

ENDOGENOUS PLA₂ INHIBITORS ARE ENCODED IN SEVERAL ORGANS OF SNAKES

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Several PLA₂ inhibitors (α , β and γ PLIs) have been reported in the blood plasma of snakes. They are encoded in the liver and further secreted into the circulating blood of the snakes, where they play their main role of natural protecting agents against an eventual leaking PLA₂-based toxins from their own venom. Descriptions of PLIs in non venomous snake species have suggested the possibility of other physiological roles for those molecules, in compliance to the wide range of functions displayed by PLA₂ in mammals. Hence, we decided to investigate the presence of cDNA encoding α -PLIs in different organs and tissues of adult *Crotalus durissus terrificus*, the South American rattlesnake. Total RNA was extracted and submitted to RT-PCR in the presence of specific oligonucleotides for that class of inhibitors. Major fragments of about 415 bp, compatible with the DNA sequence encoding for the mature form of an α -PLI of reference, have been amplified from several tissues. These results indicated the expression of α -PLI homologues in different tissues of snakes and provided additional evidence for the possibility of other roles for PLIs in snakes. Sequencing data and quantitative PCR assays (in progress) will be necessary to confirm the hypothesis.

KEY WORDS: PLA₂ inhibitor, PLI, PLA₂, *C. d. terrificus*

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