

**Fig. S1.** Immunolocalization Carbonic Anhydrase II (CA II) and Na<sub>+</sub>/K<sub>+</sub>-ATPase (NKA) in *Mytilus spp.* epithelia. (A) CA II immunostaining was observed in the cytosol of plicate organ cells. (B) No NKA staining was observed in cell membranes of the plicate organ. (C) NKA immunostaining was observed mantle epithelium facing the shell which is responsible for calcification, but not in the epithelium facing seawater (SW). Insets: No primary antibody controls. Scale bar =  $50 \mu m$ .