Kynuramine dihydrochloride

Cat. No.: HY-119395B

CAS No.: 36681-58-0

Molecular Formula: $C_9H_{14}Cl_2N_2O$

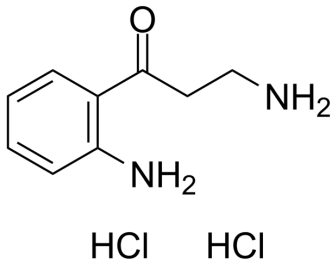
Molecular Weight: 237.13

Target: Monoamine Oxidase

Pathway: Neuronal Signaling

Storage: 4°C, sealed storage, away from moisture

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (527.14 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.2171 mL	21.0855 mL	42.1710 mL
	5 mM	0.8434 mL	4.2171 mL	8.4342 mL
	10 mM	0.4217 mL	2.1085 mL	4.2171 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: ≥ 2.08 mg/mL (8.77 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (8.77 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Kynuramine, an endogenously occurring amine, is a fluorescent substrate and probe of plasma amine oxidase[1][2].

In Vitro

Kynuramine inhibits both presynaptic and postsynaptic α-adrenoceptors in vitro[2].
Kynuramine has been shown to act as a partial agonist on serotonin receptors in dog cerebral arteries[2].
Kynuramine (20 μg/mL) frequently causes a small contraction of the ileum but failed to alter the twitch response to cholinergic stimulation[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Kynuramine (0.064, 0.32, 1.6 or 8 μg; ICV; single does) may serve a physiological role in the modulation of female sexual behavior[3].
Kynuramine (1.25, 2.5 and 5.0 mg/kg; i.v.; single does) increases heart rate and blood pressure in pithed rats[4].

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

Animal Model:	Female rats[3].
Dosage:	0.064-8 μg.
Administration:	Intraventricular administration; single does.
Result:	Produced facilitation of lordosis behavior.

Animal Model:	Male rats (about 200g)[4].
Dosage:	1.25-5.0 mg/kg.
Administration:	i.v.; single does.
Result:	Promoted heart rate and blood pressure.

REFERENCES

[1]. J B Massey, et al. Kynuramine, a fluorescent substrate and probe of plasma amine oxidase. J Biol Chem. 1977 Nov 25;252(22):8081-4.

[2]. T D Johnson, An alpha-adrenoceptor inhibitory action of kynuramine. Eur J Pharmacol. 1981 Jul 10;72(4):351-6.

[3]. S D Mendelson, et al. Intraventricular administration of l-kynurenine and kynuramine facilitates lordosis in the female rat. Eur J Pharmacol. 1987 Oct 27;142(3):447-51.

[4]. T D Johnson, et al. Blood pressure and heart rate effects of kynuramine in pithed rats. Eur J Pharmacol. 1983 Feb 18;87(2-3):323-6.

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