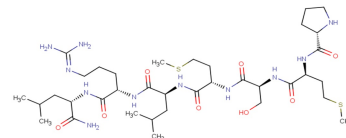


Myomodulin

Chemical Properties

CAS No.:	110570-93-9
Formula:	C ₃₆ H ₆₇ N ₁₁ O ₈ S ₂
Molecular Weight:	846.12
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



Biological Description

Description	Myomodulin is a neuropeptide present in molluscs, insects, and gastropods. Myomodulin is present in two identified aplysia neurons that contain myomodulin A the ARC motor neuron B16 and the abdominal neuron L10.
In vitro	Myomodulin decreases period and increases spike frequency in oscillator heart interneurons. Myomodulin enhances the hyperpolarization-activated cation current and inhibits the electrogenic Na/K pump[1]. A myomodulin peptide has been suggested to mediate the response of the giant glial cells to stimulation of the Leydig interneuron in the central nervous system of the leech <i>Hirudo medicinalis</i> . The peptide evokes a membrane outward current (EC ₅₀ approximately 2 μ M), which neither desensitizes nor shows any sign of run-down, and elicits a K ⁺ conductance increase of the glial cell membrane[2]. Myomodulin modulate ion channels in a wide variety of organisms including Aplysia, Lymnaea, and Pleurobranchaea. Myomodulin differentially modulates the potassium currents and reduces the amplitude of the Ca ²⁺ current by 20%[3].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.182 mL	5.909 mL	11.819 mL
5 mM	0.236 mL	1.182 mL	2.364 mL
10 mM	0.118 mL	0.591 mL	1.182 mL
50 mM	0.024 mL	0.118 mL	0.236 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Tobin AE, et al. Myomodulin increases Ih and inhibits the Na/K pump to modulate bursting in leech heart interneurons. J Neurophysiol. 2005 Dec;94(6):3938-50.

Inhibitors · Natural Compounds · Compound Libraries

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