PRODUCT INFORMATION



NCGC607

Item No. 21923

CAS Registry No.:	1462267-07-7		
Formal Name:	2-[2-[(4-iodophenyl)amino]-2-	\land	
	oxoethoxy]-N-[2-(methylphenylamino)-		
	2-oxoethyl]-benzamide		
MF:	$C_{24}H_{22}IN_3O_4$		
FW:	543.4		
Purity:	≥98%		$\downarrow \qquad \checkmark \qquad \lor \qquad \lor$
Supplied as:	A crystalline solid		
Storage:	-20°C	\sim	
Stability:	≥4 years		
Information represents	the product specifications. Batch specific analy	ical results are provided on e	ach certificate of analysis.

Laboratory Procedures

NCGC607 is supplied as a crystalline solid. A stock solution may be made by dissolving the NCGC607 in the solvent of choice, which should be purged with an inert gas. NCGC607 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of NCGC607 in these solvents is approximately 25 and 30 mg/ml, respectively.

NCGC607 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, NCGC607 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. NCGC607 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

NCGC607 is a salicylic acid derivative and small molecule glucocerebrosidase (GCase) chaperone.¹ A mutation in the GCase gene is found in patients with Gaucher disease and is the most common genetic risk factor for Parkinson's disease. In induced pluripotent stem cell-derived (iPSC) macrophages from patients with Gaucher disease, NCGC607 (3 µM) restores protein levels of GCase, translocates it to the lysosome, and decreases lysosomal levels of the glycolipid glucosylceramide. In iPSC-derived cells differentiated into dopamine neurons (iDA), NCGC607 increases GCase activity and translocation to the lysosome, where it decreases glucosylceramide as well as glucosylsphingosine levels. It also rescues decreased α -synuclein levels in iDA neurons.

Reference

1. Aflaki, E., Borger, D.K., Moaven, N., et al. A new glucocerebrosidase chaperone reduces α-synuclein and glycolipid levels in iPSC-derived dopaminergic neurons from patients with Gaucher disease and Parkinsonism. J. Neurosci. 36(28), 7441-7452 (2016).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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