

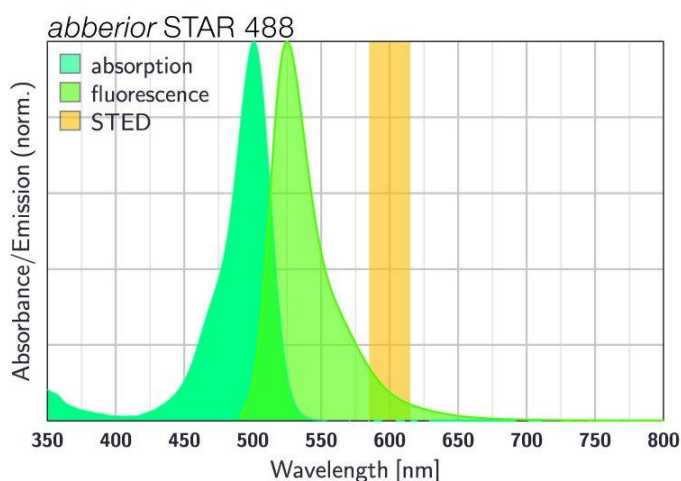
abberior STAR 488, phalloidin, 20 µg

Item number

ST488-0100-20UG

Description

abberior STAR 488 was developed for STED and confocal microscopy in the green spectral region. It can be very effectively excited with the prominent 488 nm laser line. For STED microscopy, this fluorescent dye can be efficiently used with STED laser wavelengths between 590 - 610 nm. Introducing negatively charged groups into its molecular structure making the dye excellent water soluble. Our abberior STAR 488 can substitute dyes like Oregon Green® 488, ATTO® 488 or Alexa Fluor® 488. Together with our abberior STAR 440SXP you can obtain optimal 2 color STED results with a single depletion laser. 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]	503
Extinction Coefficient	ϵ_{max} [M ⁻¹ cm ⁻¹]	65000
Emission	λ_{em} [nm]	524
Quantum Efficiency	η_{fl} [%]	89
STED min.	$\lambda_{\text{STED min}}$ [nm]	590
STED max.	$\lambda_{\text{STED max}}$ [nm]	610
Fluorescence Lifetime	τ_{fl} [ns]	3.9
Correction Factor 260	CF ₂₆₀	0.28
Correction Factor 280	CF ₂₈₀	0.14
Charge	Δq	-2
Molecular Weight	MW [g/mol]	1468.4
Derivative/Conjugate	Phalloidin	

Photophysical properties were measured for carboxylic acid in PBS pH 7.4. Fluorescence Lifetime was measured in MeOH + 0.05% TFA.



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.