

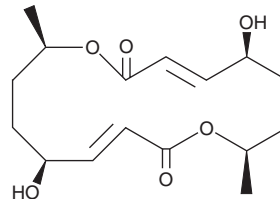
PRODUCT INFORMATION



Pyrenophorol

Item No. 28100

CAS Registry No.: 22248-41-5
Formal Name: (3E,5S,8R,11E,13S,16R)-5,13-dihydroxy-8,16-dimethyl-1,9-dioxacyclohexadeca-3,11-diene-2,10-dione
MF: C₁₆H₂₄O₆
FW: 312.4
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Fungus/*Phoma* sp.



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

Laboratory Procedures

Pyrenophorol is supplied as a solid. A stock solution may be made by dissolving the pyrenophorol in the solvent of choice, which should be purged with an inert gas. Pyrenophorol is soluble in organic solvents such as DMSO and methanol. The solubility of pyrenophorol in these solvents is approximately 5 mg/ml.

Description

Pyrenophorol is a fungal metabolite that has been found in *Alternaria* and has diverse biological activities.¹⁻³ It inhibits human topoisomerase II α when used at concentrations of 75 and 100 μ M.¹ It is active against *S. cerevisiae* (MIC = 4 μ M) and *M. violaceum*.² Pyrenophorol induces leaf necrosis and chlorophyll retention in wild oats when used at a concentration of 64 μ M.³

References

1. Jarolim, K., Del Favero, G., Ellmer, D., *et al.* Dual effectiveness of *Alternaria* but not *Fusarium* mycotoxins against human topoisomerase II and bacterial gyrase. *Arch. Toxicol.* **91(4)**, 2007-2016 (2016).
2. Sumarah, M.W., Kesting, J.R., Sørensen, D., *et al.* Antifungal metabolites from fungal endophytes of *Pinus strobus*. *Phytochemistry* **72(14-15)**, 1833-1837 (2011).
3. Kastanias, M.A. and Chrysayi-Tokousbalides, M. Comparative phytotoxicity of pyrenophorin and pyrenophorol isolated from a *Drechslera avenae* pathotype. 1999 Brighton crop protection conference: Weeds 2, 581-582 (1999).

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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