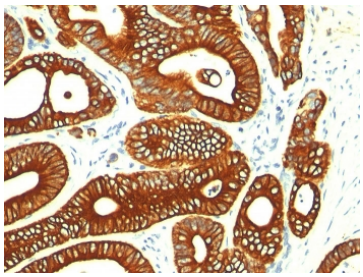
Cytokeratin 18 Antibody KRT18/835 / CK18 Monoclonal Antibody [clone KRT18/835] (V2673)

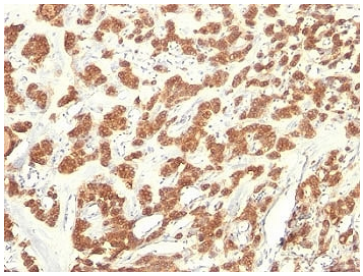
Catalog No.	Formulation	Size
V2673-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2673-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2673SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2673IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

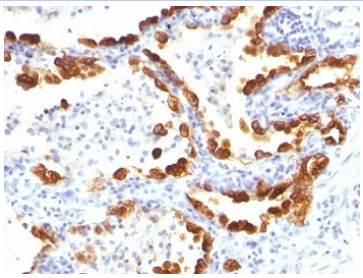
Species Reactivity	Human, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	KRT18/835
Purity	Protein G affinity chromatography
UniProt	P05783
Localization	Cytoplasmic
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Immunofluorescence: 5ug/ml
Limitations	This Cytokeratin 18 Antibody KRT18/835 / CK18 Monoclonal Antibody is available for research use only.



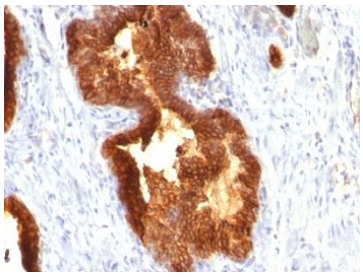
Cytokeratin 18 Antibody KRT18/835 by IHC in human colon carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human colon carcinoma tissue using Cytokeratin 18 Antibody clone KRT18/835. Strong brown cytoplasmic immunoreactivity is present throughout the neoplastic glandular epithelium, highlighting irregular glandular structures and clusters of carcinoma cells. The staining is relatively widespread within the epithelial compartment, while intervening stromal regions exhibit comparatively limited immunoreactivity. Hematoxylin counterstaining reveals nuclei in blue. The CK18 Monoclonal Antibody demonstrates the characteristic cytoplasmic distribution of this intermediate filament protein in glandular epithelial cells. Heat-induced epitope retrieval was performed using 10 mM citrate buffer, pH 6, for 10-20 minutes, followed by cooling at room temperature.



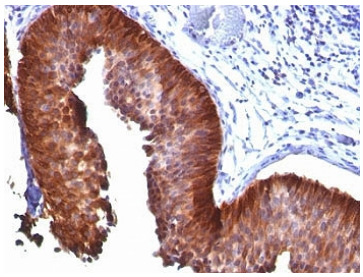
Cytokeratin 18 Antibody KRT18/835 by IHC in human thyroid carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human thyroid carcinoma tissue using Cytokeratin 18 Antibody clone KRT18/835. Brown cytoplasmic immunoreactivity is visible throughout numerous neoplastic epithelial structures, highlighting irregularly arranged tumor cells and epithelial formations. Staining intensity varies among individual cells and regions of the specimen, while nuclei remain distinguishable through blue hematoxylin counterstaining. The distribution is consistent with the expression of keratin 18 in epithelial tumors of thyroid origin. The CK18 Monoclonal Antibody was applied following heat-induced epitope retrieval in 10 mM citrate buffer, pH 6, for 10-20 minutes, followed by cooling.



