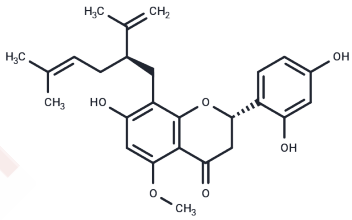
Data Sheet (Cat.No.T5S0993)

TargetMol

Kurarinone

Chemical Properties



CAS No. : 34981-26-5

Formula: C26H30O6

Molecular Weight: 438.51

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	Kurarinone is a flavonoid extracted from the shrub Sophora flavescens, which has anti-tumor, estrogenic and anti-inflammatory activities, and also has a strong inhibitory effect on immune responses.
Targets(IC50)	Bcl-2 Family,NF-κB,STAT,IκB/IKK,JAK,PERK,TNF
In vitro	**METHODS**: To test the cytotoxicity of kurarinone on HMC3 cells, we treated HMC3 cells with different concentrations of kurarinone (10, 20, 40 or 80 μM) for 24 hours. **RESULTS** HMC3 cell viability was reduced after treatment with 80 μM Kur. **METHODS**: Two human small cell lung cancer (SCLC) cell lines H1688 and H146, and an immortalized bronchial epithelial cell line BEAS-2B were treated with different concentrations of kurarinone (3.125 ~ 50 μM), and the IC50 was determined. **RESULTS** The IC50 values of kurarinone against H1688, H146 and BEAS-2B cells were 12.5±4.7, 30.4±5.1 and 55.8±4.9 μM respectively. [3]
In vivo	**METHODS**: Arthritis was reproduced in DBA/1 mice by inducing bovine type II collagen (CII) as a collagen-induced arthritis (CIA) model. After establishment of CIA, kurarinone (100 mg/kg/day) was administered orally from day 21 to day 42, and severity was determined based on symptom scoring scales and histopathology. ELISA and flow cytometry were used to detect the cytokine levels, anti-cii antibody levels, and T cell proliferation and lineage in the draining lymph nodes, respectively. **RESULTS** kurarinone treatment reduced the severity of arthritis in CIA mice and reduced the levels of pro-inflammatory cytokines TNF-α, IL-6, IFN-γ and IL-17A in serum and foot tissue. [1]

Solubility Information

Solubility	DMSO: 235 mg/mL (535.91 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 (4.56 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	2.2804 mL	11.4022 mL	22.8045 mL
5 mM	0.4561 mL	2.2804 mL	4.5609 mL
10 mM	0.228 mL	1.1402 mL	2.2804 mL
50 mM	0.0456 mL	0.228 mL	0.4561 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

Sun CP, et al. Kurarinone alleviated Parkinson's disease via stabilization of epoxyeicosatrienoic acids in animal model. Proc Natl Acad Sci U S A. 2022 Mar 1;119(9):e2118818119.

Jia ZQ,et al. Kurarinone alleviates hemin-induced neuroinflammation and microglia-mediated neurotoxicity by shifting microglial M1/M2 polarization via regulating the IGF1/PI3K/Akt signaling. Kaohsiung J Med Sci. 2022 Dec; 38(12):1213-1223.

Chung TW,et al. Antitumor effect of kurarinone and underlying mechanism in small cell lung carcinoma cells. Onco Targets Ther. 2019 Aug 5;12:6119-6131.