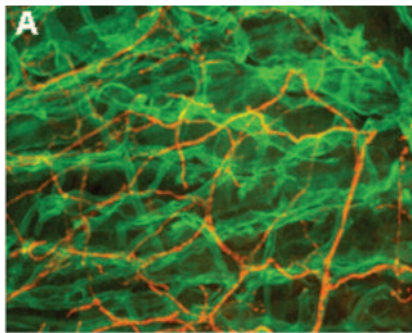


## Specializing in Secondary Antibodies and Conjugates

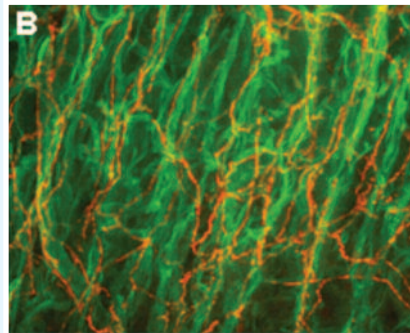
# Cy2, Cy3, and Cy5 Conjugates are brighter in Plastic Mounting Media

Among currently available fluorescent dye conjugates offered by Jackson ImmunoResearch, the cyanine dyes are better able to withstand the harsh dehydration and embedding conditions required for mounting sections in non-polar plastic media, such as DPX and Permount™. Cyanine dyes are brighter in the non-polar environment than in an aqueous medium, resulting in less acquisition time in the confocal microscope than that required for DyLight™ and Alexa Fluor® dyes (Figure 1), even though those dyes are brighter in aqueous mounting media.

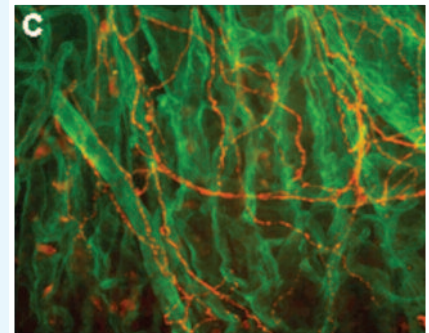
The major advantages of plastic over aqueous mounting media are brightness, contrast, and longevity of the fluorescence. Cy2 and Cy5 are once again available, along with Cy3, conjugated to a selection of multiple labeling antibodies, streptavidin, and purified IgG controls, providing the brightest reagents for those labs using plastic mounting media. For multiple labeling, see the other side for our table of Cy2, Cy3, and Cy5 conjugates. For single-labeling protocols that do not require highly cross-adsorbed antibodies, choose Cy3 conjugates from the tables of whole IgG or F(ab')<sub>2</sub> antibodies at [www.jacksonimmuno.com](http://www.jacksonimmuno.com).



A  
Cy2-goat anti-mouse IgG (H+L), 36.7ms  
Alexa Fluor 647-goat anti-rabbit IgG (H+L), 444.8ms



B  
Alexa Fluor 488-goat anti-mouse IgG (H+L), 222.4ms  
DyLight 649-goat anti-rabbit IgG (H+L), 444.8ms



C  
DyLight 488-goat anti-mouse IgG (H+L), 222.4ms  
Alexa Fluor 647-goat anti-rabbit IgG (H+L), 444.8ms

**Figures 1.** Sections of gastric mucosa were stained and mounted in DPX. Sections A, B, and C were stained with primary antibodies for abundant antigens (mouse anti-Type IV collagen [green] and rabbit anti-PGP 9.5 [red]). All sections were stained with different fluorophore-conjugated secondary antibodies from Jackson ImmunoResearch. All sections were exposed to light long enough to achieve approximately the same relative brightness. Exposure times are listed in milliseconds (ms). Differences in exposure time for each fluorophore are an indication of its relative degree of brightness. Note that Cy2 conjugates required significantly less exposure time (36.7ms) in DPX than DyLight 488 (222.4ms) and Alexa Fluor® 488 (222.4ms), both with abundant and less abundant (not shown) antigens. Cy2 conjugates also were brighter in DPX than in glycerol mounting media (not shown). Other antigens that are less visible in Cy2-stained sections are not visible with DyLight 488 and Alexa Fluor® 488 (not shown). Similar differences were observed when the other cyanines, Cy3 and Cy5, were compared with corresponding Alexa Fluor® and DyLight dyes. Images and results are courtesy of Dr. Gwen Wendelschafer-Crabb, Kennedy Lab, University of Minnesota. Similar results were reported to us by Dr. Barbara Jones, Department of Neurology and Neurosurgery, McGill University.

