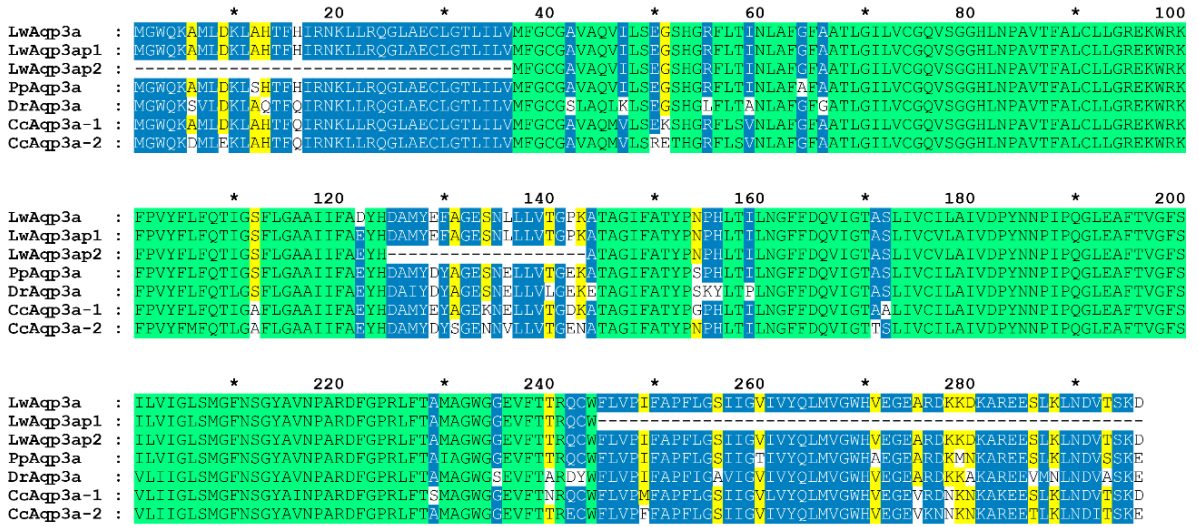


Figure S1. Manual analysis of the aqp3a leading to the theoretical redefinition of aqp3a used in this work. (a) Amino acid sequence homology alignment. The orthologous sequences in *Pimephales promelas*, *Danio rerio*, *Cyprinus carpio* was used to align to reconfirm the Lw Aqp3a. PpAqp3a (*Pimephales promelas* Aqp3a) NCBI code: XP_039505890.1; DrAqpAqp3a (*Danio rerio* Aqp3a) NCBI code: NP_998633.1. The NCBI code CcAqp3a-1 (Cc: *Cyprinus carpio*) of CcAqp3a-2 is aXP_042580483.1 and XP_042613291.1, respectively. The two truncated sequence of Aqp3a was renamed Aqp3ap1 and Aqp3ap2, respectively (the “p” referred to pseudogene). (b) Genomic structure analysis

(a)



(b)

