

## Certificate of Analysis

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**Product Name:**  $\beta$ -Alanine

**Catalog No.:** 0206

**Batch No.:** 11

CAS Number: 107-95-9

EC Number: 203-536-5

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>3</sub>H<sub>7</sub>NO<sub>2</sub>  
**Batch Molecular Weight:** 89.09  
**Physical Appearance:** White crystalline solid  
**Solubility:** water to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.25 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])  
**Melting Point:** Between 219 - 222°C  
**<sup>1</sup>H NMR:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	40.44	7.92	15.72
Found	40.56	8.11	15.87

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

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**Batch No.:** 11

CAS Number: 107-95-9

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**Description:**

Non-specific endogenous agonist at the inhibitory glycine receptor. More selective than taurine (Cat. No. 0209). Also distinguishes between GABA transporters (IC<sub>50</sub> values are 19, 58, 110, 1320 and 5690  $\mu$ M for rGAT-2, hGAT-3, rGAT-3, hBGT-3 and hGAT-1 respectively).

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Batch Molecular Weight: 89.09

Physical Appearance: White crystalline solid

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

water 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:**

**Schieden and Betz** (1995) Pharmacology of the inhibitory glycine receptor: agonist and antagonist actions of amino acids and piperidine carboxylic acid compounds. *Mol.Pharmacol.* **48** 919. PMID: 7476923.

**Borden et al** (1994) Tiagabine, SK&F 89976-A, CI 966, and NNC-711 are selective for the cloned GABA transporter GAT-1. *Eur.J.Pharmacol.* **269** 219. PMID: 7851497.

**Saitoh et al** (1994) A novel antagonist, phenylbenzene  $\omega$ -phosphono- $\alpha$ -amino acid, for strychnine-sensitive glycine receptors in the rat spinal cord. *Br.J.Pharmacol.* **113** 165. PMID: 7812607.

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