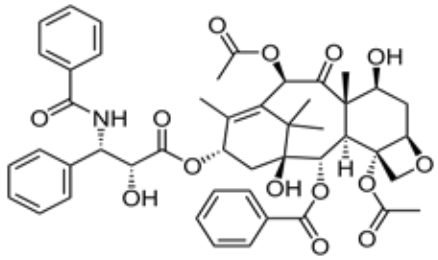
Paclitaxel

The natural anticancer diterpenoid **Paclitaxel (P0092 and P0093)** was discovered in 1971[1]. Paclitaxel was originally developed from the stem bark of the Pacific yew tree (*Taxus brevifolia Nutt*), but has since been developed in a synthetic manner. Paclitaxel exhibits chemotherapeutic activity against various cancer cell lines, including leukemias, sarcomas, and lung tumor cells.

Most antimitotic chemotherapeutic compounds such as **Colchicine (C5645), Vinblastine Sulfate (V3253)**, and **Podophyllotixin (P5712)** inhibit microtubule polymerization[2-4]. Instead, paclitaxel stabilizes assembled microtubules through the binding of β-tubulin, inhibiting microtubule depolymerization and breakdown during cell division. As a result, cells are unable to progress through mitosis and apoptosis is triggered. Paclitaxel is clinically used to treat a variety of cancers, including lung cancer, ovarian cancer, breast cancer, head and neck cancers, and Kaposi's sarcoma[5-8].

LKT Laboratories carries both synthetic and naturally-sourced paclitaxel as well as a variety of other taxanes and intermediates. See the list below for a sample of representative products.

T0093 2'-Acetyltaxol
T0095 Baccatin III
T0100 10-Deacetyltaxol
T0101 7-Epi-10-Deacetyltaxol
T0102 7-Epi-Taxol
T0105 Taxol C
T0106 Xylosyltaxol
D5709 Docetaxel
and many others!



P0092/P0093 Paclitaxel

Taxus brevifolia

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