PRODUCT INFORMATION



Carbinoxamine (maleate)

Item No. 23937

CAS Registry No.: 3505-38-2

Formal Name: 2-[(4-chlorophenyl)-2-

pyridinylmethoxy]-N,N-dimethyl-

ethanamine, (2Z)-2-butenedioate

Synonym: NSC 62362

MF: $C_{16}H_{19}CIN_2O \bullet C_4H_4O_4$

406.9 FW: **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

Carbinoxamine (maleate) is supplied as a solid. A stock solution may be made by dissolving the carbinoxamine (maleate) in the solvent of choice, which should be purged with an inert gas. Carbinoxamine (maleate) is soluble in organic solvents such as chloroform and methanol.

Description

Carbinoxamine is a competitive histamine H_1 receptor antagonist ($K_i = 2.3$ nM) and first generation antihistamine. It also competes with [3H]diltiazem, an L-type calcium channel blocker, for binding to the benzothiazepine site on rat cardiomyocytes (K_i = 1.08 nM).² Carbinoxamine decreases negative inotropic activity in isolated guinea pig left atria by 76% ($\stackrel{.}{E}C_{50}$ = 250 nM) and negative chronotropic activity in guinea pig spontaneously beating isolated right atria (EC $_{50}$ s = 250 and 480 nM, respectively) by 48% compared with control. Formulations containing carbinoxamine have been used in the treatment of allergic rhinitis.

References

- 1. Tran, V.T., Chang, R.S.L., and Snyder, S.H. Histamine H₁ receptors identified in mammalian brain membranes with [3H]mepyramine. Proc. Natl. Acad. Sci. U.S.A. 75(12), 6290-6294 (1978).
- Carosati, E., Budriesi, R., Ioan, P., et al. Discovery of novel and cardioselective diltiazem-like calcium channel blockers via virtual screening. J. Med. Chem. 51(18), 5552-5565 (2008).

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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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