

# **Betazoid DAB Buffer**

Buffer

Control Number: 901-DS900-090617

DS900 H Catalog Number: 25 ml **Description:** 

**Intended Use:** 

For In Vitro Diagnostic Use

### **Summary & Explanation:**

3, 3' Diaminobenzidine (DAB) is a widely used chromogen for immunohistochemical staining. Betazoid DAB Buffer is one of two components used for DAB staining. This product is intended to be used in combination with Betazoid DAB Chromogen (BDB900C) available in the Betazoid DAB Chromogen Kit (BDB2004). The color of the chromogen buffer mixture may vary from colorless to pale brown. Staining properties are not affected by the color of the chromogen buffer mixture. In some cases, antibody titers may increase as much as 2-fold using this DAB system. Betazoid DAB can be used both manually and on automated stainers.

### **Known Applications:**

Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

#### Supplied As:

Buffered solution with hydrogen peroxide and preservative.

### Materials and Reagents Needed But Not Provided:

Betazoid DAB Chromogen (BDB900C)\*

Microscope slides, positively charged

Desert chamber\* (Drying oven)

Positive and negative tissue controls

Xylene (Could be substituted with xylene substitute\*)

Ethanol or reagent alcohol

Decloaking chamber\* (Pressure cooker)

Deionized or distilled water

Wash buffer\*(TBS/PBS)

Pretreatment Reagents\*

Enzyme Digestion\*

Avidin-Biotin Blocking Kit\*(Labeled Streptavidin Kits Only)

Peroxidase block\*

Protein block\*

Primary antibody\*

Negative Control Reagents\*

Detection Kits\*

Detection Components\*

Hematoxylin\*

Bluing Reagent\*

Mounting medium\*

\* Biocare Medical Products: Refer to a Biocare Medical catalog for further information regarding catalog numbers and ordering information. Certain reagents listed above are based on specific application and detection system used.

# Storage and Stability:

Store at 2°C to 8°C. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

### **Protocol Recommendations:**

- 1. After application of HRP detection, rinse tissue section in PBS or TBS Wash Buffer.
- 2. Mix 1 drop (32 µl) of DAB Chromogen per 1.0 ml of DAB Substrate Buffer. The DAB working solution is stable for 5 days. Store the DAB working solution at 2-8°C.
- 3. Apply DAB mixture to tissue sections. Incubate for 2-5 minutes.
- 4. Rinse in deionized water.

### Limitations:

The protocols for a specific application can vary. These include, but are not limited to: fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of Biocare products. Ultimately, it is the responsibility of the investigator to determine optimal conditions. These products are tools that can be used for interpretation of morphological findings in conjunction with other diagnostic tests and pertinent clinical data by a qualified pathologist.

### **Quality Control:**

Refer NCCLS Quality Assurance for Immunocytochemistry approved guidelines, December 1999 MM4-A Vol.19 No.26 for more information on tissue controls.

#### **Precautions:**

Specimens, before and after fixation, and all materials exposed to them should be handled as if capable of transmitting infection and disposed of with proper precautions. Consult OSHA, federal, state or local regulations for disposal of any toxic substances. Never pipette reagents by mouth and avoid contacting the skin and mucous membranes with reagents and specimens. If reagents or specimens come in contact with sensitive areas, wash with copious amounts of water.

### Warnings:

- 1. DAB is known to be a suspected carcinogen.
- 2. Do not expose DAB components to strong light or direct sunlight.
- 3. Wear appropriate personal protective equipment and clothing.
- 4. DAB may cause sensitization of skin. Avoid contact with skin and eyes.
- 5. The MSDS is available upon request.
- 6. Observe all federal, state and local environmental regulations.

# **Troubleshooting:**

Follow the reagent specific protocol recommendations according to data sheet provided. If atypical results occur, contact Biocare's Technical Support at 1-800-542 -2002.

Page 1 of 1