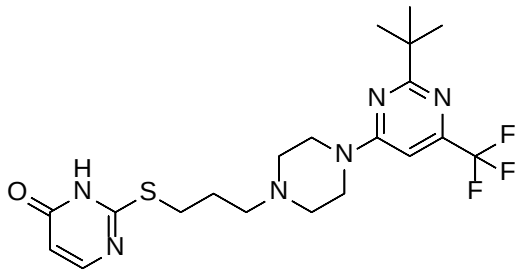
Product data sheet

MedKoo Cat#: 524126 Name: ABT-925 free base CAS: 220519-06-2 (free base) Chemical Formula: $C_{20}H_{27}F_3N_6OS$ Exact Mass: 456.1919 Molecular Weight: 456.5322	
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:
ABT-925, also known as A-37203, BSF-201640; DAT-201; Lu-201640; and A-437203, is a selective dopamine D3 receptor (DRD3) antagonist with an approximately 100-fold higher in vitro affinity for dopamine D_3 versus D_2 receptors. ABT-925 was tested in schizophrenia. ABT-925 is a selective dopamine D_3 receptor antagonist with an approximately 100-fold higher in vitro affinity for dopamine D_3 versus D_2 receptors.

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	2.19 mL	10.95 mL	21.90 mL
5 mM	0.44 mL	2.19 mL	4.38 mL
10 mM	0.22 mL	1.10 mL	2.19 mL
50 mM	0.04 mL	0.22 mL	0.44 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
TBD

In vivo study
1. Kehr J, Wang FH, Ichinose F, Yoshitake S, Farkas B, Kiss B, Adham N. Preferential Effects of Cariprazine on Counteracting the Disruption of Social Interaction and Decrease in Extracellular Dopamine Levels Induced by the Dopamine D3 Receptor Agonist, PD-128907 in Rats: Implications for the Treatment of Negative and Depressive Symptoms of Psychiatric Disorders. Front Psychiatry. 2022 Jan 12;12:801641. doi: 10.3389/fpsyt.2021.801641. PMID: 35095615; PMCID: PMC8789685.

2. Ramirez AD, Wong SK, Menniti FS. Pramipexole inhibits MPTP toxicity in mice by dopamine D3 receptor dependent and independent mechanisms. Eur J Pharmacol. 2003 Aug 15;475(1-3):29-35. doi: 10.1016/s0014-2999(03)02087-9. PMID: 12954356.

7. Bioactivity
Biological target:
A-437203 is a selective D3 receptor antagonist with K_i of 71, 1.6, and 6220 nM for D2, D3, and D4 receptors.

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In vitro activity

TBD

In vivo activity

The objective of the study was to compare the abilities of cariprazine, aripiprazole (another DA receptor partial agonist with more D_2 receptor preference), and ABT-925 (a selective DA D_3 antagonist) to counteract the social deficit and neurochemical alterations induced by the D3 receptor-preferring agonist (+)-PD 128907 (PD) in rats. ABT-925 (3 mg/kg; p.o.) and to a lesser extent aripiprazole (20 mg/kg; p.o.) were effective in blocking the PD-induced disruption of huddling. ABT-925 significantly counteracted the effect of PD at 80 min post-dose. In the nucleus accumbens (nAcc) shell, the highest dose of cariprazine, as well as ABT-925 and aripiprazole, significantly reversed the PD-induced decrease in DA levels.

Reference: Front Psychiatry. 2022 Jan 12;12:801641. https://pubmed.ncbi.nlm.nih.gov/35095615/

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.