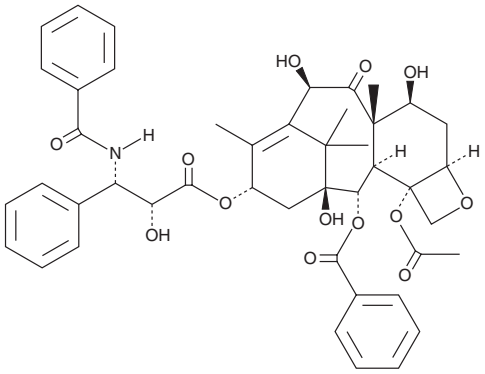
PRODUCT INFORMATION

10-deacetyl Paclitaxel

Item No. 28503



CAS Registry No.: 78432-77-6
Formal Name: (αR,βS)-β-(benzoylamino)-α-hydroxy-benzenepropanoic acid, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-12b-(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,6,11-trihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester
Synonyms: 10-DAP, 10-Deacetyltaxol
MF: $C_{45}H_{49}NO_{13}$
FW: 811.9
Purity: ≥98%
UV/Vis.: λ_{max}: 227 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Taxus chinensis* (Pilger) Rehd

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

Laboratory Procedures

10-deacetyl Paclitaxel is supplied as a solid. A stock solution may be made by dissolving the 10-deacetyl paclitaxel in the solvent of choice, which should be purged with an inert gas. 10-deacetyl Paclitaxel is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 10-deacetyl paclitaxel in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 10-deacetyl paclitaxel can be prepared by directly dissolving the solid in aqueous buffers. 10-deacetyl Paclitaxel is slightly soluble in PBS, pH 7.2. We do not recommend storing the aqueous solution for more than one day.

Description

10-deacetyl Paclitaxel (10-DAP) is a taxane and precursor in the semisynthetic synthesis of paclitaxel (Item No. 10461) that has been found in *Taxus* and has anticancer activity.[1,2] It is cytotoxic to KB carcinoma cells (EC_{50} = 0.027 µg/ml).[1] 10-DAP (16 mg/kg) reduces tumor growth in the PS mouse lymphocytic leukemia model.

References

1. McLaughlin, J.L., Miller, R.W., Powell, R.G., *et al.* 19-Hydroxybaccatin III, 10-deacetylcephalomannine, and 10-deacetyltaxol: New antitumor taxanes from *Taxus wallichiana*. *J. Nat. Prod.* **44(3),** 312-319 (1981).
2. Pyo, S.H., Choi, H.J., and Han, B.H. Large-scale purification of 13-dehydroxybaccatin III and 10-deacetylpaclitaxel, semi-synthetic precursors of paclitaxel, from cell cultures of *Taxus chinensis*. *J. Chromatogr. A.* **1123(1),** 15-21 (2006).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM