

SPHERO™ Rainbow Fluorescent Particles

The Rainbow Fluorescent Particles are similar to Rainbow Calibration Particles except that these represent uniform size particles with a single intensity. The Rainbow Fluorescent Particles are usually the brightest peak of the corresponding Rainbow Calibration Particles with the exception of RFP-50-5, RFP-70-2, RFP-100-2 and RFP-30-5A. The RFP-30-5A has the fluorescence intensity similar to stained cells in all channels. Since these particles contain a single peak with very small fluorescence and size CV, they are very useful in the alignment of the optical system of the flow cytometer in all channels.

Particle Type and Surface	Size, μm	Catalog No.	Unit
Rainbow Fluorescent, $10^7/\text{mL}$ (Intensity similar to brightest peak in RCP-20-5)	1.8-2.2	RFP-20-5	5 mL
Rainbow Fluorescent, $10^7/\text{mL}$ (Intensity similar to brightest peak in RCP-30-5)	3.0-3.4	RFP-30-5	5 mL
Rainbow Fluorescent, $10^7/\text{mL}$ (Intensity similar to mid range FLI fluorescence in RCP-30-5)	3.0-3.4	RFP-30-5A	5 mL
Rainbow Fluorescent, $10^7/\text{mL}$ (Intensity similar to brightest peak in RCP-35-5)	3.5-4.0	RFP-35-5	5 mL
Rainbow Fluorescent, $10^7/\text{mL}$	5.0-5.9	RFP-50-5	5 mL
Rainbow Fluorescent, $10^7/\text{mL}$ (Intensity similar to brightest peak in RCP-60-5)	6.0-6.4	RFP-60-5	5 mL
Rainbow Fluorescent, $10^7/\text{mL}$	6.5-8.0	RFP-70-5	5 mL
Rainbow Fluorescent, $10^7/\text{mL}$	8.1-12.0	RFP-100-2	2 mL

Figure 49 Histograms of the Rainbow Fluorescent Particles (Cat. No. RFP-30-5, Lot No. AA01).

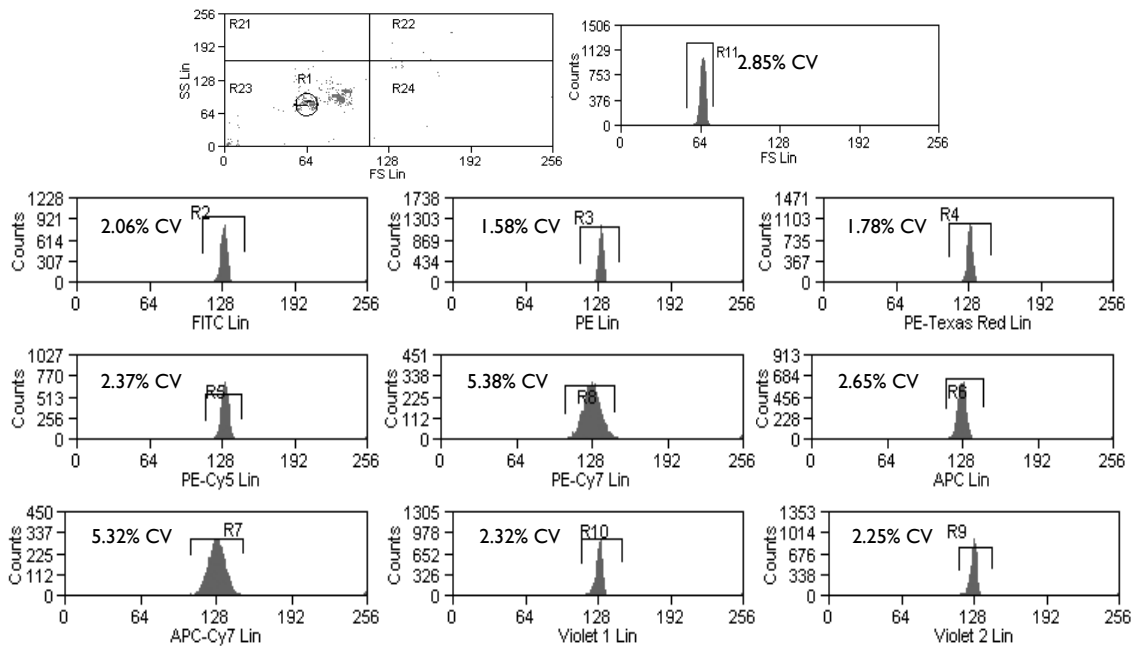
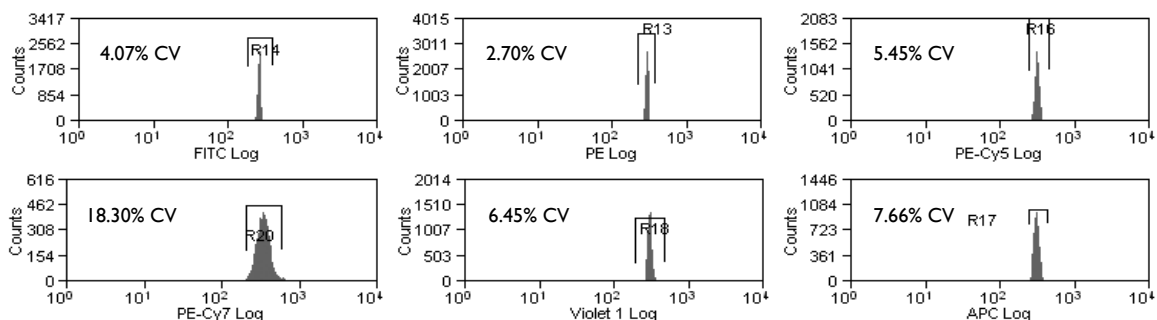


Figure 50 Histograms of the Rainbow Fluorescent Particles, Mid-Range (Cat. No. RFP-30-5A, Lot No. AA02).

