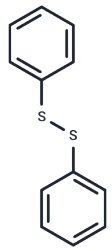
Data Sheet (Cat.No.T37518)

TargetMol

Diphenyl disulfide

Chemical Properties



CAS No. : 882-33-7

Formula: C12H10S2

Molecular Weight: 218.34

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	Diphenyl disulfide (Phenyl disulfide) shows anticancer activity in breast cancer cell lines. Diphenyl disulfide induces and enhances apoptosis in breast cancer cells through Bax protein hydrolysis activation and concomitant autophagy.Diphenyl disulfide inhibits cell proliferation and viability and reduces colony formation in a dose-dependent manner. Diphenyl disulfide can be used to treat breast cancer.
Targets(IC50)	Apoptosis,Bcl-2 Family,Endogenous Metabolite

Solubility Information

Solubility	DMSO: 50 mg/mL (229 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: 2 mg/mL (9.16 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	4.580 mL	22.9001 mL	45.8001 mL
5 mM	0.916 mL	4.580 mL	9.160 mL
10 mM	0.458 mL	2.290 mL	4.580 mL
50 mM	0.0916 mL	0.458 mL	0.916 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

Nakamura YK, et al. Suppressing effects of S-methyl methanethiosulfonate and diphenyl disulfide on mitomycin C-induced somatic mutation and recombination in Drosophila melanogaster and micronuclei in mice. Mutat Res. 1997;385(1):41-46.