

PRODUCT INFORMATION



ω -Conotoxin MVIIC (trifluoroacetate salt)

Item No. 24411

Formal Name: L-cysteinyl-L-lysylglycyl-L-lysylglycyl-L-alanyl-L-prolyl-L-cysteinyl-L-arginyl-L-lysyl-L-threonyl-L-methionyl-L-tyrosyl-L- α -aspartyl-L-cysteinyl-L-cysteinyl-L-serylglycyl-L-seryl-L-cysteinylglycyl-L-arginyl-L-arginylglycyl-L-lysyl-L-cysteinamide, cyclic (1 \rightarrow 16),(8 \rightarrow 20),(15 \rightarrow 26)-tris(disulfide), 2,2,2-trifluoroacetate

Synonym: SNX-230

MF: C₁₀₆H₁₇₈N₄₀O₃₂S₇ • XCF₃COOH

FW: 2,749.3

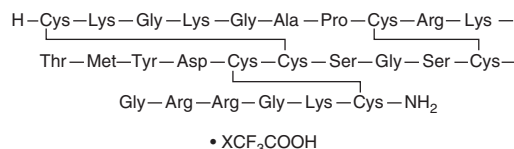
Purity: \geq 95%

Supplied as: A lyophilized powder

Storage: -20°C

Stability: \geq 4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



Laboratory Procedures

ω -Conotoxin MVIIC (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the ω -conotoxin MVIIC (trifluoroacetate salt) in water. The solubility of ω -conotoxin MVIIC (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

ω -Conotoxin MVIIC is a peptide originally isolated from the marine mollusk *C. magus*.¹ It blocks N-type calcium channels on rat superior cervical ganglions (SCGs) and P-type calcium channels on rat Purkinje neurons (K_d s = 30 and ~50 nM, respectively, in the presence of 5 mM barium).² It also blocks Q-type channels in rat CA3 neurons. ω -Conotoxin MVIIC binds to rat brain membranes (IC_{50} = 0.3 nM) and completely blocks calcium uptake by rat brain synaptosomes when used at a concentration of 2.5 μ M in the presence of 5 mM potassium.¹ It blocks potassium-evoked dopamine (Item No. 21992) release from rat striatal slices (IC_{50} = ~128 nM) and potassium-evoked calcium-dependent glutamate release from rat brain synaptosomes.^{3,4}

References

1. Hillyard, D.R., Monje, V.D., Mintz, I.M., et al. *Neuron* **9**(1), 69-77 (1992).
2. McDonough, S.I., Swartz, K.J., Mintz, I.M., et al. *J. Neurosci.* **16**(8), 2612-2623 (1996).
3. Dobrev, D. and Andreas, K. *Neurochem. Res.* **22**(9), 1085-1093 (1997).
4. Turner, T.J., Lampe, R.A., and Dunlap, K. *Mol. Pharmacol.* **47**(2), 348-353 (1995).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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