



Certificate of Analysis

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Batch No.: 1

Catalog No.: 7448

Product Name: SCOTfluor lactic acid probe 510

CAS Number: 2351933-31-6

IUPAC Name: (2S)-2-Hydroxy-3-[(7-nitro-2,1,3-benzoselenadiazol-4-yl)amino]propanoic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₉H₈N₄O₅Se

Batch Molecular Weight: 331.15 **Physical Appearance:** Red solid

Solubility: DMSO to 10 mM Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 97.3% purity at 492 nm

Chiral HPLC: Shows 99.7% purity

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

 λ_{max} : 490 nm (MeOH) λ_{ex} : 493 nm (MeOH) λ_{em} : 605 nm (MeOH)



Product Information

Print Date: Aug 14th 2023

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1

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Description:

SCOTfluor lactic acid probe 510 is a red fluorescent probe for imaging lactic acid metabolism in vivo. Excitation and emission maxima (λ) are 485 and 605 nm, respectively. Suitable for use with flow cytometry and super-resolution microscopy.

Physical and Chemical Properties:

Batch Molecular Formula: $C_9H_8N_4O_5Se$

Batch Molecular Weight: 331.15 Physical Appearance: Red 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.

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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 (2019) SCOTfluors: Small, conjugatable, orthogonal, and tunable fluorophores for *in vivo* imaging of cell metabolism. Angew.Chem Int.Ed.Engl. **58** 6911. PMID: 30924239.

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