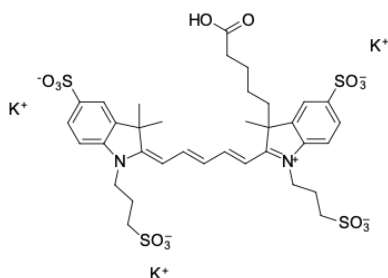


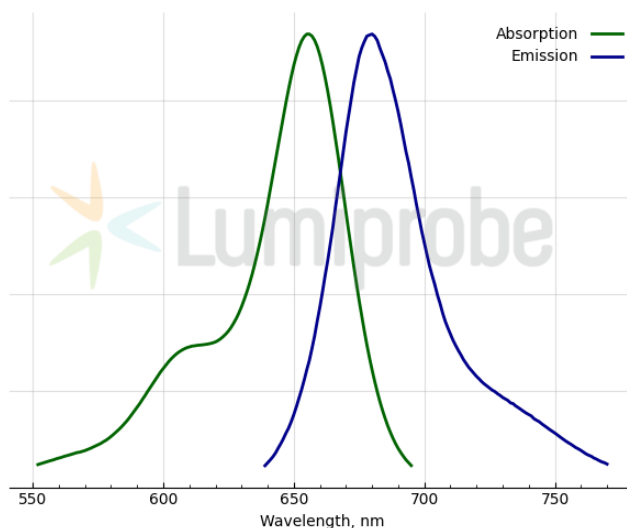
## AF 647 carboxylic acid

<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 <sub>33</sub> H <sub>41</sub> N <sub>2</sub> K <sub>3</sub> O <sub>14</sub> S <sub>4</sub>
IUPAC name:	3-(4-carboxybutyl)-2-((1E,3E)-5-((E)-3,3-dimethyl-5-sulfonato-1-(3-sulfonatopropyl)indol-2-ylidene)penta-1,3-dien-1-yl)-3-methyl-1-(3-sulfonatopropyl)-3H-indol-1-ium-5-sulfonate
Solubility:	good in DMSO, water
Quality control:	NMR <sup>1</sup> 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.
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:	655
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	191800
Emission maximum, nm:	680
Fluorescence quantum yield:	0.15
CF <sub>280</sub> :	0.09
CF <sub>280</sub> :	0.08