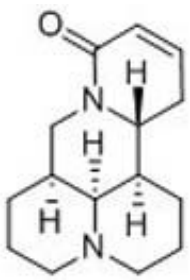
Natural Products

ChemFaces

Sophocarpine Datasheet

5th Edition (Revised in January, 2017)

[Product Information]



Name: Sophocarpine

Catalog No.: CFN99182

Cas No.: 145572-44-7

Purity: > =98%

M.F: $C_{15}H_{22}N_2O$

M.W: 246.35

Physical Description: White cryst.

Synonyms: 13,14-Didehydromatridin-15-one.

[Intended Use]

1. Reference standards;

2. Pharmacological research;

3. Synthetic precursor compounds;

4. Intermediates & Fine Chemicals;

5. Others.

[Source]

The herb of *Sophora alopecuroidos L.*

[Biological Activity or Inhibitors]

Sophocarpine and matrine exert anti-cachectic effects probably through inhibition of

TNF-alpha and IL-6 and prevent cachexia-related symptoms induced by colon26 adenocarcinoma in mice.[1]

Sophocarpine injection (called the Kangke injection) has been demonstrated to have significant antivirus effects against coxsackievirus B3 and therapeutic effects for viral myocarditis in clinical.[2]

Sophocarpine exerts anti-inflammatory activity in vitro, and it may attribute to the inhibition of iNOS and COX-2 expressions via down-regulation of the JNK and p38 MAP kinase signal pathways and inhibition of NF-κB activation. [3]

Sophocarpine can alleviate liver fibrosis mainly by inhibiting the TLR4 pathway, it may be a potential chemotherapeutic agent for chronic liver diseases.[4]

Sophocarpine can ameliorate the ischemic injury induced by transient focal cerebral ischemia in rats and that this neuroprotective effect may be related to the anti-ASIC1 channel and anti-apoptotic action of sophocarpine.[5]

Sophocarpine can alleviate hepatocyte steatosis and the potential mechanism may be the activated signaling pathway of AMPK.[6]

[Solvent]

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

[HPLC Method][7]

Mobile phase: Acetonitrile-Methanol-Water=35: 10: 55, 5.5% phosphoric acid and 1.5% SDS in aqueous phase;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 210 nm.

[Storage]

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

[References]

[1] Zhang Y, Wang S, Li Y, *et al. Int. Immunopharmacol., 2008, 8(13–14):1767-72.*

[2] Li C, Gao Y, Tian J, *et al. J. Ethnopharmacol., 2011, 135(3):620-5.*

[3] Gao Y, Jiang W, Dong C, *et al. Toxicol. in Vitro., 2012, 26(1):1-6.*

[4]Qian H, Shi J, Fan T T, *et al. World J. Gastroentero., 2014, 20(7):1822-32.*

[5] Yifeng M, Bin W, Weiqiao Z, *et al. Brain Res., 2011, 1382(9):245-51.*

[6] Song C Y, Shi J, Zeng X,*et al. Toxicol. in Vitro., 2013, 27(3):1065-71.*

[7] Zhao L, Han L, Ou Y, *et al. Chinese Journal of Pharmaceutical Analysis, 2012, 32(7): 303-25.*

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