[Product Information]

Name: Galangin  
Catalog No.: CFN98918  
Cas No.: 548-83-4  
Purity: >=98%  
M.F: C_{15}H_{10}O_{5}  
M.W: 270.24  
Physical Description: Yellow powder  
Synonyms: 3,5,7-Trihydroxyflavone; 3,5,7-Trihydroxy-2-phenyl-chromen-4-one.

[Intended Use]

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

[Source]

The rhizome of Zingiber officinale Roscoe.

[Biological Activity or Inhibitors]

Galangin, the major antimicrobial compound isolated from the shoots of Helichrysum
aureonitens, it shows significant antiviral activity against HSV-1 and CoxB1, limited activity against reovirus, and no antiviral activity against Ad31.\[1\]

Galangin has anti-genotoxicity, it acts as a cancer chemopreventive agent candidate.\[2\]

Galangin shows an inhibitory effect on acetylcholinesterase (AChE) activity with the \[IC(50)\] of 120 microM and an enzyme-flavonoid inhibition constant (\[K(i)\]) of 74 microM, suggests that it could be potential candidates for further development of new drugs against Alzheimer's disease (AD). \[3\]

Galangin induces apoptosis of hepatocellular carcinoma cells via the mitochondrial pathway.\[4\]

Galangin has vasorelaxant effects, it reduces the contractility of rat aortic rings through an endothelium-dependent mechanism, involving NO, and also through an endothelium-independent mechanism, inhibiting calcium movements through cell membranes.\[5\]

Galangin is effective as anti-proliferative, and apoptotic agent in Bcr-Abl expressing K562 and KCL22 cells and in imatinib mesylate resistant K562-R and KCL22-R cells; it increases the cytotoxic activity of imatinib mesylate in imatinib-sensitive and imatinib-resistant Bcr-Abl expressing leukemia cells, suggests that galangin is an interesting candidate for a combination therapy in the treatment of imatinib-resistant leukemias.\[6\]

Galangin can down-regulate mast cell-derived allergic inflammatory reactions by blocking histamine release and expression of pro-inflammatory cytokines, in light of in vitro and in vivo anti-allergic inflammatory effects, it could be a beneficial anti-allergic inflammatory agent.\[7\]

Galangin has anti-clastogenic effects against bleomycin-induced chromosomal aberrations in mouse spleen lymphocytes.\[8\]

Galangin has antibacterial activity, the topoisomerase IV enzyme may therefore be implicated in the antibacterial mechanism of action of galangin.\[9\]

Galangin has anti-inflammatory effects on lipopolysaccharide-activated macrophages via ERK and NF-κB pathway regulation.\[10\]

Galangin produces anti-obesity effects in cafeteria diet (CD)-fed rats, this may be
mediated through its pancreatic lipase inhibitory, hypolipidemic and antioxidant activities.[11]

[ Solvent ]

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

[ HPLC Method ][12]

Mobile phase: Methanol- 0.4% Phosphoric acid H2O=60:40;
Flow rate: 1.0 ml/min;
Column temperature: 30 ℃;
The wave length of determination: 360 nm.

[ Storage ]

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

[ References ]


[Contact]

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