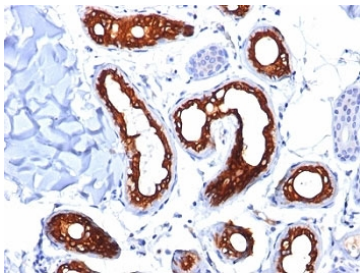
Keratin 18 Antibody KRT18/834 / KRT18 Monoclonal Antibody [clone KRT18/834] (V2672)

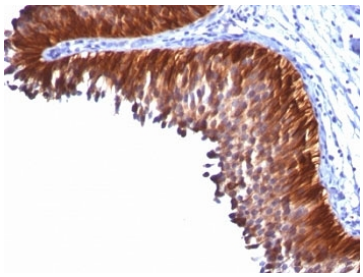
Catalog No.	Formulation	Size
V2672-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2672-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2672SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2672IHC-7ML	Prediluted 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

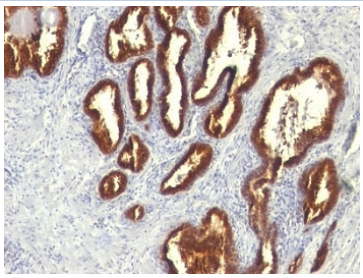
Species Reactivity	Human, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	KRT18/834
Purity	Protein G affinity chromatography
UniProt	P05783
Localization	Cytoplasmic
Applications	Western blot: 1-2ug/ml Flow cytometry: 1-2ug/10^6 cells Immunofluorescence: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Keratin 18 Antibody KRT18/834 / KRT18 Monoclonal Antibody is available for research use only.



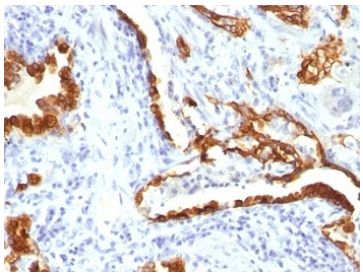
Keratin 18 Antibody KRT18/834 by IHC in human skin. Immunohistochemistry of formalin-fixed, paraffin-embedded human skin tissue using Keratin 18 Antibody clone KRT18/834. Strong brown cytoplasmic immunoreactivity is concentrated within glandular and duct-like epithelial structures embedded in the surrounding connective tissue. The positively stained epithelial cells form distinct tubular profiles, while adjacent stromal regions exhibit comparatively little staining. Hematoxylin counterstaining highlights nuclei in blue. The KRT18 Monoclonal Antibody demonstrates the distribution of keratin 18 within specialized epithelial structures of the skin, rather than widespread staining of the stratified epidermis. Heat-induced epitope retrieval was performed using 10 mM Tris containing 1 mM EDTA, pH 9, for 10-20 minutes.



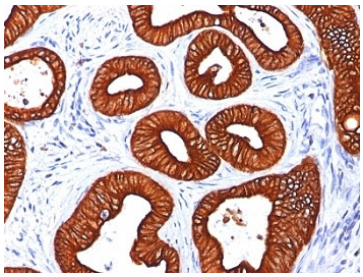
Keratin 18 Antibody KRT18/834 by IHC in human bladder carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human bladder carcinoma tissue using Keratin 18 Antibody clone KRT18/834. Strong brown cytoplasmic immunoreactivity is visible throughout a thickened epithelial region, highlighting numerous carcinoma cells arranged along an irregular tissue surface. The staining is relatively widespread within the neoplastic epithelial compartment, while adjacent stromal tissue exhibits comparatively limited immunoreactivity. Hematoxylin counterstaining reveals nuclei in blue. The KRT18 Monoclonal Antibody demonstrates the distribution of this intermediate filament protein in urothelial carcinoma cells. Heat-induced epitope retrieval was performed using 10 mM Tris containing 1 mM EDTA, pH 9, for 10-20 minutes.



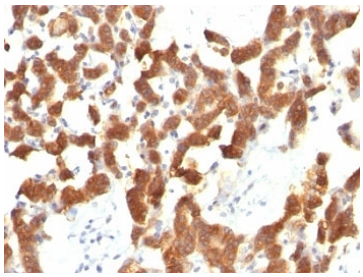
Keratin 18 Antibody KRT18/834 by IHC in human prostate carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human prostate carcinoma tissue using Keratin 18 Antibody clone KRT18/834. Strong brown cytoplasmic immunoreactivity highlights neoplastic glandular epithelial structures, including irregularly shaped glands and closely arranged carcinoma cells surrounding luminal spaces. The staining is concentrated within the epithelial compartment, while intervening stromal regions exhibit comparatively limited immunoreactivity. Hematoxylin counterstaining reveals nuclei in blue, providing contrast with the positively stained tumor cells. The KRT18 Monoclonal Antibody demonstrates the characteristic expression of keratin 18 in glandular epithelial tumors. Heat-induced epitope retrieval was performed using 10 mM Tris containing 1 mM EDTA, pH 9, for 10-20 minutes.



