

Rabbit Anti-Vimentin antibody

SL23063R

Product Name:	Vimentin
Chinese Name:	波形蛋白抗体
Alias:	FLJ36605; OTTHUMP00000019224; VIM; VIME_HUMAN; Vimentin.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Cow, Horse, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-
	Cyt=2µg/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:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Vimentin:101-200/466
Lsotype:	$\lg G$
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:	<u>PubMed</u>
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). 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.

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。 Vimentin Picture: 35

Sample:

U2os(human)cell Lysate at 40 ug

U87mg(human)cell Lysate at 40 ug

Hela (human)cell Lysate at 40 ug

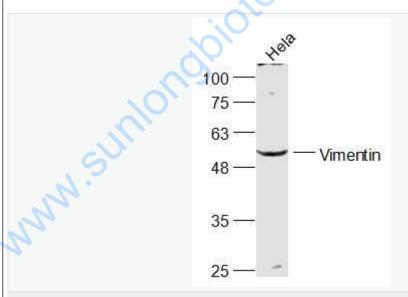
Jurkat(human)cell Lysate at 40 ug

Primary: Anti- Vimentin (SL23063R)at 1/300 dilution

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

Predicted band size: 53kD

Observed band size: 53 kD



Sample:

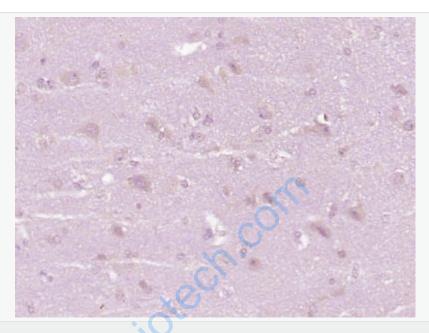
Hela(Human) Cell Lysate at 30 ug

Primary: Anti-Vimentin (SL23063R) at 1/1000 dilution

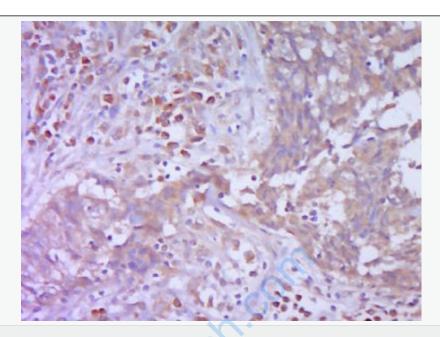
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 53 kD

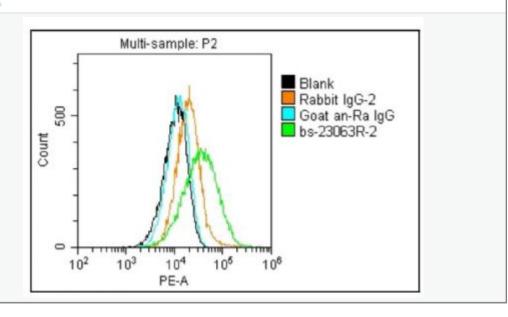
Observed band size: 53 kD



Paraformaldehyde-fixed, paraffin embedded (human brain glioma); 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 (SL23063R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions 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 (SL23063R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Blank control (blue line): U251(blue).

Primary Antibody (green line): Rabbit Anti-Vimentin antibody (SL23063R)

Dilution: $2\mu g / 10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG.

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE

Dilution: 1µg /test.

Protocol

The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min at room temperature Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.