

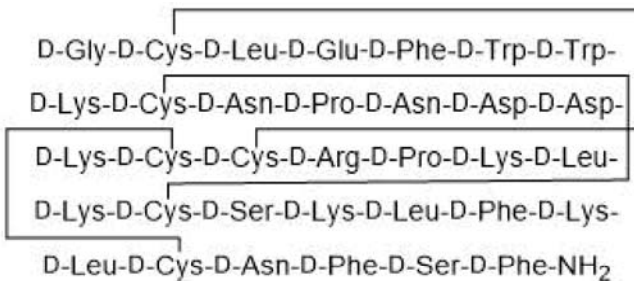
Product Name: D-GsMTx4

Catalog No.: 7170

Batch No.: 6

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₈₅H₂₇₃N₄₉O₄₅S₆
Batch Molecular Weight: 4095.86
Physical Appearance: White solid
Counter Ion: TFA
Solubility: Soluble to 1 mg/ml in water
Storage: Store at -20°C
Peptide Sequence:



2. ANALYTICAL DATA

HPLC: Shows 97.1% purity
Mass Spectrum: Consistent with structure

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

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6

Description:

D-GsMTx4 is a TRPC1/6 and Piezo2 inhibitor. Exhibits same effect as L-enantiomer, GsMTx4 (Cat. No. 4912) on TRPC channels. Inhibits mechanosensitive currents by ~70%. Protects against myocardial infarction in mouse ischemia/reperfusion model. Resistant to proteolytic digestion.

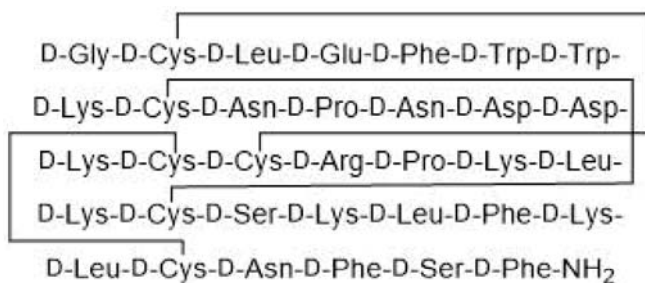
Physical and Chemical Properties:

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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:

Maneshi et al (2018) Enantiomeric Aβ peptides inhibit the fluid shear stress response of PIEZO1 Sci. Rep. **8** 14267. PMID: 30250223.

Alcaino et al (2017) Mechanosensitive ion channel Piezo2 is inhibited by D-GsMTx4 Channels (Austin) **11** 245. PMID: 28085630.

Gnanasambandam et al (2017) GsMTx4: Mechanism of Inhibiting Mechanosensitive Ion Channels Biophys.J. **112** 31. PMID: 28076814.

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