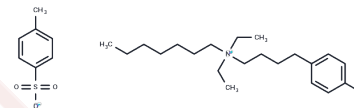


## Clofilium tosylate

### Chemical Properties

CAS No. : 92953-10-1  
 Formula: C<sub>28</sub>H<sub>44</sub>ClNO<sub>3</sub>S  
 Molecular Weight: 510.17  
 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	Clofilium tosylate is a potassium channel blocker, induces apoptosis on human promyelocytic leukemia (HL-60) cells.
Targets(IC50)	Apoptosis,Potassium Channel
In vitro	Treatment with 0-20 $\mu$ M Clofilium inhibits viability and proliferation in a time- and concentration-dependent manner in HL-60 cells. Cell viability is significantly reduced in HL-60 cells treated with 2.5 $\mu$ M to 10 $\mu$ M Clofilium After 12 hours. Treatment with 10 $\mu$ M Clofilium induces the proteolytic cleavage of inactive procaspase-3, p34 into its active form, p17 and subsequent cleavage of its substrate PARP.. However, the expression of Bcl-2 and Bax proteins does not change significantly[1].

### Solubility Information

Solubility	DMSO: 100 mg/mL (196.01 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: 4 mg/mL (7.84 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	1.9601 mL	9.8007 mL	19.6013 mL
5 mM	0.392 mL	1.9601 mL	3.9203 mL
10 mM	0.196 mL	0.9801 mL	1.9601 mL
50 mM	0.0392 mL	0.196 mL	0.392 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

Choi BY, et al. Clofilium, a potassium channel blocker, induces apoptosis of human promyelocytic leukemia (HL-60) cells via Bcl-2-insensitive activation of caspase-3. *Cancer Lett.* 1999 Dec 1;147(1-2):85-93.

Tyshkovskiy A, Ma S, Shindyapina A V, et al. Distinct longevity mechanisms across and within species and their association with aging. *Cell.* 2023

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