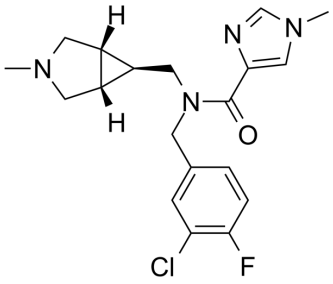
PF-03463275

Cat. No.:	HY-10716A
CAS No.:	1173239-39-8
Molecular Formula:	$C_{19}H_{22}ClFN_4O$
Molecular Weight:	376.86
Target:	GlyT
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 : 33.33 mg/mL (88.44 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.6535 mL	13.2675 mL	26.5351 mL
	5 mM	0.5307 mL	2.6535 mL	5.3070 mL
	10 mM	0.2654 mL	1.3268 mL	2.6535 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: ≥ 0.83 mg/mL (2.20 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 0.83 mg/mL (2.20 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 0.83 mg/mL (2.20 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

PF-03463275 is a centrally penetrant, orally available, selective, and competitive GlyT1 (glycine transporter-1) reversible inhibitor, with a K_i of 11.6 nM. PF-03463275 has the potential for Schizophrenia research[1][2].

In Vivo

PF-03463275 (1-10 mg/kg; s.c.) attenuates oscillatory potentials (OPs)[2].

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

Animal Model:	Male Sprague-Dawley rats[2]
Dosage:	1, 3 and 10 mg/kg
Administration:	S.c.
Result:	A dose-dependent reduction in the amplitude of oscillatory potentials (OPs) elicited from the dark-adapted rats.

REFERENCES

[1]. Lowe JA 3rd, et al. The discovery of a structurally novel class of inhibitors of the type 1 glycine transporter [published correction appears in Bioorg Med Chem Lett. 2009 Aug 15;19(16):4885. Bronk, Brian S [added]; Schaeffer, Eric [added]]. Bioorg Med Ch

[2]. Liu CN, Pettersen B, Seitis G, Osgood S, Somps C. GlyT1 inhibitor reduces oscillatory potentials of the electroretinogram in rats. Cutan Ocul Toxicol. 2014;33(3):206-211.

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