

Supplementary Figures

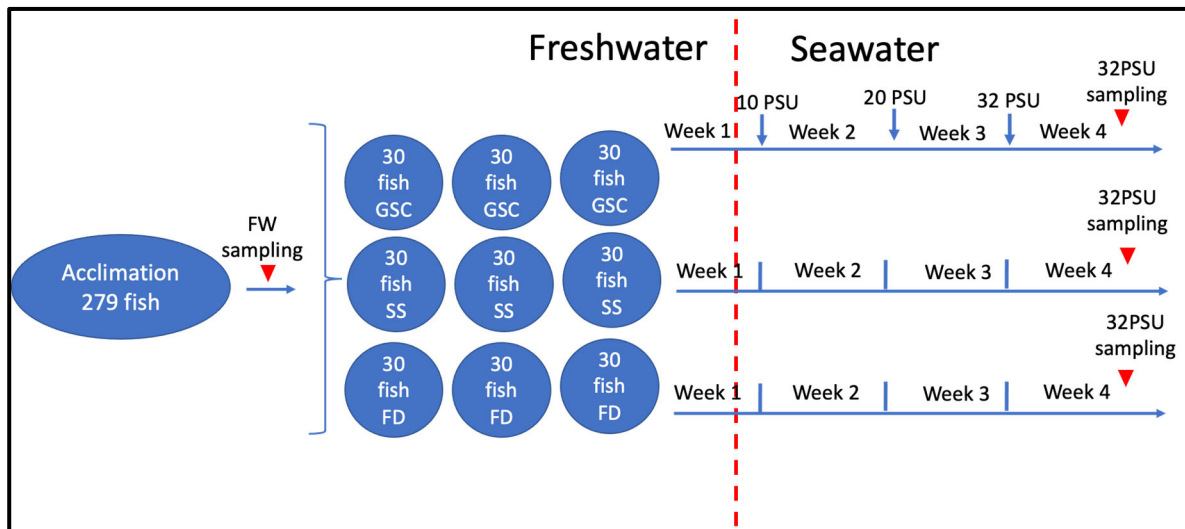


Figure S1. Experimental design for the Atlantic salmon transfer from FW to SW. After a month, all fish were acclimated in the same tank and were separated into three experimental groups: Gradual salinity change (GSC), salinity sock (SS), and functional diet (FD). The blue arrows indicate the salinity change performed in the GSC group. Sample points are indicated with a red arrow.

