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

Calycosin-7-O-β-D-glucoside

Catalog No: tcsc3716

Available Sizes

Size: 10mg

Size: 50mg

Specifications

CAS No:
20633-67-4

Formula:
$C_{22}H_{22}O_{10}$

Pathway:
Others

Target:
Others

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 32 mg/mL (71.68 mM)

Observed Molecular Weight:
446.4

Product Description

Calycosin-7-O-β-D-glucoside, a melanin biosynthesis inhibitor, is isolated from the methanol extract of astragalus.

IC50 value: 68 μM in inhibition of Tyrosinase

Target:

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

In vitro: Calycosin-7-O-β-d-glucoside showed a melanin biosynthesis inhibition zone in a culture plate of Streptomyces bikiniensis. Furthermore, 75.78 μM of calycosin-7-O-β-d-glucoside dramatically decreased 50% of the melanin content on Melan-a cells without any apparent cytotoxicity [1]. Calycosin-7-O-β-D-glucoside was revealed to scavenge NO, inhibit the activities of MMP-2 and MMP-9, and attenuate cell death in the in vitro cultured brain microvascular endothelial cells under OGD condition.

In vivo: Calycosin-7-O-β-D-glucoside treatment significantly reduced infarct volume, histological damage and blood–brain barrier permeability in the in vivo MCAO ischemia–reperfusion rat model [2]. To reveal its physiological functions under stress, seedlings with different isoflavonoid levels were established using a phenylalanine ammonia lyase (PAL) enzyme inhibitor, l-α-aminooxy-β-phenylpropionic acid (AOPP). The results showed that the significant promotion of antioxidant capacity in this species might be associated with the remarkable accumulation of Calycosin-7-O-β-D-glucoside after cold pretreatment. The results provided the first evidence that a type of isoflavonoid, Calycosin-7-O-β-D-glucoside, might play a very important role against freezing stress in vivo [3].