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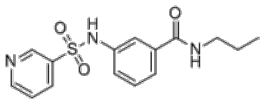
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	FX2149
Cat. No.	:	PC-49821
CAS No.	:	1842427-90-0
Molecular Formula	:	$C_{15}H_{17}N_3O_3S$
Molecular Weight	:	319.38
Target	:	LRRK2
Solubility	:	10 mM in DMSO



Biological Activity

FX2149 (FX 2149) is a potent, BBB permeable inhibitor of **LRRK2** GTP binding activity with IC90 of 10 nM, reduces PD-linked mutant LRRK2 variants (G2019S and R1441C) that bound with GTP.
FX2149 potently inhibits LRRK2 GTP binding and kinase activity in vitro.
FX2149 at 100 nM concentration significantly reduced G2019S-LRRK2 phosphorylation at residues S935 and S2032 by 90% in cell-free assays.
FX2149 (100 nM) attenuated G2019S-LRRK2-induced neuronal degeneration in SH-SY5Y cells.
FX2149 (10 mg/kg) is more efficient in reducing LRRK2 GTP binding and kinase activities in transgenic mice brains than LRRK2 inhibitor 68.
FX2149 (10 mg/kg) reduced LPS-induced microglia activation and LRRK2 upregulation in mice.
FX2149 attenuates LRRK2-R1441C-induced mitochondrial and lysosomal transport impairments.

References

Li T, et al. ***PLoS One.*** 2015 Mar 27;10(3):e0122461.

Thomas JM, et al. F***ront Aging Neurosci.*** 2017 Jan 10;8:337.

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