Data Sheet (Cat.No.T3339)



Sophoridine

Molecular Weight:

Chemical Properties

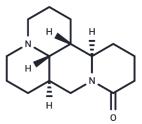
CAS No.: 6882-68-4

Formula: C15H24N2O

Appearance: no data available

248.36

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Sophoridine (Dihydro-5-episophocarpine), a natural anticancer drug, has been used in China for decades. A series of novel N-substituted Sophoridinic acid derivatives were synthesized and evaluated for their cytotoxicity with 1 as the lead. The structure-activity relationship indicated that introduction of an aliphatic acyl on the nitrogen atom might significantly enhance the anticancer activity. Among the compounds, 6b bearing bromoacetyl side-chain afforded a potential effect against four human tumor cell lines (liver, colon, breast, and lung). The mechanism of action of 6b is to inhibit the activity of DNA topoisomerase I, followed by the S-phase arrest and then cause apoptotic cell death, similar to that of its parent 1.
Targets(IC50)	Apoptosis, Topoisomerase

Solubility Information

Solubility	DMSO: 18.33 mg/mL (73.82 mM), Sonication is recommended.	
	(< 1 mg/ml refers to the product slightly soluble or insoluble)	

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.0264 mL	20.1321 mL	40.2641 mL
5 mM	0.8053 mL	4.0264 mL	8.0528 mL
10 mM	0.4026 mL	2.0132 mL	4.0264 mL
50 mM	0.0805 mL	0.4026 mL	0.8053 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.

Reference

Li X, et al. Bioorg Med Chem Lett. 2011, 21(18):5251-4.

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