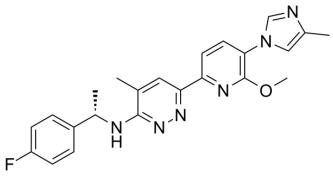
BPN-15606

Cat. No.:	HY-117482
CAS No.:	1914989-49-3
Molecular Formula:	$C_{23}H_{23}FN_6O$
Molecular Weight:	418.47
Target:	γ-secretase
Pathway:	Neuronal Signaling; Stem Cell/Wnt
Storage:	-20°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (238.97 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.3897 mL	11.9483 mL	23.8966 mL
5 mM	0.4779 mL	2.3897 mL	4.7793 mL
10 mM	0.2390 mL	1.1948 mL	2.3897 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (5.97 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (5.97 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

BPN-15606 is a highly potent, orally active γ-secretase modulator (GSM), attenuates the production of Aβ42 and Aβ40 by SHSY5Y neuroblastoma cells with IC_{50} values of 7 nM and 17nM, respectively. BPN-15606 lowers Aβ42 and Aβ40 levels in the central nervous system of rats and mice. BPN-15606 has acceptable PK/PD properties, including bioavailability, half-life, and clearance[1].

IC_{50} & Target

γ-secretase[1]

In Vivo

BPN-15606 (oral administration; 10 mg/kg, 25 mg/kg and 50 mg/kg; 7 days) shows excellent dose-dependent efficacy in both plasma and brain on lowering of Aβ42 and Aβ40 levels in mice[1].
BPN-15606 (oral administration; 5 mg/kg, 25 mg/kg and 50 mg/kg; 9 days) dose-dependently reduces CSF on lowering of A β42 and Aβ40 levels in rats[1].

BPN-15606 (oral administration; 25 mg/kg; single dose) shows a robust effect on both brain and plasma Aβ 42 and Aβ40 levels, which begins approximately 30–60 minutes following the single dose administration and lasted for ≥24 hours in C57BL/6 mice[1].

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

REFERENCES

[1]. Wagner SL, et al. Pharmacological and Toxicological Properties of the Potent Oral γ-Secretase Modulator BPN-15606. J Pharmacol Exp Ther. 2017 Jul;362(1):31-44.

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