

Vector® ImmPRESS[™] Polymer Detection Reagents

For tissue and cell based antigen visualization

The ImmPRESS™ Polymerized Reporter Enzyme Staining System is an enzymatic, ready-to-use, non-biotin, one-step detection kit. ImmPRESS™ Polymer Reagents consist of unique micropolymers of highly active peroxidase or alkaline phosphatase enzyme attached to highly cross-adsorbed, affinity purified secondary antibodies.

ImmPRESS™ VR (Veterinary Reagents) HRP Polymer Detection Reagents are specifically designed for use in animal species most commonly used in diagnostic and research-based animal model systems: bovine, goat, sheep, swine, horse, cat, dog, rabbit, rat, and mouse. These reagents are additionally cross-adsorbed to ensure minimal cross-reactivity against endogenous tissue elements in these animal species.

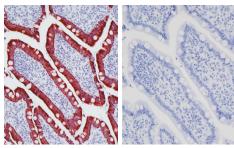
The ImmPRESS™ Polymer Reagents produce outstanding immunohistochemistry and immunocytochemistry results due to increased target accessibility, binding specificity, and signal intensity along with low background staining. A complete ImmPRESS™ product listing can be found on the last page.

Multiple Antigen Labeling

This simple system is also ideal for use in multiple labeling or multiplexing IHC applications because of the high sensitivity and low off-target binding. Pairing ImmPRESS $^{\text{TM}}$ Polymer Reagents with Vector's ImmPACT $^{\text{TM}}$ line of substrates produces sensitivities at least 2-4 times greater than with conventional substrates. Because the ImmPRESS $^{\text{TM}}$ Polymer System is a single step reagent, the time for multiple labeling experiments is shortened and the protocol simplified.

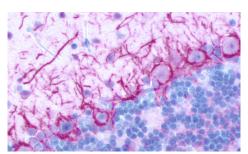
Key advantages:

- Micropolymer technology
- One-step detection, saves hands-on time
- Ready-to-use in a convenient dropper bottle, improves bench workflow
- Choice of HRP and AP detection systems
- Enhanced accessibility to nuclear and membrane antigens
- Simplified multiple labeling on same tissue section with reliable, reproducible results
- High sensitivity
- Low background

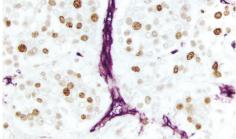


Left: Dog intestine: multi-cytokeratin (m), ImmPRESS™ VR HRP (Anti-Mouse IgG), Vector® NovaRed™ Substrate. Counterstained with Vector® Hematoxylin QS.

Right: No mouse primary antibody negative control section displaying no background.



Mouse brain: Neurofilament 200kDa (m), ImmPRESS™-AP Anti-Mouse Ig Reagent, Vector® Red (magenta), Hematoxylin QS counterstain (blue). M.O.M.™ Mouse Ig Blocking Reagent used to block endogenous mouse IgG.



Breast Carcinoma: • Ki67 (rm), ImmPRESS™ HRP Reagent (Universal), Vector® DAB substrate (brown) • CD34 (m), ImmPRESS™ HRP Reagent (Universal), Vector® VIP substrate (purple).

Multiplexing with Imm**PRESS**[™] Polymer Reagents

Multiple antigen labeling (multiplexing) in the same tissue section can easily be incorporated in your lab using the ImmPRESS™ reagents and following the guidelines indicated.

It is recommended to establish single antigen labeling on separate tissue sections prior to commencing double staining.

Step 1 - Antigen Retrieval:

Perform antigen retrieval, if required by the primary antibody, using the appropriate Vector® Antigen Unmasking Solution (Citrate-based, H-3300 or Tris-based, H-3301) with high temperature.

Step 2 - Endogenous Enzyme Blocking:

If endogenous enzyme activity is present in the tissue, a blocking reagent such as BLOXALL™ Endogenous HRP/AP Blocking Solution (SP-6000) should be used.

Please Note: A heat denaturing step does not inactivate endogenous peroxidases.

Step 3 - Protein Blocking:

Block potential non-specific tissue interactions by incubating the section with the ready-to-use serum block included in ImmPRESS™ Polymer Detection Kit.

Step 4 - Primary antibody:

Incubate with the primary antibody solution according to manufacturer's recommendations. Primary antibody titer should be re-optimized for multiple labeling applications.

