

Certificate of Analysis

Product Name: ω -Conotoxin MVIIIC
CAS Number: 147794-23-8

Catalog No.: 1084

Batch No.: 20

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₁₀₆ H ₁₇₈ N ₄₀ O ₃₂ S ₇
Batch Molecular Weight:	2749
Physical Appearance:	White lyophilised solid
Counter Ion:	TFA
Solubility:	Soluble to 1 mg/ml in water
Storage:	Desiccate at -20°C
Peptide Sequence:	Cys-Lys-Gly-Lys-Gly-Ala-Pro-Cys-Arg-Lys- Thr-Met-Tyr-Asp-Cys-Cys-Ser-Gly-Ser-Cys- Gly-Arg-Arg-Gly-Lys-Cys-NH ₂

2. ANALYTICAL DATA

HPLC:	Shows >99% purity
Mass Spectrum:	Consistent with structure

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

Product Information

www.tocris.com**Product Name:** ω -Conotoxin MVIIIC**Catalog No.:** 1084**Batch No.:** 20

CAS Number: 147794-23-8

Description:

ω -Conotoxin MVIIIC is a peptide neurotoxin; wide spectrum blocker of N, P and Q type calcium channels.

Physical and Chemical Properties:Batch Molecular Formula: C₁₀₆H₁₇₈N₄₀O₃₂S₇

Batch Molecular Weight: 2749

Physical Appearance: White lyophilised solid

Peptide Sequence:

Cys-Lys-Gly-Lys-Gly-Ala-Pro-Cys-Arg-Lys-
[] []
Thr-Met-Tyr-Asp-Cys-Cys-Ser-Gly-Ser-Cys-
[]
Gly-Arg-Arg-Gly-Lys-Cys-NH₂

Storage: Desiccate 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: 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 μ m filter to remove potential bacterial contamination whenever possible.

Other Information:

This is a dual-use item with associated conditions of supply; the relevant licence/documentation from the appropriate governing body will be required.

Note on Biotubes:

Toxins are supplied in protective biotubes. These biotubes have a screw top lid, which is manually tightened and can be easily unscrewed. If the lid is particularly tight, a coin placed in the top slot may be used to unscrew it.

Licensing Information:

Sold under license from the University of Utah.

References:

McDonough *et al* (1996) Inhibition of Ca²⁺ channels in rat central and peripheral neurons by ω -conotoxin MVIIIC. *J.Neurosci.* **16** 2612. PMID: 8786437.

Hillyard *et al* (1992) A new conus peptide ligand for mammalian presynaptic Ca²⁺ channels. *Neuron* **9** 69. PMID: 1352986.

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 Worldwww.tocris.com/distributors

Tel: +1 612 379 2956