

**Product Name:** SMCy 5.5

**Catalog No.:** 7295

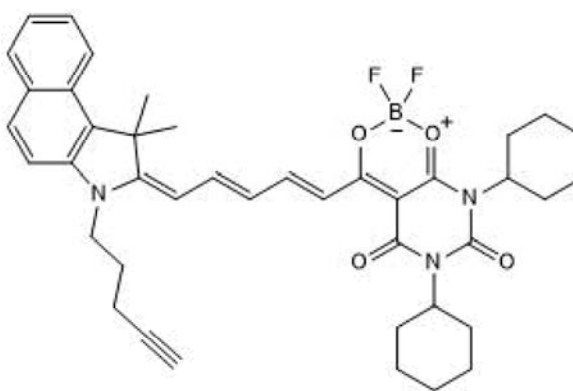
**Batch No.:** 1

CAS Number: 2417507-09-4

IUPAC Name: 6,8-Dicyclohexyl-4-((1*E*,3*E*,5*E*)-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-5*H*-1 $\lambda^3$ ,2 $\lambda^4$ -[1,3,2]dioxaborinino[6,5-*d*]pyrimidine-5,7(6*H*)-dione

## 1. PHYSICAL AND CHEMICAL PROPERTIES

<b>Batch Molecular Weight:</b>	693.64
<b>Physical Appearance:</b>	Blue solid
<b>Solubility:</b>	DMSO to 10 mM
<b>Storage:</b>	Store at -20°C
<b>Batch Molecular Structure:</b>	



## 2. ANALYTICAL DATA

<b>HPLC:</b>	Shows 97.4% purity at 656 nm
<b><sup>1</sup>H NMR:</b>	Consistent with structure
<b>Mass Spectrum:</b>	Consistent with structure
<b>UV Spectrum:</b>	Consistent with structure
<b><math>\lambda_{max}</math>:</b>	660 nm (DMSO)
<b><math>\lambda_{ex}</math>:</b>	663 nm (DMSO)
<b><math>\lambda_{em}</math>:</b>	689 nm (DMSO)

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

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**Description:**

SMCy 5.5 is a fluorogenic fluorescent probe for imaging lipid droplets that exhibits sharp excitation and emission bands and high brightness. SMCy 5.5 is suitable for use with two-photon microscopy. It is useful for deep tissue imaging and 3D imaging. Excitation/emission maxima for SMCy 5.5 in THF are 643/672 nm; Quantum yield = 0.75; Extinction coefficient = 209,000 M<sup>-1</sup> cm<sup>-1</sup>. SMCy 5.5 displays high two-photon absorption (TPA) cross-section values (13330 GM and 10400 GM at 770 and 820 nm, respectively). The probe also has a click reactive handle.

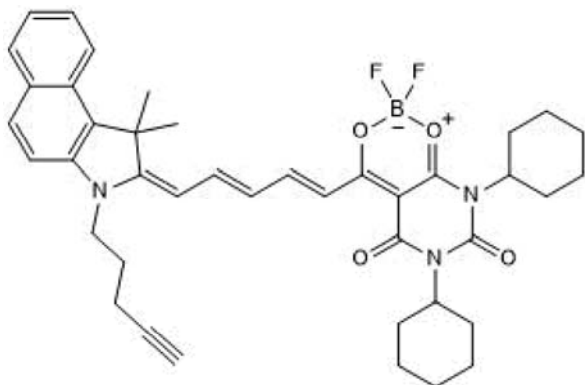
**Physical and Chemical Properties:**

Batch Molecular Weight: 693.64

Physical Appearance: Blue solid

**Minimum Purity:** ≥95%

**Batch Molecular Structure:**



**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.

**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. 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.

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