

Certificate of Analysis

Print Date: Nov 14th 2017

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Product Name: GaTx2 Catalog No.: 4911 Batch No.: 2

CAS Number: 194665-85-5

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{125}H_{199}N_{39}O_{47}S_6$

Batch Molecular Weight: 3192.54

Physical Appearance: White lyophilised solid

Net Peptide Content: 95%
Counter Ion: TFA

Solubility: Soluble to 1 mg/ml in water

Storage: Store at -20°C

Peptide Sequence:

Val-Ser-Cys-Glu-Asp-Cys-Pro-Asp-His-Cys-Ser-Thr-Gln-Lys-Ala-Arg-Ala-Lys-Cys-Asp-Asn-Asp-Lys-Cys-Val-Cys-Glu-Pro-Ile

2. ANALYTICAL DATA

HPLC: Shows 97.7% purity



Product Information

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Description:

Very high affinity CIC-2 blocker (apparent $K_D \sim 50$ pM). Slows CIC-2 activation and inhibits slow-gating but does not inhibit open CIC-2 channels. Selective for CIC-2 over other CIC family members (CIC-0, CIC-1, CIC-3 and CIC-4), CFTR, GABA_C, CaCC and $K_V1.2.$

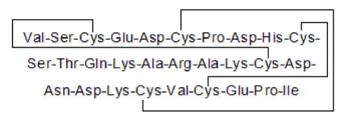
Physical and Chemical Properties:

Batch Molecular Formula: C₁₂₅H₁₉₉N₃₉O₄₇S₆

Batch Molecular Weight: 3192.54

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: 95% (Remaining weight made up of counterions and residual water).

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 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 μ m filter to remove potential bacterial contamination whenever possible.

References:

Schiffhauer *et al* (2013) Dual activation of CFTR and CLCN2 by lubiprostone in murine nasal epithelia. Am.J.Physiol.Lung Cell Mol.Physiol. *304* L324. PMID: 23316067.

Thompson et al (2009) Isolation and characterization of a high affinity peptide inhibitor of CIC-2 chloride channels. J.Biol.Chem. **284** 26051. PMID: 19574231.

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