Proteins

Product Data Sheet

NCGC00092410

Cat. No.: HY-114043 CAS No.: 442898-34-2 Molecular Formula: $C_{21}H_{27}N_3O_2$ Molecular Weight: 353.46 Target: Glucosidase

Pathway: Metabolic Enzyme/Protease Storage:

Powder -20°C 3 years $4^{\circ}C$ 2 years

In solvent -80°C 2 years

> -20°C 1 year

SOLVENT & SOLUBILITY

In Vitro DMSO: 41.67 mg/mL (117.89 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.8292 mL	14.1459 mL	28.2917 mL
	5 mM	0.5658 mL	2.8292 mL	5.6583 mL
	10 mM	0.2829 mL	1.4146 mL	2.8292 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (5.88 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	NCGC00092410 is a potent, selective, and nonsugar glucocerebrosidase (GC) inhibitor, with an IC $_{50}$ of 31 nM. NCGC00092410 shows no activity against the related hydrolases at concentrations up to 77 μ M. NCGC00092410, a GC chaperone, and increases the activity and lysosomal localization of glucocerebrosidase in mutant cell lines. NCGC00092410 can be used for the research of Gaucher disease ^[1] .
IC ₅₀ & Target	IC50: 31 nM (glucocerebrosidase) ^[1]
In Vitro	NCGC00092410 (7.3-130 nM; 25 min) inhibits the GC activity at various substrate concentrations (10-150 μM) in a dose-dependent manner ^[1] . NCGC00092410 (55-40 μM; 2 d) increases the GC activity in the N370S mutant fibroblasts ^[1] . NCGC00092410 (40 μM; 60-72 h) increases the lysosomal localization of GC in gaucher fibroblasts ^[1] .

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

[1]. Zheng W, et, al. Three classes of glucocerebrosidase inhibitors identified by quantitative high-throughput screening are chaperone leads for Gaucher disease. Proc Na Acad Sci U S A. 2007 Aug 7;104(32):13192-7.					
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	Tel: 609-228-6898 Address: 1	Fax: 609-228-5909 Deer Park Dr, Suite Q, Monr	E-mail: tech@MedChemExpress nouth Junction, NJ 08852, USA	.com	

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