

abberior LIVE SiR, HaloX, 10 nmol

Item number

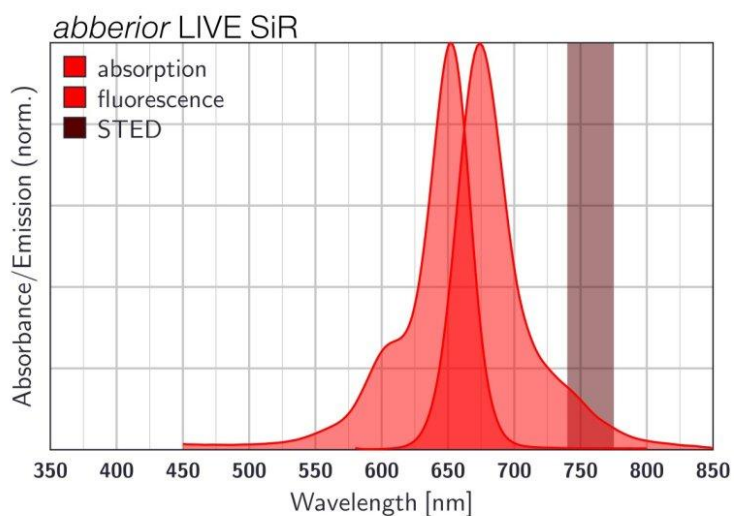
LVSIR-0146-10NMOL

Description

Our HaloX[®] probes can be easily used to specifically label your HaloTag[®] fusion proteins in living cells or on cell surfaces. Due to their high affinity, the probes interact with the HaloTag[®] protein but can exchange regularly. This is made possible by preventing the formation of a covalent bond and allowing free exchange of fresh probes. In confocal and STED microscopy, this transient binding ensures that proteins can be detected in the living cell over longer periods of time, as bleaching processes are no longer crucial.

abberior LIVE SiR HaloX[®] is a highly photostable and bright red emitting probe and can be effectively excited with lasers between 630 - 650 nm. For STED, a depletion wavelength around 750 - 800 nm is recommended.

This product is covered by one or more license from Spirochrome AG and, is intended for Research Use Only (RUO). HaloX[®] is registered trademark of Spirochrome AG. HaloTag[®] is registered trademark of Promega Corporation.



Properties

Absorption	λ_{ex} [nm]	645
Extinction Coefficient	ϵ_{max} [M ⁻¹ cm ⁻¹]	99600
Emission	λ_{em} [nm]	668
Quantum Efficiency	η_{fl} [%]	40.6
STED min.	$\lambda_{\text{STED min}}$ [nm]	750
STED max.	$\lambda_{\text{STED max}}$ [nm]	800
Fluorescence Lifetime	τ_{fl} [ns]	2.7
Charge	Δq	0
Molecular Weight	MW [g/mol]	723.3
Charge	Δq	0
Derivative/Conjugate		HaloX

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

Storage

This product contains 1 vial of abberior LIVE SiR HaloX[®] as lyophilized powder, a stock solution of 1 mM in DMF or DMSO is recommended. Depending on cell type, tissue, and expression rate of the HaloTag7 fusion protein a working solution of 100 nM to 1 μ M is advised. Our abberior LIVE HaloX[®] labels are shipped freeze-dried in amounts of 10 nmol per vial. Upon arrival, the substances can be stored for up to one year at –20 °C. Dissolve the probe in DMF or DMSO shortly before staining. 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 reduced compared to the substances in their solid form – even if stored at –20 °C.