

## Counterstain/Substrate Compatibility Table

This table is designed as a reference to determine the optimal counterstain/substrate combination for your application. Considerations should be given to tissue type, antigen unmasking protocol and other detection parameters to achieve the desired staining intensity.

| Substrate                    | Catalog Number | Hematoxylin and Hematoxylin QS H-3401 and H-3404 | Methyl Green H-3402             | Nuclear Fast Red H-3403 |
|------------------------------|----------------|--|---------------------------------|-------------------------|
| ImmPACT DAB (brown)          | SK-4105        | Excellent Contrast                               | Excellent Contrast              | Fair Contrast           |
| ImmPACT DAB EqV              | 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   |
| 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 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.