For Research Use Only

Vimentin Polyclonal antibody

Catalog Number: 10366-1-AP

Featured Product

1908 Publications

BC000163

7431

54 kDa

GeneID (NCBI):

ENSEMBL Gene ID:

GenBank Accession Number:



Basic Information

Catalog Number: 10366-1-AP Concentration:

750 ug/ml Source: Rabbit

Immunogen Catalog Number:

AG0489

Isotype:

ENSG00000026025 **UNIPROT ID:** P08670 Full Name: vimentin Calculated MW: 466 aa, 54 kDa Observed MW:

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 10⁶ 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

Species Specificity:

human, mouse, rat Cited Species:

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

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 $the\ architecture\ of\ the\ cytoplasm.\ Monocyte-derived\ macrophages\ secrete\ vimentin\ into\ the\ extracellular\ space\ in\ derived\ macrophages\ secrete\ vimentin\ into\ the\ extracellular\ space\ in\ derived\ macrophages\ secrete\ vimentin\ into\ the\ extracellular\ space\ in\ derived\ macrophages\ secrete\ vimentin\ into\ the\ extracellular\ space\ in\ derived\ macrophages\ secrete\ vimentin\ into\ the\ extracellular\ space\ in\ derived\ macrophages\ secrete\ vimentin\ into\ the\ extracellular\ space\ in\ derived\ macrophages\ secrete\ vimentin\ into\ the\ extracellular\ space\ in\ derived\ macrophages\ secrete\ vimentin\ no\ derived\ macrophages\ macrophages\ secrete\ vimentin\ no\ derived\ macrophages\ secrete\ vimentin\ no\ derived\ macrophages\ macrophages\ secrete\ vimentin\ no\ derived\ macrophages\ secrete\ no\ derived\ macrophages\ macrop$ vitro. Secretion of vimentin was enhanced by the proinflammatory cytokine tumor necrosis factor-alpha (TNFA; 191160) and inhibited by the antiinflammatory cytokine IL10 (124092), suggesting that viment in is involved in the action of the control ofimmune 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

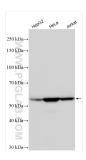
Storage

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

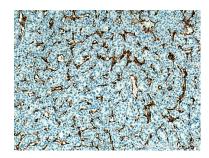
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

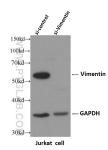
Selected Validation Data



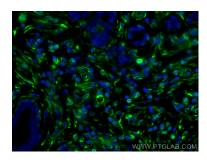
Various lysates were subjected to SDS PAGE followed by western blot with 10366-1-AP (Vimentin antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



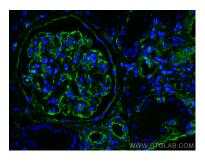
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 10366-1-AP (Vimentin antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



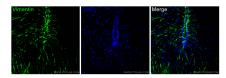
WB result of Vimentin antibody (10366-1-AP, 1:4000) with si-Control and si-Vimentin transfected Jurkat cells.



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 Affini Pure Goat Anti-Rabbit IgG(H+L).



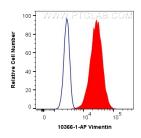
Immunofluorescent analysis of (4% PFA) fixed human kidney tissue using Vimentin antibody (10366-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



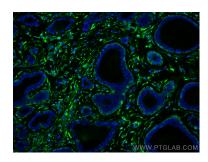
Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse brain tissue using 10366-1-AP (Vimentin antibody) at dilution of 1:400 and CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



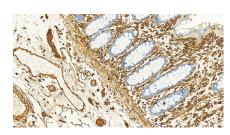
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 10366-1-AP (Vimentin antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).

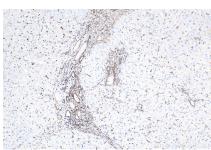


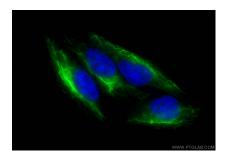
1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human Vimentin (10366-1-AP) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



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 Affini Pure Goat Anti-Rabbit IgG(H+L).



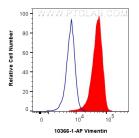




Immunohistochemical analysis of paraffinembedded normal colon slide using 10366-1-AP (Vimentin antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffinembedded 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).



1x10^6 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 (3000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).