SDZ 220-581 hydrochloride

Cat. No.: HY-13059B

CAS No.: 179411-93-9

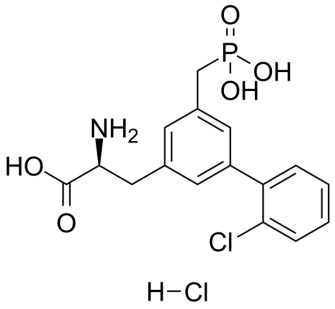
Molecular Formula: $C_{16}H_{18}Cl_2NO_5P$

Molecular Weight: 406.2

Target: iGluR

Pathway: Membrane Transporter/Ion Channel; 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 : 5 mg/mL (12.31 mM; Need ultrasonic and warming)
H_2O : < 0.1 mg/mL (ultrasonic;warming;heat to 60°C) (insoluble)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.4618 mL	12.3092 mL	24.6184 mL
5 mM	0.4924 mL	2.4618 mL	4.9237 mL
10 mM	0.2462 mL	1.2309 mL	2.4618 mL

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

BIOLOGICAL ACTIVITY

Description

SDZ 220-581 hydrochloride 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, et al. 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):655-69.

[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