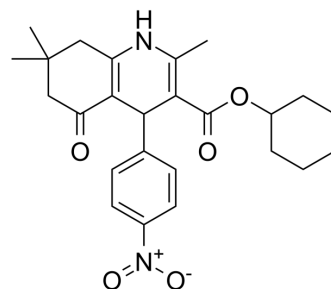


FLI-06

Cat. No.:	HY-15860		
CAS No.:	313967-18-9		
Molecular Formula:	C ₂₅ H ₃₀ N ₂ O ₅		
Molecular Weight:	438.52		
Target:	Notch		
Pathway:	Neuronal Signaling; Stem Cell/Wnt		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 38 mg/mL (86.66 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.2804 mL	11.4020 mL	22.8040 mL
	5 mM	0.4561 mL	2.2804 mL	4.5608 mL
	10 mM	0.2280 mL	1.1402 mL	2.2804 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: 2.5 mg/mL (5.70 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.5 mg/mL (5.70 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

FLI-06 is an inhibitor of Notch signaling with an EC₅₀ of 2.3 μM.

IC₅₀ & Target

EC₅₀: 2.3 μM (Notch signaling)^[1]

In Vitro

FLI-06, disrupted the Golgi apparatus in a manner distinct from that of brefeldin A and golgicide A. FLI-06 inhibited general secretion at a step before exit from the endoplasmic reticulum. In FLI-06-treated cells, no APPCTF accumulates despite strongly reduced Aβ secretion, suggesting that it acts upstream of α-secretase and β-secretase cleavage. FLI-06 is a very useful chemical probe to study the inhibition of membrane traffic at pre-ER-exit site (ERES) stages without fusion of ER-Golgi^[1].

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

PROTOCOL

Kinase Assay ^[1]

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].

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

CUSTOMER VALIDATION

- Pharmacol Res. 2019 Oct;148:104406.
- Cell Death Dis. 2020 Nov 15;11(11):981.
- Biomed Pharmacother. 2018 Nov;107:1370-1376.
- Int J Mol Med. 2018 Aug;42(2):1008-1017.
- Fundam Clin Pharmacol. 2020 Oct 4.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Kramer A, et al. Small molecules intercept Notch signaling and the early secretory pathway. Nat Chem Biol. 2013 Nov;9(11):731-8.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA