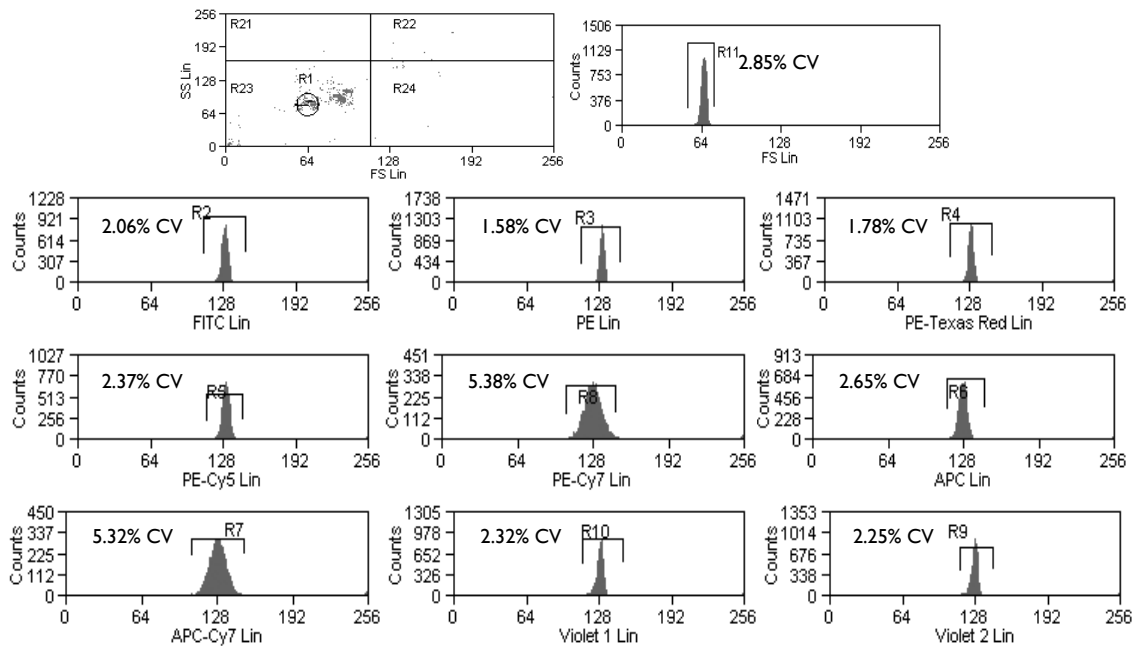


## SPHERO™ Rainbow Fluorescent Particles

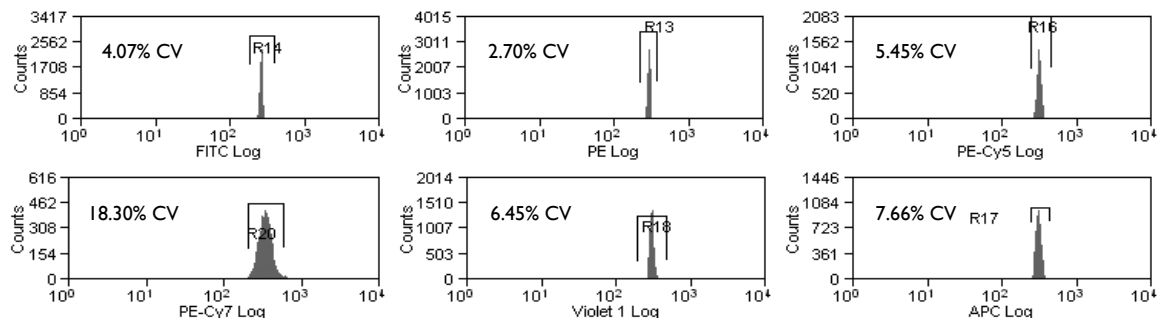
The Rainbow Fluorescent Particles are similar to Rainbow Calibration Particles except that these represent uniform size particles with a single intensity. The Rainbow Fluorescent Particles are usually the brightest peak of the corresponding Rainbow Calibration Particles with the exception of RFP-50-5, 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, $\mu\text{m}$ | Catalog No. | Unit |
|--|---------------------|-------------|------|
| Rainbow Fluorescent, $10^7/\text{mL}$<br>(Intensity similar to brightest peak in RCP-20-5)             | 1.8-2.2             | RFP-20-5    | 5 mL |
| Rainbow Fluorescent, $10^7/\text{mL}$<br>(Intensity similar to brightest peak in RCP-30-5)             | 3.0-3.4             | RFP-30-5    | 5 mL |
| Rainbow Fluorescent, $10^7/\text{mL}$<br>(Intensity similar to mid range FLI fluorescence in RCP-30-5) | 3.0-3.4             | RFP-30-5A   | 5 mL |
| Rainbow Fluorescent, $10^7/\text{mL}$<br>(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, $10^7/\text{mL}$<br>(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).

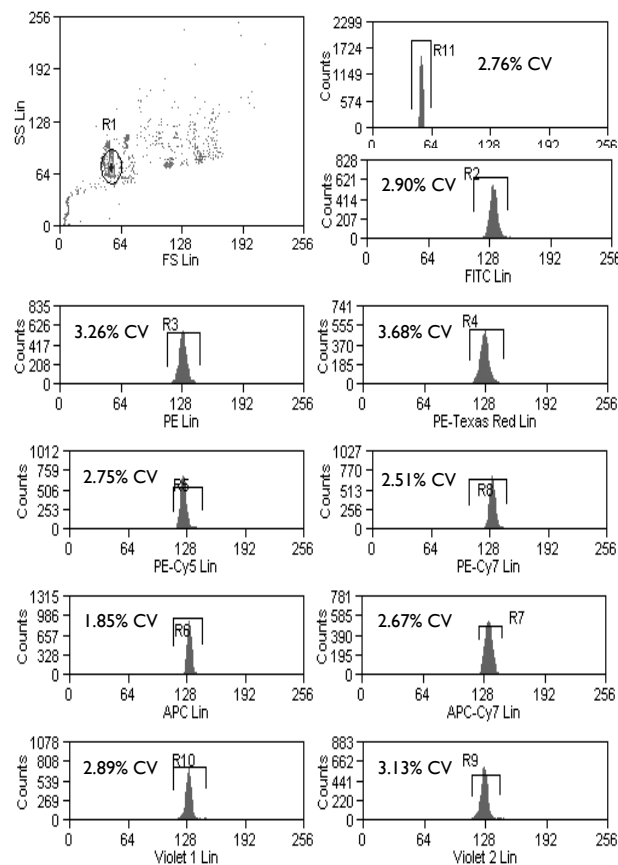


## SPHERO™ Rainbow Alignment Particles

- 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, $\mu\text{m}$ | 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.

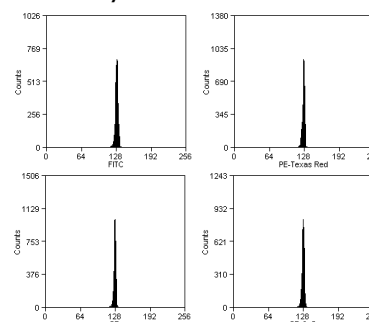


## SPHERO™ Fluorescent Alignment Particles

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

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