

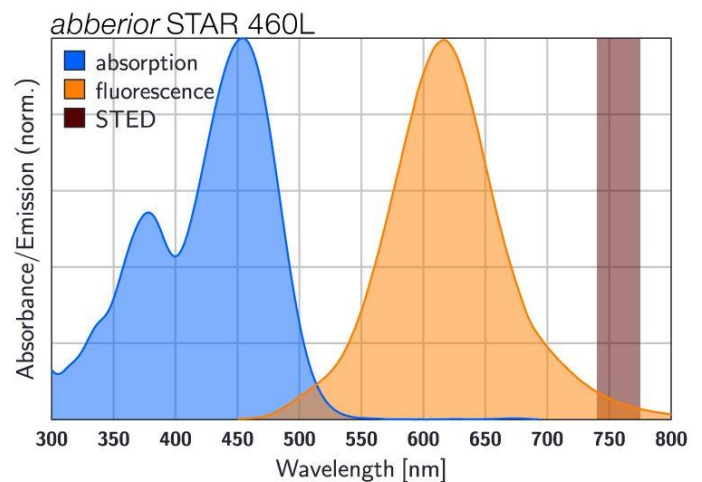
abberior STAR 460L, nanobody anti-mouse IgG, 30 µl (1 mg/ml)

Item number

ST460L-1009-30UG

Description

abberior STAR 460L is a long Stokes-shift dye optimized for STED and confocal microscopy. It shows a large Stokes-shift of approx. 162 nm and has a broad excitation and emission band: The dye is excited most efficiently in the range of 440 - 490 nm and emits between 560 - 680 nm. For STED microscopy abberior STAR 460L can be used with STED laser wavelengths between 750 - 800 nm. All these features making abberior STAR 460L the optimal dye for multicolor STED experiments, in particular as 3rd color in combination with abberior STAR ORANGE and STAR RED.



Nanobodies are an exciting, novel antibody format. Being 10x smaller than conventional whole IgG antibodies, the 15kDa nanobodies are perfect for high resolution imaging experiments where small labels, good penetration and outstanding specificity is necessary. The combination of super bright and highly photostable abberior STAR dyes and the polyclonal nanobodies produced in alpacas from Jackson ImmunoResearch (AffiniPure-VHH™ Secondaries) offer a fantastic solution for high-quality and high-resolution imaging. The nanobodies are cross-adsorbed for exquisite specificity against target species with minimal cross-reactivity to other commonly used species, making them suitable for application in multiple labeling experiments.

Properties

Absorption	λ_{ex} [nm]	455
Extinction Coefficient	ϵ_{max} [M ⁻¹ cm ⁻¹]	28000
Emission	λ_{em} [nm]	617
Quantum Efficiency	η_{fl} [%]	17
STED min.	$\lambda_{\text{STED min}}$ [nm]	750
STED max.	$\lambda_{\text{STED max}}$ [nm]	800
Fluorescence Lifetime	τ_{fl} [ns]	2
Correction Factor 260	CF ₂₆₀	0.55
Correction Factor 280	CF ₂₈₀	0.33
Charge	Δq	0
Derivative/Conjugate	Nanobody anti-mouse, polyclonal	

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

Storage

Polyclonal Nanobodies from Jackson ImmunoResearch are shipped in solution at ambient temperature. Upon arrival, the product can be stored at 4 °C for a short period of time. For long-term storage of up to one year add glycerol for a final concentration of 50 %, and store at –20 °C as a liquid.

- Avoid repeated freeze-thaw cycles for all nanobody products. Therefore, it is recommended to split the abberior secondary nanobody solution into smaller aliquots. Minimize exposure to light to prevent photobleaching of the dye.