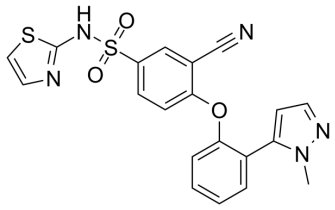
PF-04856264

Cat. No.:	HY-12811
CAS No.:	1235397-05-3
Molecular Formula:	$C_{20}H_{15}N_5O_3S_2$
Molecular Weight:	437.49
Target:	Sodium Channel
Pathway:	Membrane Transporter/Ion Channel
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 (571.44 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.2858 mL	11.4288 mL	22.8577 mL
	5 mM	0.4572 mL	2.2858 mL	4.5715 mL
	10 mM	0.2286 mL	1.1429 mL	2.2858 mL

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

BIOLOGICAL ACTIVITY

Description

PF-04856264 is a potent and selective Nav1.7 inhibitor, with IC_{50}s of 28, 131, 19, and 42 nM for human, mouse, cynomolgus monkey and dog Nav1.7, respectively. PF-04856264 has low potency against the rat Nav1.7 channel. PF-04856264 shows analgesic effect[1][2].

IC_{50} & Target

IC50: 28 (human Nav1.7), 131 nM (mouse Nav1.7), 19 nM (cynomolgus monkey Nav1.7), 42 nM (dog Nav1.7)[1]

In Vivo

PF-04856264 (3-30 mg/kg; i.p.) reverses OD1-induced pain behaviors[2].

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

Animal Model:	6-8 weeks adult male C57BL/6J mice (OD1-induced spontaneous pain model)[2]
Dosage:	3, 30 mg/kg
Administration:	I.p.

Result:	Significantly reduced spontaneous pain behaviors in mice.

REFERENCES

[1]. McCormack K, et al. Voltage sensor interaction site for selective small molecule inhibitors of voltage-gated sodium channels. Proc Natl Acad Sci U S A. 2013;110(29):E2724-E2732.

[2]. Deuis JR, et al. Analgesic Effects of GpTx-1, PF-04856264 and CNV1014802 in a Mouse Model of NaV1.7-Mediated Pain. Toxins (Basel). 2016;8(3):78. Published 2016 Mar 17.

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