

## Rabbit Anti-Vimentin antibody

SL8533R

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

**Chinese Name** 波形蛋白抗体

**Alias** VIM; FLJ36605; OTTHUMP00000019224; VIM; VIME\_HUMAN; Vimentin.

**Research Area** Tumour Cell biology immunology Signal transduction Stem cells Cytoskeleton TumourCell bio

**Immunogen Species** Rabbit

**Clonality** Polyclonal

**React Species** Human,Mouse,Rat(predicted:Dog,Pig,Cow,Horse,Rabbit)  
WB=1:1000-5000,IHC-P=1:200-1000,IHC-F=1:200-1000,ICC/IF=1:100-500,IF=1:200-1000,FI  
(Paraffin sections need antigen repair)

**Applications** not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight** 51kDa

**Cellular localization** cytoplasmic

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** KLH conjugated synthetic peptide derived from human Vimentin: 371-466/466

**Lsotype** IgG

**Purification** affinity purified by Protein A

**Buffer Solution** Human,Mouse,Rat(predicted:Dog,Pig,Cow,Horse,Rabbit)1M TBS(pH7.4) with 1% BSA,  
Human,Mouse,Rat(predicted:Dog,Pig,Cow,Horse,Rabbit)3% 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 d applications.

**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 g

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 cataract [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 end-on. Involved with LARP6 in the stabilization of type I collagen mRNAs for CO1A1 and CO1A2. Substrate for a 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 nedd8. It is 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 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

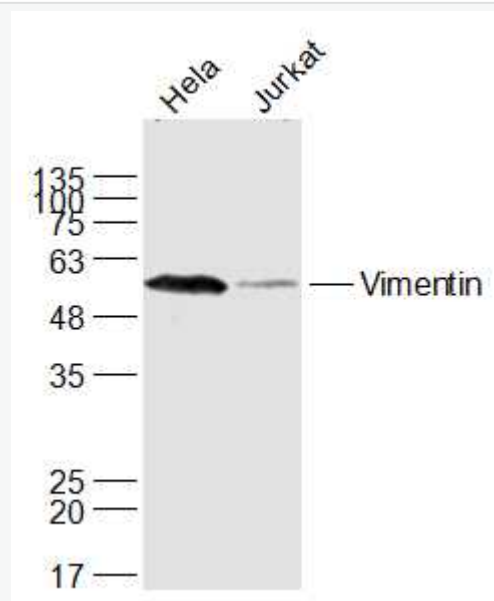
[SwissProt: P08670](#) Human

[SwissProt: P20152](#) Mouse

[SwissProt: P31000](#) Rat

[Unigene: 455493](#) Human

**Product  
Picture**



Sample:

A549(Human) Cell Lysate at 30 ug

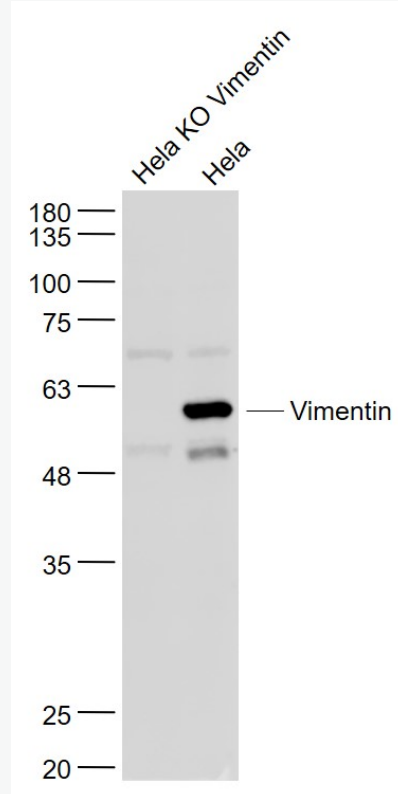
Jurkat(Human) Cell Lysate at 30 ug

Primary: Anti-Vimentin (SL8533R) at 1/1000 dilution

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

Predicted band size: 51 kD

Observed band size: 53 kD



Sample:

