# **PRODUCT** INFORMATION



## Myxochelin A

Item No. 26422

CAS Registry No.:	120243-02-9	
Formal Name:	N,N'-[(1S)-1-(hydroxymethyl)-1,5-	
	pentanediyl]bis[2,3-dihydroxy-benzamide	,OH
Synonym:	(S)-Myxochelin A	O OH
MF:	$C_{20}H_{24}N_2O_7$	
FW:	404.4	
Purity:	≥98%	
Supplied as:	A solid	
Storage:	-20°C	OH
Stability:	≥4 years	
Item Origin:	Synthetic	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

### Laboratory Procedures

Myxochelin A is supplied as a solid. A stock solution may be made by dissolving the myxochelin A in the solvent of choice, which should be purged with an inert gas. Myxochelin A is soluble in organic solvents such as DMSO, ethanol, and methanol.

#### Description

Myxochelin A is a microbial metabolite that has been found in A. disciformis and has diverse biological activities.<sup>1</sup> It is active against Gram-positive bacteria, including B. cereus, S. aureus, and M. luteus, but not Gram-negative bacteria or fungi in an agar diffusion assay when used at a concentration of 80 µg/disc. Myxochelin A inhibits 5-lipoxygenase (5-LO) activity with an IC<sub>50</sub> value of 1.9  $\mu$ M for the recombinant human enzyme.<sup>2</sup> It is cytotoxic to 26-L5 colon cancer cells when used at a concentration of  $3 \,\mu g/ml.^3$ 

#### References

- 1. 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).
- 2. Schieferdecker, S., König, S., Koeberle, A., et al. Myxochelins target human 5-lipoxygenase. J. Nat. Prod. 78(2), 335-338 (2015).
- 3. 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).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/17/2022

## CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM