

Certificate of Analysis

Print Date: Feb 28th 2024

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SNX 482 Catalog No.: 2945 **Product Name:** Batch No.: 7

CAS Number: 203460-30-4

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{192}H_{274}N_{52}O_{60}S_7$

Batch Molecular Weight: 4495.01

Physical Appearance: White lyophilised solid

83% **Net Peptide Content:**

Counter Ion: Ammonia

Solubility: Soluble in water Desiccate at -20°C Storage:

Peptide Sequence:

Gly-Val-Asp-Lys-Ala-Gly-Cys-Arg-Tyr-Met-

Phe-Gly-Gly-Cys-Ser-Val-Asn-Asp-Asp-Cys-

Cys-Pro-Arg-Leu-Gly-Cys-His-Ser-Leu-Phe-

Ser-Tyr-Cys-Ala-Trp-Asp-Leu-Thr-Phe-Ser-Asp

2. ANALYTICAL DATA

Shows >99.5% purity **HPLC:**

3. AMINO ACID ANALYSIS DATA

Amino Ac	id Theoretic	Amino Aci	mino Acid Theoretical Actual		
Ala	2.00	1.99	Lys	1.00	1.00
Arg	2.00	2.00	Met	1.00	0.97
Asx	6.00	5.98	Phe	3.00	2.98
Cys	6.00	5.19	Pro	1.00	0.95
Glx			Ser	4.00	3.44
Gly	5.00	4.91	Thr	1.00	0.95
His	1.00	0.99	Trp	1.00	0.90
lle			Tyr	2.00	1.99
Leu	3.00	3.00	Val	2.00	1.96

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

Tel:+1 612 379 2956



Product Information

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Product Name: SNX 482 Catalog No.: 2945 7

CAS Number: 203460-30-4

Description:

SNX 482 is a potent and selective, voltage-dependent R-type $Ca_V 2.3$ calcium channel blocker ($IC_{50} = 30$ nM). Antinociceptive; inhibits nociceptive C-fibre and A δ -fibre-evoked neuronal responses.

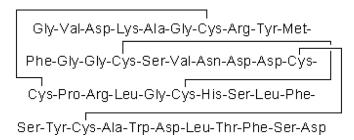
Physical and Chemical Properties:

Batch Molecular Formula: $C_{192}H_{274}N_{52}O_{60}S_7$

Batch Molecular Weight: 4495.01

Physical Appearance: White lyophilised solid

Peptide Sequence:



Storage: Desiccate at -20°C

Solubility & Usage Info:

Soluble in water

This product is supplied in lyophilized form. It may appear as a solid, gel or film and 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: 83% (Remaining weight made up of counterions and residual water).

Counter Ion: Ammonia

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:

Matthews et al (2007) The $Ca_V 2.3$ calcium channel antagonist SNX-482 reduces dorsal horn neuronal responses in a rat model of chronic neuropathic pain. Eur. J. Neurosci. **25** 3561. PMID: 17610575.

Bourinet et al (2001) Interaction of SNX482 with domains III and IV inhibits activation gating of α_{1E} (Ca_V2.3) calcium channels. Biophys.J. **81** 79. PMID: 11423396.

Newcomb *et al* (1998) Selective peptide antagonist of the class E calcium channel from the venom of the Tarantula *Hysterocrates gigas*. Biochemistry **37** 15353. PMID: 9799496.

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