

# Val-Tect Universal HRP Detection Kit

HRP Detection Kit  
901-VLT8031K-112718

# VALENT®

# BIOCARE MEDICAL

**Catalog Number:** VLT 8031 K

**Description:** Kit

### Intended Use:

For In Vitro Diagnostic Use

Val-Tect Universal HRP Detection Kit is a horseradish peroxidase (HRP)-antibody conjugate system intended for use in the detection of mouse IgG and IgM, and rabbit IgG primary antibodies on formalin-fixed, paraffin-embedded (FFPE) tissues in an immunohistochemistry (IHC) procedure on the 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:

Biocare's Val-Tect Universal HRP Detection Kit has been developed for use with mouse or rabbit primary antibodies. This novel biotin-free technology uses a three-step approach to detect mouse antibodies and a two-step method for rabbit primary antibodies. The terminal step in the detection of each species utilizes an HRP Polymer reagent followed by DAB.

3,3'-Diaminobenzidine (DAB) is a widely used chromogen for immunohistochemical staining and immunoblotting. When in the presence of peroxidase enzyme, DAB produces a brown precipitate that is insoluble in alcohol and xylene. This product comes in a two-component system consisting of a liquid-stable DAB chromogen and DAB substrate buffer. Val DAB Chromogen is a very stable and superior formulation of DAB. In some cases, antibody titers may increase by two-fold. Val DAB Chromogen is specifically designed to be used on the VALENT Automated Slide Staining Platform.

The Val-Tect Universal HRP Detection kit has been designed for use on the VALENT Automated Staining Platform.

### Known Applications:

Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

### Reagents Provided:

Val Peroxidase Block (VLT8002G20) 4 x 20 mL  
Val Background Block (VLT8011G20) 4 x 20 mL  
Val Mouse Secondary HRP (VLT8006G20) 4 x 20 mL  
Val Universal HRP Linker (VLT8029G20) 4 x 20 mL  
Val Universal HRP Polymer (VLT8007G20) 4 x 20 mL  
Val DAB Chromogen (VLT8009G3) 4 x 3 mL  
Val DAB Buffer (VLT8010G20) 8 x 20 mL  
Val Hematoxylin (VLT8014G20) 4 x 20 mL

### Reconstitution, Dilution and Mixing:

Val DAB Chromogen and Val DAB Buffer are provided as a two-component kit. 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°C to 8°C.

Remaining reagents are provided ready-to-use. No reconstitution, dilution or mixing is required.

### Materials and Reagents Required But Not Provided:

Reagents and materials, such as primary antibodies 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. Store Val Hematoxylin away from light and avoid exposure of Val DAB Chromogen to strong light or direct sunlight.

### Instructions for Use:

**Deparaffinization:** Deparaffinize slides with Val DePar for 8 minutes.

**Pretreatment Solution/Protocol:** Please refer to the respective primary antibody data sheet for recommended pretreatment solution and protocol.

**Peroxidase Block:** Block for 5 minutes with Val Peroxidase Block.

**Protein Block (Optional):** Block for 10-20 minutes with Val Background Block.

**Primary Antibody:** Please refer to the respective primary antibody data sheet for incubation time.

**Secondary (Mouse antibodies only):** Incubate for 10 minutes with Val Mouse Secondary HRP.

**Linker:** Incubate for 10 minutes with Val Universal HRP Linker.

**Polymer:** Incubate for 10-20 minutes with Val Universal HRP Polymer.

**Chromogen:** Incubate for 5 minutes with Val DAB.

### Counterstain:

1. Rinse slides with Val Aqua Rinse prior to dispensing Val Hematoxylin.
2. Incubate for 5 minutes with Val Hematoxylin
3. Rinse with Val Aqua Rinse followed by Val Wash Buffer for bluing.

The Val-Tect Universal HRP Detection Kit is provided in vials ready for use on the VALENT Automated Slide Staining Platform. Uncap the vials and place in the VALENT reagent tray. The VALENT Automated Slide Staining Platform will mix (if necessary) 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.

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## 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 Sheets 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. (1)
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**

## 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. Center for Disease Control Manual. Guide: Safety Management, NO. CDC-22, Atlanta, GA. April 30, 1976 "Decontamination of Laboratory Sink Drains to Remove Azide Salts."
2. Clinical and Laboratory Standards Institute (CLSI). Protection of Laboratory Workers from Occupationally Acquired Infections; Approved Guideline-Fourth Edition CLSI document M29-A4 Wayne, PA 2014.