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Vimentin Antibody
Mouse monoclonal antibody
Catalog # AN1213

Specification

Vimentin Antibody - Product Information

Application	**WB, IF**
Primary Accession	P08670
Reactivity	**Bovine, Human, Mouse, Rat**
Host	**Mouse**
Clonality	**monoclonal**
Isotype	**IgG2a**
Calculated MW	**50 KDa**

Vimentin Antibody - Additional Information

Gene ID	**7431**
Gene Name	**VIM**

Other Names
Vimentin, VIM

Target/Specificity
Recombinant human vimentin purified from E. coli.

Dilution
WB~~ 1:1000
IF~~ 1:500

Format
Affinity purified

Antibody Specificity
Specific for the ~50kDa vimentin protein.

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

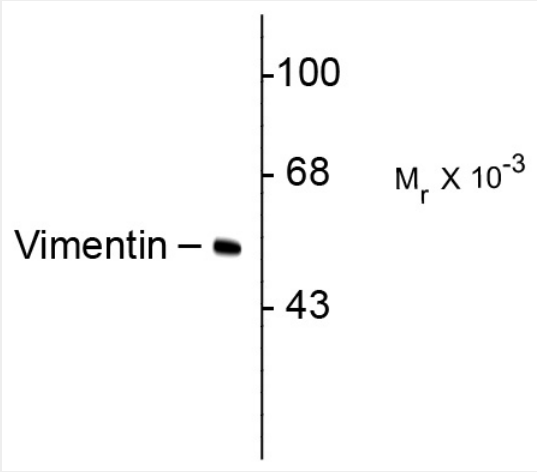
Shipping
Blue Ice

Vimentin Antibody - Protocols

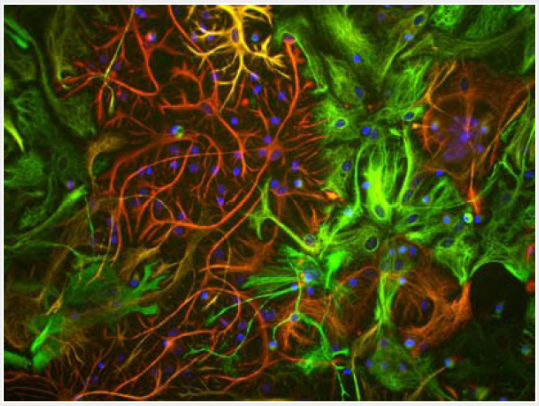
Provided below are standard protocols that you may find useful for product applications.

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

Vimentin Antibody - Images



Western blot of HeLa cells showing specific immunolabeling of the ~50k vimentin protein.



Mixed neuron/glial cultures stained with anti-vimentin (green) and rabbit anti-GFAP antibody (red). Vimentin is expressed alone in fibroblastic and endothelial cells, which are the flattened cells in the middle of the image which appear green. Astrocytes may express primarily GFAP, or GFAP and vimentin, and so appear red (GFAP only) or golden yellow (GFAP and Vimentin). In cells which express both GFAP and vimentin, the two proteins assemble to produce heteropolymer filaments.

Vimentin Antibody - Background

Vimentin is the major protein subunit of the 10nm or intermediate filaments (IFs) found in many kinds of mesenc hymal and epithelial cells as well as developing neuronal and astrocytic precursor cells in the CNS. Vimentin is thought to be critically involved in lymphocyte adhesion and transmigration (Nieminen M et al. 2006). Copolymers are frequently formed between vimentin and other IFs, such as GFAP (in many kinds of astrocytes),

desmin (in muscle cells) and neurofilament proteins (in developing neurons). Antibodies to vimentin are useful in studies of stem cells and
generally to reveal the filamentous cytoskeleton.
Recent studies suggest that vimentin affects pr
ostate cancer cells motility and invasiveness
(Zhao et al. 2008).

Vimentin Antibody - References

Nieminen M, Henttinen T, Merinen M, Marttila-Ichihara F, Eriksson JE, Jalkanen S (2006) Vimentin function in lymphocyte adhesion and transcellular migration. Nat Cell Biol 8(2):156-62.
Zhao Y, Yan Q, Long X, Chen X, Wang Y (2008) Vimentin affects the mobility and invasiveness of prostate cancer cells. Cell Biochem Funct. May 8 [Epub ahead of print]