(Rac)-Lanicemine

Cat. No.: HY-108235B

CAS No.: 61890-25-3

Molecular Formula: $C_{13}H_{14}N_2$

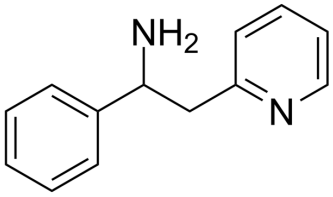
Molecular Weight: 198.26

Target: iGluR

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling

Storage:

Pure form	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (504.39 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	5.0439 mL	25.2194 mL	50.4388 mL
5 mM	1.0088 mL	5.0439 mL	10.0878 mL
10 mM	0.5044 mL	2.5219 mL	5.0439 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 (12.61 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (12.61 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (12.61 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

(Rac)-Lanicemine ((Rac)-AZD6765) is the racemate of Lanicemine. Lanicemine (AZD6765) is a low-trapping NMDA channel blocker (K_i of 0.56-2.1 μM for NMDA receptor; IC_{50}s of 4-7 μM and 6.4 μM in CHO and Xenopus oocyte cells, respectively). Antidepressant effects[1].

IC_{50} & Target

NMDA receptor[1]

In Vivo

Lanicemine produces sustained antidepressant efficacy with minimal psychotomimetic adverse effects[1].Lanicemine (3, 10

or 30 mg/kg; intraperitoneal) not only engages brain circuits involved in the generation of gamma- electroencephalography (EEG), but also influences these networks independent of the broader systems-level disruptions typical of ketamine[1].

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

Animal Model:	Male Sprague-Dawley rats[1]
Dosage:	3, 10 or 30 mg/kg
Administration:	Intraperitoneal
Result:	Produced pronounced dose-dependent elevations in spontaneous gamma-band EEG, but only gamma changes for Ketamine were tightly coupled to increases in locomotor activity.

REFERENCES

[1]. Sanacora G, et al. Lanicemine: a low-trapping NMDA channel blocker produces sustained antidepressant efficacywith minimal psychotomimetic adverse effects. Mol Psychiatry. 2014 Sep;19(9):978-85.

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