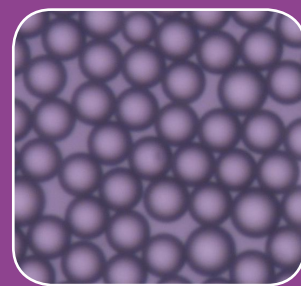




**Fluoresbrite®  
Microspheres**



## Fluoresbrite® Microspheres

Instrument manufacturers and major diagnostic companies turn to Polysciences Inc. for consistently superior products and custom fluorescent microspheres. Continued developments by our polymer chemists have resulted in products which lead the market in such applications as diagnostic assays, protein-binding assays, cell tracers and flow cytometry. These microspheres are supplied in sizes with nominal diameters from 50nm to 90µm and packaged as 2.5% solids (w/v) aqueous suspensions.

### Polychromatic (PC) Red Microspheres

Fluoresbrite® Polychromatic Red Microspheres will fluoresce in different colors, depending on the light source and filters used. When viewed under a UV light source, beads will appear as vivid orange. Microscopic viewing using a 475-490nm filter shows an extremely bright red fluorescence, while use of a 545-610nm filter yields a yellow fluorescence with excitation maxima of 491nm and 512nm and emission maxima at 554nm. **Size range:** 0.50µm - 6.00µm

**Packaging:** 2 ml & 5ml volumes

### Yellow Green (YG) Microspheres

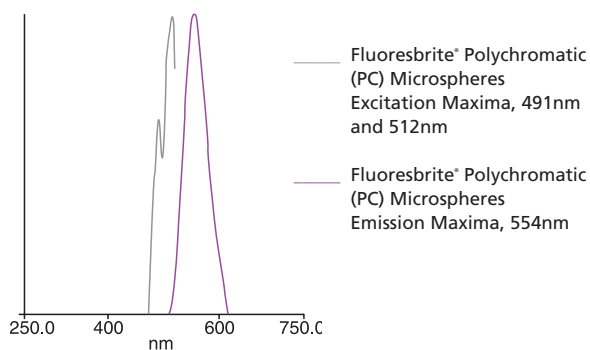
Fluoresbrite® Yellow Green Microspheres have excitation and emission spectra similar to FITC with excitation maxima of 441nm and emission maxima at 485nm. They are one of the brightest microspheres available at this wavelength and are used extensively in phagocytosis studies, flow cytometry and diagnostic assays. **Size range:** 0.50µm - 90.00µm

**Packaging:** 2 ml, 5ml & 10ml volumes

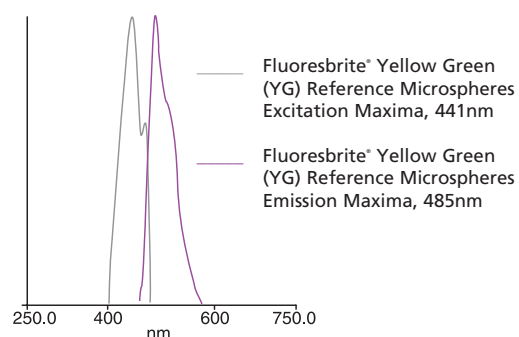
### Yellow Green (YG) Microspheres, Calibration Grade

A special grade of Fluoresbrite® Yellow Green Microspheres that have been evaluated both for particle diameter, as well as the uniformity of the fluorescent dye distribution. Instrument manufacturers have demanded these high quality particles for their flow cytometry standards. **Size range:** 0.50µm - 6.00µm **Packaging:** 1 ml volume

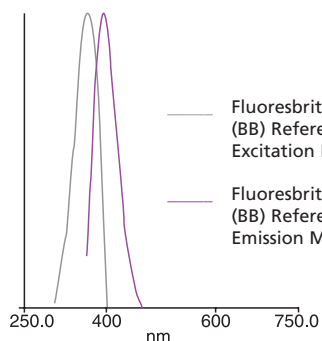
Fluoresbrite® Polychromatic (PC) Red Microspheres Excitation and Emission Spectra



