

# Vimentin

Concentrated and Prediluted Rabbit Monoclonal Antibody  
901-312-052623

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

<b>Catalog Number:</b>	<b>CRM 312 A, B</b>	<b>PRM 312 AA</b>
<b>Description:</b>	0.1, 0.5 mL, conc.	6.0 mL, RTU
<b>Dilution:</b>	1:50	Ready-to-use
<b>Diluent:</b>	Da Vinci Green	N/A

## Intended Use:

For In Vitro Diagnostic Use

Vimentin [SP20] is a rabbit monoclonal antibody that is intended for laboratory use in the qualitative identification of vimentin protein by immunohistochemistry (IHC) in formalin-fixed paraffin-embedded (FFPE) human tissues. The clinical interpretation of any staining or its absence should be complemented by morphological studies using proper controls and should be evaluated within the context of the patient's clinical history and other diagnostic tests by a qualified pathologist.

## Summary and Explanation:

This rabbit monoclonal Vimentin recognizes a 57-60 kDa protein, which is identified as vimentin. A study has shown that it has no cross-reactivity with other closely related intermediate filament proteins such as desmin and GFAP (1). Vimentin is the main intermediate filament protein in mesenchymal cells, and therefore is of value in the differential diagnosis of undifferentiated neoplasms including melanoma and sarcoma (2).

## Principle of Procedure:

Antigen detection in tissues and cells is a multi-step immunohistochemical process. The initial step binds the primary antibody to its specific epitope. After labeling the antigen with a primary antibody, an enzyme labeled polymer is added to bind to the primary antibody. The detection of the bound antibody is evidenced by a colorimetric reaction.

**Source:** Rabbit monoclonal

**Species Reactivity:** Human

**Clone:** SP20

**Isotype:** IgG

**Protein Concentration:** Lot specific Ig concentration is not available.

**Epitope/Antigen:** Vimentin

**Cellular Localization:** Cytoplasmic

**Positive Tissue Control:** Melanoma or sarcoma

## Known Applications:

Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

**Supplied As:** Buffer with protein carrier and preservative

## 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. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

## Protocol Recommendations (intelliPATH FLX® and manual use):

**Peroxide Block:** Block for 5 minutes with Peroxidized 1.

**Pretreatment:** Perform heat retrieval using Diva or Reveal Decloaker. Refer to the Diva or Reveal Decloaker product data sheet for specific instructions.

**Protein Block (Optional):** Incubate for 5-10 minutes at RT with Background Punisher.

**Primary Antibody:** Incubate for 30 minutes at RT.

**Probe:** N/A

**Polymer:** Incubate for 30 minutes at RT with a secondary-conjugated polymer.

**Chromogen:** Incubate for 5 minutes at RT with Biocare's DAB - OR - Incubate for 5-7 minutes at RT with Warp Red.

## Protocol Recommendations (intelliPATH FLX and manual use)

### Cont'd:

#### Counterstain:

Counterstain with hematoxylin. Rinse with deionized water. Apply Tacha's Bluing Solution for 1 minute. Rinse with deionized water.

#### Technical Note:

This antibody, for intelliPATH FLX and manual use, has been standardized with MACH 2 rabbit detection system. Use TBS buffer for washing steps.

#### Limitations:

The optimum antibody dilution and 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.

#### 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. This antibody contains less than 0.1% sodium azide. Concentrations less than 0.1% are not reportable hazardous materials according to U.S. 29 CFR 1910.1200, OSHA Hazard communication and EC Directive 91/155/EC. Sodium azide (NaN<sub>3</sub>) used as a preservative is toxic if ingested. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing. (Center for Disease Control, 1976, National Institute of Occupational Safety and Health, 1976) (3)

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. (4)

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.

6. The SDS is available upon request and is located at <http://biocare.net>.

#### 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. Caselitz J, *et al.* Malignant melanomas contain only the vimentin type of intermediate filaments. *Virchows Arch A Pathol Anat Histopathol.* 1983; 400(1):43-51.

2. Leader M, *et al.* Vimentin: an evaluation of its role as a tumour marker. *Histopathology.* 1987; 11(1):63-72.

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### References Cont'd:

3. 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."
4. 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.