

Revised: 28–November–2006

# FluoCells<sup>®</sup> Prepared Microscope Slides

## **Quick Facts**

## Storage upon receipt:

- FluoCells slides #1, #2 and #6:  $\leq$ 25°C
- FluoCells slides #3 and #4:  $\leq$ -20°C
- Protect from light

Abs/Em: See Table 1

## Introduction

In response to requests from educators and instrument manuufacturers, Molecular Probes offers FluoCells® prepared microscope slides, which contain multilabeled cell preparations for observation by epifluorescence or confocal microscopy. The multicolor staining in these cell preparations results in stunning, publication-quality images. The slides are especially useful for setting up microscopes and camera systems and for assessing the capabilities of optical filter sets.

- FluoCells prepared slide #1 (F-14780) contains bovine pulmonary artery endothelial (BPAE) cells stained with a combination of fluorescent dyes. Mitochondria were labeled with red-fluorescent MitoTracker® Red CMXRos, F-actin was stained using green-fluorescent BODIPY® FL phallacidin, and blue-fluorescent DAPI was used to label the nuclei.
- FluoCells prepared slide #2 (F-14781) also contains BPAE cells, but this time stained with red-fluorescent Texas Red<sup>®</sup>-X phalloidin for labeling F-actin, mouse monoclonal anti–α-tubulin in conjunction with green-fluorescent BODIPY FL goat antimouse IgG for labeling microtubules and blue-fluorescent DAPI for labeling the nuclei.
- FluoCells prepared slide #3 (F-24630) contains a 16 µm cryostat section of mouse kidney stained with a combination of fluorescent dyes. Alexa Fluor<sup>®</sup> 488 wheat germ agglutinin, a green-fluorescent lectin, was used to label elements of the glomeruli and convoluted tubules. The filamentous actin prevalent in glomeruli and the brush border were stained with red-fluorescent Alexa Fluor 568 phalloidin. Finally, the nuclei were counterstained with the blue-fluorescent DNA stain DAPI.
- FluoCells prepared slide #4 (F-24631) contains a  $16 \,\mu m$  cryostat section of mouse intestine stained with a combination

of fluorescent stains. Alexa Fluor 350 wheat germ agglutinin, a blue-fluorescent lectin, was used to stain the mucus of goblet cells. The filamentous actin prevalent in the brush border was stained with red-fluorescent Alexa Fluor 568 phalloidin. Finally, the nuclei were stained with SYTOX® Green nucleic acid stain.

• FluoCells prepared slide #6 (F-36925) contains muntjac skin fibroblast cells stained with a combination of fluorescent stains. The prominent filamentous actin in these cells was labeled with Alexa Fluor 488 phalloidin. Mitochondria were labeled with an anti–OxPhos Complex V inhibitor protein mouse monoclonal antibody in conjunction with Alexa Fluor 555 goat anti–mouse IgG. Nuclei were labeled with the far-red fluorescent TO-PRO®-3 nucleic acid stain.

Table 1	<ul> <li>Spectral</li> </ul>	characteristics	of the stains	used in Flu	IoCells prepare	d microscope	
slides.							

Dye	Abs *	Em *				
FluoCells prepared slide #1 (F-14780) – BPAE cells						
DAPI	358†	461†				
BODIPY FL phallacidin	505	512				
MitoTracker Red CMXRos	579 ‡	599 ‡				
FluoCells prepared slide #2 (F-14781) – BPAE cells						
DAPI	358†	461†				
BODIPY FL goat anti-mouse IgG	505	513				
Texas Red-X phalloidin	591	608				
FluoCells prepared slide #3 (F-24630) – mouse kidney section						
DAPI	358†	461†				
Alexa Fluor 488 wheat germ agglutinin	495	519				
Alexa Fluor 568 phalloidin	578	600				
FluoCells prepared slide #4 (F-24631) – mouse intestine section						
Alexa Fluor 350 wheat germ agglutinin	346	442				
SYTOX Green stain	504 †	523†				
Alexa Fluor 568 phalloidin	578	600				
FluoCells prepared slide #6 (F-36925) – muntjac skin fibroblasts						
Alexa Fluor 488 phalloidin	495	519				
Alexa Fluor 555 goat anti–mouse IgG	555	571				
TO-PRO-3 stain	642†	661†				

\* Absorption (Abs) and fluorescence emission (Em) maxima, in nm. † When bound to DNA. ‡ Determined in methanol; values may vary somewhat in cellular environments.

## Materials

#### Contents

FluoCells prepared slides are packaged individually, one slide per package.

#### Storage

**^**-+ #

FluoCells slides #1, #2 and #6. Store at 25°C or below, protected from light.

FluoCells slides #3 and #4. Store at -20°C or below, protected from light. The FluoCells slides #3 and #4 can be stored for short periods of time (a few days) at 2-25°C without harm.

Short-term exposure of any FluoCells slide to dim light (e.g., room lighting) will not cause damage. When stored properly, these permanently mounted specimens will retain their bright, specific staining patterns for at least six months from the date of purchase.

### Product List Current prices may be obtained from our Web site or from our Customer Service Department.

Cat #	Product Name	Unit Size
F-14780	FluoCells® prepared slide #1 *BPAE cells with MitoTracker® Red CMXRos, BODIPY® FL phallacidin, DAPI*	each
F-14781	FluoCells <sup>®</sup> prepared slide #2 *BPAE cells with mouse anti- $\alpha$ -tubulin, BODIPY <sup>®</sup> FL goat anti-mouse IgG, Texas Red <sup>®</sup> -X phalloidin, DAPI*	each
F-24630	FluoCells® prepared slide #3 *mouse kidney section with Alexa Fluor® 488 WGA, Alexa Fluor® 568 phalloidin, DAPI*	each
F-24631	FluoCells® prepared slide #4 *mouse intestine section with Alexa Fluor® 350 WGA, Alexa Fluor® 568 phalloidin, SYTOX® Green*	each
F-36925	FluoCells® prepared slide #6 *muntjac cells with mouse anti-OxPhos Complex V inhibitor protein, Alexa Fluor® 555 goat anti-mouse IgG,	
	Alexa Fluor® 488 phalloidin, TO-PRO®-3*	each

## **Contact Information**

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 Leiden, the Netherlands. All others should contact our Technical Assistance Department in Eugene, Oregon.

Please visit our Web site — www.probes.com — for the most up-to-date 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 • order@probes.com

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

Technical Assistance: 8:00 am to 4:00 pm (Pacific Time) Phone: (541) 335-0353 • Toll-Free (800) 438-2209 Fax: (541) 335-0238 • tech@probes.com

**Molecular Probes Europe BV** Poortgebouw, Rijnsburgerweg 10 2333 AA Leiden, The Netherlands Phone: +31-71-5233378 • Fax: +31-71-5233419

Customer Service: 9:00 to 16:30 (Central European Time) Phone: +31-71-5236850 • Fax: +31-71-5233419 eurorder@probes.nl

Technical Assistance: 9:00 to 16:30 (Central European Time) Phone: +31-71-5233431 • Fax: +31-71-5241883 eurotech@probes.nl

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.

Several of Molecular Probes' products and product applications are covered by U.S. and foreign patents and patents pending. Our products are not available for resale or other commercial uses without a specific agreement from Molecular Probes, Inc. We welcome inquiries about licensing the use of our dyes, trademarks or technologies. Please submit inquiries by e-mail to busdev@probes.com. All names containing the designation ® are registered with the U.S. Patent and Trademark Office.

Copyright 2003, Molecular Probes, Inc. All rights reserved. This information is subject to change without notice.

#### Linit Ciza