

SI Table 1: Thermodynamic parameters for equilibrium unfolding of CTPRa proteins fitted to Two State Model.

CTPRan	GuHCl / Circular dichroism			GuHCl / Fluorescence			Averaged Values from GuHCl denaturations			Urea / Circular dichroism		
	[D] _{50%} (M)	<i>m</i> -value (kcalmol ⁻¹ M ⁻¹)	$\Delta G_{D-N}^{H_2O}$ (kcalmol ⁻¹)	[D] _{50%} (M)	<i>m</i> -value (kcalmol ⁻¹ M ⁻¹)	$\Delta G_{D-N}^{H_2O}$ (kcalmol ⁻¹)	<[D] _{50%} > (M)	< <i>m</i> >-value (kcalmol ⁻¹ M ⁻¹)	$\Delta G_{D-N}^{H_2O}$ (kcalmol ⁻¹)	<[D] _{50%} > (M)	< <i>m</i> >-value (kcalmol ⁻¹ M ⁻¹)	$\Delta G_{D-N}^{H_2O}$ (kcalmol ⁻¹)
2	1.7 ± 0.04	2.1 ± 0.2	3.5 ± 0.3	1.6 ± 0.04	2.1 ± 0.2	3.4 ± 0.3	1.7 ± 0.05	2.0 ± 0.1	3.3 ± 0.2	2.5 ± 0.1	1.1 ± 0.1	2.7 ± 0.4
3	2.4 ± 0.02	2.4 ± 0.1	5.8 ± 0.3	2.4 ± 0.02	2.4 ± 0.1	5.5 ± 0.3	2.4 ± 0.03	2.3 ± 0.1	5.5 ± 0.3	3.6 ± 0.1	1.7 ± 0.2	6.2 ± 0.7
4	2.7 ± 0.01	2.6 ± 0.1	7.1 ± 0.4	2.7 ± 0.01	2.6 ± 0.1	6.9 ± 0.3	2.7 ± 0.03	2.6 ± 0.1	7.1 ± 0.2	4.1 ± 0.04	1.5 ± 0.2	6.2 ± 0.7
5	2.9 ± 0.01	2.8 ± 0.1	8.2 ± 0.4	2.9 ± 0.02	2.8 ± 0.2	8.1 ± 0.5	2.9 ± 0.01	3.0 ± 0.3	8.6 ± 0.8	4.4 ± 0.1	1.6 ± 0.2	6.8 ± 0.7
6	2.9 ± 0.01	3.6 ± 0.2	10.3 ± 0.7	2.9 ± 0.02	3.0 ± 0.2	8.7 ± 0.6	2.9 ± 0.01	3.3 ± 0.3	9.7 ± 0.9	4.3 ± 0.1	1.8 ± 0.4	7.6 ± 1.7
8	3.1 ± 0.01	3.7 ± 0.2	11.7 ± 0.6	3.1 ± 0.02	3.3 ± 0.2	10.1 ± 0.7	3.1 ± 0.01	3.7 ± 0.4	11.4 ± 1.2	4.7 ± 0.03	2.2 ± 0.2	10.2 ± 1.0
10	3.2 ± 0.01	4.7 ± 0.2	15.1 ± 0.7	3.2 ± 0.01	4.0 ± 0.3	12.8 ± 0.8	3.2 ± 0.01	4.4 ± 0.4	14.2 ± 1.1	4.8 ± 0.05	3.4 ± 0.4	16.0 ± 1.7

Experimental conditions are 50 mM phosphate, pH 7.0, 10 °C. [D]_{50%} and *m*-values were calculated by fitting data to a two state equation using equation 1 in Equilibrium data analysis (*SI Appendix*). $\Delta G_{D-N}^{H_2O}$ were calculated using equation 2 in Equilibrium data analysis (*SI Appendix*). The errors reported are from the fitting of the experimental data.