Tetrahydroberberine

Cat. No.: HY-N0925

CAS No.: 522-97-4

Molecular Formula: $C_{20}H_{21}NO_4$

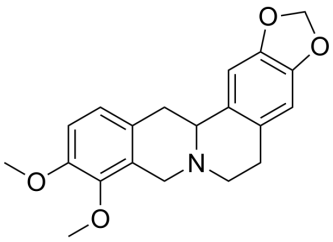
Molecular Weight: 339.39

Target: Dopamine Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 25 mg/mL (73.66 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.9465 mL	14.7323 mL	29.4646 mL
5 mM	0.5893 mL	2.9465 mL	5.8929 mL
10 mM	0.2946 mL	1.4732 mL	2.9465 mL

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

BIOLOGICAL ACTIVITY

Description

Tetrahydroberberine is a different kind of living thing that can be extended and divided into parts. Tetrahydroberberine is a kind of effective D2 receptor antagonistic force. Tetrahydroberberine has the ability to strengthen the stomach and relieve the pressure on the stomach[1][2][3].

In Vitro

Tetrahydroberberine (100 μM) blocks K(ATP) channels in sharply isolated dopaminergic (DA) neurons in rat substantia nigra pars compacta (SNc) and restores membrane hyperpolarization induced by 1 μM rotenone (HY-B1756)[3].

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

In Vivo

Tetrahydroberberine (30 μg/kg; IV) causes a dramatic increase in gastric regulatory capacity in beagle dogs, significantly enhances gastric contractility and shortens contraction intervals in rats, and enhances gastric motility function in the upper gastrointestinal tract[1].

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

REFERENCES

[1]. Lee TH, et al. Tetrahydroberberine, an isoquinoline alkaloid isolated from corydalis tuber, enhances gastrointestinal motor function. J Pharmacol Exp Ther. 2011 Sep;338(3):917-24.

[2]. Niwa M, et al. Dopaminergic unique affinity of tetrahydroberberine and l-tetrahydroberberine-d-camphor sulfonate. Pharmacology. 1991;43(6):329-36.

[3]. Wu C, et al. Tetrahydroberberine blocks ATP-sensitive potassium channels in dopamine neurons acutely-dissociated from rat substantia nigra pars compacta. Neuropharmacology. 2010 Dec;59(7-8):567-72.

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