

# Vimentin Polyclonal antibody

Catalog Number: 10366-1-AP

Featured Product

1918 Publications

## Basic Information

## Catalog Number:

10366-1-AP

## Concentration:

750 ug/ml

## 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, ColP, RIP, ELISA, Cell treatment

## 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-α (TNFα; 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

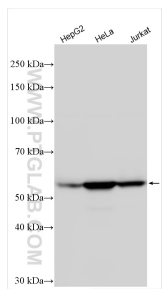
For technical support and original validation data for this product please contact:

T: 4006900926

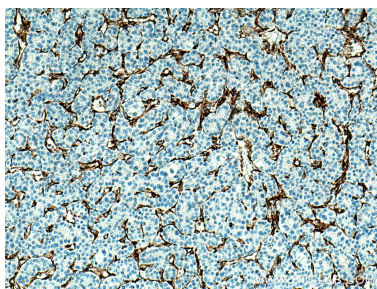
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

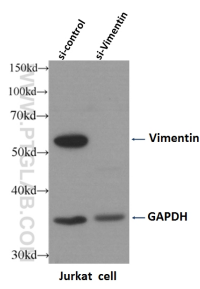
Selected Validation Data



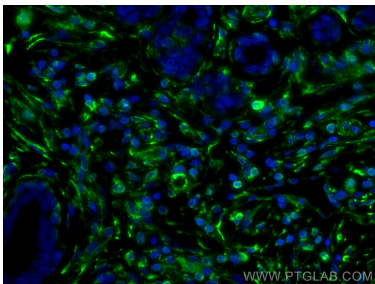
Various lysates were subjected to SDS PAGE followed by western blot with 10366-1-AP (Vimentin antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



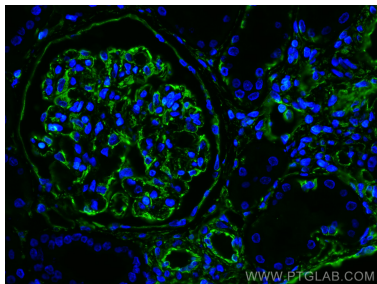
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 10366-1-AP (Vimentin antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



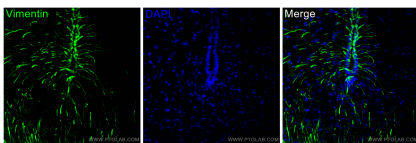
WB result of Vimentin antibody (10366-1-AP, 1:4000) with si-Control and si-Vimentin transfected Jurkat cells.



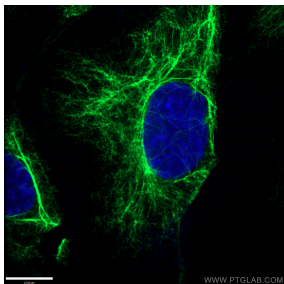
Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using Vimentin antibody (10366-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



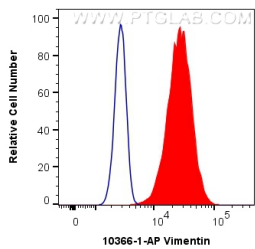
Immunofluorescent analysis of (4% PFA) fixed human kidney tissue using Vimentin antibody (10366-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



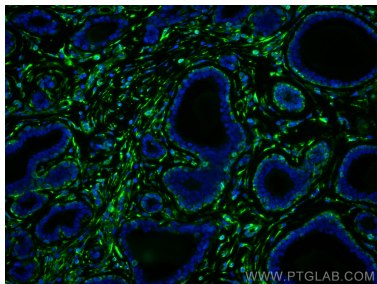
Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse brain tissue using 10366-1-AP (Vimentin antibody) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



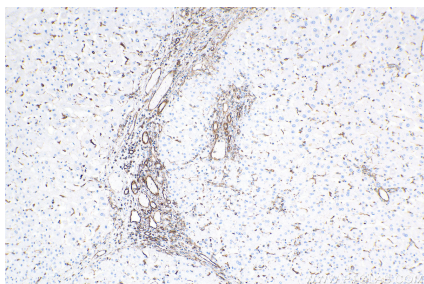
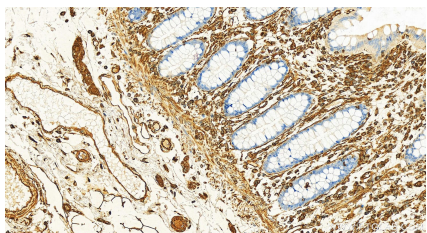
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 10366-1-AP (Vimentin antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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).



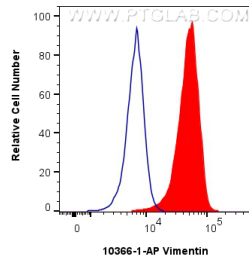
Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using Vimentin antibody (10366-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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).



1x10<sup>6</sup> mMSCs cells were intracellularly stained with 0.5 ug Vimentin Polyclonal antibody (10366-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.5 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).