

# Vimentin Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2739c

### Specification

# Vimentin Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB, IHC-P, FC,E <u>P08670</u> <u>P31000, P02543, P20152, P48670, P48616</u> Human Bovine, Hamster, Mouse, Pig, Rat Rabbit Polyclonal Rabbit IgG 53652 152-181

## Vimentin Antibody (Center) - Additional Information

Gene ID 7431

**Other Names** Vimentin, VIM

### Target/Specificity

This Vimentin antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 152-181 amino acids from the Central region of human Vimentin.

**Dilution** WB~~1:1000 IHC-P~~1:10~50 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) 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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### Vimentin Antibody (Center) - Protein Information

Name VIM (<u>HGNC:12692</u>)



**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**

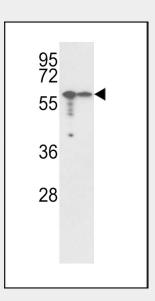
Highly expressed in fibroblasts, some expression in T- and B-lymphocytes, and little or no expression in Burkitt's lymphoma cell lines. Expressed in many hormone-independent mammary carcinoma cell lines.

## **Vimentin Antibody (Center) - Protocols**

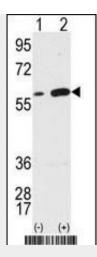
Provided below are standard protocols that you may find useful for product applications.

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

## Vimentin Antibody (Center) - Images



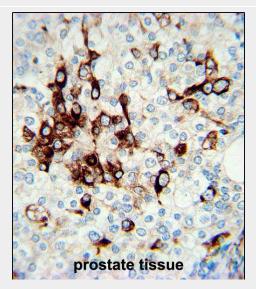
Western blot analysis of Vimentin Antibody (Center) (Cat. #AP2739c) in A2058,A375 cell line lysates (35ug/lane). Vimentin (arrow) was detected using the purified Pab.



Western blot analysis of Vimentin (arrow) using Vimentin Antibody (Center) (Cat. #AP2739c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the VIM gene (Lane 2) (Origene Technologies).



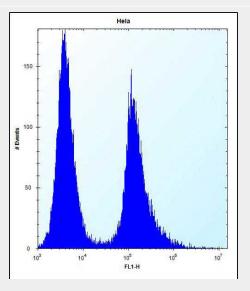
Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with Vimentin antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Vimentin Antibody (Center) (Cat. #AP2739c)immunohistochemistry analysis in formalin fixed and paraffin embedded human prostate tissue followed by peroxidase conjugation of the secondary



antibody and DAB staining. This data demonstrates the use of Vimentin Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



Vimentin Antibody (Center) (Cat. #AP2739c) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

# Vimentin Antibody (Center) - Background

Along with the microfilaments (actins) and microtubules (tubulins), the intermediate filaments represent a third class of well-characterized cytoskeletal elements. The subunits display a tissue-specific pattern of expression. Desmin (MIM 125660) is the subunit specific for muscle and vimentin the subunit specific for mesenchymal tissue.

## Vimentin Antibody (Center) - References

Whipple,R.A.,Cancer Res. 68 (14), 5678-5688 (2008) Garcia-Verdugo,I.,Biochemistry 47 (18), 5127-5138 (2008) Merdes,A., J. Cell Biol. 115 (2), 397-410 (1991)