

# **Certificate of Analysis**

Print Date: Apr 9th 2025

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Product Name: Se-NADA Catalog No.: 7449 Batch No.: 1

CAS Number: 2571574-70-2

IUPAC Name: 3-((7-Nitro-2,1,3-benzoselenadiazol-4-yl)amino)-D-alanine hydrochloride

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C9H9N5O4Se.HCI

Batch Molecular Weight: 366.62

Physical Appearance: Orange solid
Solubility: DMSO to 10 mM
Storage: Store at -20°C

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

HPLC: Shows 97.8% purity at 483 nm

¹H NMR:Consistent with structureMass Spectrum:Consistent with structureUV Spectrum:Consistent with structure

 $\lambda_{max}$ : 475 nm (Methanol)  $\lambda_{ex}$ : 489 nm (Methanol)  $\lambda_{em}$ : 585 nm (Methanol)



## **Product Information**

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## **Description:**

Se-NADA is an orange fluorescent benzoselenadiazole D-amino acid (FDAA) for imaging bacteria. It is covalently incorporated into peptidoglycans in the cell walls of live bacteria. It also acts as a photosensitizer, bringing about bacterial cell death on exposure to visible light. Se-NADA is effective against both Gram-positive and Gram-negative bacteria. Ex/Em = 470/590 nm.

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

Batch Molecular Formula: C9H9N5O4Se.HCl

Batch Molecular Weight: 366.62 Physical Appearance: Orange solid

**Minimum Purity:** ≥95%

## **Batch Molecular Structure:**

Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

## Solubility & Usage Info:

DMSO to 10 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. \*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.

#### **Licensing Information:**

Sold under license from the University of Edinburgh

## References:

Benson et al (2021) Photoactivatable metabolic warheads enable precise and safe ablation of target cells in vivo. Nat Commun 12 2369. PMID: 33888691.

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