

## Vector® DAB Peroxidase Substrate

**Cat. No.:** SK-4100

**Storage:** 2-8 °C

### 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. Adding nickel chloride to the substrate working solution results in a gray-black reaction product.

Vector DAB Substrate is also suitable for darkfield and electron microscopy (EM).

### COMPONENTS

| <u>Product Name</u>                    | <u>Volume</u> |
|--|---------------|
| Vector DAB Reagent 1                   | 6 ml          |
| Vector DAB Reagent 2                   | 6 ml          |
| Vector DAB Reagent 3                   | 6 ml          |
| Vector DAB Reagent 4 (Nickel optional) | 6 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:

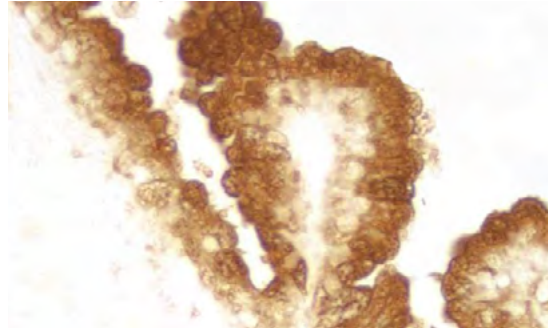
- To 5.0 ml of distilled water
- Add 2 drops ( $\approx 84 \mu\text{l}^\dagger$ ) of Vector DAB Reagent 1
- Add 4 drops ( $\approx 100 \mu\text{l}^\dagger$ ) of Vector DAB Reagent 2
- Add 2 drops ( $\approx 80 \mu\text{l}^\dagger$ ) of the Vector DAB Reagent 3

If a gray-black reaction product is desired  
Add 2 drops ( $\approx 80 \mu\text{l}^\dagger$ ) of the Nickel Solution

- Mix well before use. Use immediately.

$^\dagger$  Drop volumes differ due to solvent compositions.

**IMPORTANT:** DAB is a suspected carcinogen. 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.



Human prostate: Prostate specific antigen detected with VECTASTAIN® Elite® ABC Reagent and Vector® DAB substrate. 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 2-10 minutes. Optimal development times should be determined by the investigator.

Wash for 5 minutes in water.

Counterstain if desired. (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

We recommend using glass-distilled water in the preparation of the substrate buffer. Deionized water may contain inhibitors of the peroxidase reaction.

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