[ Product Information ]

Name: Glycitein
Catalog No.: CFN99106
Cas No.: 40957-83-3
Purity: > 98%
M.F: C_{16}H_{12}O_{5}
M.W: 284.26

Physical Description: Yellow Powder

Synonyms: 7-Hydroxy-3-(4-hydroxyphenyl)-6-methoxy-1-benzopyran-4-one.

[ Intended Use ]

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

[ Source ]

The fruits of Glycine max (L.) merr.
[ **Biological Activity or Inhibitors**]

Glycitein accounts for 5-10% of the total isoflavones in soy food products, has weak estrogenic activity, comparable to that of the other soy isoflavones but much lower than that of DES and 17beta-estradiol.[1]

Glycitein, daidzein and glsenistein, with their inhibitory effects on natural and PDGF-BB-induced SMC proliferation, may be useful in attenuating such proliferation, a basic mechanism involved in atherosclerotic vascular change, thereby preventing atherosclerotic cardiovascular diseases.[2]

Glycitein has antioxidant effects, may suppress Abeta toxicity through combined antioxidative activity and inhibition of Abeta deposition, thus may have therapeutic potential for prevention of Abeta associated neurodegenerative disorders.[3]

Glycitein has inhibitory effects on hydrogen peroxide induced cell damage by scavenging reactive oxygen species and inhibiting c-Jun N-terminal kinase.[4]

Glycitein, the most potent activator of ERK1/2, decreases RWPE-1 cell proliferation by 40%; it induces ERK1/2 activation was dependent, in part, on tyrosine kinase activity associated with vascular endothelial growth factor receptor (VEGFR). [5]

Glycitein suppresses PMA-induced phosphorylation of three types of MAP kinases, which are upstream signaling molecules in MMP gene expressions and NF-kappaB and AP-1 activities in glioma cells, therefore, the inhibition of MMP-3 and MMP-9 expression by glycitein may have therapeutic potential for controlling invasiveness of malignant gliomas.[6]

[ **Solvent**]

Chloroform, Dichloromethane, DMSO, Acetone, etc.

[ **HPLC Method**][7]

Mobile phase: Methanol-0.1% Acetic acid H2O=52:48;

Flow rate: 1.0 ml/min;

Column temperature: 30 °C;
The wave length of determination: 254m.

[ Storage ]

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

[ References ]


[ Contact ]

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