

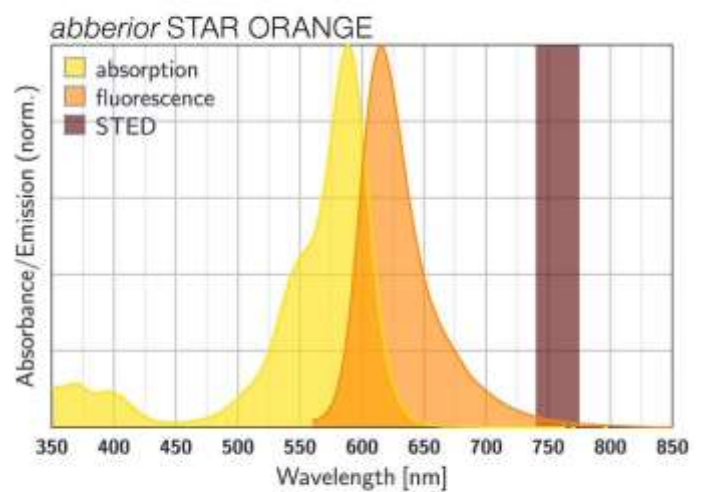
## abberior STAR ORANGE, donkey anti-rat IgG, 500 µg (1 mg/ml)

### Item number

STORANGE-1053-500UG

### 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 conjugated with polyclonal secondary anti-rat IgG antibody, host: donkey, concentration 1 mg/ml. The antibody has been tested to ensure minimal cross-reaction with bovine, chicken, goat, guinea pig, hamster, horse, human, mouse, rabbit and sheep IgG but it may cross-react with immunoglobulins from other species.

## Properties

Absorption	$\lambda_{\text{ex}}$ [nm]	589
Extinction Coefficient	$\epsilon_{\text{max}}$ [M <sup>-1</sup> cm <sup>-1</sup> ]	95000
Emission	$\lambda_{\text{em}}$ [nm]	616
Quantum Efficiency	$\eta_{\text{fl}}$ [%]	55
STED min.	$\lambda_{\text{STED min}}$ [nm]	750
STED max.	$\lambda_{\text{STED max}}$ [nm]	800
Fluorescence Lifetime	$\tau_{\text{fl}}$ [ns]	4.5
Correction Factor 260	CF <sub>260</sub>	0.55
Correction Factor 280	CF <sub>280</sub>	0.56
Charge	$\Delta q$	-3
Derivative/Conjugate	anti-Rat IgG	

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

## Storage

The product contains a vial of buffered solution and is shipped at room temperature. Upon arrival, the product can be stored at 4 °C for up to one month. Please split the product into smaller aliquots and store these at -20 °C to -80 °C for long-term storage of up to one year. Protect the conjugate from direct light exposure and avoid repeated freeze-thaw cycles.