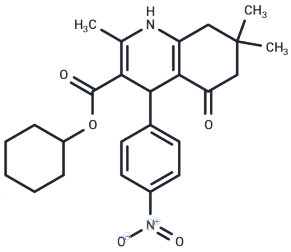
Data Sheet (Cat.No.T3075)

TargetMol

FLI-06

Chemical Properties



CAS No. : 313967-18-9

Formula: C25H30N2O5

Molecular Weight: 438.52

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	FLI-06 is a Notch signaling inhibitor (EC50: 2.3 μM).
Targets(IC50)	Gamma-secretase
In vitro	In zebrafish embryos, FLI-06 at a concentration of 50μM inhibits the endogenous Notch signaling pathway.
In vivo	In kidney epithelial 293 cells, stable transfection of mutant APP results in significant amyloid deposition. FLI-06 alters the maturation pattern of the APP, subsequently terminating the release of APPs. Furthermore, in Hela cells overexpressing Notch green fluorescent protein, FLI-06 inhibits Notch transport and progression. FLI-06 disrupts the Golgi apparatus and inhibits the secretion of pre-transport proteins in the endoplasmic reticulum during the tubular to sheet-like morphology transition.
Kinase Assay	EC50 values of the test compounds are calculated from serial dilution series ranging from 200 to 0.1 μM. Cells are seeded in 96-well plates at a density of 5,000 cells per well in 100 μL medium. The next day, 100 μL medium containing each test compound is added. Cells are incubated for 16 h, fixed and processed for automated microscopy. EC50 estimates are calculated using four-parameter log-logistic fit with the package drc [1].

Solubility Information

Solubility	Ethanol: 37.14 mg/mL (84.69 mM),Sonication is recommended. DMSO: 127.5 mg/mL (290.75 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (22.8 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (22.8 mM),Solution. *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	2.2804 mL	11.402 mL	22.804 mL
5 mM	0.4561 mL	2.2804 mL	4.5608 mL
10 mM	0.228 mL	1.1402 mL	2.2804 mL
50 mM	0.0456 mL	0.228 mL	0.4561 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

Krämer A, et al. Nat Chem Biol. 2013, 9(11), 731-738.
Wang G, Wu Y, Su Y, et al.TCF12-regulated GRB7 facilitates the HER2+ breast cancer progression by activating Notch1 signaling pathway.Journal of Translational Medicine.2024, 22(1): 745.