HB3	2.03	0.72
2:K:87:ARG:HE	2:K:90:PHE:HE1	1.37	0.72
2:I:128:GLU:C	2:I:131:ILE:HD12	2.09	0.72
3:C:3022:PHE:HB3	3:C:3025:ASP:HB2	1.71	0.72
3:D:3378:ASP:OD2	3:D:3434:ASP:OD1	2.07	0.72
3:D:3148:VAL:HG12	3:D:3151:GLN:HE21	1.54	0.72
2:I:87:ARG:HE	2:I:90:PHE:HE1	1.37	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:3378:ASP:OD2	3:C:3434:ASP:OD1	2.07	0.72
2:K:143:VAL:HA	2:K:146:MET:HG3	1.71	0.72
3:B:3378:ASP:OD2	3:B:3434:ASP:OD1	2.07	0.72
3:B:3493:LYS:NZ	3:B:3558:LEU:CB	2.53	0.72
2:L:87:ARG:HE	2:L:90:PHE:HE1	1.37	0.71
2:L:143:VAL:HA	2:L:146:MET:HG3	1.71	0.71
3:A:3022:PHE:HB3	3:A:3025:ASP:HB2	1.71	0.71
3:C:3148:VAL:HG12	3:C:3151:GLN:HE21	1.54	0.71
3:B:3022:PHE:HB3	3:B:3025:ASP:HB2	1.71	0.71
3:C:2235:ARG:HG2	3:C:2297:ARG:HH12	1.56	0.71
3:C:4903:HIS:H	3:D:4183:LYS:HD2	1.54	0.71
2:J:128:GLU:C	2:J:131:ILE:HD12	2.09	0.71
3:A:3493:LYS:NZ	3:A:3558:LEU:CB	2.53	0.71
3:B:2235:ARG:HG2	3:B:2297:ARG:HH12	1.55	0.71
3:D:2235:ARG:HG2	3:D:2297:ARG:HH12	1.55	0.71
3:A:2235:ARG:HG2	3:A:2297:ARG:HH12	1.55	0.71
3:A:3378:ASP:OD2	3:A:3434:ASP:CG	2.29	0.71
3:A:3378:ASP:OD2	3:A:3434:ASP:OD1	2.07	0.71
3:C:3493:LYS:NZ	3:C:3558:LEU:CB	2.53	0.71
3:D:3493:LYS:NZ	3:D:3558:LEU:CB	2.53	0.71
3:C:3378:ASP:OD2	3:C:3434:ASP:CG	2.29	0.71
3:A:2916:SER:OG	3:A:2920:ARG:NH2	2.24	0.71
3:B:2916:SER:OG	3:B:2920:ARG:NH2	2.24	0.70
3:D:2916:SER:OG	3:D:2920:ARG:NH2	2.24	0.70
3:D:3378:ASP:OD2	3:D:3434:ASP:CG	2.29	0.70
2:K:14:LYS:HG2	3:C:2153:LYS:HD3	1.72	0.70
3:B:2752:LYS:HA	3:B:2754:GLN:HE22	1.56	0.70
3:B:3378:ASP:OD2	3:B:3434:ASP:CG	2.29	0.70
3:C:2916:SER:OG	3:C:2920:ARG:NH2	2.24	0.70
3:D:894:VAL:O	3:D:898:ILE:HD12	1.92	0.70
3:D:3184:TYR:HA	3:D:3192:ARG:HH12	1.57	0.70
3:C:2752:LYS:HA	3:C:2754:GLN:HE22	1.56	0.70
3:C:3184:TYR:HA	3:C:3192:ARG:HH12	1.57	0.70
3:B:4609:LYS:HD2	3:B:4615:LEU:HD13	1.74	0.69
3:C:4609:LYS:HD2	3:C:4615:LEU:HD13	1.74	0.69
3:C:1685:LEU:HB3	3:C:1706:LEU:HD12	1.74	0.69
3:B:1685:LEU:HB3	3:B:1706:LEU:HD12	1.74	0.69
3:A:2752:LYS:HA	3:A:2754:GLN:HE22	1.56	0.69
3:D:2761:LYS:HE2	3:D:2761:LYS:HA	1.74	0.69
3:A:3184:TYR:HA	3:A:3192:ARG:HH12	1.57	0.69
3:A:894:VAL:O	3:A:898:ILE:HD12	1.92	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:894:VAL:O	3:C:898:ILE:HD12	1.92	0.69
3:D:1685:LEU:HB3	3:D:1706:LEU:HD12	1.74	0.69
3:D:4609:LYS:HD2	3:D:4615:LEU:HD13	1.74	0.69
2:I:148:ALA:HB3	3:A:3597:ARG:HH22	1.56	0.69
3:A:2761:LYS:HE2	3:A:2761:LYS:HA	1.74	0.69
3:B:3184:TYR:HA	3:B:3192:ARG:HH12	1.57	0.69
3:D:2752:LYS:HA	3:D:2754:GLN:HE22	1.56	0.69
3:A:1685:LEU:HB3	3:A:1706:LEU:HD12	1.74	0.69
3:B:2979:ARG:HG3	3:B:3039:THR:HG22	1.75	0.68
3:A:4609:LYS:HD2	3:A:4615:LEU:HD13	1.74	0.68
3:C:3525:ARG:HA	3:C:3528:MET:SD	2.34	0.68
3:A:3525:ARG:HA	3:A:3528:MET:SD	2.34	0.68
3:B:2761:LYS:HA	3:B:2761:LYS:HE2	1.74	0.68
3:B:3525:ARG:HA	3:B:3528:MET:SD	2.34	0.68
3:B:894:VAL:O	3:B:898:ILE:HD12	1.92	0.68
3:C:2761:LYS:HE2	3:C:2761:LYS:HA	1.74	0.68
3:D:3409:SER:HB3	3:D:3412:PHE:CE2	2.29	0.68
2:L:128:GLU:HG2	2:L:131:ILE:CD1	2.21	0.68
2:K:132:ASP:C	2:K:137:VAL:HG22	2.14	0.67
3:A:3409:SER:HB3	3:A:3412:PHE:CE2	2.29	0.67
2:J:128:GLU:HG2	2:J:131:ILE:CD1	2.21	0.67
3:A:2979:ARG:HG3	3:A:3039:THR:HG22	1.75	0.67
3:C:2764:SER:OG	3:C:2767:GLU:OE1	2.13	0.67
3:D:3525:ARG:HA	3:D:3528:MET:SD	2.34	0.67
3:B:3148:VAL:HA	3:B:3151:GLN:HG2	1.77	0.67
3:C:2979:ARG:HG3	3:C:3039:THR:HG22	1.75	0.67
3:D:2979:ARG:HG3	3:D:3039:THR:HG22	1.75	0.67
3:A:4602:ARG:HH12	3:A:4627:LYS:HB3	1.59	0.67
3:C:114:LEU:HB2	3:C:117:HIS:CD2	2.30	0.67
3:D:114:LEU:HB2	3:D:117:HIS:CD2	2.30	0.67
2:I:132:ASP:C	2:I:137:VAL:HG22	2.14	0.67
3:A:3148:VAL:HA	3:A:3151:GLN:HG2	1.77	0.67
3:B:4818:TYR:OH	3:C:4847:ASP:OD2	2.10	0.67
3:B:3409:SER:HB3	3:B:3412:PHE:CE2	2.29	0.67
3:C:3409:SER:HB3	3:C:3412:PHE:CE2	2.29	0.67
2:I:6:THR:OG1	2:I:9:GLN:OE1	2.13	0.67
3:B:114:LEU:HB2	3:B:117:HIS:CD2	2.30	0.67
3:D:1239:PHE:O	3:D:1807:ARG:NH2	2.28	0.67
3:C:4602:ARG:HH12	3:C:4627:LYS:HB3	1.59	0.66
3:B:2425:SER:O	3:C:142:LYS:NZ	2.29	0.66
3:D:4602:ARG:HH12	3:D:4627:LYS:HB3	1.59	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:142:LYS:NZ	3:D:2425:SER:O	2.27	0.66
2:J:132:ASP:C	2:J:137:VAL:HG22	2.14	0.66
3:C:3148:VAL:HA	3:C:3151:GLN:HG2	1.77	0.66
3:D:2764:SER:OG	3:D:2767:GLU:OE1	2.13	0.66
2:K:6:THR:OG1	2:K:9:GLN:OE1	2.13	0.66
3:A:2764:SER:OG	3:A:2767:GLU:OE1	2.13	0.66
3:B:4602:ARG:HH12	3:B:4627:LYS:HB3	1.59	0.66
3:A:114:LEU:HB2	3:A:117:HIS:CD2	2.30	0.66
3:B:2764:SER:OG	3:B:2767:GLU:OE1	2.13	0.66
3:D:3148:VAL:HA	3:D:3151:GLN:HG2	1.77	0.66
2:L:132:ASP:C	2:L:137:VAL:HG22	2.14	0.65
2:J:6:THR:OG1	2:J:9:GLN:OE1	2.13	0.65
3:A:1239:PHE:O	3:A:1807:ARG:NH2	2.28	0.65
3:B:1239:PHE:O	3:B:1807:ARG:NH2	2.28	0.65
3:C:3427:ASN:HB2	3:C:3463:THR:HG1	1.61	0.65
3:B:3412:PHE:O	3:B:3416:GLU:HB2	1.97	0.65
3:B:3427:ASN:HB2	3:B:3463:THR:HB	1.38	0.65
3:C:3412:PHE:O	3:C:3416:GLU:HB2	1.97	0.65
3:D:3412:PHE:O	3:D:3416:GLU:HB2	1.97	0.65
3:D:3427:ASN:CB	3:D:3463:THR:O	2.45	0.65
3:D:3499:LYS:HE3	3:D:3564:LYS:HZ2	1.62	0.65
3:A:3427:ASN:CB	3:A:3463:THR:O	2.45	0.64
3:C:1239:PHE:O	3:C:1807:ARG:NH2	2.28	0.64
2:I:108:HIS:HB3	3:A:1959:ALA:CB	2.26	0.64
3:B:3427:ASN:CB	3:B:3463:THR:O	2.45	0.64
3:D:1766:PRO:HG3	3:D:1780:PRO:HB3	1.80	0.64
2:I:128:GLU:HG2	2:I:131:ILE:CD1	2.21	0.64
3:A:1766:PRO:HG3	3:A:1780:PRO:HB3	1.80	0.64
3:B:3477:GLY:HA2	3:B:3480:ILE:HD12	1.79	0.64
3:C:1766:PRO:HG3	3:C:1780:PRO:HB3	1.80	0.64
3:B:1766:PRO:HG3	3:B:1780:PRO:HB3	1.80	0.64
3:C:3427:ASN:CB	3:C:3463:THR:O	2.45	0.64
3:C:3478:LEU:HD21	3:D:1233:GLN:HB3	1.78	0.64
3:C:3324:GLU:HG2	3:C:3327:LYS:HZ3	1.63	0.64
3:B:3695:MET:HB3	3:B:3731:LEU:HD11	1.80	0.64
3:A:3477:GLY:HA2	3:A:3480:ILE:HD12	1.79	0.63
3:D:3477:GLY:HA2	3:D:3480:ILE:HD12	1.79	0.63
3:A:3695:MET:HB3	3:A:3731:LEU:HD11	1.80	0.63
3:B:4664:ASP:OD1	3:B:4674:LYS:NZ	2.29	0.63
2:L:6:THR:OG1	2:L:9:GLN:OE1	2.13	0.63
3:D:4052:MET:HE2	3:D:4063:THR:HG23	1.79	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:4751:LYS:HA	3:D:4754:ARG:HE	1.64	0.63
3:A:3412:PHE:O	3:A:3416:GLU:HB2	1.97	0.63
3:C:4751:LYS:HA	3:C:4754:ARG:HE	1.63	0.63
2:L:138:ASN:O	2:L:142:PHE:HB2	1.98	0.63
2:K:138:ASN:O	2:K:142:PHE:HB2	1.98	0.63
3:B:222:GLU:HB2	3:B:349:MET:HG3	1.80	0.63
1:G:83:TYR:OH	3:C:1768:PHE:O	2.15	0.63
3:B:3499:LYS:HE3	3:B:3564:LYS:NZ	2.14	0.63
3:A:3037:GLY:HA2	3:A:3040:LEU:HD13	1.81	0.63
3:B:4144:ARG:HB3	3:B:4961:GLN:HE22	1.64	0.63
3:B:4751:LYS:HA	3:B:4754:ARG:HE	1.64	0.63
2:I:146:MET:HE3	3:A:3596:LYS:HB2	1.76	0.62
3:A:2556:SER:HB2	3:A:2569:ILE:HG21	1.81	0.62
3:C:3499:LYS:HE3	3:C:3564:LYS:NZ	2.14	0.62
3:C:4664:ASP:OD1	3:C:4674:LYS:NZ	2.29	0.62
3:A:4751:LYS:HA	3:A:4754:ARG:HE	1.64	0.62
3:C:2830:ASN:HD22	3:D:1435:GLY:HA2	1.63	0.62
3:C:4169:LYS:NZ	5:C:5002:ATP:O1B	2.32	0.62
3:D:3695:MET:HB3	3:D:3731:LEU:HD11	1.80	0.62
2:I:138:ASN:O	2:I:142:PHE:HB2	1.98	0.62
2:J:138:ASN:O	2:J:142:PHE:HB2	1.98	0.62
3:A:4664:ASP:OD1	3:A:4674:LYS:NZ	2.29	0.62
3:C:3499:LYS:HE3	3:C:3564:LYS:HZ2	1.64	0.62
3:D:4169:LYS:NZ	5:D:5002:ATP:O1B	2.32	0.62
3:A:4144:ARG:HB3	3:A:4961:GLN:HE22	1.64	0.62
3:A:4169:LYS:NZ	5:A:5002:ATP:O1B	2.32	0.62
3:A:4622:SER:OG	3:A:4624:ASP:OD1	2.18	0.62
3:B:2556:SER:HB2	3:B:2569:ILE:HG21	1.81	0.62
3:B:4052:MET:HE2	3:B:4063:THR:HG23	1.79	0.62
3:B:4169:LYS:NZ	5:B:5002:ATP:O1B	2.32	0.62
3:A:222:GLU:HB2	3:A:349:MET:HG3	1.80	0.62
3:C:3477:GLY:HA2	3:C:3480:ILE:HD12	1.79	0.62
3:D:4622:SER:OG	3:D:4624:ASP:OD1	2.18	0.62
2:J:15:GLU:OE1	2:J:15:GLU:N	2.32	0.62
3:B:3653:GLU:HG2	3:B:3655:ASP:H	1.65	0.62
3:C:897:LYS:HB2	3:C:902:TRP:HB2	1.82	0.62
3:C:3695:MET:HB3	3:C:3731:LEU:HD11	1.80	0.62
3:C:4590:TYR:HA	3:C:4593:LEU:HB3	1.82	0.62
2:I:83:GLU:OE2	2:I:87:ARG:NH1	2.31	0.62
3:A:4052:MET:HE2	3:A:4063:THR:HG23	1.80	0.62
3:C:4144:ARG:HB3	3:C:4961:GLN:HE22	1.64	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:222:GLU:HB2	3:D:349:MET:HG3	1.80	0.62
3:D:3037:GLY:HA2	3:D:3040:LEU:HD13	1.81	0.62
3:D:3499:LYS:HE3	3:D:3564:LYS:NZ	2.14	0.62
2:K:128:GLU:HG2	2:K:131:ILE:CD1	2.21	0.62
3:A:4775:ALA:HA	3:A:4817:MET:HE1	1.80	0.62
3:C:4052:MET:HE2	3:C:4063:THR:HG23	1.81	0.62
3:D:897:LYS:HB2	3:D:902:TRP:HB2	1.82	0.62
3:D:4144:ARG:HB3	3:D:4961:GLN:HE22	1.64	0.62
3:A:3499:LYS:HE3	3:A:3564:LYS:NZ	2.14	0.62
3:B:3037:GLY:HA2	3:B:3040:LEU:HD13	1.81	0.62
3:C:3653:GLU:HG2	3:C:3655:ASP:H	1.65	0.62
3:C:4775:ALA:HA	3:C:4817:MET:HE1	1.81	0.62
3:D:3324:GLU:HG2	3:D:3327:LYS:HZ3	1.65	0.62
3:A:3653:GLU:HG2	3:A:3655:ASP:H	1.65	0.61
3:C:222:GLU:HB2	3:C:349:MET:HG3	1.80	0.61
3:D:3653:GLU:HG2	3:D:3655:ASP:H	1.65	0.61
3:C:3037:GLY:HA2	3:C:3040:LEU:HD13	1.81	0.61
2:L:83:GLU:OE2	2:L:87:ARG:NH1	2.31	0.61
3:B:163:HIS:HB2	3:B:182:ILE:HG13	1.83	0.61
3:A:3274:ASN:HB2	3:A:3314:LEU:HD11	1.82	0.61
3:B:4590:TYR:HA	3:B:4593:LEU:HB3	1.82	0.61
3:A:4590:TYR:HA	3:A:4593:LEU:HB3	1.82	0.61
3:B:15:ARG:HH11	3:B:15:ARG:HG3	1.66	0.61
3:B:3274:ASN:HB2	3:B:3314:LEU:HD11	1.82	0.61
3:B:3464:SER:HB3	3:B:3467:VAL:HG22	1.83	0.61
3:C:3493:LYS:HZ2	3:C:3558:LEU:HB2	1.65	0.61
3:D:3493:LYS:HZ2	3:D:3558:LEU:HB2	1.65	0.61
3:C:15:ARG:HH11	3:C:15:ARG:HG3	1.66	0.61
3:C:3482:ALA:H	3:C:3485:ASP:HB3	1.65	0.61
3:A:163:HIS:HB2	3:A:182:ILE:HG13	1.83	0.61
3:A:3559:PHE:HD1	3:A:3563:GLN:HE21	1.48	0.61
3:D:4590:TYR:HA	3:D:4593:LEU:HB3	1.82	0.61
3:A:2920:ARG:NH1	3:A:2981:TYR:OH	2.34	0.61
3:B:3493:LYS:HZ2	3:B:3558:LEU:HB2	1.64	0.61
3:C:3464:SER:HB3	3:C:3467:VAL:HG22	1.83	0.61
3:D:314:LEU:HD11	3:D:372:LEU:HD11	1.83	0.61
2:I:15:GLU:OE1	2:I:15:GLU:N	2.32	0.60
3:A:3522:PRO:HA	3:A:3525:ARG:HG2	1.83	0.60
3:C:2556:SER:HB2	3:C:2569:ILE:HG21	1.81	0.60
3:D:2556:SER:HB2	3:D:2569:ILE:HG21	1.81	0.60
3:D:2920:ARG:NH1	3:D:2981:TYR:OH	2.34	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:3522:PRO:HA	3:D:3525:ARG:HG2	1.83	0.60
3:A:314:LEU:HD11	3:A:372:LEU:HD11	1.83	0.60
3:B:3482:ALA:H	3:B:3485:ASP:HB3	1.65	0.60
3:C:163:HIS:HB2	3:C:182:ILE:HG13	1.83	0.60
3:C:2920:ARG:NH1	3:C:2981:TYR:OH	2.34	0.60
3:C:3522:PRO:HA	3:C:3525:ARG:HG2	1.83	0.60
3:D:3274:ASN:HB2	3:D:3314:LEU:HD11	1.82	0.60
3:A:137:ARG:NE	3:A:139:SER:OG	2.35	0.60
3:B:3522:PRO:HA	3:B:3525:ARG:HG2	1.83	0.60
3:C:4622:SER:OG	3:C:4624:ASP:OD1	2.18	0.60
3:D:323:ASP:O	3:D:325:LYS:N	2.33	0.60
3:A:897:LYS:HB2	3:A:902:TRP:HB2	1.82	0.60
3:B:2920:ARG:NH1	3:B:2981:TYR:OH	2.34	0.60
3:B:3559:PHE:HD1	3:B:3563:GLN:HE21	1.48	0.60
3:D:799:LYS:HG2	3:D:1620:GLN:HG3	1.84	0.60
2:I:146:MET:O	3:A:3596:LYS:HD3	2.02	0.60
3:A:3482:ALA:H	3:A:3485:ASP:HB3	1.65	0.60
3:D:1839:LEU:HD12	3:D:1842:ILE:HD11	1.84	0.60
3:D:3559:PHE:HD1	3:D:3563:GLN:HE21	1.48	0.60
3:B:4622:SER:OG	3:B:4624:ASP:OD1	2.18	0.60
3:C:137:ARG:NE	3:C:139:SER:OG	2.35	0.60
3:D:163:HIS:HB2	3:D:182:ILE:HG13	1.83	0.60
2:J:83:GLU:OE2	2:J:87:ARG:NH1	2.31	0.60
2:K:15:GLU:OE1	2:K:15:GLU:N	2.32	0.60
3:C:799:LYS:HG2	3:C:1620:GLN:HG3	1.83	0.60
3:C:2830:ASN:ND2	3:D:1435:GLY:HA2	2.16	0.60
3:B:897:LYS:HB2	3:B:902:TRP:HB2	1.82	0.60
3:C:3559:PHE:HD1	3:C:3563:GLN:HE21	1.48	0.60
3:A:3464:SER:HB3	3:A:3467:VAL:HG22	1.83	0.60
3:A:4637:THR:HG21	3:A:4705:TYR:HB2	1.84	0.60
3:B:541:ILE:HD11	3:B:574:VAL:HG13	1.84	0.60
2:J:138:ASN:O	2:J:142:PHE:CB	2.50	0.60
3:D:15:ARG:HH11	3:D:15:ARG:HG3	1.66	0.60
2:I:138:ASN:O	2:I:142:PHE:CB	2.50	0.59
2:K:83:GLU:OE2	2:K:87:ARG:NH1	2.31	0.59
3:A:1839:LEU:HD12	3:A:1842:ILE:HD11	1.84	0.59
3:B:555:LEU:HD11	3:B:578:VAL:HG11	1.84	0.59
3:C:3274:ASN:HB2	3:C:3314:LEU:HD11	1.82	0.59
3:A:799:LYS:HG2	3:A:1620:GLN:HG3	1.84	0.59
3:B:137:ARG:NE	3:B:139:SER:OG	2.35	0.59
3:D:137:ARG:NE	3:D:139:SER:OG	2.35	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:2139:GLU:HG3	3:D:2192:MET:HB2	1.84	0.59
3:D:3464:SER:HB3	3:D:3467:VAL:HG22	1.83	0.59
3:D:3482:ALA:H	3:D:3485:ASP:HB3	1.65	0.59
3:B:1839:LEU:HD12	3:B:1842:ILE:HD11	1.84	0.59
3:C:3022:PHE:HD2	3:C:3029:ILE:HD13	1.67	0.59
3:D:925:PRO:HB2	3:D:928:GLU:HB2	1.84	0.59
3:C:314:LEU:HD11	3:C:372:LEU:HD11	1.83	0.59
3:C:541:ILE:HD11	3:C:574:VAL:HG13	1.84	0.59
3:D:4637:THR:HG21	3:D:4705:TYR:HB2	1.84	0.59
3:A:541:ILE:HD11	3:A:574:VAL:HG13	1.84	0.59
3:C:925:PRO:HB2	3:C:928:GLU:HB2	1.85	0.59
3:D:1129:GLY:HA3	3:D:1145:TRP:HB3	1.84	0.59
2:I:148:ALA:HB3	3:A:3597:ARG:NH2	2.18	0.59
2:K:138:ASN:O	2:K:142:PHE:CB	2.50	0.59
3:B:799:LYS:HG2	3:B:1620:GLN:HG3	1.83	0.59
3:B:4187:GLU:OE1	3:B:4949:TRP:NE1	2.31	0.59
3:C:323:ASP:O	3:C:325:LYS:N	2.33	0.59
3:A:925:PRO:HB2	3:A:928:GLU:HB2	1.85	0.59
3:A:1129:GLY:HA3	3:A:1145:TRP:HB3	1.84	0.59
3:A:2139:GLU:HG3	3:A:2192:MET:HB2	1.84	0.59
3:B:1936:LEU:HD11	3:B:1976:LEU:HD22	1.84	0.59
3:D:1936:LEU:HD11	3:D:1976:LEU:HD22	1.84	0.59
3:D:4187:GLU:OE1	3:D:4949:TRP:NE1	2.31	0.59
2:L:138:ASN:O	2:L:142:PHE:CB	2.50	0.59
3:B:3022:PHE:HD2	3:B:3029:ILE:HD13	1.68	0.59
3:B:4775:ALA:HA	3:B:4817:MET:HE1	1.84	0.59
3:C:555:LEU:HD11	3:C:578:VAL:HG11	1.85	0.59
3:C:1839:LEU:HD12	3:C:1842:ILE:HD11	1.84	0.59
3:A:15:ARG:HG3	3:A:15:ARG:HH11	1.66	0.59
3:A:555:LEU:HD11	3:A:578:VAL:HG11	1.85	0.59
3:A:3022:PHE:HD2	3:A:3029:ILE:HD13	1.68	0.59
3:A:4187:GLU:OE1	3:A:4949:TRP:NE1	2.31	0.59
3:B:314:LEU:HD11	3:B:372:LEU:HD11	1.83	0.59
3:B:4818:TYR:HE1	3:C:4847:ASP:HB2	1.66	0.59
3:D:3022:PHE:HD2	3:D:3029:ILE:HD13	1.68	0.59
3:D:4775:ALA:HA	3:D:4817:MET:HE1	1.83	0.59
3:A:1936:LEU:HD11	3:A:1976:LEU:HD22	1.84	0.58
3:D:841:LYS:O	3:D:848:ARG:NH2	2.34	0.58
3:C:1129:GLY:HA3	3:C:1145:TRP:HB3	1.84	0.58
3:C:1936:LEU:HD11	3:C:1976:LEU:HD22	1.84	0.58
3:C:3348:MET:SD	3:C:3353:LEU:HB2	2.44	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:3348:MET:SD	3:B:3353:LEU:HB2	2.44	0.58
3:C:4637:THR:HG21	3:C:4705:TYR:HB2	1.84	0.58
3:D:541:ILE:HD11	3:D:574:VAL:HG13	1.84	0.58
1:H:50:ARG:HB3	1:H:50:ARG:HH11	1.69	0.58
2:L:15:GLU:OE1	2:L:15:GLU:N	2.32	0.58
3:C:1962:THR:HA	3:C:1965:PHE:HD2	1.69	0.58
3:A:3804:ASP:H	3:A:3829:VAL:HG13	1.68	0.58
3:C:2823:PRO:O	3:C:2824:ARG:NH1	2.37	0.58
3:D:3651:PRO:HB2	3:D:3652:PRO:HD3	1.85	0.58
2:J:109:VAL:HB	3:B:3603:PHE:HZ	1.69	0.58
2:L:128:GLU:CA	2:L:131:ILE:HD11	2.29	0.58
3:B:323:ASP:O	3:B:325:LYS:N	2.33	0.58
3:B:1129:GLY:HA3	3:B:1145:TRP:HB3	1.84	0.58
3:C:3246:MET:HG2	3:C:3268:LEU:HD11	1.85	0.58
3:D:555:LEU:HD11	3:D:578:VAL:HG11	1.85	0.58
3:D:3348:MET:SD	3:D:3353:LEU:HB2	2.44	0.58
2:J:6:THR:H	2:J:9:GLN:NE2	2.02	0.58
3:A:841:LYS:O	3:A:848:ARG:NH2	2.34	0.58
3:A:3269:ASN:HB3	3:A:3271:GLU:HG3	1.86	0.58
3:B:3269:ASN:HB3	3:B:3271:GLU:HG3	1.86	0.58
3:C:3804:ASP:H	3:C:3829:VAL:HG13	1.68	0.58
2:I:111:THR:OG1	3:A:1960:ARG:NH2	2.32	0.58
3:A:2823:PRO:O	3:A:2824:ARG:NH1	2.37	0.58
3:A:3348:MET:SD	3:A:3353:LEU:HB2	2.44	0.58
3:B:925:PRO:HB2	3:B:928:GLU:HB2	1.85	0.58
3:B:2139:GLU:HG3	3:B:2192:MET:HB2	1.84	0.58
3:D:2823:PRO:O	3:D:2824:ARG:NH1	2.37	0.58
3:D:2895:PHE:HA	3:D:2898:ILE:HG12	1.86	0.58
3:A:1962:THR:HA	3:A:1965:PHE:HD2	1.69	0.58
3:B:2744:GLY:HA2	3:B:2753:VAL:HG13	1.86	0.58
3:C:2322:ARG:O	3:C:2326:ARG:HG2	2.04	0.58
3:D:1097:LYS:NZ	3:D:1198:GLY:O	2.37	0.58
1:F:50:ARG:HB3	1:F:50:ARG:HH11	1.69	0.57
2:I:6:THR:H	2:I:9:GLN:NE2	2.02	0.57
3:B:1962:THR:HA	3:B:1965:PHE:HD2	1.69	0.57
3:B:4637:THR:HG21	3:B:4705:TYR:HB2	1.84	0.57
3:C:2139:GLU:HG3	3:C:2192:MET:HB2	1.84	0.57
3:C:2744:GLY:HA2	3:C:2753:VAL:HG13	1.86	0.57
3:C:3651:PRO:HB2	3:C:3652:PRO:HD3	1.85	0.57
3:C:3892:TYR:O	3:C:3957:LYS:NZ	2.37	0.57
3:D:1962:THR:HA	3:D:1965:PHE:HD2	1.69	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:2792:THR:HG23	3:D:2794:GLU:H	1.69	0.57
3:A:2792:THR:HG23	3:A:2794:GLU:H	1.69	0.57
3:A:2895:PHE:HA	3:A:2898:ILE:HG12	1.86	0.57
3:A:3320:LEU:HD23	3:A:3321:PRO:HD3	1.86	0.57
3:B:2545:ILE:HD12	3:B:2580:LEU:HD21	1.86	0.57
3:B:3246:MET:HG2	3:B:3268:LEU:HD11	1.85	0.57
3:B:3534:LEU:HD13	3:B:3537:ARG:HG3	1.86	0.57
3:D:3892:TYR:O	3:D:3957:LYS:NZ	2.37	0.57
1:E:50:ARG:HB3	1:E:50:ARG:HH11	1.69	0.57
3:C:2826:ILE:HD12	3:D:1501:ASN:HD21	1.69	0.57
3:D:4913:HIS:O	5:D:5002:ATP:N6	2.37	0.57
2:K:6:THR:H	2:K:9:GLN:NE2	2.02	0.57
2:L:6:THR:H	2:L:9:GLN:NE2	2.02	0.57
3:A:2322:ARG:O	3:A:2326:ARG:HG2	2.04	0.57
3:B:1097:LYS:NZ	3:B:1198:GLY:O	2.37	0.57
3:B:2322:ARG:O	3:B:2326:ARG:HG2	2.04	0.57
3:C:2758:LYS:HE3	3:C:2763:LEU:HA	1.87	0.57
3:A:4913:HIS:O	5:A:5002:ATP:N6	2.37	0.57
3:B:2895:PHE:HA	3:B:2898:ILE:HG12	1.86	0.57
3:B:4913:HIS:O	5:B:5002:ATP:N6	2.37	0.57
3:C:1097:LYS:NZ	3:C:1198:GLY:O	2.37	0.57
3:D:3246:MET:HG2	3:D:3268:LEU:HD11	1.85	0.57
2:I:82:SER:O	2:I:86:ILE:HG22	2.04	0.57
3:C:2895:PHE:HA	3:C:2898:ILE:HG12	1.86	0.57
3:C:4913:HIS:O	5:C:5002:ATP:N6	2.37	0.57
3:D:3269:ASN:HB3	3:D:3271:GLU:HG3	1.86	0.57
3:D:3320:LEU:HD23	3:D:3321:PRO:HD3	1.86	0.57
3:D:3804:ASP:H	3:D:3829:VAL:HG13	1.68	0.57
2:I:113:LEU:HD22	3:A:1963:LYS:HG3	1.87	0.57
3:A:394:HIS:CE1	3:A:396:GLU:HG3	2.40	0.57
3:A:1097:LYS:NZ	3:A:1198:GLY:O	2.37	0.57
3:A:1951:LEU:HD12	3:A:1958:THR:HG21	1.86	0.57
3:A:2545:ILE:HD12	3:A:2580:LEU:HD21	1.86	0.57
3:B:1951:LEU:HD12	3:B:1958:THR:HG21	1.86	0.57
3:B:3324:GLU:HG2	3:B:3327:LYS:HZ3	1.69	0.57
3:B:3651:PRO:HB2	3:B:3652:PRO:HD3	1.85	0.57
3:C:3269:ASN:HB3	3:C:3271:GLU:HG3	1.86	0.57
3:D:1951:LEU:HD12	3:D:1958:THR:HG21	1.86	0.57
3:D:3274:ASN:OD1	3:D:3275:THR:N	2.38	0.57
3:D:3406:TRP:HA	3:D:3412:PHE:CE2	2.40	0.57
3:D:3534:LEU:HD13	3:D:3537:ARG:HG3	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:50:ARG:HB3	1:G:50:ARG:HH11	1.69	0.57
2:J:82:SER:O	2:J:86:ILE:HG22	2.04	0.57
3:A:3184:TYR:HA	3:A:3192:ARG:NH1	2.20	0.57
3:B:981:MET:HE1	3:B:1056:THR:HG23	1.87	0.57
3:C:3715:GLU:O	3:C:3719:MET:HG2	2.05	0.57
3:D:2545:ILE:HD12	3:D:2580:LEU:HD21	1.86	0.57
3:D:2744:GLY:HA2	3:D:2753:VAL:HG13	1.86	0.57
3:A:3406:TRP:HA	3:A:3412:PHE:CE2	2.40	0.57
3:A:3651:PRO:HB2	3:A:3652:PRO:HD3	1.85	0.57
3:A:3715:GLU:O	3:A:3719:MET:HG2	2.05	0.57
3:B:2823:PRO:O	3:B:2824:ARG:NH1	2.37	0.57
3:B:3804:ASP:H	3:B:3829:VAL:HG13	1.68	0.57
3:C:394:HIS:CE1	3:C:396:GLU:HG3	2.40	0.57
3:D:249:SER:HA	3:D:257:ARG:NH2	2.20	0.57
3:A:981:MET:HE1	3:A:1056:THR:HG23	1.87	0.57
3:A:1682:GLU:HG2	3:A:1683:PRO:HD3	1.86	0.57
3:A:1911:GLN:OE1	3:A:2090:ARG:NH1	2.33	0.57
3:A:3246:MET:HG2	3:A:3268:LEU:HD11	1.85	0.57
3:A:3427:ASN:OD1	3:A:3463:THR:O	2.22	0.57
3:C:875:PRO:HD2	3:C:878:LEU:HD12	1.86	0.57
3:C:1682:GLU:HG2	3:C:1683:PRO:HD3	1.86	0.57
3:D:394:HIS:CE1	3:D:396:GLU:HG3	2.40	0.57
3:A:1243:THR:HG22	3:A:1808:ASP:HB2	1.87	0.56
3:B:1911:GLN:OE1	3:B:2090:ARG:NH1	2.32	0.56
3:C:4640:PHE:HB3	3:C:4641:PRO:HD3	1.87	0.56
3:D:1682:GLU:HG2	3:D:1683:PRO:HD3	1.86	0.56
2:K:82:SER:O	2:K:86:ILE:HG22	2.04	0.56
2:K:128:GLU:CA	2:K:131:ILE:HD11	2.29	0.56
3:A:3324:GLU:HG2	3:A:3327:LYS:HZ3	1.69	0.56
3:B:249:SER:HA	3:B:257:ARG:NH2	2.20	0.56
3:C:2792:THR:HG23	3:C:2794:GLU:H	1.69	0.56
3:D:601:LEU:HG	3:D:610:VAL:HG11	1.87	0.56
3:A:249:SER:HA	3:A:257:ARG:NH2	2.20	0.56
3:A:558:LEU:HG	3:A:571:ILE:HG23	1.86	0.56
3:A:601:LEU:HG	3:A:610:VAL:HG11	1.87	0.56
3:A:875:PRO:HD2	3:A:878:LEU:HD12	1.86	0.56
3:A:1272:ARG:NH2	3:A:1582:CYS:SG	2.79	0.56
3:A:3534:LEU:HD13	3:A:3537:ARG:HG3	1.86	0.56
3:B:394:HIS:CE1	3:B:396:GLU:HG3	2.40	0.56
3:B:2758:LYS:HE3	3:B:2763:LEU:HA	1.87	0.56
3:B:2792:THR:HG23	3:B:2794:GLU:H	1.69	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:3406:TRP:HA	3:B:3412:PHE:CE2	2.40	0.56
3:B:3715:GLU:O	3:B:3719:MET:HG2	2.05	0.56
3:B:3892:TYR:O	3:B:3957:LYS:NZ	2.37	0.56
3:C:3320:LEU:HD23	3:C:3321:PRO:HD3	1.86	0.56
3:C:3406:TRP:HA	3:C:3412:PHE:CE2	2.40	0.56
3:D:558:LEU:HG	3:D:571:ILE:HG23	1.86	0.56
3:D:2758:LYS:HE3	3:D:2763:LEU:HA	1.87	0.56
3:D:3184:TYR:HA	3:D:3192:ARG:NH1	2.20	0.56
3:D:3715:GLU:O	3:D:3719:MET:HG2	2.05	0.56
3:D:4640:PHE:HB3	3:D:4641:PRO:HD3	1.88	0.56
1:H:24:VAL:HG22	1:H:48:LYS:HG2	1.88	0.56
2:L:82:SER:O	2:L:86:ILE:HG22	2.04	0.56
3:B:476:GLN:NE2	3:B:3678:GLU:OE1	2.39	0.56
3:B:3184:TYR:HA	3:B:3192:ARG:NH1	2.20	0.56
3:B:3493:LYS:HZ2	3:B:3558:LEU:CB	2.18	0.56
3:C:2426:LEU:HD21	3:D:143:LEU:HD22	1.86	0.56
3:C:3534:LEU:HD13	3:C:3537:ARG:HG3	1.86	0.56
3:D:1272:ARG:NH2	3:D:1582:CYS:SG	2.79	0.56
3:B:3320:LEU:HD23	3:B:3321:PRO:HD3	1.86	0.56
3:B:4640:PHE:HB3	3:B:4641:PRO:HD3	1.88	0.56
3:D:1243:THR:HG22	3:D:1808:ASP:HB2	1.87	0.56
3:D:2322:ARG:O	3:D:2326:ARG:HG2	2.04	0.56
3:D:4028:SER:O	3:D:4033:LYS:NZ	2.36	0.56
3:A:1495:SER:OG	3:A:1496:PRO:HD2	2.06	0.56
3:B:1682:GLU:HG2	3:B:1683:PRO:HD3	1.86	0.56
3:C:2743:TYR:HA	3:C:2757:MET:HE1	1.86	0.56
3:A:1176:THR:HG22	3:A:1181:ILE:HA	1.88	0.56
3:A:2171:VAL:HG21	3:A:2199:PHE:CD2	2.41	0.56
3:C:249:SER:HA	3:C:257:ARG:NH2	2.20	0.56
3:C:1272:ARG:NH2	3:C:1582:CYS:SG	2.79	0.56
3:D:476:GLN:NE2	3:D:3678:GLU:OE1	2.39	0.56
3:A:2744:GLY:HA2	3:A:2753:VAL:HG13	1.86	0.56
3:B:1176:THR:HG22	3:B:1181:ILE:HA	1.88	0.56
3:B:1272:ARG:NH2	3:B:1582:CYS:SG	2.79	0.56
3:B:2171:VAL:HG21	3:B:2199:PHE:CD2	2.41	0.56
3:B:2830:ASN:ND2	3:C:1435:GLY:HA2	2.20	0.56
3:C:1951:LEU:HD12	3:C:1958:THR:HG21	1.86	0.56
3:C:2545:ILE:HD12	3:C:2580:LEU:HD21	1.86	0.56
3:C:3594:GLN:HA	3:C:3597:ARG:HD3	1.88	0.56
3:D:3594:GLN:HA	3:D:3597:ARG:HD3	1.88	0.56
1:G:24:VAL:HG22	1:G:48:LYS:HG2	1.88	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:323:ASP:O	3:A:325:LYS:N	2.33	0.56
3:A:3274:ASN:OD1	3:A:3275:THR:N	2.38	0.56
3:A:4640:PHE:HB3	3:A:4641:PRO:HD3	1.88	0.56
3:C:246:THR:HG21	3:C:267:VAL:HG11	1.88	0.56
3:C:476:GLN:NE2	3:C:3678:GLU:OE1	2.39	0.56
3:C:601:LEU:HG	3:C:610:VAL:HG11	1.87	0.56
3:C:981:MET:HE1	3:C:1056:THR:HG23	1.88	0.56
3:C:3184:TYR:HA	3:C:3192:ARG:NH1	2.20	0.56
3:C:4053:GLU:OE2	3:C:4060:GLN:NE2	2.39	0.56
2:J:92:VAL:HG12	2:J:93:PHE:HD1	1.71	0.56
3:A:2758:LYS:HE3	3:A:2763:LEU:HA	1.87	0.56
3:B:2488:LEU:HD21	3:B:2548:LEU:HD22	1.88	0.56
3:B:2743:TYR:HA	3:B:2757:MET:HE1	1.88	0.56
3:B:3594:GLN:HA	3:B:3597:ARG:HD3	1.88	0.56
3:B:3778:LEU:HB2	3:B:3854:PHE:CZ	2.41	0.56
3:D:875:PRO:HD2	3:D:878:LEU:HD12	1.86	0.56
3:D:1176:THR:HG22	3:D:1181:ILE:HA	1.88	0.56
3:D:2171:VAL:HG21	3:D:2199:PHE:CD2	2.41	0.56
3:D:4664:ASP:OD1	3:D:4674:LYS:NZ	2.29	0.56
1:F:50:ARG:HB3	1:F:50:ARG:NH1	2.22	0.55
3:A:419:ILE:HG21	3:A:492:GLU:HG3	1.88	0.55
3:A:476:GLN:NE2	3:A:3678:GLU:OE1	2.39	0.55
3:A:2743:TYR:HA	3:A:2757:MET:HE1	1.88	0.55
3:B:558:LEU:HG	3:B:571:ILE:HG23	1.86	0.55
3:C:558:LEU:HG	3:C:571:ILE:HG23	1.86	0.55
3:C:1243:THR:HG22	3:C:1808:ASP:HB2	1.87	0.55
1:E:24:VAL:HG22	1:E:48:LYS:HG2	1.88	0.55
2:K:92:VAL:HG12	2:K:93:PHE:HD1	1.71	0.55
3:A:3594:GLN:HA	3:A:3597:ARG:HD3	1.88	0.55
3:B:1243:THR:HG22	3:B:1808:ASP:HB2	1.87	0.55
3:B:2610:LEU:HD13	3:B:2644:LEU:HD21	1.89	0.55
3:C:1495:SER:OG	3:C:1496:PRO:HD2	2.06	0.55
3:C:2171:VAL:HG21	3:C:2199:PHE:CD2	2.41	0.55
3:C:2325:ILE:HD12	3:D:207:PHE:CZ	2.42	0.55
3:C:2610:LEU:HD13	3:C:2644:LEU:HD21	1.89	0.55
3:C:3274:ASN:OD1	3:C:3275:THR:N	2.38	0.55
3:D:2743:TYR:HA	3:D:2757:MET:HE1	1.88	0.55
3:A:246:THR:HG21	3:A:267:VAL:HG11	1.88	0.55
3:A:4053:GLU:OE2	3:A:4060:GLN:NE2	2.39	0.55
3:B:246:THR:HG21	3:B:267:VAL:HG11	1.88	0.55
3:B:875:PRO:HD2	3:B:878:LEU:HD12	1.86	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:4019:MET:HG2	3:B:4066:LEU:HD11	1.89	0.55
3:B:4053:GLU:OE2	3:B:4060:GLN:NE2	2.39	0.55
3:D:1495:SER:OG	3:D:1496:PRO:HD2	2.06	0.55
3:A:2488:LEU:HD21	3:A:2548:LEU:HD22	1.89	0.55
3:A:3892:TYR:O	3:A:3957:LYS:NZ	2.37	0.55
3:B:3274:ASN:OD1	3:B:3275:THR:N	2.38	0.55
3:C:4155:SER:O	3:C:4159:GLN:HG2	2.07	0.55
3:D:4019:MET:HG2	3:D:4066:LEU:HD11	1.89	0.55
3:A:2947:SER:HA	3:A:2952:GLU:HA	1.88	0.55
3:A:4019:MET:HG2	3:A:4066:LEU:HD11	1.89	0.55
1:F:24:VAL:HG22	1:F:48:LYS:HG2	1.88	0.55
1:H:50:ARG:HB3	1:H:50:ARG:NH1	2.22	0.55
3:A:3778:LEU:HB2	3:A:3854:PHE:CZ	2.41	0.55
3:B:601:LEU:HG	3:B:610:VAL:HG11	1.87	0.55
3:C:3250:TRP:NE1	3:C:3309:LYS:HG2	2.22	0.55
3:C:4187:GLU:OE1	3:C:4949:TRP:NE1	2.31	0.55
3:D:419:ILE:HG21	3:D:492:GLU:HG3	1.88	0.55
1:G:50:ARG:HB3	1:G:50:ARG:NH1	2.22	0.55
2:L:14:LYS:HG2	3:D:2153:LYS:HD3	1.89	0.55
3:A:3493:LYS:HZ2	3:A:3558:LEU:HB2	1.72	0.55
3:B:2789:ILE:HD11	3:B:2901:TYR:HB3	1.88	0.55
3:C:2947:SER:HA	3:C:2952:GLU:HA	1.88	0.55
3:D:246:THR:HG21	3:D:267:VAL:HG11	1.88	0.55
3:A:3234:VAL:O	3:A:3238:ILE:HB	2.07	0.55
3:B:841:LYS:O	3:B:848:ARG:NH2	2.34	0.55
3:B:3499:LYS:HE3	3:B:3564:LYS:HZ2	1.71	0.55
3:C:4019:MET:HG2	3:C:4066:LEU:HD11	1.89	0.55
3:D:11:ILE:HD12	3:D:176:ARG:HG2	1.89	0.55
3:D:3778:LEU:HB2	3:D:3854:PHE:CZ	2.41	0.55
3:D:4053:GLU:OE2	3:D:4060:GLN:NE2	2.39	0.55
1:E:50:ARG:HB3	1:E:50:ARG:NH1	2.22	0.55
3:A:2405:GLU:OE1	3:A:2407:HIS:ND1	2.39	0.55
3:B:11:ILE:HD12	3:B:176:ARG:HG2	1.89	0.55
3:B:2947:SER:HA	3:B:2952:GLU:HA	1.88	0.55
3:B:4028:SER:O	3:B:4033:LYS:NZ	2.36	0.55
3:C:1176:THR:HG22	3:C:1181:ILE:HA	1.88	0.55
3:D:2947:SER:HA	3:D:2952:GLU:HA	1.88	0.55
3:D:3250:TRP:NE1	3:D:3309:LYS:HG2	2.22	0.55
3:B:164:PRO:HB3	3:B:169:ARG:HB2	1.89	0.55
3:B:419:ILE:HG21	3:B:492:GLU:HG3	1.88	0.55
3:B:1495:SER:OG	3:B:1496:PRO:HD2	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:3188:SER:OG	3:B:3190:ARG:NH1	2.40	0.55
3:C:1937:GLN:NE2	3:C:3608:LEU:O	2.40	0.55
3:C:4028:SER:O	3:C:4033:LYS:NZ	2.36	0.55
3:D:2610:LEU:HD13	3:D:2644:LEU:HD21	1.89	0.55
3:A:4155:SER:O	3:A:4159:GLN:HG2	2.07	0.54
3:B:1937:GLN:NE2	3:B:3608:LEU:O	2.40	0.54
3:C:3778:LEU:HB2	3:C:3854:PHE:CZ	2.41	0.54
3:D:2488:LEU:HD21	3:D:2548:LEU:HD22	1.89	0.54
3:D:3493:LYS:HZ2	3:D:3558:LEU:CB	2.18	0.54
2:K:4:GLN:HG2	2:K:5:LEU:HD12	1.90	0.54
3:C:2789:ILE:HD11	3:C:2901:TYR:HB3	1.88	0.54
3:C:3493:LYS:HZ2	3:C:3558:LEU:CB	2.18	0.54
2:I:92:VAL:HG12	2:I:93:PHE:HD1	1.71	0.54
2:J:4:GLN:HG2	2:J:5:LEU:HD12	1.90	0.54
3:A:1937:GLN:NE2	3:A:3608:LEU:O	2.40	0.54
3:A:2610:LEU:HD13	3:A:2644:LEU:HD21	1.89	0.54
3:C:3188:SER:OG	3:C:3190:ARG:NH1	2.40	0.54
3:D:629:GLN:OE1	3:D:1669:ASN:ND2	2.38	0.54
3:D:3072:MET:SD	3:D:3139:ALA:HB3	2.48	0.54
3:D:3234:VAL:O	3:D:3238:ILE:HB	2.07	0.54
2:I:107:ARG:HG2	2:I:121:GLU:HG3	1.89	0.54
2:I:128:GLU:CA	2:I:131:ILE:HD11	2.29	0.54
2:L:92:VAL:HG12	2:L:93:PHE:HD1	1.71	0.54
3:B:4155:SER:O	3:B:4159:GLN:HG2	2.07	0.54
3:C:2146:LEU:O	3:C:2150:MET:HG2	2.08	0.54
3:C:2837:LEU:HA	3:C:2840:MET:HE3	1.90	0.54
3:D:1273:ILE:HB	3:D:1282:CYS:HB2	1.90	0.54
3:D:1937:GLN:NE2	3:D:3608:LEU:O	2.40	0.54
3:D:2690:GLU:HB2	3:D:2692:GLN:HE22	1.72	0.54
2:I:4:GLN:HG2	2:I:5:LEU:HD12	1.90	0.54
2:L:33:LEU:O	2:L:37:MET:HG2	2.08	0.54
3:A:1273:ILE:HB	3:A:1282:CYS:HB2	1.90	0.54
3:A:3072:MET:SD	3:A:3139:ALA:HB3	2.48	0.54
3:C:2787:TRP:HE1	3:C:2905:ARG:HH21	1.56	0.54
3:D:896:ASN:O	3:D:900:LEU:HG	2.08	0.54
3:D:2146:LEU:O	3:D:2150:MET:HG2	2.08	0.54
3:A:1117:TRP:HB3	3:A:1201:PHE:HB3	1.90	0.54
3:A:1564:MET:SD	3:A:1565:PRO:HD2	2.48	0.54
3:A:2690:GLU:HB2	3:A:2692:GLN:HE22	1.72	0.54
3:B:2405:GLU:OE1	3:B:2407:HIS:ND1	2.39	0.54
3:B:3427:ASN:OD1	3:B:3463:THR:O	2.22	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1117:TRP:HB3	3:D:1201:PHE:HB3	1.90	0.54
2:K:33:LEU:O	2:K:37:MET:HG2	2.08	0.54
3:A:896:ASN:O	3:A:900:LEU:HG	2.08	0.54
3:A:3188:SER:OG	3:A:3190:ARG:NH1	2.40	0.54
3:B:1048:ASP:OD1	3:B:1049:SER:N	2.41	0.54
3:B:1564:MET:SD	3:B:1565:PRO:HD2	2.48	0.54
3:B:3250:TRP:NE1	3:B:3309:LYS:HG2	2.22	0.54
3:C:141:ASP:HB3	3:C:144:ALA:HB3	1.90	0.54
3:C:164:PRO:HB3	3:C:169:ARG:HB2	1.89	0.54
3:D:2789:ILE:HD11	3:D:2901:TYR:HB3	1.89	0.54
2:I:128:GLU:HG3	2:I:131:ILE:HD11	1.89	0.54
2:J:107:ARG:HG2	2:J:121:GLU:HG3	1.89	0.54
2:K:140:GLU:O	2:K:143:VAL:HG22	2.08	0.54
3:A:4028:SER:O	3:A:4033:LYS:NZ	2.36	0.54
3:B:2690:GLU:HB2	3:B:2692:GLN:HE22	1.72	0.54
3:C:3507:ASP:OD1	3:C:3510:ARG:NH2	2.41	0.54
3:D:4155:SER:O	3:D:4159:GLN:HG2	2.07	0.54
3:B:1722:ASN:O	3:B:1919:ARG:NH2	2.41	0.54
3:B:2146:LEU:O	3:B:2150:MET:HG2	2.08	0.54
3:B:3234:VAL:O	3:B:3238:ILE:HB	2.07	0.54
3:A:2146:LEU:O	3:A:2150:MET:HG2	2.07	0.54
3:A:2683:SER:OG	3:A:2685:TYR:O	2.25	0.54
3:A:3493:LYS:HZ2	3:A:3558:LEU:CB	2.19	0.54
3:C:659:ILE:HD11	3:C:826:VAL:HG22	1.90	0.54
3:C:1273:ILE:HB	3:C:1282:CYS:HB2	1.90	0.54
3:D:1048:ASP:OD1	3:D:1049:SER:N	2.41	0.54
2:I:33:LEU:O	2:I:37:MET:HG2	2.08	0.53
2:J:140:GLU:O	2:J:143:VAL:HG22	2.08	0.53
3:A:11:ILE:HD12	3:A:176:ARG:HG2	1.89	0.53
3:B:659:ILE:HD11	3:B:826:VAL:HG22	1.90	0.53
3:B:2787:TRP:HE1	3:B:2905:ARG:HH21	1.56	0.53
3:C:2488:LEU:HD21	3:C:2548:LEU:HD22	1.89	0.53
3:C:2561:LEU:O	3:C:2566:ARG:NH1	2.42	0.53
3:C:3072:MET:SD	3:C:3139:ALA:HB3	2.48	0.53
3:D:141:ASP:HB3	3:D:144:ALA:HB3	1.90	0.53
2:J:138:ASN:HD21	2:J:141:GLU:HB2	1.74	0.53
2:K:11:ALA:O	2:K:15:GLU:OE1	2.26	0.53
2:L:107:ARG:HG2	2:L:121:GLU:HG3	1.89	0.53
3:B:896:ASN:O	3:B:900:LEU:HG	2.08	0.53
3:C:141:ASP:O	3:C:143:LEU:N	2.41	0.53
3:C:896:ASN:O	3:C:900:LEU:HG	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:3234:VAL:O	3:C:3238:ILE:HB	2.07	0.53
3:D:1564:MET:SD	3:D:1565:PRO:HD2	2.48	0.53
2:I:138:ASN:HD21	2:I:141:GLU:HB2	1.74	0.53
2:L:11:ALA:O	2:L:15:GLU:OE1	2.26	0.53
3:A:164:PRO:HB3	3:A:169:ARG:HB2	1.90	0.53
3:A:3145:SER:HB3	3:A:3148:VAL:HG22	1.91	0.53
3:A:3499:LYS:HE3	3:A:3564:LYS:HZ2	1.71	0.53
3:B:3072:MET:SD	3:B:3139:ALA:HB3	2.48	0.53
3:C:1564:MET:SD	3:C:1565:PRO:HD2	2.48	0.53
3:C:2405:GLU:OE1	3:C:2407:HIS:ND1	2.39	0.53
1:G:78:THR:OG1	1:G:80:ASP:OD1	2.23	0.53
3:A:2789:ILE:HD11	3:A:2901:TYR:HB3	1.89	0.53
3:B:3507:ASP:OD1	3:B:3510:ARG:NH2	2.41	0.53
3:C:2690:GLU:HB2	3:C:2692:GLN:HE22	1.72	0.53
3:D:981:MET:HE1	3:D:1056:THR:HG23	1.89	0.53
3:D:2202:TYR:O	3:D:2206:ILE:HG12	2.09	0.53
3:D:3507:ASP:OD1	3:D:3510:ARG:NH2	2.41	0.53
3:A:1722:ASN:O	3:A:1919:ARG:NH2	2.41	0.53
3:B:1273:ILE:HB	3:B:1282:CYS:HB2	1.90	0.53
3:B:3145:SER:HB3	3:B:3148:VAL:HG22	1.91	0.53
3:C:11:ILE:HD12	3:C:176:ARG:HG2	1.89	0.53
3:C:419:ILE:HG21	3:C:492:GLU:HG3	1.88	0.53
3:C:629:GLN:OE1	3:C:1669:ASN:ND2	2.37	0.53
3:C:2202:TYR:O	3:C:2206:ILE:HG12	2.09	0.53
3:C:2683:SER:OG	3:C:2685:TYR:O	2.25	0.53
3:D:2787:TRP:HE1	3:D:2905:ARG:HH21	1.56	0.53
3:D:3188:SER:OG	3:D:3190:ARG:NH1	2.40	0.53
2:J:33:LEU:O	2:J:37:MET:HG2	2.08	0.53
2:K:138:ASN:HD21	2:K:141:GLU:HB2	1.74	0.53
2:L:4:GLN:HG2	2:L:5:LEU:HD12	1.90	0.53
2:L:140:GLU:O	2:L:143:VAL:HG22	2.08	0.53
3:A:1973:ILE:HG21	3:A:3620:PHE:HA	1.91	0.53
3:A:2202:TYR:O	3:A:2206:ILE:HG12	2.08	0.53
3:C:3145:SER:HB3	3:C:3148:VAL:HG22	1.91	0.53
3:D:141:ASP:O	3:D:143:LEU:N	2.41	0.53
3:D:164:PRO:HB3	3:D:169:ARG:HB2	1.89	0.53
3:D:1722:ASN:O	3:D:1919:ARG:NH2	2.41	0.53
3:D:4637:THR:HG22	3:D:4639:SER:H	1.74	0.53
1:F:50:ARG:NH1	1:F:53:LYS:HG3	2.24	0.53
3:A:141:ASP:O	3:A:143:LEU:N	2.41	0.53
3:A:1048:ASP:OD1	3:A:1049:SER:N	2.41	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:2561:LEU:O	3:A:2566:ARG:NH1	2.42	0.53
3:A:3250:TRP:NE1	3:A:3309:LYS:HG2	2.22	0.53
3:B:4637:THR:HG22	3:B:4639:SER:H	1.74	0.53
3:C:841:LYS:O	3:C:848:ARG:NH2	2.34	0.53
3:C:1722:ASN:O	3:C:1919:ARG:NH2	2.41	0.53
3:D:1973:ILE:HG21	3:D:3620:PHE:HA	1.91	0.53
2:K:107:ARG:HG2	2:K:121:GLU:HG3	1.89	0.53
3:A:3507:ASP:OD1	3:A:3510:ARG:NH2	2.41	0.53
3:B:1117:TRP:HB3	3:B:1201:PHE:HB3	1.90	0.53
3:B:1973:ILE:HG21	3:B:3620:PHE:HA	1.91	0.53
3:B:2202:TYR:O	3:B:2206:ILE:HG12	2.08	0.53
3:B:2837:LEU:HA	3:B:2840:MET:HE3	1.91	0.53
3:C:983:LEU:O	3:C:1055:ARG:NH2	2.41	0.53
3:C:1048:ASP:OD1	3:C:1049:SER:N	2.41	0.53
3:C:1117:TRP:HB3	3:C:1201:PHE:HB3	1.90	0.53
3:C:2730:ASP:OD1	3:C:2821:TYR:OH	2.27	0.53
3:D:1911:GLN:OE1	3:D:2090:ARG:NH1	2.33	0.53
3:A:2285:TYR:OH	3:A:2380:ASP:O	2.27	0.53
3:A:4753:LEU:HG	3:B:4773:LEU:HD22	1.90	0.53
3:B:4775:ALA:HA	3:B:4817:MET:CE	2.39	0.53
3:C:4637:THR:HG22	3:C:4639:SER:H	1.74	0.53
3:C:4775:ALA:HA	3:C:4817:MET:CE	2.39	0.53
1:H:8:ILE:HA	3:D:730:LEU:HD11	1.90	0.53
2:I:140:GLU:O	2:I:143:VAL:HG22	2.08	0.53
2:L:49:LEU:O	2:L:53:ILE:HG12	2.09	0.53
3:A:2787:TRP:HE1	3:A:2905:ARG:HH21	1.56	0.53
3:A:4637:THR:HG22	3:A:4639:SER:H	1.74	0.53
3:B:2730:ASP:OD1	3:B:2821:TYR:OH	2.27	0.53
3:C:1973:ILE:HG21	3:C:3620:PHE:HA	1.91	0.53
2:I:111:THR:CB	3:A:1960:ARG:HH22	2.22	0.52
3:A:141:ASP:HB3	3:A:144:ALA:HB3	1.90	0.52
3:A:3280:ILE:O	3:A:3284:ILE:HG12	2.09	0.52
3:C:2826:ILE:HA	3:D:1501:ASN:HD21	1.73	0.52
3:C:3427:ASN:OD1	3:C:3463:THR:O	2.22	0.52
3:D:2730:ASP:OD1	3:D:2821:TYR:OH	2.27	0.52
1:G:50:ARG:NH1	1:G:53:LYS:HG3	2.24	0.52
2:J:128:GLU:CA	2:J:131:ILE:HD11	2.29	0.52
2:K:49:LEU:O	2:K:53:ILE:HG12	2.09	0.52
2:L:87:ARG:HA	2:L:90:PHE:CE1	2.45	0.52
2:L:138:ASN:HD21	2:L:141:GLU:HB2	1.74	0.52
3:A:1089:ARG:HB3	3:A:1204:VAL:HG23	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:2730:ASP:OD1	3:A:2821:TYR:OH	2.27	0.52
1:H:50:ARG:NH1	1:H:53:LYS:HG3	2.24	0.52
2:J:11:ALA:O	2:J:15:GLU:OE1	2.27	0.52
2:L:143:VAL:O	2:L:147:THR:HG22	2.10	0.52
3:B:515:ALA:HB2	3:B:523:GLY:HA3	1.91	0.52
3:B:983:LEU:O	3:B:1055:ARG:NH2	2.41	0.52
3:C:3280:ILE:O	3:C:3284:ILE:HG12	2.09	0.52
3:D:515:ALA:HB2	3:D:523:GLY:HA3	1.91	0.52
2:I:11:ALA:O	2:I:15:GLU:OE1	2.26	0.52
2:I:87:ARG:HA	2:I:90:PHE:CE1	2.45	0.52
2:J:87:ARG:HA	2:J:90:PHE:CE1	2.45	0.52
3:A:2722:ASN:O	3:A:2726:GLU:HG3	2.10	0.52
3:B:132:CYS:SG	3:B:187:SER:OG	2.68	0.52
3:C:132:CYS:SG	3:C:187:SER:OG	2.68	0.52
3:D:659:ILE:HD11	3:D:826:VAL:HG22	1.90	0.52
3:D:2285:TYR:OH	3:D:2380:ASP:O	2.27	0.52
3:D:2561:LEU:O	3:D:2566:ARG:NH1	2.42	0.52
1:E:50:ARG:NH1	1:E:53:LYS:HG3	2.24	0.52
2:K:87:ARG:HA	2:K:90:PHE:CE1	2.45	0.52
3:A:2837:LEU:HA	3:A:2840:MET:HE3	1.92	0.52
3:C:2285:TYR:OH	3:C:2380:ASP:O	2.27	0.52
3:D:2072:GLU:O	3:D:3660:ARG:NH1	2.43	0.52
3:D:3145:SER:HB3	3:D:3148:VAL:HG22	1.91	0.52
3:D:3280:ILE:O	3:D:3284:ILE:HG12	2.09	0.52
2:I:147:THR:HA	3:A:3596:LYS:HD3	1.91	0.52
3:A:544:ASN:HB3	3:A:547:ASN:HB2	1.91	0.52
3:A:659:ILE:HD11	3:A:826:VAL:HG22	1.90	0.52
3:A:849:ASP:OD1	3:A:1214:ARG:NE	2.43	0.52
3:A:2929:LEU:HD13	3:A:2971:ILE:HG12	1.91	0.52
3:B:544:ASN:HB3	3:B:547:ASN:HB2	1.91	0.52
3:B:3414:ARG:NH1	3:B:3417:GLN:OE1	2.43	0.52
3:D:983:LEU:O	3:D:1055:ARG:NH2	2.41	0.52
3:D:2837:LEU:HA	3:D:2840:MET:HE3	1.91	0.52
3:A:983:LEU:O	3:A:1055:ARG:NH2	2.41	0.52
3:A:4775:ALA:HA	3:A:4817:MET:CE	2.39	0.52
3:B:270:HIS:CD2	3:B:491:GLU:HG3	2.45	0.52
3:B:2561:LEU:O	3:B:2566:ARG:NH1	2.42	0.52
3:C:1089:ARG:HB3	3:C:1204:VAL:HG23	1.91	0.52
3:C:1911:GLN:OE1	3:C:2090:ARG:NH1	2.33	0.52
3:C:2436:ILE:HG22	3:C:2491:GLY:HA3	1.92	0.52
3:D:849:ASP:OD1	3:D:1214:ARG:NE	2.43	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:2722:ASN:O	3:D:2726:GLU:HG3	2.10	0.52
3:A:629:GLN:OE1	3:A:1669:ASN:ND2	2.38	0.52
3:B:2285:TYR:OH	3:B:2380:ASP:O	2.27	0.52
3:C:3250:TRP:HB2	3:C:3273:MET:CE	2.40	0.52
1:E:80:ASP:OD1	1:E:81:VAL:N	2.43	0.52
2:I:49:LEU:O	2:I:53:ILE:HG12	2.09	0.52
2:K:143:VAL:O	2:K:147:THR:HG22	2.10	0.52
3:A:515:ALA:HB2	3:A:523:GLY:HA3	1.91	0.52
3:B:3250:TRP:HB2	3:B:3273:MET:CE	2.40	0.52
3:B:4170:ARG:NH1	5:B:5002:ATP:O2G	2.40	0.52
3:C:544:ASN:HB3	3:C:547:ASN:HB2	1.91	0.52
3:C:814:LEU:HD12	3:C:815:PRO:HD2	1.92	0.52
3:C:3729:ALA:HA	3:C:3732:HIS:CD2	2.45	0.52
3:D:1009:ARG:O	3:D:1013:ARG:NE	2.42	0.52
3:D:2683:SER:OG	3:D:2685:TYR:O	2.25	0.52
3:D:3414:ARG:NH1	3:D:3417:GLN:OE1	2.43	0.52
3:A:2541:HIS:O	3:A:2545:ILE:HG12	2.10	0.52
3:A:3729:ALA:HA	3:A:3732:HIS:CD2	2.45	0.52
3:B:629:GLN:OE1	3:B:1669:ASN:ND2	2.37	0.52
3:B:849:ASP:OD1	3:B:1214:ARG:NE	2.43	0.52
3:C:270:HIS:CD2	3:C:491:GLU:HG3	2.45	0.52
3:C:849:ASP:OD1	3:C:1214:ARG:NE	2.43	0.52
3:C:2722:ASN:O	3:C:2726:GLU:HG3	2.10	0.52
3:C:2929:LEU:HD13	3:C:2971:ILE:HG12	1.91	0.52
3:D:544:ASN:HB3	3:D:547:ASN:HB2	1.91	0.52
3:D:562:LEU:HD22	3:D:600:LEU:HD22	1.92	0.52
3:D:1089:ARG:HB3	3:D:1204:VAL:HG23	1.91	0.52
2:I:143:VAL:O	2:I:147:THR:HG22	2.10	0.51
3:D:2405:GLU:OE1	3:D:2407:HIS:ND1	2.39	0.51
3:D:3250:TRP:HB2	3:D:3273:MET:CE	2.40	0.51
3:D:4775:ALA:HA	3:D:4817:MET:CE	2.39	0.51
2:J:49:LEU:O	2:J:53:ILE:HG12	2.09	0.51
3:A:562:LEU:HD22	3:A:600:LEU:HD22	1.92	0.51
3:A:814:LEU:HD12	3:A:815:PRO:HD2	1.92	0.51
3:A:3414:ARG:NH1	3:A:3417:GLN:OE1	2.43	0.51
3:B:141:ASP:HB3	3:B:144:ALA:HB3	1.90	0.51
3:B:562:LEU:HD22	3:B:600:LEU:HD22	1.92	0.51
3:B:2541:HIS:O	3:B:2545:ILE:HG12	2.10	0.51
3:C:562:LEU:HD22	3:C:600:LEU:HD22	1.92	0.51
3:C:2072:GLU:O	3:C:3660:ARG:NH1	2.43	0.51
3:D:1549:SER:OG	3:D:1551:ASN:O	2.28	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:8:ILE:HA	3:A:730:LEU:HD11	1.93	0.51
3:A:1549:SER:OG	3:A:1551:ASN:O	2.28	0.51
3:A:2478:ILE:HD13	3:A:2527:LEU:HD11	1.92	0.51
3:B:2072:GLU:O	3:B:3660:ARG:NH1	2.43	0.51
3:C:1009:ARG:O	3:C:1013:ARG:NE	2.42	0.51
3:C:3414:ARG:NH1	3:C:3417:GLN:OE1	2.43	0.51
3:C:4170:ARG:NH1	5:C:5002:ATP:O2G	2.40	0.51
3:D:132:CYS:SG	3:D:187:SER:OG	2.68	0.51
1:F:26:HIS:CD2	1:F:105:LEU:HD11	2.46	0.51
1:F:80:ASP:OD1	1:F:81:VAL:N	2.43	0.51
2:I:113:LEU:HD13	3:A:1966:ARG:HB2	1.92	0.51
2:L:128:GLU:HA	2:L:131:ILE:HD11	1.93	0.51
3:A:132:CYS:SG	3:A:187:SER:OG	2.68	0.51
3:B:1089:ARG:HB3	3:B:1204:VAL:HG23	1.91	0.51
3:B:1549:SER:OG	3:B:1551:ASN:O	2.28	0.51
3:B:3280:ILE:O	3:B:3284:ILE:HG12	2.09	0.51
3:C:1118:SER:HB3	3:C:1204:VAL:HG11	1.93	0.51
3:C:1549:SER:OG	3:C:1551:ASN:O	2.28	0.51
3:C:2541:HIS:O	3:C:2545:ILE:HG12	2.10	0.51
3:D:814:LEU:HD12	3:D:815:PRO:HD2	1.92	0.51
3:D:2929:LEU:HD13	3:D:2971:ILE:HG12	1.91	0.51
3:D:3427:ASN:OD1	3:D:3463:THR:O	2.22	0.51
1:G:80:ASP:OD1	1:G:81:VAL:N	2.43	0.51
3:A:270:HIS:CD2	3:A:491:GLU:HG3	2.45	0.51
3:A:1009:ARG:O	3:A:1013:ARG:NE	2.42	0.51
3:A:1772:SER:OG	3:A:1774:GLU:OE1	2.28	0.51
3:B:2478:ILE:HD13	3:B:2527:LEU:HD11	1.91	0.51
3:C:4747:ALA:HA	3:C:4753:LEU:HB3	1.92	0.51
3:D:3729:ALA:HA	3:D:3732:HIS:CD2	2.45	0.51
3:D:4747:ALA:HA	3:D:4753:LEU:HB3	1.92	0.51
1:E:26:HIS:CD2	1:E:105:LEU:HD11	2.46	0.51
1:G:26:HIS:CD2	1:G:105:LEU:HD11	2.46	0.51
3:A:3427:ASN:HD21	3:A:3464:SER:HA	1.76	0.51
3:B:141:ASP:O	3:B:143:LEU:N	2.41	0.51
3:B:2436:ILE:HG22	3:B:2491:GLY:HA3	1.92	0.51
3:B:4045:LYS:HD3	3:B:4078:LEU:HD23	1.93	0.51
3:C:2478:ILE:HD13	3:C:2527:LEU:HD11	1.92	0.51
3:C:3324:GLU:HG2	3:C:3327:LYS:NZ	2.26	0.51
3:D:1118:SER:HB3	3:D:1204:VAL:HG11	1.93	0.51
3:D:2478:ILE:HD13	3:D:2527:LEU:HD11	1.92	0.51
3:D:2779:LEU:HA	3:D:2782:MET:HG2	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:4045:LYS:HD3	3:D:4078:LEU:HD23	1.93	0.51
1:H:26:HIS:CD2	1:H:105:LEU:HD11	2.46	0.51
3:A:466:PRO:HG2	3:A:479:LEU:HG	1.93	0.51
3:A:2072:GLU:O	3:A:3660:ARG:NH1	2.43	0.51
3:B:1118:SER:HB3	3:B:1204:VAL:HG11	1.93	0.51
3:B:2929:LEU:HD13	3:B:2971:ILE:HG12	1.91	0.51
3:B:3015:VAL:HG23	3:B:3029:ILE:HD12	1.93	0.51
3:B:3427:ASN:HD21	3:B:3464:SER:HA	1.76	0.51
3:C:1932:PHE:CE1	3:C:1996:LEU:HB2	2.46	0.51
3:C:3047:LYS:HD2	3:C:3048:THR:HG23	1.93	0.51
3:D:1932:PHE:CE1	3:D:1996:LEU:HB2	2.46	0.51
3:D:3015:VAL:HG23	3:D:3029:ILE:HD12	1.93	0.51
3:A:1118:SER:HB3	3:A:1204:VAL:HG11	1.93	0.51
3:A:3493:LYS:NZ	3:A:3558:LEU:HB2	2.23	0.51
3:A:4045:LYS:HD3	3:A:4078:LEU:HD23	1.93	0.51
3:C:732:LEU:HB3	3:C:779:PHE:CZ	2.46	0.51
3:C:4045:LYS:HD3	3:C:4078:LEU:HD23	1.93	0.51
3:D:270:HIS:CD2	3:D:491:GLU:HG3	2.45	0.51
3:D:2541:HIS:O	3:D:2545:ILE:HG12	2.10	0.51
2:J:143:VAL:O	2:J:147:THR:HG22	2.10	0.51
3:A:3015:VAL:HG23	3:A:3029:ILE:HD12	1.93	0.51
3:A:3250:TRP:HB2	3:A:3273:MET:CE	2.40	0.51
3:B:713:TRP:HZ2	3:B:1251:LEU:HD21	1.76	0.51
3:C:3015:VAL:HG23	3:C:3029:ILE:HD12	1.93	0.51
3:C:3803:LEU:HB2	3:C:3884:SER:HB2	1.93	0.51
3:D:3324:GLU:HG2	3:D:3327:LYS:NZ	2.26	0.51
1:H:80:ASP:OD1	1:H:81:VAL:N	2.43	0.51
2:K:128:GLU:HG3	2:K:131:ILE:HD11	1.89	0.51
3:A:3455:LYS:O	3:A:3459:TYR:HB3	2.11	0.51
3:B:466:PRO:HG2	3:B:479:LEU:HG	1.93	0.51
3:B:1729:MET:CE	3:B:1930:ASP:HB2	2.41	0.51
3:B:3493:LYS:NZ	3:B:3558:LEU:HB2	2.23	0.51
3:B:4620:GLN:OE1	3:B:4632:ARG:NH2	2.44	0.51
3:D:466:PRO:HG2	3:D:479:LEU:HG	1.93	0.51
3:D:2436:ILE:HG22	3:D:2491:GLY:HA3	1.92	0.51
2:I:12:GLU:HA	2:I:15:GLU:OE1	2.12	0.50
3:A:4620:GLN:OE1	3:A:4632:ARG:NH2	2.44	0.50
3:B:814:LEU:HD12	3:B:815:PRO:HD2	1.92	0.50
3:B:1220:ASP:O	3:B:1223:THR:OG1	2.28	0.50
3:B:2722:ASN:O	3:B:2726:GLU:HG3	2.10	0.50
3:B:3455:LYS:O	3:B:3459:TYR:HB3	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:3729:ALA:HA	3:B:3732:HIS:CD2	2.45	0.50
3:D:3427:ASN:HD21	3:D:3464:SER:HA	1.76	0.50
2:I:88:GLU:OE1	2:I:91:ARG:NH2	2.45	0.50
3:A:4625:ASP:OD1	3:A:4625:ASP:N	2.43	0.50
3:B:4827:ILE:O	3:B:4831:ILE:HG12	2.11	0.50
3:C:515:ALA:HB2	3:C:523:GLY:HA3	1.91	0.50
3:C:1729:MET:CE	3:C:1930:ASP:HB2	2.41	0.50
3:C:4620:GLN:OE1	3:C:4632:ARG:NH2	2.44	0.50
3:D:732:LEU:HB3	3:D:779:PHE:CZ	2.46	0.50
3:A:307:SER:HB3	3:A:327:THR:HG22	1.94	0.50
3:A:1932:PHE:CE1	3:A:1996:LEU:HB2	2.46	0.50
3:A:2779:LEU:HA	3:A:2782:MET:HG2	1.92	0.50
3:A:3803:LEU:HB2	3:A:3884:SER:HB2	1.93	0.50
3:A:4827:ILE:O	3:A:4831:ILE:HG12	2.12	0.50
3:B:732:LEU:HB3	3:B:779:PHE:CZ	2.46	0.50
3:B:2779:LEU:HA	3:B:2782:MET:HG2	1.92	0.50
3:C:466:PRO:HG2	3:C:479:LEU:HG	1.93	0.50
3:C:1428:TYR:OH	3:C:1444:GLY:O	2.30	0.50
3:D:258:ARG:NE	3:D:316:LEU:O	2.33	0.50
3:D:3047:LYS:HD2	3:D:3048:THR:HG23	1.93	0.50
3:D:4827:ILE:O	3:D:4831:ILE:HG12	2.11	0.50
2:J:12:GLU:HA	2:J:15:GLU:OE1	2.12	0.50
2:K:128:GLU:HA	2:K:131:ILE:HD11	1.93	0.50
3:A:2436:ILE:HG22	3:A:2491:GLY:HA3	1.92	0.50
3:A:4747:ALA:HA	3:A:4753:LEU:HB3	1.92	0.50
3:B:1932:PHE:CE1	3:B:1996:LEU:HB2	2.46	0.50
3:B:3324:GLU:HG2	3:B:3327:LYS:NZ	2.26	0.50
3:C:3250:TRP:HB2	3:C:3273:MET:HE1	1.94	0.50
3:D:737:ILE:HD12	3:D:1482:ARG:HD3	1.94	0.50
3:D:2322:ARG:HH22	3:D:2415:GLU:HG3	1.77	0.50
2:L:12:GLU:HA	2:L:15:GLU:OE1	2.12	0.50
2:L:88:GLU:OE1	2:L:91:ARG:NH2	2.45	0.50
3:A:317:MET:HB2	3:A:321:LYS:HD2	1.94	0.50
3:A:1729:MET:CE	3:A:1930:ASP:HB2	2.41	0.50
3:A:3047:LYS:HD2	3:A:3048:THR:HG23	1.93	0.50
3:B:2834:SER:O	3:B:2838[A]:HIS:HB2	2.11	0.50
3:C:4014:LEU:HD13	3:C:4122:ALA:HB2	1.94	0.50
3:C:4637:THR:O	3:C:4650:LYS:NZ	2.41	0.50
3:D:4014:LEU:HD13	3:D:4122:ALA:HB2	1.94	0.50
3:D:4620:GLN:OE1	3:D:4632:ARG:NH2	2.44	0.50
2:L:61:ASN:CG	2:L:62:GLY:H	2.15	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:115:TYR:HE2	3:A:169:ARG:HB3	1.77	0.50
3:A:1428:TYR:OH	3:A:1444:GLY:O	2.30	0.50
3:B:3076:LYS:O	3:B:3077:GLN:HG3	2.12	0.50
3:C:2779:LEU:HA	3:C:2782:MET:HG2	1.92	0.50
3:C:4896:ASP:HA	3:C:4899:ASP:HB2	1.94	0.50
3:D:317:MET:HB2	3:D:321:LYS:HD2	1.94	0.50
3:D:3467:VAL:HB	3:D:3471:LYS:NZ	2.27	0.50
2:K:61:ASN:CG	2:K:62:GLY:H	2.15	0.50
2:K:88:GLU:OE1	2:K:91:ARG:NH2	2.45	0.50
3:A:737:ILE:HD12	3:A:1482:ARG:HD3	1.94	0.50
3:A:2834:SER:O	3:A:2838[A]:HIS:HB2	2.11	0.50
3:A:3427:ASN:OD1	3:A:3465:LEU:CD2	2.60	0.50
3:B:737:ILE:HD12	3:B:1482:ARG:HD3	1.94	0.50
3:B:1428:TYR:OH	3:B:1444:GLY:O	2.30	0.50
3:B:3336:GLU:HG3	3:B:3355:ILE:HG22	1.94	0.50
3:B:4014:LEU:HD13	3:B:4122:ALA:HB2	1.94	0.50
3:B:4747:ALA:HA	3:B:4753:LEU:HB3	1.92	0.50
3:C:559:ILE:HG23	3:C:562:LEU:HD12	1.93	0.50
3:C:713:TRP:HZ2	3:C:1251:LEU:HD21	1.76	0.50
3:C:1772:SER:OG	3:C:1774:GLU:OE1	2.28	0.50
3:C:3427:ASN:HD21	3:C:3464:SER:HA	1.75	0.50
3:C:3455:LYS:O	3:C:3459:TYR:HB3	2.11	0.50
3:D:3455:LYS:O	3:D:3459:TYR:HB3	2.11	0.50
2:J:128:GLU:HG3	2:J:131:ILE:HD11	1.89	0.50
3:A:242:ASP:OD1	3:A:242:ASP:N	2.45	0.50
3:A:3280:ILE:CG2	3:A:3299:LEU:HD21	2.42	0.50
3:B:1001:GLU:OE2	3:B:1005:ASN:ND2	2.45	0.50
3:B:1772:SER:OG	3:B:1774:GLU:OE1	2.28	0.50
3:C:3427:ASN:CB	3:C:3463:THR:OG1	2.42	0.50
3:D:1428:TYR:OH	3:D:1444:GLY:O	2.30	0.50
3:D:1844:GLN:NE2	3:D:1853:GLU:OE1	2.45	0.50
2:J:128:GLU:HA	2:J:131:ILE:HD11	1.93	0.50
3:A:3324:GLU:HG2	3:A:3327:LYS:NZ	2.26	0.50
3:B:2920:ARG:HG3	3:B:2923:TYR:HB2	1.93	0.50
3:B:3427:ASN:OD1	3:B:3465:LEU:CD2	2.60	0.50
3:C:1729:MET:HE2	3:C:1930:ASP:HB2	1.94	0.50
3:C:2920:ARG:HG3	3:C:2923:TYR:HB2	1.93	0.50
3:C:3280:ILE:CG2	3:C:3299:LEU:HD21	2.42	0.50
3:C:4827:ILE:O	3:C:4831:ILE:HG12	2.12	0.50
3:D:115:TYR:HE2	3:D:169:ARG:HB3	1.77	0.50
3:D:2749:ASP:HA	3:D:2754:GLN:OE1	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:2857:LYS:HA	3:D:2860:LEU:HG	1.93	0.50
2:I:128:GLU:HA	2:I:131:ILE:HD11	1.93	0.49
2:J:67:PRO:HB2	3:B:2202:TYR:CZ	2.46	0.49
2:J:88:GLU:OE1	2:J:91:ARG:NH2	2.45	0.49
3:A:732:LEU:HB3	3:A:779:PHE:CZ	2.46	0.49
3:B:1009:ARG:O	3:B:1013:ARG:NE	2.42	0.49
3:B:4896:ASP:HA	3:B:4899:ASP:HB2	1.94	0.49
3:C:737:ILE:HD12	3:C:1482:ARG:HD3	1.94	0.49
3:C:3691:TYR:O	3:C:3695:MET:HG3	2.12	0.49
3:D:1729:MET:CE	3:D:1930:ASP:HB2	2.41	0.49
3:D:3280:ILE:CG2	3:D:3299:LEU:HD21	2.42	0.49
3:D:4116:GLN:HA	3:D:4119:LEU:HD12	1.94	0.49
3:D:4896:ASP:HA	3:D:4899:ASP:HB2	1.94	0.49
1:G:8:ILE:HA	3:C:730:LEU:HD11	1.93	0.49
3:A:1729:MET:HE2	3:A:1930:ASP:HB2	1.94	0.49
3:A:1844:GLN:NE2	3:A:1853:GLU:OE1	2.45	0.49
3:A:2322:ARG:HH22	3:A:2415:GLU:HG3	1.77	0.49
3:A:3076:LYS:O	3:A:3077:GLN:HG3	2.12	0.49
3:B:2753:VAL:O	3:B:2753:VAL:HG12	2.12	0.49
3:B:3150:ARG:NH1	3:B:3151:GLN:HB3	2.28	0.49
3:B:3198:PRO:HG2	3:B:3204:VAL:HA	1.95	0.49
3:B:4116:GLN:HA	3:B:4119:LEU:HD12	1.94	0.49
3:C:1834:PHE:O	3:C:1835:HIS:ND1	2.45	0.49
3:C:1844:GLN:NE2	3:C:1853:GLU:OE1	2.45	0.49
3:C:2749:ASP:HA	3:C:2754:GLN:OE1	2.12	0.49
3:C:2834:SER:O	3:C:2838[A]:HIS:HB2	2.11	0.49
3:A:4014:LEU:HD13	3:A:4122:ALA:HB2	1.94	0.49
3:B:2171:VAL:HG21	3:B:2199:PHE:HD2	1.77	0.49
3:B:2749:ASP:HA	3:B:2754:GLN:OE1	2.12	0.49
3:B:2937:HIS:O	3:B:2940:ILE:HG22	2.12	0.49
3:B:3467:VAL:HB	3:B:3471:LYS:NZ	2.27	0.49
3:B:3691:TYR:O	3:B:3695:MET:HG3	2.12	0.49
3:C:2753:VAL:O	3:C:2753:VAL:HG12	2.13	0.49
3:C:4079:ASP:O	3:C:4082:GLU:HG3	2.12	0.49
3:D:59:PRO:HG3	3:D:296:ARG:CZ	2.43	0.49
3:D:242:ASP:OD1	3:D:242:ASP:N	2.45	0.49
3:D:1772:SER:OG	3:D:1774:GLU:OE1	2.28	0.49
2:I:61:ASN:CG	2:I:62:GLY:H	2.15	0.49
2:I:146:MET:SD	3:A:3600:VAL:CG1	3.00	0.49
2:J:61:ASN:CG	2:J:62:GLY:H	2.15	0.49
3:A:1440:ASN:HB3	3:A:1546:GLN:HB3	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:2857:LYS:HA	3:A:2860:LEU:HG	1.93	0.49
3:A:2920:ARG:HG3	3:A:2923:TYR:HB2	1.93	0.49
3:B:115:TYR:HE2	3:B:169:ARG:HB3	1.77	0.49
3:B:2834:SER:O	3:B:2838[B]:HIS:HB2	2.12	0.49
3:B:4079:ASP:O	3:B:4082:GLU:HG3	2.12	0.49
3:B:4796:SER:HB3	3:B:4803:ASP:H	1.77	0.49
3:C:3150:ARG:NH1	3:C:3151:GLN:HB3	2.28	0.49
3:C:3467:VAL:HB	3:C:3471:LYS:NZ	2.27	0.49
3:D:307:SER:HB3	3:D:327:THR:HG22	1.94	0.49
3:D:713:TRP:HZ2	3:D:1251:LEU:HD21	1.76	0.49
3:D:1001:GLU:OE2	3:D:1005:ASN:ND2	2.45	0.49
3:D:4637:THR:O	3:D:4650:LYS:NZ	2.41	0.49
2:J:51:ASP:OD1	2:J:52:MET:N	2.45	0.49
3:A:114:LEU:HB2	3:A:117:HIS:HD2	1.77	0.49
3:A:2937:HIS:O	3:A:2940:ILE:HG22	2.12	0.49
3:A:3198:PRO:HG2	3:A:3204:VAL:HA	1.94	0.49
3:A:3467:VAL:HB	3:A:3471:LYS:NZ	2.27	0.49
3:B:559:ILE:HG23	3:B:562:LEU:HD12	1.94	0.49
3:B:1844:GLN:NE2	3:B:1853:GLU:OE1	2.45	0.49
3:B:3280:ILE:CG2	3:B:3299:LEU:HD21	2.42	0.49
3:C:2937:HIS:O	3:C:2940:ILE:HG22	2.12	0.49
3:D:2834:SER:O	3:D:2838[A]:HIS:HB2	2.11	0.49
3:D:3803:LEU:HB2	3:D:3884:SER:HB2	1.94	0.49
3:A:59:PRO:HG3	3:A:296:ARG:CZ	2.43	0.49
3:A:713:TRP:HZ2	3:A:1251:LEU:HD21	1.76	0.49
3:A:4896:ASP:HA	3:A:4899:ASP:HB2	1.94	0.49
3:B:2252:GLU:OE2	3:B:3819:MET:HG3	2.13	0.49
3:B:2322:ARG:HH22	3:B:2415:GLU:HG3	1.77	0.49
3:B:4172:PHE:O	3:B:4176:VAL:HG22	2.13	0.49
3:C:2154:VAL:HG13	3:C:2158:HIS:HD2	1.78	0.49
3:C:2322:ARG:HH22	3:C:2415:GLU:HG3	1.77	0.49
3:C:3076:LYS:O	3:C:3077:GLN:HG3	2.12	0.49
3:C:3198:PRO:HG2	3:C:3204:VAL:HA	1.94	0.49
3:C:4886:THR:O	3:C:4895:ASN:N	2.46	0.49
3:D:643:LEU:O	3:D:645:GLN:NE2	2.46	0.49
3:D:3134:LEU:HB2	3:D:3162:PHE:CE1	2.48	0.49
3:D:4796:SER:HB3	3:D:4803:ASP:H	1.77	0.49
3:A:2252:GLU:OE2	3:A:3819:MET:HG3	2.13	0.49
3:B:1440:ASN:HB3	3:B:1546:GLN:HB3	1.95	0.49
3:B:2338:GLU:HA	3:C:140:THR:HB	1.95	0.49
3:B:2683:SER:OG	3:B:2685:TYR:O	2.25	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:2857:LYS:HA	3:B:2860:LEU:HG	1.93	0.49
3:B:3803:LEU:HB2	3:B:3884:SER:HB2	1.93	0.49
3:C:307:SER:HB3	3:C:327:THR:HG22	1.94	0.49
3:C:3427:ASN:OD1	3:C:3465:LEU:CD2	2.60	0.49
3:C:4796:SER:HB3	3:C:4803:ASP:H	1.77	0.49
3:D:2154:VAL:HG13	3:D:2158:HIS:HD2	1.78	0.49
3:D:3076:LYS:O	3:D:3077:GLN:HG3	2.12	0.49
2:L:128:GLU:HG3	2:L:131:ILE:HD11	1.89	0.49
3:A:559:ILE:HG23	3:A:562:LEU:HD12	1.93	0.49
3:A:1001:GLU:OE2	3:A:1005:ASN:ND2	2.45	0.49
3:A:4079:ASP:O	3:A:4082:GLU:HG3	2.12	0.49
3:A:4796:SER:HB3	3:A:4803:ASP:H	1.77	0.49
3:B:3047:LYS:HD2	3:B:3048:THR:HG23	1.93	0.49
3:C:3493:LYS:NZ	3:C:3558:LEU:HB2	2.23	0.49
3:C:4172:PHE:O	3:C:4176:VAL:HG22	2.13	0.49
3:D:2920:ARG:HG3	3:D:2923:TYR:HB2	1.93	0.49
3:D:3638:ASP:OD1	3:D:3730:ARG:NH2	2.37	0.49
3:D:3691:TYR:O	3:D:3695:MET:HG3	2.12	0.49
3:A:1834:PHE:O	3:A:1835:HIS:ND1	2.45	0.49
3:A:4116:GLN:HA	3:A:4119:LEU:HD12	1.94	0.49
3:B:59:PRO:HG3	3:B:296:ARG:CZ	2.43	0.49
3:C:1001:GLU:OE2	3:C:1005:ASN:ND2	2.45	0.49
3:C:2857:LYS:HA	3:C:2860:LEU:HG	1.93	0.49
3:C:3134:LEU:HB2	3:C:3162:PHE:CE1	2.48	0.49
3:D:1644:LEU:HD23	3:D:1651:LEU:HA	1.95	0.49
3:D:2171:VAL:HG21	3:D:2199:PHE:HD2	1.77	0.49
3:D:2753:VAL:O	3:D:2753:VAL:HG12	2.13	0.49
3:D:3198:PRO:HG2	3:D:3204:VAL:HA	1.95	0.49
3:D:3427:ASN:OD1	3:D:3465:LEU:CD2	2.60	0.49
2:K:12:GLU:HA	2:K:15:GLU:OE1	2.12	0.49
3:A:2834:SER:O	3:A:2838[B]:HIS:HB2	2.12	0.49
3:A:3150:ARG:NH1	3:A:3151:GLN:HB3	2.28	0.49
3:A:3336:GLU:HG3	3:A:3355:ILE:HG22	1.94	0.49
3:A:3691:TYR:O	3:A:3695:MET:HG3	2.12	0.49
3:A:4172:PHE:O	3:A:4176:VAL:HG22	2.13	0.49
3:A:4196:THR:HB	3:A:4919:LEU:HD11	1.95	0.49
3:B:643:LEU:O	3:B:645:GLN:NE2	2.46	0.49
3:B:2154:VAL:HG13	3:B:2158:HIS:HD2	1.78	0.49
3:B:4196:THR:HB	3:B:4919:LEU:HD11	1.95	0.49
3:C:59:PRO:HG3	3:C:296:ARG:CZ	2.43	0.49
3:C:866:PRO:HG2	3:C:1009:ARG:HH11	1.78	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:4079:ASP:O	3:D:4082:GLU:HG3	2.12	0.49
2:K:51:ASP:OD1	2:K:52:MET:N	2.45	0.48
3:A:3638:ASP:OD1	3:A:3730:ARG:NH2	2.37	0.48
3:B:866:PRO:HG2	3:B:1009:ARG:HH11	1.78	0.48
3:C:115:TYR:HE2	3:C:169:ARG:HB3	1.77	0.48
3:C:4196:THR:HB	3:C:4919:LEU:HD11	1.95	0.48
3:D:331:PHE:HE1	3:D:363:ILE:HG12	1.78	0.48
3:D:866:PRO:HG2	3:D:1009:ARG:HH11	1.78	0.48
3:D:2229:LEU:HB3	3:D:2297:ARG:HD3	1.95	0.48
3:D:4196:THR:HB	3:D:4919:LEU:HD11	1.95	0.48
1:G:88:HIS:HD2	1:G:89:PRO:HD2	1.78	0.48
2:J:15:GLU:O	2:J:19:LEU:HG	2.13	0.48
3:A:866:PRO:HG3	3:A:1005:ASN:HB3	1.95	0.48
3:B:307:SER:HB3	3:B:327:THR:HG22	1.94	0.48
3:B:2968:LEU:HB2	3:B:2969:PRO:HD3	1.96	0.48
3:B:3509:ILE:O	3:B:3513:ILE:HG12	2.14	0.48
3:C:2171:VAL:HG21	3:C:2199:PHE:HD2	1.77	0.48
3:C:2229:LEU:HB3	3:C:2297:ARG:HD3	1.95	0.48
3:C:4116:GLN:HA	3:C:4119:LEU:HD12	1.94	0.48
3:D:1834:PHE:O	3:D:1835:HIS:ND1	2.45	0.48
3:A:2753:VAL:HG12	3:A:2753:VAL:O	2.13	0.48
3:A:2968:LEU:HB2	3:A:2969:PRO:HD3	1.95	0.48
3:B:1834:PHE:O	3:B:1835:HIS:ND1	2.45	0.48
3:C:2252:GLU:OE2	3:C:3819:MET:HG3	2.13	0.48
3:C:2834:SER:O	3:C:2838[B]:HIS:HB2	2.12	0.48
3:D:559:ILE:HG23	3:D:562:LEU:HD12	1.93	0.48
3:D:2252:GLU:OE2	3:D:3819:MET:HG3	2.13	0.48
3:D:2834:SER:O	3:D:2838[B]:HIS:HB2	2.12	0.48
3:D:3250:TRP:HB2	3:D:3273:MET:HE1	1.95	0.48
3:D:3467:VAL:HA	3:D:3470:LEU:HG	1.96	0.48
3:D:3509:ILE:O	3:D:3513:ILE:HG12	2.14	0.48
3:A:331:PHE:HE1	3:A:363:ILE:HG12	1.78	0.48
3:A:2154:VAL:HG13	3:A:2158:HIS:HD2	1.78	0.48
3:A:2171:VAL:HG21	3:A:2199:PHE:HD2	1.77	0.48
3:B:2736:LYS:HG3	3:B:2737:LEU:HD23	1.94	0.48
3:B:3134:LEU:HB2	3:B:3162:PHE:CE1	2.48	0.48
3:B:3496:PHE:CE2	3:B:3556:ASN:N	2.82	0.48
3:C:3404:ILE:O	3:C:3408:LYS:HG2	2.13	0.48
3:D:2582:PRO:HB3	3:D:2617:CYS:SG	2.54	0.48
3:D:2736:LYS:HG3	3:D:2737:LEU:HD23	1.94	0.48
3:D:2937:HIS:O	3:D:2940:ILE:HG22	2.12	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:88:HIS:HD2	1:F:89:PRO:HD2	1.78	0.48
2:I:51:ASP:OD1	2:I:52:MET:N	2.45	0.48
3:A:866:PRO:HG2	3:A:1009:ARG:HH11	1.78	0.48
3:A:999:LEU:HD23	3:A:1050:LEU:HD21	1.96	0.48
3:A:1249:MET:HB3	3:A:1599:MET:HB3	1.96	0.48
3:A:2749:ASP:HA	3:A:2754:GLN:OE1	2.12	0.48
3:A:3397:ARG:NH2	3:A:3550:ARG:HD2	2.24	0.48
3:A:3467:VAL:HA	3:A:3470:LEU:HG	1.96	0.48
3:A:3740:VAL:HG13	3:A:3758:THR:HG22	1.95	0.48
3:A:4617:ILE:HG23	3:A:4665:ARG:HH22	1.78	0.48
3:B:3122:ILE:HG22	3:B:3127:GLN:HG2	1.96	0.48
3:C:317:MET:HB2	3:C:321:LYS:HD2	1.94	0.48
3:D:2968:LEU:HB2	3:D:2969:PRO:HD3	1.95	0.48
3:D:3336:GLU:HG3	3:D:3355:ILE:HG22	1.94	0.48
3:D:3774:GLN:HB3	3:D:3854:PHE:HE2	1.79	0.48
1:E:88:HIS:HD2	1:E:89:PRO:HD2	1.78	0.48
2:L:15:GLU:O	2:L:19:LEU:HG	2.13	0.48
3:B:242:ASP:OD1	3:B:242:ASP:N	2.45	0.48
3:B:317:MET:HB2	3:B:321:LYS:HD2	1.94	0.48
3:C:1440:ASN:HB3	3:C:1546:GLN:HB3	1.95	0.48
3:C:2968:LEU:HB2	3:C:2969:PRO:HD3	1.96	0.48
3:D:999:LEU:HD23	3:D:1050:LEU:HD21	1.96	0.48
3:D:4170:ARG:NH1	5:D:5002:ATP:O2G	2.41	0.48
1:F:78:THR:OG1	1:F:80:ASP:OD1	2.23	0.48
2:I:15:GLU:O	2:I:19:LEU:HG	2.13	0.48
2:K:15:GLU:O	2:K:19:LEU:HG	2.14	0.48
3:A:115:TYR:CE1	3:A:175:VAL:HG22	2.49	0.48
3:A:3134:LEU:HB2	3:A:3162:PHE:CE1	2.48	0.48
3:A:3427:ASN:OD1	3:A:3465:LEU:HD22	2.14	0.48
3:A:3509:ILE:O	3:A:3513:ILE:HG12	2.14	0.48
3:A:4933:HIS:HD2	3:A:4937:GLU:HB3	1.79	0.48
3:B:891:GLU:HA	3:B:894:VAL:HG22	1.96	0.48
3:B:891:GLU:O	3:B:895:MET:HG3	2.13	0.48
3:B:895:MET:HA	3:B:898:ILE:HD13	1.96	0.48
3:B:2283:LYS:HE3	3:B:2285:TYR:HE1	1.79	0.48
3:B:3476:ILE:O	3:B:3480:ILE:HG13	2.14	0.48
3:C:891:GLU:O	3:C:895:MET:HG3	2.13	0.48
3:C:2283:LYS:HE3	3:C:2285:TYR:HE1	1.79	0.48
3:C:3476:ILE:O	3:C:3480:ILE:HG13	2.14	0.48
3:C:4617:ILE:HG23	3:C:4665:ARG:HH22	1.78	0.48
3:D:3122:ILE:HG22	3:D:3127:GLN:HG2	1.96	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:3476:ILE:O	3:D:3480:ILE:HG13	2.14	0.48
1:H:88:HIS:HD2	1:H:89:PRO:HD2	1.78	0.48
2:K:108:HIS:HE1	3:C:1956:ALA:HA	1.79	0.48
3:A:891:GLU:HA	3:A:894:VAL:HG22	1.96	0.48
3:A:4170:ARG:NH1	5:A:5002:ATP:O2G	2.40	0.48
3:B:4617:ILE:HG23	3:B:4665:ARG:HH22	1.78	0.48
3:C:2736:LYS:HG3	3:C:2737:LEU:HD23	1.94	0.48
3:C:4933:HIS:HD2	3:C:4937:GLU:HB3	1.79	0.48
3:D:891:GLU:O	3:D:895:MET:HG3	2.13	0.48
3:D:891:GLU:HA	3:D:894:VAL:HG22	1.96	0.48
3:D:3150:ARG:NH1	3:D:3151:GLN:HB3	2.27	0.48
3:D:3404:ILE:O	3:D:3408:LYS:HG2	2.13	0.48
3:D:4172:PHE:O	3:D:4176:VAL:HG22	2.13	0.48
3:D:4933:HIS:HD2	3:D:4937:GLU:HB3	1.79	0.48
3:A:882:ARG:CZ	3:A:937:LEU:HD12	2.44	0.48
3:A:2283:LYS:HE3	3:A:2285:TYR:HE1	1.79	0.48
3:A:2582:PRO:HB3	3:A:2617:CYS:SG	2.54	0.48
3:A:3345:ARG:NH1	3:A:3347:ASP:OD1	2.44	0.48
3:A:3496:PHE:CE2	3:A:3556:ASN:N	2.82	0.48
3:B:2229:LEU:HB3	3:B:2297:ARG:HD3	1.95	0.48
3:B:2565:GLN:O	3:B:2569:ILE:HG13	2.14	0.48
3:C:986:ILE:O	3:C:1055:ARG:NH2	2.47	0.48
3:C:2582:PRO:HB3	3:C:2617:CYS:SG	2.54	0.48
3:C:3033:LEU:HD13	3:C:3104:MET:SD	2.54	0.48
3:D:986:ILE:O	3:D:1055:ARG:NH2	2.47	0.48
3:D:4617:ILE:HG23	3:D:4665:ARG:HH22	1.78	0.48
3:A:643:LEU:O	3:A:645:GLN:NE2	2.46	0.48
3:A:2229:LEU:HB3	3:A:2297:ARG:HD3	1.95	0.48
3:A:3122:ILE:HG22	3:A:3127:GLN:HG2	1.96	0.48
3:A:3404:ILE:O	3:A:3408:LYS:HG2	2.13	0.48
3:A:4615:LEU:HA	3:A:4619:GLU:HB2	1.96	0.48
3:A:4886:THR:O	3:A:4895:ASN:N	2.46	0.48
3:B:331:PHE:HE1	3:B:363:ILE:HG12	1.78	0.48
3:B:2582:PRO:HB3	3:B:2617:CYS:SG	2.54	0.48
3:B:4933:HIS:HD2	3:B:4937:GLU:HB3	1.79	0.48
3:C:514:PHE:CE2	3:C:522:ALA:HB1	2.49	0.48
3:C:1249:MET:HB3	3:C:1599:MET:HB3	1.96	0.48
3:C:1644:LEU:HD23	3:C:1651:LEU:HA	1.95	0.48
3:C:3122:ILE:HG22	3:C:3127:GLN:HG2	1.96	0.48
3:C:3427:ASN:OD1	3:C:3465:LEU:HD22	2.14	0.48
3:C:3496:PHE:CE2	3:C:3556:ASN:N	2.82	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:3740:VAL:HG13	3:C:3758:THR:HG22	1.95	0.48
3:C:3774:GLN:HB3	3:C:3854:PHE:HE2	1.79	0.48
3:D:882:ARG:CZ	3:D:937:LEU:HD12	2.44	0.48
3:A:1644:LEU:HD23	3:A:1651:LEU:HA	1.95	0.47
3:A:3476:ILE:O	3:A:3480:ILE:HG13	2.14	0.47
3:B:115:TYR:CE1	3:B:175:VAL:HG22	2.49	0.47
3:B:3033:LEU:HD13	3:B:3104:MET:SD	2.54	0.47
3:C:189:GLU:HG2	3:C:207:PHE:HE1	1.79	0.47
3:C:271:ALA:HB2	3:C:488:LEU:HD22	1.96	0.47
3:C:331:PHE:HE1	3:C:363:ILE:HG12	1.78	0.47
3:C:891:GLU:HA	3:C:894:VAL:HG22	1.96	0.47
3:C:3172:GLU:OE1	3:C:3266:THR:OG1	2.29	0.47
3:D:115:TYR:CE1	3:D:175:VAL:HG22	2.49	0.47
3:D:555:LEU:HD23	3:D:589:ILE:HD11	1.96	0.47
3:D:3496:PHE:CE2	3:D:3556:ASN:N	2.82	0.47
3:A:891:GLU:O	3:A:895:MET:HG3	2.13	0.47
3:A:3499:LYS:CE	3:A:3564:LYS:HZ1	2.27	0.47
3:B:986:ILE:O	3:B:1055:ARG:NH2	2.47	0.47
3:B:3297:LYS:HE3	3:B:3297:LYS:HB3	1.34	0.47
3:B:3404:ILE:O	3:B:3408:LYS:HG2	2.14	0.47
3:B:3697:LYS:HA	3:B:3700:HIS:CD2	2.49	0.47
3:C:643:LEU:O	3:C:645:GLN:NE2	2.46	0.47
3:C:2565:GLN:O	3:C:2569:ILE:HG13	2.14	0.47
3:C:2788:ARG:HB2	3:C:2904:SER:OG	2.14	0.47
3:C:3336:GLU:HG3	3:C:3355:ILE:HG22	1.94	0.47
3:C:3467:VAL:HA	3:C:3470:LEU:HG	1.96	0.47
3:D:189:GLU:HG2	3:D:207:PHE:HE1	1.79	0.47
3:D:514:PHE:CE2	3:D:522:ALA:HB1	2.49	0.47
3:D:928:GLU:HA	3:D:931:TYR:CE2	2.49	0.47
3:D:2283:LYS:HE3	3:D:2285:TYR:HE1	1.79	0.47
3:D:2758:LYS:HB2	3:D:2762:LEU:HD23	1.96	0.47
3:D:3454:ARG:N	3:D:3457:ASP:OD2	2.47	0.47
3:D:3697:LYS:HA	3:D:3700:HIS:CD2	2.49	0.47
3:B:882:ARG:CZ	3:B:937:LEU:HD12	2.44	0.47
3:B:1644:LEU:HD23	3:B:1651:LEU:HA	1.95	0.47
3:B:2758:LYS:HB2	3:B:2762:LEU:HD23	1.96	0.47
3:C:2849:HIS:CE1	3:C:2877:LEU:HD11	2.50	0.47
3:C:3183:ILE:HG13	3:C:3187:LYS:HB2	1.96	0.47
3:C:3523:ALA:HA	3:C:3526:TRP:CD1	2.50	0.47
3:C:3638:ASP:OD1	3:C:3730:ARG:NH2	2.37	0.47
3:D:2788:ARG:HB2	3:D:2904:SER:OG	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:3145:SER:O	3:D:3149:GLU:HG2	2.14	0.47
3:A:514:PHE:CE2	3:A:522:ALA:HB1	2.49	0.47
3:A:895:MET:HA	3:A:898:ILE:HD13	1.96	0.47
3:A:1114:ARG:NH1	3:A:1128:LEU:O	2.45	0.47
3:A:1220:ASP:O	3:A:1223:THR:OG1	2.28	0.47
3:A:2736:LYS:HG3	3:A:2737:LEU:HD23	1.94	0.47
3:A:2767:GLU:O	3:A:2770:ILE:HG12	2.14	0.47
3:A:2849:HIS:CE1	3:A:2877:LEU:HD11	2.50	0.47
3:A:3454:ARG:N	3:A:3457:ASP:OD2	2.47	0.47
3:B:111:ARG:HD3	3:B:111:ARG:HA	1.69	0.47
3:B:514:PHE:CE2	3:B:522:ALA:HB1	2.49	0.47
3:B:2767:GLU:O	3:B:2770:ILE:HG12	2.14	0.47
3:C:555:LEU:HD23	3:C:589:ILE:HD11	1.97	0.47
3:C:882:ARG:CZ	3:C:937:LEU:HD12	2.44	0.47
3:C:895:MET:HA	3:C:898:ILE:HD13	1.96	0.47
3:D:2290:TRP:CZ2	3:D:2388:ILE:HG12	2.50	0.47
3:D:2849:HIS:CE1	3:D:2877:LEU:HD11	2.50	0.47
3:D:3740:VAL:HG13	3:D:3758:THR:HG22	1.95	0.47
3:A:928:GLU:HA	3:A:931:TYR:CE2	2.49	0.47
3:A:2508:SER:OG	3:A:2560:SER:OG	2.28	0.47
3:B:1249:MET:HB3	3:B:1599:MET:HB3	1.96	0.47
3:C:866:PRO:HG3	3:C:1005:ASN:HB3	1.95	0.47
3:C:3509:ILE:O	3:C:3513:ILE:HG12	2.13	0.47
3:D:271:ALA:HB2	3:D:488:LEU:HD22	1.96	0.47
3:D:866:PRO:HG3	3:D:1005:ASN:HB3	1.95	0.47
3:D:2767:GLU:O	3:D:2770:ILE:HG12	2.14	0.47
3:D:4886:THR:O	3:D:4895:ASN:N	2.46	0.47
3:A:674:TYR:CE1	3:A:756:SER:HB3	2.49	0.47
3:A:877:HIS:HA	3:A:880:ARG:CD	2.45	0.47
3:A:986:ILE:O	3:A:1055:ARG:NH2	2.47	0.47
3:A:2565:GLN:O	3:A:2569:ILE:HG13	2.14	0.47
3:A:3172:GLU:OE1	3:A:3266:THR:OG1	2.28	0.47
3:A:3697:LYS:HA	3:A:3700:HIS:CD2	2.50	0.47
3:A:3774:GLN:HB3	3:A:3854:PHE:HE2	1.79	0.47
3:B:866:PRO:HG3	3:B:1005:ASN:HB3	1.95	0.47
3:B:2788:ARG:HB2	3:B:2904:SER:OG	2.14	0.47
3:B:3072:MET:HG3	3:B:3140:LEU:HG	1.96	0.47
3:B:3462:GLN:OE1	3:C:1187:GLY:HA3	2.15	0.47
3:C:756:SER:HB2	3:C:769:ARG:HB2	1.97	0.47
3:C:877:HIS:HA	3:C:880:ARG:CD	2.45	0.47
3:C:928:GLU:HA	3:C:931:TYR:CE2	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:3145:SER:O	3:C:3149:GLU:HG2	2.15	0.47
3:C:3454:ARG:N	3:C:3457:ASP:OD2	2.47	0.47
3:D:877:HIS:HA	3:D:880:ARG:CD	2.45	0.47
3:D:3033:LEU:HD13	3:D:3104:MET:SD	2.54	0.47
3:D:3219:VAL:HA	3:D:3279:ASN:OD1	2.15	0.47
2:I:33:LEU:HD22	2:I:49:LEU:HD12	1.97	0.47
2:J:33:LEU:HD22	2:J:49:LEU:HD12	1.97	0.47
3:A:189:GLU:HG2	3:A:207:PHE:HE1	1.79	0.47
3:A:434:ASP:O	3:A:438:LYS:NZ	2.48	0.47
3:A:555:LEU:HD23	3:A:589:ILE:HD11	1.97	0.47
3:A:2758:LYS:HB2	3:A:2762:LEU:HD23	1.96	0.47
3:A:3033:LEU:HD13	3:A:3104:MET:SD	2.54	0.47
3:B:363:ILE:HD12	3:B:372:LEU:HD22	1.97	0.47
3:B:555:LEU:HD23	3:B:589:ILE:HD11	1.96	0.47
3:B:877:HIS:HA	3:B:880:ARG:CD	2.45	0.47
3:B:928:GLU:HA	3:B:931:TYR:CE2	2.49	0.47
3:B:1729:MET:HE2	3:B:1930:ASP:HB2	1.96	0.47
3:B:3345:ARG:NH1	3:B:3347:ASP:OD1	2.44	0.47
3:B:3774:GLN:HB3	3:B:3854:PHE:HE2	1.79	0.47
3:B:4615:LEU:HA	3:B:4619:GLU:HB2	1.96	0.47
3:C:114:LEU:HB2	3:C:117:HIS:HD2	1.78	0.47
3:C:749:LEU:HD22	3:C:755:ILE:HD11	1.97	0.47
3:C:1929:SER:HG	3:C:3620:PHE:HD2	1.63	0.47
3:C:3184:TYR:CE2	3:C:3201:VAL:HA	2.50	0.47
3:C:3219:VAL:HA	3:C:3279:ASN:OD1	2.15	0.47
3:D:114:LEU:HB2	3:D:117:HIS:HD2	1.77	0.47
3:D:227:TYR:HB3	3:D:352:SER:HB2	1.97	0.47
3:D:434:ASP:O	3:D:438:LYS:NZ	2.48	0.47
3:D:674:TYR:CE1	3:D:756:SER:HB3	2.50	0.47
3:D:2508:SER:HG	3:D:2560:SER:HG	1.58	0.47
3:D:2565:GLN:O	3:D:2569:ILE:HG13	2.14	0.47
3:D:3427:ASN:OD1	3:D:3465:LEU:HD22	2.14	0.47
3:D:4928:LYS:HE2	3:D:4932:GLU:HG3	1.97	0.47
3:A:3920:LEU:O	3:A:3924:ILE:HG12	2.15	0.47
3:B:3184:TYR:CE2	3:B:3201:VAL:HA	2.50	0.47
3:B:3523:ALA:HA	3:B:3526:TRP:CD1	2.50	0.47
3:B:3740:VAL:HG13	3:B:3758:THR:HG22	1.95	0.47
3:B:3939:ARG:NH2	3:C:172:GLY:O	2.47	0.47
3:C:115:TYR:CE1	3:C:175:VAL:HG22	2.48	0.47
3:C:549:ALA:O	3:C:552:SER:OG	2.18	0.47
3:D:3493:LYS:NZ	3:D:3558:LEU:HB2	2.23	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:2290:TRP:CZ2	3:A:2388:ILE:HG12	2.50	0.47
