

**BVT-0408**

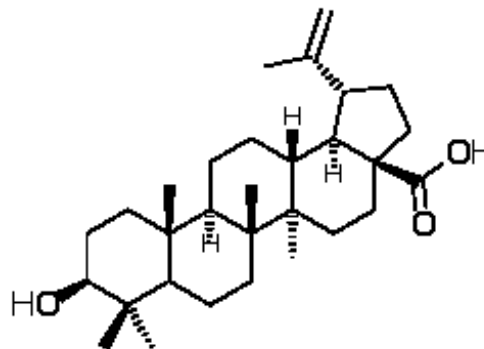
**Betulinic acid**

[Betulinsäure; 3 $\beta$ -Hydroxy-lup-20(29)-en-28-carboxylic acid]

Formula  $C_{30}H_{48}O_3$   
MW 456.7  
CAS 472-15-1

**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.
- Antiviral.
- Antiprotozoal.
- Anti-inflammatory.

## Product Specific References

1. Birch bark research and development: P. A. Krasutsky; Nat. Prod. Rep. **2006**, 23, 919-942. (Review)
2. Pharmacological properties of the ubiquitous natural product betulin: S. Alakurtti et al.; Eur. J. Pharm. Sci. **2006**, 29, 1-13. (Review)
3. Betulinic acid derivatives as anticancer agents. Structure activity relationship: R. Mukherjee et al.; Anticancer Agents Med. Chem. **2006**, 6, 271-279.
4. Activation and inhibition of the proteasome by betulinic acid and its derivatives: L. Huang et al.; FEBS Lett. **2007**, 581, 4955-4959.
5. Pentacyclic triterpenes of the lupane, oleanane and ursane group as tools in cancer therapy: M. N. Laszczyk; Planta Med. **2009**, 75, 1549-1560. (Review)
6. Betulin-derived compounds as inhibitors of alphavirus replication: L. Pohjala et al.; J. Nat. Prod. **2009**, 72, 1917-1926.
7. Antiprotozoal activity of betulinic acid derivatives: D. B. Dominguez-Carmona et al.; Phytomedicine **2010**, 17, 379-382.
8. Lupane triterpenoids. Betulin and betulinic acid derivatives induce apoptosis in tumor cells: H. Kommera et al.; Invest New Drugs **2011**, 29, 266-272.
9. Anti-HIV conjugates of betulin with AZT prepared via click chemistry: I. D. Bori et al.; Tetrahedron Lett. **2012**, 53, 1987-1989.

**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.