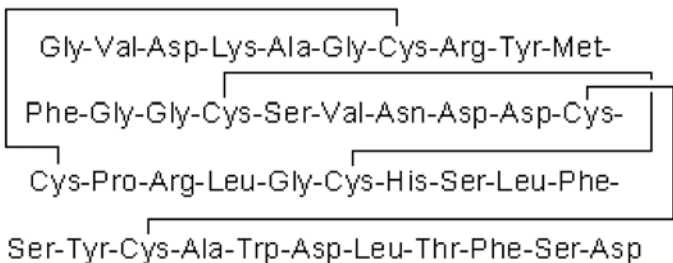


**Product Name:** SNX 482  
**CAS Number:** 203460-30-4

**Catalog No.:** 2945      **Batch No.:** 7

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>192</sub>H<sub>274</sub>N<sub>52</sub>O<sub>60</sub>S<sub>7</sub>  
**Batch Molecular Weight:** 4495.01  
**Physical Appearance:** White lyophilised solid  
**Net Peptide Content:** 83%  
**Counter Ion:** Ammonia  
**Solubility:** Soluble in water  
**Storage:** Desiccate at -20°C  
**Peptide Sequence:**



**2. ANALYTICAL DATA**

**HPLC:** Shows >99.5% purity

**3. AMINO ACID ANALYSIS DATA**

Amino Acid Theoretical		Actual		Amino 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		
Ile			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

**Product Name:** SNX 482

**Catalog No.:** 2945

**Batch No.:** 7

CAS Number: 203460-30-4

**Description:**

Potent and selective, voltage-dependent R-type Ca<sub>v</sub>2.3 calcium channel blocker (IC<sub>50</sub> = 30 nM). Antinociceptive; inhibits nociceptive C-fibre and A $\delta$ -fibre-evoked neuronal responses.

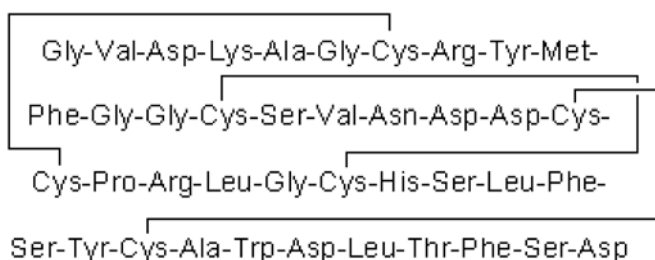
**Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>192</sub>H<sub>274</sub>N<sub>52</sub>O<sub>60</sub>S<sub>7</sub>

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 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:** 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 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  $\mu$ m filter to remove potential bacterial contamination whenever possible.

**References:**

**Matthews et al** (2007) The Ca<sub>v</sub>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  $\alpha_{1E}$  (Ca<sub>v</sub>2.3) 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 *Hysteroocrates gigas*. *Biochemistry* **37** 15353. PMID: 9799496.

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