3:A:4637:THR:O	3:A:4650:LYS:NZ	2.41	0.47
3:B:189:GLU:HG2	3:B:207:PHE:HE1	1.79	0.47
3:B:3219:VAL:HA	3:B:3279:ASN:OD1	2.15	0.47
3:B:3427:ASN:OD1	3:B:3465:LEU:HD22	2.14	0.47
3:B:3454:ARG:N	3:B:3457:ASP:OD2	2.47	0.47
3:B:3467:VAL:HA	3:B:3470:LEU:HG	1.96	0.47
3:B:3920:LEU:O	3:B:3924:ILE:HG12	2.15	0.47
3:C:674:TYR:CE1	3:C:756:SER:HB3	2.50	0.47
3:C:3548:VAL:O	3:C:3552:LEU:HG	2.15	0.47
3:D:895:MET:HA	3:D:898:ILE:HD13	1.96	0.47
3:D:3523:ALA:HA	3:D:3526:TRP:CD1	2.50	0.47
3:A:3072:MET:HG3	3:A:3140:LEU:HG	1.96	0.47
3:B:2290:TRP:CZ2	3:B:2388:ILE:HG12	2.50	0.47
3:B:2787:TRP:CH2	3:B:2840:MET:HB3	2.50	0.47
3:B:3560:HIS:O	3:B:3564:LYS:C	2.53	0.47
3:B:3638:ASP:OD1	3:B:3730:ARG:NH2	2.37	0.47
3:B:4091:ALA:C	3:B:4093:ASP:H	2.18	0.47
3:B:4590:TYR:OH	3:B:4718:SER:HB2	2.15	0.47
3:C:227:TYR:HB3	3:C:352:SER:HB2	1.97	0.47
3:C:2290:TRP:CZ2	3:C:2388:ILE:HG12	2.50	0.47
3:C:4590:TYR:OH	3:C:4718:SER:HB2	2.15	0.47
3:D:1440:ASN:HB3	3:D:1546:GLN:HB3	1.95	0.47
3:D:3427:ASN:CB	3:D:3463:THR:OG1	2.43	0.47
3:D:4615:LEU:HA	3:D:4619:GLU:HB2	1.96	0.47
1:F:63:GLY:O	1:F:67:MET:HG3	2.16	0.46
2:I:96:ASP:OD1	2:I:96:ASP:N	2.48	0.46
2:K:96:ASP:OD1	2:K:96:ASP:N	2.48	0.46
2:L:38:ARG:HD2	2:L:44:PRO:HD2	1.97	0.46
3:A:3774:GLN:HB3	3:A:3854:PHE:CE2	2.51	0.46
3:B:756:SER:HB2	3:B:769:ARG:HB2	1.97	0.46
3:B:1429:SER:OG	3:B:1556:GLU:HB2	2.15	0.46
3:B:3499:LYS:CE	3:B:3564:LYS:HZ1	2.27	0.46
3:C:1429:SER:OG	3:C:1556:GLU:HB2	2.15	0.46
3:C:3072:MET:HG3	3:C:3140:LEU:HG	1.97	0.46
3:C:3697:LYS:HA	3:C:3700:HIS:CD2	2.49	0.46
3:D:1249:MET:HB3	3:D:1599:MET:HB3	1.96	0.46
3:D:2765:GLU:HA	3:D:2768:LYS:HD2	1.97	0.46
3:D:3184:TYR:CE2	3:D:3201:VAL:HA	2.50	0.46
3:D:3774:GLN:HB3	3:D:3854:PHE:CE2	2.50	0.46
3:D:4091:ALA:C	3:D:4093:ASP:H	2.18	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:1114:ARG:HG2	3:A:1138:ASP:HB2	1.97	0.46
3:A:2788:ARG:HB2	3:A:2904:SER:OG	2.14	0.46
3:A:3183:ILE:HG13	3:A:3187:LYS:HB2	1.96	0.46
3:A:3184:TYR:CE2	3:A:3201:VAL:HA	2.50	0.46
3:B:749:LEU:HD22	3:B:755:ILE:HD11	1.97	0.46
3:B:999:LEU:HD23	3:B:1050:LEU:HD21	1.96	0.46
3:B:4661:TYR:HB3	3:B:4665:ARG:HH21	1.80	0.46
3:C:3560:HIS:O	3:C:3564:LYS:C	2.54	0.46
3:C:3774:GLN:O	3:C:3854:PHE:HZ	1.99	0.46
3:C:3920:LEU:O	3:C:3924:ILE:HG12	2.15	0.46
3:D:756:SER:HB2	3:D:769:ARG:HB2	1.97	0.46
3:D:3166:PHE:CE2	3:D:3168:VAL:HB	2.51	0.46
3:D:3560:HIS:O	3:D:3564:LYS:C	2.54	0.46
2:I:14:LYS:HG2	3:A:2153:LYS:HD3	1.97	0.46
3:A:271:ALA:HB2	3:A:488:LEU:HD22	1.96	0.46
3:A:363:ILE:HD12	3:A:372:LEU:HD22	1.97	0.46
3:A:1010:ASP:OD1	3:A:1013:ARG:NH2	2.48	0.46
3:A:3145:SER:O	3:A:3149:GLU:HG2	2.14	0.46
3:A:3308:ASN:OD1	3:A:3437:SER:CB	2.61	0.46
3:A:3560:HIS:O	3:A:3564:LYS:C	2.54	0.46
3:A:4928:LYS:HE2	3:A:4932:GLU:HG3	1.97	0.46
3:B:271:ALA:HB2	3:B:488:LEU:HD22	1.96	0.46
3:B:2765:GLU:HA	3:B:2768:LYS:HD2	1.97	0.46
3:C:1010:ASP:OD1	3:C:1013:ARG:NH2	2.48	0.46
3:C:2767:GLU:O	3:C:2770:ILE:HG12	2.14	0.46
3:C:3505:VAL:HG23	3:C:3552:LEU:HD13	1.97	0.46
3:C:3774:GLN:HB3	3:C:3854:PHE:CE2	2.50	0.46
3:D:1269:GLU:HB2	3:D:1288:LYS:HE2	1.97	0.46
3:D:3183:ILE:HG13	3:D:3187:LYS:HB2	1.96	0.46
3:D:3505:VAL:HG23	3:D:3552:LEU:HD13	1.97	0.46
2:K:38:ARG:HD2	2:K:44:PRO:HD2	1.97	0.46
3:A:33:GLN:OE1	3:A:53:SER:OG	2.34	0.46
3:A:227:TYR:HB3	3:A:352:SER:HB2	1.97	0.46
3:A:2787:TRP:CH2	3:A:2840:MET:HB3	2.50	0.46
3:A:3250:TRP:CE2	3:A:3309:LYS:HG2	2.51	0.46
3:A:3548:VAL:O	3:A:3552:LEU:HG	2.15	0.46
3:A:3774:GLN:O	3:A:3854:PHE:HZ	1.99	0.46
3:A:4091:ALA:C	3:A:4093:ASP:H	2.18	0.46
3:A:4661:TYR:HB3	3:A:4665:ARG:HH21	1.80	0.46
3:B:1010:ASP:OD1	3:B:1013:ARG:NH2	2.48	0.46
3:B:3774:GLN:HB3	3:B:3854:PHE:CE2	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:3774:GLN:O	3:B:3854:PHE:HZ	1.99	0.46
3:B:4891:CYS:HB3	3:B:4913:HIS:CE1	2.50	0.46
3:C:999:LEU:HD23	3:C:1050:LEU:HD21	1.96	0.46
3:C:4091:ALA:C	3:C:4093:ASP:H	2.18	0.46
3:D:981:MET:HE1	3:D:1056:THR:HA	1.98	0.46
3:D:3774:GLN:O	3:D:3854:PHE:HZ	1.99	0.46
1:H:63:GLY:O	1:H:67:MET:HG3	2.16	0.46
2:J:38:ARG:HD2	2:J:44:PRO:HD2	1.97	0.46
3:A:111:ARG:HD3	3:A:111:ARG:HA	1.69	0.46
3:A:1429:SER:OG	3:A:1556:GLU:HB2	2.15	0.46
3:B:674:TYR:CE1	3:B:756:SER:HB3	2.50	0.46
3:B:1269:GLU:HB2	3:B:1288:LYS:HE2	1.98	0.46
3:B:3559:PHE:HA	3:B:3563:GLN:NE2	2.31	0.46
3:C:1718:ARG:HD3	3:C:1831:MET:HA	1.98	0.46
3:C:3335:SER:O	3:C:3339:HIS:ND1	2.49	0.46
3:C:4928:LYS:HE2	3:C:4932:GLU:HG3	1.97	0.46
3:D:1010:ASP:OD1	3:D:1013:ARG:NH2	2.48	0.46
3:D:1114:ARG:HG2	3:D:1138:ASP:HB2	1.97	0.46
3:D:3250:TRP:CE2	3:D:3309:LYS:HG2	2.51	0.46
3:D:3307:ILE:HD11	3:D:3372:LEU:HD13	1.98	0.46
3:D:4590:TYR:OH	3:D:4718:SER:HB2	2.15	0.46
3:D:4863:GLN:O	3:D:4867:ILE:HG12	2.16	0.46
1:G:85:ALA:O	1:G:94:PRO:HB3	2.16	0.46
3:A:156:GLU:HG3	3:A:187:SER:HB3	1.98	0.46
3:A:1269:GLU:HB2	3:A:1288:LYS:HE2	1.98	0.46
3:A:3166:PHE:CE2	3:A:3168:VAL:HB	2.51	0.46
3:A:3307:ILE:HD11	3:A:3372:LEU:HD13	1.98	0.46
3:A:3523:ALA:HA	3:A:3526:TRP:CD1	2.50	0.46
3:A:3559:PHE:HA	3:A:3563:GLN:NE2	2.31	0.46
3:A:4634:VAL:HG13	3:A:4640:PHE:HE1	1.81	0.46
3:B:1718:ARG:HD3	3:B:1831:MET:HA	1.98	0.46
3:B:2849:HIS:CE1	3:B:2877:LEU:HD11	2.50	0.46
3:C:363:ILE:HD12	3:C:372:LEU:HD22	1.97	0.46
3:C:1114:ARG:NH1	3:C:1128:LEU:O	2.45	0.46
3:C:2758:LYS:HB2	3:C:2762:LEU:HD23	1.96	0.46
3:C:2787:TRP:CH2	3:C:2840:MET:HB3	2.51	0.46
3:D:878:LEU:HA	3:D:881:ILE:HG22	1.98	0.46
3:D:3920:LEU:O	3:D:3924:ILE:HG12	2.15	0.46
2:I:38:ARG:HD2	2:I:44:PRO:HD2	1.97	0.46
3:A:2765:GLU:HA	3:A:2768:LYS:HD2	1.97	0.46
3:B:227:TYR:HB3	3:B:352:SER:HB2	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:1114:ARG:HG2	3:B:1138:ASP:HB2	1.97	0.46
3:B:3145:SER:O	3:B:3149:GLU:HG2	2.14	0.46
3:B:3335:SER:O	3:B:3339:HIS:ND1	2.49	0.46
3:B:3401:GLU:HA	3:B:3404:ILE:HG12	1.98	0.46
3:C:878:LEU:HA	3:C:881:ILE:HG22	1.98	0.46
3:C:1825:PHE:CE1	3:C:1842:ILE:HD12	2.51	0.46
3:C:3374:ILE:HA	3:C:3377:VAL:HG22	1.97	0.46
3:C:3892:TYR:OH	3:C:3899:ASP:OD1	2.19	0.46
3:C:4615:LEU:HA	3:C:4619:GLU:HB2	1.96	0.46
3:D:1114:ARG:NH1	3:D:1128:LEU:O	2.45	0.46
3:D:2697:SER:O	3:D:2699:GLY:N	2.48	0.46
3:D:4891:CYS:HB3	3:D:4913:HIS:CE1	2.50	0.46
2:K:10:ILE:HD11	2:K:70:LEU:HD11	1.98	0.46
3:A:878:LEU:HA	3:A:881:ILE:HG22	1.98	0.46
3:A:1979:PHE:CZ	3:A:1996:LEU:HD23	2.51	0.46
3:A:4590:TYR:OH	3:A:4718:SER:HB2	2.15	0.46
3:B:3183:ILE:HG13	3:B:3187:LYS:HB2	1.96	0.46
3:C:181:LEU:HD21	3:C:214:VAL:HG23	1.98	0.46
3:C:1014:GLN:HG2	3:C:1027:ARG:NH2	2.31	0.46
3:C:2508:SER:OG	3:C:2560:SER:OG	2.28	0.46
3:C:3166:PHE:CE2	3:C:3168:VAL:HB	2.51	0.46
3:C:3401:GLU:HA	3:C:3404:ILE:HG12	1.98	0.46
3:C:4891:CYS:HB3	3:C:4913:HIS:CE1	2.50	0.46
3:D:1979:PHE:CZ	3:D:1996:LEU:HD23	2.51	0.46
3:D:2187:ILE:HD13	3:D:2227:VAL:HG13	1.98	0.46
3:D:3072:MET:HG3	3:D:3140:LEU:HG	1.96	0.46
1:H:85:ALA:O	1:H:94:PRO:HB3	2.16	0.46
2:K:67:PRO:HB2	3:C:2202:TYR:CZ	2.51	0.46
3:A:756:SER:HB2	3:A:769:ARG:HB2	1.97	0.46
3:A:3219:VAL:HA	3:A:3279:ASN:OD1	2.15	0.46
3:A:3250:TRP:HB2	3:A:3273:MET:HE1	1.98	0.46
3:B:114:LEU:HB2	3:B:117:HIS:HD2	1.77	0.46
3:C:1269:GLU:HB2	3:C:1288:LYS:HE2	1.98	0.46
3:C:4863:GLN:O	3:C:4867:ILE:HG12	2.16	0.46
3:D:181:LEU:HD21	3:D:214:VAL:HG23	1.98	0.46
3:D:749:LEU:HD22	3:D:755:ILE:HD11	1.97	0.46
3:D:1429:SER:OG	3:D:1556:GLU:HB2	2.15	0.46
3:D:2658:GLU:HB3	3:D:2661:LEU:HB3	1.98	0.46
3:D:2787:TRP:CH2	3:D:2840:MET:HB3	2.50	0.46
3:D:3335:SER:O	3:D:3339:HIS:ND1	2.49	0.46
2:L:10:ILE:HD11	2:L:70:LEU:HD11	1.98	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:2296:GLU:HG3	3:A:2390:THR:HG22	1.98	0.46
3:A:4863:GLN:O	3:A:4867:ILE:HG12	2.16	0.46
3:B:1825:PHE:CE1	3:B:1842:ILE:HD12	2.51	0.46
3:B:1979:PHE:CZ	3:B:1996:LEU:HD23	2.51	0.46
3:B:2142:MET:SD	3:B:2174:VAL:HG11	2.56	0.46
3:B:3505:VAL:HG23	3:B:3552:LEU:HD13	1.97	0.46
3:C:1708:ASP:HA	3:C:1712:SER:HB2	1.98	0.46
3:C:2658:GLU:HB3	3:C:2661:LEU:HB3	1.98	0.46
3:C:4661:TYR:HB3	3:C:4665:ARG:HH21	1.80	0.46
3:D:1718:ARG:HD3	3:D:1831:MET:HA	1.98	0.46
3:D:3427:ASN:HB2	3:D:3463:THR:HG1	1.76	0.46
2:L:33:LEU:HD22	2:L:49:LEU:HD12	1.97	0.45
2:L:51:ASP:OD1	2:L:52:MET:N	2.45	0.45
3:A:4190:VAL:HG11	3:A:4949:TRP:CH2	2.52	0.45
3:B:1014:GLN:HG2	3:B:1027:ARG:NH2	2.31	0.45
3:B:1986:CYS:O	3:B:1993:ARG:NH2	2.50	0.45
3:B:2607:LEU:HD23	3:B:2665:ALA:HA	1.98	0.45
3:B:3250:TRP:CE2	3:B:3309:LYS:HG2	2.51	0.45
3:B:3374:ILE:HA	3:B:3377:VAL:HG22	1.97	0.45
3:B:3548:VAL:O	3:B:3552:LEU:HG	2.15	0.45
3:B:4832:GLU:O	3:B:4843:ARG:NH2	2.49	0.45
3:B:4928:LYS:HE2	3:B:4932:GLU:HG3	1.97	0.45
3:C:3454:ARG:O	3:C:3458:ARG:HG2	2.16	0.45
3:D:801:ARG:HG2	3:D:1618:LEU:HA	1.98	0.45
3:D:2607:LEU:HD23	3:D:2665:ALA:HA	1.98	0.45
3:D:3454:ARG:O	3:D:3458:ARG:HG2	2.17	0.45
1:E:45:LYS:HB2	1:E:45:LYS:HE2	1.68	0.45
1:F:45:LYS:HE2	1:F:45:LYS:HB2	1.68	0.45
2:K:33:LEU:HD22	2:K:49:LEU:HD12	1.97	0.45
3:A:2697:SER:O	3:A:2699:GLY:N	2.48	0.45
3:B:948:CYS:HB3	3:B:1064:LEU:HD12	1.99	0.45
3:B:3250:TRP:HB2	3:B:3273:MET:HE1	1.98	0.45
3:C:1979:PHE:CZ	3:C:1996:LEU:HD23	2.51	0.45
3:C:2771:TYR:O	3:C:2774:PRO:HD2	2.16	0.45
3:C:3250:TRP:CE2	3:C:3309:LYS:HG2	2.51	0.45
3:C:3277:LEU:O	3:C:3281:LEU:HD23	2.16	0.45
3:C:4190:VAL:HG11	3:C:4949:TRP:CH2	2.52	0.45
3:C:4832:GLU:O	3:C:4843:ARG:NH2	2.50	0.45
3:D:363:ILE:HD12	3:D:372:LEU:HD22	1.97	0.45
3:D:1014:GLN:HG2	3:D:1027:ARG:NH2	2.31	0.45
3:D:1986:CYS:O	3:D:1993:ARG:NH2	2.49	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:63:GLY:O	1:E:67:MET:HG3	2.16	0.45
2:J:10:ILE:HD11	2:J:70:LEU:HD11	1.98	0.45
2:L:61:ASN:OD1	2:L:62:GLY:N	2.49	0.45
3:A:749:LEU:HD22	3:A:755:ILE:HD11	1.97	0.45
3:A:1718:ARG:HD3	3:A:1831:MET:HA	1.98	0.45
3:A:2658:GLU:HB3	3:A:2661:LEU:HB3	1.98	0.45
3:A:3335:SER:O	3:A:3339:HIS:ND1	2.49	0.45
3:B:181:LEU:HD21	3:B:214:VAL:HG23	1.98	0.45
3:B:587:ASN:OD1	3:B:2133:ARG:NH1	2.49	0.45
3:B:2296:GLU:HG3	3:B:2390:THR:HG22	1.98	0.45
3:B:2771:TYR:O	3:B:2774:PRO:HD2	2.16	0.45
3:B:3277:LEU:O	3:B:3281:LEU:HD23	2.16	0.45
3:B:3454:ARG:O	3:B:3458:ARG:HG2	2.16	0.45
3:B:4822:ARG:HG2	3:C:4851:PHE:CD2	2.51	0.45
3:C:513:HIS:O	3:C:517:VAL:HG23	2.17	0.45
3:C:1114:ARG:HG2	3:C:1138:ASP:HB2	1.97	0.45
3:C:2590:ARG:O	3:C:2593:VAL:HG12	2.17	0.45
3:C:2765:GLU:HA	3:C:2768:LYS:HD2	1.97	0.45
2:L:11:ALA:O	2:L:14:LYS:HB3	2.17	0.45
3:A:1986:CYS:O	3:A:1993:ARG:NH2	2.50	0.45
3:A:2142:MET:SD	3:A:2174:VAL:HG11	2.56	0.45
3:A:2187:ILE:HD13	3:A:2227:VAL:HG13	1.98	0.45
3:A:2863:LYS:HE2	3:A:2865:GLY:O	2.17	0.45
3:A:4898:PHE:O	3:A:4904:GLY:HA3	2.17	0.45
3:C:948:CYS:HB3	3:C:1064:LEU:HD12	1.98	0.45
3:C:3154:ALA:O	3:C:3157:GLU:HG3	2.17	0.45
3:C:3345:ARG:NH1	3:C:3347:ASP:OD1	2.44	0.45
3:D:1825:PHE:CE1	3:D:1842:ILE:HD12	2.51	0.45
3:D:2296:GLU:HG3	3:D:2390:THR:HG22	1.99	0.45
3:D:3345:ARG:NH1	3:D:3347:ASP:OD1	2.44	0.45
3:D:3401:GLU:HA	3:D:3404:ILE:HG12	1.98	0.45
3:D:3559:PHE:HA	3:D:3563:GLN:NE2	2.31	0.45
3:D:3892:TYR:OH	3:D:3899:ASP:OD1	2.19	0.45
3:D:4832:GLU:O	3:D:4843:ARG:NH2	2.50	0.45
3:A:2771:TYR:O	3:A:2774:PRO:HD2	2.16	0.45
3:A:3233:HIS:O	3:A:3237:VAL:HG22	2.17	0.45
3:A:3454:ARG:O	3:A:3458:ARG:HG2	2.16	0.45
3:A:4832:GLU:O	3:A:4843:ARG:NH2	2.50	0.45
3:A:4891:CYS:HB3	3:A:4913:HIS:CE1	2.50	0.45
3:B:434:ASP:O	3:B:438:LYS:NZ	2.48	0.45
3:B:866:PRO:HG2	3:B:1009:ARG:NH1	2.32	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:3233:HIS:O	3:B:3237:VAL:HG22	2.17	0.45
3:B:4898:PHE:O	3:B:4904:GLY:HA3	2.17	0.45
3:C:801:ARG:HA	3:C:1617:TRP:O	2.17	0.45
3:C:1986:CYS:O	3:C:1993:ARG:NH2	2.50	0.45
3:C:2187:ILE:HD13	3:C:2227:VAL:HG13	1.98	0.45
3:C:2911:GLU:HG2	3:C:2912:LEU:HD23	1.99	0.45
3:D:624:ALA:HB2	3:D:1667:LEU:HD12	1.99	0.45
3:D:644:LEU:HD13	3:D:1630:LEU:HD21	1.99	0.45
3:D:2142:MET:SD	3:D:2174:VAL:HG11	2.56	0.45
3:D:4634:VAL:HG13	3:D:4640:PHE:HE1	1.81	0.45
1:E:85:ALA:O	1:E:94:PRO:HB3	2.16	0.45
1:G:63:GLY:O	1:G:67:MET:HG3	2.16	0.45
3:A:1708:ASP:HA	3:A:1712:SER:HB2	1.98	0.45
3:A:1960:ARG:HA	3:A:1960:ARG:HE	1.82	0.45
3:A:3426:ASN:HD22	3:A:3426:ASN:HA	1.63	0.45
3:A:3505:VAL:HG23	3:A:3552:LEU:HD13	1.97	0.45
3:B:801:ARG:HG2	3:B:1618:LEU:HA	1.98	0.45
3:B:2187:ILE:HD13	3:B:2227:VAL:HG13	1.98	0.45
3:B:3166:PHE:CE2	3:B:3168:VAL:HB	2.51	0.45
3:B:3861:GLN:H	3:B:3867:THR:HG23	1.82	0.45
3:B:4634:VAL:HG13	3:B:4640:PHE:HE1	1.81	0.45
3:B:4863:GLN:O	3:B:4867:ILE:HG12	2.16	0.45
3:B:4886:THR:O	3:B:4895:ASN:N	2.46	0.45
3:C:434:ASP:O	3:C:438:LYS:NZ	2.48	0.45
3:C:866:PRO:HG2	3:C:1009:ARG:NH1	2.32	0.45
3:D:33:GLN:OE1	3:D:53:SER:OG	2.34	0.45
3:D:587:ASN:OD1	3:D:2133:ARG:NH1	2.49	0.45
3:D:1708:ASP:HA	3:D:1712:SER:HB2	1.98	0.45
3:D:2590:ARG:O	3:D:2593:VAL:HG12	2.17	0.45
3:D:3374:ILE:HA	3:D:3377:VAL:HG22	1.97	0.45
3:D:3548:VAL:O	3:D:3552:LEU:HG	2.15	0.45
1:F:85:ALA:O	1:F:94:PRO:HB3	2.16	0.45
1:H:78:THR:OG1	1:H:80:ASP:OD1	2.23	0.45
2:I:11:ALA:O	2:I:14:LYS:HB3	2.17	0.45
2:I:61:ASN:OD1	2:I:62:GLY:N	2.49	0.45
2:J:96:ASP:N	2:J:96:ASP:OD1	2.48	0.45
3:A:181:LEU:HD21	3:A:214:VAL:HG23	1.98	0.45
3:A:1825:PHE:CE1	3:A:1842:ILE:HD12	2.51	0.45
3:A:3374:ILE:HA	3:A:3377:VAL:HG22	1.97	0.45
3:A:3401:GLU:HA	3:A:3404:ILE:HG12	1.98	0.45
3:B:801:ARG:HA	3:B:1617:TRP:O	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:878:LEU:HA	3:B:881:ILE:HG22	1.98	0.45
3:B:1114:ARG:NH1	3:B:1128:LEU:O	2.45	0.45
3:B:1960:ARG:HA	3:B:1960:ARG:HE	1.82	0.45
3:B:3167:PRO:HA	3:B:3248:ARG:NH2	2.32	0.45
3:B:3553:ASP:O	3:B:3557:VAL:HG23	2.17	0.45
3:C:188:SER:HB2	3:C:190:ARG:HH11	1.82	0.45
3:C:644:LEU:HD13	3:C:1630:LEU:HD21	1.99	0.45
3:C:3307:ILE:HD11	3:C:3372:LEU:HD13	1.98	0.45
3:C:4509:VAL:HG11	3:C:4579:HIS:HB2	1.99	0.45
3:C:4634:VAL:HG13	3:C:4640:PHE:HE1	1.81	0.45
3:D:801:ARG:HA	3:D:1617:TRP:O	2.17	0.45
3:D:2771:TYR:O	3:D:2774:PRO:HD2	2.16	0.45
3:D:2863:LYS:HE2	3:D:2865:GLY:O	2.17	0.45
3:D:3154:ALA:O	3:D:3157:GLU:HG3	2.17	0.45
3:D:4661:TYR:HB3	3:D:4665:ARG:HH21	1.80	0.45
2:J:11:ALA:O	2:J:14:LYS:HB3	2.17	0.45
3:A:587:ASN:OD1	3:A:2133:ARG:NH1	2.49	0.45
3:A:624:ALA:HB2	3:A:1667:LEU:HD12	1.98	0.45
3:A:981:MET:HE1	3:A:1056:THR:HA	1.99	0.45
3:A:1014:GLN:HG2	3:A:1027:ARG:NH2	2.31	0.45
3:A:2607:LEU:HD23	3:A:2665:ALA:HA	1.98	0.45
3:A:4589:GLY:O	3:A:4590:TYR:HB3	2.17	0.45
3:B:1113:MET:HB2	3:B:1156:TRP:HZ2	1.82	0.45
3:B:2255:LEU:O	3:B:3810:ARG:NH1	2.47	0.45
3:B:2863:LYS:HE2	3:B:2865:GLY:O	2.17	0.45
3:B:4509:VAL:HG11	3:B:4579:HIS:HB2	1.99	0.45
3:C:1960:ARG:HA	3:C:1960:ARG:HE	1.82	0.45
3:C:2787:TRP:HA	3:C:2906:GLY:HA3	1.99	0.45
3:C:3861:GLN:H	3:C:3867:THR:HG23	1.82	0.45
3:D:188:SER:HB2	3:D:190:ARG:HH11	1.82	0.45
3:D:3233:HIS:O	3:D:3237:VAL:HG22	2.17	0.45
3:D:3370:TYR:HB3	3:D:3465:LEU:HD12	1.99	0.45
1:G:45:LYS:HB2	1:G:45:LYS:HE2	1.68	0.45
2:I:10:ILE:HD11	2:I:70:LEU:HD11	1.98	0.45
2:K:11:ALA:O	2:K:14:LYS:HB3	2.17	0.45
3:A:513:HIS:O	3:A:517:VAL:HG23	2.17	0.45
3:A:801:ARG:HG2	3:A:1618:LEU:HA	1.98	0.45
3:B:2658:GLU:HB3	3:B:2661:LEU:HB3	1.98	0.45
3:B:2911:GLU:HG2	3:B:2912:LEU:HD23	1.99	0.45
3:C:976:TYR:O	3:C:978:PRO:HD3	2.17	0.45
3:C:981:MET:HE1	3:C:1056:THR:HA	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2863:LYS:HE2	3:C:2865:GLY:O	2.17	0.45
3:C:3559:PHE:HA	3:C:3563:GLN:NE2	2.31	0.45
3:C:3651:PRO:CB	3:C:3652:PRO:HD3	2.47	0.45
3:C:3872:ILE:HA	3:C:3875:VAL:HG12	1.99	0.45
3:D:2075:ILE:HG22	3:D:2077:ASP:H	1.82	0.45
3:D:2605:MET:HB3	3:D:2606:PRO:HD3	1.99	0.45
3:D:3651:PRO:CB	3:D:3652:PRO:HD3	2.47	0.45
3:D:4190:VAL:HG11	3:D:4949:TRP:CH2	2.52	0.45
2:K:61:ASN:OD1	2:K:62:GLY:N	2.49	0.45
3:A:1113:MET:HB2	3:A:1156:TRP:HZ2	1.82	0.45
3:A:1910:LEU:HB2	3:A:2087:LEU:HD21	1.99	0.45
3:A:2075:ILE:HG22	3:A:2077:ASP:H	1.82	0.45
3:A:3312:PRO:HA	3:A:3376:PHE:HZ	1.82	0.45
3:A:3313:GLN:HA	3:A:3316:LYS:HD3	1.99	0.45
3:A:4480:PHE:O	3:A:4484:ILE:HG23	2.17	0.45
3:B:188:SER:HB2	3:B:190:ARG:HH11	1.82	0.45
3:B:2590:ARG:O	3:B:2593:VAL:HG12	2.17	0.45
3:B:2596:VAL:HG21	3:B:2610:LEU:HD11	1.99	0.45
3:B:3307:ILE:HD11	3:B:3372:LEU:HD13	1.98	0.45
3:C:801:ARG:HG2	3:C:1618:LEU:HA	1.98	0.45
3:C:1113:MET:HB2	3:C:1156:TRP:HZ2	1.82	0.45
3:C:1910:LEU:HB2	3:C:2087:LEU:HD21	1.99	0.45
3:C:2607:LEU:HD23	3:C:2665:ALA:HA	1.98	0.45
3:C:3397:ARG:NH2	3:C:3550:ARG:HD2	2.24	0.45
3:D:976:TYR:O	3:D:978:PRO:HD3	2.17	0.45
3:D:1960:ARG:HA	3:D:1960:ARG:HE	1.82	0.45
3:D:3312:PRO:HA	3:D:3376:PHE:HZ	1.82	0.45
3:D:4898:PHE:O	3:D:4904:GLY:HA3	2.17	0.45
1:H:25:VAL:HG12	1:H:104:LEU:HA	1.99	0.44
3:A:188:SER:HB2	3:A:190:ARG:HH11	1.82	0.44
3:B:513:HIS:O	3:B:517:VAL:HG23	2.17	0.44
3:B:995:MET:HE3	3:B:995:MET:HB3	1.87	0.44
3:B:2605:MET:HB3	3:B:2606:PRO:HD3	1.99	0.44
3:C:156:GLU:HG3	3:C:187:SER:HB3	1.98	0.44
3:C:258:ARG:NE	3:C:316:LEU:O	2.33	0.44
3:C:881:ILE:O	3:C:885:LEU:HD23	2.18	0.44
3:C:2075:ILE:HG22	3:C:2077:ASP:H	1.82	0.44
3:C:3399:VAL:HG21	3:C:3473:LEU:HD22	2.00	0.44
3:C:3840:PHE:HE1	3:C:3874:THR:HG23	1.82	0.44
3:D:156:GLU:HG3	3:D:187:SER:HB3	1.98	0.44
3:D:866:PRO:HG2	3:D:1009:ARG:NH1	2.32	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1910:LEU:HB2	3:D:2087:LEU:HD21	1.99	0.44
3:D:2482:ASP:OD1	3:D:2483:PHE:N	2.50	0.44
1:E:25:VAL:HG12	1:E:104:LEU:HA	1.99	0.44
3:A:644:LEU:HD13	3:A:1630:LEU:HD21	1.99	0.44
3:A:2590:ARG:O	3:A:2593:VAL:HG12	2.17	0.44
3:A:3167:PRO:HA	3:A:3248:ARG:NH2	2.32	0.44
3:A:3496:PHE:HE2	3:A:3552:LEU:O	2.00	0.44
3:B:33:GLN:OE1	3:B:53:SER:OG	2.34	0.44
3:B:4190:VAL:HG11	3:B:4949:TRP:CH2	2.52	0.44
3:B:4589:GLY:O	3:B:4590:TYR:HB3	2.17	0.44
3:C:587:ASN:OD1	3:C:2133:ARG:NH1	2.49	0.44
3:C:2142:MET:SD	3:C:2174:VAL:HG11	2.56	0.44
3:C:2296:GLU:HG3	3:C:2390:THR:HG22	1.99	0.44
3:C:2697:SER:O	3:C:2699:GLY:N	2.48	0.44
3:C:3070:LYS:O	3:C:3073:GLU:HG3	2.17	0.44
3:C:3553:ASP:O	3:C:3557:VAL:HG23	2.17	0.44
3:C:3840:PHE:CE1	3:C:3874:THR:HG23	2.53	0.44
3:C:4589:GLY:O	3:C:4590:TYR:HB3	2.17	0.44
3:D:513:HIS:O	3:D:517:VAL:HG23	2.17	0.44
3:D:3277:LEU:O	3:D:3281:LEU:HD23	2.16	0.44
3:A:976:TYR:O	3:A:978:PRO:HD3	2.17	0.44
3:A:2605:MET:HB3	3:A:2606:PRO:HD3	1.99	0.44
3:A:3277:LEU:O	3:A:3281:LEU:HD23	2.16	0.44
3:A:3426:ASN:C	3:A:3428:MET:H	2.21	0.44
3:A:3840:PHE:CE1	3:A:3874:THR:HG23	2.53	0.44
3:B:76:ARG:HH11	3:B:80:GLU:HG3	1.82	0.44
3:B:1708:ASP:HA	3:B:1712:SER:HB2	1.98	0.44
3:B:1910:LEU:HB2	3:B:2087:LEU:HD21	1.99	0.44
3:B:2075:ILE:HG22	3:B:2077:ASP:H	1.82	0.44
3:B:3313:GLN:HA	3:B:3316:LYS:HD3	1.99	0.44
3:B:3423:ASN:O	3:B:3425:ILE:CD1	2.46	0.44
3:C:2596:VAL:HG21	3:C:2610:LEU:HD11	1.99	0.44
3:C:4898:PHE:O	3:C:4904:GLY:HA3	2.17	0.44
3:D:1914:CYS:SG	3:D:2091:GLN:NE2	2.78	0.44
3:D:3174:HIS:ND1	3:D:3175:LEU:HG	2.33	0.44
3:D:3313:GLN:HA	3:D:3316:LYS:HD3	1.99	0.44
3:D:3553:ASP:O	3:D:3557:VAL:HG23	2.17	0.44
3:D:3861:GLN:H	3:D:3867:THR:HG23	1.82	0.44
3:A:948:CYS:HB3	3:A:1064:LEU:HD12	1.98	0.44
3:B:3427:ASN:CB	3:B:3463:THR:OG1	2.42	0.44
3:B:3840:PHE:CE1	3:B:3874:THR:HG23	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:4480:PHE:O	3:B:4484:ILE:HG23	2.17	0.44
3:C:1091:GLU:HB3	3:C:1094:TYR:CD2	2.53	0.44
3:C:3426:ASN:C	3:C:3428:MET:H	2.21	0.44
3:C:3545:GLU:HG2	3:C:3546:LYS:N	2.32	0.44
3:D:2580:LEU:HD23	3:D:2580:LEU:HA	1.81	0.44
3:D:4509:VAL:HG11	3:D:4579:HIS:HB2	1.99	0.44
1:G:90:GLY:HA2	3:C:638:PRO:HD3	2.00	0.44
3:A:1091:GLU:HB3	3:A:1094:TYR:CD2	2.53	0.44
3:A:3190:ARG:HG2	3:A:3191:GLU:OE1	2.17	0.44
3:A:3861:GLN:H	3:A:3867:THR:HG23	1.82	0.44
3:B:2482:ASP:OD1	3:B:2483:PHE:N	2.50	0.44
3:B:4610:LEU:HD11	3:B:4635:ILE:HG12	2.00	0.44
3:C:33:GLN:OE1	3:C:53:SER:OG	2.34	0.44
3:C:2605:MET:HB3	3:C:2606:PRO:HD3	1.99	0.44
3:C:3190:ARG:HG2	3:C:3191:GLU:OE1	2.17	0.44
3:C:3233:HIS:O	3:C:3237:VAL:HG22	2.17	0.44
3:C:3499:LYS:CE	3:C:3564:LYS:NZ	2.81	0.44
3:C:4888:CYS:HB3	3:C:4891:CYS:SG	2.58	0.44
3:D:3399:VAL:HG21	3:D:3473:LEU:HD22	2.00	0.44
3:D:3840:PHE:HE1	3:D:3874:THR:HG23	1.82	0.44
2:L:21:ASP:OD1	2:L:22:LYS:N	2.51	0.44
2:L:96:ASP:OD1	2:L:96:ASP:N	2.48	0.44
3:A:2884:LYS:O	3:A:2887:GLU:HG3	2.18	0.44
3:A:3493:LYS:HZ3	3:A:3558:LEU:HB3	1.81	0.44
3:A:3545:GLU:HG2	3:A:3546:LYS:N	2.32	0.44
3:A:3661:VAL:HG23	3:A:3666:GLN:HG2	2.00	0.44
3:A:4610:LEU:HD11	3:A:4635:ILE:HG12	2.00	0.44
3:B:258:ARG:NE	3:B:316:LEU:O	2.33	0.44
3:B:976:TYR:O	3:B:978:PRO:HD3	2.17	0.44
3:B:3190:ARG:HG2	3:B:3191:GLU:OE1	2.17	0.44
3:B:4752:THR:HG23	3:B:4753:LEU:HD12	2.00	0.44
3:C:76:ARG:HH11	3:C:80:GLU:HG3	1.82	0.44
3:C:624:ALA:HB2	3:C:1667:LEU:HD12	1.99	0.44
3:C:2062:ILE:O	3:C:2066:MET:HG2	2.18	0.44
3:C:3496:PHE:HE2	3:C:3552:LEU:O	2.00	0.44
3:C:4480:PHE:O	3:C:4484:ILE:HG23	2.17	0.44
3:C:4610:LEU:HD11	3:C:4635:ILE:HG12	2.00	0.44
3:C:4753:LEU:HG	3:D:4773:LEU:HD22	1.99	0.44
3:D:2193:VAL:HG11	3:D:2227:VAL:HG11	2.00	0.44
3:D:3123:LEU:HB3	3:D:3124:GLU:OE1	2.17	0.44
3:D:3872:ILE:HA	3:D:3875:VAL:HG12	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:4480:PHE:O	3:D:4484:ILE:HG23	2.18	0.44
3:D:4589:GLY:O	3:D:4590:TYR:HB3	2.16	0.44
3:D:4770:THR:HG23	3:D:4862:ILE:HG12	2.00	0.44
3:A:881:ILE:O	3:A:885:LEU:HD23	2.17	0.44
3:A:1896:MET:HG2	3:A:1896:MET:O	2.18	0.44
3:A:2773:TRP:NE1	3:A:2777:GLU:OE2	2.51	0.44
3:A:3123:LEU:HB3	3:A:3124:GLU:OE1	2.17	0.44
3:A:3427:ASN:HD22	3:A:3463:THR:C	2.18	0.44
3:A:3553:ASP:O	3:A:3557:VAL:HG23	2.17	0.44
3:A:4770:THR:HG23	3:A:4862:ILE:HG12	2.00	0.44
3:B:2787:TRP:HA	3:B:2906:GLY:HA3	1.99	0.44
3:B:3070:LYS:O	3:B:3073:GLU:HG3	2.17	0.44
3:B:3154:ALA:O	3:B:3157:GLU:HG3	2.17	0.44
3:B:3399:VAL:HG21	3:B:3473:LEU:HD22	2.00	0.44
3:B:3426:ASN:C	3:B:3428:MET:H	2.21	0.44
3:B:4584:PHE:O	3:B:4587:ILE:HG22	2.18	0.44
3:C:3313:GLN:HA	3:C:3316:LYS:HD3	1.99	0.44
3:C:3370:TYR:HB3	3:C:3465:LEU:HD12	1.99	0.44
3:C:3506:ARG:NH2	3:C:3549:GLU:OE1	2.42	0.44
3:D:3190:ARG:HG2	3:D:3191:GLU:OE1	2.17	0.44
3:D:3297:LYS:HE3	3:D:3297:LYS:HB3	1.34	0.44
3:A:514:PHE:HD2	3:A:526:TRP:HB2	1.83	0.44
3:A:758:CYS:HB3	3:A:819:TYR:CE2	2.53	0.44
3:A:1914:CYS:SG	3:A:2091:GLN:NE2	2.78	0.44
3:A:2176:VAL:HG22	3:A:2220:TYR:CZ	2.53	0.44
3:A:3070:LYS:O	3:A:3073:GLU:HG3	2.17	0.44
3:A:3154:ALA:O	3:A:3157:GLU:HG3	2.17	0.44
3:A:3215:MET:O	3:A:3219:VAL:HG23	2.18	0.44
3:A:4509:VAL:HG11	3:A:4579:HIS:HB2	1.99	0.44
3:B:156:GLU:HG3	3:B:187:SER:HB3	1.98	0.44
3:B:644:LEU:HD13	3:B:1630:LEU:HD21	1.99	0.44
3:B:981:MET:HE1	3:B:1056:THR:HA	1.99	0.44
3:B:3840:PHE:HE1	3:B:3874:THR:HG23	1.82	0.44
3:C:2884:LYS:O	3:C:2887:GLU:HG3	2.18	0.44
3:C:3167:PRO:HA	3:C:3248:ARG:NH2	2.32	0.44
3:D:115:TYR:CD1	3:D:175:VAL:HG22	2.53	0.44
3:D:2062:ILE:O	3:D:2066:MET:HG2	2.18	0.44
3:D:2787:TRP:HA	3:D:2906:GLY:HA3	1.99	0.44
3:D:3426:ASN:C	3:D:3428:MET:H	2.21	0.44
1:F:83:TYR:OH	3:B:1768:PHE:O	2.29	0.44
3:A:115:TYR:CD1	3:A:175:VAL:HG22	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:866:PRO:HG2	3:A:1009:ARG:NH1	2.32	0.44
3:A:2193:VAL:HG11	3:A:2227:VAL:HG11	2.00	0.44
3:A:2482:ASP:OD1	3:A:2483:PHE:N	2.50	0.44
3:A:2787:TRP:HA	3:A:2906:GLY:HA3	1.99	0.44
3:A:3174:HIS:ND1	3:A:3175:LEU:HG	2.33	0.44
3:A:3399:VAL:HG21	3:A:3473:LEU:HD22	2.00	0.44
3:A:3653:GLU:OE1	3:A:3653:GLU:N	2.46	0.44
3:A:3872:ILE:HA	3:A:3875:VAL:HG12	1.99	0.44
3:A:4569:GLU:HB3	3:A:4570:PRO:HD3	2.00	0.44
3:B:758:CYS:HB3	3:B:819:TYR:CE2	2.53	0.44
3:B:2258:ARG:HB3	3:B:2260:PRO:HD2	2.00	0.44
3:B:3215:MET:O	3:B:3219:VAL:HG23	2.18	0.44
3:B:3307:ILE:HD12	3:B:3375:ARG:HD3	2.00	0.44
3:B:3308:ASN:OD1	3:B:3437:SER:CB	2.61	0.44
3:B:3496:PHE:HE2	3:B:3552:LEU:O	2.00	0.44
3:B:3651:PRO:CB	3:B:3652:PRO:HD3	2.47	0.44
3:B:4637:THR:O	3:B:4650:LYS:NZ	2.41	0.44
3:C:758:CYS:HB3	3:C:819:TYR:CE2	2.53	0.44
3:C:2482:ASP:OD1	3:C:2483:PHE:N	2.50	0.44
3:C:2773:TRP:NE1	3:C:2777:GLU:OE2	2.51	0.44
3:C:4584:PHE:O	3:C:4587:ILE:HG22	2.18	0.44
3:D:948:CYS:HB3	3:D:1064:LEU:HD12	1.98	0.44
3:D:2773:TRP:NE1	3:D:2777:GLU:OE2	2.51	0.44
3:D:3215:MET:O	3:D:3219:VAL:HG23	2.18	0.44
3:D:3467:VAL:HB	3:D:3471:LYS:HZ1	1.83	0.44
3:D:4584:PHE:O	3:D:4587:ILE:HG22	2.18	0.44
3:A:801:ARG:HA	3:A:1617:TRP:O	2.17	0.43
3:A:2087:LEU:O	3:A:2091:GLN:HG2	2.18	0.43
3:A:3366:LEU:HG	3:A:3370:TYR:CD1	2.53	0.43
3:A:3370:TYR:HB3	3:A:3465:LEU:HD12	1.99	0.43
3:A:3651:PRO:CB	3:A:3652:PRO:HD3	2.47	0.43
3:A:3840:PHE:HE1	3:A:3874:THR:HG23	1.82	0.43
3:B:514:PHE:HD2	3:B:526:TRP:HB2	1.83	0.43
3:B:2759:PRO:O	3:B:2762:LEU:N	2.51	0.43
3:B:3872:ILE:HA	3:B:3875:VAL:HG12	1.99	0.43
3:B:4753:LEU:HD11	3:C:4769:LEU:HB3	2.00	0.43
3:C:115:TYR:CD1	3:C:175:VAL:HG22	2.53	0.43
3:C:3215:MET:O	3:C:3219:VAL:HG23	2.18	0.43
3:C:3366:LEU:HG	3:C:3370:TYR:CD1	2.53	0.43
3:C:3496:PHE:CE2	3:C:3555:ALA:HB3	2.53	0.43
3:C:3794:ALA:HB2	3:C:3868:VAL:HG11	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:4792:PHE:HB3	3:C:4843:ARG:NH2	2.33	0.43
3:D:514:PHE:HD2	3:D:526:TRP:HB2	1.83	0.43
3:D:881:ILE:O	3:D:885:LEU:HD23	2.18	0.43
3:D:3167:PRO:HA	3:D:3248:ARG:NH2	2.32	0.43
3:D:3366:LEU:HG	3:D:3370:TYR:CD1	2.53	0.43
3:A:1829:LEU:HG	3:A:1912:TYR:CE2	2.53	0.43
3:A:2596:VAL:HG21	3:A:2610:LEU:HD11	1.99	0.43
3:A:2911:GLU:HG2	3:A:2912:LEU:HD23	1.99	0.43
3:A:3324:GLU:HA	3:A:3327:LYS:HZ3	1.83	0.43
3:A:3627:SER:O	3:A:3631:THR:OG1	2.24	0.43
3:B:624:ALA:HB2	3:B:1667:LEU:HD12	1.99	0.43
3:B:881:ILE:O	3:B:885:LEU:HD23	2.17	0.43
3:B:1829:LEU:HG	3:B:1912:TYR:CE2	2.53	0.43
3:B:1896:MET:O	3:B:1896:MET:HG2	2.18	0.43
3:B:2087:LEU:O	3:B:2091:GLN:HG2	2.18	0.43
3:B:2176:VAL:HG22	3:B:2220:TYR:CZ	2.53	0.43
3:B:3123:LEU:HB3	3:B:3124:GLU:OE1	2.17	0.43
3:B:3174:HIS:ND1	3:B:3175:LEU:HG	2.33	0.43
3:C:2082:ARG:HG3	3:C:3687:LEU:HD22	2.01	0.43
3:C:2176:VAL:HG22	3:C:2220:TYR:CZ	2.53	0.43
3:C:3307:ILE:HD12	3:C:3375:ARG:HD3	2.00	0.43
3:C:3496:PHE:HE2	3:C:3555:ALA:HB3	1.83	0.43
3:D:3070:LYS:O	3:D:3073:GLU:HG3	2.17	0.43
3:D:4606:VAL:HA	3:D:4609:LYS:HE2	2.01	0.43
3:D:4610:LEU:HD11	3:D:4635:ILE:HG12	2.00	0.43
1:F:25:VAL:HG12	1:F:104:LEU:HA	1.99	0.43
2:J:21:ASP:OD1	2:J:22:LYS:N	2.51	0.43
2:K:21:ASP:OD1	2:K:22:LYS:N	2.51	0.43
2:K:108:HIS:CE1	3:C:1956:ALA:HA	2.53	0.43
3:A:3499:LYS:CE	3:A:3564:LYS:NZ	2.81	0.43
3:B:2062:ILE:O	3:B:2066:MET:HG2	2.18	0.43
3:B:2082:ARG:HG3	3:B:3687:LEU:HD22	2.01	0.43
3:B:2884:LYS:O	3:B:2887:GLU:HG3	2.18	0.43
3:B:3483:PRO:O	3:B:3486:GLN:HB2	2.18	0.43
3:B:3763:ILE:HD11	3:B:3838:ASP:O	2.18	0.43
3:B:4162:LYS:HD2	3:B:4203:ALA:HB1	2.00	0.43
3:C:739:ARG:HD2	3:C:739:ARG:HA	1.81	0.43
3:C:2193:VAL:HG11	3:C:2227:VAL:HG11	2.00	0.43
3:C:3035:ILE:O	3:C:3039:THR:HG23	2.19	0.43
3:C:3123:LEU:HB3	3:C:3124:GLU:OE1	2.17	0.43
3:C:3312:PRO:HA	3:C:3376:PHE:HZ	1.82	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:3653:GLU:OE1	3:C:3653:GLU:N	2.47	0.43
3:C:4752:THR:HG23	3:C:4753:LEU:HD12	2.00	0.43
3:D:1113:MET:HB2	3:D:1156:TRP:HZ2	1.82	0.43
3:D:4203:ALA:HA	3:D:4206:ILE:HG12	2.00	0.43
2:I:17:PHE:CZ	2:I:28:ILE:HG13	2.54	0.43
3:A:2062:ILE:O	3:A:2066:MET:HG2	2.18	0.43
3:A:3109:PHE:O	3:A:3165:ALA:HB2	2.19	0.43
3:B:2773:TRP:NE1	3:B:2777:GLU:OE2	2.51	0.43
3:B:3496:PHE:CE2	3:B:3555:ALA:HB3	2.53	0.43
3:B:3496:PHE:HE2	3:B:3555:ALA:HB3	1.83	0.43
3:B:4888:CYS:HB3	3:B:4891:CYS:SG	2.58	0.43
3:C:1829:LEU:HG	3:C:1912:TYR:CE2	2.53	0.43
3:C:1896:MET:HG2	3:C:1896:MET:O	2.18	0.43
3:C:2087:LEU:O	3:C:2091:GLN:HG2	2.18	0.43
3:C:2988:ARG:HD2	3:C:2990:LEU:O	2.19	0.43
3:D:931:TYR:HA	3:D:934:GLN:HB2	2.01	0.43
3:D:3840:PHE:CE1	3:D:3874:THR:HG23	2.53	0.43
1:G:25:VAL:HG12	1:G:104:LEU:HA	1.99	0.43
2:I:83:GLU:O	2:I:87:ARG:HG2	2.18	0.43
2:J:17:PHE:CZ	2:J:28:ILE:HG13	2.54	0.43
3:A:2224:ASN:O	3:A:2227:VAL:HG23	2.19	0.43
3:A:4888:CYS:HB3	3:A:4891:CYS:SG	2.58	0.43
3:B:3499:LYS:CE	3:B:3564:LYS:NZ	2.81	0.43
3:B:3661:VAL:HG23	3:B:3666:GLN:HG2	2.00	0.43
3:C:3109:PHE:O	3:C:3165:ALA:HB2	2.18	0.43
3:D:1896:MET:O	3:D:1896:MET:HG2	2.18	0.43
3:D:3483:PRO:O	3:D:3486:GLN:HB2	2.18	0.43
3:D:3794:ALA:HB2	3:D:3868:VAL:HG11	2.00	0.43
2:K:83:GLU:O	2:K:87:ARG:HG2	2.18	0.43
3:A:76:ARG:HH11	3:A:80:GLU:HG3	1.82	0.43
3:A:2082:ARG:HG3	3:A:3687:LEU:HD22	2.01	0.43
3:A:2759:PRO:O	3:A:2762:LEU:N	2.51	0.43
3:A:3763:ILE:HD11	3:A:3838:ASP:O	2.18	0.43
3:A:4584:PHE:O	3:A:4587:ILE:HG22	2.18	0.43
3:B:3370:TYR:HB3	3:B:3465:LEU:HD12	1.99	0.43
3:B:3545:GLU:HG2	3:B:3546:LYS:N	2.32	0.43
3:C:931:TYR:HA	3:C:934:GLN:HB2	2.01	0.43
3:C:2255:LEU:O	3:C:3810:ARG:NH1	2.47	0.43
3:C:2716:LYS:HG3	3:C:2717:LEU:HD22	2.00	0.43
3:C:2759:PRO:O	3:C:2762:LEU:N	2.51	0.43
3:D:1051:ARG:HA	3:D:1054:VAL:HG12	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:2759:PRO:HD3	3:D:2821:TYR:HB2	2.01	0.43
3:D:3109:PHE:O	3:D:3165:ALA:HB2	2.18	0.43
3:D:3496:PHE:HE2	3:D:3555:ALA:HB3	1.83	0.43
2:I:21:ASP:OD1	2:I:22:LYS:N	2.51	0.43
2:J:83:GLU:O	2:J:87:ARG:HG2	2.18	0.43
3:A:935:MET:O	3:A:939:THR:OG1	2.31	0.43
3:A:2258:ARG:HB3	3:A:2260:PRO:HD2	2.00	0.43
3:A:3483:PRO:O	3:A:3486:GLN:HB2	2.18	0.43
3:B:1091:GLU:HB3	3:B:1094:TYR:CD2	2.53	0.43
3:B:2716:LYS:HG3	3:B:2717:LEU:HD22	2.00	0.43
3:B:3035:ILE:O	3:B:3039:THR:HG23	2.19	0.43
3:C:2736:LYS:HD2	3:C:2757:MET:SD	2.59	0.43
3:C:3323:MET:HE1	3:C:3326:LEU:HD22	2.01	0.43
3:C:4162:LYS:HD2	3:C:4203:ALA:HB1	2.01	0.43
3:C:4606:VAL:HA	3:C:4609:LYS:HE2	2.01	0.43
3:D:758:CYS:HB3	3:D:819:TYR:CE2	2.53	0.43
3:D:1091:GLU:HB3	3:D:1094:TYR:CD2	2.53	0.43
3:D:1829:LEU:HG	3:D:1912:TYR:CE2	2.53	0.43
3:D:2176:VAL:HG22	3:D:2220:TYR:CZ	2.53	0.43
3:D:2596:VAL:HG21	3:D:2610:LEU:HD11	1.99	0.43
3:D:2884:LYS:O	3:D:2887:GLU:HG3	2.18	0.43
3:D:3470:LEU:HD12	3:D:3471:LYS:HD3	2.01	0.43
2:J:61:ASN:OD1	2:J:62:GLY:N	2.49	0.43
2:L:17:PHE:CZ	2:L:28:ILE:HG13	2.54	0.43
3:A:514:PHE:CD2	3:A:526:TRP:HB2	2.54	0.43
3:A:3331:ALA:HA	3:A:3334:VAL:HG22	2.01	0.43
3:A:3496:PHE:CE2	3:A:3555:ALA:HB3	2.53	0.43
3:A:3496:PHE:HE2	3:A:3555:ALA:HB3	1.83	0.43
3:B:115:TYR:CD1	3:B:175:VAL:HG22	2.53	0.43
3:B:330:THR:HG23	3:B:366:VAL:HG22	2.01	0.43
3:B:514:PHE:CD2	3:B:526:TRP:HB2	2.54	0.43
3:B:3312:PRO:HA	3:B:3376:PHE:HZ	1.82	0.43
3:B:4569:GLU:HB3	3:B:4570:PRO:HD3	2.00	0.43
3:C:514:PHE:CD2	3:C:526:TRP:HB2	2.54	0.43
3:C:1298:ASP:OD1	3:C:1299:ILE:N	2.52	0.43
3:C:2224:ASN:O	3:C:2227:VAL:HG23	2.19	0.43
3:C:3308:ASN:OD1	3:C:3437:SER:CB	2.61	0.43
3:C:4921:PHE:HE2	3:C:4940:VAL:HG11	1.84	0.43
3:D:150:GLN:NE2	3:D:158:CYS:SG	2.72	0.43
3:D:1966:ARG:NH2	3:D:3605:MET:O	2.52	0.43
3:D:2082:ARG:HG3	3:D:3687:LEU:HD22	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:2911:GLU:HG2	3:D:2912:LEU:HD23	1.99	0.43
3:D:2988:ARG:HD2	3:D:2990:LEU:O	2.19	0.43
3:D:3221:LEU:C	3:D:3223:GLU:H	2.22	0.43
3:D:3606:ALA:HA	3:D:3607:PRO:HD3	1.86	0.43
3:D:3661:VAL:HG23	3:D:3666:GLN:HG2	2.00	0.43
3:D:4660:PHE:C	3:D:4660:PHE:CD2	2.92	0.43
3:D:4752:THR:HG23	3:D:4753:LEU:HD12	2.00	0.43
3:D:4792:PHE:HB3	3:D:4843:ARG:NH2	2.33	0.43
3:A:3488:LEU:HA	3:A:3491:LEU:HD23	2.01	0.43
3:A:4113:THR:HA	3:A:4116:GLN:HB2	2.01	0.43
3:A:4753:LEU:HD23	3:B:4773:LEU:HD13	2.00	0.43
3:B:766:ILE:HB	3:B:779:PHE:HB2	2.01	0.43
3:B:3109:PHE:O	3:B:3165:ALA:HB2	2.18	0.43
3:B:4113:THR:HA	3:B:4116:GLN:HB2	2.01	0.43
3:C:1091:GLU:HB3	3:C:1094:TYR:HD2	1.84	0.43
3:C:1966:ARG:NH2	3:C:3605:MET:O	2.52	0.43
3:C:2422:ILE:HD11	3:D:189:GLU:OE2	2.19	0.43
3:C:3174:HIS:ND1	3:C:3175:LEU:HG	2.33	0.43
3:C:3522:PRO:O	3:C:3525:ARG:HG2	2.19	0.43
3:C:3661:VAL:HG23	3:C:3666:GLN:HG2	2.00	0.43
3:C:4903:HIS:H	3:D:4183:LYS:CD	2.27	0.43
3:D:674:TYR:CD2	3:D:815:PRO:HB3	2.54	0.43
3:D:3426:ASN:HD22	3:D:3426:ASN:HA	1.63	0.43
3:D:3545:GLU:HG2	3:D:3546:LYS:N	2.32	0.43
2:L:83:GLU:O	2:L:87:ARG:HG2	2.18	0.43
3:A:766:ILE:HB	3:A:779:PHE:HB2	2.01	0.43
3:A:3794:ALA:HB2	3:A:3868:VAL:HG11	2.00	0.43
3:A:4023:LEU:HD12	3:A:4026:LEU:HD23	2.01	0.43
3:A:4660:PHE:C	3:A:4660:PHE:CD2	2.92	0.43
3:A:4752:THR:HG23	3:A:4753:LEU:HD12	2.00	0.43
3:B:1966:ARG:NH2	3:B:3605:MET:O	2.52	0.43
3:B:2224:ASN:O	3:B:2227:VAL:HG23	2.19	0.43
3:B:3794:ALA:HB2	3:B:3868:VAL:HG11	2.00	0.43
3:B:4555:ILE:HD12	3:B:4555:ILE:HA	1.79	0.43
3:B:4770:THR:HG23	3:B:4862:ILE:HG12	2.00	0.43
3:B:4792:PHE:HB3	3:B:4843:ARG:NH2	2.33	0.43
3:B:4921:PHE:HE2	3:B:4940:VAL:HG11	1.84	0.43
3:C:1559:ARG:HD2	3:C:1565:PRO:HD3	2.00	0.43
3:C:4061:SER:O	3:C:4064:GLU:HG3	2.19	0.43
3:D:995:MET:HE3	3:D:995:MET:HB3	1.87	0.43
3:D:2087:LEU:O	3:D:2091:GLN:HG2	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:3763:ILE:HD11	3:D:3838:ASP:O	2.18	0.43
3:A:330:THR:HG23	3:A:366:VAL:HG22	2.01	0.42
3:A:3307:ILE:HD12	3:A:3375:ARG:HD3	2.00	0.42
3:A:4606:VAL:HA	3:A:4609:LYS:HE2	2.01	0.42
3:B:3071:THR:HG23	3:B:3094:ILE:HD12	2.01	0.42
3:B:3482:ALA:O	3:B:3486:GLN:HG2	2.19	0.42
3:B:3522:PRO:O	3:B:3525:ARG:HG2	2.19	0.42
3:B:4023:LEU:HD12	3:B:4026:LEU:HD23	2.01	0.42
3:B:4606:VAL:HA	3:B:4609:LYS:HE2	2.01	0.42
3:B:4625:ASP:OD1	3:B:4625:ASP:N	2.43	0.42
3:B:4863:GLN:NE2	3:C:4860:ALA:HB2	2.34	0.42
3:B:4903:HIS:H	3:C:4183:LYS:HD2	1.84	0.42
3:C:3483:PRO:O	3:C:3486:GLN:HB2	2.18	0.42
3:C:4569:GLU:HB3	3:C:4570:PRO:HD3	2.00	0.42
3:C:4770:THR:HG23	3:C:4862:ILE:HG12	2.00	0.42
3:D:76:ARG:HH11	3:D:80:GLU:HG3	1.82	0.42
3:D:766:ILE:HB	3:D:779:PHE:HB2	2.01	0.42
3:D:1559:ARG:HD2	3:D:1565:PRO:HD3	2.01	0.42
3:D:3035:ILE:O	3:D:3039:THR:HG23	2.18	0.42
2:J:77:MET:O	2:J:79:ASP:N	2.47	0.42
2:K:17:PHE:CZ	2:K:28:ILE:HG13	2.54	0.42
3:A:1943:ARG:O	3:A:1946:GLU:HG2	2.19	0.42
3:A:2988:ARG:HD2	3:A:2990:LEU:O	2.19	0.42
3:A:3035:ILE:O	3:A:3039:THR:HG23	2.19	0.42
3:A:4792:PHE:HB3	3:A:4843:ARG:NH2	2.33	0.42
3:B:674:TYR:CD2	3:B:815:PRO:HB3	2.54	0.42
3:B:718:VAL:HG23	3:B:793:SER:HB3	2.01	0.42
3:B:739:ARG:HD2	3:B:739:ARG:HA	1.81	0.42
3:B:1051:ARG:HA	3:B:1054:VAL:HG12	2.00	0.42
3:B:2193:VAL:HG11	3:B:2227:VAL:HG11	2.00	0.42
3:B:3366:LEU:HG	3:B:3370:TYR:CD1	2.53	0.42
3:C:514:PHE:HD2	3:C:526:TRP:HB2	1.83	0.42
3:C:718:VAL:HG23	3:C:793:SER:HB3	2.01	0.42
3:C:1898:LEU:HD13	3:C:1902:VAL:HG12	2.01	0.42
3:C:2759:PRO:HD3	3:C:2821:TYR:HB2	2.01	0.42
3:C:4555:ILE:HD12	3:C:4555:ILE:HA	1.79	0.42
3:D:2736:LYS:HD2	3:D:2757:MET:SD	2.59	0.42
3:D:3071:THR:HG23	3:D:3094:ILE:HD12	2.02	0.42
3:D:3307:ILE:HD12	3:D:3375:ARG:HD3	2.00	0.42
3:A:938:GLU:O	3:A:942:THR:HG23	2.20	0.42
3:A:1298:ASP:OD1	3:A:1299:ILE:N	2.52	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:1427:TYR:HB2	3:A:1563:VAL:HG11	2.02	0.42
3:A:2641:SER:HB3	3:A:2676:LEU:HD21	2.01	0.42
3:A:4203:ALA:HA	3:A:4206:ILE:HG12	2.00	0.42
3:B:1559:ARG:HD2	3:B:1565:PRO:HD3	2.00	0.42
3:C:674:TYR:CD2	3:C:815:PRO:HB3	2.54	0.42
3:C:3470:LEU:HD12	3:C:3471:LYS:HD3	2.00	0.42
3:C:4113:THR:HA	3:C:4116:GLN:HB2	2.01	0.42
3:D:2224:ASN:O	3:D:2227:VAL:HG23	2.19	0.42
3:D:2258:ARG:HB3	3:D:2260:PRO:HD2	2.00	0.42
3:D:2872:VAL:HG22	3:D:2873:PRO:HD2	2.02	0.42
3:D:3496:PHE:CE2	3:D:3555:ALA:HB3	2.53	0.42
3:D:3496:PHE:HE2	3:D:3552:LEU:O	2.00	0.42
3:D:4569:GLU:HB3	3:D:4570:PRO:HD3	2.00	0.42
3:D:4888:CYS:HB3	3:D:4891:CYS:SG	2.58	0.42
2:K:101:ILE:HD12	2:K:137:VAL:O	2.19	0.42
3:A:931:TYR:HA	3:A:934:GLN:HB2	2.01	0.42
3:A:931:TYR:O	3:A:935:MET:HG2	2.19	0.42
3:B:3214:LEU:CD2	3:B:3242:LEU:HD21	2.49	0.42
3:B:3338:ASP:HA	3:B:3341:LYS:HD2	2.01	0.42
3:D:931:TYR:O	3:D:935:MET:HG2	2.19	0.42
3:D:1220:ASP:O	3:D:1223:THR:OG1	2.28	0.42
3:D:3331:ALA:HA	3:D:3334:VAL:HG22	2.01	0.42
3:D:3522:PRO:O	3:D:3525:ARG:HG2	2.19	0.42
3:D:4023:LEU:HD12	3:D:4026:LEU:HD23	2.01	0.42
2:I:101:ILE:HD12	2:I:137:VAL:O	2.19	0.42
2:J:104:ALA:O	2:J:108:HIS:CD2	2.73	0.42
3:A:1966:ARG:NH2	3:A:3605:MET:O	2.52	0.42
3:A:3071:THR:HG23	3:A:3094:ILE:HD12	2.01	0.42
3:A:3089:GLY:O	3:A:3093:ILE:HG12	2.20	0.42
3:A:3427:ASN:CB	3:A:3463:THR:OG1	2.42	0.42
3:A:4921:PHE:HE2	3:A:4940:VAL:HG11	1.84	0.42
3:B:674:TYR:HE1	3:B:756:SER:HB3	1.84	0.42
3:B:675:TYR:CE1	3:B:790:PRO:HB3	2.55	0.42
3:B:896:ASN:HA	3:B:899:GLU:CD	2.40	0.42
3:B:931:TYR:HA	3:B:934:GLN:HB2	2.01	0.42
3:B:1427:TYR:HB2	3:B:1563:VAL:HG11	2.02	0.42
3:B:2119:LEU:HD21	3:B:2167:MET:HE1	2.01	0.42
3:B:2486:HIS:O	3:B:2490:VAL:HG22	2.20	0.42
3:B:2736:LYS:HD2	3:B:2757:MET:SD	2.59	0.42
3:B:3280:ILE:HG23	3:B:3299:LEU:HD21	2.02	0.42
3:B:3467:VAL:HB	3:B:3471:LYS:HZ3	1.84	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:3488:LEU:HA	3:B:3491:LEU:HD23	2.01	0.42
3:B:4660:PHE:C	3:B:4660:PHE:CD2	2.92	0.42
3:C:1051:ARG:HA	3:C:1054:VAL:HG12	2.01	0.42
3:C:2486:HIS:O	3:C:2490:VAL:HG22	2.20	0.42
3:C:2641:SER:HB3	3:C:2676:LEU:HD21	2.01	0.42
3:C:3496:PHE:CE2	3:C:3552:LEU:O	2.73	0.42
3:C:3763:ILE:HD11	3:C:3838:ASP:O	2.18	0.42
3:D:1298:ASP:OD1	3:D:1299:ILE:N	2.52	0.42
3:D:1898:LEU:HD13	3:D:1902:VAL:HG12	2.01	0.42
3:D:3214:LEU:CD2	3:D:3242:LEU:HD21	2.49	0.42
3:D:3488:LEU:HA	3:D:3491:LEU:HD23	2.01	0.42
1:H:45:LYS:HE2	1:H:45:LYS:HB2	1.68	0.42
1:H:83:TYR:OH	3:D:1768:PHE:O	2.21	0.42
2:J:20:PHE:O	2:J:22:LYS:HB2	2.20	0.42
3:A:2716:LYS:HG3	3:A:2717:LEU:HD22	2.00	0.42
3:A:3338:ASP:HA	3:A:3341:LYS:HD2	2.01	0.42
3:A:3496:PHE:CE2	3:A:3552:LEU:O	2.73	0.42
3:B:1100:ARG:HB3	3:B:1236:TYR:CD1	2.55	0.42
3:B:3478:LEU:HD21	3:C:1233:GLN:HB3	2.01	0.42
3:C:330:THR:HG23	3:C:366:VAL:HG22	2.01	0.42
3:C:1100:ARG:HB3	3:C:1236:TYR:CD1	2.55	0.42
3:C:2828:MET:O	3:C:2894:LYS:HD3	2.19	0.42
3:C:3221:LEU:C	3:C:3223:GLU:H	2.22	0.42
3:C:3482:ALA:O	3:C:3486:GLN:HG2	2.19	0.42
3:C:4203:ALA:HA	3:C:4206:ILE:HG12	2.00	0.42
3:D:514:PHE:CD2	3:D:526:TRP:HB2	2.54	0.42
3:D:675:TYR:CE1	3:D:790:PRO:HB3	2.55	0.42
3:D:3089:GLY:O	3:D:3093:ILE:HG12	2.20	0.42
3:D:3308:ASN:OD1	3:D:3437:SER:CB	2.61	0.42
3:D:3393:GLU:CD	3:D:3537:ARG:HH22	2.23	0.42
3:D:3496:PHE:CE2	3:D:3552:LEU:O	2.73	0.42
3:D:4162:LYS:HD2	3:D:4203:ALA:HB1	2.00	0.42
3:D:4166:LYS:O	3:D:4170:ARG:HG3	2.20	0.42
3:A:1051:ARG:HA	3:A:1054:VAL:HG12	2.01	0.42
3:A:1897:LYS:HB2	3:A:1897:LYS:HE2	1.81	0.42
3:A:2789:ILE:HD13	3:A:2903:VAL:HB	2.02	0.42
3:A:3214:LEU:CD2	3:A:3242:LEU:HD21	2.49	0.42
3:A:3470:LEU:HD12	3:A:3471:LYS:HD3	2.01	0.42
3:A:3522:PRO:O	3:A:3525:ARG:HG2	2.19	0.42
3:A:4162:LYS:HD2	3:A:4203:ALA:HB1	2.01	0.42
3:B:931:TYR:O	3:B:935:MET:HG2	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:1785:ASP:N	3:B:1785:ASP:OD1	2.53	0.42
3:B:3324:GLU:HA	3:B:3327:LYS:HZ3	1.84	0.42
3:C:1446:ILE:HG12	3:C:1542:ALA:HB2	2.01	0.42
3:C:2580:LEU:HD23	3:C:2580:LEU:HA	1.81	0.42
3:C:2872:VAL:HG22	3:C:2873:PRO:HD2	2.02	0.42
3:C:3427:ASN:HD22	3:C:3463:THR:C	2.18	0.42
3:D:1446:ILE:HG12	3:D:1542:ALA:HB2	2.01	0.42
3:D:2119:LEU:HD21	3:D:2167:MET:HE1	2.01	0.42
3:D:4113:THR:HA	3:D:4116:GLN:HB2	2.01	0.42
3:D:4641:PRO:HG2	3:D:4647:LYS:HA	2.01	0.42
2:I:77:MET:O	2:I:79:ASP:N	2.47	0.42
2:J:101:ILE:HD12	2:J:137:VAL:O	2.19	0.42
2:K:131:ILE:H	2:K:131:ILE:HG13	1.55	0.42
2:L:20:PHE:O	2:L:22:LYS:HB2	2.20	0.42
3:A:2736:LYS:HD2	3:A:2757:MET:SD	2.59	0.42
3:A:2828:MET:O	3:A:2894:LYS:HD3	2.20	0.42
3:B:3089:GLY:O	3:B:3093:ILE:HG12	2.20	0.42
3:B:3427:ASN:HB2	3:B:3463:THR:HG1	1.77	0.42
3:B:3467:VAL:O	3:B:3470:LEU:HG	2.20	0.42
3:B:3496:PHE:CE2	3:B:3552:LEU:O	2.73	0.42
3:B:3855:GLN:NE2	3:B:3925:GLN:O	2.53	0.42
3:B:4061:SER:O	3:B:4064:GLU:HG3	2.19	0.42
3:B:4203:ALA:HA	3:B:4206:ILE:HG12	2.00	0.42
3:C:938:GLU:O	3:C:942:THR:HG23	2.20	0.42
3:C:3331:ALA:HA	3:C:3334:VAL:HG22	2.01	0.42
3:C:3467:VAL:O	3:C:3470:LEU:HG	2.20	0.42
3:C:4166:LYS:O	3:C:4170:ARG:HG3	2.20	0.42
3:D:896:ASN:HA	3:D:899:GLU:CD	2.40	0.42
3:D:1729:MET:HE2	3:D:1930:ASP:HB2	2.02	0.42
3:D:1785:ASP:OD1	3:D:1785:ASP:N	2.53	0.42
3:D:3467:VAL:O	3:D:3470:LEU:HG	2.20	0.42
3:D:4091:ALA:O	3:D:4092:LYS:HB3	2.20	0.42
3:A:674:TYR:CD2	3:A:815:PRO:HB3	2.54	0.42
3:A:674:TYR:HE1	3:A:756:SER:HB3	1.83	0.42
3:A:718:VAL:HG23	3:A:793:SER:HB3	2.01	0.42
3:A:1091:GLU:HB3	3:A:1094:TYR:HD2	1.84	0.42
3:A:1444:GLY:HA3	3:A:1487:MET:HA	2.02	0.42
3:A:1559:ARG:HD2	3:A:1565:PRO:HD3	2.00	0.42
3:A:3482:ALA:O	3:A:3486:GLN:HG2	2.19	0.42
3:B:1091:GLU:HB3	3:B:1094:TYR:HD2	1.84	0.42
3:B:1298:ASP:OD1	3:B:1299:ILE:N	2.52	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:2222:LEU:HD23	3:B:2222:LEU:HA	1.92	0.42
3:B:2708:THR:HB	3:B:2780:LYS:HB3	2.02	0.42
3:B:2828:MET:O	3:B:2894:LYS:HD3	2.20	0.42
3:B:2988:ARG:HD2	3:B:2990:LEU:O	2.19	0.42
3:B:4641:PRO:HG2	3:B:4647:LYS:HA	2.02	0.42
3:C:931:TYR:O	3:C:935:MET:HG2	2.20	0.42
3:C:3071:THR:HG23	3:C:3094:ILE:HD12	2.01	0.42
3:C:3596:LYS:HD2	3:C:3597:ARG:NH1	2.35	0.42
3:D:330:THR:HG23	3:D:366:VAL:HG22	2.01	0.42
3:D:938:GLU:O	3:D:942:THR:HG23	2.20	0.42
3:D:1943:ARG:O	3:D:1946:GLU:HG2	2.19	0.42
3:D:1959:ALA:HA	3:D:1962:THR:HG22	2.01	0.42
3:D:2716:LYS:HG3	3:D:2717:LEU:HD22	2.00	0.42
3:D:2759:PRO:O	3:D:2762:LEU:N	2.51	0.42
1:F:90:GLY:HA2	3:B:638:PRO:HD3	2.01	0.42
2:L:93:PHE:HE2	2:L:101:ILE:HG23	1.85	0.42
3:A:1100:ARG:HB3	3:A:1236:TYR:CD1	2.55	0.42
3:A:1966:ARG:NE	3:A:3602:CYS:O	2.50	0.42
3:A:4091:ALA:O	3:A:4092:LYS:HB3	2.20	0.42
3:A:4092:LYS:HA	3:A:4129:PHE:CE1	2.55	0.42
3:B:1196:ASP:N	3:B:1196:ASP:OD1	2.53	0.42
3:B:2759:PRO:HD3	3:B:2821:TYR:HB2	2.01	0.42
3:B:3331:ALA:HA	3:B:3334:VAL:HG22	2.01	0.42
3:B:3466:ILE:H	3:B:3466:ILE:HD12	1.85	0.42
3:B:4092:LYS:HA	3:B:4129:PHE:CE1	2.55	0.42
3:B:4859:LEU:HD12	3:B:4859:LEU:HA	1.94	0.42
3:C:674:TYR:HE1	3:C:756:SER:HB3	1.83	0.42
3:C:896:ASN:HA	3:C:899:GLU:CD	2.40	0.42
3:C:897:LYS:HE3	5:C:5005:ATP:HN62	1.84	0.42
3:C:1419:PHE:O	3:C:1423:THR:HB	2.20	0.42
3:C:2344:LEU:HD22	3:C:2434:GLY:HA3	2.02	0.42
3:C:3495:ARG:NH1	3:C:3500:ASP:OD2	2.53	0.42
3:C:4023:LEU:HD12	3:C:4026:LEU:HD23	2.01	0.42
3:C:4091:ALA:O	3:C:4092:LYS:HB3	2.20	0.42
3:D:1091:GLU:HB3	3:D:1094:TYR:HD2	1.84	0.42
3:D:1419:PHE:O	3:D:1423:THR:HB	2.20	0.42
3:D:1444:GLY:HA3	3:D:1487:MET:HA	2.02	0.42
3:D:2690:GLU:HB2	3:D:2692:GLN:NE2	2.35	0.42
3:D:3022:PHE:CD2	3:D:3029:ILE:HD13	2.53	0.42
3:D:3596:LYS:HD2	3:D:3597:ARG:NH1	2.35	0.42
2:I:104:ALA:O	2:I:108:HIS:CD2	2.73	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:101:ILE:HD12	2:L:137:VAL:O	2.19	0.41
2:L:104:ALA:O	2:L:108:HIS:CD2	2.73	0.41
3:A:489:PHE:CD2	3:A:494:MET:HG3	2.55	0.41
3:A:675:TYR:CE1	3:A:790:PRO:HB3	2.55	0.41
3:B:489:PHE:CD2	3:B:494:MET:HG3	2.55	0.41
3:B:680:ASP:OD2	3:B:801:ARG:NE	2.53	0.41
3:B:1419:PHE:O	3:B:1423:THR:HB	2.20	0.41
3:B:2641:SER:HB3	3:B:2676:LEU:HD21	2.01	0.41
3:B:3215:MET:HA	3:B:3215:MET:CE	2.50	0.41
3:B:3396:PHE:HE1	3:B:3474:LEU:HD23	1.85	0.41
3:C:489:PHE:CD2	3:C:494:MET:HG3	2.55	0.41
3:C:766:ILE:HB	3:C:779:PHE:HB2	2.01	0.41
3:C:2258:ARG:HB3	3:C:2260:PRO:HD2	2.00	0.41
3:C:3466:ILE:H	3:C:3466:ILE:HD12	1.85	0.41
3:D:169:ARG:NE	3:D:179:ASP:OD2	2.39	0.41
3:D:1100:ARG:HB3	3:D:1236:TYR:CD1	2.55	0.41
3:D:2486:HIS:O	3:D:2490:VAL:HG22	2.20	0.41
3:D:2828:MET:O	3:D:2894:LYS:HD3	2.19	0.41
3:D:3482:ALA:O	3:D:3486:GLN:HG2	2.19	0.41
3:D:3495:ARG:NH1	3:D:3500:ASP:OD2	2.53	0.41
1:G:3:VAL:HG11	1:G:62:GLU:HG3	2.02	0.41
2:I:101:ILE:HD11	2:I:139:TYR:CD1	2.55	0.41
2:I:123:ASP:O	2:I:127:ARG:HD3	2.21	0.41
2:K:20:PHE:O	2:K:22:LYS:HB2	2.20	0.41
2:K:101:ILE:HD11	2:K:139:TYR:CD1	2.55	0.41
2:L:38:ARG:HD2	2:L:43:ASN:HA	2.03	0.41
3:A:1196:ASP:OD1	3:A:1196:ASP:N	2.53	0.41
3:A:2690:GLU:HB2	3:A:2692:GLN:NE2	2.35	0.41
3:A:3297:LYS:HB3	3:A:3297:LYS:HE3	1.34	0.41
3:B:1943:ARG:O	3:B:1946:GLU:HG2	2.19	0.41
3:B:2720:PHE:CE1	3:B:2896:LEU:HD23	2.55	0.41
3:B:2757:MET:HE2	3:B:2757:MET:HB2	1.61	0.41
3:B:3606:ALA:HA	3:B:3607:PRO:HD3	1.86	0.41
3:B:3890:TRP:CD2	3:C:76:ARG:HD3	2.55	0.41
3:B:4091:ALA:O	3:B:4092:LYS:HB3	2.20	0.41
3:C:614:LEU:HD22	3:C:632:ILE:HG12	2.02	0.41
3:C:1785:ASP:OD1	3:C:1785:ASP:N	2.53	0.41
3:C:3214:LEU:CD2	3:C:3242:LEU:HD21	2.49	0.41
3:C:3378:ASP:OD1	3:C:3379:TYR:N	2.53	0.41
3:C:4137:GLU:O	3:C:4918:TYR:OH	2.32	0.41
3:C:4191:ASN:OD1	3:C:4608:ARG:NH1	2.52	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:4641:PRO:HG2	3:C:4647:LYS:HA	2.01	0.41
3:D:1972:GLN:O	3:D:1975:MET:HG3	2.21	0.41
3:D:2247:VAL:HG11	3:D:2257:LEU:HD21	2.03	0.41
3:D:3323:MET:HE1	3:D:3326:LEU:HD22	2.02	0.41
3:D:3338:ASP:HA	3:D:3341:LYS:HD2	2.01	0.41
1:E:83:TYR:OH	3:A:1768:PHE:O	2.24	0.41
2:J:101:ILE:HD11	2:J:139:TYR:CD1	2.55	0.41
2:L:4:GLN:OE1	2:L:4:GLN:N	2.53	0.41
3:A:614:LEU:HD22	3:A:632:ILE:HG12	2.02	0.41
3:A:2759:PRO:HD3	3:A:2821:TYR:HB2	2.01	0.41
3:A:3505:VAL:CG2	3:A:3552:LEU:HD13	2.50	0.41
3:A:4061:SER:O	3:A:4064:GLU:HG3	2.19	0.41
3:A:4191:ASN:OD1	3:A:4608:ARG:NH1	2.52	0.41
3:A:4660:PHE:O	3:A:4660:PHE:HD2	2.04	0.41
3:B:614:LEU:HD22	3:B:632:ILE:HG12	2.02	0.41
3:B:897:LYS:HE3	5:B:5005:ATP:HN62	1.85	0.41
3:B:938:GLU:O	3:B:942:THR:HG23	2.20	0.41
3:B:3221:LEU:C	3:B:3223:GLU:H	2.22	0.41
3:B:3296:MET:HE2	3:B:3296:MET:HB2	1.95	0.41
3:B:3378:ASP:OD1	3:B:3379:TYR:N	2.53	0.41
3:B:3495:ARG:NH1	3:B:3500:ASP:OD2	2.53	0.41
3:B:3505:VAL:CG2	3:B:3552:LEU:HD13	2.50	0.41
3:C:675:TYR:CE1	3:C:790:PRO:HB3	2.55	0.41
3:C:2119:LEU:HD21	3:C:2167:MET:HE1	2.01	0.41
3:C:3022:PHE:CD2	3:C:3029:ILE:HD13	2.53	0.41
3:D:698:ALA:HB3	3:D:789:PHE:CE1	2.56	0.41
3:D:2332:GLY:O	3:D:2336:ARG:HG3	2.21	0.41
3:D:2344:LEU:HD22	3:D:2434:GLY:HA3	2.02	0.41
3:D:2641:SER:HB3	3:D:2676:LEU:HD21	2.01	0.41
3:D:3378:ASP:OD1	3:D:3379:TYR:N	2.53	0.41
3:D:4921:PHE:HE2	3:D:4940:VAL:HG11	1.84	0.41
1:G:43:ARG:HA	3:C:1682:GLU:OE2	2.20	0.41
2:I:93:PHE:HE2	2:I:101:ILE:HG23	1.85	0.41
2:K:123:ASP:O	2:K:127:ARG:HD3	2.21	0.41
3:A:612:ASP:OD1	3:A:1656:HIS:ND1	2.54	0.41
3:A:1898:LEU:HD13	3:A:1902:VAL:HG12	2.01	0.41
3:A:2119:LEU:HD21	3:A:2167:MET:HE1	2.01	0.41
3:A:2235:ARG:HG2	3:A:2297:ARG:NH1	2.31	0.41
3:A:2332:GLY:O	3:A:2336:ARG:HG3	2.20	0.41
3:A:2872:VAL:HG22	3:A:2873:PRO:HD2	2.02	0.41
3:A:2917:ILE:HD11	3:A:2999:LYS:HB3	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:3215:MET:HA	3:A:3215:MET:CE	2.51	0.41
3:A:3378:ASP:OD1	3:A:3379:TYR:N	2.53	0.41
3:A:3596:LYS:HD2	3:A:3597:ARG:NH1	2.35	0.41
3:A:3975:GLN:O	3:A:3979:VAL:HG23	2.20	0.41
3:B:505:LEU:HD23	3:B:505:LEU:HA	1.92	0.41
3:B:1898:LEU:HD13	3:B:1902:VAL:HG12	2.01	0.41
3:B:2872:VAL:HG22	3:B:2873:PRO:HD2	2.02	0.41
3:B:3470:LEU:HD12	3:B:3471:LYS:HD3	2.01	0.41
3:C:1444:GLY:HA3	3:C:1487:MET:HA	2.02	0.41
3:C:1959:ALA:HA	3:C:1962:THR:HG22	2.01	0.41
3:C:1972:GLN:O	3:C:1975:MET:HG3	2.21	0.41
3:C:2708:THR:HB	3:C:2780:LYS:HB3	2.03	0.41
3:C:3215:MET:CE	3:C:3215:MET:HA	2.51	0.41
3:C:3280:ILE:HG23	3:C:3299:LEU:HD21	2.02	0.41
3:C:3338:ASP:HA	3:C:3341:LYS:HD2	2.01	0.41
3:C:3396:PHE:HE1	3:C:3474:LEU:HD23	1.86	0.41
3:C:3855:GLN:NE2	3:C:3925:GLN:O	2.53	0.41
3:D:552:SER:HA	3:D:555:LEU:HD13	2.02	0.41
3:D:2724:TYR:HB3	3:D:2775:ILE:HD13	2.02	0.41
1:H:3:VAL:HG11	1:H:62:GLU:HG3	2.02	0.41
2:I:38:ARG:HD2	2:I:43:ASN:HA	2.02	0.41
3:A:713:TRP:CZ2	3:A:1251:LEU:HD21	2.55	0.41
3:A:896:ASN:HA	3:A:899:GLU:CD	2.40	0.41
3:A:1959:ALA:HA	3:A:1962:THR:HG22	2.01	0.41
3:A:2486:HIS:O	3:A:2490:VAL:HG22	2.20	0.41
3:A:2720:PHE:CE1	3:A:2896:LEU:HD23	2.56	0.41
3:B:1929:SER:HG	3:B:3620:PHE:HD2	1.68	0.41
3:B:2789:ILE:HD13	3:B:2903:VAL:HB	2.02	0.41
3:B:2856:LYS:HD3	3:B:2859:GLU:OE2	2.21	0.41
3:B:4166:LYS:O	3:B:4170:ARG:HG3	2.20	0.41
3:C:680:ASP:OD2	3:C:801:ARG:NE	2.53	0.41
3:C:1943:ARG:O	3:C:1946:GLU:HG2	2.19	0.41
3:C:2332:GLY:O	3:C:2336:ARG:HG3	2.20	0.41
3:C:3488:LEU:HA	3:C:3491:LEU:HD23	2.01	0.41
3:D:612:ASP:OD1	3:D:1656:HIS:ND1	2.54	0.41
3:D:1427:TYR:HB2	3:D:1563:VAL:HG11	2.02	0.41
3:D:4660:PHE:O	3:D:4660:PHE:HD2	2.03	0.41
1:F:3:VAL:HG11	1:F:62:GLU:HG3	2.03	0.41
2:K:4:GLN:OE1	2:K:4:GLN:N	2.53	0.41
3:A:162:ILE:O	3:A:163:HIS:ND1	2.54	0.41
3:A:2261:ASP:O	3:A:2265:VAL:HG23	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:2934:ASP:O	3:A:2938:GLN:HG2	2.21	0.41
3:B:1972:GLN:O	3:B:1975:MET:HG3	2.21	0.41
3:B:2697:SER:O	3:B:2699:GLY:N	2.48	0.41
3:B:2893:LEU:HD13	3:B:2896:LEU:HD12	2.03	0.41
3:B:3596:LYS:HD2	3:B:3597:ARG:NH1	2.35	0.41
3:C:612:ASP:OD1	3:C:1656:HIS:ND1	2.54	0.41
3:C:1711:LEU:HB3	3:C:1831:MET:SD	2.61	0.41
3:C:2247:VAL:HG11	3:C:2257:LEU:HD21	2.03	0.41
3:C:2856:LYS:HD3	3:C:2859:GLU:OE2	2.21	0.41
3:C:3393:GLU:CD	3:C:3537:ARG:HH22	2.23	0.41
3:C:4107:GLU:OE1	3:C:4149:TYR:OH	2.23	0.41
3:D:614:LEU:HD22	3:D:632:ILE:HG12	2.02	0.41
3:D:674:TYR:HE1	3:D:756:SER:HB3	1.83	0.41
3:D:1196:ASP:OD1	3:D:1196:ASP:N	2.53	0.41
3:D:2154:VAL:HG13	3:D:2158:HIS:CD2	2.56	0.41
3:D:4509:VAL:CG1	3:D:4579:HIS:HB2	2.51	0.41
3:D:4721:TYR:OH	3:D:4745:ASP:OD1	2.31	0.41
1:E:3:VAL:HG11	1:E:62:GLU:HG3	2.03	0.41
2:J:1:MET:O	2:J:1:MET:SD	2.79	0.41
2:J:4:GLN:OE1	2:J:4:GLN:N	2.53	0.41
2:K:93:PHE:HE2	2:K:101:ILE:HG23	1.85	0.41
3:A:252:HIS:C	3:A:257:ARG:HH12	2.24	0.41
3:A:967:PRO:HB2	3:A:969:ASN:OD1	2.21	0.41
3:A:1785:ASP:OD1	3:A:1785:ASP:N	2.53	0.41
3:A:2708:THR:HB	3:A:2780:LYS:HB3	2.03	0.41
3:A:3280:ILE:HG23	3:A:3299:LEU:HD21	2.02	0.41
3:A:3488:LEU:HA	3:A:3491:LEU:CD2	2.51	0.41
3:A:4166:LYS:O	3:A:4170:ARG:HG3	2.20	0.41
3:A:4509:VAL:CG1	3:A:4579:HIS:HB2	2.51	0.41
3:B:612:ASP:OD1	3:B:1656:HIS:ND1	2.54	0.41
3:B:2247:VAL:HG11	3:B:2257:LEU:HD21	2.03	0.41
3:C:2760:TYR:CE1	3:C:2768:LYS:HG2	2.56	0.41
3:C:3975:GLN:O	3:C:3979:VAL:HG23	2.21	0.41
3:C:4092:LYS:HA	3:C:4129:PHE:CE1	2.55	0.41
3:C:4172:PHE:CZ	3:C:4189:PHE:HA	2.56	0.41
3:D:3397:ARG:NH2	3:D:3550:ARG:HD2	2.24	0.41
2:L:1:MET:SD	2:L:1:MET:O	2.79	0.41
3:A:897:LYS:HE3	5:A:5005:ATP:HN62	1.85	0.41
3:A:1929:SER:HG	3:A:3620:PHE:HD2	1.67	0.41
3:A:2241:ASP:OD2	3:A:2297:ARG:NH2	2.54	0.41
3:A:2247:VAL:HG11	3:A:2257:LEU:HD21	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:2255:LEU:O	3:A:3810:ARG:NH1	2.47	0.41
3:A:3152:ARG:HA	3:A:3155:LEU:HD12	2.03	0.41
3:A:3396:PHE:HE1	3:A:3474:LEU:HD23	1.86	0.41
3:A:3466:ILE:H	3:A:3466:ILE:HD12	1.85	0.41
3:A:3495:ARG:NH1	3:A:3500:ASP:OD2	2.53	0.41
3:B:1446:ILE:HG12	3:B:1542:ALA:HB2	2.01	0.41
3:B:1711:LEU:HB3	3:B:1831:MET:SD	2.61	0.41
3:B:2241:ASP:OD2	3:B:2297:ARG:NH2	2.54	0.41
3:B:3312:PRO:HA	3:B:3376:PHE:CZ	2.56	0.41
3:B:3393:GLU:CD	3:B:3537:ARG:HH22	2.23	0.41
3:B:3890:TRP:CE3	3:C:76:ARG:HD3	2.55	0.41
3:B:4753:LEU:CD1	3:C:4769:LEU:HB3	2.50	0.41
3:C:1914:CYS:SG	3:C:2091:GLN:NE2	2.78	0.41
3:C:2488:LEU:HD11	3:C:2548:LEU:HD13	2.03	0.41
3:C:2893:LEU:HD13	3:C:2896:LEU:HD12	2.03	0.41
3:C:4660:PHE:C	3:C:4660:PHE:CD2	2.92	0.41
3:D:162:ILE:O	3:D:163:HIS:ND1	2.54	0.41
3:D:252:HIS:C	3:D:257:ARG:HH12	2.24	0.41
3:D:661:LEU:HD13	3:D:673:TRP:CD1	2.56	0.41
3:D:1711:LEU:HB3	3:D:1831:MET:SD	2.61	0.41
3:D:2488:LEU:HD11	3:D:2548:LEU:HD13	2.03	0.41
3:D:2917:ILE:HD11	3:D:2999:LYS:HB3	2.03	0.41
3:D:2984:SER:O	3:D:3001:LYS:NZ	2.32	0.41
3:D:3102:LEU:HB2	3:D:3103:PRO:HD3	2.03	0.41
3:D:3499:LYS:CE	3:D:3564:LYS:NZ	2.81	0.41
3:D:3505:VAL:CG2	3:D:3552:LEU:HD13	2.50	0.41
2:K:104:ALA:O	2:K:108:HIS:CD2	2.73	0.41
2:L:6:THR:HG1	2:L:9:GLN:CD	2.17	0.41
2:L:101:ILE:HD11	2:L:139:TYR:CD1	2.55	0.41
2:L:123:ASP:O	2:L:127:ARG:HD3	2.21	0.41
3:A:229:ILE:HG22	3:A:288:HIS:CD2	2.56	0.41
3:A:552:SER:HA	3:A:555:LEU:HD13	2.02	0.41
3:A:661:LEU:HD13	3:A:673:TRP:CD1	2.56	0.41
3:A:680:ASP:OD2	3:A:801:ARG:NE	2.53	0.41
3:A:698:ALA:HB3	3:A:789:PHE:CE1	2.56	0.41
3:A:739:ARG:HD2	3:A:739:ARG:HA	1.81	0.41
3:A:1972:GLN:O	3:A:1975:MET:HG3	2.21	0.41
3:A:2154:VAL:HG13	3:A:2158:HIS:CD2	2.56	0.41
3:A:2724:TYR:HB3	3:A:2775:ILE:HD13	2.02	0.41
3:A:2760:TYR:CE1	3:A:2768:LYS:HG2	2.56	0.41
3:A:3221:LEU:C	3:A:3223:GLU:H	2.22	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:3323:MET:HE1	3:A:3326:LEU:HD22	2.02	0.41
3:A:3393:GLU:CD	3:A:3537:ARG:HH22	2.23	0.41
3:A:3467:VAL:O	3:A:3470:LEU:HG	2.20	0.41
3:A:3855:GLN:NE2	3:A:3925:GLN:O	2.53	0.41
3:B:252:HIS:C	3:B:257:ARG:HH12	2.24	0.41
3:B:698:ALA:HB3	3:B:789:PHE:CE1	2.56	0.41
3:B:713:TRP:CZ2	3:B:1251:LEU:HD21	2.55	0.41
3:B:1267:HIS:HB3	3:B:1287:GLN:NE2	2.36	0.41
3:B:1444:GLY:HA3	3:B:1487:MET:HA	2.02	0.41
3:B:1914:CYS:SG	3:B:2091:GLN:NE2	2.78	0.41
3:B:2645:PHE:HB2	3:B:2672:VAL:HG11	2.03	0.41
3:B:2934:ASP:O	3:B:2938:GLN:HG2	2.21	0.41
3:B:3152:ARG:HA	3:B:3155:LEU:HD12	2.03	0.41
3:B:3427:ASN:HD22	3:B:3463:THR:C	2.18	0.41
3:B:3488:LEU:HA	3:B:3491:LEU:CD2	2.51	0.41
3:B:3493:LYS:HZ3	3:B:3558:LEU:HB3	1.84	0.41
3:B:3534:LEU:HA	3:B:3535:PRO:HD3	1.97	0.41
3:C:147:VAL:HG21	3:C:192:LEU:HD23	2.03	0.41
3:C:229:ILE:HG22	3:C:288:HIS:CD2	2.56	0.41
3:C:252:HIS:C	3:C:257:ARG:HH12	2.24	0.41
3:C:698:ALA:HB3	3:C:789:PHE:CE1	2.56	0.41
3:C:1196:ASP:N	3:C:1196:ASP:OD1	2.53	0.41
3:C:1267:HIS:HB3	3:C:1287:GLN:NE2	2.36	0.41
3:C:1427:TYR:HB2	3:C:1563:VAL:HG11	2.02	0.41
3:C:2261:ASP:O	3:C:2265:VAL:HG23	2.21	0.41
3:C:2720:PHE:CE1	3:C:2896:LEU:HD23	2.55	0.41
3:C:2789:ILE:HD13	3:C:2903:VAL:HB	2.02	0.41
3:C:2930:ILE:HD12	3:C:3003:MET:HE2	2.02	0.41
3:C:3089:GLY:O	3:C:3093:ILE:HG12	2.20	0.41
3:D:21:VAL:HG23	3:D:215:ALA:HB3	2.03	0.41
3:D:111:ARG:HA	3:D:111:ARG:HD3	1.69	0.41
3:D:147:VAL:HG21	3:D:192:LEU:HD23	2.03	0.41
3:D:192:LEU:O	3:D:210:THR:HG22	2.21	0.41
3:D:489:PHE:CD2	3:D:494:MET:HG3	2.55	0.41
3:D:648:LEU:HD23	3:D:648:LEU:HA	1.94	0.41
3:D:718:VAL:HG23	3:D:793:SER:HB3	2.01	0.41
3:D:1267:HIS:HB3	3:D:1287:GLN:NE2	2.36	0.41
3:D:1843:LEU:HD23	3:D:1843:LEU:HA	1.95	0.41
3:D:2261:ASP:O	3:D:2265:VAL:HG23	2.21	0.41
3:D:2708:THR:HB	3:D:2780:LYS:HB3	2.02	0.41
3:D:2720:PHE:CE1	3:D:2896:LEU:HD23	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:2856:LYS:HD3	3:D:2859:GLU:OE2	2.21	0.41
3:D:3159:LEU:HD12	3:D:3159:LEU:HA	1.95	0.41
3:D:3396:PHE:HE1	3:D:3474:LEU:HD23	1.85	0.41
3:D:3488:LEU:HA	3:D:3491:LEU:CD2	2.51	0.41
3:D:4061:SER:O	3:D:4064:GLU:HG3	2.19	0.41
2:I:45:THR:N	2:I:48:GLU:HB2	2.36	0.41
2:J:45:THR:N	2:J:48:GLU:HB2	2.36	0.41
2:K:45:THR:N	2:K:48:GLU:HB2	2.36	0.41
3:A:1419:PHE:O	3:A:1423:THR:HB	2.20	0.41
3:A:1728:PRO:HD3	3:A:1757:LEU:HG	2.03	0.41
3:A:3102:LEU:HB2	3:A:3103:PRO:HD3	2.03	0.41
3:A:3398:MET:O	3:A:3402:VAL:HG23	2.21	0.41
3:A:3493:LYS:HZ2	3:A:3558:LEU:CD1	2.34	0.41
3:A:4649:VAL:HA	3:A:4652:LYS:HG2	2.03	0.41
3:B:150:GLN:NE2	3:B:158:CYS:SG	2.72	0.41
3:B:808:HIS:CG	3:B:832:LEU:HD23	2.56	0.41
3:B:877:HIS:O	3:B:880:ARG:HD3	2.21	0.41
3:B:2261:ASP:O	3:B:2265:VAL:HG23	2.21	0.41
3:B:2655:LYS:O	3:B:2958:GLN:NE2	2.54	0.41
3:B:2724:TYR:HB3	3:B:2775:ILE:HD13	2.02	0.41
3:C:3333:VAL:HA	3:C:3336:GLU:CD	2.42	0.41
3:C:3423:ASN:O	3:C:3425:ILE:CD1	2.46	0.41
3:D:310:GLU:OE1	3:D:310:GLU:N	2.31	0.41
3:D:877:HIS:O	3:D:880:ARG:HD3	2.21	0.41
3:D:1728:PRO:HD3	3:D:1757:LEU:HG	2.03	0.41
3:D:2255:LEU:O	3:D:3810:ARG:NH1	2.47	0.41
3:D:2760:TYR:CE1	3:D:2768:LYS:HG2	2.56	0.41
3:D:3427:ASN:HD22	3:D:3463:THR:C	2.18	0.41
3:D:4092:LYS:HA	3:D:4129:PHE:CE1	2.55	0.41
3:D:4832:GLU:HG2	3:D:4833:ASP:H	1.86	0.41
1:G:88:HIS:CD2	1:G:89:PRO:HD2	2.56	0.40
2:I:20:PHE:O	2:I:22:LYS:HB2	2.20	0.40
2:I:141:GLU:HA	2:I:144:GLN:NE2	2.36	0.40
2:L:22:LYS:HA	2:L:22:LYS:HD2	1.81	0.40
3:A:192:LEU:O	3:A:210:THR:HG22	2.21	0.40
3:A:808:HIS:CG	3:A:832:LEU:HD23	2.56	0.40
3:A:2419:ILE:HA	3:A:2422:ILE:HD12	2.03	0.40
3:A:2837:LEU:HD22	3:A:2897:GLN:NE2	2.37	0.40
3:A:4641:PRO:HG2	3:A:4647:LYS:HA	2.01	0.40
3:B:349:MET:CE	3:B:349:MET:HA	2.51	0.40
3:B:552:SER:HA	3:B:555:LEU:HD13	2.02	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:1959:ALA:HA	3:B:1962:THR:HG22	2.01	0.40
3:B:2332:GLY:O	3:B:2336:ARG:HG3	2.21	0.40
3:B:2930:ILE:HD12	3:B:3003:MET:HE2	2.03	0.40
3:B:3102:LEU:HB2	3:B:3103:PRO:HD3	2.03	0.40
3:B:3333:VAL:HA	3:B:3336:GLU:CD	2.41	0.40
3:B:4191:ASN:OD1	3:B:4608:ARG:NH1	2.52	0.40
3:B:4660:PHE:O	3:B:4660:PHE:HD2	2.04	0.40
3:C:21:VAL:HG23	3:C:215:ALA:HB3	2.03	0.40
3:C:192:LEU:O	3:C:210:THR:HG22	2.21	0.40
3:C:967:PRO:HB2	3:C:969:ASN:OD1	2.21	0.40
3:C:2826:ILE:HD12	3:D:1501:ASN:ND2	2.35	0.40
3:C:3152:ARG:HA	3:C:3155:LEU:HD12	2.03	0.40
3:C:3315:LEU:HA	3:C:3319:PHE:HB2	2.04	0.40
3:C:3478:LEU:HD21	3:D:1233:GLN:CB	2.46	0.40
3:C:4509:VAL:CG1	3:C:4579:HIS:HB2	2.51	0.40
3:C:4678:ASP:OD1	3:C:4678:ASP:N	2.55	0.40
3:D:2241:ASP:OD2	3:D:2297:ARG:NH2	2.54	0.40
3:D:3215:MET:HA	3:D:3215:MET:CE	2.51	0.40
3:D:3505:VAL:HG23	3:D:3552:LEU:CD1	2.52	0.40
3:D:4650:LYS:HG2	3:D:4670:LEU:HD22	2.03	0.40
1:E:88:HIS:CD2	1:E:89:PRO:HD2	2.56	0.40
2:I:1:MET:O	2:I:1:MET:SD	2.79	0.40
2:J:123:ASP:O	2:J:127:ARG:HD3	2.21	0.40
2:L:45:THR:N	2:L:48:GLU:HB2	2.36	0.40
3:A:23:GLN:HG2	3:A:36:CYS:SG	2.61	0.40
3:A:147:VAL:HG21	3:A:192:LEU:HD23	2.03	0.40
3:A:2763:LEU:O	3:A:2768:LYS:HE2	2.22	0.40
3:A:4176:VAL:HA	3:A:4180:GLY:HA3	2.03	0.40
3:B:23:GLN:HG2	3:B:36:CYS:SG	2.61	0.40
3:B:3975:GLN:O	3:B:3979:VAL:HG23	2.21	0.40
3:B:4172:PHE:CZ	3:B:4189:PHE:HA	2.56	0.40
3:C:552:SER:HA	3:C:555:LEU:HD13	2.02	0.40
3:C:2426:LEU:HG	3:D:143:LEU:HD13	2.03	0.40
3:C:2724:TYR:HB3	3:C:2775:ILE:HD13	2.02	0.40
3:C:2917:ILE:HD11	3:C:2999:LYS:HB3	2.03	0.40
3:C:2934:ASP:O	3:C:2938:GLN:HG2	2.21	0.40
3:D:897:LYS:HE3	5:D:5005:ATP:HN62	1.84	0.40
3:D:967:PRO:HB2	3:D:969:ASN:OD1	2.21	0.40
3:D:3152:ARG:HA	3:D:3155:LEU:HD12	2.03	0.40
3:D:4172:PHE:CZ	3:D:4189:PHE:HA	2.56	0.40
3:A:911:ASN:OD1	3:A:912:LYS:N	2.55	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:992:GLN:O	3:A:996:VAL:HG23	2.22	0.40
3:A:2645:PHE:HB2	3:A:2672:VAL:HG11	2.03	0.40
3:A:2893:LEU:HD13	3:A:2896:LEU:HD12	2.03	0.40
3:A:3122:ILE:O	3:A:3123:LEU:HD22	2.22	0.40
3:A:4832:GLU:HG2	3:A:4833:ASP:H	1.86	0.40
3:B:229:ILE:HG22	3:B:288:HIS:CD2	2.56	0.40
3:B:967:PRO:HB2	3:B:969:ASN:OD1	2.21	0.40
3:B:2904:SER:HB2	3:B:2908:LYS:HZ3	1.87	0.40
3:B:3315:LEU:HA	3:B:3319:PHE:HB2	2.04	0.40
3:B:3505:VAL:HG23	3:B:3552:LEU:CD1	2.51	0.40
3:B:4509:VAL:CG1	3:B:4579:HIS:HB2	2.51	0.40
3:B:4832:GLU:HG2	3:B:4833:ASP:H	1.86	0.40
3:C:111:ARG:HD3	3:C:111:ARG:HA	1.69	0.40
3:C:2407:HIS:CE1	3:C:2408:LEU:HG	2.56	0.40
3:C:2763:LEU:O	3:C:2768:LYS:HE2	2.22	0.40
3:C:2837:LEU:HD22	3:C:2897:GLN:NE2	2.36	0.40
3:C:3312:PRO:HA	3:C:3376:PHE:CZ	2.56	0.40
3:C:3505:VAL:CG2	3:C:3552:LEU:HD13	2.50	0.40
3:C:4650:LYS:HG2	3:C:4670:LEU:HD22	2.04	0.40
3:D:2655:LYS:O	3:D:2958:GLN:NE2	2.54	0.40
3:D:2893:LEU:HD13	3:D:2896:LEU:HD12	2.03	0.40
3:D:3329:LYS:O	3:D:3333:VAL:HG23	2.21	0.40
3:D:4649:VAL:HA	3:D:4652:LYS:HG2	2.03	0.40
2:J:38:ARG:HD2	2:J:43:ASN:HA	2.02	0.40
2:J:93:PHE:HE2	2:J:101:ILE:HG23	1.85	0.40
2:L:67:PRO:HB2	3:D:2202:TYR:CZ	2.57	0.40
2:L:121:GLU:HG2	2:L:122:VAL:H	1.87	0.40
3:A:1446:ILE:HG12	3:A:1542:ALA:HB2	2.01	0.40
3:A:3505:VAL:HG23	3:A:3552:LEU:CD1	2.52	0.40
3:A:4172:PHE:CZ	3:A:4189:PHE:HA	2.56	0.40
3:A:4678:ASP:OD1	3:A:4678:ASP:N	2.55	0.40
3:B:1792:ILE:HD11	3:B:1838:ASP:HB3	2.04	0.40
3:B:1897:LYS:HB2	3:B:1897:LYS:HE2	1.80	0.40
3:B:2760:TYR:CE1	3:B:2768:LYS:HG2	2.56	0.40
3:B:4600:PHE:HB2	3:B:4643:ASN:HB3	2.04	0.40
3:B:4650:LYS:HG2	3:B:4670:LEU:HD22	2.03	0.40
3:C:495:ILE:H	3:C:495:ILE:HD12	1.87	0.40
3:C:969:ASN:OD1	3:C:970:TYR:N	2.55	0.40
3:C:1220:ASP:O	3:C:1223:THR:OG1	2.28	0.40
3:C:1415:ASP:OD1	3:C:1415:ASP:N	2.55	0.40
3:C:3102:LEU:HB2	3:C:3103:PRO:HD3	2.03	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:3122:ILE:O	3:C:3123:LEU:HD22	2.22	0.40
3:C:3505:VAL:HG23	3:C:3552:LEU:CD1	2.52	0.40
3:D:349:MET:HA	3:D:349:MET:CE	2.51	0.40
3:D:765:SER:HA	3:D:779:PHE:O	2.21	0.40
3:D:1139:GLY:HA3	3:D:1156:TRP:CE3	2.56	0.40
3:D:1792:ILE:HD11	3:D:1838:ASP:HB3	2.04	0.40
3:D:2407:HIS:CE1	3:D:2408:LEU:HG	2.56	0.40
3:D:2487:LEU:HA	3:D:2490:VAL:HG22	2.04	0.40
3:D:2757:MET:HE2	3:D:2757:MET:HB2	1.62	0.40
3:D:2837:LEU:HD22	3:D:2897:GLN:NE2	2.36	0.40
3:D:3280:ILE:HG23	3:D:3299:LEU:HD21	2.02	0.40
3:D:3509:ILE:CD1	3:D:3552:LEU:CD2	2.95	0.40
1:E:90:GLY:HA2	3:A:638:PRO:HD3	2.04	0.40
2:K:1:MET:O	2:K:1:MET:SD	2.79	0.40
2:L:141:GLU:HA	2:L:144:GLN:NE2	2.36	0.40
3:A:648:LEU:HD23	3:A:648:LEU:HA	1.94	0.40
3:A:1711:LEU:HB3	3:A:1831:MET:SD	2.61	0.40
3:A:2635:GLU:OE2	3:A:2680:TYR:OH	2.35	0.40
3:A:2856:LYS:HD3	3:A:2859:GLU:OE2	2.21	0.40
3:A:4847:ASP:OD2	3:D:4818:TYR:OH	2.29	0.40
3:B:992:GLN:O	3:B:996:VAL:HG23	2.22	0.40
3:B:1988:CYS:HA	3:B:1989:PRO:HD3	1.97	0.40
3:B:2419:ILE:HA	3:B:2422:ILE:HD12	2.03	0.40
3:B:3320:LEU:CD2	3:B:3321:PRO:HD3	2.51	0.40
3:B:3366:LEU:HG	3:B:3370:TYR:CE1	2.57	0.40
3:B:4176:VAL:HA	3:B:4180:GLY:HA3	2.03	0.40
3:C:877:HIS:O	3:C:880:ARG:HD3	2.21	0.40
3:C:1139:GLY:HA3	3:C:1156:TRP:CE3	2.56	0.40
3:C:1792:ILE:HD11	3:C:1838:ASP:HB3	2.04	0.40
3:C:2241:ASP:OD2	3:C:2297:ARG:NH2	2.54	0.40
3:C:2496:LEU:HD23	3:C:2520:LEU:HD13	2.03	0.40
3:C:2655:LYS:O	3:C:2958:GLN:NE2	2.55	0.40
3:D:739:ARG:HA	3:D:739:ARG:HD2	1.81	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	E	105/108 (97%)	101 (96%)	4 (4%)	0	100	100
1	F	105/108 (97%)	101 (96%)	4 (4%)	0	100	100
1	G	105/108 (97%)	101 (96%)	4 (4%)	0	100	100
1	H	105/108 (97%)	101 (96%)	4 (4%)	0	100	100
2	I	136/149 (91%)	124 (91%)	12 (9%)	0	100	100
2	J	136/149 (91%)	124 (91%)	12 (9%)	0	100	100
2	K	136/149 (91%)	124 (91%)	12 (9%)	0	100	100
2	L	136/149 (91%)	124 (91%)	12 (9%)	0	100	100
3	A	4343/4967 (87%)	4192 (96%)	147 (3%)	4 (0%)	48	72
3	B	4343/4967 (87%)	4191 (96%)	148 (3%)	4 (0%)	48	72
3	C	4343/4967 (87%)	4192 (96%)	147 (3%)	4 (0%)	48	72
3	D	4343/4967 (87%)	4191 (96%)	148 (3%)	4 (0%)	48	72
All	All	18336/20896 (88%)	17666 (96%)	654 (4%)	16 (0%)	50	72

