

**Table S4:** Impact of the general energy (GE) function on DeepFold’s modeling performance. Specifically, the table presents the effect of the GE on the secondary structure SOV score, number of Ramachandran outliers, the MolProbity clash score, and the total MolProbity score on the overall dataset and those targets with poor physical model quality.

Target Type (# of Proteins)	DeepFold Energy Function	SS SOV	Rama Outliers	Clash Score	MP-score
All Targets (221)	w/o General Energy	79.68%	6.52	3.61	1.735
	with General Energy	<b>79.71%</b>	<b>5.92</b>	<b>3.13</b>	<b>1.692</b>
MP-score <50 <sup>th</sup> Percentile (16)	w/o General Energy	58.41%	13.00	17.54	2.882
	with General Energy	<b>61.44%</b>	<b>9.81</b>	<b>8.58</b>	<b>2.308</b>