

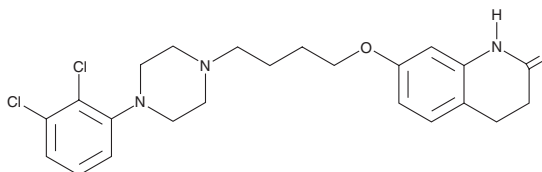
PRODUCT INFORMATION



Aripiprazole

Item No. 19989

CAS Registry No.: 129722-12-9
Formal Name: 7-[4-[4-(2,3-dichlorophenyl)-1-piperazinyl]butoxy]-3,4-dihydro-2(1H)-quinolinone
Synonyms: OPC 31, OPC 14597
MF: C₂₃H₂₇Cl₂N₃O₂
FW: 448.4
Purity: ≥98%
UV/Vis.: λ_{max}: 216, 255 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Aripiprazole is supplied as a crystalline solid. A stock solution may be made by dissolving the aripiprazole in the solvent of choice, which should be purged with an inert gas. Aripiprazole is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of aripiprazole in these solvents is approximately 1, 25, and 30 mg/ml, respectively.

Aripiprazole is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, aripiprazole should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Aripiprazole has a solubility of approximately .12 mg/ml in a 1:7 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Aripiprazole is an atypical antipsychotic.¹ It is a partial agonist at dopamine D₂, D_{2L}, and D₃ receptors (K_s = 3.3, 0.74, 9.7 nM, respectively), a partial agonist of the serotonin (5-HT) receptor subtype 5-HT_{1A} (K_i = 5.6 nM), and an inverse agonist of 5-HT_{2B} receptors (K_i = 0.36 nM). It is functionally selective at the dopamine D₂ receptor with cell-type- and function-selective activities. Aripiprazole inhibits disruptions in prepulse inhibition induced by phencyclidine in mice when administered at doses of 5 and 10 mg/kg.² Formulations containing aripiprazole have been used in the treatment of schizophrenia, bipolar mania or mixed episodes, and Tourette's disorder.

References

1. Shapiro, D.A., Renock, S., Arrington, E., et al. Aripiprazole, a novel atypical antipsychotic drug with a unique and robust pharmacology. *Neuropsychopharmacology* **28(8)**, 1400-1411 (2003).
2. Fejgin, K., Safonov, S., Pålsson, E., et al. The atypical antipsychotic, aripiprazole, blocks phencyclidine-induced disruption of prepulse inhibition in mice. *Psychopharmacology (Berl.)* **191(2)**, 377-385 (2007).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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