All (16) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	A	1495	SER
3	A	2358	SER
3	B	1495	SER
3	B	2358	SER
3	C	1495	SER
3	C	2358	SER
3	D	1495	SER
3	D	2358	SER
3	A	1955	ALA
3	B	1955	ALA
3	C	1955	ALA
3	D	1955	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	A	313	ASN
3	B	313	ASN
3	C	313	ASN
3	D	313	ASN

5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	E	88/89 (99%)	85 (97%)	3 (3%)	32	56
1	F	88/89 (99%)	85 (97%)	3 (3%)	32	56
1	G	88/89 (99%)	85 (97%)	3 (3%)	32	56
1	H	88/89 (99%)	85 (97%)	3 (3%)	32	56
2	I	119/127 (94%)	108 (91%)	11 (9%)	7	19
2	J	119/127 (94%)	108 (91%)	11 (9%)	7	19
2	K	119/127 (94%)	108 (91%)	11 (9%)	7	19
2	L	119/127 (94%)	108 (91%)	11 (9%)	7	19
3	A	3836/4358 (88%)	3792 (99%)	44 (1%)	70	82
3	B	3836/4358 (88%)	3792 (99%)	44 (1%)	70	82
3	C	3836/4358 (88%)	3792 (99%)	44 (1%)	70	82
3	D	3836/4358 (88%)	3792 (99%)	44 (1%)	70	82
All	All	16172/18296 (88%)	15940 (99%)	232 (1%)	62	79

