Jackson ImmunoResearch LABORATORIES, INC.

Specializing in **Secondary Antibodies** and **Conjugates**

PerCP Conjugates for Flow Cytometry

PerCP is a fluorescent peridinin-chlorophyll protein complex isolated from dinoflagellates. We offer the form found in Dinophyceae sp. with a molecular weight of about 35.5 kDa. It has a broad spectrum of excitation with a main peak at 472 nm, and a long Stokes shift to an emission peak at 677 nm (Figure 1).

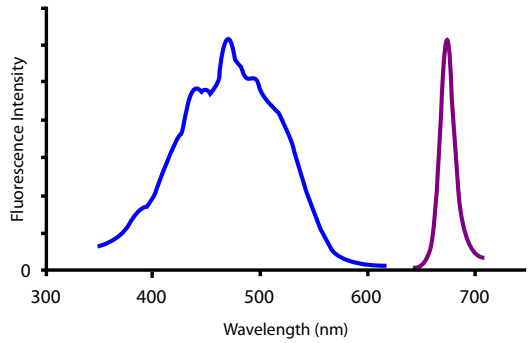

Figure 1. Relative shape and position of spectra in the peak region of excitation (blue) and emission (purple) for PerCP conjugated to an affinity-purified secondary antibody from Jackson ImmunoResearch. Quantitative comparisons should not be made since peak heights have been normalized. Spectra were obtained with an M-Series spectrofluorometer system from Photon Technology International, Inc.

PerCP conjugates of highly adsorbed secondary antibodies are offered to label unconjugated primary antibodies, and PerCP-streptavidin is offered to label biotinylated primary or secondary antibodies (Figures 2 and 3). Two practical labeling protocols are possible with the products.

Compared with a single-step PerCP-conjugated primary antibody (Figure 2), about the same level of fluorescence is obtained with a two-step procedure using a biotinylated primary antibody and PerCP-conjugated streptavidin. A consistent, slightly higher signal is achieved by using an unconjugated primary antibody and PerCP-conjugated secondary antibody. Although three-step procedures are usually undesirable for flow cytometry, a somewhat greater amplification may be obtained with unconjugated primary antibody, biotinylated secondary antibody, and PerCP-conjugated streptavidin (Figure 3).

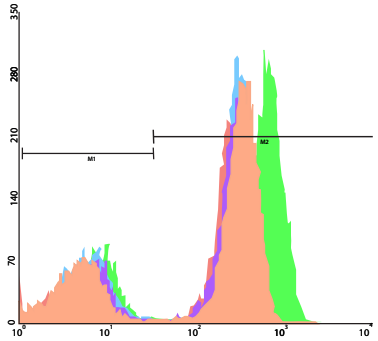

Figure 2. Human peripheral lymphocytes were stained either directly with PerCP-conjugated anti-CD3 (orange) from BioLegend, or indirectly with biotin-conjugated anti-CD3 (B-D Pharmingen) and PerCP-streptavidin either from Jackson ImmunoResearch (blue), BioLegend (purple), or B-D Pharmingen (red). For further comparison, cells were stained with unconjugated anti-CD3 (B-D Pharmingen) and PerCP-conjugated secondary antibody from Jackson Immuno-Research (green). Stained cells were analyzed in a dual-laser FACSCalibur flow cytometer (Becton Dickinson).

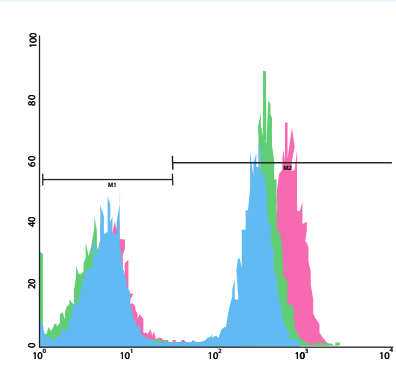

Figure 3. Human peripheral lymphocytes were stained with unconjugated anti-CD3 (B-D Pharmingen) and PerCP-conjugated secondary antibody from Jackson ImmunoResearch (green), or with biotin-conjugated anti-CD3 (B-D Pharmingen) and PerCP-streptavidin from Jackson ImmunoResearch (blue). For further comparison, cells were stained with unconjugated anti-CD3 (B-D Pharmingen), biotinylated secondary antibody and PerCP-streptavidin from Jackson ImmunoResearch (red). Stained cells were analyzed in a dual-laser FACSCalibur flow cytometer (Becton Dickinson)

www.jacksonimmuno.com

Tel: 800-367-5296 Fax: 610-869-0171 Email:cuserv@jacksonimmuno.com

PerCP conjugates may be used alone or with Alexa Fluor® 488 (or FITC) and R-PE for one- to three-color analyses with a single-laser flow cytometer equipped with an argon laser emiting at 488 nm. Up to four-color analyses with low compensation are easily achieved by adding APC-conjugated antibodies with 633 or 635 nm excitation provided by a dual-laser flow cytometer (Figure 4).

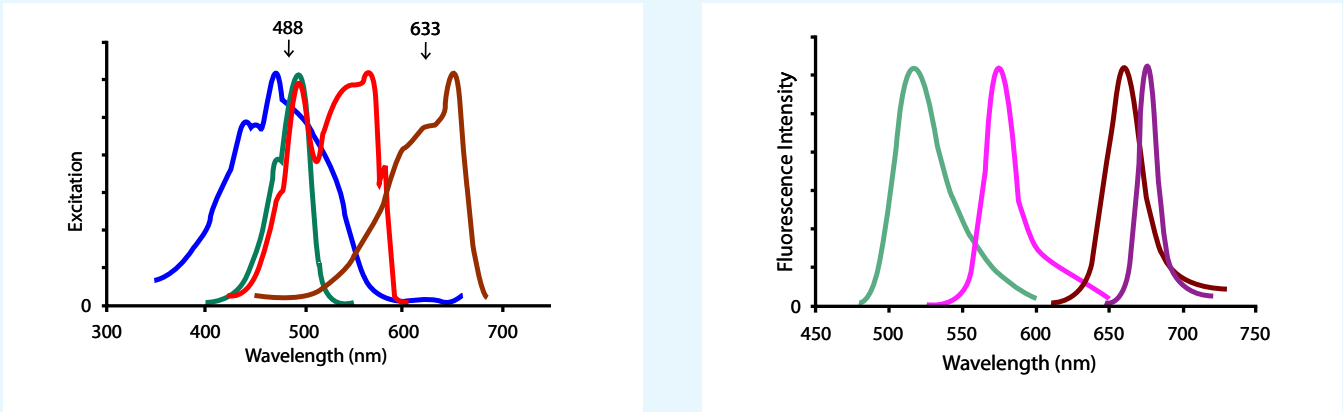

Figure 4. Excitation spectra (left) for PerCP-(blue), Alexa Fluor® 488/FITC-(green), R-PE-(red), and APC-(brown) conjugated secondary antibodies from Jackson ImmunoResearch. Emission spectra (right) for Alexa Fluor® 488/FITC-(green), R-PE-(pink), APC-(brown), and PerCP-(purple) conjugated secondary antibodies from Jackson ImmunoResearch. Quantitative comparisons should not be made since peak heights have been normalized. All spectra were obtained with an M-Series spectrofluorometer system from Photon Technology International, Inc.

Certified by BSI to ISO 9001:2015 under certificate number FM 545248.

Jackson ImmunoResearch Laboratories Inc.
872 West Baltimore Pike | West Grove | PA USA 19390

www.jacksonimmuno.com

Tel: 800-367-5296 Fax: 610-869-0171 Email:cuserv@jacksonimmuno.com