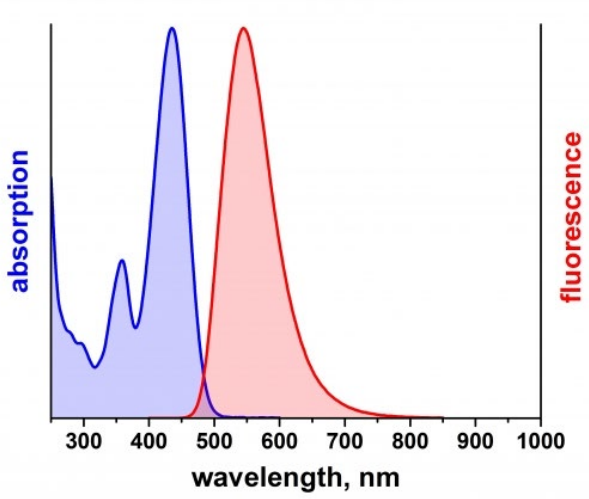
06714 Atto 430LS

Atto 430LS is a new fluorescent label featuring an extraordinary large Stokes-Shift of 114 nm. Thus its emission spectrum is almost completely separated from its absorption spectrum, making the dye highly suitable for multiplexing experiments. Atto 430LS is very hydrophilic and shows excellent water solubility. The dye exhibits a high fluorescence quantum yield, which is only slightly reduced after conjugation to biomolecules, e.g. proteins, even at high degrees of labeling (DOL).
Atto 430LS is an anionic dye. After conjugation to a substrate the dye carries a net electrical charge of $^{-1}$. The fluorescence is excited most efficiently in the range 400 - 460 nm.

Product Description

Mw	589 g/mol
λ_{abs}	436 nm
ε_{max}	3.2 x 10^4 M^{-1} cm^{-1}
λ_{fl}	545 nm
η_{fl}	65%
τ_{fl}	4.0 ns
CF_{260}	0.32
CF_{280}	0.22

Optical data of the carboxy derivative (in aqueous solution)



Storage and handling

The product is shipped solvent-free at ambient temperature. Upon receipt, store at -20 °C. To avoid moisture condensation onto the product, vial must be equilibrated to room temperature before opening. When stored properly, protected from moisture and light.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.