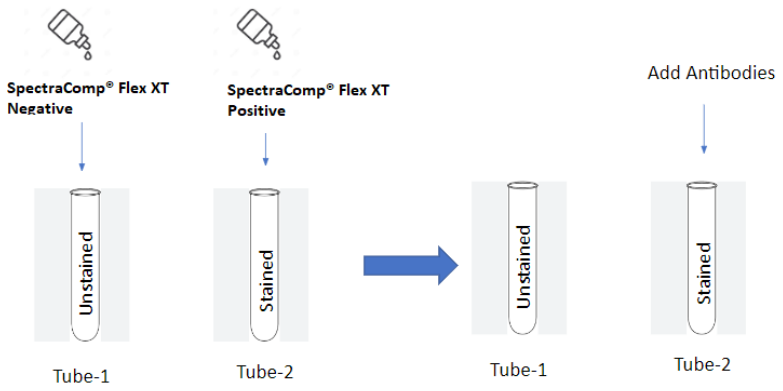
1. Technical Data Sheet

Summary	SpectraComp® Flex XT compensation and unmixing controls are state-of-the-art cell mimics that capture multiple antibody host species (mouse anti-human, mouse, rat, hamster, rabbit and human), and mimic the fluorescence spectra of stained cells.
Application	SpectraComp® Flex XT are intended as compensation and unmixing controls to match the single stained 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 the positive signal of a given fluorophore for compensation and/or spectral unmixing. Note: SpectraComp® Flex XT 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® Flex XT 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 cell mimics.
Handling and Safety	No special handling or safety precautions are necessary. See the Safety Data Sheet (SDS) at www.slingshotbio.com.
Storage	SpectraComp® Flex XT should be stored at 2 - 8 °C once the product is received.
Expiration	One year from the date of manufacturing.
Instructions for Use **QC Data**	1. Unpack and vortex both vials on high for 2 - 3 seconds to resuspend cell mimics. 2. Add 1 drop of the SpectraComp® Flex XT Negative cell mimics into the bottom of a 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 SpectraComp® Flex XT Positive cell mimics into the bottom of a separate 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). See the illustration below as an example.



4. Add your pre-titrated antibody directly to the solution at the bottom of the tube or well 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 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 cell mimics.**

6. Add 2 ml of 1X PBS containing 0.2% BSA (Bovine Serum Albumin) to the tube.

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

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

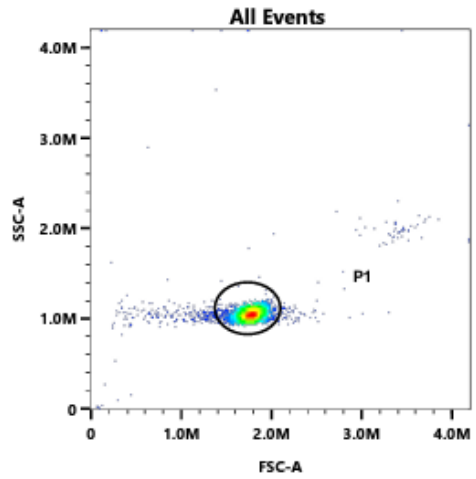
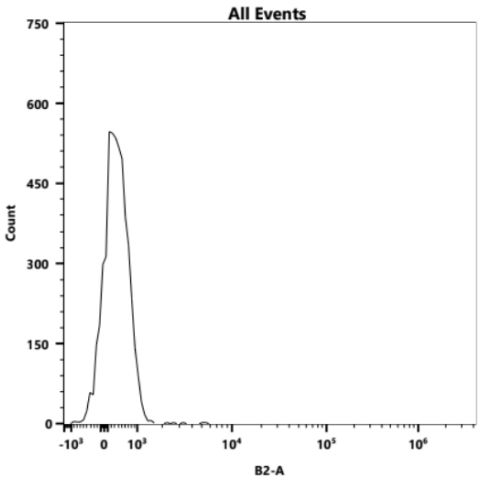
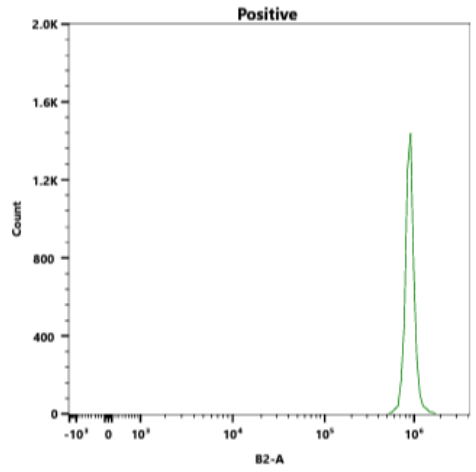
8. Resuspend the cell mimic pellet in 1X PBS at preferred volume.

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

9. View and acquire the SpectraComp® Flex XT cell mimics using the same instrument settings as leukocytes.

10. It is recommended to designate the unstained SpectraComp® Flex XT particle as an external negative for compensation/unmixing workflows requiring such.

SpectraComp® Flex XT Figure 1 (A, B, C)

		Figure 1. (A) Scatter population of SpectraComp® Flex XT
		Figure 1. (B) Histogram plot of unstained Negative population of SpectraComp® Flex XT
		Figure 1. (C) Histogram plot of Positive SpectraComp® Flex XT stained with a Human IgG1 FITC Isotype Control.
Technical Support	For technical support regarding this product please contact: support@slingshotbio.com	