Natural Products



Chrysin Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Chrysin

Catalog No.: CFN98741

Cas No.: 480-40-0

Purity: >=98%

M.F: C₁₅H₁₀O₄

M.W: 254.2

Physical Description: Yellow powder

Synonyms: 5,7-dihydroxy-2-phenyl-4h-benzo[b]pyran-4-one;Chrysine.

[Intended Use]

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

[Source]

The bark of Oroxylum indicum.

[Biological Activity or Inhibitors]

Chrysin is a natural, biologically active compound extracted from many plants, honey, and



propolis, it possesses potent anti-inflammation, anti-cancer, and anti-oxidation properties; it-induced apoptosis is mediated through caspase activation and Akt inactivation in U937 leukemia cells.^[1]

Chrysin administration can significantly reduce the mitotic index and significantly increase the apoptotic index in 'normal appearing' crypts, suggests a possible chemopreventive activity of chrysin in the early step of colon tumorigenesis through modulation of cryptal cell proliferation activity and apoptosis.^[2]

Chrysin possesses anxiolytic actions without inducing sedation and muscle relaxation, postulates that it is a partial agonist of the central benzodiazepine (BDZ) receptors.^[3]

Chrysin as an effective chemopreventive agent having the capability to obstruct DEN initiated and Fe-NTA promoted renal cancer in the rat model. ^[4]

Chrysin, a naturally-occurring ligand for benzodiazepine receptors, with anticonvulsant properties.^[5]

Chrysin acts as a hepatoprotective and antioxidant agent against d -galactosamineinduced hepatotoxicity.^[6]

[Solvent]

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

[HPLC Method]^[7]

Mobile phase: Methanol- Acetonitrile- Orthophosphoric acid- Water=30:38:1:60; Flow rate: 1.0 ml/min; Column temperature: Room Temperature; The wave length of determination: 262 nm.

[Storage]

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

[References]

[1]Woo K J, Jeong Y J, Park J W, et al. Biochem. Bioph.Res.Co., 2004, 325(4):1215-22.

[2] Miyamoto S, Kohno H, Suzuki R, et al. Oncol. Rep., 2006, 15(5):1169-73.

[3] Wolfman C, Viola H, Paladini A, et al. Pharmacol. Biochem. Be., 1994, 47(1):1-4.

[4] Rehman M U, Tahir M, Khan A Q, et al. Toxicol. Lett., 2012, 216(2-3):146-58.

[5] Medina J H, Paladini A C, Wolfman C, *et al. Biochem. Pharmacol., 1990,* 40(10):2227-31.

[6] Pushpavalli G, Kalaiarasi P, Veeramani C, et al. Eur. J. Pharmacol., 2010, 631(1-3):36-41.

[7] Zaveri M, Khandhar A, Jain S. Eurasian Journal of Analytical Chemistry, 2008, 3(2):245-57.

[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