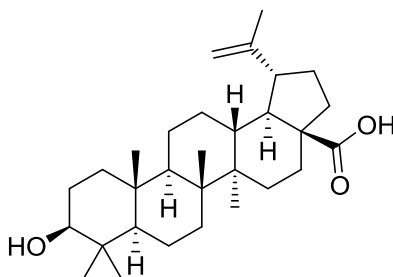


## Betulinic acid

Code No.: **BIA-B1758**

Pack sizes: **1 mg, 5 mg**



Synonyms : (+)-Betulinic acid, Betulic acid, Lupatic acid, NSC 113090,  $\beta$ -Betulinic acid

## Specifications

|                   |  |
|-------------------|--|
| CAS #             | : 472-15-1                                   |
| Molecular Formula | : $C_{30}H_{48}O_3$                          |
| Molecular Weight  | : 456.7                                      |
| Source            | : <i>Akania bidwillii</i>                    |
| Appearance        | : White solid                                |
| Purity            | : >95% by HPLC                               |
| Long Term Storage | : -20°C                                      |
| Solubility        | : Soluble in ethanol, methanol, DMF or DMSO. |

## Application Notes

Betulinic acid is a pentacyclic lupane terpene, first published in 1917. Betulinic acid is isolated as a constituent of various tree species, including birch. Betulinic acid has antiviral, antibacterial, antimalarial, antiinflammatory, anthelmintic and antinociceptive properties. Betulinic acid induces apoptosis via caspase activation and also disrupts the mitochondrial membrane, induces DNA fragmentation and suppresses aerobic glycolysis via interaction with Cav-1. Derivatives of betulinic acid are active against bacterial biofilms.

## References

1. Chemical studies of the Myrtaceae. II. The constituents of Syncarpia laurifolia Tenn. Hodgson D. et al., Aust. J. Chem. 1960, 13, 385.
2. Betulinic acid and its derivatives: A review on their biological properties. Yogeeswari P. & Sriram D., Curr. Med. Chem. 2005, 12, 657.
3. Betulinic acid suppresses breast cancer aerobic glycolysis via caveolin-1/NF- $\kappa$ B/c-Myc pathway. Jiao L. et al., Biochem. Pharmacol. 2019, 161, 149.
4. Triterpene derivatives as relevant scaffold for new antibiofilm drugs. Silva G.N.S.D. et al., Biomolecules. 2019, 9(2).