

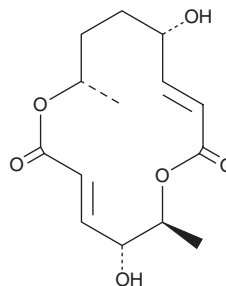
PRODUCT INFORMATION



Clonostachydiol

Item No. 29066

CAS Registry No.: 2205018-06-8
Formal Name: (3E,5R,6S,9E,11S,14S)-5,11-dihydroxy-6,14-dimethyl-1,7-dioxacyclotetradeca-3,9-diene-2,8-dione
MF: C₁₄H₂₀O₆
FW: 284.3
Purity: ≥70%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Bacterium/*Streptomyces* sp.



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

Laboratory Procedures

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

Description

Clonostachydiol is a fungal metabolite originally isolated from *Clonostachys cylindrospora* that has anticancer and anthelmintic activities.^{1,2} It is cytotoxic to P388 (IC₅₀ = 25 μM), as well as L1210, HT-29, and A549 cancer cells (IC₅₀s = 4.5, 4.2, and 5.7 μg/ml, respectively). Clonostachydiol (2.5 mg/kg, s.c.) reduces fecal worm burden by 80 to 90% in lambs infected with the nematode *H. contortus*.¹

References

1. Grabley, S., Hammann, P., Thiericke, R., *et al.* Secondary metabolites by chemical screening. 21. Clonostachydiol, a novel anthelmintic macrodiolide from the fungus *Clonostachys cylindrospora* (strain FH-A 6607). *J. Antibiot. (Tokyo)* **46(2)**, 343-345 (1993).
2. Lang, G., Mitova, M.I., Ellis, G., *et al.* Bioactivity profiling using HPLC/microtiter-plate analysis: Application to a New Zealand marine alga-derived fungus, *Gliocladium* sp. *J. Nat. Prod.* **69(4)**, 621-624 (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.

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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