FluoSpheres® Platinum Luminescent Microspheres

Table 1. Contents and Storage Information.

Material	Amount	Concentration	Storage	Stability
FluoSpheres® Platinum Luminescent Microspheres	2 mL suspension	0.5% solids in dH_2O, 2 mM sodium azide	• 4°C • Protect from light • DO NOT FREEZE	1 year
Approximate Fluorescence Excitation and Emission, in nm: ~390/650 nm				

Introduction

In biological specimens, autofluorescence is a common source of background fluorescence. One approach to increasing detectability is the use of time-resolved luminescence reagents. Molecular Probes provides FluoSpheres® Platinum Luminescent Microspheres, which incorporate Pt^{2+} in an organic coordination complex. This unique dye confers luminescence with a decay time of >100 µs, far longer than that of conventional fluorescent probes or autofluorescent samples, typically having decay times of <50 ns. Thus, time-resolved fluorometry can virtually eliminate autofluorescence.[1-4] In addition, these platinum luminescent microspheres feature long-wavelength emission (650 nm), that is well separated from the excitation peak (~390 nm) (Figure 1). This unusually large Stokes shift lets you use filter combinations that effectively isolate the desired luminescence signal.

These uncoated FluoSpheres® platinum luminescent carboxylate-modified microspheres are available with nominal diameters of 0.04 µm, 0.2 µm or 1.0 µm. The actual sizes of the microspheres are printed on the product labels.

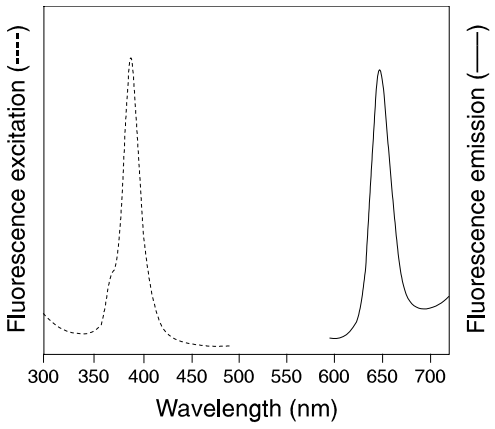

Figure 1. Excitation and emission spectra of FluoSpheres® 1.0 µm platinum luminescent (~390/650) microspheres (F20888).

Guidelines for Use

Before sampling, mix well by sonication, vigorous shaking or vortex mixing.

References

1. Cytometry 24, 312 (1996); **2.** J Histochem Cytochem 45, 1279 (1997); **3.** J Histochem Cytochem 47, 183 (1999); **4.** Clin Chem 43, 1937 (1997).

Product List **Current prices may be obtained from our website or from our Customer Service Department.**

Cat #	Product Name	Unit Size
B10710	BlockAid™ blocking solution *for use with microspheres*	50 mL
F20886	FluoSpheres®, carboxylate-modified microspheres, 0.04 µm, platinum luminescent (390/650) *0.5% solids*	2 mL
F20888	FluoSpheres®, carboxylate-modified microspheres,1.0 µm, platinum luminescent (390/650) *0.5% solids*	2 mL

Contact Information

Molecular Probes, Inc.
29851 Willow Creek Road
Eugene, OR 97402
Phone: (541) 465-8300
Fax: (541) 335-0504

Customer Service:
6:00 am to 4:30 pm (Pacific Time)
Phone: (541) 335-0338
Fax: (541) 335-0305
probesorder@invitrogen.com

Toll-Free Ordering for USA:
Order Phone: (800) 438-2209
Order Fax: (800) 438-0228

Technical Service:
8:00 am to 4:00 pm (Pacific Time)
Phone: (541) 335-0353
Toll-Free (800) 438-2209
Fax: (541) 335-0238
probestech@invitrogen.com

Invitrogen European Headquarters
Invitrogen, Ltd.
3 Fountain Drive
Inchinnan Business Park
Paisley PA4 9RF, UK
Phone: +44 (0) 141 814 6100
Fax: +44 (0) 141 814 6260
Email: euroinfo@invitrogen.com
Technical Services: eurotech@invitrogen.com

Further information on Molecular Probes products, including product bibliographies, is available from your local distributor or directly from Molecular Probes. Customers in Europe, Africa and the Middle East should contact our office in Paisley, United Kingdom. All others should contact our Technical Assistance Department in Eugene, Oregon.

Molecular Probes products are high-quality reagents and materials intended for research purposes only. These products must be used by, or directly under the supervision of, a technically qualified individual experienced in handling potentially hazardous chemicals. Please read the Material Safety Data Sheet provided for each product; other regulatory considerations may apply.