43069 Atto 565 azide

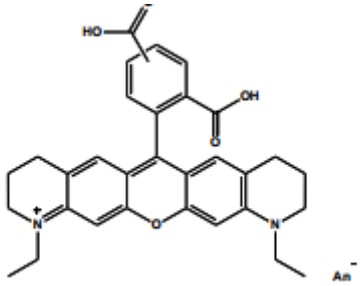
Application

Atto 565 is a fluorescent label belonging to the class of Rhodamine dyes. The dye is intended for application in the area of life science, e.g. labeling of DNA, RNA or proteins. Characteristic features of the label are strong absorption, high fluorescence quantum yield, and high thermal and photo-stability. Thus Atto 565 is highly suitable for single-molecule detection applications and high-resolution microscopy such as PALM, dSTORM, STED etc. Additionally the dye highly qualifies to be applied in flow cytometry (FACS), fluorescence in-situ hybridization (FISH) and many more.
The dye is moderately hydrophilic. The fluorescence is excited most efficiently in the range 545 - 575 nm. As supplied, Atto 565 consists of a mixture of two isomers with practically identical absorption and fluorescence.
The **azide** modification is used in the Huisgen reaction ("Click Chemistry").

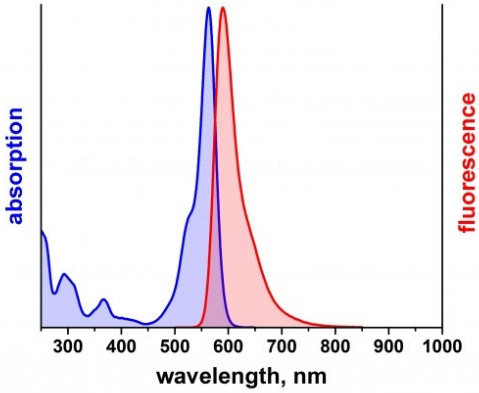
Product Description

MW	825 g/mol
λ_{abs}	564 nm
e_{max}	1.2 x 10^5 M^{-1} cm^{-1}
λ_{fl}	590 nm
η_{fl}	90%
τ_{fl}	4.0 ns
CF_{260}	0.27
CF_{280}	0.12

Optical data of the carboxy derivative (in aqueous solution)



Structure of free acid



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.