

Sempervirine

Chemical Properties

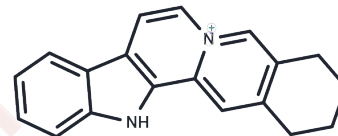
CAS No. : 6882-99-1

Formula: C₁₉H₁₇N₂

Molecular Weight: 273.35

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	Sempervirine can unwind circular DNA, it shows selective inhibition of in vitro synthesis of cancer DNA .
Targets(IC50)	DNA/RNA Synthesis
In vitro	The high template in vitro activity of native DNA from cancerous mammalian and plant tissues, compared to DNA from healthy tissues, enabled us to select substances which selectively inhibit cancer DNA synthesis. Among them, alstonine, serpentine, Sempervirine and flavopereirine, all alkaloids which belong to the Beta-carboline class, distinguish cancer DNA from healthy tissue DNA inhibit DNA in vitro synthesis when native DNA from different cancerous tissues or cells is used as template. They have practically no effect on DNA from healthy tissues. The inhibitory effect of alkaloids is due to their capacity to form an 'alkaloid-cancer DNA' complex which has been characterized by use of the Sephadex column.

Solubility Information

Solubility	DMSO: 1.67 mg/mL (6.11 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.6583 mL	18.2916 mL	36.5831 mL
5 mM	0.7317 mL	3.6583 mL	7.3166 mL
10 mM	0.3658 mL	1.8292 mL	3.6583 mL
50 mM	0.0732 mL	0.3658 mL	0.7317 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

Selective inhibition of in vitro synthesis of cancer DNA by alkaloids of beta-carboline class. *Exp Cell Biol.* 1982;50(2):79-87.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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