

Anti-Vimentin Antibody (Monoclonal, V9)

Catalog Number: MA1102

About Vim

The VIM gene was one of many that Gieser and Swaroop (1992) recovered from a subtracted cDNA library for retinal pigment epithelium. Vimentin gene express in human lymphocytes and in Burkitt's lymphoma cells. Vimentin is secreted by activated macrophages. The gene encoding human vimentin is located on the short arm of chromosome 10.

Overview

Product Name	Anti-Vimentin Antibody (Monoclonal, V9)
Reactive Species	Human, Pig, Rabbit, Rat
Description	Boster Bio Anti-Vimentin Antibody (Monoclonal, V9) catalog # MA1102. Tested in IF, IHC, WB applications. This antibody reacts with Human, Pig, Rabbit, Rat.
Application	IF, IHC, WB
Clonality	Monoclonal V9
Formulation	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN ₃ as preservative.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Mouse
Uniprot ID	P31000

Technical Details

Immunogen	Pig eye lens vimentin.
Predicted Reactive Species	Monkey
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot, and HRP Conjugated anti-Mouse IgG Super Vision Assay Kit (SV0001-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Mouse IgG1
Form	Lyophilized
Concentration	Adding 1 ml of PBS buffer will yield a concentration of 100 ug/ml.
Purification	Ascites

Suggested Dilutions

Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.

If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

Western blot, 0.5-1ug/ml, Human, rabbit, pig, rat

Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human, rabbit, pig, rat, By Heat

Immunofluorescence, 5ug/ml, Human

Anti-Vimentin Antibody (Monoclonal, V9) (MA1102) Images

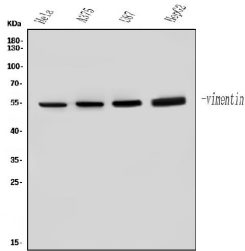


Figure 1. Western blot analysis of Vimentin using anti-Vimentin antibody (MA1102).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,

Lane 2: human A375 whole cell lysates,

Lane 3: human U87 whole cell lysates,

Lane 4: human HepG2 whole cell lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes.

Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5

hour at RT. The membrane was incubated with mouse anti-

Vimentin antigen affinity purified monoclonal antibody

(Catalog # MA1102) at 0.5 ug/mL overnight at 4°C, then

washed with TBS-0.1%Tween 3 times with 5 minutes each

and probed with a goat anti-mouse IgG-HRP secondary

antibody at a dilution of 1:10000 for 1.5 hour at RT. The

signal is developed using an Enhanced Chemiluminescent

detection (ECL) kit (Catalog # EK1001) with Tanon 5200

system. A specific band was detected for Vimentin at

approximately 54KD. The expected band size for Vimentin is at 54KD.

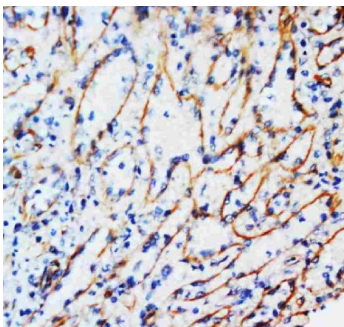


Figure 2. IHC analysis of Vimentin using anti-Vimentin antibody (MA1102).

Vimentin was detected in paraffin-embedded section of

human mammary cancer tissues. Heat mediated antigen

retrieval was performed in citrate buffer (pH6, epitope

retrieval solution) for 20 mins. The tissue section was

blocked with 10% goat serum. The tissue section was then

incubated with 1ug/ml rabbit anti-Vimentin Antibody

(MA1102) overnight at 4°C. Biotinylated goat anti-rabbit IgG

was used as secondary antibody and incubated for 30

minutes at 37°C. The tissue section was developed using

Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with

DAB as the chromogen.

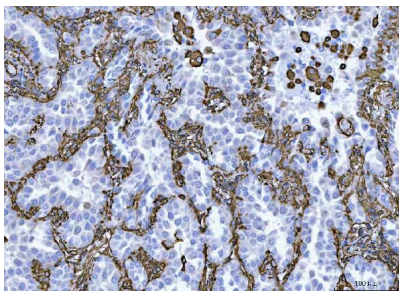


Figure 3. IHC analysis of Vimentin using anti-Vimentin antibody (MA1102).

Vimentin was detected in a paraffin-embedded section of

human lung adenocarcinoma tissue. Heat mediated antigen

retrieval was performed in EDTA buffer (pH 8.0, epitope

retrieval solution). The tissue section was blocked with 10%

goat serum. The tissue section was then incubated with 2

ug/ml mouse anti-Vimentin Antibody (MA1102) overnight at

4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used

as secondary antibody and incubated for 30 minutes at

37°C. The tissue section was developed using HRP

Conjugated Mouse IgG Super Vision Assay Kit (Catalog #

SV0001) with DAB as the chromogen.