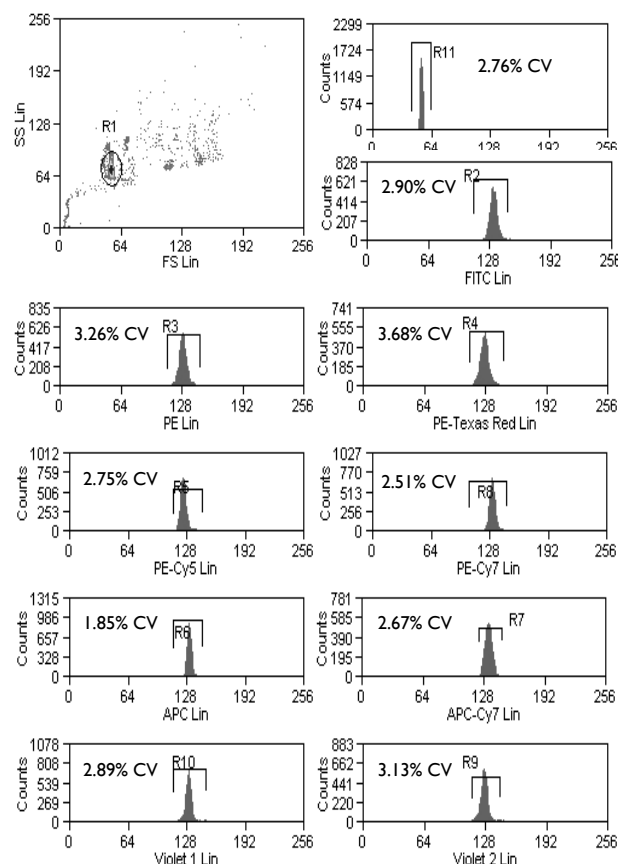


SPHERO™ Rainbow Alignment Particles

- Consists of a prediluted, single peak for optical alignment of any flow cytometer in any channel
- Contains a single peak with very small fluorescence and size CV
- Fluorescent in UV, FITC, PE, PE-TR, PE-Cy5, PE-Cy7, APC, APC-Cy7, and IR channels
- Measures the coefficients of variation (CVs), peak channels, and histogram distribution of flow cytometers.

Particle Type and Surface	Size, μm	Catalog No.	Unit
Rainbow Fluorescent Alignment Particles, $1.2 \times 10^6/\text{mL}$	3.5-3.9	RAP-38-5	5 mL

Figure 51 Histograms of the Rainbow Alignment Particles (Cat. No. RAP-38-5, Lot No. AA01) on a Beckman Coulter Cyan™ ADP.

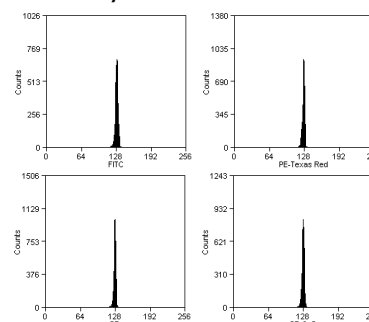


SPHERO™ Fluorescent Alignment Particles

- Consists of a single peak for optical alignment of any flow cytometer
- Contains a single peak with very small fluorescence and size CV
- Fluorescent in FITC, PE, PE-TR, and PE-Cy5 channels
- Measures the coefficients of variation (CVs), peak channels, and histogram distribution of flow cytometers.

Particle Type and Surface	Size, μm	Catalog No.	Unit
Fluorescent Alignment Particles, $10^8/\text{mL}$	3.0-3.4	FAP-3056-5	5 mL

Figure 52 Histograms of the Fluorescent Alignment Particles (Cat. No. FAP-3056-5, Lot No. AA01) on a Beckman Coulter Cyan™ ADP.



SPHERO™ Rainbow Calibration and Rainbow QC Kits

The Rainbow Calibration Kit and Rainbow QC Kit are designed to simplify the routine calibration of flow cytometers.

SPHERO™ Rainbow QC Kit (Cat. No. RCK-3K)
Consists of one vial each of the following particles:

- RCP-30-5A-1 (Peak 1), 3.0-3.4 μm , $10^7/\text{mL}$, 5mL
- RCP-30-5A-4 (Peak 4), 3.0-3.4 μm , $10^7/\text{mL}$, 5mL
- RCP-30-5A-8 (Peak 8), 3.0-3.4 μm , $10^7/\text{mL}$, 5mL

SPHERO™ Rainbow Calibration Kit (Cat. No. RQC-4K)
Consists of one vial each of the following particles:

- BCP-60-2, 6.0-6.4 μm , $10^7/\text{mL}$, 2mL
- RFP-60-2, 6.0-6.4 μm , $10^7/\text{mL}$, 2mL
- RCP-30-2L (Peaks 1-4), 3.0-3.4 μm , $10^7/\text{mL}$, 2mL
- RCP-30-2H (Peaks 5-8), 3.0-3.4 μm , $10^7/\text{mL}$, 2mL

Particle Type and Surface	Catalog No.	Unit
Rainbow Calibration Kit	RCK-3K	1 Kit
Rainbow QC Kit	RQC-4K	1 Kit