



Certificate of Analysis

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Product Name: Dynamin inhibitory peptide, myristoylated Catalog No.: 1775 Batch No.: 7

CAS Number: 251634-22-7

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{61}H_{107}N_{19}O_{14}$

Batch Molecular Weight: 1330.64

Physical Appearance: White lyophilised solid

Counter Ion: Trifluoroacetate

Solubility: Soluble to 1 mg/ml in water

Storage: Store at -20°C

Peptide Sequence: Myr-Gln-Val-Pro-Ser-Arg-Pro-Asn-Arg-Ala-

Pro-NH₂

2. ANALYTICAL DATA

HPLC: Shows 98.9% purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amina Asid Theoretical Astual	Amina Asid Theoretical Astus
Amino Acid Theoretical Actual	Amino Acid Theoretical Actua

Ala	1.00	0.97	Lys		
Arg	2.00	2.01	Met		
Asx	1.00	1.02	Phe		
Cys			Pro	3.00	3.02
Glx	1.00	1.02	Ser	1.00	0.73
Gly			Thr		
His			Trp		
lle			Tyr		
Leu			Val	1.00	0.97

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



Product Information

Print Date: Dec 10th 2021

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Product Name: Dynamin inhibitory peptide, myristoylated Catalog No.: 1775 Batch No.: 7

CAS Number: 251634-22-7

Description:

Dynamin inhibitory peptide, myristoylated is a cell-permeable version of dynamin inhibitory peptide, an inhibitor of the GTPase dynamin that competitively blocks binding of dynamin to amphiphysin, preventing endocytosis. Reduces NMDA receptor internalization. Control Peptide also available.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{61}H_{107}N_{19}O_{14}$ Batch Molecular Weight: 1330.64

Physical Appearance: White lyophilised solid

Peptide Sequence:

Myr-Gln-Val-Pro-Ser-Arg-Pro-Asn-Arg-Ala-Pro-NH₂ 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: Trifluoroacetate

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:

Nong et al (2003) Glycine binding primes NMDA receptor internalization. Nature 422 302. PMID: 12646920.

Kittler et al (2000) Constitutive endocytosis of GABA_A receptors by an association with the adaptin AP2 complex modulates inhibitory synaptic currents in hippocampal neurons. J.Neurosci. 20 7972. PMID: 11050117.

Grabs *et al* (1997) The SH3 domain of amphiphysin binds the proline-rich domain of dynamin at a single site that defines a new SH3 binding consensus sequence. J.Biol.Chem. **272** 13419. PMID: 9148966.