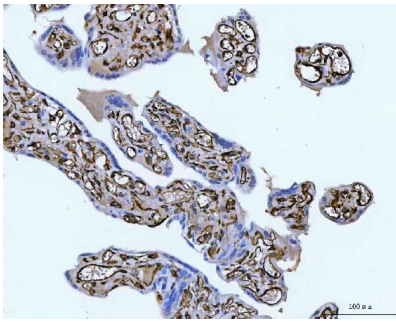


Figure 4. IHC analysis of Vimentin using anti-Vimentin antibody (MA1102). Vimentin was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Vimentin Antibody (MA1102) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

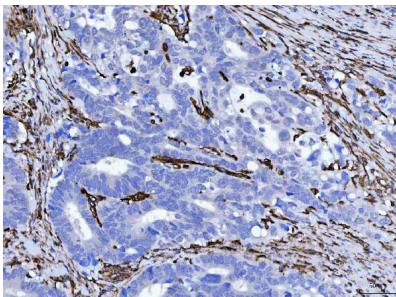


Figure 5. IHC analysis of Vimentin using anti-Vimentin antibody (MA1102). Vimentin was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Vimentin Antibody (MA1102) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

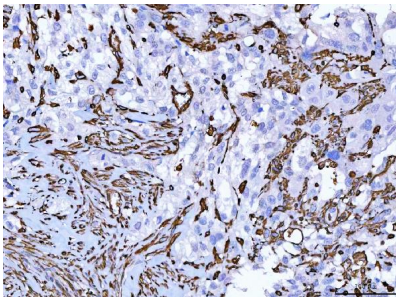


Figure 6. IHC analysis of Vimentin using anti-Vimentin antibody (MA1102). Vimentin was detected in a paraffin-embedded section of human invasive urothelial carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Vimentin Antibody (MA1102) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

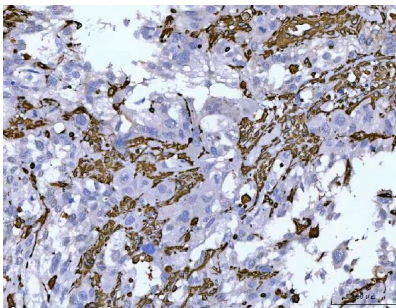


Figure 7. IHC analysis of Vimentin using anti-Vimentin antibody (MA1102). Vimentin was detected in a paraffin-embedded section of human invasive urothelial carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Vimentin Antibody (MA1102) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

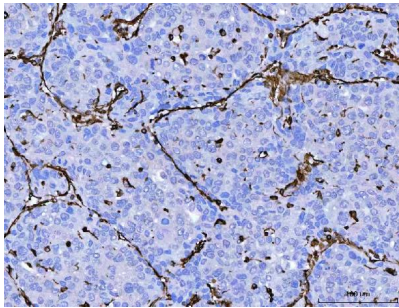


Figure 8. IHC analysis of Vimentin using anti-Vimentin antibody (MA1102).
Vimentin was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Vimentin Antibody (MA1102) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

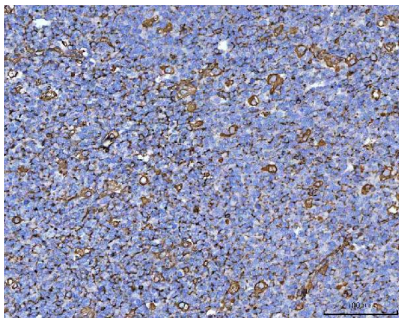


Figure 9. IHC analysis of Vimentin using anti-Vimentin antibody (MA1102).
Vimentin was detected in a paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Vimentin Antibody (MA1102) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

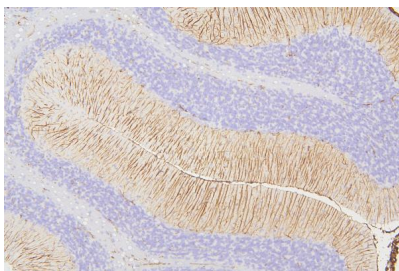


Figure 10. IHC analysis of Vimentin using anti-Vimentin antibody (MA1102).
Vimentin was detected in a paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Vimentin Antibody (MA1102) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

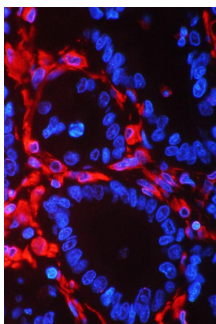


Figure 11. IF analysis of Vimentin using anti-Vimentin antibody (MA1102).
Vimentin was detected in paraffin-embedded section of human intestinal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5ug/mL mouse anti-Vimentin Antibody (MA1102) overnight at 4°C. Biotin conjugated goat anti-mouse IgG (BA1001) was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using DyLight®594 Conjugated Avidin (BA1141). The section was counterstained with DAPI. Visualize using a fluorescence microscope and

filter sets appropriate for the label used.

106 Publications Citing This Product

1. PubMed ID: 33989617, Zhu WQ,Cai NN,Jiang Y,Yang R,Shi JZ,Zhu CL,Zhang BY,Tang B,Zhang XM.Survivable potential of germ cells after trehalose cryopreservation of bovine testicular tissues.Cryobiology.2021 May 11:S0011-2240(21)00081-X.doi:10.1016/j.cryobiol.2021.05.001.Epub ahead of print.PMID:33989617.

2. PubMed ID: 32194806, Fan R,Wang H,Zhang L,Ma T,Tian Y,Li H.Nanocrystallized Oleanolic Acid Better Inhibits Proliferation, Migration and Invasion in Intracranial Glioma via Caspase-3 Pathway.J Cancer.2020 Jan 29;11(7):1949-1958.doi:10.7150/jca.38847.PMID:32194806;PMCID:PMC7052863.

3. PubMed ID: -, Xian-Song Wang,Li Xie,Kaiyu Zheng et al.Human Peripheral Blood-derived Mast Cells Contribute to Epithelial to Mesenchymal Transition in Bronchial Epithelial Cells in the Presence of IL-1beta,29 June 2020,PREPRINT (Version 1) available at Research Square [htt

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