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Seal to avoid light.
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3rd Edition (Revised in January, 2014)

[Product Information]

Name: Caudatin

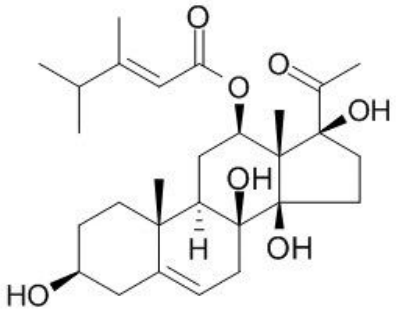
Catalog No.: CFN99007

Cas No.: 38395-02-7

Purity: > 98%

M.F: $C_{28}H_{42}O_7$

M.W: 490.6



Physical Description: Powder

Synonyms:

(3beta,12beta,14beta,17alpha)-12-[[(2E)-3,4-Dimethyl-1-oxo-2-pentenyl]oxy]-3,8,14,17-tetrahydroxypregn-5-en-20-one

[Intended Use]

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

[Source]

The roots of *Cynanchum otophyllum*

[Aplications]

Caudatin exhibited significantly inhibitory activity against HBV DNA replication with IC50 values in the range of 2.82-7.48 μM.

Caudatin exerts antiproliferative effects on human hepatocellular carcinoma SMMC7721 cells. The anticancer activity of caudatin could be attributed partly to its inhibition of cell proliferation and induction of apoptosis in cancer cells through caspase activation. Then the in vivo assay further showed that caudatin significantly inhibited the growth of transplantable H22 tumors in mice.

caudatin impairs the cell viability and induces G0/G1 phase arrest in A549 cells with a dose dependent manner. A549 cells, not HUVECs, dealing with caudatin exhibited typical characteristics of apoptosis, which were accompanied by activation of caspase-3, caspase-9 and Poly(ADP–Ribose) Polymerase (PARP). In addition, caudatin treatment resulted in a decrease of β-catenin and increase of phosphorylation of β-catenin, and inhibited phosphorylation levels of GSK3β (Ser 9) in A549 cells. Conditional medium of A549 cells-induced or growth factors-induced tube formation of HUVECs was markedly inhibited by caudatin treatment, which was associated with the inhibiting VEGF secretion from A549 cells by caudatin. Our findings suggest that caudatin inhibits carcinomic human alveolar basal epithelial cell growth and angiogenesis by targeting GSK3β/β-catenin pathway and suppressing VEGF production.

[Solvent]

Chloroform, Dichloromethane, DMSO, Acetone, etc.

[HPLC Method]

Mobile phase: Methanol-H2O gradient elution;

Flow rate: 1.0 ml/min;

The wave length of determination: 217 nm.

[Storage]

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

[References]

1. *Letters in Drug Design & Discovery*, 2012, 9(8), 775-779.

2. *Steroids*, 2007, 72(11-12), 778-786.

3. *Chinese Journal of Natural Medicines*, 2008, 6(3), 210-213.

4. *Phytomedicine,* 2008, 15(11), 1016-1020.

5. *J. Cell. Biochem.*, 2012, 113, 3403-3410.