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Vimentin Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AX10005

Product Information

Application	WB, IF, FC, IHC-P-Leica, E
Primary Accession	P08670
Other Accession	NP_003371.2
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB41034
Calculated MW	53652

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	WB~~1:2000 IF~~1:50 FC~~1:50 IHC-P-Leica~~1:500 E~~Use at an assay dependent concentration.
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.

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). May promote axon outgrowth and motor fiber repair via DSP-mediated recruitment to outgrowth tips (By similarity).
Cellular Location	Cytoplasm. Cytoplasm, cytoskeleton. Nucleus matrix {ECO:0000250|UniProtKB:P31000}. Cell membrane {ECO:0000250|UniProtKB:P20152}. Cell projection, axon {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.

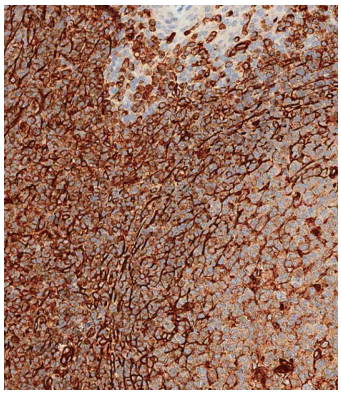
Background

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.

References

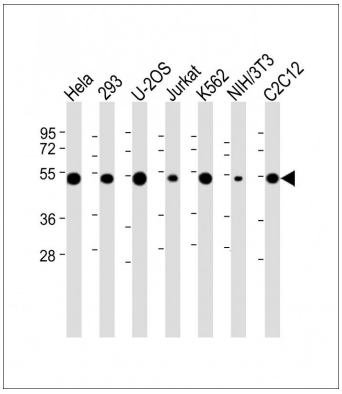
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Korita, P.V., et al. Anticancer Res. 30(6):2279-2285(2010)
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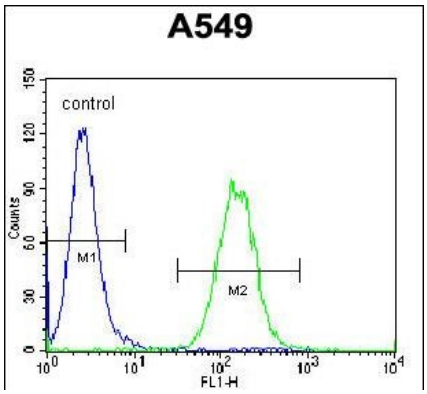
Images



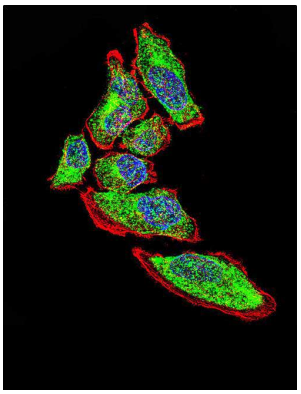
Immunohistochemical analysis of paraffin-embedded Human tonsil tissue using AX10005 performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1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

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.

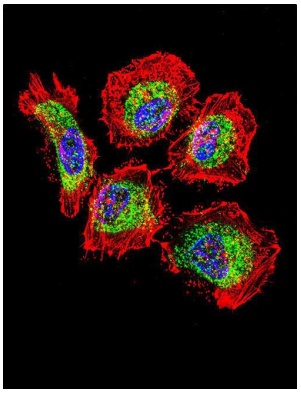




Vimentin Antibody flow cytometric analysis of A549 cells (right histogram) compared to a negative control cell (left histogram).Alexa Fluor 488-conjugated donkey anti-rabbit lgG secondary antibodies were used for the analysis.

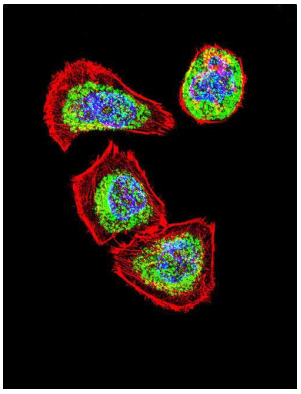


Confocal immunofluorescent analysis of Vimentin Antibody with A549 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red). DAPI was used to stain the cell nuclear (blue).



Confocal immunofluorescent analysis of Vimentin Antibody with 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).



Citations

- Decreased collagen type III synthesis in skin fibroblasts is associated with parastomal hernia following colostomy.
- Therapeutic effect of modulating the NLRP3-regulated transforming growth factor-β signaling pathway on interstitial cystitis/bladder pain syndrome

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.