



Figure S1 (A) Box plot showing *Eda* expression levels in pooled brain samples of larval marine ($n = 8$ pools of 3 individuals each) and benthic ($n = 8$ pools of 3 individuals each) sticklebacks. *Eda* expression is significantly higher in larval marine brains (Mann-Whitney-Wilcoxon test, $W = 54$, $P = 0.021$). (B) Box plot shows *Eda* expression levels in three brain regions of juvenile marine ($n = 8$) and benthic ($n = 8$) sticklebacks. There was a trend for *Eda* to be expressed at higher levels in the diencephalon (Mann-Whitney-Wilcoxon test, $W = 50$, $P = 0.065$). There was no significant difference in *Eda* expression in the telencephalon (Mann-Whitney-Wilcoxon test, $W = 33$, $P = 0.32$) or hindbrain (Mann-Whitney-Wilcoxon test, $W = 32$, $P = 1.0$). Box plots show the median and 25% and 75% quartiles, and whiskers show the 1.5x interquartile range.