PRODUCT INFORMATION



Terpendole I

Item No. 29443

CAS Registry No.:	167612-17-1
Formal Name:	(2S,3R,3aR,4aS,4bS,6aS,12bS,12cR,14aS)-
	3,3a,5,6,6a,7,12,12b,12c,13,14,14a-dodecahydro- н
	2-(1-hydroxy-1-methylethyl)-12b,12c-dimethyl-
	2H,4bH-oxireno[4',4'a]-1-benzopyrano[5',6':6,7]
	indeno[1,2-b]indole-3,4b-diol
MF:	$C_{27}H_{35}NO_5$
FW:	453.6
Purity:	≥95%
Supplied as:	A solid HO ⁻
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Fungus/Unidentified sp.
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.	

Laboratory Procedures

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

Description

Terpendole I is a fungal metabolite that has been found in A. yamanashiensis.¹ It is a weak inhibitor of acyl-coenzyme A:cholesterol acyltransferase (ACAT; IC₅₀ = 145 μ M) and is active against the bacteria B. cereus and B. subtilis (MICs = 100 μ g/ml for both) but not S. aureus, P. aeruginosa, or K. pneumoniae (MICs = >200 μ g/ml for all) or the fungus C. albicans (MIC = 200 μ g/ml).^{1,2} It is cytotoxic to HeLa cells with an IC₅₀ value of 52.6 μ M.³

References

- 1. Tomoda, H., Tabata, N., Yang, D.-J., et al. Terpendoles, novel ACAT inhibitors produced by Albophoma yamanashiensis. III. Production, isolation and structure elucidation of new components. J. Antibiot. (Tokyo) 48(8), 793-804 (1995).
- 2. Zhao, J.-C., Wang, Y.-L., Zhang, T.-Y., et al. Indole diterpenoids from the endophytic fungus Drechmeria sp. as natural antimicrobial agents. Phytochemistry 148, 21-28 (2018).
- 3. Nagumo, Y., Motoyama, T., Hayashi, T., et al. Structure-activity relationships of terpendole E and its natural derivatives. ChemistrySelect 2(4), 1533-1536 (2017).

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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