Picrotin

Cat. No.: HY-107782

CAS No.: 21416-53-5

Molecular Formula: $C_{15}H_{18}O_7$

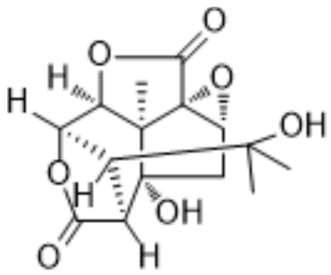
Molecular Weight: 310.3

Target: GABA Receptor

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling

Storage:

Powder	-20°C	3 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (322.27 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.2227 mL	16.1134 mL	32.2269 mL
	5 mM	0.6445 mL	3.2227 mL	6.4454 mL
	10 mM	0.3223 mL	1.6113 mL	3.2227 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 (8.06 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (8.06 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (8.06 mM); Suspended solution

BIOLOGICAL ACTIVITY

Description

Picrotin is an active compound, also is one of the composition of picrotoxin (an antagonist of GABAA receptors (GABAARs) and glycine receptors (GlyRs)). Picrotin has sensitivity for GlyRs/b> with IC_{50} values range from 5.2 μM to 106 μM. Picrotin can be used for the research of neurotransmission[1][2].

IC_{50} & Target

IC50: 13.1 μM (α2 GlyRs)[1]

In Vitro

Picrotin has sensitivity for α2 GlyRs with IC_{50} value of 13.1 μM[1].

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

REFERENCES

[1]. Dian-Shi Wang, et al. Mechanisms for picrotoxinin and picrotin blocks of alpha2 homomeric glycine receptors. J Biol Chem. 2007 Jun 1;282(22):16016-35.

[2]. Yang Z, et al. A proposed structural basis for picrotoxinin and picrotin binding in the glycine receptor pore. J Neurochem. 2007 Oct;103(2):580-9.

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