

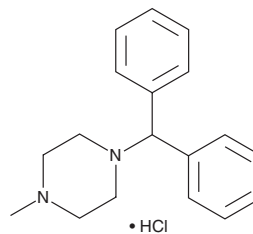
PRODUCT INFORMATION



Cyclizine (hydrochloride)

Item No. 31190

CAS Registry No.: 303-25-3
Formal Name: 1-(diphenylmethyl)-4-methyl-piperazine, monohydrochloride
MF: C₁₈H₂₂N₂ • HCl
FW: 302.8
Purity: ≥98%
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

Cyclizine (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the cyclizine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Cyclizine (hydrochloride) is soluble in the organic solvent methanol at a concentration of approximately 1 mg/ml.

Description

Cyclizine is a histamine H₁ receptor antagonist.¹⁻³ It binds selectively to histamine H₁ receptors (K_d = 5 nM) over H₂ and H₃ receptors (K_ds = 1,600 and >580 nM, respectively).³ Cyclizine inhibits anti-IgE-induced histamine release from isolated human lung fragments with an IC₅₀ value of 5.42 μM but induces histamine release with a 50% release concentration (RC₅₀) of 10.81 μM.⁴ It reduces LPS-induced nitrite accumulation and protein levels of induced nitric oxide synthase (iNOS) in RAW 264.7 cells when used at a concentration of 100 nM.² Cyclizine (10 and 20 mg/kg) reduces immobility in the forced swim test in rats.⁵

References

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2. Králová, J., Račková, L., Pekarová, M., *et al.* The effects of H₁-antihistamines on the nitric oxide production by RAW 264.7 cells with respect to their lipophilicity. *Int. Immunopharmacol.* **9(7-8)**, 990-995 (2009).
3. Hill, S.J. Distribution, properties, and functional characteristics of three classes of histamine receptor. *Pharmacol. Rev.* **42(1)**, 45-83 (1990).
4. Church, M.K. and Gradidge, C.F. Inhibition of histamine release from human lung *in vitro* by antihistamines and related drugs. *Br. J. Pharmacol.* **69(4)**, 663-667 (2019).
5. Khanwelkar, C.C., Gokhale, D.V., Santakke, A.V., *et al.* Effects of H₁-receptor antagonists in antidepressant tests in rats. *Al Ameen J. Med. Sci.* **1(2)**, 84-92 (2008).

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.

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