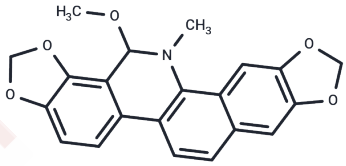
Data Sheet (Cat.No.T8724)

TargetMol

6-Methoxydihydrosanguinarine

Chemical Properties



CAS No. : 72401-54-8

Formula: C21H17NO5

Molecular Weight: 363.36

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	6-Methoxydihydrosanguinarine is a natural product. 6-Methoxydihydrosanguinarine shows strong cytotoxicity against MCF-7 and SF-268 cell lines with IC50 values of 0.61 μM and 0.54 μM, respectively.It has antibacterial activity against Methicillin-resistant Staphylococcus aureus (MRSA) strains with minimum inhibitory concentrations (MICs) ranging from1.9 to 3.9 microg/ml
Targets(IC50)	Others
In vivo	6-methoxydihydrosanguinarine (6ME), a benzophenanthridine alkaloid isolated from Hylomecon species, may have potential as a chemotherapeutic agent.??6ME inhibits the growth of HepG2 cells in a concentration- and time-dependent manner (IC50=3.8+/-0.2 microM following 6 h incubation).?Treatment of HepG2 cells with 6ME resulted in the release of mitochondrial cytochrome c followed by the activation of caspase proteases, and subsequent proteolytic cleavage of poly(ADP-ribose) polymerase.?6ME increased the expression of p53 and bax and decreased the expression of bcl-2.?The cytotoxic effect of 6ME is mediated by the time-dependent generation of reactive oxygen species.?Preincubation of HepG2 cells with vitamin C decreased the expression of p53 and bax and inhibited the release of cytochrome c, activation of downstream caspase and the cleavage of poly(ADP-ribose) polymerase, thus inhibiting the apoptosis inducing effect of 6ME

Solubility Information

Solubility	DMSO: 30 mg/mL (82.56 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: 3.3 mg/mL (9.08 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	2.7521 mL	13.7605 mL	27.5209 mL
5 mM	0.5504 mL	2.7521 mL	5.5042 mL
10 mM	0.2752 mL	1.376 mL	2.7521 mL
50 mM	0.055 mL	0.2752 mL	0.5504 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

Yin H Q , Kim Y H , Moon C K , et al. Reactive oxygen species-mediated induction of apoptosis by a plant alkaloid 6-methoxydihydrosanguinarine in HepG2 cells[J]. Biochemical Pharmacology, 2005, 70(2):242-248.
Zou HL, et al. Alkaloids from Macleaya cordata and their cytotoxicity assay. Zhongguo Zhong Yao Za Zhi. 2015 Feb;40(3):458-62.