

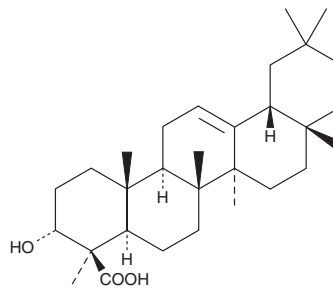
# PRODUCT INFORMATION



## $\alpha$ -Boswellic Acid

Item No. 11692

CAS Registry No.: 471-66-9  
Formal Name: (4 $\beta$ )-3 $\alpha$ -hydroxy-olean-12-en-23-oic acid  
MF: C<sub>30</sub>H<sub>48</sub>O<sub>3</sub>  
FW: 456.7  
Purity:  $\geq$ 98%  
Supplied as: A crystalline solid  
Storage: -20°C  
Stability:  $\geq$ 4 years  
Item Origin: Plant/*Boswellia carterii*



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

### Laboratory Procedures

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

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

$\alpha$ -Boswellic acid is a pentacyclic triterpene and an isomer of  $\beta$ -boswellic acid (Item No. 11693) originally isolated from *B. serrata*.<sup>1,2</sup> It increases Survivin and Reelin expression, decreases production of reactive oxygen species (ROS) and levels of hyperphosphorylated Tau, and inhibits apoptosis induced by streptozotocin (Item No. 13104) in primary fetal human astrocytes.<sup>1</sup>  $\alpha$ -Boswellic acid (200 mg/kg) increases gastric juice pH and production of gastric wall mucus and decreases leukocyte infiltration, submucosal edema, and the formation of hemorrhagic lesions in a rat model of ethanol-induced gastric injury.<sup>2</sup>

### References

1. Fathi, E., Katouli, F.H., Riazi, G.H., *et al.* The effects of alpha boswellic acid on reelin expression and Tau phosphorylation in human astrocytes. *Neuromolecular Med.* **19(1)**, 136-146 (2017).
2. Zhang, Y., Jia, J., Ding, Y., *et al.* Alpha-boswellic acid protects against ethanol-induced gastric injury in rats: Involvement of nuclear factor erythroid-2-related factor 2/heme oxygenase-1 pathway. *J. Pharm. Pharmacol.* **68(4)**, 514-522 (2016).

#### 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

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