

Certificate of Analysis

www.tocris.com

Product Name: Autocamtide-2-related inhibitory peptide, myristoylated **Catalog No.:** 5959 **Batch No.:** 4
CAS Number: 201422-04-0

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₇₈H₁₄₂N₂₂O₂₀
Batch Molecular Weight: 1708.12
Physical Appearance: White lyophilised solid
Counter Ion: TFA
Solubility: Soluble to 1 mg/ml in water
Storage: Store at -20°C
Peptide Sequence: Myr-Lys-Lys-Ala-Leu-Arg-Arg-Gln-Glu-Ala-Val-Asp-Ala-Leu

2. ANALYTICAL DATA

HPLC: Shows 99.9% purity
Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid		Theoretical	Actual	Amino Acid		Theoretical	Actual
Ala	3.00	2.89	Lys	2.00	2.05		
Arg	2.00	2.08	Met				
Asx	1.00	0.97	Phe				
Cys			Pro				
Glx	2.00	2.03	Ser				
Gly			Thr				
His			Trp				
Ile			Tyr				
Leu	2.00	1.99	Val	1.00	1.01		

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

bio-techne.com
 info@bio-techne.com
 techsupport@bio-techne.com

North America
 Tel: (800) 343 7475

China
 info.cn@bio-techne.com
 Tel: +86 (21) 52380373

Europe Middle East Africa
 Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
 Tel:+1 612 379 2956

Product Name: Autocamtide-2-related inhibitory peptide, myristoylated **Catalog No.:** 5959 **4**
CAS Number: 201422-04-0

Description:

Autocamtide-2-related inhibitory peptide, myristoylated is a CaM kinase II inhibitor; enhanced cell permeable derivative of Autocamtide-2-related inhibitory peptide (Cat No. 1688). Pretreatment blocks reinstatement of morphine-seeking behavior in vivo.

Physical and Chemical Properties:

Batch Molecular Formula: C₇₈H₁₄₂N₂₂O₂₀
Batch Molecular Weight: 1708.12
Physical Appearance: White lyophilised solid

Peptide Sequence:

Myr-Lys-Lys-Ala-Leu-Arg-Arg-Gln-Glu-Ala-Val-Asp-Ala-Leu

Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 1 mg/ml 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.

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:

Liu *et al* (2012) Inhibition of CaMKII activity in the nucleus accumbens shell blocks the reinstatement of morphine-seeking behavior in rats. *Neurosci.Lett.* **518** 167. PMID: 22579819.

Laabich *et al* (2000) Neuroprotective effect of AIP on *N*-methyl-*D*-aspartate-induced cell death in retinal neurons. *Brain Res.Mol.Brain Res.* **85** 32. PMID: 11146104.

Ishida *et al* (1995) A novel highly specific and potent inhibitor of calmodulin-dependent protein kinase II. *Biochem.Biophys.Res.Commun.* **212** 806. PMID: 7626114.

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

bio-techne.com

info@bio-techne.com
techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors
Tel:+1 612 379 2956