

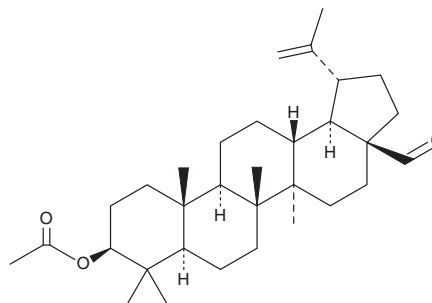
# PRODUCT INFORMATION



## 3-Acetyl Betulinaldehyde

Item No. 33051

**CAS Registry No.:** 27570-21-4  
**Formal Name:** (3 $\beta$ )-3-(acetyloxy)-lup-20(29)-en-28-al  
**Synonyms:** 3-O-Acetylbetulinaldehyde,  
Acetylbetulinaldehyde  
**MF:** C<sub>32</sub>H<sub>50</sub>O<sub>3</sub>  
**FW:** 482.7  
**Purity:**  $\geq$ 95%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 2 years  
**Item Origin:** Semisynthetic



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

### Laboratory Procedures

3-Acetyl betulinaldehyde is supplied as a crystalline solid. A stock solution may be made by dissolving the 3-acetyl betulinaldehyde in the solvent of choice, which should be purged with an inert gas. 3-Acetyl betulinaldehyde is soluble in organic solvents such as chloroform and dimethyl formamide. The solubility of 3-acetyl betulinaldehyde in these solvents is approximately 10 and 1 mg/ml, respectively.

### Description

3-Acetyl betulinaldehyde is a triterpene and derivative of the cholesterol biosynthesis inhibitor betulin (Item No. 11041) that has been found in *A. japonica*.<sup>1</sup> It is an intermediate in the synthesis of 3-acetylbetulinic acid, as well as various lupane and germanicane triterpenes and saponins with anticancer activity.<sup>2</sup>

### References

1. Tung, N.H., Kwon, H.-J., Kim, J.-H., *et al.* An anti-influenza component of the bark of *Alnus japonica*. *Arch. Pharm. Res.* **33(3)**, 363-367 (2010).
2. Thibeault, D., Gauthier, C., Legault, J., *et al.* Synthesis and structure-activity relationship study of cytotoxic germanicane- and lupane-type 3 $\beta$ -O-monodesmosidic saponins starting from betulin. *Bioorg. Med. Chem.* **15(18)**, 6144-6157 (2007).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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