

## Dihydroevocarpine

## Chemical Properties

CAS No. : 15266-35-0

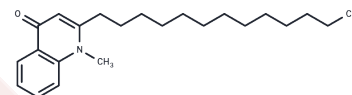
Formula: C<sub>23</sub>H<sub>35</sub>NO

Molecular Weight: 341.53

Keep away from direct sunlight

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	Dihydroevocarpine (1-methyl-2-tridecylquinolin-4-one) induces AML cytotoxicity, apoptosis and G <sub>0</sub> /G <sub>1</sub> blockade, and inhibits tumor growth by inhibiting mTORC1/2 activity and the mTOR pathway in an acute myeloid leukemia (AML) xenograft model.
Targets(IC <sub>50</sub> )	mTOR
In vitro	Dihydroevocarpine exhibits moderate in vitro cytotoxicity against CCRF-CEM and CEM/ADR5000 leukemia cell lines, with IC <sub>50</sub> values of 14.08 μM and 33.14 μM, respectively. [1]
In vivo	BALB/C nude mice bearing subcutaneous HL-60 leukemia cells were treated with intraperitoneal injections of Dihydroevocarpine (10 mg/kg/day) for 20 days, resulting in a significant antitumor effect.[2]

## Solubility Information

Solubility	DMSO: 10 mg/mL (29.28 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: 1 mg/mL (2.93 mM), Suspension. <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	2.928 mL	14.640 mL	29.280 mL
5 mM	0.5856 mL	2.928 mL	5.856 mL
10 mM	0.2928 mL	1.464 mL	2.928 mL
50 mM	0.0586 mL	0.2928 mL	0.5856 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

Adams M, Mahringer A, Kunert O, Fricker G, Efferth T, Bauer R. Cytotoxicity and p-glycoprotein modulating effects of quinolones and indoloquinazolines from the Chinese herb *Evodia rutaecarpa*. *Planta Med.* 2007 Dec;73(15):1554-7.

Zhang S, Xiong Y, Zhang Y, Zhao H. Targeting of mTORC1/2 by dihydroevocarpine induces cytotoxicity in acute myeloid leukemia. *J Cell Physiol.* 2019 Aug;234(8):13032-13041.

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