

## Mouse Vimentin Monoclonal Antibody | anti-VIM antibody

Vimentin

|                              |                      |                                                                 |
|------------------------------|----------------------|-----------------------------------------------------------------|
| CATALOG #<br><b>AAA59245</b> | HOST<br><b>Mouse</b> | REACTIVITY<br><b>Human, Canine , Feline, Rat, Horse, Rabbit</b> |
|------------------------------|----------------------|-----------------------------------------------------------------|

### PRODUCT SYNONYMS

Vimentin; Monoclonal Antibody; anti-VIM antibody

### PRODUCT SPECIFICATIONS

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host            | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Reactivity      | Human, Canine , Feline, Rat, Horse, Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Clonality       | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Isotype         | IgG1/K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Clone Number    | V9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Form/Format     | Vimentin is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Control         | Tonsil, Lymph Node                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Localization    | Cytoplasmic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Reactivity Note | Paraffin, Frozen                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Immunogen       | Purified vimentin from porcine eye lens.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Intended Use    | This antibody is intended for use in Immunohistochemical applications on formalin- fixed paraffin-embedded tissues (FFPE), frozen tissue sections and cell preparations. Interpretation of results should be performed by a qualified medical professional                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Precautions     | <ol style="list-style-type: none"> <li>1. For professional users only. Results should be interpreted by a qualified medical professional.</li> <li>2. This product contains &lt;0.1% sodium azide (NaN<sub>3</sub>) as a preservative. Ensure proper handling procedures are used with this reagent.</li> <li>3. Always wear personal protective equipment such as laboratory coat, goggles and gloves when handling reagents.</li> <li>4. Dispose of unused solution with copious amount of water.</li> <li>5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.</li> <li>6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.</li> <li>7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).</li> <li>8. For additional safety information refer to Safety Data Sheet for this product.</li> <li>9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and AMDL" (see References in this document)</li> </ol> |

## Staining Procedure

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positive charged slides such as Hydrophilic Plus Slides
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate and rehydrate tissues.
4. Subject tissues to heat epitope retrieval using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate .
5. Any of three heating methods may be used:
  - a. TintoRetriever r Pressure Cooker or Equivalent**

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA, and place in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.
  - b. TintoRetriever PT Module or Water Bath Method**

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.
  - c. Conventional Steamer Method**

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a Steamer, cover and steam for 30-60 minutes.
6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual staining, perform antibody incubation at ambient temperature. For automated staining methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with IHC wash buffer or DI water.
9. Continue IHC staining protocol.

## Specimen Preparation

**Paraffin sections:** The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using ImmunoDNA Retriever with Citrate, ImmunoDNA Retriever with EDTA or ImmunoDNA Digestor. See reverse side for complete protocol. Tissue should remain hydrated via use of Immuno/DNA Washer solutions.

**Frozen sections and cell preparations:** The antibody can be used for labeling acetone-fixed frozen sections and acetone-fixed cell preparations.

## Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter or organic solvent based resin such as PermaMounter contact Tech Support.

## Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

### Preparation and Storage

Store at 2-8 °C.

Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use, and avoid prolonged exposure to room temperature conditions.

## IMAGES

| Performance Characteristics    |                                   |
|--------------------------------|-----------------------------------|
| Normal Tissues                 |                                   |
|                                | Positive (+)                      |
| mesenchymal cells              | fibrocytes                        |
| lipocytes                      | smooth muscle cells               |
| vascular endothelial cells     | astrocytes                        |
| peripheral nerve               | macrophages                       |
| Kiupffer cells                 | mesoepithelial cells              |
| sweat glands of breast         | follicular cells of thyroid       |
| adrenal cortex                 | renal distal tubules              |
| renal glomerulus               | pancreatic acinar cells           |
| retinal epithelial cells       | skeletal and cardiac muscle cells |
| colonic and gastric mucosa     | glial cells                       |
|                                | Negative (-)                      |
|                                | neurons                           |
| Abnormal Tissues               |                                   |
|                                | Positive (+)                      |
| sarcomas 17/20                 | melanoma 16/18                    |
| melanoma 4/4                   | schwannoma 3/3                    |
| neuroendocrine carcinoma       | variable (10-60%)                 |
| thymoma                        | variable (10-60%)                 |
| mesotheliomas                  | variable (10-60%)                 |
| papillary carcinoma of thyroid | variable (10-60%)                 |
| renal carcinoma                | variable (10-60%)                 |
| endometrial carcinoma          | variable (10-60%)                 |
| ovarian carcinoma              | variable (10-60%)                 |
| lung carcinoma                 | variable (10-60%)                 |

