



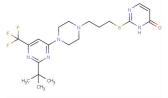
A-437203

Chemical Properties

CAS No.: 220519-06-2
Formula: C20H27F3N6OS

Molecular Weight: 456.53 Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).



Biological Description

Description	A-437203 is a selective D3 receptor antagonist (Kis: 71, 1.6, and 6220 nM for D2, D3, and D4 receptors).
Targets(IC ₅₀)	D2 receptor: 71 nM (Ki) D3 receptor: 1.6 nM D4 receptor(ki): 6220 nM
In vivo	A-437203 is initially tested alone in the rat forced swim test (FST). Doses of A-437203 evaluated are 0.52, 1.75, 5.24, and 17.46 μmol/kg i.p. Doses are chosen based on the selectivity of A-437203 for D3 vs D2 dopamine receptors and reports indicating that the effects of A-437203 at doses of 17.46 μmol/kg (10 mg/kg) or lower are clearly mediated by D3 but not D2 receptors since higher doses of the compound such as 174.6 μmol/kg (100 mg/kg) are necessary to bind and block D2 receptor from the irreversible inactivation induced by the alkylating agent EEDG. ANOVA revealed no significant difference between the treatments for any of the behaviors analyzed (F4, 45=1.12, p=0.359 for immobility, F4, 45=0.188, p=0.943 for climbing, and F4, 45=1.634, p=0.182 for swimming). Based on these results, the dose of 17.46 μmol/kg i.p. of A-437203 is selected for further experiments.

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.19 mL	10.952 mL	21.904 mL
5 mM	0.438 mL	2.19 mL	4.381 mL
10 mM	0.219 mL	1.095 mL	2.19 mL
50 mM	0.044 mL	0.219 mL	0.438 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Basso AM, et al. Antidepressant-like effect of D(2/3) receptor-, but not D(4) receptor-activation in the rat forced swim test. Neuropsychopharmacology. 2005 Jul;30(7):1257-68.

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