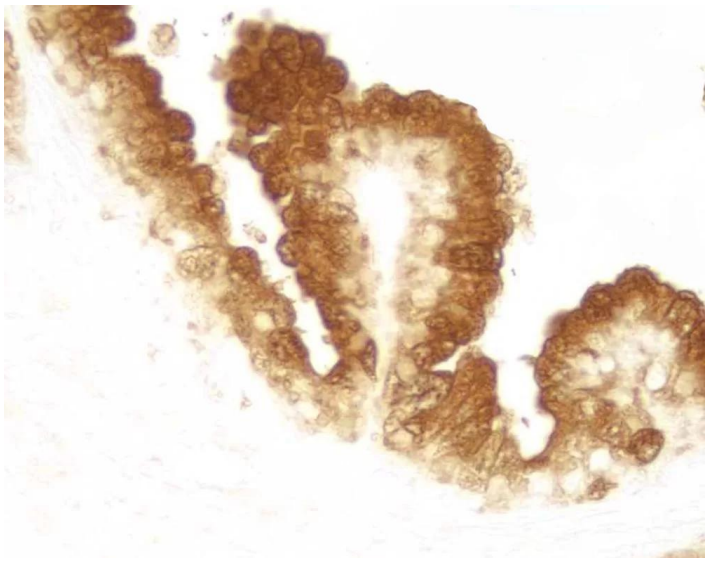
www.vectorlabs.com
Email: customerservice@vectorlabs.com
Telephone: (650) 697-3600

DAB SUBSTRATE KIT, PEROXIDASE (HRP), WITH NICKEL, (3,3'-DIAMINOBENZIDINE)

SKU: SK-4100



DESCRIPTION

This kit contains all of the reagents necessary to prepare either a DAB or a DAB/nickel substrate working solution. Vector DAB Substrate (3,3’-diaminobenzidine) produces a brown reaction product in the presence of peroxidase (HRP) enzyme. This kit also includes nickel chloride, which, when added to the substrate working solution, results in a gray-black reaction product. Vector DAB Substrate is suitable for darkfield and electron microscopy (EM).

Features of this kit:

- Ideal for IHC/ICC/ISH and blots
- Heat Stable
- Permanent mounting
- Ideal for single and multiple labeling
- No wait times for mixing and dissolving powders or tablets

For research use only. Not intended for therapeutic or diagnostic use in animals or humans.

• Sufficient reagents to produce 300 ml of working solution

SPECIFICATIONS

Chromogen Color	Brown, Gray-Black
Detection Enzyme	Peroxidase
Microscopy	Brightfield, Darkfield, Electron, Spectral Imaging
Mounting Medium Type	Aqueous (Hardening), Non-Aqueous (Permanent)
Unit Size	1 Kit
Applications	Immunohistochemistry / Immunocytochemistry, In situ hybridization, Blotting Applications, Elispot
Additional Substrate Properties	Heat Resistant, Multiple Labeling
Safety Title	WARNING: Cancer –www.P65Warnings.ca.gov
Substrate Reaction Product	Precipitating Reaction Product

KIT COMPONENTS

- 6 ml DAB Reagent 1
- 6 ml DAB Reagent 2
- 6 ml DAB Reagent 3
- 6 ml DAB Reagent 4 (Nickel Optional)

TECHNICAL INFORMATION

This kit contains stock solutions in convenient dropper bottles. Slides developed with DAB/ Ni should be dehydrated, cleared, and permanently mounted. For additional information, view this product review on Biocompare.com.

Counterstain / Substrate Compatibility

This table is designed as a reference to determine the optimal counterstain / substrate combination for your application. Consideration should be given to tissue type, antigen

For research use only. Not intended for therapeutic or diagnostic use in animals or humans.

unmasking protocol, and other detection parameters to achieve the desired staining intensity.

