VENOMTECH®

Venom Research Solutions™

**Target:** G- Protein coupled receptors
**Format:** Targeted Venom Discovery Array

**Code:** T-VDA$^{GPCR}$

## 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$^{GPCR}$ include *Crotalus atrox* (eastern diamondback rattlesnake) where **bradykinin B2 receptor antagonist** has been discovered[1]; *Dendroaspis augusticeps* (eastern green mamba) where several novel muscarinic receptor antagonists have been discovered[2] and *Naja kaouthia* (Monocled cobra) venom which contains large abundance of three-finger proteins including those antagonising nicotinic and muscarinic nicotine receptors[3]. 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® qualified acoustic source plates (Labcyte Inc) and 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)



**Web: www.venomtech.co.uk Email: info@venomtech.co.uk Tel: +44 (0)1227 827114**

UK registered company No. 7191036, VAT reg. No. 998263457, registered address Kent Enterprise Hub, University of Kent, Canterbury, CT2 7NJ UK.