For Research Use Only

Vimentin Monoclonal antibody

Catalog Number:60330-1-Ig Featured Product 212 Publications

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Basic Information

Catalog Number:
60330-1-Ig

Size:
150ul , Concentration: 1000 μg/ml by Nanodrop;

Source:
Mouse

Isotype:
IgG1

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:
55-60 kDa

Purification Method:
Protein A purification

CloneNo.:
3H9D1

Recommended Dilutions:
WB 1:20000-1:100000
IHC 1:4000-1:16000
IF 1:500-1:2000

Applications

Tested Applications:
WB, IF, FC, IHC, ELISA

Cited Applications:
WB, IP, IF, FC, IHC, CoIP

Species Specificity:
human, mouse, rat

Cited Species:
human, rat, mouse, zebrafish

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 : HeLa cells, NIH/3T3 cells, ROS1728 cells, Jurkat cells, A549 cells, U2OS cells, U-251 cells

IHC : human appendicitis tissue, human renal cell carcinoma tissue, human endometrial cancer tissue, human ovary tumor tissue, human breast cancer tissue, human colon tissue, human liver cancer tissue, human tonsillitis tissue, human pancreas tissue

IF : HUVEC cells, Retinal organoids, HepG2 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 (TNFA; 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.

Notable Publications

Author	Pubmed ID	Journal	Application
Wenjing Guo	33117682	Front Oncol	WB
Jianmin Li	32989231	Lab Invest	WB
Bingyu Xie	36179941	Mol Cell Endocrinol	WB,IF

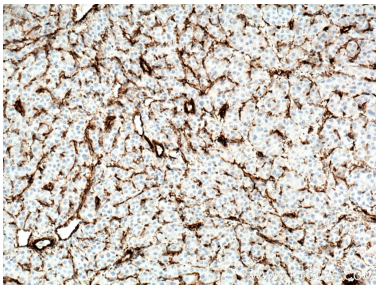
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

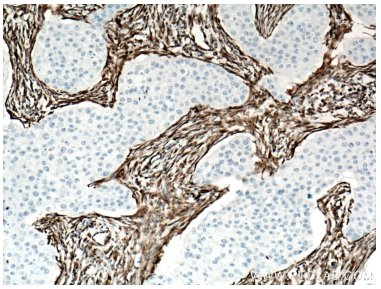
*** 20ul sizes contain 0.1% BSA

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
W: ptglab.com

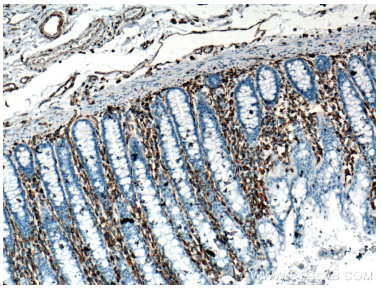
Selected Validation Data



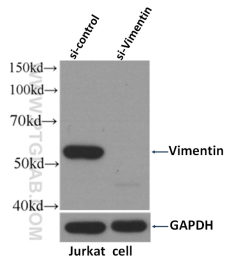
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 60330-1-Ig (Vimentin antibody) at dilution of 1:6400 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



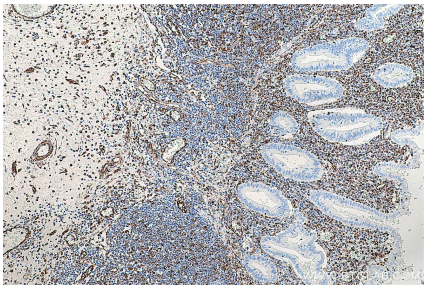
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 60330-1-Ig (Vimentin antibody) at dilution of 1:8000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



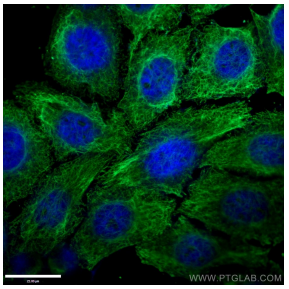
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 60330-1-Ig (Vimentin antibody) at dilution of 1:102400 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



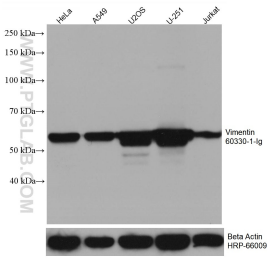
WB result of Vimentin antibody (60330-1-Ig, 1:4000) with si-Control and si-Vimentin transfected Jurkat cells.



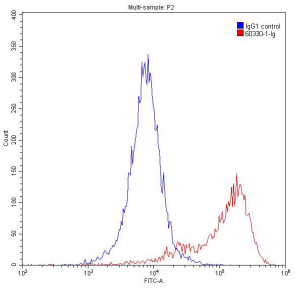
Immunohistochemical analysis of paraffin-embedded human appendicitis tissue slide using 60330-1-Ig (Vimentin antibody) at dilution of 1:8000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



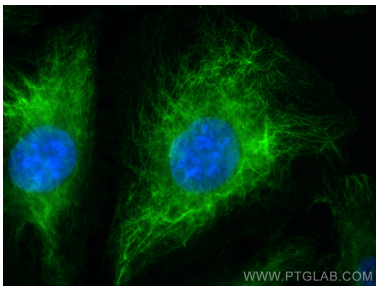
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 60330-1-Ig (Vimentin antibody) at dilution of 1:100 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Various lysates were subjected to SDS PAGE followed by western blot with 60330-1-Ig (Vimentin antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Beta Actin Monoclonal antibody (HRP-66009) as loading control.



1X10^6 Jurkat cells were stained with 0.2 ug Anti-Human Vimentin (60330-1-Ig, Clone:3H9D1) and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1500 (red), or stained with 0.2 ug isotype control and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1500 (blue). Cells were fixed with 90% MeOH.



Immunofluorescent analysis of (-20°C Methanol) fixed HUVEC cells using Vimentin antibody (60330-1-Ig, Clone: 3H9D1) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).