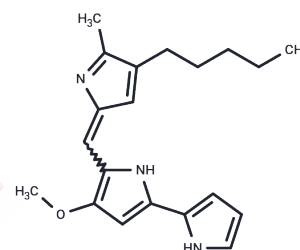


Prodigiosin

Chemical Properties

CAS No. :	82-89-3
Formula:	C ₂₀ H ₂₅ N ₃ O
Molecular Weight:	323.44
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	Prodigiosin is a natural red pigment and secondary metabolite that inhibits the Wnt/ β -catenin pathway and exhibits antibacterial, antifungal, antimalarial, anticancer, and immunosuppressive activities.
Targets(IC50)	Antibiotic, Antifungal, Wnt/ β -catenin
In vitro	Prodigiosin treatment (25–500 nM; 24 hours) reduced viability and induced apoptosis in breast cancer cell lines MDA-MB-231 and MDA-MB-468, while decreasing levels of phosphorylated LRP6 and DVL2, active β -catenin, and total β -catenin. Prodigiosin significantly inhibits phosphorylation of GSK3 β at Ser9 in HEK293T cells [1]. Prodigiosin inhibits the growth of chytrid fungi Batrachochytrium dendrobatidis and B. salamandrivorans with MIC values of 10 μ M and 50 μ M, respectively[2].
In vivo	Prodigiosin (5 mg/kg; intraperitoneal injection; twice weekly; for 3 weeks) significantly inhibited tumor growth, reduced tumor cell density, and decreased expression of the proliferation marker Ki-67 [1].

Solubility Information

Solubility	DMSO: 20 mg/mL (61.84 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	3.0918 mL	15.4588 mL	30.9176 mL
5 mM	0.6184 mL	3.0918 mL	6.1835 mL
10 mM	0.3092 mL	1.5459 mL	3.0918 mL
50 mM	0.0618 mL	0.3092 mL	0.6184 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

Woodhams DC, et al. Prodigiosin, Violacein, and Volatile Organic Compounds Produced by Widespread Cutaneous Bacteria of Amphibians Can Inhibit Two Batrachochytrium Fungal Pathogens. *Microb Ecol.* 2018 May;75(4):1049-1062.

Wang Z, et al. Prodigiosin inhibits Wnt/ β -catenin signaling and exerts anticancer activity in breast cancer cells. *Proc Natl Acad Sci U S A.* 2016 Nov 15;113(46):13150-13155.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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