

Expression of transposable elements in neural tissues during *Xenopus* development

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Transposable elements comprise a large proportion of animal genomes. Transposons can have detrimental effects on genome stability but also offer positive roles for genome evolution and gene expression regulation. Proper balance of the positive and deleterious effects of transposons is crucial for cell homeostasis and requires a mechanism that tightly regulates their expression. Herein we describe the expression of DNA transposons of the Tc1/mariner superfamily during *Xenopus* development. Sense and antisense transcripts containing complete Tc1-2_Xt were detected in *Xenopus* embryos. Both transcripts were found in zygotic stages and were mainly localized in Spemann's organizer and neural tissues. In addition, the Tc1-like elements Eagle, Froggy, Jumpy, Maya, Xeminos and TXr were also expressed in zygotic stages but not oocytes in *X. tropicalis*. Interestingly, although Tc1-2_Xt transcripts were not detected in *Xenopus laevis* embryos, transcripts from other two Tc1-like elements (TXr and TX