

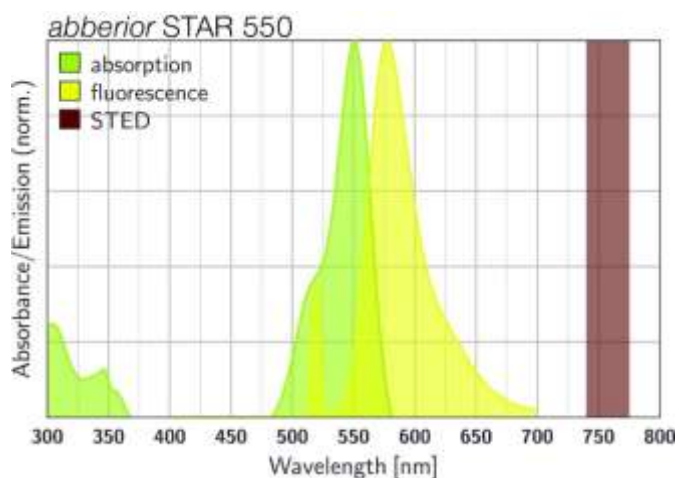
abberior STAR 550, phalloidin, 300 units

Item number

ST550-0100-300U

Description

abberior STAR 550 was developed for STED and confocal microscopy in the green-orange spectral region. Characteristic features of this dye are its exceptional photostability and brightness. abberior STAR 550 can be very effectively excited effectively excited with a 561 nm laser. For STED microscopy, abberior STAR 550 can be used most efficiently with a STED laser wavelength between 650 – 775 nm. In combination with abberior STAR BLUE, abberior STAR ORANGE, and abberior STAR RED, abberior STAR 550 enables versatile 4-color imaging across a broad spectral range. 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]	552
Extinction Coefficient	ϵ_{max} [M ⁻¹ cm ⁻¹]	85000
Emission	λ_{em} [nm]	574
Quantum Efficiency	η_{fl} [%]	44
STED min.	$\lambda_{\text{STED min}}$ [nm]	650
STED max.	$\lambda_{\text{STED max}}$ [nm]	775
Fluorescence Lifetime	τ_{fl} [ns]	3.8
Correction Factor 260	CF ₂₆₀	0.3
Correction Factor 280	CF ₂₈₀	0.2
Charge	Δq	0
Molecular Weight	MW [g/mol]	1271.4
Derivative/Conjugate	Phalloidin	

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.

- Reconstitute the vial in 1.5 mL of DMF or DMSO to obtain a stock solution of 200 units/mL. We recommend diluting this stock solution 1:200 to prepare a staining solution with a final concentration of 1 unit/mL.
- 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.