

### Vimentin Antibody

Mouse Monoclonal Antibody (Mab) Catalog # AM1929b

## Specification

# Vimentin Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype

WB,E <u>P08670</u> <u>NP\_003371.2</u> Human Mouse Monoclonal IgM,k

## Vimentin Antibody - Additional Information

Gene ID 7431

**Other Names** Vimentin, VIM

Target/Specificity

This VIME monoclonal antibody is generated from mouse immunized with VIME recombinant protein.

**Dilution** WB~~1:500~1000 E~~Use at an assay dependent concentration.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Euglobin precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** Vimentin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Vimentin Antibody - Protein Information

Name VIM (HGNC:12692)

**Function** Vimentins are class-III intermediate filaments found in various non-epithelial cells, especially mesenchymal cells. Vimentin is attached to the nucleus, endoplasmic reticulum, and mitochondria, either laterally or terminally. Plays a role in cell directional movement, orientation, cell sheet organization and Golgi complex polarization at the cell migration front (By similarity).



Protects SCRIB from proteasomal degradation and facilitates its localization to intermediate filaments in a cell contact-mediated manner (By similarity).

#### **Cellular Location**

Cytoplasm. Cytoplasm, cytoskeleton. Nucleus matrix {ECO:0000250|UniProtKB:P31000}. Cell membrane {ECO:0000250|UniProtKB:P20152}

### **Tissue Location**

Highly expressed in fibroblasts, some expression in T- and B-lymphocytes, and little or no expression in Burkitt's lymphoma cell lines. Expressed in many hormone-independent mammary carcinoma cell lines.

## Vimentin Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### **Vimentin Antibody - Images**



Vimentin Antibody (Cat. #AM1929b) western blot analysis in Hela cell line lysates (35µg/lane).This demonstrates the Vimentin antibody detected the Vimentin protein (arrow).

### Vimentin Antibody - Background

This gene encodes a member of the intermediate filament family. Intermediate filamentents, along with microtubules and actin microfilaments, make up the cytoskeleton. The protein encoded by this gene is responsible for maintaining cell shape, integrity of the cytoplasm, and stabilizing cytoskeletal interactions. It is



also involved in the immune response, and controls the transport of low-density lipoprotein (LDL)-derived cholesterol from a lysosome to the site of esterification. It functions as an organizer of a number of critical proteins involved in attachment, migration, and cell signaling. Mutations in this gene causes a dominant, pulverulent cataract.

## Vimentin Antibody - References

Kers, J., et al. Transplantation 90(5):502-509(2010) Pinheiro, A.P., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (5), 1070-1080 (2010) : Korita, P.V., et al. Anticancer Res. 30(6):2279-2285(2010) Martins-de-Souza, D., et al. J Psychiatr Res (2010) In press : Li, M., et al. J. Exp. Clin. Cancer Res. 29, 109 (2010) :