

Certificate of Analysis

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Product Name: (R)-(-)-Phenylephrine hydrochloride

Catalog No.: 2838

Batch No.: 1

CAS Number: 61-76-7

EC Number: 200-517-3

IUPAC Name: (R)-(-)-1-(3-Hydroxyphenyl)-2-methylaminoethanol hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₉H₁₃NO₂.HCl

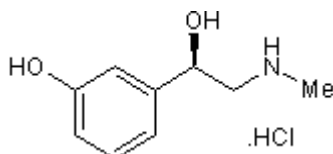
Batch Molecular Weight: 203.67

Physical Appearance: White solid

Solubility: water to 100 mM
DMSO to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

Melting Point: Between 142 - 143°C

HPLC: Shows >99.9% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Optical Rotation: [α]_D = -43.9 (Concentration = 2, Solvent = Water)

Microanalysis:	Carbon	Hydrogen	Nitrogen	Chlorine
Theoretical				17.4
Found				17.4

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

Tocris Bioscience is an R&D Systems company
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IUPAC Name: (R)-(-)-1-(3-Hydroxyphenyl)-2-methylaminoethanol hydrochloride

Description:

α_1 -adrenoceptor agonist; pK_i values are 5.86, 4.87 and 4.70 for α_{1D} , α_{1B} and α_{1A} receptors respectively.

Physical and Chemical Properties:

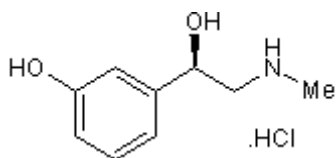
Batch Molecular Formula: C₉H₁₃NO₂.HCl

Batch Molecular Weight: 203.67

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water to 100 mM

DMSO 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:

Minneman *et al* (1994) Selectivity of agonists for cloned α_1 -adrenergic receptor subtypes. *Mol.Pharmacol.* **46** 929. PMID: 7969082.

Ford *et al* (1997) Pharmacological pleiotropism of the human recombinant α_{1A} -adrenoceptor: implications for α_1 -adrenoceptor classification. *Br.J.Pharmacol.* **121** 1127. PMID: 9249248.

Morton *et al* (2007) α_{1A} -adrenoceptors mediate contractions to phenylephrine in rabbit penile arteries. *Br.J.Pharmacol.* **150** 112. PMID: 17115072.

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