## **Immunofluorescence Selection Guide**



Follow the simple steps below to choose the most appropriate labeling and detection solution for your experiment.



#### **Choose Primary Antibody**

- Specific for antigen of interest
- Consider tissue species and preparation (fixation)
- · Consider antigen retrieval requirements



**VECTABOND®** Reagent

#### **Blocking Reagents**

- Choices determined by the options selected in Steps 1-2
- · Streptavidin/Biotin Blocking Kit (if using biotin/streptavidin system)
- Avidin/Biotin Blocking Kit
- · Normal Sera (from the species of secondary antibody)
- M.O.M.\* Mouse Ig Blocking Reagent
- R.T.U. Animal-Free Blocker® and Diluent
- Casein Solution



### **Choose Signal Amplification** with Biotin-based Systems (Option C)

• Multiple rounds of amplification possible (with biotin-based systems)

**Reduce Autofluorescence** 

TrueVIEW™ Autofluorescence

from Aldehyde Fixation

Quenching Kit





conjugated

Legend

secondary antibody

antibody



Amplifier





anti-avidin / streptavidin











True\/IF\// Quenching Action

SECONDARY DETECTION SYSTEMS

#### **Choose Secondary Antibody and Tertiary Detection System**

- Choose fluorophore based on wavelengths available in microscope
- Fluorophore-conjugated secondary antibody or biotinylated secondary antibody
- Consider sensitivity requirements
- · Consider species of primary antibody
- Consider tissue species









#### One Step

Single-label.

- Fast. Convenient.
- Fluorophore-conjugated secondary antibodies
- VectaFluor™ R.T.U. DyLight® Labeled Secondary Antibodies



#### One Step

Dual-label two-antigen detection.

· VectaFluor Duet Immunofluorescence **Double Labeling Kits** 



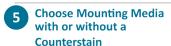
#### Two Step

- Biotin-based.
- Biotinylated secondary antibody and fluorescent avidin or streptavidin Fluorochrome conjugated.
- · See Step 3 for additional amplifications



Highest sensitivity. Non-biotin based.

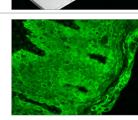
• VectaFluor Excel Amplified Fluorescent Staining System (Amplifier Antibody + fluorescent tertiary antibody)



 VECTASHIELD® antifade mounting media, with or without counterstain



- Fluorescence microscope
- View using appropriate excitation/emission filters



Tonsil (FFPE): Cytokeratin detected with VectaFluor Anti-Rabbit IgG, DyLight 488 (green). Autofluorescence quenched with TrueVIEW Quenching and mounted with VECTASHIELD Vibrance.





# **Ordering Information**





| Tissue Preparation                          |          |  |  |  |  |
|---|----------|--|--|--|--|
| Product                                     | Cat. No. |  |  |  |  |
| VECTABOND Reagent (Tissue Section Adhesive) | SP-1800  |  |  |  |  |
| ImmPrint Histology Pen                      | H-6100   |  |  |  |  |
| ImmEdge Hydrophobic Barrier Pen             | H-4000   |  |  |  |  |

| Antigen Retrieval   |          |
|---|----------|
| Product   | Cat. No. |
| Antigen Unmasking Solution<br>Citrate-based (100X) (pH 6.0) | H-3300   |
| Antigen Unmasking Solution<br>Tris-based (100X) (pH 9.0)    | H-3301   |

| Quench/Block  |          |
|---|----------|
| Product   | Cat. No. |
| TrueVIEW Autofluorescence<br>Quenching Kit (without Counterstain)   | SP-8400  |
| TrueVIEW Autofluorescence<br>Quenching Kit (with DAPI Counterstain) | SP-8500  |
| BLOXALL® Endogenous HRP and AP<br>Blocking Solution                 | SP-6000  |
| Avidin/Biotin Blocking Kit  | SP-2001  |
| Streptavidin/Biotin Blocking Kit                                    | SP-2002  |
| Normal Goat Serum   | S-1000   |
| Normal Horse Serum  | S-2000   |
| Normal Rabbit Serum   | S-5000   |
| 2.5% Normal Horse Serum   | S-2012   |
| Bovine Serum Albumin (BSA)  | SP-5050  |
| 10x Casein Solution   | SP-5020  |
| R.T.U. Animal-Free Blocker & Diluent                                | SP-5035  |
| M.O.M. Mouse Ig Blocking Reagent                                    | MKB-2213 |
| Carbo-Free™ Blocking Solution                                       | SP-5040  |



