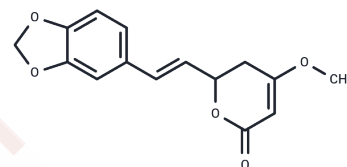


Methysticin

Chemical Properties

CAS No. : 20697-20-5
Formula: C₁₅H₁₄O₅
Molecular Weight: 274.27
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	Methysticin, a major kavalactone extracted from kava, can induce CYP1A1.
Targets(IC50)	Cytochromes P450
In vivo	Methysticin (6 mg/kg) is administered orally once weekly for six months to 6-month-old transgenic APP/Psen1 mice. This treatment initiates activation of the Nrf2 pathway in the mice's hippocampus and cortex. Despite Methysticin not altering A β deposition in the brains of treated APP/Psen1 mice compared to controls, it significantly mitigates microgliosis, astrogliosis, and the secretion of pro-inflammatory cytokines TNF- α and IL-17A. Additionally, Methysticin markedly activates the Nrf2/ARE pathway specifically in the hippocampus and cortex, but not in the midbrain and cerebellum of ARE-luciferase reporter gene mice, leading to a significant increase in the expression of both genes relative to untreated animals.

Solubility Information

Solubility	Ethanol: 1 mg/mL (3.65 mM), Sonication is recommended. DMSO: 5 mg/mL (18.23 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.646 mL	18.2302 mL	36.4604 mL
5 mM	0.7292 mL	3.646 mL	7.2921 mL
10 mM	0.3646 mL	1.823 mL	3.646 mL
50 mM	0.0729 mL	0.3646 mL	0.7292 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

Li Y, et al. Methysticin and 7,8-dihydromethysticin are two major kavalactones in kava extract to induce CYP1A1. Toxicol Sci. 2011 Dec;124(2):388-99.

Fragoulis A, et al. Oral administration of Methysticin improves cognitive deficits in a mouse model of Alzheimer's disease. Redox Biol. 2017 Aug;12:843-853.

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