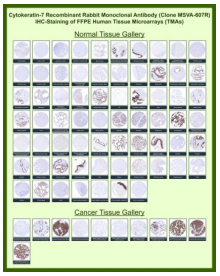
Cytokeratin 7 Antibody for IHC / KRT7 Immunohistochemistry Antibody [clone MSVA-607R] (V5927)

Catalog No.	Formulation	Size
V5927-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5927-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	MSVA-607R
Purity	Protein A affinity
UniProt	P08729
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE): 1:100-1:200 Western Blot: 1:50-1:100
Limitations	This Cytokeratin 7 Antibody for IHC / KRT7 Immunohistochemistry Antibody is available for research use only.



Cytokeratin 7 Antibody for IHC Tissue Microarray (TMA) multi-tissue staining. Immunohistochemistry analysis of KRT7 expression in FFPE human tissue microarray (TMA) sections using Cytokeratin 7 Antibody for IHC clone MSVA-607R demonstrates strong cytoplasmic HRP-DAB brown staining in glandular and ductal epithelia, including bronchial epithelium, breast ducts, endometrial glands, and urothelium, while stratified squamous epithelia such as skin and esophagus remain largely negative. In cancer tissue arrays, robust cytoplasmic staining is observed in adenocarcinomas of glandular origin, including breast, lung, and gastrointestinal tumors, whereas many non-glandular tumor types show reduced or absent staining. The staining pattern highlights Cytokeratin 7 as a glandular epithelial marker and supports its use in distinguishing CK7-positive adenocarcinomas from CK7-negative tumor types, consistent with established KRT7 expression profiles.

Description

Cytokeratin 7 (KRT7), commonly referred to as CK7, is a type II intermediate filament protein expressed in simple, glandular, and transitional epithelia, where it contributes to cytoskeletal stability and epithelial organization. It is widely distributed in epithelial tissues including lung, breast, ovary, endometrium, and urinary tract, and is largely absent from most stratified squamous epithelia. Because of this characteristic expression pattern, Cytokeratin 7 is one of the most widely used epithelial markers in immunohistochemistry for evaluating tissue origin and differentiation. Cytokeratin 7 Antibody for IHC enables clear cytoplasmic detection of KRT7 in formalin-fixed, paraffin-embedded tissues, where staining highlights glandular and ductal epithelial cell populations with high specificity.

Cytokeratin 7 antibody, also referred to as KRT7 antibody or CK7 antibody in the literature, recognizes a cytoplasmic intermediate filament protein localized within epithelial cells. This Cytokeratin 7 Antibody for IHC is optimized for Tissue Microarray (TMA)-based immunohistochemistry, enabling standardized, side-by-side evaluation of epithelial marker expression across large panels of normal and cancer tissues. In normal tissue TMAs, strong cytoplasmic HRP-DAB brown staining is consistently observed in glandular epithelia including bronchial epithelium, breast ducts, endometrial glands, and urothelium, while squamous epithelia and mesenchymal tissues remain largely negative, producing a clear and interpretable staining contrast across tissue types.

In cancer tissue microarrays, Cytokeratin 7 expression is frequently observed in adenocarcinomas and tumors derived from glandular or transitional epithelia, including lung, breast, ovarian, and endometrial carcinomas. Cytoplasmic staining highlights tumor epithelial cells and supports classification of tumor origin, particularly in distinguishing CK7-positive adenocarcinomas from CK7-negative malignancies. This pattern is especially valuable in the context of CK7/CK20 immunohistochemical profiling, where Cytokeratin 7 expression provides key diagnostic context for differentiating primary tumor sites and epithelial lineage in metastatic disease models.

Tissue Microarray (TMA) analysis enables direct comparison of KRT7 expression across dozens of tissue types under identical staining conditions, demonstrating highly reproducible and consistent cytoplasmic staining in glandular epithelia and epithelial-derived tumors, alongside minimal background in non-expressing tissues. Clone MSVA-607R produces strong, well-defined staining across TMA panels, allowing clear identification of epithelial compartments and facilitating comparative pathology studies. The observed staining distribution aligns with known KRT7 biology and publicly available datasets such as the Human Protein Atlas, supporting the reliability of this antibody in large-scale immunohistochemistry analysis.

The differential expression of Cytokeratin 7 between glandular and squamous epithelia adds important interpretive value in IHC-based studies, where absence of CK7 staining can support identification of squamous differentiation, while positive staining reinforces glandular or transitional epithelial origin. This contrast enhances the utility of Cytokeratin 7 in studies of epithelial classification, tumor differentiation, and tissue-specific expression patterns.

This antibody targets Cytokeratin 7 in research applications requiring robust and interpretable immunohistochemical detection of epithelial and glandular differentiation markers, making it well suited for Tissue Microarray-based studies, epithelial biology research, and tumor classification.

This antibody is part of the Cytokeratin 7 antibody collection, where additional KRT7/CK7 antibodies for various applications can be explored.

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.

This antibody is also part of a broader collection of IHC antibodies validated by tissue microarray analysis, supporting consistent staining across normal and cancer tissues.

Application Notes

1. Optimal dilution of the Cytokeratin 7 Antibody for IHC / KRT7 Immunohistochemistry Antibody should be determined by the researcher.

2. This Keratin 7/KRT7 antibody is recombinantly produced by expression in human HEK293 cells.

3. Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121oC in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37oC for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions.

Immunogen

A recombinant fragment (around amino acids 1-100) of human Cytokeratin 7 protein (exact sequence is proprietary) was used as the immunogen for the Keratin 7/KRT7 antibody.

Storage

Cytokeratin 7/KRT7 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

KRT7 antibody, Cytokeratin 7 antibody, CK7 antibody, keratin 7 antibody, epithelial marker antibody, glandular epithelium marker antibody

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