Substrate	Catalog Number	Hematoxylin (H-3404) Hematoxylin QS (H-3401)	Methyl Green (H-3402)	Nuclear Fast Red (H-3404)
ImmPACT DAB (brown)	SK-4105	Excellent Contrast	Excellent Contrast	Fair Contrast
ImmPACT DAB EqV (brown)	SK-4103	Excellent Contrast	Excellent Contrast	Fair Contrast
DAB (brown)	SK-4100	Excellent Contrast	Excellent Contrast	Fair Contrast
DAB-Ni (gray-black)	SK-4100	Excellent Contrast	Fair Contrast*	Good Contrast
ImmPACT AEC (red)	SK-4205	Excellent Contrast	Counterstain Incompatibility**	Color Incompatibility
ImmPACT AMEC Red (red)	SK-4285	Excellent Contrast	Counterstain Incompatibility**	Color Incompatibility
AEC (red)	SK-4200	Excellent Contrast	Counterstain Incompatibility**	Color Incompatibility
TMB (blue)	SK-4400	Color Incompatibility	Counterstain Incompatibility	Excellent Contrast
ImmPACT VIP (purple)	SK-4605	Fair Contrast	Excellent Contrast	Poor Contrast
Vector VIP (purple)	SK-4600	Fair Contrast	Excellent Contrast	Poor Contrast
ImmPACT SG (blue-gray)	SK-4705	Poor Contrast	Good Contrast	Excellent Contrast
SG (blue-gray)	SK-4700	Poor Contrast	Good Contrast	Excellent Contrast
ImmPACT NovaRED (red)	SK-4805	Excellent Contrast	Excellent Contrast***	Color Incompatibility
Vector NovaRED (red)	SK-4800	Excellent Contrast	Excellent Contrast***	Color Incompatibility
ImmPACT Vector Red (magenta)	SK-5105	Excellent Contrast	Excellent Contrast	Color Incompatibility
Vector Red (magenta)	SK-5100	Excellent Contrast	Excellent Contrast	Color Incompatibility

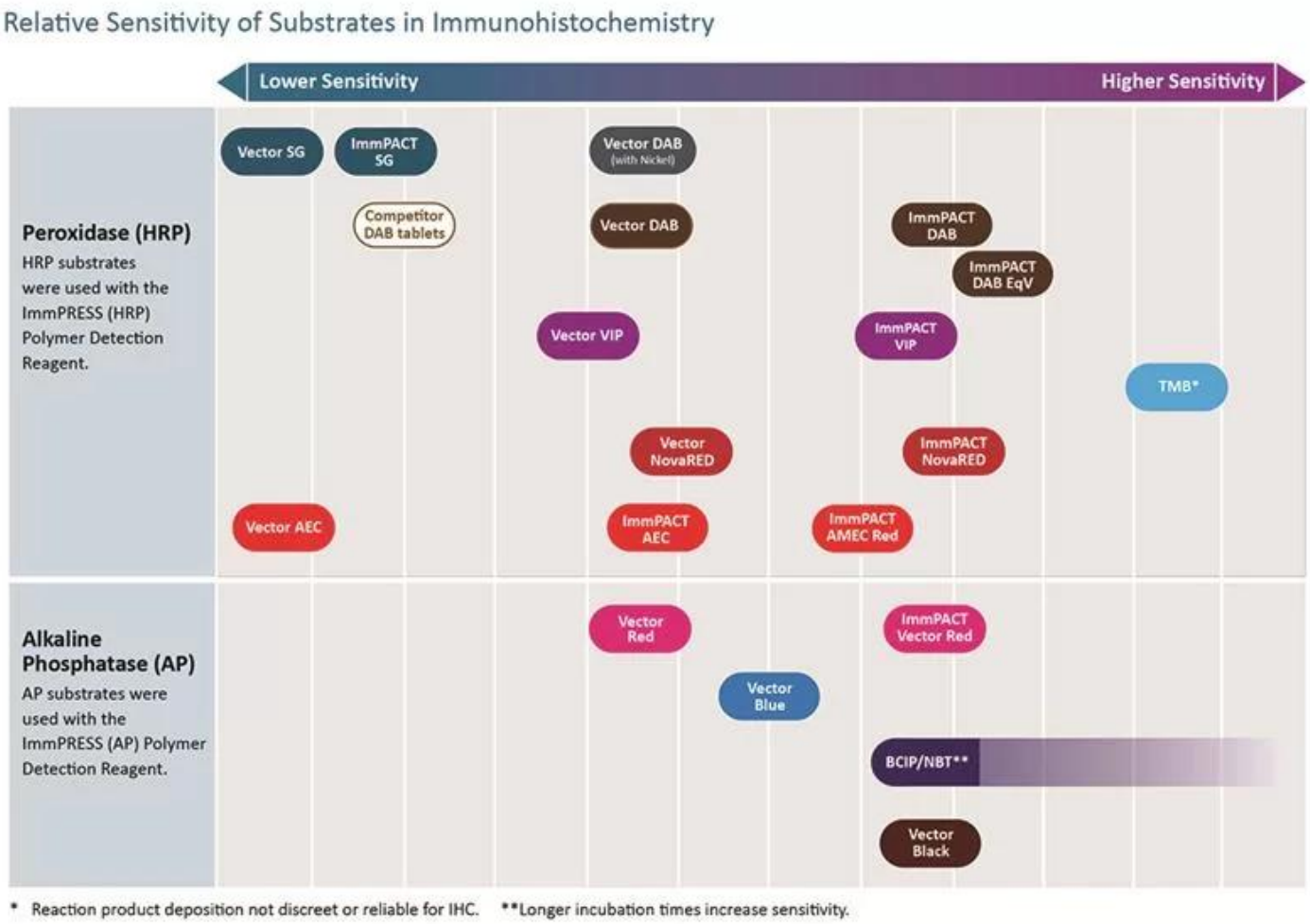
For research use only. Not intended for therapeutic or diagnostic use in animals or humans.