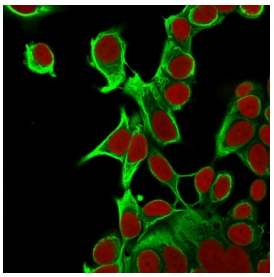
Cytokeratin 18 Antibody KRT18/835 by IHC in human lung carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human lung carcinoma tissue using Cytokeratin 18 Antibody clone KRT18/835. Brown cytoplasmic staining is prominent in carcinoma cells forming irregular epithelial structures, with variable intensity among individual tumor cells. The surrounding tissue contains numerous blue-counterstained nuclei and comparatively limited brown immunoreactivity. The staining highlights the epithelial compartment and is consistent with the cytoplasmic localization of keratin 18. The CK18 Monoclonal Antibody was applied following heat-induced epitope retrieval using 10 mM citrate buffer, pH 6, for 10-20 minutes, followed by cooling at room temperature.



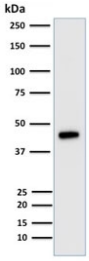
Cytokeratin 18 Antibody KRT18/835 by IHC in human prostate carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human prostate carcinoma tissue using Cytokeratin 18 Antibody clone KRT18/835. Strong brown cytoplasmic immunoreactivity is concentrated within neoplastic glandular epithelial structures, highlighting closely arranged carcinoma cells surrounding irregular luminal spaces. The surrounding stromal tissue exhibits comparatively weak staining, creating a clear distinction between epithelial and nonepithelial compartments. Hematoxylin counterstaining reveals nuclei in blue. The CK18 Monoclonal Antibody demonstrates the characteristic distribution of keratin 18 in glandular epithelial cells. Heat-induced epitope retrieval was performed in 10 mM citrate buffer, pH 6, for 10-20 minutes, followed by cooling.



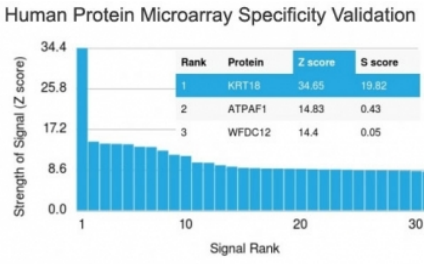
Cytokeratin 18 Antibody KRT18/835 by IHC in human bladder carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human bladder carcinoma tissue using Cytokeratin 18 Antibody clone KRT18/835. Strong brown cytoplasmic immunoreactivity is visible throughout a thick epithelial region, highlighting numerous carcinoma cells arranged along an irregular tissue surface. The staining is predominantly cytoplasmic, with nuclei remaining distinguishable through blue hematoxylin counterstaining. Adjacent stromal tissue exhibits comparatively limited staining. The CK18 Monoclonal Antibody demonstrates keratin 18 expression within the neoplastic epithelial compartment. Heat-induced epitope retrieval was performed using 10 mM citrate buffer, pH 6, for 10-20 minutes, followed by cooling at room temperature.



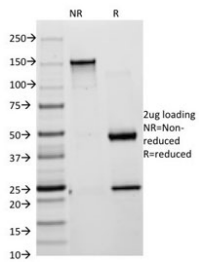
Cytokeratin 18 Antibody KRT18/835 by IF in human MCF7 cells. Immunofluorescence staining of permeabilized human MCF7 breast carcinoma cells using Cytokeratin 18 Antibody clone KRT18/835, detected in green, with RedDot nuclear counterstaining in red. Strong green fluorescence highlights an extensive cytoplasmic filament network surrounding the nuclei and extending toward the cellular periphery. The filamentous distribution is consistent with the organization of keratin 18 intermediate filaments in epithelial cells. Red nuclear fluorescence provides clear contrast with the surrounding cytoskeletal staining. The CK18 Monoclonal Antibody demonstrates the expected cytoplasmic localization of KRT18 in this epithelial carcinoma cell model.



Cytokeratin 18 Antibody KRT18/835 by WB in human HCT116 cells. Western blot analysis of human HCT116 colorectal carcinoma cell lysate using Cytokeratin 18 Antibody clone KRT18/835. A prominent immunoreactive band is detected at approximately 46-50 kDa, consistent with the expected molecular weight range of human keratin 18. The principal band is clearly distinguishable against a relatively low-background blot, with no prominent additional bands visible in the displayed molecular weight range. Molecular weight markers are provided alongside the sample lane for reference. The CK18 Monoclonal Antibody demonstrates recognition of a protein migrating near the expected size of KRT18 under the tested conditions, supporting its use in western blot analysis of epithelial cell lysates.



