

## Val DAB Chromogen Kit

DAB Chromogen Kit  
901-VLT8008K-112718



**BIOCARE**  
M E D I C A L

**Catalog Number:** VLT 8008 K

**Description:** Kit

### Intended Use:

For In Vitro Diagnostic Use

Val DAB Chromogen Kit consists of two solutions for the staining of formalin-fixed, paraffin-embedded (FFPE) tissues, as part of an immunohistochemistry (IHC) procedure using a horseradish peroxidase (HRP) detection system, on Biocare Medical's VALENT® Automated Slide Staining Platform. The clinical interpretation of any staining or its absence should be complemented by morphological studies and proper controls and should be evaluated within the context of the patient's clinical history and other diagnostic tests by a qualified pathologist.

### Summary & Explanation:

Immunohistochemistry (IHC) permits the visual identification of specific protein antigens in tissues for diagnostic purposes. Following application of the primary antibody, the presence of a target antigen is visualized by the sequential application of an enzyme-antibody conjugate that binds the primary antibody, and a chromogen reagent, to produce a colored reaction product that is visible by light microscopy. 3,3'-Diaminobenzidine (DAB) is a widely used chromogen for immunohistochemical staining with horseradish peroxidase (HRP) detection systems. In the presence of peroxidase enzyme, DAB produces a brown precipitate that is insoluble in alcohol and xylene. Val DAB Chromogen Kit contains two solutions: Val DAB Chromogen and the corresponding Val DAB Buffer. It is intended for use with an HRP detection system in an IHC staining procedure on the VALENT Automated Slide Staining Platform. The Val DAB Chromogen Kit is specifically formulated for on-rack mixing of Val DAB Chromogen and Val DAB Buffer, without the need for pre-mixing by the user. A mixing vial is required for each unique run of the VALENT.

### Known Applications:

Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

### Reagents Provided:

Val DAB Chromogen (VLT8009G3) 2 x 3 mL

Val DAB Buffer (VLT8010G20) 4 x 20 mL

### Reconstitution, Dilution and Mixing:

Val DAB Chromogen Kit is provided as a two-component mix. Mix 120 µL of Val DAB Chromogen per 2000 µL of Val DAB Buffer. The DAB working solution is stable for 5 days. Diluted reagents should be used promptly; any remaining reagent should be stored at 2-8°C.

### Materials and Reagents Required But Not Provided:

Reagents and materials, such as primary antibodies, detection kits and ancillary reagents are not provided.

Refer to the Biocare Medical website located at <http://biocare.net> for information regarding catalog numbers and ordering information.

Refer to the VALENT Automated Slide Staining Platform User Manual for a complete list of VALENT specific materials and reagents required.

### Storage and Stability:

Store at 2°C to 8°C. The product is stable to the expiration date printed on the label, when stored under these conditions. Do not use after expiration date. Avoid exposure to strong light or direct sunlight.

### Instructions for Use:

1. After application of HRP detection, rinse tissue section in Val Wash Buffer.
2. On-line Mix: 120 µL of Val DAB Chromogen per 2000 µL of Val DAB Buffer. If chromogen is mixed off-line, use the same ratio. Each slide requires 300 µL and the total volume made must include a 50 µL dead volume.
3. Apply the DAB mixture to tissue section. Incubate for 5 minutes.
4. Rinse tissue in Val Aqua Rinse.

The Val DAB Chromogen Kit is provided in vials ready for use on the VALENT Automated Slide Staining Platform. Uncap each vial and place in the VALENT reagent tray. The VALENT Automated Slide Staining Platform will mix and apply reagent as required in the selected protocol.

Refer to the appropriate antibody data sheet for the recommended staining protocol. Refer to the VALENT Automated Slide Staining Platform User Manual for detailed instructions on instrument operation and additional protocol options.

### Limitations:

These reagents have been optimized for use with VALENT antibodies and ancillary reagents. The protocols for a specific application can vary. These include, but are not limited to fixation, heat-retrieval method, incubation times, and tissue section thickness. Third party primary antibodies may be used on the VALENT Automated Slide Staining Platform; however, appropriate antibody concentration may depend upon multiple factors and must be empirically determined by the user. Ultimately, it is the responsibility of the investigator to determine optimal conditions.

### Quality Control:

Refer to CLSI Quality Standards for Design and Implementation of Immunohistochemistry Assays; Approved Guideline-Second edition (I/LA28-A2) CLSI Wayne, PA USA ([www.clsi.org](http://www.clsi.org)). 2011

### Precautions:

1. Refer to reagent Safety Data Sheet for precautions.
2. 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. 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. (3)
3. Microbial contamination of reagents may result in an increase in nonspecific staining.
4. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change.
5. Do not use reagent after the expiration date printed on the vial.



**HEALTH HAZARD    IRRITANT**

## Val DAB Chromogen Kit

DAB Chromogen Kit  
901-VLT8008K-112718



**BIOCARE**  
M E D I C A L

### Troubleshooting:

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

### References:

1. Taylor CR, Cote RJ. Immunomicroscopy: A Diagnostic Tool for the Surgical Pathologist. 3rd Ed. Philadelphia: Saunders Elsevier, 2006.
2. Dabbs DJ. Diagnostic Immunohistochemistry: Theranostic and Genomic Applications. 3rd Ed. Philadelphia: Saunders Elsevier, 2010.
3. Clinical and Laboratory Standards Institute (CLSI). Protection of Laboratory Workers from Occupationally Acquired Infections; Approved Guideline-Fourth Edition (M29-A4) Wayne, PA 2014.