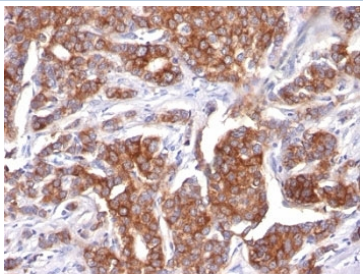
Keratin 18 Antibody KRT18/834 by IHC in human lung carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human lung carcinoma tissue using Keratin 18 Antibody clone KRT18/834. Brown cytoplasmic immunoreactivity highlights irregularly arranged carcinoma cells and epithelial structures distributed throughout the specimen. Staining intensity varies among individual cells, with some epithelial regions exhibiting stronger immunoreactivity than adjacent areas. The surrounding stromal tissue shows comparatively limited staining, and hematoxylin counterstaining reveals nuclei in blue. The KRT18 Monoclonal Antibody demonstrates keratin 18 expression within the neoplastic epithelial population. Heat-induced epitope retrieval was performed using 10 mM Tris containing 1 mM EDTA, pH 9, for 10-20 minutes.



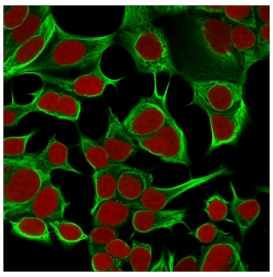
Keratin 18 Antibody KRT18/834 by IHC in human colon carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human colon carcinoma tissue using Keratin 18 Antibody clone KRT18/834. Strong brown cytoplasmic immunoreactivity is present throughout numerous neoplastic glandular structures, highlighting irregular epithelial formations and carcinoma cells surrounding luminal spaces. The staining is relatively uniform within the glandular epithelium, while intervening stromal regions exhibit comparatively little immunoreactivity. Hematoxylin counterstaining highlights nuclei in blue. The KRT18 Monoclonal Antibody demonstrates the distribution of keratin 18 in colorectal carcinoma cells, consistent with its association with simple epithelial differentiation. Heat-induced epitope retrieval was performed using 10 mM Tris containing 1 mM EDTA, pH 9, for 10-20 minutes.



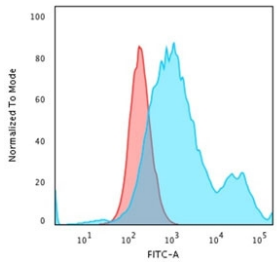
Keratin 18 Antibody KRT18/834 by IHC in human thyroid carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human thyroid carcinoma tissue using Keratin 18 Antibody clone KRT18/834. Brown cytoplasmic immunoreactivity is visible in numerous carcinoma cells arranged in irregular epithelial groups, with staining intensity varying across the specimen. Some tumor cells exhibit strong cytoplasmic staining, while adjacent cells display weaker immunoreactivity. Hematoxylin counterstaining reveals nuclei in blue, providing contrast with the positively stained epithelial population. The KRT18 Monoclonal Antibody demonstrates the distribution of keratin 18 within the neoplastic tissue. Heat-induced epitope retrieval was performed using 10 mM Tris containing 1 mM EDTA, pH 9, for 10-20 minutes.



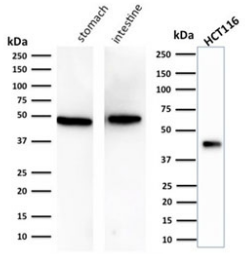
Keratin 18 Antibody KRT18/834 by IHC in human breast carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human breast carcinoma tissue using Keratin 18 Antibody clone KRT18/834. Brown cytoplasmic immunoreactivity is visible throughout numerous carcinoma cells arranged in irregular epithelial clusters and glandular formations. The staining highlights the neoplastic epithelial population, with variable intensity among individual tumor cells. Intervening stromal regions exhibit comparatively limited staining, while hematoxylin counterstaining reveals nuclei in blue. The KRT18 Monoclonal Antibody demonstrates keratin 18 expression in breast carcinoma cells, consistent with its association with glandular epithelial differentiation. Heat-induced epitope retrieval was performed using 10 mM Tris containing 1 mM EDTA, pH 9, for 10-20 minutes.



