Lumiprobe Corporation
201 International Circle, Suite 135
Hunt Valley, Maryland 21030
USA
Phone: +1 888 973 6353
Fax: +1 888 973 6354
Email: order@lumiprobe.com

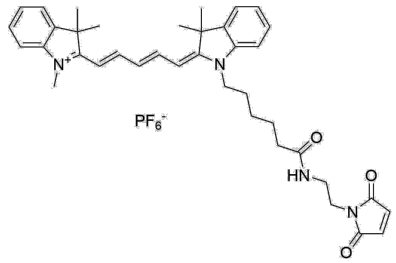
Cyanine5 maleimide

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

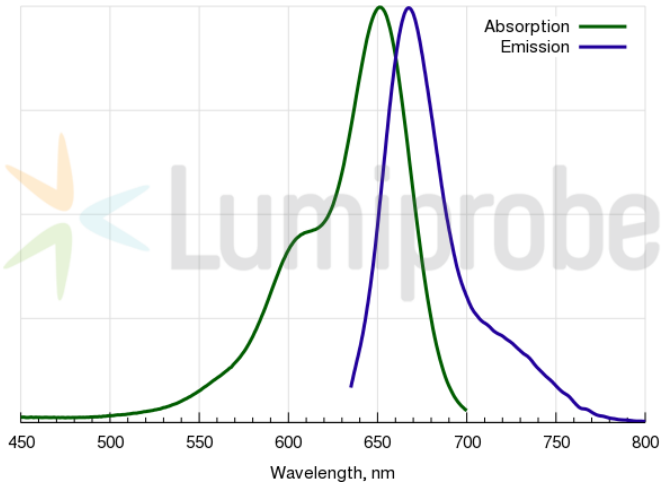
Cyanine5 maleimide is a mono-reactive dye which selectively couples with thiol groups (for example, with cysteines in peptides and proteins) to give labeled conjugates.

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:	$C_{38}H_{45}N_4O_3$
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 uM, 23 mg/L)
Quality control:	NMR ^{1}H, HPLC-MS (95%)
Storage conditions:	Storage: 24 months after receival 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, $L \cdot mol^{-1} \cdot cm^{-1}$:	250000
Emission maximum, nm:	662
Fluorescence quantum yield:	0.2
CF_{260}:	0.03

CF_{280}:	0.04

Cy® is a trademark of GE Healthcare.