# PRODUCT INFORMATION



# **Eticlopride (hydrochloride)**

Item No. 29112

CAS Registry No.: 97612-24-3

Formal Name: 3-chloro-5-ethyl-N-[[(2S)-1-ethyl-2-

pyrrolidinyl]methyl]-6-hydroxy-2-methoxy-

benzamide, monohydrochloride

Synonyms: S-(-)-Eticlopride, (-)-Eticlopride

MF: C<sub>17</sub>H<sub>25</sub>CIN<sub>2</sub>O<sub>3</sub> • HCI

FW: 377.3 Purity: ≥98% UV/Vis.:  $\lambda_{\text{max}}$ : 213 nm Supplied as: A crystalline solid

-20°C Storage: Stability: ≥2 years

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



Eticlopride (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the eticlopride (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Eticlopride (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of eticlopride (hydrochloride) in ethanol is approximately 30 mg/ml and approximately 25 mg/ml in DMSO and DMF.

## Description

Eticlopride is a dopamine D<sub>2</sub> and D<sub>3</sub> receptor antagonist (K<sub>i</sub>s = 0.029 and 0.46 nM in MN9D mouse neuronal cells expressing rat  $D_2$  and human  $D_3$  receptors, respectively). It is selective for dopamine  $D_2$ and  $D_3$  receptors (IC<sub>50</sub>s = 1 and 113 nM, respectively) over dopamine  $D_1$ ,  $\alpha_2$ -adrenergic, and  $\beta$ -adrenergic, histamine  $H_1$ , and muscarinic receptors (IC<sub>50</sub>s = 700->100,000 nM), as well as the serotonin (5-HT) receptor subtypes 5-HT<sub>1</sub> and 5-HT<sub>2</sub> (IC<sub>50</sub>s = 6,200 and 830, respectively), but does bind  $\alpha_1$ -adrenergic receptors ( $\alpha_1$ -ARs; IC<sub>50</sub> = 110 nM) in radioligand binding assays.<sup>2</sup> Eticlopride (10 µg/kg) inhibits stereotyped behavior in rats induced by 7-hydroxy-N,N-di-n-propyl-2-aminotetralin (7-OH-DPAT).<sup>3</sup> It also inhibits ketamine- and cocaine-induced hypermotility in rats when administered at doses of 20 and 50 µg/kg, respectively.

### References

- 1. Tang, L., Todd, R.D., Heller, A., et al. Pharmacological and functional characterization of  $D_2$ ,  $D_3$  and  $D_4$ dopamine receptors in fibroblast and dopaminergic cell lines. J. Pharmacol. Exp. Ther. 268(1), 495-502
- 2. Hall, H., Köhler, C., and Gawell, L. Some in vitro receptor binding properties of [3H]eticlopride, a novel substituted benzamide, selective for dopamine-D2 receptors in the rat brain. Eur. J. Pharmacol. 111(2), 191-199 (1985).
- 3. Giuliani, D., and Ferrari, F. Involvement of dopamine receptors in the antipsychotic profile of (-) eticlopride. Physiol. Behav. 61(4), 563-567 (1997).

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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