Keratin 18 Antibody KRT18/834 by IF in human MCF7 cells. Immunofluorescence staining of permeabilized human MCF7 breast carcinoma cells using Keratin 18 Antibody clone KRT18/834, 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 staining forms interconnected filamentous structures consistent with the organization of keratin 18 intermediate filaments in epithelial cells. Red nuclear fluorescence provides contrast with the surrounding cytoplasmic staining. The KRT18 Monoclonal Antibody demonstrates the expected cytoplasmic distribution of this intermediate filament protein in a human breast carcinoma cell model.



Keratin 18 Antibody KRT18/834 by FACS in human HeLa cells. Flow cytometric analysis of paraformaldehyde-fixed human HeLa cells using Keratin 18 Antibody clone KRT18/834. The blue histogram represents antibody-stained cells, while the red histogram represents the isotype control. A pronounced rightward fluorescence shift is visible in the antibody-stained population, indicating increased fluorescence relative to the control. The blue distribution includes a broad population extending toward higher fluorescence intensities, while the control remains concentrated at lower intensities. The KRT18 Monoclonal Antibody demonstrates antibody-associated fluorescence in fixed HeLa cells, supporting its use for flow cytometric detection under the tested conditions.



Keratin 18 Antibody KRT18/834 by WB in human stomach, intestine, and HCT116 cells. Western blot analysis of human stomach and intestine tissue lysates and HCT116 colorectal carcinoma cell lysate using Keratin 18 Antibody clone KRT18/834. The stomach and intestine samples show prominent bands migrating near 48-50 kDa, consistent with the predicted molecular weight of KRT18, approximately 48 kDa. The HCT116 sample exhibits a distinct band at approximately 40 kDa, below the expected molecular weight. Molecular weight markers are displayed alongside the sample lanes. Although keratin 18 undergoes proteolytic processing in certain biological contexts, the identity of the lower-migrating HCT116 band has not been independently established. The KRT18 Monoclonal Antibody demonstrates immunoreactivity in all three human samples.

Description

Keratin 18 Antibody KRT18/834 / KRT18 Monoclonal Antibody recognizes keratin 18, a type I intermediate filament protein encoded by the KRT18 gene. Keratin 18 is a defining component of the cytoskeleton in many simple epithelial cells, where it typically forms heteropolymeric intermediate filaments with keratin 8. These filament networks contribute to cellular architecture, mechanical stability, and the organization of intracellular structures. The distribution of KRT18 is closely associated with epithelial lineage and differentiation, making it an informative marker for investigating normal tissues and epithelial malignancies.

In healthy tissues, keratin 18 is widely expressed in glandular and simple epithelia, including the gastrointestinal tract, liver, pancreas, respiratory system, and reproductive organs. Its expression differs from the keratin profiles characteristic of mature stratified squamous epithelia, which generally contain other intermediate filament proteins. These distinctions reflect differences in epithelial specialization and functional requirements. Keratin 18 Antibody KRT18/834 is relevant to studies examining how these cytoskeletal patterns correspond to tissue architecture and cellular identity.

In carcinoma research, KRT18 is frequently investigated alongside keratins 7, 8, 19, and 20 to characterize epithelial differentiation. Many adenocarcinomas retain KRT18 expression, including tumors arising in the colon, lung, breast, pancreas, prostate, and thyroid. Immunohistochemical analysis can reveal the distribution of keratin-positive tumor cells within complex tissue structures. However, keratin 18 is not specific to an individual tumor type, and its interpretation requires consideration of morphology and additional lineage-associated markers.

Changes in keratin filament organization may accompany epithelial transformation, altered cell polarity, and tumor progression. Although KRT18 is predominantly associated with simple epithelial differentiation, its expression can persist in neoplastic cells exhibiting substantial morphological changes. The protein also undergoes phosphorylation and proteolytic processing during cellular stress, influencing intermediate filament dynamics and cytoskeletal remodeling.

NSJ Bioreagents provides Keratin 18 Antibody KRT18/834 for investigating epithelial differentiation and cytoskeletal organization in human tissues and cell models. The KRT18 Monoclonal Antibody supports research examining carcinoma phenotypes, tissue-specific intermediate filament expression, and changes in epithelial organization associated with disease.

Explore our Cytokeratin 18 Antibody KRT18/835 for additional research into KRT18 expression, epithelial differentiation, and cytoskeletal organization in normal tissues and carcinomas.

Application Notes

Optimal dilution of the Keratin 18 Antibody KRT18/834 / KRT18 Monoclonal Antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA 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 Keratin 18 Antibody KRT18/834.

Storage

Store the Keratin 18 Antibody KRT18/834 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Cytokeratin 18 antibody, CK18 antibody, KRT18 antibody, K18 antibody, Keratin-18 antibody, Cytokeratin-18 antibody, Type I cytoskeletal keratin 18 antibody

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