

## **Anti-Vimentin Antibody**

Our Anti-Vimentin primary antibody from PhosphoSolutions is mouse monoclonal. It detects human, mous Catalog # AN1607

### Specification

## **Anti-Vimentin Antibody - Product Information**

Application	WB, IHC
Primary Accession	<u>P08670</u>
Reactivity	Bovine
Host	Mouse
Clonality	Monoclonal
Isotype	lgG2a
Calculated MW	53652

## **Anti-Vimentin Antibody - Additional Information**

Gene ID 7431 Other Names CTRCT30 antibody, Epididymis luminal protein 113 antibody, FLJ36605 antibody, HEL113 antibody, VIM antibody, VIME HUMAN antibody, Vimentin antibody

#### Target/Specificity

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).

**Dilution** WB~~1:1000 IHC~~1:100~500

Format Protein G Purified

#### 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

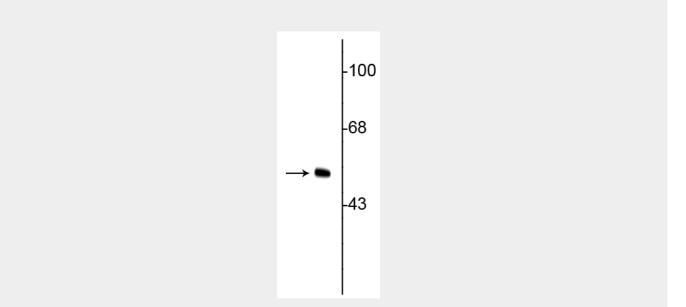


# Anti-Vimentin Antibody - Protocols

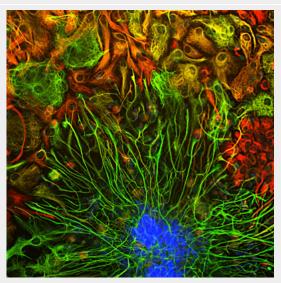
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## **Anti-Vimentin Antibody - Images**



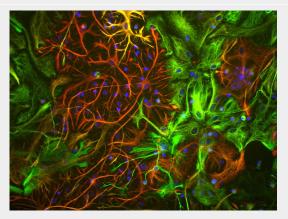
Western blot of HeLa cell lysate showing specific immunolabeling of the  $\sim$ 50 kDa vimentin protein.



Immunostaining of E20 rat cortical neuron/glial cell culture stained with anti-vimentin (cat. 2107-VIM, red, 1:2000) and anti-GFAP antibody (cat. 621-GFAP, green, 1:5000). The blue is DAPI



staining nuclear DNA. Vimentin is expressed alone in fibroblastic and developing cells and appear red. The astrocytes that appear red express only GFAP, while the golden yellow and yellow astrocytes express GFAP and Vimentin.



Mixed neuron/glial cultures stained with anti-vimentin (green, 1:500) and rabbit anti-GFAP antibody (cat. 620-GFAP, red, 1:1000). The blue stains nuclear DNA. 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).

# Anti-Vimentin Antibody - Background

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).