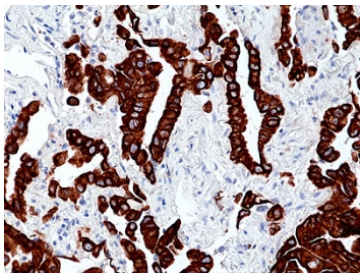
Recombinant Keratin 7 Antibody RM416 / Cytokeratin 7 Recombinant MAb [clone RM416] (R20432)

Catalog No.	Formulation	Size
R20432-0.1ML	Antibody in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ul

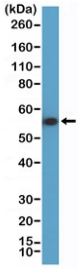
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM416
Purity	Protein A purified from animal origin-free supernatant
UniProt	P08729
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1:50 -1:100 Western Blot : 1:1000-1:10000
Limitations	This Recombinant Keratin 7 Antibody RM416 is available for research use only.



IHC staining of FFPE human lung adenocarcinoma tissue with Recombinant Keratin 7 Antibody RM416 at 1:100.



Western blot testing of human HeLa cell lysate using Recombinant Keratin 7 Antibody RM416 at 1:10,000 dilution. Predicted molecular weight ~51 kDa.

Description

Recombinant Keratin 7 Antibody RM416 recognizes keratin 7 (KRT7), a type II intermediate filament protein that contributes to the structural integrity and organization of epithelial cells. Also known as Cytokeratin 7, CK7, and K7, this approximately 51 kDa protein is encoded by the human KRT7 gene. Keratin 7 is primarily expressed in simple, glandular, and transitional epithelia, where it forms part of the cytoplasmic intermediate filament network. Its characteristic tissue distribution makes it an important marker for studying epithelial differentiation, cellular architecture, and the origin of epithelial malignancies.

Keratin intermediate filaments consist of heteropolymers formed through interactions between type I and type II keratin proteins. Keratin 7 associates with type I keratins, including keratin 18 and keratin 19, to form stable filament networks that extend throughout the cytoplasm. These networks provide mechanical resilience and help maintain cellular organization during physiological stress. Keratin filaments also interact with desmosomal structures and other cytoskeletal components, supporting epithelial tissue integrity and intercellular adhesion.

Cytokeratin 7 is expressed in numerous epithelial tissues, including the respiratory tract, breast, female reproductive tract, urinary tract, and various glandular structures. Its expression is particularly prominent in many glandular epithelial cells and their associated tumors. In contrast, normal colorectal epithelium and most conventional colorectal adenocarcinomas generally exhibit little or no CK7 expression. These differences make KRT7 a useful marker for investigating epithelial lineage and tissue-specific differentiation.

In cancer research, keratin 7 is frequently examined alongside keratin 20 (KRT20) to characterize carcinoma immunophenotypes. A CK7-positive/CK20-negative profile is commonly associated with lung, breast, ovarian, and endometrial carcinomas, whereas many colorectal adenocarcinomas display a CK7-negative/CK20-positive pattern. However, these expression profiles are not absolute, and individual tumors may exhibit overlapping or atypical staining patterns. Interpretation therefore requires consideration of additional markers and tissue morphology.

Changes in keratin 7 expression may accompany epithelial remodeling, altered differentiation, and malignant progression. Immunohistochemistry enables examination of its distribution within tissue architecture, while western blotting supports analysis of protein expression and apparent molecular weight. Recombinant monoclonal antibodies provide a defined antibody sequence that can support consistency across experimental studies.

A Recombinant Keratin 7 Antibody RM416 from NSJ Bioreagents supports research investigating Cytokeratin 7 expression, epithelial intermediate filament organization, tissue differentiation, and the molecular characteristics of epithelial tumors.

For an alternative antibody targeting the same protein, see our Cytokeratin 7 Antibody OV-TL12/30 (V2654), a mouse monoclonal antibody validated for WB, IHC, IF, and flow cytometry.

Application Notes

The stated application concentrations are suggested starting points. Titration of the Recombinant Keratin 7 Antibody RM416 may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A peptide corresponding to the C-terminus of human Cytokeratin-7 was used as the immunogen for the Recombinant Keratin 7 Antibody RM416.

Storage

Store the Recombinant Keratin 7 Antibody RM416 at -20oC.

Alternate Names

Keratin 7 antibody, CK7 antibody, CK-7 antibody, KRT7 antibody, Cytokeratin-7 antibody, Keratin Type II Cytoskeletal 7 antibody, Type II Cytokeratin 7 antibody, Cytokeratin 7/CK7 antibody, K7 antibody

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