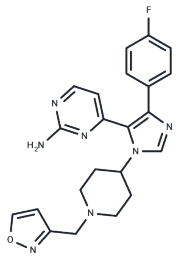
Data Sheet (Cat.No.T16507)

PF-5006739

Chemical Properties



CAS No. : 1293395-67-1

Formula: C22H22FN7O

Molecular Weight: 419.45

Storage: Keep away from direct sunlight
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	PF-5006739 is a potent and selective CK1δ/ε inhibitor with IC50 values of 3.9 nM and 17.0 nM, respectively.It can be used in the study of psychiatric disorders and exhibits low nanomolar in vitro potency against CK1δ/ε and high kinome selectivity.PF-5006739 dose-dependently reduces opioid-seeking behavior in rodent relapse models and improves glucose tolerance in mouse models of diet-induced obesity (DIO) and genetic obesity (ob/ob).
Targets(IC50)	Casein Kinase
In vitro	PF-5006739 shows low nanomolar in vitro inhibitory activity against CK1δ/ε, with IC50 values of 3.9 and 17 nM [1]. Treatment with PF-5006739 at 0.4–50 μM for 5 days rapidly and dose-dependently induces mPER2::luc bioluminescence in WAT tissue explants [2].
In vivo	PF-5006739 (10 mg/kg/day, subcutaneous injection, once daily) significantly improves blood glucose status in DIO mice [2].

Solubility Information

Solubility	DMSO: 80 mg/mL (190.73 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
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	1.192 mL	2.3841 mL
50 mM	0.0477 mL	0.2384 mL	0.4768 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

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

Cunningham PS, et al. Targeting of the circadian clock via CK1δ/ε to improve glucose homeostasis in obesity.Sci Rep. 2016 Jul 21;6:29983.