

Isofraxidin Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Isofraxidin

Catalog No.: CFN90181

Cas No.: 486-21-5

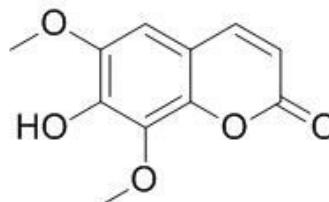
Purity: >=98%

M.F: C₁₁H₁₀O₅

M.W: 222.19

Physical Description: White powder

Synonyms: 7-Hydroxy-6,8-dimethoxy-2h-1-benzopyran-2-on.



[Intended Use]

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

[Source]

The herbs of *Sarcandra glabra* (Thunb.) Nakai.

[Biological Activity or Inhibitors]

Isofraxidin (IF) is a coumarin compound that can be isolated from medicinal plants, such

as *Sarcandra glabra* (Thunb.), IF possesses significant analgesic and anti-inflammatory activities that may be mediated through the regulation of pro-inflammatory cytokines, TNF- α and the phosphorylation of p38 and ERK1/2.^[1]

Isofraxidin inhibits expression of MMP-7 and in vitro cell invasion at a non-toxic level through inhibiting ERK1/2 phosphorylation in hepatoma cell lines, which suggest isofraxidin might become an effective agent for suppressing hepatoma cell invasion.^[2]

Isofraxidin is one possible radio-protector, it can protect leukemia cells from radiation-induced apoptosis via ROS/mitochondria pathway in a p53-independent manner.^[3]

Isofraxidin has definite anti-bacterial, anti-oxidant, and anti-inflammatory activities. However, it also has a protective effect against LPS-induced acute lung injury (ALI), and the protective effect of IF seems to result from the inhibition of COX-2 protein expression in the lung, which regulates the production of PGE2.^[4]

[Solvent]

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

[HPLC Method]^[5]

Mobile phase: Methanol - 0.1% Acetic acid H₂O ,gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 30 °C;

The wave length of determination: 300 nm.

[Storage]

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

[References]

[1]Niu X, Xing W, Li W, *et al. Int. Immunopharm.*, 2012, 14(2):164-71.

- [2] Yamazaki T, Tokiwa T. *Biol. Pharmaceut.Bull.*, 2010, 33(10):1716-22.
- [3] Li P, Zhao Q L, Wu L H, *et al. Apoptosis*, 2014, 19(6):1043-53.
- [4] Niu X, Wang Y, Li W, *et al. Int. Immunopharm.*, 2015, 24(2):432-9.
- [5] Zhao R Z, Zhao Y, Zhang L Q, *et al. Pak. J. Pharm.Sci.*, 2013, 26(1):1-6.

[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