All (232) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	E	4	GLU
1	E	50	ARG
1	E	86	THR
1	F	4	GLU
1	F	50	ARG
1	F	86	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	G	4	GLU
1	G	50	ARG
1	G	86	THR
1	H	4	GLU
1	H	50	ARG
1	H	86	THR
2	I	15	GLU
2	I	22	LYS
2	I	75	ARG
2	I	76	LYS
2	I	77	MET
2	I	86	ILE
2	I	110	MET
2	I	118	THR
2	I	131	ILE
2	I	145	MET
2	I	146	MET
2	J	15	GLU
2	J	22	LYS
2	J	75	ARG
2	J	76	LYS
2	J	77	MET
2	J	86	ILE
2	J	110	MET
2	J	118	THR
2	J	131	ILE
2	J	145	MET
2	J	146	MET
2	K	15	GLU
2	K	22	LYS
2	K	75	ARG
2	K	76	LYS
2	K	77	MET
2	K	86	ILE
2	K	110	MET
2	K	118	THR
2	K	131	ILE
2	K	145	MET
2	K	146	MET
2	L	15	GLU
2	L	22	LYS
2	L	75	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	L	76	LYS
2	L	77	MET
2	L	86	ILE
2	L	110	MET
2	L	118	THR
2	L	131	ILE
2	L	145	MET
2	L	146	MET
3	A	111	ARG
3	A	309	MET
3	A	343	ARG
3	A	349	MET
3	A	778	MET
3	A	880	ARG
3	A	912	LYS
3	A	995	MET
3	A	1022	GLN
3	A	1044	LYS
3	A	1494	MET
3	A	1975	MET
3	A	2054	LYS
3	A	2172	MET
3	A	2737	LEU
3	A	2757	MET
3	A	2760	TYR
3	A	2761	LYS
3	A	2838[A]	HIS
3	A	2838[B]	HIS
3	A	2847	ASN
3	A	2884	LYS
3	A	3018	ARG
3	A	3047	LYS
3	A	3150	ARG
3	A	3190	ARG
3	A	3215	MET
3	A	3221	LEU
3	A	3231	MET
3	A	3235	MET
3	A	3281	LEU
3	A	3296	MET
3	A	3297	LYS
3	A	3381	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	A	3398	MET
3	A	3422	GLN
3	A	3461	MET
3	A	3719	MET
3	A	4660	PHE
3	A	4672	MET
3	A	4690	LYS
3	A	4925	LEU
3	A	4942	LYS
3	A	4951	PHE
3	B	111	ARG
3	B	309	MET
3	B	343	ARG
3	B	349	MET
3	B	778	MET
3	B	880	ARG
3	B	912	LYS
3	B	995	MET
3	B	1022	GLN
3	B	1044	LYS
3	B	1494	MET
3	B	1975	MET
3	B	2054	LYS
3	B	2172	MET
3	B	2737	LEU
3	B	2757	MET
3	B	2760	TYR
3	B	2761	LYS
3	B	2838[A]	HIS
3	B	2838[B]	HIS
3	B	2847	ASN
3	B	2884	LYS
3	B	3018	ARG
3	B	3047	LYS
3	B	3150	ARG
3	B	3190	ARG
3	B	3215	MET
3	B	3221	LEU
3	B	3231	MET
3	B	3235	MET
3	B	3281	LEU
3	B	3296	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	B	3297	LYS
3	B	3381	ARG
3	B	3398	MET
3	B	3422	GLN
3	B	3461	MET
3	B	3719	MET
3	B	4660	PHE
3	B	4672	MET
3	B	4690	LYS
3	B	4925	LEU
3	B	4942	LYS
3	B	4951	PHE
3	C	111	ARG
3	C	309	MET
3	C	343	ARG
3	C	349	MET
3	C	778	MET
3	C	880	ARG
3	C	912	LYS
3	C	995	MET
3	C	1022	GLN
3	C	1044	LYS
3	C	1494	MET
3	C	1975	MET
3	C	2054	LYS
3	C	2172	MET
3	C	2737	LEU
3	C	2757	MET
3	C	2760	TYR
3	C	2761	LYS
3	C	2838[A]	HIS
3	C	2838[B]	HIS
3	C	2847	ASN
3	C	2884	LYS
3	C	3018	ARG
3	C	3047	LYS
3	C	3150	ARG
3	C	3190	ARG
3	C	3215	MET
3	C	3221	LEU
3	C	3231	MET
3	C	3235	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	C	3281	LEU
3	C	3296	MET
3	C	3297	LYS
3	C	3381	ARG
3	C	3398	MET
3	C	3422	GLN
3	C	3461	MET
3	C	3719	MET
3	C	4660	PHE
3	C	4672	MET
3	C	4690	LYS
3	C	4925	LEU
3	C	4942	LYS
3	C	4951	PHE
3	D	111	ARG
3	D	309	MET
3	D	343	ARG
3	D	349	MET
3	D	778	MET
3	D	880	ARG
3	D	912	LYS
3	D	995	MET
3	D	1022	GLN
3	D	1044	LYS
3	D	1494	MET
3	D	1975	MET
3	D	2054	LYS
3	D	2172	MET
3	D	2737	LEU
3	D	2757	MET
3	D	2760	TYR
3	D	2761	LYS
3	D	2838[A]	HIS
3	D	2838[B]	HIS
3	D	2847	ASN
3	D	2884	LYS
3	D	3018	ARG
3	D	3047	LYS
3	D	3150	ARG
3	D	3190	ARG
3	D	3215	MET
3	D	3221	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	D	3231	MET
3	D	3235	MET
3	D	3281	LEU
3	D	3296	MET
3	D	3297	LYS
3	D	3381	ARG
3	D	3398	MET
3	D	3422	GLN
3	D	3461	MET
3	D	3719	MET
3	D	4660	PHE
3	D	4672	MET
3	D	4690	LYS
3	D	4925	LEU
3	D	4942	LYS
3	D	4951	PHE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (24) such sidechains are listed below:

