

**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:** C<sub>8</sub>H<sub>11</sub>NO<sub>3</sub>·C<sub>4</sub>H<sub>6</sub>O<sub>6</sub>·<sup>3</sup>/<sub>4</sub>H<sub>2</sub>O

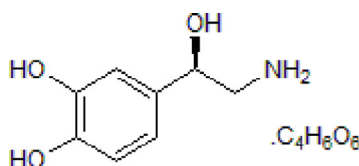
**Batch Molecular Weight:** 332.77

**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

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

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

**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:**

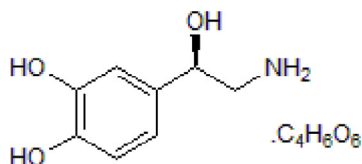
Batch Molecular Formula: C<sub>8</sub>H<sub>11</sub>NO<sub>3</sub>·C<sub>4</sub>H<sub>6</sub>O<sub>6</sub>·<sup>3</sup>/<sub>4</sub>H<sub>2</sub>O

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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