



LKT Laboratories, Inc.

4-O-Methylhonokiol

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Product Information

Product ID M184770

CAS No. 68592-15-4

Chemical Name 2-(4-Methoxy-3-prop-2-enylphenyl)-4-prop-2-enylphenol

Synonym 3,5'-Diallyl-2'-hydroxy-4-methoxybiphenyl, 4-O-methylhonokiol.

Formula C₁₉H₂₀O₂

Formula Wt. 280.37

Melting Point

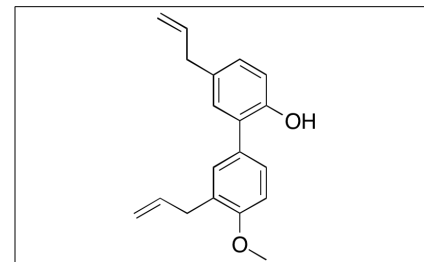
Purity ≥98%

Solubility

Store Temp 4°C

Ship Temp Ambient

Description 4-O-Methylhonokiol is a major bioactive constituent of *Magnolia officinalis* stem bark. In a study with C57BK/6J mice, 4-O-methylhonokiol prevented high-fat-diet induced obesity and insulin resistance, in addition to restoring impaired cardiac insulin signaling. In another study using female RjOrl mice, 4-O-methylhonokiol was shown to act as a central nervous system penetrating substrate-specific inhibitor of COX-2 and as a CB2 receptor agonist. Furthermore, in high-risk HPV-16 genotype SiHa cells, treatment with 4-O-methylhonokiol suppressed the PI3K/Akt signaling pathway thereby reducing the survival of the cells. 4-O-methylhonokiol has also shown several other biological activities including anti-inflammatory, antithrombotic, anti-anxiety, antimicrobial, and anti-HIV activities.



Bulk quantities available upon request

Product ID	Size
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M184770	5 mg
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M184770	10 mg
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M184770	25 mg
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M184770	100 mg
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References Kim SC, Kang JI, Hyun JW, et al. 4-O-Methylhonokiol protects HaCaT cells from TGF-beta1-induced cell cycle arrest by regulating of canonical and non-canonical pathways of TGF-beta signaling. *Biomol Ther (Seoul)*. 2017 Feb 13. [epub ahead of print] PMID: 28190316.

Zhang Z, Chen J, Zhou S, et al. Magnolia bioactive constituent 4-O-methylhonokiol prevents the impairment of cardiac insulin signaling and the cardiac pathogenesis in high-fat diet-induced obese mice. *Int J Biol Sci*. 2015 Jun 5;11(8):879-891. PMID: 26157343.

Chicca A, Gachet MS, Petrucci V, et al. 4'-O-Methylhonokiol increases levels of 2-arachidonoyl glycerol in mouse brain via selective inhibition of its COX-2-mediated oxygenation. *J Neuroinflammation*. 2015 May 13;12:89. PMID: 25962384.

Han JY, Ahn SY, Yoo JH, et al. Alleviation of kainic acid-induced brain barrier dysfunction by 4-O-methylhonokiol in in vitro and in vivo models. *Biomed Res Int*. 2015;2015:893163. PMID: 25688368.

Hyun S, Kim MS, Song YS, et al. Peroxisome proliferator-activated receptor-gamma agonist 4-O-methylhonokiol induces apoptosis by triggering the intrinsic apoptosis pathway and inhibiting the PI3K/Akt survival pathway in SiHa human cervical cancer cells. *J Microbiol Biotechnol*. 2015 Mar;25(3):334-342. PMID: 25563418.

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