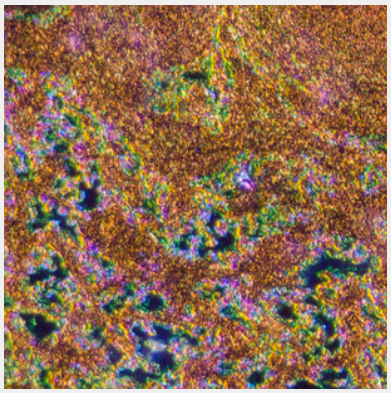
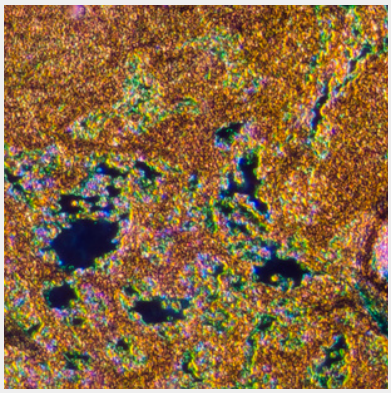
antibodies.com

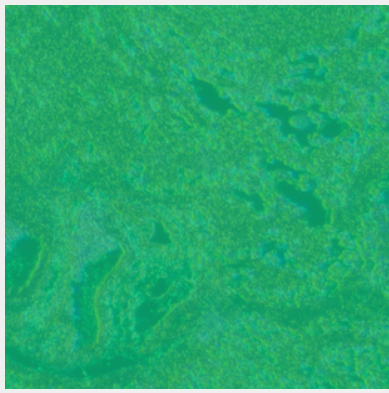
IHC Detection Tools

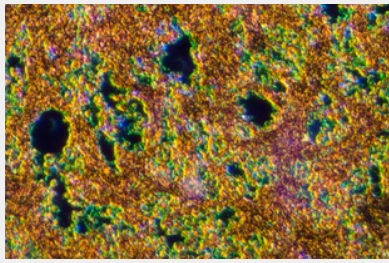
New Products in 2024

Immunohistochemistry is a technique used to visualize the distribution and localization of specific proteins or antigens in tissues.









Explore More
⟶

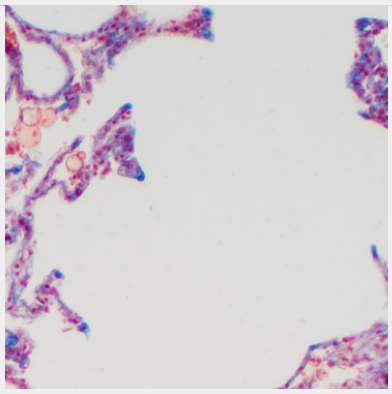
Europe + 46 (0)8-525 070 54 **UK** + 44 (0)1223 298 875 **USA** + 1 (314) 370-6046
Email: info@antibodies.com **&** orders@antibodies.com

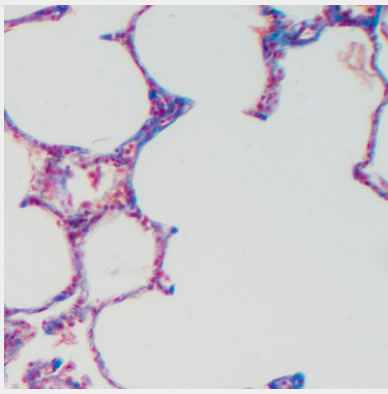
Overview

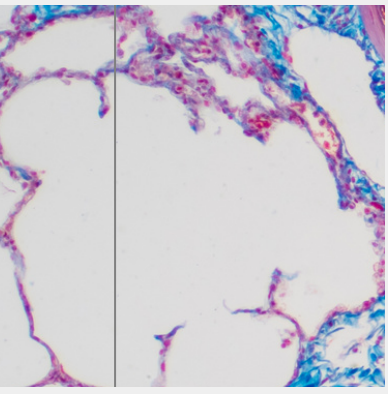
IHC Detection Tools are methods and reagents used in immunohistochemistry (IHC) to visualize the interaction between antibodies and antigens in tissue sections. IHC Detection Tools are important for studying the localization and expression of proteins and other biomolecules in the context of intact tissue, and for diagnosing various diseases based on their molecular signatures.

