10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Vimentin Antibody

Our Anti-Vimentin primary antibody from PhosphoSolutions is chicken polyclonal. It detects human, mo

Catalog # AN1605

Specification

Anti-Vimentin Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P08670
Reactivity	**Bovine**
Host	**Chicken**
Clonality	**Polyclonal**
Isotype	**IgY**
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
Total IgY fraction

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

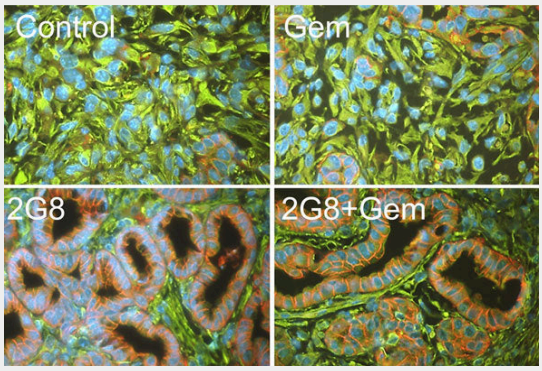
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Vimentin Antibody - Protocols

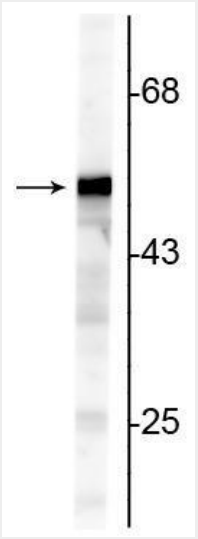
Provided below are standard protocols that you may find useful for product applications.

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

Anti-Vimentin Antibody - Images

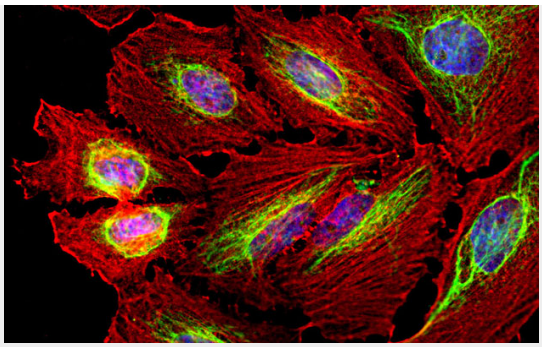


Immunostaining of tumors and precursor PanIN lesions from 4 week old LSL-KrasG12D; Cdkn2alox/lox; p48Cre (KIC) mice that were treated with 2G8 and/or gemcitabine, Gem. (Anti-Vimentin, cat. 2105-VIM, green; Anti-E-cadherin, red). Photo courtesy of Rolf Brekken, University of Texas Southwestern. CC-BY-4.0

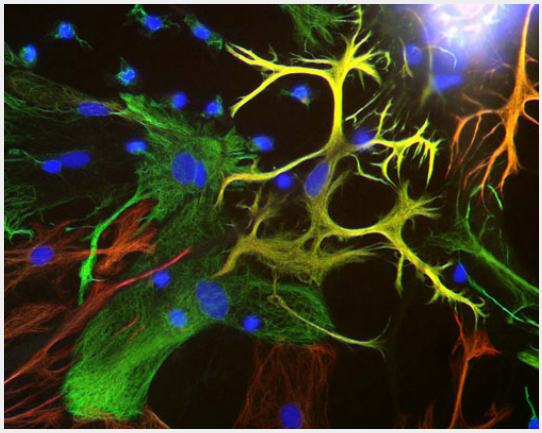


Western blot of NIH 3T3 cell lysate showing specific immunolabeling of the ~50 kDa Vimentin protein.

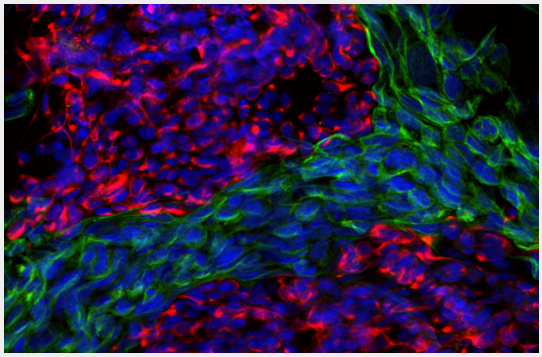
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Immunostaining of HeLa cells labelled with anti-vimentin antibody (cat.2105-VIM, 1:10,000, green), anti-actin (red), and DAPI (blue) labelling of nuclear DNA. The vimentin antibody labels the intermediate filament network while the actin antibody labels the submembranous cytoskeleton, stress fibers, and bundles of actin associated with cell adhesion sites.

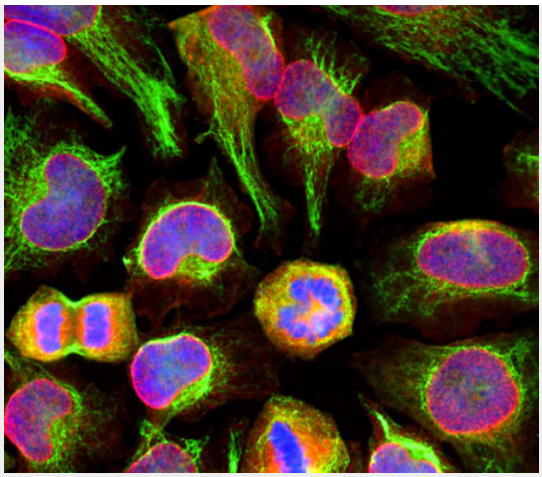


Immunostaining of mixed neuron/glial cultures stained with anti-Vimentin antibody (cat. 2105-VIM, 1:500, green) and anti-GFAP antibody (cat. 620-GFAP, 1:1000, red). Vimentin is expressed alone in fibroblastic and endothelial cells, which are the flattened cells in the middle of the image which appear green. Astrocytes may express primarily GFAP, or GFAP and vimentin, and so appear red (GFAP only) or golden yellow (GFAP and Vimentin).



Immunoflourescence of mixed fibroblasts and PC12 cells labeled with anti-peripherin (cat. 1630-PER, red, 1:500) and anti-vimentin (cat. 2105-VIM, green, 1:10,000). The blue is Hoechst staining nuclear DNA. Peripherin is labeled in only the PC12 cells cytoplasmic filaments and vimentin is only labeled in the fibroblasts intermediate filaments where peripherin is not present.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Immunolabeling of HeLa cells stained with anti-nuclear pore complex antibody (cat. 1515-NPC, red, 1:100) and rabbit anti-vimentin antibody (cat. 2105-VIM, green, 1:10,000). The blue is DAPI staining nuclear DNA. The anti-nuclear pore complex antibody reveals strong granular labeling of the nuclei corresponding to the protein. The anti-vimentin antibody specifically labels intermediate filaments.

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).