Vector Black (black)	SK-5200	Excellent Contrast	Excellent Contrast*	Excellent Contrast
Vector Blue (blue)	SK-5300	Color Incompatibility	Good Contrast	Excellent Contrast
BCIP / NBT (indigo)	SK-5400	Color Incompatibility	Excellent Contrast*	Excellent Contrast

*This substrate shows a slight decrease in sensitivity following the methyl green protocol. This decrease can be minimized by reducing the heat incubation and acetone rinse times.

**Substrate dissolves in acetone wash.

***A slight color change in ImmPACT NovaRED and Vector NovaRED reaction produt may be seen using methyl green.



For research use only. Not intended for therapeutic or diagnostic use in animals or humans.

www.vectorlabs.com
Email: customerservice@vectorlabs.com
Telephone: (650) 697-3600

Enzyme Substrate Combinations

Recommended combinations of substrates and the recommended order in which they should be used.

First Substrate \ Second Substrate		Alkaline Phosphatase			Peroxidase					
		ImmPACT Vector Red & Vector Red (magenta) SK-5105 & SK-5100	Vector Blue (blue) SK-5300	BCIP/NBT (indigo) SK-5400	ImmPACT VIP & Vector VIP (purple) SK-4605 & SK-4600	ImmPACT DAB, ImmPACT DAB EqV & DAB (brown) SK-4105, SK-4103, SK-4100	DAB-Ni (gray-black) SK-4100	ImmPACT NovaRED & Vector NovaRED (red) SK-4805 & SK-4800	ImmPACT SG & SG (blue-gray) SK-4705 & SK-4700	ImmPACT AEC, ImmPACT AMEC Red & AEC (red) SK-4205, SK-4285, SK-4200
Alkaline Phosphatase	ImmPACT Vector Red & Vector Red (magenta) SK-5105 & SK-5100		–	–	–	+	+	–	+	–
	Vector Blue (blue) SK-5300	+		–	+	+	+	+	+	+
	BCIP/NBT (indigo) SK-5400	+	–		+	+	+	+	+	+
Peroxidase	ImmPACT VIP & Vector VIP (purple) SK-4605, SK-4600	–	+	–		+	+	–	+	–
	ImmPACT DAB, ImmPACT DAB EqV & DAB (brown) SK-4105, SK-4103, SK-4100	+	+	+	+		–	–	+	+
	DAB-Ni (gray-black) SK-4100	+	–	–	+	+		+	–	–
	ImmPACT NovaRED & Vector NovaRED (red) SK-4805, SK-4800	–	+	+	–	+	+		+	–
	ImmPACT SG & SG (blue-gray) SK-4705, SK-4700	+	–	–	+	+	–	–		+
	ImmPACT AEC, ImmPACT AMEC Red & AEC (red) SK-4205, SK-4285, SK-4200	–	–	–	–	+	–	–	+	

