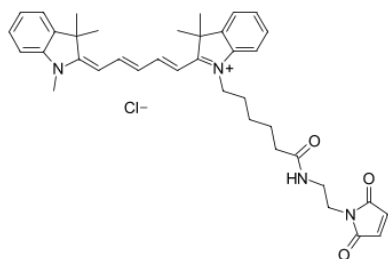


## Cyanine5 maleimide

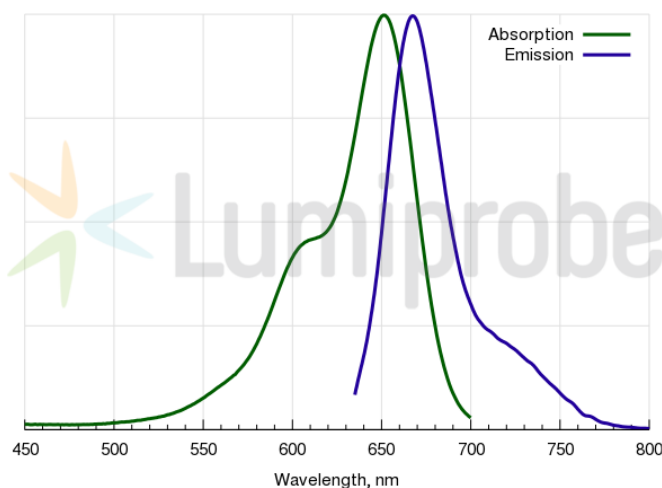
Cyanine5 maleimide is a mono-reactive dye which selectively couples with thiol groups (for example, with cysteines in peptides and proteins) to give labeled conjugates.

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](#).



**Cy5 maleimide structure**



**Cy5 excitation and emission spectra**

### General properties

Appearance:	dark blue powder
Molecular weight:	641.24
CAS number:	1437872-46-2 (without anion), 1437796-65-0 (chloride)
Molecular formula:	C <sub>38</sub> H <sub>45</sub> ClN <sub>4</sub> O <sub>3</sub>
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 <sup>1</sup> 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.
TN VED Code:	3204190000

### Spectral properties

Excitation maximum, nm:	646
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	250000
Emission maximum, nm:	662
Fluorescence quantum yield:	0.2
CF <sub>260</sub> :	0.03
CF <sub>280</sub> :	0.04

Cy® is a trademark of GE Healthcare.