# PRODUCT INFORMATION



# α-Amyrin

Item No. 29831

CAS Registry No.: 638-95-9

Formal Name: (3β)-urs-12-en-3-ol NSC 114787 Synonym:

MF:  $C_{30}H_{50}O$ FW: 426.7 **Purity:** ≥95% Supplied as: A solid Storage: -20°C Stability: ≥4 years

Item Origin: Plant/Burseraceae

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

## **Laboratory Procedures**

 $\alpha$ -Amyrin is supplied as a solid. A stock solution may be made by dissolving the  $\alpha$ -amyrin in the solvent of choice, which should be purged with an inert gas. α-Amyrin is soluble in the organic solvent methanol.

#### Description

α-Amyrin is a triterpenoid that has been found in B. copallifera and has diverse biological activities.<sup>1-4</sup> It inhibits HIV-1 reverse transcriptase ( $IC_{50} = 3.3 \mu M$ ).<sup>1</sup>  $\alpha$ -Amyrin inhibits the proliferation of B16 2F2 melanoma cells and LPS-induced nitric oxide (NO) production in RAW 264.7 macrophages  $(IC_{50}s = 50 \text{ and } 8.98 \mu\text{M}, \text{ respectively}).^{2.3} \text{ It reduces myeloperoxidase (MPO) activity, indicating a decrease in$ polymorphonuclear leukocyte (PMN) infiltration, and ear edema induced by phorbol 12-myristate 13-acetate (TPA; Item No. 10008014) in mice (ID<sub>50</sub>s = 0.45 and 0.31 mg/ear, respectively).<sup>4</sup>

### References

- 1. Akihisa, T., Ogihara, J., Kato, J., et al. Inhibitory effects of triterpenoids and sterols on human immunodeficiency virus-1 reverse transcriptase. Lipids 36(5), 507-512 (2001).
- 2. Hata, K., Hori, K., and Takahashi, S. Differentiation- and apoptosis-inducing activities by pentacyclic triterpenes on a mouse melanoma cell line. J. Nat. Prod. 65(5), 645-648 (2002).
- Romero-Estrada, A., Maldonado-Magaña, A., González-Christen, J., et al. Anti-inflammatory and antioxidative effects of six pentacyclic triterpenes isolated from the Mexican copal resin of Bursera copallifera. BMC Complement. Altern. Med. 16(1), 422 (2016).
- Otuki, M.F., Vieira-Lima, F., Malheiros, Â., et al. Topical antiinflammatory effects of the ether extract from Protium kleinii and α-amyrin pentacyclic triterpene. Eur. J. Pharmacol. 507(1-3), 253-259 (2005).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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