

**BVT-0410**

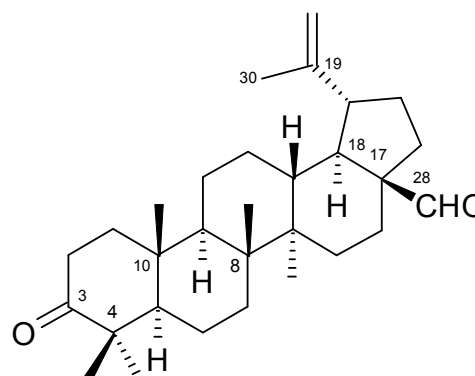
**Betulonic aldehyde**

[3-Oxo-20(29)-lupen-28-al; Betulonaldehyde]

Formula  $C_{30}H_{46}O_2$   
MW 438.7  
CAS 4439-98-9

**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 >98% (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.

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## Product Description

- Triterpene from the birch bark.
- Inhibitor of eukaryotic human topoisomerase-I ( $IC_{50} \sim 5 \mu M$ ).
- Anticancer compound.
- Antiprotozoal.
- Broad pharmacological activity.

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## 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. Pentacyclic triterpenes of the lupane, oleanane and ursane group as tools in cancer therapy: M. N. Laszczyk; Planta Med. **2009**, 75, 1549-1560. (Review)
4. Betulin-derived compounds as inhibitors of alphavirus replication: L. Pohjala et al.; J. Nat. Prod. **2009**, 72, 1917-1926.
5. Inhibitory effect of the natural product betulin and its derivatives against the intracellular bacterium Chlamydia pneumoniae: O. Salin et al.; Biochem. Pharmacol. **2010**, 80, 1141-1151.
6. 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.
7. Beneficial health effects of Lupeol triterpene, a review of preclinical studies: H. R. Siddique and M. Saleem; Life Sciences **2011**, 88, 285-293.

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