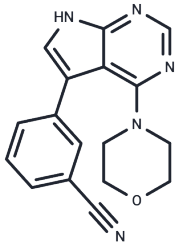
Data Sheet (Cat.No.T2050)

TargetMol

PF-06447475

Chemical Properties



CAS No. : 1527473-33-1

Formula: C17H15N5O

Molecular Weight: 305.33

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	PF-06447475 is a highly effective, specific, brain penetrant LRRK2 inhibitor with IC0 of 3/11 nM for wild type LRRK2 and G2019S LRRK2 respectively.
Targets(IC50)	LRRK2
In vitro	In the macrophage cell line Raw264.7, PF-06447475 inhibits endogenous LRRK2 kinase activity with IC50 of <10 nM. [2] In astrocytes, PF-06447475 rescues LRRK2 mutation-induced defects in lysosomal morphology and function. [3]
In vivo	In G2019S BAC-transgenic mice, PF-06447475 (100 mg/kg, p.o.) inhibits pS935 and pS1292 phosphorylation of LRRK2 with IC50 of 103 nM and 21 nM, respectively. [1] In G2019S-LRRK2 rats, PF-06447475 (30 mg/kg, p.o.) blocks α-synuclein-induced dopaminergic neurodegeneration and attenuates neuroinflammation associated with G2019S-LRRK2 expression. [2]

Solubility Information

Solubility	DMSO: 15.3 mg/mL (50.11 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2751 mL	16.3757 mL	32.7514 mL
5 mM	0.655 mL	3.2751 mL	6.5503 mL
10 mM	0.3275 mL	1.6376 mL	3.2751 mL
50 mM	0.0655 mL	0.3275 mL	0.655 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.

Reference

Henderson JL, et al. J Med Chem. 2015, 58(1), 419-432.
Daher JP, et al. J Biol Chem. 2015, 290(32), 19433-19444.
Henry AG, et al. Hum Mol Genet. 2015, 24(21), 62013-6028.

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