HeLa KO Vimentin (Human) Cell Lysate at 30 ug

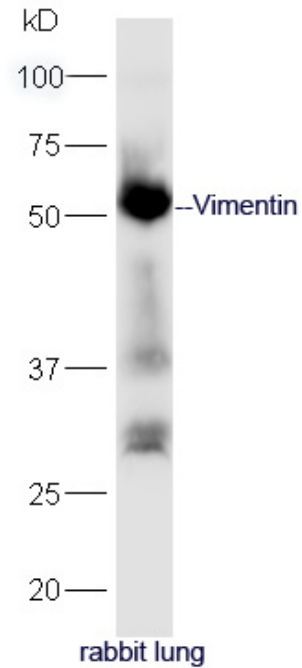
HeLa(Human) Cell Lysate at 30 ug

Primary: Anti- Vimentin (SL8533R) at 1/1000 dilution

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

Predicted band size: 51 kD

Observed band size: 57 kD



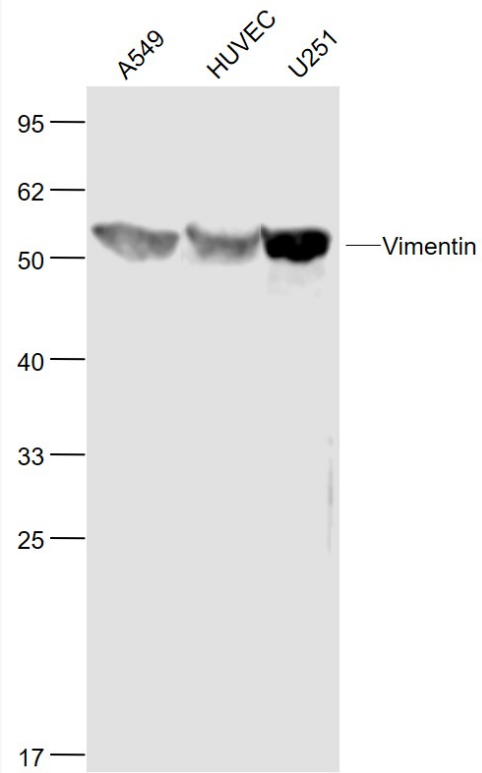
Protein: lung(rabbit) lysate at 40ug;

Primary: rabbit Anti-Vimentin (SL8533R) at 1:300;

Secondary: HRP conjugated Goat-Anti-rabbit IgG(SL0295G-HRP) at 1: 5000;

Predicted band size: 51 kD

Observed band size: 51 kD



Sample:

A549(Human) Cell Lysate at 30 ug

HUVEC(Human) Cell Lysate at 30 ug

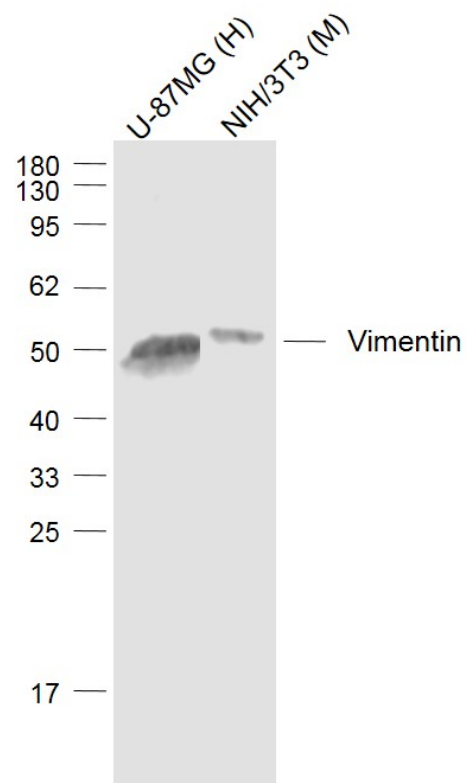
U251(Human) Cell Lysate at 30 ug

Primary: Anti-Vimentin (SL8533R) 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:

