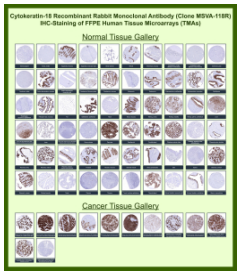
KRT18 Antibody / Keratin 18 [clone MSVA-118R] (V5934)

Catalog No.	Formulation	Size
V5934-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5934-20UG	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-118R
UniProt	P05783
Localization	Cytoplasm, Nucleolus, Nucleus, Perinuclear region
Applications	Immunohistochemistry (FFPE) : 1:100-1:200
Limitations	This KRT18/Keratin 18 antibody is available for research use only.



Immunohistochemistry analysis of Keratin 18 / Cytokeratin 18 antibody (clone MSVA-118R) in human tissues. Formalin-fixed, paraffin-embedded human tissue microarrays containing a broad range of normal and cancer tissues were stained using Keratin 18 / Cytokeratin 18 recombinant rabbit monoclonal antibody (clone MSVA-118R). In normal tissues, brown chromogenic signal is observed predominantly in epithelial cell populations of simple and glandular epithelia, including gastrointestinal mucosa, pancreatic acini and ducts, renal tubular epithelium, hepatocytes, bronchial epithelium, endometrial glands, and prostatic glandular epithelium, while mesenchymal and stromal tissues show little to no staining. In cancer tissues, strong cytoplasmic brown staining is observed in carcinomas with glandular or epithelial differentiation, whereas non-epithelial malignancies show reduced or absent staining. The observed staining distribution reflects epithelial-associated expression of Keratin 18 in human tissues.

Description

KRT18 Antibody recognizes Keratin 18, also known as Cytokeratin 18 (KRT18), a type I intermediate filament protein that is widely expressed in simple epithelial cells and epithelial-derived tissues. Keratin 18 is a cytoplasmic structural protein that forms obligate heterodimers with type II keratins, most prominently Keratin 8, to assemble the intermediate filament

network that maintains epithelial cell architecture, intracellular organization, and mechanical stability. KRT18 Antibody is commonly used in research and pathology contexts and is frequently referred to in the literature as Cytokeratin 18 antibody or CK18 antibody.

Keratin 18 expression is characteristic of simple and glandular epithelia lining internal organs, including liver, pancreas, gastrointestinal tract, kidney, lung, breast, and prostate. In these tissues, KRT18 is predominantly localized to luminal and secretory epithelial cells rather than basal cell compartments. This expression pattern distinguishes Cytokeratin 18 from basal keratins such as Cytokeratin 14 or Cytokeratin 15 and makes KRT18 Antibody useful for identifying epithelial cells of simple epithelial origin and for differentiating epithelial structures from surrounding stromal, mesenchymal, or hematopoietic tissue components.

Alterations in Keratin 18 expression and filament organization have been reported in a range of pathological contexts. Changes in CK18 distribution or expression intensity have been observed in epithelial injury, cellular stress responses, and epithelial-derived malignancies, reflecting disruption of cytoskeletal integrity and epithelial differentiation programs. Consequently, Cytokeratin 18 antibody staining patterns are frequently evaluated in research studies focused on epithelial differentiation, tissue remodeling, and carcinoma biology, particularly in tumors arising from glandular or ductal epithelia.

At the cellular level, Keratin 18 contributes to the organization of the intermediate filament cytoskeleton and supports epithelial cell shape and resilience to mechanical and metabolic stress. Its broad expression across simple epithelial tissues makes KRT18 Antibody a valuable tool for studies of epithelial lineage identification, tissue architecture, and epithelial biology. The KRT18 Antibody (clone MSVA-118R) is designed to detect Keratin 18 expression in research applications where assessment of epithelial cell populations is required.

Application Notes

1. Optimal dilution of the KRT18/Keratin 18 antibody should be determined by the researcher.

2. This KRT18/Keratin 18 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

Recombinant human full-length KRT18 protein was used as the immunogen for the KRT18/Keratin 18 antibody.

Storage

KRT18/Keratin 18 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.