

Certificate of Analysis

Print Date: Oct 10th 2019

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Product Name: (RS)-AMPA Catalog No.: 0169 Batch No.: 26

CAS Number: 74341-63-2

IUPAC Name: (RS)- α -Amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_7H_{10}N_2O_4.H_2O$

Batch Molecular Weight: 204.19 **Physical Appearance:** White solid

Solubility: water to 10 mM with gentle warming

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: R_f = 0.43 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])

HPLC: Shows 99.9% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 41.18 5.92 13.72 Found 41.17 5.66 13.48



Product Information

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IUPAC Name: (RS)-α-Amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid

Description:

Prototypical and defining agonist for the AMPA subgroup of ionotropic glutamate receptors. Active Enantiomer, Inactive Enantiomer and Hydrobromide Salt also available.

Physical and Chemical Properties:

Batch Molecular Formula: C₇H₁₀N₂O₄.H₂O

Batch Molecular Weight: 204.19 Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

water to 10 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:

Honore *et al* (1982) The binding of ³H-AMPA, a structural analogue of glutamic acid, to rat brain membranes. J.Neurochem. **38** 173. PMID: 6125564.

Krogsgaard-Larsen et al (1980) New class of glutamate agonist structurally related to ibotenic acid. Nature 284 64. PMID: 6101908.