

Certificate of Analysis

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Product Name: (S)-(-)-HA-966

Catalog No.: 0282

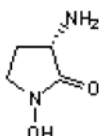
Batch No.: 6

CAS Number: 111821-58-0

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

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₄H₈N₂O₂
Batch Molecular Weight: 116.12
Physical Appearance: Cream solid
Solubility: water to 100 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.2 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])
Melting Point: Between 152 - 154°C
Chiral HPLC: Shows 100% purity
¹H NMR: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen	
Theoretical	41.37	6.94	24.11	0.00
Found	41.16	7.15	23.76	0.00

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956

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CAS Number: 111821-58-0

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

Description:

Possesses potent sedative and ataxic action, probably through disruption of striatal dopaminergic mechanisms. R-enantiomer also available.

Physical and Chemical Properties:

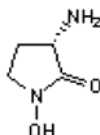
Batch Molecular Formula: C₄H₈N₂O₂

Batch Molecular Weight: 116.12

Physical Appearance: Cream solid

Minimum Purity: ≥98%

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:

Grobaski et al (1997) Responses of rat substantia nigra DA-containing neurones to (-)-HA-966 *in vitro*. Br.J.Pharmacol. **120** 575. PMID: 9051293.

Shepard and Lehmann (1992) (±)-1-Hydroxy-3-aminopyrrolidone-2 (HA-966) inhibits the activity of substantia nigra DA neurons through a non-N-MthD.-aspartate receptor mediated mechanism. J.Pharmacol.Exp.Ther. **261** 387. PMID: 1578355.

Singh et al (1990) Enantiomers of HA-966 (3-amino-1-hydroxypyrrolidin-2-one) exhibit distinct central nervous system effects: (+)-HA-966 is a selective glycine/N-MthD.-aspartate receptor antagonist, but (-)-HA966 is a potent γ-butyrolactone-like sedative. Proc.Natl.Acad.Sci.U.S.A. **87** 347. PMID: 2153294.

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