



## **Certificate of Analysis**

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Product Name: D-Serine Catalog No.: 0226 Batch No.: 14

CAS Number: 312-84-5 EC Number: 206-229-4

## 1. PHYSICAL AND CHEMICAL PROPERTIES

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

Solubility: water to 100 mM Storage: Store at RT

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 34.29 6.71 13.33 Found 34.28 6.71 13.29



## **Product Information**

Print Date: Apr 14th 2023

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CAS Number: 312-84-5 EC Number: 206-229-4

**Description:** 

D-Serine is a glycine agonist at the NMDA receptor.

**Physical and Chemical Properties:** 

Batch Molecular Formula: C<sub>3</sub>H<sub>7</sub>NO<sub>3</sub> Batch Molecular Weight: 105.09 Physical Appearance: White 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:

**Mothet** *et al* (2000) D-serine is an endogenous ligand for the glycine site of the N-methyl-D-aspartate receptor. Proc.Natl.Acad.Sci.USA **97** 4926. PMID: 10781100.

**Schell** *et al* (1997) D-Serine as a neuromodulator: regional and developmental localizations in rat brain glia resemble NMDA receptors. J. Neurosci. **17** 1604. PMID: 9030620.

Lodge (1989) Non-competitive NMDA antagonists. The NMDA Receptor (2nd edition). Eds. G.L.Collingr 37.