

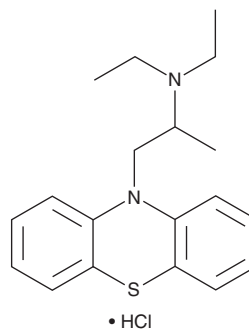
PRODUCT INFORMATION



Ethopropazine (hydrochloride)

Item No. 28493

CAS Registry No.: 1094-08-2
Formal Name: N,N-diethyl- α -methyl-10H-phenothiazine-10-ethanamine, monohydrochloride
Synonyms: NSC 64074, NSC 169467
MF: C₁₉H₂₄N₂S • HCl
FW: 348.9
Purity: \geq 98%
UV/Vis.: λ_{max} : 252 nm
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

Ethopropazine (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the ethopropazine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Ethopropazine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ethopropazine (hydrochloride) in ethanol and DMSO is approximately 5 mg/ml and approximately 10 mg/ml in DMF.

Ethopropazine (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ethopropazine (hydrochloride) should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Ethopropazine (hydrochloride) has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Ethopropazine is a butyrylcholinesterase (BChE) inhibitor (IC₅₀ = 15.14 μ M in human erythrocyte lysates).¹ It is selective for BChE over acetylcholinesterase (AChE) at 500 μ M. Ethopropazine also binds to rat forebrain and hindbrain membrane preparations (K_is = 3.1 and 7.2 nM, respectively), which are endogenously enriched in M₁ and M₂ muscarinic acetylcholine receptors, respectively.² Ethopropazine (0.232 mg/kg) decreases the intensity and increases the latency of haloperidol-induced catalepsy, a model of extrapyramidal syndrome, in rats when used in combination with the adenosine A_{2A} receptor antagonist ZM 241395 (Item No. 20447).³ It reduces thermal hyperalgesia in a rat model of neuropathic pain induced by sciatic nerve ligation when administered at doses of 20 and 30 mg/kg.⁴ Formulations containing ethopropazine were previously used in the treatment of Parkinson's disease.

References

1. Ucar, G., Gokhan, N., Yesilada, A., *et al. Neurosci. Lett.* **382**(3), 327-331 (2005).
2. Burke, R.E. *Mov. Disord.* **1**(2), 135-144 (1986).
3. González-Lugo, O.E., Ceballos-Huerta, F., Jiménez-Capdeville, M.E., *et al. Prog. Neuropsychopharmacol. Biol. Psychiatry* **34**(8), 1465-1471 (2010).
4. Jevtovic-Todorovic, V., Meyenburg, A.P., Olney, J.W., *et al. Neuropharmacology* **44**(6), 739-748 (2003).

WARNING

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

SAFETY DATA

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/03/2023

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM