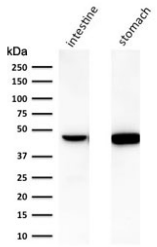
Keratin 18 Antibody Ks18.04 / CK18 Monoclonal Antibody [clone C-04 or Ks18.04] (V2675)

Catalog No.	Formulation	Size
V2675-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2675-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2675SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2675IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

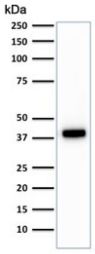
Citations (7)

Bulk quote request

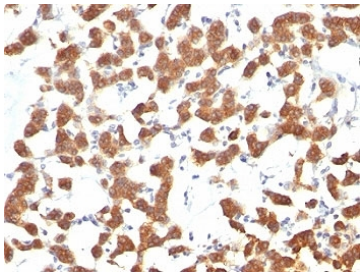
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	C-04 or Ks18.04
Purity	Protein G affinity chromatography
UniProt	P05783
Localization	Cytoplasmic
Applications	Flow cytometry: 1-2ug/10^6 cells Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Keratin 18 Antibody Ks18.04 / CK18 Monoclonal Antibody is available for research use only.



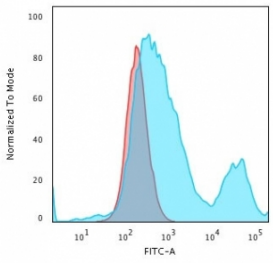
Keratin 18 Antibody Ks18.04 by WB in human intestine and stomach. Western blot analysis of human intestine and stomach tissue lysates using Keratin 18 Antibody clone Ks18.04, also known as C-04. Lane 1 contains human intestine lysate, and lane 2 contains human stomach lysate. Both samples exhibit a prominent immunoreactive band migrating at approximately 46-50 kDa, consistent with the expected molecular weight of keratin 18. The stomach sample shows a broader and more intense band than the intestine sample. Molecular weight markers are displayed to the left of the blot. The CK18 Monoclonal Antibody demonstrates recognition of a protein near the expected size of KRT18 in both gastrointestinal tissues.



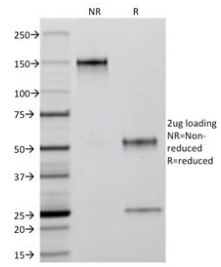
Keratin 18 Antibody Ks18.04 by WB in human HCT116 cells. Western blot analysis of human HCT116 colorectal carcinoma cell lysate using Keratin 18 Antibody clone Ks18.04, also designated C-04. A prominent immunoreactive band is detected at approximately 40 kDa, migrating below the expected molecular weight range of human KRT18, approximately 46-50 kDa. The band is well defined against a relatively low-background blot, with no prominent additional bands visible. Molecular weight markers are displayed alongside the sample lane. Although keratin 18 undergoes proteolytic processing under certain biological conditions, the identity of this lower-migrating band has not been independently established. The CK18 Monoclonal Antibody demonstrates detectable immunoreactivity in HCT116 cell lysate.



Keratin 18 Antibody Ks18.04 by IHC in human thyroid carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human thyroid carcinoma tissue using Keratin 18 Antibody clone Ks18.04, also known as C-04. Strong brown cytoplasmic immunoreactivity is visible throughout numerous carcinoma cells, highlighting their irregularly arranged epithelial structures. The staining is predominantly cytoplasmic, with variable intensity among individual cells and comparatively limited staining in intervening nonepithelial regions. Hematoxylin counterstaining reveals nuclei in blue. The CK18 Monoclonal Antibody demonstrates the distribution of keratin 18 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, followed by cooling at room temperature.



Keratin 18 Antibody Ks18.04 by FACS in human HeLa cells. Flow cytometric analysis of paraformaldehyde-fixed human HeLa cells using Keratin 18 Antibody clone Ks18.04, also designated C-04. The blue histogram represents cells stained with the CK18 Monoclonal Antibody, while the red histogram represents the isotype control. The antibody-stained population exhibits increased fluorescence relative to the control, including a distinct high-fluorescence population extending toward the right side of the histogram. Considerable overlap remains between the principal distributions. This result demonstrates antibody-associated fluorescence in fixed HeLa cells, although the heterogeneous signal and overlapping populations should be considered when interpreting the staining.



Keratin 18 Antibody Ks18.04 purity by SDS-PAGE. SDS-PAGE analysis of purified, BSA-free Keratin 18 Antibody clone Ks18.04, also known as C-04, under non-reduced (NR) and reduced (R) conditions. The non-reduced sample displays a prominent band near 150 kDa, consistent with intact immunoglobulin. Under reduced conditions, distinct bands migrate at approximately 50-55 kDa and 25 kDa, corresponding to immunoglobulin heavy and light chains. Molecular weight standards are displayed in the left lane. This analysis evaluates the electrophoretic characteristics and integrity of the purified CK18 Monoclonal Antibody preparation rather than detection of endogenous keratin 18 protein.

Description

Keratin 18 Antibody Ks18.04 / CK18 Monoclonal Antibody recognizes keratin 18, a type I intermediate filament protein encoded by the KRT18 gene. Also identified as clone C-04, this mouse monoclonal antibody targets a cytoskeletal component characteristic of simple epithelial cells. Keratin 18 typically forms heteropolymeric intermediate filaments with keratin 8, creating networks that contribute to mechanical stability, cellular organization, and epithelial integrity. Its widespread distribution in glandular and simple epithelia makes it an important marker for investigating epithelial differentiation.

Keratin 18 is expressed in numerous internal organs, including the gastrointestinal tract, liver, pancreas, lungs, and reproductive system. Its distribution contrasts with the keratin profiles of mature stratified squamous epithelia, which generally express other intermediate filament proteins. This distinction helps researchers characterize epithelial populations and examine how cytoskeletal organization changes during differentiation, tissue remodeling, and disease.

In cancer research, KRT18 is frequently investigated as a marker of epithelial lineage. Adenocarcinomas arising from the gastrointestinal tract, breast, lung, pancreas, ovary, and thyroid commonly retain keratin 18 expression. Immunohistochemical detection can help characterize epithelial differentiation in tumor specimens, although KRT18 is not specific to any individual carcinoma. Interpretation requires consideration of tissue morphology and complementary lineage markers.

Clone Ks18.04, also designated clone C-04, has been used in research examining epithelial intermediate filament expression. Its recognition of keratin 18 is relevant to studies comparing normal epithelial tissues with neoplastic counterparts. Western blot analysis can provide information about protein expression and electrophoretic migration, while immunohistochemistry reveals the distribution of keratin-positive cells within preserved tissue architecture.

Keratin 18 also participates in cellular stress responses and undergoes caspase-mediated cleavage during apoptosis. Cleavage products have been investigated as indicators of epithelial injury, particularly in liver disease and oncology. However, antibodies recognizing total KRT18 should not be assumed to distinguish intact protein from specific cleavage products without appropriate validation.

NSJ Bioreagents provides Keratin 18 Antibody Ks18.04 for investigating epithelial cytoskeletal organization and differentiation. The CK18 Monoclonal Antibody, also known as C-04, supports research involving epithelial tumors, tissue-specific keratin expression, and changes in intermediate filament 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 Ks18.04 / CK18 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

A cytoskeletal preparation from A431 cells was used as the immunogen for the Keratin 18 antibody.

Storage

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

Alternate Names

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

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