U-87MG (Human) Cell Lysate at 30 ug

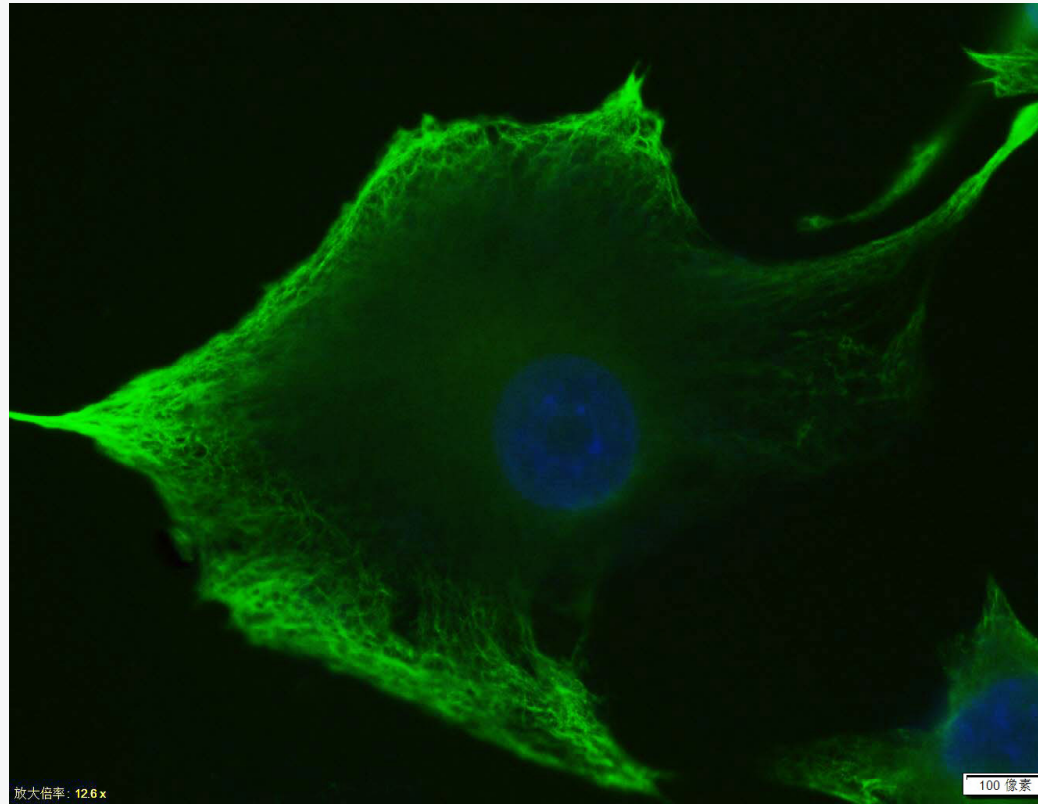
NIH/3T3 (Mouse) Cell Lysate at 30 ug

Primary: Anti-Vimentin (SL8533R) at 1/1000 dilution

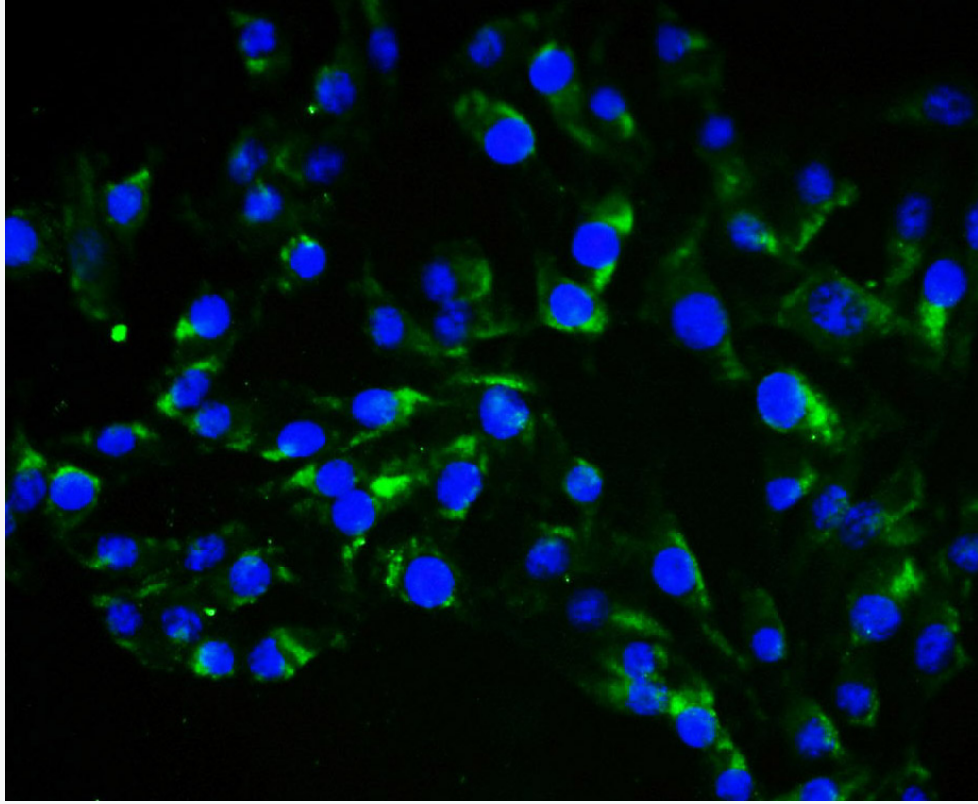
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 51 kD

