

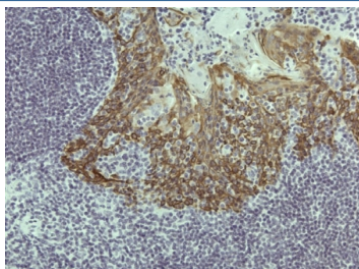
Recombinant CK5 Antibody / Cytokeratin 5 [clone RM226] (R20256)

Catalog No.	Formulation	Size
R20256-0.1ML	Antibody in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	0.1 ml

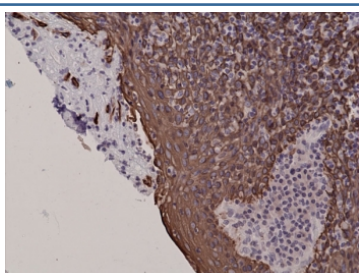
Recombinant **RABBIT MONOCLONAL**

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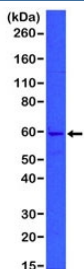
Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat, Bovine
Format	Purified
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM226
Purity	Protein A purified from animal origin-free supernatant
UniProt	P13647
Applications	Immunohistochemistry (FFPE) : 1:100 -1:400 (1) Western Blot : 1:1000
Limitations	This recombinant CK5 antibody is available for research use only.



IHC staining of FFPE human tonsil tissue with recombinant CK5 antibody.



IHC staining of FFPE human tonsil tissue with recombinant CK5 antibody.



Western blot of A431 cell lysate with recombinant CK5 antibody. Predicted molecular weight 58~62 kDa.

Description

The Recombinant CK5 antibody is a recombinant reagent that specifically detects cytokeratin 5 (CK5), an intermediate filament protein expressed in the basal layer of stratified epithelia. CK5, encoded by the KRT5 gene, pairs with cytokeratin 14 (CK14) to form heterodimers that integrate into the cytoskeletal network, providing structural stability and resilience to mechanical stress. As a basal cell marker, CK5 is widely used in pathology to identify basal epithelial cells and to distinguish tumor subtypes in diagnostic settings. The Recombinant CK5 antibody offers consistent and reproducible detection of this protein in research and clinical studies.

Cytokeratins are a large family of intermediate filament proteins that provide mechanical support and contribute to tissue integrity. CK5 is predominantly expressed in stratified squamous epithelia, including skin, esophagus, and mammary glands. In the epidermis, CK5 is restricted to basal keratinocytes, where it plays a role in maintaining proliferative capacity and anchoring the basal layer to the basement membrane. Alterations in CK5 expression have been implicated in diseases such as epidermolysis bullosa simplex, caused by mutations in KRT5 or KRT14, which lead to blistering due to cytoskeletal fragility.

The Recombinant CK5 antibody is highly valuable in cancer diagnostics and research. In breast pathology, CK5 serves as a marker of basal-like breast carcinomas, a subtype associated with triple-negative phenotype and distinct clinical outcomes. In lung cancer, CK5 is used to help distinguish squamous cell carcinoma from adenocarcinoma, aiding in accurate classification of tumor type. Immunohistochemical staining with the Recombinant CK5 antibody reveals basal cell populations, supporting diagnostic interpretation in both neoplastic and non-neoplastic tissues.

Beyond diagnostic use, the Recombinant CK5 antibody is applied in developmental biology to trace basal progenitor populations and to study epithelial differentiation. In immunofluorescence, it highlights cytoplasmic intermediate filament networks characteristic of basal keratinocytes. In western blotting, the antibody reliably detects CK5 protein in extracts from epithelial tissues and cultured keratinocytes. Recombinant expression ensures high specificity and consistency between production lots, addressing variability that can affect traditional hybridoma-derived antibodies.

Synonym terms such as recombinant cytokeratin 5 antibody, recombinant KRT5 antibody, and recombinant basal cell keratin antibody expand accessibility for researchers using alternate nomenclature. By enabling validated and reproducible detection, the Recombinant CK5 antibody is an indispensable tool in epithelial biology, cancer pathology, and diagnostic immunohistochemistry.

NSJ Bioreagents ensures rigorous quality control for the Recombinant CK5 antibody, giving scientists and clinicians confidence in its use across immunohistochemistry, immunofluorescence, and western blotting. With this reagent, researchers can reliably study epithelial structure, basal cell function, and disease-associated changes in keratin expression.

This recombinant CK5 antibody reacts to human Cytokeratin 5. It may also react to the bovine, mouse or rat protein, as predicted by immunogen homology.

Application Notes

The stated application concentrations are suggested starting points. Titration of the recombinant CK5 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 5 was used as the immunogen for this recombinant CK5 antibody.

Storage

Store the recombinant CK5 antibody at -20oC (with glycerol) or aliquot and store at -20oC (without glycerol).