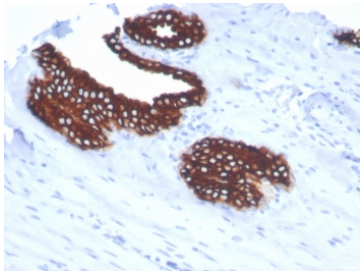
Keratin 18 Antibody / Cytokeratin 18 [clone KRT18/7056R] (V4283)

Catalog No.	Formulation	Size
V4283-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4283-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4283SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

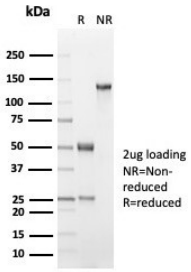
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	KRT18/7056R
Purity	Protein A/G affinity
UniProt	P05783
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This Keratin 18 antibody is available for research use only.



Immunohistochemistry analysis of Keratin 18 / Cytokeratin 18 antibody (clone KRT18/7056R) in human prostate tissue. Formalin-fixed, paraffin-embedded human prostate tissue was stained using Keratin 18 antibody (clone KRT18/7056R). 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 luminal epithelial cells of prostatic glands, with strong cytoplasmic staining outlining glandular epithelial structures, while surrounding stromal cells show little to no staining. This staining pattern reflects epithelial cell-associated expression of Cytokeratin 18 in prostate tissue.



SDS-PAGE analysis of purified, BSA-free Keratin 18 antibody (clone KRT18/7056R) as confirmation of integrity and purity.

Description

Keratin 18 Antibody recognizes Cytokeratin 18, also known as Keratin 18 (KRT18), a type I intermediate filament protein that is widely expressed in simple epithelial cells and many epithelial-derived tissues. Cytokeratin 18 is a cytoplasmic structural protein that typically forms obligate heterodimers with type II keratins, most notably Keratin 8, to assemble the intermediate filament network that maintains epithelial cell architecture, mechanical stability, and intracellular organization. Keratin 18 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 epithelia lining glandular organs and internal surfaces, including liver, pancreas, gastrointestinal tract, kidney, lung, and many ductal and secretory epithelial tissues. In contrast to basal keratins such as Cytokeratin 14 or Cytokeratin 15, KRT18 is not restricted to basal cell compartments but is broadly distributed throughout epithelial cell layers. This expression pattern makes Keratin 18 Antibody useful for identifying epithelial cells of simple or glandular origin and for distinguishing epithelial tissues from mesenchymal or hematopoietic components.

Alterations in Cytokeratin 18 expression and organization have been reported in a variety of pathological contexts. Changes in CK18 distribution, fragmentation, or expression levels have been observed in epithelial injury, stress responses, and epithelial-derived malignancies, reflecting disruption of cytoskeletal integrity and epithelial differentiation programs. As a result, Cytokeratin 18 antibody staining patterns are frequently evaluated in research studies focused on epithelial biology, tissue remodeling, and tumor progression, particularly in carcinomas arising from simple epithelial tissues.

At the cellular level, Cytokeratin 18 contributes to the organization of the intermediate filament cytoskeleton and participates in maintaining epithelial cell shape and intracellular resilience. Its broad epithelial expression makes Keratin 18 Antibody a valuable tool for studies of epithelial differentiation, tissue architecture, and epithelial lineage identification. The Keratin 18 Antibody (clone KRT18/7056R) is designed to detect Cytokeratin 18 expression in research applications where assessment of epithelial cell populations is required.

Application Notes

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

Immunogen

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

Storage

Aliquot the Keratin 18 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.