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## **Product Information**

Product ID P7219 CAS No. 82508-31-4

**Chemical Name** 

Synonym PAB

Formula C<sub>23</sub>H<sub>28</sub>O<sub>8</sub> Formula Wt. 432.46 **Melting Point** 

Purity ≥98%

Solubility

OH OH
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Product ID Size P7219 1 mg P7219 5 mg

Store Temp Ambient Ship Temp Ambient

Description Psuedolaric acid B (PAB) is a diterpene acid found in the root bark and trunk bark of Pseudolarix kaempferi. PAB exhibits anticancer chemotherapeutic, immunosuppressive, anti-angiogenic, anti-inflammatory, and antifungal activities in a variety of models. In vitro, PAB activates caspases 3 and 9, upregulates Bax and Bad, and downregulates Bcl-2 and Bcl-xl, inducing apoptosis. PAB also increases PKC activity, inducing cell cycle arrest, autophagy, and senescence in cancer cell lines. In other models, PAB competitively inhibits tubulin assembly, preventing formation of mitotic spindles and microtubule polymerization. In animal models with tumor xenografts, this compound decreases tumor weight. Additionally, PAB downregulates expression of pro-angiogenic factors such as VEGF, HIF-1α, and cyclin E. PAB decreases IL-2 production by T cells and inhibits T cell proliferation in vitro. This compound also inhibits translocation of NF-kB and expression of cyclooxygenase (COX-2), decreasing production of prostaglandin E2 (PGE2). PAB displays antifungal activity against a variety of fungi both in vitro and in vivo.

References Pseudolaric acid B induces caspase-dependent cell death in human ovarian cancer cells. Yu B, Yue DM, Shu LH, Li NJ, Wang JH. Oncol Rep. 2013 Nov 25. [Epub ahead of print]. PMID: 24276652.

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