

Anticancer agent 47

Chemical Properties

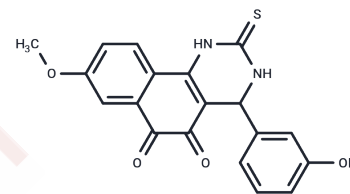
CAS No. : 2461795-23-1

Formula: C₁₉H₁₄N₂O₄S

Molecular Weight: 366.39

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	Anticancer agent 47 (compound 4j) exhibits potent anticancer properties, demonstrating antiproliferative activities, inducing apoptosis, and causing cell cycle arrest at the G ₀ /G ₁ phase. Moreover, Anticancer agent 47 has shown significant in vivo antitumor activities [1].
Targets(IC ₅₀)	Apoptosis,Others
In vitro	Anticancer agent 47 (compound 4j) exhibits antiproliferative activity with IC ₅₀ values of 1.6, 0.72, and 7.07 μM for HepG2, A549, and H596 cells, respectively [1]. At concentrations of 0.8, 1.6, and 3.2 μM for 24 h, it induces apoptosis and cell cycle arrest at the G ₀ /G ₁ phase [1]. At 5 μM for 5 h, it significantly increases ROS production [1]. Apoptosis analysis for HepG2 and H596 cells at 0.8, 1.6, and 3.2 μM for 24 h resulted in apoptotic cell rates of 14.23%, 20.47%, and 27.66%, respectively. Cell cycle analysis for HepG2 cells revealed 48.54%, 49.60%, and 53.00% of cells at G ₀ /G ₁ phase at 0.6, 1.2, and 2.4 μM, respectively [1].
In vivo	Anticancer agent 47, administered intravenously at a dosage of 20 mg/kg every other day for 19 days, demonstrates significant antitumor activities in BALB/c nude mice bearing HepG2 xenografts. This regimen effectively inhibited tumor growth, achieving a tumor inhibition rate of 58.7%.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7293 mL	13.6467 mL	27.2933 mL
5 mM	0.5459 mL	2.7293 mL	5.4587 mL
10 mM	0.2729 mL	1.3647 mL	2.7293 mL
50 mM	0.0546 mL	0.2729 mL	0.5459 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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