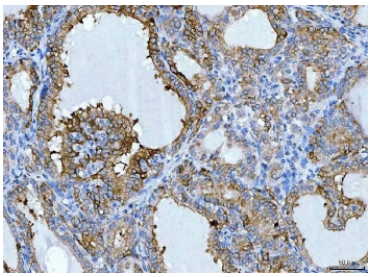
Keratin 7 Polyclonal Antibody / Cytokeratin 7 (RQ6885)

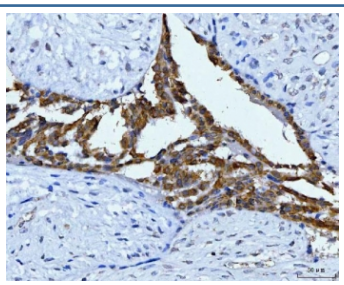
Catalog No.	Formulation	Size
RQ6885	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

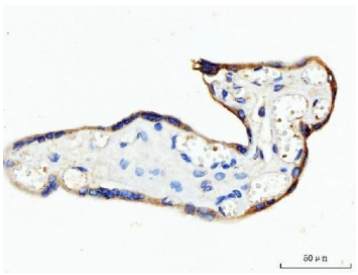
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P08729
Localization	Cytoplasmic
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This Keratin 7 Polyclonal Antibody is available for research use only.



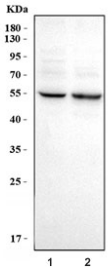
IHC staining of FFPE human thyroid cancer tissue with Keratin 7 Polyclonal Antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human breast cancer tissue with Keratin 7 Polyclonal Antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human placental tissue with Keratin 7 Polyclonal Antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human 1) HeLa and 2) RT-4 cell lysate with Keratin 7 Polyclonal Antibody. Predicted molecular weight ~51 kDa.

Description

Keratin 7 Polyclonal Antibody recognizes keratin 7 (KRT7), a type II intermediate filament protein that provides structural support to epithelial cells. Also known as Cytokeratin 7, CK7, and K7, this approximately 51 kDa protein is encoded by the KRT7 gene on human chromosome 12. Keratin 7 is primarily expressed in simple and glandular epithelia, where it contributes to cytoskeletal organization, mechanical stability, and maintenance of epithelial cell architecture. Its tissue-specific expression makes it an important marker in epithelial differentiation and cancer research.

Keratin intermediate filaments are assembled from type I and type II keratin proteins that form heterodimers and subsequently organize into larger filament networks. Keratin 7 commonly associates with type I keratins, particularly keratin 18 and keratin 19, to establish a resilient cytoplasmic framework. These networks help epithelial cells withstand mechanical stress while maintaining their shape and structural integrity. Intermediate filaments also interact with desmosomes and hemidesmosomes, contributing to cell-cell and cell-matrix adhesion.

Cytokeratin 7 is expressed in numerous epithelial tissues, including the respiratory tract, mammary gland, female reproductive tract, urinary tract, and glandular structures of various organs. Its expression varies with tissue type, differentiation state, and cellular lineage. In contrast, normal intestinal epithelium and many colorectal adenocarcinomas generally exhibit limited or absent CK7 expression. These distribution patterns make Keratin 7 a useful marker for investigating epithelial origin and differentiation.

In cancer research, KRT7 expression is frequently examined alongside keratin 20 (KRT20) to characterize epithelial tumors. The CK7-positive/CK20-negative phenotype is commonly associated with breast, lung, ovarian, and endometrial carcinomas, while many colorectal adenocarcinomas exhibit the opposite pattern. However, these profiles are not absolute, and individual tumors may demonstrate variable expression. Interpretation therefore requires consideration of additional markers, tissue morphology, and biological context.

Keratin 7 expression can also change during epithelial remodeling, cellular stress, and malignant progression. Investigating these changes provides insight into epithelial differentiation and tumor-associated alterations in cytoskeletal organization. Immunohistochemistry enables examination of tissue distribution, while western blotting supports analysis of protein expression and apparent molecular weight.

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

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

Optimal dilution of the Keratin 7 Polyclonal Antibody should be determined by the researcher.

Immunogen

Amino acids QEQKSAKSSRLPDIFEAQIAGLR from the human protein were used as the immunogen for the Keratin 7 Polyclonal Antibody.

Storage

After reconstitution, the Keratin 7 Polyclonal Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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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