

Product data sheet



MedKoo Cat#: 574397 Name: SB-243213 CAS#: 200940-22-3 Chemical Formula: C ₂₂ H ₁₉ F ₃ N ₄ O ₂ Exact Mass: 428.146 Molecular Weight: 428.42	
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:

SB-243213 is an orally active, selective and high-affinity 5-HT_{2C} receptor antagonist. SB-243213 has improved anxiolytic profile and has the potential for schizophrenia and motor disorders.

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	125	297.78

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.33 mL	11.67 mL	23.34 mL
5 mM	0.47 mL	2.33 mL	4.67 mL
10 mM	0.23 mL	1.17 mL	2.33 mL
50 mM	0.05 mL	0.23 mL	0.47 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

- Deurwaerdère P, Le Moine C, Chesselet MF. Selective blockade of serotonin 2C receptor enhances Fos expression specifically in the striatum and the subthalamic nucleus within the basal ganglia. *Neurosci Lett*. 2010 Jan 22;469(2):251-5. doi: 10.1016/j.neulet.2009.12.006. Epub 2009 Dec 11. PMID: 20004702.
- Monti JM, Jantos H. Effects of the serotonin 5-HT_{2A/2C} receptor agonist DOI and of the selective 5-HT_{2A} or 5-HT_{2C} receptor antagonists EMD 281014 and SB-243213, respectively, on sleep and waking in the rat. *Eur J Pharmacol*. 2006 Dec 28;553(1-3):163-70. doi: 10.1016/j.ejphar.2006.09.027. Epub 2006 Sep 23. PMID: 17059817.

7. Bioactivity

Biological target:

SB-243213 is a 5-HT_{2C} receptor antagonist with a pK_i of 9.37 and a pK_b of 9.8 for human 5-HT_{2C} receptor. SB 243213 shows greater than a 100-fold selectivity over a wide range of neurotransmitter receptors, enzymes and ion channels.

In vitro activity

To be determined

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In vivo activity

In adult rats, SB-243213 significantly reduced the time spent in rapid-eye-movement (REM) sleep following subcutaneous administration. SB-243213 did not reverse the changes in sleep and waking induced by the serotonin agonist DOI. 5-HT(2A) receptor mechanisms are likely accountable for DOI-induced alterations in waking and slow wave sleep.

Reference: Eur J Pharmacol. 2006 Dec 28;553(1-3):163-70. <https://pubmed.ncbi.nlm.nih.gov/17059817/>

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.