Observed band size: 53 kD



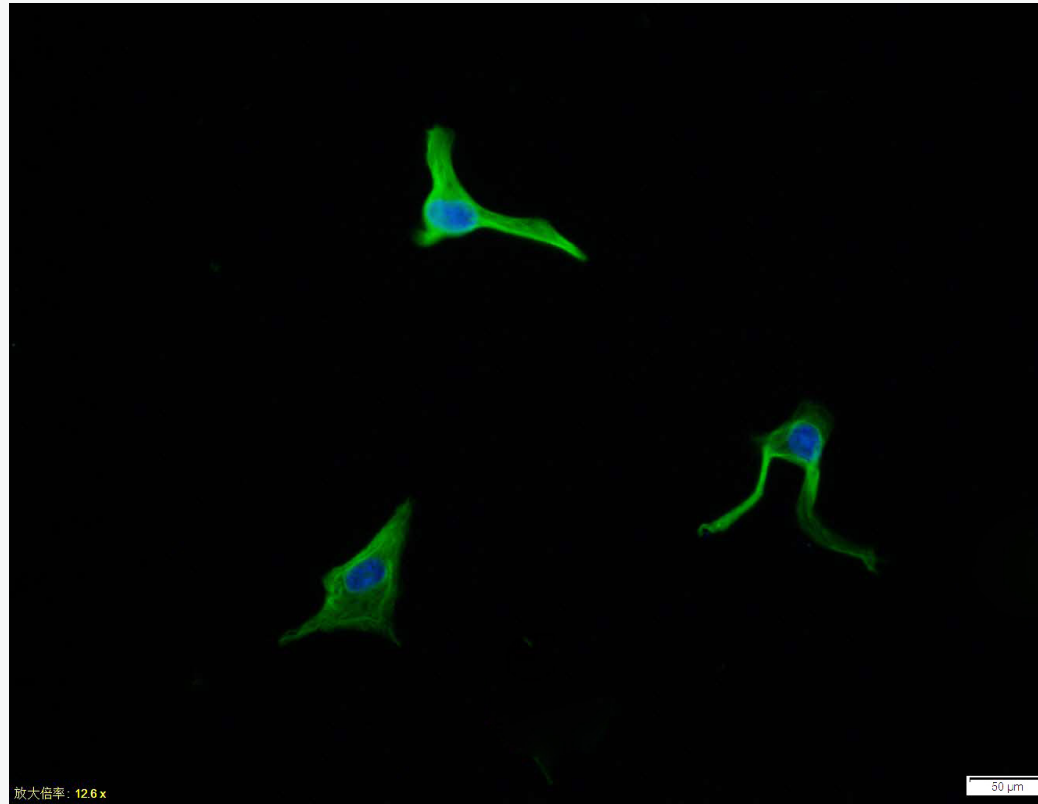
Tissue/cell: U-87MG cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 30 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (SL8533R) Polyclonal Antibody, Unconjugated (SL0295G-FITC) at 37°C for 90 min; DAPI (blue, C02-04002) was used to stain the cell nuclei.



