

Mouse Anti-Vimentin antibody

SLM-33170M

Product Name **[KO validated anti]** Vimentin

Chinese Name 波形蛋白单克隆抗体

Alias FLJ36605; OTTHUMP00000019224; VIM; VIME_HUMAN; Vimentin.

Research Area Tumour Developmental biology Neurobiology Signal transduction Stem cells Cell type markers

Immunogen Species Mouse

Clonality Monoclonal

Clone NO. 3B7

React Species Human

Applications WB=1:1000-10000,IHC-P=1:200-1000,IHC-F=1:200-1000,ICC/IF=1:100-500,IF=1:200-1000,IF (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 53kDa

Cellular localization cytoplasmic Extracellular matrix

Form Liquid

Concentration 1mg/ml

immunogen Recombinant human Vimentin Protein

Lsotype IgG

Purification affinity purified by Protein G

Buffer Solution Human1M TBS(pH7.4) with 1% BSA, Human3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

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

PubMed [PubMed](#)

Product This gene encodes a member of the intermediate filament family. Intermediate filamentents, also

Detail

microtubules and actin microfilaments, make up the cytoskeleton. The protein encoded by this gene is involved in the organization of the cytoskeleton for maintaining cell shape, integrity of the cytoplasm, and stabilizing cytoskeletal interactions. It is involved in the immune response, and controls the transport of low-density lipoprotein (LDL)-derived cholesterol to the lysosome to the site of esterification. It functions as an organizer of a number of critical proteins involved in cell attachment, migration, and cell signaling. Mutations in this gene causes a dominant, pulverulent form of osteogenesis imperfecta [MIM:166980] (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 SYNM. Interacts (via rod region) with PLEC (via CH 1 domain) (By similarity). 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 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, a prominent phosphoprotein in various cells of mesenchymal origin. Phosphorylation is enhanced during cell division, at which time vimentin filaments are significantly reorganized. Phosphorylation by PKC promotes 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: 7431](#) Human

[Entrez Gene: 22352](#) Mouse

[Entrez Gene: 81818](#) Rat

[Omim: 193060](#) Human

[SwissProt: P08670](#) Human

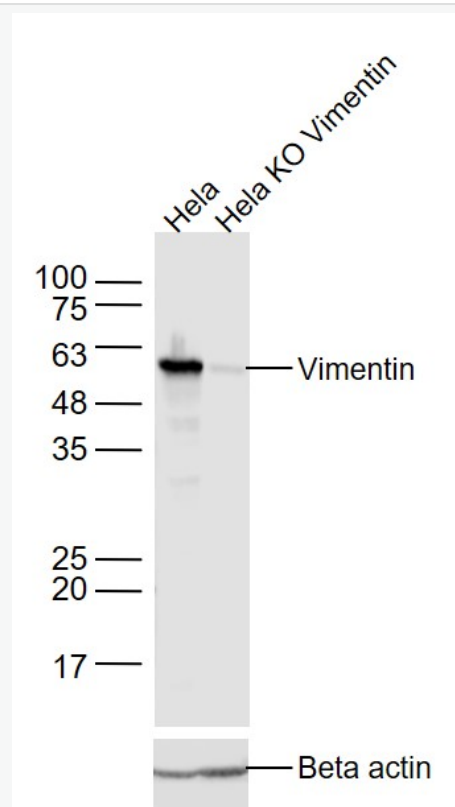
[SwissProt: P20152](#) Mouse

[SwissProt: P31000](#) Rat

[Unigene: 455493](#) Human

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 Cytoskeleton 完整性的蛋白之一。

**Product
Picture**



Sample:

HeLa(Human) Cell Lysate at 30 ug

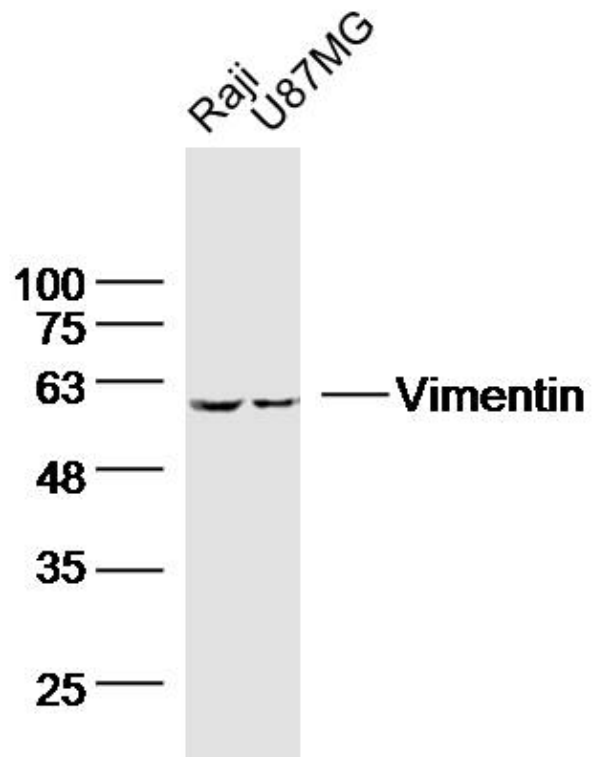
Hela KO Vimentin (Human) Cell Lysate at 30 ug

