

4-O-Methyl honokiol

Catalog No: tcsc0035406



Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg



Specifications

CAS No:

68592-15-4

Formula:

$C_{19}H_{20}O_2$

Pathway:

Cell Cycle/DNA Damage;NF-κB

Target:

PPAR;NF-κB

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Observed Molecular Weight:

280.36

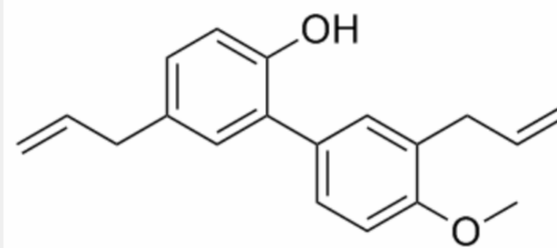
Product Description

4-O-Methyl honokiol is a natural neolignan isolated from *Magnolia officinalis*, acts as a **PPAR γ** agonist, and inhibits **NF-κB** activity, used for cancer and inflammation research.

IC50 & Target: PPAR γ , NF- κ B^[1]

In Vitro: 4-O-Methyl honokiol is a natural neolignan isolated from *Magnolia officinalis*, acts as a PPAR γ agonist, and inhibits NF- κ B activity. 4-O-Methyl honokiol (20 μ M) increases the expression, transcription and DNA binding activities, and nuclear translocation of PPAR γ in both in prostate PC-3 and LNCaP cells. 4-O-Methyl honokiol (0-30 μ M) inhibits LNCaP and PC-3 cancer cells growth, causes G0/G1 phase arrest and induces apoptotic cell death, and such effects can be reversed by PPAR γ antagonist. 4-O-Methyl honokiol inhibits NF- κ B activity and cancer cell growth, but such effects as well as its activation of PPAR γ can be abolished by knock-down of p21^[1]. 4-O-methylhonokiol (0.5, 1 and 2 μ M) reduces LPS-induced release of NO, PGE2, ROS, TNF- α and IL-1 β in cultured astrocytes, and amyloidogenesis in cultured astrocytes and microglial BV-2 cells^[2].

In Vivo: 4-O-Methyl honokiol (40 or 80 mg/kg, i.p. everyday for 4 weeks) inhibits the growth of SW620 and PC3 tumours in SW620 and PC3 xenograft model. 4-O-Methyl honokiol significantly increases the expression of p21 and PPAR γ in the tumour tissues^[1]. 4-O-Methyl honokiol (0.5 or 1 mg/kg/day daily for 3 weeks) significantly ameliorates LPS-induced memory impairment, and inhibits LPS-induced iNOS and COX-2 expression in mice. 4-O-Methyl honokiol also shows inhibitory activities against the A β ₁₋₄₂ accumulation, and activates astrocytes and microglia in LPS-injected mice brain^[2].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!