

1. Technical Data Sheet

Summary	SpectraComp® compensation controls are state-of-the-art cell mimics that capture multiple antibody host species (mouse anti-human, mouse, rat, and hamster), and provide a fluorescence spectra for the antibody they are stained with.
Application	SpectraComp® are intended as compensation or unmixing controls to match the single staining performance of real cells. Staining the cell mimics yields a positive peak and a negative peak for use as single-stained controls. Note: SpectraComp® 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	SpectraComp® are cell mimics that are suspended in aqueous solution and are packaged in a convenient dropper bottle. Each drop contains approximately 1×10^5 cell mimics.
Handling and Safety	No special handling or safety precautions are necessary. See Safety Data Sheet (SDS) at www.slingshotbio.com .

**Instructions
for Use**

1. Unpack and vortex the vial on high for 2 - 3 seconds to resuspend cell mimics.
2. Add 1 drop of the SpectraComp® cell mimics into the bottom of the test tube or well of a plate for each fluorophore you will have in the experiment.

Note: SpectraComp® is formulated to provide an internal negative population that is not designed to bind antibody. You have the option to use this as a negative population for compensation/unmixing workflows, or you can prepare a separate unstained SpectraComp® tube/well for a universal negative.

3. Add your antibody to the mixture and vortex.

Note: It is recommended to pre-determine the appropriate titer of the antibody that works best for the application.

4. Incubate at room temperature for 15 - 30 minutes, protected from light.

Note: Use the same treatment of SpectraComp® as you would with cells (i.e. if you are permeabilizing and fixing your cells, you should treat SpectraComp® exactly the same).

5. 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 be used for washing.

6. 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 pellet.

7. For maximal signal to noise ratio, repeat steps 5 and 6 at least once for a total of 2 washes or more. Centrifuge again for 5 minutes at 600 g after the final wash.

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

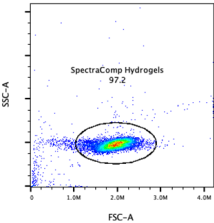
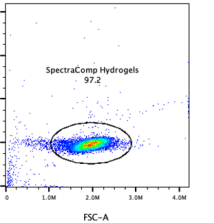
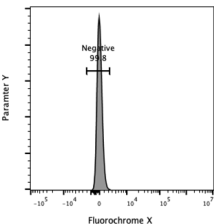
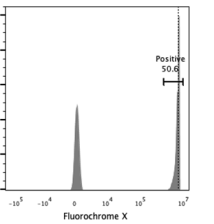
Note: Protect the samples from light and analyze the samples as soon as possible.

9. View and acquire the SpectraComp® cell mimics on the same instrument settings as leukocytes.

Storage

SpectraComp® should be stored at 2-8°C once the product is received.

SpectraComp Compensation Cell Mimics Technical Data Sheet (Catalogue
P/N: SSB-05-A, 25 tests / SSB-05-B, 100 tests / SSB-05-C, 500 tests, Internal Version: 9.0 | Effective: Sep 25 2026
P/N: SSB-11-0428)

Expiration	18 months from the date of manufacturing.
QC Data	SpectraComp Figure 1 (A, B, C, D) A  C  B  D  Figure 1. (A) Gate the SpectraComp 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 SpectraComp 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.
Technical Support	For technical support regarding this product please contact: support@slingshotbio.com