
Product Data Sheet

Product Name: Ziprasidone HCl

Cat. No.: GC11521

Chemical Properties

Cas. No. 122883-93-6

Chemical Name 5-[2-[4-(1,2-benzothiazol-3-yl)piperazin-1-yl]ethyl]-6-chloro-1,3-dihydroindol-2-one;hydrochloride

SMILES C1CN(CCN1CCC2=C(C=C3C(=C2)CC(=O)N3)Cl)C4=NSC5=CC=CC=C54.ClFormula $C_{21}H_{21}ClN_4OS.HCl$ M.Wt 449.4Solubility $\geq 22.47\text{mg/mL}$ in DMSO 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 HCl (CP-88059 HCl) is a combined 5-HT (serotonin) and dopamine receptor antagonist which exhibits potent effects of antipsychotic activity. Target: 5-HT receptor; Dopamine receptor. Ziprasidone (hydrochloride) is the salt form of ziprasidone, which possesses an in vitro 5-HT_{2A}/dopamine D₂ receptor affinity ratio higher than any clinically available antipsychotic agent. In vivo, ziprasidone antagonizes 5-HT_{2A} receptor-induced head twitch with 6-fold higher potency than for blockade of d-amphetamine-induced hyperactivity, a measure of central dopamine D₂ receptor antagonism. Ziprasidone also has high affinity for the 5-HT_{1A}, 5-HT_{1D} and 5-HT_{2C} receptor subtypes, which may further enhance its therapeutic potential [1]. Ziprasidone sulfoxide and sulfone were the major metabolites in human serum. The affinities of the sulfoxide and sulfone metabolites for 5-HT₂ and D₂ receptors are low with respect to ziprasidone, and are thus unlikely to contribute to its antipsychotic effects [2]. Ziprasidone was associated with significant differential adverse effects relative to placebo in BPM, BPD, and schizophrenia with no significant difference in weight gain in

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

all 3 groups. Self-reported somnolence was increased across the 3 conditions. Subjects with BPM were more vulnerable to EPS than those with BPD or schizophrenia [3]. Clinical indications: Bipolar I disorder; Bipolar disorder; Mania; Schizophrenia FDA Approved Date: February 2001

References:

- [1]. Seeger, T.F., et al., Ziprasidone (CP-88,059): a new antipsychotic with combined dopamine and serotonin receptor antagonist activity. *J Pharmacol Exp Ther*, 1995. 275(1): p. 101-13.
- [2]. Prakash, C., et al., Metabolism and excretion of a new antipsychotic drug, ziprasidone, in humans. *Drug Metab Dispos*, 1997. 25(7): p. 863-72.
- [3]. Gao, K., et al., Risk for adverse events and discontinuation due to adverse events of ziprasidone monotherapy relative to placebo in the acute treatment of bipolar depression, mania, and schizophrenia. *J Clin Psychopharmacol*, 2013. 33(3): p. 425-31.

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