

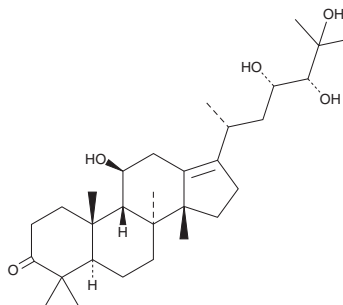
PRODUCT INFORMATION



Alisol A

Item No. 34050

CAS Registry No.: 19885-10-0
Formal Name: (8 α ,9 β ,14 β)-11 β ,23S,24R,25-tetrahydroxy-dammar-13(17)-en-3-one
MF: C₃₀H₅₀O₅
FW: 490.7
Purity: \geq 98%
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years
Item Origin: Plant/*Alisma orientalis*



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

Laboratory Procedures

Alisol A is supplied as a solid. A stock solution may be made by dissolving the alisol A in the solvent of choice, which should be purged with an inert gas. Alisol A is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of alisol A in these solvents is approximately 30 mg/ml.

Description

Alisol A is a terpenoid that has been found in *A. orientale* and has diverse biological activities.¹⁻⁴ It inhibits the secretion of hepatitis B virus (HBV) surface antigen in HBV-infected 2.2.15 cells (IC₅₀ = 39 μ M).² Alisol A (20 and 40 μ M) induces cell cycle arrest at the G₀/G₁ phase and autophagy in MDA-MB-231 human breast cancer cells.³ It reduces hepatic steatosis and increases in plasma triglyceride, total cholesterol, LDL-C, and HDL-C levels in a mouse model of high-fat diet-induced obesity when administered at a dose of 100 mg/kg per day.⁴ Alisol A decreases blood glucose and insulin levels in intraperitoneal glucose and insulin tolerance tests, respectively, in the same model.

References

1. Matsuda, H., Tomohiro, N., Yoshikawa, M., *et al.* Studies on Alismatis Rhizoma. II. Anti-complementary activities of methanol extract and terpene components from Alismatis Rhizoma (dried rhizome of *Alisma orientale*). *Biol. Pharm. Bull.* **21(12)**, 1317-1321 (1998).
2. Zhang, Q., Jiang, Z.-Y., Luo, J., *et al.* Anti-HBV agents. Part 1: Synthesis of alisol A derivatives: A new class of hepatitis B virus inhibitors. *Bioorg. Med. Chem. Lett.* **18(16)**, 4647-4650 (2008).
3. Lou, C., Xu, X., Chen, Y., *et al.* Alisol A suppresses proliferation, migration, and invasion in human breast cancer MDA-MB-231 cells. *Molcecules* **24(20)**, 3651 (2019).
4. Ho, C., Gao, Y., Zheng, D., *et al.* Alisol A attenuates high-fat-diet-induced obesity and metabolic disorders via the AMPK/ACC/SREBP-1c pathway. *J. Cell Mol. Med.* **23(8)**, 5108-5118 (2019).

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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