

Gentiopicroside Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Gentiopicroside

Catalog No.: CFN98047

Cas No.: 20831-76-9

Purity: > 98%

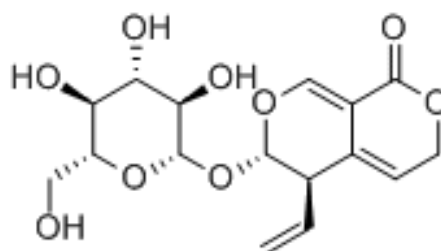
M.F: C₁₆H₂₀O₉

M.W: 356.32

Physical Description: Powder

Synonyms: Gentiopicrin; Gentiopicroin;

(5β-trans)-6-(β-D-Glucopyranosyloxy)-5,6-dihydro-5-vinyl-1H,3H-pyrano[3,4-c]pyran-1-one; 1H,3H-Pyrano[3,4-c]pyran-1-one,5-ethenyl-6-(β-D-;glucopyranosyloxy)-5,6-dihydro-,(5R-trans)-;(5R,6S)-5-ethenyl-6-[(2S,3R,4S,5S,6R)-3,4,5-trihydroxy-6-(hydroxymethyl)oxan-2-yl]oxy-5,6-dihydro-3H-pyrano[5,4-c]pyran-1-one.



[Intended Use]

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

[Source]

The roots of *Gentiana manshurica Kitag.*

[Biological Activity or Inhibitors]

Gentiopicroside, a secoiridoid glycoside isolated from the methanol extract of the aerial parts of *Centaurium erythraea*, has antibacterial and free radical scavenging activities, it also has general toxicity in brine shrimp lethality.^[1]

Gentiopicroside has smooth muscle relaxing activity.^[2]

Gentiopicroside exhibits analgesic activities and attenuates morphine rewarding effect through downregulation of GluN2B receptors in nucleus accumbens.^[3]

Gentiopicroside has been developed into a novel traditional Chinese drug named gentiopicroside injection, and it was approved for the treatment of acute jaundice and chronic active hepatitis by SFDA.^[4]

Gentiopicroside exhibits obvious anti-inflammatory effects, it can decrease the permeability of celiac blood capillary, and reduce the paw swelling induced by carrageenan and zymosan A; it can prevent interleukin-1 beta induced inflammation response in rat articular chondrocyte; gentiopicroside treatment can exert anti-inflammatory effects on experimental acute colitis through attenuating the expression levels of TNF- α , IL-1 β , IL-6, iNOS and COX-2, and it may present the therapeutic potential in the treatment of colitis.^[5-7]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[HPLC Method]^[8]

Mobile phase: Acetonitrile-0.03% Phosphoric acid H₂O, gradient elution;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 254 nm.

[Storage]

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

[References]

- [1] Kumarasamy Y, Nahar L, Sarker S D. *Fitoterapia*, 2003, 74(1-2):151-4.
- [2] Rojas A, Bah M, Isela Rojas J, et al. *Planta Med.*, 2000, 66(8):765-7.
- [3] Liu S B, Ma L, Guo H J, et al. *Cns Neurosci. Ther.*, 2012, 18(8):652-8.
- [4] Deng Y, Wang L, Yang Y, et al. *Drug Metab. Pharmacok.*, 2013, 28(4):339-44.
- [5] Chen C X, Liu Z W, Sun Z R, et al. *Chinese Traditional & Herbal Drugs*, 2003, 34(9):814-6
- [6] Zhao L, Ye J, Wu G T, et al. *J. Ethnopharmacol.*, 2015, 172:100-7.
- [7] Niu Y T, Zhao Y P, Jiao Y F, et al. *Int. Immunopharmacol.*, 2016, 39:16-22.
- [8] Lin S J, Tseng H H, Wen K C, et al. *J. Chromatogr. A*, 1996, 730(1-2):17-23.

[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