

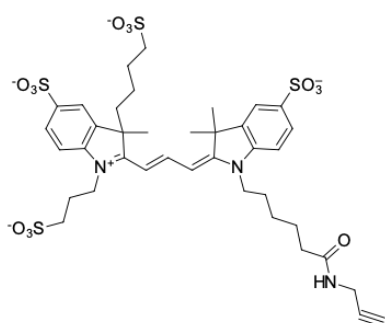
AF 555 alkyne

<http://www.lumiprobe.com/p/af-555-alkyne>

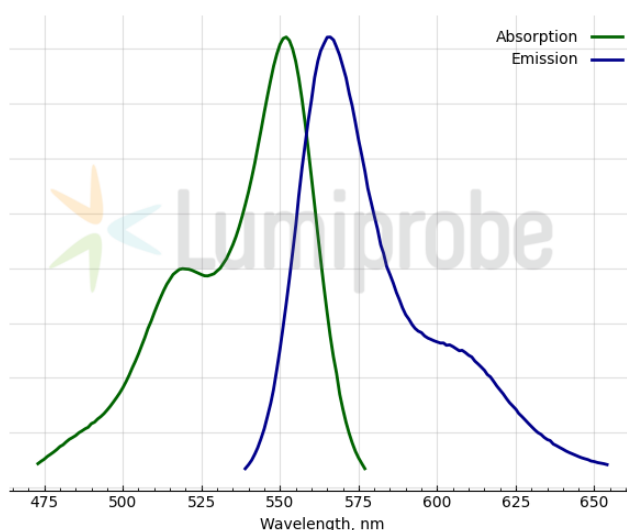
AF 555 alkyne is a yellow fluorescent dye containing a terminal alkyne group for bioorthogonal conjugation via copper(I)-catalyzed azide-alkyne cycloaddition (CuAAC). The dye reacts selectively with azide-modified biomolecules, forming stable triazole linkages under mild aqueous conditions.

AF 555 alkyne absorbs at ~552 nm and emits bright fluorescence at ~566 nm. The dye is characterized by high brightness, good photostability, and high water solubility, making it suitable for fluorescence microscopy, flow cytometry, and high-content screening. Its excitation profile is compatible with standard 532–561 nm laser lines.

The reagent is commonly used for post-labeling of azide-functionalized proteins, glycans, nucleic acids, lipids, and other biomolecules introduced by metabolic labeling or chemical modification.



Structure of AF 555 alkyne



Absorption and emission spectra of AF 555

General properties

Appearance:	dark red powder
Molecular weight:	998.36
Molecular formula:	$C_{38}H_{46}K_3N_3O_{13}S_4$
Solubility:	good in water, DMF, DMSO
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. Avoid prolonged exposure to light.
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 , $L \cdot mol^{-1} \cdot cm^{-1}$:	152000
Emission maximum, nm:	566
Fluorescence quantum yield:	0.14