

**Supplemental Fig. 2.** Species specificity of the *Alexandrium pacificum* Group IV PCR assay demonstrated by melting curve analysis. Positive control melting peak was 81.2 °C. The positive control was *A. pacificum* Group IV CCMP 1598 the negative controls were *A. affine* CCMP 112, *A. minutum* CCMP 113, *A. tamarense* Group III CCMP 115, *A. affine* CCMP 116, *A. fundyense* Group I CCMP 1908, *A. fundyense* Group I CCMP 1719, *A. fundyense* Group I Dentist Dock 1, *A. fundyense* Group I USCG 2, *A. andersoni* CCMP 1718, *A. tamarense* Group III CCMP 1771, *A. ostenfeldii* CCMP 1773, *A. minutum* CCMP 1888, *A. insuetum* CCMP 2082, *A. hiranoi* CCMP 2215, *A. leei* CCMP 2955, *A. monilatum* Amon Miss VIMS, *A. monilatum* Amon YK VIMS, *A. ostenfeldii* 1773, *A. ostenfeldii* AoF0933, *A. ostenfeldii* AoNOR4, *A. ostenfeldii* AoTVA4, *A. ostenfeldii* Ap002/B2NR, *A. ostenfeldii* Ap003/A4NR, *A. ostenfeldii* Ap004/A2NR, *A. ostenfeldii* Ap006/A3NR (Table 1).

