

FluoSpheres® Platinum Luminescent Microspheres

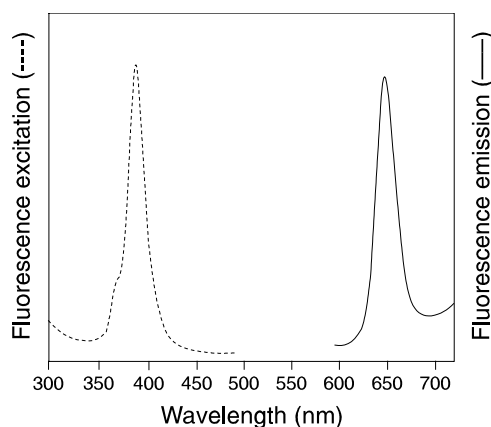
Table 1. Contents and Storage Information.

Material	Amount	Concentration	Storage	Stability
FluoSpheres® Platinum Luminescent Microspheres	2 mL suspension	0.5% solids in dH ₂ O, 2 mM sodium azide	<ul style="list-style-type: none"> • 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 Pt²⁺ 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

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