

## abberior LIVE 590, carboxylic acid, 500 µg

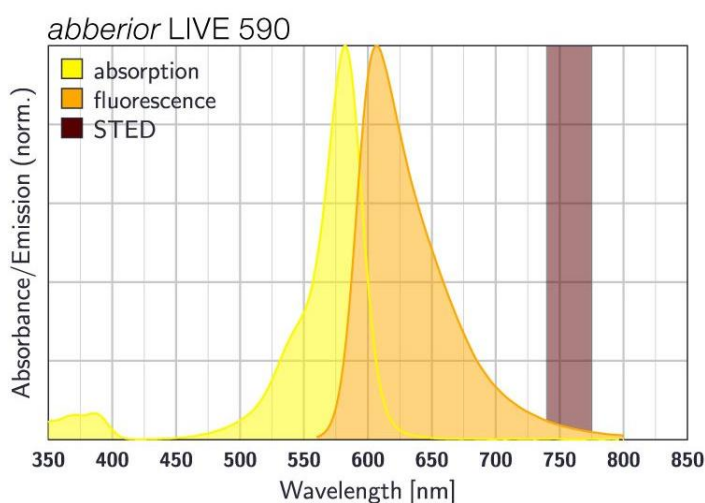
### Item number

LV590-0001-500UG

### 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.

Organic fluorescent dye for microscopy.



### Properties

|                        |                                                      |        |
|------------------------|------------------------------------------------------|--------|
| Absorption             | $\lambda_{ex}$ [nm]                                  | 585    |
| Extinction Coefficient | $\epsilon_{max}$ [M <sup>-1</sup> cm <sup>-1</sup> ] | 105000 |
| Emission               | $\lambda_{em}$ [nm]                                  | 609    |
| Quantum Efficiency     | $\eta_f$ [%]                                         | 60     |
| STED min.              | $\lambda_{STED min}$ [nm]                            | 750    |
| STED max.              | $\lambda_{STED max}$ [nm]                            | 800    |
| Fluorescence Lifetime  | $\tau_f$ [ns]                                        | 3.5    |
| Charge                 | $\Delta q$                                           | 0      |
| Molecular Weight       | MW [g/mol]                                           | 428.5  |
| Derivative/Conjugate   | Carboxylic acid                                      |        |

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



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## 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 carboxylic acid derivates come as a freeze-dried powder and should be dissolved in DMF, DMSO, or acetonitrile.