Primary: Anti- Vimentin (SLM-33170M) at 1/1000 dilution

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

Predicted band size: 53 kD

Observed band size: 58 kD



Sample:

Raji Cell Lysate at 40 ug

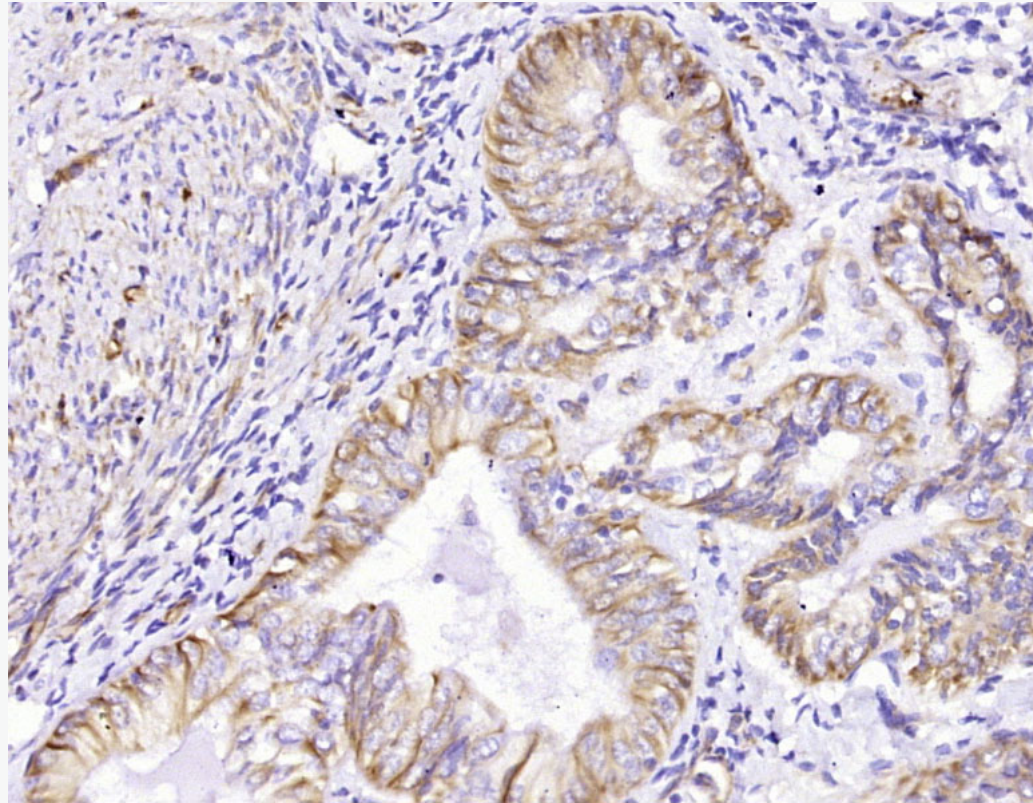
U87MG Cell Lysate at 40 ug

Primary: Anti- Vimentin (SLM-33170M)at 1/1000 dilution

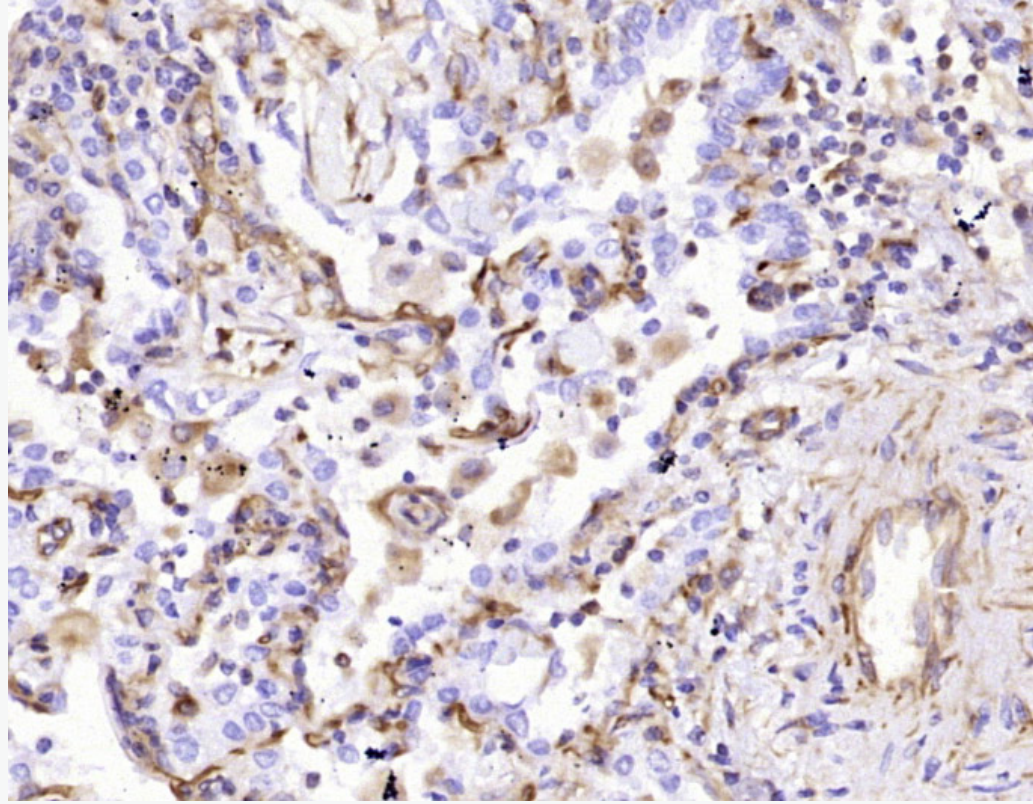
Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 53kD

