



## 4-O-Methyl honokiol

Catalog No: tcsc0035406

Available Sizes
Size: 5mg
Size: 10mg
Size: 25mg
Specifications
CAS No: 58592-15-4
Formula: $C_{19}^{H}_{20}^{O}_{2}$
Pathway: Cell Cycle/DNA Damage;NF-κΒ
T <b>arget:</b> PPAR;NF-κΒ
Purity / Grade: >98%
Solubility: .0 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 **PPARγ** agonist, and inhibtis **NF-κB** activity, used for cancer and inflammation research.



IC50 & Target: PPARγ, NF-κB<sup>[1]</sup>

In Vitro: 4-O-Methyl honokiol is a natural neolignan isolated from Magnolia officinalis, acts as a PPARγ agonist, and inhibits NF-κB activity. 4-O-Methyl honokiol (20 μM) increases the expression, transcription and DNA binding activities, and nuclear translocation of PPARγ in both in prostate PC-3 and LNCap cells. 4-O-Methyl honokiol (0-30 μM) 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 PPARγ antagonist. 4-O-Methyl honokiol inhibits NF-κB activity and cancer cell growth, but such effects as well as its activation of PPARγ can be abolished by knock-down of p21<sup>[1]</sup>. 4-O-methylhonokiol (0.5, 1 and 2 μM) reduces LPS-induced release of NO, PGE2, ROS, TNF-α and IL-1β in cultured astrocytes, and amyloidogenesis in cultured astrocytes and microglial BV-2 cells<sup>[2]</sup>.

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 $\gamma$  in the tumour tissues<sup>[1]</sup>. 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 $\beta_{1-42}$  accumulation, and activates astrocytes and microglia in LPS-injected mice brain<sup>[2]</sup>.

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