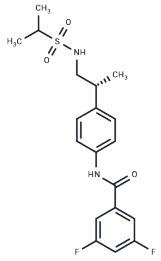
Data Sheet (Cat.No.TQ0289)

LY450108

Chemical Properties



CAS No. : 376594-67-1

Formula: C19H22F2N2O3S

Molecular Weight: 396.45

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	LY450108 is a potentiator of the AMPA receptor that can be used in Parkinson's disease studies.
Targets(IC50)	iGluR

Solubility Information

Solubility	DMSO: 50 mg/mL (126.12 mM),Sonication is recommended. H2O: 1 mg/mL (2.52 mM),Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.04 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5224 mL	12.6119 mL	25.2239 mL
5 mM	0.5045 mL	2.5224 mL	5.0448 mL
10 mM	0.2522 mL	1.2612 mL	2.5224 mL
50 mM	0.0504 mL	0.2522 mL	0.5045 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

Jhee SS, Chappell AS, Zarotsky V, et al. Multiple-dose plasma pharmacokinetic and safety study of LY450108 and LY451395 (AMPA receptor potentiators) and their concentration in cerebrospinal fluid in healthy human subjects. J Clin Pharmacol. 2006 Apr;46(4):424-32.

O'Neill MJ, Witkin JM. AMPA receptor potentiators: application for depression and Parkinson's disease. Curr Drug Targets. 2007 May;8(5):603-20.

Douglas A. Schober, Martin B. Gill, Hong Yu, et al. Transmembrane AMPA Receptor Regulatory Proteins and Cornichon-2 Allosterically Regulate AMPA Receptor Antagonists and Potentiators. The Journal of Biological Chemistry, 286, 13134-13142.

Simon E Ward1, Benjamin D Bax, Mark Harries. Challenges for and current status of research into positive modulators of AMPA receptors. British Journal of Pharmacology. 2010,160(2):181-190.