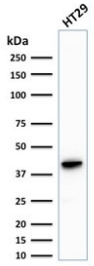
CK20 Antibody for IHC / Cytokeratin 20 Immunohistochemistry Antibody [clone KRT20/1993] (V7323)

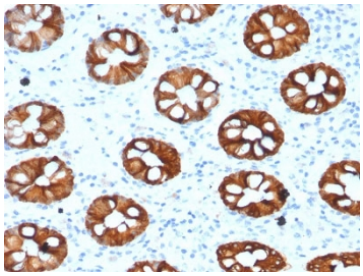
Catalog No.	Formulation	Size
V7323-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7323-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7323SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7323IHC-7ML	Prediluted 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

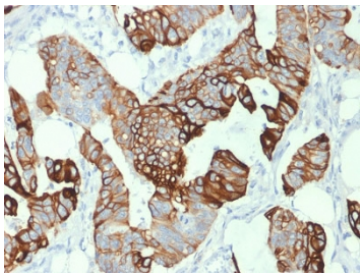
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	KRT20/1993
Purity	Protein G affinity chromatography
UniProt	P35900
Localization	Cytoplasmic
Applications	Western blot: 0.5-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CK20 antibody is available for research use only.



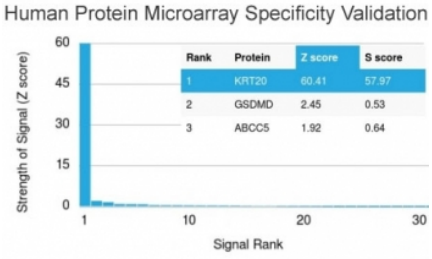
Western blot testing of human HT29 cell lysate with CK20 antibody (clone KRT20/1993). Predicted molecular weight ~46 kDa.



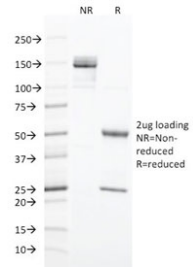
CK20 Antibody for IHC (clone KRT20/1993). Immunohistochemistry analysis of human colon tissue using mouse monoclonal CK20 antibody (clone KRT20/1993). HRP-DAB brown chromogenic staining highlights cytoplasmic Keratin 20 / Cytokeratin 20 (KRT20) expression in epithelial cells lining colonic glandular crypt structures, while surrounding stromal cells remain largely negative. The staining pattern reflects the expected epithelial localization of this intermediate filament protein in gastrointestinal mucosa. Required HIER: boil tissue sections in 10 mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min.



CK20 Antibody for IHC (clone KRT20/1993). Immunohistochemistry analysis of human colon carcinoma tissue using mouse monoclonal CK20 antibody (clone KRT20/1993). HRP-DAB brown chromogenic staining highlights cytoplasmic Keratin 20 / Cytokeratin 20 (KRT20) expression in malignant epithelial cells forming glandular structures, while surrounding stromal cells remain largely negative. The staining pattern reflects the known epithelial localization of this intermediate filament protein in colorectal carcinoma. Required HIER: boil tissue sections in 10 mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using CK20 antibody (clone KRT20/1993). These results demonstrate the foremost specificity of the KRT20/1993 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free CK20 antibody (clone KRT20/1993) as confirmation of integrity and purity.

Description

Keratin 20 (KRT20) is a type I epithelial cytokeratin widely used as a marker of intestinal epithelial differentiation in histopathology. CK20 Antibody for IHC (clone KRT20/1993) enables immunohistochemical detection of Cytokeratin 20 in formalin-fixed, paraffin-embedded tissue sections, where staining typically appears as cytoplasmic labeling of epithelial cells lining glandular structures of the colon and other gastrointestinal tissues. Because CK20 expression is strongly associated with intestinal epithelium, immunohistochemistry staining using a CK20 antibody is commonly used to visualize epithelial cell populations and evaluate epithelial differentiation patterns in gastrointestinal tissues and colorectal carcinoma samples.

Keratin 20 is encoded by the KRT20 gene located on chromosome 17q21 within a genomic cluster that contains several keratin genes responsible for epithelial cytoskeletal organization. The protein is commonly referred to in the literature as Cytokeratin 20 or CK20 and forms heterodimers with type II keratins such as keratin 8. These keratin dimers assemble into intermediate filament networks that extend throughout the cytoplasm of epithelial cells, providing mechanical stability and helping maintain epithelial tissue architecture. In immunohistochemistry staining, Cytokeratin 20 antibody labeling

highlights these cytoplasmic filament structures, allowing visualization of epithelial cell morphology and glandular organization within tissue sections.

Keratin 20 expression is particularly prominent in intestinal epithelial cells and colonic mucosa. In normal colon tissue, CK20 immunohistochemistry typically produces strong cytoplasmic staining in epithelial cells lining glandular crypt structures while surrounding stromal cells remain largely negative. This selective epithelial staining pattern makes Cytokeratin 20 antibody detection a useful tool for identifying intestinal epithelial differentiation and for studying epithelial cell distribution in gastrointestinal tissues.

In cancer research and pathology studies, CK20 is widely used as a colorectal carcinoma marker. Cytokeratin 20 expression is frequently retained in colorectal adenocarcinoma as well as other epithelial tumors derived from gastrointestinal tissues. Immunohistochemistry staining with a CK20 Antibody for IHC allows researchers to visualize malignant epithelial cells within tumor tissue and evaluate epithelial differentiation patterns in cancer specimens. Cytokeratin 20 staining patterns therefore support studies investigating epithelial tumor biology, tumor differentiation states, and epithelial lineage identification in histological samples.

The mouse monoclonal antibody clone KRT20/1993 targets Keratin 20 and can be used to detect KRT20 protein in formalin-fixed, paraffin-embedded tissues for research applications. Immunohistochemistry staining with a CK20 Antibody for IHC typically produces cytoplasmic epithelial labeling in gastrointestinal tissues and colorectal tumors, supporting visualization of epithelial cell architecture and enabling detailed histopathological analysis of epithelial differentiation and colorectal carcinoma biology.

Application Notes

Optimal dilution of the CK20 Antibody for IHC should be determined by the researcher.

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

A portion of amino acids 196-323 from the human protein was used as the immunogen for this CK20 antibody.

Storage

Store the CK20 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Cytokeratin 20 antibody, Keratin 20 antibody, KRT20 antibody, Cytokeratin-20 antibody, Keratin 20 protein antibody

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