

# Certificate of Analysis

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**Product Name:** Desipramine hydrochloride

**Catalog No.:** 3067

**Batch No.:** 5

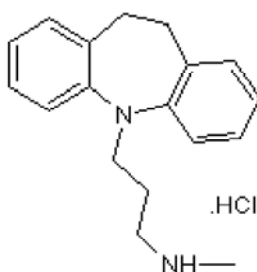
CAS Number: 58-28-6

EC Number: 200-373-1

IUPAC Name: 10-11-Dihydro-*N*-methyl-5*H*-dibenz[*Z*][*b*,*f*]azepine-5-propanamine hydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>18</sub>H<sub>22</sub>N<sub>2</sub>.HCl  
**Batch Molecular Weight:** 302.84  
**Physical Appearance:** White solid  
**Solubility:** water to 100 mM  
**Storage:** Desiccate at +4°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 100.0% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	71.39	7.66	9.25
Found	71.41	7.87	9.11

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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IUPAC Name: 10-11-Dihydro- <i>N</i> -methyl-5 <i>H</i> -dibenz[ <i>Z</i> ][ <i>b</i> , <i>f</i> ]azepine-5-propanamine hydrochloride		

**Description:**

Desipramine hydrochloride is a tricyclic antidepressant that is a selective inhibitor of noradrenalin transporters ( $K_i$  values are 4, 61 and 78720 nM for NET, SERT and DAT transporters respectively).

**Physical and Chemical Properties:**

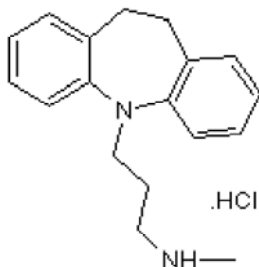
Batch Molecular Formula: C<sub>18</sub>H<sub>22</sub>N<sub>2</sub>.HCl

Batch Molecular Weight: 302.84

Physical Appearance: White solid

**Minimum Purity:** ≥99%

**Batch Molecular Structure:**



**References:**

**Zhao et al** (2008) NE transporter regulation mediates the long-term behavioral effects of the antidepressant desipr. *Neuropsychopharmacol.* **33** 3190.

**Torres et al** (2003) Plasma membrane monoamine transporters: structure, regulation and function. *Nat.Rev.Neurosci.* **4** 13. PMID: 12511858.

**Storage:** Desiccate at +4°C

**Solubility & Usage Info:**

water to 100 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.

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