

# DAB

## Peroxidase Substrate

<b>Cat. No.</b>	<b>SK-4100</b>
<b>Storage</b>	Store reagents in original bottles at 2-8 °C. Avoid storing reagents or working solution in strong direct light.
<b>Description</b>	<p>This kit contains all of the reagents necessary to prepare either a DAB or a DAB/nickel substrate working solution. 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.</p> <p>The DAB Substrate is also suitable for darkfield and electron microscopy (EM).</p>

### Components

Product Name	Volume
DAB Reagent 1	6 ml
DAB Reagent 2	6 ml
DAB Reagent 3	6 ml
DAB Reagent 4 (Nickel optional)	6 ml

### Preparation of Substrate Working Solution

To 5.0 ml of distilled water:

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

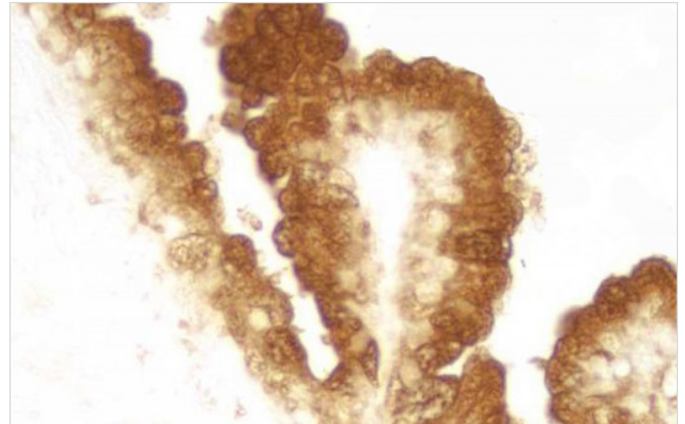
If a gray-black reaction product is desired:

- Add 2 drops ( $\approx 80 \mu\text{l}^\dagger$ ) of the DAB Reagent 4 (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 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.

For permanent, non-aqueous mounting: Dehydrate, clear and coverslip using a non-aqueous mounting media, such as VectaMount® Mounting Medium (H-5000) or VectaMount® Express Mounting Medium (H-5700).

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)