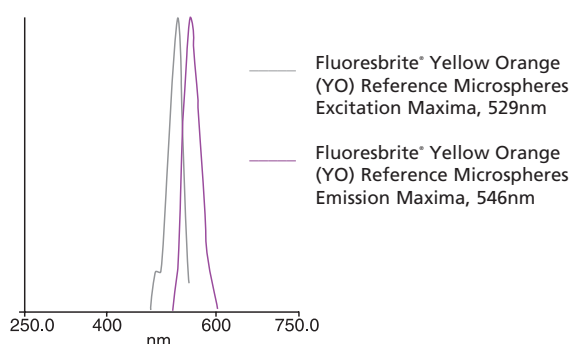
Fluoresbrite® Yellow Green (YG) Reference Microspheres Excitation and Emission Spectra



Fluoresbrite® Bright Blue (BB) Reference Microspheres Excitation and Emission Spectra



Fluoresbrite® Yellow Orange (YO) Reference Microspheres Excitation and Emission Spectra



## Fluoresbrite® Carboxylate Microspheres

Fluoresbrite® Carboxylate Microspheres are fluorescent monodisperse polystyrene microspheres that have carboxylate groups on their surfaces which can be activated for the covalent coupling of proteins. Polysciences' Fluoresbrite® particles are used extensively in phagocytosis and neural retrograde transport studies and as markers for cell bound antigens. These microspheres are packaged as 2.5% solids (w/v) aqueous suspensions.

### Bright Blue (BB) Carboxylate Microspheres

**Size range:** 0.05µm - 10.0µm

**Packaging:** 2 ml, 5ml & 10 volumes

### Yellow Green (YG) Carboxylate Microspheres

**Size range:** 0.05µm - 10.0µm

**Packaging:** 2 ml, 5ml & 10 volumes

### Yellow Orange (YO) Reference Microspheres Excitation and Emission Spectra

**Size range:** 0.05µm - 6.0µm

**Packaging:** 2 ml, 5ml & 10 volumes

## Multifluorescent Microspheres

Fluoresbrite® Multifluorescent Microspheres are offered in three sizes. Each microsphere is dyed with three different fluorescent dyes with excitation maxima of 377, 517 and 588nm and emission maxima of 479, 546 and 612nm, respectively. These microspheres are packaged as 2.5% solids (w/v) aqueous suspensions. **Size range:** 0.20µm - 1.00µm **Packaging:** 5ml volumes

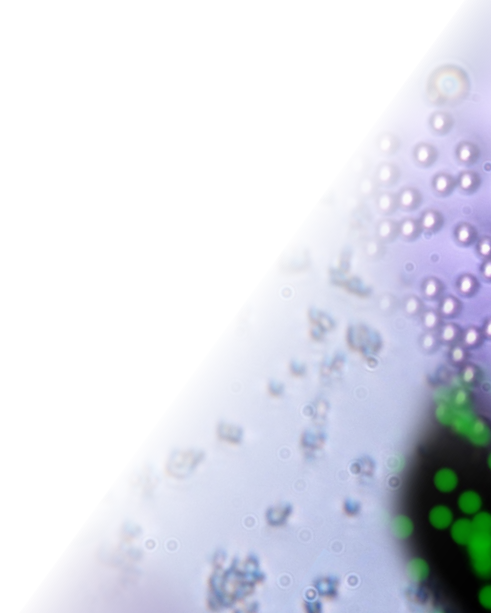
## PolyFluor® Microspheres

Fluoresbrite® PolyFluor® Microspheres incorporate a series of polymerizable fluorescent compounds which produce fluorescence at a variety of wavelengths. These microspheres have a nominal diameter of 1.0µm. The fluorescence is uniformly distributed throughout the outer 25% of the radii of the particles. These microspheres are packaged as 2.5% solids (w/v) aqueous suspensions. **Packaging:** 10ml volumes

PolyFluor® 345 Microspheres  
PolyFluor® 394 Microspheres  
PolyFluor® 407 Microspheres  
PolyFluor® 497 Microspheres  
PolyFluor® 511 Microspheres  
PolyFluor® 512 Microspheres  
PolyFluor® 570 Microspheres

Dye	Excitation Max. (nm)	Emission Max. (nm)
PolyFluor® 345	285	345
PolyFluor® 394	339	394
PolyFluor® 407	362	407
PolyFluor® 497	355	497
PolyFluor® 511	470	511
PolyFluor® 512	439	512
PolyFluor® 570	548	570

Excitation and emission data listed are for free dyes.



