

Certificate of Analysis

Print Date: Sep 17th 2020

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Product Name: NMDA Catalog No.: 0114 Batch No.: 36

CAS Number: 6384-92-5

IUPAC Name: N-Methyl-D-aspartic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₅H₉NO₄. ¹/₄H₂O

Batch Molecular Weight: 151.63 **Physical Appearance:** White solid

Solubility: water to 100 mM

phosphate buffered saline to 100 mM

1eq. NaOH to 100 mM

Storage: Store at RT

Batch Molecular Structure:

HO₂C₁₁, CO₂H

2. ANALYTICAL DATA

Chiral HPLC: Shows 100% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Optical Rotation: $[\alpha]_D = -15.4$ (Concentration = 1, Solvent = Water)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 39.61 6.31 9.24 Found 39.85 6.43 9.24

Tel: +86 (21) 52380373



Product Information

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Product Name: NMDA Catalog No.: 0114 Batch No.: 36

CAS Number: 6384-92-5

IUPAC Name: N-Methyl-D-aspartic acid

Description:

Prototypic NMDA receptor agonist. Caged version also available

(Cat. No 2224).

Physical and Chemical Properties:

Batch Molecular Formula: C₅H₉NO₄.1/₄H₂O

Batch Molecular Weight: 151.63 Physical Appearance: White solid

Minimum Purity: ≥99%

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

water to 100 mM phosphate buffered saline to 100 mM

1eq. NaOH 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:

Watkins and Evans (1981) Excitatory amino acid transmitters. Annu.Rev.Pharmacol.Toxicol. 21 165. PMID: 6112965.

Watkins (1978) Excitatory amino acids. Kainic acid as a Tool in Neurobiology. Edited by E 37.