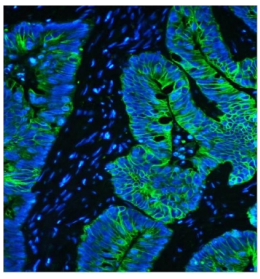
Keratin 8 Antibody / Cytokeratin 8 [clone 3G9] (RQ4889)

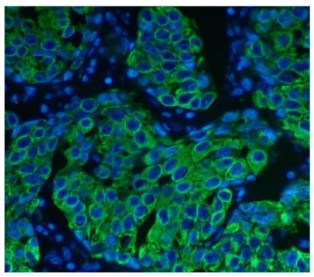
Catalog No.	Formulation	Size
RQ4889	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

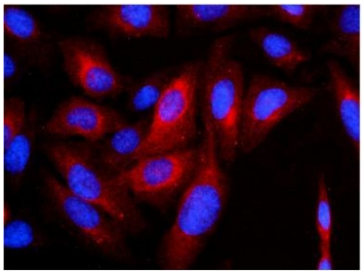
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	3G9
Purity	Purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P05787
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml Immunofluorescence (FFPE) : 2-4ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This Keratin 8 antibody is available for research use only.



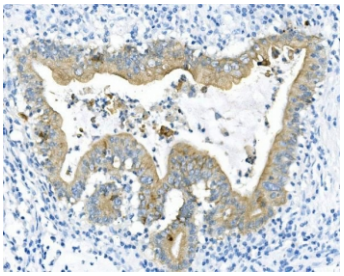
Keratin 8 Antibody Intestinal Cancer IF. Immunofluorescent staining of FFPE human intestinal cancer tissue using Keratin 8 Antibody demonstrates strong green cytoplasmic and membranous staining within malignant epithelial cells. The staining pattern is consistent with expression of Cytokeratin 8 (CK8/KRT8), a type II intermediate filament protein widely expressed in simple epithelial tissues and epithelial-derived carcinomas. CK8 immunoreactivity highlights tumor-associated epithelial architecture and cellular organization, while DAPI (blue) counterstains cell nuclei. HIER: steam tissue sections in pH 8 EDTA buffer for 20 minutes prior to staining.



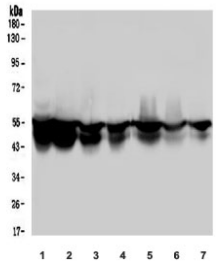
Keratin 8 Antibody Breast Cancer IF. Immunofluorescent staining of FFPE human breast cancer tissue using Keratin 8 Antibody demonstrates strong green cytoplasmic and membranous staining throughout malignant epithelial cell populations. The staining pattern is consistent with expression of Cytokeratin 8 (CK8/KRT8), a type II intermediate filament protein commonly expressed in epithelial tissues and epithelial-derived carcinomas. CK8 immunoreactivity highlights tumor cell morphology, epithelial differentiation, and cytoskeletal organization, while DAPI (blue) counterstains cell nuclei. HIER: steam tissue sections in pH 8 EDTA buffer for 20 minutes prior to staining.



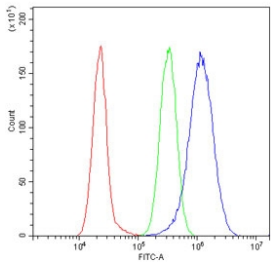
Keratin 8 Antibody U-2 OS Cell IF. Immunofluorescent staining of FFPE U-2 OS cells using Keratin 8 Antibody demonstrates distinct red cytoplasmic staining consistent with expression of Cytokeratin 8 (CK8/KRT8), a type II intermediate filament protein involved in epithelial cytoskeletal organization and cellular structural integrity. The staining pattern highlights the filamentous cytoplasmic distribution characteristic of intermediate filament proteins, while DAPI (blue) counterstains cell nuclei. This image demonstrates intracellular localization of CK8 and supports the utility of the antibody for immunofluorescence applications. HIER: steam tissue sections in pH 6 citrate buffer for 20 minutes prior to staining.



Keratin 8 Antibody Rectal Cancer IHC. Immunohistochemical staining of FFPE human rectal cancer tissue using Keratin 8 Antibody demonstrates membranous and cytoplasmic HRP-DAB brown staining within malignant epithelial cells lining gland-forming tumor structures. The staining pattern is consistent with expression of Cytokeratin 8 (CK8/KRT8), a type II intermediate filament protein widely expressed in simple epithelial tissues and epithelial-derived carcinomas. CK8 immunoreactivity highlights neoplastic epithelial architecture and supports evaluation of epithelial differentiation in rectal cancer specimens. HIER: boil tissue sections in pH 8 EDTA buffer for 20 minutes and allow to cool before testing.



