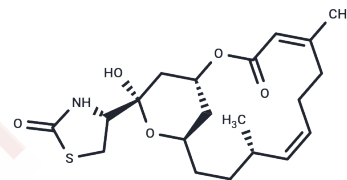


Latrunculin B

Chemical Properties

CAS No. :	76343-94-7
Formula:	C ₂₀ H ₂₉ N ₁ O ₅ S
Molecular Weight:	395.51
Storage:	Store at low temperature 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	Latrunculin B, an alkaloid from the Red Sea sponge, is an actin polymerization inhibitor with antifungal and antiprotozoal activity. Latrunculin B modulates the electrophysiological characteristics of the pulmonary veins and attenuates the occurrence of torsade de pointes, and may be used in the study of glaucoma in adolescents.
Targets(IC50)	Antifungal
In vitro	Displaying growth inhibition of HeLa cells with an IC ₅₀ value of 1.4 μM, Latrunculin B also modulates electrophysiological characteristics and arrhythmogenesis in pulmonary vein cardiomyocytes[1]. In pulmonary vein (PV) preparations, Latrunculin B (100 nM) decreases spontaneous electrical activity by 16±4%. Moreover, it reduces the late Na ⁺ current, L-type Ca ²⁺ current, Na ⁺ /Ca ²⁺ exchanger current, and stretch-activated BKCa current in PV cardiomyocytes. Latrunculin B alters the transient outward K ⁺ current and ultra-rapid delayed rectifier K ⁺ current, while increasing the delayed rectifier K ⁺ current in isolated PV cardiomyocytes. Additionally, at a concentration of 100 nM, Latrunculin B decreases intracellular Ca ²⁺ transient and sarcoplasmic reticulum Ca ²⁺ content in PV cardiomyocytes, attenuating stretch-induced increased spontaneous electrical activity and trigger activity[2].

Solubility Information

Solubility	DMSO: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5284 mL	12.6419 mL	25.2838 mL
5 mM	0.5057 mL	2.5284 mL	5.0568 mL
10 mM	0.2528 mL	1.2642 mL	2.5284 mL
50 mM	0.0506 mL	0.2528 mL	0.5057 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

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