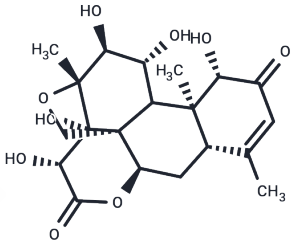
Data Sheet (Cat.No.TWS2045)

TargetMol

Bruceine D

Chemical Properties



CAS No. : 21499-66-1

Formula: C20H26O9

Molecular Weight: 410.42

Storage: Store at low temperature
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	1. Bruceine D from Brucea javanica, may have the potential to be used as a natural viricide, or a lead compound for new viricides. 2. Bruceine D inhibits the growth of three pancreatic cancer cell lines, i.e., PANC-1, SW199 and CAPAN-1; induces cytotoxicity in Capan-2 cells via the induction of cellular apoptosis involving the mitochondrial pathway.
Targets(IC50)	Apoptosis,Antiviral,Gamma-secretase,Parasite

Solubility Information

Solubility	DMSO: 257.5 mg/mL (627.41 mM),Sonication is recommended. Chloroform, Dichloromethane, Ethyl Acetate, Acetone, etc.: Soluble, (< 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 (4.87 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	2.4365 mL	12.1826 mL	24.3653 mL
5 mM	0.4873 mL	2.4365 mL	4.8731 mL
10 mM	0.2437 mL	1.2183 mL	2.4365 mL
50 mM	0.0487 mL	0.2437 mL	0.4873 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

Liu L , Lin Z X , Leung P S , et al. Involvement of the mitochondrial pathway in bruceine D-induced apoptosis in Capan-2 human pancreatic adenocarcinoma cells.[J]. International Journal of Molecular Medicine, 2012, 30(1):93.
Li M, Bei Z C, Yuan Y, et al.In-cell bioluminescence resonance energy transfer (BRET)-based assay uncovers ceritinib and CA-074 as SARS-CoV-2 papain-like protease inhibitors.Journal of Enzyme Inhibition and Medicinal Chemistry.2024, 39(1): 2387417.