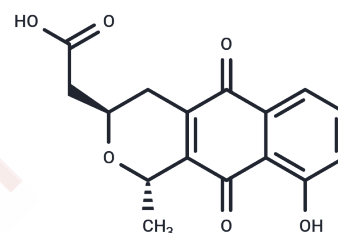


Nanaomycin A

Chemical Properties

CAS No. :	52934-83-5
Formula:	C ₁₆ H ₁₄ O ₆
Molecular Weight:	302.28
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Nanaomycin A, a quinone antibiotics, reactivates silenced tumor suppressor genes in human cancer cells. Nanaomycin A is a selective inhibitor of DNMT3B (IC ₅₀ = 500 nM).
Targets(IC ₅₀)	Antibiotic,Parasite,Dehydrogenase,DNA Methyltransferase
In vitro	Nanaomycin A inhibits in vitro growth of the human malaria parasite Plasmodium falciparum with an IC ₈₀ value of 33.1 nM[1]. Nanaomycin A (10, 100, 1000, 10000 nM) had a distinct cytotoxic effect in HCT116 (colon), A549 (lung), and HL60 (bone marrow) human tumor cell lines. Nanaomycin A (5 μM) had an 18-fold relative induction. Nanaomycin A (0.5, 5 μM) revealed induction of RASSF1A protein expression in A549 cells[2].

Solubility Information

Solubility	DMSO: 95 mg/mL (314.28 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	3.3082 mL	16.541 mL	33.0819 mL
5 mM	0.6616 mL	3.3082 mL	6.6164 mL
10 mM	0.3308 mL	1.6541 mL	3.3082 mL
50 mM	0.0662 mL	0.3308 mL	0.6616 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

Kuck D, et al. Nanaomycin A selectively inhibits DNMT3B and reactivates silenced tumor suppressor genes in human cancer cells. *Mol Cancer Ther.* 2010 Nov;9(11):3015-23.

Tanaka Y, et al. Heme-dependent radical generation: possible involvement in antimalarial action of non-peroxide microbial metabolites, nanaomycin A and radicicol. *J Antibiot (Tokyo).* 1999 Oct;52(10):880-8.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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