[ Product Information ]

Name: Quercitrin

Catalog No.: CFN98850

Cas No.: 522-12-3

Purity: > 98%

M.F: C_{21}H_{20}O_{11}

M.W: 448.4

Physical Description: Yellow powder

Synonyms: 2-(3,4-Dihydroxyphenyl)-5,7-dihydroxy-3-[[2S,3R,4R,5R,6S)-3,4,5-trihydroxy-6-methyl-2-oxanyl]oxy]-1-benzopyran-4-one.

[ Intended Use ]

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

[ Source ]

The herb of Apocynum venetum L.
Biological Activity or Inhibitors

Quercetin is a common antioxidant flavonoid found in vegetables, which is usually present in glycosylated forms, such as quercitrin (3-rhamnosylquercetin), has anti-inflammatory effect which is mediated through the inhibition of the NF-kappaB pathway, inhibits cytokine and inducible nitric oxide synthase expression through inhibition of the NF-kappaB pathway without modification of c-Jun N-terminal kinase activity.\(^1\)

Quercetin has prevention of H2O2-induced apoptosis via anti-oxidant activity and heme oxygenase 1 gene expression in macrophages.\(^2\)

Quercitrin exhibits a scavenger and antioxidant role, and these effects probably are mediated via different mechanisms, which may involve the negative modulation of the Fenton reaction and NMDA receptor.\(^3\)

Quercetin( 50 uM) can reduce UVB-induced cell death and apoptosis in HaCaT cells, also similarly reduce UVB-induced ROS generation and cell death in live zebrafish.\(^4\)

Quercitrin exhibits strong antioxidant and anti-carcinogenic activities, it contributes to the inhibition of neoplastic transformation by blocking activation of the MAPK pathway and stimulation of cellular protection signaling.\(^5\)

Quercitrin and Taxifolin can stimulate osteoblast differentiation in MC3T3-E1 cells and inhibit osteoclastogenesis in RAW 264.7 cells, shows a positive effect of these flavonoids on bone metabolism.\(^6\)

Solvent

Pyridine, DMSO, Methanol, Ethanol, etc.

HPLC Method\(^7\)

Mobile phase: Acetonitrile-0.5% Acetic acid H2O=17:83;
Flow rate: 1.0 ml/min;
Column temperature: Room Temperature;
The wavelength of determination: 350 nm.
[ Storage ]

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

[ References ]


[ 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