

PRODUCT INFORMATION



Leoidin

Item No. 29939

CAS Registry No.: 105350-54-7
Formal Name: 2,4-dichloro-3,8-dihydroxy-1,6,9-trimethyl-11-oxo-11H-dibenzo[b,e][1,4]dioxepin-7-carboxylic acid, methyl ester

MF: C₁₈H₁₄Cl₂O₇

FW: 413.2

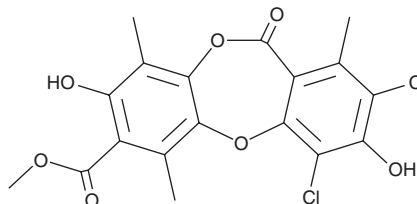
Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

Item Origin: Fungus/*Lecanora* sp.



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Leoidin is supplied as a solid. A stock solution may be made by dissolving the leoidin in the solvent of choice, which should be purged with an inert gas. Leoidin is soluble in ethanol, methanol, DMSO, and dimethyl formamide.

Description

Leoidin is a depsidone originally isolated from *L. gangaleoides* that has antibacterial and enzyme inhibitory activities.¹⁻³ It is active against the bacteria *E. faecalis*, *H. influenzae*, *M. catarrhalis*, *S. aureus*, and *S. pneumoniae* (MICs = 8, 32, 1, 128, and 64 µg/ml, respectively).² Leoidin inhibits phenylalanyl-tRNA synthetase (PheRS) isolated from *P. aeruginosa* (IC₅₀ = 42 µM). It also inhibits organic anion-transporting polypeptide 1B1 (OATP1B1) and OATP1B3 with K_i values of 0.08 and 1.84 µM, respectively, in CHO cells expressing the human transporters.³

References

1. Devlin, J.P., Mahandru, M.M., Ollis, W.D., *et al.* Phytochemical examination of the lichen, *Lecanora gangaleoides* Nyl. *J. Chem. Soc. Perkins Trans.* **1(24)**, 1491-1494 (1986).
2. Hu, Y., Keniry, M., Palmer, S.O., *et al.* Discovery and analysis of natural-product compounds inhibiting protein synthesis in *Pseudomonas aeruginosa*. *Antimicrob. Agents Chemother.* **60(8)**, 4820-4829 (2016).
3. De Bruyn, T., van Westen, G.J.P., Ijzerman, A.P., *et al.* Structure-based identification of OATP1B1/3 inhibitors. *Mol. Pharmacol.* **83(6)**, 1257-1267 (2013).

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.

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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