[Product Information]

Name: Genipin
Catalog No.: CFN99142
Cas No.: 6902-77-8
Purity: > 98%
M.F: C_{11}H_{14}O_{5}
M.W: 226.23

Physical Description: White powder

Synonyms: (1R,4aS,7aS)-1-hydroxy-7-(hydroxymethyl)-1,4a,5,7a-tetrahydrocyclopenta[c]pyran-4-carboxylic acid methyl ester.

[Intended Use]

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

[Source]

The fruits of Gardenia jasminoides Ellis.
**Biological Activity or Inhibitors**

Genipin inhibits UCP2-mediated proton leak and acutely reverses obesity- and high glucose-induced β cell dysfunction in isolated pancreatic islets in a -dependent manner, it represents that comprise a starting point for the of therapies aimed at treating beta cell dysfunction.[1]

Genipin and geniposide, two known constituents in gardenia fruit, show acute anti-inflammatory activities in carrageenan-induced rat paw edema, genipin, rather than geniposide, is the major anti-inflammatory component of gardenia fruit.[2]

Genipin cross-linked electrospun gelatin mats loaded with vascular endothelial growth factor (VEGF) could be part of a useful strategy to stimulate and induce angiogenesis in tissue engineered applications.[3]

Genipin shows an antithrombotic effect in vivo due to the suppression of platelet aggregation, phospholipase A(2) (PLA(2)) inhibition by geniposide is one possible anti-platelet mechanism.[4]

Genipin-induced apoptosis in hepatoma cells is mediated by reactive oxygen species/c-Jun NH 2-terminal kinase-dependent activation of mitochondrial pathway.[5]

Genipin may enhance the bile acid-independent secretory capacity of hepatocytes, mainly by stimulation of exocytosis and insertion of Mrp2 in the bile canaliculi, Inchin-ko-to (ICKT) may be a potent therapeutic agent for a number of cholestatic liver diseases.[6]

Genipin induces cyclooxygenase-2 expression via NADPH oxidase, MAPKs, AP-1, and NF-κ B in RAW 264.7 cells.[7]

**Solvent**

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

**HPLC Method**[8]

Mobile phase: 0.1% Formic acid in water- 0.1% Formic acid in acetonitrile, gradient elution;
Flow rate: 1.0 ml/min;
Column temperature: 28℃;
The wavelength of determination: 238 nm.

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

[ References ]

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