

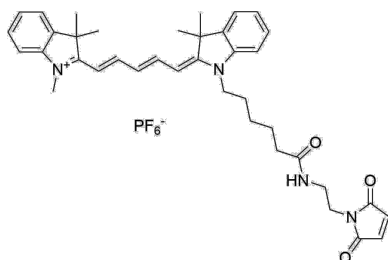
Cyanine5 maleimide

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

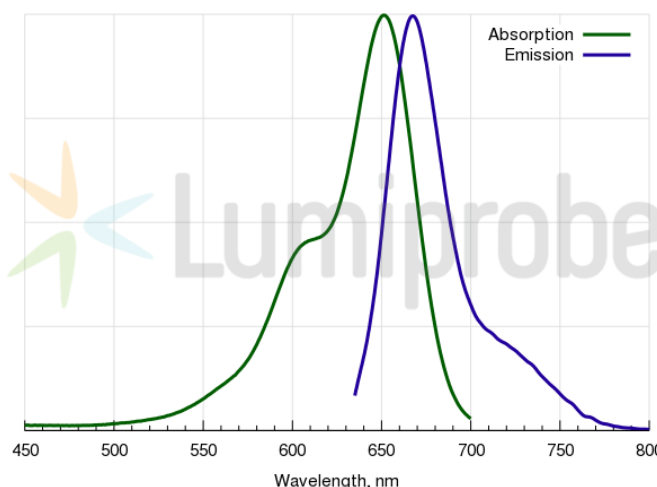
Cyanine5 maleimide is a mono-reactive dye which selectively couples with thiol groups (for example, with cysteines in peptides and proteins) to give labeled conjugates.

Cyanine5 is an analog of Cy5®, a common fluorophore which is compatible with various instrumentation like microscopes, imagers, and fluorescence readers.

For the labeling of antibodies and sensitive proteins we recommend to use the water soluble [sulfo-Cyanine5 maleimide](#).



Structure of Cyanine5 maleimide



Cyanine5 excitation and emission spectra

General properties

Appearance:	dark blue powder
Molecular weight:	605.8
CAS number:	1437872-46-2 (without anion)
Molecular formula:	C ₃₈ H ₄₅ N ₄ O ₃
IUPAC name:	3H-Indolium, 2-[5-[1-[6-[[2-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)ethyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadien-1-yl]-1,3,3-trimethyl-
Solubility:	soluble in organic solvents (DMF, DMSO, dichloromethane), practically insoluble in water (31 µM, 23 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.

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