

Product Information

CF™488A, Aminooxy

Catalog Number **SCJ4600017**

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

TECHNICAL BULLETIN

Product Description

CF™488A, aminooxy is used to label aldehydes or ketones in protein or DNA to form a stable hydrazone compound.

CF488A is a green fluorescent dye optimally excitable by the 488 nm argon laser line. Under common detection conditions, CF488A is at least as bright as Alexa Fluor® 488. However, a major advantage of CF488A over Alexa Fluor 488 is that antibody conjugates prepared from the former are biologically more specific. Alexa Fluor 488 carries multiple negative charges, which can significantly change the isoelectric point of the proteins the dye labels and consequently alter the specificity of the protein conjugates. CF488A, on the other hand, is minimally charged. Thus, antibody conjugates prepared from the dye ensure biological detection with high signal-to-noise ratio. Another feature of CF488A is that the emission peak wavelength is about 10 nm shorter than that of Alexa Fluor 488 and 15 nm shorter than that of the traditional green dye FITC (or FAM). The shorter wavelength of CF488A offers the advantage of less fluorescence “spill-over” in the red channel in multi-color detection applications.

CF488A dye properties:

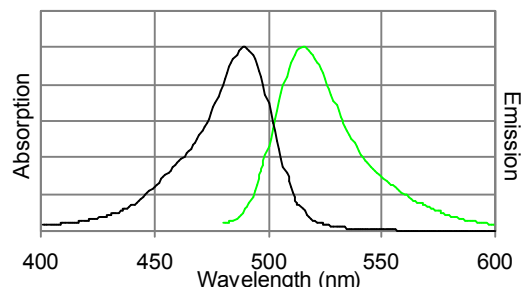
Abs/Em Maxima: 490/515 nm (See Figure 1)
Extinction coefficient: 70,000
Molecular weight: ~766
Flow cytometry laser line: 488 nm
Microscopy laser line: 488 nm
Direct replacement for: Alexa Fluor 488, Cy™2, DyLight® 488, FAM, and fluorescein (FITC)

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 CF488A 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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