

Licochalcone B Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Licochalcone B

Catalog No.: CFN99576

Cas No.: 58749-23-8

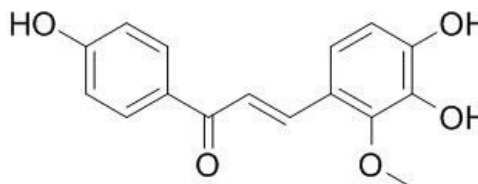
Purity: >=98%

M.F: C₁₆H₁₄O₅

M.W: 286.28

Physical Description: White powder

Synonyms: (E)-3-(3,4-Dihydroxy-2-methoxyphenyl)-1-(4-hydroxyphenyl)-2-propen-1-one;
3,4,4'-Trihydroxy-2-methoxy-trans-chalcone.



[Intended Use]

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

[Source]

The roots of *Glycyrrhiza glabra* L.

[Biological Activity or Inhibitors]

Licochalcone B and Licochalcone D, isolated from *Glycyrrhiza*, can significantly inhibit LPS-induced phosphorylation at serine 276 and transcriptional activation of NF- κ B, they have anti-inflammatory activity. [1]

Licochalcone B can inhibit the proliferation of human malignant bladder cancer cell lines (T24 and EJ) in vitro and antitumor activity in vivo in MB49 (murine bladder cancer cell line) tumor model, it significantly inhibits cell lines proliferation in a concentration-dependent and time-dependent manner, these findings provide support for the use of Licochalcone B in chemoprevention and bladder cancer therapy. [2]

Licochalcone B has antimetastatic effects on human bladder carcinoma T24 by inhibition of matrix metalloproteinases-9 and NF- κ B activity. [3]

Licochalcone B can protect the liver from carbon tetrachloride (CCl₄)-induced injury, the protection may be due to inhibition of p38 and NF κ B signaling, which subsequently reduces inflammation in the liver. [4]

Licochalcone B has cardioprotective effects against ischemia/reperfusion in isolated rat hearts, the effects may be attributed to its antioxidant, antiapoptotic, and anti-inflammatory activities. [5]

[Solvent]

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

[HPLC Method] [6]

Mobile phase: Acetonitrile-0.05% Phosphoric acid H₂O, gradient elution;

Flow rate: 0.8 ml/min;

Column temperature: 40 °C;

The wave length of determination: 360 nm.

[Storage]

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

[References]

- [1] Jun-ichi Furusawa, Megumi Funakoshi-Tago, Tadahiko Mashino, *et al. Int. Immunopharmacol.*, 2009, 9(4):499-507.
- [2] Yuan X, Li T, Xiao E, *et al. Food Chem. Toxicol.*, 2014, 65(1):242-51.
- [3] Zhao H, Yuan X, Jiang J, *et al. Basic Clin. Pharmacol.*, 2014, 115(6):527-33.
- [4] Teng H F, Chen M, Chu A S, *et al. Iran. J. Basic Med. Sci.*, 2016, 19(8):910-5.
- [5] Han J, Wang D, Yu B, *et al. Oxid. Med. Cell. Longev.*, 2014, 2014:1-11.
- [6] Zhang Y B, Xu W, Yang X W, *et al. Chinese Journal of Pharmaceutical Analysis*, 2013, 33(2):214-9.

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