

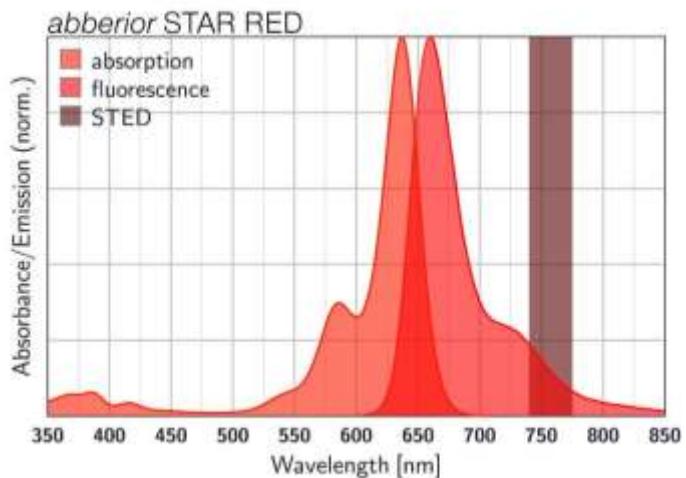
abberior STAR RED, donkey anti-rat IgG, 500 µg (1 mg/ml)

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	λ_{ex} [nm]	638
Extinction Coefficient	ϵ_{max} [$\text{M}^{-1}\text{cm}^{-1}$]	120000
Emission	λ_{em} [nm]	655
Quantum Efficiency	η_{f} [%]	90
STED min.	$\lambda_{\text{STED min}}$ [nm]	750
STED max.	$\lambda_{\text{STED max}}$ [nm]	800
Fluorescence Lifetime	τ_{fl} [ns]	3.4
Correction Factor 260	CF ₂₆₀	0.16
Correction Factor 280	CF ₂₈₀	0.32
Charge	Δq	-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.