# PRODUCT INFORMATION



# **Oleanolic Acid Acetate**

Item No. 29764

CAS Registry No.: 4339-72-4

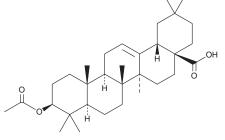
Formal Name: 3ß-(acetyloxy)-olean-12-en-28-oic acid

Synonym: 3-Acetyloleanolic Acid

MF:  $C_{32}H_{50}O_4$ FW: 498.7 **Purity:** ≥95% Supplied as: A solid -20°C Storage: Stability: ≥4 years

Item Origin: Plant/Glycyrrhizae radix et rhizoma

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



## **Laboratory Procedures**

Oleanolic acid acetate is supplied as a solid. A stock solution may be made by dissolving the oleanolic acid acetate in the solvent of choice, which should be purged with an inert gas. Oleanolic acid acetate is soluble in the organic solvent dimethyl formamide at a concentration of approximately 0.14 mg/ml.

## Description

Oleanolic acid acetate is a triterpene that has been found in the root bark of M. macrophylla and has diverse biological activities.<sup>1-4</sup> It is active against P. gingivalis (MIC = 39 μg/ml).<sup>1</sup> Oleanolic acid acetate (5-50 μM) induces apoptosis in and reduces viability of HCT116 colon carcinoma cells.<sup>2</sup> It induces apoptosis in human umbilical vein endothelial cells (HUVECs) in vitro and inhibits capillary vessel formation in a Matrigel™ plug assay in mice.<sup>3</sup> Oleanolic acid acetate (2, 10, and 50 mg/kg) reduces the number of skin lesions, epidermal thickness and immune cell infiltration, and serum IgE, IgG2a, and histamine levels in a mouse model of atopic dermatitis.4

## References

- 1. Kim, N.-C., Desjardins, A.E., Wu, C.D., et al. Activity of triterpenoid glycosides from the root bark of Mussaenda macrophylla against two oral pathogens. J. Nat. Prod. 62(10), 1379-1384 (1999).
- 2. Yoo, K.H., Park, J.-H., Cui, E.J., et al. 3-O-acetyloleanolic acid induces apoptosis in human colon carcinoma HCT-116 cells. Phytother. Res. 26(10), 1541-1546 (2012).
- Cui, E.-J., Hwang-Bo, J., Park, J.-H., et al. 3-O-Acetyloleanolic acid exhibits anti-angiogenic effects and induces apoptosis in human umbilical vein endothelial cells. Biotechnol. Lett. 35(11), 1807-1815 (2013).
- Choi, J.K., Oh, H.-M., Lee, S., et al. Oleanolic acid acetate inhibits atopic dermatitis and allergic contact dermatitis in a murine model. Toxicol. Appl. Pharmacol. 269(1), 72-80 (2013).

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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## **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