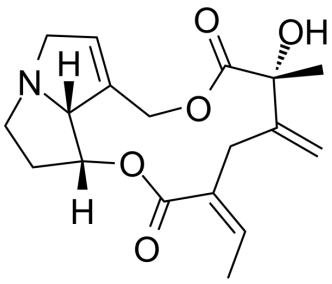
Seneciphylline

Cat. No.:	HY-N1282
CAS No.:	480-81-9
Molecular Formula:	$C_{18}H_{23}NO_5$
Molecular Weight:	333.38
Target:	Gutathione S-transferase; Cytochrome P450
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 7.69 mg/mL (23.07 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.9996 mL	14.9979 mL	29.9958 mL
	5 mM	0.5999 mL	2.9996 mL	5.9992 mL
	10 mM	0.3000 mL	1.4998 mL	2.9996 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 0.77 mg/mL (2.31 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 0.77 mg/mL (2.31 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 0.77 mg/mL (2.31 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Seneciphylline is a toxic pyrrolizidine alkaloid in Gynura japonica[1]. Seneciphylline significantly increases the activities of epoxide hydrase and glutathione-S-transferase but causes reduction of cytochrome P-450 and related monooxygenase activities[2].

REFERENCES

[1]. Bandyopadhyay S, et al. Cytotoxicity of Senecio in macrophages is mediated via its induction of oxidative stress. Res Vet Sci. 2009 Aug;87(1):85-90.

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

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA