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Rabbit Anti-Vimentin antibody

SL0756R

Product Name:	Vimentin
Chinese Name:	波形蛋白抗体
Alias:	FLJ36605; OTTHUMP00000019224; VIM; VIME_HUMAN; Vimentin.
文献引用 PubMed :	**Specific References(30)**|SL0756R has been referenced in 30 publications. **[IF=3.73]**Wang, Yueqin, et al. "Hypoxia-Inducible Factor-1alpha and MAPK Co-Regulate Activation of Hepatic Stellate Cells upon Hypoxia Stimulation."?PLoS ONE?8.9 (2013).**WB;Mouse**. PubMed:24040163 **[IF=3.32]**Hu, Bin, et al. "IFN-γ Inhibits Osteopontin Expression in Human Decidual Stromal Cells and can be Attenuated by 1α, 25-Dihydroxyvitamin D3." American Journal of Reproductive Immunology 68.4 (2012): 353-361.**Human**. PubMed:22784028 **[IF=2.41]**Liu, Yang, et al. "Down-regulation of< i> Wnt10a affects odontogenesis and proliferation in mesenchymal cells." Biochemical and Biophysical Research Communications (2013).**Mouse**. PubMed:23603361 **[IF=0.96]**Fu, Min, et al. "Effects of Ureaplasma urealyticum lipid-associated membrane proteins on rheumatoid arthritis synovial fibroblasts." Journal of International Medical Research 41.5 (2013): 1655-1670.**Human**. PubMed:24097830 **[IF=3.44]**Li, Yingli, et al. "Differences between Niche Cells and Limbal Stromal Cells in Maintenance of Corneal Limbal Stem Cells." Investigative Ophthalmology & Visual

Science (2014): IOVS-13**Human**.

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[IF=3.06]Sottnik, Joseph L., et al. "Osteocytes Serve as a Progenitor Cell of Osteosarcoma." Journal of Cellular Biochemistry (2014).**IHC-P;Mouse**.

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[IF=2.06]Wang, Jing, et al. "Immortalized porcine intestinal epithelial cell cultures susceptible to porcine rotavirus infection." Journal of Virological Methods (2014).**Pig**.

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[IF=4.12]Pan, Yan, et al. "Enoxaparin Sensitizes Human Non-small-cell Lung Carcinomas to Gefitinib by Inhibiting DOCK1 Expression, Vimentin Phosphorylation and Akt Activation." Molecular pharmacology (2014): mol-114.**WB;Human**.

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[IF=2.38]Tong, Weihua, et al. "Sorcin Enhances Metastasis and Promotes Epithelial-to-Mesenchymal Transition of Colorectal Cancer." Cell Biochemistry and Biophysics (2015): 1-7.**WB;Human**.

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[IF=2.38]Cheng, Gangwei, et al. "Direct Effects of Bevacizumab on Rat Conjunctival Fibroblast." Cell Biochemistry and Biophysics: 1-6.**Rat**.

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[IF=2.84]Deng, Boya, et al. "MicroRNA-142-3p inhibits cell proliferation and invasion of cervical cancer cells by targeting FZD7." Tumor Biology (2015): 1-9.**WB;Human**.

PubMed:25976503

[IF=3.38]Fernández-Ferreiro, Anxo, et al. "In vitro and in vivo ocular safety and eye surface permanence determination by direct and Magnetic Resonance Imaging of ion-sensitive hydrogels based on Gellan gum and kappa-carrageenan."European Journal of Pharmaceutics and Biopharmaceutics (2015).**IHC-F;Rat**.

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PubMed:27401062

[IF=8.39]Monteiro, Nelson, et al. "Dental Cell Sheet Biomimetic Tooth Bud Model."Biomaterials (2016).**IF(IHC-P);Pig**.

PubMed:27565550

[IF=4.72]Sucre, Jennifer MS, et al. "A three-dimensional human model of the fibroblast activation that accompanies bronchopulmonary dysplasia identifies Notch-mediated pathophysiology." American Journal of Physiology-Lung Cellular and Molecular Physiology 310.10 (2016): L889-L898.**IF(IHC-P);Human**.

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[IF=1.28]Chen, Jia, et al. "Biological characterization of metanephric mesenchymal stem cells from the Beijing duck." Experimental and Therapeutic Medicine 11.2 (2016): 439-447.**FCM;Others**.

PubMed:26893628

[IF=5.03]Wilkinson, Dan C., et al. "Development of a Three-Dimensional Bioengineering Technology to Generate Lung Tissue for Personalized Disease Modeling." Stem Cells Translational Medicine (2016): sctm-2016.**IHC-P;Human**.

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[IF=4.26]Yap, Chan Choo, et al. "Different doublecortin (DCX) patient alleles show distinct phenotypes in cultured neurons: evidence for divergent loss-of-function and off-pathway cellular mechanisms." Journal of Biological Chemistry (2016): jbc-M116.**WB;Rat**.

PubMed:7799303

[IF=3.98]Li, Junqin, et al. "Fatty acid synthase mediates the epithelial-mesenchymal

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PubMed:0

[IF=1.46]Xiao, Jiajia, et al. "Isolation of Bovine Skin-Derived Precursor Cells and Their Developmental Potential After Nuclear Transfer." Cellular Reprogramming (Formerly" Cloning and Stem Cells") 18.6 (2016): 411-418.**IF;Bovine**.

PubMed:27906583

[IF=3.23]Daverey, Amita, and Sandeep K. Agrawal. "Curcumin alleviates oxidative stress and mitochondrial dysfunction in astrocytes." Neuroscience 333 (2016): 92-103.**WB;Human**.

PubMed:27423629

[IF=4.71]Smith, Elizabeth E., et al. "Developing a biomimetic tooth bud model." Journal of Tissue Engineering and Regenerative Medicine (2017).**IF(IHC-P);Human**.

PubMed:28066993

[IF=0.00]Khuder, Saja S. Regulation of Expression of CEACAM1 and Functional Correlation in Metabolic Diseases. Diss. University of Toledo, 2016.**IHC-P;Mouse**.

PubMed:000

[IF=1.70]Huang, Chao, and Bin Wen. "Phenotype transformation of immortalized NCM460 colon epithelial cell line by TGF-β1 is associated with chromosome instability." Molecular Biology Reports 43.10 (2016): 1069-1078.**IF(ICC);Human**.

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[IF=7.43]Wang, Jing, et al. "Phosphorylation-dependent regulation of ALDH1A1 by Aurora kinase A: insights on their synergistic relationship in pancreatic cancer." BMC biology 15.1 (2017): 10.**WB;Human**.

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PubMed:28719644

Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Pig,Cow,Goat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg/TestICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	53kDa
Cellular localization:	cytoplasmicExtracellular matrix
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Vimentin:371-466/466
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes a member of the intermediate filament family. Intermediate filamentents, along with microtubules and actin microfilaments, make up the cytoskeleton. The protein encoded by this gene is responsible for maintaining cell shape, integrity of the cytoplasm, and stabilizing cytoskeletal interactions. It is also involved in the immune response, and controls the transport of low-density lipoprotein (LDL)-derived cholesterol from a lysosome to the site of esterification. It functions as an organizer of a number of critical proteins involved in attachment, migration, and cell signaling. Mutations in this gene causes a dominant, pulverulent cataract.[provided by RefSeq, Jun 2009] **Function:** Vimentins are class-III intermediate filaments found in various non-epithelial cells, especially mesenchymal cells. Vimentin is attached to the nucleus, endoplasmic reticulum, and mitochondria, either laterally or terminally. Involved with LARP6 in the stabilization of type I collagen mRNAs for CO1A1 and CO1A2. **Subunit:** Homopolymer assembled from elementary dimers. Interacts with HCV core protein. Interacts with LGSN and SYNM. Interacts (via rod region) with PLEC (via CH 1 domain) (By similarity). Interacts with SLC6A4. Interacts with STK33. Interacts with LARP6. Interacts with RAB8B (By similarity). **Subcellular Location:** Cytoplasm.

Tissue Specificity:
Highly expressed in fibroblasts, some expression in T- and B-lymphocytes, and little or no expression in Burkitt's lymphoma cell lines. Expressed in many hormone-independent mammary carcinoma cell lines.

Post-translational modifications:
Filament disassembly during mitosis is promoted by phosphorylation at Ser-55 as well as by nestin (By similarity). One of the most prominent phosphoproteins in various cells of mesenchymal origin. Phosphorylation is enhanced during cell division, at which time vimentin filaments are significantly reorganized. Phosphorylation by PKN1 inhibits the formation of filaments. Phosphorylated at Ser-56 by CDK5 during neutrophil secretion in the cytoplasm. Phosphorylated by STK33.

Similarity:
Belongs to the intermediate filament family.

SWISS:
P08670

Gene ID:
7431

Database links:

Entrez Gene: 7431Human

Entrez Gene: 22352Mouse

Entrez Gene: 81818Rat

Omim: 193060Human

SwissProt: P08670Human

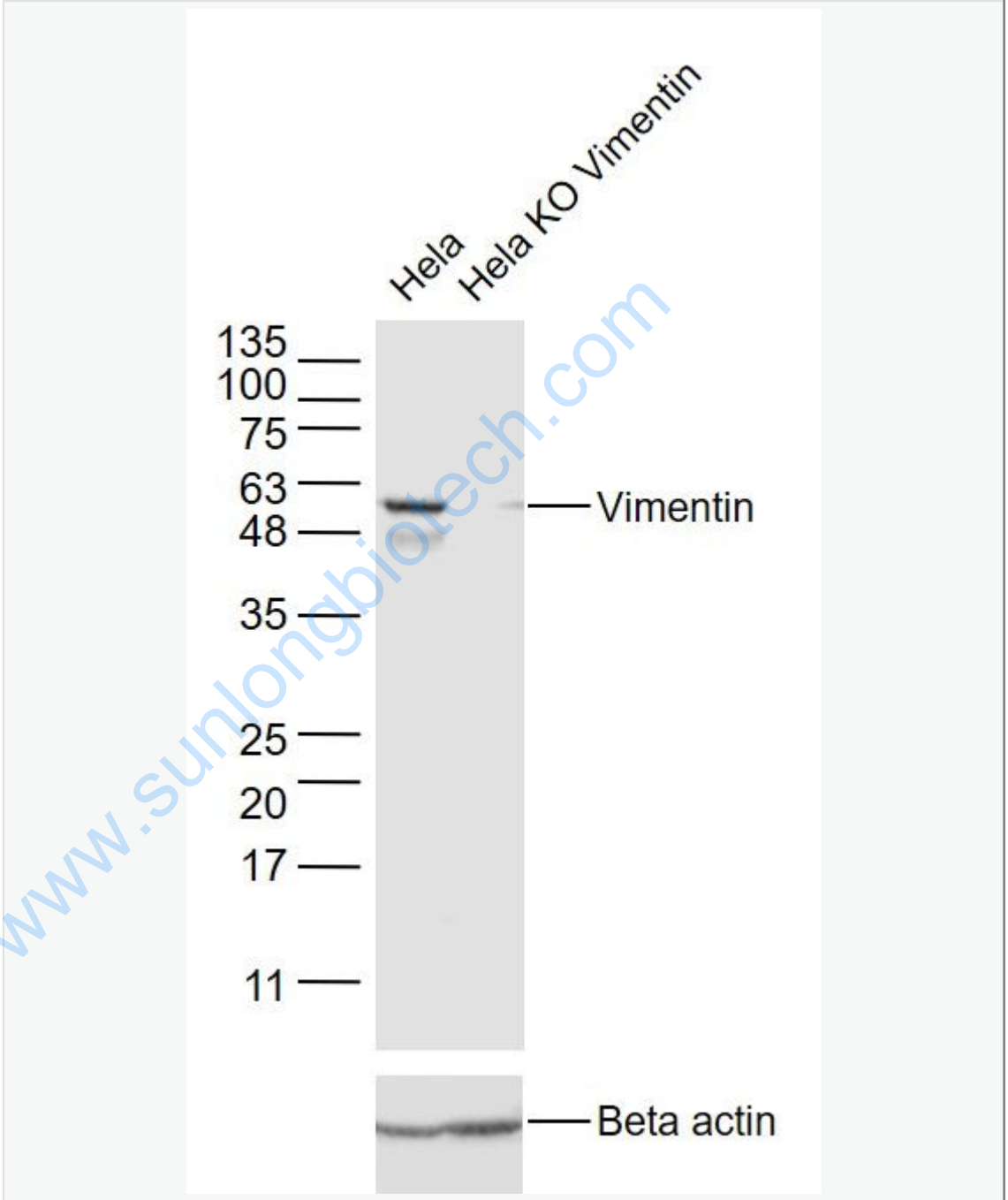
SwissProt: P20152Mouse

SwissProt: P31000Rat

Unigene: 455493Human

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Vimentin—
波形蛋白。是五种主要的中间丝之一，存在于各种正常和病理性间质来源的组织，

	如纤维母细胞、endothelial cells、lymphocyte等正常细胞和肉瘤、淋巴瘤、黑色素瘤等Tumour。波形蛋白是负责维持Cytoskeleton完整性的蛋白之一。
Picture:	 Sample: Hela(Human) Cell Lysate at 30 ug

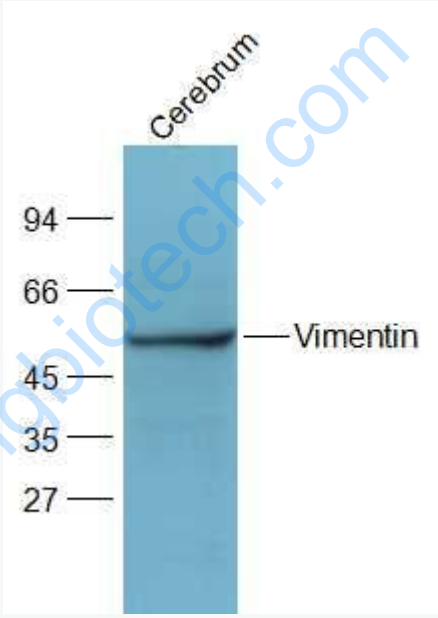
Hela KO Vimentin (Human) Cell Lysate at 30 ug

Primary: Anti- Vimentin (SL0756R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 53 kD

Observed band size: 53 kD



Sample:

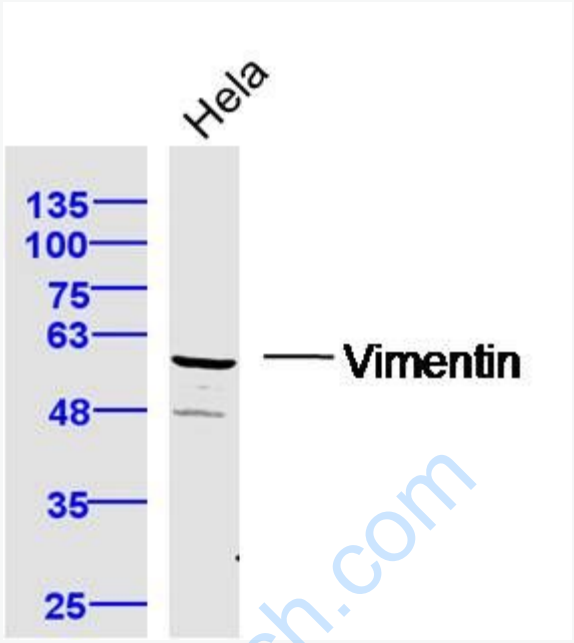
Cerebrum (Mouse) Lysate at 40 ug

Primary: Anti-Vimentin (SL0756R) at 1/2000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 53 kD

Observed band size: 53 kD



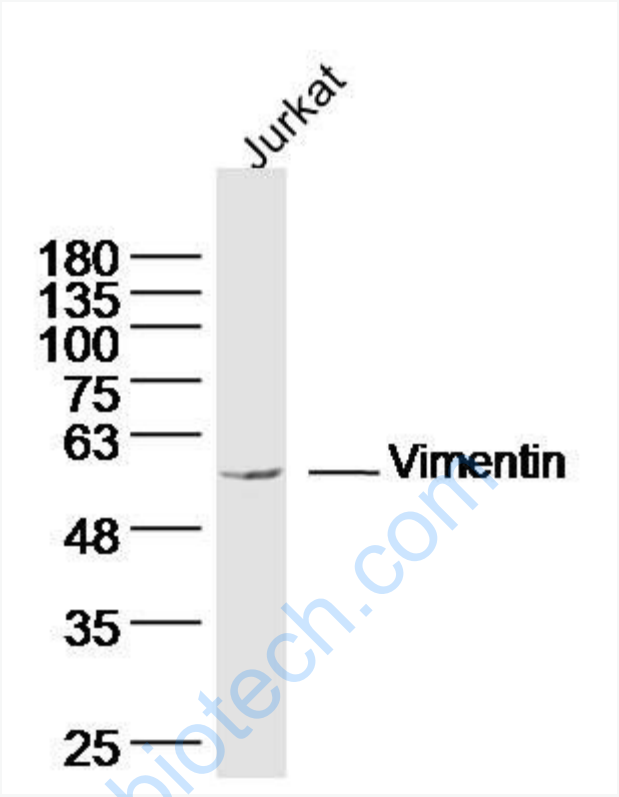
Sample: Hela Cell (Human) Lysate at 40 ug

Primary: Anti-Vimentin (SL0756R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 53 kD

Observed band size: 53 kD



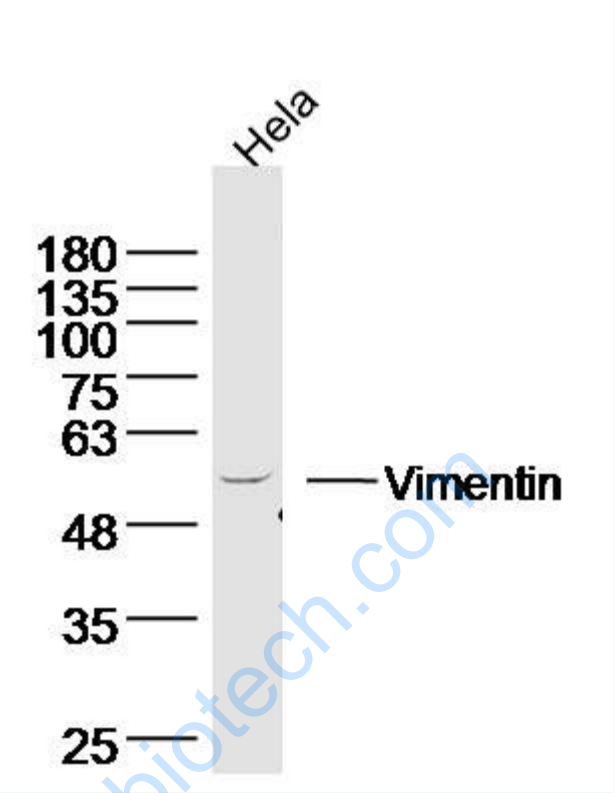
Sample: Jurkat (human)Cell Lysate at 40 ug

Primary: Anti- Vimentin (SL0756R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 53 kD

Observed band size: 53 kD



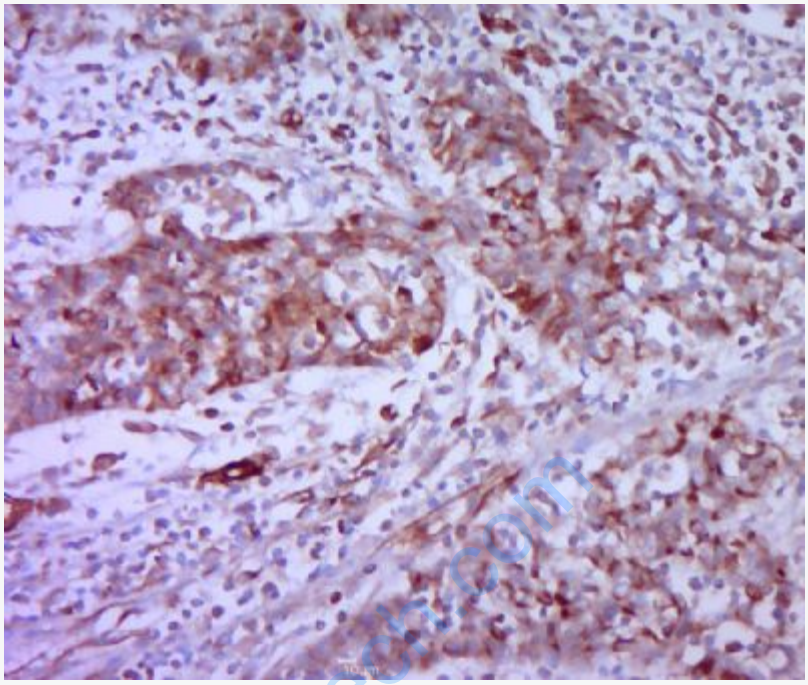
Sample: Hela (human)Cell Lysate at 40 ug

Primary: Anti- Vimentin (SL0756R) at 1/300 dilution

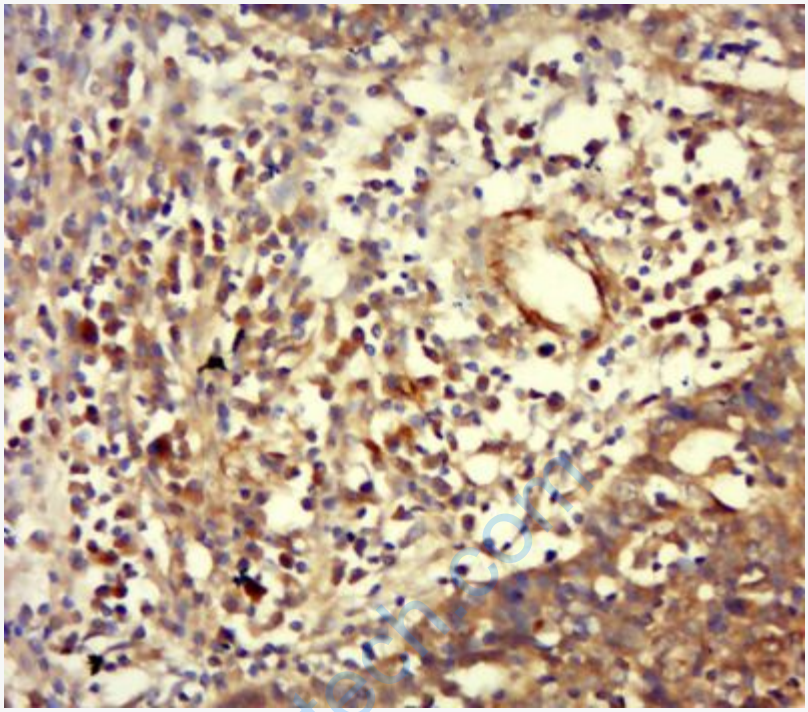
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 53 kD

