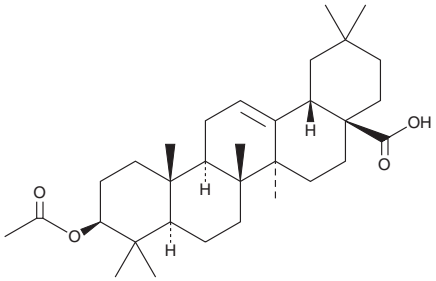
PRODUCT INFORMATION

Oleanolic Acid Acetate

Item No. 29764

CAS Registry No.:	4339-72-4
Formal Name:	3β-(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
Storage:	-20°C
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.[1-4] It is active against *P. gingivalis* (MIC = 39 µg/ml).[1] Oleanolic acid acetate (5-50 µM) induces apoptosis in and reduces viability of HCT116 colon carcinoma cells.[2] It induces apoptosis in human umbilical vein endothelial cells (HUVECs) *in vitro* and inhibits capillary vessel formation in a Matrigel™ plug assay in mice.[3] 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).
3. 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).
4. 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).

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