

Glabridin Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Glabridin

Catalog No.: CFN99731

Cas No.: 59870-68-7

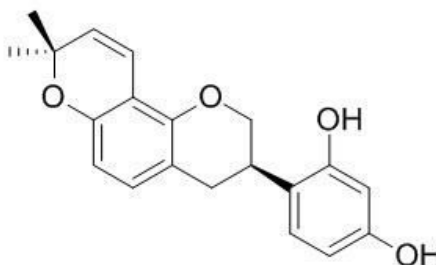
Purity: >=98%

M.F: C₂₀H₂₀O₄

M.W: 324.37

Physical Description: Powder

Synonyms: 4-[(3R)-8,8-Dimethyl-3,4-dihydro-2H-pyrano[6,5-f]chromen-3-yl]benzene-1,3-diol.



[Intended Use]

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

[Source]

The roots of *Glycyrrhiza glabra* L.

[Biological Activity or Inhibitors]

Glabridin is a unique compound possessing more than one function; not only the inhibition of melanogenesis but also the inhibition of inflammation in the skins.^[1]

Glabridin has antioxidative effects, the in vivo and in vitro reduction of the susceptibility of low density lipoprotein (LDL) to oxidation obtained with glabridin, may be related to the absorption or binding of glabridin to the LDL particle and subsequent protection of LDL from oxidation by inhibiting the formation of lipid peroxides and oxysterols, and by protecting LDL associated carotenoids.^[2]

Glabridin and its derivatives exhibit varying degrees of estrogen receptor agonism and demonstrate growth-inhibitory actions on breast cancer cells. ^[3]

Glabridin can significantly reduce the DNA laddering caused by staurosporine in a concentration-dependent manner, suppress the elevated Bax protein and caspase-3 proenzyme and decrease bcl-2 induced by staurosporine in cultured rat cortical neurons, facilitating cell survival, it also can inhibit superoxide production in cultured cortical neurons exposed to staurosporine; indicates that glabridin has a neuroprotective effect via modulation of multiple pathways associated with apoptosis.^[4]

[Solvent]

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

[HPLC Method]^[5]

Mobile phase: 2% Acetic acid in water- Acetonitrile=30:70 ;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 280 nm.

[Storage]

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

[References]

- [1] Yokota T, Nishio H, Kubota Y, *et al.* *Pigm. Cell Melanoma R.*, 1998, 11(6):355-61.
- [2] Belinky P A, Aviram M, Fuhrman B, *et al.* *Atherosclerosis*, 1998, 137(1):49-61.
- [3] Tamir S, Eizenberg M, Somjen D, *et al.* *Cancer Res.*, 2000, 60(20):5704-9.
- [4] Yu X Q, Xue C C, Zhou Z W, *et al.* *Life Sci.*, 2008, 82(1-2):68-78.
- [5] Shanker K, Fatima A, Negi A S, *et al.* *Chromatographia*, 2007, 65(11):771-4.

[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