IDRA 21

Cat. No.: HY-101528

CAS No.: 22503-72-6

Molecular Formula: $C_8H_9ClN_2O_2S$

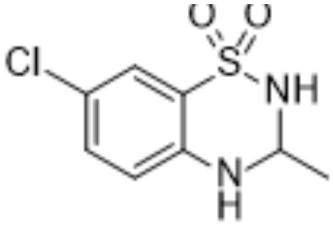
Molecular Weight: 232.69

Target: iGluR

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling

Storage:

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



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (1074.39 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.2976 mL	21.4878 mL	42.9756 mL
	5 mM	0.8595 mL	4.2976 mL	8.5951 mL
	10 mM	0.4298 mL	2.1488 mL	4.2976 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 (8.94 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (8.94 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (8.94 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

IDRA 21 is a positive and orally active modulator of the AMPA receptor. IDRA 21 facilitates excitatory neurotransmission via GluR1/2 receptors. IDRA 21 has the potential for the research of cognitive/memory disorders, including those associated with aging[1].

In Vitro

IDRA 21 (1-300 μM, 30 min) increases hippocampal neurons death in a dose-dependent manner[2].

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

In Vivo	IDRA 21 (0.15-10 mg/kg, p.o., once every 3 days, 3 weeks) improves delayed matching-to-sample (DMTS) task accuracy in young and aged rhesus monkeys[1]. IDRA 21 (6-24 mg/kg, i.g., once time) increases G41 neuronal injury produced by global ischemia in adult rats[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Buccafusco JJ, et al. The effects of IDRA 21, a positive modulator of the AMPA receptor, on delayed matching performance by young and aged rhesus monkeys. Neuropharmacology. 2004 Jan;46(1):10-22. doi: 10.1016/j.neuropharm.2003.07.002.

[2]. Yamada KA, et al. The diazoxide derivative IDRA 21 enhances ischemic hippocampal neuron injury. Ann Neurol. 1998 May;43(5):664-9.

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