

Saponarin

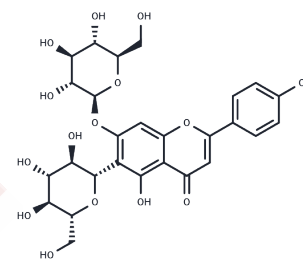
Chemical Properties

CAS No. : 20310-89-8

Formula: C₂₇H₃₀O₁₅

Molecular Weight: 594.52

Storage: Store at low temperature, Keep away from direct sunlight
 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	Saponarin (Petrocosmoside) shows in vitro and in vivo hepatoprotective and antioxidant activity against CCl ₄ -induced liver damage.
Targets(IC ₅₀)	ERK,NF-κB,AMPK,COX,Cytochromes P450,Interleukin,p38 MAPK,PERK
In vitro	In freshly isolated rat hepatocytes, paracetamol (100 μ mol) led to a significant decrease in cell viability, increased LDH leakage, decreased levels of cellular GSH, and elevated MDA quantity. Saponarin (60-0.006 μ g/mL) preincubation, however, significantly ameliorated paracetamol-induced hepatotoxicity in a concentration-dependent manner. The beneficial effect of Saponarin was also observed in vivo. Rats were challenged with paracetamol alone (600 mg/kg, i.p.) and after 7-day pretreatment with Saponarin (80 mg/kg, oral gavage). Paracetamol toxicity was evidenced by increase in MDA quantity and decrease in cell GSH levels and antioxidant defence system. No changes in phase I enzyme activities of AH and EMND and cytochrome P 450 quantity were detected. Saponarin pretreatment resulted in significant increase in cell antioxidant defence system and GSH levels and decrease in lipid peroxidation. The biochemical changes are in good correlation with the histopathological data. Protective activity of Saponarin was similar to the activity of positive control silymarin[1].

Solubility Information

Solubility	DMSO: 90 mg/mL (151.38 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.682 mL	8.4101 mL	16.8203 mL
5 mM	0.3364 mL	1.682 mL	3.3641 mL
10 mM	0.1682 mL	0.841 mL	1.682 mL
50 mM	0.0336 mL	0.1682 mL	0.3364 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

Hepatoprotective and antioxidant effects of saponarin, isolated from *Gypsophila trichotoma* Wend. on paracetamol-induced liver damage in rats. *Biomed Res Int.* 2013;2013:757126.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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