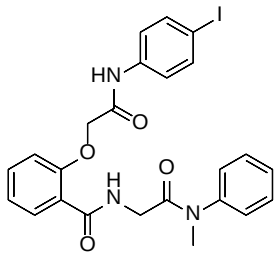
Product data sheet

MedKoo Cat#: 561296 Name: NCGC607 CAS: 1462267-07-7 Chemical Formula: $C_{24}H_{22}IN_3O_4$ Exact Mass: 543.0655 Molecular Weight: 543.3615	
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:
NCGC607 is a a small-molecule noninhibitory chaperone of glucocerebrosidase.

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
DMF	30.0	55.21
DMF:PBS (pH 7.2) (1:3)	0.25	0.46
DMSO	43.75	80.52

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.84 mL	9.20 mL	18.40 mL
5 mM	0.37 mL	1.84 mL	3.68 mL
10 mM	0.18 mL	0.92 mL	1.84 mL
50 mM	0.04 mL	0.18 mL	0.37 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

Aflaki E, Borger DK, Moaven N, Stubblefield BK, Rogers SA, Patnaik S, Schoenen FJ, Westbroek W, Zheng W, Sullivan P, Fujiwara H, Sidhu R, Khaliq ZM, Lopez GJ, Goldstein DS, Ory DS, Marugan J, Sidransky E. A New Glucocerebrosidase Chaperone Reduces α-Synuclein and Glycolipid Levels in iPSC-Derived Dopaminergic Neurons from Patients with Gaucher Disease and Parkinsonism. J Neurosci. 2016 Jul 13;36(28):7441-52. doi: 10.1523/JNEUROSCI.0636-16.2016. PMID: 27413154; PMCID: PMC4945664.

In vivo study

TBD

7. Bioactivity
Biological target:

NCGC607 is a noninhibitory chaperone of glucocerebrosidase (Gcase).

In vitro activity

The cells were then treated with NCGC607, a small-molecule noninhibitory chaperone of glucocerebrosidase identified by high-throughput screening and medicinal chemistry structure optimization. This compound successfully chaperoned the mutant enzyme,

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restored glucocerebrosidase activity and protein levels, and reduced glycolipid storage in both iPSC-derived macrophages and dopaminergic neurons, indicating its potential for treating neuronopathic Gaucher disease.

Reference: J Neurosci. 2016 Jul 13;36(28):7441-52. https://pubmed.ncbi.nlm.nih.gov/27413154/

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.