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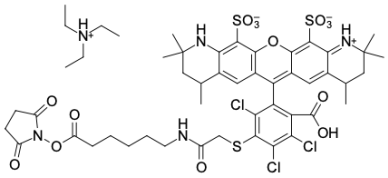
AF 546 NHS ester

http://www.lumiprobe.com/p/af-546-nhs-ester-6

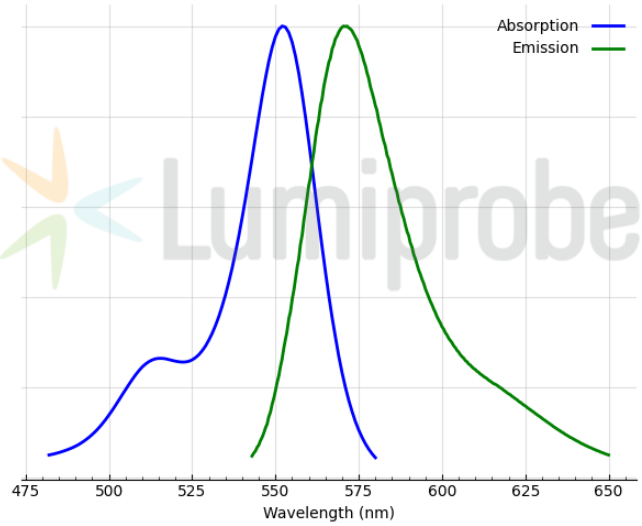
AF 546 NHS ester is a rhodamine-based fluorescent dye designed for covalent labeling of biomolecules at primary amines.

AF 546 NHS ester effectively reacts with the ε-amino groups of lysines and the N-terminal amino groups of proteins, forming a stable amide bond. The reaction is carried out in a slightly alkaline environment (typically pH 7.5–8.5), which ensures high conjugation and reproducible results.

The dye is characterized by high brightness, good photostability, and minimal pH sensitivity in the physiological range. Its spectral properties make it suitable for multicolor fluorescence microscopy, flow cytometry, and fluorescence immunoassays.<?p>



Structure of AF 546 NHS ester



Absorption and emission spectra of AF 546

General properties

Appearance:	dark-red crystals
Molecular weight:	1159.63
Molecular formula:	$C_{50}H_{62}Cl_3N_5O_{14}S_3$
Solubility:	water, DMSO, DMF
Quality control:	NMR ^1H and HPLC-MS (95+%)
Storage conditions:	12 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.
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:	552
ε, $L \cdot mol^{-1} \cdot cm^{-1}$:	130000
Emission maximum, nm:	570
Fluorescence quantum yield:	0.9
CF_{260}:	0.25
CF_{280}:	0.13