Streptavidin and Antibody Description	Cyanine Cy2 A=492, E=510	Cyanine Cy3 A=550, E=570	Cyanine Cy5 A=650, E=670
Streptavidin	1.0 mg 016-220-084	1.0 mg 016-160-084	1.0 mg 016-170-084
Donkey Anti-Chicken IgY*(IgG)(H+L) (min X Bov, Gt, GP, Sy Hms, Hrs, Hu, Ms, Rb, Rat, Shp Sr Prot)	ML* 0.5 mg 703-225-155	0.5 mg 703-165-155	0.5 mg 703-175-155
Donkey Anti-Goat IgG (H+L)*** (min X Ck, GP, Sy Hms, Hrs, Hu, Ms, Rb, Rat Sr Prot)	ML* 0.5 mg 705-225-147	0.5 mg 705-165-147	0.5 mg 705-175-147
Donkey Anti-Guinea Pig IgG (H+L) (min X Bov, Ck, Gt, GP, Sy Hms, Hrs, Hu, Ms, Rb, Rat, Shp Sr Prot)	ML* 0.5 mg 706-225-148	0.5 mg 706-165-148	0.5 mg 706-175-148
Donkey Anti-Human IgG (H+L) (min X Bov, Ck, Gt, GP, Sy Hms, Hrs, Ms, Rb, Rat, Shp Sr Prot)	ML* 0.5 mg 709-225-149	0.5 mg 709-165-149	0.5 mg 709-175-149
Donkey Anti-Mouse IgG (H+L) (min X Bov, Ck, Gt, GP, Sy Hms, Hrs, Hu, Rb, Shp Sr Prot)	ML* 0.5 mg 715-225-150	0.5 mg 715-165-150	0.5 mg 715-175-150
Donkey Anti-Mouse IgG (H+L) (min X Bov, Ck, Gt, GP, Sy Hms, Hrs, Hu, Rb, Rat, Shp Sr Prot)**	ML* 0.5 mg 715-225-151	0.5 mg 715-165-151	0.5 mg 715-175-151
Goat Anti-Mouse IgG (H+L) (min X Hu, Bov, Hrs, Rb, Sw Sr Prot)	ML* 1.5 mg 115-225-146	1.5 mg 115-165-146	1.5 mg 115-175-146
Goat Anti-Mouse IgG (H+L) (min X Hu, Bov, Hrs, Rb, Rat Sr Prot)	ML* 0.5 mg 115-225-166	0.5 mg 115-165-166	0.5 mg 115-175-166
Goat Anti-Mouse IgG Fc, fragment specific (min X Hu, Bov, Hrs Sr Prot)	ML* 1.5 mg 115-225-071	1.5 mg 115-165-071	1.5 mg 115-175-071
Goat Anti-Mouse IgM, $\mu$ chain specific (min X Hu, Bov, Hrs Sr Prot)	ML* 1.0 mg 115-225-075	1.0 mg 115-165-075	1.0 mg 115-175-075
Goat Anti-Mouse IgG, Fc, subclass 1 specific (min X Hu, Bov, Rb Sr Prot)	ML* 0.5 mg 115-225-205	0.5 mg 115-165-205	0.5 mg 115-175-205
Goat Anti-Mouse IgG, Fc, subclass 2a specific (min X Hu, Bov, Rb Sr Prot)	ML* 0.5 mg 115-225-206	0.5 mg 115-165-206	0.5 mg 115-175-206
Goat Anti-Mouse IgG, Fc, subclass 2b specific (min X Hu, Bov, Rb Sr Prot)	ML* 0.5 mg 115-225-207	0.5 mg 115-165-207	0.5 mg 115-175-207
Goat Anti-Mouse IgG, Fc, subclass 3 specific (min X Hu, Bov, Rb Sr Prot)	ML* 0.5 mg 115-225-209	0.5 mg 115-165-209	0.5 mg 115-175-209
Donkey Anti-Rabbit IgG (H+L) (min X Bov, Ck, Gt, GP, Sy Hms, Hrs, Hu, Ms, Rat, Shp Sr Prot)	ML* 0.5 mg 711-225-152	0.5 mg 711-165-152	0.5 mg 711-175-152
