

Sinapine

Chemical Properties

CAS No. : 18696-26-9

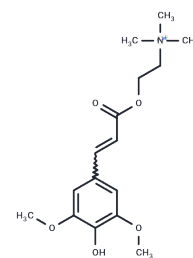
Formula: C₁₆H₂₄N₂O₅

Molecular Weight: 310.37

Storage: Store at low temperature, Keep away from direct sunlight, Keep away from moisture

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. Sinapine, an alkaloid from seeds of the cruciferous species, can be used as an effective natural compound for chemo-resistance. 2. Sinapine has antioxidant and radio-protective activities. |
| Targets(IC50) | Antioxidant, Cholinesterase (ChE), P-gp |

Solubility Information

| | |
|---------------------|---|
| Solubility | Chloroform, Dichloromethane, Ethyl Acetate, Acetone, etc.: Soluble, H ₂ O: < 0.25 mg/mL (0.8 mM, Insoluble or slightly soluble) DMSO: 20 mg/mL (64.44 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 (6.44 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

| | 1mg | 5mg | 10mg |
|-------|-----------|------------|------------|
| 1 mM | 3.222 mL | 16.1098 mL | 32.2196 mL |
| 5 mM | 0.6444 mL | 3.222 mL | 6.4439 mL |
| 10 mM | 0.3222 mL | 1.611 mL | 3.222 mL |
| 50 mM | 0.0644 mL | 0.3222 mL | 0.6444 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

Guo Y , An H , Feng L , et al. Sinapine as an active compound for inhibiting the proliferation of Caco-2 cells via downregulation of P-glycoprotein[J]. Food & Chemical Toxicology, 2014, 67(5):187-192.

Kim K Y, Kang Y M, Lee A, et al. Hydroethanolic Extract of *Lepidium apetalum* Willdenow Alleviates Dextran Sulfate Sodium-Induced Colitis by Enhancing Intestinal Barrier Integrity and Inhibiting Oxidative Stress and Inflammation. *Antioxidants*. 2024, 13(7): 795.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481