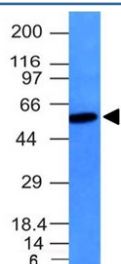


Vimentin Antibody Clone VM452 / VIM Mesenchymal Marker Antibody [clone VM452] (V3935)

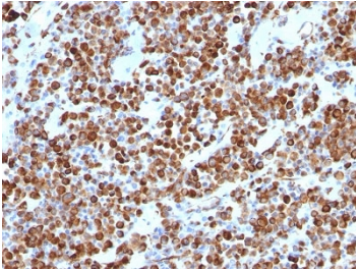
Catalog No.	Formulation	Size
V3935-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3935-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3935SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

[Bulk quote request](#)

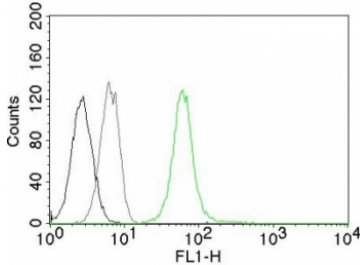
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	VM452
Purity	Protein G affinity chromatography
UniProt	P08670
Localization	Cytoplasmic
Applications	Flow Cytometry : 1-2ug/10 ⁶ cells Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Vimentin antibody is available for research use only.



Western blot testing of Vimentin Antibody Clone VM452 and Raji cell lysate. Expected molecular weight: 53-58 kDa.

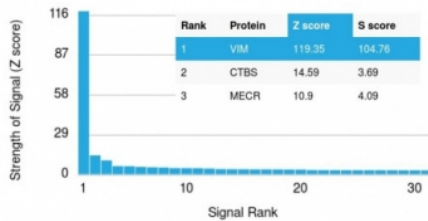


IHC staining of FFPE human melanoma with Vimentin antibody (clone VM452). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



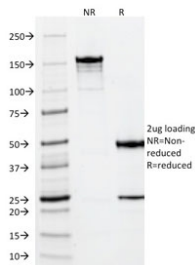
Flow cytometry testing of Jurkat cells and Alexa Fluor 488 conjugated Vimentin Antibody Clone VM452 (green), cells alone (black) and isotype control (gray).

Human Protein Microarray Specificity Validation

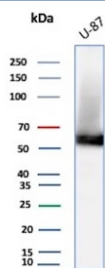


Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Vimentin antibody (clone VM452). These results demonstrate the foremost specificity of the VM452 mAb.

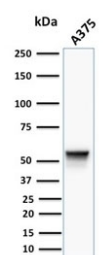
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free Vimentin antibody (clone VM452) as confirmation of integrity and purity.



Western blot testing of Vimentin Antibody Clone VM452 and U-87 MG cell lysate. Expected molecular weight: 53-58 kDa.



Western blot testing of Vimentin Antibody Clone VM452 and A375 cell lysate. Expected molecular weight: 53-58 kDa.

Description

Vimentin (VIM) is a type III intermediate filament protein that forms a cytoplasmic structural network in mesenchymal cells, supporting cellular integrity, migration, and intracellular organization. Vimentin Antibody Clone VM452 is developed for researchers seeking a clone-specific reagent with emphasis on tissue-based validation, making it highly relevant for searches such as VM452 antibody, Vimentin clone VM452 antibody, and VIM clone VM452 antibody. Vimentin is also referred to as Vimentin antibody, VIM antibody, and mesenchymal marker antibody in the literature, helping unify gene, protein, and functional terminology for improved search alignment.

Vimentin is broadly expressed in fibroblasts, endothelial cells, leukocytes, and other mesenchymal-derived cell types, while epithelial cells typically lack expression unless undergoing epithelial-mesenchymal transition or pathological remodeling. This expression profile makes Vimentin one of the most widely used markers in tumor pathology research, particularly for identifying mesenchymal differentiation, stromal components, and invasive tumor phenotypes. Its cytoplasmic filamentous staining pattern is a hallmark feature in immunohistochemistry-based studies of both normal and diseased tissues.

Functionally, Vimentin interacts with actin filaments and microtubules to regulate cell shape, adhesion, and motility. Its dynamic reorganization through phosphorylation supports processes such as mitosis, migration, and cellular stress responses. Vimentin is also involved in wound healing, immune regulation, and developmental transitions, further reinforcing its importance as a multifunctional cytoskeletal protein in both physiological and pathological contexts.

The clone VM452 monoclonal antibody serves as a key differentiator in this product, with clone VM452 referenced in peer-reviewed literature and supported by tissue microarray (TMA) specificity testing across a wide range of normal and cancer tissues. This TMA-based validation approach provides valuable context for tissue-level expression patterns and staining consistency, which is especially important for researchers performing immunohistochemistry and comparative tissue analysis. Incorporating clone VM452 into experimental workflows supports clone-specific reproducibility while leveraging tissue-wide specificity data, offering a well-defined option for detecting Vimentin / VIM expression in studies that prioritize histological context and broad tissue screening.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the Vimentin Antibody Clone VM452 to be titrated up or down for optimal performance.

Immunogen

Recombinant protein was used as the immunogen for the Vimentin Antibody Clone VM452.

Storage

Store the Vimentin antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

VIM antibody, Vimentin intermediate filament antibody, Mesenchymal marker antibody, Type III intermediate filament antibody, Fibroblast marker antibody

References (1)

