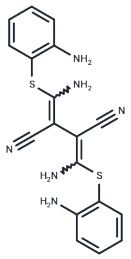
Data Sheet (Cat.No.T21332)

TargetMol

U0126

Chemical Properties



CAS No. : 109511-58-2

Formula: C18H16N6S2

Molecular Weight: 380.49

Storage: Store at low temperature
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	U0126, an effective and selective non-competitive inhibitor of MAP kinase, inhibits MEK-1 and MEK-2 with IC50 values of 0.07 and 0.06 μM respectively. U0126 inhibits autophagy and mitophagy.
Targets(IC50)	Mitophagy,MEK,Autophagy,Influenza Virus
In vitro	Rat hepatocarcinoma cells (FAO) stimulated by fetal calf serum (FCS) exhibits a significant proportion in S phase (32.62%) whereas U0126 strongly decreases the proportion of cells in S phase (9.92%) and increases the proportion of cells in G0-G1 phase and to a lesser extent in G2/M[1]. U0126 efficiently reduces progeny virus titers of all tested strains in A549 cells. While nM concentrations of U0126 are efficient to reduce H1N1v and H5N1 (MB1), μM concentrations of U0126 are required to reduce the virus titer of H5N1 (GSB) and H7N7. The EC50 values for U0126-EtOH against H1N1v are 1.2 μM in A549 cells and 74.7 μM in MDCKII cells[2].
In vivo	In mice, U0126-EtOH (U0126; i.p., 10.5 mg/kg) inhibits tumor growth with a 60-70% reduction 9 days after injection and thereafter[1]. After treatment with U0126-EtOH (U0126; i.p., 30 mg/kg), the vasoconstriction to S6c is markedly reduced in rats[3].

Solubility Information

Solubility	DMSO: 83.33 mg/mL (219.01 mM), H2O: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6282 mL	13.1409 mL	26.2819 mL
5 mM	0.5256 mL	2.6282 mL	5.2564 mL
10 mM	0.2628 mL	1.3141 mL	2.6282 mL
50 mM	0.0526 mL	0.2628 mL	0.5256 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

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