

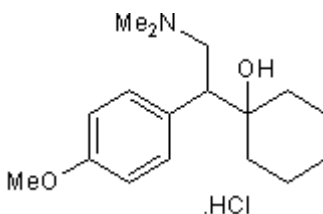
## Certificate of Analysis

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**Product Name:** Venlafaxine hydrochloride **Catalog No.:** 2917 **Batch No.:** 1  
**CAS Number:** 99300-78-4  
**IUPAC Name:** 1-[2-(Dimethylamino)-1-(4-methoxyphenyl)ethyl]cyclohexanol hydrochloride

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>17</sub>H<sub>27</sub>NO<sub>2</sub>.HCl  
**Batch Molecular Weight:** 313.86  
**Physical Appearance:** White crystalline solid  
**Solubility:** water to 100 mM  
DMSO to 50 mM  
ethanol to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**Melting Point:** At 211°C  
**HPLC:** Shows >99.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	65.06	8.99	4.46
Found	64.92	9.03	4.54

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

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**Description:**

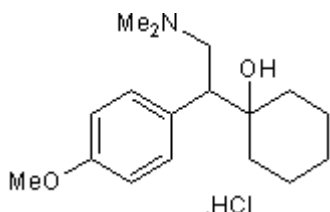
Dual serotonin/noradrenalin re-uptake inhibitor that displays ~ 30-fold higher affinity for SERT than NET (K<sub>i</sub> values are 82 and 2480 nM respectively). Antidepressant; increases swimming and climbing behavior in the forced-swim test in rats.

**Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>17</sub>H<sub>27</sub>NO<sub>2</sub>.HCl  
 Batch Molecular Weight: 313.86  
 Physical Appearance: White crystalline solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

water to 100 mM  
 DMSO to 50 mM  
 ethanol 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.

**References:**

**Bymaster et al** (2001) Comparative affinity of duloxetine and venlafaxine for serotonin and norepinephrine transporters *in vitro* and *in vivo*, human serotonin receptor subtypes, and other neuronal receptors. *Neuropsychopharmacol.* **25** 871.

**Magalas et al** (2005) The serotonin/noradrenaline reuptake inhibitor venlafaxine attenuates acquisition, but not maintenance, of intravenous self-administration of heroin in rats. *Eur.J.Pharmacol.* **528** 103. PMID: 16325805.

**Gould et al** (2006) A comparison of the chronic treatment effects of venlafaxine and other antidepressants on serotonin and norepinephrine transporters. *Biol.Psychiatry* **59** 408. PMID: 16140280.

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