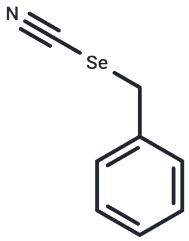
Data Sheet (Cat.No.T40560)

TargetMol

Benzyl selenocyanate

Chemical Properties



CAS No. : 4671-93-6

Formula: C8H7NSe

Molecular Weight: 196.11

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	Benzyl selenocyanate is a chemopreventive agent that effectively inhibits chemically induced tumors at both initiation and postinitiation stages in animal models. It acts as a potent inhibitor of DNA (cytosine-5)-methyltransferase (Mtase) with an IC50 of 8.4 μM.
Targets(IC50)	Apoptosis,DNA Methyltransferase
In vitro	Selenite, Benzyl selenocyanate and p-XSC inhibited Mtase extracted from human colon cancer with IC50 values of 3.8, 8.1 and 5.2 μM, respectively[1].

Solubility Information

Solubility	DMSO: 80 mg/mL (407.93 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 (16.83 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	5.0992 mL	25.4959 mL	50.9918 mL
5 mM	1.0198 mL	5.0992 mL	10.1984 mL
10 mM	0.5099 mL	2.5496 mL	5.0992 mL
50 mM	0.102 mL	0.5099 mL	1.0198 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

E S Fiala, et al. Inhibition of DNA cytosine methyltransferase by chemopreventive selenium compounds, determined by an improved assay for DNA cytosine methyltransferase and DNA cytosine methylation. Carcinogenesis. 1998 Apr;19(4):597-604.