

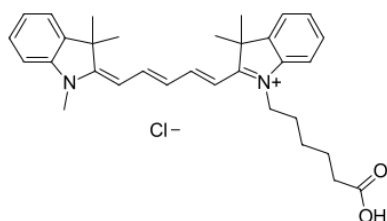
Cyanine5 carboxylic acid

<http://www.lumiprobe.com/p/cy5-carboxylic-acid>

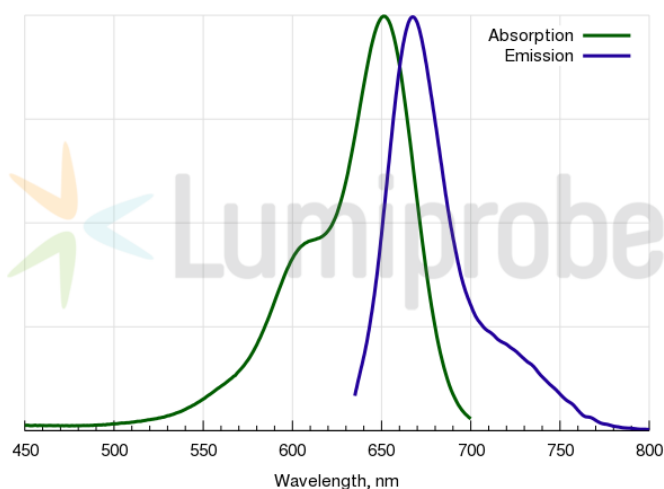
Non-activated carboxylic acid, an analog of Cy5® free carboxylic acid. Contains Cyanine5 fluorophore.

This dye has limited water solubility, but can be dissolved in mixtures of water with organic phase (DMF, DMSO, alcohols) to obtain useful concentrations of the material in solution. [Water-soluble version](#) is available.

This molecule can be considered non-reactive dye for the use in control samples, and for instrument calibration. For coupling with amines and protein labeling, consider using [Cyanine5 NHS ester](#), or water-soluble [sulfo-Cyanine5 NHS ester](#).



Cyanine5 free carboxylic acid structure



Cyanine5 absorbance and emission spectra

General properties

Appearance:	dark golden solid
Molecular weight:	519.12
CAS number:	1032678-07-1 (chloride), 195867-59-5 (inner salt), 766503-38-2 (without anion)
Molecular formula:	C ₃₂ H ₃₉ ClN ₂ O ₂
IUPAC name:	3H-Indolium, 2-[5-[1-(5-carboxypentyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadien-1-yl]-1,3,3-trimethyl-, chloride
Solubility:	soluble in organic solvents (DMF, DMSO, dichloromethane), very poorly soluble in water (0.25 mM, 130 mg/L)
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.
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:	646
ε, L·mol ⁻¹ ·cm ⁻¹ :	250000
Emission maximum, nm:	662
Fluorescence quantum yield:	0.2
CF ₂₆₀ :	0.03
CF ₂₈₀ :	0.04

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