

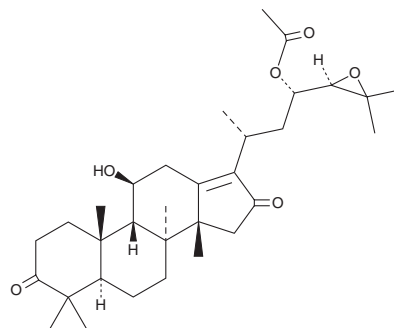
PRODUCT INFORMATION



Alisol C Monoacetate

Item No. 35823

CAS Registry No.: 26575-93-9
Formal Name: (8 α ,9 β ,11 β ,14 β ,23S,24R)-23-(acetyloxy)-24,25-epoxy-11-hydroxy-dammar-13(17)-ene-3,16-dione
Synonyms: AC23A, Alisol C 23-acetate
MF: C₃₂H₄₈O₆
FW: 528.7
Purity: \geq 98%
UV/Vis.: λ_{max} : 246 nm
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 C monoacetate is supplied as a solid. A stock solution may be made by dissolving the alisol C monoacetate in the solvent of choice, which should be purged with an inert gas. Alisol C monoacetate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of alisol C monoacetate in these solvents is approximately 2, 3, and 1 mg/ml, respectively.

Description

Alisol C monoacetate is a triterpenoid that has been found in *Alisma orientale* and has diverse biological activities.¹⁻⁴ It is active against certain antibiotic-resistant strains of *S. aureus*, *E. faecium*, *E. coli*, and *P. aeruginosa* (MICs = 2.5-5 μ g/ml) but not against other antibiotic-resistant strains of *S. aureus* or *E. coli* (MICs = >256 μ g/ml).^{2,3} Alisol C monoacetate (1-10 μ M) inhibits osteoclast formation induced by calcitriol (Item No. 71820) in a co-culture of primary rat osteoblasts and primary rat bone marrow cells.⁴ It reduces trabecular bone loss and serum levels of a variety of cytokines, including TNF- α , IL-6, and IL-1 β , in an ovariectomized rat model of osteoporosis when administered at doses of 1 and 2 mg/kg. Alisol C monoacetate (10 and 50 mg/kg) also reduces ear edema in a mouse model of delayed-type hypersensitivity.¹

References

1. 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).
2. Jin, H.-G., Jin, Q., Kim, A.R., *et al.* A new triterpenoid from *Alisma orientale* and their antibacterial effect. *Arch. Pharm. Res.* **35(11)**, 1919-1926 (2012).
3. Li, C., Yan, W., Cui, E., *et al.* Anti-bacterial effect of phytoconstituents isolated from *Alimatis rhizoma*. *Appl. Biol. Chem.* **64**, 9 (2021).
4. Jia, X., Zhu, H., Li, G., *et al.* Anti-osteoporotic effects of alisol C 23-acetate via osteoclastogenesis inhibition. *Biomed. Pharmacother.* **137**, 111321 (2021).

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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