## **Product** Data Sheet

# 10-Deacetylbaccatin III

Cat. No.: HY-16565 CAS No.: 32981-86-5 Molecular Formula:  $C_{29}H_{36}O_{10}$ Molecular Weight: 544.59 Others Target: Pathway: Others

Storage: Powder -20°C 3 years

2 years In solvent -80°C 2 years

> -20°C 1 year

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 50 mg/mL (91.81 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.8362 mL	9.1812 mL	18.3624 mL
	5 mM	0.3672 mL	1.8362 mL	3.6725 mL
	10 mM	0.1836 mL	0.9181 mL	1.8362 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (4.59 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (4.59 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (4.59 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description

10-Deacetylbaccatin-III is an intermediate for taxol analog preparations. IC50 value:Target: Taxols have exhibit antitumor agents. Several of these taxols can be synthesized from 10- Deacetylbaccatin-III. 10-Deacetylbaccine III is the fifth intermediate of paclitaxel biosynthesis. The biosynthetic pathway consists of approximately 20 enzymatic steps but is not fully elucidated. 10-Deacetylbaccine III is an antineoplastic agent and an anti-cancer intermediate.

#### **REFERENCES**

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- [2]. Naill MC, Kolewe ME, Roberts SC. Paclitaxel uptake and transport in Taxus cell suspension cultures. Biochem Eng J. 2012 Apr 15;63:50-56.
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- [4]. Kevin Walker and Rodney Croteau. Taxol biosynthesis: Molecular cloning of a benzoyl- CoA:taxane  $2\alpha$ -O-benzoyltransferase cDNA from Taxus and functional expression in Escherichia coli. PNAS, 2000, 97 $\boxtimes$ 25 $\boxtimes$ 213591-13596.

Caution: Product has not been fully validated for medical applications. For research use only.

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