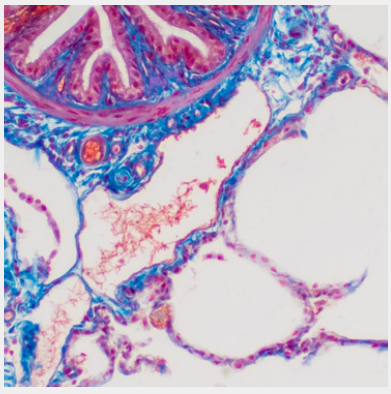
Our Diagnostic-Grade IHC Detection Tools at Affordable Prices

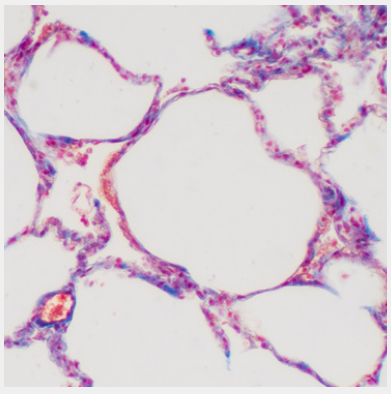
Chromogen Kits



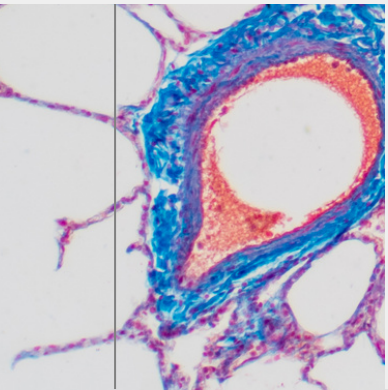






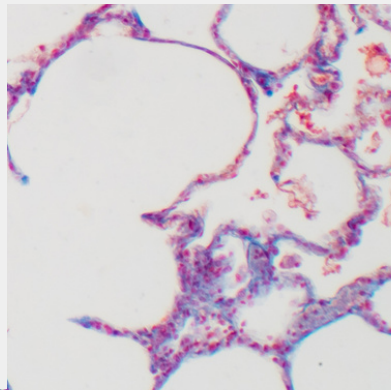


Detection Kits



Antigen Retrieval Buffers

Ancillary Reagents

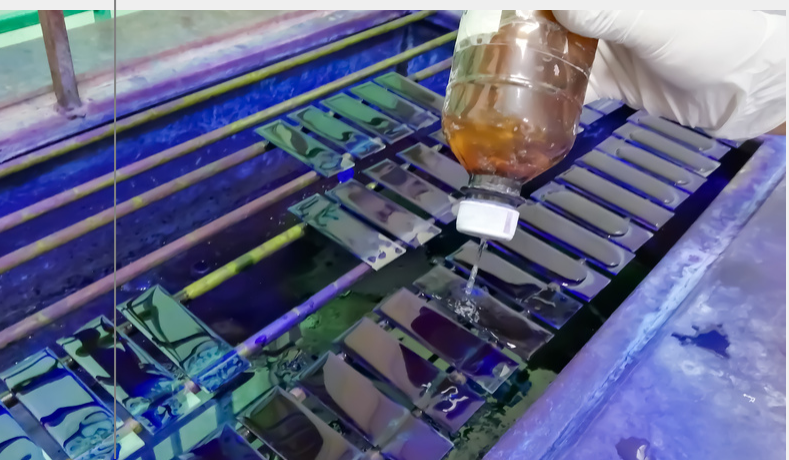


Antigen Retrieval

Antigen retrieval buffer is a solution that is used to unmask the antigens on tissue sections that have been fixed with formalin or other cross-linking agents. Antigen retrieval buffer can have different pH values and compositions, depending on the type of antigen and tissue.

