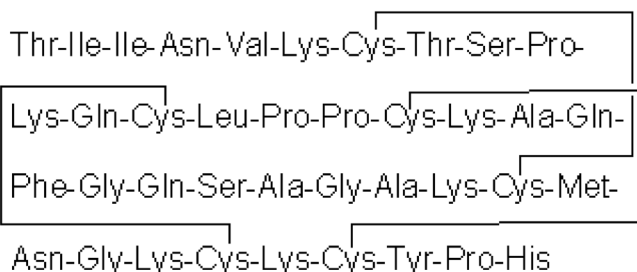


Product Name: Margatoxin
CAS Number: 145808-47-5

Catalog No.: 3563 **Batch No.:** 6

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₇₈H₂₈₆N₅₂O₅₀S₇
Batch Molecular Weight: 4178.96
Physical Appearance: White solid
Counter Ion: TFA
Solubility: Soluble to 0.50 mg/ml in water
Storage: Store at -20°C
Peptide Sequence:



2. ANALYTICAL DATA

HPLC: Shows 95.6% purity
Mass Spectrum: Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: Margatoxin

Catalog No.: 3563

6

CAS Number: 145808-47-5

Description:

Margatoxin is a potent K_v1.3 channel blocker (IC₅₀ = 36 pM). Displays no effect at calcium-activated channels. Reduces VEGF-induced transmembrane calcium influxes and nitric oxide production in human endothelial cells.

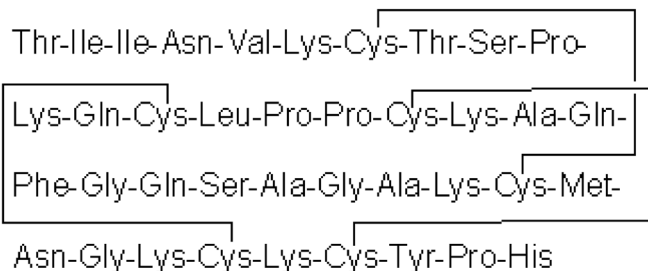
Physical and Chemical Properties:

Batch Molecular Formula: C₁₇₈H₂₈₆N₅₂O₅₀S₇

Batch Molecular Weight: 4178.96

Physical Appearance: White solid

Peptide Sequence:



Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 0.50 mg/ml in water

This product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Counter Ion: TFA

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Peptides in solution are much less stable than in lyophilized form. This is especially true for peptides whose sequences contain amino acids such as Cys, Met, Trp, Asn, Gln, and N-terminal Glu.

Therefore we recommend storing peptides in solution for as short a time as possible. Avoid repeated freeze thaw cycles by dividing the peptide solution into aliquots and storing the aliquots at -20°C. Any portion of an aliquot unused after thawing should be discarded.

Peptides stored in solution can occasionally be susceptible to bacterial degradation. We recommend using sterile solutions or passing the peptide solution through a 0.2 µm filter to remove potential bacterial contamination whenever possible.

References:

Erdogan et al (2005) Margatoxin inhibits VEGF-induced hyperpolarization, proliferation and nitric oxide production of human endothelial cells. *J.Vasc.Res.* **42** 368. PMID: 16043967.

Garcia-Calvo et al (1993) Purification, characterization, and biosynthesis of Margatoxin, a component of *Centruroides margaritatus* venom that selectively inhibits voltage-dependent potassium channels. *J.Biol.Chem.* **268** 18866. PMID: 8360176.

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