[Product Information]

Name: Honokiol
Catalog No.: CFN99902
Cas No.: 35354-74-6
Purity: > 98%
M.F: C₁₈H₁₈O₂
M.W: 266.33

Physical Description: Powder

Synonyms: 3,5'-Diallyl-4,2'-dihydroxybiphenyl; 3',5-di(prop-2-en-1-yl)biphenyl-2,4'-diol.

[Intended Use]

1. Reference standards;
2. Pharmacological research;
3. Synthetic precursor compounds;
4. Intermediates & Fine Chemicals;
5. Others.

[Source]

The barks of Magnolia officinalis.

[Biological Activity or Inhibitors]
Honokiol and magnolol are the main constituents simultaneously identified in the barks of Magnolia officinalis, which have been used in traditional Chinese medicine to treat a variety of mental disorders including depression, the mixture of honokiol and magnolol possess potent antidepressant-like properties in behaviors involved in normalization of biochemical abnormalities in brain 5-HT and 5-HIAA, serum corticosterone levels and platelet AC activity in the CMS rats.\(^1\)

Honokiol inhibits angiogenesis in vitro and tumor growth in vivo, it is a systemically available and non-toxic inhibitor of angiogenesis and should be further evaluated as a potential chemotherapeutic agent.\(^2\)

Honokiol overcomes conventional drug resistance in human multiple myeloma by induction of caspase-dependent and -independent apoptosis.\(^3\)

Honokiol and magnolol exhibit free radical scavenging activities as shown by the diphenyl-p-picrylhydrazyl assay, but they are less potent than $\alpha$-tocopherol.\(^4\)

Honokiol and magnolol show strong antibacterial activities against both Propionibacterium acnes and Propionibacterium granulosum, which are acne-causing bacteria; they exhibit cytotoxic effects when triclosan was employed as an acne-mitigating agent; they reduce secretion of interleukin-8 and tumor necrosis factor $\alpha$ (TNF- $\alpha$) induced by P. acnes in THP-1 cells indicating the anti-inflammatory effects of them; suggest the possibility that magnolol and honokiol may be considered as attractive acne-mitigating candidates for topical application.\(^5\)

Honokiol has antioxidant activity, it protects rat brain from focal cerebral ischemia – reperfusion injury by inhibiting neutrophil infiltration and reactive oxygen species production.\(^6,7\)

Honokiol has antimicrobial activity, including antifungal activity.\(^8,9\)

Honokiol and magnolol have neuroprotective effects, the effects may be related to their anti-oxidative actions and antagonism of excitotoxicity induced by excitatory amino acids, suggests that they may be potential therapeutic agents for neurodegenerative diseases.\(^10\)
**[Solvent]**

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

**[HPLC Method]**\(^{[1]}\)

Mobile phase: Acetonitrile- 0.05% Formic acid H2O =60:40 ;
Flow rate: 1.0 ml/min;
Column temperature: Room Temperature;
The wave length of determination: 254 nm.

**[Storage]**

2-8°C, Protected from air and light, refrigerate or freeze.

**[References]**


**[Contact]**

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