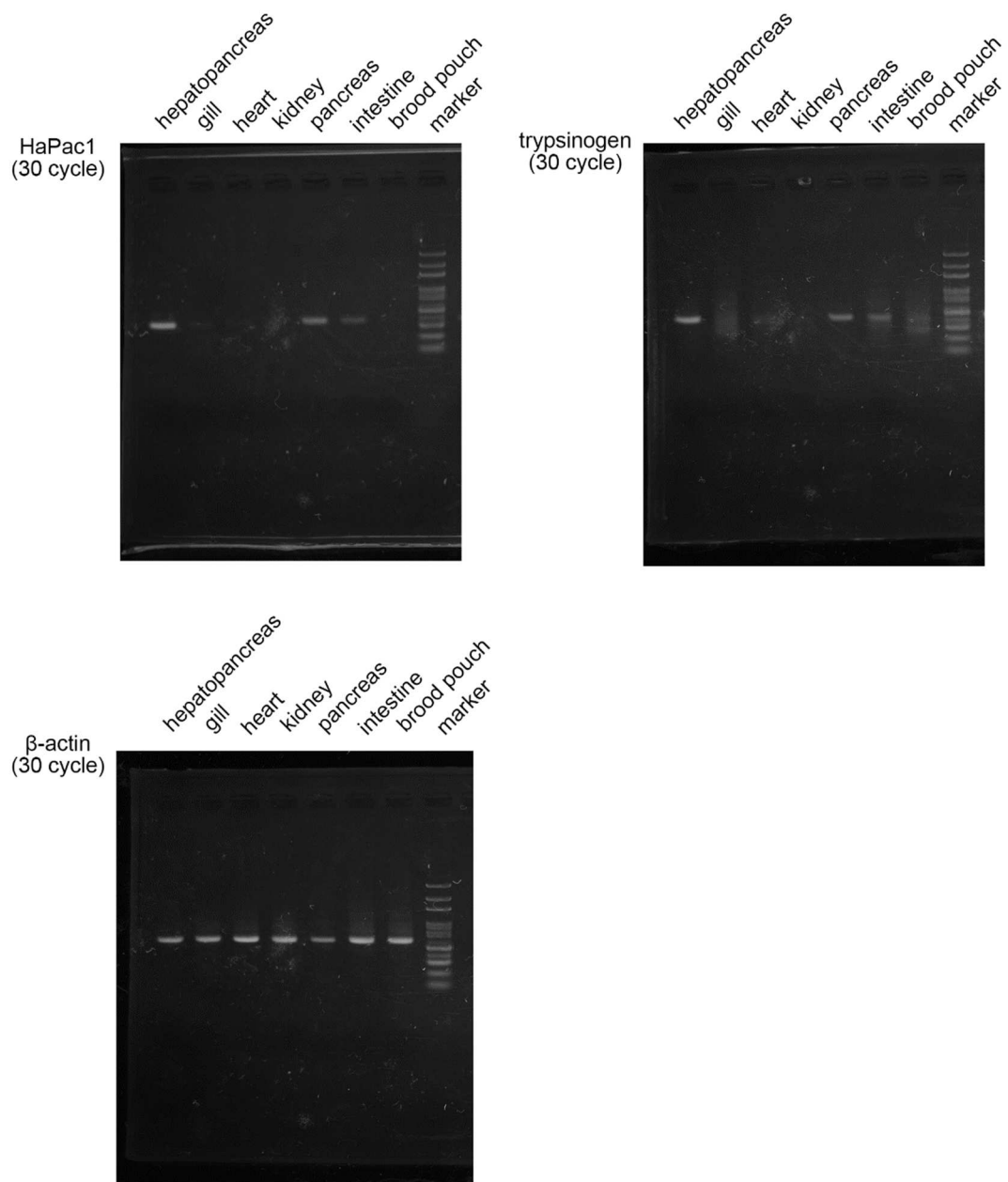
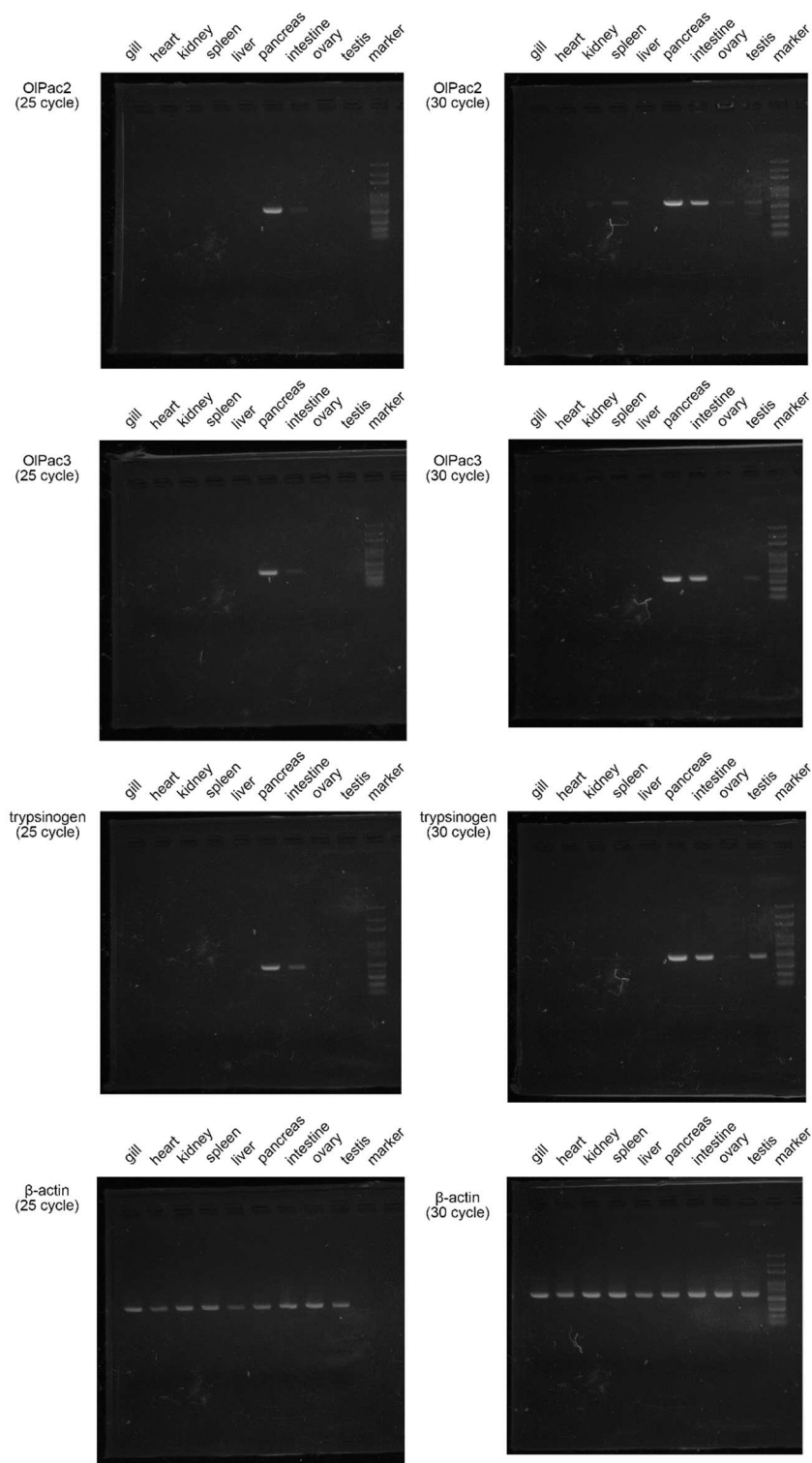


