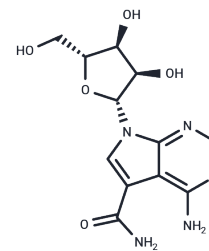


Sangivamycin

Chemical Properties

CAS No. :	18417-89-5
Formula:	C ₁₂ H ₁₅ N ₅ O ₅
Molecular Weight:	309.28
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	Sangivamycin (NSC-65346) is an effective inhibitor of protein kinase C (PKC, $K_i = 10 \mu\text{M}$). Sangivamycin exhibits antiproliferative activity against a variety of human cancers.
Targets(IC50)	Nucleoside Antimetabolite/Analog,PKC
In vitro	Sangivamycin (0.3 μM ; 0-72 hours) exhibits a predominantly cytotoxic effect in multidrug-resistant MCF7/adriamycin-resistant (ADR) human breast carcinoma cells, and a cytostatic effect in drug-sensitive MCF7/wild type (WT) cells. In MCF7/ADR cells, Sangivamycin triggers caspase activation, leading to significant cleavage of lamin A into a 28-kDa fragment within 48 hours. These findings highlight Sangivamycin's differential antitumor activities, inducing apoptosis-driven cell death in MCF7/ADR cells and growth arrest in MCF7/WT cells.

Solubility Information

Solubility	DMSO: 120 mg/mL (388 mM),Sonication is recommended. ($< 1 \text{ mg/ml}$ refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (10.67 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2333 mL	16.1666 mL	32.3332 mL
5 mM	0.6467 mL	3.2333 mL	6.4666 mL
10 mM	0.3233 mL	1.6167 mL	3.2333 mL
50 mM	0.0647 mL	0.3233 mL	0.6467 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

Lee SA, et al. The nucleoside analog sangivamycin induces apoptotic cell death in breast carcinoma MCF7/adriamycin-resistant cells via protein kinase Cdelta and JNK activation. *J Biol Chem.* 2007;282(20):15271-15283.

Loomis CR, Bell RM. Sangivamycin, a nucleoside analogue, is a potent inhibitor of protein kinase C. *J Biol Chem.* 1988;263(4):1682-1692.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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