

Silychristin Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Silychristin

Catalog No.: CFN90243

Cas No.: 33889-69-9

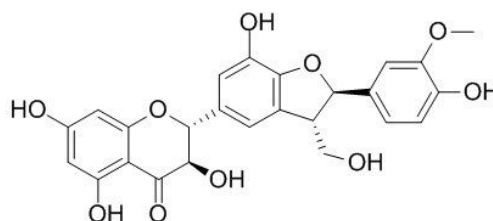
Purity: >=98%

M.F: C₂₅H₂₂O₁₀

M.W: 482.44

Physical Description: Powder

Synonyms: (2R,3R)-3,5,7-Trihydroxy-2-[(2R,3S)-7-hydroxy-2-(4-hydroxy-3-methoxyphenyl)-3-(hydroxymethyl)-2,3-dihydro-1-benzofuran-5-yl]-2,3-dihydro-4H-chromen-4-one.



[Intended Use]

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

[Source]

The herbs of *Silybum marianum* (L.) Gaertn.

[Biological Activity or Inhibitors]

Silychristin and resveratrol are phenolic compounds that may have roles in the reduction of cancer susceptibility, one of the possible mechanism by which resveratrol and silychristin may exert their anti-carcinogenic effects is through an interaction by certain CYP450s, they are strong and selective inhibitors of CYP1A1 associated EROD activity and may be considered for use as a strong cancer chemopreventive agent in humans by the preventing malignant transformation and reducing the activations of carcinogens through inhibition of CYP1A1.^[1]

Silychristin is a flavonolignan derived from the milk thistle is a potent inhibitor of the thyroid hormone transporter monocarboxylate transporter 8 (MCT8).^[2]

Silibinin and silicristin show remarkable stimulatory effects on these parameters (Proliferation rate, biosynthesis of protein and DNA, and the activity of the enzyme lactate dehydrogenase), mainly in Vero cells; administration of them before or after the chemical-induced injury can lessen or avoid the nephrotoxic effects. ^[3]

[Solvent]

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

[HPLC Method]^[4]

Mobile phase: Methanol -H₂O, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 290 nm.

[Storage]

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

[References]

[1] Mutlu D, Aksit H, Demirtas I, *et al. Congress of the Turkish Toxicology Society. 2015,10.*

- [2] Johannes J, Jayarama-Naidu R, Meyer F, *et al. Endocrinology*, 2016, 157(4):1694-701.
- [3] Sonnenbichler J, Scalera F, Sonnenbichler I, *et al. J.Pharmacol. Exp.Ther.*, 1999, 290(3):1375-83.
- [4] Wallace S, Carrier D J, Beitle R R, *et al. Journal of Nutraceuticals Functional & Medical Foods*, 2003, 4(2):37-48.

[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