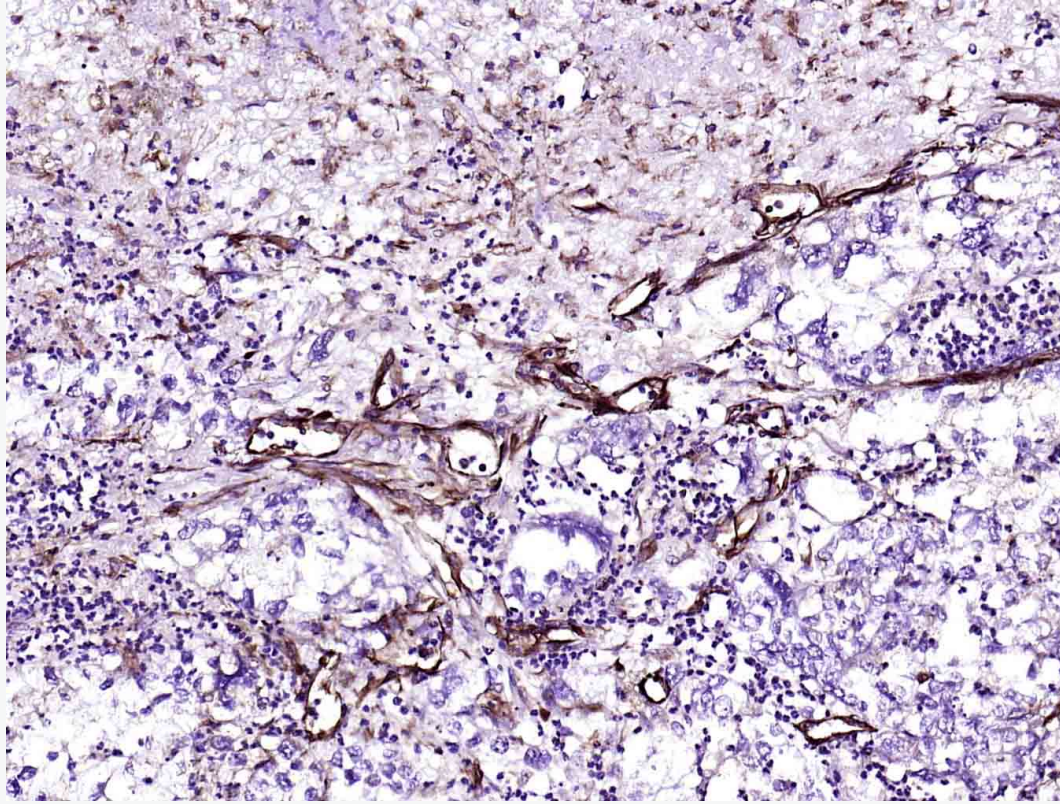
Observed band size: 58kD



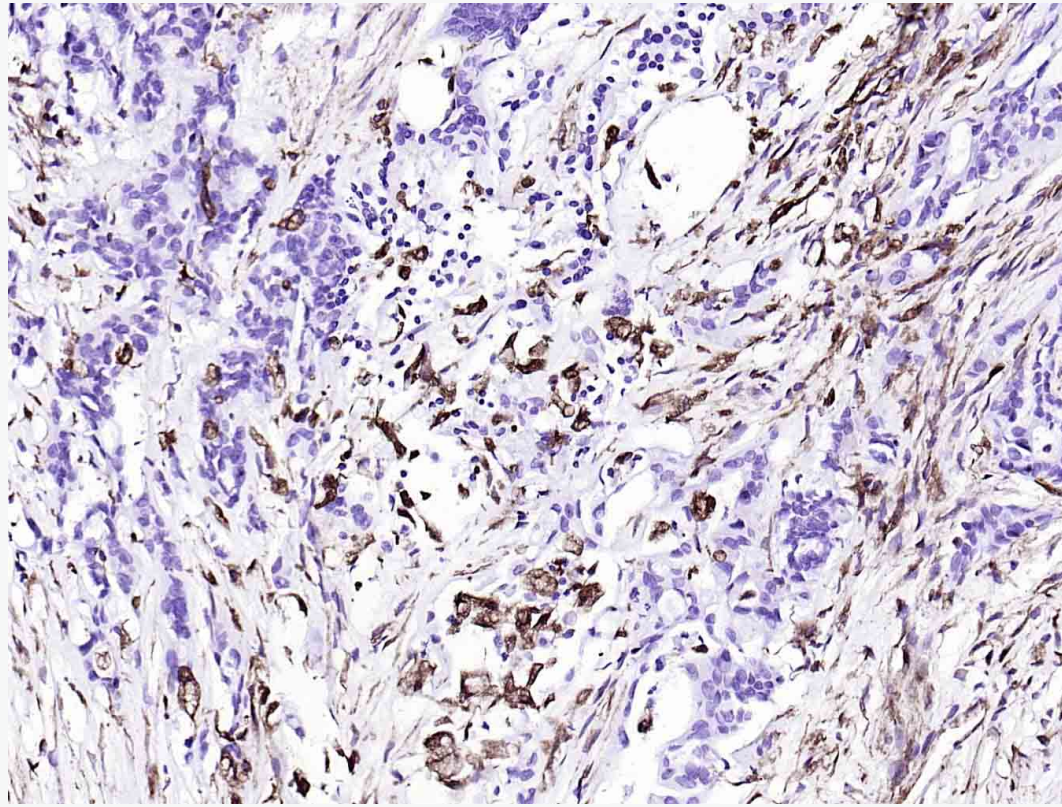
Paraformaldehyde-fixed, paraffin embedded (Human cervical cancer); Antigen retrieval by boiling in citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 30min; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Vimentin) Rabbit Anti-Human Vimentin Antibody, Unconjugated (ascites of SLM-33170M 3B7) at 1:2000 overnight at 4°C, followed by secondary antibody incubation with IRDye800CW Goat Anti-Mouse IgG at 1:20000 dilution for 1 