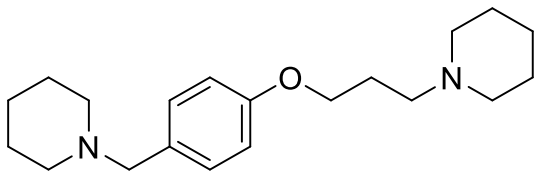
Product data sheet

MedKoo Cat#: 526662 Name: JNJ-5207852 CAS: 98473-34-2 Chemical Formula: $C_{20}H_{32}N_2O$ Exact Mass: 316.2515 Molecular Weight: 316.489	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.
	In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:
JNJ-5207852 is a potent and selective H3 antagonist with high affinity at the rat (pKi=8.9) and human (pKi=9.24) H3 receptor. JNJ-5207852 is selective for the H3 receptor, with negligible binding to other receptors, transporters and ion channels at 1 microm. JNJ-5207852 readily penetrates the brain tissue after subcutaneous (s.c.) administration, as determined by ex vivo autoradiography (ED50 of 0.13 mg kg(-1) in mice).

2. CoA, QC data, SDS, and handling instruction
SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
TBD	TBD	TBD

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	3.16 mL	15.80 mL	31.60 mL
5 mM	0.63 mL	3.16 mL	6.32 mL
10 mM	0.32 mL	1.58 mL	3.16 mL
50 mM	0.06 mL	0.32 mL	0.63 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator
Please refer the product web page under section of "Calculator"

6. Recommended literature which reported protocols for in vitro and in vivo study
In vitro study

1. Nakamura T, Yoshikawa T, Noguchi N, Sugawara A, Kasajima A, Sasano H, Yanai K. The expression and function of histamine H_3 receptors in pancreatic beta cells. Br J Pharmacol. 2014 Jan;171(1):171-85. doi: 10.1111/bph.12429. PMID: 24117016; PMCID: PMC3874705.

2. Barbier AJ, Berridge C, Dugovic C, Laposky AD, Wilson SJ, Boggs J, Aluisio L, Lord B, Mazur C, Pudiak CM, Langlois X, Xiao W, Apodaca R, Carruthers NI, Lovenberg TW. Acute wake-promoting actions of JNJ-5207852, a novel, diamine-based H3 antagonist. Br J Pharmacol. 2004 Nov;143(5):649-61. doi: 10.1038/sj.bjp.0705964. Epub 2004 Oct 4. Erratum in: Br J Pharmacol. 2005 Jan;144(1):145. PMID: 15466448; PMCID: PMC1575430.

In vivo study

1. Barbier AJ, Berridge C, Dugovic C, Laposky AD, Wilson SJ, Boggs J, Aluisio L, Lord B, Mazur C, Pudiak CM, Langlois X, Xiao W, Apodaca R, Carruthers NI, Lovenberg TW. Acute wake-promoting actions of JNJ-5207852, a novel, diamine-based H3 antagonist. Br J Pharmacol. 2004 Nov;143(5):649-61. doi: 10.1038/sj.bjp.0705964. Epub 2004 Oct 4. Erratum in: Br J Pharmacol. 2005 Jan;144(1):145. PMID: 15466448; PMCID: PMC1575430.

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7. Bioactivity

Biological target:

JNJ-5207852 is a potent and selective H3 antagonist.

In vitro activity

JNJ-5207852 increased GIIS (glucose-induced insulin secretion) in a dose-dependent manner, with an EC_{50} of 13.8 μM and an E_{max} of 103% (Figure 3D).

Reference: Br J Pharmacol. 2014 Jan;171(1):171-85. https://pubmed.ncbi.nlm.nih.gov/24117016/

In vivo activity

JNJ-5207852 elicited a dose-dependent increase in the total time spent awake (Figure 4a). This wake-promoting effect was most noticeable at the higher dose, where 10 mg kg^{-1} JNJ-5207852 caused an increase in time spent awake that manifested within the first 30 min after dosing and remained present throughout the observation period (1580±103 vs 640±122 s in the vehicle-treated rats in the 30–60 min post-dosing interval, $P<0.05$; 1525±241 vs 577±184 s in the vehicle-treated animals in the 60–90 min post-dosing observation interval, $P<0.05$).

Reference: Br J Pharmacol. 2004 Nov;143(5):649-61. https://pubmed.ncbi.nlm.nih.gov/15466448/

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.