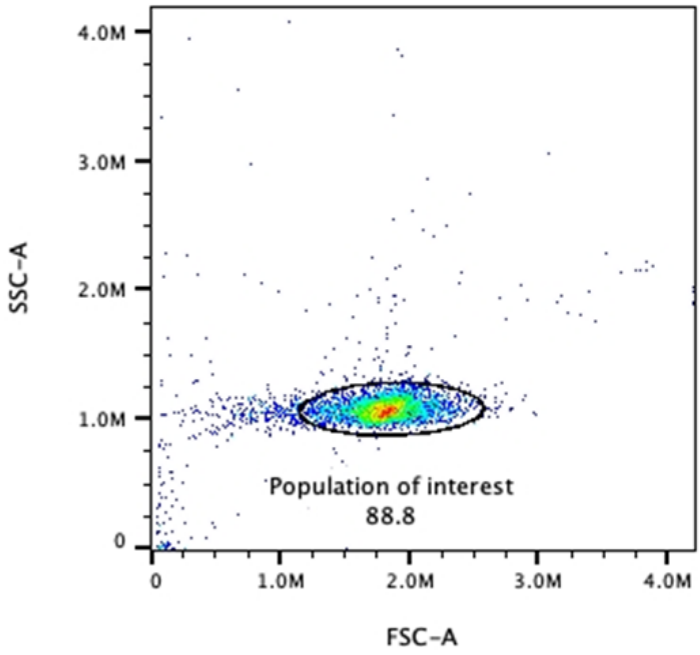
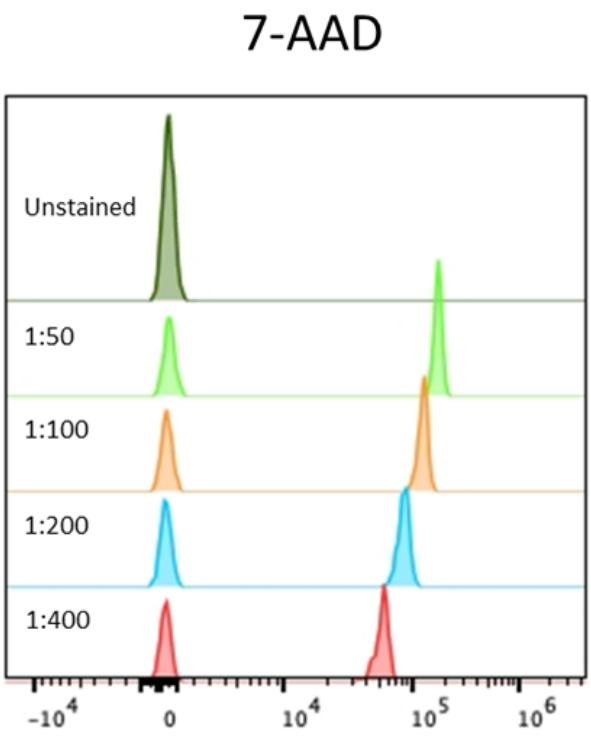
1. Technical Data Sheet

Summary	ViaComp® viability controls are advanced 2-in-1 cell mimics that bind to both DNA-intercalating dyes and amine-reactive viability dyes to simulate the viability characteristics of cells.
Application	ViaComp® is intended to be used as compensation and assay controls to match the viability characteristics of the cells. The positive and negative peaks can aid in identifying live and dead cell populations.
Materials	ViaComp® viability controls are cell mimics that are suspended in aqueous solution and are packaged in a convenient dropper bottle. Each drop contains approximately 6.6 x 10^4 cell mimics.
Handling and Safety	No special handling or safety precautions are necessary. See SDS at www.slingshotbio.com.
Instructions for Use	**Staining with DNA dyes** 1. Allow ViaComp® to warm up to room temperature before staining. 2. Vortex the ViaComp® bottle on high for 2-3 seconds to resuspend the cell mimics. 3. Add 1 drop of cell mimics into the tube (Ensure the drop goes to the bottom of the tube). Add 1x PBS according to desired dilution for DNA-binding dye. 4. Add desired amounts of DNA-binding dye to the tube. **Note: It is recommended to determine the titer of the viability dye that works best for your application.** 5. Incubate at room temperature for 10-30 min. **Note: Refer to the specific vendor's instructions for the incubation time if different.** 6. Centrifuge the tube for 5-6 minutes at 500 x g. Remove excess supernatant without disturbing the bead pellet. 7. Wash by resuspending the bead pellet in 2 ml of 1% BSA in 1x PBS or desired staining buffer and then vortex. 8. Repeat steps 6 and 7 to wash particles thoroughly. Resuspend the cell mimics in desired volume of staining buffer.