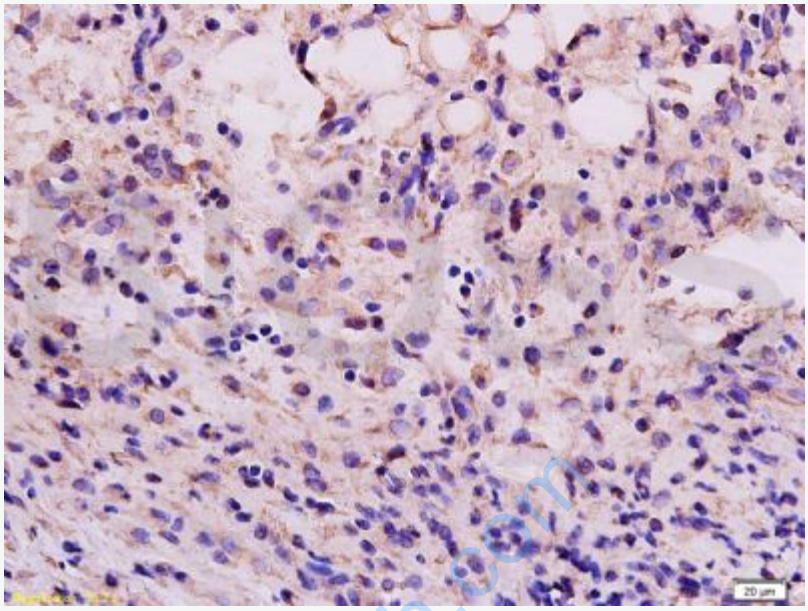
Observed band size: 53 kD



Paraformaldehyde-fixed, paraffin embedded (human cervical cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Vimentin) Polyclonal Antibody, Unconjugated (SL0756R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



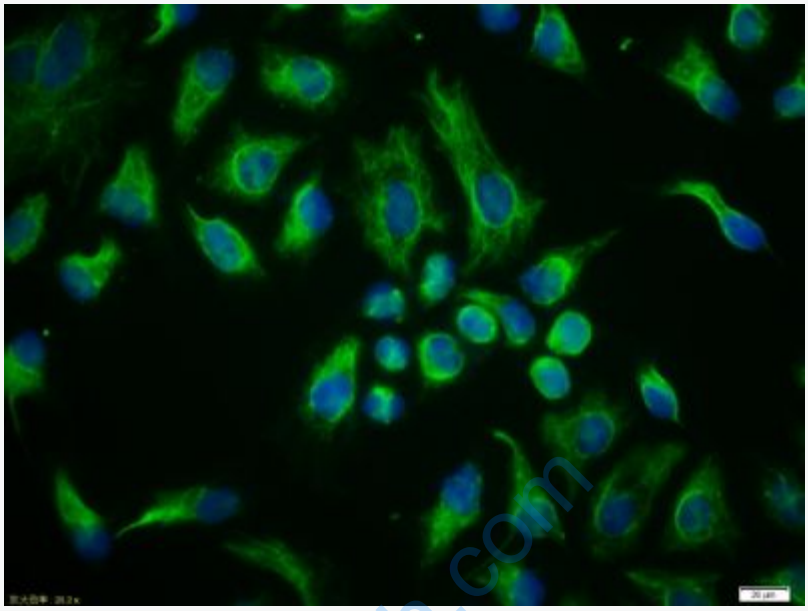
Paraformaldehyde-fixed, paraffin embedded (human cervical cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Vimentin) Polyclonal Antibody, Unconjugated (SL0756R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



