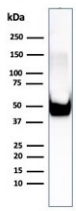
Vimentin Antibody / Cytoskeletal Remodeling Marker Antibody [clone rVIM/6575] (V9293)

Catalog No.	Formulation	Size
V9293-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9293-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9293SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

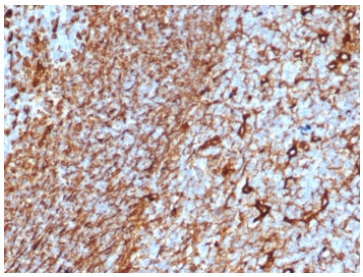
Recombinant | MOUSE MONOCLONAL

Bulk quote request

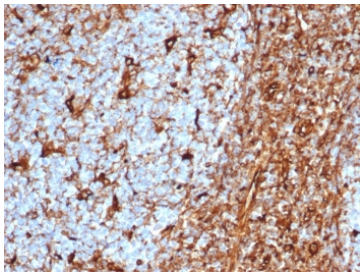
Availability	1-3 business days
Species Reactivity	Human (broad species reactivity predicted)
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rVIM/6575
Purity	Protein A/G affinity
UniProt	P08670
Localization	Cytoplasmic
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This Vimentin antibody is available for research use only.



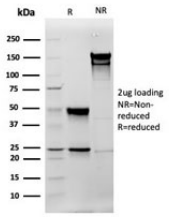
Vimentin Antibody / Cytoskeletal Remodeling Marker Antibody for WB. Western blot analysis of human U-87 MG cell lysate using Vimentin antibody detects a strong band at approximately 55 kDa, consistent with the predicted molecular weight of Vimentin (VIM). The rabbit monoclonal clone rVIM/6575 shows a prominent band, supporting detection of intermediate filament components involved in dynamic cytoskeletal reorganization. The banding pattern aligns with Vimentin expression in cells exhibiting active structural adaptation and reinforces its use as a cytoskeletal remodeling marker in mesenchymal and tumor-derived cell systems.



IHC staining of FFPE human tonsil tissue with Vimentin antibody (clone rVIM/6575). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Vimentin Antibody / Cytoskeletal Remodeling Marker Antibody. Immunohistochemistry analysis of FFPE human tonsil tissue using Vimentin antibody shows strong HRP-DAB brown cytoplasmic staining in stromal and mesenchymal cell populations, with minimal staining in most lymphoid cells. The recombinant rabbit monoclonal clone rVIM/6575 highlights variable filament density and organization across the stromal compartment, with regions of dense interconnected networks and areas of more diffuse cytoplasmic staining. This heterogeneous pattern is consistent with dynamic cytoskeletal reorganization and supports the use of Vimentin as a marker of cytoskeletal remodeling in tissue-associated stromal cells.



SDS-PAGE analysis of purified, BSA-free Vimentin antibody (clone rVIM/6575) as confirmation of integrity and purity.

Description

Vimentin (VIM) is a type III intermediate filament protein that plays a fundamental role in cytoskeletal remodeling and structural reorganization within cells. Vimentin Antibody / Cytoskeletal Remodeling Marker Antibody is specifically positioned for studying dynamic filament rearrangement, cytoskeletal plasticity, and structural adaptation in response to cellular signals. This Vimentin Antibody is uniquely positioned for analyzing remodeling events associated with stress response, mitotic progression, and environmental adaptation in mesenchymal and transformed cells. Vimentin is also referred to as Vimentin antibody, VIM antibody, and intermediate filament protein antibody in the literature.

Vimentin undergoes continuous cycles of assembly and disassembly, allowing cells to rapidly reorganize their cytoskeletal architecture. These remodeling processes are essential for maintaining cellular integrity during changes in shape, division, and mechanical stress. The Vimentin Antibody / Cytoskeletal Remodeling Marker Antibody enables detailed investigation of these dynamic structural transitions, particularly in cells undergoing morphological change or environmental adaptation.

In biological systems, cytoskeletal remodeling is required for processes such as migration, cytokinesis, and response to extracellular stimuli. Vimentin provides a flexible filament network that can be reorganized without compromising structural stability. Its expression is associated with cells that must continuously adjust their architecture to meet functional demands.

Functionally, Vimentin coordinates with actin filaments and microtubules to regulate cytoskeletal restructuring, intracellular organization, and mechanical resilience. The Vimentin Antibody / Cytoskeletal Remodeling Marker Antibody differentiator is central to this antibody, positioning it specifically for studies focused on dynamic structural adaptation rather than static cytoskeletal imaging or EMT-driven biology. A Vimentin Antibody provides a powerful tool for analyzing filament reorganization, structural plasticity, and cytoskeletal remodeling in complex cellular systems.

Application Notes

Optimal dilution of the Vimentin Antibody / Cytoskeletal Remodeling Marker Antibody should be determined by the researcher.

Immunogen

Recombinant full-length human Vimentin protein was used as the immunogen for the Vimentin Antibody / Cytoskeletal Remodeling Marker Antibody.

Storage

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

Alternate Names

Vimentin antibody, VIM antibody, cytoskeletal filament antibody, intermediate filament protein antibody, structural remodeling marker antibody, cytoskeletal dynamics marker antibody, filament reorganization antibody