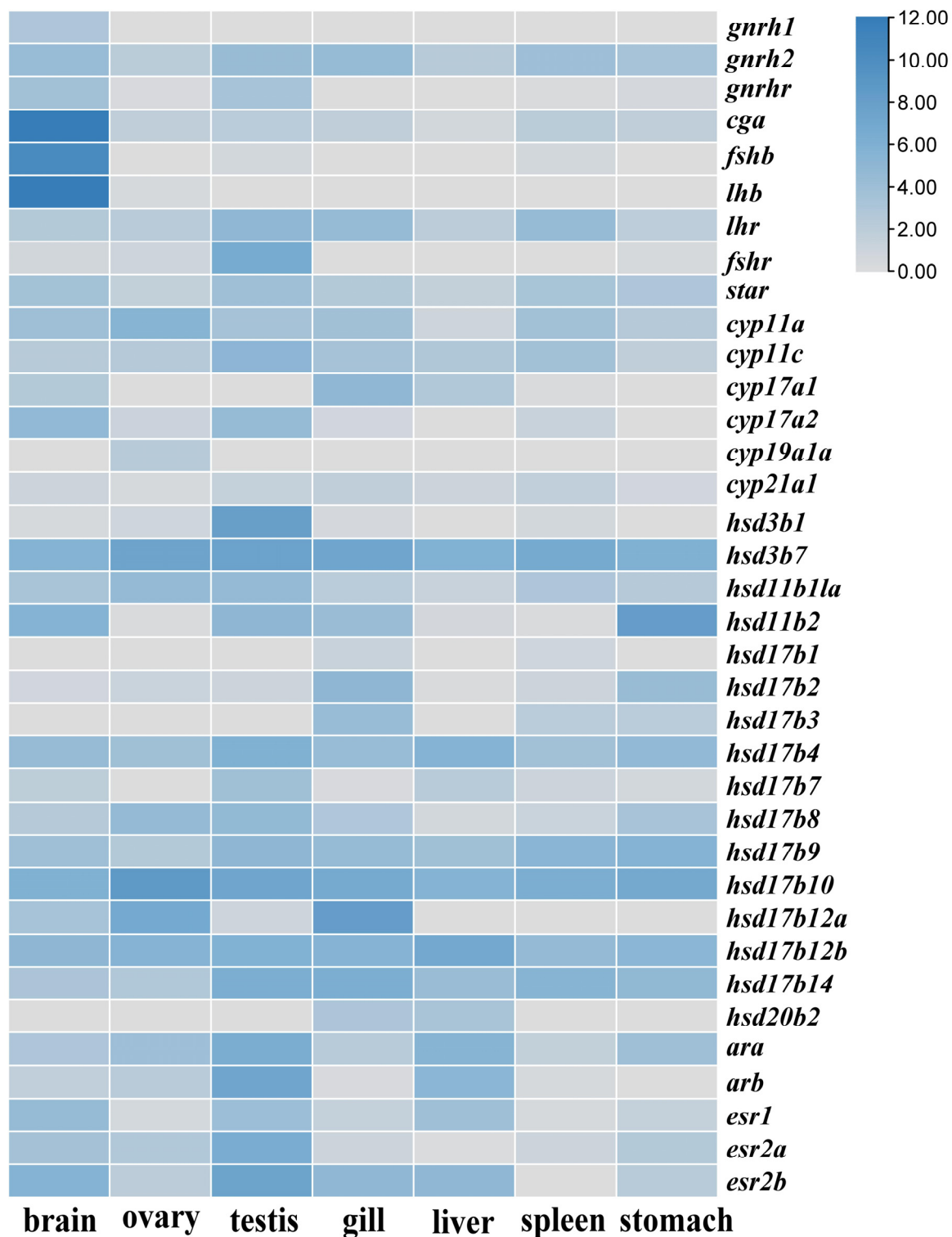
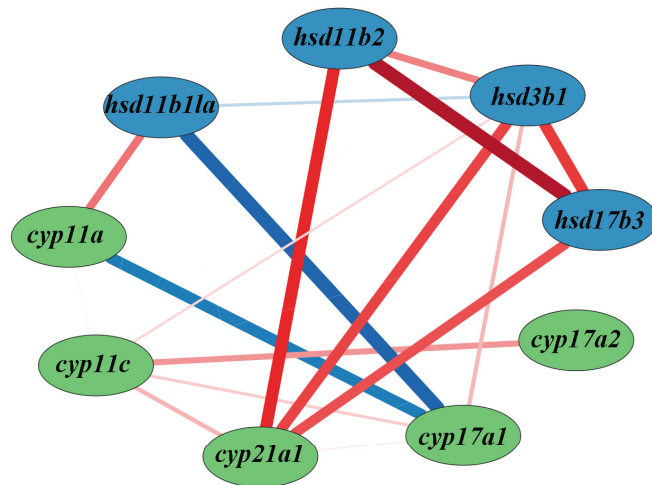


**Figure S1:** mVISTA analysis of (A) *star/star2*, (B) *cyp11a/cyp11c* and (C) *cyp17a1/cyp17a2*. Blue color represents intergenic regions, purple color represents exon region, orange color represents intron region. When the similarity of gene structure between *L. maculatus* and selected teleosts is higher than 50%, it will be displayed in color. The genes of the *L. maculatus* HPG axis are shown in red font, enlarged italic and bold.

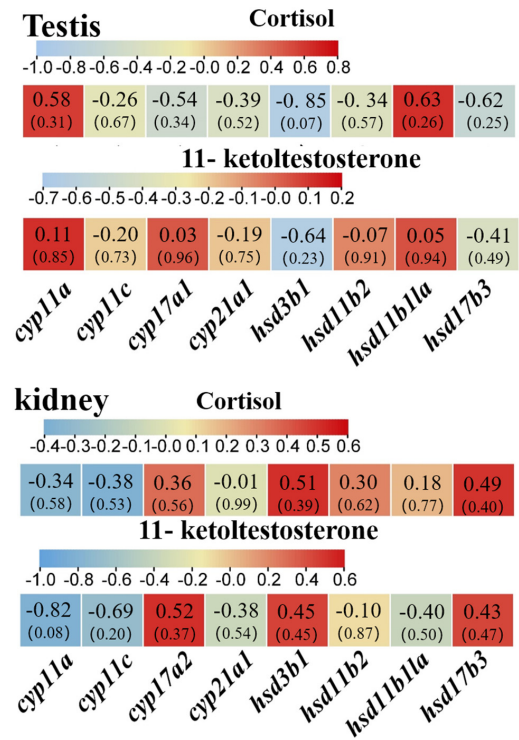


**Figure S2:** Expression profile of HPG axis genes in 7 adult tissues of *L. maculatus* with their  $\log_2(\text{FPKM}+1)$  values.

A



B



**Figure S3:** Pearson correlation of (A) steroid hormone metabolism pathway genes and (B) steroid hormones in response to salinity changes in *L. maculatus*. The thicker the line, the higher the correlation.