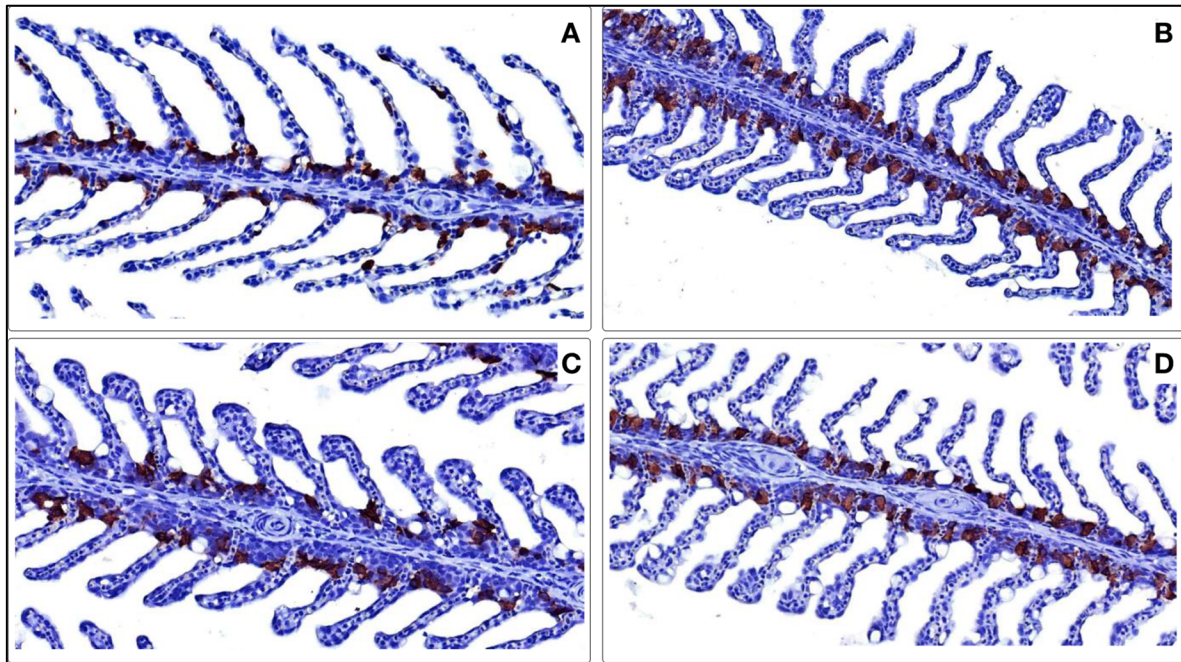


Figure S2. Localization of chloride cells in the gill filament epithelium. (A) Freshwater (FW) gills sample; (B) Gradual salinity change (GSC) 32 PSU; (C) Salinity shock (SS) 32 PSU; D) functional diet (FD) 32 PSU. A) Na⁺/K⁺-ATPase positive cells located in the middle region of the superficial interlamellar space and near the lamellar vascular axis. B-C Na⁺/K⁺-ATPase positive cell deeper in the epithelium.

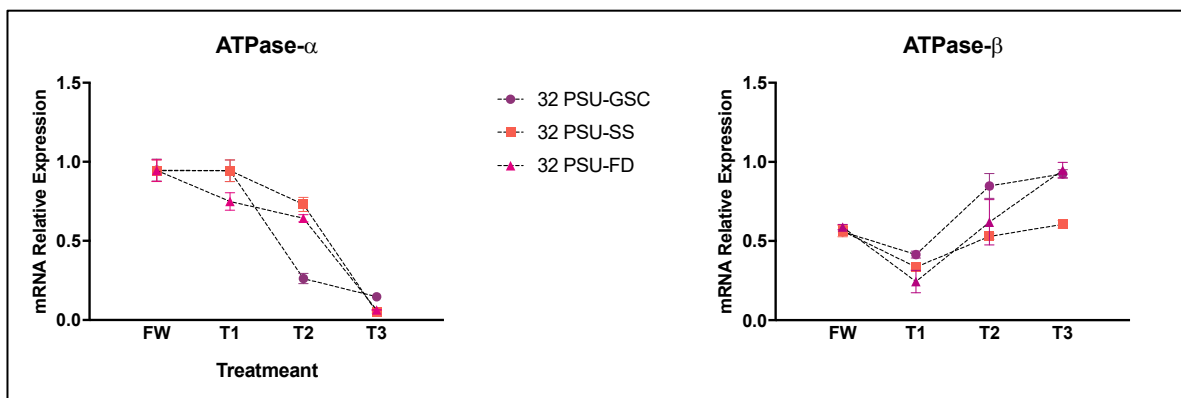


Figure S3. RT-qPCR analysis of ATPase- α and ATPase- β subunits. FW: Freshwater previous treatment group; GSC: gradual salinity change at 10 PSU, 20 PSU, and 32 PSU groups; 32PSU-SS Salinity shock at 32-PSU group; 32PSU-FD: Salinity shock at 32 PSU group previously feeding with a functional diet.

