CAS Registry No.: 21498-08-8
Formal Name: 2-[1-(2,6-dichlorophenoxy)ethyl]-4,5-dihydro-1H-imidazole, monohydrochloride
MF: C_{11}H_{12}Cl_{2}N_{2}O • HCl
FW: 295.6
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid

Laboratory Procedures

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

Lofexidine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the lofexidine (hydrochloride) in the solvent of choice. Lofexidine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of lofexidine (hydrochloride) in ethanol and DMSO is approximately 30 mg/ml and approximately 20 mg/ml in DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of lofexidine (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of lofexidine (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Lofexidine is an α₂-adrenergic receptor agonist (K_d = 7.6 nM for rat cerebral cortex membranes) that has transient antihypertensive effects. 1-2 It is used in managing opioid withdrawal symptoms during detoxification from heroin (Item No. 9001543) and methadone. 3-4

References


Related Products

For a list of related products please visit: www.caymanchem.com/catalog/15989

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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 with your material.

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Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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