MCE MedChemExpress

Product Data Sheet

Songorine

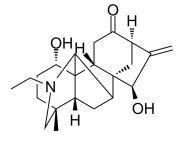
Cat. No.:HY-N2080CAS No.:509-24-0Molecular Formula: $C_{22}H_{31}NO_3$ Molecular Weight:357.49

Target: GABA Receptor

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (279.73 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.7973 mL	13.9864 mL	27.9728 mL
	5 mM	0.5595 mL	2.7973 mL	5.5946 mL
	10 mM	0.2797 mL	1.3986 mL	2.7973 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: ≥ 2.5 mg/mL (6.99 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.99 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.99 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	Songorine is a diterpenoid alkaloid isolated from the genus Aconitum. Songorine is a GABAA receptor antagonist in rat brain and has anti cancer, antiarrhythmic and anti-inflammatory activities. Songorine has the potential for the treatment of Epithelial ovarian cancer $(EOC)^{[1]}$.
IC ₅₀ & Target	IC50: GABAA receptor ^[1]
In Vivo	Songorine is investigated its efficacy and safety in SKOV3 tumorbearing BALB/c nude mice, songorine inhibits EOC cell survival, invasion and migration, promoted EOC cell apoptosis and suppressed mammalian EOC tumorigenic behavior. In addition, western blot and IHC results show that songorine consistently downregulates the expression of Ncadherin,

vimentin, matrix metalloproteinase (MMP)2, MMP9, phosphorylated GSK3 β , β catenin and Bcl2, and upregulated the expression of Ecadherin, cleaved caspase3, cleaved caspase9 and Bax^[1].

Songorine shows an Antiarrhythmic activity in aconitine-induced arrhythmia model in rats, exhibits LD_{50} and ED_{50} values of 142 mg and 7.3mg, respectively^[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Zhang H, et al. Songorine suppresses cell growth and metastasis in epithelial ovarian cancer via the Bcl\(\mathbb{Q}\)2/Bax and GSK3\(\beta\)/\(\beta\)Bacatenin signaling pathways. Oncol Rep. 2019 May;41(5):3069-3079.

[2]. Khan H, et al. Therapeutic potential of songorine, a diterpenoid alkaloid of the genus Aconitum. Eur J Med Chem. 2018 Jun 10;153:29-33.

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

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Page 2 of 2 www.MedChemExpress.com