

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

Product Description

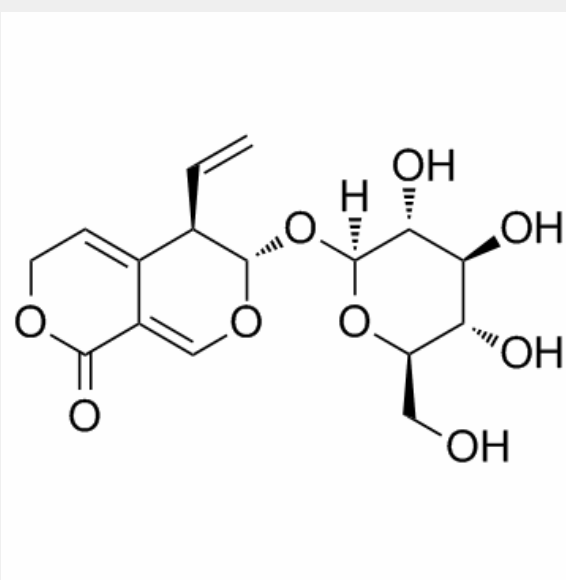
Gentiopicroside, a naturally occurring iridoid glycoside, inhibits **P450** activity, with an IC_{50} and a K_i of 61 μM and 22.8 μM for CYP2A6; Gentiopicroside has anti-inflammatory and antioxidative effects.

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 ulcer index in mice. Gentiopicroside (20, 40, and 80 mg/kg) also obviously decreases the levels of HSP-70, TNF- α , IL-6, MDA and increases increased GSH level and SOD activity. In addition, Gentiopicroside normalizes EGF and VEGF level in mice^[2].



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