

28616 Atto 425-Biotin

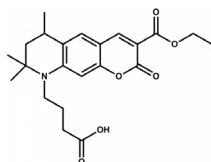
Application

Atto 425 is a new label with very high quantum yield (0.9 in water) and good molecular absorption (45.000) as well as sufficient stoke's shift (λ_{abs} 439 nm, fluorescence λ_{max} 484 nm in water). Atto 425 is suitable for labelling proteins as well as oligonucleotides. It does nearly not show cis-trans isomerisation, which limits brightness and reproducibility for many other dyes. Due to an insignificant triplet formation rate it is well suited for single molecule detection applications. Biotin conjugates may be used for determination of biotin-binding sites, especially for avidin, streptavidin or neutravidin. As well known for Biotin-Fluorescein conjugates, those conjugates may be useful as polar tracers to investigate cellular processes like cell fusion, cell volume changes, membrane permeability etc.

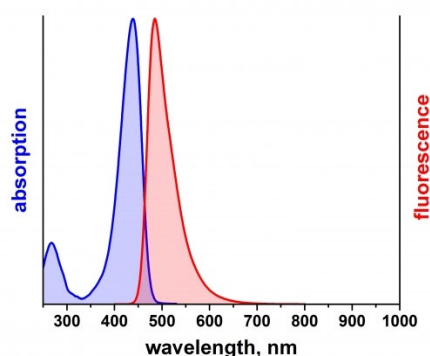
Biotin conjugation of Atto 425 does not significantly change the labels spectral data regarding excitation and emission maxima.

Product Description

MW	712 g/mol
λ_{abs}	439 nm
ϵ_{max}	$4.5 \times 10^4 \text{ M}^{-1} \text{ cm}^{-1}$
λ_{fl}	485 nm
η_{fl}	90 %
τ_{fl}	3.6 ns
CF ₂₆₀	0.19
CF ₂₈₀	0.17



Optical data of the carboxy derivative (in aqueous solution)



Storage: protected from moisture and 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.

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