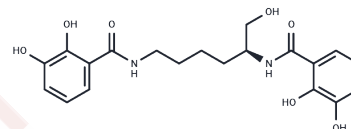


Myxochelin A

Chemical Properties

CAS No. :	120243-02-9
Formula:	C ₂₀ H ₂₄ N ₂ O ₇
Molecular Weight:	404.419
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	Myxochelin A is a microbial metabolite found in <i>A. disciformis</i> with diverse biological activities. It exhibits activity against Gram-positive bacteria, including <i>B. cereus</i> , <i>S. aureus</i> , and <i>M. luteus</i> , but not against Gram-negative bacteria or fungi at a concentration of 80 µg/disc in an agar diffusion assay. Myxochelin A inhibits 5-lipoxygenase (5-LO) activity, with an IC ₅₀ value of 1.9 µM for the recombinant human enzyme. Additionally, it is cytotoxic to 26-L5 colon cancer cells at a concentration of 3 µg/ml.
Targets(IC50)	Others,Lipoxygenase

Solubility Information

Solubility	Methanol: Soluble Ethanol: Soluble DMSO: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4727 mL	12.3634 mL	24.7268 mL
5 mM	0.4945 mL	2.4727 mL	4.9454 mL
10 mM	0.2473 mL	1.2363 mL	2.4727 mL
50 mM	0.0495 mL	0.2473 mL	0.4945 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

Kunze, B., Bedorf, N., Kohl, W., et al. Myxochelin A, a new iron-chelating compound from *Angiococcus disciformis* (Myxobacterales). Production, isolation, physico-chemical and biological properties. *J. Antibiot. (Tokyo)* 42(1):14-17 (1989)

Schieferdecker, S., König, S., Koeberle, A., et al. Myxochelins target human 5-lipoxygenase. *Nat. Prod.* 78(2):335-338 (2015)

Miyanaga, S., Obata, T., Onaka, H., et al. Absolute configuration and antitumor activity of myxochelin A produced by *Nonomuraea pusilla* TP-A0861. *J. Antibiot. (Tokyo)* 59(11):698-703 (2006)

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