

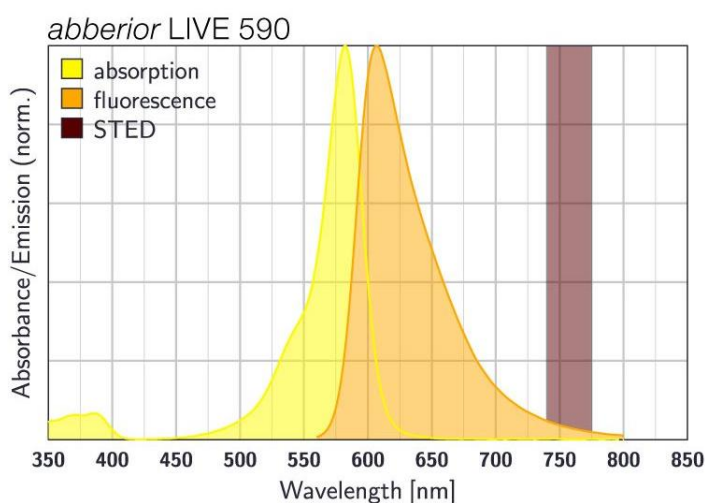
abberior LIVE 590, Halo, 30 nmol

Item number

LV590-0147-30NMOL

Description

abberior LIVE 590 is a member of a new class of fluorescent dyes for live-cell imaging exclusively offered by abberior. This dye is highly photostable and bright orange fluorescent dye, which can be effectively excited with excitation light between 550 - 610 nm. For STED, a depletion wavelength between 750 - 800 nm is recommended. Due to the unique isomeric structure the favored conformation is stabilized, leading to an enhanced cell permeability of the dye. abberior LIVE 590 can therefore be used in very low nanomolar concentration, reducing background and cytotoxicity effectively, allowing long-term STED and confocal imaging of living cells or tissue.



Discover our abberior LIVE 590 Halo, a fluorogenic label that covalently binds to the active site of your HaloTag fusion protein within living cells. This label rapidly binds with exceptional specificity under typical physiological conditions.

Properties

Absorption	λ_{ex} [nm]	585
Extinction Coefficient	ϵ_{max} [M ⁻¹ cm ⁻¹]	105000
Emission	λ_{em} [nm]	609
Quantum Efficiency	η_{fl} [%]	60
STED min.	$\lambda_{\text{STED min}}$ [nm]	750
STED max.	$\lambda_{\text{STED max}}$ [nm]	800
Fluorescence Lifetime	τ_{fl} [ns]	3.5
Charge	Δq	0
Molecular Weight	MW [g/mol]	634.2
Derivative/Conjugate		Halo

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



Storage

Each purchase includes 1 vial of lyophilized abberior LIVE 590 Halo, ensuring top-quality performance for live-cell STED and confocal microscopy. For optimal use, we recommend 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. 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.

- Note: 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 .