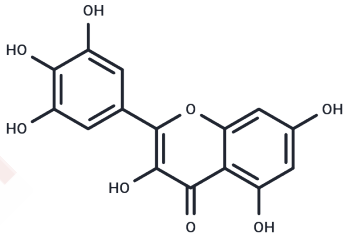
Data Sheet (Cat.No.T0579)

TargetMol

Myricetin

Chemical Properties



CAS No. : 529-44-2

Formula: C15H10O8

Molecular Weight: 318.24

Storage: Keep away from direct sunlight,Keep away from moisture
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	Myricetin (Cannabiscetin) is a natural flavonoid and MEK1 inhibitor. Myricetin has hypoglycemic, antioxidant, hepatoprotective, anti-tumor and anti-inflammatory activities.
Targets(IC50)	Apoptosis,Endogenous Metabolite,Autophagy,PI3K
In vitro	**METHODS**: Human hepatocellular carcinoma cells HepG2 and Huh-7 were treated with Myricetin (100-200 μM) for 72 h. Cell viability was measured by CCK-8 assay. **RESULTS**: Myricetin significantly inhibited cell growth in a dose-dependent manner. [1] **METHODS**: Ovarian cancer cells A2780 and OVCAR3 were treated with Myricetin (25 μM) for 48 h. Apoptosis was detected by single stranded-DNA Apoptosis ELISA kit. **RESULTS**: In A2780 cells treated with Myricetin, an approximately 2.5-fold increase in apoptotic signaling was observed compared to untreated cells, whereas under similar treatment conditions, apoptotic signaling in OVCAR3 cells increased approximately 4-fold compared to untreated cells. [2]
In vivo	**METHODS**: To detect anti-tumor activity in vivo, Myricetin (30 mg/kg once a day) and cisplatin (5 mg/kg every three days) were intraperitoneally injected into BALB/c nude mice bearing Huh-7 xenografts for two weeks. **RESULTS**: Treatment with Myricetin or cisplatin alone moderately inhibited tumor growth, but the combination treatment inhibited tumor growth more significantly than Myricetin or cisplatin alone. [1]
Cell Research	Pancreatic cancer cells (MIA PaCa-2, Panc-1 or S2-013) or normal pancreatic ductal cells (PDCs) are treated with myricetin (12.5-200 μM). Cell viability is determined using the Dojindo Cell Counting Kit-8. Cells are seeded onto a 96-well plate at 1×104 cells per well and allowed to adhere overnight. After treatment with myricetin at various concentrations for 24 hours, 10 μL of the tetrazolium substrate is added to each well of the plate. Plates are incubated at 37°C for 1 hour, after which the absorbance at 450 nm is measured[2].

Solubility Information

Solubility	Ethanol: 20 mg/mL (62.85 mM),Heating is recommended. DMSO: 55 mg/mL (172.83 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 6.3 mg/mL (19.8 mM),Solution. *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	3.1423 mL	15.7114 mL	31.4228 mL
5 mM	0.6285 mL	3.1423 mL	6.2846 mL
10 mM	0.3142 mL	1.5711 mL	3.1423 mL
50 mM	0.0628 mL	0.3142 mL	0.6285 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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