

Anti-Vimentin Antibody

Catalog # AN2016

Product Information

Application	WB, ICC
Primary Accession	P02543
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Clone Names	V9
Calculated MW	53668

Additional Information

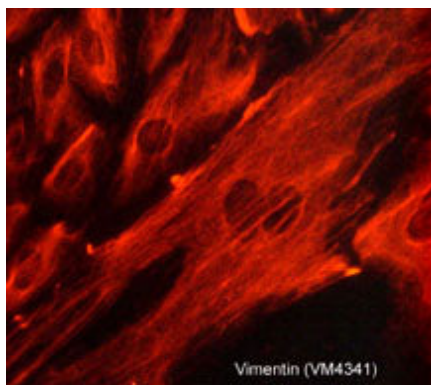
Gene ID	100522394
Other Names	VIM
Dilution	WB~~1:1000 ICC~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-Vimentin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

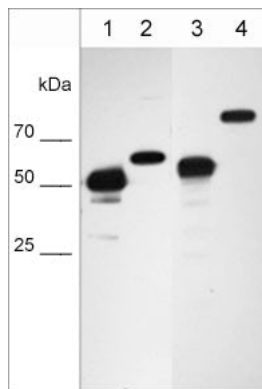
Intermediate filaments (IF) are important components of the cytoskeleton and nuclear envelope. IF protein family members are encoded by 70 genes that have diverse expression patterns during development and tissue-specific functions. For example, the keratins form IFs in epithelial cells, while vimentin forms filaments in mesenchymal, endothelial, and hematopoietic cells. Neurofilament triplet proteins and internexins form IFs in neurons, while desmin, synemin and syncoilin form the extra-sarcomeric cytoskeleton of myoblasts. The nuclear IF system consists of lamin family proteins organized in a meshwork-like lamina around the nucleus. Vimentin is a 58 kDa IF protein that forms 10 nm filaments that are important for mechanical stability, motility, and adhesion in various cell types. Vimentin activity is regulated by proteolysis and phosphorylation. Rho-kinases can phosphorylate vimentin leading to destabilization of intermediate filaments, while Akt phosphorylation of Ser-39 in vimentin reduces proteolysis of vimentin and promotes cancer cell motility and invasion.

Images

Immunocytochemical labeling of Vimentin in paraformaldehyde fixed and NP-40 permeabilized A7r5 cells. The cells were labeled with a mouse monoclonal



antibody to Vimentin (AN2016), then the antibody was detected using Goat anti-Mouse secondary antibody conjugated to DyLight® 594.



Western blot image of cell structure markers in NCI-H1915 lung carcinoma cells. The blot was probed with anti-Vimentin intermediate filament protein AN2016 (lane 1), anti-Nucleoporin p62 NM4361 (lane 2), anti-Hsp60 mitochondrial protein HM4381 (lane 3), and anti-Calnexin endoplasmic reticulum protein CM4371 (lane 4).

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