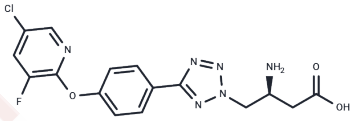
Data Sheet (Cat.No.T9690)

TargetMol

LYS006

Chemical Properties



CAS No. : 1799681-85-8

Formula: C16H14ClFN6O3

Molecular Weight: 392.77

Storage: Store at low temperature
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	LYS006 is a highly efficient and selective LTA4H (leukotriene A4 hydrolase) inhibitor, which can be used for neutrophil-driven inflammatory diseases such as ulcerative colitis.
Targets(IC50)	Aminopeptidase
In vitro	**Method**: In vitro assays were conducted to evaluate the inhibitory effect of LYS006 on LTA4H enzymatic activity using Arg-AMC (arginine conjugated with 7-amino-4-methylcoumarin) as the substrate, with an incubation time of 15 minutes. Additionally, a human whole blood (hWB) assay was performed with a 30-minute treatment to assess the inhibition of LTB4 biosynthesis. **Result**: LYS006 effectively inhibited the hydrolysis of Arg-AMC catalyzed by LTA4H within 15 minutes, with an IC_{50} of 2 nM. In the hWB assay, 30-minute treatment with LYS006 inhibited LTB4 biosynthesis, with an IC_{50} of 167 nM. [1]
In vivo	**Method**: Mice were administered a single oral dose of LYS006 (0.3 mg/kg), and the inhibition of LTB4 release was evaluated in comparison to the vehicle control group. **Result**: LYS006 inhibited approximately 43% of LTB4 release compared to the vehicle control group. [1]

Solubility Information

Solubility	H2O: <1 mg/mL (insoluble) DMSO: 80 mg/mL (203.68 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (8.4 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*

In vivo Formulation	*vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.546 mL	12.7301 mL	25.4602 mL
5 mM	0.5092 mL	2.546 mL	5.092 mL
10 mM	0.2546 mL	1.273 mL	2.546 mL
50 mM	0.0509 mL	0.2546 mL	0.5092 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

Bollbuck B, et, al. Heteroaryl butanoic acid derivatives as leukotriene A4 hydrolase inhibitors and their preparation, pharmaceutical compositions and use in the treatment of diseases. WO2015092740A1.