

**Product Name:** (R)-(+)-HA-966

**Catalog No.:** 0281

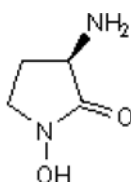
**Batch No.:** 12

CAS Number: 123931-04-4

IUPAC Name: (R)-(+)-3-Amino-1-hydroxypyrrolidin-2-one

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>4</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub>  
**Batch Molecular Weight:** 116.12  
**Physical Appearance:** White solid  
**Solubility:** water to 100 mM  
**Storage:** Desiccate at RT  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.6 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])  
**HPLC:** Shows 99.8% purity  
**Chiral HPLC:** Shows 100% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = +105.4 (Concentration = 1, Solvent = Water)  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	41.37	6.94	24.12
Found	41.23	7.1	23.97

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

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IUPAC Name: (R)-(+)-3-Amino-1-hydroxypyrrolidin-2-one

**Description:**

Antagonist/partial agonist at the glycine site of the NMDA receptor; able to cross the blood-brain barrier. S-enantiomer also available.

**Physical and Chemical Properties:**

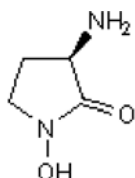
Batch Molecular Formula: C<sub>4</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub>

Batch Molecular Weight: 116.12

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Desiccate 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.

**Licensing Information:**

Sold with the permission of Merck Sharp and Dohme Ltd.

**References:**

**Kemp and Priestley** (1991) Effects of (+)-HA-966 and 7-chlorokynurenic acid on the kinetics of N-MthD.-aspartate receptor agonist responses in cat cultured cortical neurons. *Mol.Pharmacol.* **39** 666. PMID: 1674587.

**Pullan et al** (1991) Agonist-like character of the (R) enantiomer of 1-hydroxy-3-amino-pyrrolid-2-one (HA-966). *Eur.J.Pharmacol.* **208** 25. PMID: 1834473.

**Pullan et al** (1990) Stereoselectivity for the (R)-enantiomer of HA-966 (1-hydroxy-3-aminopyrrolidone-2) at the glycine site of the N-MthD.-aspartate receptor complex. *J.Neurochem.* **55** 1346. PMID: 1975835.

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