### Carboxylate Color Range Kit I

Kit contains 1ml each of ~1.75µm Fluoresbrite® monodisperse polystyrene microspheres (2.5% solids [w/v] in aqueous suspension) containing dyes with these excitation maxima: 273nm, 360nm, 441nm, 529nm, 641nm and 763nm. Available in 1ml and 5ml volumes.

	Excitation Wavelength
Floresbrite® Carboxylate 1.75µm	273nm
Fluoresbrite® Carboxylate 1.75µm (BB)	360nm
Fluoresbrite® Carboxylate 1.75µm (YG)	441nm
Fluoresbrite® Carboxylate 1.75µm (YO)	529nm
Fluoresbrite® Carboxylate 1.75µm	641nm
Fluoresbrite® Carboxylate 1.75µm	763nm

### Carboxylate Color Range Kit II

Kit contains 1ml each of ~0.50µm Fluoresbrite® monodisperse polystyrene microspheres (2.5% solids [w/v] in aqueous suspension) containing dyes with these excitation maxima: 273nm, 360nm, 441nm, 529nm, 641nm, 763nm. Available in 1ml and 5ml volumes.

	Excitation Wavelength
Fluoresbrite® Carboxylate 0.5µm	273nm
Fluoresbrite® Carboxylate 0.5µm (BB)	360nm
Fluoresbrite® Carboxylate 0.5µm (YG)	441nm
Fluoresbrite® Carboxylate 0.5µm (YO)	529nm
Fluoresbrite® Carboxylate 0.5µm	641nm
Fluoresbrite® Carboxylate 0.5µm	763nm

### Carboxylate Size Range Kit I

Fluoresbrite® Carboxylate Size Range Kits allow you to evaluate which fluorescent particle size performs optimally for your specific application. Kit contains 1ml of Fluoresbrite® YG monodisperse polystyrene microspheres (2.5% solids [w/v] in aqueous suspension) for each of these nominal sizes: 0.10µm, 0.20µm, 0.50µm, 0.75µm, 1.0µm.

### Carboxylate Size Range Kit II

Fluoresbrite® Carboxylate Size Range Kits allow you to evaluate which fluorescent particle size performs optimally for your specific application. Kit contains 1ml of Fluoresbrite® YG monodisperse polystyrene microspheres (2.5% solids [w/v] in aqueous suspension) for each of these nominal sizes: 1.75µm, 2.0µm, 3.0µm, 4.5µm, 6.0µm.

### Calibration Grade Size Range Kit

Our flow cytometry customers demand precisely manufactured microparticles as calibration tools. Our unique synthesis methods routinely result in particles with fluorescence CV's of less than 5% and often as low as 1%. This kit guarantees that our discriminating customers will have the finest particles with the lowest fluorescence CV currently available from our stock. A range of 5 sizes of Fluoresbrite® YG microspheres can be used to calibrate the green channel. Kit contains 1ml (2.5% solids [w/v] in aqueous suspension) for each of these nominal sizes: 0.5µm, 1.0µm, 2.0µm, 3.0µm, 6.0µm.

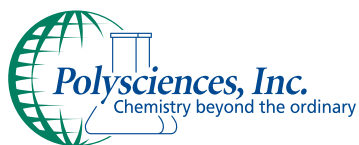
**Sound interesting?**

For more detailed information on

Fluoresbrite®, go to:

[www.polysciences.com/fluoresbrite](http://www.polysciences.com/fluoresbrite)

or call (800) 523-2575



[polysciences.com](http://polysciences.com)

Polysciences, Inc. is a world leader in the development of particle-based solutions for diagnostics, bioprocessing and instrument standardization. We are your source for organic, inorganic, biodegradable, magnetic, fluorescent, dyed and specific antibody and general protein coated particles. Our particle diameters span the range of 40nm to ~10µm. We stand behind our products. Regardless of the size of your question or the size of your company, we offer tech support, absolutely free.

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