

Certificate of Analysis

Product Name: Tomoxetine hydrochloride

Catalog No.: 2011

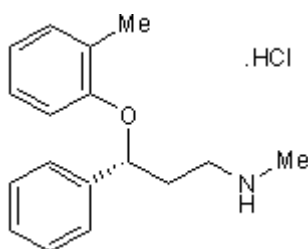
Batch No.: 2

CAS Number: 82248-59-7

IUPAC Name: (*R*)-*N*-Methyl- γ -(2-methylphenoxy)-benzenepropanamine hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₇H₂₁NO.HCl
Batch Molecular Weight: 291.82
Physical Appearance: White solid
Solubility: water to 50 mM with gentle warming
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 100% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: [α]_D = -39.6 (Concentration = 1, Solvent = Methanol)
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	69.97	7.6	4.8
Found	70.06	7.65	4.84

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

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IUPAC Name: (R)-N-Methyl-γ-(2-methylphenoxy)-benzenepropanamine hydrochloride

Description:

Potent and selective noradrenalin re-uptake inhibitor (K_i values are 5, 77 and 1451 nM for inhibition of radioligand binding to human NET, SERT and DAT respectively). Displays minimal affinity for a range of other neurotransmitter receptors and transporters ($K_i > 1 \mu\text{M}$). Antidepressant.

Physical and Chemical Properties:

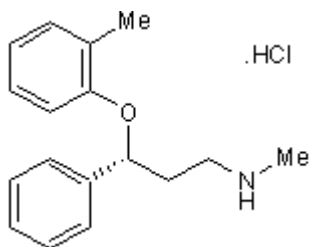
Batch Molecular Formula: $\text{C}_{17}\text{H}_{21}\text{NO} \cdot \text{HCl}$

Batch Molecular Weight: 291.82

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



References:

Wong et al (1982) A new inhibitor of norepinephrine uptake devoid of affinity for receptors in rat brain. *J.Pharmacol.Exp.Ther.* **222** 61. PMID: 6123593.

Bymaster et al (2002) Atomoxetine increases extracellular levels of norepinephrine and dopamine in prefrontal cortex of rat: a potential mechanism for efficacy in attention deficit/hyperactivity disorder. *Neuropsychopharmacology* **27** 699. PMID: 12431845.

Storage: Store at RT

Solubility & Usage Info:

water to 50 mM with gentle warming

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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