Keratin 8 Antibody Multi-Cell Line Western Blot. Western blot analysis of placenta (lane 1), Caco-2 (lane 2), A549 (lane 3), A431 (lane 4), HeLa (lane 5), K562 (lane 6), and HEK293 (lane 7) lysates using Keratin 8 Antibody demonstrates a prominent band at approximately 56 kDa, consistent with the expected molecular weight of Cytokeratin 8 (CK8/KRT8). Cytokeratin 8 is a type II intermediate filament protein widely expressed in simple epithelial tissues and many epithelial-derived cell lines, where it contributes to cytoskeletal organization, cellular integrity, and stress-response signaling. Detection of the expected molecular weight band across multiple lysates supports expression of CK8 and the suitability of this antibody for western blot applications.



Keratin 8 Antibody A549 Cell FACS. Flow cytometry analysis of human A549 cells using Keratin 8 Antibody demonstrates a clear rightward shift of the positive cell population (blue) relative to the isotype control (green), consistent with expression of Cytokeratin 8 (CK8/KRT8). Cytokeratin 8 is a type II intermediate filament protein widely expressed in simple epithelial cells and epithelial-derived tumor cell lines, where it contributes to cytoskeletal organization and cellular structural integrity. Cells were blocked with goat serum prior to staining. Red=cells alone; Green=isotype control; Blue=Keratin 8 antibody.

Description

Keratin 8 antibody is useful for studying Keratin 8, also known as Cytokeratin 8 (CK8 or KRT8), a type II intermediate filament protein that serves as a major structural component of simple epithelial cells. Cytokeratin 8 typically forms heteropolymeric intermediate filaments through association with Cytokeratin 18, creating a cytoskeletal network that supports cellular architecture, mechanical stability, and resistance to physiologic stress. As one of the most widely

expressed epithelial cytokeratins, Keratin 8 plays an important role in maintaining epithelial integrity and supporting normal cellular function.

Cytokeratin 8 is broadly expressed in simple epithelial tissues throughout the body, including the gastrointestinal tract, respiratory epithelium, liver, pancreas, kidney, mammary gland, and numerous glandular structures. Beyond its structural role, Keratin 8 participates in cellular processes involving signal transduction, apoptosis, migration, differentiation, and protection against cellular stress. These functions demonstrate that Cytokeratin 8 contributes not only to cytoskeletal organization but also to mechanisms that regulate epithelial cell survival and adaptation.

Keratin 8 is one of the most frequently utilized epithelial markers in both basic research and diagnostic pathology. Because Cytokeratin 8 expression is retained in many epithelial-derived malignancies, antibodies against CK8 are commonly used to identify carcinomas and distinguish epithelial tumors from neoplasms of mesenchymal, hematopoietic, or neural origin. Evaluation of Keratin 8 expression can provide valuable information regarding epithelial lineage, tissue origin, differentiation status, and tumor-associated cellular characteristics.

Altered Cytokeratin 8 expression has been associated with epithelial injury, inflammation, tissue remodeling, fibrosis, and cancer progression. Changes in KRT8 expression patterns are frequently observed during malignant transformation and may reflect alterations in epithelial differentiation, invasive behavior, and cellular stress responses. Consequently, Keratin 8 remains an important biomarker in studies investigating epithelial biology, tumor development, and disease-associated changes in cytoskeletal architecture.

Because of its widespread epithelial distribution, Cytokeratin 8 is frequently incorporated into multi-marker antibody panels used for tissue classification, tumor characterization, and studies of epithelial differentiation. CK8 is often evaluated alongside Cytokeratin 18, Cytokeratin 19, Cytokeratin 7, and other epithelial markers to assess lineage relationships and phenotypic alterations associated with development, disease progression, and cellular transformation.

Keratin 8 antibodies are commonly utilized in immunohistochemistry, western blotting, immunofluorescence, flow cytometry, and related protein detection applications. These reagents support investigations of epithelial cell biology, intermediate filament organization, carcinoma pathology, tissue differentiation, and cellular stress responses. Keratin 8 antibody tools help researchers characterize epithelial populations, evaluate tumor-associated expression patterns, and investigate the biologic functions of this important cytoskeletal protein.

Researchers seeking protein microarray validated detection of Keratin 8 for epithelial differentiation, cytoskeletal biology, and cancer research applications may also be interested in our Cytokeratin 8 Antibody page.

Application Notes

Optimal dilution of the Keratin 8 antibody should be determined by the researcher.

Immunogen

Amino acids D107-K325 from the human protein were used as the immunogen for the Keratin 8 antibody.

Storage

After reconstitution, the Keratin 8 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

Cytokeratin 8 Antibody, CK8 Antibody, KRT8 Antibody, Keratin Type II Cytoskeletal 8 Antibody, Simple Epithelial Keratin Antibody, Intermediate Filament Protein 8 Antibody