PRODUCT INFORMATION



28-Acetylbetulin

Item No. 33052

CAS Registry No.: 27686-35-7

Formal Name: (3β)-28-acetate-lup-20(29)-ene-3,28-diol Synonyms: 28-acetoxy Betulin, 28-O-Acetylbetulin,

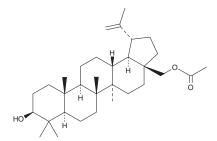
C-28-Acetylbetulin

MF: $C_{32}H_{52}O_3$ FW: 484.8 **Purity:** ≥95%

Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years Item Origin: Semisynthetic

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



Laboratory Procedures

28-Acetylbetulin is supplied as a crystalline solid. A stock solution may be made by dissolving the 28-acetylbetulin in the solvent of choice, which should be purged with an inert gas. 28-Acetylbetulin is soluble in dimethyl formamide at a concentration of 1 mg/ml. 28-Acetylbetulin is also slightly soluble in DMSO.

Description

28-Acetylbetulin is a lupane triterpenoid and derivative of the cholesterol biosynthesis inhibitor betulin (Item No. 11041) that has been found in M. chiapensis and has anti-inflammatory and anticancer activities. $^{1.2}$ It inhibits LPS-induced nitric oxide (NO) and prostaglandin E2 (PGE2; Item No. 14010) production by 55.9 and 69.5%, respectively, in RAW 264.7 cells (IC $_{50}$ s = 4.7 and 1.7 μ M, respectively). 28-Acetylbetulin induces cytotoxicity in a variety of cancer cells, including A549, HT-29, and MCF-7 cells (IC₅₀s = 14.37, 10.96, and 11.38 μ M, respectively).²

References

- 1. Reyes, C.P., Núñez, M.J., Jiménez, I.A., et al. Activity of lupane triterpenoids from Maytenus species as inhibitors of nitric oxide and prostaglandin E2. Bioorg. Med. Chem. 14(5), 1573-1579 (2006).
- Kommera, H., Kaluderović, G.N., Kalbitz, J., et al. Lupane triterpenoids--betulin and betulinic acid derivatives induce apoptosis in tumor cells. Invest. New Drugs 29(2), 266-272 (2011).

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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