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Hainantoxin-IV Protein

A Blocker of TTX-Sensitive Na_VChannels

Catalog # PG10040

Specification

Hainantoxin-IV Protein - Product Information

Hainantoxin-IV Protein - Additional Information

Storage
-20°C

Precautions
Hainantoxin-IV Protein is for research use only and not for use in diagnostic or therapeutic procedures.

Hainantoxin-IV Protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Hainantoxin-IV Protein - Images

Hainantoxin-IV Protein - Background

Hainantoxin-IV (HNTX-IV) is a 35-amino acid peptidyl toxin originally isolated from the venom of the Chinese bird spider Ornithoctonus hainana Liang(Selenocosmia hainana Liang). HNTX-IV is a potent and selective inhibitor of TTX-sensitive NaV channels1. It has been shown to specifically inhibit the neuronal TTX-S VGSCs with an IC50 of 34 nM in adult rat dorsal root ganglion (DRG) neurons. HNTX-IV blocks neuromuscular transmission in the isolated nerve-synapse preparations of rat. HNTX-IV seems to interact with neurotoxin receptor site 1 through a mechanism quite similar to that of TTX without affecting the activation and inactivation kinetics. The toxin has six cysteine residues that form three disulfide bonds are clustered together in small peptides2.

Hainantoxin-IV Protein - References

1 . Dongling, Li.et al. (2004) J. Biol. Chem. 279,37734.2 . Liu, Y.et al. (2012) J. Pept. Sci.18,643.