

Herniarin

Chemical Properties

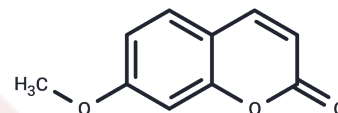
CAS No. : 531-59-9

Formula: C₁₀H₈O₃

Molecular Weight: 176.17

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	Herniarin (Ayapanin) is a natural coumarin with antitumor effect.
Targets(IC50)	Apoptosis,Others,Antibacterial
In vitro	Herniarin is cytotoxic to the breast carcinoma cell line MCF-7 (IC50: 207.6 μM) and induces apoptosis in MCF-7 cells at 100 μM [1]. While Herniarin alone shows no significant cytotoxicity on transitional cell carcinoma (TCC) cells, it significantly enhances the antitumor effect of cisplatin (5 μg/mL) at 80 μg/mL and increases chromatin condensation [2].

Solubility Information

Solubility	DMSO: 50 mg/mL (283.82 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 (11.35 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

	1mg	5mg	10mg
1 mM	5.6763 mL	28.3817 mL	56.7634 mL
5 mM	1.1353 mL	5.6763 mL	11.3527 mL
10 mM	0.5676 mL	2.8382 mL	5.6763 mL
50 mM	0.1135 mL	0.5676 mL	1.1353 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

Mousavi SH, et al. Comparative analysis of the cytotoxic effect of 7-prenyloxy coumarin compounds and herniarin on MCF-7 cell line. *Avicenna J Phytomed.* 2015 Nov-Dec;5(6):520-30.

Haghighitalab A, et al. Enhancement of cisplatin cytotoxicity in combination with herniarin in vitro. *Drug Chem Toxicol.* 2014 Apr;37(2):156-62.

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