Natural Products

ChemFaces

Echinatine Datasheet

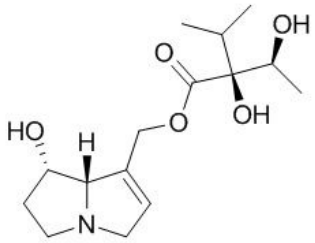
4th Edition (Revised in July, 2016)

[Product Information]

Name: Echinatine

Catalog No.: CFN00255

Cas No.: 480-83-1



Purity: > 95%

M.F: $C_{15}H_{25}NO_5$

M.W: 299.37

Physical Description: Powder

Synonyms:(1-Hydroxy-2,3,5,7a-tetrahydro-1H-pyrrolizin-7-yl)methyl-2,3-dihydroxy-2-isopropylbutanoate.

[Intended Use]

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

[Source]

The herbs of *Eupatorium cannabinum L.*

[Biological Activity or Inhibitors]

Echinatin can inhibit DNP-ATPase activity while stimulating range latent ATPase activity in the low concentration, so echinatin can disturb the mitochondrial energy transfer reactions and membrane permeability.[1]

Echinatin exerts a protective effect against ischemia/reperfusion (I/R)-induced myocardial injury on hearts, this effect may be attributed to the antioxidant and anti-inflammatory activities of this compound.[2]

[Solvent]

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

[HPLC Method][3]

HPLC-MS:

Mobile phase: Acetonitrile-15 mM Ammonia water solution,gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 25 ℃;

Flow rate of gas (N2): 70 L / min;

Capillary temperature : 150 ℃;

APCI vaporizer temperature : 400 ℃;

The source voltage: 6.0 kV;

The capillary voltage: 46V;

Mass scan range: 150-500 amu.

[Storage]

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

[References]

[1] Inoue B, Inaba K, Mori T, *et al. J.Toxicol. Sci., 1982, 7(4):245-54.*

[2] Tian X H, Liu C L, Jiang H L, *et al. BMC Cardiovasc. Disor., 2016, 16(1):1-9.*

[3] Mroczek T, Ndjoko-Ioset K, Głowniak K, *et al. Anal.Chim. Acta, 2006, 566(2):157-66.*

[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