



The *noggin2* gene of *Gekko japonicus* (Gekkonidae) is down-regulated in the spinal cord after tail amputation

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ABSTRACT. The cDNA encoding *noggin2* protein was obtained from the brain and spinal cord cDNA library of *Gekko japonicus*. The size of the *noggin2* transcript and its expression in different tissues were analyzed by Northern blot analysis. *In situ* hybridization revealed positive hybridization signals in both gray and white matter of the spinal cord. Changes in *noggin2* expression in the spinal cord after tail amputation were examined by real-time PCR. The *noggin2* was expressed in the normal spinal cord and down-regulated three days after tail amputation, reaching the lowest level at two weeks, during the time course when we followed the expression levels. We concluded that the expression of *noggin2* is affected by the process of spinal cord injury and regeneration.

Key words: *Gekko japonicus*; Molecular cloning; *Noggin2*; Regeneration; Spinal cord