Mol	Chain	Res	Type
2	I	108	HIS
2	J	108	HIS
2	K	108	HIS
2	L	108	HIS
3	A	2754	GLN
3	A	3151	GLN
3	A	3256	ASN
3	A	3426	ASN
3	A	3563	GLN
3	B	2754	GLN
3	B	3151	GLN
3	B	3256	ASN
3	B	3426	ASN
3	B	3563	GLN
3	C	2754	GLN
3	C	3151	GLN
3	C	3256	ASN
3	C	3426	ASN
3	C	3563	GLN
3	D	2754	GLN
3	D	3151	GLN
3	D	3256	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	D	3426	ASN
3	D	3563	GLN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 20 ligands modelled in this entry, 8 are monoatomic - leaving 12 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
5	ATP	A	5005	-	28,33,33	0.74	0	34,52,52	0.76	1 (2%)
5	ATP	D	5005	-	28,33,33	0.74	0	34,52,52	0.76	1 (2%)
5	ATP	A	5002	-	28,33,33	0.62	0	34,52,52	0.62	1 (2%)
5	ATP	B	5002	-	28,33,33	0.62	0	34,52,52	0.61	1 (2%)
5	ATP	D	5002	-	28,33,33	0.62	0	34,52,52	0.62	1 (2%)
7	XAN	C	5004	-	7,12,12	1.56	1 (14%)	6,17,17	5.21	3 (50%)
5	ATP	C	5002	-	28,33,33	0.62	0	34,52,52	0.61	1 (2%)
7	XAN	B	5004	-	7,12,12	1.56	1 (14%)	6,17,17	5.20	2 (33%)
5	ATP	B	5005	-	28,33,33	0.74	0	34,52,52	0.76	1 (2%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
7	XAN	D	5004	-	7,12,12	1.56	1 (14%)	6,17,17	5.23	3 (50%)
7	XAN	A	5004	-	7,12,12	1.56	1 (14%)	6,17,17	5.20	3 (50%)
5	ATP	C	5005	-	28,33,33	0.74	0	34,52,52	0.76	1 (2%)

