TOCRIS
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Print Date: Jan 8th 2016

Certificate of Analysis

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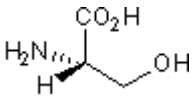
Product Name: **L-Serine** **Catalog No.: 0227** **Batch No.: 12**
CAS Number: 56-45-1 EC Number: 200-274-3
IUPAC Name: β-Hydroxyalanine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_3H_7NO_3$
Batch Molecular Weight: 105.09
Physical Appearance: White solid
Solubility: water to 100 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.4 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])
Melting Point: At 231°C(dec)
HPLC: Shows 100% purity
^{1}H NMR: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	34.29	6.71	13.33
Found	34.27	6.96	13.19

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Product Name: **L-Serine**
Catalog No.: 0227 **Batch No.: 12**

CAS Number: 56-45-1
EC Number: 200-274-3

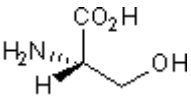
IUPAC Name: β-Hydroxyalanine

Description:
Endogenous agonist at the inhibitory glycine receptor. D-Serine (Cat. No. 0226) also available.

Physical and Chemical Properties:
Batch Molecular Formula: $C_3H_7NO_3$
Batch Molecular Weight: 105.09
Physical Appearance: White solid

Minimum Purity: >99%

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:

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

Schmeiden 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.