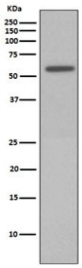
Phospho-Vimentin (Ser72) Antibody / Mitotic Marker Antibody [clone ADE-22] (RQ5249)

Catalog No.	Formulation	Size
RQ5249	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

Availability	1-2 weeks
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	ADE-22
Purity	Affinity purified
UniProt	P08670
Applications	Western blot: 1:500-1:2000
Limitations	This Phospho-Vimentin (Ser72) Antibody / Mitotic Marker Antibody is available for research use only.



Phospho-Vimentin (Ser72) Antibody / Mitotic Marker Antibody Calyculin A-Treated HeLa WB. Western blot analysis of lysate from Calyculin A-treated HeLa cells using Phospho-Vimentin (Ser72) Antibody / Mitotic Marker Antibody. A distinct immunoreactive band is detected at approximately 53-58 kDa, consistent with the expected molecular weight of phosphorylated vimentin. Calyculin A treatment inhibits protein phosphatases, promoting accumulation of serine 72-phosphorylated vimentin and demonstrating the antibody's specificity for the phosphorylated form of the protein during mitotic signaling and cytoskeletal remodeling.

Description

Phospho-Vimentin (Ser72) Antibody / Mitotic Marker Antibody recognizes vimentin phosphorylated at serine 72, a highly regulated post-translational modification that controls intermediate filament dynamics during mitosis. Vimentin is a type III intermediate filament protein expressed predominantly in mesenchymal cells, where it provides structural support,

maintains cellular integrity, and coordinates cytoskeletal organization. Phosphorylation at serine 72 promotes filament disassembly and reorganization, enabling the extensive cytoskeletal remodeling required for chromosome segregation and successful cell division. As a result, Phospho-Vimentin (Ser72) Antibody / Mitotic Marker Antibody is an excellent tool for investigating mitotic progression, kinase signaling, and phosphorylation-dependent regulation of the cytoskeleton.

Vimentin phosphorylation is mediated by mitosis-associated kinases in response to cell cycle progression and growth factor signaling. Modification at serine 72 facilitates reversible intermediate filament remodeling, allowing cells to round up during mitosis, assemble the mitotic spindle, complete cytokinesis, and subsequently re-establish the normal filament network following cell division. Because phosphorylation at this residue is transient and tightly regulated, phospho-serine 72 serves as a valuable marker of actively dividing cells rather than overall vimentin expression. Analysis of phospho-vimentin therefore complements total vimentin detection by distinguishing activated cytoskeletal remodeling from constitutive protein abundance.

Aberrant phosphorylation of vimentin has been associated with cancer progression, epithelial-to-mesenchymal transition, enhanced cellular migration, invasion, fibrosis, and metastatic dissemination. Increased serine 72 phosphorylation reflects activation of signaling pathways that promote cytoskeletal plasticity and tumor cell motility, making this modification an important biomarker for studies of cell cycle regulation, oncogenic kinase signaling, therapeutic response, and mechanisms of tumor progression. Monitoring phospho-vimentin can therefore provide valuable insight into dynamic cellular processes that are not evident from total vimentin expression alone.

NSJ Bioreagents' Phospho-Vimentin (Ser72) Antibody / Mitotic Marker Antibody (clone ADE-22) is a recombinant rabbit monoclonal antibody developed for highly specific detection of vimentin phosphorylated at serine 72. The recombinant format provides excellent lot-to-lot consistency while supporting reliable analysis of mitotic signaling, cytoskeletal remodeling, and phosphorylation-dependent cellular events by western blotting, immunohistochemistry, immunofluorescence, and related phosphoprotein applications.

Explore our Protein Microarray Validated Vimentin Antibody page to learn more about vimentin biology, mesenchymal cell markers, and additional validated products.

Application Notes

Optimal dilution of the Phospho-Vimentin (Ser72) Antibody / Mitotic Marker Antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human Vimentin (surrounding phosphorylated serine 72) was used as the immunogen for the Phospho-Vimentin (Ser72) Antibody.

Storage

Store the Phospho-Vimentin (Ser72) Antibody at -20oC.

Alternate Names

Phospho-Vimentin (Ser72) antibody, Phospho-VIM (Ser72) antibody, Phosphorylated Vimentin Ser72 antibody, Vimentin phospho Ser72 antibody, Vimentin pSer72 antibody, Phospho-Vimentin S72 antibody

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