

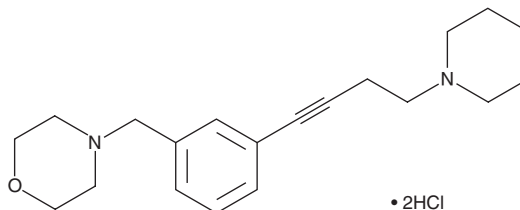
PRODUCT INFORMATION

JNJ-10181457 (hydrochloride)

Item No. 11997



CAS Registry No.: 544707-20-2
Formal Name: 4-[[3-[4-(1-piperidinyl)-1-butyne-1-yl]phenyl]methyl]-morpholine, dihydrochloride
Synonym: RWJ 662733
MF: $C_{20}H_{28}N_2O \cdot 2HCl$
FW: 385.4
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 240, 251 nm
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

JNJ-10181457 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the JNJ-10181457 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. JNJ-10181457 (hydrochloride) is soluble in DMSO. JNJ-10181457 (hydrochloride) is also soluble in water. We do not recommend storing the aqueous solution for more than one day.

Description

JNJ-10181457 is an antagonist of histamine H_3 receptors ($K_s = 1.17$ and 7.08 nM for human and rat receptors, respectively).¹ It increases extracellular norepinephrine and acetylcholine levels in the frontal cortex of rats when administered subcutaneously at a dose of 10 mg/kg. JNJ-10181457 (1.25-10 mg/kg, p.o.) reduces the number of cataplectic attacks and time spent in cataplexy in familial narcoleptic Dobermans. In mice, JNJ-10181457 (10 mg/kg) decreases the time spent in the open areas of the elevated zero maze, as well as increases locomotor activity in an open field test.² It also inhibits LPS-induced increases in time spent immobile in the tail suspension test in mice.³

References

1. Bonaventure, P., Letavic, M., Dugovic, C., *et al.* Histamine H_3 receptor antagonists: From target identification to drug leads. *Biochem. Pharmacol.* **73**(8), 1084-1096 (2007).
2. Mohsen, A., Yoshikawa, T., Miura, Y., *et al.* Mechanism of the histamine H_3 receptor-mediated increase in exploratory locomotor activity and anxiety-like behaviours in mice. *Neuropharmacology* **81**, 188-194 (2014).
3. Iida, T., Yoshikawa, T., Kárpáti, A., *et al.* JNJ10181457, a histamine H_3 receptor inverse agonist, regulates *in vivo* microglial functions and improves depression-like behaviours in mice. *Biochem. Biophys. Res. Commun.* **488**(3), 534-540 (2017).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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