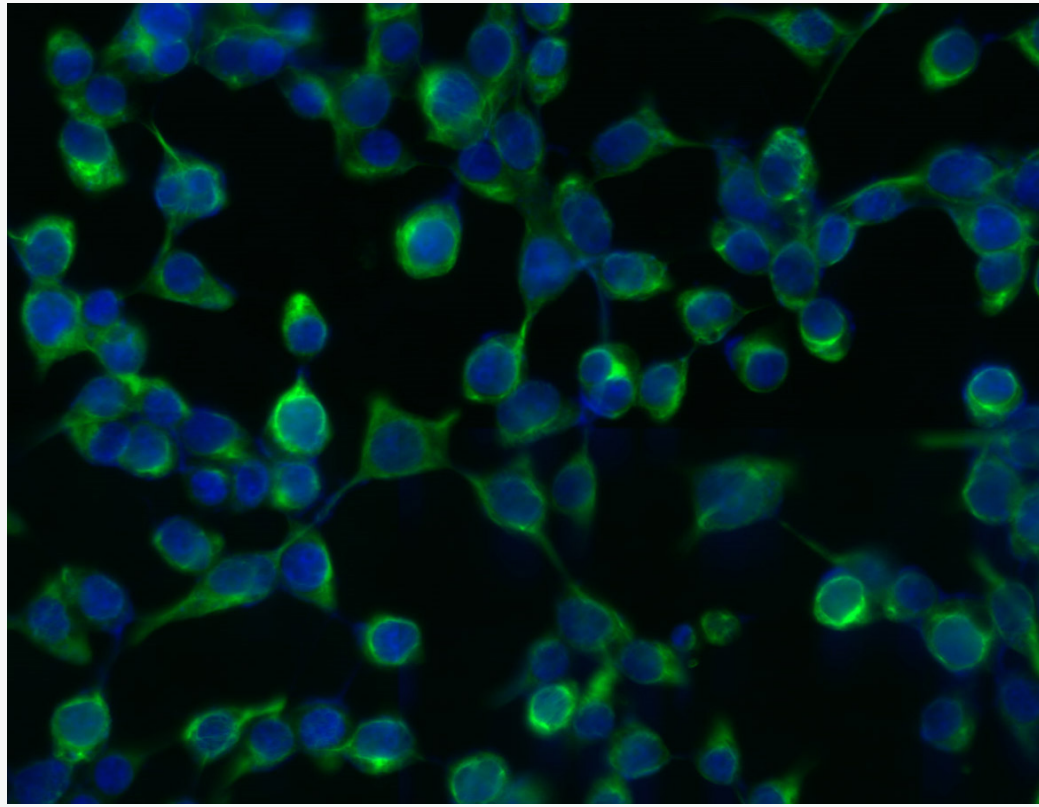
Tissue/cell: endothelial cells of umbilical artery;4% Paraformaldehyde-fixed;

