

## Viewing RP1\_sm\_35-107-FFX1FH\_reg-multi.table

When finished, you should close this window.

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All-Atom	Clashscore, all atoms:	2.58		98 <sup>th</sup> percentile* (N=1784, all resolutions)			
Contacts	Clashscore is the number of serious steric overlaps (> 0.4 Å) per 1000 atoms.						
	Poor rotamers	1	1.54%	Goal: <1%			
	Ramachandran outliers	3	4.23%	Goal: <0.05%			
II I	Ramachandran favored	64	90.14%	Goal: >98%			
Protein Geometry	MolProbity score <sup>^</sup>	NolProbity score <sup>^</sup> 1.73		88 <sup>th</sup> percentile* (N=27675, 0Å - 99Å)			
acometa y	Cβ deviations >0.25Å	2	2.99%	Goal: 0			
	Bad backbone bonds:	0 / 592	0.00%	Goal: 0%			
	Bad backbone angles:	6 / 797	0.75%	Goal: <0.1%			

In the two column results, the left column gives the raw count, right column gives the percentage.

<sup>^</sup> MolProbity score combines the clashscore, rotamer, and Ramachandran evaluations into a single score, normalized to be on the same scale as X-ray resolution.

#	Alt Res	High B	Clash > 0.4Å	Ramachandran	Rotamer	Cβ deviation	Bond lengths	Bond angles
		Avg:	Clashscore:	Outliers: 3 of	Poor rotamers: 1 of	Outliers:	Outliers:	Outliers: 5
		56.85	2.58	71	65	2 of 67	0 of 73	of 73
A 35	ALA	50	0.517Å N with A 56 ASN HD21	-	-	0.052Å	-	-
A 36	LYS	50	-	Favored (38.08%) General / -77.9,133.4	96.1% ( <i>mttt</i> ) chi angles: 300.5,183.3,176.9,183.8	0.035Å	-	-
A 37	ARG	99.99	-	Allowed (1.4%) General / -105.2,78.6	0% chi angles: 58.6,225.3,145.5,295.5	0.129Å	-	-
A 38	ILE	50	-	Favored (6.21%) Isoleucine or valine / -101.4,150.0	59.8% ( <i>mt</i> ) chi angles: 288.4,176.6	0.141Å	-	-
Α	SER	50	-	Favored (16.16%)	8.4% (t)	0.022Å	-	-

<sup>\* 100&</sup>lt;sup>th</sup> percentile is the best among structures of comparable resolution; 0<sup>th</sup> percentile is the worst. For clashscore the comparative set of structures was selected in 2004, for MolProbity score in 2006.

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39				General / -101.2,158.3	chi angles: 194.3			
A 40	PHE	50	-	Favored (25.65%) General / -144.4,135.8	72% ( <i>m-85</i> ) chi angles: 286.9,278	0.067Å	-	-
A 41	TYR	50	-	Favored (3.57%) General / -121.8,-177.5	82.6% ( <i>m-85</i> ) chi angles: 298.9,82.5	0.053Å	-	-
A 42	LYS	50	-	Favored (48.41%) General / -136.4,149.7	28.5% ( <i>mtmt</i> ) chi angles: 303.5,160.9,305.2,194.2	0.155Å	-	-
A 43	SER	50	-	Favored (48.64%) General / -63.5,131.6	8.1% ( <i>t</i> ) chi angles: 195	0.04Å	-	-
A 44	GLY	50	-	Favored (69.96%) Glycine / 83.8,15.6	-	-	-	-
A 45	ASP	50	-	Favored (2.49%) Pre-proline / -155.1,96.5	43.9% ( <i>t0</i> ) chi angles: 194.1,348.5	0.046Å	-	-
A 46	PRO	50	-	Favored (3.54%) Trans-proline / -92.7,-3.5	10.2% ( <i>Cg_endo</i> ) chi angles: 40.2	0.014Å	-	-
A 47	GLN	50	-	Favored (19.23%) General / -88.1,-31.5	24.4% (mm100) chi angles: 307.4,309.4,120.6	0.094Å	-	-
A 48	PHE	50	-	Favored (7.28%) General / -48.6,123.8	88% ( <i>t80</i> ) chi angles: 179.8,80.8	0.106Å	-	-
A 49	GLY	50	-	Favored (73.7%) Glycine / -70.1,-17.2	-	-	-	-
A 50	GLY	50	-	Favored (12.35%) Glycine / 105.6,144.3	-	-	-	-
A 51	VAL	50	-	Favored (69.16%) Isoleucine or valine /	2.9% ( <i>t</i> ) chi angles: 155	0.081Å	-	-

