

Table 1  
Stability parameters of proteins in presence of osmolytes<sup>a</sup>

[Osmolyte] (M)	Mb (pH 6.1)			RNase A (pH 6.0)			Lzm (pH 4.8)			Cyt c (pH 3.0)		
	$T_m$ (°C)	$\Delta H_m$ (kcal mol <sup>-1</sup> )	$\Delta G_D^\circ$ (kcal mol <sup>-1</sup> )	$T_m$ (°C)	$\Delta H_m$ (kcal mol <sup>-1</sup> )	$\Delta G_D^\circ$ (kcal mol <sup>-1</sup> )	$T_m$ (°C)	$\Delta H_m$ (kcal mol <sup>-1</sup> )	$\Delta G_D^\circ$ (kcal mol <sup>-1</sup> )	$T_m$ (°C)	$\Delta H_m$ (kcal mol <sup>-1</sup> )	$\Delta G_D^\circ$ (kcal mol <sup>-1</sup> )
<b>Gly</b>												
0.00	67.4	82 ± 4	2.7 ± 0.4	65.5	118 ± 2	11.0 ± 0.3	62.7	89 ± 5	6.6 ± 0.6	45.0	16 ± 1	0.6 ± 0.0 <sub>7</sub>
0.25	69.1	83 ± 3	2.6 ± 0.4	66.1	119 ± 2	11.2 ± 0.3	64.1	91 ± 3	6.9 ± 0.3	45.3	13 ± 1	0.4 ± 0.0 <sub>6</sub>
0.50	70.5	84 ± 2	2.7 ± 0.5	68.0	119 ± 4	11.5 ± 0.3	65.4	90 ± 3	6.8 ± 0.4	46.0	12 ± 1	0.3 ± 0.0 <sub>3</sub>
0.75	71.2	85 ± 3	2.7 ± 0.6	68.3	120 ± 3	11.7 ± 0.4	66.8	92 ± 3	7.1 ± 0.4	46.3	11 ± 1	0.2 ± 0.0 <sub>2</sub>
1.00	72.6	88 ± 3	2.8 ± 0.6	69.4	121 ± 4	12.0 ± 0.4	68.4	93 ± 3	7.3 ± 0.4	48.3	11 ± 1	0.2 ± 0.0 <sub>4</sub>
<b>Pro</b>												
0.25	68.1	85 ± 3	2.6 ± 0.4	65.9	115 ± 2	10.8 ± 0.4	63.9	90 ± 4	6.7 ± 0.5	45.8	16 ± 1	0.6 ± 0.0 <sub>2</sub>
0.50	68.2	85 ± 2	2.6 ± 0.3	66.4	119 ± 2	11.3 ± 0.3	64.5	92 ± 3	7.0 ± 0.5	46.5	16 ± 1	0.6 ± 0.0 <sub>2</sub>
0.75	67.8	82 ± 3	2.8 ± 0.2	66.5	120 ± 4	11.4 ± 0.3	64.8	92 ± 3	7.0 ± 0.5	47.0	14 ± 1	0.4 ± 0.0 <sub>2</sub>
1.00	68.0	83 ± 3	2.4 ± 0.3	66.7	120 ± 2	11.4 ± 0.3	65.1	87 ± 3	6.5 ± 0.5	49.3	14 ± 1	0.4 ± 0.0 <sub>3</sub>
<b>Sar</b>												
0.25	68.5	85 ± 2	2.8 ± 0.5	65.9	118 ± 4	11.1 ± 0.3	64.0	88 ± 4	6.5 ± 0.5	46.8	16 ± 1	0.6 ± 0.0 <sub>2</sub>
0.50	69.1	87 ± 3	2.9 ± 0.5	67.5	119 ± 4	11.4 ± 0.3	65.1	89 ± 5	6.7 ± 0.5	48.4	16 ± 1	0.6 ± 0.0 <sub>3</sub>
0.75	70.5	86 ± 3	2.8 ± 0.6	67.8	119 ± 3	11.5 ± 0.3	66.4	90 ± 3	6.9 ± 0.5	50.1	15 ± 1	0.5 ± 0.0 <sub>3</sub>
1.00	72.1	88 ± 3	3.1 ± 0.5	70.1	119 ± 4	11.8 ± 0.3	67.9	91 ± 3	7.1 ± 0.6	51.1	16 ± 1	0.5 ± 0.0 <sub>3</sub>
<b>GB</b>												
0.25	68.0	85 ± 2	2.9 ± 0.6	66.1	122 ± 4	11.6 ± 0.3	63.1	89 ± 5	6.6 ± 0.5	45.8	16 ± 2	0.6 ± 0.0 <sub>2</sub>
0.50	68.8	85 ± 3	2.8 ± 0.5	66.3	120 ± 3	11.4 ± 0.3	64.9	90 ± 3	6.8 ± 0.5	46.5	16 ± 1	0.6 ± 0.0 <sub>2</sub>
0.75	69.5	86 ± 2	2.9 ± 0.6	67.0	122 ± 2	11.7 ± 0.3	65.0	91 ± 3	6.9 ± 0.5	47.5	15 ± 1	0.5 ± 0.0 <sub>3</sub>
1.00	70.2	87 ± 3	3.1 ± 0.4	68.1	120 ± 3	11.7 ± 0.4	65.8	89 ± 4	6.7 ± 0.5	49.7	16 ± 1	0.5 ± 0.0 <sub>3</sub>

A ‘±’ with a value of  $\Delta H_m$  represents the standard deviation of the fit. The average error from several independent measurements are within errors of the least-squares fit. Values of  $\Delta G_D^\circ$  were calculated with Eq. 2 using values of  $\Delta C_p$  given in the text.