

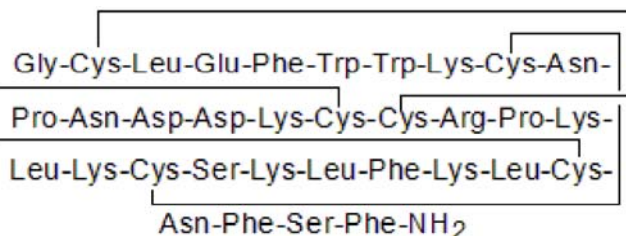
**Product Name:** GsMTx4

**Catalog No.:** 4912

**Batch No.:** 10

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>185</sub>H<sub>273</sub>N<sub>49</sub>O<sub>45</sub>S<sub>6</sub>  
**Batch Molecular Weight:** 4095.86  
**Physical Appearance:** White lyophilised solid  
**Counter Ion:** TFA  
**Solubility:** Soluble to 1 mg/ml in water  
**Storage:** Store at -20°C  
**Peptide Sequence:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 97% purity

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

**Product Name:** GsMTx4

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**Description:**

TRPC1 and TRPC6 blocker. Also blocks stretch-activated cation channels in astrocytes, cardiac cells, and smooth and skeletal muscle cells. Also inhibits TACAN, a mechanosensitive ion channel involved in the pain response.

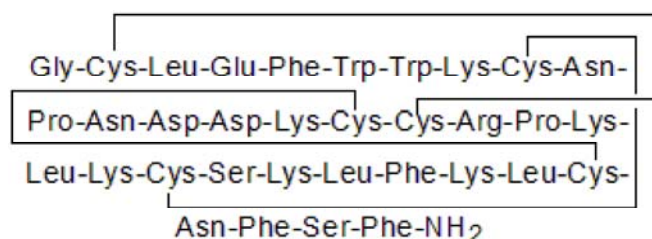
**Physical and Chemical Properties:**

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Batch Molecular Weight: 4095.86

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.

**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.

**Licensing Information:**

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**References:**

**Beaulieu-Laroche et al** (2020) TACAN is an ion channel involved in sensing mechanical pain. Cell **180** 956. PMID: 32084332.

**Bae et al** (2011) The mechanosensitive ion channel Piezo1 is inhibited by the peptide GsMTx4. Biochemistry **50** 6295. PMID: 21696149.

**Bowman et al** (2007) Mechanosensitive ion channels and the peptide inhibitor GsMTx-4: history, properties, mechanisms and pharmacology. Toxicon. **49** 249. PMID: 17157345.

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