Natural Products

ChemFaces

Gardenoside Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Gardenoside

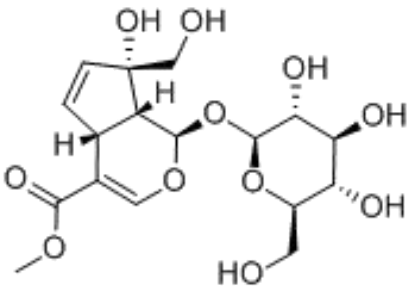
Catalog No.: CFN90237

Cas No.: 24512-62-7

Purity: >=98%

M.F: $C_{17}H_{24}O_{11}$

M.W:404.37



Physical Description: Powder

Synonyms:(1S)-1α-(β-D-Glucopyranosyloxy)-1,4aα,7,7aα-tetrahydro-7α-hydroxy-7-Hydroxymethylcyclopenta[c]pyran-4-carboxylic acid methyl ester.

[Intended Use]

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

[Source]

The fruits of *Gardenia jasminoides Ellis.*

[Biological Activity or Inhibitors]

Gardenoside has antimicrobial activity.[1]

Gardenoside has direct protective effects on neurons subjected to oxygen-glucose deprivation and reperfusion injury, which may be one of the mechanisms underlying its therapeutic effects on oxygen-glucose deprivation and reperfusion injury.[2]

Gardenoside has nephrotoxicity effect, higher dose gardenoside(300 mg·kg(-1)) can cause renal pathological injury in rats after 3 days of oral administration, under this dose,the addition of urine KIM-1 testing based on routine renal function indexes would probably provide better prediction of nephrotoxicity. [3]

Gardenoside derivative is good at protecting hepatocytes than gardenoside from in vitro injury induced by CCl4 or H2O2 and the mechanism might be related to the anti-oxidant process.[4]

Gardenoside is one of the most important effective extractions of a herb for its hepatoprotective properties, it has a protective effect on free fatty acids (FFAs)-induced cellular steatosis in HepG2 cells which indicates that gardenoside may be a potential therapeutic herb against NASH by suppressed supernatant inflammatory cytokine production and intracellular NFkB activity.[5]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[HPLC Method][6]

Mobile phase: Methanol- 0.1%Phosphoric acid H2O=15:85;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 238 nm.

[Storage]

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

[References]

[1] Ishiguro K, Yamaki M, Takagi S. *J. Nat. Prod., 1983, 46(4):532-6.*

[2] Li W H, Zhu L Q, Wang S R, *et al. Journal of Chinese Pharmaceutical Sciences, 2004, 39(5):344-6.*

[3] Feng X Y, Tian J Z, Yan Y I, *et al. Chinese Journal of Experimental Traditional Medical Formulae, 2016(10);118-21.*

[4] Cheng C, Huang C, Wang Y, *et al. Acta Universitatis Medicinalis Anhui, 2014(7):946-9.*

[5] Liang H, Zhang L, Wang H, *et al. Int. J.Mol. Sci., 2014, 16(11):27749-56.*

[6] Wang X L, Tai W Q, Wu L T. *Chinese Journal of Modern Applied Pharmacy, 2007, 24 (1):59-60.*

[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