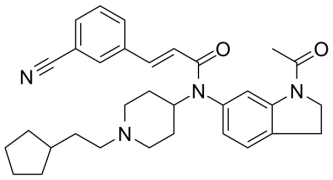
JNJ-5207787

Cat. No.:	HY-107732
CAS No.:	683746-68-1
Molecular Formula:	$C_{32}H_{38}N_4O_2$
Molecular Weight:	510.67
Target:	Neuropeptide Y Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



BIOLOGICAL ACTIVITY

Description	JNJ-5207787 is a nonpeptidic, selective and penetrate the blood-brain barrier neuropeptide Y Y_2 receptor (Y_2) antagonist. JNJ-5207787 inhibits the binding of peptide YY (PYY) with pIC_{50}s of 7.0 and 7.1 for human Y_2 receptor and rat Y_2 receptor, respectively. JNJ-5207787 is >100-fold selective versus human Y_1, Y_4, and Y_5 receptors[1].

IC_{50} & Target	human Y_2 receptor	rat Y_2 receptor
	7.0 (pIC_{50})	7.1 (pIC_{50})

In Vitro

JNJ-5207787 (0.01, 0.1, 1, 10 μM) has antagonistic properties and inhibits the PYY-stimulated [^{35}S]GTPγS binding to basal level with a p IC_{50} corr of 7.20[1].

JNJ-5207787 (10 μM; 15 min) inhibits [^{125}I]PYY labeling in lateral septum, cerebellum, ventral tegmental area, substantia nigra, hippocampus, septum, amygdala, and hypothalamus[1].

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

In Vivo

JNJ-5207787 (i.p.; 30 mg/kg) penetrates into the brain (C_{max}=1351 ng/ml at 30 min) and occupies Y_2 receptor binding sites[1].

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

Animal Model:	Sixteen female Sprague-Dawley Rats (approximately 300 g of body weight)[1]
Dosage:	30 mg/kg
Administration:	IP
Result:	Penetrated into the brain (C_{max}=1351 ng/ml at 30 min) and occupied Y_2 receptor binding sites.

REFERENCES

[1]. 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

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