

Ligustilide

Chemical Properties

CAS No. : 4431-01-0

Formula: C₁₂H₁₄O₂

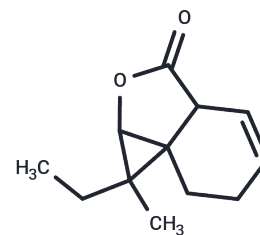
Molecular Weight: 190.24

Storage:

Store at low temperature, The compound is unstable in solution. Please use soon

Powder: -20°C for 3 years

Actual storage temperature shall be subject to the COA.



Biological Description

Description	3-Butylidene-4,5-dihydrophthalide is an effective constituent extracted from Angelica sinensis.
Targets(IC50)	Apoptosis, Autophagy
In vitro	To investigate the neuroprotective of ligustilide (LIG) against glutamate-induced apoptosis of PC12 cells, cell viability were examined by MTT assay. Pretreatment with ligustilide (1, 5, 15 μmol · L ⁻¹) significantly improved cell viability. The apoptosis rate in glutamate-induced PC12 cells was 13.39%, and decreased in the presence of ligustilide (1, 5, 15 μmol · L ⁻¹) by 9.06%, 6.48%, 3.82%, separately. Extracellular accumulation of Ca ²⁺ induced by glutamate were significantly reduced by ligustilide .

Solubility Information

Solubility	DMSO: 1.91 mg/mL (10.04 mM), Sonication is recommended. (The compound is unstable in solution, please use soon.) (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (5.26 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	5.2565 mL	26.2826 mL	52.5652 mL
5 mM	1.0513 mL	5.2565 mL	10.513 mL
10 mM	0.5257 mL	2.6283 mL	5.2565 mL
50 mM	0.1051 mL	0.5257 mL	1.0513 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

Wu Q, et al. Protective effect of ligustilide against glutamate-induced apoptosis in PC12 cells. Yao Xue Xue Bao. 2015 Feb;50(2):162-8.

Du H, et al. A cell membrane chromatography method for investigation of 5-hydroxytryptamine receptor-ligustilide interaction. Se Pu. 2015 May;33(5):530-4.

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