06715 Atto 490LS

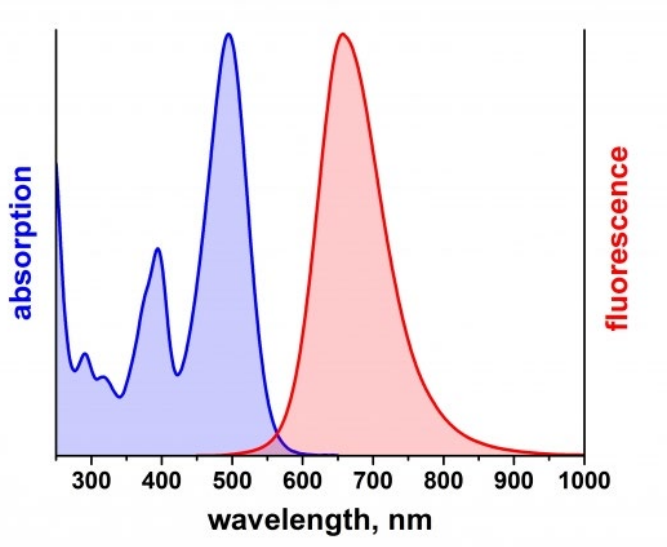
Application

Atto 490LS is a new fluorescent label featuring an extraordinary large Stokes-Shift of 165 nm. Thus the emission spectrum is almost completely separated from its absorption spectrum, making the dye highly suitable for multiplexing experiments, in particular in combination with Atto 488 and Atto 514. Atto 490LS is very hydrophillic and shows excellent water solubility. The dye exhibits a relatively high fluorescence quantum yield, which is only slightly reduced after conjugation to biomolecules, e.g. proteins, even at high degrees of labeling (DOL). Atto 490LS is an anionic dye. After conjugation to a substrate the dye carries a net electrical charge of $^{-1}$.

Product Description

MW	696 g/mol
λ_{abs}	495 nm
ε_{max}	4.0 x 10^4 M^{-1} cm^{-1}
λ_{fl}	658 nm
η_{fl}	30%
τ_{fl}	2.6 ns
CF_{260}	0.39
CF_{280}	0.21

Optical data of the carboxy derivative (in PBS pH 7.4)



Storage: protected from light at -20°C

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.