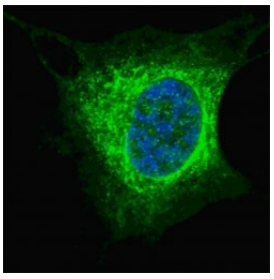
Vimentin Antibody for IF / Cytoskeletal Filament Marker Antibody (F48161)

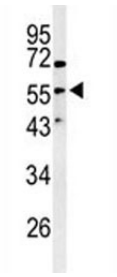
Catalog No.	Formulation	Size
F48161-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48161-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

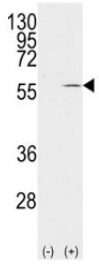
Availability	1-3 business days
Species Reactivity	Human, Mouse
Predicted Reactivity	Rat, Bovine, Primate, Hamster
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P08670
Applications	Immunofluorescence : 1:200 Western Blot : 1:1000 IHC (Paraffin) : 1:10-1:50
Limitations	This Vimentin antibody is available for research use only.



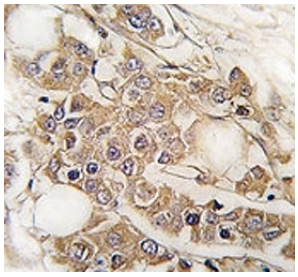
Vimentin Antibody for IF / Cytoskeletal Filament Marker Antibody. Immunofluorescence analysis of Vimentin / VIM in human SY5Y cells demonstrating strong cytoplasmic filamentous staining (green) consistent with intermediate filament network organization. The Vimentin Antibody for IF / Cytoskeletal Filament Marker Antibody highlights an extensive cytoskeletal filament pattern extending from the perinuclear region toward the cell periphery, characteristic of Vimentin filament architecture. Nuclei are counterstained with DAPI (blue), and the staining pattern supports high-resolution visualization of cytoskeletal structure in confocal imaging applications.



Western blot analysis of Vimentinin antibody and HeLa lysate



Western blot analysis of Vimentin antibody and 293 cell lysate (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the VIM gene (2).



IHC analysis of FFPE human breast carcinoma tissue stained with Vimentin antibody

Description

Vimentin (VIM) is a type III intermediate filament protein that forms a highly organized cytoplasmic filament network in mesenchymal cells, where it maintains structural integrity and regulates cellular morphology. Vimentin Antibody for IF / Cytoskeletal Filament Marker Antibody is specifically optimized for immunofluorescence-based visualization of Vimentin filament architecture, enabling high-resolution imaging of cytoskeletal networks in fixed and permeabilized cells. This aligns strongly with search intent such as Vimentin immunofluorescence antibody, VIM IF antibody, and cytoskeletal filament marker antibody. Vimentin is also referred to as Vimentin antibody, VIM antibody, and intermediate filament marker antibody in the literature, supporting strong alignment between gene, protein, and imaging-focused terminology.

In immunofluorescence and confocal microscopy applications, Vimentin forms a distinctive filamentous network that extends from the perinuclear region outward to the cell periphery. The Vimentin Antibody for IF / Cytoskeletal Filament Marker Antibody highlights these elongated cytoplasmic fibers, allowing researchers to directly visualize filament organization, network density, and structural remodeling within individual cells. This filament-specific staining pattern is a defining feature of the cytoskeletal filament marker antibody positioning and is essential for studies examining cytoskeletal architecture, cell polarity, and mechanical stability.

Vimentin is widely expressed in fibroblasts, endothelial cells, leukocytes, and other mesenchymal-derived populations, where its filament network supports migration, adhesion, and intracellular transport. In fluorescence imaging workflows, the Vimentin Antibody for IF / Cytoskeletal Filament Marker Antibody enables detailed assessment of cytoskeletal rearrangement during processes such as cell spreading, migration, and epithelial-mesenchymal transition. It is also commonly used in co-localization studies alongside actin, tubulin, or organelle markers to evaluate spatial relationships between cytoskeletal systems.

Functionally, Vimentin interacts with actin filaments and microtubules to coordinate cytoskeletal dynamics and intracellular organization. Its assembly and disassembly are regulated through phosphorylation and other post-translational modifications, which drive filament reorganization during mitosis and stress responses. The Vimentin Antibody for IF /

Cytoskeletal Filament Marker Antibody differentiator is central to this antibody, positioning it specifically for fluorescence imaging applications where visualization of filament structure, network continuity, and subcellular distribution is critical. A rabbit polyclonal Vimentin Antibody for IF provides strong fluorescent signal and clear filament resolution, supporting high-quality imaging of Vimentin / VIM cytoskeletal networks in single-cell and multi-cellular systems.

Application Notes

Titration of the Vimentin Antibody for IF / Cytoskeletal Filament Marker Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 63-90 from the human protein was used as the immunogen for this Vimentin Antibody for IF / Cytoskeletal Filament Marker Antibody.

Storage

Aliquot the Vimentin antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

VIM antibody, Vimentin cytoskeletal filament antibody, Intermediate filament marker antibody, Cytoplasmic filament marker antibody, Mesenchymal cytoskeleton antibody