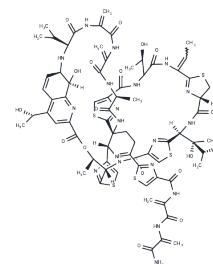


Siomycin A

Chemical Properties

CAS No. :	12656-09-6
Formula:	C71H81N19O18S5
Molecular Weight:	1648.84
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	Siomycin A is a thiopeptide antibiotic that selectively inhibits Forkhead box M1 (FOXO1) without affecting other Forkhead box family members, exhibiting anti-tumor properties and promoting apoptosis.
Targets(IC50)	Apoptosis,Others,Antibacterial
In vitro	cell viability in a dose-dependent and a time-dependent association in K562, MCF7 and MiaPaCa-2 cells markedly reduced by Siomycin A (0-10 μ M; 24-72 hours; K562, MCF7 and MiaPaCa-2 cells). Among the three cell lines(IC50 of the human leukemia K562 cells is the lowest at 6.25 μ M at 24 h), while that for the human pancreatic cancer MiaPaCa-2 cells is 6.38 μ M. However, the IC50 of the human pancreatic cancer MiaPaCa-2 cells at 48 and 72 h are the lowest of the three cell lines, which are 0.76 and 0.54 μ M, respectively [1]. Siomycin A (0-10 μ M; MiaPaCa-2 cells) treatment has potent proapoptotic effect in MiaPaCa-2 cells[1]. Siomycin A (0-10 μ M; 24 hours; MiaPaCa-2 cells) treatment significantly reduces the expression levels of MMP-2, MMP-9 and α -tubulin protein in the MiaPaCa-2 cells[1].
In vivo	In vivo mouse model,Siomycin A (1 μ M; subcutaneous injection; for 4 weeks; male Balb/c nude mice) pretreatment decreases tumour growth [2].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.6065 mL	3.0324 mL	6.0649 mL
5 mM	0.1213 mL	0.6065 mL	1.213 mL
10 mM	0.0606 mL	0.3032 mL	0.6065 mL
50 mM	0.0121 mL	0.0606 mL	0.1213 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

Wang B, et al. Effects and mechanism of siomycin A on the growth and apoptosis of MiaPaCa-2 cancer cells. *Oncol Lett.* 2019 Sep;18(3):2869-2876.

Kim H, et al. Forkhead box M1 (FOXM1) transcription factor is a key oncogenic driver of aggressive human meningioma progression. *Neuropathol Appl Neurobiol.* 2019 Jun 9.

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