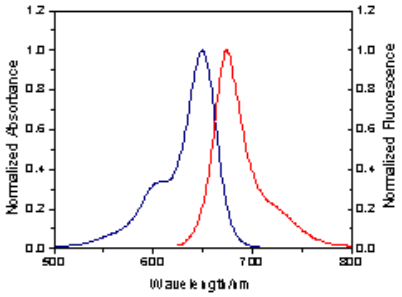
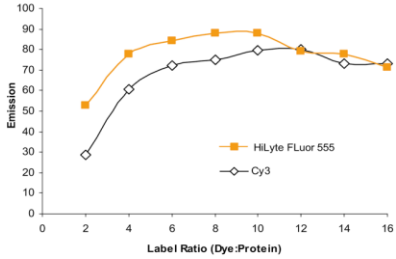
Product Data Sheet

Product Name:	HiLyte™ Fluor 555 acid, SE
Size:	1 mg
Catalog Number:	AS-81251
Molecular Weight:	1067.36
Solvent:	DMF or DMSO
Product Description:	HiLyte™ Fluor 555 conjugates are more photostable and brighter than conjugates of Cy3™, the preferred dye for preparing orange fluorescent bioconjugates. HiLyte™ Fluor 555 acid, SE is an excellent amine-reactive fluorescent labeling dye that generates the protein conjugates that are only slightly red-shifted compared to those of Cy3™ dyes, resulting in an optimal match to filters designed for Cy3™ dyes. Extinction coefficient is 150,000 $M^{-1}cm^{-1}$, with a quantum yield of 0.10. The photostability of HiLyte™ Fluor 555 provides researchers with additional time for image capture. Additionally, our in-house data indicated that HiLyte™ Fluor 555 is superior to Cy3™ in fluorescence polarization-based assays.
Spectra:	Maximum Ex/Em wavelength is 552/569 nm.

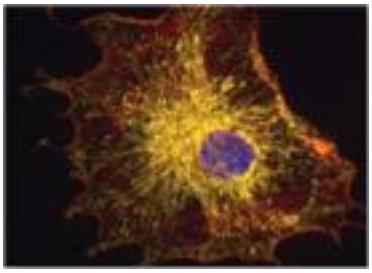


Flourescence intensity:	Performance of dye-goat anti-rabbit IgG conjugates



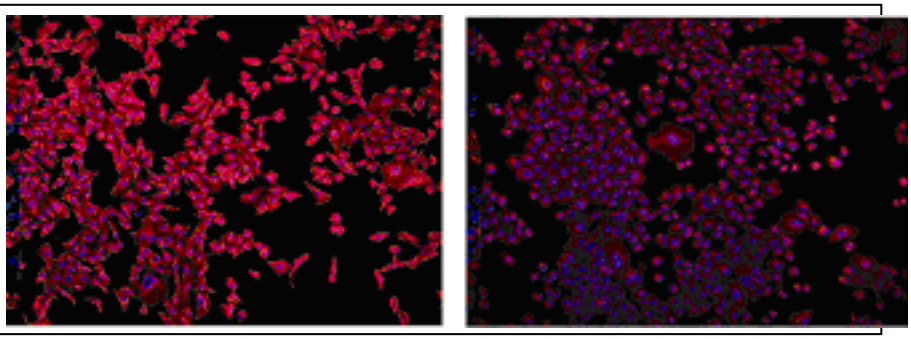
Comparison data of HiLyte™ Fluor 555 and Cy3™ emission at different dye to protein ratio

Application: Immunofluorescence staining with HiLyte™ Fluor 555 conjugated streptavidin (cat# AS-60666) and HiLyte Flour 488 conjugated goat anti-mouse (cat# AS-28175-H488)



Bovine pulmonary artery endothelial cells actins were stained with biotin-conjugated phalloidin, visualized with HiLyte™ Fluor 555 conjugated streptavidin (cat# AS-60666). Mitochondria were stained with mouse anti-Oxphos complex V, visualized with HiLyte Fluor™ 488-conjugated goat anti-mouse (cat# AS-28175-H488), nuclei labeled with Hoechst 33342 (cat# AS-83218).

Immunofluorescence staining with HiLyte Fluor™ 555 (left panel) or Cy3™ (right panel) labeled secondary antibodies. 3T3 cells incubated with anti-tubulin antibody and goat-anti-rabbit antibodies, labeled either with HiLyte™ Fluor 555 or Cy5™, nuclei were stained with Hoechst 33342 (cat# AS-83218).



Stock solution preparation: Make 10 mg/ml of dye stock solution (7.5 mM) 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-81250	HiLyte™ Fluor 555 acid
AS-81252	HiLyte™ Fluor 555 amine
AS-81253	HiLyte™ Fluor 555 hydrazide
AS-81254	HiLyte™ Fluor 555 C2 maleimide
AS-72045	AnaTag™ HiLyte Fluor 555 Protein Labeling Kit *Ultra Convenient*
AS-72046	AnaTag™ HiLyte Fluor 555 Microscale Protein Labeling Kit *Ultra Convenient
HiLyte™ Fluor 555 labeled Secondary Antibodies & Streptavidin	

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