hour at room temperature according to SP Kit(Mouse) (sp-0024) instructions and DAB staining.



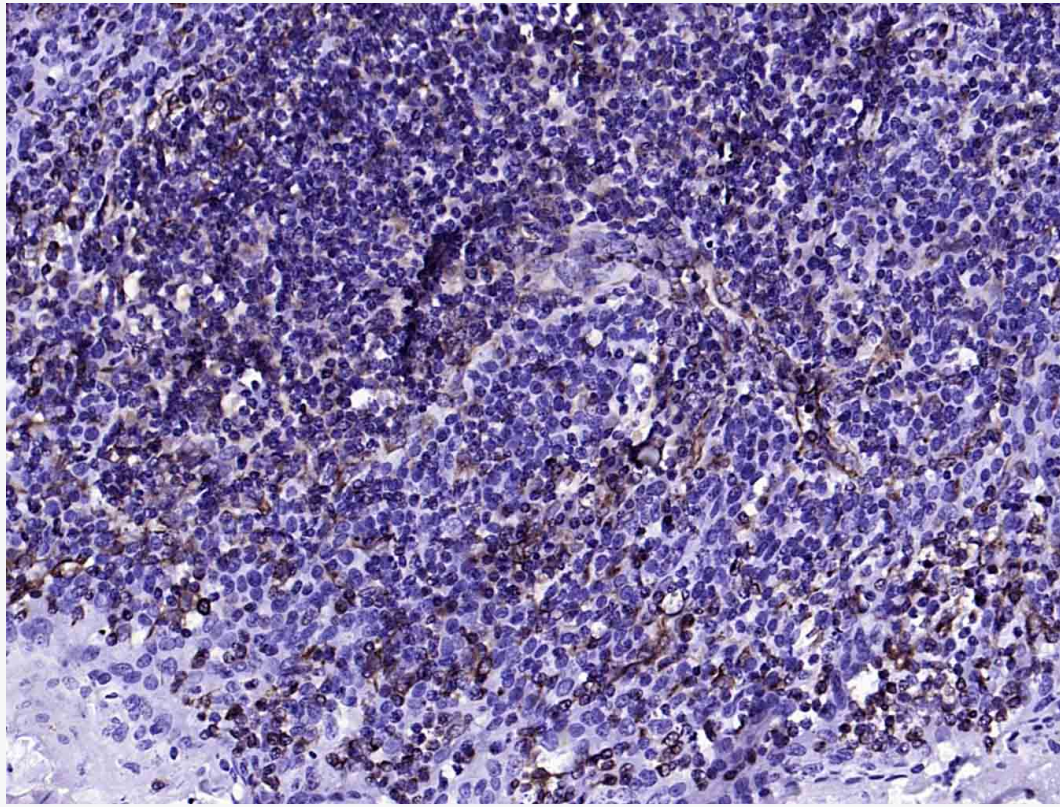
Paraformaldehyde-fixed, paraffin embedded (Human lung cancer); Antigen retrieval by boiling in citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 30min; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Vimentin) antibody, Unconjugated (ascites of SLM-33170M 3B7) at 1:2000 overnight at 4°C, followed by secondary antibody incubation according to SP Kit(Mouse) (sp-0024) instructions and DAB staining.



