



LKT Laboratories, Inc.

Saikosaponin D

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Product Information

Product ID S0134

CAS No. 20874-52-6

Chemical Name

Synonym Saikosaponin

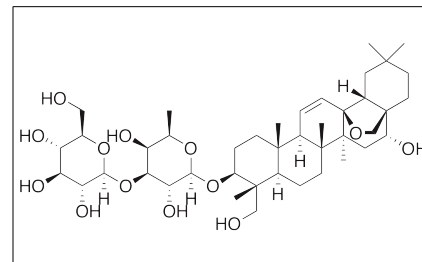
Formula $C_{42}H_{68}O_{13}$

Formula Wt. 780.98

Melting Point 212-218°C

Purity ≥98%

Solubility Soluble in DMSO or methanol.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
S0134	1 mg	\$388.80
S0134	5 mg	\$777.70

Store Temp -20°C

Ship Temp Ambient

Description Saikosaponin D is a triterpene saponin found in *Bupleurum* that exhibits antioxidative, immunomodulatory, anti-fibrotic, anti-angiogenic, anticancer, and chemopreventive activities. Saikosaponin D increases activity of superoxide dismutase, catalase, and glutathione peroxidase and decreases activity of malondialdehyde in cellular models of oxidative damage. In other in vitro models, saikosaponin D increases secretion of IL-12, maturation of dendritic cells, and proliferation of lymphocytes. Saikosaponin D inhibits SERCA, increasing intracellular Ca^{2+} and inducing autophagy. In vivo, this compound decreases severity of fibrosis. In embryos, saikosaponin D decreases microvessel formation. Additionally, this compound decreases tumor formation in DEN-treated animal models and suppresses expression of CEBP- β and COX-2. Saikosaponin D also induces apoptosis and activation of caspases 3 and 7 in hepatocellular carcinoma cells.

References Zhang BZ, Guo XT, Chen JW, et al. Saikosaponin-D Attenuates Heat Stress-Induced Oxidative Damage in LLC-PK1 Cells by Increasing the Expression of Anti-Oxidant Enzymes and HSP72. *Am J Chin Med*. 2014 Aug 29;1-17. [Epub ahead of print] PMID: 25169909.

Ying ZL, Li XJ, Dang H, et al. Saikosaponin-d affects the differentiation, maturation and function of monocyte-derived dendritic cells. *Exp Ther Med*. 2014 May;7(5):1354-1358. PMID: 24940438.

Wong VK, Li T, Law BY, et al. Saikosaponin-d, a novel SERCA inhibitor, induces autophagic cell death in apoptosis-defective cells. *Cell Death Dis*. 2013 Jul 11;4:e720. PMID: 23846222.

Lu XL, He SX, Ren MD, et al. Chemopreventive effect of saikosaponin-d on diethylnitrosamine-induced hepatocarcinogenesis: involvement of CCAAT/enhancer binding protein B and cyclooxygenase-2. *Mol Med Rep*. 2012 Mar;5(3):637-44. PMID: 22159471.

Zheng JX, Lu KQ, Xia DG, et al. Therapeutic effects and mechanism of saikosaponin-d in mice with bleomycin-induced pulmonary fibrosis. *Zhonghua Yi Xue Za Zhi*. 2010 Mar 30;90(12):808-12. PMID: 20450618.

Wang BF, Cheng YA, Dang SS. Angiogenesis inhibitory effect of saikosaponin-d on chicken embryo. *Zhongguo Zhong Xi Yi Jie He Za Zhi*. 2009 May;29(5):425-9. PMID: 19673334.

Chiang LC, Ng LT, Liu LT, et al. Cytotoxicity and anti-hepatitis B virus activities of saikosaponins from *Bupleurum* species.

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