1. Technical Data Sheet

Summary	HyParComp™ compensation controls are state-of-the-art cell mimics that capture multiple antibody host species (mouse anti-human, mouse, rat, and hamster), and mimic the fluorescence spectra of stained cells.
Application	HyParComp™ are intended as compensation controls to match the single staining performance of real cells. Staining the cell mimics yields a positive fluorescence histogram that will aid in resolving the performance of the fluorophore; it will also serve as the basis for positive signal of a given fluorophore for compensation and/or spectral unmixing. Note: HyParComp™ performance has been verified and validated on analytical flow cytometers and not on cell sorters. **For Research Use Only. Not for use in diagnostic or therapeutic procedures.**
Materials	HyParComp™ are cell mimics that are suspended in aqueous solution and are packaged in a convenient dropper bottle. Each drop contains approximately 1 x 10^5 beads.
Handling and Safety	No special handling or safety precautions are necessary. See the Safety Data Sheet (SDS) at www.slingshotbio.com.
Instructions for Use	1. Unpack and vortex both vials on high for 2 - 3 seconds to resuspend cell mimics. 2. Add 1 drop of the negative cell mimics into the bottom of the test tube or well of a plate for the unstained negative control. (1 drop contains approximately 1 x10^5 cell mimics). 3. Add 1 drop of the positive capture cell mimics into the bottom of the test tube or well of a plate for each fluorophore you will have in the experiment. (1 drop contains approximately 1 x10^5 cell mimics). 4. Add your pre-titrated antibody directly to the mimics and vortex. **Note**: It is recommended to pre-determine the appropriate titer of the antibody that works best for the application. **DO NOT add antibody to the unstained tube**. 5. Incubate at room temperature for 15 - 30 minutes, **protected from light**. **Note**: Particles should be treated the same way as cells to be analyzed, i.e. all fixation and permeabilization steps used on cells should be applied to the particles. *Do not add Brilliant Violet Staining Buffer or SuperBright Staining buffer to single stained controls.*

6. Add 2 ml of 1X PBS containing 1% BSA (Bovine Serum Albumin) to the tube.

   Note: Staining buffer containing BSA or FBS (Fetal Bovine Serum) can also be used for washing.

7. Centrifuge the tube for 5 minutes at 600 g and immediately aspirate the supernatant to minimize the cell mimic loss, being careful not to disturb the cell mimic pellet.

8. Resuspend the cell mimic pellet in 1X PBS at preferred volume and vortex.

   Note: Protect the samples from light and analyze the samples as soon as possible.

9. View and acquire the HyParComp cell mimics on Forward and Side Scatter parameters (FSC-A and SSC-A) using the same instrument settings as leukocytes.

Storage

HyParComp™ should be stored at 2 - 8 °C once the product is received.

Expiration

One year from the date of manufacturing

QC Data

HyParComp Figure 1 (A, B, C, D)

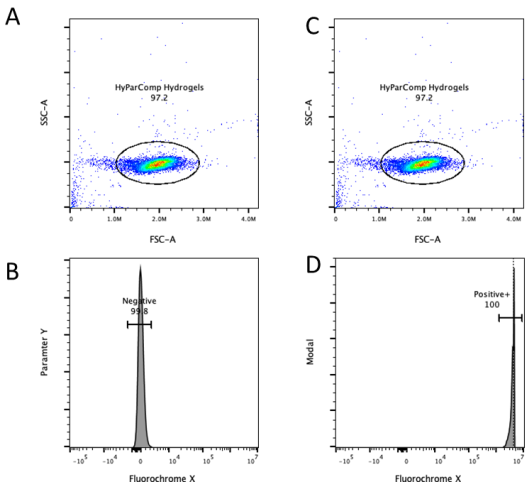

Figure 1. (A) Gate the HyParComp population from the negative sample. (B) Place a gate on the negative histogram for the fluorophore of interest from the negative sample. (C) Gate the HyParComp population from a positive single-stain control sample. (D) Place a gate on the positive histogram for the fluorophore of interest from the positive single-stain control sample.