

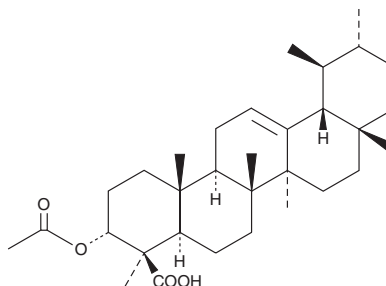
# PRODUCT INFORMATION



## $\beta$ -acetyl-Boswellic Acid

Item No. 11674

**CAS Registry No.:** 5968-70-7  
**Formal Name:** (3 $\alpha$ ,4 $\beta$ )-3-(acetyloxy)-urs-12-en-23-oic acid  
**Synonyms:** ABA, 3-O-acetyl- $\beta$ -Boswellic acid,  $\beta$ -Boswellic acid acetate  
**MF:** C<sub>32</sub>H<sub>50</sub>O<sub>4</sub>  
**FW:** 498.7  
**Purity:**  $\geq$ 95%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 2 years



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

### Laboratory Procedures

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

$\beta$ -acetyl-Boswellic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers,  $\beta$ -acetyl-boswellic acid should first be dissolved in DMSO and then diluted with the aqueous buffer of choice.  $\beta$ -acetyl-Boswellic acid 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

Boswellic acids are pentacyclic triterpenes first isolated from the resin of *Boswellia* plants. They have anti-inflammatory and anti-arthritis actions in mice.<sup>1,2</sup>  $\beta$ -acetyl-Boswellic acid is a non-reducing inhibitor of 5-lipoxygenase (5-LO) that shows selectivity for 5-LO over 12-LO or COX.<sup>3,4</sup> When studied as a 1:1 mixture with  $\alpha$ -acetyl-boswellic acid, it inhibits topoisomerase II activity and arrests cell cycling or induces apoptosis in cancer cells.<sup>5,6</sup>

### References

1. Wang, Q., Pan, X., Wong, H.H., et al. *Osteoarthritis Cartilage* **22(1)**, 128-132 (2014).
2. Mostafa, D.M., Ammar, N.M., Basha, M., et al. *Drug Deliv.* **22(6)**, 748-756 (2015).
3. Safayhi, H., Mack, T., Sabieraj, J., et al. *J. Pharmacol. Exp. Ther.* **261**, 1143-1146 (1992).
4. Ammon, H.P., Safayhi, H., Mack, T., et al. *J. Ethnopharmacol.* **38(2-3)**, 113-119 (1993).
5. Zhao, W., Entschladen, F., Liu, H., et al. *Cancer Detect. Prev.* **27(1)**, 67-75 (2003).
6. Xia, L., Chen, D., Han, R., et al. *Mol. Cancer Ther.* **4(3)**, 381-388 (2005).

#### 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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