-112.0,127.4

A 52	ARG	50	-	Favored (34.56%) General / -99.3,139.7	86.5% ( <i>mtt-85</i> ) chi angles: 280.5,181.9,175,278.8	0.045Å	-	-
A 53	VAL	50	-	Favored (20.73%) Isoleucine or valine / -141.1,154.0	4.6% (p) chi angles: 77.1	0.109Å	-	-
A 54	VAL	99.99	-	Favored (15.06%) Isoleucine or valine / -95.7,103.8	85% (t) chi angles: 177.4	0.065Å	-	-
#	Alt Res	High B	Clash > 0.4Å	Ramachandran	Rotamer	Cβ deviation	Bond lengths	Bond angles
		Avg:	Clashscore:	Outliers: 3 of	Poor rotamers: 1 of	Outliers:	Outliers:	Outliers: 5
		56.85	2.58	71	65	2 of 67	0 of 73	of 73
A 55	VAL	50	-	Favored (18.41%) Isoleucine or valine / -84.5,110.0	83.3% ( <i>t</i> ) chi angles: 174.8	0.057Å	-	-
A 56	ASN	50	0.517Å HD21 with A 35 ALA N	Favored (46.48%) Pre-proline / -147.2,155.8	5.9% ( <i>t-20</i> ) chi angles: 202,235.2	0.115Å	-	-
A 57	PRO	50	-	Favored (74.57%) Trans-proline / -62.7,-23.5	40.1% ( <i>Cg_exo</i> ) chi angles: 325.9	0.06Å	-	-
A 58	ARG	50	-	Favored (40.14%) General / -81.9,-19.8	45.9% ( <i>tpt85</i> ) chi angles: 188.2,59.8,188.9,83.5	0.146Å	-	-
A 59	SER	50	-	Favored (14.16%) General / -95.9,-29.5	16.5% ( <i>p</i> ) chi angles: 49.3	0.171Å	-	-
A 60	PHE	50	-	Favored (28.74%) General / -138.0,130.1	76.1% ( <i>m-85</i> ) chi angles: 302.8,286.2	0.093Å	-	-
A 61	LYS	50	-	Favored (81.63%) General / -66.8,-36.1	17.9% (pttp) chi angles: 62.2,169,192.3,73.1	0.122Å	-	-
A	SER	50	-	Favored (3.58%)	37.2% (p)	0.092Å	-	-

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62		General / -167.7,-177.7	chi angles: 53.4			
A 63	PHE 50 -	Favored (97.89%) General / -60.8,-42.6	30.3% ( <i>t80</i> ) chi angles: 191.8,60.6	0.072Å	-	-
A 64	ASP 50 -	Favored (69.44%) General / -56.6,-36.5	6.2% ( <i>p-10</i> ) chi angles: 49.6,298.7	0.121Å	-	-
A 65	ALA 50 -	Favored (86.2%) General / -62.6,-37.5	-	0.1Å	-	-
A 66	LEU 50 -	Favored (67.08%) General / -73.0,-36.8	59.2% ( <i>tp</i> ) chi angles: 177.5,58.5	0.08Å	-	-
A 67	LEU 50 -	Favored (92.59%) General / -61.0,-40.2	14.8% ( <i>mt</i> ) chi angles: 309.9,192.6	0.151Å	-	-
A 68	0.522Å ASP 50 HA with A 71 SER HB2	Favored (31.57%) General / -84.7,-20.2	34.4% ( <i>m-20</i> ) chi angles: 288.4,294.9	0.399Å	-	-
A 69	ASN 50 -	Favored (68.72%) General / -58.7,-31.9	11.6% ( <i>t30</i> ) chi angles: 183.9,84.1	0.075Å	-	-
A 70	LEU 99.99 -	Favored (27.77%) General / -108.3,10.2	68.1% ( <i>mt</i> ) chi angles: 305.3,176.6	0.064Å	-	-
A 71	0.522Å SER 99.99 HB2 with A 68 ASP HA	Favored (3.18%) General / -76.5,77.4	42.6% ( <i>t</i> ) chi angles: 181.1	0.118Å	-	-
A 72	ARG 99.99 -	Favored (5.93%) General / -62.4,165.5	15.6% ( <i>tpt180</i> ) chi angles: 202.7,61.5,195.7,169.7	0.064Å	-	-
A 73	LYS 99.99 -	Favored (2.66%) General / -136.2,40.8	35.3% ( <i>mmtm</i> ) chi angles: 301.2,289.9,162.8,290.5	0.036Å	-	-
A 74	0.723Å (VAL 99.99 HG13 with A 75 PRO HD2	OUTLIER (0%) Pre-proline / -155.4,-91.2	2.7% (p) chi angles: 49.9	0.51Å	-	OUTLIER(S) worst is C- CA-CB: 7.069 σ

