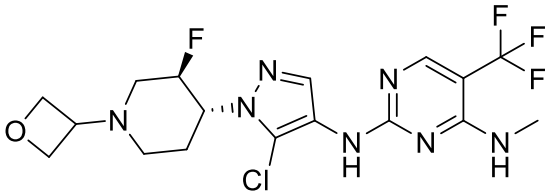
Product data sheet

MedKoo Cat#: 510294 Name: GNE-9605 CAS: 1536200-31-3 Chemical Formula: $C_{17}H_{20}ClF_4N_7O$ Exact Mass: 449.1354 Molecular Weight: 449.8386	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.
	In solvent: -80°C 3 months; -20°C 2 weeks.



1. Product description:
GNE-9605 is a highly potent, selective, and brain-penetrant aminopyrazole leucine-rich repeat kinase 2 (LRRK2) small molecule inhibitors. Leucine-rich repeat kinase 2 (LRRK2) has drawn significant interest in the neuroscience research community because it is one of the most compelling targets for a potential disease-modifying Parkinson's disease therapy.

2. CoA, QC data, SDS, and handling instruction
SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	69.67	154.87
Ethanol	12.0	26.68
Methanol	1.0	2.22

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	**1 mg**	**5 mg**	**10 mg**
1 mM	2.22 mL	11.12 mL	22.23 mL
5 mM	0.44 mL	2.22 mL	4.45 mL
10 mM	0.22 mL	1.11 mL	2.22 mL
50 mM	0.04 mL	0.22 mL	0.44 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator
Please refer the product web page under section of "Calculator"

6. Recommended literature which reported protocols for in vitro and in vivo study
In vitro study

1. Estrada AA, Chan BK, Baker-Glenn C, Beresford A, Burdick DJ, Chambers M, Chen H, Dominguez SL, Dotson J, Drummond J, Flagella M, Fuji R, Gill A, Halladay J, Harris SF, Heffron TP, Kleinheinz T, Lee DW, Le Pichon CE, Liu X, Lyssikatos JP, Medhurst AD, Moffat JG, Nash K, Scearce-Levie K, Sheng Z, Shore DG, Wong S, Zhang S, Zhang X, Zhu H, Sweeney ZK. Discovery of highly potent, selective, and brain-penetrant aminopyrazole leucine-rich repeat kinase 2 (LRRK2) small molecule inhibitors. J Med Chem. 2014 Feb 13;57(3):921-36. doi: 10.1021/jm401654j. Epub 2014 Jan 15. PMID: 24354345.

In vivo study
TBD

7. Bioactivity
Biological target:
GNE-9605 is a potent, orally active, selective Leucine-rich repeat kinase 2 (LRRK2) inhibitor with an IC_{50} value of 18.7 nM.

In vitro activity

Product data sheet

Disciplined application of established optimal CNS design parameters culminated in the rapid identification of GNE-0877 and GNE-9605 as highly potent and selective LRRK2 inhibitors. The demonstrated metabolic stability, brain penetration across multiple species, and selectivity of these inhibitors support their use in preclinical efficacy and safety studies.

Reference: J Med Chem. 2014 Feb 13;57(3):921-36. https://pubmed.ncbi.nlm.nih.gov/24354345/

In vivo activity

TBD

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.