

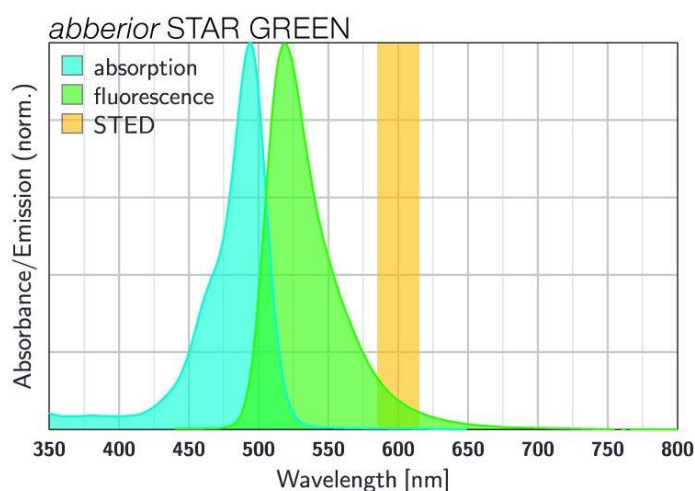
abberior STAR GREEN, Halo, 30 nmol

Item number

STGREEN-0147-30NMOL

Description

abberior STAR GREEN is a novel fluorescent dye belonging to the group of fluorescein dyes. Characteristic features of this dyes are bright green fluorescent with a fluorescent quantum yield of over 80% and exceptional photostability under STED and confocal imaging conditions. abberior STAR GREEN can be very effectively excited with the 488 nm laser line. For STED microscopy, this dye can be efficiently used with a STED laser wavelength between 590 – 610 nm. Our abberior STAR GREEN is the ideal partner for abberior STAR 440L to obtain optimal 2 color STED results with a single depletion laser. abberior STAR GREEN can substitute dyes like Oregon Green® 488, ATTO® 488 or Alexa Fluor® 488. Best results are obtained with freshly prepared samples.



Discover our abberior STAR GREEN Halo, a cell impermeant label that covalently binds to the active site of your HaloTag fusion protein, whether on the surface of living cells or intracellular targets of fixed cells. This label rapidly binds with exceptional specificity under typical physiological conditions. Each purchase includes 1 vial of lyophilized abberior STAR GREEN Halo, ensuring top-quality performance for STED and confocal microscopy. To achieve optimal results, prepare a stock solution of 1 mM in DMF or DMSO. Adjust the working solution concentration between 0.1 μ M to 0.5 μ M based on the cell type, tissue, and expression rate of your HaloTag fusion protein.

Properties

Absorption	λ_{ex} [nm]	493
Extinction Coefficient	ϵ_{max} [M ⁻¹ cm ⁻¹]	75000
Emission	λ_{em} [nm]	519
Quantum Efficiency	η_{fl} [%]	84
STED min.	$\lambda_{\text{STED min}}$ [nm]	590
STED max.	$\lambda_{\text{STED max}}$ [nm]	610
Fluorescence Lifetime	τ_{fl} [ns]	4.1
Correction Factor 260	CF ₂₆₀	0.48
Correction Factor 280	CF ₂₈₀	0.34
Charge	Δq	0
Molecular Weight	MW [g/mol]	689.1
Derivative/Conjugate		Halo

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

Storage

HaloTag® labels are shipped freeze-dried in amounts of 30 nmol per vial. Upon arrival, the substances can be stored for up to one year at –20 °C. Shortly before the staining procedure dissolve the label 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 substances in their solid form – even if stored at –20 °C.