



**Vector® SG
Peroxidase Substrate**
Cat. No. SK-4700

Store at 2-8 °C

Burlingame, CA USA

Vector® SG Substrate

Vector® SG Substrate produces a blue-gray reaction product in the presence of peroxidase (HRP) enzyme. **Vector® SG** Substrate can be used on tissue sections or cells, or on membranes such as nitrocellulose, PVDF, or nylon. **Vector® SG** Substrate is also suitable for darkfield and electron microscopy (EM).

The **Vector® SG** Substrate Kit contains all of the reagents (except buffer) necessary to prepare the substrate working solution. These reagents are supplied in convenient dropper bottles.

REAGENTS:

5 ml Chromogen
7.2 ml Hydrogen Peroxide

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 (approximately 75 μl [†]) of Chromogen
Add 3 drops (approximately 120 μl [†]) of the Hydrogen Peroxide Solution
- Mix well before use

* For blot applications use 15 ml of 100 mM citrate buffer, pH 6.0.

[†] Drop volumes differ due to solvent compositions.

INSTRUCTIONS FOR USE:

For Tissues or Cells

After incubation with a peroxidase (HRP) detection system, rinse well. 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 (Cat. No. H-3403) for best contrast. (See counterstain compatibility chart on reverse side.) Coverslip with either a non-aqueous mounting medium such as **VectaMount™** (Cat. No. H-5000) or an aqueous mounting medium such as **VectaMount™ AQ** (Cat. No. H-5501).

For Blots

Development time is generally 10 - 20 minutes at room temperature. When development is satisfactory, rinse membrane in water and air dry.

NOTES:

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.

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.

The **Vector® SG** reaction product can be intensified using DAB Enhancing Solution (Cat. No. H-2200) after development.

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.

For Laboratory Use