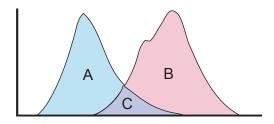


# Simply Cellular® Compensation Standards

## Reduce spectral overlap and enjoy properly compensated sample results!

#### What is Spectral Overlap?

Flow cytometers are designed to have a primary detector for each fluorochrome label (e.g. FL1-FITC, FL2-PE,  $FL3-PE-Cy^{TM}5$ ). Fluorescent signals emitted by fluorochromes can bleed or overlap into the secondary fluorescence detectors. In order to remove this overlap, the proper amount of signal must be subtracted from the secondary detector as a percentage of fluorescence intensity measured in the primary detector. This subtraction is performed by the electrical circuits prior to collecting sample data or by software



Fluorescence carryover (C) is the region of overlap of the two emission spectra (A,B).

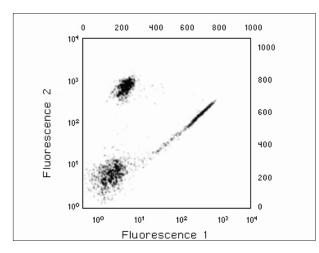
when analyzing the list mode files. When the mean fluorescence of two populations of labeled standards are adjusted such that they have equal intensities in the secondary fluorescence detectors, then the data from the samples will be accurately compensated.

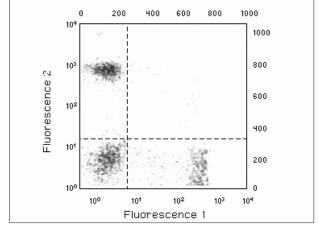
#### **How Do They Work?**

Simply Cellular® Compensation Standards are for use in conjunction with hardware or software to remove spectral overlap from fluorochromes into secondary fluorescence detectors of a flow cytometer. Each Simply Cellular® Compensation Standard is a mixture of two populations of microspheres that have the ability to bind mouse monoclonal antibodies at high and low capacities, respectively. The microspheres are supplied in a sterile-filtered, pH buffered PBS solution containing surfactant and preservatives. As the operator labels these standards with the same antibody used to label the cell samples, the standards will exhibit spectral properties that closely match the cells being analyzed. These matching properties permit accurate adjustment of color compensation across the intensity range of the analysis.

#### **What Can I Expect?**

The following data are examples of how the fluorescence signals of the cells will be compensated when the instrument is adjusted using labeled Simply Cellular® anti-Mouse Compensation Standards.

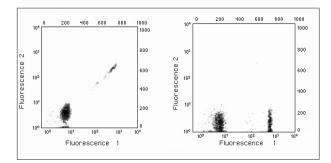




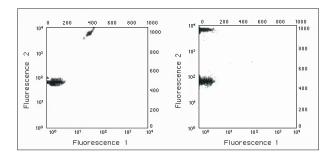
Uncompensated lymphocytes labeled with CD4-PE and CD8-FITC.

Validation of FITC and PE compensated lymphocytes.





Uncompensated (left) and compensated (right) Simply Cellular® anti-Mouse Compensation Standards labeled with CD8-FITC.



Uncompensated (left) and compensated (right) Simply Cellular® anti-Mouse Compensation Standards labeled with CD4-PE.

See our Flow Cytometry Protein A and Protein G Antibody Binding Beads if other specificities are needed.

#### **SIMPLY CELLULAR® COMPENSATION STANDARDS**

Cat.#	Product Description
550	Simply Cellular® Compensation Standard (anti-Mouse)
551	Simply Cellular® Compensation Standard (anti-Rat)
552	Simply Cellular® Compensation Standard (anti-Human)

Cy<sup>TM</sup>, including Cy5, is a trademark of GE Healthcare Limited. This product is manufactured under license from Carnegie Mellon University under U.S. Patent Number 5,268,486 and related patents.

Simply Cellular® is a registered trademark of Bangs Laboratories, Inc.

#### **Related Products**

553	Flow Cytometry Protein A Antibody Binding Beads
554	Flow Cytometry Protein G Antibody Binding Beads



Bangs Laboratories manufactures magnetic, polymeric and silica microsphere products setting the standards for diagnostic, research, and flow cytometry applications. No matter the project, we have a product that serves or we'll work to custom-design a solution to fit. And that's not the half of it.

We also stand behind our products. Regardless of the size of your question or the size of your company, we offer tech support, absolutely free.

### Sound interesting?



Visit: www.bangslabs.com



@particledoc



info@bangslabs.com



800.387.0672