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Cyanine3 maleimide

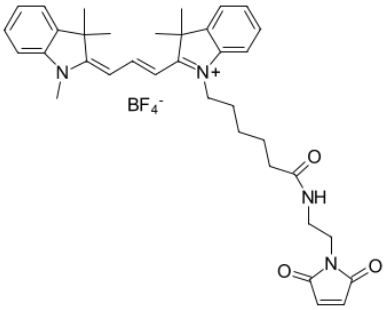
http://www.lumiprobe.com/p/cy3-maleimide

Thiol mono-reactive Cyanine3 dye. This reagent can be used to attach Cyanine3 fluorophore (an analog of Cy3®) to proteins and peptides containing cysteine residues, as well as to other thiolated molecules (such as thiol-containing oligonucleotides).

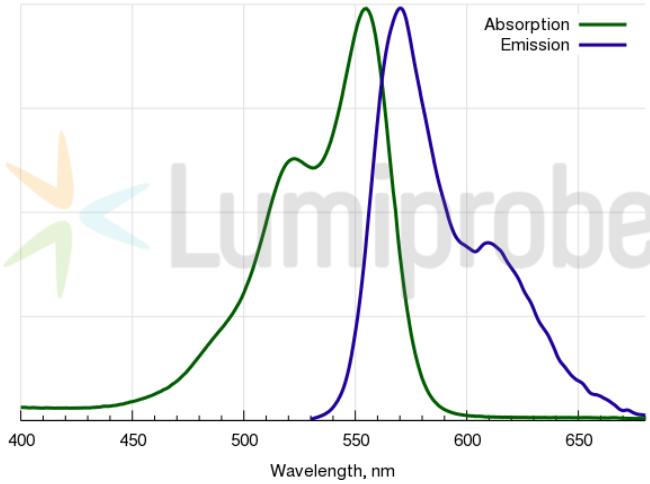
Cystines should be reduced with TCEP (tris-carboxyethylphosphine) or other appropriate reductant prior to the labeling.

Labeling with Cyanine3 maleimide is selective, and efficient.

We recommend using water-soluble Sulfo-Cyanine3 maleimide for the labeling of antibodies and other sensitive proteins.



Structure of Cyanine3 dye maleimide



Cy3 absorbance and emission spectra

General properties

Appearance:	red powder
Molecular weight:	666.56
Molecular formula:	$C_{36}H_{43}N_4O_3BF_4$
Solubility:	well soluble in DMSO (0.50 M = 330 g/L), in DMF, dichloromethane, very poorly soluble in water (0.57 mM = 420 mg/L)
Quality control:	NMR ^1H, 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:	555
ε, $L \cdot mol^{-1} \cdot cm^{-1}$:	150000
Emission maximum, nm:	570
Fluorescence quantum yield:	0.31
CF_{260}:	0.04
CF_{280}:	0.09