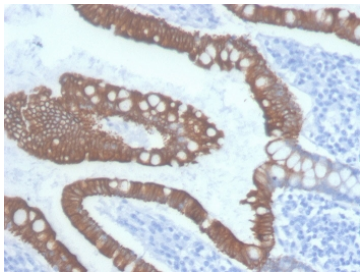
Cytokeratin 20 Antibody Mouse Monoclonal KRT20/3145 / KRT20 Antibody [clone KRT20/3145] (V8275)

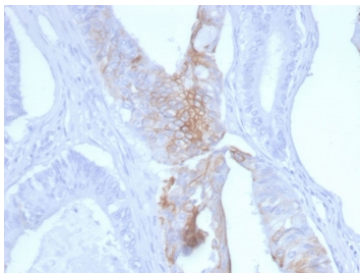
Catalog No.	Formulation	Size
V8275-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8275-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8275SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

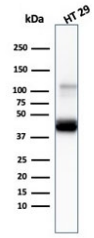
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG, kappa
Clone Name	KRT20/3145
Purity	Protein G affinity chromatography
UniProt	P35900
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 0.1-0.2ug/ml Western Blot : 1-2ug/ml
Limitations	This Cytokeratin 20 antibody is available for research use only.



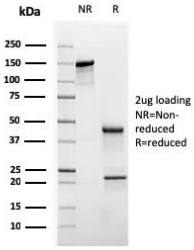
Cytokeratin 20 Antibody Mouse Monoclonal KRT20/3145. Immunohistochemistry analysis of FFPE human colon carcinoma tissue using mouse monoclonal Cytokeratin 20 antibody (clone KRT20/3145). HRP-DAB brown chromogenic staining highlights cytoplasmic Keratin 20 / Cytokeratin 20 (KRT20) expression in malignant 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. HIER: boil tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human colon carcinoma with Cytokeratin 20 antibody (clone KRT20/3145). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Cytokeratin 20 Antibody Mouse Monoclonal KRT20/3145. Western blot analysis of human HT-29 cell lysate using Cytokeratin 20 Antibody Mouse Monoclonal KRT20/3145. Lane 1: human HT-29 cell lysate. A band is detected at approximately 46 kDa, consistent with the predicted molecular weight of Keratin 20 / Cytokeratin 20 (KRT20), an epithelial intermediate filament protein commonly expressed in gastrointestinal epithelial cells such as HT-29 colorectal adenocarcinoma cells.



SDS-PAGE analysis of purified, BSA-free Cytokeratin 20 antibody (clone KRT20/3145) as confirmation of integrity and purity.

Description

Keratin 20 (KRT20) is a type I acidic cytokeratin that belongs to the epithelial intermediate filament protein family responsible for maintaining cytoskeletal stability and structural organization in epithelial cells. Cytokeratin 20 Antibody Mouse Monoclonal KRT20/3145 recognizes Keratin 20 and enables detection of this epithelial cytoskeletal protein in research studies examining epithelial cell identity, epithelial differentiation, and cytoskeletal organization. Keratin 20 is localized primarily in the cytoplasm of epithelial cells where it forms intermediate filament networks that provide mechanical support and maintain epithelial tissue architecture.

Keratin 20 is encoded by the KRT20 gene located on chromosome 17q21 within a genomic cluster containing several keratin genes involved in epithelial cytoskeletal structure. The protein is widely known in the literature as Cytokeratin 20 or CK20, two commonly used synonyms in epithelial biology and cancer research. Keratin 20 forms heterodimers with type II keratins such as keratin 8, and these dimers polymerize to generate intermediate filament networks throughout the cytoplasm of epithelial cells. These filament structures support epithelial cell stability and contribute to the mechanical resilience of tissues exposed to continuous mechanical stress.

Keratin 20 expression is strongly associated with differentiated epithelial cell populations. 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. Detection of KRT20 protein therefore supports studies examining epithelial differentiation, epithelial organization, and epithelial tissue development.

In cancer biology, Keratin 20 expression is frequently retained in tumors originating from gastrointestinal and urothelial epithelia. CK20 expression is commonly detected in colorectal carcinoma, gastric carcinoma, pancreatic carcinoma, and bladder carcinoma, where it serves as a marker of epithelial differentiation. Detection of Cytokeratin 20 assists research examining epithelial tumor biology, cytoskeletal organization, and differentiation states within tumor cells.

The mouse monoclonal antibody clone KRT20/3145 targets Keratin 20 and can be used to detect KRT20 protein in research applications examining epithelial cytoskeletal proteins. Detection of Cytokeratin 20 supports studies investigating epithelial differentiation pathways, epithelial tissue organization, and epithelial tumor biology.

Application Notes

Optimal dilution of the Cytokeratin 20 Antibody Mouse Monoclonal KRT20/3145 antibody should be determined by the researcher.

Immunogen

A recombinant human partial protein (amino acids 196-323) 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