**Supplementary Tables and Figures**

**Table S1: Sequencing, filtering and mapping statistics.**

**Table S2: Gene ontology enrichment analysis by module of co-expression network analysis.**

**Figure S1: Differentially expressed genes in the KEGG pathway of circadian rhythm.** KEGG ontology were extracted from the KAAS online tools and plotted using pathview R package. The scale represents the log2FC expression levels between high and low conditions from edgeR analysis. Negative and positive values represent genes up-regulated and down-regulated in high temperature fish, irrespective of the genotype. β-TrCP: F-box and WD-40 domain protein 1/1 ; AMPK : 5'-AMP-activated protein kinase, regulatory gamma subunit ; CKlε/δ : casein kinase 1, epsilon ; Bmal : aryl hydrocarbon receptor nuclear translocator-like protein 1; Clock : neuronal PAS domain-containing protein 2; CREB: cAMP response element-binding protein ; Cry : cryptochrome ; Dec : class B basic helix-loop-helix protein 3 ; FBXL3 : F-box and leucine-rich repeat protein 3 ; Per : period circadian regulator 1 ; REVERBA : nuclear receptor subfamily 1 group D member 1 ; Ror : RAR-related orphan receptor alpha ; SCF : S-phase kinase-associated protein 1