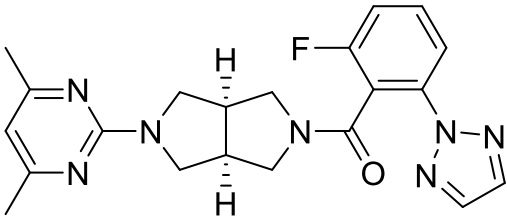


Product data sheet



MedKoo Cat#: 327024 Name: Seltorexant CAS#: 1293281-49-8 Chemical Formula: C ₂₁ H ₂₂ FN ₇ O Exact Mass: 407.1870 Molecular Weight: 407.45	
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:

Seltorexant, also known as JNJ-42847922 and MIN-202, is an orally active, high-affinity, and selective OX2R antagonist that has been shown to promote sleep in various species. Seltorexant shows antidepressant and sleep-promoting effects in patients with major depressive disorder and induces somnolence in healthy subjects without residual central effects.

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
DMSO	25	61.36

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.45 mL	12.27 mL	24.54 mL
5 mM	0.49 mL	2.45 mL	4.91 mL
10 mM	0.25 mL	1.23 mL	2.45 mL
50 mM	0.05 mL	0.25 mL	0.49 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

To be determined

In vivo study

- Ziemichód W, Kurowska A, Grabowska K, Kurowska M, Biała G. Characteristics of Seltorexant-Innovative Agent Targeting Orexin System for the Treatment of Depression and Anxiety. *Molecules*. 2023 Apr 19;28(8):3575. doi: 10.3390/molecules28083575. PMID: 37110810; PMCID: PMC10142100.
- Bonaventure P, Shelton J, Yun S, Nepomuceno D, Sutton S, Aluisio L, Fraser I, Lord B, Shoblock J, Welty N, Chaplan SR, Aguilar Z, Halter R, Ndifor A, Koudriakova T, Rizzolio M, Letavic M, Carruthers NI, Lovenberg T, Dugovic C. Characterization of JNJ-42847922, a Selective Orexin-2 Receptor Antagonist, as a Clinical Candidate for the Treatment of Insomnia. *J Pharmacol Exp Ther*. 2015 Sep;354(3):471-82. doi: 10.1124/jpet.115.225466. Epub 2015 Jul 15. PMID: 26177655.

7. Bioactivity

Biological target:

Seltorexant is a selective OX2R antagonist (pKi values of 8.0 and 8.1 for human and rat OX2R).

In vitro activity

Product data sheet



To be determined

In vivo activity

This study highlighted the potential of seltorexant as a candidate for insomnia treatment. In rats, single oral administration of seltorexant during the light phase reduced the latency to non-rapid eye movement (NREM) sleep and prolonged NREM sleep time in the first 2 hours; REM sleep was minimally affected. Seltorexant did not increase dopamine release in rat nucleus accumbens or produce place preference in mice after subchronic conditioning, indicating that the compound lacks intrinsic motivational properties in contrast to zolpidem. All sleep parameters returned to baseline levels following discontinuation.

Reference: J Pharmacol Exp Ther. 2015 Sep;354(3):471-82. <https://pubmed.ncbi.nlm.nih.gov/26177655/>

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.