#	Alt Res	High B	Clash > 0.4Å	Ramachandran	Rotamer	Cβ deviation	Bond lengths	Bond angles
		Avg: 56.85	Clashscore: 2.58	Outliers: 3 of 71	Poor rotamers: 1 of 65	Outliers: 2 of 67	Outliers: 0 of 73	Outliers: 5 of 73
A 75	PRO	50	0.723Å HD2 with A 74 VAL HG13	Favored (3.93%) Trans-proline / -71.8,114.3	28.1% ( <i>Cg_endo</i> ) chi angles: 20.7	0.052Å	-	-
A 76	LEU	50	-	OUTLIER (0.04%) Pre-proline / 73.9,97.1	30.1% ( <i>mt</i> ) chi angles: 311.7,181	0.108Å	-	-
A 77	PRO	50	-	Allowed (1.03%) Trans-proline / -84.4,-28.7	86.3% ( <i>Cg_endo</i> ) chi angles: 31.3	0.086Å	-	-
A 78	PHE	50	-	Favored (14.48%) General / -91.7,-34.8	11.6% ( <i>m-85</i> ) chi angles: 318.9,118.8	0.081Å	-	-
A 79	GLY	50	-	Favored (27.5%) Glycine / 143.0,-160.1	-	-	-	-
A 80	VAL	50	-	Favored (61.57%) Isoleucine or valine / -106.0,125.8	62.1% ( <i>t</i> ) chi angles: 180.1	0.04Å	-	-
A 81	ARG	50	-	Favored (2.96%) General / -137.5,10.8	33.3% ( <i>mmt180</i> ) chi angles: 294.7,297.9,172.3,236.3	0.139Å	-	-
A 82	ASN	50	-	Favored (29.84%) General / -154.9,152.5	27.2% ( <i>t30</i> ) chi angles: 174.9,34.4	0.118Å	-	-
A 83	ILE	50	-	Favored (48.2%) Isoleucine or valine / -136.1,137.7	46.4% ( <i>mt</i> ) chi angles: 284.4,172.1	0.064Å	-	-
A 84	SER	50	-	Favored (25.6%) General / -114.0,155.6	30.6% ( <i>t</i> ) chi angles: 184.8	0.034Å	-	-
A 85	THR	50	-	Favored (94.25%) Pre-proline/	8.6% ( <i>p</i> ) chi angles: 43.7	0.05Å	-	-

A 86	PRO	50	-	Favored (5.85%) Trans-proline / -80.2,5.7	6.2% ( <i>Cg_endo</i> ) chi angles: 41	0.012Å	-	-
A 87	ARG	99.99	-	Favored (7.47%) General / -126.8,15.6	37.4% ( <i>mmt-85</i> ) chi angles: 307.8,299.2,173.9,241.1	0.109Å	-	-
A 88	GLY	50	-	Favored (96.36%) Glycine / 65.3,42.2	-	-	-	-
A 89	ARG	99.99	-	Favored (8.27%) General / -125.4,16.2	94.5% ( <i>mtt180</i> ) chi angles: 296.9,188.4,178.6,192.3	0.138Å	-	-
A 90	HIS	50	-	OUTLIER (0.03%) General / 170.6,142.4	46.4% ( <i>m-70</i> ) chi angles: 280.5,304.5	0.177Å	-	OUTLIER(S) worst is CA- CB-CG: 4.994
A 91	SER	50	-	Favored (15.74%) General / -78.6,171.0	3.7% ( <i>m</i> ) chi angles: 276.5	0.029Å	-	-
A 92	ILE	50	-	Favored (48.55%) Isoleucine or valine / -124.6,140.2	50.8% ( <i>mm</i> ) chi angles: 302.3,299	0.117Å	-	-
A 93	TLID			Favored				
93	THR	50	-	(9.69%) General / -120.6,-6.9	6.2% (t) chi angles: 195.5	0.176Å	-	-
93 A 94	ARG	50	-	(9.69%) General /		0.176Å 0.129Å	-	-
A 94			- Clash > 0.4Å	(9.69%) General / -120.6,-6.9 Favored (29.75%) General /	chi angles: 195.5  14.6% (ptt-85)		- Bond lengths	- Bond angles
A 94	ARG <b>Alt Res</b>	50  High B Avg:	<b>0.4Å</b> Clashscore:	(9.69%) General / -120.6,-6.9 Favored (29.75%) General / -149.9,166.4 Ramachandran Outliers: 3 of	chi angles: 195.5  14.6% (ptt-85)	0.129Å  Cβ deviation Outliers:	<b>lengths</b> Outliers:	<b>angles</b> Outliers: 5
A 94	ARG <b>Alt Res</b>	50 High B	<b>0.4Å</b>	(9.69%) General / -120.6,-6.9 Favored (29.75%) General / -149.9,166.4 Ramachandran	chi angles: 195.5  14.6% (ptt-85)	0.129Å Cβ deviation	lengths	angles

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				-68.6,-37.4	311,189.6,285.1			
A 97	GLU	50	-	Favored (70.66%) General / -65.7,-30.1	40.5% ( <i>mt-10</i> ) chi angles: 289.4,157.8,29	0.045Å	-	-
A 98	LEU	50	-	Allowed (0.77%) General / -65.8,102.6	15.1% ( <i>mt</i> ) chi angles: 308.1,161.8	0.061Å	-	-
A 99	GLU	50	-	Favored (25.5%) General / -91.2,144.6	5.1% ( <i>tp10</i> ) chi angles: 201.9,43.3,77.4	0.124Å	-	OUTLIER(S) worst is C-N- CA: 4.412 σ
A 100	ASP	50	-	Favored (5.85%) General / -53.7,151.7	12.4% ( <i>t0</i> ) chi angles: 210.3,355.6	0.04Å	-	-
A 101	GLY	50	-	Favored (2.57%) Glycine / 76.1,-49.5	-	-	-	-
A 102	GLU	50	-	Allowed (0.59%) General / -52.2,161.7	5.1% ( <i>tp10</i> ) chi angles: 181.6,54.8,118.3	0.068Å	-	OUTLIER(S) worst is C-N- CA: 4.406 σ
A 103	SER	50	-	Favored (29.33%) General / -105.0,146.2	74.2% ( <i>m</i> ) chi angles: 295.1	0.134Å	-	-
A 104	TYR	50	-	Favored (33.18%) General / -131.6,161.2	58.7% ( <i>m</i> -85) chi angles: 304.2,262.3	0.036Å	-	-
A 105	LEU	50	-	Favored (55.53%) General / -110.5,130.6	3% (tt) chi angles: 179.2,132.5	0.058Å	-	-
A 106	CYS	50	-	Favored (30.32%) General / -88.6,139.6	96.9% ( <i>m</i> ) chi angles: 294.7	0.047Å	-	OUTLIER(S) worst is C-N- CA: 4.855 σ
A 107	SER 9	99.99	-	-	5.6% (t) chi angles: 161.1	0.095Å	-	-

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