



LKT Laboratories, Inc.

Paeoniflorin

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Product Information

Product ID P0218

CAS No. 23180-57-6

Chemical Name

Synonym Paeonia moutan, Paeony root

Formula $C_{23}H_{28}O_{11}$

Formula Wt. 480.46

Melting Point 196°C

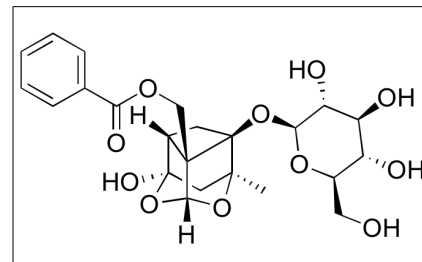
Purity ≥98%

Solubility Soluble in water (10 mg/mL) or ethanol. MeOH 1 mg/mL.

Store Temp -20°C

Ship Temp Ambient

Description Paeoniflorin is found in *Paeonia*; it exhibits anti-inflammatory, antioxidative, neuromodulatory, antidepressant, analgesic, and anticancer chemotherapeutic activities. In animal models of DSS-induced colitis, paeoniflorin decreases expression of toll-like receptor 4 (TLR4), inhibits production of IL-6 and TNF- α , and suppresses activity of myeloperoxidase. Paeoniflorin also scavenges ROS by inhibiting expression of NADPH oxidase, decreasing oxidative stress in animal models. Paeoniflorin decreases immobility in animals undergoing the forced swim test and tail suspension test and increases levels of 5-HT in the hippocampus. Additionally, paeoniflorin inhibits cell and tumor growth and induces G1 phase cell cycle arrest in cellular and animal models of colorectal cancer. This compound also decreases hyperalgesia in animal models and inhibits L-type voltage-gated Ca^{2+} channels.



Bulk quantities available upon request

Product ID	Size
P0218	1 mg
P0218	5 mg
P0218	10 mg
P0218	25 mg

References Zhang J, Dou W, Zhang E, et al. Paeoniflorin abrogates DSS-induced colitis via a TLR4-dependent pathway. *Am J Physiol Gastrointest Liver Physiol*. 2014 Jan 1;306(1):G27-36. PMID: 24232001.

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Qiu F, Zhong X, Mao Q, et al. The antidepressant-like effects of paeoniflorin in mouse models. *Exp Ther Med*. 2013 Apr;5(4):1113-1116. PMID: 23599734.

Wang H, Zhou H, Wang CX, et al. Paeoniflorin inhibits growth of human colorectal carcinoma HT 29 cells in vitro and in vivo. *Food Chem Toxicol*. 2012 May;50(5):1560-7. PMID: 22326807.

Zhang XJ, Li Z, Leung WM, et al. The analgesic effect of paeoniflorin on neonatal maternal separation-induced visceral hyperalgesia in rats. *J Pain*. 2008 Jun;9(6):497-505. PMID: 18387856.

Tsai TY, Wu SN, Liu YC, et al. Inhibitory action of L-type Ca^{2+} current by paeoniflorin, a major constituent of peony root, in NG108-15 neuronal cells. *Eur J Pharmacol*. 2005 Oct 31;523(1-3):16-24. PMID: 16243310.

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