
Product Data Sheet

Product Name: Bromopride

Cat. No.: GC31047

Chemical Properties

Cas. No. 4093-35-0

SMILES O=C(NCCN(CC)CC)C1=CC(Br)=C(N)C=C1OCFormula $C_{14}H_{22}BrN_3O_2$

M.Wt 344.25

Solubility DMSO : 170 mg/mL (493.83 mM; Need ultrasonic) 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**

Bromopride is a dopamine D₂ receptor antagonist ($K_i = 14$ nM).¹ It binds to bovine anterior pituitary membranes with an IC₅₀ value of 2.13 μM.² Bromopride inhibits cholinesterase activity *in vitro* in rat plasma and striatum homogenate (IC₅₀s = 67.8 and 38.4 μM, respectively).³ It increases serum prolactin levels in rats by 100% when used at a dose of 0.02 mol/kg.² Bromopride (2.5 mg/kg) decreases locomotion and rearing in an open field test and impairs acquisition, but not retention, of a conditioned avoidance response in a two-way active conditioned avoidance test in rats.⁴

1. Tonini, M., Cipollina, L., Poluzzi, E., et al. Clinical implications of enteric and central D₂ receptor blockade by antidopaminergic gastrointestinal prokinetics. *Aliment. Pharmacol. Ther.* 19(4)379-390(2004) 2. Meltzer, H.Y., Simonovic, M., and So, R. Effects of a series of substituted benzamides on rat prolactin secretion and 3H-spiroperone binding to bovine anterior pituitary membranes. *Life Sci.* 32(25)2877-2886(1983) 3. Nasello, A.G., Gidali, D., de Sá-Rocha, L.C., et al. Differential effects of bromopride and domperidone on cholinesterase activity in rat tissues. *Life Sci.* 56(3)151-156(1995) 4. Nasello, A.G.,

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

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Vanzeler, M.L., and Felicio, L.F. A comparison of bromopride and domperidone effects on rat conditioned avoidance and motor activity. *Pharmacol. Toxicol.* 68(1):46-50 (1991)

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