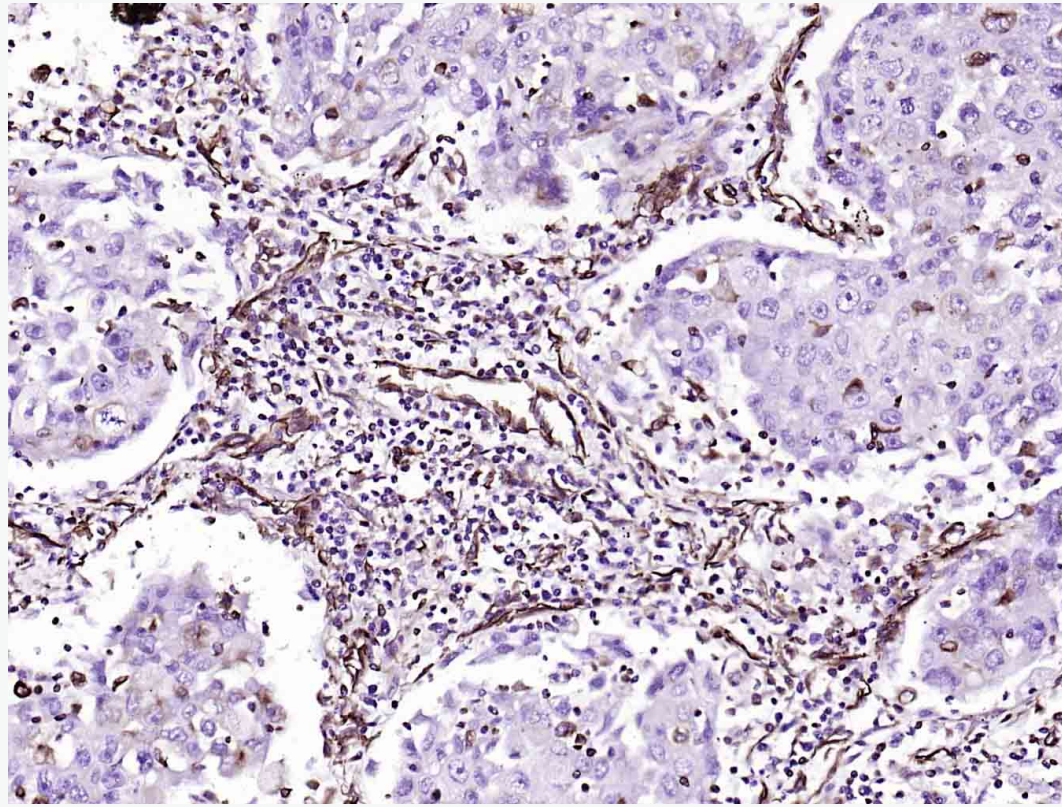
Paraformaldehyde-fixed, paraffin embedded (human endometrial carcinoma); Antigen retrieval in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 15 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (1:100) Monoclonal Antibody, Unconjugated (SLM-33170M) at 1:200 overnight at 4°C, followed by DAB staining according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.



