

# VECTOR LABORATORIES

## Counterstain/Substrate Compatibility Table

This table is designed as a reference to determine the optimal counterstain/substrate combination for your application.

Substrate	Substrate Cat. No	VECTOR® Hematoxylin and Hematoxylin QS H-3401 and H-3404	VECTOR® Methyl Green H-3402	VECTOR® Nuclear Fast Red H-3403
ImmPACT™ DAB (brown)	SK-4105	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 <i>Red</i> (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
VECTOR® 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
VECTOR® RED (magenta)	SK-5100	Excellent Contrast	Excellent Contrast	Color Incompatibility
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
Glucose Oxidase NBT (indigo)	SK-3100	Color Incompatibility	Excellent Contrast	Excellent Contrast
Glucose Oxidase TNBT (black)	SK-3200	Excellent Contrast	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 in the methyl green protocol.

\*\* Substrate dissolves in acetone wash.

\*\*\* A slight color change in ImmPACT™ NovaRED™ and Vector® NovaRED™ reaction product may be seen using methyl green.

Counterstains should be optimized for each tissue type, antigen unmasking protocol, and immunocytochemical staining intensity desired.