Eltoprazine (hydrochloride)
Item No. 18428

CAS Registry No.: 98206-09-8
Formal Name: 1-(2,3-dihydro-1,4-benzodioxin-5-yl)-
piperazine, monohydrochloride
Synonyms: DU-28,853, DU-28,893
MF: C_{12}H_{16}N_{2}O_{2} \cdot HCl
FW: 256.7
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 216 nm

Laboratory Procedures

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

Eltoprazine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the eltoprazine (hydrochloride) in the solvent of choice. Eltoprazine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of eltoprazine (hydrochloride) in these solvents is approximately 25, 20, and 30 mg/ml, respectively.

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 eltoprazine (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of eltoprazine (hydrochloride) in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Eltoprazine is a phenylpiperazine compound that acts as a partial agonist at serotonin 5-HT_{1A}, 5-HT_{1B}, and 5-HT_{2B} receptors (K_{i}s = 40, 52, and 81 nM, respectively).\(^1\) It exerts a dose-dependent decrease in aggressive behavior in resident-intruder tests with rats (ID_{50} = 0.24 mg/kg).\(^2\)

References