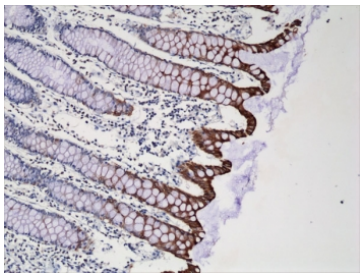
Recombinant CK20 Antibody / Cytokeratin 20 / KRT20 [clone RM283] (R20300)

Catalog No.	Formulation	Size
R20300-0.1ML	Antibody in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ul

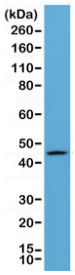
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM283
Purity	Protein A purified from animal origin-free supernatant
UniProt	P35900
Gene ID	54474
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1:100-1:250 (1) Western Blot : 1:1000-1:2000
Limitations	This recombinant CK20 antibody is available for research use only.



IHC testing of FFPE human colon tissue with recombinant CK20 antibody at 1:250.



Western blot of human A431 lysate using recombinant CK20 antibody at 1:1000. Predicted molecular weight ~49 kDa.

Description

The Recombinant CK20 antibody is a recombinant reagent engineered to detect cytokeratin 20 (CK20), also known as KRT20. CK20 is a type I intermediate filament protein expressed in specific epithelial tissues, including gastrointestinal epithelium, urothelium, and Merkel cells. It forms heterodimers with type II cytokeratins to establish the cytoskeletal framework that provides structural stability and resilience to epithelial cells. The restricted expression of CK20 makes it a valuable marker in diagnostic pathology and research, particularly for distinguishing tumor origin. The Recombinant CK20 antibody ensures reliable and reproducible detection of this important epithelial marker.

CK20 is encoded by the KRT20 gene located on chromosome 17q21. Structurally, it follows the typical keratin organization with a central alpha helical rod domain flanked by non helical head and tail regions. These structural domains allow filament assembly and interactions with other cytoskeletal proteins. CK20 expression is most prominent in gastrointestinal mucosa, such as colon and stomach, and in urothelium. It is absent in many other epithelial tissues, which makes its expression pattern highly useful for tumor classification. The Recombinant CK20 antibody recognizes conserved epitopes, supporting its application across diverse sample types.

In immunohistochemistry, the Recombinant CK20 antibody highlights cytoplasmic networks in colorectal epithelium and urothelium, yielding strong staining that is preserved in many carcinomas. Its diagnostic value is particularly evident when used in conjunction with CK7, as the CK7/CK20 staining pattern is frequently employed to determine the origin of metastatic carcinomas. In immunofluorescence, the antibody reveals filamentous staining consistent with keratin cytoskeleton organization. In western blotting, it detects CK20 protein in tissue extracts, supporting quantitative analysis of expression levels. Recombinant design ensures consistency across experimental use, reducing variability compared with hybridoma derived antibodies.

The Recombinant CK20 antibody is widely used in oncology. It is strongly expressed in colorectal adenocarcinomas, transitional cell carcinomas, and Merkel cell carcinomas, making it a critical diagnostic tool. In contrast, CK20 expression is generally absent in lung, breast, and prostate carcinomas, allowing pathologists to distinguish between tumor types. Beyond oncology, the antibody is applied in developmental and stem cell biology, where CK20 helps define epithelial differentiation states. Synonym terms such as recombinant cytokeratin 20 antibody, recombinant KRT20 antibody, and recombinant epithelial keratin 20 antibody improve product discoverability for researchers working across different systems.

By offering validated and reproducible detection, the Recombinant CK20 antibody provides a dependable reagent for both research and diagnostic pathology. NSJ Bioreagents ensures strict quality control, giving researchers confidence in immunohistochemistry, immunofluorescence, and western blotting applications. With specificity for CK20, the Recombinant CK20 antibody is an indispensable tool for advancing studies in epithelial biology and cancer diagnostics.

Application Notes

The stated application concentrations are suggested starting points. Titration of the recombinant CK20 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

1. A pH6 Citrate buffer or pH9 Tris/EDTA buffer HIER step is recommended for testing of FFPE tissue sections.

Immunogen

A peptide corresponding to the C-terminus of human Cytokeratin 20 was used as the immunogen for this recombinant CK20 antibody.

Storage

Store the recombinant CK20 antibody at -20oC (with glycerol) or aliquot and store at -20oC (without glycerol).