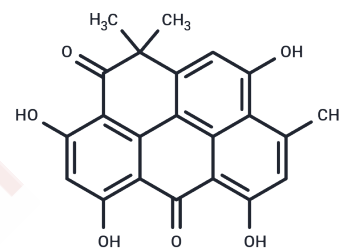


Resistomycin

Chemical Properties

CAS No. :	20004-62-0
Formula:	C ₂₂ H ₁₆ O ₆
Molecular Weight:	376.36
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	Resistomycin (Geliomycin), a pentacyclic polyketide antibiotic, exhibits potent anticancer properties by triggering apoptosis.
Targets(IC50)	Apoptosis, Antibacterial, Antibiotic
In vitro	Resistomycin effectively impedes the advancement of triple-negative breast cancer (TNBC) by targeting and inhibiting E3 ligase Pellino-1, which leads to the degradation of SNAIL/SLUG proteins. It binds strongly to GST-Pellino-1, with a dissociation constant (KD) of 2.58 μ M, as demonstrated through surface plasmon resonance [1]. Additionally, Resistomycin administration has been shown to decrease SNAIL and SLUG protein levels in TNBC cells [1]. Furthermore, it has been found to provoke apoptosis and cell cycle arrest in human hepatocellular carcinoma cells by activating the p38 MAPK pathway, both in laboratory settings and in animal models [2].

Solubility Information

Solubility	DMSO: 3.33 mg/mL (8.85 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.657 mL	13.2852 mL	26.5703 mL
5 mM	0.5314 mL	2.657 mL	5.3141 mL
10 mM	0.2657 mL	1.3285 mL	2.657 mL
50 mM	0.0531 mL	0.2657 mL	0.5314 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

Liu SS, et al. Resistomycin attenuates triple-negative breast cancer progression by inhibiting E3 ligase Pellino-1 and inducing SNAIL/SLUG degradation. *Signal Transduct Target Ther.* 2020 Jul 29;5(1):133.

Han Z, et al. Resistomycin Induced Apoptosis and Cycle Arrest in Human Hepatocellular Carcinoma Cells by Activating p38 MAPK Pathway In Vitro and In Vivo. *Pharmaceuticals (Basel).* 2021 Sep 23;14(10):958.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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