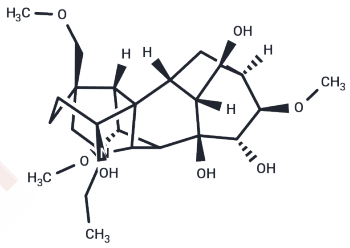
Data Sheet (Cat.No.T3S0631)

TargetMol

Fuziline

Chemical Properties



CAS No. : 80665-72-1

Formula: C24H39NO7

Molecular Weight: 453.57

Storage: 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	Fuziline is a diterpene alkaloid found in Aconitum kusnezoffii and Aconitum carmichaelii.It is functionally related to an aconitane.
Targets(IC50)	Anti-infection
In vitro	In the in vitro assays,fuziline increases cell viability in the model of ISO-induced injury.
Cell Research	Rat cardiomyocytes(H9c2) were cultured in 96-well plates with High-glucose DMEM added with 10% FBS,100 μg/mL streptomycin and 100 U/mL penicillin,and H9c2 cells were placed in an incubator with 37°C and 5% CO2 for 24 hours. then addressed with isoproterenol(ISO) and different concentrations of fuziline for the indicated time. Then, the DMEM was removed and 100 μL MTT solution (0.1 mg/well) was added, and H9c2 cells were incubated for 3 hours. After that, the supernatant was removed and the formazan crystals were dissolved in 150 μL DMSO. Then, the absorbance of each sample was detected at 490 nm by a microplate reader.[2]

Solubility Information

Solubility	DMSO: 50 mg/mL (110.24 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.41 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2047 mL	11.0237 mL	22.0473 mL
5 mM	0.4409 mL	2.2047 mL	4.4095 mL
10 mM	0.2205 mL	1.1024 mL	2.2047 mL
50 mM	0.0441 mL	0.2205 mL	0.4409 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

Liang X , Cheng P , Xiao-Fang X , et al. Alkaloids Isolated from the Lateral Root of Aconitum carmichaelii[J]. Molecules, 2012, 17(8):9939-9946.

Fan CL, et al. Fuziline alleviates isoproterenol-induced myocardial injury by inhibiting ROS-triggered endoplasmic reticulum stress via PERK/eIF2α/ATF4/Chop pathway. J Cell Mol Med. 2020 Jan;24(2):1332-1344.