

Certificate of Analysis

www.tocris.com

Product Name: Muscimol

Catalog No.: 0289

Batch No.: 10

CAS Number: 2763-96-4

EC Number: 220-430-4

IUPAC Name: 5-Aminomethyl-3-hydroxyisoxazole

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₄H₆N₂O₂·0.4H₂O

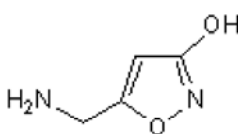
Batch Molecular Weight: 121.31

Physical Appearance: White 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	39.6	5.65	23.09
Found	39.72	5.59	23.1

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

Product Name: Muscimol

Catalog No.: 0289

Batch No.: 10

CAS Number: 2763-96-4

EC Number: 220-430-4

IUPAC Name: 5-Aminomethyl-3-hydroxyisoxazole

Description:

Potent GABA_A receptor agonist and partial GABA_{A-ρ} receptor agonist. Inhibits memory retention and attenuates airway constriction *in vivo*.

Physical and Chemical Properties:

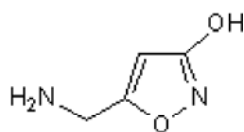
Batch Molecular Formula: C₄H₆N₂O₂·0.4H₂O

Batch Molecular Weight: 121.31

Physical Appearance: White 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 as a lyophilized solid and may 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. 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:

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.

Akhondzadeh and Stone (1995) Induction of a novel form of hippocampal long-term depression by muscimol: involvement of GABA_A but not glutamate receptors. *Br.J.Pharmacol.* **115** 527. PMID: 7582468.

Johnston *et al* (1968) Central actions of ibotenic acid and muscimol. *Biochem.Pharmacol.* **17** 2488. PMID: 5752907.

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