



# TOXIVEN BIOTECH PRIVATE LIMITED

**Target:** G-Protein coupled receptors

**Format:** Targeted Venom Discovery Array

**Code:** T-VDA<sup>GPCR</sup>

## Product Description

Although not typically expected as pathways for venoms, GPCR modulation has been discovered in several snake venoms; such as **Muscarinic acetylcholine receptor blockers**. Snake venoms are rich source of GPCR tools such as the three-finger toxin motif that is particularly effective and binding GPCRs. These targeted arrays contain pure venom fractions from 12, 24, 48 or 96 species **optimised for identification of novel tools**. Every array contains characterised venoms active in GPCR pathways from the literature to act as positive controls. The control venoms for T-VDA<sup>GPCR</sup> include *Crotalus atrox* (eastern diamondback rattlesnake) where **bradykinin B2 receptor antagonist** has been discovered<sup>1</sup>; *Dendroaspis augusticeps* (eastern green mamba) where several novel muscarinic receptor antagonists have been discovered<sup>2</sup> and *Najakaouthia* (Monocled cobra) venom which contains large abundance of three-finger proteins including those antagonising nicotinic and muscarinic nicotine receptors<sup>3</sup>. The other venom fractions making up the library have been specially selected by our drug discovery scientists to maximise novel hit potential.

- Venoms are supplied lyophilised in Echo<sup>®</sup> qualified acoustic source plates (Labcyte Inc) and are useable on any SBS footprint liquid handling device or by hand.
- 384-well format has 200ng venom fraction per well, suggested dilution 20µl as hit fractions are typically active at 5µg/ml and below.
- 1536-well format also available.

**Estimated delivery time:** 2 weeks (inc international) when in stock.

1. Exploring the venom proteome of the western diamondback rattlesnake, *Crotalus atrox*, via snake venomics and combinatorial peptide ligand library approaches. Calvete J.J., Fasoli E., Sanz L., Boschetti E., Righetti P.G.J. *Proteome Res.* 8:3055-3067(2009)
2. Purification and properties of m1-toxin, a specific antagonist of m1 muscarinic receptors. Max S.I., Liang J.-S., Potter L.T.J. *Neurosci.* 13:4293-4300(1993)
3. 'Weak toxin' from *Naja kaouthia* is a nontoxic antagonist of alpha 7 and muscle-type nicotinic acetylcholine receptors. Utkin Y.N., Kukhtina V.V., Kryukova E.V., Chiodini F., Bertrand D., Methfessel C., Tsetlin V.I.J. *Biol. Chem.* 276:15810-15815(2001)

## ToxiVen Biotech Private Limited

1-3B, First floor, MR Complex, Kovaipudur, Coimbatore, Tamil Nadu, India 641042

Tel: +91 422 436 7550 | Mob: +91 98940 70550

Email: [products@toxiven.com](mailto:products@toxiven.com) | Website: [www.toxiven.com](http://www.toxiven.com)