

For Research Use Only

# Vimentin Polyclonal antibody

Catalog Number: 10366-1-AP

Featured Product

1878 Publications



## Basic Information

### Catalog Number:

10366-1-AP

### Size:

150ul, Concentration: 750 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG0489

### GenBank Accession Number:

BC000163

### GeneID (NCBI):

7431

### ENSEMBL Gene ID:

ENSG00000026025

### UNIPROT ID:

P08670

### Full Name:

vimentin

### Calculated MW:

466 aa, 54 kDa

### Observed MW:

54 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:20000-1:100000

IHC: 1:2500-1:10000

IF-P: 1:50-1:500

IF-Fro: 1:200-1:800

IF/ICC: 1:200-1:800

FC (Intra): 0.40 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IF-P, IF-Fro, FC (Intra), ELISA

### Cited Applications:

WB, IHC, IF, FC (Intra), IP, CoIP, RIP, ELISA, Cell treatment, IHC-IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, bovine, hamster, sheep, goat, deer

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB**: HepG2 cells, NIH/3T3 cells, mouse heart tissue, Jurkat cells, HeLa cells

**IHC**: human liver cancer tissue, human breast cancer tissue, human hepatocirrhosis tissue, human liver tissue, human normal colon, human tonsillitis tissue

**IF-P**: human breast cancer tissue, human kidney tissue

**IF-Fro**: mouse brain tissue,

**IF/ICC**: HepG2 cells,

**FC (Intra)**: HeLa cells, mMSCs cells

## Background Information

Vimentin, also named as VIM, belongs to the intermediate filament family. Vimentin is class-III intermediate filaments found in various non-epithelial cells, especially mesenchymal cells. Vimentin is important for stabilizing the architecture of the cytoplasm. Monocyte-derived macrophages secrete vimentin into the extracellular space in vitro. Secretion of vimentin was enhanced by the proinflammatory cytokine tumor necrosis factor- $\alpha$  (TNF $\alpha$ ; 191160) and inhibited by the antiinflammatory cytokine IL10 (124092), suggesting that vimentin is involved in the immune response. Vimentin has specialized functions that contribute to specific dynamic cellular processes. As a phosphoprotein, 55-60 kDa of vimentin proteins can be observed due to the different phosphorylation level. Isoforms of vimentin (49 kDa and 60 kDa) had also been reported. (PMID: 8640945, 22728585).

## Notable Publications

Author	Pubmed ID	Journal	Application
Ji Xing	36230734	Cancers (Basel)	IHC,IF
Xia Peng	36247281	Am J Transl Res	WB
Mengru Xie	32999278	Int J Oral Sci	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

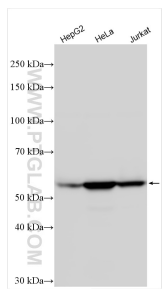
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

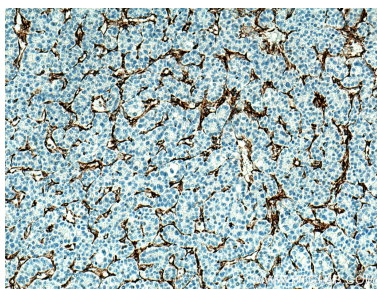
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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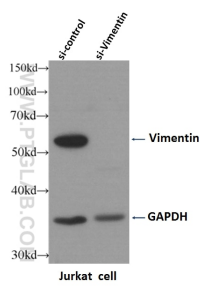
Selected Validation Data



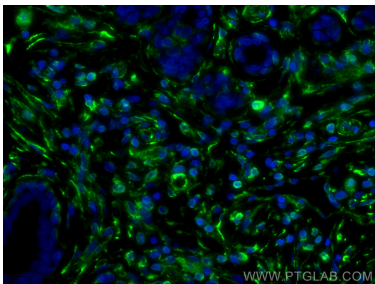
Various lysates were subjected to SDS PAGE followed by western blot with 10366-1-AP (Vimentin antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



