

49409 Atto 488 Phalloidin

Application

Atto 488 is a fluorescent label with excellent water solubility. The dye shows strong absorption, high fluorescence quantum yield, high photostability, and only little triplet formation.

After coupling to a substrate the label carries a net electrical charge of -1. The fluorescence is excited most efficiently in the range 480 - 515 nm. For instance the 488 nm line of the Argon-Ion laser is very suitable for excitation.

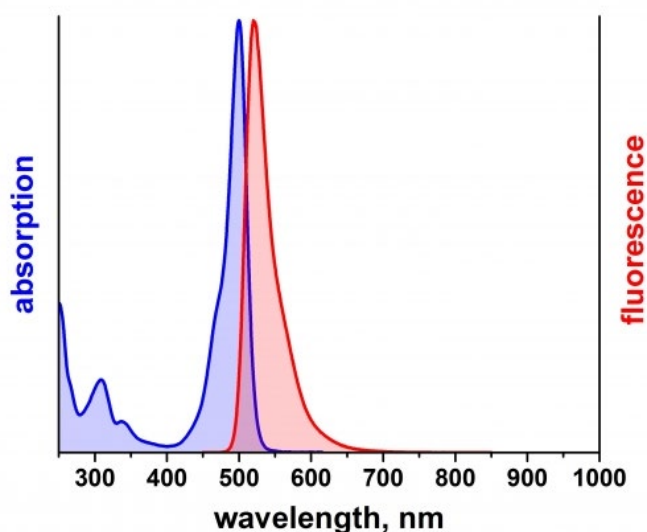
Phalloidin can be used for labeling F-actin in fixed cells it binds to the same sites on F-actin as natural phalloidin. Phalloidin conjugates are used for the identification and quantitation of F-actin in tissues, cell cultures, or cell-free preparations.

Because fluorescent phalloidin conjugates are not permeant to most live cells, they can be used to detect cells that have compromised membranes.

Product Description

MW	1473 g/mol
λ_{abs}	500 nm
ϵ_{max}	$2.4 \times 10^4 \text{ M}^{-1} \text{ cm}^{-1}$
λ_{fl}	520 nm
η_{fl}	80 %
τ_{fl}	4.1 ns
CF ₂₆₀	0.22
CF ₂₈₀	0.09

Absorption and fluorescence emission of Atto 488 Phalloidin in aqueous solution

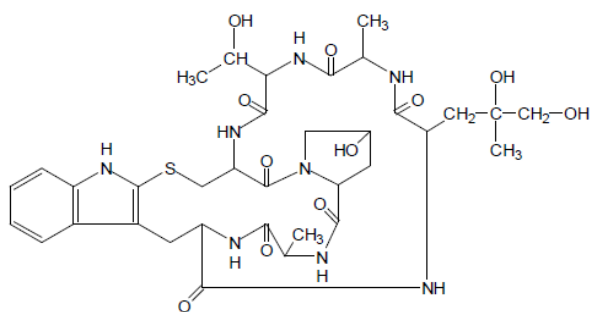


Properties of Phalloidin:

Molecular formula: $C_{35}H_{48}N_8O_{11}S$

Molecular weight: 788.9 (anhydrous)

Extinction Coefficient: $E^{1\%} = 0.597$ (295 nm in water)



Staining procedure:

We recommend solving the lyophilisate (10 nmol) in 500 μ l methanol as a stock solution. Store the stock solution at -20°C .

For F-actin staining add 20 - 30 μ l of the stock solution to 1 ml of the labeling buffer (PBS buffer).

Storage of Atto 488 phalloidin: protected from light at -20°C

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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