Natural Products



# Liensinine Datasheet

4<sup>th</sup> Edition (Revised in July, 2016)

#### [Product Information]

Name: Liensinine

Catalog No.: CFN99580

Cas No.: 2586-96-1

**Purity:** >=98%

M.F: C<sub>37</sub>H<sub>42</sub>N<sub>2</sub>O<sub>6</sub>

M.W: 610.75

Physical Description: White powder

Synonyms:4-[[(1r)-6,7-dimethoxy-2-methyl-3,4-dihydro-1h-isoquinolin-1-yl]methyl]-2-[[(1r) -1-[(4-hydroxyphenyl)methyl]-6-methoxy-2-methyl-3,4-dihydro-1h-isoquinolin-7-yl]oxy]phe nol;2-methyl-1-isoquinolinyl]methyl]-2-[[(1R)-1,2,3,4-tetrahydro-1-[(4-hydroxyphenyl)meth yl]-6-methoxy-2-methyl-7-isoquinolinyl]oxy]-;Phenol,4-[[(1R)-1,2,3,4-tetrahydro-6, 7-dimethoxy-;Liensinine perchlorafe.

## [Intended Use]

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

## [Source]

The plantule of Nelumbo nucifera Gaertn.

#### [Biological Activity or Inhibitors]

Liensinine and neferine, a kind of isoquinoline alkaloid, can antagonize the ventricular arrhythmias, have inhibition of human ether-a-go-go-related gene (hERG). <sup>[1]</sup> Liensinine inhibits late-stage autophagy/mitophagy through blocking autophagosomelysosome fusion, it could potentially be further developed as a novel autophagy/mitophagy inhibitor, and a combination of liensinine with classical chemotherapeutic drugs could represent a novel therapeutic strategy for treatment of breast cancer.<sup>[2]</sup> Liensinine exerts remarkable effect against thrombosis and possesses strong effect against platelet aggregation and coagulation. <sup>[3]</sup>

#### [ Solvent ]

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

#### [ HPLC Method ]<sup>[4]</sup>

Mobile phase: Methanol- 0.2 M KH<sub>2</sub>P0<sub>4</sub>-0.2 M NaOH- Methylamine =71:17:12:0.002,(pH 9.2-9.3); Flow rate: 0.8 ml/min; Column temperature: Room Temperature; The wave length of determination: 282 nm.

#### [ Storage ]

 $2-8^{\circ}$ C, Protected from air and light, refrigerate or freeze.

#### [ References ]

[1] Dong Z X, Zhao X, Gu D F, et al. Cell. Physiol. Biochem., 2012, 29(3-4):431-42.

[2] Zhou J, Li G, Zheng Y, et al. Autophagy, 2015, 11(8):1259-79.

[3] Hui W, Gang L, Luo S D. Chinese Pharmacological Bulletin, 2010, 26(6):768-72.
[4] Huang Y, Zhao L, Bai Y, et al. Arzneimittel-Forsch., 2011, 61(6):347-52.

# [ Contact ]

Address:Email: info@chemfaces.comS5-3 Building, No. 111, Dongfeng Rd.,Tel: +86-27-84237783Wuhan Economic and Technological Development Zone,Fax: +86-27-84254680Wuhan, Hubei 430056,Web: www.chemfaces.comChinaTech Support: service@chemfaces.com