Goat Anti-Rabbit IgG (H+L) (min X Hu, Ms, Rat Sr Prot)	ML* 1.5 mg 111-225-144	1.5 mg 111-165-144	1.5 mg 111-175-144
Donkey Anti-Rat IgG (H+L) (min X Bov, Ck, Gt, GP, Sy Hms, Hrs, Hu, Rb, Shp Sr Prot)	ML* 0.5 mg 712-225-150	0.5 mg 712-165-150	0.5 mg 712-175-150
Donkey Anti-Rat IgG (H+L) (min X Bov, Ck, Gt, GP, Sy Hms, Hrs, Hu, Ms, Rb, Shp Sr Prot)**	ML* 0.5 mg 712-225-153	0.5 mg 712-165-153	0.5 mg 712-175-153
Goat Anti-Rat IgG (H+L) (min X Hu, Bov, Hrs, Rb Sr Prot)	ML* 1.5 mg 112-225-143	1.5 mg 112-165-143	1.5 mg 112-175-143
Goat Anti-Rat IgG, Fc, fragment specific (min X Hu, Bov, Hrs Sr Prot)	ML* 1.5 mg 112-225-071	1.5 mg 112-165-071	1.5 mg 112-175-071
Goat Anti-Rat IgM, $\mu$ chain specific (min X Hu, Bov, Hrs Sr Prot)	ML* 1.0 mg 112-225-075	1.0 mg 112-165-075	1.0 mg 112-175-075
Donkey Anti-Sheep IgG (H+L)*** (min X Ck, GP, Sy Hms, Hrs, Hu, Ms, Rb, Rat Sr Prot)	ML* 0.5 mg 713-225-147	0.5 mg 713-165-147	0.5 mg 713-175-147
<b>Controls</b>			
ChromPure Donkey IgG, whole molecule	1.0 mg 017-220-003	1.0 mg 017-160-003	1.0 mg 017-170-003
ChromPure Goat IgG, whole molecule	1.0 mg 005-220-003	1.0 mg 005-160-003	1.0 mg 005-170-003

† IgY is the original designation for the IgG-like protein found in both serum and egg yolk.

\* ML= Multiple Labeling (see Multiple Labeling at [www.jacksonimmuno.com](http://www.jacksonimmuno.com) for an explanation).

\*\* Caution: See Selection and Location of Affinity-Purified Antibodies before selecting an antibody adsorbed against closely related species.

\*\*\* Warning: BSA and dry milk may contain IgG which will react with this antibody. Use of BSA and/or dry milk to block or dilute this antibody may increase background and/or reduce secondary antibody titer.

DyLight is a trademark of Thermo Fisher Scientific Inc and its subsidiaries. Jackson ImmunoResearch is licensed by Thermo Fisher Scientific to manufacture and sell conjugates of DyLight Fluorescent Dyes. Cy™ is a trademark of GE Healthcare. Jackson ImmunoResearch is licensed by GE Healthcare to manufacture and sell conjugates of Cy2, Cy3, Cy5, and Cy7 under Patent Number 5,268,486 and other patents pending. Alexa Fluor® fluorescent dyes are a trademark of Life Technologies Corp.



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