Buffers

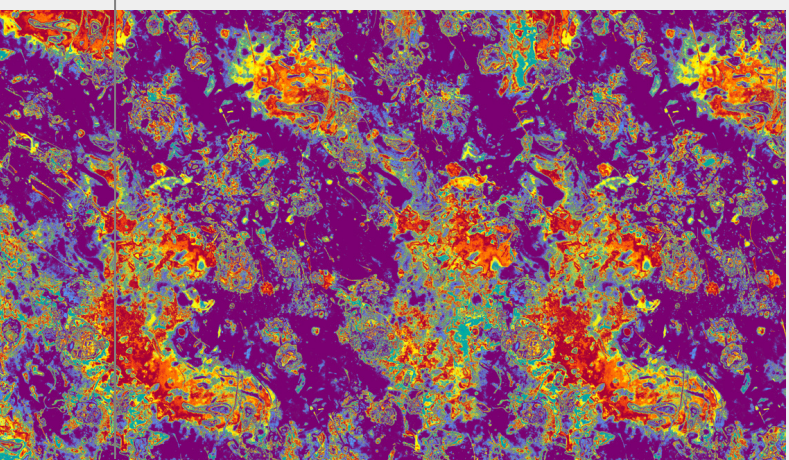
- **10X Antigen Retrieval Buffers**: pH 10.0 (A319566), pH 6.0 (A319559), pH 7.0 (A319560), H 8.0 (A319561), pH 8.0 EDTA (A319562), pH 9.0 Tris-EDTA (A319565)
- **One-step Dewaxing/Antigen Retrieval Buffers**: pH 6.0 (A293492), pH 9.0 (A293491)



Detection Kits

These kits are used to visualize the antibody-antigen binding by using an enzyme, such as horseradish peroxidase (HRP) or alkaline phosphatase (AP), that catalyzes a colorimetric or fluorometric reaction. Some kits also include a blocking reagent to reduce non-specific binding, especially for mouse antibodies on mouse tissues.

Mouse HRP Kit (A319533)	This kit contains a biotinylated goat anti-mouse secondary antibody and a streptavidin-HRP conjugate. Used to detect mouse primary antibodies on tissue sections.
Mouse/Rabbit HRP Kit (A319534)	This kit contains a biotinylated goat anti-rabbit/mouse secondary antibody and a streptavidin-HRP conjugate. Used to detect mouse or rabbit primary antibodies on tissue sections.
Mouse/Rabbit HRP/DAB Kit (A319535)	This kit contains a biotinylated goat anti-rabbit/mouse secondary antibody, a streptavidin-HRP conjugate, and a DAB chromogen/substrate. Used to detect mouse or rabbit primary antibodies on tissue sections.
Mouse on Mouse HRP/DAB Detection Kit (A319543)	This kit contains a mouse Ig blocking reagent and a mouse-specific HRP polymer reagent. Used to reduce endogenous mouse Ig staining and detect mouse primary antibodies on mouse tissue sections.
Peroxidase Mouse & Rabbit Kit (A319546)	This kit contains a peroxidase-conjugated polymer backbone with secondary antibody molecules against mouse and rabbit immunoglobulins. Used to detect mouse or rabbit primary antibodies on tissue sections.
Peroxidase Mouse & Rabbit Kit (DAB Liquid) (A319547)	This kit contains a peroxidase-conjugated polymer backbone with secondary antibody molecules against mouse and rabbit immunoglobulins, and a DAB chromogen/substrate. Used to detect mouse or rabbit primary antibodies on tissue sections.



30 Minutes - Immunohistochemistry DAB Detection System [A320597]

- for Mouse/Rabbit Antibodies

Experience an advanced system designed to greatly amplify chromogenic signals in conventional manual IHC staining procedures.