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
5	ATP	A	5005	-	-	4/18/38/38	0/3/3/3
5	ATP	D	5005	-	-	4/18/38/38	0/3/3/3
5	ATP	A	5002	-	-	4/18/38/38	0/3/3/3
5	ATP	B	5002	-	-	4/18/38/38	0/3/3/3
5	ATP	D	5002	-	-	4/18/38/38	0/3/3/3
7	XAN	C	5004	-	-	-	0/2/2/2
5	ATP	C	5002	-	-	4/18/38/38	0/3/3/3
7	XAN	B	5004	-	-	-	0/2/2/2
5	ATP	B	5005	-	-	4/18/38/38	0/3/3/3
7	XAN	D	5004	-	-	-	0/2/2/2
7	XAN	A	5004	-	-	-	0/2/2/2
5	ATP	C	5005	-	-	4/18/38/38	0/3/3/3

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	D	5004	XAN	C6-N1	3.70	1.39	1.33
7	C	5004	XAN	C6-N1	3.69	1.39	1.33
7	A	5004	XAN	C6-N1	3.68	1.39	1.33
7	B	5004	XAN	C6-N1	3.68	1.39	1.33

All (19) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	D	5004	XAN	C2-N1-C6	10.45	123.91	115.09
7	C	5004	XAN	C2-N1-C6	10.41	123.88	115.09
7	A	5004	XAN	C2-N1-C6	10.40	123.87	115.09
7	B	5004	XAN	C2-N1-C6	10.39	123.87	115.09
7	D	5004	XAN	C5-C6-N1	-6.91	114.18	123.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	C	5004	XAN	C5-C6-N1	-6.89	114.21	123.42
7	B	5004	XAN	C5-C6-N1	-6.89	114.21	123.42
7	A	5004	XAN	C5-C6-N1	-6.87	114.23	123.42
5	D	5002	ATP	C5-C6-N6	2.33	123.86	120.31
5	A	5002	ATP	C5-C6-N6	2.33	123.85	120.31
5	B	5002	ATP	C5-C6-N6	2.32	123.85	120.31
5	C	5002	ATP	C5-C6-N6	2.30	123.81	120.31
5	D	5005	ATP	C5-C6-N6	2.15	123.58	120.31
5	B	5005	ATP	C5-C6-N6	2.14	123.58	120.31
5	A	5005	ATP	C5-C6-N6	2.12	123.55	120.31
5	C	5005	ATP	C5-C6-N6	2.12	123.54	120.31
7	C	5004	XAN	C4-N3-C2	2.03	120.82	116.16
7	A	5004	XAN	C4-N3-C2	2.01	120.77	116.16
7	D	5004	XAN	C4-N3-C2	2.01	120.77	116.16

There are no chirality outliers.

