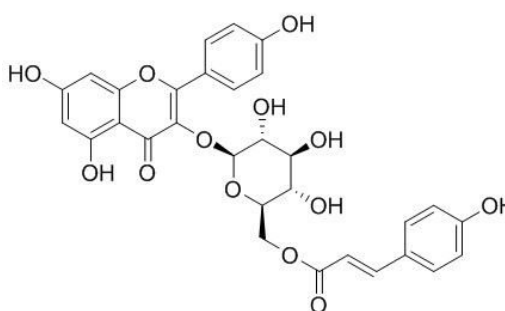


Tiliroside Datasheet

4th Edition (Revised in July, 2016)**[Product Information]****Name:** Tiliroside**Catalog No.:** CFN98026**Cas No.:** 20316-62-5**Purity:** > 95%**M.F:** C₃₀H₂₆O₁₃**M.W:** 594.52**Physical Description:** Yellow powder

Synonyms: (2E)-3-(4-Hydroxyphényl)acrylatede[(2R,3S,4S,5R,6S)-6-[[5,7-dihydroxy-2-(4-hydroxyphényl)-4-oxo-4H-chromén-3-yl]oxy]-3,4,5-trihydroxytétrahydro-2H-pyran-2-yl]méthyle; 4H-1-Benzopyran-4-one, 5, 7-dihydroxy-2-(4-hydroxyphenyl)-3-[[6-O-[(2E)-3-(4-hydroxyphenyl)-1-oxo-2-propenyl]-.beta.-D-glucopyranosyl]oxy]-.

[Intended Use]

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

[Source]The herbs of *Agrimonia pilosa Ledeb.*

[Biological Activity or Inhibitors]

Tiliroside, a dietary flavonol glycoside from the flowers of *Tilia argentea* (linden), shows a hepatoprotective effect against D-galactosamine (D-GalN)/lipopolysaccharide (LPS)-induced liver injury in mice.^[1]

Tiliroside has anti-inflammatory and antioxidant activity, it can significantly reduce the oedema and leukocyte infiltration induced by 12-O-tetradecanoylphorbol 13-acetate (TPA).^[2]

Tiliroside shows very potent anti-complement activity (IC₅₀=5.4 x 10⁻⁵ M) on the classical pathway of the complement system. ^[3]

Tiliroside and gnaphaliin are antioxidants against in vitro Cu²⁺-induced LDL oxidation in the same order of magnitude compared to that of the reference drug, probucol.^[4]

Tiliroside has anti-diabetic effects, the effects at least partially mediated through inhibitory effects on carbohydrate digestion and glucose uptake in the gastrointestinal tract.^[5]

Tiliroside has shown in vivo anti-inflammatory activity; it also can inhibit neuroinflammation in BV2 microglia through a mechanism involving TRAF-6-mediated activation of NF- κ B and p38 MAPK signalling pathways, these activities are possibly due, in part, to the antioxidant property of this compound.^[6]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[HPLC Method]^[7]

Mobile phase: Acetonitrile- 0.1% Acetic acid H₂O, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 25 °C;

The wave length of determination: 310 nm.

[Storage]

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

[References]

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- [4] Schinella G R, Tournier H A, Máñez S, *et al. Fitoterapia*, 2007, 78(1):1-6.
- [5] Goto T, Horita M, Nagai H, *et al. Mol. Nutr.Food Res.*, 2012, 56(3):435- 45.
- [6] Velagapudi R, Aderogba M, Olajide O A.B.B.A.Gen. Subjects, 2014, 1840(12):3311-9.
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