| Fluorochrome-Labeled Secondary Antibodies            |         |             |             |             |             |             |         |         |
|--|---------|-------------|-------------|-------------|-------------|-------------|---------|---------|
| Product  | AMCA    | Fluorescein | DyLight 488 | DyLight 549 | DyLight 594 | DyLight 649 | Cy3®    | Cy5®    |
| Anti-Mouse IgG (H+L), made in horse                  |         | FI-2000     | DI-2488     | DI-2549     | DI-2594     | DI-2649     | CY-2300 | CY-2500 |
| Anti-Mouse IgG (H+L), rat adsorbed, made in horse    |         | FI-2001     |             |             |             |             |         |         |
| Anti-Mouse IgM, mu chain specific, made in goat      |         | FI-2020     |             |             |             |             |         |         |
| Anti-Rabbit IgG (H+L), made in horse                 |         |             | DI-1088     |             | DI-1094     |             |         |         |
| Anti-Rabbit IgG (H+L), made in goat                  |         | FI-1000     | DI-1488     | DI-1549     | DI-1594     | DI-1649     | CY-1300 | CY-1500 |
| Anti-Rat IgG (H+L), made in rabbit                   |         | FI-4000     |             |             |             |             |         |         |
| Anti-Rat IgG (H+L), mouse adsorbed, made in rabbit   |         | FI-4001     |             |             |             |             |         |         |
| Anti-Rat IgG, made in goat                           |         |             |             |             |             |             | CY-4300 | CY-4500 |
| Anti-Goat IgG (H+L), made in horse                   |         |             | DI-3088     |             | DI-3094     |             |         |         |
| Anti-Goat IgG (H+L), made in rabbit                  | CI-5000 | FI-5000     |             |             |             |             |         |         |
| Anti-Sheep IgG (H+L), made in rabbit                 |         | FI-6000     |             |             |             |             |         |         |
| VectaFluor™ Anti-Rabbit IgG, made in horse           |         |             | DI-1788     |             | DI-1794     |             |         |         |
| VectaFluor™ Anti-Mouse IgG, made in horse            |         |             |             |             | DI-2794     |             |         |         |
| Anti-Human Fluorochrome-Labeled Secondary Antibod    | lies    |             |             |             |             |             |         |         |
| Anti-Human IgG (H+L), made in goat                   |         | FI-3000     |             |             |             |             |         |         |
| Anti-Human IgE, epsilon chain specific, made in goat |         | FI-3040     |             |             |             |             |         |         |
| Anti-Human IgG, gamma chain specific, made in goat   |         | FI-3080     |             |             |             |             |         |         |
| Anti-Human IgM, mu chain specific, made in goat      |         | FI-3020     |             |             |             |             |         |         |
| Anti-Human Kappa Chain, made in goat                 | CI-3060 | FI-3060     |             |             |             |             |         |         |
| Anti-Human Lambda Chain, made in goat                | CI-3070 | FI-3070     |             |             |             |             |         |         |



| Tertiary Reagents                                 |         |         |             |             |             |             |             |         |         |
|---|---------|---------|-------------|-------------|-------------|-------------|-------------|---------|---------|
| Product   | Biotin  | AMCA    | Fluorescein | DyLight 488 | DyLight 549 | DyLight 594 | DyLight 649 | СуЗ     | Cy5     |
| VectaFluor Excel Amplified<br>Anti-Rabbit IgG Kit |         |         |             | DK-1488     |             | DK-1594     |             |         |         |
| VectaFluor Excel Amplified<br>Anti-Mouse IgG Kit  |         |         |             | DK-2488     |             | DK-2594     |             |         |         |
| Streptavidin                                      |         | SA-5008 | SA-5001     | SA-5488     | SA-5549     | SA-5594     | SA-5649     | SA-1300 | SA-1500 |
| Avidin  |         |         | A-2001      |             |             |             |             |         |         |
| Avidin DCS  |         |         | A-2011      |             |             |             |             |         |         |
| Anti-Streptavidin                                 | BA-0500 |         |             | SP-4488     | SP-4549     |             |             |         |         |
| Anti-Avidin                                       | BA-0300 |         |             |             |             |             |             |         |         |



| Secondary Antibody Kits   |          |  |  |  |  |
|---|----------|--|--|--|--|
| Product   | Cat. No. |  |  |  |  |
| VectaFluor Duet Kits  |          |  |  |  |  |
| VectaFluor Duet IF Double Labeling Kit<br>- DyLight 488 Anti-Rabbit (green)<br>- DyLight 594 Anti-Mouse (red) | DK-8818  |  |  |  |  |
| VectaFluor Duet IF Double Labeling Kit<br>- DyLight 594 Anti-Rabbit (red)<br>- DyLight 488 Anti-Mouse (green) | DK-8828  |  |  |  |  |
| M.O.M. (Mouse on Mouse) Kits  |          |  |  |  |  |
| M.O.M. Basic Kit  | BMK-2202 |  |  |  |  |
| M.O.M. Fluorescein Kit  | FMK-2201 |  |  |  |  |



| Counterstain/Mount  |          |
|---|----------|
| Product   | Cat. No. |
| Non-Hardening Formula   |          |
| VECTASHIELD Antifade Mounting<br>Medium                                   | H-1000   |
| VECTASHIELD Antifade Mounting<br>Medium with DAPI                         | H-1200   |
| VECTASHIELD Antifade Mounting<br>Medium with PI                           | H-1300   |
| Hardening Formula   |          |
| VECTASHIELD HardSet™ Antifade<br>Mounting Medium                          | H-1400   |
| VECTASHIELD HardSet Antifade<br>Mounting Medium with DAPI                 | H-1500   |
| VECTASHIELD HardSet Antifade<br>Mounting Medium with TRITC-<br>Phalloidin | H-1600   |
| VECTASHIELD Vibrance™ Antifade<br>Mounting Medium                         | H-1700   |
| VECTASHIELD Vibrance Antifade<br>Mounting Medium with DAPI                | H-1800   |
|   |          |

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