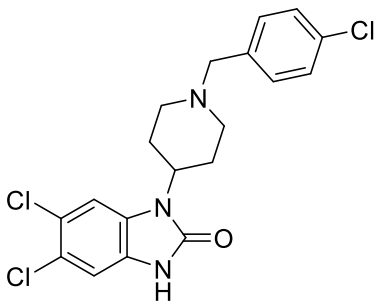
Product data sheet

MedKoo Cat#: 555270 Name: SR-17018 CAS#: 2134602-45-0 Chemical Formula: $C_{19}H_{18}Cl_3N_3O$ Exact Mass: 409.0515 Molecular Weight: 410.723	
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:
SR-17018 is an mu-opioid-receptor (MOR) agonist with an EC50 of 97 nM.

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	6.0	14.61

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.43 mL	12.17 mL	24.35 mL
5 mM	0.49 mL	2.43 mL	4.87 mL
10 mM	0.24 mL	1.22 mL	2.43 mL
50 mM	0.05 mL	0.24 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

1. Hill R, Sanchez J, Lemel L, Antonijevic M, Hosking Y, Mistry SN, Kruegel AC, Javitch JA, Lane JR, Canals M. Assessment of the potential of novel and classical opioids to induce respiratory depression in mice. Br J Pharmacol. 2023 Dec;180(24):3160-3174. doi: 10.1111/bph.16199. Epub 2023 Aug 22. PMID: 37489013.
2. Grim TW, Schmid CL, Stahl EL, Pantouli F, Ho JH, Acevedo-Canabal A, Kennedy NM, Cameron MD, Bannister TD, Bohn LM. A G protein signaling-biased agonist at the μ-opioid receptor reverses morphine tolerance while preventing morphine withdrawal. Neuropsychopharmacology. 2020 Jan;45(2):416-425. doi: 10.1038/s41386-019-0491-8. Epub 2019 Aug 23. PMID: 31443104; PMCID: PMC6901606.

7. Bioactivity
Biological target:

SR-17018 is an mu-opioid-receptor (MOR) agonist, binding with GTPγS, with an EC50 of 97 nM.

In vitro activity

To be determined

Product data sheet

In vivo activity

Biased agonists, such as SR-17018, may be useful for opioid dependence treatment, while also restoring opioid antinociceptive sensitivity. When chronically administered to mice, SR-17018 did not lead to certain hallmarks of opioid neuronal adaptations seen with morphine. Substitution with SR-17018 in morphine-tolerant mice restored morphine potency and efficacy, whereas the onset of opioid withdrawal was prevented.

Reference: Neuropsychopharmacology. 2020 Jan; 45(2): 416–425. https://pubmed.ncbi.nlm.nih.gov/31443104/

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.