

abberior STAR ORANGE, carboxylic acid, 1 mg

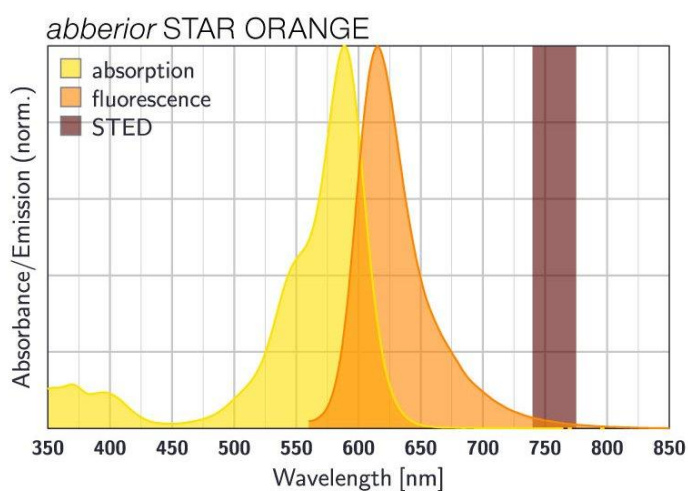
Item number

STORANGE-0001-1MG

Description

abberior STAR ORANGE is a novel fluorescent dye developed for STED and confocal microscopy in the orange spectral region. Introducing negatively charged groups into its molecular structure making the dye excellently water soluble and enables background-free imaging. Thus, abberior STAR ORANGE is highly photostable and a bright orange fluorescent dye, which can be effectively excited with excitation light between 550 - 610 nm. For STED microscopy, this dye can be most efficiently used with a STED laser wavelength between 750 - 800 nm. Our abberior STAR ORANGE can substitute dyes like ATTO® 594 or Alexa Fluor® 594. Together with our abberior STAR RED you can obtain stunning 2 color STED results. In combination with our abberior STAR 580 you get the ideal pair for FLIM experiments. Best results are obtained with freshly prepared samples.

Organic fluorescent dye for microscopy.



Properties

Absorption	λ_{ex} [nm]	589
Extinction Coefficient	ϵ_{max} [M ⁻¹ cm ⁻¹]	95000
Emission	λ_{em} [nm]	616
Quantum Efficiency	η_{fl} [%]	55
STED min.	$\lambda_{\text{STED min}}$ [nm]	750
STED max.	$\lambda_{\text{STED max}}$ [nm]	800
Fluorescence Lifetime	τ_{fl} [ns]	4.5
Correction Factor 260	CF ₂₆₀	0.55
Correction Factor 280	CF ₂₈₀	0.56
Charge	Δq	-3
Molecular Weight	MW [g/mol]	825.7
Derivative/Conjugate	Carboxylic acid	

Photophysical properties were measured for carboxylic acid in PBS pH 7.4.

Storage

The product contains a vial of lyophilized powder and is shipped at room temperature. Upon arrival, please store the product at -20 °C. For proper long-term storage up to one year, protect the product from light and moisture.

- Our abberior carboxylic acid derivates come as a freeze-dried powder and should be dissolved in DMF, DMSO, or acetonitrile.