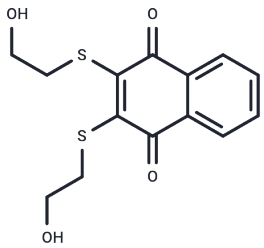
Data Sheet (Cat.No.T7078)

TargetMol

NSC 95397

Chemical Properties



CAS No. : 93718-83-3

Formula: C14H14O4S2

Molecular Weight: 310.39

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	NSC 95397 is a potent inhibitor of Cdc25 dual specificity phosphatase(Ki of 32, 96, and 40 nM for Cdc25A, Cdc25B, and Cdc25C, respectively).
Targets(IC50)	Apoptosis,Phosphatase
In vitro	NSC 95397 reduced cell viability and anchorage-independent growth of all the three colon cancer cell lines through inhibited proliferation and induced apoptosis via regulating cell-cycle-related proteins, including p21, cyclin-dependent kinases, and caspases[1].
Cell Research	To measure the cell proliferation activity of NSC 95397 against colon cancer cells, SW480 (1 × 10^4), SW620 (2 × 10^4), and DLD-1 (1 × 10^4) cells were seeded into 96-well plates.?After overnight culture, NSC 95397 cells were added at the indicated concentrations.?After 24 h of incubation, cell proliferation was determined in vitro using a BrdU cell proliferation assay kit.?O.D. 450 values were analyzed by using a Multiskan PC.The apoptosis of colon cancer cells was determined by a PE Annexin V Apoptosis Detection Kit with 7-AAD.?Briefly, cells were treated with the indicated concentration of NSC 95397 for 24 h. After 24 h, Cells were harvested and stained with PE Annexin V/7-AAD for 15 min. The stained cells were analyzed using FACSCanto II low cytometer and FCS Express software[1]

Solubility Information

Solubility	DMSO: 100 mg/mL (322.18 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: 10 mg/mL (32.22 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	3.2218 mL	16.1088 mL	32.2175 mL
5 mM	0.6444 mL	3.2218 mL	6.4435 mL
10 mM	0.3222 mL	1.6109 mL	3.2218 mL
50 mM	0.0644 mL	0.3222 mL	0.6444 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

Navneet D , Bou-Yue P , Chien-Min L , et al. NSC 95397 Suppresses Proliferation and Induces Apoptosis in Colon Cancer Cells through MKP-1 and the ERK1/2 Pathway[J]. International Journal of Molecular Sciences, 2018, 19(6): 1625-.

Park H , Carr B I , Li M , et al. Fluorinated NSC as a Cdc25 inhibitor[J]. Bioorganic and Medicinal Chemistry Letters, 2007, 17(8):2351-2354.