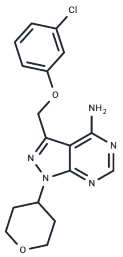
Data Sheet (Cat.No.T5056)

PF-4800567

Chemical Properties



CAS No. : 1188296-52-7

Formula: C17H18ClN5O2

Molecular Weight: 359.81

Storage: Keep away from direct sunlight,Store under nitrogen,
Store at low temperature
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-4800567 is a selective inhibitor of casein kinase 1ε (CK1ε; IC50 = 32 nM) with greater than 20-fold selectivity over CK1δ.
Targets(IC50)	Casein Kinase
In vitro	PF-4800567 shows inhibitory activity against CK1ε and CK1δ in whole cells, with IC50s of 2.65 and 20.38 μM, respectively. PF-4800567 (0.01-10 μM) blocks CK1?-mediated PER3 nuclear localization mediated by CK1? and suppresses PER2 degradation at 1 μM. In addition, PF-4800567 (32 nM) has little effect on the circadian clock [1].
In vivo	PF-4800567 (100 mg/kg, s.c.) is quickly absorbed and distributed in the plasma and brain of mice [1].

Solubility Information

Solubility	DMSO: 60 mg/mL (166.75 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.56 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7792 mL	13.8962 mL	27.7924 mL
5 mM	0.5558 mL	2.7792 mL	5.5585 mL
10 mM	0.2779 mL	1.3896 mL	2.7792 mL
50 mM	0.0556 mL	0.2779 mL	0.5558 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

Walton KM, et al. Selective inhibition of casein kinase 1 epsilon minimally alters circadian clock period. J Pharmacol Exp Ther. 2009 Aug;330(2):430-9.