10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Vimentin Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AX10005

Specification

Vimentin Antibody - Product Information

Application	**IF, WB, IHC-P-Leica, FC,E**
Primary Accession	P08670
Other Accession	NP_003371.2
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**

Vimentin Antibody - Additional Information

Gene ID 7431

Other Names
Vimentin, VIM

Target/Specificity
This Vimentin antibody is generated from rabbits immunized with human Vimentin recombinant protein.

Dilution
IF~~1:50
WB~~1:2000
IHC-P-Leica~~1:500
FC~~1:50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

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.

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

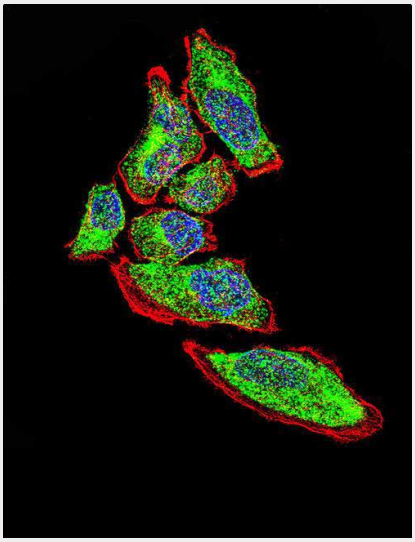
Tissue Location
Highly expressed in fibroblasts, some expression in T- and B-lymphocytes, and little or no expression in Burkitt's lymphoma cell lines. Expressed in many hormone-independent mammary carcinoma cell lines.

Vimentin Antibody - Protocols

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

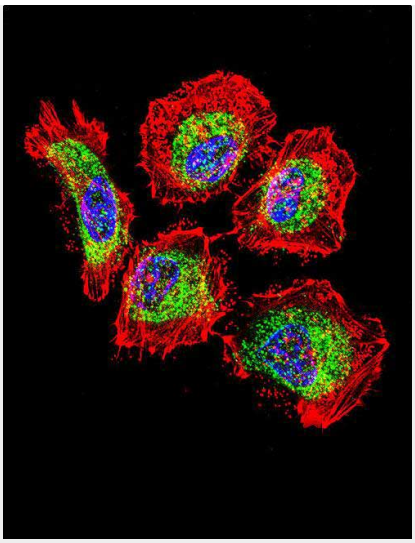
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Vimentin Antibody - Images

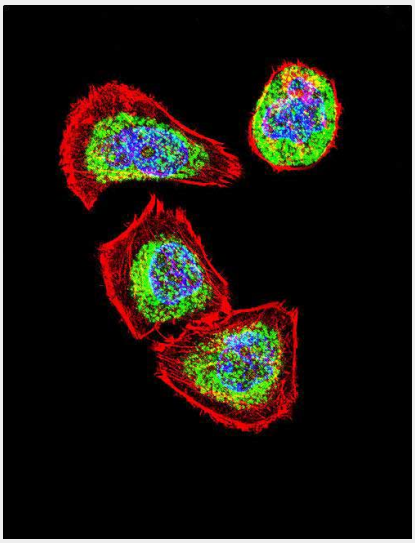


Confocal immunofluorescent analysis of Vimentin Antibody with A549 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red). DAPI was used to stain the cell nuclear (blue).

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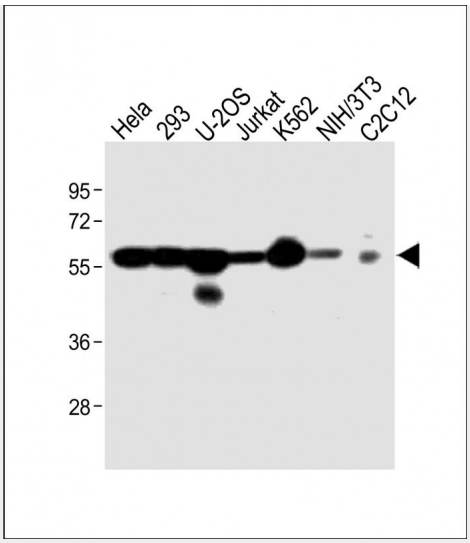


Confocal immunofluorescent analysis of Vimentin Antibody with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red). DAPI was used to stain the cell nuclear (blue).

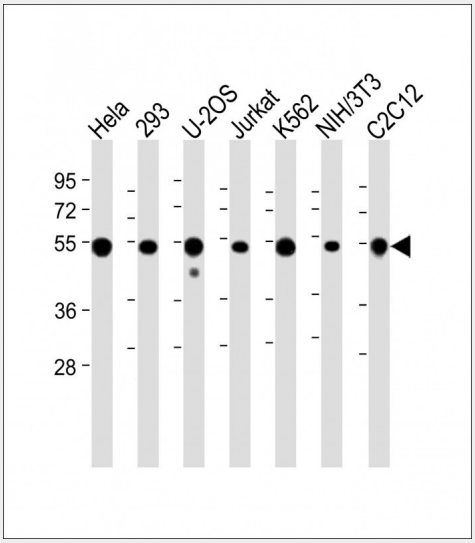


Confocal immunofluorescent analysis of Vimentin Antibody with U251 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red). DAPI was used to stain the cell nuclear (blue).

