
Product Data Sheet

Product Name: Iloperidone hydrochloride

Cat. No.: GC10799

Chemical Properties

Cas. No. 1299470-39-5

Chemical Name 1-(4-(3-(4-(6-fluorobenzo[d]isoxazol-3-yl)piperidin-1-yl)propoxy)-3-methoxyphenyl)ethanone hydrochloride

SMILES CC(C1=CC(OC)=C(OCCCN2CCC(C3=NOC4=C3C=CC(F)=C4)CC2)C=C1)=O.ClFormula $C_{24}H_{28}ClFN_2O_4$ M.Wt 462.94

Solubility Soluble 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**

Iloperidone (hydrochloride) is a D(2)/5-HT(2) receptor antagonist, which is an atypical antipsychotic for the treatment of schizophrenia symptoms. Target: 5-HT receptor; Dopamine receptor

Iloperidone (hydrochloride) is the hydrochloride of iloperidone, iloperidone (HP 873; 1-[4-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]propoxy]-3-methoxyphenyl]ethanone) is a compound currently in clinical trials for the treatment of schizophrenia. Iloperidone displays affinity for dopamine D2 receptors and for 5-HT_{2A} receptors and has a variety of in vivo activities suggestive of an atypical antipsychotic. Iloperidone displayed higher affinity for the dopamine D₃ receptor ($K_i = 7.1$ nM) than for the dopamine D₄ receptor ($K_i = 25$ nM). Iloperidone displayed high affinity for the 5-HT₆ and 5-HT₇ receptors ($K_i = 42.7$ and 21.6 nM, respectively), and was found to have higher affinity for the 5-HT_{2A} ($K_i = 5.6$ nM) than for the 5-HT_{2C} receptor ($K_i = 42.8$ nM) [1]. Iloperidone was eliminated slowly, with a mean $t_{1/2}$ of 13.5 to 14.0 hours. Coadministration with food did not significantly affect AUC, t_{max} , or C_{max} . These results indicate that the rate of iloperidone's absorption is decreased, but the overall

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bioavailability is unchanged, when the drug is taken with food. Orthostatic hypotension, dizziness, and somnolence were the most commonly reported adverse events [2]. Iloperidone pharmacokinetics and pharmacodynamics are presented herein, together with an evaluation of clinical safety and efficacy results [3]. Clinical indications: Post traumatic stress disorder; Schizophrenia Toxicity: Commonly observed adverse reactions (incidence $\geq 5\%$ and two-fold greater than placebo) were: dizziness, dry mouth, fatigue, nasal congestion, orthostatic hypotension, somnolence, tachycardia, and weight increased.

References:

- [1]. Kongsamut, S., et al., Iloperidone binding to human and rat dopamine and 5-HT receptors. Eur J Pharmacol, 1996. 317(2-3): p. 417-23.
- [2]. Sainati, S.M., et al., Safety, tolerability, and effect of food on the pharmacokinetics of iloperidone (HP 873), a potential atypical antipsychotic. J Clin Pharmacol, 1995. 35(7): p. 713-20.
- [3]. Albers, L.J., A. Musenga, and M.A. Raggi, Iloperidone: a new benzisoxazole atypical antipsychotic drug. Is it novel enough to impact the crowded atypical antipsychotic market Expert Opin Investig Drugs, 2008. 17(1): p. 61-75.

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