Vimentin (Mesenchymal Cell Marker) Antibody

Mouse Monoclonal Antibody [Clone VM452]

Catalog No	Format	Size
7431-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
7431-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
7431-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

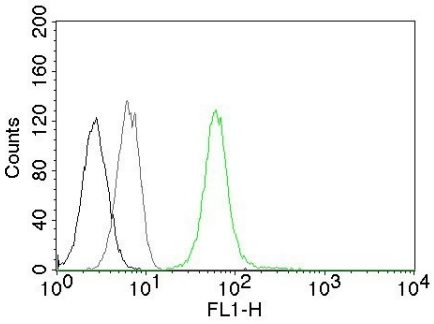
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

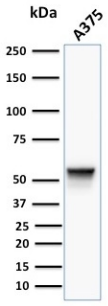
Clone	VM452
Gene Name	VIM
Immunogen	Recombinant full-length human vimentin protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1
Mol. Weight of Antigen	57-60kDa
Cellular Localization	Cell membrane, Cytoplasm, Cytoskeleton, Nucleus matrix
Species Reactivity	Cat, Chicken, Cow, Dog, Goat, Human, Pig
Positive Control	Raji, A375 or Jurkat cells. Human melanomas.

**Optimal dilution for a specific application should be determined.*

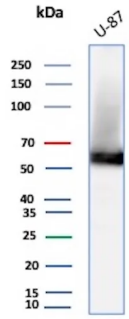
Product Images for Vimentin (Mesenchymal Cell Marker) Antibody



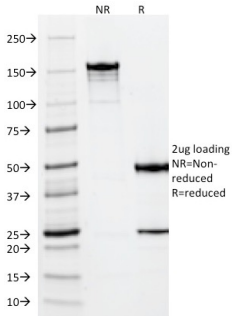
Flow Cytometry of human Vimentin on Jurkat cells. Black: cells alone; Grey: Isotype Control; Green: AF488-labeled Vimentin Mouse Monoclonal Antibody (VM452).



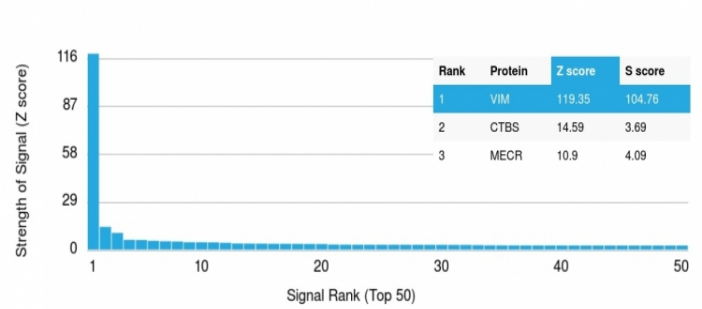
Western blot analysis of human A375 cell lysate using Vimentin Mouse Monoclonal Antibody (VM452).



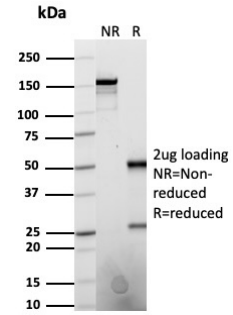
Western blot analysis of U87 cell lysate using Vimentin Mouse Monoclonal Antibody (VM452).



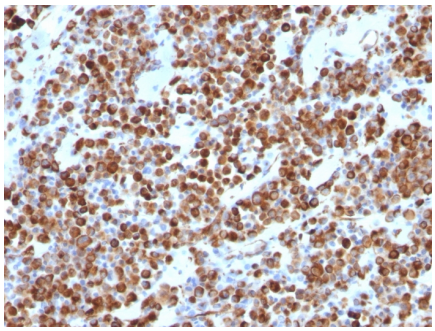
SDS-PAGE Analysis of Purified Vimentin Mouse Monoclonal Antibody(VM452). Confirmation of Integrity and Purity of Antibody.



Analysis of Protein Array containing more than 19,000 full-length human proteinsusing Vimentin (VIM) Mouse Monoclonal Antibody (VM452) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



SDS-PAGE Analysis of Purified Vimentin Recombinant Mouse Monoclonal Antibody (VM452). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human Melanoma stained with Vimentin Mouse Monoclonal Antibody (VM452).

Specificity & Comments

This MAb reacts with a 58kDa protein identified as vimentin. It shows no cross-reaction with other closely related intermediate filament proteins (IFP's) such as desmin, keratin, neurofilament, and glial fibrillary acid protein.Anti-vimentin alone is of limited value as a diagnostic tool; however, when used in panels with other antibodies, it is useful for the sub-classification of a given tumor. Expression of vimentin, when used in conjunction with anti-keratin, is helpful when distinguishing melanomas from undifferentiated carcinomas and large cell lymphomas. All melanomas and Schwannomas react strongly with anti-vimentin. It labels a variety of mesenchymal cells, including melanocytes, lymphocytes, endothelial cells, and fibroblasts. Non-reactivity of anti-vimentin is often considered more useful than its positive reactivity, since there are a few tumors that do not contain vimentin, e.g. hepatoma and seminoma. Anti-vimentin is also useful as a tissue process control reagent.

Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Apoptosis, Cytokine Signaling, Immunology, Neural Stem Cells, Ovarian Cancer, Signal Transduction, Stem Cell Differentiation

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.