

	homolog	$K_{D,1}$ ( $\mu\text{M}$ )	$\Delta H_1$ ( $\text{kcal}\cdot\text{mol}^{-1}$ )	$n$ (#)	$K_{D,2}$ ( $\mu\text{M}$ )	$\Delta H_2$ ( $\text{kcal}\cdot\text{mol}^{-1}$ )	fit model	buffer	# reps
$\text{Zn}^{2+}$	P	$2.7 \pm \text{n/a}$	$-0.4 \pm \text{n/a}$	$0.7 \pm \text{n/a}$	---	---	equivalent sites	Tris	1
	A1	$3.5 \pm 0.7$	$0.8 \pm 0.1$	$1.3 \pm 0.2$	---	---	equivalent sites	TES	2
	A14	$27.9 \pm 12.6$	$-2.3 \pm 0.5$	$1.0 \pm 0.2$	---	---	equivalent sites	Tris	2
	A2	$33.2 \pm 2.3$	$6.1 \pm 1.4$	$2 \pm \text{n/a}$	$83.4 \pm 2.1$	$-9.1 \pm 1.1$	independent sites	Tris	2
	A4	$12.5 \pm 1.3$	$-4.9 \pm 2.3$	$2.2 \pm 0.1$	**	**	equivalent sites	Tris	2
	A5	$1.3 \pm 0.3$	$-1.4 \pm 0.4$	$0.9 \pm 0.1$	---	---	equivalent sites	Tris	2
	A5 <sub>H17A</sub>	$3.0 \pm 0.1$	$-2.5 \pm 0.2$	$0.8 \pm 0.1$	---	---	equivalent sites	Tris	2
	A5 <sub>C79S</sub>	---	---	---	---	---	equivalent sites	Tris	2
	A5 <sub>C43S/C79S</sub>	---	---	---	---	---	equivalent sites	Tris	2
	A6	**	**	**	**	**	**	Tris	2
	A11	$10.9 \pm 0.3$	$-2.0 \pm 0.1$	$1.2 \pm 0.1$	---	---	equivalent sites	Tris	2
	tunA	$0.1 \pm 0.1$	$-7.4 \pm 0.5$	$2.0 \pm 0.1$	**	**	equivalent sites	TES	2
tunB	$2.6 \pm \text{n/a}$	$8.2 \pm \text{n/a}$	$1.1 \pm \text{n/a}$	---	---	equivalent sites	TES	1	
$\text{Cu}^{2+}$	P	$1.7 \pm 0.8$	$-2.4 \pm 0.3$	$2.1 \pm 0.1$	**	**	equivalent sites	TES	2
	A1	---	---	---	---	---	---	TES	2
	A14	$1.1 \pm 0.3$	$-5.2 \pm 0.2$	$1.5 \pm 0.2$	---	---	equivalent sites	TES	2
	A2	**	**	$2 \pm \text{n/a}$	**	**	**	TES	2
	A4	**	**	$2 \pm \text{n/a}$	**	**	**	TES	2
	A5	$1.2 \pm 0.1$	$-3.6 \pm 0.2$	$1.2 \pm 0.1$	---	---	equivalent sites	TES	2
	A5 <sub>H17A</sub>	$2.9 \pm 1.2$	$-4.3 \pm 0.6$	$1.1 \pm 1.4$	---	---	equivalent sites	TES	2
	A5 <sub>C79S</sub>	$6.4 \pm 0.2$	$-3.1 \pm 0.1$	$0.9 \pm 0.1$	---	---	equivalent sites	TES	2
	A5 <sub>C43S/C79S</sub>	$2.4 \pm 0.6$	$-2.6 \pm 0.2$	$1.2 \pm 0.1$	---	---	equivalent sites	TES	2
	A6	$1.9 \pm 0.5$	$-3.6 \pm 0.3$	$0.8 \pm 0.1$	---	---	equivalent sites	TES	2
A11	$2.1 \pm 0.1$	$-5.4 \pm 0.2$	$2.4 \pm 0.1$	---	---	equivalent sites	TES	2	
$\text{Ca}^{2+}$	tunA	$0.1 \pm 0.1$	$-9.5 \pm 1.6$	$2.1 \pm 0.2$	**	**	equivalent sites	TES	2
	tunB	$1.6 \pm 0.3$	$246 \pm 86$	$1.8 \pm 0.2$	$1.6 \pm 0.3$	$-133 \pm 61$	equivalent sites	TES	2