

**Product Name:** (R)-AMPA

**Catalog No.:** 0253

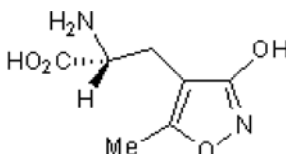
**Batch No.:** 2

CAS Number: 83654-13-1

IUPAC Name: (R)- $\alpha$ -Amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>7</sub>H<sub>10</sub>N<sub>2</sub>O<sub>4</sub>.0.67H<sub>2</sub>O  
**Batch Molecular Weight:** 198.18  
**Physical Appearance:** White solid  
**Solubility:** water to 10 mM  
 phosphate buffered saline to 10 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.4 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])  
**Melting Point:** Between 220 - 224°C  
**Chiral HPLC:** Shows >99.5% purity  
<sup>1</sup>H NMR: Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = +20 (Concentration = 1, Solvent = Water)

<b>Microanalysis:</b>		Carbon	Hydrogen	Nitrogen
	Theoretical	42.43	5.76	14.14
	Found	42.22	5.95	13.9

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

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**Description:**

Inactive enantiomer of AMPA. Active Enantiomer and Racemate also available.

**Physical and Chemical Properties:**

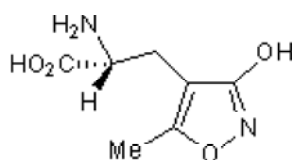
Batch Molecular Formula: C<sub>7</sub>H<sub>10</sub>N<sub>2</sub>O<sub>4</sub>·0.67H<sub>2</sub>O

Batch Molecular Weight: 198.18

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

water to 10 mM

phosphate buffered saline to 10 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:**

**Lauridsen et al** (1985) Ibotenic acid analogues. Synthesis, molecular flexibility, and *in vitro* activity of agonists and antagonists at central glutamic acid receptors. *J.Med.Chem.* **28** 668. PMID: 2859375.

**Hansen et al** (1983) Enzymic resolution and binding to rat brain membranes of the glutamic acid agonist  $\alpha$ -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid. *J.Med.Chem.* **26** 901. PMID: 6133955.

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