

## Cyanine3 maleimide

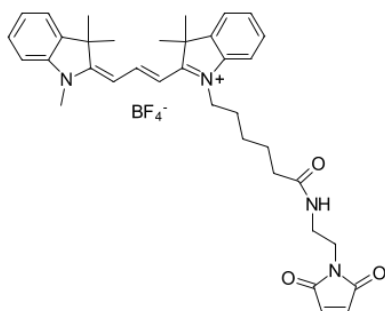
<http://www.lumiprobe.com/p/cy3-maleimide>

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).

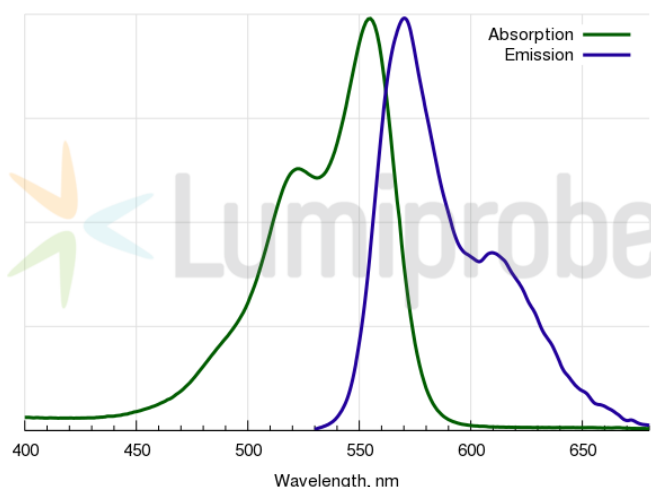
Cystines should be reduced with TCEP (tris-carboxyethylphosphine) or other appropriate reductant prior to the labeling.

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 receipt at $-20^\circ C$ in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.

### Spectral properties

Excitation/absorption maximum, nm:	555
$\epsilon$ , $L \cdot mol^{-1} \cdot cm^{-1}$ :	150000
Emission maximum, nm:	570
Fluorescence quantum yield:	0.31
$CF_{260}$ :	0.04
$CF_{280}$ :	0.09

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