Product Data Sheet

Product Name: ω-Conotoxin GVIA (trifluoroacetate salt)
Cat. No.: GC45241

Chemical Properties

Cas. No.			
Formula	$C_{120}H_{182}N_{38}O_{43}S_6 \cdot XCF_3COOH$	M.Wt	3037.4
Solubility	Water: 1 mg/ml	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

ω-Conotoxin GVIA is a peptide originally isolated from the marine mollusk C. geographus that acts as an N-type calcium channel blocker. It binds to human neocortical, rat hippocampal, and chick brain synaptic plasma membranes (IC50s = 4.6, 60, and 150 pM, respectively, in radioligand binding assays). ω-Conotoxin GVIA inhibits norepinephrine and acetylcholine release from human neocortical slices (IC50s = 14 and 3 nM, respectively) and calcium influx into chick synaptosomes by 92% when used at a concentration of 0.1 μM. It blocks electrically-evoked twitch responses of rat vas deferens and guinea pig ileum (IC50s = 9.8 and 55 nM, respectively) but does not affect the postjunctional contractile responses induced by norepinephrine on vas deferens or by carbamoylcholine on ileum. ω-Conotoxin GVIA does not affect potassium-induced contraction of rat aorta at concentrations up to 1 μM.

Caution: Product has not been fully validated for medical applications. For research use only.
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