- **Rapid 3-step** IHC protocol
- Results in less than **30 minutes**

Staining Procedure

Tissue Primer (1 min)

Primary Antibody (5 min)

Linker 1 (5 min)

Linker 2 (5 min)

Tracer (5 min)

Stable DAB (5 min)

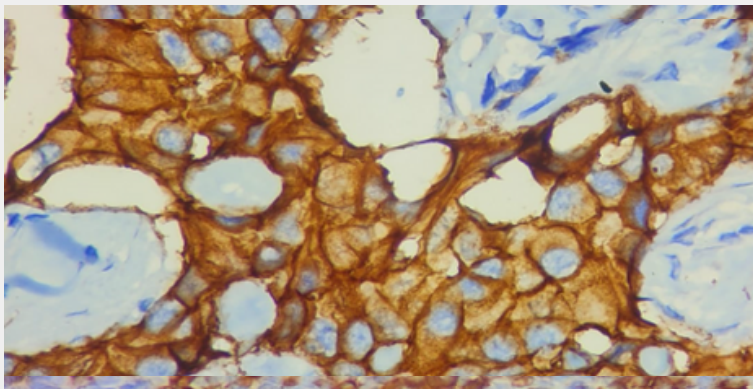
Counterstain (1 min)

Dehydration (1 min)

Final Cover (1 min)

