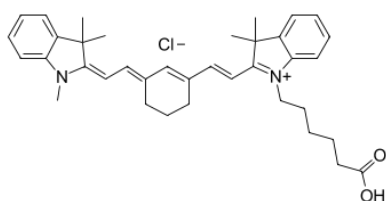


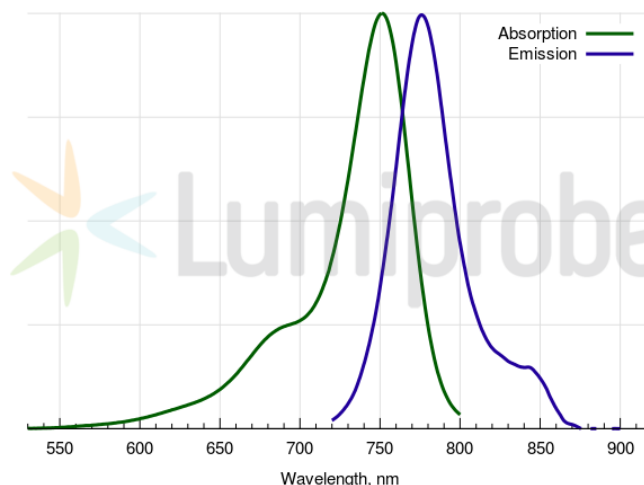
Cyanine7 carboxylic acid

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

The unactivated free carboxylic acid of near-infrared fluorescent dye Cyanine7. For coupling and labeling reactions also consider using pre-activated [Cyanine7 NHS ester](#), or water-soluble [sulfo-Cyanine7 NHS ester](#).



Cyanine7 free carboxylic acid structure



Cyanine7 absorbance and emission spectra

General properties

| | |
|---------------------|---|
| Appearance: | green powder |
| Molecular weight: | 585.22 |
| CAS number: | 1628790-40-8 (chloride), 1628897-82-4 (without anion), 2241083-63-4 (inner salt) |
| Molecular formula: | C ₃₇ H ₄₅ ClN ₂ O ₂ |
| IUPAC name: | 3H-Indolium, 2-[2-[3-[2-[1-(5-carboxypentyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-1,3,3-trimethyl-, chloride |
| Solubility: | soluble in organic solvents (DMSO, DMF, dichloromethane), low solubility in water |
| Quality control: | NMR ¹ 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 ⁻¹ ·cm ⁻¹ : | 199000 |
| Emission maximum, nm: | 773 |
| CF ₂₆₀ : | 0.022 |
| CF ₂₈₀ : | 0.029 |

Cy® is a trademark of GE Healthcare.