

Certificate of Analysis

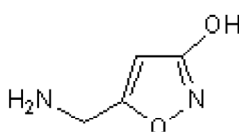
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Product Name: Muscimol
CAS Number: 2763-96-4
IUPAC Name: 5-Aminomethyl-3-hydroxyisoxazole

Catalog No.: 0289 **Batch No.:** 12
EC Number: 220-430-4

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₄H₆N₂O₂·0.1H₂O
Batch Molecular Weight: 115.9
Physical Appearance: Beige solid
Solubility: water to 100 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	41.45	5.39	24.17
Found	41.68	5.22	23.84

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

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Product Information

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Product Name: Muscimol

CAS Number: 2763-96-4

IUPAC Name: 5-Aminomethyl-3-hydroxyisoxazole

Catalog No.: 0289

Batch No.: 12

EC Number: 220-430-4

Description:

Muscimol is a potent GABA_A receptor agonist and partial GABA_{A-p} receptor agonist. Inhibits memory retention and attenuates airway constriction *in vivo*.

Physical and Chemical Properties:

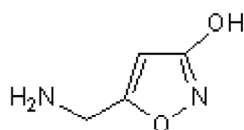
Batch Molecular Formula: C₄H₆N₂O₂·0.1H₂O

Batch Molecular Weight: 115.9

Physical Appearance: Beige solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

water to 100 mM

When purchased as a 1mg unit, this product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

Gleason *et al* (2009) The GABA_A agonist muscimol attenuates induced airway constriction in guinea pigs *in vivo*. *J.Appl.Physiol.* **106** 1257. PMID: 19213928.

Jafari-Sabet and Jannat-Dastjerdi (2009) Muscimol state-dependent memory: involvement of dorsal hippocampal μ-opioid receptors. *Behav.Brain Res.* **202** 5. PMID: 19447274.

Johnstone (1996) GABA_C receptors: relatively simple transmitter-gated ion channels? *TiPS* **17** 319. PMID: 8885697.

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