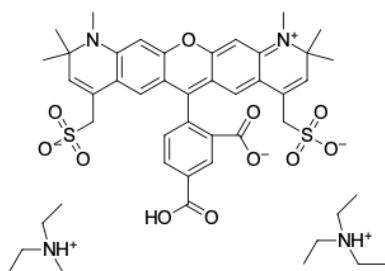


## AF 594 carboxylic acid

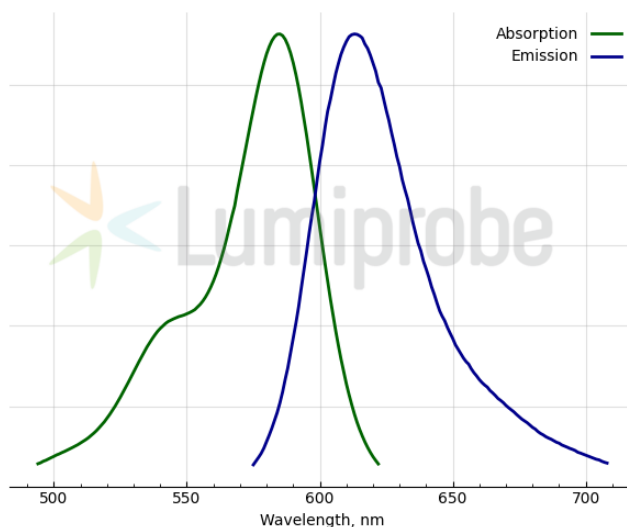
<http://www.lumiprobe.com/p/af-594-carboxylic-acid-5>

AF 594 is a bright, red-fluorescent dye with excitation maximum at 590 nm and emission maximum at 617 nm. This dye has better photostability and higher fluorescence quantum yield than traditional fluorescent stains (phycoerythrin PE, Texas Red etc.).

AF 594 carboxylic acid is a non-reactive form of AF 594 dye that can be used as a reference standard in experiments involving AF 594 dye conjugates. Besides, the carboxylic group can react with hydrazines, hydroxylamines, and amines using carbodiimides such as EDAC.



**Structure of AF 594 carboxylic acid**



**AF 594 absorbance and emission spectra**

### General properties

Appearance:	black-blue crystals
Molecular weight:	925.18
Molecular formula:	$C_{47}H_{64}N_4O_{11}S_2$
Solubility:	soluble in water, DMSO, DMF
Quality control:	NMR $^1H$ and HPLC-MS (95+%)
Storage conditions:	24 months after receipt at $-20^\circ C$ in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. 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:	586
$\epsilon$ , $L \cdot mol^{-1} \cdot cm^{-1}$ :	105000
Emission maximum, nm:	613
Fluorescence quantum yield:	0.77
$CF_{260}$ :	0.28
$CF_{280}$ :	0.51