

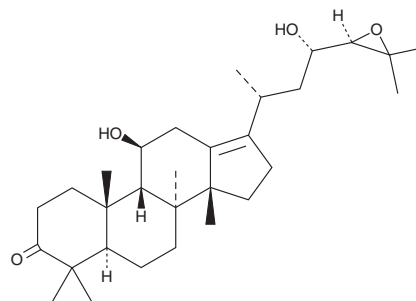
PRODUCT INFORMATION



Alisol B

Item No. 34808

CAS Registry No.: 18649-93-9
Formal Name: (8 α ,9 β ,11 β ,14 β ,23S,24R)-24,25-epoxy-11,23-dihydroxy-dammar-13(17)-en-3-one
Synonym: 16-Deoxoalisol C
MF: C₃₀H₄₈O₄
FW: 472.7
Purity: \geq 98%
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years
Item Origin: Plant/*Alisma plantago-aquatica* tubers



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

Laboratory Procedures

Alisol B is supplied as a solid. A stock solution may be made by dissolving the alisol B in the solvent of choice, which should be purged with an inert gas. Alisol B is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of alisol B in ethanol and DMF is approximately 1 mg/ml and approximately 5 mg/ml in DMSO.

Description

Alisol B is a triterpene that has been found in *A. orientale* and has diverse biological activities.¹⁻³ It increases the number of LC3 puncta, a marker of autophagy, as well as induces cell cycle arrest at the G₁ phase and apoptosis, in MCF-7 breast cancer cells when used at a concentration of 30 μ M.¹ Alisol B (0.5-5 μ M) inhibits RANKL-induced osteoclast differentiation of mouse bone marrow-derived macrophages (BMDMs).² It reduces increases in ear thickness in a mouse model of delayed-type hypersensitivity induced by picryl chloride when administered at doses of 10 or 50 mg/kg.³

References

1. Law, B.Y.K., Wang, M., Ma, D.-L., *et al.* Alisol B, a novel inhibitor of the sarcoplasmic/endoplasmic reticulum Ca²⁺ ATPase pump, induces autophagy, endoplasmic reticulum stress, and apoptosis. *Mol. Cancer Ther.* **9(3)**, 718-730 (2010).
2. Lee, J.-W., Kobayashi, Y., Nakamichi, Y., *et al.* Alisol-B, a novel phyto-steroid, suppresses the RANKL-induced osteoclast formation and prevents bone loss in mice. *Biochem. Pharmacol.* **80(3)**, 352-361 (2010).
3. Lee, J.H., Kwon, O.S., Jin, H.-G., *et al.* The rhizomes of *Alisma orientale* and alisol derivatives inhibit allergic response and experimental atopic dermatitis. *Biol. Pharm. Bull.* **35(9)**, 1581-1587 (2012).

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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