

Anti-Vimentin Rabbit Monoclonal Antibody

Catalog # ABO13913

Specification

Anti-Vimentin Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format Description WB, IHC, IF, ICC, FC <u>P08670</u> Rabbit Rabbit IgG Rat, Human, Mouse Monoclonal Liquid

Anti-Vimentin Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-Vimentin Rabbit Monoclonal Antibody - Additional Information

Gene ID 7431

Other Names Vimentin, VIM

Calculated MW 53652 MW KDa

Application Details WB 1:1000-1:5000
IHC 1:200-1:1000
ICC/IF 1:50-1:200
FC 1:50

Subcellular Localization Cytoplasm.

Tissue Specificity

Highly expressed in fibroblasts, some expression in T- and B-lymphocytes, and little or no expression in Burkitt's lymphoma cell lines. Expressed in many hormone- independent mammary carcinoma cell lines.

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human Vimentin

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for



up to one month. Avoid repeated freeze-thaw cycles.

Anti-Vimentin Rabbit Monoclonal Antibody - Protein Information

Name VIM (HGNC:12692)

Function

Vimentins are class-III intermediate filaments found in various non-epithelial cells, especially mesenchymal cells. Vimentin is attached to the nucleus, endoplasmic reticulum, and mitochondria, either laterally or terminally. Plays a role in cell directional movement, orientation, cell sheet organization and Golgi complex polarization at the cell migration front (By similarity). Protects SCRIB from proteasomal degradation and facilitates its localization to intermediate filaments in a cell contact-mediated manner (By similarity).

Cellular Location

Cytoplasm. Cytoplasm, cytoskeleton. Nucleus matrix {ECO:0000250|UniProtKB:P31000}. Cell membrane {ECO:0000250|UniProtKB:P20152}

Tissue Location

Highly expressed in fibroblasts, some expression in T- and B-lymphocytes, and little or no expression in Burkitt's lymphoma cell lines. Expressed in many hormone-independent mammary carcinoma cell lines.

Anti-Vimentin Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Vimentin Rabbit Monoclonal Antibody - Images





Immunohistochemical analysis of paraffin-embedded Human lung large cell cancer, using the Antibody at 1:1000 dilution.



Immunohistochemical analysis of paraffin-embedded Human lung adenocarcinoma, using the Antibody at 1:1000 dilution.



Immunohistochemical analysis of paraffin-embedded human colon, using Vimentin Antibody.





Immunofluorescent analysis of Hela cells, using Vimentin Antibody.



Figure 1. Western blot analysis of Vimentin using anti-Vimentin antibody (M00235-1).

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 30 ug of sample under reducing conditions.

Lane 1: human 293T whole cell lysates,

Lane 2: human U251 whole cell lysates,

Lane 3: human U-87MG whole cell lysates,

Lane 4: human Jurkat whole cell lysates,

Lane 5: rat lung tissue lysates,

Lane 6: mouse lung tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Vimentin antigen affinity purified monoclonal antibody (Catalog # M00235-1) at 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Vimentin at approximately 54 kDa.