Vimentin Monoclonal antibody

Catalog Number: 60330-1-Ig

For Research Use Only

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
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: FC, IF, IHC, WB, ELISA
Cited Applications: CoIP, FC, IF, IHC, IP, WB
Species Specificity: human, mouse, rat
Cited Species: human, rat, mouse, zebrafish

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, HepG2 cells

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

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

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<td>33117682</td>
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<td>Jianmin Li</td>
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<td>Bingyu Xie</td>
<td>36179961</td>
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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

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

Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 60330-1-Ig (Vimentin antibody) at dilution of 1:102,400 (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 1:8,000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 60330-1-Ig (Vimentin antibody) at dilution of 1:6,400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

WB result of Vimentin antibody (60330-1-Ig, 1:4,000) 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 1:8,000 (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 1:50,000 incubated at room temperature for 1.5 hours. The membrane was stripped and relotted 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:SH901) and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1,500 (red), or stained with 0.2 ug isotype control and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1,500 (blue). Cells were fixed with 90% MeOH.

Immunofluorescent analysis of (-20°C Methanol) fixed HUVEC cells using Vimentin antibody (60330-1-Ig, Clone: SH901) at dilution of 1:1,000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).