All (32) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
5	A	5002	ATP	C5'-O5'-PA-O1A
5	A	5002	ATP	C5'-O5'-PA-O3A
5	A	5005	ATP	C5'-O5'-PA-O3A
5	A	5005	ATP	O4'-C4'-C5'-O5'
5	B	5002	ATP	C5'-O5'-PA-O1A
5	B	5002	ATP	C5'-O5'-PA-O3A
5	B	5005	ATP	C5'-O5'-PA-O3A
5	B	5005	ATP	O4'-C4'-C5'-O5'
5	C	5002	ATP	C5'-O5'-PA-O1A
5	C	5002	ATP	C5'-O5'-PA-O3A
5	C	5005	ATP	C5'-O5'-PA-O3A
5	C	5005	ATP	O4'-C4'-C5'-O5'
5	D	5002	ATP	C5'-O5'-PA-O1A
5	D	5002	ATP	C5'-O5'-PA-O3A
5	D	5005	ATP	C5'-O5'-PA-O3A
5	D	5005	ATP	O4'-C4'-C5'-O5'
5	A	5005	ATP	C3'-C4'-C5'-O5'
5	B	5005	ATP	C3'-C4'-C5'-O5'
5	C	5005	ATP	C3'-C4'-C5'-O5'
5	D	5005	ATP	C3'-C4'-C5'-O5'
5	A	5002	ATP	C5'-O5'-PA-O2A
5	A	5005	ATP	C5'-O5'-PA-O1A
5	B	5002	ATP	C5'-O5'-PA-O2A

Continued on next page...

Continued from previous page...

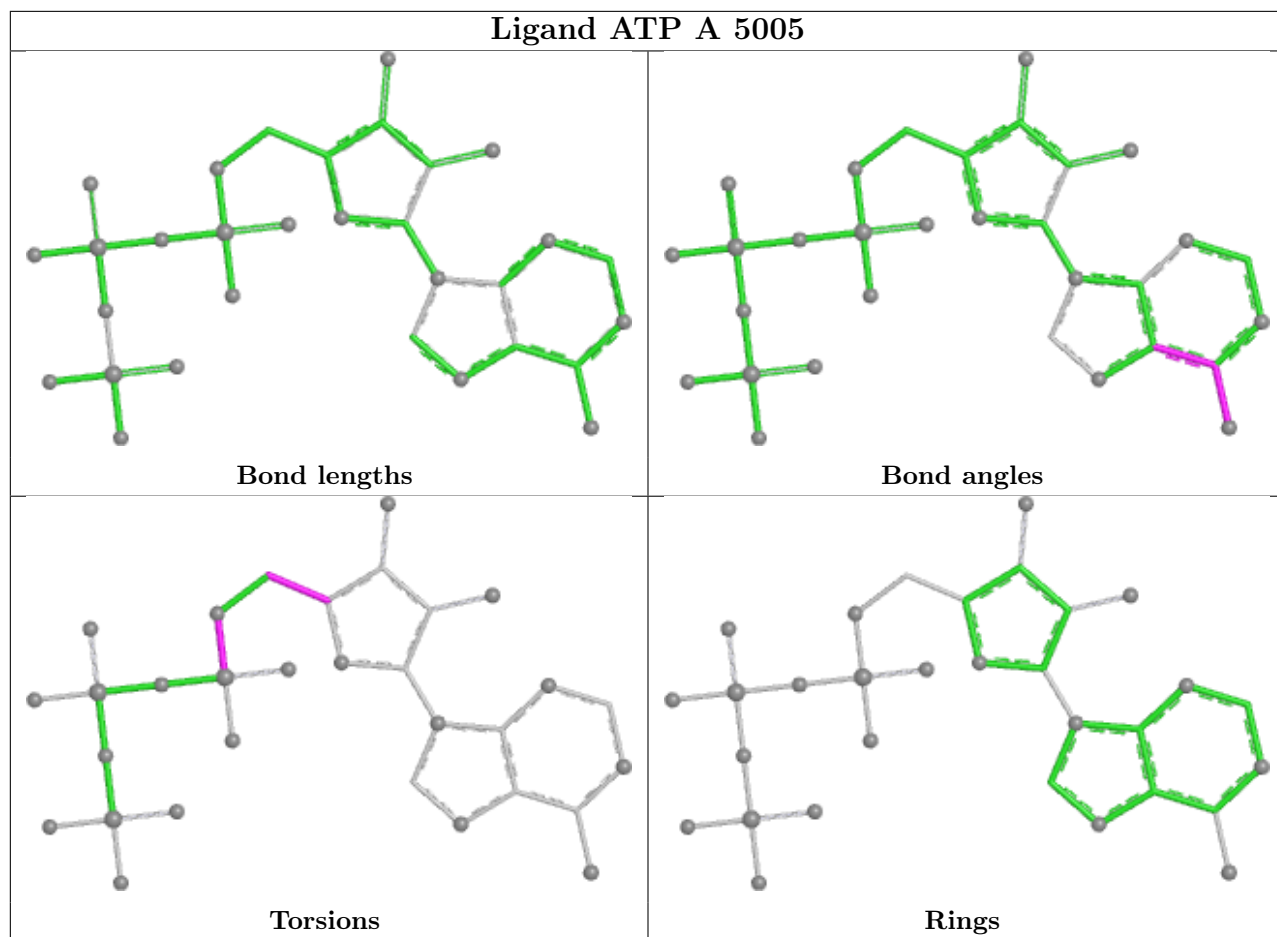
Mol	Chain	Res	Type	Atoms
5	B	5005	ATP	C5'-O5'-PA-O1A
5	C	5002	ATP	C5'-O5'-PA-O2A
5	C	5005	ATP	C5'-O5'-PA-O1A
5	D	5002	ATP	C5'-O5'-PA-O2A
5	D	5005	ATP	C5'-O5'-PA-O1A
5	A	5002	ATP	C4'-C5'-O5'-PA
5	B	5002	ATP	C4'-C5'-O5'-PA
5	C	5002	ATP	C4'-C5'-O5'-PA
5	D	5002	ATP	C4'-C5'-O5'-PA

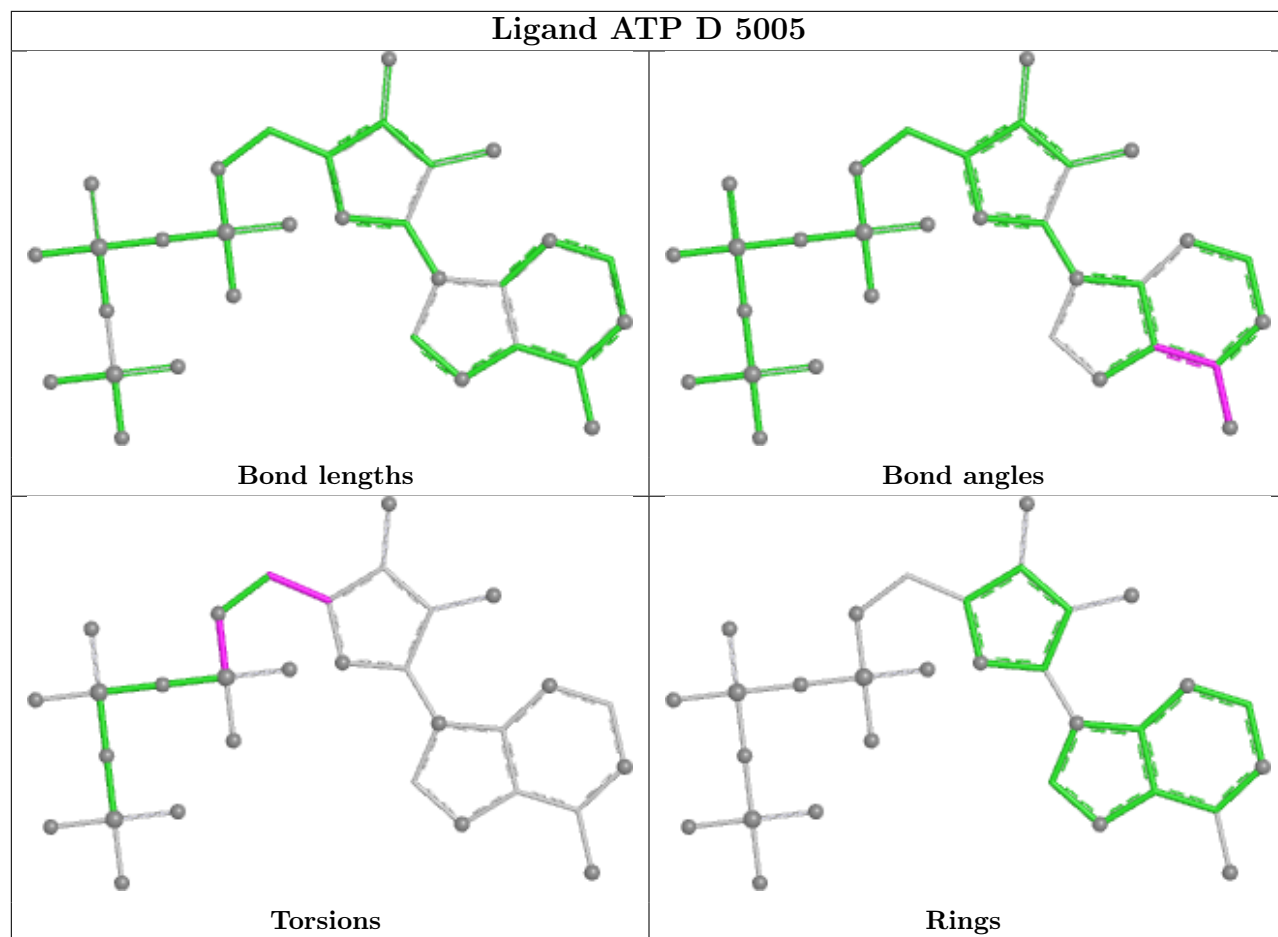
There are no ring outliers.

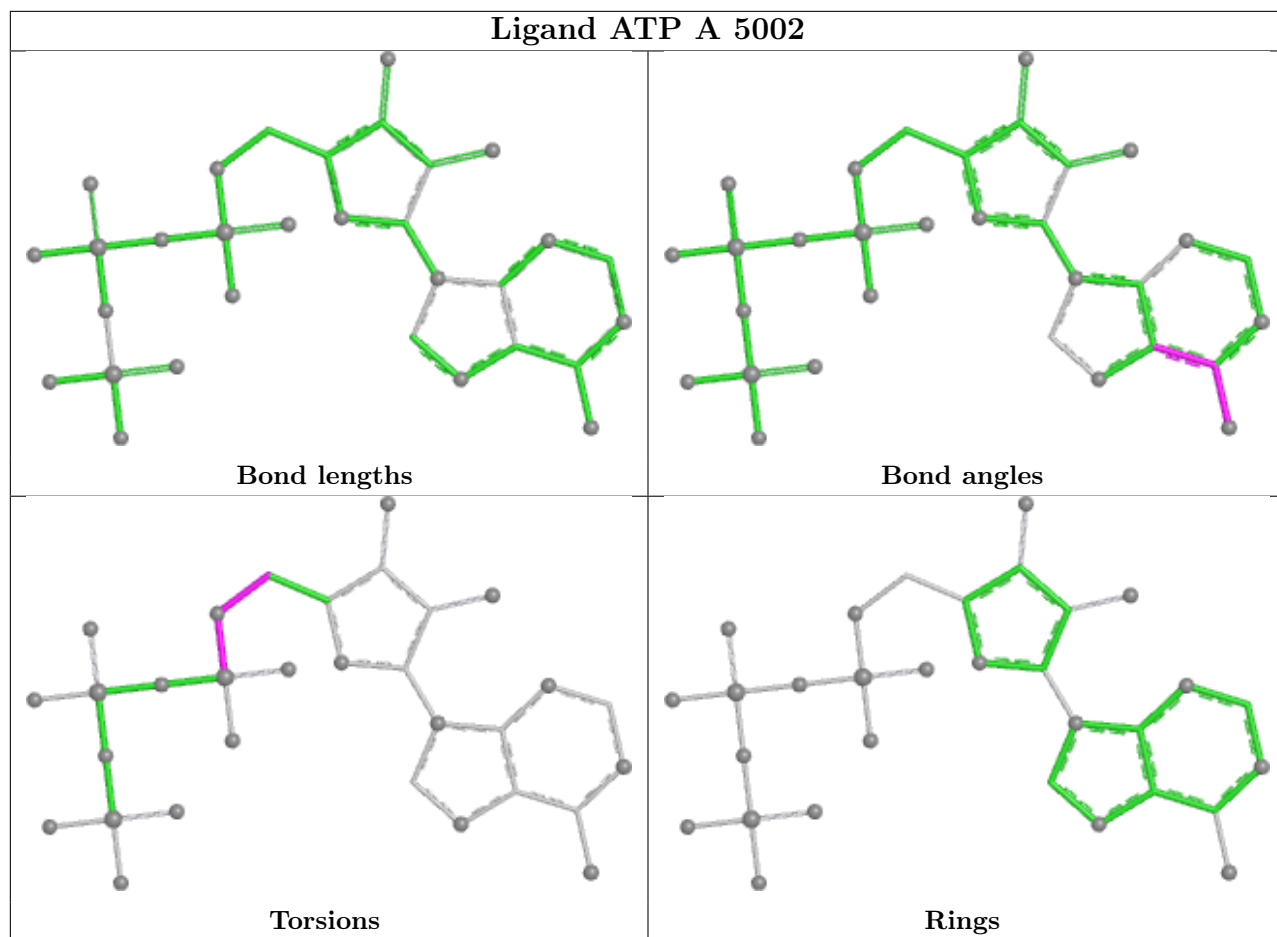
8 monomers are involved in 16 short contacts:

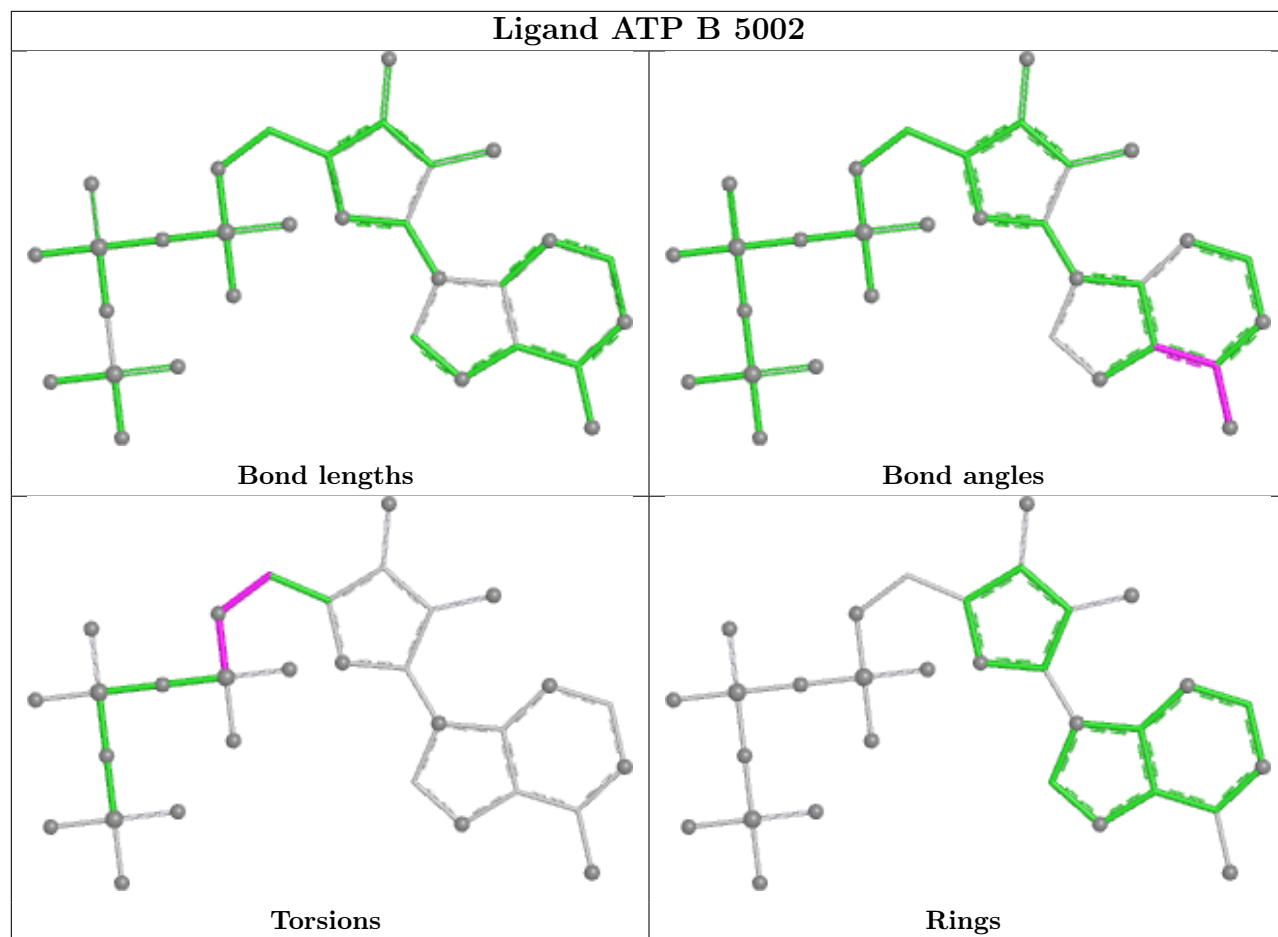
Mol	Chain	Res	Type	Clashes	Symm-Clashes
5	A	5005	ATP	1	0
5	D	5005	ATP	1	0
5	A	5002	ATP	3	0
5	B	5002	ATP	3	0
5	D	5002	ATP	3	0
5	C	5002	ATP	3	0
5	B	5005	ATP	1	0
5	C	5005	ATP	1	0

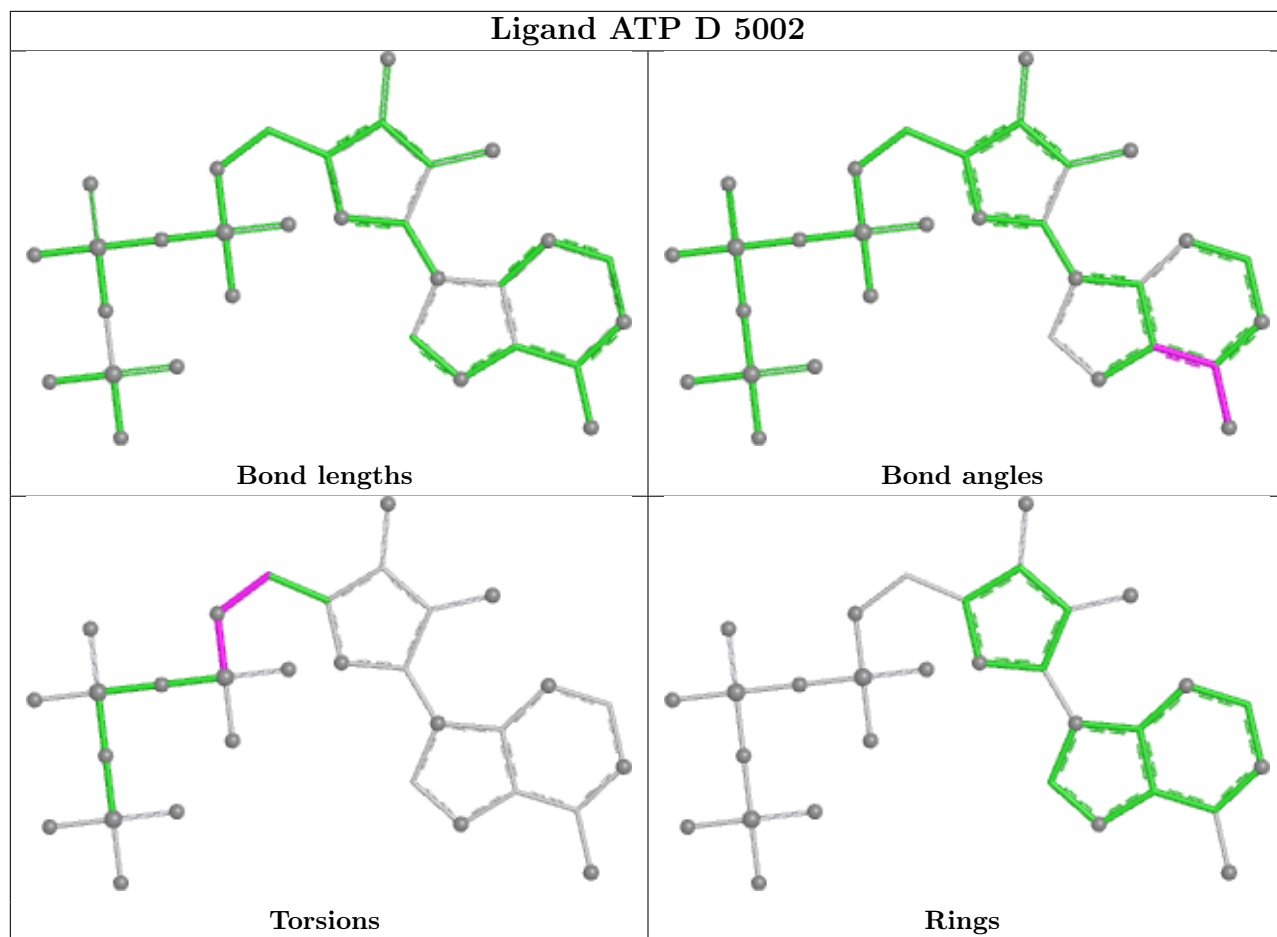
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. 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.