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

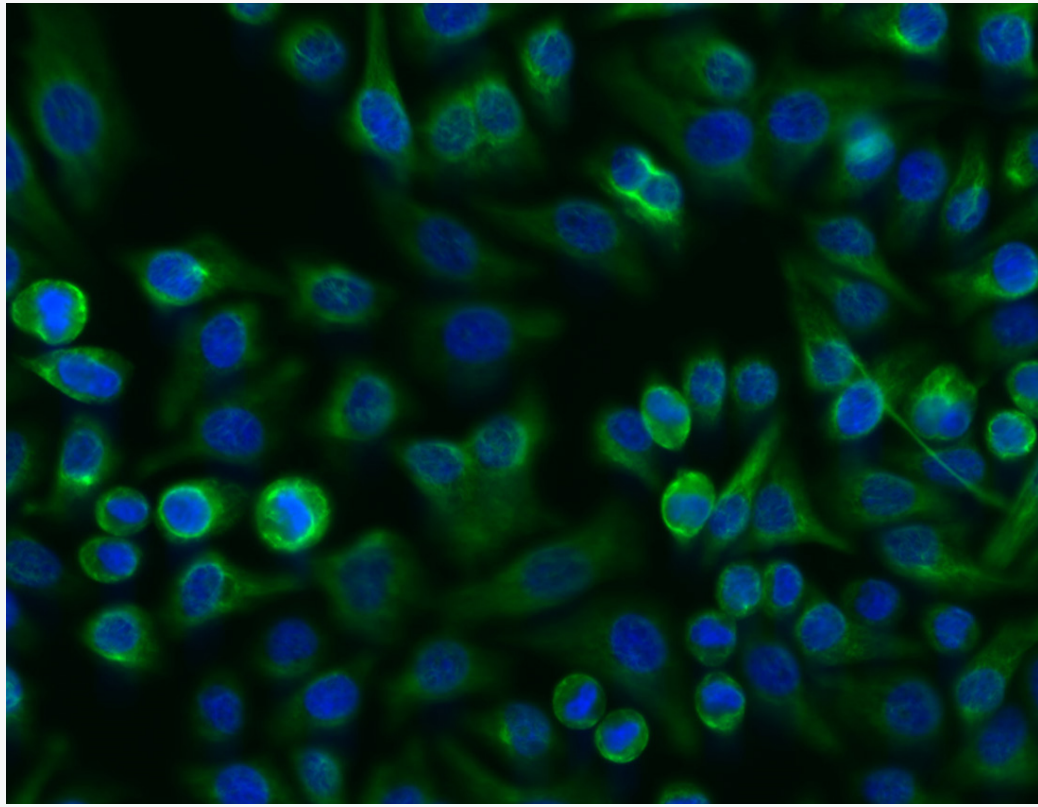
Incubation: Anti-Vimentin Polyclonal Antibody, Alexa Fluor 488 conjugated(SL8533R-A488) for 1 hour at 37°C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei



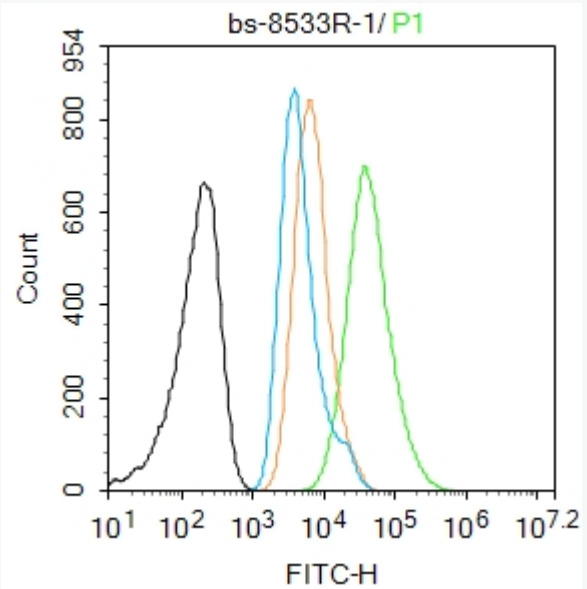
Tissue/cell: U-87MG cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 30 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (SL8533R) polyclonal Antibody, Unconjugated (SL8533R) 1:100, 90 minutes at 37°C; followed by a control incubation with Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the nuclei.



Tissue/cell: 293T cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; 1% BSA in PBS buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Vimentin) Antibody, Unconjugated (SL8533R) 1:200, 2 hours at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody (SL0295G-FITC) at 37°C for 90 minutes, DAPI (5ug/ml, blue, C-0033) was used to stain nuclei.



Tissue/cell: FHC cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; 1% BSA in PBS buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Vimentin) Rabbit Anti-Human Vimentin Antibody, Unconjugated (SL8533R) 1:200, 2 hours at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody (SL0295G-FITC) at 37°C for 90 minutes, DAPI (5ug/ml, blue, C-0033) was used to stain the nuclei.



Blank control:A549.

Primary Antibody (green line): Rabbit Anti-Vimentin antibody (SL8533R)

Dilution: 1 $\mu$ g /10<sup>6</sup> cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-AF488

Dilution: 1 $\mu$ g /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 was performed.