+ Indicates good contrast – Indicates incompatiblity of substrates for various reasons

CITATIONS

Powered by Bioz © 2023 See more details on Bioz

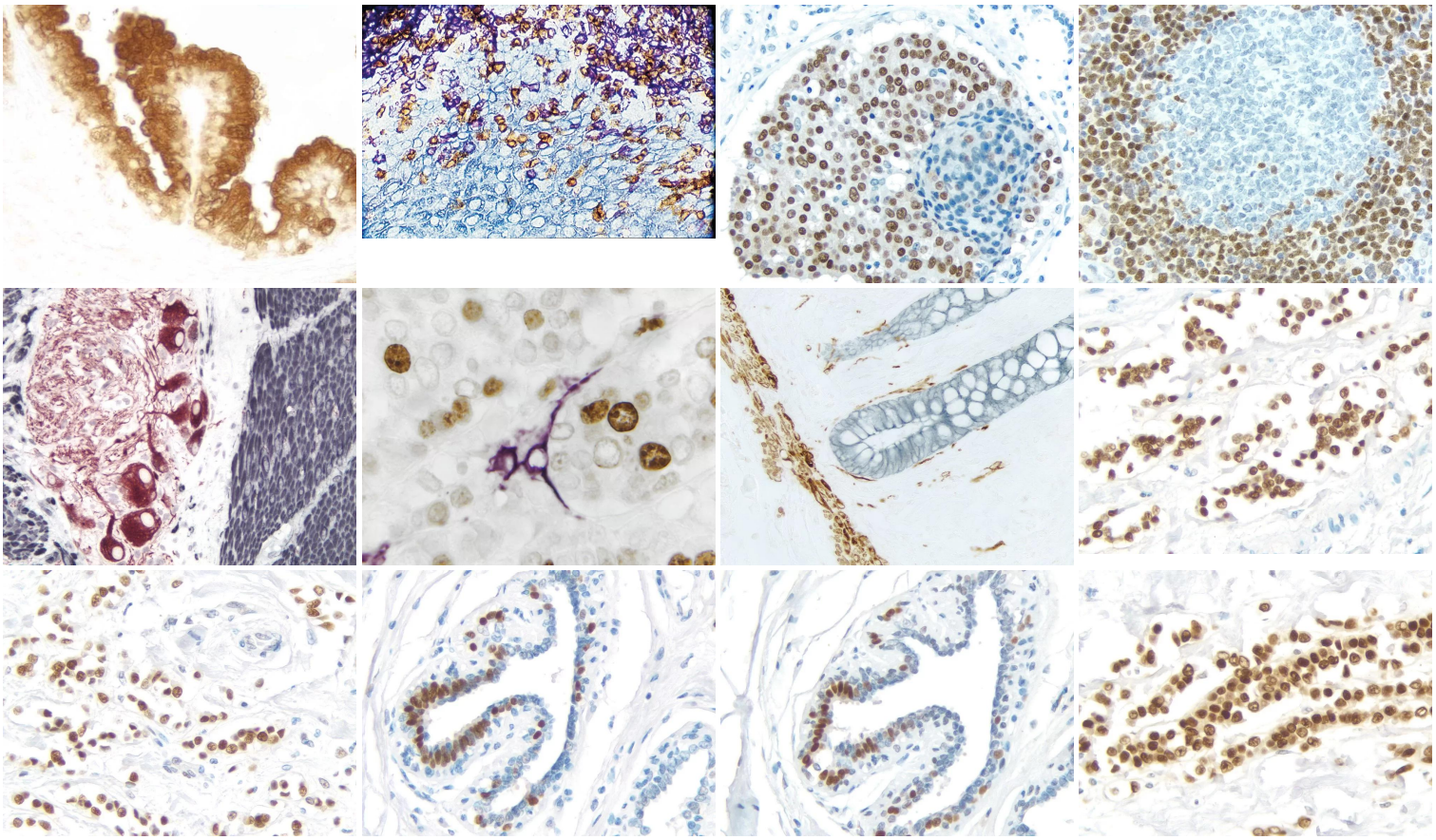
DOCUMENTS

For research use only. Not intended for therapeutic or diagnostic use in animals or humans.

