

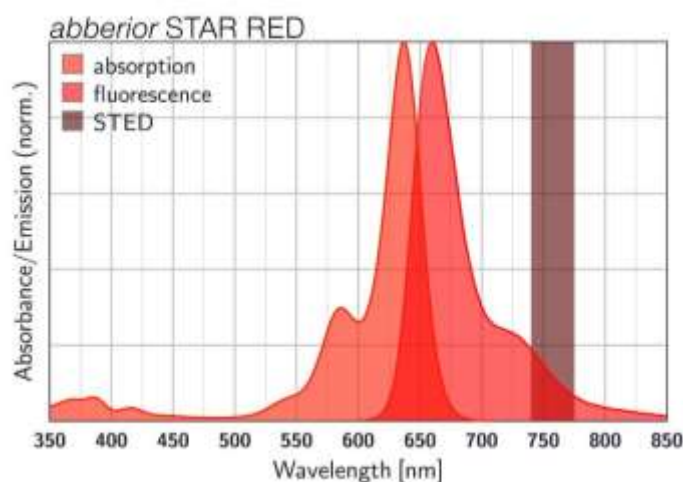
## abberior STAR RED, donkey anti-rat IgG, 500 µg (1 mg/ml)

### Item number

STRED-1053-500UG

### Description

abberior STAR RED is a well-known red dye, named also KK114 in literature. It was developed for STED and confocal imaging in the red spectral region. It shows an exceptional brightness and low background, delivering stunning STED images. abberior STAR RED can be excited with lasers at wavelength between 630 - 650 nm. For STED, a depletion wavelength around 750 - 800 nm is recommended. abberior STAR RED can substitute dyes like ATTO® 647N, Alexa Fluor® 647, or Cy5®. Our abberior STAR RED is the ideal partner for abberior STAR ORANGE or abberior STAR 580 to obtain optimal 2 color STED results. 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]	638
Extinction Coefficient	$\epsilon_{\text{max}}$ [M <sup>-1</sup> cm <sup>-1</sup> ]	120000
Emission	$\lambda_{\text{em}}$ [nm]	655
Quantum Efficiency	$\eta_{\text{fl}}$ [%]	90
STED min.	$\lambda_{\text{STED min}}$ [nm]	750
STED max.	$\lambda_{\text{STED max}}$ [nm]	800
Fluorescence Lifetime	$\tau_{\text{fl}}$ [ns]	3.4
Correction Factor 260	CF <sub>260</sub>	0.16
Correction Factor 280	CF <sub>280</sub>	0.32
Charge	$\Delta q$	-1
Derivative/Conjugate	anti-Rat IgG	

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

## Storage

These products contain 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.