

Cyanine5.5 amine

<http://www.lumiprobe.com/p/cy55-amine>

Cyanine5.5 (Cy5.5® analog) amine derivative. The dye contains a free amine group which can be conjugated with a variety of functionalities, including NHS esters, and epoxides.

Cyanine5.5 is a far red dye which works fine for live organism imaging, and applications requiring low fluorescence background.



Cy5.5 amine structure



Cy5.5 absorbance and emission spectra

General properties

Appearance:	dark blue powder
Molecular weight:	753.88
CAS number:	2097714-44-6 (without anion), 2097714-45-7 (chloride)
Molecular formula:	C ₄₆ H ₅₈ Cl ₂ N ₄ O
IUPAC name:	1H-Benz[e]indolium, 2-[5-[3-[6-[(6-aminohexyl)amino]-6-oxohexyl]-1,3-dihydro-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3-pentadien-1-yl]-1,1,3-trimethyl-
Solubility:	practically insoluble in water (< 2 uM), good in polar organic solvents (DMF, DMSO, alcohols)
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:	684
ε, L·mol ⁻¹ ·cm ⁻¹ :	198000
Emission maximum, nm:	710
Fluorescence quantum yield:	0.2
CF ₂₆₀ :	0.07
CF ₂₈₀ :	0.03

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