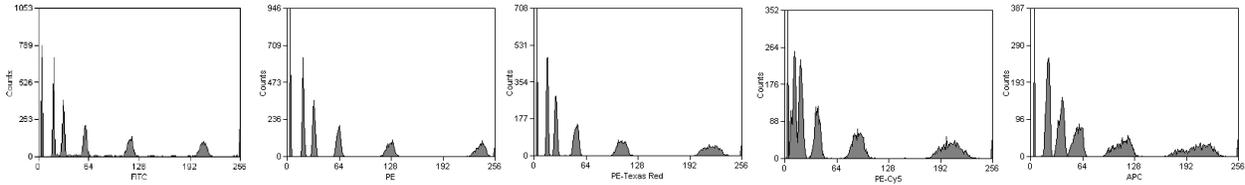


**SPHERO™ Rainbow Linear Calibration Particles**

- Designed to check the linearity of the PMT in the linear scale of flow cytometers
- Used to quantitate the DNA content of cells stained with either Hoechst dyes, DAPI, Ethidium Bromide, Propidium Iodide, YOYO or TOTO.

Particle Type and Surface	Size, $\mu\text{m}$	Catalog No.	Unit
Rainbow Linear Calibration, $10^7/\text{mL}$ , 6 peaks	3.0-3.4	RLP-30-5	5 mL

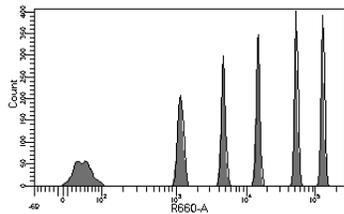


Histograms of RLP-30-2

**SPHERO™ Allophycocyanin Calibration Particles**

- Contain a mixture of fluorescent particles with different intensities in the Allophycocyanin channel
- Excited with either He-Ne laser at 632 nm or a diode laser at 635 nm
- Used to determine the linearity of the logarithmic amps and sensitivity of flow cytometers in Allophycocyanin channel.

Particle Type and Surface	Size, $\mu\text{m}$	Catalog No.	Unit
APC Calibration, $10^7/\text{mL}$ , 6 peaks	3.0-3.4	ACP-30-5K	2x5 mL



Histograms and PMT QC Template Graph of APC-30-5K

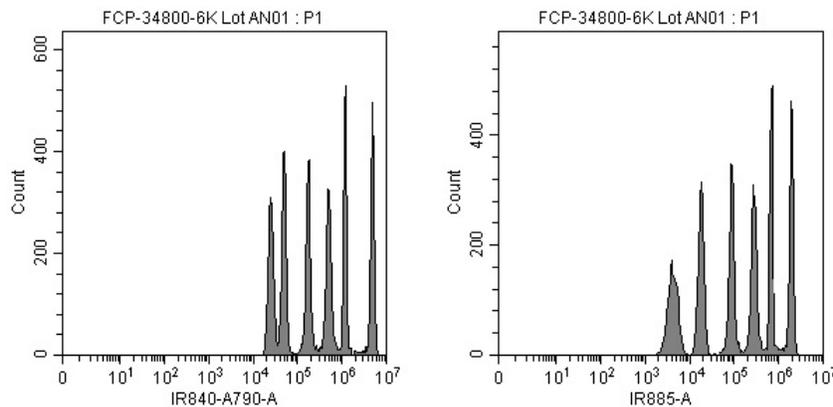
**APC Channel**

PEAK	CH#	MEAP
1	76.2	N/A
2	143.47	4923
3	171.95	15597
4	195.45	40878
5	221.56	119945
6	239.76	232788

**SPHERO™ IR Calibration Particles**

- Contain a mixture of fluorescent particles with different intensities in IR channels
- Excited with 785-nm IR diode laser or other laser operating in the infrared
- Used to determine the linearity of the logarithmic amps and sensitivity in near-IR channels.

