INSTRUCTIONS FOR USE:

After incubation with an AP detection system, rinse sections with buffer. Incubate with the substrate working solution for 20-30 minutes. Optimal development times should be determined by the investigator. The incubation time of this substrate can be lengthened (up to 24 hours) providing significantly more sensitivity. Improved staining may be obtained by developing the substrate in the dark.

Wash slides in buffer for 5 minutes. Rinse in water and counterstain, if desired (see chart on reverse).

For permanent, non-aqueous mounting: Dehydrate, clear and coverslip using a non-aqueous mounting media, such as VectaMount® Mounting Medium (H-5000). BCIP/NBT is not compatible with DPX mountant.

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

DESCRIPTION

This kit contains all of the reagents necessary to prepare the substrate working solution. BCIP/NBT (5-bromo-4-chloro-3-indolyl phosphate/nitroblue tetrazolium) Substrate produces an indigo reaction product in the presence of alkaline phosphatase (AP) enzyme.

COMPONENTS

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCIP/NBT Reagent 1</td>
<td>4 ml</td>
</tr>
<tr>
<td>BCIP/NBT Reagent 2</td>
<td>3 ml</td>
</tr>
<tr>
<td>BCIP/NBT Reagent 3</td>
<td>4 ml</td>
</tr>
<tr>
<td>BCIP/NBT Substrate Mixing Bottle (Empty)</td>
<td></td>
</tr>
</tbody>
</table>

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 100 mM Tris-HCl, pH 9.5 buffer *

- Add 2 drops (≈84 µl†) of BCIP/NBT Reagent 1
- Add 2 drops (≈40 µl†) of BCIP/NBT Reagent 2
- Add 2 drops (≈80 µl†) of BCIP/NBT Reagent 3

Mix well before use. Use immediately.

* 0.1% Tween 20 in the BCIP/NBT working solution is recommended for use with antigen retrieved tissues.
† 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.