



LKT Laboratories, Inc.

## Wogonin

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### Product Information

Product ID W5726

CAS No. 632-85-9

#### Chemical Name

Synonym 5,7-Dihydroxy-8-methoxyflavone

Formula  $C_{16}H_{12}O_5$

Formula Wt. 284.26

Melting Point 202-206°C

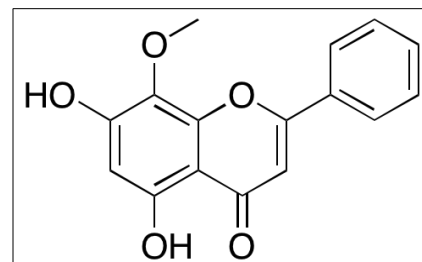
Purity ≥98%

Solubility ≥20 mg/ml in DMSO. 1  
mg/ml in ethanol.  
Insoluble in water.

Store Temp -20°C

Ship Temp Ambient

**Description** Wogonin is a plant flavonoid originally found in species of *Scutellaria*. Wogonin exhibits anticancer chemotherapeutic, anti-inflammatory, and anti-angiogenic activities. In lung adenocarcinoma cells, wogonin downregulates expression of c-Myc, SKP2, HDAC1/2, and GSK-3β, inducing apoptosis. In other cancer cell lines, this compound inhibits cyclin-dependent kinase 9 (CDK9) and downregulates expression of anti-apoptotic protein Mcl-1, also inducing apoptosis. In animal models of colon cancer, wogonin downregulates expression of HIF-1α and PI3K/Akt and inhibits tumor growth. In endothelial cells, wogonin inhibits phosphorylation of VEGFR2, ERK, Akt, and p38 MAPK, preventing cell migration and tube formation. Additionally, wogonin also inhibits expression of iNOS and COX-2 across various cell lines.



### Pricing and Availability

**Bulk quantities available upon request**

Product ID	Size	List Price
W5726	5 mg	\$134.40
W5726	10 mg	\$202.80
W5726	25 mg	\$454.80

**References** Chen XM, Bai Y, Zhong YJ, et al. Wogonin has multiple anti-cancer effects by regulating c-Myc/SKP2/Fbw7α and HDAC1/HDAC2 pathways and inducing apoptosis in human lung adenocarcinoma cell line A549. *PLoS One*. 2013 Nov 12;8(11):e79201. PMID: 24265759.

Wang H, Zhao L, Zhu LT, et al. Wogonin reverses hypoxia resistance of human colon cancer HCT116 cells via downregulation of HIF-1α and glycolysis, by inhibiting PI3K/Akt signaling pathway. *Mol Carcinog*. 2013 Jun 13. [Epub ahead of print]. PMID: 23761018.

Polier G, Ding J, Konkimalla BV, et al. Wogonin and related natural flavones are inhibitors of CDK9 that induce apoptosis in cancer cells by transcriptional suppression of Mcl-1. *Cell Death Dis*. 2011 Jul 21;2:e182. PMID: 21776020

Lu N, Gao Y, Ling Y, et al. Wogonin suppresses tumor growth in vivo and VEGF-induced angiogenesis through inhibiting tyrosine phosphorylation of VEGFR2. *Life Sci*. 2008 Apr 23;82(17-18):956-63. PMID: 18378261.

Wakabayashi I. Inhibitory effects of baicalein and wogonin on lipopolysaccharide-induced nitric oxide production in macrophages. *Pharmacol Toxicol*. 1999 Jun;84(6):288-91. PMID: 10401731.

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