Step 5 - ImmPRESS™ Polymer Detection Reagent:

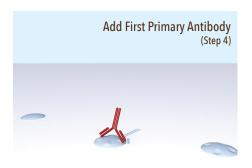
Incubate the section with the Ready-to-use ImmPRESS™ Reagent according to the instructions. The wash time listed in the protocol, especially after the ImmPRESS™ Reagent, should be followed and can be lengthened if necessary.

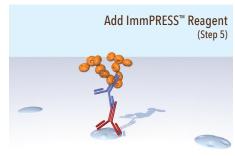
Step 6. Enzyme Substrate:

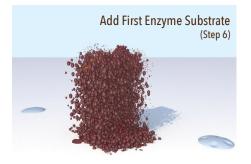
Incubate in the Vector® substrate of choice. Match the substrate with the correct enzyme detection system and consider properties such as sensitivity, color contrast, type of microscopy, and heat resistance.

Repeat Steps 3-6 for detecting the second antigen.

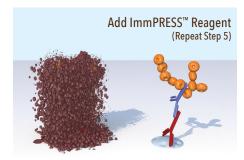
Note: All staining protocols need to be optimized for a particular application, and the appropriate deletion controls should always be run to allow for the accurate interpretation of results.

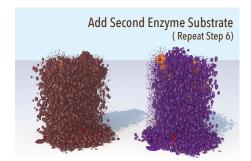












Vector® Imm**PRESS**™ *Excel*Amplified Peroxidase Polymer Staining System

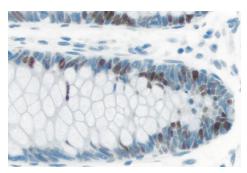
ImmPRESS™ Excel Anti-Rabbit IgG Staining Kit	MP-7601	15 ml
		50 ml
ImmPRESS™ Excel Anti-Mouse IgG Staining Kit	MP-7602	15 ml
		50 ml

ImmPRESS™ Excel Amplified Peroxidase (HRP) Polymer Staining Systems are complete staining kits that capitalize on all the advantages of the ImmPRESS™ HRP Polymer System technology and offer additional sensitivity and convenience.

This system employs a ready-to-use (R.T.U.) Amplifier Antibody, followed by an ImmPRESS™ Excel HRP Polymer Reagent. These reagents are affinity purified and extensively cross-adsorbed to ensure high sensitivity and low background. The result of this non-biotin, two-step amplification is an increase in signal intensity with low background staining.

The ImmPRESS™ Excel Amplified HRP Kits would be recommended for applications that require detection of weakly expressed antigens or in cases of unknown expression levels such as gene knock-in studies, or in determining up regulation of a given target. This straightforward kit format will yield reliable, consistent results and save time in trying to establish optimal titrations with concentrated detection reagents.

Colon: Anti-CD34 (mouse monoclonal), ImmPRESS™ Excel Amplified Anti-Mouse IgG Staining Kit, ImmPACT™ DAB EqV (brown). Hematoxylin QS counterstain (blue).



Colon: Anti-Ki67 (rabbit monoclonal), ImmPRESS™ Excel Amplified Anti-Rabbit IgG Staining Kit, ImmPACT™ DAB EgV (brown). Hematoxylin QS counterstain (blue).

Each ImmPRESS™ Excel Amplified Staining Kit includes the following ready-to-use (RTU) reagents:

- BLOXALL™ Endogenous Enzyme Blocking Solution
- 2.5% Normal Horse Serum
- Amplifier Antibody (goat anti-rabbit Ig or goat anti-mouse IgG)
- ImmPRESS™ Excel Polymer Reagent (horse anti-goat IgG)
- ImmPACT™ DAB EqV Reagent 1 (Chromogen)
- ImmPACT[™] DAB EqV Reagent 2 (Buffer)

ImmPRESS™ Excel Staining Kit (15 ml) will stain approximately 75-150 sections and ImmPRESS™ Excel Staining Kit (50 ml) will stain approximately 250-500 sections.



