## **Product Data Sheet**



# Sulfo-Cyanine 7 NHS ester [equivalent to Cy7® NHS ester] Catalog ID: 151101 Revised: 2025-01-31

#### **Description**

Water-soluble near-infrared dye sulfo-Cyanine7 is an amine-reactive succinimide ester.

Sulfo-Cyanine7 is an enhanced analog of the Cy7® fluorophore, offering a 20% improvement in quantum yield and greater photostability. This fluorescent dye is particularly well-suited for near-infrared (NIR) imaging applications.

Near-infrared fluorescent imaging leverages the transparency of biological tissues within a specific wavelength range. This non-destructive technique enables the monitoring of the distribution of labeled molecules in live organisms.

The Sulfo-Cyanine7 NHS ester reagent simplifies the preparation of Sulfo-Cyanine7-labeled biomolecules, such as proteins. These dye-labeled molecules can be used in a variety of research and drug development experiments.

This reagent is highly water-soluble, making it ideal for labeling sensitive proteins and those prone to denaturation. For applications requiring organic phase solubility, the non-sulfonated Cyanine7 NHS ester is also available.

### **Chemical Properties**

CAS number	477908-53-5	
Formula	C44H58N4O10S2	0,8-
Molecular Weight	867.09	+N
HPLC Purity	≥95%	†NH
$\lambda_{abs}$ (nm)	756	0
$\epsilon_{\text{max}}$ (M <sup>-1</sup> cm <sup>-1</sup> )	2.5×10 <sup>5</sup>	0-1
$\lambda_{fl}$ (nm)	779	ď
$CF_{260} = \epsilon_{260}/\epsilon_{max}$	0.05	
$CF_{280} = \epsilon_{280}/\epsilon_{max}$	0.036	

#### **Storage**

Upon receipt, store at -20°C in the dark. Protect from light and moisture. When stored as indicated, Sulfo-Cyanine 7 NHS ester is stable for at least 1 year.

This product is for Research Use Only Not for Human or Veterinary or Therapeutic Use