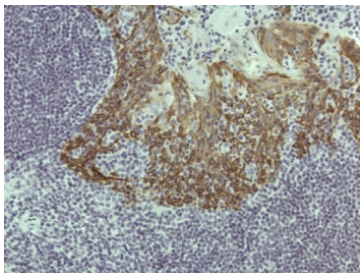
CK5 Antibody RM226 / Recombinant Cytokeratin 5 Antibody [clone RM226] (R20256)

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

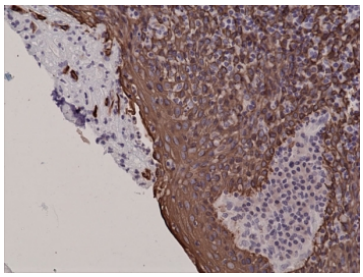
Recombinant RABBIT MONOCLONAL

Bulk quote request

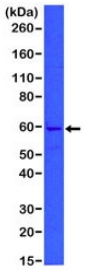
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat, Bovine
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM226
Purity	Protein A purified from animal origin-free supernatant
UniProt	P13647
Applications	Immunohistochemistry (FFPE): 1:100 -1:400 (1) Western blot: 1:1000
Limitations	This CK5 Antibody RM226 / Recombinant Cytokeratin 5 Antibody is available for research use only.



CK5 Antibody RM226 by IHC in Human Tonsil. Immunohistochemistry of FFPE human tonsil tissue using recombinant CK5 Antibody RM226. Brown staining is observed predominantly in the cytoplasm of squamous epithelial cells, highlighting the epithelial compartment against the surrounding lymphoid tissue. The Recombinant Cytokeratin 5 Antibody demonstrates strong epithelial immunoreactivity, while the adjacent lymphoid regions show comparatively little staining. Nuclei are counterstained blue with hematoxylin.



CK5 Antibody RM226 by IHC in Human Tonsil, Second View. Immunohistochemistry of FFPE human tonsil tissue using recombinant CK5 Antibody RM226. Strong brown cytoplasmic staining is observed throughout the stratified squamous epithelium, with a clear boundary between the positively stained epithelial cells and the underlying lymphoid tissue. The Recombinant Cytokeratin 5 Antibody highlights the epithelial architecture, while lymphoid follicles show minimal immunoreactivity. Nuclei are counterstained blue with hematoxylin.



CK5 Antibody RM226 by WB in Human A431 Cells. Western blot analysis of human A431 cell lysate using recombinant CK5 Antibody RM226. A single immunoreactive band is detected at approximately 58-60 kDa, consistent with the predicted molecular weight of cytokeratin 5 (58-62 kDa). The Recombinant Cytokeratin 5 Antibody demonstrates recognition of a protein migrating at the expected molecular weight of KRT5, supporting its use for investigating basal epithelial keratin expression.

Description

CK5 Antibody RM226 recognizes cytokeratin 5 (KRT5), a type II intermediate filament protein expressed primarily in basal epithelial cells of stratified and pseudostratified epithelia. Also known as keratin 5, CK5 is a structural component of the cytoskeleton that helps epithelial cells withstand mechanical stress. The human KRT5 gene is located on chromosome 12 and encodes a protein with a molecular weight of approximately 58 kDa. KRT5 expression is particularly prominent in basal keratinocytes of the epidermis, as well as basal epithelial populations in the prostate, mammary gland, and respiratory tract.

KRT5 typically pairs with keratin 14 (KRT14), a type I intermediate filament protein, to form heterodimers that assemble into larger filament networks. These networks contribute to cellular stability and help maintain epithelial tissue architecture. As basal keratinocytes differentiate and migrate toward the skin surface, expression of KRT5 and KRT14 generally decreases while suprabasal keratins such as KRT1 and KRT10 become more prominent. This differentiation-dependent expression pattern makes CK5 useful for identifying basal epithelial compartments and investigating epithelial development, regeneration, and wound healing.

In cancer research, CK5 is widely studied as a marker of squamous differentiation and basal-like epithelial phenotypes. Its expression is frequently detected in squamous cell carcinomas of the lung, cervix, head, and neck. CK5 is commonly evaluated alongside CK6 and p63 when investigating squamous differentiation. In breast cancer research, CK5 expression can help characterize basal-like tumor populations, although additional molecular and immunohistochemical markers are necessary for accurate classification. In prostate tissue, CK5 is associated with basal epithelial cells and can help distinguish preserved basal cell layers from malignant glands, which typically lack these cells.

Mutations in KRT5 are associated with epidermolysis bullosa simplex, an inherited disorder characterized by skin fragility and blister formation. NSJ Bioreagents offers recombinant rabbit monoclonal CK5 Antibody RM226, developed against a peptide corresponding to the C-terminal region of human KRT5. Recombinant monoclonal production provides a defined antibody sequence and supports manufacturing consistency. A CK5 Antibody RM226 is useful for investigating basal epithelial differentiation, cytoskeletal organization, and KRT5 expression in normal and diseased tissues.

Explore our protein microarray-validated Cytokeratin 5 Antibody KRT5/3594 for investigating basal epithelial differentiation, squamous cell carcinomas, and keratin filament organization.

Application Notes

The stated application concentrations are suggested starting points. Titration of the CK5 Antibody RM226 / Recombinant Cytokeratin 5 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 RM226.

Storage

Store the CK5 Antibody RM226 at -20oC (with glycerol) or aliquot and store at -20oC (without glycerol).

Alternate Names

Cytokeratin 5 antibody, Keratin 5 antibody, KRT5 antibody, CK-5 antibody, Basal Cell Keratin antibody, Type II Cytoskeletal Keratin 5 antibody

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