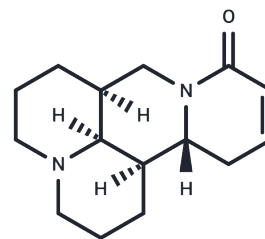


## Sophocarpine

## Chemical Properties

CAS No. :	6483-15-4
Formula:	C <sub>15</sub> H <sub>22</sub> N <sub>2</sub> O
Molecular Weight:	246.35
Appearance:	no data available
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year



## Biological Description

Description	Sophocarpine, a major ingredient of Sophora alopecuroides, has a wide range of pharmacological effects.
Targets(IC50)	ERK,NF-κB,STAT,COX,JNK,p38 MAPK,Potassium Channel,TLR
In vitro	Sophocarpine exerts anti-cachectic effects by inhibiting TNF-α and IL-6 production in both RAW264.7 cells and murine primary macrophages. [1] Sophocarpine also shows antiviral activity by inhibiting HHV-6 replication in Molt-3 cells. [2] In addition, Sophocarpine is a potent blocker of HERG K <sup>+</sup> channels with an IC <sub>50</sub> of about 200 nM. [3]
In vivo	Administration of 50 mg/kg/d sophocarpine for 5 days from the onset of cachexia does not inhibit the tumor growth but results in attenuation of cachexia symptoms in colon26 adenocarcinoma xenograft BALB/c mice. [1] LD <sub>50</sub> : Mice 63.94 mg/kg (i.v.) [4]

## Solubility Information

Solubility	Ethanol: 49 mg/mL (198.9 mM),Sonication is recommended. H <sub>2</sub> O: 5 mg/mL (20.3 mM),Sonication is recommended. DMSO: 49 mg/mL (198.9 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	4.0593 mL	20.2963 mL	40.5927 mL
5 mM	0.8119 mL	4.0593 mL	8.1185 mL
10 mM	0.4059 mL	2.0296 mL	4.0593 mL
50 mM	0.0812 mL	0.4059 mL	0.8119 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.

### Reference

- Liu XQ, et al. [Thymopolypeptides combined with matrine type alkaloids suppress HBV replication]. Zhongguo Zhong Yao Za Zhi. 2016 Apr;41(7):1275-1281. Chinese.
- Zhang Y, et al. Sophocarpine and matrine inhibit the production of TNF-alpha and IL-6 in murine macrophages and prevent cachexia-related symptoms induced by colon26 adenocarcinoma in mice. Int Immunopharmacol. 2008 Dec 20;8(13-14):1767-72.
- Song CY, et al. Sophocarpine alleviates hepatocyte steatosis through activating AMPK signaling pathway. Toxicol In Vitro. 2013 Apr;27(3):1065-71.
- Gao Y, et al. Anti-inflammatory effects of sophocarpine in LPS-induced RAW 264.7 cells via NF-κB and MAPKs signaling pathways. Toxicol In Vitro. 2012 Feb;26(1):1-6.

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