

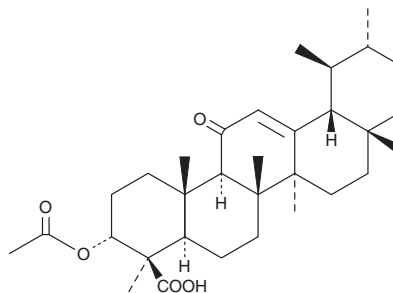
PRODUCT INFORMATION



3-acetyl-11-keto-β-Boswellic Acid

Item No. 11672

CAS Registry No.: 67416-61-9
Formal Name: (3α,4β)-3-(acetyloxy)-11-oxo-urs-12-en-23-oic acid
Synonyms: 3-O-acetyl-11-keto-β-Boswellic acid, AKBA
MF: C₃₂H₄₈O₅
FW: 512.7
Purity: ≥95%
UV/Vis.: λ_{max}: 208, 249 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

3-acetyl-11-keto-β-Boswellic Acid (AKBA) is supplied as a crystalline solid. A stock solution may be made by dissolving the AKBA in the solvent of choice. AKBA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of AKBA in ethanol is approximately 5 mg/ml and approximately 25 mg/ml in DMSO and DMF.

AKBA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AKBA should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. AKBA has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

AKBA is a naturally occurring pentacyclic triterpene isolated from the gum resin exudate from the stem of the tree *B. serrata* (frankincense).¹ It selectively inhibits 5-lipoxygenase (IC₅₀ = 1.5 μM) in an enzyme-directed, nonredox, and noncompetitive manner.² AKBA and other members of the boswellic acid family have been studied for potential use in the control of inflammatory diseases, including arthritis and cancer.³⁻⁶

References

1. Ammon, H. P., Safayhi, H., Mack, T., et al. *Journal of Ethnopharmacology* **38(2-3)**, 113-119 (1993).
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3. Zhao, W., Entschladen, F., Liu, H., et al. *Cancer Detection and Prevention* **27(1)**, 67-75 (2003).
4. Xia, L., Chen, D., Han, R., et al. *Molecular Cancer Therapeutics* **4(3)**, 381-388 (2005).
5. Mostafa, D. M., Ammar, N. M., Basha, M., et al. *Drug Deliv.* **22(6)**, 748-756 (2015).
6. Wang, Q., Pan, X., Wong, H. H., et al. *Osteoarthritis Cartilage* **22(1)**, 128-132 (2014).

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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