

Phillyrin Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Phillyrin

Catalog No.: CFN99998

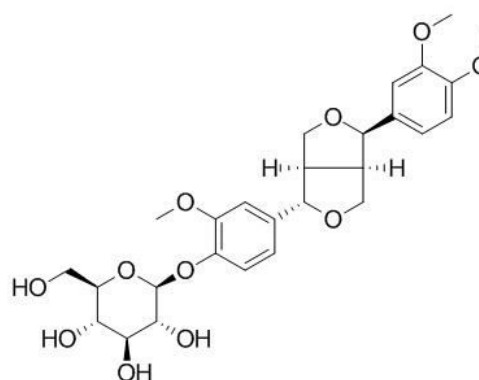
Cas No.: 487-41-2

Purity: > 98%

M.F: C₂₇H₃₄O₁₁

M.W: 534.56

Physical Description: Powder



Synonyms: (2S,3R,4S,5S,6R)-2-[4-[(3R,3aR,6S,6aR)-3-(3,4-dimethoxyphenyl)-1,3,3a,4,6,6a-hexahydrofuro[3,4-c]furan-6-yl]-2-methoxyphenoxy]-6-(hydroxymethyl)oxane-3,4,5-triol.

[Intended Use]

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

[Source]

The herbs of *Forsythia suspense*.

[Biological Activity or Inhibitors]

Phillyrin (Phil) is one of the main chemical constituents of *Forsythia suspensa* (Thunb.), which has shown to be an important traditional Chinese medicine, Phil may have a protective effect on LPS-induced ALI, and it potentially contributes to the suppression of the activation of MAPK and NF- κ B pathways, Phil may be a new preventive agent of acute lung injury in the clinical setting.^[1]

Phillyrin prevents lipid accumulation in HepG2 cells by blocking the expression of SREBP-1c and FAS through LKB1/AMPK activation, suggesting that phillyrin is a novel AMPK activator with a role in the prevention and treatment of obesity. Phillyrin also has anti-obesity effects in nutritive obesity mice.^[2,3]

Phillyrin has protective effects on H₂O₂-induced oxidative stress and apoptosis in PC12 cells.^[4]

[Solvent]

Pyridine, DMSO, Methanol, Ethanol, Hot water, etc.

[HPLC Method]^[5]

Mobile phase: Acetonitrile : H₂O=25:75 ;

Flow rate: 0.8 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 277 nm.

[Storage]

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

[References]

[1] Zhong W T, Wu Y C, Xie X X, *et al. Fitoterapia*, 2013, 90:132-9.

[2] Do M T, Kim H G, Choi J H, *et al. Food Chem.*, 2013, 136(2):415-25.

[3] Zhao Y, Li F, Yang J, *et al.* *Journal of Chinese Medicinal Materials*, 2005, 28(2):123-4.

[4] Wei T, Tian W, Yan H, *et al.* *Cell Mol. Neurobiol.*, 2014, 34(8):1165-73.

[5] Zhao W H, Shi R B, Liu B, *et al.* *China Journal of Chinese Materia Medica*, 2005, 30(1): 36-9.

[Contact]

Address:

S5-3 Building, No. 111, Dongfeng Rd.,
Wuhan Economic and Technological Development Zone,
Wuhan, Hubei 430056,
China

Email: info@chemfaces.com

Tel: +86-27-84237783

Fax: +86-27-84254680

Web: www.chemfaces.com

Tech Support: service@chemfaces.com