

MY-943

Chemical Properties

CAS No. :

Formula: C30H36N4O6S2

Molecular Weight: 612.76

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	MY-943, a potent inhibitor of tubulin polymerization and LSD1, exhibits anticancer properties by inducing G2/M phase arrest, promoting apoptosis, and suppressing cell migration, thus showing potential for use in gastric cancer research [1].
Targets(IC50)	Apoptosis,Histone Demethylase,Others,Microtubule Associated
In vitro	MY-943 exhibits antiproliferative activity against three cancer cell lines, with IC50 values of 0.019 μ M for MGC-803 cells, 0.044 μ M for HCT-116 cells, and 0.030 μ M for KYSE450 cells [1]. It dose-dependently and time-dependently inhibits the viability of MGC-803 and SGC-7901 cells at concentrations of 10, 20, 30 nM over 20, 40, 48, 60 hours [1]. MY-943 (1, 5, 10 μ M; 48 h) attenuates the alkylation of β -tubulin by EBI in a dose-dependent manner and prevents the formation of β -tubulin:EBI complex bands in MGC-803 and SGC-7901 cells [1]. Concentration-dependently, MY-943 (10, 20, 30 nM; 8, 16, 24 nM; 48 h) inhibits tubulin polymerization in MGC-803 and SGC-7901 cells [1] and induces apoptosis in a dose-dependent manner [1]. The compound downregulates the expression of anti-apoptotic proteins Bcl-2 and Mcl-1 and upregulates cleaved Caspase-3 and Caspase-7 levels dose-dependently [1]. Additionally, MY-943 dose-dependently decreases the levels of Weel, CyclinB1, and CDC2 and increases the levels of phosphorylated histone H3, H3K4me1, and H3K4me2 [1]. It effectively induces G2/M phase arrest dose-dependently [1] and significantly inhibits the migratory capabilities of gastric cancer cells MGC-803 and SGC-7901 [1].
In vivo	MY-943 (25 mg/kg/day; intraperitoneal injection; 21 days) significantly inhibited the growth of gastric cancer in mice and substantially reduced the weight and volume of the mice's tumor tissues [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.632 mL	8.1598 mL	16.3196 mL
5 mM	0.3264 mL	1.632 mL	3.2639 mL
10 mM	0.1632 mL	0.816 mL	1.632 mL
50 mM	0.0326 mL	0.1632 mL	0.3264 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

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