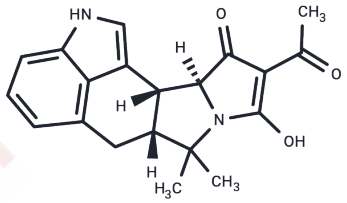
Data Sheet (Cat.No.T15027)

TargetMol

Cyclopiazonic acid

Chemical Properties



CAS No. : 18172-33-3

Formula: C20H20N2O3

Molecular Weight: 336.38

Storage: Store at low temperature,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	Cyclopiazonic acid (CPA) is a neurotoxic secondary metabolite (SM) made by A. flavus. Cyclopiazonic acid (CPA) is an endoplasmic reticulum calcium ATPase (Ca2+ATPase; SERCA)nanomolar inhibitor and a potent inducer of cell death in plants.
Targets(IC50)	Apoptosis,Calcium Channel,5-HT Receptor,RSV,MDM-2/p53

Solubility Information

Solubility	DMSO: 100 mg/mL (297.28 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: 4 mg/mL (11.89 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	2.9728 mL	14.8641 mL	29.7283 mL
5 mM	0.5946 mL	2.9728 mL	5.9457 mL
10 mM	0.2973 mL	1.4864 mL	2.9728 mL
50 mM	0.0595 mL	0.2973 mL	0.5946 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

Chalivendra SC, et al. Cyclopiazonic Acid Is a Pathogenicity Factor for Aspergillus flavus and a Promising Target for Screening Germplasm for Ear Rot Resistance. Mol Plant Microbe Interact. 2017 May;30(5):361-373.