



LKT Laboratories, Inc.

Aripiprazole

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Product Information

Product ID A7034

CAS No. 129722-12-9

Chemical Name 7-[4-[4-(2,3-dichlorophenyl)piperazin-1-yl]butoxy]-1, 2, 3, 4-tetrahydroquinolin-2-one

Synonym

Formula C₂₃H₂₇Cl₂N₃O₂

Formula Wt. 448.39

Melting Point 139-139.5° C

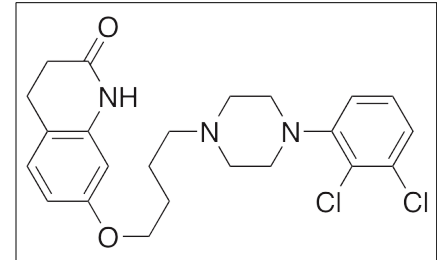
Purity ≥98%

Solubility

Store Temp Ambient

Ship Temp Ambient

Description Aripiprazole is a second generation atypical antipsychotic that also exhibits neuromodulatory, antidepressant, anxiolytic, antipsychotic, cognition enhancing, and antioxidative activities. Aripiprazole acts as a partial agonist at D2 receptors and 5-HT1A receptors and as an antagonist at 5-HT2A receptors and is used clinically to treat schizophrenia and bipolar I disorder. Aripiprazole also displays moderate affinity for and 5-HT2C/6/7 receptors and the serotonin transporter (SERT). Aripiprazole improves spatial memory in the Morris water maze test, exhibits antidepressant activity in the Porsolt test, and also improves social competence, potentially through increases in GABA transmission in prefrontal brain regions. This compound also potentiates nerve growth factor (NGF)-induced neurite outgrowth and increases levels of heat shock protein 90α (HSP90α). Aripiprazole protects cells from hydrogen peroxide-induced damage, increasing activity of superoxide dismutase 1 (SOD1).



Bulk quantities available upon request

Product ID	Size
A7034	100 mg
A7034	250 mg
A7034	1 g

References Lee JS, Lee JD, Park HJ, et al. Is the GABA System Related to the Social Competence Improvement Effect of Aripiprazole? An (18F)-Fluoroflumazenil PET Study. *Psychiatry Investig.* 2013 Mar;10(1):75-80. PMID: 23482902.

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Ishima T, Iyo M, Hashimoto K. Neurite outgrowth mediated by the heat shock protein Hsp90α: a novel target for the antipsychotic drug aripiprazole. *Transl Psychiatry.* 2012 Oct 16;2:e170. PMID: 23047241.

Zupancic M, Gonzalez ML. Aripiprazole in the acute and maintenance phase of bipolar I disorder. *Ther Clin Risk Manag.* 2012;8:1-6. PMID: 22298948.

Burda K, Czubak A, Kus K, et al. Influence of aripiprazole on the antidepressant, anxiolytic and cognitive functions of rats. *Pharmacol Rep.* 2011;63(4):898-907. PMID: 22001977.

Stark AD, Jordan S, Allers KA, et al. Interaction of the novel antipsychotic aripiprazole with 5-HT1A and 5-HT 2A receptors: functional receptor-binding and in vivo electrophysiological studies. *Psychopharmacology (Berl).* 2007 Feb;190(3):373-82. PMID: 17242925.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.