www.vectorlabs.com
Email: customerservice@vectorlabs.com
Telephone: (650) 697-3600

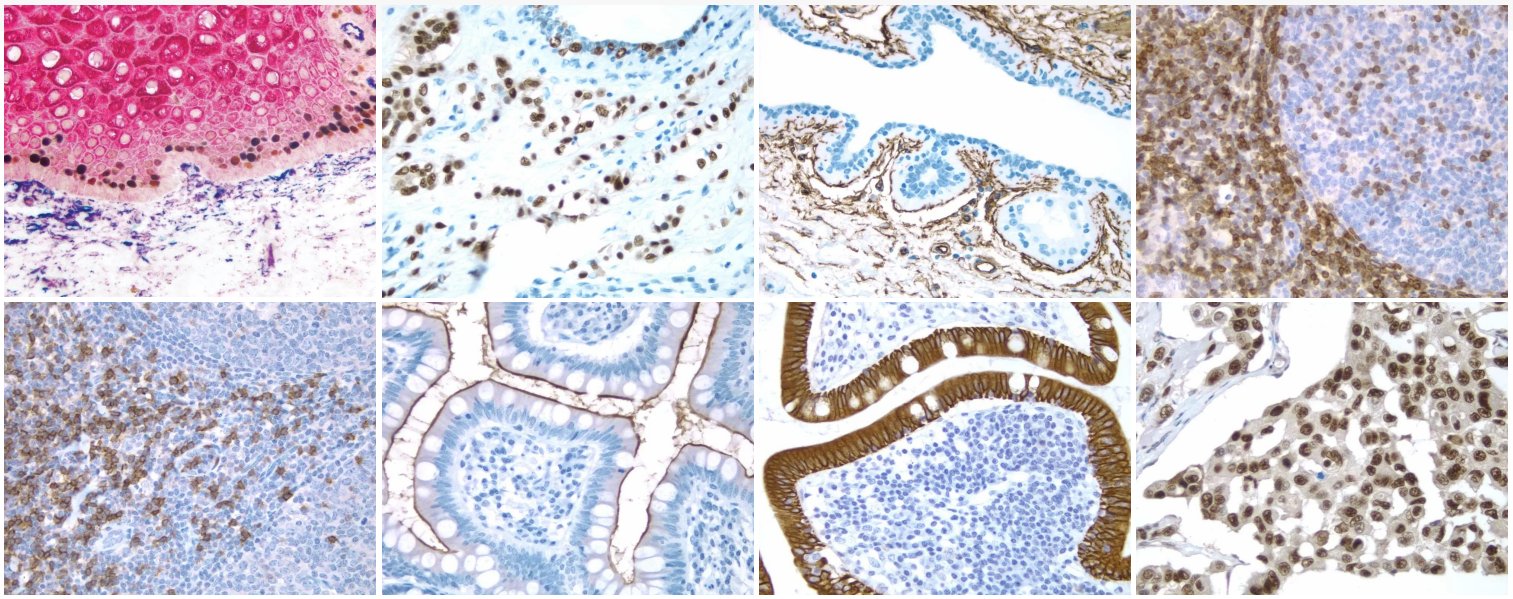
- Safety Data Sheet
- Enzyme Substrates Brochure
- Enzyme Substrate Combinations Chart
- Counterstain/Substrate Compatibility Chart
- User Guide
- Download CoA
- Datasheet

GALLERY IMAGES



For research use only. Not intended for therapeutic or diagnostic use in animals or humans.

www.vectorlabs.com
Email: customerservice@vectorlabs.com
Telephone: (650) 697-3600



For research use only. Not intended for therapeutic or diagnostic use in animals or humans.