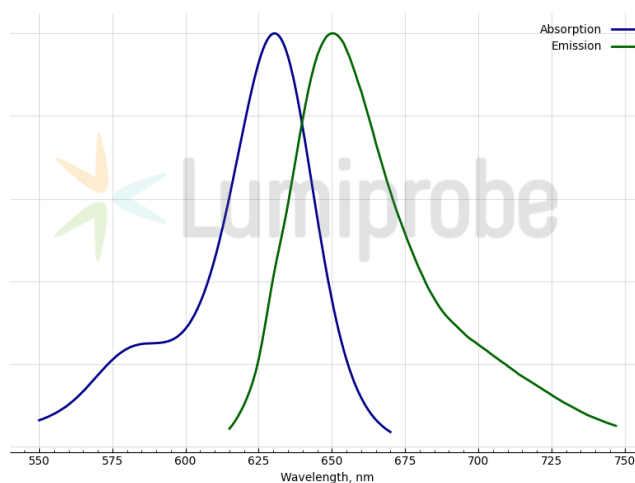
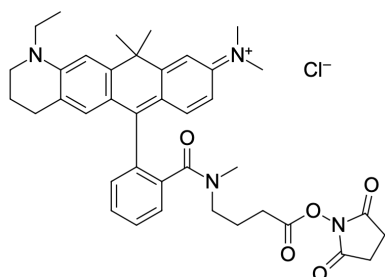


## ATT 633 NHS ester

<http://www.lumiprobe.com/p/atto-633-nhs-ester>

ATT 633 NHS ester is an activated ester of the ATT 633 fluorophore, designed for covalent labeling of biomolecules containing primary amine groups. The reagent efficiently reacts with  $\epsilon$ -amino groups of lysine residues and N-terminal amino groups of proteins, forming stable amide bonds.

ATT 633 is a far-red hydrophilic dye characterized by high molar absorptivity and quantum yield. The fluorophore exhibits good photostability, provides a bright signal and high detection sensitivity, and is suitable for a wide range of applications, including fluorescence microscopy, flow cytometry, and in-gel visualization.



**Absorption and emission spectra of ATT 633**

### General properties

Appearance:	blue-purple crystals
Molecular weight:	685.26
CAS number:	2982226-58-2
Molecular formula:	$C_{39}H_{45}ClN_4O_5$
Solubility:	DCM, DMSO, acetonitrile
Quality control:	NMR $^1H$ , HPLC-MS (95%)
Storage conditions:	Storage: 24 months after receipt at $-20^\circ C$ in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. 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:	630
$\epsilon$ , $L \cdot mol^{-1} \cdot cm^{-1}$ :	168000
Emission maximum, nm:	650
$CF_{260}$ :	0.313
$CF_{280}$ :	0.091