SDZ 220-581

Cat. No.: HY-13059

CAS No.: 174575-17-8

Molecular Formula: $C_{16}H_{17}ClNO_5P$

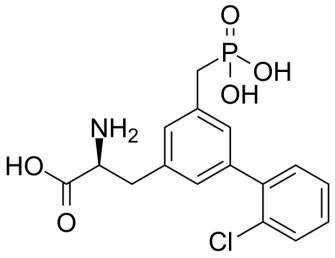
Molecular Weight: 369.74

Target: iGluR

Pathway: Membrane Transporter/Ion Channel; 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 : 8.57 mg/mL (23.18 mM; Need ultrasonic and warming)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.7046 mL	13.5230 mL	27.0460 mL
5 mM	0.5409 mL	2.7046 mL	5.4092 mL
10 mM	0.2705 mL	1.3523 mL	2.7046 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 (6.76 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (6.76 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.76 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

SDZ 220-581 is an orally active, potent, competitive NMDA receptor antagonist with pK_i value of 7.7[1].

IC_{50} & Target

pKi: 7.7 (NMDA receptor)[1]

In Vivo

SDZ 220-581 (3.2-32 mg/kg; oral administration; for 24 hours; male OF-l mice) treatment dose-dependently protects mice against maximal electroshock seizures (MES). The time-course of protection by SDZ 220-581 is characterized by a rapid onset and long duration of action[1].

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

Animal Model:	Male OF-l mice (18-26 g)[1]
Dosage:	3.2 mg/kg, 10 mg/kg, 32 mg/kg
Administration:	Oral administration; for 24 hours
Result:	Dose-dependently protected mice against maximal electroshock seizures (MES) upon oral administration.

REFERENCES

[1]. Urwyler S, Campbell E, Fricker G, Biphenyl-derivatives of 2-amino-7-phosphono-heptanoic acid, a novel class of potent competitive N-methyl-D-aspartate receptor antagonists--II. Pharmacological characterization in vivo. Neuropharmacology. 1996 Jun;35(6):65

[2]. Gilmour G, et al. In vitro characterisation of the novel positive allosteric modulators of the $mGlu_5$ receptor, LSN2463359 and LSN2814617, and their effects on sleep architecture and operant responding in the rat. Neuropharmacology. 2013 Jan;64:224-39.

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