



## Product Data Sheet

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**Product Name:** HiLyte Fluor™ 488 acid

**Size:** 10 mg

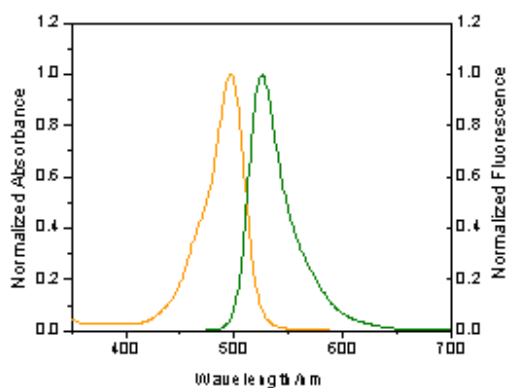
**Catalog Number:** AS-81160

**Molecular Weight:** 601.53

**Solvent:** DMF or DMSO

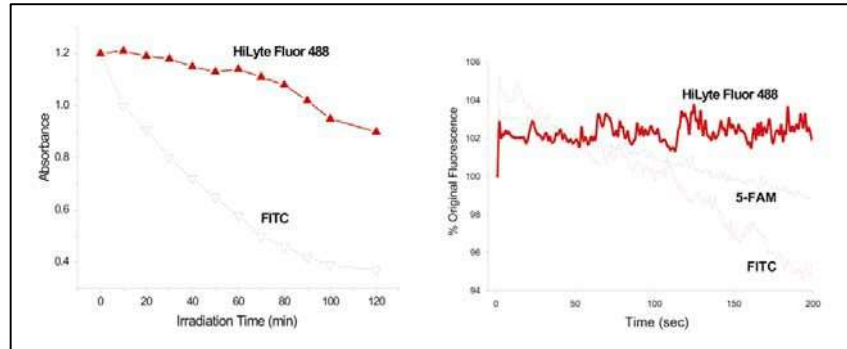
**Product Description:** FITC, the most popular fluorescent labeling dye for preparing green fluorescent bioconjugates, has its limitations, such as severe photobleaching in microscopy imaging and pH sensitivity. However, protein conjugates prepared with HiLyte Fluor™ 488 dyes (Ex/Em=497 nm/525 nm) are far more superior compared to conjugates of FITC. HiLyte Fluor™ 488 conjugates are significantly brighter than fluorescein conjugates and are much more photostable. Extinction coefficient is 70,000 M<sup>-1</sup>cm<sup>-1</sup>, with a quantum yield of 0.91. Additionally, the fluorescence of HiLyte Fluor™ 488 is not affected by pH (working pH range is 4-10). This pH insensitivity is a major improvement over fluorescein, which emits its maximum fluorescence only at pH above 9.

**Spectra:** Maximum Ex/Em wavelength = 501/ 527 nm



Photostability:

HiLyte Fluor™ 488, 5-FAM and FITC photostability over time



Shelf Life and Storage:

Shelf life is two years if stored at -20C, desiccated and protected from light.

Related Products:

Catalog #	Product Name
AS-81161-1 (1 mg)	HiLyte Fluor™ 488 acid,SE
AS-81161 (5 mg)	HiLyte Fluor™ 488 acid,SE
AS-81162	HiLyte Fluor™ 488 amine, TFA salt
AS-81163	HiLyte Fluor™ 488 hydrazide
AS-81164	HiLyte Fluor™ 488 C2 maleimide

This product is for *in vitro* research use only