



## **Product Information Sheet**

## **Ordering Information**

Product Number: 1072

Product Name: iFluor™ 488 amine

Unit Size: 1 mg

Storage Conditions: Freeze (<-15 °C), Minimize light exposure

Expiration Date: 12 months upon receiving

## **Chemical and Spectral Properties**

Appearance: Solid

Molecular Weight: 805.61

Soluble In: DMSO

Excitation Wavelength: 491

Emission Wavelength: 514

## **Application Notes**

Although FITC is still the most popular fluorescent labeling dye for preparing green fluorescent bioconjugates, there are certain limitations with FITC, such as severe photobleaching for microscope imaging and pH-sensitive fluorescence. Protein conjugates prepared with iFluor™ 488 dyes are far superior compared to conjugates of fluorescein derivatives such as FITC. iFluor™ 488 conjugates are significantly brighter than fluorescein conjugates and are much more photostable. Additionally, the fluorescence of iFluor™ 488 is not affected by pH (4-10). This pH insensitivity is a major improvement over fluorescein, which emits its maximum fluorescence only at pH above 9. iFluor™ 488 amine is stable and used for modifying carbonyl groups (e.g., aldehyde and carboxy groups).