

Certificate of Analysis

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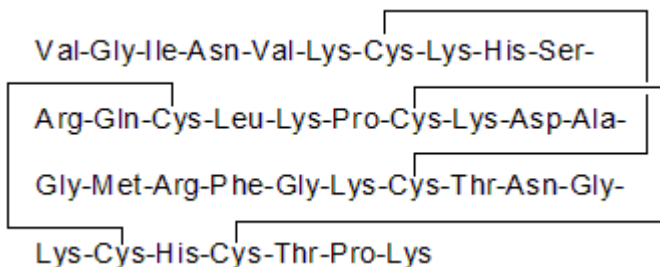
Product Name: ADWX 1

Catalog No.: 4812

Batch No.: 1

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{169}H_{281}N_{57}O_{46}S_7$
 Batch Molecular Weight: 4071.86
 Physical Appearance: White lyophilised solid
 Counter Ion: TFA
 Solubility: Soluble to 2 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

Tocris Bioscience is an R&D Systems company
 USA & CANADA Tel: (800) 343-7475 EUROPE Tel: +44 (0)1235 529449 CHINA Tel: +86 (21) 52380373
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SYSTEMS®

Product Name: ADWX 1

Catalog No.: 4812

Batch No.: 1

Description:

Potent and selective K_v1.3 channel blocker (IC₅₀ values are 0.0019 and 0.65 nM for K_v1.3 and K_v1.1, respectively). Inhibits CD4⁺ CCR7⁻ T cell activation. Ameliorates rat experimental autoimmune encephalomyelitis, in a model for multiple sclerosis.

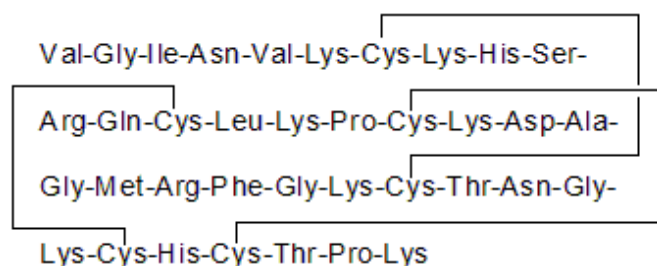
Physical and Chemical Properties:

Batch Molecular Formula: C₁₆₉H₂₈₁N₅₇O₄₆S₇

Batch Molecular Weight: 4071.86

Physical Appearance: White lyophilised solid

Peptide Sequence:



Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 2 mg/ml in 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 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:

Han et al (2008) Structural basis of a potent peptide inhibitor designed for K_v1.3 channel, a therapeutic target of autoimmune disease. *J.Biol.Chem.* **283** 19058. PMID: 18480054.

Li et al (2012) Selective inhibition of CCR7(-) effector memory T cell activation by a novel peptide targeting Kv1.3 channel in a rat experimental autoimmune encephalomyelitis model. *J.Biol.Chem.* **287** 29479. PMID: 22761436.

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