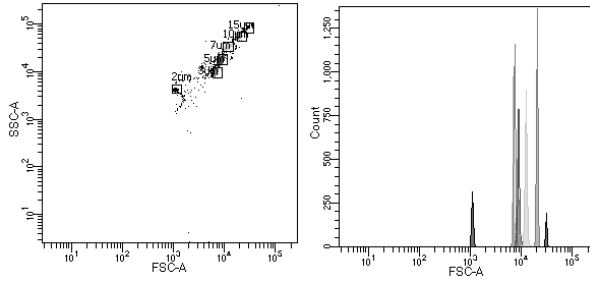


SPHERO™ Flow Cytometry Particle Size Standard Kit

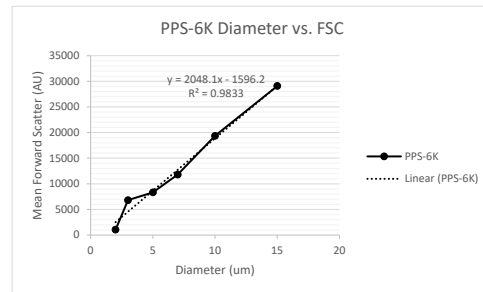
The SPHERO™ Flow Cytometry Particle Size Standard Kit is designed to be a reliable size reference for flow cytometry. This kit consists of six different size particles with a known diameter. The diameter for each particle has been determined using a Beckman Coulter Multisizer 3 and NIST traceable particles.

Using FSC signals of the flow cytometry, the size of cells can be estimated when compared to the SPHERO™ Flow Cytometry Particle Size Standards. When using this product, be aware that FSC signals are related to both size and refractive index.



FSC log histograms of PPS-6K

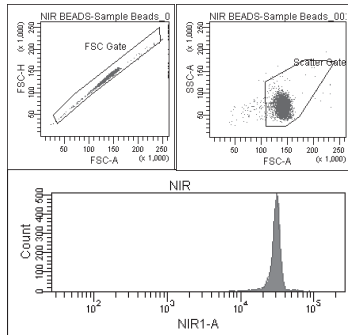
Particle Type and Surface	Size, μm	Catalog No.	Unit
Particle Size Standard Kit, Flow Cytometry Grade, $2.5 \times 10^6/\text{mL}$	2.0-2.4, 3.0-3.4, 5.0-5.9, 7.0-7.9, 8.0-12.9, & 13.0-17.9	PPS-6K	6x5 mL



Data showing FSC measurement is proportional to the diameter of the beads, Cat. No. PPS-6K

SPHERO™ IR Fluorescent Particles

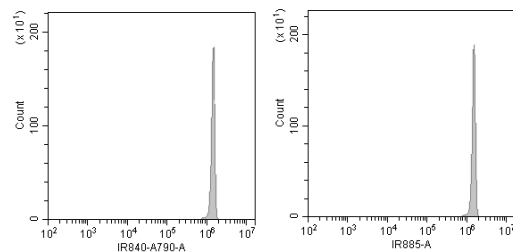
- Designed for flow cytometry applications with NIR and IR excitations
- Manufactured from flow cytometer grade polystyrene particles
- Available in a variety of sizes and chemistries



Histograms of CFH-5078-2 at 735nm Ex detected by a PMT with 840/30 nm BP

* Data provided by David Haviland, Ph.D., University of Texas Health Science Center, Houston Center for Stem Cell Research, Flow Cytometry Laboratory

Particle Type and Surface	Size, μm	Catalog No.	Unit
Fluorescent, CyGreen, $10^7/\text{mL}$	2.8-3.4	FP-3074-2	2 mL
Fluorescent, Jade Green, $10^7/\text{mL}$	2.8-3.4	FP-3078-2	2 mL
Fluorescent, Aqua Green, $10^7/\text{mL}$	3.0-3.4	FP-3079-2	2 mL
Fluorescent, CyGreen, $10^7/\text{mL}$	5.0-5.9	FP-5074-2	2 mL
Fluorescent, Jade Green, $10^7/\text{mL}$	5.0-5.9	FP-5078-2	2 mL
Fluorescent, CyGreen, Mid Intensity, $10^7/\text{mL}$	10.0-14.0	FP-10074-2	2 mL
Fluorescent, CyGreen, High Intensity, $10^7/\text{mL}$	10.0-14.0	FH-10074-2	2 mL
Fluorescent, Jade Green, Low Intensity, $10^7/\text{mL}$	10.0-14.0	FL-10078-2	2 mL
Fluorescent, Jade Green, Mid Intensity, $10^7/\text{mL}$	10.0-14.0	FP-10078-2	2 mL
Fluorescent, Jade Green, High Intensity, $10^7/\text{mL}$	10.0-14.0	FH-10078-2	2 mL

