

Supplemental TABLE S1. Effects of Ca^{2+} concentrations on sensitivity of Cd^{2+} -selective microelectrodes.

Unit: mM	$-\text{Ca}^{2+}$	$+\text{Ca}^{2+}$								$+\text{K}^{+}+\text{Ca}^{2+}+\text{Mg}^{2+}$
	Cd^{2+} (0.01, 0.05, 0.1)	0.01	0.025	0.05	0.1	0.2	0.5	1.0	2.0	K^{+} (0.1)/ Ca^{2+} (0.05)/ Mg^{2+} (0.1)
Nernst Slope	34.0476	25.1954	26.4443	28.9053	28.4665	28.6798	27.1430	26.9611	27.0076	29.0247
	± 0.5584	± 0.4619	± 0.2704	± 0.3568	± 0.5725	± 0.8838	± 0.3648	± 0.3496	± 0.4301	± 0.9358
Nernst Intercept	247.4408	239.5143	239.6579	241.8781	237.6448	238.7986	227.3050	221.8072	216.1608	243.1562
	± 1.4602	± 1.5502	± 1.4003	± 0.9108	± 1.5195	± 1.8944	± 1.2770	± 1.0566	± 0.9820	± 1.2556

Cd^{2+} -selective microelectrodes were calibrated in Cd^{2+} solutions (0.01, 0.05, 0.1 mM) supplemented with or without 0, 0.01, 0.025, 0.05, 0.1, 0.2, 0.5, 1.0, and 2.0 mM Ca^{2+} . In addition, the Nernst slope and intercept of the Cd^{2+} electrodes was calibrated in the measuring solution containing 0.1 mM KCl, 0.1 mM MgCl_2 , and 0.05 mM CaCl_2 .