
Product Data Sheet

Product Name: Ziprasidone D8

Cat. No.: GC37969

Chemical Properties

Cas. No. 1126745-58-1

SMILES O=C1CC2=CC(CCN(C([2H])([2H])C3([2H])([2H])C([2H])([2H])C([2H])([2H])C([2H])([2H])N3C4=NSC5=C4C=CC=C5)=C(Cl)C=C2N1

Formula $C_{21}H_{13}D_8ClN_4OS$ M.Wt 420.98

Solubility DMSO: slightly soluble, Methanol: slightly soluble Storage 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 size: ship with RT, or blue ice upon request.

Structure

Background

Ziprasidone-d₈ is intended for use as an internal standard for the quantification of ziprasidone by GC- or LC-MS. Ziprasidone is an atypical antipsychotic.¹ It is an agonist of the serotonin (5-HT) receptor subtype 5-HT_{1A} (EC₅₀ = 36.31 nM for inhibition of forskolin-induced adenylate cyclase activity in HeLa cells expressing human receptors), as well as an inverse agonist of 5-HT_{1D} receptors (IC₅₀ = 2.69 nM) and a partial agonist of 5-HT_{1B} receptors (EC₅₀ = 6.17 nM) in [³⁵S]GTPγS binding assays.^{2,3} Ziprasidone is an antagonist at 5-HT_{2A} and dopamine D₂ receptors (K_is = 1.15 and 1.29 nM, respectively) in cell-based assays.⁴ It inhibits d-amphetamine-induced hyperactivity and apomorphine-induced stereotypy in rats (ID₅₀s = 1.53 and 2.43 mg/kg, respectively). Formulations containing ziprasidone have been used in the treatment of schizophrenia and bipolar I disorder.

1. Seeman, P. Atypical antipsychotics: Mechanism of action *Can. J. Psychiatry* 47(1)27-38(2002)
 2. Schmidt, A.W., Lebel, L.A., Howard, H.R., Jr., et al. Ziprasidone: A novel

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

antipsychotic agent with a unique human receptor binding profile Eur. J. Pharmacol. 425(3)197-201(2001) 3. Audinot, V., Newman-Tancredi, A., Cussac, D., et al. Inverse agonist properties of antipsychotic agents at cloned, human (h) serotonin (5-HT)1B and h5-HT1D receptors Neuropsychopharmacology 25(3)410-422(2001) 4. Seeger, T.F., Seymour, P.A., Schmidt, A.W., et al. Ziprasidone (CP-88,059): A new antipsychotic with combined dopamine and serotonin receptor antagonist activity J. Pharmacol. Exp. Ther. 275(1)101-113(1995)

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA