

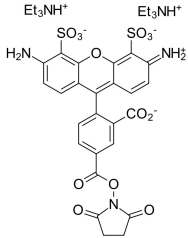
## AF488 NHS ester (A270022)

### Specifications:

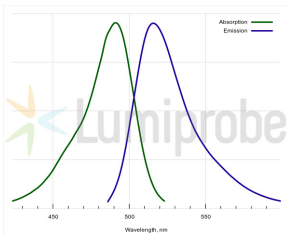
Name:	AF488 NHS ester
Description:	AF488 is a bright and photostable dye, equivalent of Alexa Fluor® 488. Due to its high hydrophilicity, this is a dye of choice for the labeling of sensitive proteins and antibodies. The dye is useful for many demanding applications, including microscopy. From the chemical standpoint, AF488 is a sulfonated rhodamine dye, Rhodamine 110 (R110). Like other rhodamines, it is available as 5- and 6-isomers, which have almost identical photophysical properties. The isomers need to be separated though - otherwise, use of mixed isomer dye can lead to doubled peaks during HPLC or electrophoresis separations of the labeled products. This product is an isomerically pure 5-AF488. This NHS ester is an amine reactive dye, meaning it can label amine groups in proteins, peptides, amino-modified oligos, and other target molecules.
Absorption Maxima:	495 nm
Extinction Coefficient:	71800 M <sup>-1</sup> cm <sup>-1</sup>
Emission Maxima:	519 nm
Fluorescence Quantum Yield:	0.91
Purity:	> 80% (by <sup>1</sup> H NMR and HPLC-MS). The balance is mostly carboxylic acid.
Molecular Formula:	C <sub>31</sub> H <sub>32</sub> N <sub>4</sub> O <sub>13</sub> S <sub>2</sub>
Molecular Weight:	732.74 kDa
Product Form:	Dark orange solid.
Solubility:	Good in water, DMF, and DMSO.
Storage:	Shipped at room temperature. Upon delivery, store in the dark at -20°C. Avoid prolonged exposure to light. Desiccate.
Disclaimer:	This product is for research use only. It is not intended for diagnostic or therapeutic use.

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Images:



Structure of AF488 NHS ester.



Absorption and emission spectra of AF488.