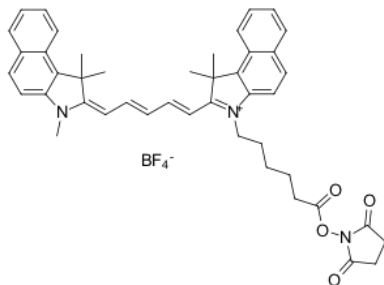


## Cyanine5.5 NHS ester

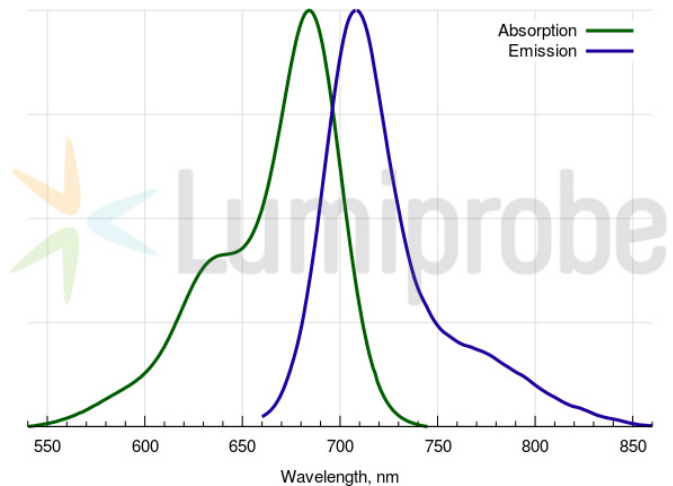
Cyanine5.5 NHS ester is a reactive dye for the labeling of amino-groups in peptides, proteins, and oligonucleotides, an analog of Cy5.5® NHS ester.

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®, Alexa Fluor 680, and DyLight 680.



**Cy5.5 NHS ester structure**



**Cy5.5 absorbance and emission spectra**

### General properties

Appearance:	dark blue solid
Molecular weight:	767.66
CAS number:	1469277-96-0, 2054318-82-8 (chloride); 1469541-53-4, 1874250-60-8 (without anion)
Molecular formula:	C <sub>44</sub> H <sub>46</sub> N <sub>3</sub> BF <sub>4</sub> O <sub>4</sub>
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 μM, < 1 mg/L)
Quality control:	NMR <sup>1</sup> H, HPLC-MS (95%)
Storage conditions:	Storage: 12 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.
TN VED Code:	3204190000

### Spectral properties

Excitation maximum, nm:	684
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	198000
Emission maximum, nm:	710
Fluorescence quantum yield:	0.2
CF <sub>260</sub> :	0.07
CF <sub>280</sub> :	0.03