

Product Information

CF™594, Hydrazide

Catalog Number **SCJ4600029**

Storage Temperature $-20\text{ }^{\circ}\text{C}$

TECHNICAL BULLETIN

Product Description

CF™594, hydrazide can be used as a fixable polar tracer for visualizing cell morphology, or for labeling biomolecules with an aldehyde or ketone group (such as carbohydrate molecules after peroxidation with periodate).

CF594 is a deep red fluorescent dye spectrally similar to Alexa Fluor® 594 and Texas Red® dye. When conjugated to proteins, CF594 is significantly brighter than Alexa Fluor 594 due to its high quantum yield and exceptional water solubility. CF594 also has excellent photostability, making it ideal for demanding applications such as confocal microscopy and single molecule imaging. These properties make CF594 the best deep-red dye for labeling proteins and nucleic acids. The dye is particularly useful in combination with our blue fluorescent CF350, green fluorescent CF488A and far red CF647 for multicolor imaging.

CF594 dye properties:

Abs/Em Maxima: 593/614 nm (See Figure 1)

Extinction coefficient: 115,000

Molecular weight: ~730

A_{280}/A_{max} or CF (correction factor for estimating degree of protein labeling): 0.08

Flow cytometry laser line: 532 or 561 nm

Microscopy laser line: 594 nm

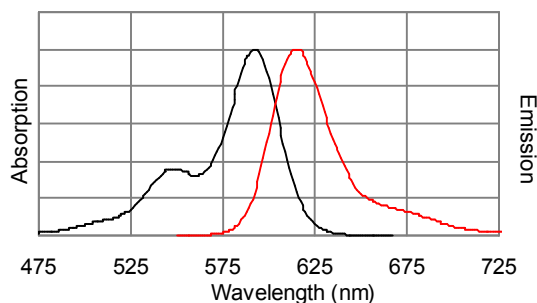
Direct replacement for: Alexa Fluor 594, DyLight® 594, and Texas Red

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.

Figure 1.

Absorption and emission spectra of CF594 conjugated to goat anti-mouse IgG in PBS.



Preparation Instructions

Stock solutions may be prepared in water or PBS.

Stock solutions may be stored at $-20\text{ }^{\circ}\text{C}$ for at least 6 months.

Storage/Stability

Store the dye desiccated at $-20\text{ }^{\circ}\text{C}$. When stored as directed, the dye should remain active for at least 6 months.

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