ImmPRESS™ Polymer Detection Kits Available:

Enzyme	Product	Catalog Number	Unit Size	ImmPRESS™ Reagent	Normal Blocking Serum	Approximate Number of Sections Stained
Peroxidase	ImmPRESS™ Anti-Rabbit IgG Kit (made in horse)	MP-7401	15 ml	15 ml ready-to-use solution	15 ml 2.5% normal horse serum	75-150
			50 ml	50 ml ready-to-use solution	50 ml 2.5% normal horse serum	250-500
	ImmPRESS™ Anti-Mouse IgG Kit (made in horse)	MP-7402	15 ml	15 ml ready-to-use solution	15 ml 2.5% normal horse serum	75-150
			50 ml	50 ml ready-to-use solution	50 ml 2.5% normal horse serum	250-500
	ImmPRESS™ Anti-Mouse IgG, Rat Adsorbed, Kit (made in horse)	MP-7422	15 ml	15 ml ready-to-use solution	15 ml 2.5% normal horse serum	75-150
	ImmPRESS™ Anti-Rat IgG Kit (made in goat)	MP-7404	50 ml	50 ml ready-to-use solution	50 ml 2.5% normal goat serum	250-500
	ImmPRESS™ Anti-Rat IgG, Mouse Adsorbed, Kit (made in goat)	MP-7444	15 ml	15 ml ready-to-use solution	15 ml 2.5% normal goat serum	75-150
	ImmPRESS™ Anti-Goat IgG Kit (made in horse)	MP-7405	50 ml	50 ml ready-to-use solution	50 ml 2.5% normal horse serum	250-500
	ImmPRESS™ Anti-Rabbit IgG Kit (made in goat)	MP-7451	15 ml	15 ml ready-to-use solution	15 ml 2.5% normal goat serum	75-150
			50 ml	50 ml ready-to-use solution	50 ml 2.5% normal goat serum	250-500
	ImmPRESS™ Anti-Mouse IgG Kit (made in goat)	MP-7452	15 ml	15 ml ready-to-use solution	15 ml 2.5% normal goat serum	75-150
			50 ml	50 ml ready-to-use solution	50 ml 2.5% normal goat serum	250-500
	ImmPRESS™ Universal Antibody Kit, Anti-Rabbit/Mouse IgG	MP-7500	15 ml	15 ml ready-to-use solution	15 ml 2.5% normal horse serum	75-150
			50 ml	50 ml ready-to-use solution	50 ml 2.5% normal horse serum	250-500
	ImmPRESS™ VR Anti-Rabbit IgG Kit (made in horse)	MP-6401	15 ml	15 ml ready-to-use solution	15 ml 2.5% normal horse serum	75-150
	ImmPRESS™ VR Anti-Mouse IgG Kit (made in horse)	MP-6402	15 ml	15 ml ready-to-use solution	15 ml 2.5% normal horse serum	75-150
	Vector® M.O.M™ ImmPRESS™ Kit (with M.O.M™ Mouse Ig Blocking Reagent)	MP-2400	15 ml	15 ml ready-to-use solution	30 ml 2.5% normal horse serum	75-150
Amplified Peroxidase	ImmPRESS™ Excel Anti-Rabbit IgG Staining Kit	MP-7601	15 ml	15 ml ready-to-use solution	15 ml 2.5% normal horse serum	75-150
			50 ml	50 ml ready-to-use solution	50 ml 2.5% normal horse serum	250-500
	ImmPRESS™ Excel Anti-Mouse IgG Staining Kit	MP-7602	15 ml	15 ml ready-to-use solution	15 ml 2.5% normal horse serum	75-150
			50 ml	50 ml ready-to-use solution	15 ml 2.5% normal horse serum	75-150
Alkaline Phosphatase	ImmPRESS™-AP Anti-Rabbit IgG Kit (made in horse)	MP-5401	15ml	15 ml ready-to-use solution	15 ml 2.5% normal horse serum	75-150
			50 ml	50 ml ready-to-use solution	50 ml 2.5% normal horse serum	250-500
	ImmPRESS™-AP Anti-Mouse IgG Kit (made in horse)	MP-5402	15ml	15 ml ready-to-use solution	15 ml 2.5% normal horse serum	75-150
			50 ml	50 ml ready-to-use solution	50 ml 2.5% normal horse serum	250-500
	o! ImmPRESS™-AP Anti-Goat IgG Kit (made in horse)	MP-5405	15ml	15 ml ready-to-use solution	15 ml 2.5% normal horse serum	75-150
			50 ml	50 ml ready-to-use solution	50 ml 2.5% normal horse serum	250-500
	ImmPRESS™-AP Anti-Rat IgG Kit (made in goat)	MP-5404	15ml	15 ml ready-to-use solution	15 ml 2.5% normal goat serum	75-150
Coming Soc	ImmPRESS™ Anti-Rat IgG, Mouse Adsorbed, Kit (made in goat)	MP-5444	15 ml	15 ml ready-to-use solution	15 ml 2.5% normal horse serum	75-150

