

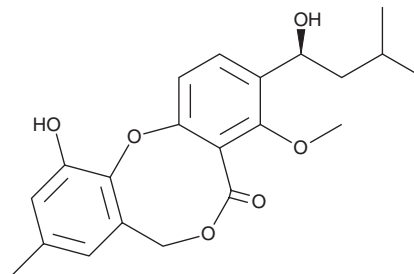
PRODUCT INFORMATION



Penicillide

Item No. 26912

CAS Registry No.: 55303-92-9
Formal Name: 11-hydroxy-3-[(1S)-1-hydroxy-3-methylbutyl]-4-methoxy-9-methyl-5H,7H-dibenzo[b,g][1,5]dioxocin-5-one
Synonym: Vermixocin A
MF: C₂₁H₂₄O₆
FW: 372.4
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Penicillide is supplied as a solid. A stock solution may be made by dissolving the penicillide in the solvent of choice, which should be purged with an inert gas. Penicillide is soluble in the organic solvent DMSO.

Description

Penicillide is a fungal metabolite originally isolated from *Penicillium* that has diverse biological activities.¹⁻⁵ It is an inhibitor of calpain 2/m-calpain (IC₅₀ = 7.1 μM) and acyl-coenzyme A:cholesterol acyltransferase (ACAT; IC₅₀ = 22.9 μM).^{2,3} It is also an antagonist of oxytocin receptors (IC₅₀ = 67 μM).⁴ Penicillide inhibits RNA synthesis in P388 murine leukemia cells.⁵

References

1. Sassa, T., Niwa, G., Unno, H., *et al.* Structure of penicillide, a new metabolite produced by a *Penicillium* species. *Tetrahedron Lett.* **45**, 3941-3942 (1974).
2. Chung, M.-C., Lee, H.-J., Chun, H.K., *et al.* Penicillide, a nonpeptide calpain inhibitor, produced by *Penicillium* sp. F60760. *J. Microbiol. Biotechnol.* **8(2)**, 188-190 (1998).
3. Kuroda, K., Morishita, Y., Saito, Y., *et al.* AS-186 compounds, new inhibitors of Acyl-CoA: Cholesterol acyltransferase from *Penicillium aspersporum* KY1635. *J. Antibiot.* **47(1)**, 16-22 (1994).
4. Salituro, G.M., Pettibone, D.J., Clineschmidt, B.V., *et al.* Potent, non-peptidic oxytocin receptor antagonists from a natural source. *Bioorg. Med. Chem. Lett.* **3(2)**, 337-340 (1993).
5. Proksa, B., Uhrin, D., Adamcová, J., *et al.* Vermixocins A and B, two novel metabolites from *Penicillium vermiculatum*. *J. Antibiot. (Tokyo)* **45(8)**, 1268-1272 (1992).

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