

**AM32993PU-N****Monoclonal Antibody to Vimentin - Aff - Purified**

<b>Alternate names:</b>	VIM
<b>Quantity:</b>	0.1 ml
<b>Background:</b>	Vimentin is the major protein subunit of the 10nm or intermediate filaments (IFs) found in many kinds of mesenchymal 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 prostate cancer cells motility and invasiveness (Zhao et al. 2008).
<b>Uniprot ID:</b>	<a href="#">P08670</a>
<b>NCBI:</b>	<a href="#">NP_003371.2</a>
<b>GeneID:</b>	<a href="#">7431</a>
<b>Host / Isotype:</b>	Mouse / IgG2a
<b>Clone:</b>	2D1
<b>Immunogen:</b>	Recombinant human vimentin purified from E. coli.
<b>Format:</b>	<b>State:</b> Liquid purified IgG fraction <b>Purification:</b> Affinity Chromatography <b>Buffer System:</b> PBS <b>Preservatives:</b> 10mM Sodium Azide
<b>Applications:</b>	<b>Western Blot:</b> 1/1000. <b>Immunofluorescence:</b> 1/500. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	Specific for the ~50kDa Vimentin protein.
<b>Species Reactivity:</b>	<b>Tested:</b> Human, Mouse, Rat, Bovine. <b>Expected from sequence similarity:</b> Mammalians.
<b>Storage:</b>	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
<b>General Readings:</b>	1. Nieminen M, Henttinen T, Merinen M, Marttila-Ichihara F, Eriksson JE, Jalkanen S. Vimentin function in lymphocyte adhesion and transcellular migration. Nat Cell Biol. 2006 Feb;8(2):156-62. Epub 2006 Jan 22. PubMed PMID: 16429129. 2. 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]

**Pictures:**

Mixed neuron/glial cultures stained with anti-Vimentin (green) and Rabbit anti-GFAP antibody (Cat.-No AP08673SU-N) (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.

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

