1. Technical Data Sheet

Summary	Slingshot Labs single biomarker controls are lyophilized cell mimics that feature single biomarkers with scatter coordinates (FSC and SSC) that closely match lymphocyte populations.
Application	Slingshot Labs single biomarker controls are intended to provide positive signal detection for specified surface biomarkers that are targeted by specific antibodies. These cell mimics are an ideal process control for assays that have measured readouts using flow cytometry. **For Research Use Only. Not for use in diagnostic or therapeutic procedures.**
Materials	This product is lyophilized for stability and ease of use. Each vial contains approximately $2.5x10^5$ cell mimics.
Handling and Safety	No special handling or safety precautions are necessary. See Safety Data Sheet (SDS) at www.slingshotbio.com.
Storage	Store lyophilized products at -20°C upon receipt. Use immediately upon reconstitution.
Expiration	One year from the date of manufacturing.
Instructions for Use	1. Tap down the vial to ensure that all cell mimics are collected at the bottom of the vial. 2. Add 250 µL of water (see note below) to the vial. Make sure to avoid contacting or disturbing the pellet until it has been fully immersed. Gently pipette up and down to resuspend the cell mimics. Transfer the content to desired container for staining. **Note**: Using 1% BSA in water will improve yield during reconstitution, and plain water will improve yield over 1x PBS. MilliQ grade water or higher is preferred for purity, but DI water can be used as well. 3. Add 1mL of chosen reconstitution buffer (see above note) to the original glass vial, mix, and transfer the remaining solution to the desired tube. 4. Centrifuge at 500 x g for 5 minutes or 16000 x g for 30 seconds and remove the supernatant without disturbing the cell pellet. Resuspend pellet in desired staining buffer. 5. Add an appropriate amount of your staining antibody cocktail and mix well by vortexing.

	Note: Titrate antibodies on cells prior to making antibody cocktail for best results. 6. Incubate at RT in the dark for 10-15 min. 7. Wash with 2mL staining buffer. Mix well, then centrifuge at 500 x g for 5 minutes or 16000 x g for 30 seconds. Aspirate the supernatant without disturbing the pellet. **Note**: FACS tubes provide optimal washing due to higher volume capacity. 8. Repeat the previous wash step once more. Add desired volume of staining buffer to the tube/well after the final wash. **Note**: For best results, a total of two washes are recommended. 9. Acquire using the same FSC and SSC settings as leukocytes.
QC Data	Refer to supplement