Hans-Adolf-Krebs-Weg 6
37077 Göttingen, Germany
E-Mail: support@abberior.com
Website: abberior.rocks

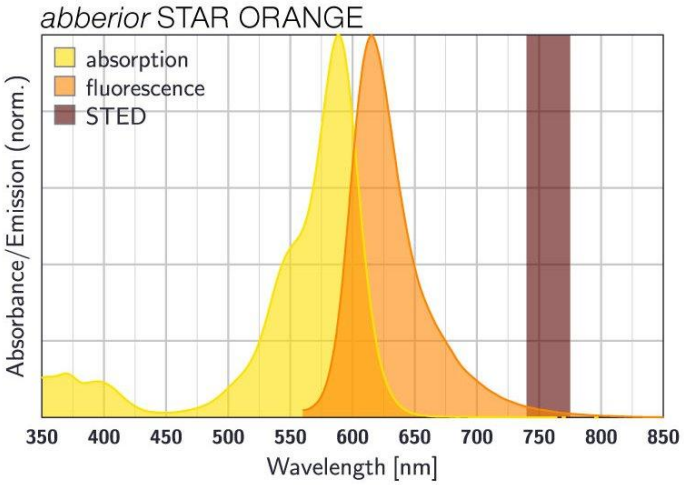
abberior STAR ORANGE, membrane, 5 nmol

Item number

STORANGE-0206-5NMOL

Description

abberior STAR ORANGE is a novel fluorescent dye developed for STED and confocal microscopy in the orange spectral region. Introducing negatively charged groups into its molecular structure making the dye excellently water soluble and enables background-free imaging. Thus, abberior STAR ORANGE is highly photostable and a bright orange fluorescent dye, which can be effectively excited with excitation light between 550 - 610 nm. For STED microscopy, this dye can be most efficiently used with a STED laser wavelength between 750 - 800 nm. Our abberior STAR ORANGE can substitute dyes like ATTO® 594 or Alexa Fluor® 594. Together with our abberior STAR RED you can obtain stunning 2 color STED results. In combination with our abberior STAR 580 you get the ideal pair for FLIM experiments. Best results are obtained with freshly prepared samples.



Our abberior STAR ORANGE membrane probes can be readily used to specifically label the outer plasma membrane of living cells or can be used for in vitro studies. All our bright and photostable abberior STAR membrane probes are modified by cholesterol as a functional group. Since the dye is not incorporated into the membrane, our unique abberior membrane probes do not change the composition of the plasma membrane by foreign substances. The natural behavior of the membrane and fluidity will maintain. This product contains 1 vial of abberior STAR ORANGE membrane as a lyophilized powder, a stock solution of 10 µM in DMF or DMSO is recommended. Depending on cell type, or tissue a working solution of 10 to 50 nM in aqueous media is advised, which is sufficient for up to 1000 cell stainings.

Hans-Adolf-Krebs-Weg 6
37077 Göttingen, Germany
E-Mail: support@abberior.com
Website: abberior.rocks

Properties

Absorption	λ_{ex} [nm]	589
Extinction Coefficient	ε_{max} [$M^{-1}cm^{-1}$]	95000
Emission	λ_{em} [nm]	616
Quantum Efficiency	η_{fl} [%]	55
STED min.	$\lambda_{STED\ min}$ [nm]	750
STED max.	$\lambda_{STED\ max}$ [nm]	800
Fluorescence Lifetime	τ_{fl} [ns]	4.5
Correction Factor 260	CF_{260}	0.55
Correction Factor 280	CF_{280}	0.56
Charge	Δq	-3
Molecular Weight	MW [g/mol]	3289.9
Derivative/Conjugate		Membrane (Cholesterol)

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

Storage

Our abberior STAR membrane probes are freeze-dried and shipped at room temperature. Upon arrival, the product can be stored for up to one year at –20 °C. Proximately 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 solution might be significantly reduced compared to the probe in its solid form – even if stored at –20 °C.