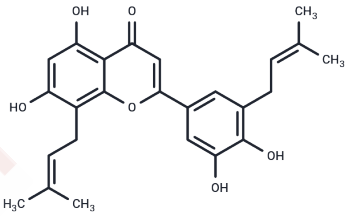
Data Sheet (Cat.No.TN3972)

TargetMol

Epimedokoreanin B

Chemical Properties



CAS No. : 161068-53-7

Formula: C25H26O6

Molecular Weight: 422.47

Storage: Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Epimedokoreanin B is a natural isopentenylflavonoid compound isolated from Korean horny goat weed (Epimedium koreanum Nakai) that exhibits anticancer, anti-inflammatory, and antibacterial activities. Epimedokoreanin B is an anti-periodontitis agent that inhibits the growth and biofilm formation of gingival proteases and Porphyromonas gingivalis. Epimedokoreanin B can inhibit the growth of lung cancer cells through endoplasmic reticulum stress-mediated apoptosis accompanied by autophagy.
Targets(IC50)	Apoptosis,Antibacterial
In vitro	**Methods**: Human myeloma cells U266 and RPMI-8226 were treated with Epimedokoreanin B at gradient concentrations (5, 10, 15 μM) for 48 hours. Apoptosis was assessed via Annexin V/PI double staining. **Results**: Cells exhibited concentration-dependent apoptosis induction. At 15 μM, the apoptosis rate reached 62.2% in U266 cells and 51.81% in RPMI-8226 cells. [1] **Methods**: Human osteosarcoma cells (Saos-2) and mouse osteosarcoma cells (LM8) were treated with Epimedokoreanin B at gradient concentrations (5, 10, 20 μM) for 48-72 hours. Proliferation was assessed using MTT assay or cell counting. **Results**: Concentration-dependent inhibition of proliferation was observed in both osteosarcoma cell lines, accompanied by decreased STAT3 phosphorylation levels. [2]
In vivo	**Methods**: LM8 mouse osteosarcoma cells were subcutaneously implanted into C3H mice to establish a tumor model. Once tumors became palpable, Epimedokoreanin B oral gavage administration commenced at doses of 10 mg/kg or 30 mg/kg, once daily for 14 consecutive days. **Results**: Tumor growth was significantly slowed, with marked reductions in tumor volume and weight observed in both dose groups.[2]

Solubility Information

Solubility	DMSO: 33.33 mg/mL (78.89 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.367 mL	11.8352 mL	23.6703 mL
5 mM	0.4734 mL	2.367 mL	4.7341 mL
10 mM	0.2367 mL	1.1835 mL	2.367 mL
50 mM	0.0473 mL	0.2367 mL	0.4734 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Jia P, et al. Directly targeting G-quadruplexes contributes to the anti-multiple myeloma efficacy of Epimedokoreanin B. Acta Biochim Biophys Sin (Shanghai). 2025 Jul 3.
Pan C, et al. Flavonoid Compounds Contained in Epimedii Herba Inhibit Tumor Progression by Suppressing STAT3 Activation in the Tumor Microenvironment.
Kariu T, et al. Inhibition of gingipains and Porphyromonas gingivalis growth and biofilm formation by prenyl flavonoids. J Periodontal Res. 2017;52(1):89-96.
Pan C, et al. Flavonoid Compounds Contained in Epimedii Herba Inhibit Tumor Progression by Suppressing STAT3 Activation in the Tumor Microenvironment. Front Pharmacol. 2020;11:262.