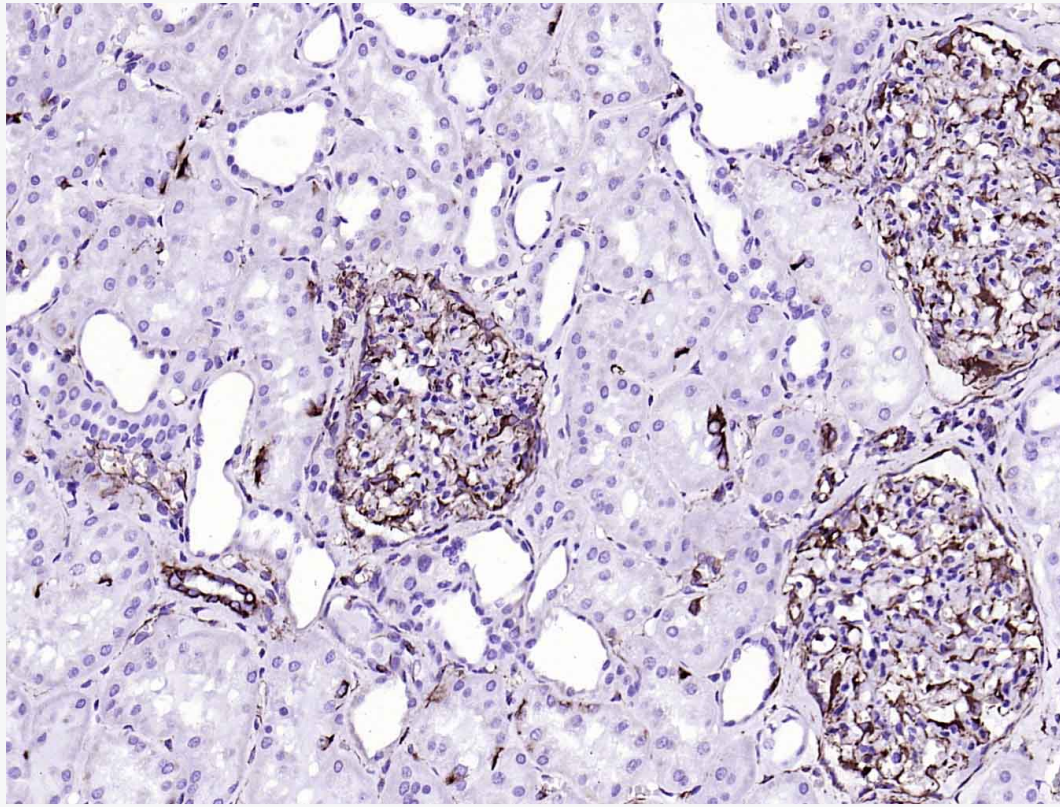
Paraformaldehyde-fixed, paraffin embedded (human colon); Antigen retrieval by boiling in so
buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min
buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Vimentin) Monoclo
Unconjugated (SLM-33170M) at 1:200 overnight at 4°C, followed by operating according to
Kit(Mouse)(sp-0024) instructions and DAB staining.



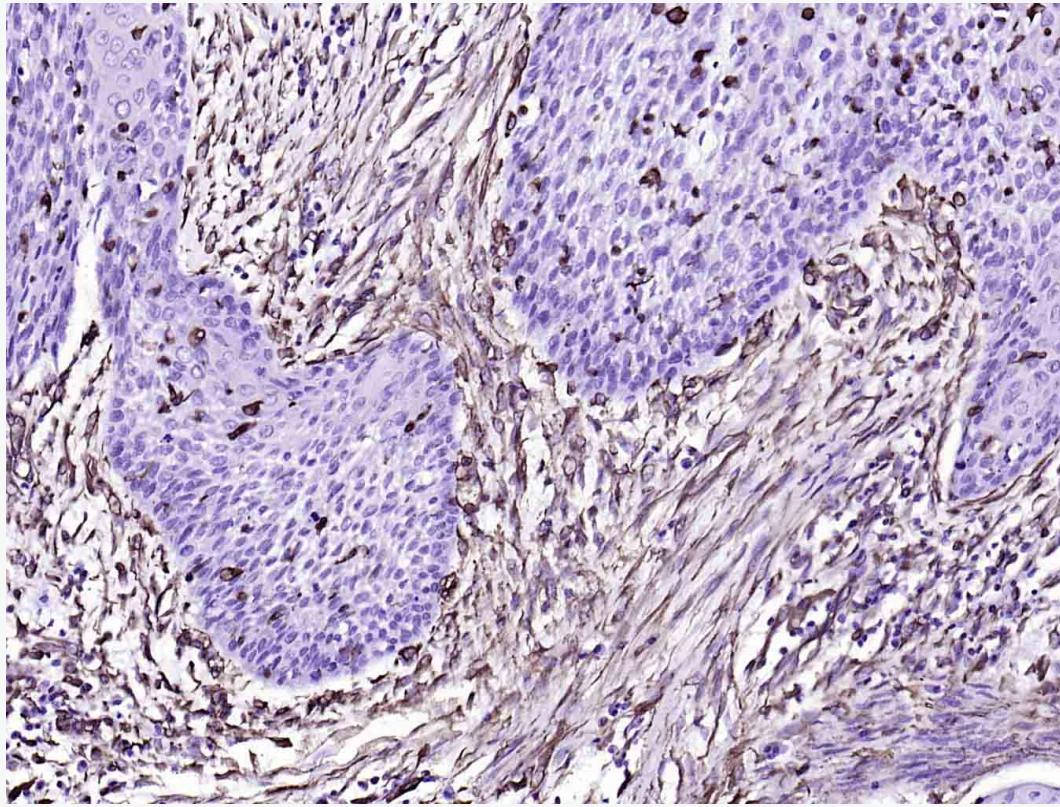
Paraformaldehyde-fixed, paraffin embedded (human tonsil); Antigen retrieval by boiling in so
buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min
buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Vimentin) Monoclo
Unconjugated (SLM-33170M) at 1:200 overnight at 4°C, followed by operating according to
Kit(Mouse)(sp-0024) instructions and DAB staining.



