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

Gentiopicroside

Catalog No: tcsc0009015

Available Sizes

Size: 10mg

Size: 25mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
20831-76-9

Formula:
$C_{16}H_{20}O_9$

Pathway:
Metabolic Enzyme/Protease

Target:
Cytochrome P450

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 150 mg/mL (420.97 mM)

Alternative Names:
Gentiopicrin

Observed Molecular Weight:
356.32

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Product Description

Gentiopicroside, a naturally occurring iridoid glycoside, inhibits **P450** activity, with an IC_{50} and a K_i of 61 μM and 22.8 μM for CYP2A6; Gentiopicroside has antianti-inflammatoryand antioxidative effects.

IC50 & Target: IC50: 61 μM (CYP2A6)[1]

Ki: 22.8 μM (CYP2A6)[1]

In Vitro: Gentiopicroside inhibits P450 activity, with an IC_{50} and a K_i of 61 μM and 8.12 μM for CYP2A6, also slightly inhibits CYP2E1 activity with an IC_{50} of 1.6 mM, but shows no inhibition on CYP1A2 and CYP3A4[1]. Gentiopicroside (12.5, 25 and 50 μM) inhibits RANKL-induced osteoclast formation from mouse bone marrow macrophages (BMMs) in a dose-dependent manner, blocks the expression of osteoclast-related proteins, prevents receptor activator of nuclear factor-κB ligand (RANKL)-triggered JNK and NF-κB activation. Gentiopicroside (50 μM) also inhibits RANKL-induced bone resorption[3].

In Vivo: Gentiopicroside (20, 40, and 80 mg/kg, p.o.) significantly reduces gastric ulcerindex in mice. Gentiopicroside (20, 40, and 80 mg/kg) also ovbiously decreases the levels of HSP-70, TNF-α, IL-6, MDA and increases ncreased GSH level and SOD activity. In addition, Gentiopicroside normalizes EGF and VEGF level in mice[2].