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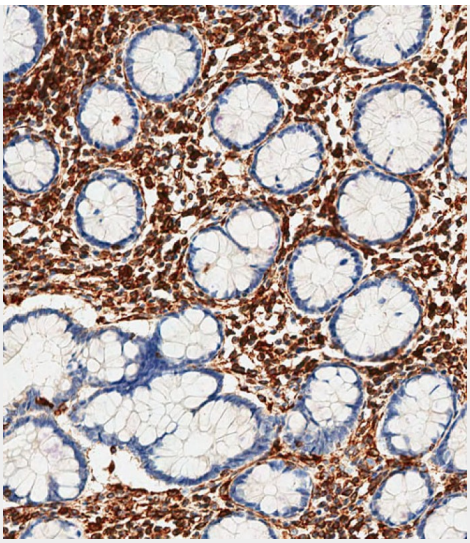


All lanes : Anti-VIME Antibody at 1:4000 dilution Lane 1: Hela whole cell lysate Lane 2: 293 whole cell lysate Lane 3: U-2OS whole cell lysate Lane 4: Jurkat whole cell lysate Lane 5: K562 whole cell lysate Lane 6: NIH/3T3 whole cell lysate Lane 7: C2C12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 54 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

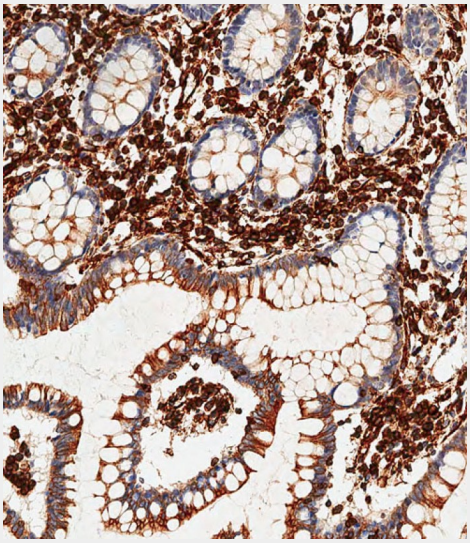


All lanes : Anti-VIME Antibody at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: 293 whole cell lysate Lane 3: U-2OS whole cell lysate Lane 4: Jurkat whole cell lysate Lane 5: K562 whole cell lysate Lane 6: NIH/3T3 whole cell lysate Lane 7: C2C12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 54 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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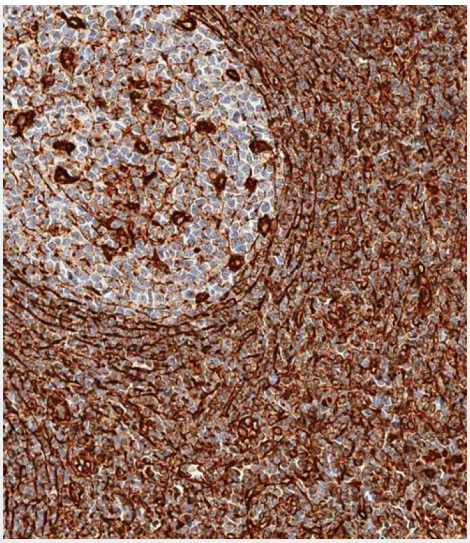


Immunohistochemical analysis of paraffin-embedded Human small intestine tissue using AX10005 performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

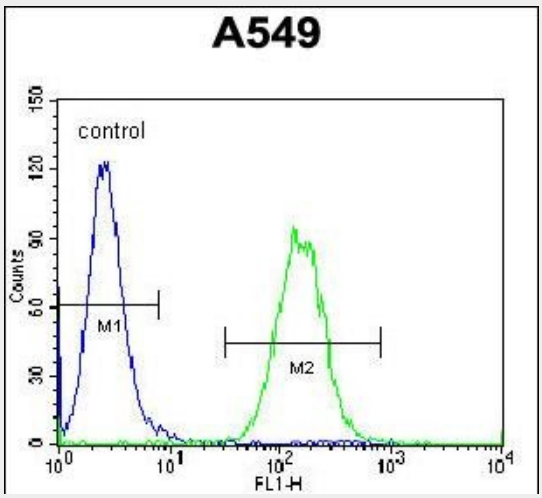


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Immunohistochemical analysis of paraffin-embedded Human tonsil tissue using AX10005 performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Vimentin Antibody flow cytometric analysis of A549 cells (right histogram) compared to a negative control cell (left histogram).Alexa Fluor 488-conjugated donkey anti-rabbit IgG secondary antibodies were used for the analysis.

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) :

Vimentin Antibody - Citations

- Decreased collagen type III synthesis in skin fibroblasts is associated with parastomal hernia following colostomy.