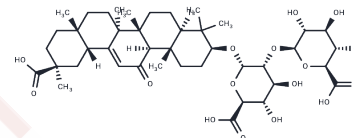


Glycyrrhizic acid

Chemical Properties

CAS No. :	1405-86-3
Formula:	C42H62O16
Molecular Weight:	822.93
Storage:	Store under nitrogen Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	Glycyrrhizic acid (Glycyrrhizin), the active ingredient in licorice, is a triterpene saponins and an antagonist of HMGB1. Glycyrrhizic acid has the potential to be used in cancer, diabetes and other research.
Targets(IC50)	MAO,Dehydrogenase,Virus Protease
In vitro	METHODS: MDCK cells were treated with Glycyrrhizic acid for 48 hours and cell growth inhibition was measured using MTT assay. RESULTS: Glycyrrhizic acid inhibited the growth of MDCK cells (EC50=15.2 μM). [1] METHODS: African green monkey Vero E6 cells were treated with Glycyrrhizic acid for 48 hours and cell growth inhibition was determined using MTT assay. RESULTS: Glycyrrhizic acid showed no inhibitory effect on the growth of Vero E6 cells (CC50>100 μM). [2]
In vivo	METHODS: To study the anti-inflammatory activity of Glycyrrhizic acid, Glycyrrhizic acid (50 mg/kg) was injected intraperitoneally to iodine-induced NOD.H-2h4 mice. RESULTS: Dihydroartemisinin significantly reduced the levels of TgAb, HMGB1, TNF-α, IL-6, and IL-1β in the mice and effectively alleviated thyroiditis in the mice. [3]

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: 93 mg/mL (113.01 mM),Sonication is recommended. DMSO: 257.5 mg/mL (312.91 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	5% DMSO+95% Saline: 4.65 mg/mL (5.65 mM),Solution. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.2152 mL	6.0759 mL	12.1517 mL
5 mM	0.243 mL	1.2152 mL	2.4303 mL
10 mM	0.1215 mL	0.6076 mL	1.2152 mL
50 mM	0.0243 mL	0.1215 mL	0.243 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

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