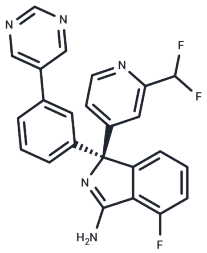
Data Sheet (Cat.No.T6772)

TargetMol

AZD3839 free base

Chemical Properties



CAS No. : 1227163-84-9

Formula: C24H16F3N5

Molecular Weight: 431.41

Storage: Store at low temperature,Keep away from direct sunlight
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	AZD3839 free base is a potent and selective BACE1 inhibitor with a Ki of 26.1 nM, demonstrating approximately 14-fold selectivity over BACE2. [Phase 1]
Targets(IC50)	Beta-Secretase,BACE
In vitro	In SH-SY5Y cells, AZD3839 efficiently decreases the Aβ40 levels with IC50 of 4.8 nM, and decreases the formation of sAPPβ with IC50 of 16.7 nM. AZD3839 also decreases the Aβ40 levels secreted from C57BL/6 mouse primary cortical neurons, N2A cells, and Dunkin-Hartley guinea pig primary cortical neurons with IC50 values of 50.9, 32.2, and 24.8 nM, respectively. [1] AZD3839 causes in vitro BACE1 inhibition in the cell assay with IC50 value of 16.7 nM. [2]
In vivo	In C57BL/6 mice, AZD3839 (69 mg/kg, p.o.) causes a dose- and time-dependent reduction of plasma and brain Aβ. In guinea pig and non-human primates, AZD3839 also inhibits Aβ generation. [1]

Solubility Information

Solubility	DMSO: 80 mg/mL (185.44 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: 80 mg/mL (185.44 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 (7.65 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	2.318 mL	11.5899 mL	23.1798 mL
5 mM	0.4636 mL	2.318 mL	4.636 mL
10 mM	0.2318 mL	1.159 mL	2.318 mL
50 mM	0.0464 mL	0.2318 mL	0.4636 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

Jeppsson F, et al. J Biol Chem. 2012, 287(49), 41245-41257.
Swahn BM, et al. J Med Chem. 2012, 55(21), 9346-9361.