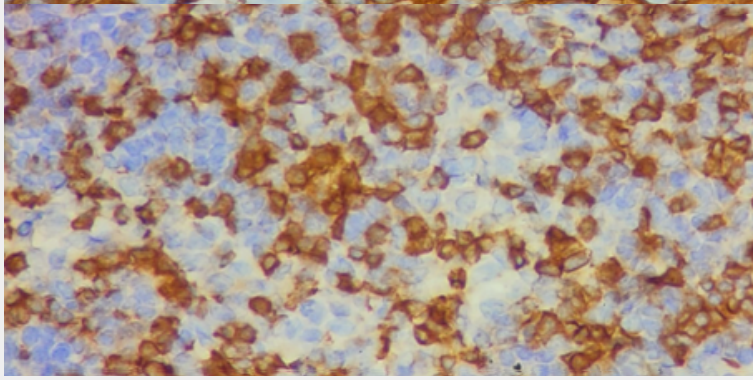
3-Step DAB Detection

Tissue Type: FFPE
Antibody: Her2-Neu
Incubation: 5min



3-Step DAB Detection

Tissue Type: FFPE
Antibody: CD3
Incubation: 5min



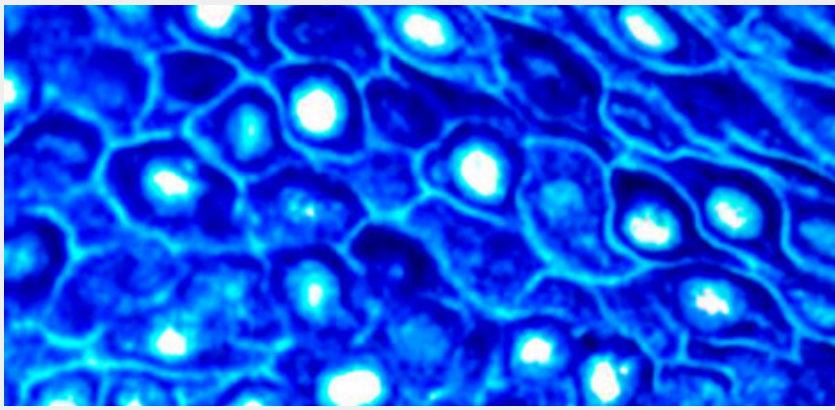
Chromogen Kits

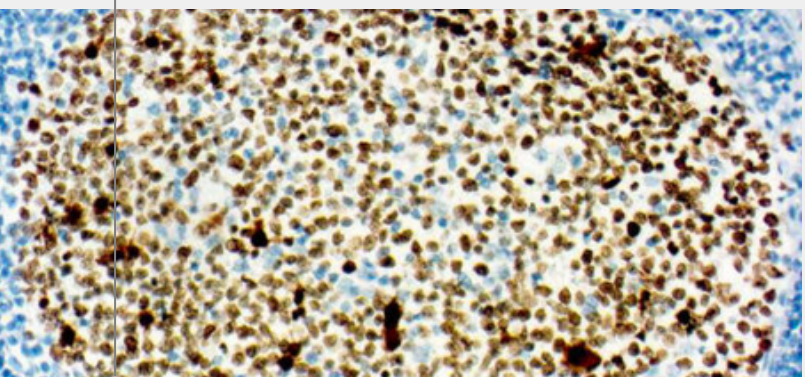
Chromogen kits are essential components in immunohistochemistry (IHC) detection tools, which are widely used in biological and medical research to visualize the presence, localization, and abundance of specific proteins in tissue samples. Chromogens play a crucial role in generating a visible and interpretable signal.

Alkaline Phosphatase	• AP Chromogen - Red Kit (A319571) • AP Chromogen - Red (Auto, Enhanced) Kit (A319577) • AP Chromogen - Blue Enhanced Kit (A319578) • AP Chromogen - Green Enhanced Kit (A319579) • DAB Auto Kit (A319590) • High Contrast DAB Kit (A319575) • DAB Substrate (Stable) Kit (A319569) • AP Enhancer (A319553)
Horseradish peroxidase	• HRP Chromogen - Yellow Kit (A319580) • HRP Chromogen - Black Kit (A319581) • HRP Chromogen - Blue Kit (A319582) • HRP Chromogen - Green Kit (A319586) • HRP Chromogen - Red Kit (A319587)

AP - Blue Enhanced Kit (A319578)

Tissue: Human tonsil
Type: FFPE
Antibody: HMW CK
Incubation: 5min



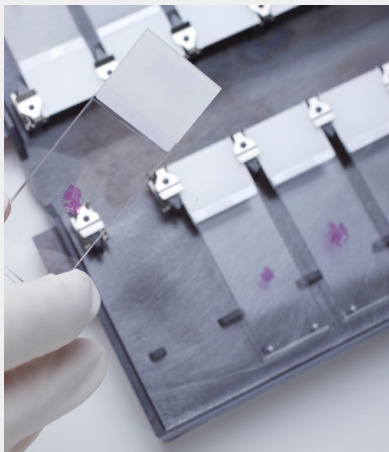


DAB Auto (A319590)

Tissue: Human tonsil
Type: FFPE
Antibody: CD8
Incubation: 5min

Other related Products

Tissue Section Preparation	• **Elite PAP Pen (A319563):** Creates a hydrophobic barrier around tissue sections to prevent the spread of reagents. • **Tissue Glue (A319596):** Glues tissue sections to slides, preventing detachment. • **Tissue Primer (A319574):** Primes tissue
Dewaxing	• **DP3 for One-Step Deparaffinization** (A319591) • **One-step Dewaxing/Antigen Retrieval Buffer (pH6.0)** (A293492) • **One-step Dewaxing/Antigen Retrieval Buffer (pH9.0)** (A293491)
Serum	• **Normal Donkey Serum** (A319763) • **Normal Goat Serum** (A319764) • **Normal Mouse Serum** (A319765) • **Normal Rat Serum** (A319766)
Additional Staining and Counterstaining	• **FITC Diluent (A319550)**: Dilutes FITC conjugated antibodies or probes for reduced background fluorescence. • **Hematoxylin (A319576)**: Stains cell nuclei blue, providing contrast to chromogenic or fluorescent staining. • **Nuclear Fast Red for IHC (A319597)**: Stains cell nuclei red, serving as a counterstain. • **Purple Hematoxylin for IHC (A319595)**: Stains cell nuclei purple, offering a counterstain.
Mounting and Sealing	• **IHC Fluorescent Mounting Media Enhanced (A319570), Standard (A319556)** • **IHC Preservation Sealer (A319588)**: Seals tissue sections after staining, preventing them from fading or deteriorating. • **Histology Sealer (10X) (A319594)**: Seals tissue sections on slides before staining or mounting.
Wash Buffers	• **40X Immuno Wash Buffer (A319589)**: Concentrated buffer for washing tissue sections, removing excess reagents, and reducing background staining. • **Immuno Wash Buffer, 10X (A319551)**: Concentrated buffer for washing tissue sections, removing excess reagents, and reducing background staining.



Trouble Shooting

Little or no staining of controls or specimen tissue, except for counterstain. May show little or no background staining.

Possible Cause	Solution
Primary antibody diluted with inappropriate buffer.	• Verify the formula and compatibility of the antibody diluent, as changes in ion concentration or pH may reduce antibody sensitivity, especially with monoclonal antibodies. • Avoid adding NaCl to the antibody diluent. • Prevent nonspecific binding and improve antibody penetration using the recommended diluent.
Primary antibody defective; one or several secondary or ancillary reagents defective. Do NOT use product after expiration date stamped on vial.	• Store products according to each product specific package insert. • If using a neat or concentrated antibody, it may be aliquoted and frozen. Avoid repeated freezing and thawing. • Do not freeze ready-to-use diluted products.
Use of alcohol-based counterstain and/or alcohol-based mounting media with aqueous- based chromogens.	• Repeat staining, using water-based counterstain and mounting media. Use a permanent chromogen, such as DAB, that is not affected by organic solvents.

Excessive counterstaining may compromise proper interpretation of results.	• Use a counterstain that:
	  ◦ Will not excessively stain tissue sections.
	  ◦ Can be diluted so as not to obliterate the specific signal.
	• Reduce incubation time of the counterstain.

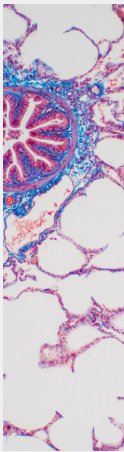
Immunoreactivity diminished or destroyed during dewaxing at high oven temperature.	• Oven temperature not to exceed 60°C. • **Note**: The intensity of immunostaining may be diminished when tissue is exposed to prolonged heat.

