

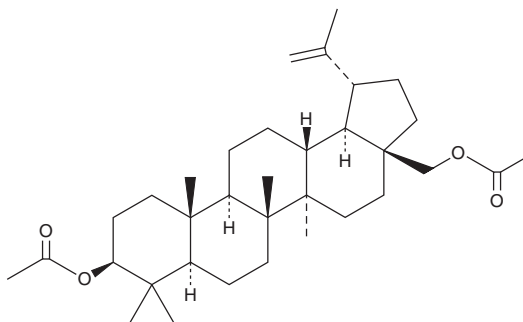
# PRODUCT INFORMATION



## Betulin 3,28-diacetate

Item No. 33028

<b>CAS Registry No.:</b>	1721-69-3
<b>Formal Name:</b>	3 $\beta$ ,28-diacetate lup-20(29)-ene-3,28-diol
<b>Synonyms:</b>	Betulin Diacetate, NSC 38876
<b>MF:</b>	C <sub>34</sub> H <sub>54</sub> O <sub>4</sub>
<b>FW:</b>	526.8
<b>Purity:</b>	≥95%
<b>Supplied as:</b>	A crystalline solid
<b>Storage:</b>	-20°C
<b>Stability:</b>	≥4 years
<b>Item Origin:</b>	Plant/ <i>Betula pendula</i>



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

### Laboratory Procedures

Betulin 3,28-diacetate is supplied as a crystalline solid. A stock solution may be made by dissolving the betulin 3,28-diacetate in the solvent of choice, which should be purged with an inert gas. Betulin 3,28-diacetate is soluble in the organic solvent chloroform at a concentration of approximately 10 mg/ml. Betulin 3,28-diacetate is slightly soluble in DMSO and dimethyl formamide.

### Description

Betulin 3,28-diacetate is a triterpene and derivative of betulin (Item No. 11041) that has been found in *B. pendula* and has antiviral and hepatoprotective activities.<sup>1-3</sup> It inhibits Semliki Forest virus (SFV) replication in virus-infected Huh7 cells (IC<sub>50</sub> = 9.1  $\mu$ M).<sup>2</sup> Betulin 3,28-diacetate (20 mg/kg) increases the rate of bile secretion, a marker of hepatic function, in rat models of hepatitis induced by carbon tetrachloride, ethanol, or tetracycline (Item No. 14328).<sup>3</sup>

### References

1. Salah, A. and Bakibaev, A. Effective method of extraction of betulin diacetate from birch bark. *J. Nat. Prod. Resour.* **3(1)**, 90-93 (2017).
2. Pohjala, L., Alakurtti, S., Ahola, T., *et al.* Betulin-derived compounds as inhibitors of alphavirus replication. *J. Nat. Prod.* **72(11)**, 1917-1926 (2009).
3. Flekhter, O.B., Karachurina, L.T., Poroikov, V.V., *et al.* The synthesis and hepatoprotective activity of esters of the lupane group triterpenoids. *Russ. J. Bioorg. Chem.* **26(3)**, 192-200 (2000).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

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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