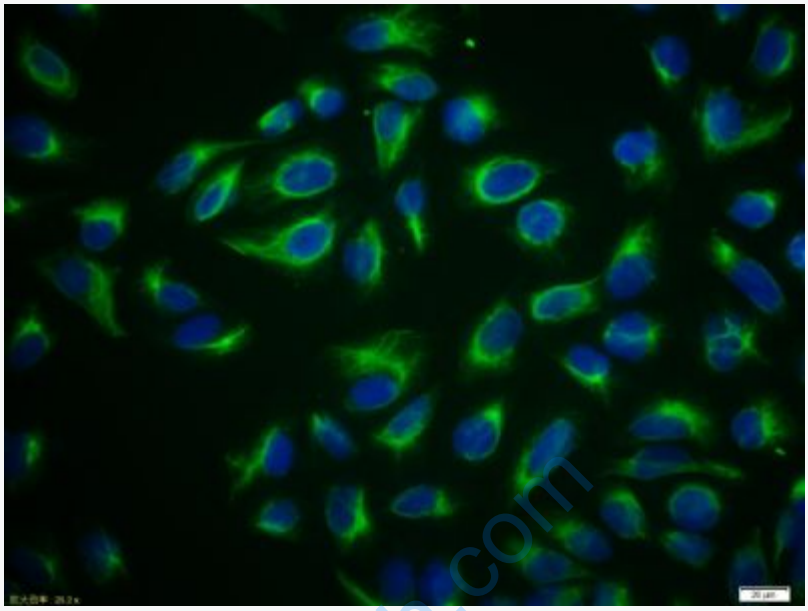
Tissue/cell: mouse kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

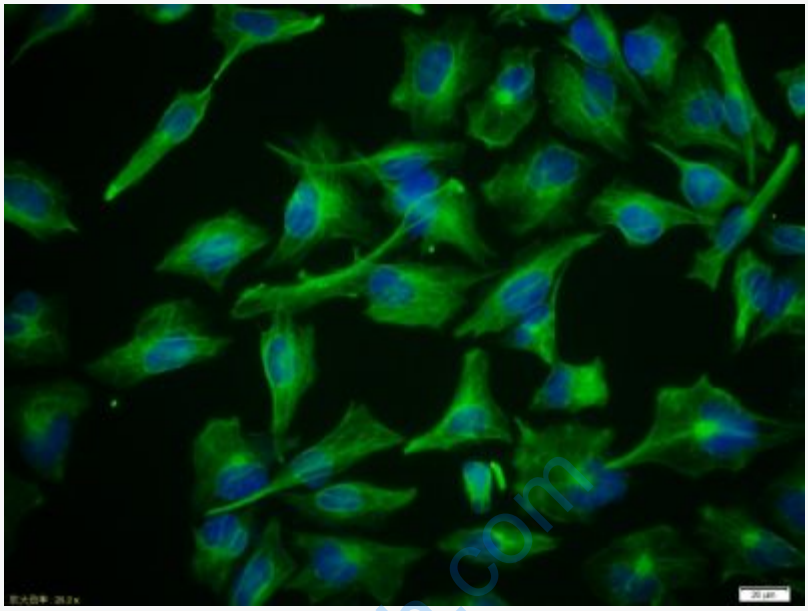
Incubation: Anti-Vimentin Polyclonal Antibody, Unconjugated(SL0756R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



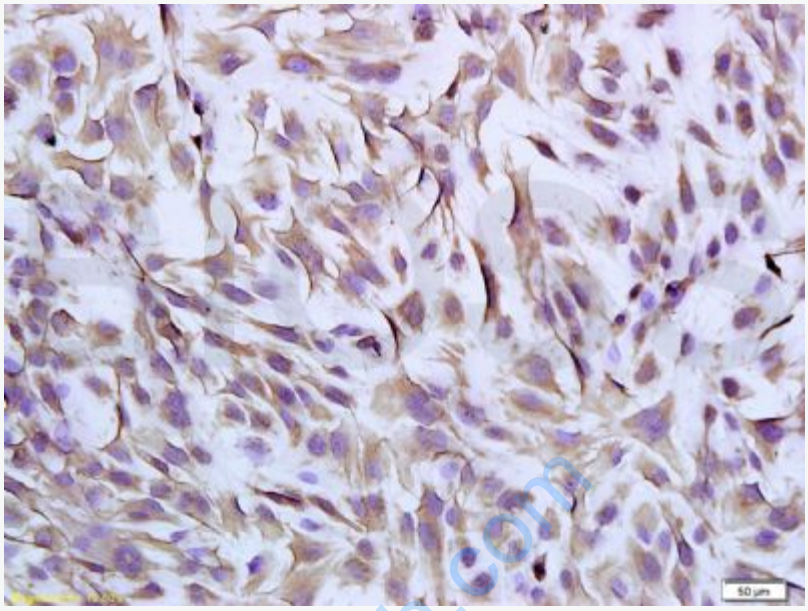
Tissue/cell: HeLa cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Vimentin) Polyclonal Antibody, Unconjugated (SL0756R) 1:50, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody (SL0756R) at 37°C for 90 minutes, DAPI (5ug/ml, blue, C-0033) was used to stain the cell nuclei.



Tissue/cell: U-2OS cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Vimentin) Polyclonal Antibody, Unconjugated (SL0756R) 1:50, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody (SL0756R) at 37°C for 90 minutes, DAPI (5ug/ml, blue, C-0033) was used to stain the cell nuclei.



Tissue/cell: U251 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Vimentin) Polyclonal Antibody, Unconjugated (SL0756R) 1:50, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody (SL0756R) at 37°C for 90 minutes, DAPI (5ug/ml, blue, C-0033) was used to stain the cell nuclei.



Tissue/cell: mouse mesenchymal stem cells;

Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-Vimentin Polyclonal Antibody, Unconjugated(SL0756R) 1:300, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

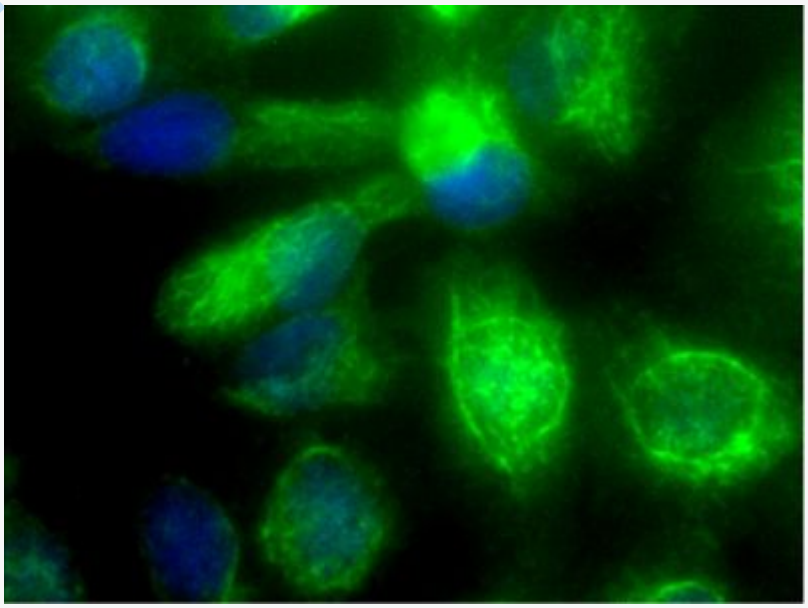
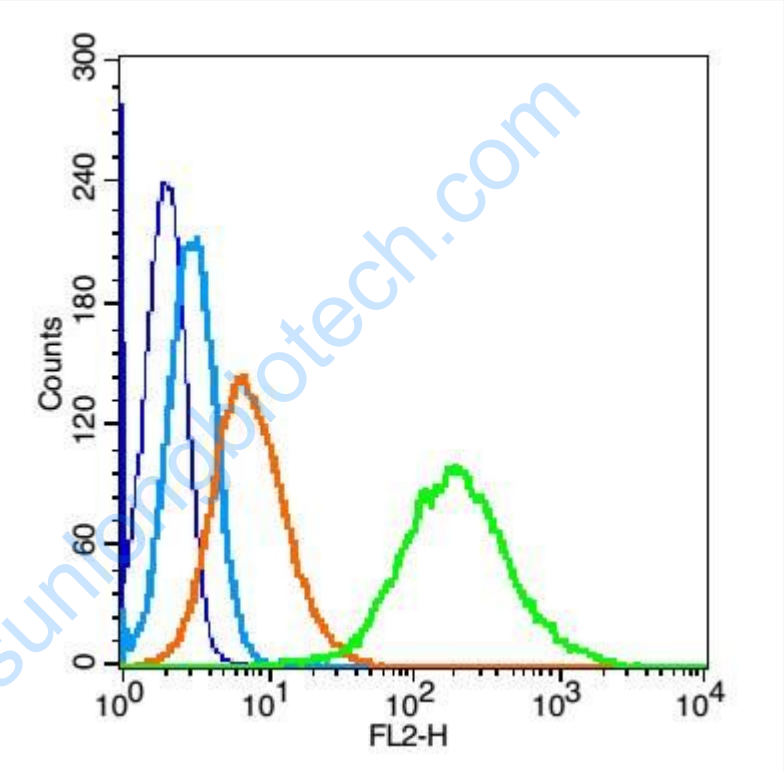


Image submitted by One World Lab validation program. U138 cells were stained with bs-0756R Rabbit Anti-Vimentin Polyclonal Antibody at 1:100 in PBS and incubated for one hour at room temperature, followed by secondary antibody incubation, DAPI staining and detection.



Blank control: Jurkat cells(blue).

Primary Antibody:Rabbit Anti-Vimentin antibody antibody(SL0756R), Dilution: 1μg in 100 μL 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions);

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

Protocol

	The cells were fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice. Primary antibody (SL0756R) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.