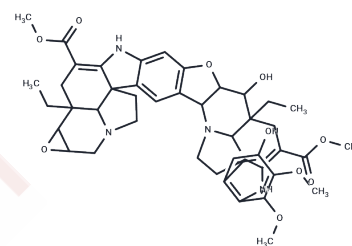


## Conophylline

## Chemical Properties

|                   |   |
|-------------------|---|
| CAS No. :         | 142741-24-0   |
| Formula:          | C44H50N4O10   |
| Molecular Weight: | 794.89  |
| Storage:          | Powder: -20°C for 3 years   In solvent: -80°C for 1 year<br>Actual storage temperature shall be subject to the COA. |



## Biological Description

|               |   |
|---------------|---|
| Description   | Conophylline is a natural alkaloid extracted from a tropical plant <i>Ervatamia microphylla</i> . Conophylline is a differentiation inducer of for pancreatic cells and suppresses HSC and induces apoptosis.   |
| Targets(IC50) | Apoptosis,Others  |
| In vitro      | Conophylline (100 ng/ml; 48 hours) reproduces differentiation-inducing activity but not the apoptosis-inducing activity of activin. Conophylline (100 ng/ml; 72 hours) exhibits the differentiation-inducing activity in AR42J cells and converts these cells to endocrine cells. Conophylline increases the expression of neurogenin-3 by activating p38 mitogen-activated protein kinase to induce differentiation of AR42J cells [1]. Conophylline inhibits DNA synthesis induced by serum. Conophylline reduces the expression of $\alpha$ -SMA and collagen-1 in rat HSC and Lx-2 cells. Conophylline also promotes activation of caspase-3 and induces apoptosis in Lx-2 Cells [2]. |
| In vivo       | Conophylline (0.9 mg/kg; p.o.; daily; for 12 weeks) attenuates the formation of the liver fibrosis induced by TAA in vivo [2].  |

## Preparing Stock Solutions

|       | 1mg       | 5mg       | 10mg       |
|-------|-----------|-----------|------------|
| 1 mM  | 1.258 mL  | 6.2902 mL | 12.5804 mL |
| 5 mM  | 0.2516 mL | 1.258 mL  | 2.5161 mL  |
| 10 mM | 0.1258 mL | 0.629 mL  | 1.258 mL   |
| 50 mM | 0.0252 mL | 0.1258 mL | 0.2516 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

Kojima I, et al. Conophylline: a novel differentiation inducer for pancreatic beta cells. Int J Biochem Cell Biol. 2006; 38(5-6):923-30.

Kubo N, et al. Conophylline suppresses hepatic stellate cells and attenuates thioacetamide-induced liver fibrosis in rats. Liver Int. 2014 Aug;34(7):1057-67.

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