

Certificate of Analysis

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Product Name: Noradrenaline bitartrate

Catalog No.: 5169

Batch No.: 5

CAS Number: 51-40-1

IUPAC Name: 4-[(1*R*)-2-Amino-1-hydroxyethyl]-1,2-benzenediol (L-(+))-bitartrate salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₈H₁₁NO₃·C₄H₆O₆·³/₄H₂O

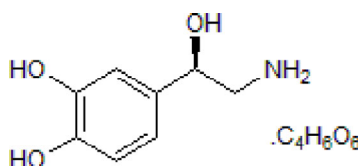
Batch Molecular Weight: 332.77

Physical Appearance: White solid

Solubility: water to 100 mM
DMSO to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.4% purity

Chiral HPLC: Shows 99.0% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon Hydrogen Nitrogen		
Theoretical	43.31	5.6	4.21
Found	42.95	5.55	4.09

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

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Description:

Noradrenaline bitartrate is an endogenous adrenergic hormone and neurotransmitter. A classical stress hormone; underlies the fight or flight response, along with adrenaline. Increases heart rate. Vasoconstrictor.

Physical and Chemical Properties:

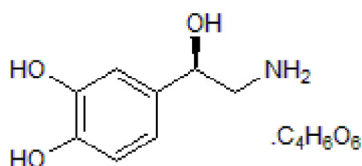
Batch Molecular Formula: C₈H₁₁NO₃·C₄H₆O₆·¾H₂O

Batch Molecular Weight: 332.77

Physical Appearance: White solid

Minimum Purity: ≥99%

Batch Molecular Structure:



Storage: Store at +4°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

Lewitt *et al* (2012) NE: the next therapeutics frontier for Parkinson's disease. *Transl.Neurodegener.* **1** 4. PMID: 23211006.

Gary *et al* (1985) Stress and brain noradrenaline: A review. *Neuroscience & Biobehavioral Reviews* **9** 233.

Bunney *et al* (1965) NE in depressive reactions. A review. *Arch.Gen.Psychiatry.* **13** 483. PMID: 5320621.

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