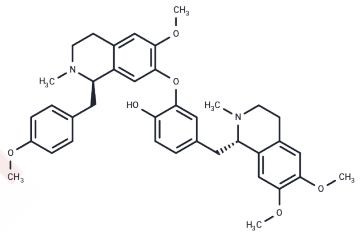
Data Sheet (Cat.No.T5S1097)

TargetMol

Neferine

Chemical Properties



CAS No. : 2292-16-2

Formula: C38H44N2O6

Molecular Weight: 624.77

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. Neferine ((-)-Neferine) has anti-tumor activities , Metabolic activation mediated by CYP3A4 and GSH depletion enhanced Neferine-induced cytotoxicity. 2. Neferine can be helpful to increase the efficacy of DOX and to achieve anticancer synergism by curbing the toxicity. 3. Neferine inhibited high glucose-induced endothelial apoptosis via blocking ROS/Akt/NF-κB pathway, which provides the evidence for using Neferine to treat diabetic vasculopathy. 4. Neferine induced apoptosis in a dose-dependent manner with the hypergeneration of reactive oxygen species, activation of MAPKs, lipid peroxidation, depletion of cellular antioxidant pool, loss of mitochondrial membrane potential, and intracellular calcium accumulation.
Targets(IC50)	Apoptosis,NF-κB,Autophagy

Solubility Information

Solubility	DMSO: 240 mg/mL (384.14 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: 2 mg/mL (3.2 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6006 mL	8.0029 mL	16.0059 mL
5 mM	0.3201 mL	1.6006 mL	3.2012 mL
10 mM	0.1601 mL	0.8003 mL	1.6006 mL
50 mM	0.032 mL	0.1601 mL	0.3201 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

Zhang X , Liu Z , Xu B , et al. Neferine, an alkaloid ingredient in lotus seed embryo, inhibits proliferation of human osteosarcoma cells by promoting p38 MAPK-mediated p21 stabilization[J]. European Journal of Pharmacology, 2012, 677(1-3):47-54.