

## Chelidonine

## Chemical Properties

CAS No. : 476-32-4

Formula: C<sub>20</sub>H<sub>19</sub>NO<sub>5</sub>

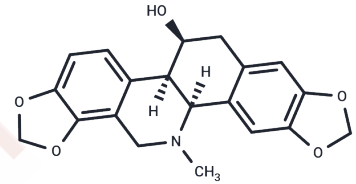
Molecular Weight: 353.37

Keep away from direct sunlight, Keep away from moisture

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	1. Chelidonine (Stylophorin) isolated from <i>Chelidonium majus</i> efficiently induced apoptosis in HeLa cells through possible alteration of p38-p53 and AKT/PI3 kinase signalling pathways. 2. Chelidonine is a promising model compound for overcoming MDR and for enhancing cytotoxicity of chemotherapeutics, especially against leukaemia cells, its efficacy needs to be confirmed in animal models. 3. Chelidonine may be a potential therapeutic agent against metastasis of invasive human cancer cells, exhibits antimigratory and antiinvasive effects in MDA-MB-231 cells, by suppressing COL-induced integrin signaling, through inhibiting the formation of the IPP complex and subsequent downregulation of IPP downstream signaling molecules, such as Akt and ERK1/2.
Targets(IC50)	Apoptosis, Influenza Virus

## Solubility Information

Solubility	Chloroform, Dichloromethane, Ethyl Acetate, Acetone, etc.: Soluble, DMSO: 150 mg/mL (424.48 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (28.3 mM), Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (28.3 mM), Solution. <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	2.8299 mL	14.1495 mL	28.299 mL
5 mM	0.566 mL	2.8299 mL	5.6598 mL
10 mM	0.283 mL	1.4149 mL	2.8299 mL
50 mM	0.0566 mL	0.283 mL	0.566 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

Kim O , Hwangbo C , Kim J , et al. Chelidonine suppresses migration and invasion of MDA-MB-231 cells by inhibiting formation of the integrin-linked kinase/PINCH/ $\alpha$ -parvin complex[J]. Molecular Medicine Reports, 2015.  
Liang X, Cao Y, Duan Z, et al. Discovery of New Small Molecule Inhibitors of the BPTF Bromodomain. Bioorganic Chemistry. 2023: 106453.

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