

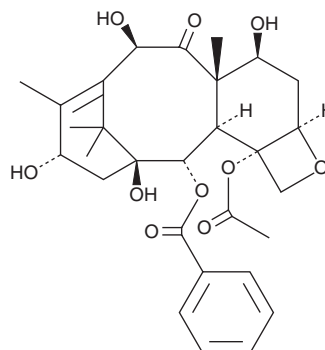
# PRODUCT INFORMATION



## 10-Deacetylbaaccatin III

Item No. 22261

**CAS Registry No.:** 32981-86-5  
**Formal Name:** (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-12b-(acetyloxy)-12-(benzyloxy)-1,2a,3,4,4a,6,9,10,11,12,12a,12b-dodecahydro-4,6,9,11-tetrahydroxy-4a,8,13,13-tetramethyl-7,11-methano-5H-cyclodeca[3,4]benz[1,2-b]oxet-5-one  
**Synonym:** NSC 251677  
**MF:** C<sub>29</sub>H<sub>36</sub>O<sub>10</sub>  
**FW:** 544.6  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 230 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

10-Deacetylbaaccatin III is supplied as a crystalline solid. A stock solution may be made by dissolving the 10-deacetylbaaccatin III in the solvent of choice, which should be purged with an inert gas. 10-Deacetylbaaccatin III is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 10-deacetylbaaccatin III in these solvents is approximately 20 mg/ml.

### Description

10-Deacetylbaaccatin III is an inhibitor of microtubule assembly (IC<sub>50</sub>s = 23 and 0.9 μM for porcine brain and *Physarum* microtubules, respectively) found in *T. baccata* extracts.<sup>1</sup> It is a precursor in the semisynthetic synthesis of paclitaxel (Item No. 10461) and other semisynthetic taxoids.<sup>2</sup> 10-Deacetylbaaccatin III also selectively inhibits growth of *L. donovani* intracellular amastigotes within J774 murine macrophages (IC<sub>50</sub> = 70 nM), while having no effect on macrophage morphology.<sup>3</sup>

### References

1. Lataste, H., Senilh, V., Wright, M., *et al.* Relationships between the structures of taxol and baaccatin III derivatives and their *in vitro* action on the disassembly of mammalian brain and *Physarum* amoebal microtubules. *Proc. Natl. Acad. Sci. USA* **81(13)**, 4090-4094 (1984).
2. Zhiri, A., Jaziri, M., Guo, Y., *et al.* Tissue cultures of *Taxus baccata* as a source of 10-deacetylbaaccatin III, a precursor for the hemisynthesis of taxol. *Biol. Chem. Hoppe Seyler* **376(10)**, 583-586 (1995).
3. Georgopoulou, K., Smirlis, D., Bisti, S., *et al.* *In vitro* activity of 10-deacetylbaaccatin III against *Leishmania donovani* promastigotes and intracellular amastigotes. *Planta Med.* **73(10)**, 1081-1088 (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.

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