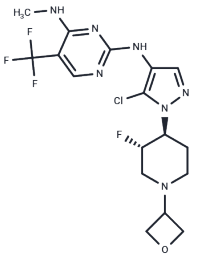
Data Sheet (Cat.No.T1770)

TargetMol

GNE-9605

Chemical Properties



CAS No. : 1536200-31-3

Formula: C17H20ClF4N7O

Molecular Weight: 449.83

Storage: 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	GNE-9605 is a highly effective, specifical, and brain-penetrant LRRK2 inhibitor (IC50: 19 nM).
Targets(IC50)	LRRK2
In vitro	In rats, PKGNE-9605 administered orally at a dose of 1 mg/kg exhibited a total plasma clearance rate of 26 mL/min/kg, achieving an oral bioavailability of 90%. In BAC transgenic mice models expressing the human LRRK2 G2019S mutation associated with Parkinson's disease, GNE-9605, administered intraperitoneally at doses of 10 and 50 mg/kg, was able to inhibit the autophosphorylation of LRRK2 at Ser1292.
In vivo	In vitro human MDR1 permeability data indicate that GNE-9605 exhibits favorable brain penetration in higher organisms. In biochemical (Ki: 2.0 nM) and cellular (IC50: 19 nM) assays, GNE-9605 demonstrates potent inhibitory activity against LRRK2.

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble), DMSO: 82 mg/mL (182.29 mM),Sonication is recommended. Ethanol: 10 mg/mL (22.23 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: 3.3 mg/mL (7.34 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	2.2231 mL	11.1153 mL	22.2306 mL
5 mM	0.4446 mL	2.2231 mL	4.4461 mL
10 mM	0.2223 mL	1.1115 mL	2.2231 mL
50 mM	0.0445 mL	0.2223 mL	0.4446 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

Estrada AA , et al. J Med Chem. 2014, 57(3), 921-936.