

# **Certificate of Analysis**

Print Date: Feb 25th 2025

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Product Name: Nor NOHA monoacetate Catalog No.: 6370 Batch No.: 3

CAS Number: 2250019-93-1

IUPAC Name: (2S)-2-Amino-4-[[(hydroxyamino)iminomethyl]amino]butanoic acid monoacetate

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_5H_{12}N_4O_3.C_2H_4O_2.^3/4H_2O_3$ 

**Batch Molecular Weight:** 249.74 **Physical Appearance:** White solid

Solubility: water to 100 mM Storage: Store at -20°C

**Batch Molecular Structure:** 

.CH3CO2H

## 2. ANALYTICAL DATA

<sup>1</sup>H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis:

Carbon Hydrogen Nitrogen

Theoretical 33.67 7.06 22.43 Found 33.54 7.16 22.1

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

## **Product Information**

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## **Description:**

Nor NOHA monoacetate is a reversible, competitive arginase inhibitor (IC $_{50}$  = 2  $\mu$ M). Exhibits 10-fold selectivity for human type II arginase over type I. Enhances the effect of acetylcholine on isolated aortic and mesenteric arterial rings. Inhibits growth of lung carcinoma implants in mice.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>5</sub>H<sub>12</sub>N<sub>4</sub>O<sub>3</sub>.C<sub>2</sub>H<sub>4</sub>O<sub>2</sub>.<sup>3</sup>/<sub>4</sub>H<sub>2</sub>O

Batch Molecular Weight: 249.74 Physical Appearance: White solid

#### **Batch Molecular Structure:**

.CH3CO2H

Storage: Store at -20°C

## Solubility & Usage Info:

water to 100 mM

This compound is hygroscopic and may absorb atmospheric moisture during prolonged storage, causing the solid to become sticky and/or collapse into a gel or glass-like form. Although purity is unaffected, it may be difficult to extract the full quantity from the vial. In such a situation, we recommend that solutions are 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:

**Huynh** et al (2009) The vascular effects of different arginase inhibitors in rat isolated aorta and mesenteric arteries. Br.J.Pharmacol. **156** 84. PMID: 19133993.

Rodriguez et al (2004) Arginase I production in the tumor microenvironment by mature myeloid cells inhibits T-cell receptor expression and antigen-specific T-cell responses. Cancer Res. 64 5839. PMID: 15313928.

Colleluori and Ash et al (2001) Classical and slow-binding inhibitors of human type II arginase. Biochemistry 40 9356. PMID: 11478904.

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