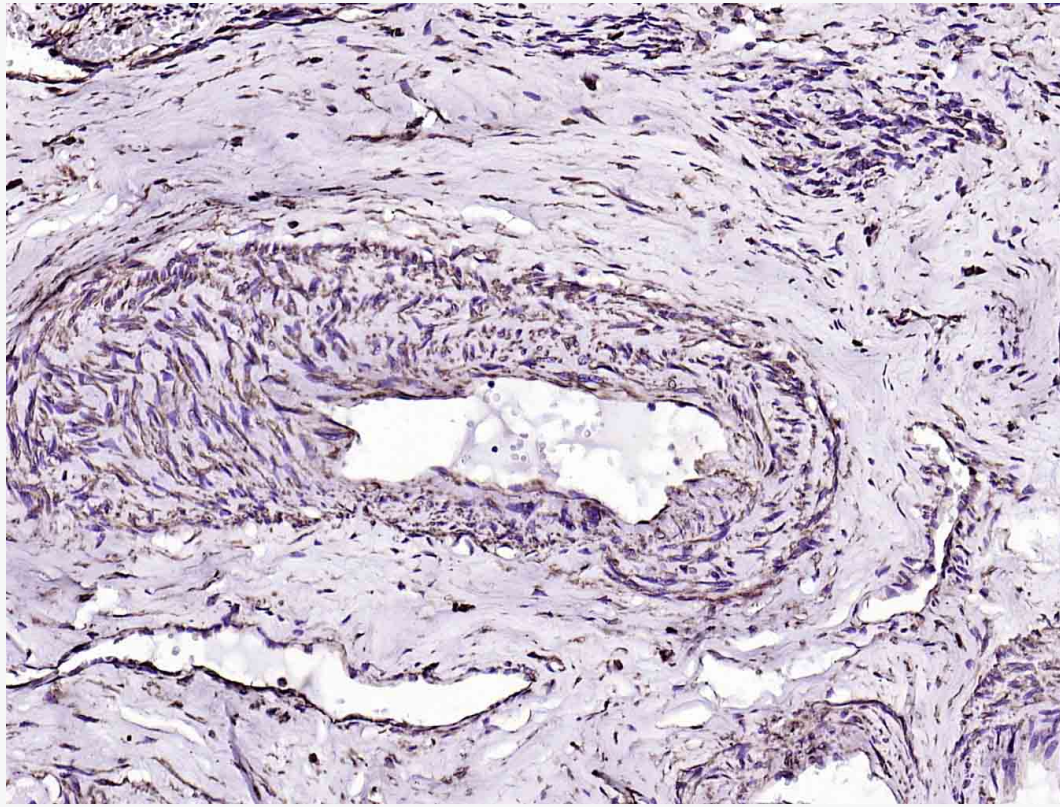
Paraformaldehyde-fixed, paraffin embedded (human lung carcinoma); Antigen retrieval by boiling in citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 30min; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Vimentin) Rabbit Polyclonal Antibody, Unconjugated (SLM-33170M) at 1:200 overnight at 4°C, followed by operating according to the DAB staining Kit(Mouse)(sp-0024) instructions and DAB staining.



