

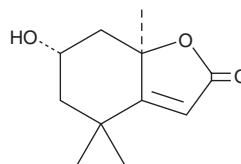
PRODUCT INFORMATION



Loliolide

Item No. 34196

CAS Registry No.: 5989-02-6
Formal Name: (6S,7aR)-5,6,7,7a-tetrahydro-6-hydroxy-4,4,7a-trimethyl-2(4H)-benzofuranone
Synonyms: (-)-Loliolide, NSC 289632
MF: C₁₁H₁₆O₃
FW: 196.2
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Eucommia ulmoides* leaves



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

Laboratory Procedures

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

Description

Loliolide is a monoterpene lactone that has been found in *P. urinaria* and has diverse biological activities.¹⁻⁴ It scavenges DPPH (Item No. 14805) and peroxide radicals in cell-free assays when used at concentrations ranging from 62.5 to 250 μM and reduces peroxide-induced apoptosis in Vero cells.¹ Loliolide (10 μg/ml) inhibits LPS-induced proliferation of isolated mouse T and B cells.² It reduces hepatitis C virus (HCV) infectivity in Huh7.5 cells (EC₅₀ = 2.48 μM) and inhibits HCV binding to Huh7.5 cells when used at concentrations of 10 and 50 μM.³

References

1. Yang, X., Kang, M.-C., Lee, K.-W., *et al.* Antioxidant activity and cell protective effect of loliolide isolated from *Sargassum ringgoldianum* subsp. *coreanum*. *Algae* **26(2)**, 201-208 (2011).
2. Okada, N., Shirata, K., Niwano, M., *et al.* Immunosuppressive activity of a monoterpene from *Eucommia ulmoides*. *Phytochemistry* **37(1)**, 281-282 (1994).
3. Chung, C.-Y., Liu, C.-H., Burnouf, T., *et al.* Activity-based and fraction-guided analysis of *Phyllanthus urinaria* identifies loliolide as a potent inhibitor of hepatitis C virus entry. *Antiviral Res.* **130**, 58-68 (2016).
4. Okunade, A.L. and Wiemer, D.F. (-)-Loliolide, an ant-repellent compound from *Xanthoxylum setulosum*. *J. Nat. Prod.* **48(3)**, 472-473 (1985).

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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