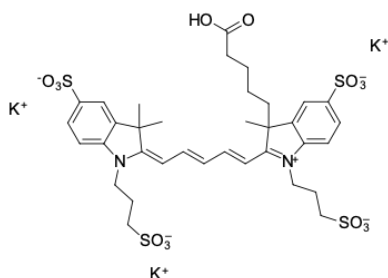


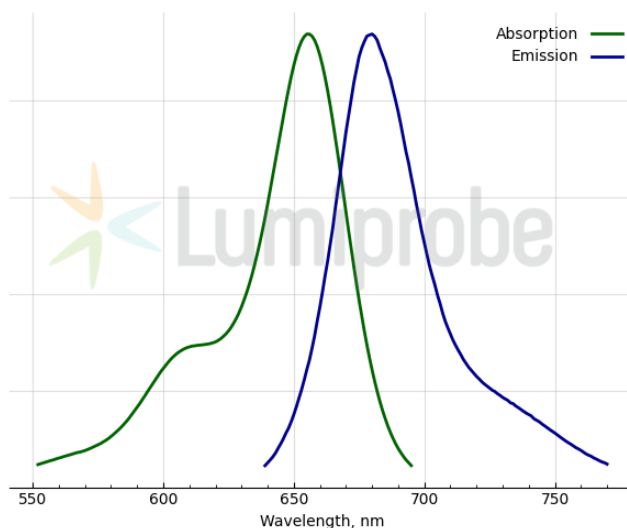
AF 647 carboxylic acid

<http://www.lumiprobe.com/p/af-647-carboxylic-acid>

AF 647 is a bright, photostable, and hydrophilic fluorophore emitting in the far-red channel (absorption max. is at 650 nm, emission max. is at 671 nm). AF 647 carboxylic acid is a water-soluble dye that can be used as a reference standard and, after activation, for synthesizing AF 647-containing biomolecules.



Structure of AF 647 carboxylic acid



Absorption and emission spectra of AF 647

General properties

Appearance:	golden blue solid
Molecular weight:	959.26
Molecular formula:	C ₃₃ H ₄₁ N ₂ K ₃ O ₁₄ S ₄
IUPAC name:	3-(4-carboxybutyl)-2-((1E,3E)-5-((E)-3,3-dimethyl-5-sulfonato-1-(3-sulfonatopropyl)indolin-2-ylidene)penta-1,3-dien-1-yl)-3-methyl-1-(3-sulfonatopropyl)-3H-indol-1-ium-5-sulfonate
Solubility:	good in DMSO, DMF, water
Quality control:	NMR ¹ H, HPLC-MS (95%)
Storage conditions:	12 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light.

Spectral properties

Excitation/absorption maximum, nm:	655
ϵ , L·mol ⁻¹ ·cm ⁻¹ :	191800
Emission maximum, nm:	680
Fluorescence quantum yield:	0.15
CF ₂₈₀ :	0.09
CF ₂₈₀ :	0.08