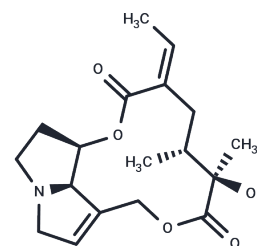


Senecionine

Chemical Properties

CAS No. : 130-01-8
 Formula: C₁₈H₂₅NO₅
 Molecular Weight: 335.39
 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	Cytidine 5'-triphosphate disodium salt is one of the endogenous metabolites and is a cation-permeable ligand-gated ion channel agonist.
Targets(IC50)	Others
In vitro	The cytotoxicity was greater in the absence of extracellular Ca ²⁺ than in its presence, suggesting that alterations in intracellular Ca ²⁺ distribution, and not an influx of extracellular Ca ²⁺ , were responsible for the Senecionine-induced hepatotoxicity [1].
In vivo	Senecionine fails to stimulate epoxide hydrase, it diminishes the activity of glutathione-S-transferase, aminopyrine demethylase and AHH [2]. Twice-weekly injections of senecionine, beginning on Day 12 or later, results in premature deliveries in three of seven rats, and the pups from all litters are stillborn or die shortly after birth [3].
Animal Research	Swiss albino rats weighing 155-175 g are incubated for 3 consecutive days with seneciphylline and senecionine at a daily dose of 40 or 80 mg/kg body wt. Control animals received normal saline only. The animals are killed 24 h after the last dose. The livers are removed, weighed and then homogenized in 1.15% KCl, 0.02 HEPES (pH 7.4) [4].

Solubility Information

Solubility	Ethanol: 1 mg/mL (2.98 mM), Sonication is recommended. DMSO: 1.68 mg/mL (5.01 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9816 mL	14.908 mL	29.816 mL
5 mM	0.5963 mL	2.9816 mL	5.9632 mL
10 mM	0.2982 mL	1.4908 mL	2.9816 mL
50 mM	0.0596 mL	0.2982 mL	0.5963 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

D S Griffin, et al. Effects of the Pyrrolizidine Alkaloid Senecionine and the Alkenals trans-4-OH-hexenal and trans-2-hexenal on Intracellular Calcium Compartmentation in Isolated Hepatocytes. *Biochem Pharmacol.* 1989 Feb 1; 38 (3), 391-7

Kakrani HK, et al. Effect of seneciphylline and senecionine on hepatic drug metabolizing enzymes in rats. *J Ethnopharmacol.* 1984 Dec;12(3):271-8.

Tu ZB, et al. Identification of senecionine and senecionine N-oxide as antifertility constituents in *Senecio vulgaris*. *J Pharm Sci.* 1988 May;77(5):461-3.

Wang C, et al. The comparative pharmacokinetics of two pyrrolizidine alkaloids, senecionine and adonifoline, and their main metabolites in rats after intravenous and oral administration by UPLC/ESIMS. *Anal Bioanal Chem.* 2011 Jul;401(1):275-87.

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