



Certificate of Analysis

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Product Name: SMCy 5.5 Catalog No.: 7295 Batch No.: 1

CAS Number: 2417507-09-4

IUPAC Name: 6,8-Dicyclohexyl-4-((1E,3E,5E)-5-(1,1-dimethyl-3-(pent-4-yn-1-yl)-1,3-dihydro-2*H*-benzo[e]indol-2-ylidene)penta-1,3-

dien-1-yl)-2,2-difluoro-2,8-dihydro-5H-1 λ^3 ,2 λ^4 -[1,3,2]dioxaborinino[6,5-d]pyrimidine-5,7(6H)-dione

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₄₁H₄₆BF₂N₃O₄

Batch Molecular Weight: 693.64 **Physical Appearance:** Blue solid

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

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 97.4% purity at 656 nm

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

 λ_{max} : 660 nm (DMSO) λ_{ex} : 663 nm (DMSO) λ_{em} : 689 nm (DMSO)

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

Product Information

Print Date: Mar 15th 2024

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dien-1-yl)-2,2-difluoro-2,8-dihydro-5H-1 λ^3 ,2 λ^4 -[1,3,2]dioxaborinino[6,5-d]pyrimidine-5,7(6H)-dione

Description:

Key information: SMCy 5.5 is a fluorogenic fluorescent probe for imaging lipid droplets. Supplied with an alkyne reactive handle for click chemistry. Suitable for deep tissue imaging and 3D imaging. Application: Suitable for 2-photon excitation (2-PE) microscopy. Alkyne handle allows optional functionalization. Properties and Photophysical Data: SMCy 5.5 exhibits sharp excitation and emission bands and high brightness. It displays high two-photon absorption (TPA) cross-section values (13330 GM and 10400 GM at 770 and 820 nm, respectively). Excitation and emission maxima (λ) for SMCy 5.5 in Tetrahydrofuran are 643nm and 672 nm, respect... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

Batch Molecular Formula: C₄₁H₄₆BF₂N₃O₄

Batch Molecular Weight: 693.64 Physical Appearance: Blue 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.

References:

Collot *et al* (2018) Ultrabright and fluorogenic probes for multicolor imaging and tracking of lipid droplets in cells and tissues. J.Am.Chem.Soc. *140* 5401. PMID: 29446627.

Fam et al (2018) Recent advances in fluorescent probes for lipid droplets. Materials (Basel) 11 1768. PMID: 30231571.

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