Data Sheet (Cat.No.T0036)

TargetMol

18β-Glycyrrhetinic acid

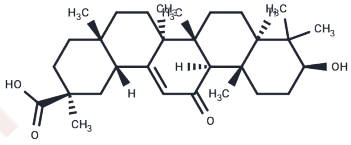
Chemical Properties

CAS No. : 471-53-4

Formula: C30H46O4

Molecular Weight: 470.68

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	18β-Glycyrrhetinic acid (Enoxolone) is the major bioactive component of Glycyrrhizae Radix and possesses anti-ulcerative, anti-inflammatory and antiproliferative properties.
Targets(IC50)	Endogenous Metabolite,Dehydrogenase
In vitro	MTS assay demonstrates that 24 h treatment of Enoxolone suppresses cell proliferation in both cell lines in a dose-dependent manner. Enoxolone at 160 μM significantly decreases the percentage of viable cells to around 40.5±10.5% in A549 and 38.3±4.6% in NCI-H460 ($p<0.01$ respectively). When the cells are treated with 320 μM Enoxolone, a greater inhibitory effects on cell proliferation is shown, as the percentage of viable cells is below 30% compare with untreated controls ($p<0.001$). Treatment with Enoxolone at 160 μM and 320 μM decreases the levels of full-length PARP and increases the levels of cleaved-PARP.
In vivo	Rats in Enoxolone+Triptolide (TP) group which receive low-dose Enoxolone (50?mg/kg) have significant reductions in the three serum parameters when compare with TP rats. Rats in Enoxolone+TP group which receive the high-dose Enoxolone (100?mg/kg) have slightly lowered the levels of three liver enzymes, the reductions do not reach statistical significance compare with TP group. Contrastingly, preadministration of low-dose Enoxolone protects animals from TP-induced hepatic lesions. On the contrary, low-dose Enoxolone (50?mg/kg) markedly suppresses the release of the four cytokines above.

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 252.5 mg/mL (536.46 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.25 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1246 mL	10.6229 mL	21.2459 mL
5 mM	0.4249 mL	2.1246 mL	4.2492 mL
10 mM	0.2125 mL	1.0623 mL	2.1246 mL
50 mM	0.0425 mL	0.2125 mL	0.4249 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

Boldt J, et al. Expert Opin PharmacOthers. 2007, 8(13):2135-47.
Zhang H, Cai J, Li C, et al.Wogonin inhibits latent HIV-1 reactivation by downregulating histone crotonylation. Phytomedicine.2023: 154855.