Natural Products

ChemFaces

Wogonin Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Wogonin

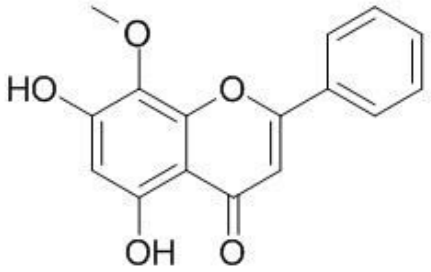
Catalog No.: CFN97089

Cas No.: 632-85-9

Purity: > 98%

M.F: $C_{16}H_{12}O_5$

M.W: 284.3



Physical Description: Yellow powder

Synonyms: 5,7-Dihydroxy-8-methoxy-2-phenyl-1-benzopyran-4-one.

[Intended Use]

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

[Source]

The root of *Scutellaria baicalensis Georgi.*

[Biological Activity or Inhibitors]

Wogonin is one major constituent of Scutellaria baicalensis, possesses potent anticancer activities , the activities are largely due to their abilities to scavenge oxidative radicals, to attenuate NF-kappaB activity, to inhibit several genes important for regulation of the cell cycle, to suppress COX-2 gene expression and to prevent viral infections. [1]

Wogonin and fisetin induce apoptosis in human promyeloleukemic cells, accompanied by a decrease of reactive oxygen species, and activation of caspase 3 and.endonuclease, induction of bax protein and suppression of Mcl-1 protein were detected in the process.[2]

Wogonin, baicalin, and baicalein are three major components of Scutellaria, they have anti-inflammatory activity against carrageenan-induced paw edema in rats, the baicalin exhibits the greatest inhibition activity.[3]

Wogonin can suppress the VEGF-stimulated migration and tube formation of human umbilical vein endothelial cells (HUVECs), also restrain VEGF-induced tyrosine phosphorylation of vascular endothelial growth factor receptor 2 (VEGFR2), strongly suggests that wogonin might be a promising antitumor drug.[4]

Wogonin induces apoptosis in RPMI 8226, a human myeloma cell line, by downregulating phospho-Akt and overexpressing Bax.[5]

[Solvent]

Chloroform, Dichloromethane, DMSO, Acetone, etc.

[HPLC Method][6]

Mobile phase: Methanol-0.1%Phosphoric acid H2O gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 30 ℃;

The wave length of determination: 275 nm.

[Storage]

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

[References]

[1] Min L W. *New therapeutic aspects of flavones: Cancer Treatment Reviews, 2009, 35(35):57-68.*

[2] Lee W R, Shen S C, Lin H Y, *et al. Biochem. Pharmacol., 2002, 63(2):225-36.*

[3] Chun-ChingLin, Den-EnShieh. *Am. J. Chinese Med., 1996, 24(1):31-6.*

[4] Na L, Ying G, Yun L, *et al. Life Sci., 2008, 82(17-18):956-63.*

[5] Zhang M, Liu L P, Chen Y, *et al. Life Sci., 2013, 92(1):55-62.*

[6] Lin D, Liang W. *China Pharmacist, 2009, 12(08):1044-6.*

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