Natural Products



Tectoridin Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Tectoridin

Catalog No.: CFN99921

Cas No.: 611-40-5

Purity: >=98%

M.F: C₂₂H₂₂O₁₁

M.W: 462.40

Physical Description: Powder

Synonyms: -5-Hydroxy-3-(4-hydroxyphenyl)-6-methoxy-;Shekanin;

5-Hydroxy-3-(4-hydroxyphenyl)-6-methoxy-7-[(2S,3R,4S,5S,6R)-3,4,5-trihydroxy-6-(hydr

oxymethyl)oxan-2-yl]oxychromen-4-one.

[Intended Use]

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

[Source]

The rhizomes of Belamcanda chinensis (L.) DC.

[Biological Activity or Inhibitors]

Tectoridin and 6"-O-xylosyltectoridin are prodrugs which can be transformed to the active agents (tectorigenin)by human intestinal bacteria, the metabolite, tectorigenin, had more potent hypoglycemic activity as well as in vitro cytotoxic activity against tumor cell lines than 6"-O-xylosyltectoridin and tectoridin.^[1]

Tectorigeninand tectoridin have inhibition on prostaglandin E2 production and cyclooxygenase-2 induction in rat peritoneal macrophages, which is one of the mechanisms of the anti-inflammatory activities of the rhizomes of Belamcanda chinensis.^[2]

Tectoridin and tectorigenin have hepatoprotective effect on tert-butyl hyperoxide-induced liver injury.^[3]

Tectoridin, a poor ligand of estrogen receptor α , exerts its estrogenic effects via an ERK-dependent pathway.^[4]

Tectoridin has antioxidant properties.^[5]

Tectoridins are capable of interacting at ryanodine binding sites to differentially modulate fast skeletal and cardiac calcium-release channels.^[6]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[HPLC Method]^[7]

Mobile phase: Methanol- Acetonitrile-H2O=40:20:40 ; Flow rate: 1.0 ml/min; Column temperature: 30 °C; The wave length of determination: 264 nm.

[Storage]

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

[References]

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[4] Kang K, Lee S B, Sang H J, et al. Mol. Cells, 2009, 27(3):351-7.

[5] Han T, Cheng G, Liu Y, et al. Food Chem. Toxicol. , 2012, 50(2):409-14.

[6]Bidasee K R, Maxwell A, Reynolds W F, et al. J. Pharm. Exp. Ther., 2000, 293(3):

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