

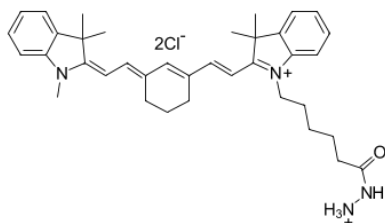
## Cyanine7 hydrazide

<http://www.lumiprobe.com/p/cy7-hydrazide>

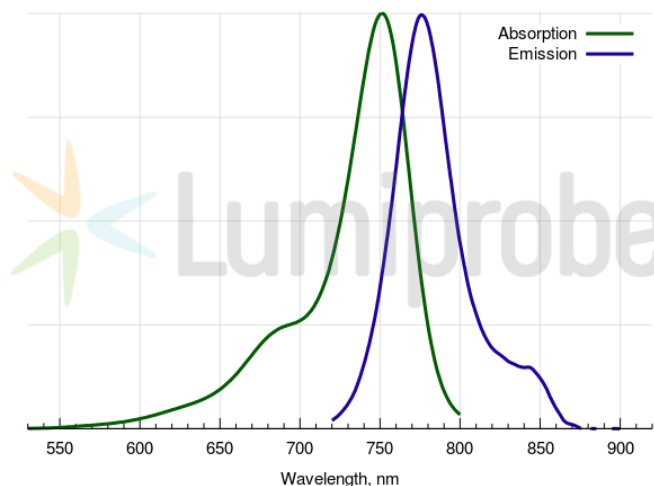
Hydrazide derivative of Cyanine7, a NIR fluorescent dye, an analog of Cy7®.

This variety of heptamethine fluorophore contains a six-membered ring rigidizing the polymethine chain which allows to increase quantum yield by 20% compared to parent structure.

Hydrazide reacts quickly and smoothly with aldehydes and ketones yielding stable hydrazone products. This reaction is also good for the labeling of glycoproteins after periodate oxidation.



**Structure of Cyanine7 hydrazide**



**Cyanine7 absorbance and emission spectra**

### General properties

Appearance:	green powder
Mass spec M+ increment:	544.8
Molecular weight:	635.70
CAS number:	2183440-61-9 (without anion)
Molecular formula:	C <sub>37</sub> H <sub>48</sub> Cl <sub>2</sub> N <sub>4</sub> O
Solubility:	moderate solubility in water, good in polar organic solvents (DMF, DMSO, alcohols)
Quality control:	NMR <sup>1</sup> H, HPLC-MS (95%)
Storage conditions:	Storage: 24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.

### Spectral properties

Excitation/absorption maximum, nm:	750
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	199000
Emission maximum, nm:	773
Fluorescence quantum yield:	0.3
CF <sub>260</sub> :	0.022
CF <sub>280</sub> :	0.029

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