Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Genipin

Catalog No: tcsc1096

Available Sizes

Size: 50mg

Size: 100mg

Specifications

CAS No:
6902-77-8

Formula:
$C_{11}H_{14}O_5$

Pathway:
Autophagy

Target:
Autophagy

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 210 mg/mL (928.26 mM)

Alternative Names:
(+)-Genipin

Observed Molecular Weight:
226.23

Product Description

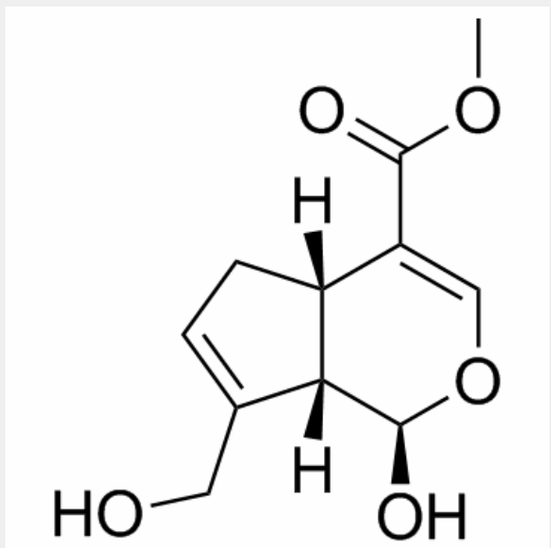
Genipin is a cell permeable inhibitor of uncoupling protein 2 (UCP2).

In Vitro:

Copyright 2021 Taiclone Biotech Corp.

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Genipin stimulats glucose uptake in a time- and dose-dependent manner. The maximal effect is achieved at 2 h with a concentration of 10 μM. In myotubes, genipin promotes glucose transporter 4 (GLUT4) translocation to the cell surface, which increases the phosphorylation of insulin receptor substrate-1 (IRS-1), AKT, and GSK3β. Meanwhile, genipin increases ATP levels, closed KATP channels, and then increases the concentration of calcium in the cytoplasm in C2C12 myotubes. Genipin-stimulated glucose uptake could be blocked by both the PI3-K inhibitor wortmannin and calcium chelator EGTA. Moreover, genipin increases the level of reactive oxygen species and ATP in C2C12 myotubes[1]. Genipin increases mitochondrial membrane potential, which then increases ATP levels and closes KATP channels, thereby stimulating insulin secretion in pancreatic β-cells. Genipin activates glucose-excited POMC neurons[2]. Cytochrome c content increases significantly in the cytosol of genipin-treated FaO cells. Activation of caspase-3 and caspase-7 is ultimately responsible for genipin-induced apoptotic process in hepatoma cells. ROS level notably increases in Hep3B cells treated with 200 μM genipin[3].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!

Copyright 2021 Taiclone Biotech Corp.