

## Certificate of Analysis

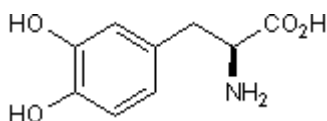
[www.tocris.com](http://www.tocris.com)

**Product Name:** L-DOPA  
**CAS Number:** 59-92-7  
**IUPAC Name:** L-3,4-Dihydroxyphenylalanine

**Catalog No.:** 3788  
**Batch No.:** 3  
**EC Number:** 200-445-2

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>9</sub>H<sub>11</sub>NO<sub>4</sub>  
**Batch Molecular Weight:** 197.19  
**Physical Appearance:** White solid  
**Solubility:** water to 5 mM  
 1eq. HCl to 50 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 100% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = -11.7 (Concentration = 1, Solvent = 1N HCl)  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	54.82	5.62	7.1
Found	54.82	5.65	7.11

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

**Product Information**[www.tocris.com](http://www.tocris.com)**Product Name:** L-DOPA

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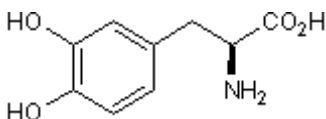
**Batch No.:** 3**Description:**

Immediate precursor of dopamine, produced by tyrosine hydroxylase. Displays antiParkinsonian activity.

**Physical and Chemical Properties:**Batch Molecular Formula: C<sub>9</sub>H<sub>11</sub>NO<sub>4</sub>

Batch Molecular Weight: 197.19

Physical Appearance: White solid

**Minimum Purity:** >99%**Batch Molecular Structure:****Storage:** Store at -20°C**Solubility & Usage Info:**

water to 5 mM

1eq. HCl to 50 mM

CAUTION: L-DOPA rapidly degrades in alkaline solutions

**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:**

**Pisani and Shen** (2009) Levodopa-induced dyskinesia and striatal signaling pathways. *Proc.Natl.Acad.Sci.USA* **106** 2973.

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