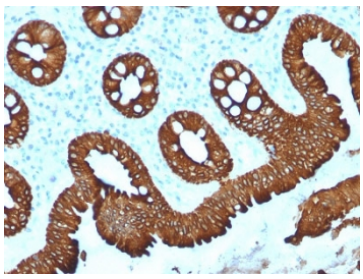
Cytokeratin 20 Antibody Protein Microarray Validated / KRT20 Antibody [clone KRT20/1992] (V3909)

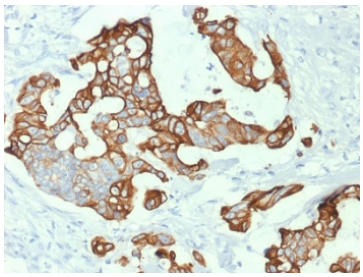
Catalog No.	Formulation	Size
V3909-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3909-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3909SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

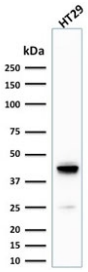
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	KRT20/1992
Purity	Protein G affinity chromatography
UniProt	P35900
Localization	Cytoplasmic
Applications	Western Blot : 0.5ug/ml-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Cytokeratin 20 antibody is available for research use only.



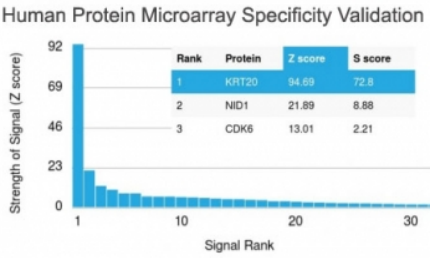
Cytokeratin 20 Antibody for IHC. Immunohistochemistry analysis of human colon tissue using protein microarray validated Cytokeratin 20 antibody (clone KRT20/1992). HRP-DAB brown chromogenic staining highlights cytoplasmic Keratin 20 / Cytokeratin 20 (KRT20) expression in epithelial cells lining colonic glandular crypts, while surrounding stromal cells remain largely negative. This 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.



IHC testing of human colon carcinoma with Cytokeratin 20 antibody (clone KRT20/1992). Required HIER: boil tissue sections in 10mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min.



Western blot testing of human HT29 cell lysate with Cytokeratin 20 antibody (clone KRT20/1992). Predicted molecular weight ~46 kDa.



Cytokeratin 20 Antibody Protein Microarray Validated. HuProt(TM) human protein microarray specificity analysis using Cytokeratin 20 Antibody Protein Microarray Validated clone KRT20/1992. The microarray contains more than 19,000 full-length human proteins. KRT20 shows the strongest signal with the highest Z-score and S-score, indicating highly selective recognition of Keratin 20 / KRT20 relative to other proteins on the array. Z-score represents the signal intensity generated when the antibody binds to a specific protein spot, expressed as standard deviations above the mean signal of the array. The S-score represents the difference between adjacent Z-scores and reflects the relative specificity of the antibody for its intended target protein.

Description

Keratin 20 (KRT20) is a type I acidic cytokeratin that belongs to the epithelial intermediate filament family responsible for maintaining cytoskeletal stability and structural organization in epithelial cells. Cytokeratin 20 Antibody Protein Microarray Validated clone KRT20/1992 recognizes Keratin 20 and enables detection of this epithelial cytoskeletal protein in research studies investigating epithelial cell identity and differentiation. Keratin 20 is localized primarily within the cytoplasm of epithelial cells where it forms intermediate filament networks that provide mechanical support and help maintain epithelial tissue architecture.

Keratin 20 is encoded by the KRT20 gene located on chromosome 17q21, within a genomic cluster that contains multiple keratin genes involved in epithelial cytoskeletal organization. The protein is widely referred to in the literature as Cytokeratin 20 or CK20, two common synonyms used in epithelial biology and cancer research. Keratin 20 typically forms heterodimers with type II keratins such as keratin 8, and these heterodimers polymerize to generate intermediate filament structures that extend throughout the cytoplasm. These filament networks contribute to epithelial cell stability and maintain the mechanical resilience of tissues that experience constant physical stress.

Keratin 20 expression is strongly associated with differentiated epithelial cells. High expression levels are observed in intestinal epithelial cells, gastric mucosa, and urothelial umbrella cells. Because of this restricted distribution pattern, Cytokeratin 20 antibody reagents are frequently used as markers for epithelial lineage identification in biological research. Detection of KRT20 protein allows investigators to examine epithelial differentiation status and evaluate epithelial cell populations in a variety of experimental systems.

In cancer biology, Keratin 20 expression is often retained in tumors originating from gastrointestinal and urothelial epithelia. CK20 expression is commonly observed in colorectal carcinoma, gastric carcinoma, pancreatic carcinoma, and bladder carcinoma, where it serves as a marker of epithelial differentiation. Detection of Cytokeratin 20 can therefore

assist research studies examining epithelial tumor biology, cellular differentiation states, and cytoskeletal organization in cancer cells.

The mouse monoclonal antibody clone KRT20/1992 targets Keratin 20 and has been validated using protein microarray technology to support specific detection of KRT20 in research applications. Protein microarray validation involves testing antibody binding across large panels of recombinant proteins to confirm selective target recognition. This approach helps support the specificity of Cytokeratin 20 antibody reagents for studies investigating epithelial cytoskeletal proteins, epithelial differentiation pathways, and epithelial tumor biology.

Application Notes

Optimal dilution of the protein microarray validated Cytokeratin 20 antibody should be determined by the researcher.

Immunogen

A portion of amino acids 196-323 from the human protein was used as the immunogen for this Cytokeratin 20 antibody.

Storage

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

Alternate Names

Keratin 20 antibody, CK20 antibody, KRT20 antibody, Cytokeratin-20 antibody, Keratin 20 protein antibody

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