

abberior STAR GREEN, maleimide, 1 mg

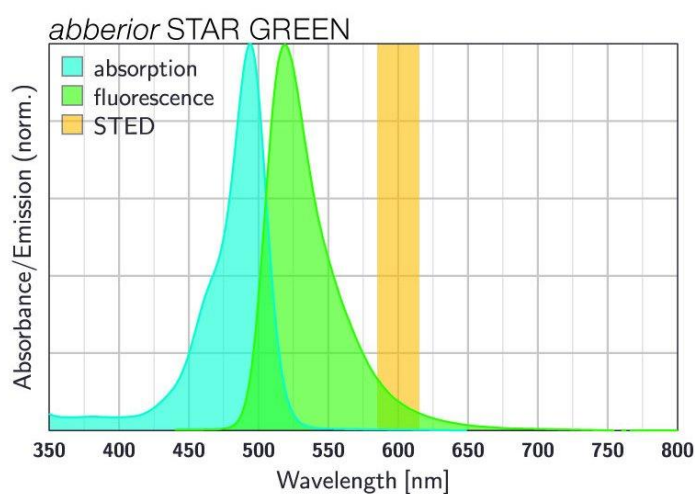
Item number

STGREEN-0003-1MG

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.

The maleimide is used for conjugating a fluorescent dye to a thiol group (cysteine residues) on a protein or thio-modified molecules. The resulting abberior conjugate will show a bright fluorescence and photostability. abberior offers labeling protocols for labeling of antibodies via thiol-reactive groups.



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]	605.5
Derivative/Conjugate		Maleimide

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

Storage

The product contains a vial of lyophilized powder and is shipped at room temperature. Upon arrival, please store the product at -20 °C. For proper long-term storage up to one year, protect the product from light and moisture.

- Our abberior maleimides are freeze-dried and should be dissolved only shortly before the coupling reaction. Recommended solvents include amine- and water-free DMF, DMSO, or acetonitrile.