# PRODUCT INFORMATION



## **Bromopride**

Item No. 29329

CAS Registry No.: 4093-35-0

Formal Name: 4-amino-5-bromo-N-[2-(diethylamino)

ethyl]-2-methoxy-benzamide

Synonyms: Emepride, Emoril, Viadil

MF:  $C_{14}H_{22}BrN_3O_2$ 

FW: 344.3 **Purity:** ≥95% Supplied as: A solid Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### **Laboratory Procedures**

Bromopride is supplied as a solid. A stock solution may be made by dissolving the bromopride in the solvent of choice, which should be purged with an inert gas. Bromopride is slightly soluble in methanol and DMSO.

### Description

Bromopride is a dopamine  $D_2$  receptor antagonist ( $K_i = 14$  nM).<sup>1</sup> It binds to bovine anterior pituitary membranes with an IC<sub>50</sub> value of 2.13  $\mu$ M.<sup>2</sup> Bromopride inhibits cholinesterase activity *in vitro* in rat plasma and striatum homogenate (IC<sub>50</sub>s = 67.8 and 38.4  $\mu$ M, respectively).<sup>3</sup> It increases serum prolactin levels in rats by 100% when used at a dose of 0.02 mol/kg.<sup>2</sup> Bromopride (2.5 mg/kg) decreases locomotion and rearing in an open field test and impairs acquistion, but not retention, of a conditioned avoidance response in a two-way active conditioned avoidance test in rats.4

#### References

- 1. Tonini, M., Cipollina, L., Poluzzi, E., et al. Clinical implications of enteric and central D<sub>2</sub> 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 <sup>3</sup>H-spiperone binding to bovine anterior pituitary membranes. Life Sci. 32(25), 2877-2886
- 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).
- Nasello, A.G., 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).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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