[Product Information]

Name: Fraxinellone
Catalog No.: CFN99782
Cas No.: 28808-62-0
Purity: >=98%
M.F: C_{14}H_{16}O_{3}
M.W: 232.28

Physical Description: White powder

Synonyms: 1(3H)-Isobenzofuranone, 3-(3-furanyl)-3a,4,5,6-; Tetrahydro-3a,7-dimethyl-,(3R,3aR)- (9CI); 3-(3-Furyl)-3a,4,5,6-tetrahydro-3a,7-dimethylphthalide; (3R)-3 β -(3-Furyl)-3a,4,5,6-tetrahydro-3a β, 7-dimethylisobenzofuran-1(3H)-one.

[Intended Use]

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

[Source]

The herbs of *Swertia bimaculata*. 
**[Biological Activity or Inhibitors]**

Fraxinellone is formed by the natural degradation of limonoids isolated from the root bark of *Dictamnus dasycarpus*, it possesses neuroprotective and vasorelaxing activities, it also has anti-inflammatory activity, the anti-inflammatory properties of fraxinellone are related to the down-regulations of iNOS and COX-2 due to NF-kappa B inhibition through the negative regulations of IKK and ERK1/2 phosphorylations in RAW 264.7 cells.[1]

Fraxinellone is a selective blocker of voltage-dependent Ca2+ channel, while dictamine relaxed the rat aorta by suppressing the Ca2+ influx through both voltage-dependent and receptor-operated Ca2+ channels.[2]

Fraxinellone can dramatically induce apoptosis of activated peripheral CD4(+) T cells in vivo, consequently resulting in less CD4(+) T-cell activation and infiltration to the liver, suggests that fraxinellone may be a potential leading compound useful in treating T-cell-mediated liver disorders in humans. [3]

Fraxinellone exhibits a variety of insecticidal activities including feeding-deterrent activity, inhibition of growth, and larvicidal activity.[4]

Fraxinellone has antimicrobial activity, the inhibition rate of fraxinellone at 50ppm reached 100%, 99.8% and 99.8% against *Escherichia coli*, *Staphlococcus aurens* and *Bacillus megathrium*, respectively.[5]

**[Solvent]**

Pyridine, Methanol, Ethanol, etc.

**[HPLC Method]**[6]

Mobile phase: Methanol -H2O=70:30 ;
Flow rate: 0.5 ml/min;
Column temperature: 25 ℃;
The wave length of determination: 240 nm.
[ Storage ]

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

[ References ]


[ Contact ]

Address: Email: info@chemfaces.com
S5-3 Building, No. 111, Dongfeng Rd.,
Wuhan Economic and Technological Development Zone,
Wuhan, Hubei 430056,
China
Tel: +86-27-84237783
Fax: +86-27-84254680
Web: www.chemfaces.com
Tech Support: service@chemfaces.com