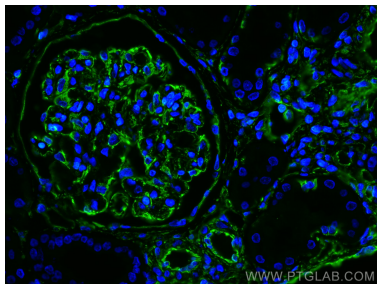
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 10366-1-AP (Vimentin antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



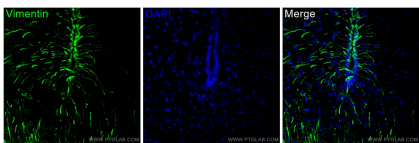
WB result of Vimentin antibody (10366-1-AP, 1:4000) with si-Control and si-Vimentin transfected Jurkat cells.



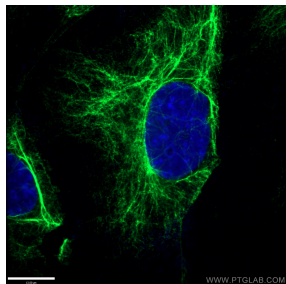
Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using Vimentin antibody (10366-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



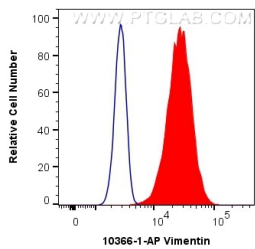
Immunofluorescent analysis of (4% PFA) fixed human kidney tissue using Vimentin antibody (10366-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



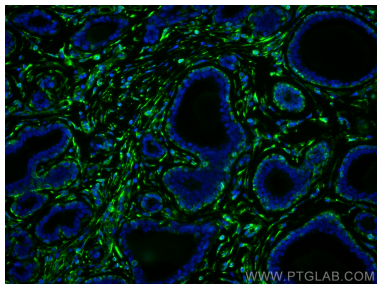
Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse brain tissue using 10366-1-AP (Vimentin antibody) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



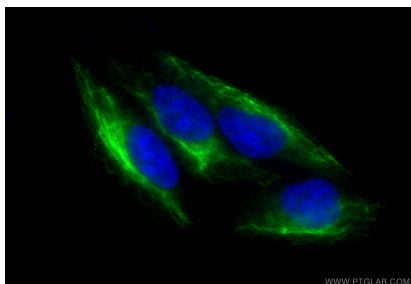
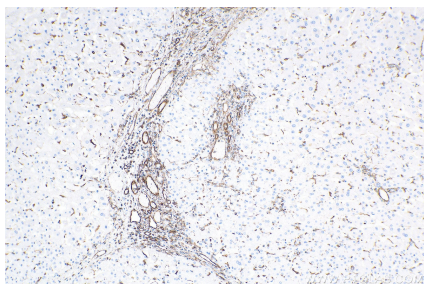
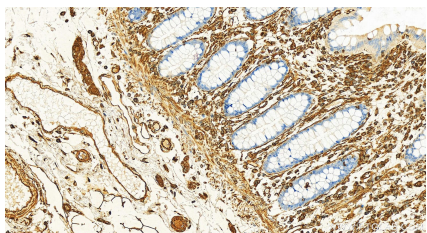
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 10366-1-AP (Vimentin antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human Vimentin (10366-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



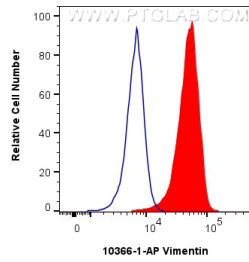
Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using Vimentin antibody (10366-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded normal colon slide using 10366-1-AP (Vimentin antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffin-embedded human hepatocirrhosis tissue slide using 10366-1-AP (Vimentin antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using Vimentin antibody (10366-1-AP) at dilution of 1:400 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).



$1 \times 10^6$  mMSCs cells were intracellularly stained with 0.5  $\mu$ g Vimentin Polyclonal antibody (10366-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.5  $\mu$ g Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).