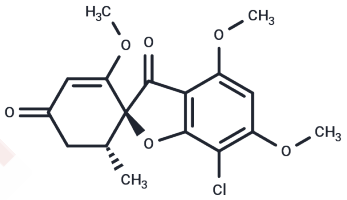
Data Sheet (Cat.No.T1382)

TargetMol

Griseofulvin

Chemical Properties



CAS No. : 126-07-8

Formula: C17H17ClO6

Molecular Weight: 352.77

Storage: Store at low temperature
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	Griseofulvin (Fulvicin) is an antifungal agent used in the treatment of TINEA infections.
Targets(IC50)	Apoptosis,Bcl-2 Family,Caspase,Microtubule Associated,Endogenous Metabolite, Antibiotic,Antifungal,Wee1
In vitro	Griseofulvin exhibits effective anti-infective activity in vivo. When administered in conjunction with nocodazole (5 mg/kg), Griseofulvin significantly enhances the efficacy of nocodazole, resulting in the cessation of tumor growth.
In vivo	In vitro tests have demonstrated that the minimum inhibitory concentration (MIC) of Griseofulvin against various dermatophytes ranges between 0.14 to 0.6 μg/mL. Griseofulvin's primary mechanism of action on cellular mitosis is the disassembly of spindle microtubules. Additionally, Griseofulvin has the capacity to induce chromosomal structural abnormalities in mammalian cells. It is effective in combating different types of skin fungi, including species from the genera Microsporum, Trichophyton, and Epidermophyton. However, it is not sensitive to other fungi, such as Scopulariopsis and Hendersonula, and has almost no effect on yeasts.
Cell Research	The cells (5× 103/mL) are incubated in triplicate in a 96-well plate in the presence or absence of indicated concentration of Griseofulvin in a final volume of 0.2 mL for different time intervals at 37 ℃. Thereafter, 20 μL MTT solution (5 mg/mL in PBS) is added to each well. After a 2-hour incubation at 37 ℃, 0.1 mL lysis buffer (20% SDS, 50% dimethylformamide) is added, incubation is continued overnight at 37 ℃, and then the optical density at 570 nm is measured by plate reader. (Only for Reference)

Solubility Information

Solubility	DMSO: 62.5 mg/mL (177.17 mM),Sonication is recommended. Ethanol: < 1 mg/mL (insoluble or slightly soluble), 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: 2 mg/mL (5.67 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*

In vivo Formulation	*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	2.8347 mL	14.1735 mL	28.3471 mL
5 mM	0.5669 mL	2.8347 mL	5.6694 mL
10 mM	0.2835 mL	1.4174 mL	2.8347 mL
50 mM	0.0567 mL	0.2835 mL	0.5669 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

De Carli L, et al. Mutat Res, 1988, 195(2), 91-126.
Ho YS, et al. Int J Cancer, 2001, 91(3), 393-401.
Rajendran P, et al. Clin Cancer Res, 2011, 17(6), 1425-1439.