

Table S3: Fourier coefficients (kcal/mol) of approximate RFE expressions pertaining to the correlation between local and electrostatic interactions $U_{corr}^{(m)}$ and $U_{turn}^{(m)}$ of eq. (1) in U. Kozłowska, G.G. Maisuradze, A. Liwo, H.A. Scheraga, J. Comput. Chem., accompanying paper [see eqs. (43), (46), (48)–(50), and (56)–(58) in A. Liwo, C. Czaplewski, J. Pillardy, H.A. Scheraga, J. Chem. Phys., 2001, 115, 2323-2347 for the meaning of the coefficients] obtained in this work by hierarchical optimization using the 1ENH and 1E0L proteins.

Coefficient	Gly	Ala	Pro
b_{11}	0.707184	-0.305115	0.686699
b_{12}	0.000000	1.568744	0.617979
b_{21}	1.652732	-0.083133	0.093891
b_{22}	0.000000	-1.637985	-1.359900
c_{11}	-0.927963	2.302366	1.914370
c_{12}	0.000000	-1.596422	-0.454839
d_{11}	2.373462	-2.089734	-1.548870
d_{12}	0.000000	-0.532502	0.664143
e_{11}	-0.573715	1.296793	0.850642
e_{12}	0.000000	-0.340513	-0.879867
e_{21}	0.000000	0.011028	-0.656144
e_{22}	-1.983253	-0.587866	-1.361770