SunLong Biotech Co.,LTD
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[Primary Antibody]

Rabbit Anti-Vimentin antibody

Catalog Number: SL23063R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	Vimentin
Immunogen:	KLH conjugated synthetic peptide derived from human Vimentin: 101-200/466
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:1000-5000 IHC-P=1:200-1000 IHC-F=1:200-1000 ICC/IF=1:100-500 IF=1:200-1000 ELISA=1:5000-10000 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human
Predicted MW.:	53kDa
Subcellular Location:	cytoplasmic
Background:	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]

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	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). Interacts with SLC6A4. Interacts with STK33. Interacts with LARP6. Interacts with RAB8B. **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. 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. **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. It is one of the five major intermediate filaments, present in various normal and pathological tissues of mesenchymal origin, such as normal cells including fibroblasts, endothelial cells, lymphocytes, and Tumours including sarcoma, lymphoma, melanoma. Vimentin is one of the proteins responsible for maintaining Cytoskeleton integrity.

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[VALIDATION IMAGES]

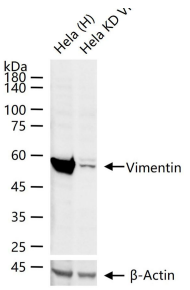


Figure 1. 25 ug total protein per lane of various lysates (see on figure) probed with Vimentin polyclonal antibody, unconjugated (SL23063R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min

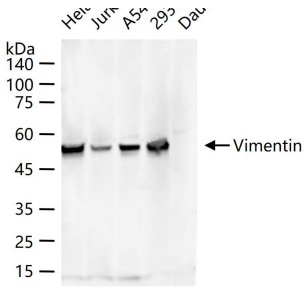


Figure 2. 25 ug total protein per lane of various lysates (see on figure) probed with Vimentin polyclonal antibody, unconjugated (SL23063R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min

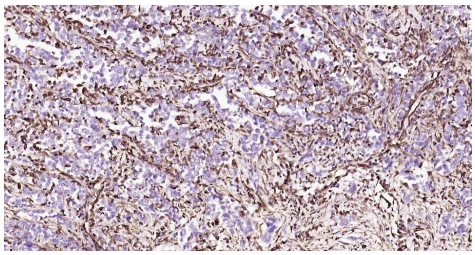


Figure 3. Paraformaldehyde-fixed, paraffin embedded Human Lung Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Vimentin Polyclonal Antibody, Unconjugated (SL23063R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining

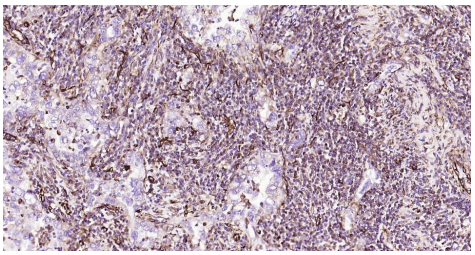


Figure 4. Paraformaldehyde-fixed, paraffin embedded Human Cervical Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Vimentin Polyclonal Antibody, Unconjugated (SL23063R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining

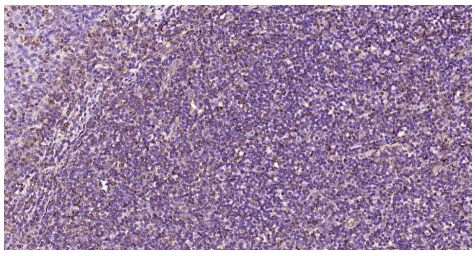


Figure 5. Paraformaldehyde-fixed, paraffin embedded Human Tonsil; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Vimentin Polyclonal Antibody, Unconjugated (SL23063R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining

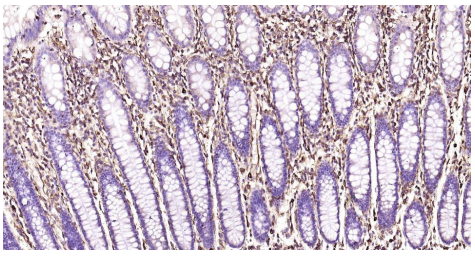


Figure 6. Paraformaldehyde-fixed, paraffin embedded Human Colon; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Vimentin Polyclonal Antibody, Unconjugated (SL23063R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining

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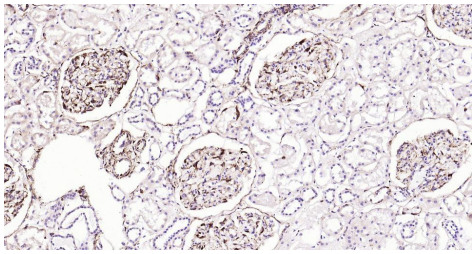


Figure 7. Paraformaldehyde-fixed, paraffin embedded Human Kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Vimentin Polyclonal Antibody, Unconjugated (SL23063R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining

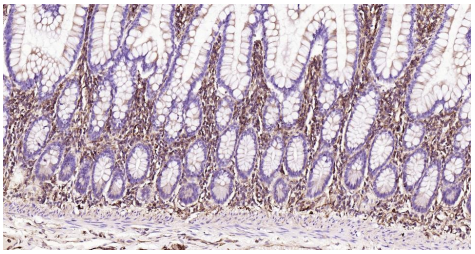


Figure 8. Paraformaldehyde-fixed, paraffin embedded Human Small Intestine; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Vimentin Polyclonal Antibody, Unconjugated (SL23063R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining

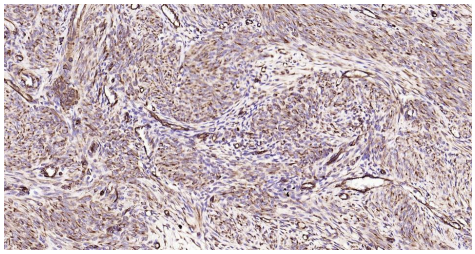


Figure 9. Paraformaldehyde-fixed, paraffin embedded Human Uterus; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Vimentin Polyclonal Antibody, Unconjugated (SL23063R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining

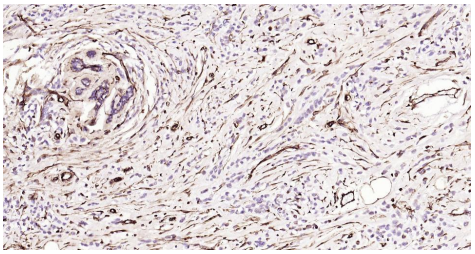


Figure 10. Paraformaldehyde-fixed, paraffin embedded Human Breast Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Vimentin Polyclonal Antibody, Unconjugated (SL23063R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining

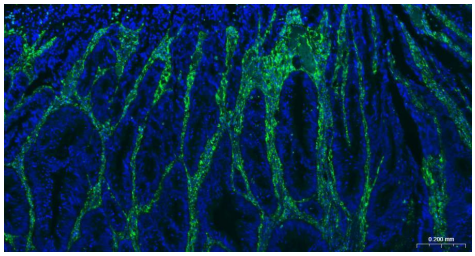


Figure 11. Paraformaldehyde-fixed, paraffin embedded Human Colon Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Vimentin Polyclonal Antibody, Unconjugated (SL23063R) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Rabbit IgG antibody (green, SL0295G-BF488), DAPI (blue, C02-04002) was used to stain the cell nuclei

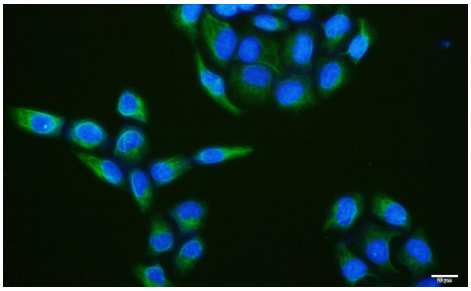


Figure 12. Hela cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Vimentin) polyclonal Antibody, Unconjugated (SL23063R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei

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