



Certificate of Analysis

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Product Name: Lofepramine Catalog No.: 2545 Batch No.: 1

CAS Number: 23047-25-8 EC Number: 245-396-8 IUPAC Name: 1-(4-Chlorophenyl)-2-[[3-(10,11-dihydro-5*H*-dibenz(*Z*)[*b*,*f*]azepin-5-yl)propyl]methylamino]ethanone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{26}H_{27}N_2OCI$

Batch Molecular Weight: 418.97

Physical Appearance: Light yellow solid
Solubility: DMSO to 75 mM ethanol to 10 mM

Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

Melting Point: At 104°C

HPLC: Shows >99.2% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 74.54 6.5 6.69 Found 74.34 6.47 6.69



Product Information

Print Date: Jan 15th 2016 **WWW.tocris.com**

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Description:

Serotonin and noradrenalin re-uptake inhibitor (SNRI) that is metabolized to desipramine. Produces inhibition of liver tryptophan pyrollase activity in vitro and displays antidepressant properties in vivo.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₆H₂₇N₂OCl Batch Molecular Weight: 418.97 Physical Appearance: Light yellow solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 75 mM ethanol to 10 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Leonard (1987) A comparison of the pharmacological properties of the novel tricyclic antidepressant lofepramine with its major metabolite, desipramine: a review. Int.Clin.Psychopharmacol. **2** 281. PMID: 2891742.

Badawy et al (1991) The effects of lofepramine and desmethylimipramine on tryptophan metabolism and disposition in the rat Biochem.Pharmacol. 42 921. PMID: 1867646.

Kelly and Leonard (1999) An investigation of the antidepressant properties of lofepramine and its desmethylated metabolites in the forced swim and olfactory bulbectomized rat models of depression. Eur.Neuropsychopharmacol. 9 101. PMID: 10082234.