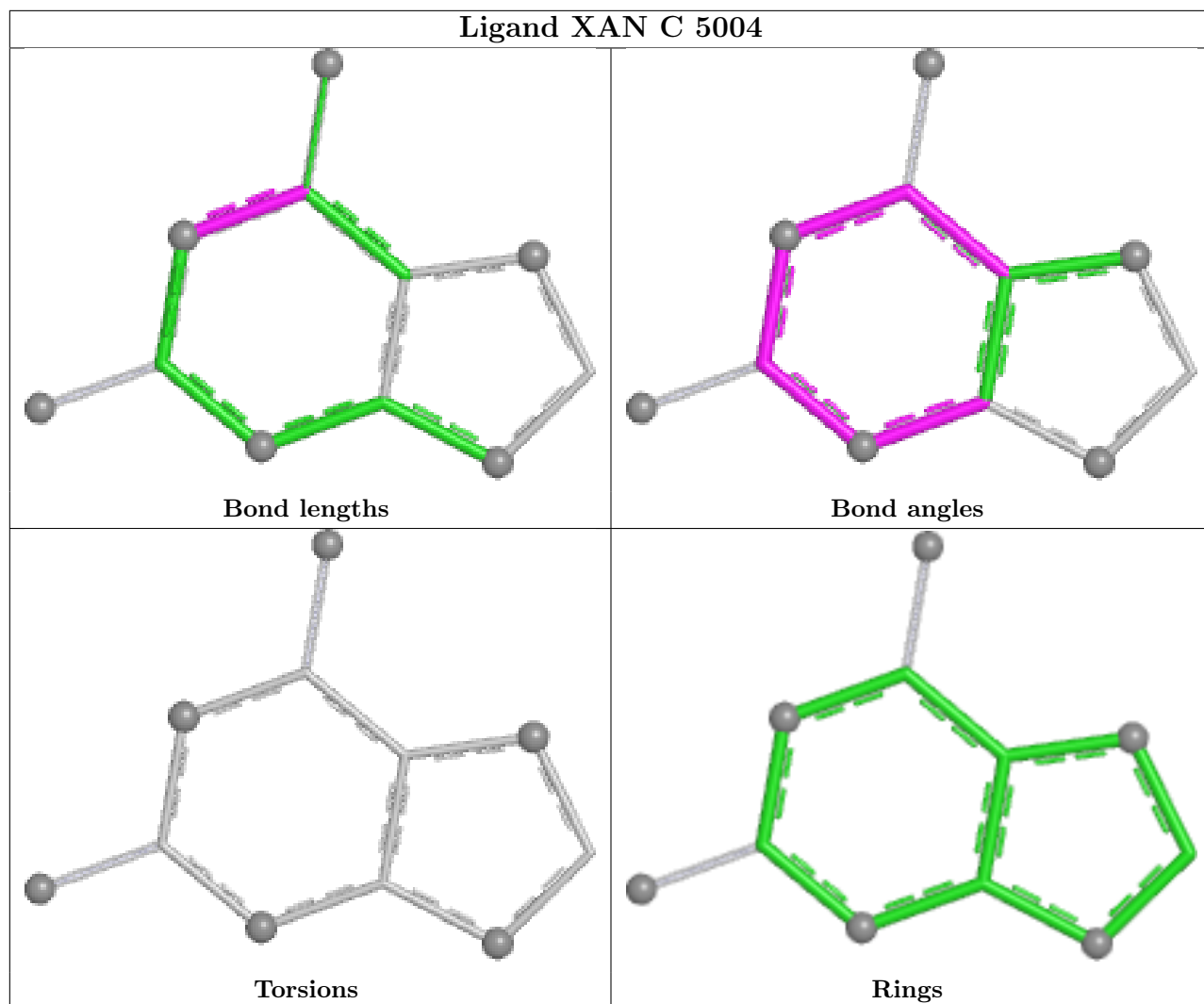


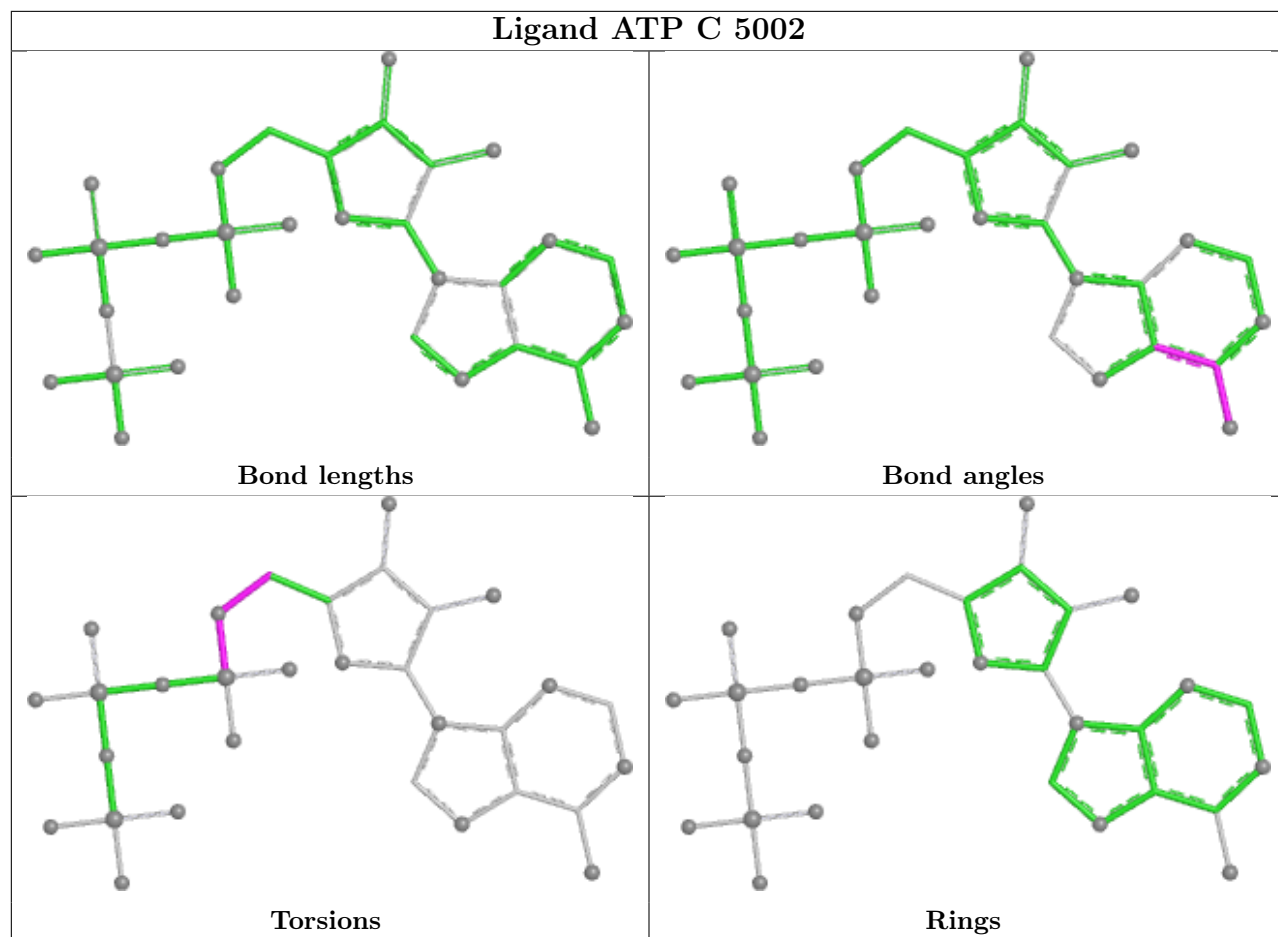


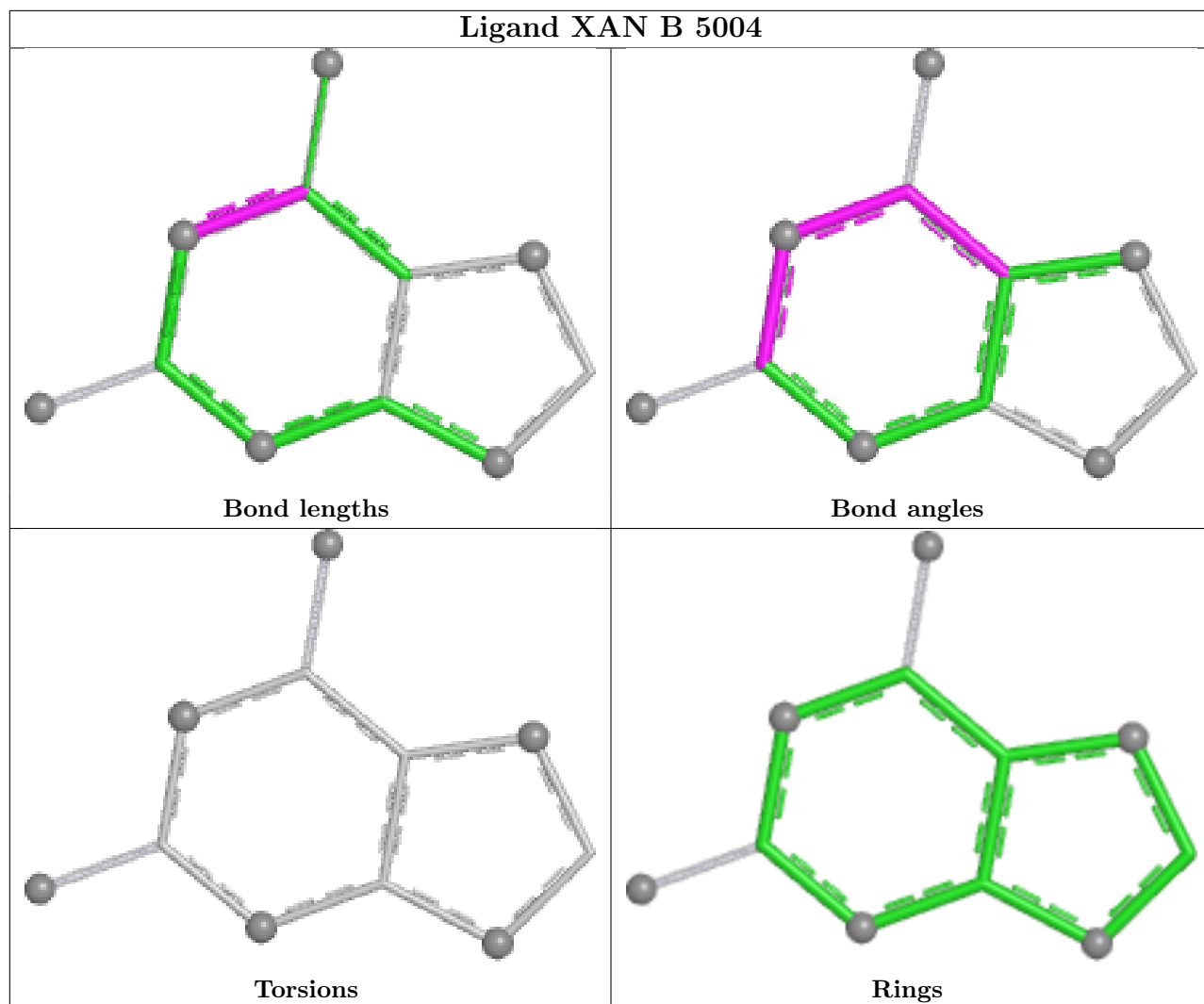


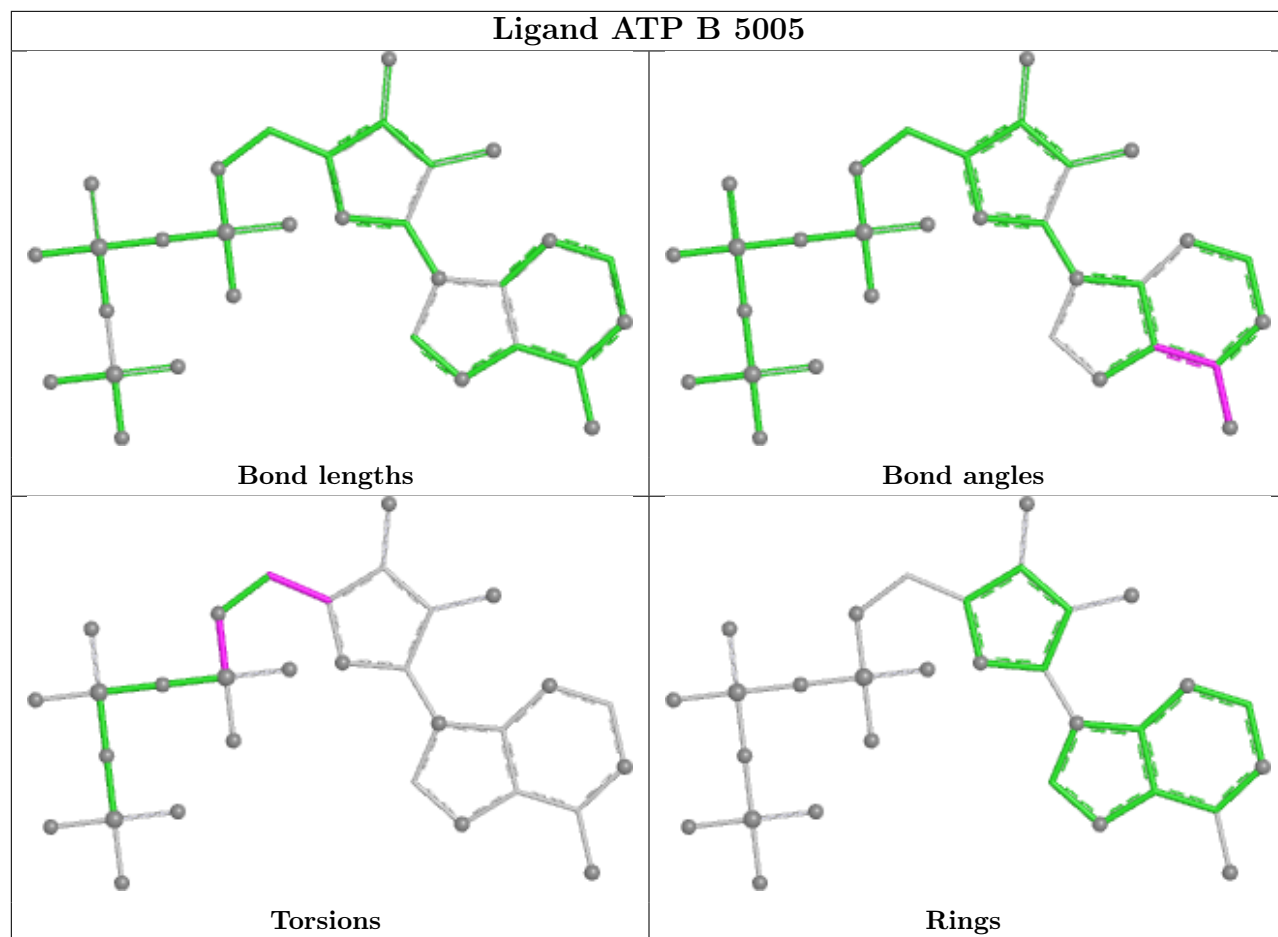


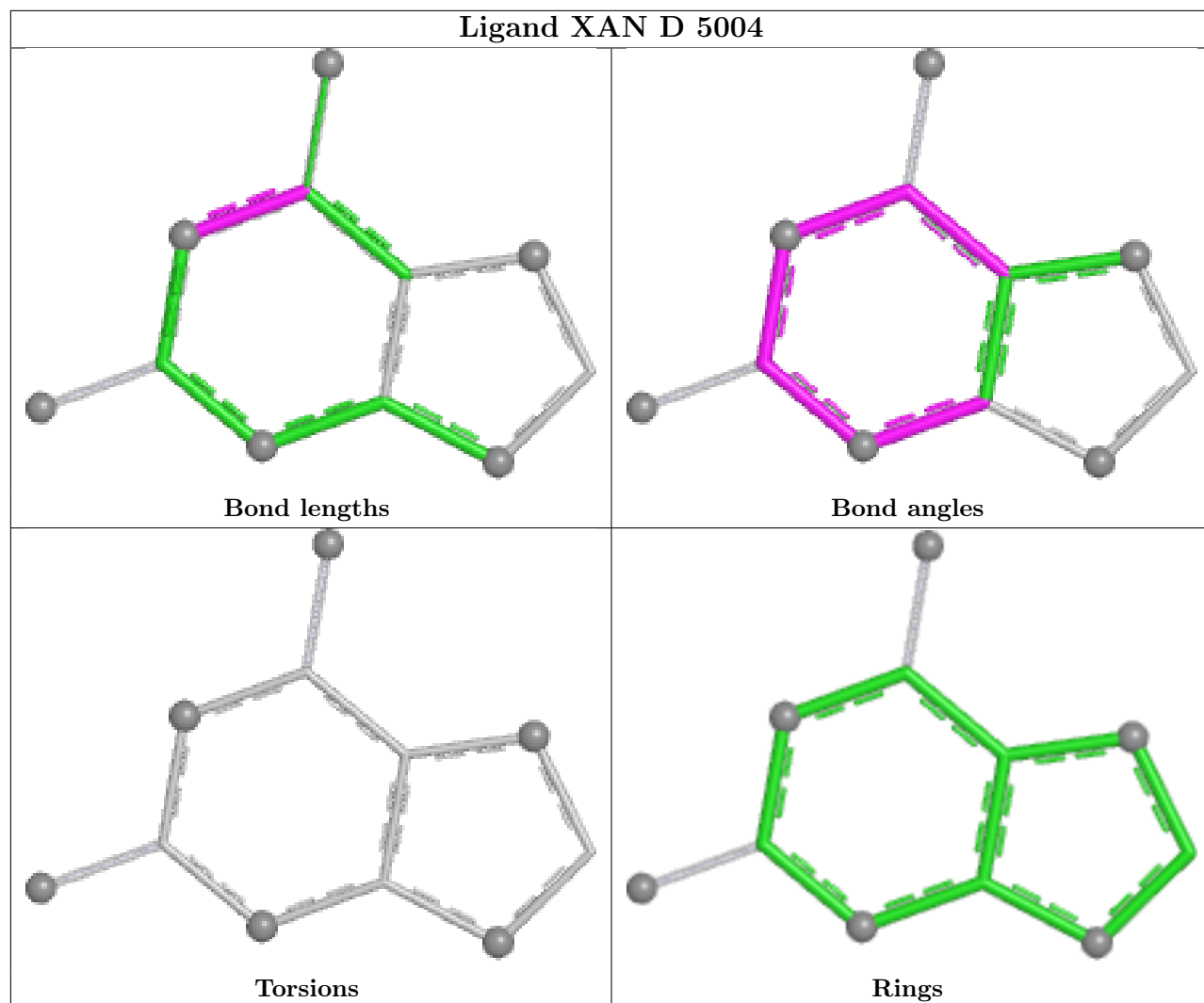


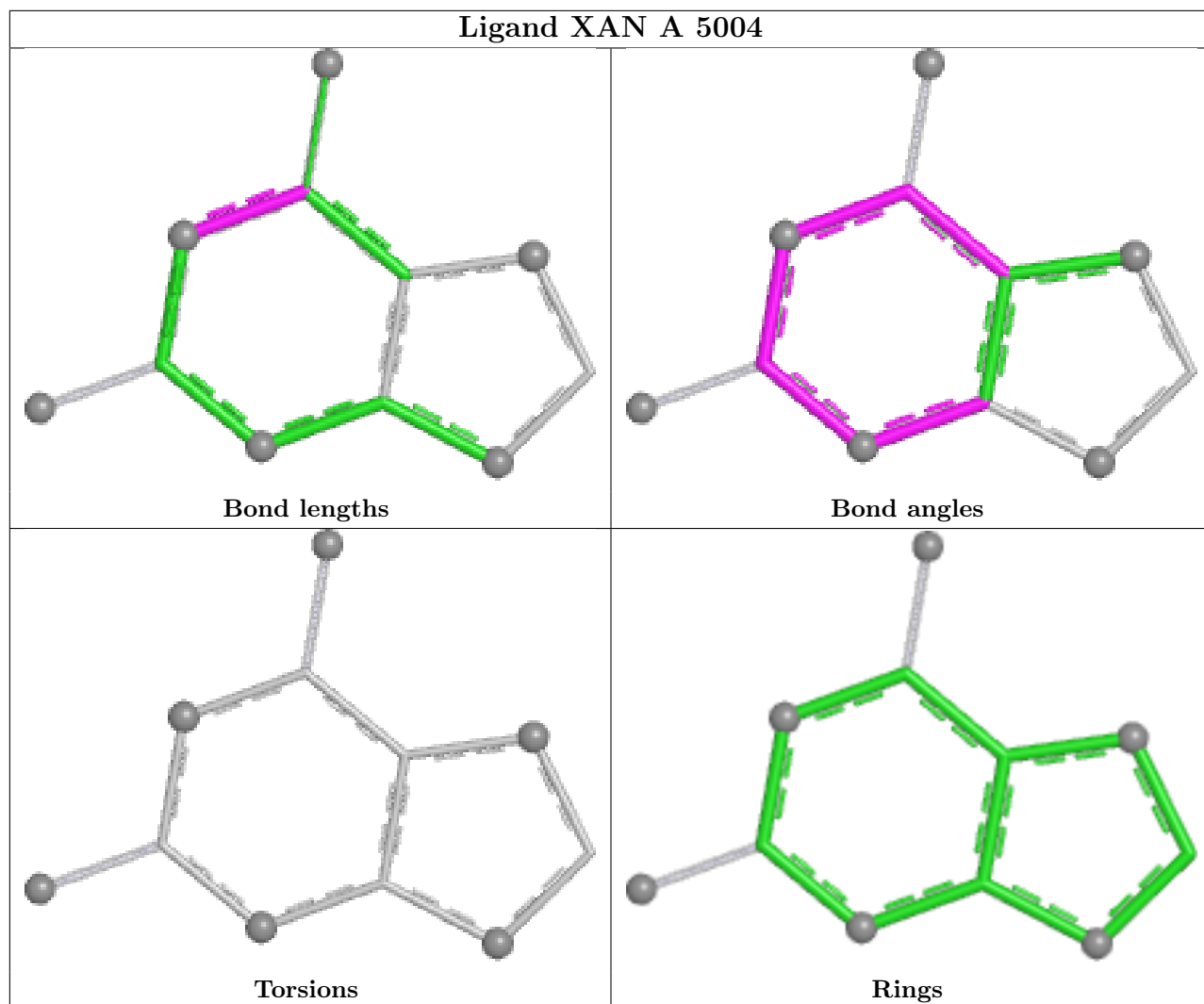


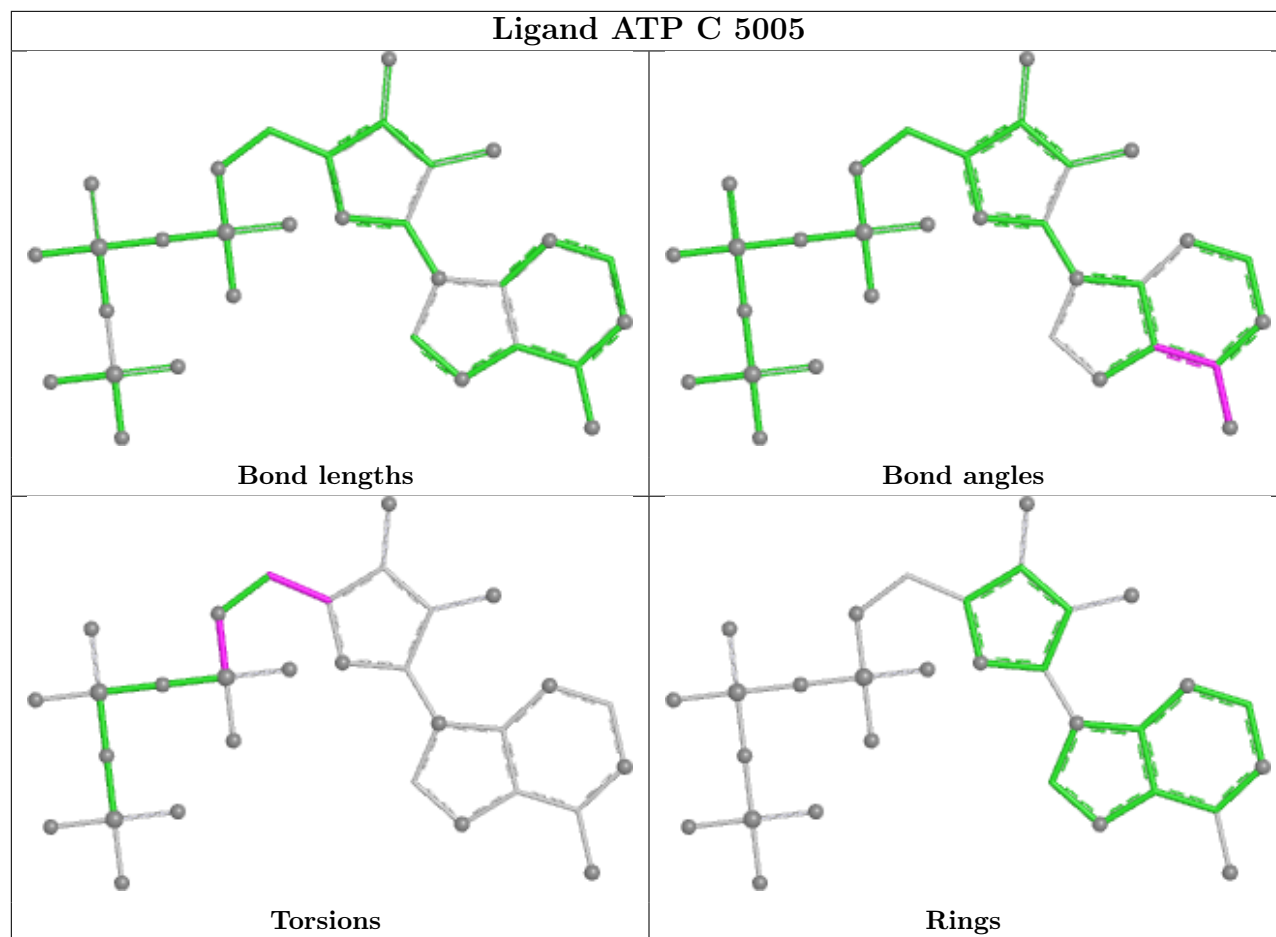












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

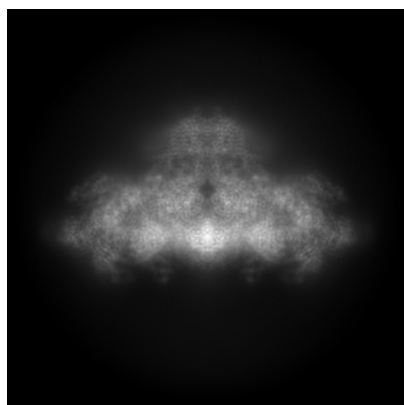
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-26414. These allow visual inspection of the internal detail of the map and identification of artifacts.

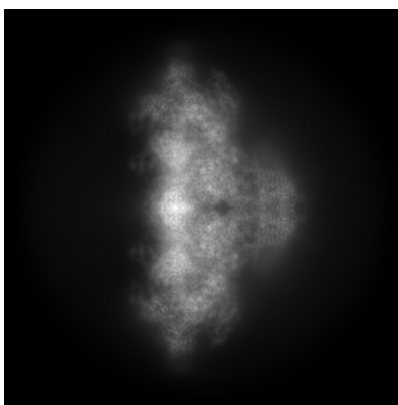
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

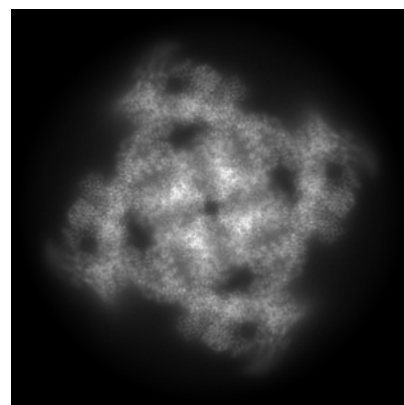
6.1.1 Primary map



X



Y

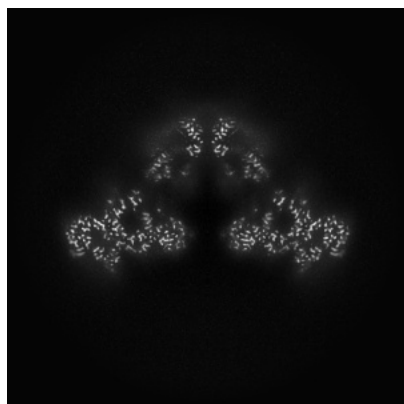


Z

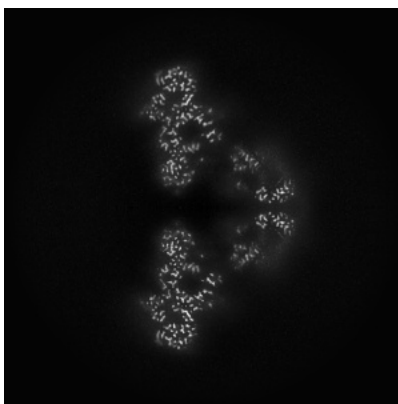
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

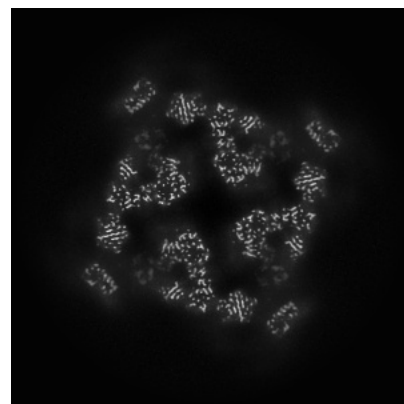
6.2.1 Primary map



X Index: 256



Y Index: 256

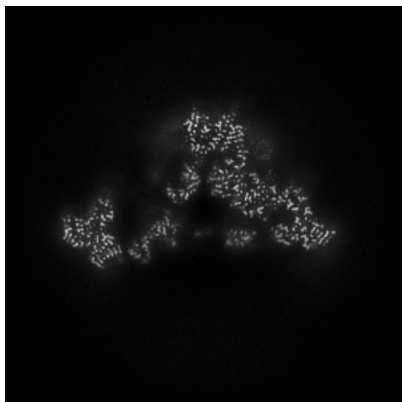


Z Index: 256

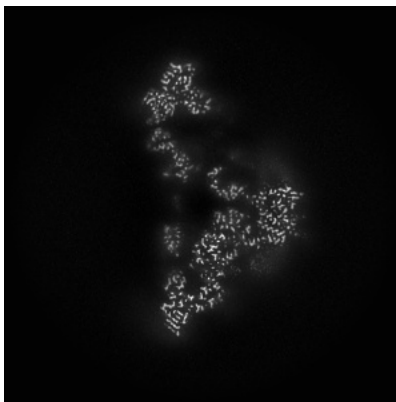
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

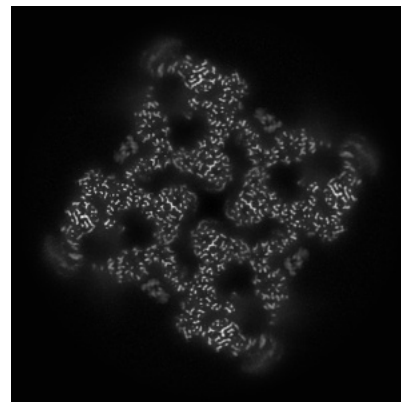
6.3.1 Primary map



X Index: 275



Y Index: 274

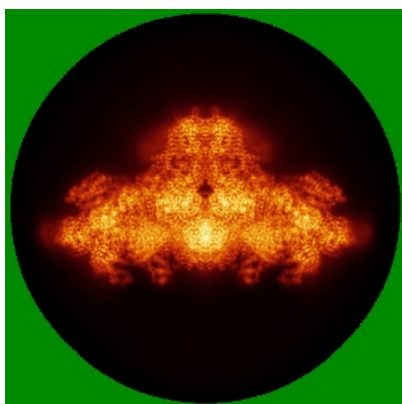


Z Index: 220

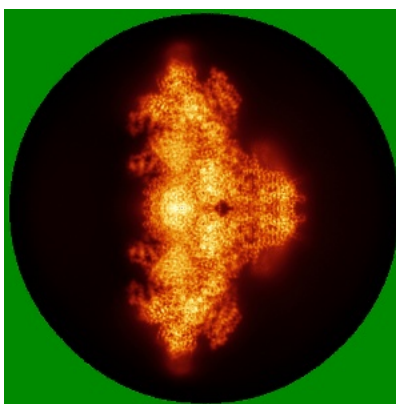
The images above show the largest variance slices of the map in three orthogonal directions.

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

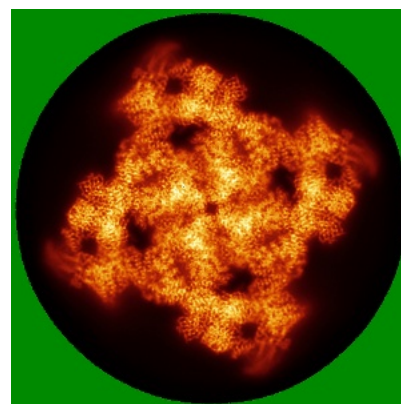
6.4.1 Primary map



X



Y



Z

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

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.1. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

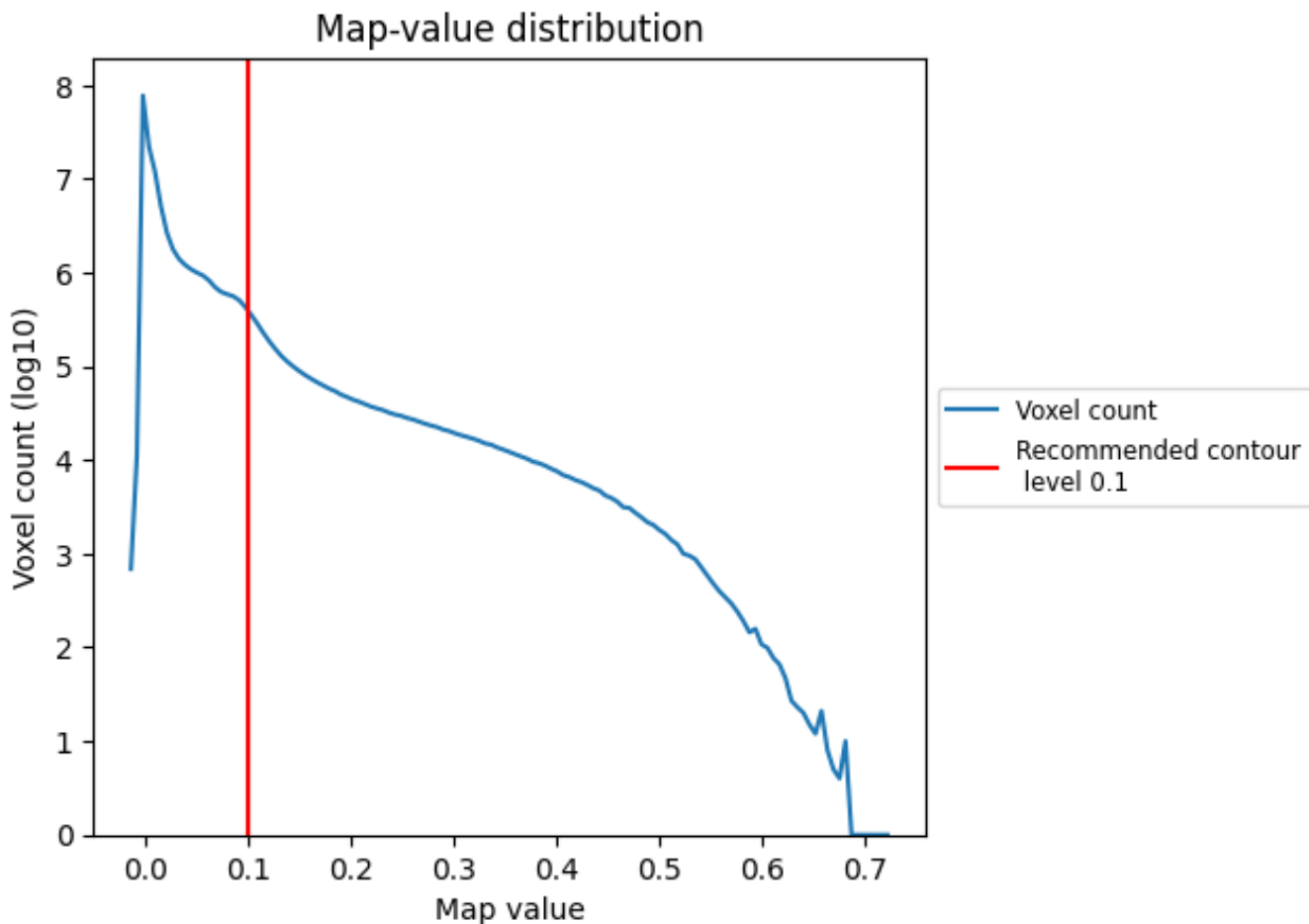
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

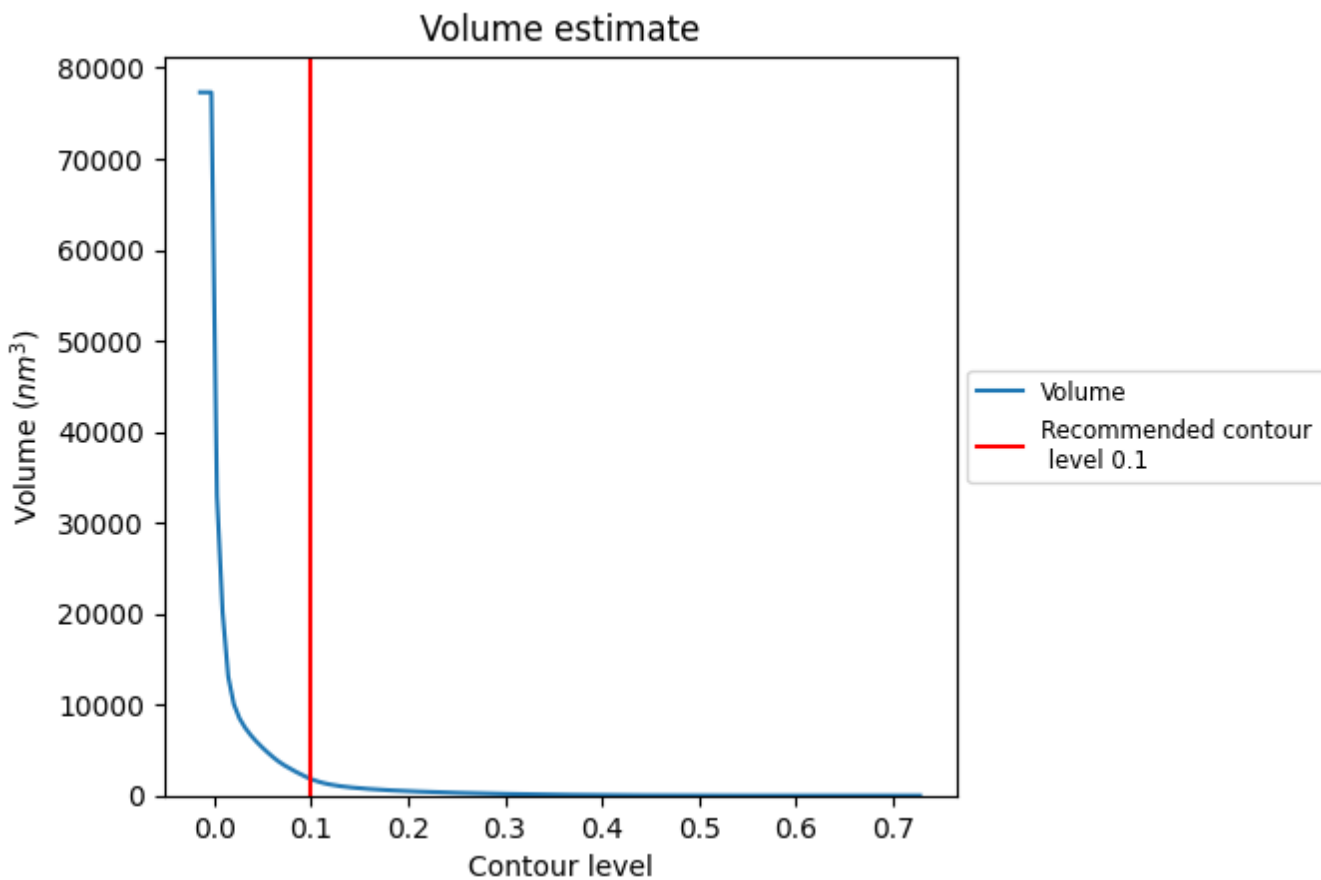
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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

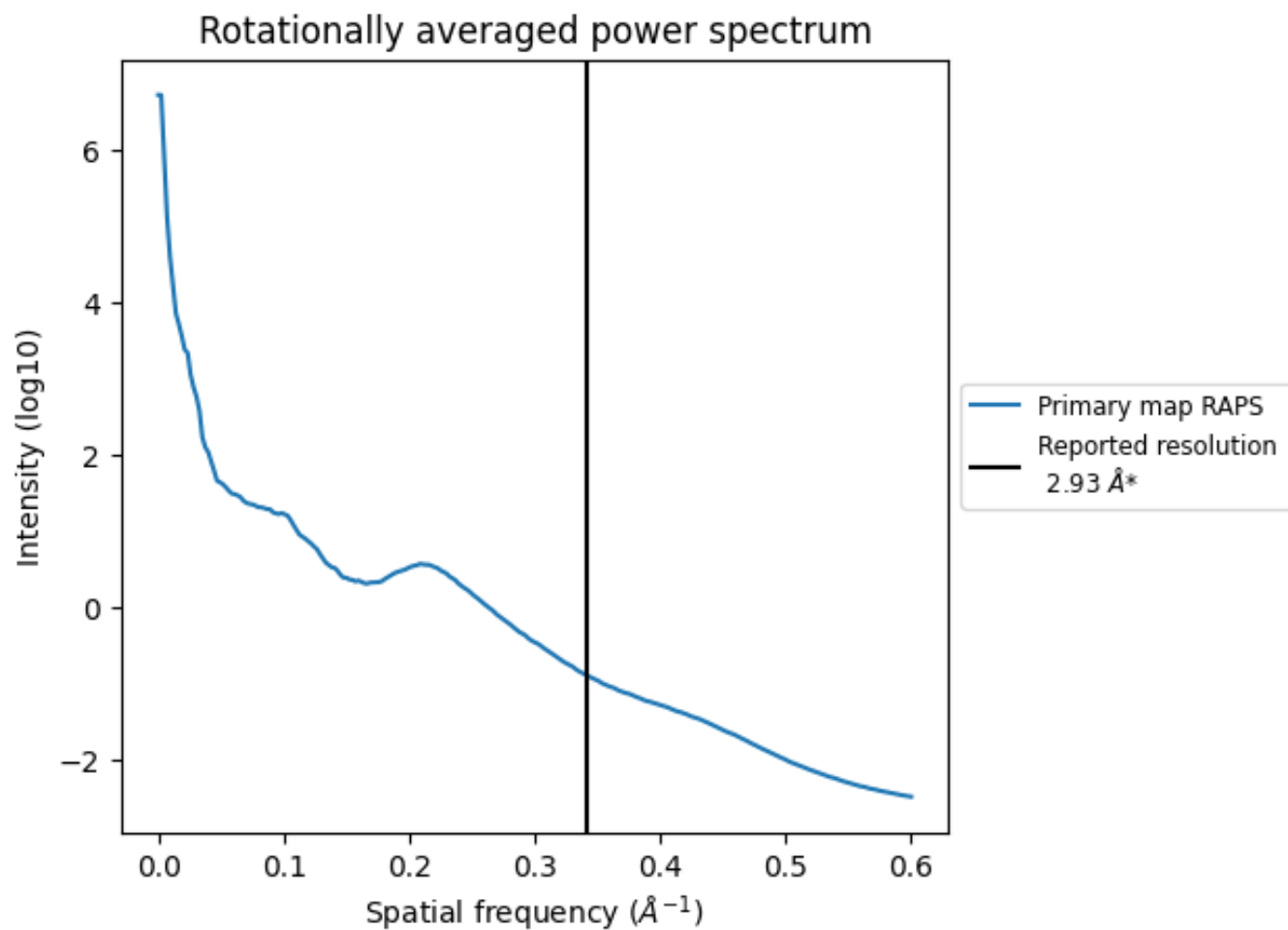
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1824 nm³; this corresponds to an approximate mass of 1648 kDa.

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

7.3 Rotationally averaged power spectrum [i](#)



*Reported resolution corresponds to spatial frequency of 0.341 Å⁻¹

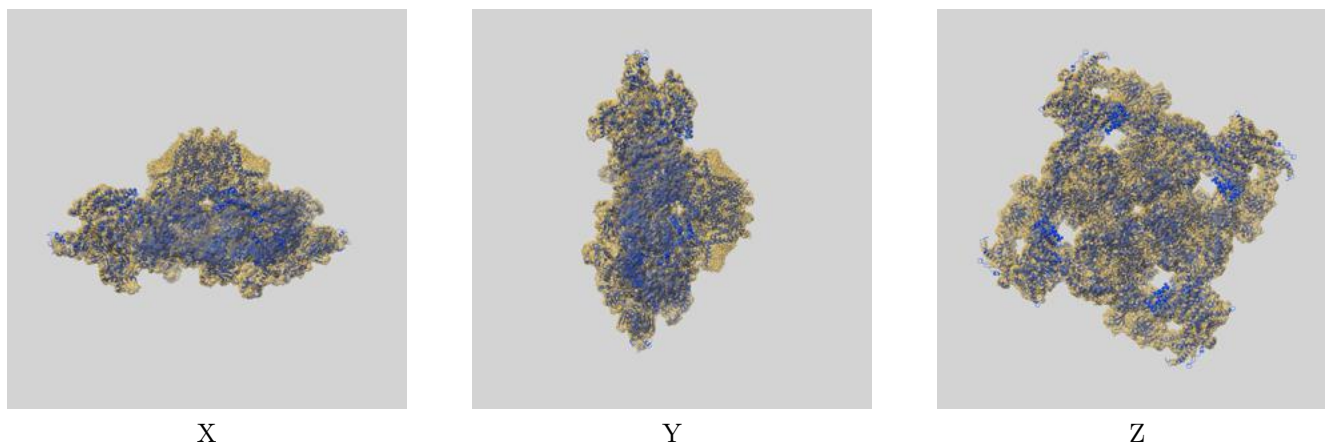
8 Fourier-Shell correlation

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

9 Map-model fit [i](#)

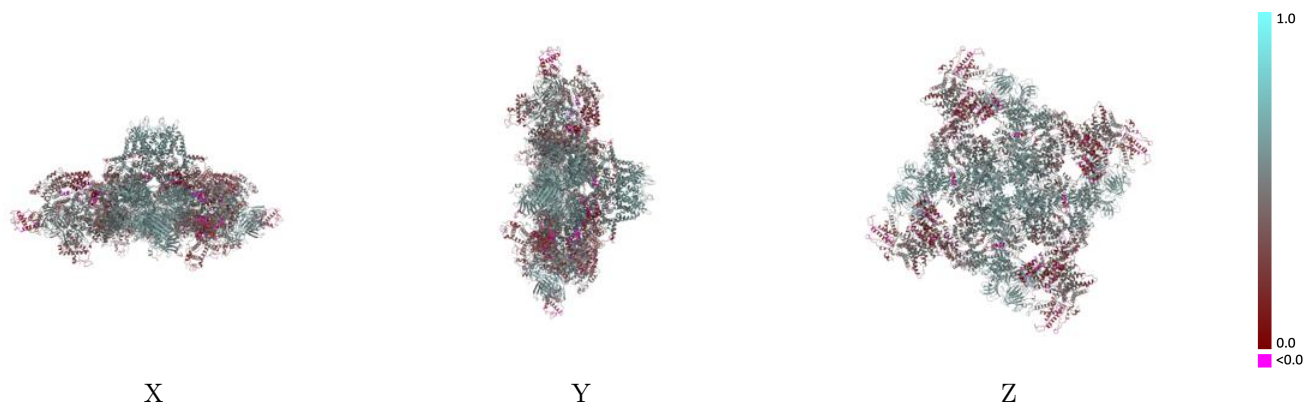
This section contains information regarding the fit between EMDB map EMD-26414 and PDB model 7UA4. Per-residue inclusion information can be found in section 3 on page 8.

9.1 Map-model overlay [i](#)



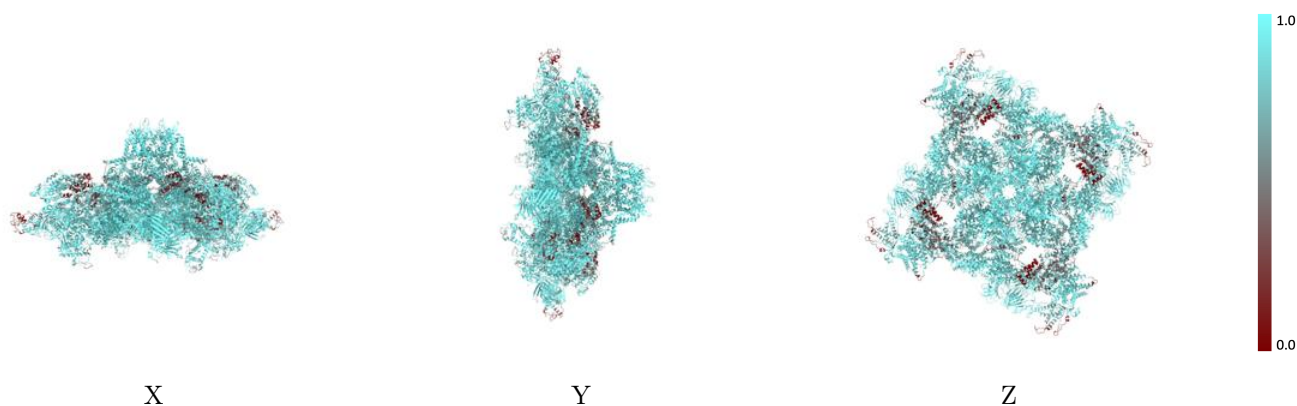
The images above show the 3D surface view of the map at the recommended contour level 0.1 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



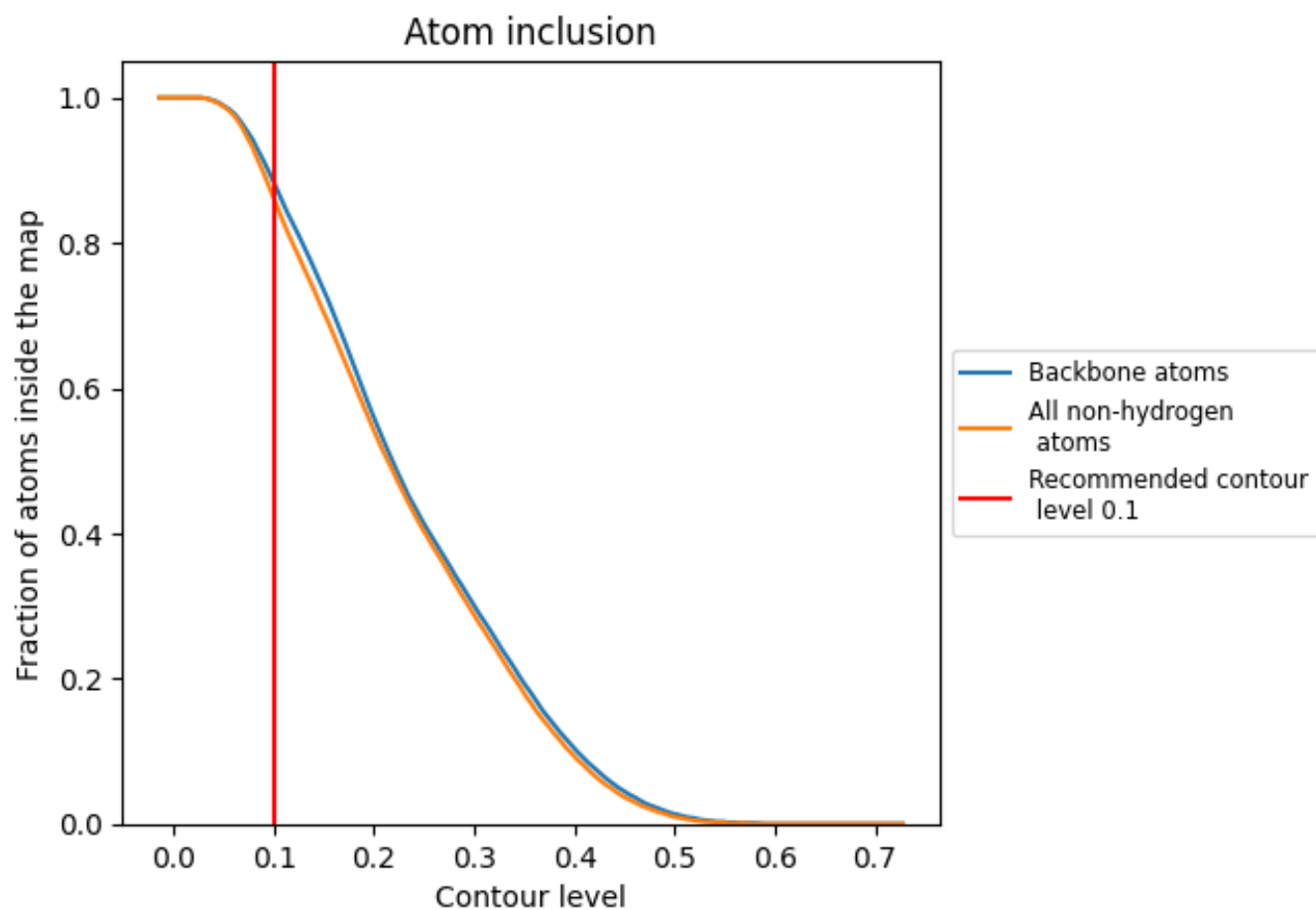
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.1).



























9.4 Atom inclusion [i](#)



At the recommended contour level, 88% of all backbone atoms, 86% 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 (0.1) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.8610	 0.4560
A	 0.8680	 0.4670
B	 0.8670	 0.4580
C	 0.8660	 0.4570
D	 0.8660	 0.4610
E	 0.9670	 0.5880
F	 0.9720	 0.5700
G	 0.9720	 0.5710
H	 0.9690	 0.5730
I	 0.6900	 0.2200
J	 0.6640	 0.2040
K	 0.6880	 0.2240
L	 0.6650	 0.2110

