

abberior STAR RED, phalloidin, 20 µg

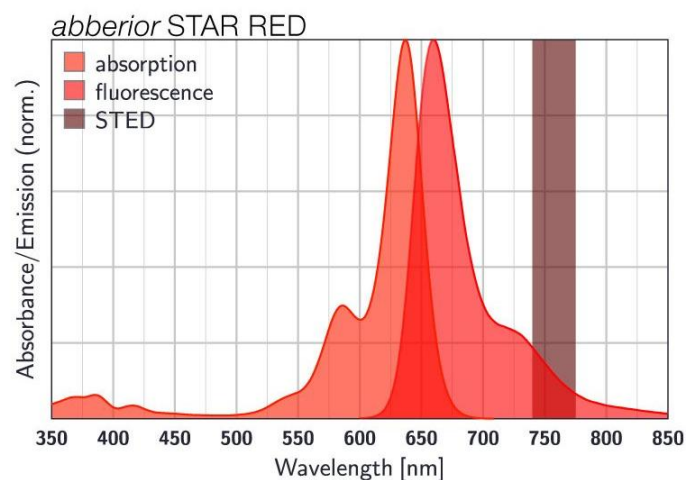
Item number

STRED-0100-20UG

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.

Fluorescent dye conjugate of phalloidin are used to stain F-actin. The high specificity of phalloidin offers significant advantages over antibodies for actin labeling.



Properties

Absorption	λ_{ex} [nm]	638
Extinction Coefficient	ϵ_{max} [M ⁻¹ cm ⁻¹]	120000
Emission	λ_{em} [nm]	655
Quantum Efficiency	η_{fl} [%]	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
Molecular Weight	MW [g/mol]	1657.8
Derivative/Conjugate		Phalloidin

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

Storage

Our *abberior phalloidin* probes are freeze-dried and shipped at room temperature. Upon arrival, the product can be stored for up to one year at -20 °C. Shortly before the staining procedure dissolve the probe in DMF or DMSO. Once dissolved the stock solutions should be kept at -20 °C, protected from light and moisture.

- Depending on solvent quality the shelf-life of the stock solutions might be significantly reduced compared to the phalloidin conjugate in its solid form. Repeated freeze-thaw cycles can be avoided by splitting the dissolved compound into smaller aliquots.