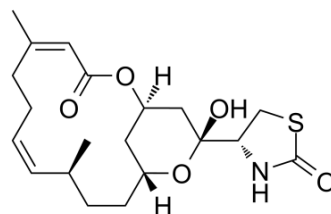


Latrunculin B

Cat. No.:	HY-101848
CAS No.:	76343-94-7
Molecular Formula:	C ₂₀ H ₂₉ NO ₅ S
Molecular Weight:	395.51
Target:	Fungal
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Latrunculin B, an antimicrobial marine alkaloid, is an actin polymerization inhibitor. Latrunculin B regulates pulmonary vein electrophysiological characteristics and attenuates stretch-induced arrhythmogenesis ^{[1][2]} . Antifungal and antiprotozoal activity.
In Vitro	Latrunculin B displays growth inhibition of HeLa cells with an IC ₅₀ value of 1.4 μM ^[1] . Latrunculin B modulates electrophysiological characteristics and arrhythmogenesis in pulmonary vein cardiomyocytes. Latrunculin B (100 nM) decreases the spontaneous electrical activity by 16±4% in pulmonary vein (PV) preparations. Latrunculin B (100 nM) decreases the late Na ⁺ current, L-type Ca ²⁺ current, Na ⁺ /Ca ²⁺ exchanger current, and stretch-activated BKCa current in PV cardiomyocytes. Latrunculin B reduces the transient outward K ⁺ current and ultra-rapid delayed rectifier K ⁺ current, but increases the delayed rectifier K ⁺ current in isolated PV cardiomyocytes. Latrunculin B (100 nM) decreases intracellular Ca ²⁺ transient and sarcoplasmic reticulum Ca ²⁺ content in PV cardiomyocytes. Latrunculin B attenuates stretch-induced increased spontaneous electrical activity and trigger activity ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Diao T A Youssef, et al. Magnificines A and B, Antimicrobial Marine Alkaloids Featuring a Tetrahydrooxazolo[3,2-a]azepine-2,5(3H,6H)-dione Backbone from the Red Sea Sponge *Negombata magnifica*. *Mar Drugs*. 2021 Apr 12;19(4):214.
- [2]. Yen-Yu Lu, et al. Latrunculin B modulates electrophysiological characteristics and arrhythmogenesis in pulmonary vein cardiomyocytes. *Clin Sci (Lond)*. 2016 May;130(9):721-32.

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

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