Particle Type and Surface	Size, $\mu\text{m}$	Catalog No.	Unit
Fluorescent Calibration, $10^7/\text{mL}$ , 800nm EM, 6 peaks	3.5 (+/- 0.2)	FCP-34800-6K	6x1 mL



Histograms of FCP-34800-6K

**SPHERO™ Blank Calibration Particles**

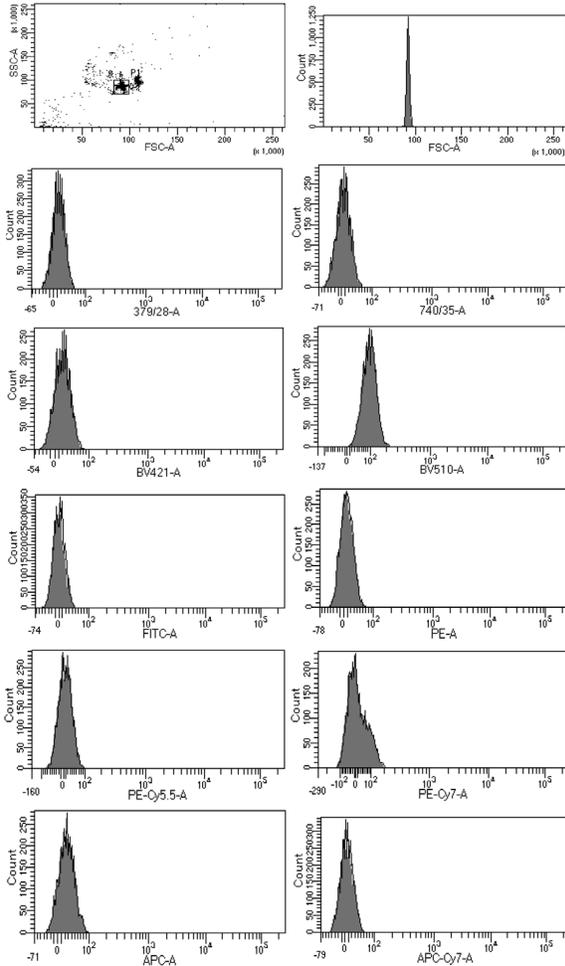
- Consists of the blank peak of the corresponding Rainbow Calibration Particles
- Used to set the threshold of the instrument in every channel
- Valuable in quality verification of FSC and SSC channels when several sizes are used at the same time.

Particle Type and Surface	Size, $\mu\text{m}$	Catalog No.	Unit
Blank Calibration, $10^7/\text{mL}$	1.8-2.2	BCP-20-5	5 mL
Blank Calibration, $10^7/\text{mL}$	3.0-3.4	BCP-30-5	5 mL
Blank Calibration, $10^7/\text{mL}$	3.2 (+/-0.1)	BCP-32-5	5 mL
Blank Calibration, $10^7/\text{mL}$	3.5-4.0	BCP-35-5	5 mL
Blank Calibration, $10^7/\text{mL}$	5.0-5.9	BCP-50-5	5 mL
Blank Calibration, $10^7/\text{mL}$	6.0-6.4	BCP-60-5	5 mL
Blank Calibration, $5 \times 10^6/\text{mL}$	8.0-12.9	BCP-100-5	5 mL

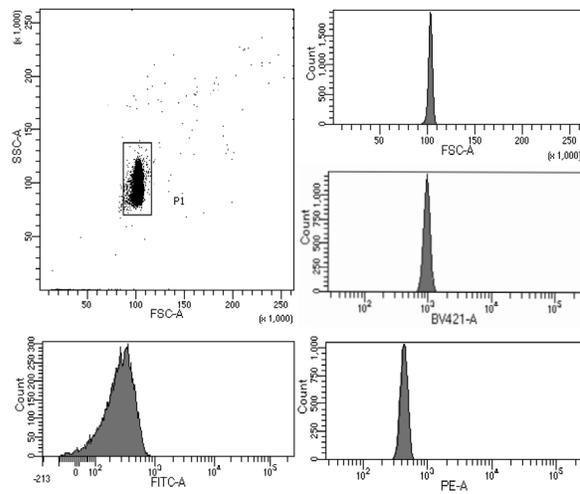
Below are the **Blank Calibration Particles** not associated with the Rainbow Calibration Particles.

Particle Type and Surface	Size, $\mu\text{m}$	Catalog No.	Unit
Blank Calibration, $10^7/\text{mL}$	1.0-1.4	BCP-10-5	5 mL
Blank Calibration, $10^7/\text{mL}$	6.5-8.0	BCP-70-5	5 mL
Blank Calibration, $5 \times 10^6/\text{mL}$	13.0-17.9	BCP-150-5	5 mL
Blank Calibration, $5 \times 10^5/\text{mL}$	18.0-24.9	BCP-200-5	5 mL
Blank Calibration, $5 \times 10^5/\text{mL}$	25.0-35.0	BCP-300-5	5 mL

Flow Cytometry  
Linearity & Sensitivity



Dot plot and histograms of BCP-30-5



Dot plot and histograms of BCP-100-5