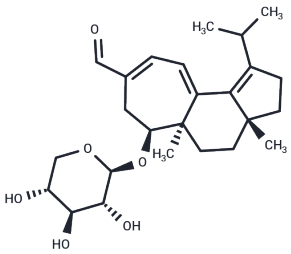
Data Sheet (Cat.No.TN7240)

TargetMol

Erinacine A

Chemical Properties



CAS No. : 156101-08-5

Formula: C25H36O6

Molecular Weight: 432.55

Storage: Store at low temperature,Keep away from direct sunlight
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Erinacine A ((+)-Erinacin A) is a cyanoalkane diterpene extracted from Monkey Head Fungus, a neuroprotective agent with anticancer activity. (+)-Erinacin A induces apoptosis, reduced proliferation, invasiveness, oxidative stress production and cell cycle arrest in cancer cells.
Targets(IC50)	Apoptosis,Bcl-2 Family,Epigenetic Reader Domain,NF-κB,Akt,Caspase,Histone Acetyltransferase,NO Synthase,JNK,p38 MAPK,PI3K
In vitro	30 μM Erinacine A, treated for 3-24 hours, activated exogenous and endogenous apoptosis (apoptotic) pathways in DLD-1 cells, while down-regulating the expression levels of anti-apoptotic proteins. [1]
In vivo	In a SAM rat model of transient stroke, single-dose intraperitoneal injections of Erinacine A (1, 5, and 10 mg/kg) reduced neuronal cell death and inhibited the expression of inflammatory cytokines in brain tissue. [1] Erinacine A (1, 2, and 5 mg/kg, intraperitoneal injection once daily for 5 days) significantly inhibited tumor growth in a DLD-1 xenograft mouse model, resulting in a significant reduction in tumor size. [2]

Solubility Information

Solubility	Ethanol: 8 mg/mL (18.49 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3119 mL	11.5594 mL	23.1187 mL
5 mM	0.4624 mL	2.3119 mL	4.6237 mL
10 mM	0.2312 mL	1.1559 mL	2.3119 mL
50 mM	0.0462 mL	0.2312 mL	0.4624 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

Lee KF, et al. Protective effects of Hericium erinaceus mycelium and its isolated erinacine A against ischemia-injury-induced neuronal cell death via the inhibition of iNOS/p38 MAPK and nitrotyrosine. Int J Mol Sci. 2014 Aug 27;15(9):15073-89.

Lee KC, et al. Induction Apoptosis of Erinacine A in Human Colorectal Cancer Cells Involving the Expression of TNFR, Fas, and Fas Ligand via the JNK/p300/p50 Signaling Pathway With Histone Acetylation. Front Pharmacol. 2019 Oct 15;10:1174.

Bailly C, et al. Erinacine A and related cyathane diterpenoids: Molecular diversity and mechanisms underlying their neuroprotection and anticancer activities. Pharmacol Res. 2020 Sep;159:104953.

Tsai-Teng T, et al. Erinacine A-enriched Hericium erinaceus mycelium ameliorates Alzheimer's disease-related pathologies in APPswe/PS1dE9 transgenic mice. J Biomed Sci. 2016 Jun 27;23(1):49.

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