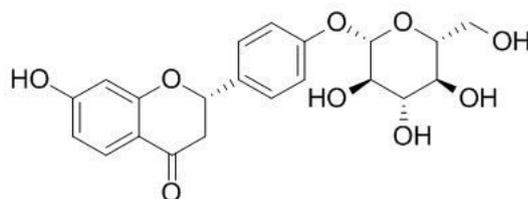


Liquiritin Datasheet

4th Edition (Revised in July, 2016)**[Product Information]****Name:** Liquiritin**Catalog No.:** CFN99154**Cas No.:** 551-15-5**Purity:** > 98%**M.F:** C₂₁H₂₂O₉**M.W:** 418.39**Physical Description:** White powder**Synonyms:** (2S)-7-hydroxy-2-[4-[[[(2S,3R,4S,5S,6R)-3,4,5-trihydroxy-6-(hydroxymethyl)-2-oxanyl]oxy]phenyl]-3,4-dihydro-2H-1-benzopyran-4-one.**[Intended Use]**

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

[Source]The root of *Glycyrrhiza glabra* L.

[Biological Activity or Inhibitors]

Liquiritin, a flavone compound derived from *Glycyrrhiza uralensis*, it can effectively reverse alteration in immobility time and sucrose consumption, can increase SOD activity, inhibit lipid peroxidation, and lessen production of MDA, demonstrates that a potential antidepressant-like effect of liquiritin treatment on chronic variable stress can induce depression model rats, which might be related to defense of liquiritin against oxidative stress.^[1]

Liquiritin has neuroprotective effect against focal cerebral ischemia/reperfusion in mice via its antioxidant and antiapoptosis properties, it may be a potential agent against cerebral I/R injury in mice.^[2]

Liquiritin significantly promotes the neurite outgrowth stimulated by NGF in PC12 cells in dose dependant manners whereas the liquiritin alone did not induce neurite outgrowth, and it has the neurotrophic effect on the overexpression of neural related genes such as neurogenin 3, neurofibromatosis 1, notch gene homolog 2, neuromedin U receptor 2 and neurotrophin 5; liquiritin also modulate ERK and AKT/GSK-3 β dependent pathways to protect against glutamate induced cell damage in differentiated PC12 cells,thus, liquiritin may be a good candidate for treatment of various neurodegenerative diseases such as Alzheimer's disease or Parkinson's disease.^[3,4]

Liquiritin can attenuate advanced glycation end products-induced endothelial dysfunction via RAGE/NF- κ B pathway in human umbilical vein endothelial cells, it may be a promising agent for the treatment of vasculopathy in diabetic patients.^[5]

[Solvent]

Pyridine, DMSO, Methanol, Acetone, etc.

[HPLC Method]^[6]

Mobile phase: 1.0% Acetic acid in H₂O- 1.0% Acetic acid in acetonitrile, gradient elution;;

Flow rate: 1.0 ml/min;

Column temperature: 40 °C;

The wave length of determination: 254 nm.

[Storage]

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

[References]

- [1] Zhao Z, Wang W, Guo H, *et al. Behav. Brain Res.*, 2008, 194(194):108-13.
- [2] YaXuan Sun, Yue Tang, AiLi Wu, *et al. J. Asian Nat. Prod. Res.*, 2010, 12(12):1051-60.
- [3] Chen Z A, Wang J L, Liu R T, *et al. Cytotechnol*, 2009, 60(60):125-32.
- [4] Teng L, Meng Q, Lu J, *et al. Mol. Med .Rep.*, 2014, 10(2):818-24.
- [5] Zhang X, Song Y, Han X, *et al. Mol .Cell Biochem.*, 2013, 374(1-2):191-201.
- [6] Seo C S, Kim J H, Shin H K. *Pak J. Pharm. Sci.*, 2014, 27(4):819-24.

[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