



Supplementary file 3. The Evolutionary history of *Ventx* family genes.

A. Synteny of the *Ventx* genomic region in gnathostomes. Blue dotted boxes indicate species-specific gene duplication events. Note that a triplication event, giving rise to *Ventx1*, *Ventx2* and *Ventx3*, occurred in the last common ancestor of tetrapods. One or more *Ventx* paralogs was subsequently lost during squamata, archosaura and testudina evolution. Mammals lost both *Ventx1* and *Ventx3* paralogs and exclusively kept *Ventx2*. Mouse represents an extreme case with a total loss of *Ventx* genes. **B.** Simplified tree of vertebrates, which displays typical situations regarding the number of *Ventx* genes in main evolutionary branches.