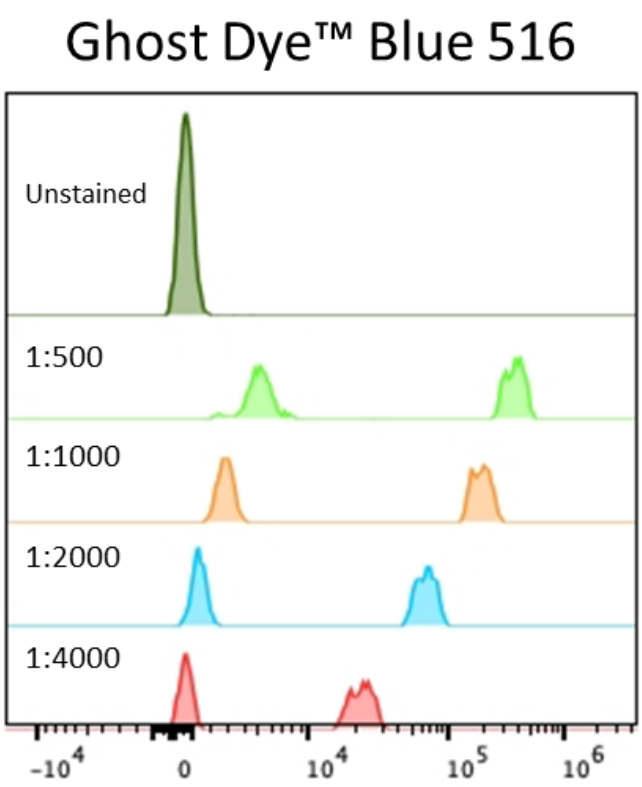
	9. View and acquire ViaComp® using the same FSC and SSC settings as leukocytes. 10. For best resolution, use a low flow rate on your cytometer. **Staining with Amine-reactive dyes** 1. Allow ViaComp® to warm up to room temperature before staining. 2. Vortex the ViaComp® bottle on high for 2-3 seconds to resuspend the cell mimics in the buffer. 3. Add 1 drop of cell mimics into the tube (Ensure that the drop goes to the bottom of the tube). Add 1x PBS according to desired dilution for amine-reactive dye. 4. Add desired amount of amine-reactive dye to the tube. **Note: It is recommended to determine the titer of the viability dye that works best for your application.** 5. Incubate at room temperature for 20-30 min. **Note: Refer to the vendor's instructions for the incubation time if different.** 6. Centrifuge the tube for 5-6 minutes at 500 x g. Remove excess supernatant without disturbing the bead pellet. 7. Wash by resuspending the bead pellet in 2 ml of 1% BSA in 1x PBS or desired staining buffer and then vortex. 8. Repeat steps 6 and 7 to wash particles thoroughly. Resuspend the cell mimics in desired volume of staining buffer. 9. View and acquire ViaComp® using the same FSC and SSC settings as leukocytes. 10. For best resolution, use a low flow rate on your cytometer.
Storage	ViaComp® should be stored at -20 °C once the product is received. **24 hours before its intended use**, store it at 2-8 °C to thaw. Once thawed, store at 2-8 °C.
Expiration	One year from the date of manufacturing. (DOM); **Shelf life:** Six months from the date of thaw.* *Follow the Expiration date if it occurs before shelf life expiration.
QC Data	



Example scatter profile for ViaComp®



Example titration data using 7-AAD



Example titration data using Ghost Dye ^{TM} Blue 516