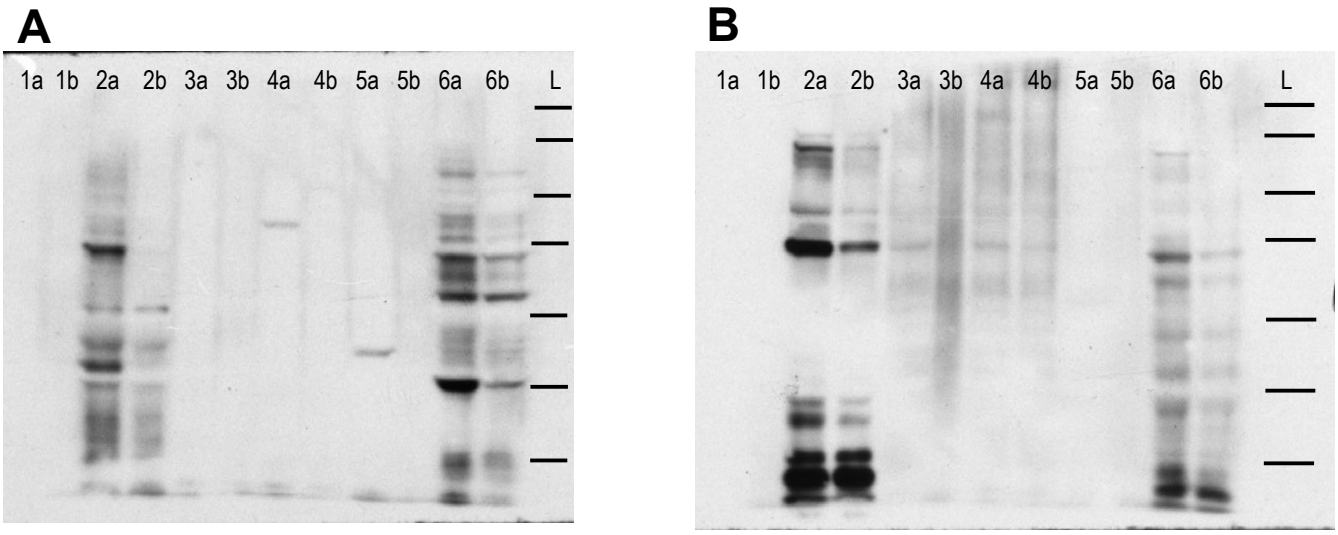
Supplementary Figure 1. Protein phosphorylation patterns of digestive gland homogenates of the three studied species of marine bivalves in the native state and after experimental manipulation of the protein phosphorylation states.

Species: Myt – *Mytilus edulis*, Oyst – *Crassostrea gigas*, Arctica – *Arctica islandica*.

Experimental treatments: Stop – proteins in the native state extracted in the presence of inhibitors of phosphatases and kinases (1a, 3a, 53a), CeO_2 – cerium oxide treated homogenates (1b, 3b, 5b), cAMP – homogenates treated with cAMP to stimulate endogenous protein kinase A (2a, 4a, 6a); PMA – homogenates treated with phorbol myristate acetate to stimulate endogenous protein kinase C (2b, 4b, 6b). Immunoblots with antibodies against phosphorylated PKA (A) and PKC (B) substrates are shown. L – approximate positions of the bands of the protein size ladder.



1a - Myt Stop, 1b - Myt CeO_2, 2a - Myt cAMP, 2b - Myt PMA,
3a - Oyst Stop, 3b - Oyst CeO_2, 4a - Oyst cAMP, 4b - Oyst PMA,
5a - Arctica Stop, 5b - Arctica CeO_2, 6a - Arctica cAMP, 6b - Arctica PMA