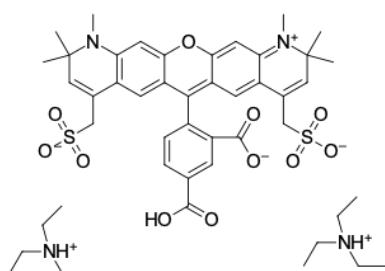


AF 594 carboxylic acid

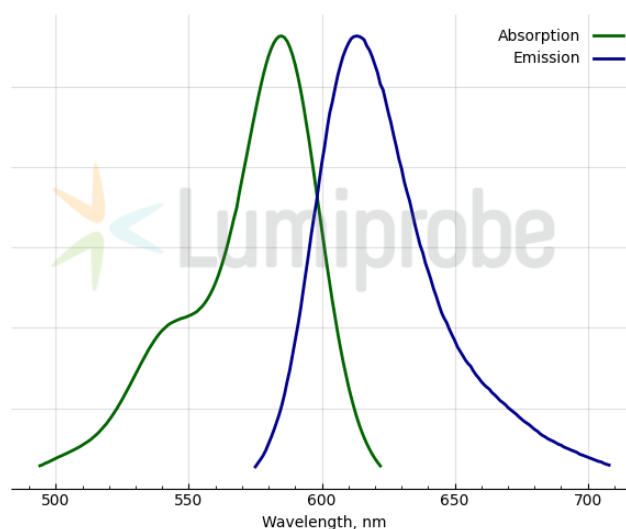
<http://www.lumiprobe.com/p/af-594-carboxylic-acid-5>

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°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. Avoid prolonged exposure to light.

Spectral properties

Excitation/absorption maximum, nm:	586
ϵ , $L \cdot mol^{-1} \cdot cm^{-1}$:	105000
Emission maximum, nm:	613
Fluorescence quantum yield:	0.77
CF_{260} :	0.28
CF_{280} :	0.51