**Pactacin is a novel digestive enzyme in teleosts**

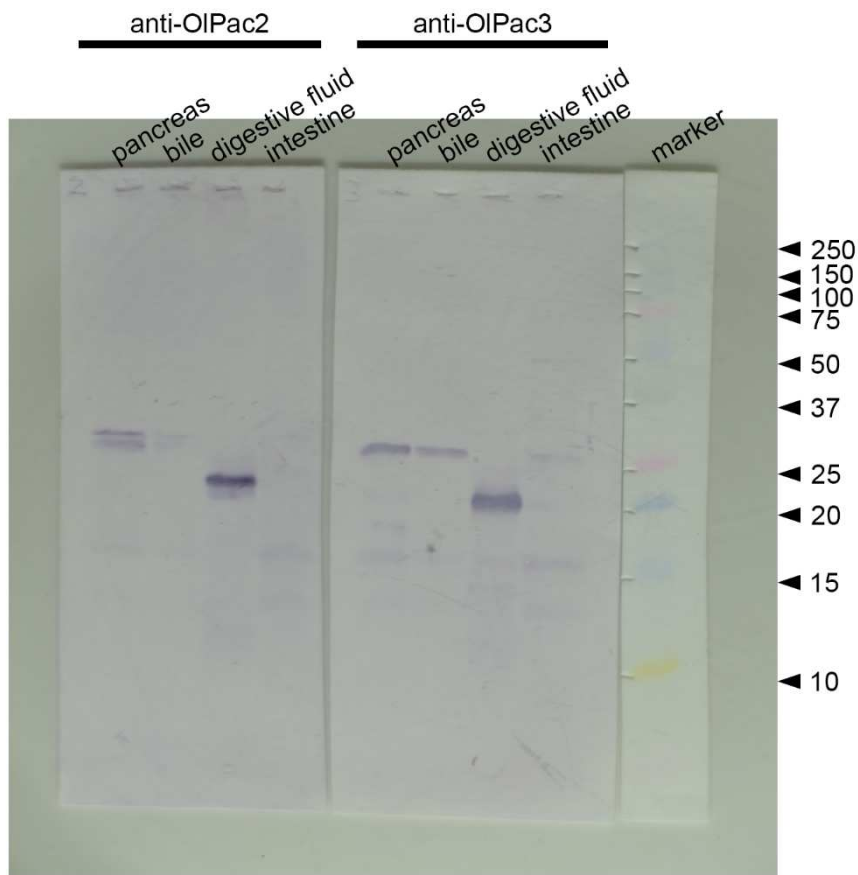
Mari Kawaguchi, Yohei Okazawa, Aiko Imafuku, Yuko Nakano, Risa Shimizu, Reiji Ishizuka,  
Tianlong Jiang, Tatsuki Nagasawa, Junya Hiroi, and Shigeki Yasumasu



