Lofepramine
Item No. 20813

CAS Registry No.: 23047-25-8
Formal Name: 1-(4-chlorophenyl)-2-[(3-(10,11-dihydro-5H-dibenz[b,f]azepin-5-yl)propyl)methylamino]-ethanone
Synonym: Lopramine
MF: C_{26}H_{27}ClN_{2}O
MW: 419.0
Purity: ≥95%
UV/Vis.: λ_{max}: 251 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

Lofepramine is supplied as a crystalline solid. A stock solution may be made by dissolving the lofepramine in the solvent of choice. Lofepramine is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of lofepramine in these solvents is approximately 3 and 10 mg/ml, respectively.

Lofepramine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, lofepramine should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Lofepramine has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Lofepramine is a first generation tricyclic antidepressant that is extensively metabolized to desipramine.\(^1\) It potently inhibits serotonin and norepinephrine transporters (K_{d} = 70 and 5.4 nM, respectively) and less potently antagonizes serotonin, histamine, and muscarinic receptors.\(^2-4\)

References