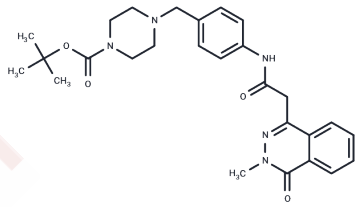
Data Sheet (Cat.No.T16518)

TargetMol

PH-002

Chemical Properties



CAS No. : 1311174-68-1

Formula: C27H33N5O4

Molecular Weight: 491.58

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	PH-002, an inhibitor targeting the intramolecular domain interaction of apolipoprotein (apo) E4 in neuronal cells, additionally enhances mitochondrial motility and promotes neurite outgrowth, thereby countering related impairments.
Targets(IC50)	Others
In vitro	PH-002 inhibits intramolecular domain interaction of apolipoprotein (apo) E4 in neuronal cells (IC50: 116 nM in FRET) [1].
In vivo	PH-002 (100 nM) promotes dendritic spine development in primary neurons from NSE-apoE4 transgenic mice to levels similar to those in NSE-apoE3 neurons (apoE3-expressing primary neurons treated with PH-002 show results comparable to untreated neurons). Additionally, PH-002 enhances COX1 levels in primary neurons from the NSE-apoE4 transgenic mouse cortex and hippocampus, increasing COX1 by ~60% after 4 days of treatment at 200 nM [2].

Solubility Information

Solubility	DMSO: 75 mg/mL (152.57 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0343 mL	10.1713 mL	20.3426 mL
5 mM	0.4069 mL	2.0343 mL	4.0685 mL
10 mM	0.2034 mL	1.0171 mL	2.0343 mL
50 mM	0.0407 mL	0.2034 mL	0.4069 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

Brodbeck J, et al. Structure-dependent impairment of intracellular apolipoprotein E4 trafficking and its detrimental effects are rescued by small-molecule structure correctors. J Biol Chem. 2011 May 13;286(19):17217-26.
Chen HK, et al. Small molecule structure correctors abolish detrimental effects of apolipoprotein E4 in cultured neurons. J Biol Chem. 2012 Feb 17;287(8):5253-66.