Supplementary Figure 1 Full-length gel images of semi-quantitative expression analysis. HaPac1 and trypsinogen gene expression in adult seahorse hepatopancreas, gills, heart, kidney, mesentery including pancreas (labeled as pancreas), intestines, and brood pouch.  $\beta$ -actin was used as a control signal.

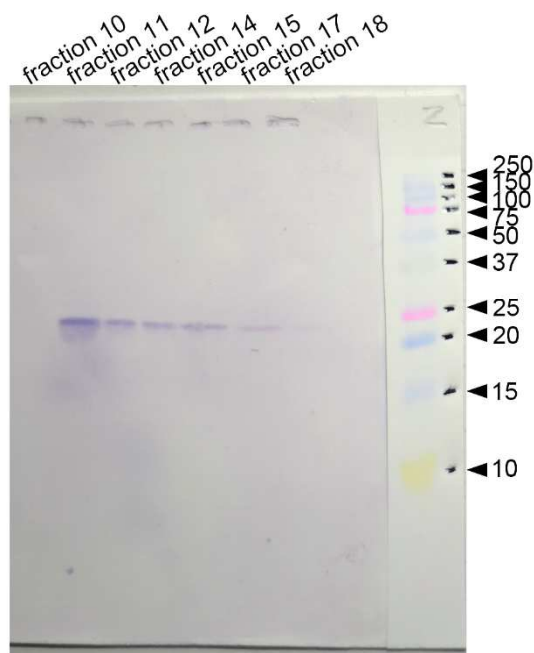


Supplementary Figure 2 Full-length gel images of semi-quantitative expression analysis. OIPac2 (MC6AST2), OIPac3 (MC6AST3), and trypsinogen gene expression in adult medaka gills, heart, kidney, spleen, liver, mesentery including pancreas (labeled as pancreas), intestines, ovary and testes.  $\beta$ -actin was used as a control signal.

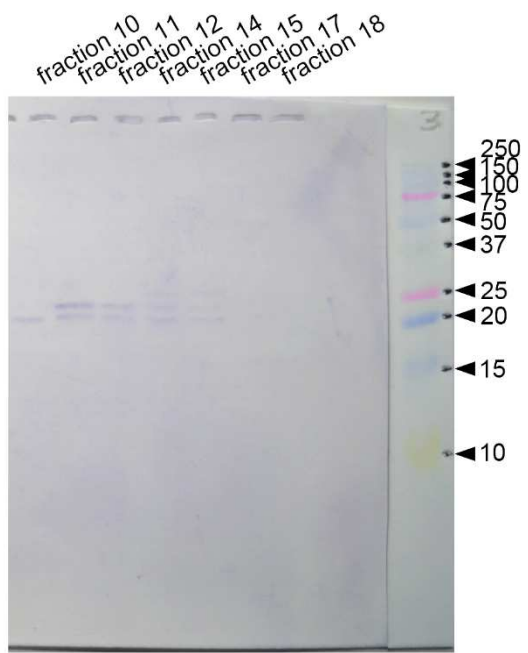


Supplementary Figure 3 Original photo of western blot analysis of pactacin. Medaka extracts of the mesentery including pancreas (labeled as pancreas), intestines, bile and digestive fluid with anti-OIPac2 antibody or anti-OIPac3 antibody. Numbers on the left refer to molecular weights (kDa) of molecular markers.

anti-OIPac2



anti-OIPac3



Supplementary Figure 4 Original photo of western blot analysis of fractions 10, 11, 12, 14, 15, 17 and 18. Anti-OIPac2 or anti-OIPac3 antibodies were used. Numbers on the left refer to molecular weights (kDa) of molecular markers.