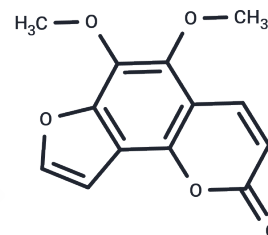


## pimpinellin

## Chemical Properties

CAS No. :	131-12-4
Formula:	C <sub>13</sub> H <sub>10</sub> O <sub>5</sub>
Molecular Weight:	246.22
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	Pimpinellin is a natural product that acts as antagonist of proteins with GABA receptor activity.
Targets(IC50)	Apoptosis, Anti-infection, GABA Receptor
In vitro	Pimpinellin had potent cytotoxic activities against the three cell lines, with the IC <sub>50</sub> values of 14.4±0.3µM, 20.4±0.5µM, and 29.2±0.6µM, respectively. The mechanism of the antitumor action indicated that pimpinellin inhibited the growth of MGC-803 cells via the induction of tumor cell apoptosis, with apoptosis ratio of 27.44% after 72h of treatment at 20µM.

## Solubility Information

Solubility	DMSO: 49 mg/mL (199.01 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2 mg/mL (8.12 mM), Sonication is recommended. <i>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.</i>

### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	4.0614 mL	20.307 mL	40.6141 mL
5 mM	0.8123 mL	4.0614 mL	8.1228 mL
10 mM	0.4061 mL	2.0307 mL	4.0614 mL
50 mM	0.0812 mL	0.4061 mL	0.8123 mL

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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

Yang S , Liu M , Liang N , et al. Discovery and antitumor activities of constituents from *Cyrtomium fortunei* (J.) Smith rhizomes[J]. Chemistry Central Journal, 2013, 7(1):24.

Li S, Kelly C, Knob R, et al. Analysis of Coumarin-Based Phototoxins in Citrus-Derived Essential Oils Using Liquid Chromatography-Mass Spectrometry. *Chromatographia*. 2023: 1-11.

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