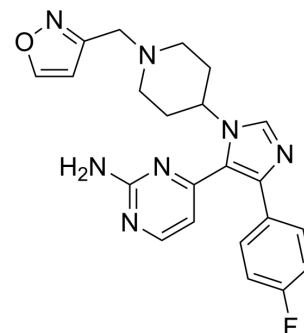


PF-5006739

Cat. No.:	HY-12443
CAS No.:	1293395-67-1
Molecular Formula:	C ₂₂ H ₂₂ FN ₇ O
Molecular Weight:	419.45
Target:	Casein Kinase
Pathway:	Cell Cycle/DNA Damage; Stem Cell/Wnt
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (238.41 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	2.3841 mL	11.9204 mL	23.8407 mL
				5 mM	0.4768 mL	2.3841 mL	4.7681 mL
				10 mM	0.2384 mL	1.1920 mL	2.3841 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 (5.96 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.96 mM); Clear solution						

BIOLOGICAL ACTIVITY

Description	PF-5006739 is a potent and selective inhibitor of CK1δ/ε with IC ₅₀ s of 3.9 nM and 17.0 nM, respectively. PF-5006739 is a potential therapeutic agent for a range of psychiatric disorders with low nanomolar in vitro potency for CK1δ/ε and high kinome selectivity. PF-5006739 attenuates opioid agent-seeking behavior in a rodent operant reinstatement model in animals in a dose-dependent manner ^[1] . PF-5006739 improves glucose tolerance in both diet-induced obesity (DIO) and genetic (ob/ob) mice models of obesity ^[2] .
IC ₅₀ & Target	CK1δ 3.9 nM (IC ₅₀)

REFERENCES

[1]. Wager TT, et al. Casein kinase 1 δ/ϵ inhibitor PF-5006739 attenuates opioid drug-seeking behavior. ACS Chem Neurosci. 2014 Dec 17;5(12):1253-65.

[2]. Cunningham PS, et al. Targeting of the circadian clock via CK1 δ/ϵ to improve glucose homeostasis in obesity. Sci Rep. 2016 Jul 21;6:29983.

Caution: Product has not been fully validated for medical applications. For research use only.

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