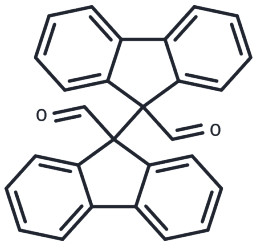
Data Sheet (Cat.No.T38563)

TargetMol

Raptinal

Chemical Properties



CAS No. : 1176-09-6

Formula: C28H18O2

Molecular Weight: 386.44

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	Raptinal activates caspase-3 directly and initiates intrinsic caspase-dependent apoptosis pathway in multiple cell lines.
Targets(IC50)	Apoptosis,Caspase
In vitro	In human gastric cancer cell lines AGS, MKN28, and MKN45, Raptinal(10μM) induces the cleavage of pro-caspase-3 into the active form. Raptinal induces death against various cancer and non-cancerous cell lines (IC50 = 0.7-3.4 μM)[2].
In vivo	In B16-F10 and 4T1 models, intraperitoneal administration of Raptinal (20 mg/kg) exerts anticancer activity. In C57BL/6 mice, intravenous administration of Raptinal (37.5 mg/kg) shows the peak plasma concentration and elimination half-life of 54.40.9 μg/mL and 92.1 minutes, respectively[2].

Solubility Information

Solubility	DMSO: 22.27 mg/mL (57.63 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 (5.18 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	2.5877 mL	12.9386 mL	25.8772 mL
5 mM	0.5175 mL	2.5877 mL	5.1754 mL
10 mM	0.2588 mL	1.2939 mL	2.5877 mL
50 mM	0.0518 mL	0.2588 mL	0.5175 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

Yanheng Chen, et al. H. pylori infection confers resistance to apoptosis via Brd4-dependent BIRC3 eRNA synthesis. Cell Death Dis. 2020 Aug 21;11(8):667.

Rahul Palchaudhuri,et al. A Small Molecule that Induces Intrinsic Pathway Apoptosis with Unparalleled Speed. Cell Rep. 2015 Dec 1;13(9):2027-36.