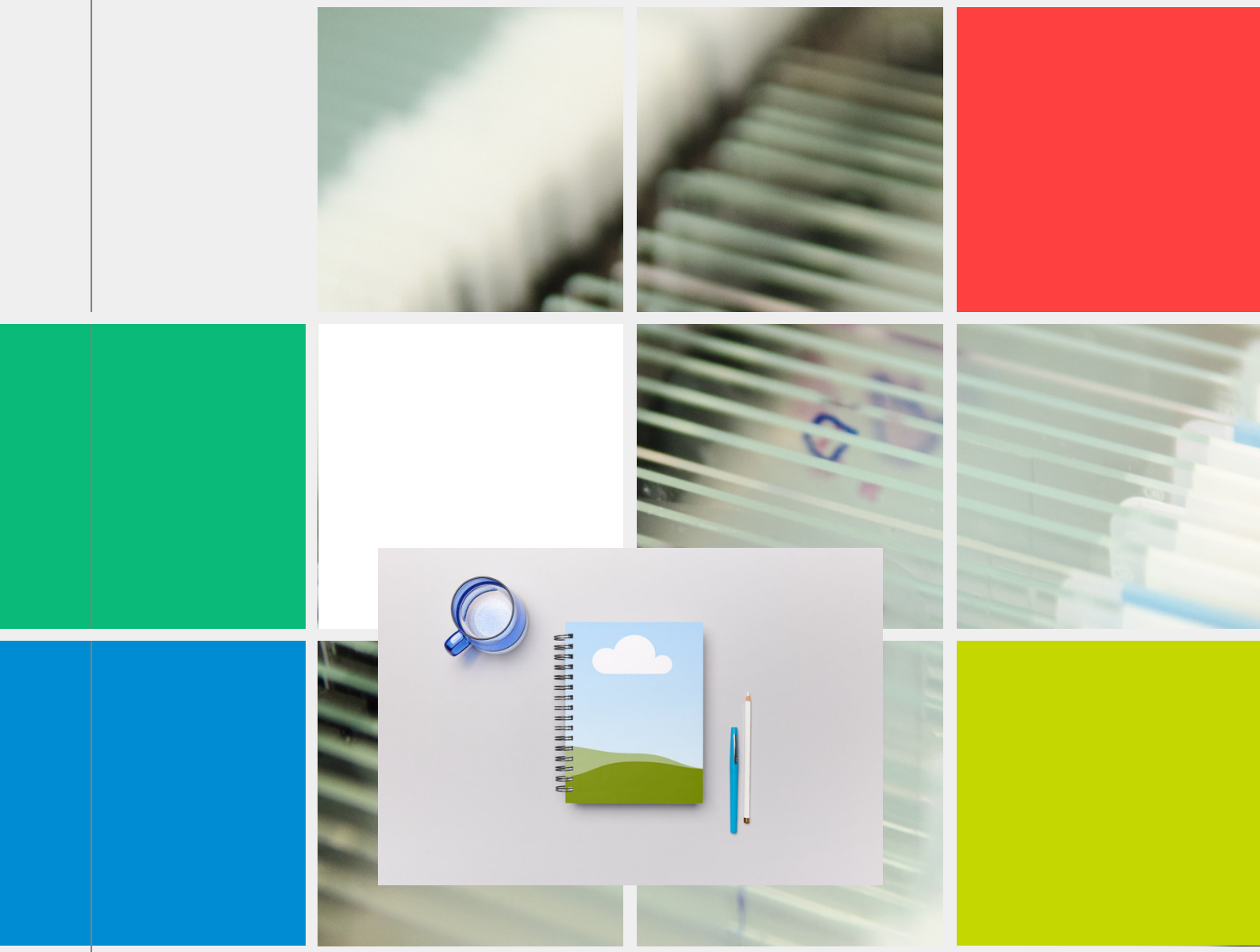
Trouble Shooting

Incompatible buffer used for preparation of enzyme substrate–chromogen reagents.	• Check the compatibility of buffer ingredients with enzyme and substrate-chromogen reagents. Repeat staining. • Commercial phosphate buffers may contain additives that will inhibit alkaline phosphatase activity. • Avoid sodium azide in diluents and buffers. • A concentration of 15mM/Lsodium azide, which is routinely added to IHC reagents to inhibit bacterial growth.
Excessive wash buffer or blocking serum remaining on tissue section prior to application of IHC reagents.	• Excess reagent left on the tissue section will dilute the next consecutive reagent. Repeat staining, wiping away excess washing buffer and blocking serum.

Background seen in all control tissues and specimen tissue. May see marked back- ground staining in several tissue elements such as connective tissue, adipose tissue and epithelium.

Possible Cause	Solution
Excessive incubation with substrate–chromogen reagent.	• Reduce incubation time.
Substrate–chromogen reagent prepared incorrectly.	• Repeat incubation with correctly prepared chromogen reagent.
Secondary (link antibody) and/or tertiary reagents too concentrated.	• Repeat staining. Determine correct concentration for each reagent. Incubation temperature and incubation time will affect results. To determine the optimal incubation protocol, vary both the time and temperature for each reagent in the IHC staining protocol.
Sections incorrectly dewaxed	• Prepare new sections and deparaffinize accord- ing to standard laboratory protocol using fresh xylene or xylene substitute.





Contact us for further inquiries

antibodies.com

Europe + 46 (0)8-525 070 54 **UK** + 44 (0)1223 298 875 **USA** + 1 (314) 370-6046
Email: info@antibodies.com **&** orders@antibodies.com