



**Supplementary Figure S1. Phylogenetic tree of the evolutionary relationships between teleost *cbx6* paralogues.** The tree is generated using the Neighbor-Joining method. The analysis involved 84 amino acid sequences. All ambiguous position were removed for each sequence pair and there is 768 positions in the final dataset. Evolutionary analyses were conducted in MEGA X. The orange stars indicate the recent carp-specific whole-genome duplication (CsGD) that occurred in some Cyprinidae fishes.