Product Information

Meclizine (hydrochloride)
Item No. 14615

CAS Registry No.: 1104-22-9
Formal Name: 1-[(4-chlorophenyl)phenylmethyl]-4-[(3-methylphenyl)methyl]-piperazine, dihydrochloride
Synonyms: Bonamine, Meclazine, NSC 28728, Parachloramine, Postafen
MF: C_{25}H_{27}ClN_{2} • 2HCl
FW: 463.9
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: λ_{max} 229 nm

Laboratory Procedures
For long term storage, we suggest that meclizine (hydrochloride) be stored as supplied at -20°C. It should be stable for at least two years.

Meclizine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the meclizine (hydrochloride) in the solvent of choice. Meclizine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purified with an inert gas. The solubility of meclizine (hydrochloride) in these solvents is approximately 0.11, 0.17, and 5 mg/ml, respectively.

Meclizine (hydrochloride) is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Meclizine is an antagonist of the histamine H_{1} receptor (K_{i} = 250 nM). Unlike some antihistamines, it has low affinity for muscarinic receptors (K_{i} = 3.6 nM). Meclizine is also a weak agonist of pregnane X receptor (EC_{50} > 10 µM). Because of its actions on the H_{1} receptor, meclizine reduces nausea, dizziness, and motion sickness. The effects of this compound on early development are diverse.

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/14615

SafETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent our email to your institution.

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Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

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