[ Product Information ]

Name: Swertiamarin
Catalog No.: CFN99818
Cas No.: 17388-39-5
Purity: >=98%
M.F: C_{16}H_{22}O_{10}
M.W: 374.34
Physical Description: Powder
Synonyms: Swertiamarine; Swertiamaroside;
1H,3H-Pyrano(3,4-c)pyran-1-one,5-ethenyl-6-(beta-d-glucopyranosyloxy)-4a,5,6-tetrahydroydro-4a-hydroxy-,(4aR,5R,6S)-; (5R,6S)-5-ethenyl-4a-hydroxy-1-oxo-4,4a,5,6-tetrahydro-1H,3H-pyran[3,4-c]pyran-6-yl beta-D-glucopyranoside.

[ Intended Use ]

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

[ Source ]
The herbs of *Swertia bimaculata*.

**[Biological Activity or Inhibitors]**

Swertiamarin, a secoiridoid glycoside was found to contain a major constituent of the extract, possesses significant antioxidant and hepatoprotective properties against d-GalN induced hepatotoxicity given at 100 and 200 mg/kg body weight orally for 8 days, which might be due to its in vitro antioxidant activity.[1]

Swertiamarine has wound healing activity via the stimulation of collagen production and its mitotic activity, it also exhibits cytoprotective effects.[2]

Swertiamarin can significantly increase high-density lipoprotein (HDL) levels and it shows a significant lipid-lowering effect, as well as a high antiatherogenic potential, overall swertiamarin is an effective lipid-lowering lead compound and can be useful for preventing atherosclerosis. [3]

Swertiamarin possesses both peripheral and central antinociceptive activity.[4]

Swertiamarin has anti-inflammatory activity, it inhibits the development of arthritis by modulating NF-κB/IκB and JAK2/STAT3 signaling, suggests that swertiamarin acts as an anti-rheumatic agent.[5]

Swertiamarin has anti-diabetic effects, the anti-diabetic effect of swertiamarin is due to gentiananine, an active metabolite of swertiamarin.[6]

Swertiamarin stimulates gastric emptying and gastrointestinal motility by inhibiting the dopamine D2 receptor.[7]

**[Solvent]**

Pyridine, Methanol, Ethanol, etc.

**[HPLC Method]**[8]

Mobile phase: 0.04% Formic acid in water- 0.04% Formic acid in acetonitrile, gradient elution;
Flow rate: 1.0 ml/min;
Column temperature: 30 °C;

The wavelength of determination: 237 nm.

[ Storage ]

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

[ References ]


[ Contact ]

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