Natural Products



Sauchinone Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Sauchinone

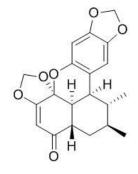
Catalog No.: CFN90153

Cas No.: 177931-17-8

Purity: >=98%

M.F: C₂₀H₂₀O₆

M.W: 356.36



Physical Description: Powder

Synonyms:(5aα,7α,8β,8aβ,14aS*,14bβ)-5a,6,7,8,8a,14b-Hexahydro-7,8-dimethyl-

5H-benzo[kl]bis[1,3]dioxolo[4,5-b:4',5'-g]xanthen-5-one.

[Intended Use]

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

[<u>Source</u>]

The herbs of Saururus chinensis(Lour.) Baill.

[Biological Activity or Inhibitors]

Sauchinone, a lignan isolated from Saururus chinensis (Saururaceae), is a diastereomeric lignan with cytoprotective and antioxidant activities in cultured hepatocytes; it has inhibition of lipopolysaccharide-inducible nitric oxide synthase, TNF- α and COX-2 expression by sauchinone effects on I- κ B α phosphorylation, C/EBP and AP-1 activation .^[1] Sauchinone has been shown to exert potent hepatoprotective, anti-inflammatory and inhibitory effects on bone resorption, it prevents cytokine-induced NO production, iNOS expression,JAK/STAT activation,and NF- κ B activation and inhibition of glucose-stimulated insulin secretion (GSIS), suggests that sauchinone can be used for the prevention of functional β -cell damage.^[2]

Sauchinone protects the liver from toxicity induced by iron accumulation, and sauchinone's effects may be mediated by LKB1-dependent AMPK activation.^[3]

Sauchinone protects C6 glioma cells from ST-induced apoptosis in a caspase-3 dependent manner, our findings may be critical for developing a strategy to protect nerve cells from apoptosis, suggesting the potential development of sauchinone as a neuroprotective agent.^[4]

Sauchinone attenuates liver fibrosis and hepatic stellate cell activation through TGF-β/Smad signaling pathway.^[5]

[Solvent]

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

[HPLC Method]^[6]

Mobile phase: Acetonitrile- H2O=60:40 ; Flow rate: 1.0 ml/min; Column temperature: Room Temperature; The wave length of determination: 244 nm.

[Storage]

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

[References]

[1] Lee A K, Sang H S, Kim Y C, et al. Brit. J. Pharmacol., 2003, 139(1):11-20.

[2] Gil-Saeng Jeong, Dong-Sung Lee, Byung-Hyun Park, *et al. Toxicol. in Vitro, 2011, 25(2):505-12.*

[3] Kim Y W, Lee SMShin S M. Free Radical Bio. Med., 2009, 47(7):1082-92.

[4] Song H, Kim Y C, Moon A. Biol. Pharmaceut. Bull., 2003, 26(10):1428-30.

[5] Lee J H, Jang E J, Seo H L, et al. Chem. Biol. Int., 2014, 224C:58-67.

[6] Wang L. China Pharmacist, 2008, 11(3):283-4.

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