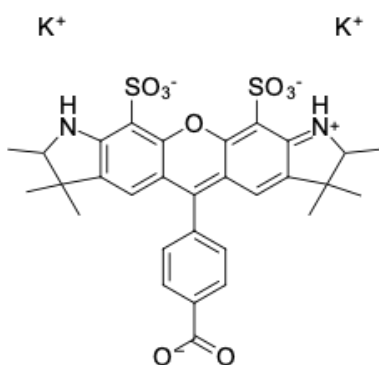


AF 532 carboxylic acid

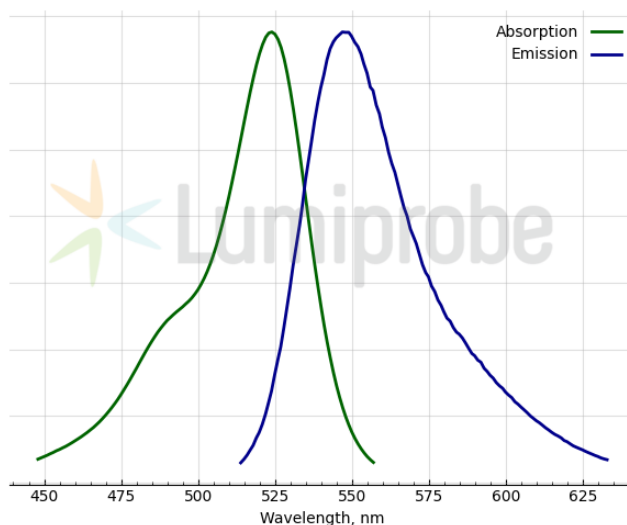
<http://www.lumiprobe.com/p/af-532-carboxylic-acid-5>

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 |
| ϵ , $L \cdot mol^{-1} \cdot cm^{-1}$: | 80500 |
| Emission maximum, nm: | 547 |
| Fluorescence quantum yield: | 0.6 |
| CF_{260} : | 0.17 |
| CF_{280} : | 0.11 |