

## Certificate of Analysis

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

**Product Name:** *p*-Chlorophenylalanine

CAS Number: 7424-00-2

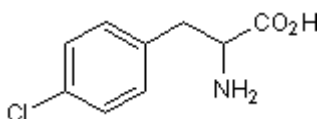
**Catalog No.:** 0938

EC Number: 231-051-9

**Batch No.:** 4

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>9</sub>H<sub>10</sub>ClNO<sub>2</sub>  
**Batch Molecular Weight:** 199.64  
**Physical Appearance:** White solid  
**Solubility:** 1eq. NaOH to 10 mM  
water to 5 mM with gentle warming  
**Storage:** Store at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 100% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	54.15	5.05	7.02
Found	54.22	5.01	7.05

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

**Product Name:** *p*-Chlorophenylalanine

CAS Number: 7424-00-2

**Catalog No.:** 0938

EC Number: 231-051-9

**Batch No.:** 4

**Description:**

Binds irreversibly to tryptophan hydroxylase to cause depletion of serotonin in the brain.

**Physical and Chemical Properties:**

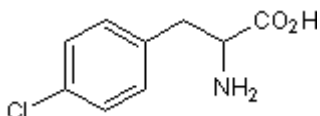
Batch Molecular Formula: C<sub>9</sub>H<sub>10</sub>ClNO<sub>2</sub>

Batch Molecular Weight: 199.64

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

1eq. NaOH to 10 mM

water to 5 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.

**References:**

**Koyuncuoglu et al** (1975) The effects of DL-*p*-chlorophenylalanine and DL- $\alpha$ -methyl-*p*-tyrosine on the brain catecholamine, serotonin and free amino acid contents in rat. *Psychopharmacologia* **45** 163. PMID: 129787.

**Datla and Curzon** (1996) Effect of *p*-chlorophenylalanine at moderate dosage on 5-HT and 5-HIAA concentrations in brain regions of control and *p*-chloroamphetamine treated rats. *Neuropharmacology* **35** 315. PMID: 8783206.

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

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel: +1 612 379 2956