

**Vector® SG**  
Peroxidase Substrate

**Cat. No.:** SK-4700

**Storage:** 2-8 °C

**DESCRIPTION**

This kit contains all of the reagents necessary to prepare the substrate working solution. Vector SG Substrate produces a blue-gray reaction product in the presence of peroxidase (HRP) enzyme. Vector SG Substrate is suitable for darkfield and electron microscopy (EM).

**COMPONENTS**

<u>Product Name</u>	<u>Volume</u>
Vector SG Reagent 1	5 ml
Vector SG Reagent 2	7.2 ml

**STORAGE:**

- Store reagents in original bottles at 2-8 °C
- Avoid storing reagents or working solution in strong direct light

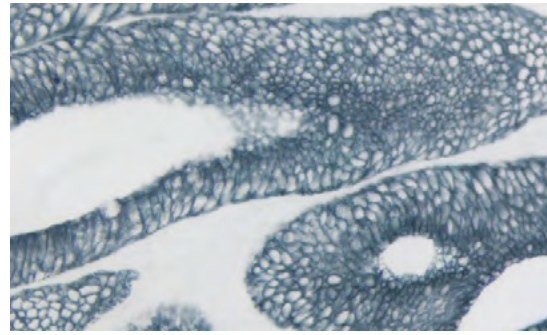
**PREPARATION OF SUBSTRATE WORKING SOLUTION:**

To 5 ml of PBS (10 mM sodium phosphate, 0.9% saline, pH 7.5):  
Add 3 drops (~ 75 µl<sup>†</sup>) of Vector SG Reagent 1  
Add 3 drops (~ 120 µl<sup>†</sup>) of Vector SG Reagent 2

Mix well before use.

<sup>†</sup> Drop volumes differ due to solvent compositions.

**IMPORTANT:** Little is known about the toxicity and carcinogenicity of the substrate kit components. Appropriate care should be exercised when using this reagent including gloves, eye protection, lab coats, and good laboratory procedures. Dispose in accordance with local regulations.



*Colon Carcinoma: AE1/AE3 (m) detected with ImmPRESS® Reagent (HRP) and Vector® SG Substrate (gray). No counterstain.*

**INSTRUCTIONS FOR USE:**

After incubation with a peroxidase (HRP) detection system, rinse sections in buffer. Incubate with the substrate working solution at room temperature for 2-15 minutes. Optimal development times should be determined by the investigator.

Wash slides for 5 minutes in water.

Counterstain, if desired, with Vector Nuclear Fast Red for best contrast. (See counterstain compatibility chart on reverse side.)

**For permanent, non-aqueous mounting:** Dehydrate, clear and coverslip using a non-aqueous mounting media, such as VectaMount® Mounting Medium (H-5000).

**For aqueous mounting:** Coverslip using an aqueous mounting media such as VectaMount AQ Mounting Medium (H-5501).

**NOTES**

1) We recommend using glass-distilled water in the preparation of substrate buffer. Deionized water may contain inhibitors of the peroxidase reaction. Solutions containing sodium azide or other inhibitors of peroxidase activity should not be used in diluting the peroxidase substrate.

2) Unused working solution is stable for up to 48 hours when stored at 2-8 °C. If a precipitate forms, filter through a 0.45 µm filter.

3) The Vector SG reaction product can be intensified using DAB Enhancing Solution (H-2200) after development.

4) The color of the reagent solutions may darken with time. This will have no effect on the quality or intensity of the staining.

Detailed product listings, specifications, protocols and additional information are available on our website: [vectorlabs.com](http://vectorlabs.com)