

Product Data Sheet

Product Name: Aripiprazole D8

Cat. No.: GC35386

Chemical Properties

Cas. No. 1089115-06-9,1089115-04-7

SMILES O=C1NC2=C(C=CC(OCCCCN3C([2H])([2H])C([2H])([2H])N(C4=CC=CC(Cl)=C4Cl)C([2H])([2H])C3([2H])[2H])=C2)CC1

Formula $C_{23}H_{19}D_8Cl_2N_3O_2$ M.Wt 456.43

Solubility DMF: 30 mg/ml, DMF:PBS (pH 7.2) (1:1): 0.12 mg/ml, DMSO: 25 mg/ml, Ethanol: 1 mg/ml
Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available sizes: ship with RT, or blue ice upon request.

Structure

Background

Aripiprazole-d₈ is intended for use as an internal standard for the quantification of aripiprazole by GC- or LC-MS. Aripiprazole is an atypical antipsychotic.¹ It is a partial agonist at dopamine D₂, D_{2L}, and D₃ receptors (K_is = 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.

1. Shapiro, D.A., Renock, S., Arrington, E., et al. Aripiprazole, a novel atypical

Caution: Product has not been fully validated for medical applications. For research use only.

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antipsychotic drug with a unique and robust
pharmacologyNeuropsychopharmacology28(8)1400-1411(2003) 2.Fejgin, K., Safonov, S.,
P?lsson, E., et al.The atypical antipsychotic, aripiprazole, blocks phencyclidine-induced
disruption of prepulse inhibition in micePsychopharmacology (Berl.)191(2)377-
385(2007)

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