



LKT Laboratories, Inc.

Paclitaxel, semi-synthetic

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Product Information

Product ID P0093

CAS No. 33069-62-4

Chemical Name [2aR-[2a α ,4B,4a β ,6B,9 α -(α R*, β S*),11 α ,12 α ,12a α ,12b α]]-8-(Benzoylamino)- α -hydroxybenzenepropanoic acid 6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,-5,6,9,10,11,12,12a,12b-dodecahydro

Synonym Taxol, Taxol A, Paxene

Formula C₄₇H₅₁NO₁₄

Formula Wt. 853.9

Melting Point 213-217°C

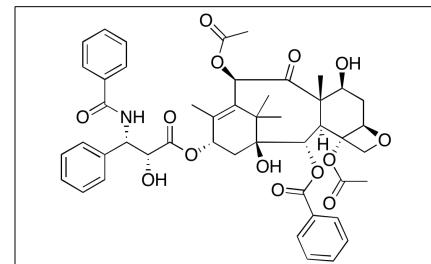
Purity ≥98%

Solubility Insoluble in water (4 mg/L). Soluble in ethanol (18 mg/mL) or DMSO (50 mg/ml).

Store Temp -20°C

Ship Temp Ambient

Description Paclitaxel is a diterpene originally sourced from *Taxus yunnanensis* that exhibits anticancer chemotherapeutic and anti-angiogenic activities. Paclitaxel induces tubulin polymerization, forming stable but nonfunctional microtubules; it inhibits shortening of microtubule leading edges, decreases peripheral microtubule formation, and alters morphology of focal adhesions, preventing cell migration and proliferation. Paclitaxel also dysregulates the epithelial-to-mesenchymal (EMT) transition, inducing transition of cancer cells into benign fibroblast-like cells. In vitro, paclitaxel induces caspase 8-mediated apoptosis through the association of caspase 8's death effector domain with microtubules.



Bulk quantities available upon request

Product ID **Size**

P0093 5 mg

P0093 25 mg

P0093 100 mg

References Kamath K, Smiyun G, Wilson L, et al. Mechanisms of inhibition of endothelial cell migration by taxanes. *Cytoskeleton* (Hoboken). 2013 Oct 23. [Epub ahead of print]. PMID: 24155271.

Caltová K, Cervinka M. Antiproliferative effects of selected chemotherapeutics in human ovarian cancer cell line A2780. *Acta Medica* (Hradec Kralove). 2012;55(3):116-24. PMID: 23297519.

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Yu YH, Kim E, Park DE, et al. Cationic solid lipid nanoparticles for co-delivery of paclitaxel and siRNA. *Eur J Pharm Biopharm.* 2012 Feb;80(2):268-273. PMID: 22108492.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.