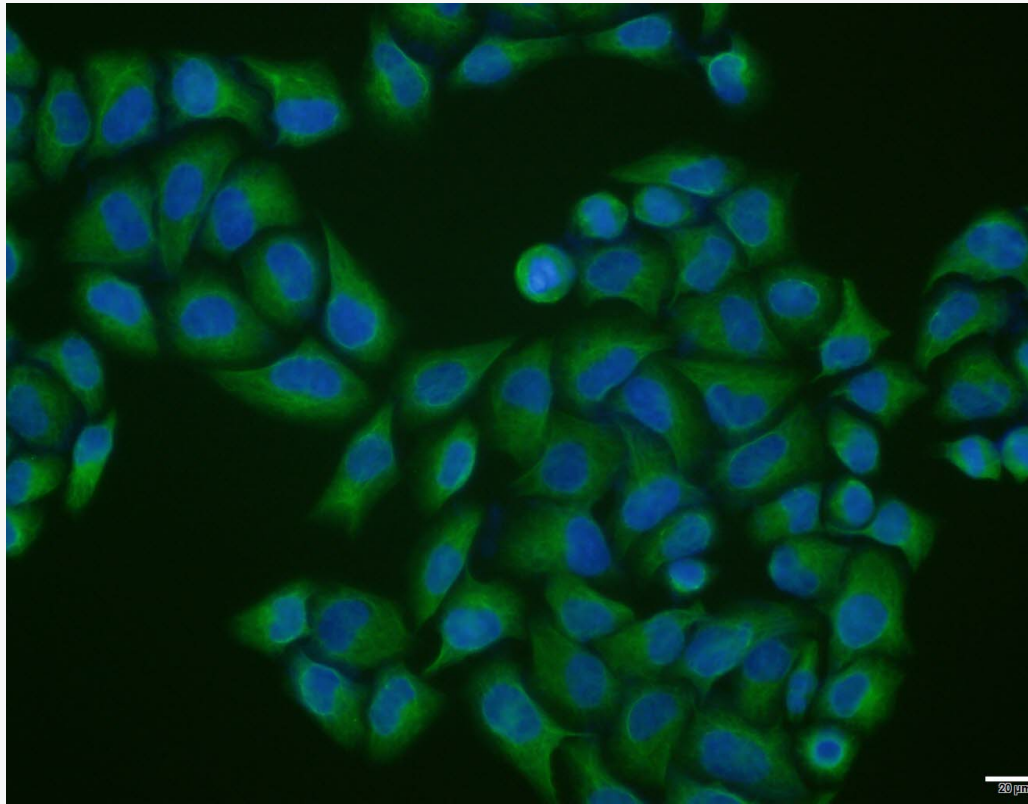
Paraformaldehyde-fixed, paraffin embedded (Human kidney); Antigen retrieval by boiling in citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min in citrate buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Vimentin) Monoclonal antibody (SLM-33170M) Unconjugated (SLM-33170M) at 1:200 overnight at 4°C, followed by operating according to DAB staining Kit(Mouse)(sp-0024) instructions and DAB staining.



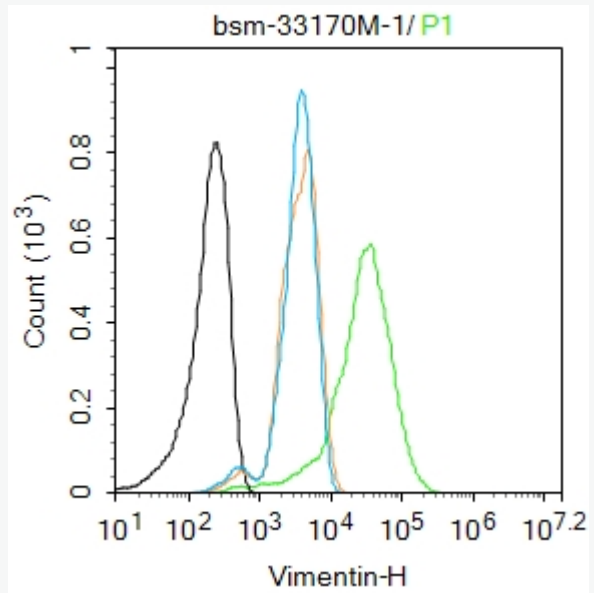
Paraformaldehyde-fixed, paraffin embedded (human cervical carcinoma); Antigen retrieval by sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 15 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SLM-33170M) Monoclonal Antibody, Unconjugated (SLM-33170M) at 1:200 overnight at 4°C, followed by DAB staining according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Human uterus); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Block non-specific binding by 3% normal goat serum in sodium citrate buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Vimentin) Monoclonal antibody (SLM-33170M) at 1:200 overnight at 4°C, followed by operating according to the DAB staining Kit(Mouse)(sp-0024) instructions and DAB staining.



HeLa cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking
goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Vimentin) monoclonal A
Unconjugated (SLM-33170M) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Ant
antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



Blank control:Hela.

Primary Antibody (green line): Mouse Anti-Vimentin antibody (SLM-33170M)

Dilution: 1ug/Test;

Secondary Antibody : Goat anti-Mouse IgG-FITC

Dilution: 0.5ug/Test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 95% methanol for 20 min at -20°C.The cells were then incubated in 5%BSA to block non-specific interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 cells per sample was performed.