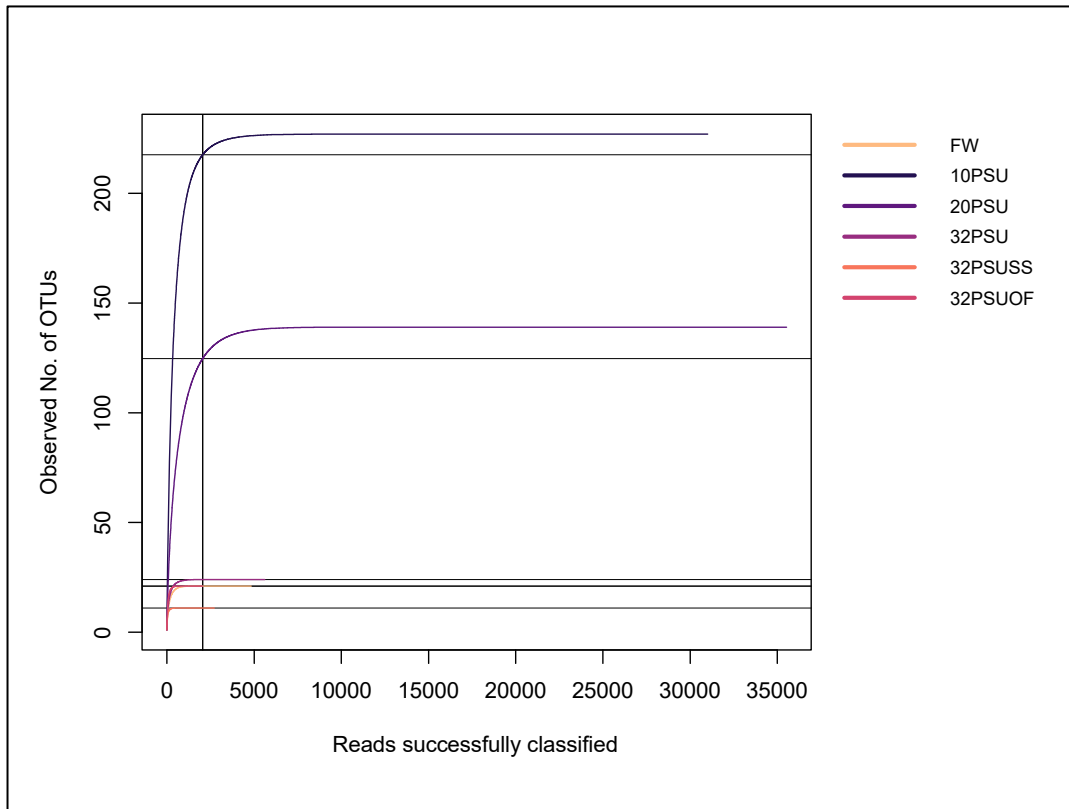


Figure S4. Rarefaction curve. FW: Freshwater previous treatment group; GSC: gradual salinity change at 10 PSU, 20 PSU, and 32 PSU groups; 32PSU-SS Salinity shock at 32-PSU group; 32PSU-FD: Salinity shock at 32 PSU group previously feeding with a functional diet.

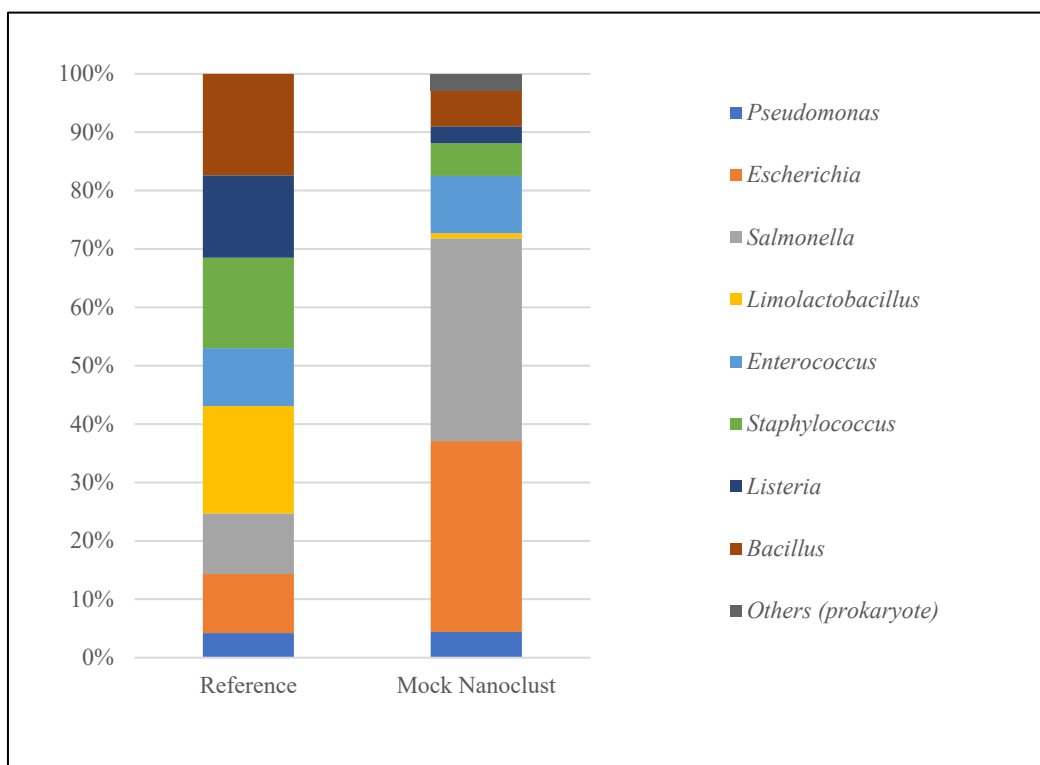


Figure S5. Mock community composition