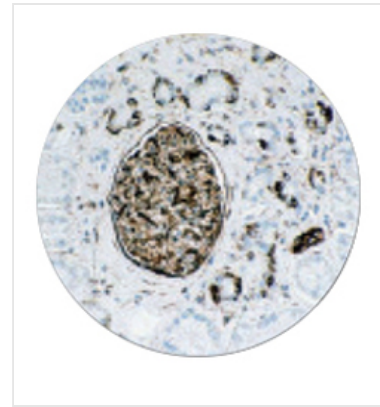
| Antibody Type    | Dilution       | Volume/Qty |
|------------------|----------------|------------|
| Tinto Prediluted | Ready-to-Use   | 3.0 mL     |
| Tinto Prediluted | Ready-to-Use   | 7.0 mL     |
| Tinto Prediluted | Ready-to-Use   | 15.0 mL    |
| Concentrated     | 1:250 - 1:1000 | 0.1 mL     |
| Concentrated     | 1:250 - 1:1000 | 0.5 mL     |
| Concentrated     | 1:250 - 1:1000 | 1.0 mL     |
| Control Slides   | Not Applicable | 5 slides   |

### Application Data

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| Recommended IHC Protocol |                       |                     |                       |
|--------------------------|-----------------------|---------------------|-----------------------|
| Step                     | ImmunoDetector AP/HRP | PolyDetector AP/HRP | PolyDetector Plus HRP |
| Peroxidase/AP Blocker    | 5 min.                | 5 min.              | 5 min.                |
| Primary Antibody         | 30-60 min.            | 30-60 min.          | 30-60 min.            |
| 1st Step Detection       | 10 min.               | 30-45 min.          | 15 min.               |
| 2nd Step Detection       | 10 min.               | Not Applicable      | 15 min.               |
| Substrate-Chromogen      | 5-10 min.             | 5-10 min.           | 5-10 min.             |
| Counterstain             | Varies                | Varies              | Varies                |

IHC (Immunohistochemisry)



IHC (Immunohiostchemistry)

| Antibody Type    | Dilution       | Volume/Qty |
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| Control Slides   | Not Applicable | 5 slides   |

Application Data

## ADDITIONAL INFORMATION

### Related Product Information for anti-VIM antibody

Vimentin is a member of the intermediate filament family of proteins. Intermediate filaments are an important structural feature of eukaryotic cells. Together with microtubules and actin microfilaments, they make up the cytoskeleton. Expression of vimentin, when used in conjunction with keratin, is helpful in distinguishing melanomas from Undifferentiated Carcinomas and Large-Cell Lymphomas. All Melanomas and Schwannomas react strongly with vimentin. This antibody recognizes a 57 kDa intermediate filament. It labels a variety of mesenchymal cells, including melanocytes, lymph cells, endothelial cells and fibroblasts. Non-reactivity of vimentin antibody is often considered more useful than its presence, since there are a few tumors that do not contain vimentin (e.g., Hepatoma and Seminoma).

## NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                                                                                                                                           |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | <a href="#">62414289</a>                                                                                                                                                                                                                                                                                  |
| NCBI GeneID                      | <a href="#">7431</a>                                                                                                                                                                                                                                                                                      |
| NCBI Accession #                 | <a href="#">NP_003371.2</a>                                                                                                                                                                                                                                                                               |
| NCBI GenBank Nucleotide #        | <a href="#">NM_003380.2</a>                                                                                                                                                                                                                                                                               |
| UniProt Accession #              | <a href="#">P08670</a> ; <a href="#">Q15867</a> ; <a href="#">Q15868</a> ; <a href="#">Q15869</a> ; <a href="#">Q548L2</a> ; <a href="#">Q6LER9</a> ; <a href="#">Q8N850</a> ; <a href="#">Q96ML2</a> ; <a href="#">Q9NTM3</a> ; <a href="#">B0YJC2</a> ; <a href="#">D3DRU4</a> ; <a href="#">Q53HU8</a> |
| NCBI Official Full Name          | vimentin                                                                                                                                                                                                                                                                                                  |
| NCBI Official Synonym Full Names | vimentin                                                                                                                                                                                                                                                                                                  |
| NCBI Official Symbol             | VIM                                                                                                                                                                                                                                                                                                       |
| NCBI Official Synonym Symbols    | FLJ36605                                                                                                                                                                                                                                                                                                  |
| NCBI Protein Information         | vimentin; OTTHUMP00000019224; OTTHUMP00000019225                                                                                                                                                                                                                                                          |
| UniProt Protein Name             | Vimentin                                                                                                                                                                                                                                                                                                  |

|                    |            |
|--------------------|------------|
| UniProt Gene Name  | VIM        |
| UniProt Entry Name | VIME_HUMAN |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/vimentin-antibody-clone-v9-elisa/59245>