



Product Data Sheet

Product Name: HiLyte™ Fluor 594 acid, SE

Size: 1 mg

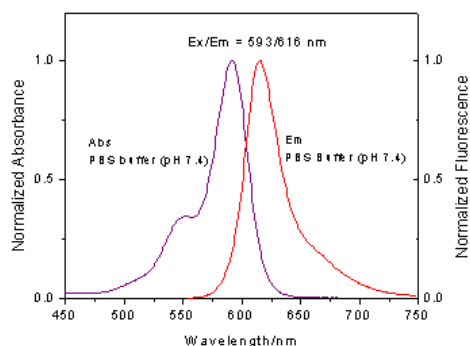
Catalog Number: AS-81272-1

Molecular Weight: 848.94

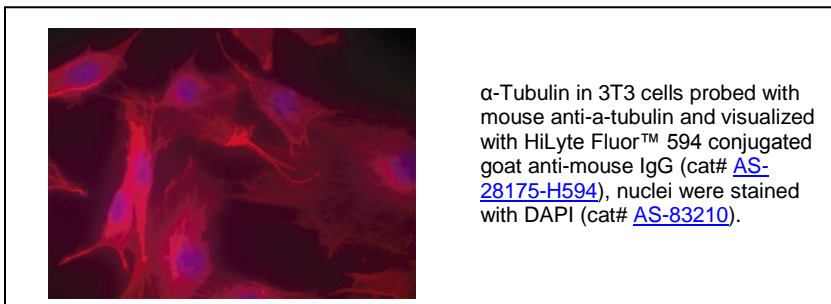
Solvent: DMF or DMSO

Product Description: HiLyte™ Fluor 594, SE is an amine-reactive fluorescent dye for protein labeling. HiLyte™ Fluor 594 has spectral characteristics similar to those of Texas Red®, with excitation and emission wavelength at 593/615 nm in PBS buffer (pH 7.4), and 596/617 nm when conjugated to macromolecules. The labeling performance and stability properties of HiLyte™ Fluor 594 are better than those of Texas Red®. The higher extinction coefficient ($80,000 \text{ M}^{-1}\text{cm}^{-1}$) and a lower correction factor (0.17) of HiLyte™ Fluor 594 are better than those of Alexa Fluor™ 594 (Invitrogen). The fluorescence quantum yield of HiLyte™ Fluor 594 is 0.9 in aqueous solution. HiLyte™ Fluor 594 conjugated streptavidin provides high fluorescence intensity and low background as validated in immunofluorescence staining of mammalian cells. HiLyte™ Fluor 594-protein conjugates are suitable for immunofluorescent staining, in situ hybridization, flow cytometry and other biological applications. Biomolecules conjugated to HiLyte™ Fluor 594 exhibit little spectral overlap with green-fluorescent conjugates, and can be efficiently excited by 568 nm line of Ar-Kr laser and by the 594 nm line of orange He-Ne laser.

Spectra: Maximum Ex/Em wavelength is 593/616 nm.



Application: Immunofluorescence staining with HiLyte™ Fluor 594 conjugated secondary antibody



Stock solution preparation: Make 10 mg/ml of dye stock solution in high quality anhydrous DMSO. Completely dissolve all dye content by vortexing. Dye solution should be prepared fresh immediately before an experiment. Extensive storage of the dye solution may reduce dye activity. Any solution containing the dye should be protected from light.

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

Related Products:

Catalog#	Product Name
AS-81271	HiLyte Fluor™ 594 acid
AS-81273	HiLyte Fluor™ 594 amine TFA salt
AS-81274	HiLyte Fluor™ 594 hydrazide
AS-81275	HiLyte Fluor™ 594 C2 maleimide
AS-72121	AnaTag™ HiLyte™ Fluor 594 Protein Labeling Kit *Ultra Convenient
AS-72120	AnaTag™ HiLyte™ Fluor 594 Microscale Protein Labeling Kit *Ultra Convenient
	HiLyte™ Fluor 594 labeled Secondary Antibodies & Streptavidin

This product is for *in vitro* research use only.