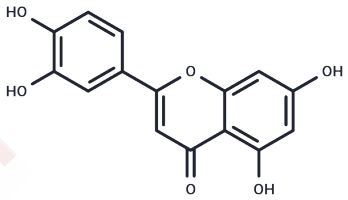
Data Sheet (Cat.No.T1027)

TargetMol

Luteolin

Chemical Properties



CAS No. : 491-70-3

Formula: C15H10O6

Molecular Weight: 286.24

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Luteolin (Luteolol) belongs to the flavonoid group of natural products and is a Nrf2 inhibitor, PDE inhibitor. Luteolin has a wide range of biological activities including antitumor, antioxidant, anti-inflammatory, antimicrobial, antiviral, antiallergic, and procoagulant.
Targets(IC50)	Apoptosis,Nrf2,Endogenous Metabolite,Autophagy,PDE
In vitro	**METHODS**: ESCC cell lines EC1, EC9706, KYSE30 and KYSE450 were treated with Luteolin (10-80 μM) for 48-72 h. Cell viability was measured using the CCK-8 Assay. **RESULTS**: Luteolin inhibited the growth of ESCC cell lines in a dose-dependent manner with IC50 in the range of 20-60 μM. [1] **METHODS**: Human cervical cancer cells, HeLa, were treated with Luteolin (5-20 μM) for 48 h. Cell cycle profiles were analyzed using Flow Cytometry. **RESULTS**: Luteolin treatment blocked the cell cycle progression of HeLa cells in sub-G1 phase. [2]
In vivo	**METHODS**: To detect anti-tumor activity in vivo, Luteolin (50 mg/kg) was injected intraperitoneally once daily for eighteen days into BALB/C-nu mice bearing ESCC tumor EC1. **RESULTS**: The Luteolin treatment group showed a reduction in tumor size and a reduction in total tumor weight of about 65%. [1] **METHODS**: To study the effect on intestinal mucositis, Luteolin (3-30 mg/kg in water plus 1% Tween) was administered by gavage or intraperitoneally to irinotecan-induced intestinal mucositis in Swiss mice once a day for fourteen days. **RESULTS**: Luteolin prevented irinotecan-induced intestinal damage by reducing weight loss and diarrhea scores as well as attenuating duodenal and colonic shortening. [3]

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble), 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5.7 mg/mL (19.91 mM),Suspension. DMSO: 55 mg/mL (192.15 mM),Sonication is recommended. Ethanol: 3 mg/mL (10.48 mM),Heating is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.4936 mL	17.4679 mL	34.9357 mL
5 mM	0.6987 mL	3.4936 mL	6.9871 mL
10 mM	0.3494 mL	1.7468 mL	3.4936 mL
50 mM	0.0699 mL	0.3494 mL	0.6987 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.

Reference

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