

Certificate of Analysis

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Product Name: Purotoxin 1

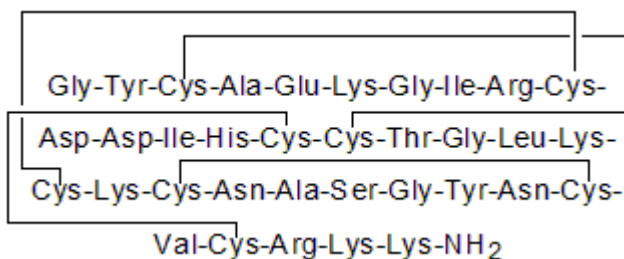
Catalog No.: 4922

Batch No.: 1

CAS Number: 1396322-38-5

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₁₅₅ H ₂₄₉ N ₅₁ O ₄₇ S ₈
Batch Molecular Weight:	3835.47
Physical Appearance:	White lyophilised solid
Net Peptide Content:	80%
Counter Ion:	TFA salt
Solubility:	Soluble to 1 mg/ml in water
Storage:	Store at -20°C
Peptide Sequence:	



2. ANALYTICAL DATA

HPLC:	Shows 100% purity
Mass Spectrum:	Consistent with structure

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

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Description:

Potent P2X₃ receptor modulator (IC₅₀ = 12 nM). Exhibits negligible effects on P2X₂ and P2X_{2/3}. Demonstrates antinociceptive properties in an animal model of inflammatory pain.

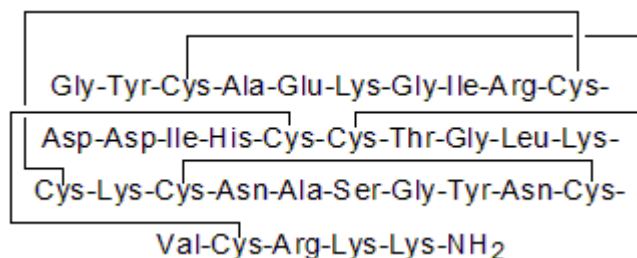
Physical and Chemical Properties:

Batch Molecular Formula: C₁₅₅H₂₄₉N₅₁O₄₇S₈

Batch Molecular Weight: 3835.47

Physical Appearance: White lyophilised solid

Peptide Sequence:



Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 1 mg/ml in water

This product is supplied as a lyophilized solid and may 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.

Net Peptide Content: 80% (Remaining weight made up of counterions and residual water).

Counter Ion: TFA salt

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:

Grishin et al (2010) Novel peptide from spider venom inhibits P2X₃ receptors and inflammatory pain. *Ann.Neurol.* **67** 680. PMID: 20437566.

Kabanova et al (2012) Modulation of P2X₃ receptors by spider toxins. *Biochim.Biophys.Acta.* **1818** 2868. PMID: 22842000.

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