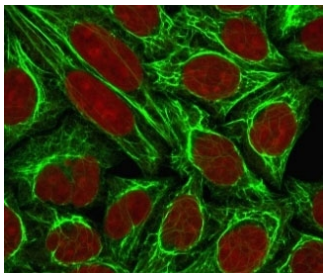
Cytokeratin 18 Antibody CTKN18-1 / Mouse Monoclonal [clone CTKN18-1] (V7110)

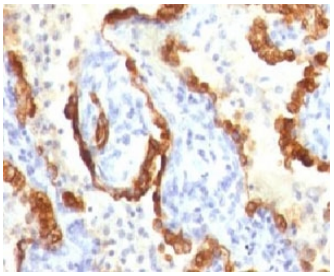
Catalog No.	Formulation	Size
V7110-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7110-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7110SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7110IHC-7ML	Prediluted 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

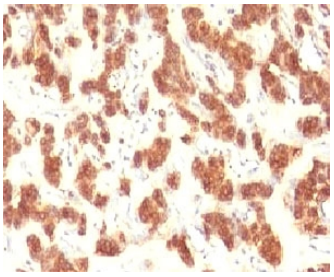
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CTKN18-1
Purity	Protein G affinity chromatography
UniProt	P05783
Localization	Cytoplasmic
Applications	Western blot: 1-2ug/ml Immunofluorescence: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Prediluted IHC only format: incubate for 30 min at RT (1)
Limitations	This Cytokeratin 18 Antibody CTKN18-1 is available for research use only.



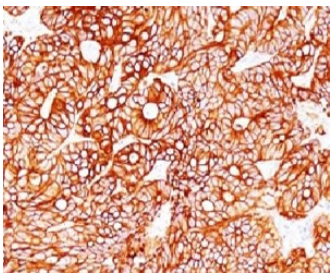
Immunofluorescence analysis of Cytokeratin 18 Antibody CTKN18-1 in human MCF7 cells. Permeabilized human MCF7 cells were stained using Cytokeratin 18 antibody (clone CTKN18-1, green) to visualize the cytoplasmic intermediate filament network, with nuclear counterstaining performed using Reddot (red). Cytokeratin 18 signal is observed as an extensive filamentous cytoplasmic network surrounding the nuclei, while nuclear staining is confined to the nuclear compartment. This staining pattern reflects cytoplasmic localization of Cytokeratin 18 in epithelial-derived breast cancer cells.



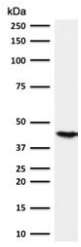
IHC testing of FFPE human lung carcinoma and Cytokeratin 18 antibody (clone CTKN18-1). FFPE testing requires sections to be boiled in pH 9 10mM Tris with 1mM EDTA for 10-20 min, followed by cooling at RT for 20 min, prior to staining.



IHC testing of FFPE human thyroid carcinoma and Cytokeratin 18 antibody (clone CTKN18-1). FFPE testing requires sections to be boiled in pH 9 10mM Tris with 1mM EDTA for 10-20 min, followed by cooling at RT for 20 min, prior to staining.



IHC testing of FFPE human colon carcinoma and Cytokeratin 18 antibody (clone CTKN18-1). FFPE testing requires sections to be boiled in pH 9 10mM Tris with 1mM EDTA for 10-20 min, followed by cooling at RT for 20 min, prior to staining.



Western blot testing of HCT-116 cell lysate with Cytokeratin 18 Antibody CTKN18-1. Predicted molecular weight ~48 kDa.

Description

Cytokeratin 18 Antibody CTKN18-1 recognizes Cytokeratin 18, also known as Keratin 18 (KRT18), a type I intermediate filament protein that is broadly expressed in simple epithelial cells and epithelial-derived tissues. Cytokeratin 18 is a cytoplasmic structural protein that typically forms obligate heterodimers with type II keratins, most notably Keratin 8, to assemble the intermediate filament network responsible for maintaining epithelial cell architecture, intracellular organization, and mechanical stability. Cytokeratin 18 Antibody is commonly used in research and pathology contexts and is frequently referred to in the literature as CK18 antibody or Keratin 18 antibody.

Cytokeratin 18 expression is characteristic of simple and glandular epithelia lining internal organs, including liver,

pancreas, gastrointestinal tract, kidney, lung, breast, and prostate. In these tissues, CK18 is predominantly localized to luminal and secretory epithelial cells rather than basal cell compartments. This expression pattern distinguishes Cytokeratin 18 from basal keratins such as Cytokeratin 14 or Cytokeratin 15 and makes Cytokeratin 18 Antibody useful for identifying epithelial cells of simple epithelial origin and for differentiating epithelial structures from surrounding stromal, mesenchymal, or hematopoietic components.

Alterations in Cytokeratin 18 expression and organization have been documented in a variety of pathological contexts. Changes in CK18 distribution, expression intensity, or filament organization have been observed in epithelial injury, cellular stress responses, and epithelial-derived malignancies. As a result, Cytokeratin 18 antibody staining patterns are frequently evaluated in research studies focused on epithelial differentiation, tissue remodeling, and carcinoma biology, particularly in tumors arising from glandular or ductal epithelia.

At the cellular level, Cytokeratin 18 contributes to the organization of the intermediate filament cytoskeleton and supports epithelial cell shape and resilience to mechanical and metabolic stress. Its broad expression across simple epithelial tissues makes Cytokeratin 18 Antibody a valuable tool for studies of epithelial lineage identification, tissue architecture, and epithelial biology. The Cytokeratin 18 Antibody (clone CTKN18-1) is designed to detect Cytokeratin 18 expression in research applications where assessment of epithelial cell populations is required.

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

Titering of the Cytokeratin 18 Antibody CTKN18-1 may be required for optimal performance.

1. 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).

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