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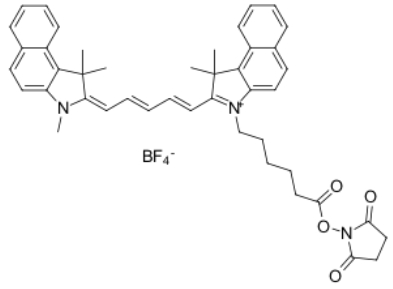
Cyanine5.5 NHS ester

http://www.lumiprobe.com/p/cy55-nhs-ester

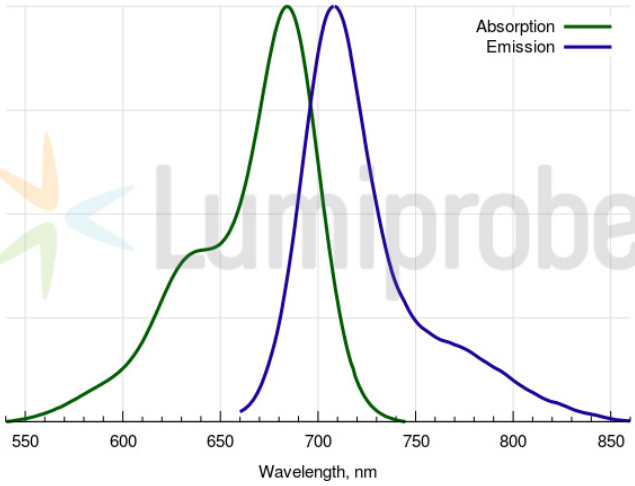
Cyanine5.5 NHS ester is a reactive dye for the labeling of amino-groups in peptides, proteins, and oligonucleotides, an analog of Cy5.5® NHS ester.

Cy5.5 is a far-red (and near-infrared) emitting dye which is ideal for fluorescence measurements where background fluorescence is a concern. It is also suitable for in vivo NIR imaging experiments.

This reagent can replace NHS esters of Cy5.5® and DyLight 680.



Cy5.5 NHS ester structure



Cy5.5 absorbance and emission spectra

General properties

Appearance:	dark blue to violet solid
Molecular weight:	767.66
CAS number:	2375105-86-3
Molecular formula:	$C_{44}H_{46}N_3BF_4O_4$
IUPAC name:	1H-Benz[e]indolium, 2-[5-(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)-1,3-pentadien-1-yl]-3-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,1-dimethyl-
Solubility:	soluble in organic solvents (DMSO, DMF, dichloromethane), practically insoluble in water (< 1 uM, < 1 mg/L)
Quality control:	NMR ^{1}H, HPLC-MS (95%)
Storage conditions:	Storage: 12 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.

Spectral properties

Excitation/absorption maximum, nm:	684
ε, $L \cdot mol^{-1} \cdot cm^{-1}$:	198000
Emission maximum, nm:	710
Fluorescence quantum yield:	0.2
CF_{260}:	0.07
CF_{280}:	0.03