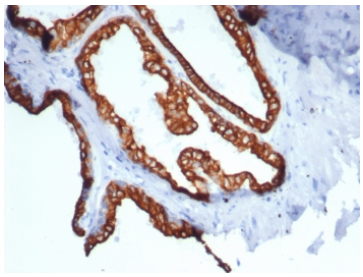
KRT18 Antibody rKRT18/7299 / Cytokeratin 18 MAb [clone rKRT18/7299] (V4280)

Catalog No.	Formulation	Size
V4280-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4280-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4280SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

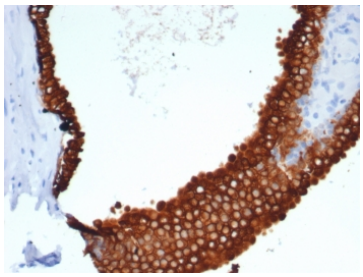
Recombinant | MOUSE MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rKRT18/7299
Purity	Protein A/G affinity
UniProt	P05783
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This KRT18 Antibody rKRT18/7299 is available for research use only.



Immunohistochemistry analysis of KRT18 Antibody rKRT18/7299 in human prostate carcinoma tissue. Formalin-fixed, paraffin-embedded human prostate carcinoma tissue was stained using recombinant KRT18 / Cytokeratin 18 antibody (clone rKRT18/7299). Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0, followed by cooling prior to antibody incubation. Brown chromogenic signal is observed in tumor epithelial cells forming glandular structures, with strong cytoplasmic staining outlining malignant epithelial cells, while surrounding stromal components show little to no staining. This staining pattern reflects epithelial cell-associated expression of Cytokeratin 18 in prostate carcinoma.



IHC staining of FFPE human prostate carcinoma tissue with recombinant KRT18 antibody (clone rKRT18/7299). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

KRT18 Antibody rKRT18/7299 recognizes Cytokeratin 18, also known as Keratin 18 (KRT18), a type I intermediate filament protein that is broadly expressed in simple epithelial cells and epithelial-derived tissues. Cytokeratin 18 is a cytoplasmic structural protein that typically 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.

Cytokeratin 18 expression is characteristic of simple and glandular epithelia lining internal organs, including liver, pancreas, gastrointestinal tract, kidney, lung, 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 or mesenchymal tissue components.

Alterations in Cytokeratin 18 expression and organization have been documented in a range of pathological contexts. Changes in CK18 distribution, expression intensity, or filament organization have been observed in epithelial injury, cellular stress responses, and epithelial-derived malignancies. As a result, 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, Cytokeratin 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 rKRT18/7299) is designed to detect Cytokeratin 18 expression in research applications where assessment of epithelial cell populations is required.

Explore our Cytokeratin 18 Antibody KRT18/835 for additional research into KRT18 expression, epithelial differentiation, and cytoskeletal organization in normal tissues and carcinomas.

Application Notes

Optimal dilution of the KRT18 Antibody rKRT18/7299 should be determined by the researcher.

Immunogen

Recombinant full-length human protein was used as the immunogen for the recombinant KRT18 antibody.

Storage

Aliquot the recombinant KRT18 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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