Supplementary Material

Supplementary Figure 1. The CDS region and deduced amino acid sequences of *Pannier* gene from *H. axyridis* (HaPnr-α). The amino acid sequence was numbered from the start of its predicted mature protein. The start codon ATG was bolded and underlined, and the stop codon TAA at the end of the coding region was bolded and marked with an asterisk. The second exon, alternative splicing part, was showed red fonts. The blue boxes represent one predicted GATA-type domain, and the orange boxes represent the other one of HaPnr-α.
Supplementary Figure 2. The CDS region and deduced amino acid sequences of *Pannier* gene from *H. axyridis* (*HaPnr-β*). The amino acid sequence was numbered from the start of its predicted mature protein. The start codon ATG was bolded and underlined, and the stop codon TAA at the end of the coding region was bolded and marked with an asterisk. The second exon, alternative splicing part, was showed red fonts. The orange boxes represent the only one predicted GATA-type domain of *HaPnr-β*. 
**Supplementary Figure 3.** Schematic diagram of the primer of dsRNA and RT-qPCR designed for *HaPnr, HaPnr-α* and *HaPnr-β.*