

SY-640

## Chemical Properties

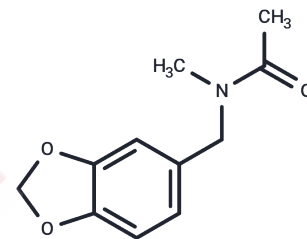
CAS No. : 168705-70-2

Formula: C<sub>11</sub>H<sub>13</sub>NO<sub>3</sub>

Molecular Weight: 207.23

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	SY-640 is an Acetamide derivative. SY-640 exhibits potent hepatoprotective effect. SY-640 reduces liver injury in mice induced by Propionibacterium acnes and Lipopolysaccharide.
Targets(IC50)	Endogenous Metabolite
In vitro	SY-640 attenuates the increased expression of leukocyte function-associated antigen-1 and inhibits the number of liver-infiltrating cells[1].
In vivo	SY-640, administered orally at a dose of 150 mg/kg once daily for three days, significantly elevates both cytochrome P-450 content and aminopyrine demethylase activity in the liver microsomes of mice. However, hepatic microsomal aminopyrine demethylase activity notably decreases two hours post-administration. Furthermore, a seven-day regimen of the same dose markedly reduces liver injury induced by Propionibacterium acnes and Lipopolysaccharide, whereas a single dose proves ineffective.

## Solubility Information

Solubility	DMSO: 95 mg/mL (458.43 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: 3.3 mg/mL (15.92 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	4.8256 mL	24.1278 mL	48.2556 mL
5 mM	0.9651 mL	4.8256 mL	9.6511 mL
10 mM	0.4826 mL	2.4128 mL	4.8256 mL
50 mM	0.0965 mL	0.4826 mL	0.9651 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

P F Li, et al. [Inhibitory effect of 2-(N-acetyl-methyl amino)-3',4'-methylenedioxyacetyl-aminophene(SY-640) on covalent binding of carcinogenic benzo(a)pyrene with mouse hepatocyte nuclear DNA]. Yao Xue Xue Bao. 1997 Sep;32(9):663-8.

Y Tanaka, et al. Hepatoprotective effect of SY-640, a novel acetamide derivative, on Propionibacterium acnes and lipopolysaccharide-induced liver injury in mice. Arch Int Pharmacodyn Ther. Mar-Apr 1995;329(2):319-30.

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