

Isosaponarin

Chemical Properties

CAS No. : 19416-87-6

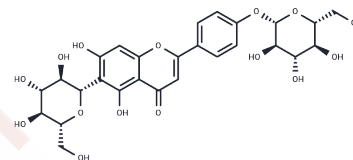
Formula: C₂₇H₃₀O₁₅

Molecular Weight: 594.52

Keep away from direct sunlight

Storage: 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	Isosaponarin is a natural product with multiple activities. It inhibits the increase in Ca ²⁺ levels induced by 4-aminopyridine in rat synaptosomes without affecting the membrane potential of synaptosomes, while reducing the phosphorylation of PKC, PKC α , SNAP-25, and MARCKS, thereby inhibiting the release of glutamate from vesicles in synaptosomes.
Targets(IC50)	PKC,TGF-beta/Smad
In vitro	<p>Methods: Human fibroblasts were treated with Isosaponarin at concentrations of 0.001-0.1 μg/mL for 24 hours to evaluate its effects on collagen synthesis and the expression of related proteins.</p> <p>Results: Isosaponarin promoted collagen synthesis, which was closely associated with the upregulation of TβR-II and P4H production. [1]</p>
In vivo	<p>Methods: A single oral dose of 50 mg/kg Isosaponarin was administered to 6-week-old female ICR mice to investigate its intestinal metabolism as well as absorption and excretion in the body.</p> <p>Results: Isosaponarin was metabolized to Isovitexin in the intestine, and most of it was not absorbed but excreted via feces. [2]</p>

Solubility Information

Solubility	DMSO: 100 mg/mL (168.2 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

The effect of isosaponarin isolated from wasabi leaf on collagen synthesis in human fibroblasts and its underlying mechanism. *J Nat Med.* 2010 Jul;64(3):305-12.

Hashimoto, et al. Dietary Isosaponarin is Intestinally Metabolized to Isovitexin, Most of Which are Excreted in Feces without Being Absorbed. *Asian Journal of Food Research and Nutrition*,2(3):104-116.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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