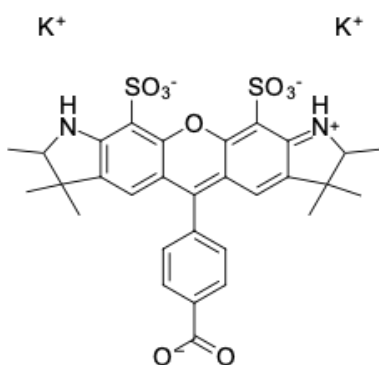


## AF 532 carboxylic acid

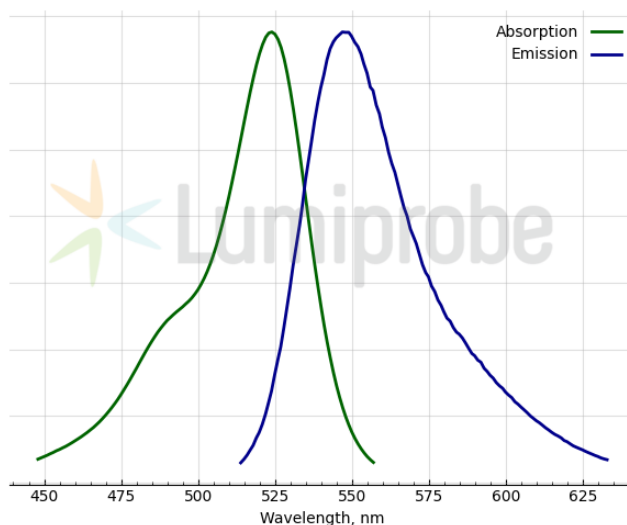
<http://www.lumiprobe.com/p/af-532-carboxylic-acid-5>

AF 532 is a bright, photostable, and hydrophilic fluorophore emitting in the yellow-green channel, an alternative to HEX, JOE, and SIMA. The dye is useful in super-resolution microscopy, particularly in stochastic optical reconstruction microscopy (STORM), as an activator in nSTORM and a reporter in dSTORM.

AF 532 carboxylic acid is a non-reactive form of AF 532 dye that can be used as a reference standard in experiments involving AF 532 dye conjugates. Besides, the carboxylic group can react with hydrazines, hydroxylamines, and amines using carbodiimides such as EDAC.



**Structure of AF 532 carboxylic acid**



**Absorption and emission spectra of AF 532**

### General properties

Appearance:	reddish-brown powder
Molecular weight:	702.88
Molecular formula:	$C_{30}H_{28}K_2N_2O_9S_2$
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.

### Spectral properties

Excitation/absorption maximum, nm:	524
$\epsilon$ , $L \cdot mol^{-1} \cdot cm^{-1}$ :	80500
Emission maximum, nm:	547
Fluorescence quantum yield:	0.6
$CF_{260}$ :	0.17
$CF_{280}$ :	0.11