

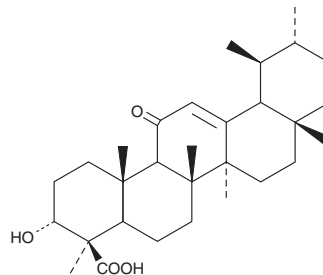
PRODUCT INFORMATION



11-keto-β-Boswellic Acid

Item No. 11668

CAS Registry No.: 17019-92-0
Formal Name: (3α,4β)-3-hydroxy-11-oxo-urs-12-en-23-oic acid
Synonyms: 11-oxo-β-Boswellic acid, KBA
MF: C₃₀H₄₆O₄
FW: 470.7
Purity: ≥95%
UV/Vis.: λ_{max}: 248 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years
Item Origin: Plant/*Boswellia serrata*



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

Laboratory Procedures

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

KBA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, KBA should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. KBA 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

KBA is a naturally occurring pentacyclic triterpene isolated from the gum resin exudate from the stem of the tree *B. serrata* (frankincense).¹ Boswellic acids are specific, non-redox inhibitors of leukotriene synthesis via 5-lipoxygenase that demonstrate anti-inflammatory and anti-arthritis actions.²⁻⁴

References

1. Ammon, H.P., Safayhi, H., Mack, T., *et al.* Mechanism of anti-inflammatory actions of curcumin and boswellic acids. *J. Ethnopharmacol.* **38(2-3)**, 113-119 (1993).
2. Safayhi, H., Mack, T., Sabieraj, J., *et al.* Boswellic acids: Novel, specific, nonredox inhibitors of 5-lipoxygenase. *Journal of Pharmacology and Experimental Therapeutics.* **261(3)**, 1143-1146 (1992).
3. Mostafa, D. M., Ammar, N. M., Basha, M., *et al.* Transdermal microemulsions of *B. carterii* Bird: Formulation, characterization and in vivo evaluation of anti-inflammatory activity. *Drug Deliv.* **22(6)**, 748-756 (2015).
4. Q. Wang, X. Pan, H. H. Wong, *et al.* Oral and topical boswellic acid attenuates mouse osteoarthritis. *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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 09/26/2023

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM