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δ^{11}B as monitor of calcification site pH in divergent marine calcifying organisms

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Supplementary Table 1. Example of relationship between pH and predicted $\delta^{11}B_{CaCO3}$ using Eq. 1 where pK_B is 8.6152 (at 25°C and 32 psu; Dickson, 1990), $\delta^{11}B_{SW}$ is 39.61 ‰ (Foster et al., 2010), and α is 1.0272 (Klochko et al., 2006). The difference between each predicted $\delta^{11}B_{CaCO3}$ change is noted to exemplify the influence of pH. For example, a change in pH from 7.75 to 7.80 results in a difference in predicted $\delta^{11}B_{CaCO3}$ of 0.35 ‰ (15.77 ‰ – 15.42 ‰). Note: the sensitivity of predicted $\delta^{11}B_{CaCO3}$ to pH increases with pH (up to pK_B).

pH	$\delta^{11}B_{CaCO3}$ (‰)	Difference (‰)
7.70	14.98	
7.75	15.3	0.32
7.80	15.64	0.34
7.85	16.01	0.37
7.90	16.42	0.41
7.95	16.86	0.44
8.00	17.33	0.47
8.05	17.84	0.51
8.10	18.38	0.54
8.15	18.96	0.58
8.20	19.57	0.61
8.25	20.21	0.64
8.30	20.89	0.68
8.35	21.6	0.71
8.40	22.32	0.72
8.50	23.85	1.53

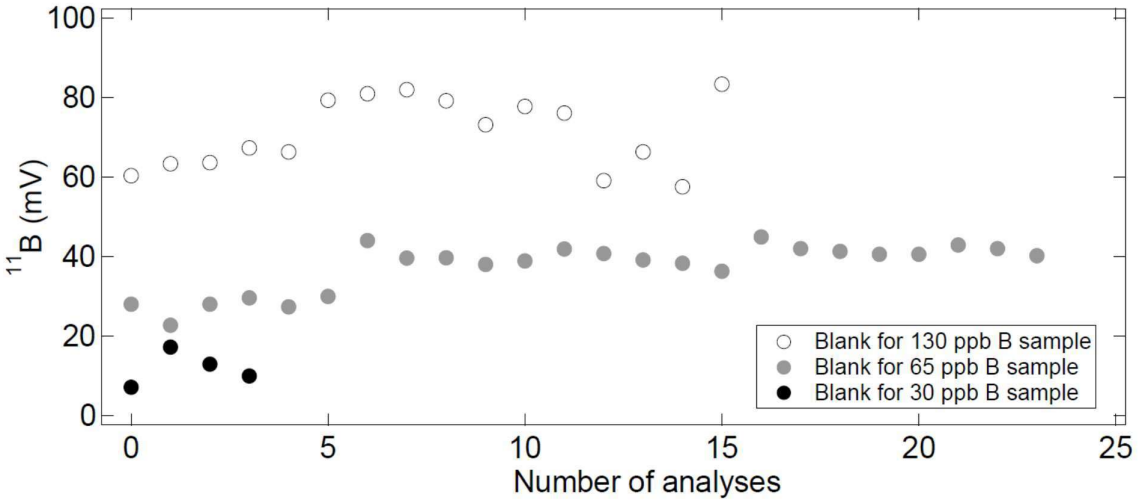

Fig. S1. Blank intensities for ^{11}B where NIST951 was measured at concentrations of 30 ppb, 65 ppb, and 130 ppb.