Cytokeratin 18 Antibody KRT18/835 by protein microarray. Protein Microarray Validated analysis of Cytokeratin 18 Antibody clone KRT18/835 using a HuProt human protein microarray containing more than 19,000 full-length proteins. The graph identifies KRT18 as the highest-ranking binding target, with a strong Z-score that exceeds the signals generated by the other proteins represented in the analysis. The separation between the leading KRT18 signal and subsequent targets supports preferential recognition of the intended antigen under the tested conditions. The CK18 Monoclonal Antibody demonstrates substantial target-associated binding in this assay, although protein microarray results do not independently establish specificity in every biological sample or experimental application.



Cytokeratin 18 Antibody KRT18/835 purity by SDS-PAGE. SDS-PAGE analysis of purified, BSA-free Cytokeratin 18 Antibody clone KRT18/835 under non-reduced (NR) and reduced (R) conditions. The non-reduced sample displays a prominent band migrating near 150 kDa, consistent with intact immunoglobulin. Under reduced conditions, a prominent band is visible near 25 kDa, corresponding to the immunoglobulin light chain, while the expected heavy-chain region is comparatively faint in the displayed preparation. Molecular weight standards are included for reference. This analysis evaluates the electrophoretic characteristics and integrity of the CK18 Monoclonal Antibody preparation rather than detection of endogenous cytokeratin 18 protein.

Description

Cytokeratin 18 Antibody KRT18/835 / CK18 Monoclonal Antibody recognizes keratin 18, a type I intermediate filament protein encoded by the KRT18 gene. Cytokeratin 18 is a major component of the cytoskeleton in simple epithelial cells, where it typically forms heteropolymeric intermediate filaments with keratin 8. These filament networks contribute to cellular integrity, mechanical stability, and the organization of intracellular structures. KRT18 is widely expressed in epithelial tissues, including the gastrointestinal tract, liver, pancreas, respiratory tract, and glandular epithelia.

Unlike keratins predominantly associated with stratified squamous epithelia, KRT18 is characteristic of simple epithelial differentiation. Its expression is maintained in many carcinomas arising from glandular and other simple epithelial tissues. Immunohistochemical detection of cytokeratin 18 is therefore useful for investigating epithelial lineage and differentiation in normal and neoplastic tissues. Expression patterns vary according to tumor origin, differentiation state, and cellular phenotype, making interpretation alongside additional cytokeratin markers important.

Cytokeratin 18 also participates in cellular responses to stress and apoptosis. During programmed cell death, executioner caspases cleave KRT18 at defined sites, producing fragments associated with apoptotic epithelial cells. Caspase-cleaved KRT18 has been investigated as a biomarker of epithelial injury in liver disease and cancer. However, antibodies recognizing total KRT18 should be distinguished from reagents specifically directed against cleavage-generated neoepitopes.

In the liver, KRT18 forms intermediate filament networks with KRT8 in hepatocytes and contributes to cytoskeletal stability during metabolic and oxidative stress. Mutations affecting these keratins have been associated with increased susceptibility to certain forms of liver injury. Altered filament organization can influence cellular resilience, protein interactions, and responses to inflammatory signaling.

NSJ Bioreagents provides Cytokeratin 18 Antibody KRT18/835 for investigating KRT18 expression in epithelial tissues and carcinoma models. The CK18 Monoclonal Antibody supports research into epithelial differentiation, intermediate filament organization, and cytoskeletal changes associated with disease. Examining KRT18 alongside KRT8 and other lineage-associated keratins can provide additional insight into epithelial identity and pathological remodeling.

Explore our Cytokeratin 18 Antibody collection for additional antibodies targeting KRT18, a key epithelial intermediate filament protein involved in cellular integrity, differentiation, and apoptosis.

Application Notes

Optimal dilution of the Cytokeratin 18 Antibody KRT18/835 / CK18 Monoclonal Antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant full-length human KRT18 protein was used as the immunogen for the Cytokeratin 18 antibody.

Storage

Store the Cytokeratin 18 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Keratin 18 antibody, KRT18 antibody, CK18 antibody, Keratin-18 antibody, Cytokeratin-18 antibody, K18 antibody, Keratin 18 Monoclonal antibody

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