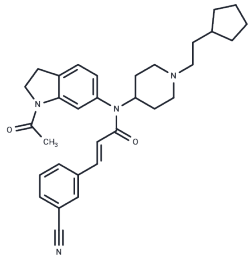
Data Sheet (Cat.No.T15620)

TargetMol

JNJ-5207787

Chemical Properties



CAS No. : 683746-68-1

Formula: C32H38N4O2

Molecular Weight: 510.67

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	JNJ-5207787 is a blood-brain barrier penetrant neuropeptide Y Y2 receptor antagonist that demonstrates greater than 100-fold selectivity over Y1, Y4, and Y5 receptor subtypes, JNJ-5207787 potently suppresses peptide YY binding at both human and rat Y2 receptors, supporting the use of JNJ-5207787 in central nervous system research focused on neuropeptide signaling.
Targets(IC50)	Others
In vitro	JNJ-5207787 inhibits PYY-stimulated [35S]GTPγS binding, returning it to basal levels with a corrected pIC50 of 7.20 (evaluated at 0.01-10 μM) [1].
In vivo	In Sprague-Dawley rats, JNJ-5207787 demonstrates blood-brain barrier (BBB) permeability. Following intraperitoneal (i.p.) administration at a dose of 30 mg/kg, the compound reaches a maximum brain concentration (Cmax) of 1351 ng/mL within 30 minutes. In vivo occupancy experiments confirm that systemically administered JNJ-5207787 occupies central Y2 receptor binding sites [1].

Solubility Information

Solubility	DMSO: 4 mg/mL (7.83 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9582 mL	9.7911 mL	19.5821 mL
5 mM	0.3916 mL	1.9582 mL	3.9164 mL
10 mM	0.1958 mL	0.9791 mL	1.9582 mL
50 mM	0.0392 mL	0.1958 mL	0.3916 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

Bonaventure P, et al. Characterization of N-(1-Acetyl-2,3-dihydro-1H-indol-6-yl)-3-(3-cyano-phenyl)-N-[1-(2-cyclopentyl-ethyl)-piperidin-4yl]acrylamide (JNJ-5207787), a small molecule antagonist of the neuropeptide YY2 receptor. J Pharmacol Exp Ther. 2004 Mar;308(3):1130-7.