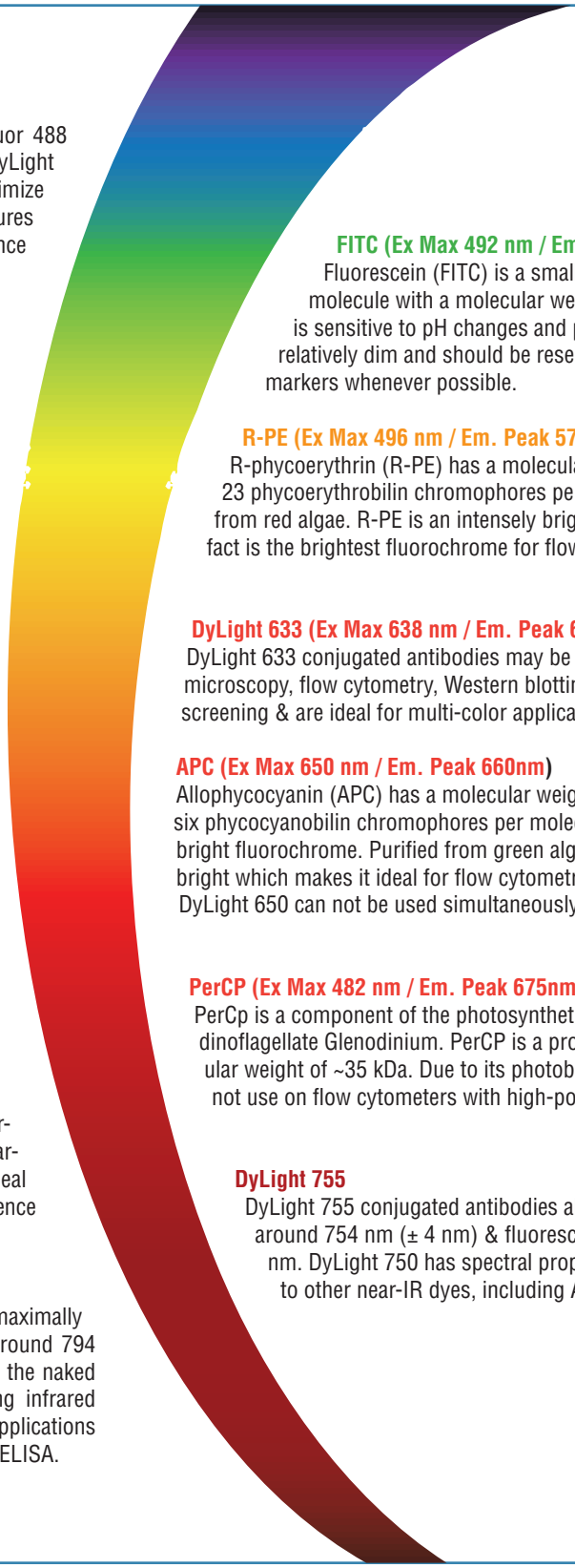
Fluorochrome Guide



DyLight 488 (Ex Max 493nm / Em. Peak 519nm)
DyLight 488 is brighter than Cy2, FITC & AlexaFluor 488 conjugates plus typically give less background. DyLight 488 conjugated antibodies are suggested to maximize sensitivity for all immunofluorescence procedures requiring a green-fluorescing dye including fluorescence microscopy.

DyLight 550 (Ex Max 562 nm / Em. Peak 576nm)
DyLight 550 is brighter in most applications than TRITC, Cy3 & AlexaFluor 555. All Dylight 550 antibodies are suggested for maximum sensitivity in all immunofluorescence detection procedures within the orange-red portion of the visible spectrum.

DyLight® 594 (Ex Max 594 nm / Em. Peak 618nm)
DyLight 594 antibody conjugates absorb light maximally around 593 nm (± 4 nm) & fluoresce with a peak around 618 nm. They are distinctly brighter than AlexaFluor 594 conjugates, & much brighter & more water soluble than Texas Red conjugates.

DyLight 650 (Ex Max 652 nm / Em. Peak 672nm)
DyLight 650 conjugated antibodies are brighter than Cy5 & AlexaFluor 647 conjugates plus, they typically give less background. Although DyLight 650 is not as bright as APC conjugates it tends to be a better choice for intracellular applications. These far red-emitting conjugates are great for multiple-labeling detection with a confocal microscope.

DyLight 680 (Ex Max 682 nm / Em. Peak 715nm)
DyLight 680 conjugated antibodies produces near-infrared (IR) fluorescence that replaces other near-IR dyes, including Cy5 & AlexaFluor 680, & is ideal for multi-color applications including fluorescence microscopy & flow cytometry.

DyLight 800
DyLight 800 conjugated antibodies absorb light maximally around 770 nm (± 4 nm) & fluoresce maximally around 794 nm. DyLight 800 is near-IR fluor that is invisible to the naked eye but increases the staining options when using infrared imaging systems. This dye is ideal for multi-color applications including fluorescence microscopy, flow cytometry, ELISA.

FITC (Ex Max 492 nm / Em. Peak 518 nm)
Fluorescein (FITC) is a small fluorescent organic molecule with a molecular weight of 473 daltons. FITC is sensitive to pH changes and photobleaching but, is relatively dim and should be reserved for highly expressed markers whenever possible.

R-PE (Ex Max 496 nm / Em. Peak 578nm)
R-phycoerythrin (R-PE) has a molecular weight of 240 kDa with 23 phycoerythrobilin chromophores per molecule & is purified from red algae. R-PE is an intensely bright phycobiliprotein and in fact is the brightest fluorochrome for flow cytometry.

DyLight 633 (Ex Max 638 nm / Em. Peak 658nm)
DyLight 633 conjugated antibodies may be used in fluorescence microscopy, flow cytometry, Western blotting, ELISA, high-content screening & are ideal for multi-color applications.

APC (Ex Max 650 nm / Em. Peak 660nm)
Allophycocyanin (APC) has a molecular weight of 104 kDa and has six phycocyanobilin chromophores per molecule, which make it a very bright fluorochrome. Purified from green algae, APC is an intensely bright which makes it ideal for flow cytometry applications. APC and DyLight 650 can not be used simultaneously.

PerCP (Ex Max 482 nm / Em. Peak 675nm)
PerCp is a component of the photosynthetic apparatus found in the dinoflagellate Glenodinium. PerCP is a protein complex with a molecular weight of ~35 kDa. Due to its photobleaching characteristics do not use on flow cytometers with high-power lasers.

DyLight 755
DyLight 755 conjugated antibodies absorb light maximally around 754 nm (± 4 nm) & fluoresce maximally around 776 nm. DyLight 750 has spectral properties that are very similar to other near-IR dyes, including AlexaFluor 750.