TOXIVEN BIOTECH PRIVATE LIMITED

Target:	**Pain –analgesics and antinociceptives**
Format:	**Targeted Venom Discovery Array**
Code	T-VDA^{pain}

Product Description

The **Pain Targeted Venom Discovery Array (T-VDA)** is specifically designed to maximise discovery of new analgesic tools. Ion channels are very important pain targets along with receptors such as opioids and acetylcholine. Venoms from theraphosids (tarantulas), scorpions and snakes are rich sources of new analgesic tools. These targeted arrays contain pure venom fractions from 12, 24,48 or 96 species **optimised for identification of novel tools**. Each array contains characterised venoms active in analgesic pathways from the literature to act as positive controls. The control venoms for T-VDA^{pain} include *Thrixopelma puriens*(Peruvian velvet tarantula) where **Protox II**, a gating modifier of NaV1.7[1], was discovered; *Leiurus quinquestriatus* (death stalker scorpion) where **opioid selective tools** have been discovered[2]; and *Dendroaspis polylepis* (black mamba) venom which contain **mambalgins**[3]-potent and selective ASIC channel tools. 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 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.

1. Priest B.T., et al. (2007). ProTx-I and ProTx-II: gating modifiers of voltage-gated sodium channels. Toxicon49:194-201
2. Martin-Eauclaire MFet al(2010). Involvement of endogenous opioid system in scorpion toxin-induced antinociception in mice. Neurosci Lett.Sep 20;482(1):45-50
3. Diochot, S. et al. (2012). Black mamba venom peptides target acid-sensing ion channels to abolish pain. Nature 490, 552-555

Data compiled from UniProt: Reorganizing the protein space at the Universal Protein Resource (UniProt), Nucleic Acids Res. 40: D71-D75 (2012)

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 | Website: www.toxiven.com