

Product Information Sheet

Ordering Information

Product Number:	1072
Product Name:	iFluor™ 488 amine
Unit Size:	1 mg
Storage Conditions:	<-15 °C and kept from light and moisture
Expiration Date:	24 months upon receiving

Chemical and Spectral Properties

Molecular Weight:	805.61
Soluble in:	DMSO
Excitation Wavelength:	491 nm
Emission Wavelength:	514 nm

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 (Ex/Em=491 nm/520 nm) 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).