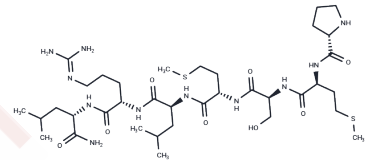


Myomodulin

Chemical Properties

CAS No. :	110570-93-9
Formula:	C ₃₆ H ₆₇ N ₁₁ O ₈ S ₂
Molecular Weight:	846.12
Storage:	Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Myomodulin is a neuropeptide present in molluscs, insects, and gastropods. Within these organisms, myomodulin A specifically occurs in two identified Aplysia neurons: the ARC motor neuron [B16] and the abdominal neuron [L10].
Targets(IC50)	Calcium Channel,Potassium Channel,Sodium Channel
In vitro	Myomodulin modulates heart interneuron functions by decreasing the period and increasing spike frequency, alongside enhancing hyperpolarization-activated cation currents and inhibiting the electrogenic Na/K pump[1]. It also plays a role in the nervous system of the leech Hirudo medicinalis, by mediating giant glial cell response to Leydig interneuron stimulation, inducing a significant membrane outward current (EC50 approximately 2 μM) and increasing K ⁺ conductance without desensitization or run-down[2]. Additionally, myomodulin affects ion channels across various organisms, including Aplysia, Lymnaea, and Pleurobranchaea, by differentially modulating potassium currents and decreasing Ca ²⁺ current amplitude by 20%[3].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.1819 mL	5.9093 mL	11.8187 mL
5 mM	0.2364 mL	1.1819 mL	2.3637 mL
10 mM	0.1182 mL	0.5909 mL	1.1819 mL
50 mM	0.0236 mL	0.1182 mL	0.2364 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

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.

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481