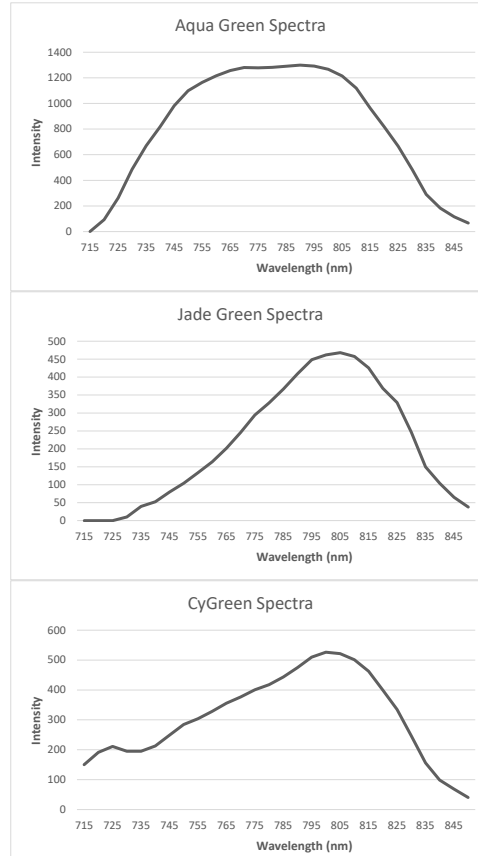


Histogram of the FH-10078-2

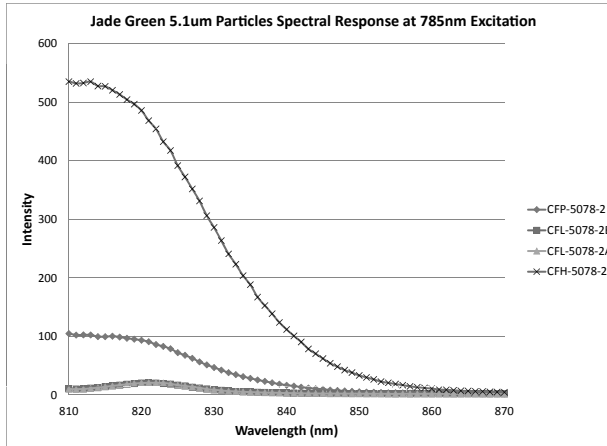
Flow Cytometry Size Standard and IR Fluorescent

SPHERO™ Carboxyl IR Fluorescent Particles

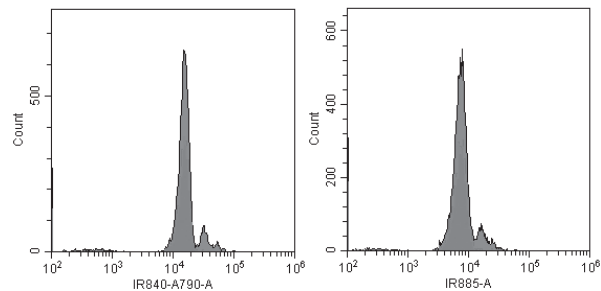
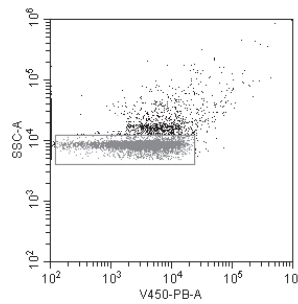
Particle Type and Surface	Size, μm	Catalog No.	Unit
Carboxyl, Fluorescent, Aqua Green, 2.9x10 ¹⁰ /mL	0.1-0.3	CFP01-0279-10	10 mL
Carboxyl, Fluorescent, Aqua Green, 1.8x10 ⁹ /mL	1.0-1.9	CFP01-1079-3	3 mL
Carboxyl, Fluorescent, CyGreen 10 ⁷ /mL	3.0-3.4	CFP-3074-2	2 mL
Carboxyl, Fluorescent, Aqua Green, 10 ⁷ /mL	3.0-3.4	CFP-3079-2	2 mL
Carboxyl, Fluorescent, UltraBlue, 10 ⁷ /mL	3.5-3.9	CFP-3571-2	2 mL
Carboxyl, Fluorescent, CyGreen, 10 ⁷ /mL	3.5-3.9	CFP-3574-2	2 mL
Carboxyl, Fluorescent, Jade Green, 10 ⁷ /mL	3.5-3.9	CFP-3578-2	2 mL
Carboxyl, Fluorescent, Aqua Green, 10 ⁷ /mL	3.5-3.9	CFP-3579-2	2 mL
Carboxyl, Fluorescent, UltraBlue, 10 ⁷ /mL	5.0-5.9	CFP-5071-2	2 mL
Carboxyl, Fluorescent, CyGreen, 10 ⁷ /mL	5.0-5.9	CFP-5074-2	2 mL
Carboxyl, Fluorescent, Jade Green, 10 ⁷ /mL	5.0-5.9	CFP-5078-2	2 mL
Carboxyl, Fluorescent, Jade Green, Low Intensity Peak 1, 10 ⁷ /mL	5.0-5.9	CFL-5078-2A	2 mL
Carboxyl, Fluorescent, Jade Green, Low Intensity Peak 2, 10 ⁷ /mL	5.0-5.9	CFL-5078-2B	2 mL
Carboxyl, Fluorescent, Jade Green, High Intensity, 10 ⁷ /mL	5.0-5.9	CFH-5078-2	2 mL



Spectra of CyGreen, Jade Green and Aqua Green fluorophores at 695 nm excitation



Spectra of CFP-5078-2, CFL-5078-2A, CFP-5078-2B & CFH-5078-2 at 785 nm excitation



Dot plot and histograms of CFP01-0278-10 on a Beckman Coulter cytoFLEX LX

Flow Cytometry
IR Fluorescent