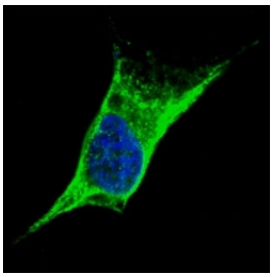
Vimentin Antibody for IF / EMT Marker Antibody (F48162)

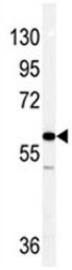
Catalog No.	Formulation	Size
F48162-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48162-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

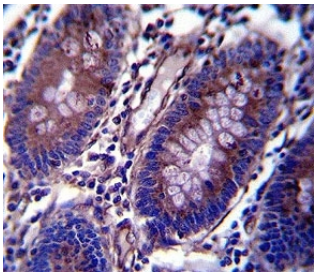
Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat, Bovine, Pig, Primate, Chicken, Hamster, Xenopus
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	P08670
Applications	Immunofluorescence : 1:100 Western Blot : 1:1000 IHC (Paraffin) : 1:10-1:50 Flow Cytometry : 1:10-1:50
Limitations	This anti-Vimentin antibody is available for research use only.



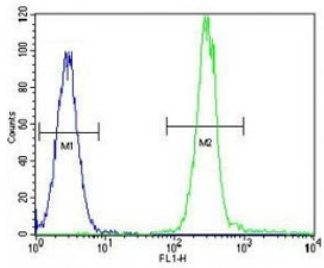
Vimentin Antibody for IF / EMT Marker Antibody. Immunofluorescence analysis of Vimentin / VIM in human SY5Y cells showing strong cytoplasmic filamentous staining (green) consistent with mesenchymal cytoskeletal organization and EMT-associated phenotype. The Vimentin Antibody for IF / EMT Marker Antibody highlights an elongated, spindle-like cell morphology with prominent filament networks extending throughout the cytoplasm, a characteristic feature of cells exhibiting mesenchymal traits. Nuclei are counterstained with DAPI (blue), and the staining pattern supports visualization of cytoskeletal remodeling and cell state transitions in fluorescence imaging applications.



Western blot analysis of anti-Vimentin antibody and NCI-H460 lysate



Vimentin antibody immunohistochemistry analysis in formalin fixed and paraffin embedded human colon tissue.



Vimentin antibody flow cytometric analysis of HeLa cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary Ab was used for the analysis.

Description

Vimentin (VIM) is a type III intermediate filament protein that serves as a central marker of mesenchymal identity and epithelial-mesenchymal transition in both normal biology and cancer progression. Vimentin Antibody for IF / EMT Marker Antibody is specifically designed for immunofluorescence-based detection of EMT-associated Vimentin expression, enabling visualization of mesenchymal phenotypes and cellular plasticity at the single-cell level. This aligns strongly with search intent such as Vimentin EMT antibody, VIM IF antibody for EMT, and EMT marker antibody for immunofluorescence. Vimentin is also referred to as Vimentin antibody, VIM antibody, and mesenchymal marker antibody in the literature, supporting strong alignment across gene, protein, and disease-focused terminology.

In immunofluorescence imaging, Vimentin is strongly upregulated during epithelial-mesenchymal transition, where epithelial cells lose polarity and cell-cell adhesion while acquiring migratory, invasive, and stem-like characteristics. The Vimentin Antibody for IF / EMT Marker Antibody enables direct visualization of this transition by highlighting cytoplasmic filamentous Vimentin expression in EMT-positive cells, often in contrast to epithelial markers such as cytokeratins. This contrast is critical for identifying transitioning cell populations within heterogeneous tumors and for mapping EMT-driven changes in cell state during cancer progression.

Vimentin expression is prominent in fibroblasts, endothelial cells, immune cells, and mesenchymal-like tumor cells, where it supports cytoskeletal remodeling, migration, and tissue invasion. In fluorescence-based workflows, the Vimentin Antibody for IF / EMT Marker Antibody is widely used to study tumor microenvironment composition, stromal activation, and EMT-associated phenotypes. It is particularly valuable in co-localization experiments, where Vimentin is analyzed alongside epithelial markers, stem cell markers, or signaling proteins to define distinct cellular states and transitional populations within complex tissues.

Functionally, Vimentin interacts with actin filaments and microtubules to regulate cell shape, adhesion, and motility, all of which are essential during EMT and metastatic progression. Its dynamic reorganization through phosphorylation supports cytoskeletal flexibility required for invasion and migration. The Vimentin Antibody for IF / EMT Marker Antibody

differentiator is central to this antibody, positioning it specifically for fluorescence imaging studies of tumor plasticity, invasive behavior, and epithelial-to-mesenchymal transition. A rabbit polyclonal Vimentin Antibody for IF provides strong fluorescent signal and enables sensitive detection of Vimentin / VIM expression in EMT-active cell populations, supporting advanced cancer biology and cell state research.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the Vimentin Antibody for IF / EMT Marker Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 430-457 from the human protein was used as the immunogen for this Vimentin Antibody for IF / EMT Marker Antibody.

Storage

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

Alternate Names

VIM antibody, Vimentin EMT marker antibody, Mesenchymal transition marker antibody, Intermediate filament marker antibody, Tumor invasion marker antibody