

BVT-0407

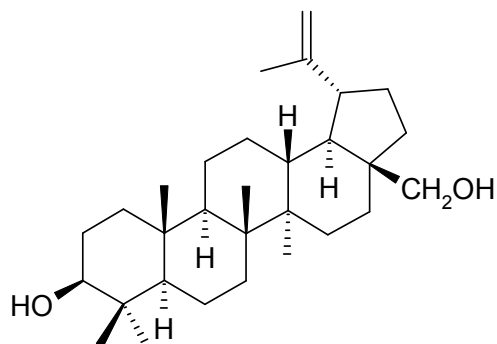
Betulin

[Betulinol; Lup-20(29)-en-3,28-diol]

Formula $C_{30}H_{50}O_2$
MW 442.7
CAS 473-98-3

Handling / Storage

Shipping Ambient
Short Term Storage +4°C
Long Term Storage -20°C



Use / Stability

Store, as supplied, at -20°C for up to 1 year.
Store solutions dark and at -20°C.

Hazard / Toxicity

MSDS available upon request.

Product Specifications

Source/Host Isolated from *birch bark (betula alba)*.
Purity Detail >99% (HPLC)
Appearance White solid.
Solubility Soluble in methanol, acetone or DMSO.

Other Product Data

Identity Determined by 1H -NMR.

WARNING: Intended for research use only. This product is not intended or approved for human, diagnostics, therapeutic or veterinary use. Use of this product for human or animal testing is extremely hazardous and may result in disease, severe injury, or death. **MATERIAL SAFETY DATA:** Review the complete Material Safety Data Sheet before use.

Product Description

- Triterpene from the birch bark.
- Anticancer compound.
- Antibacterial.
- Antifungal.
- Antiviral.
- Antiprotozoal.

Product Specific References

1. A bicentennial of betulin: E. W. H. Hayek, et al.; *Phytochemistry* **1989**, 28, 2229-2242.
2. Birch bark research and development: P. A. Krasutsky; *Nat. Prod. Rep.* **2006**, 23, 919-942. (Review)
3. Pharmacological properties of the ubiquitous natural product betulin: S. Alakurtti, et al.; *Eur. J. Pharm. Sci.* **2006**, 29, 1-13. (Review)
4. Pentacyclic triterpenes of the lupane, oleanane and ursane group as tools in cancer therapy: M. N. Laszczyk; *Planta Med.* **2009**, 75, 1549-1560. (Review)
5. Betulin is a potent anti-tumor agent that is enhanced by cholesterol: F. B. Mullauer, et al.; *PLoS One* **2009**, 4, e1. doi:10.1371.
6. Betulin induces mitochondrial cytochrome c release associated apoptosis in human cancer cells: Y. Li, et al.; *Mol. Carcinog.* **2010**, 49, 630-640.
7. Possible fungistatic implications of betulin presence in betulaceae plants and their hymenochaetaceae parasitic fungi: I. Jasicka-Misiak, et al.; *Z. Naturforsch. C.* **2010**, 65, 201-206.
8. Toxicity of betulin derivatives and in vitro effect on promastigotes and amastigotes of *Leishmania infantum* and *L. donovani*: L. Wert, et al.; *J. Antibiot.* **2011**, 64, 475-481.
9. Betulin complex in cyclodextrin derivatives. Properties and antineoplastic activities in in vitro and in vivo tumor models: C. Soica, et al.; *Int. J. Mol. Sci.* **2012**, 13, 14992-15011.
10. Anti-HIV conjugates of betulin with AZT prepared via click chemistry: I. D. Bori, et al.; *Tetrahedron Lett.* **2012**, 53, 1987-1989.
11. Betulin as an antitumor agent tested in vitro on A431, HeLa and MCF7, and as an angiogenic inhibitor in vivo in the CAM assay: C. A. Dehelean, et al.; *Nat. Prod. Commun.* **2012**, 7, 981-985.

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