

## DAB-Ni Substrate Kit (20x) for Immunohistochemistry

(Nickel Enhanced 3,3'-Diaminobenzidine Tetrahydrochloride Substrate kit for Horseradish Peroxidase)

Storage: 4-8°C

 Catalog No.: ☐ C10-12    12ml    2400 slides \*  
*\* if use 100µl per slide*

### Intended Use:

DAB (3,3'-Diaminobenzidine ) is one of the most commonly used precipitating substrates for peroxidase. Our DAB-Ni substrate Kit is a nickel chloride enhanced DAB system with increased sensitivity and contrast compared to standard DAB. DAB-Ni will develop a black colored deposit upon reacting with peroxidase. The DAB-Ni Substrate Kit requires 5 minutes incubation on slides in an enclosed chamber at room temperature. The color development may be carefully monitored under a microscope. After the appropriate color is observed, gently rinse the slides under tap water for 1-2 minutes to remove excess DAB-Ni substrate. The specimen may be counterstained, dehydrated and permanently mounted (O-Mount, catalog # E02-18) before cover-slipping. All four components in the DAB-Ni kit are provided in concentrated form, which gives laboratories the advantage of easy storage and less shipping cost.

### Kit Components:

| Component No.    | Content                 | 12ml Kit |
|------------------|-------------------------|----------|
| <b>Reagent 1</b> | DAB Substrate (20x)     | 12ml     |
| <b>Reagent 2</b> | DAB Chromogen (20x)     | 12ml     |
| <b>Reagent 3</b> | Hydrogen peroxide (20x) | 12ml     |
| <b>Reagent 4</b> | Nickel Solution (7x)    | 18mlx2   |

### Recommended Protocol:

1. Prepare 1ml of distilled water. Add 1 drop of DAB Substrate (**Reagent 1**) into 1ml of distilled water. Mix well.
2. Add 1 drop of DAB Chromogen (**Reagent 2**) and 1 drop of concentrated Hydrogen Peroxide (**Reagent 3**) to the diluted Reagent. Mix well.
3. Add 3 drops of Nickel Solution (**Reagent 4**) to the mixture. Mix well.
4. Add about 100µl (2 drops) of the pre-diluted DAB-Ni mixture to each slide and incubate in an enclosed chamber at room temperature for about 5 minutes. When appropriate color is developed, rinse under tap water gently for about 1-2 minutes.
5. Keep away from light during operation and use the prepared DAB-Ni mixture within 5 hours.

### Related Products:

| Product   | Catalog No.      | Size                      |
|---|------------------|---------------------------|
| AEC kit (20x concentrate)                         | C01-12           | 12ml                      |
| DAB Kit (20x, 3-component DAB)                    | C02-12 / C02-100 | 12ml / 100ml              |
| DAB+ Kit (2-component DAB)                        | C09-12 / C09-100 | 12ml +240ml / 100ml + 2 L |
| BCIP/NBT Kit (RTU)                                | C05-100 / C05-18 | 100ml / 18ml              |
| Fast Red Kit (tablets and ready-to-use substrate) | C03-60           | 12 Tab + 60ml             |
| AP-Red+ Kit (40x concentrate)                     | C04-8            | 8ml +8ml +16ml            |
| GB-Mount (Aqueous)                                | E01-18           | 18ml                      |
| O-Mount (Organic)                                 | E02-18           | 18ml                      |
| Simpo-Mount (Aqueous)                             | E03-100 / E03-18 | 100ml / 18ml              |
| ISH Mount (Aqueous) for in situ hybridization     | E21-100          | 100ml                     |
| Fluorescent Mounting Medium                       | E18-100 / E18-18 | 100ml / 18ml              |
| Fluorescent Mounting Medium with DAPI             | E19-100 / E19-18 | 100ml / 18ml              |
| Fluorescent Mounting Medium with PI               | E20-100 / E20-18 | 100ml / 18ml              |

### Precautions:

DAB nickel chloride may be carcinogenic. Please wear gloves and take other necessary precautions, such as eye protection, lab coat, and good laboratory procedures. Dispose in accordance with local regulations.

### Remarks:

For research use only.