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Last decade update for three-finger toxins: Newly emerging structures and biological activities

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#### Abstract

Three-finger toxins (TFTs) comprise one of largest families of snake venom toxins. While they are principal to and the most toxic components of the venoms of the *Elapidae* snake family, their presence has also been detected in the venoms of snakes from other families. The first TFT,  $\alpha$ -bungarotoxin, was discovered almost 50 years ago and has since been used widely as a specific marker of the  $\alpha 7$  and muscle-type nicotinic acetylcholine receptors. To date, the number of TFT amino acid sequences deposited in the UniProt Knowledgebase free-access database is more than 700, and new members are being added constantly. Although structural variations among the TFTs are not numerous, several new structures have been discovered recently; these include the disulfide-bound dimers of TFTs and toxins with nonstandard pairing of disulfide bonds. New types of biological activities have also been

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### Toxins | Free Full-Text | Computational Studies of Snake Venom ...

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### Three-finger toxin - Wikipedia

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**Three-finger toxins** (abbreviated 3FTx) are a protein superfamily of small **toxin** proteins found in ... Despite their conserved **structure**, **three-finger toxin** proteins have a wide ... distinct **pharmacological activities** in vitro, though their functional significance is ... **Recently**, a **new** class of nAChR antagonist 3FTx proteins called ...

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