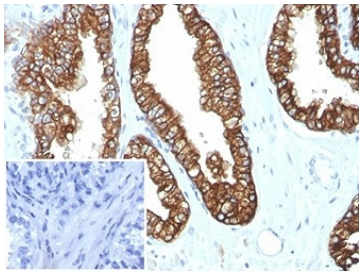
Keratin 8/18 Antibody / Simple Epithelial Keratin Antibody [clone KRT8.18/4997R] (V4066)

Catalog No.	Formulation	Size
V4066-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4066-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4066SAF-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	KRT8.18/4997R
Purity	Protein A/G affinity
UniProt	P05787, P05783
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This Keratin 8/18 Antibody / Simple Epithelial Keratin Antibody is available for research use only.



Keratin 8/18 Antibody Human Prostate Carcinoma IHC. Immunohistochemistry staining of FFPE human prostate carcinoma tissue was performed with recombinant Keratin 8/18 Antibody, clone KRT8.18/4997R. Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 min followed by cooling. Strong cytoplasmic staining is observed in the epithelial tumor cells, while the PBS negative control inset shows minimal background staining. This Keratin 8/18 Antibody demonstrates simple epithelial keratin expression in human prostate carcinoma.

Description

Keratin 8/18 Antibody / Simple Epithelial Keratin Antibody recognizes the keratin 8 and keratin 18 intermediate filament

system expressed in many simple epithelial cells. Keratin 8 (KRT8/CK8) is a type II keratin that commonly forms heteropolymers with the type I keratin 18 (KRT18/CK18). Together, K8 and K18 contribute to an extensive cytoplasmic intermediate filament network that provides mechanical support and helps maintain epithelial cell architecture.

K8/K18 represents one of the characteristic keratin pairs of simple epithelia. Expression is found in numerous epithelial tissues, including hepatocytes, renal tubular cells and epithelial cells of the gastrointestinal tract and glandular organs. Unlike the more complex keratin patterns found in stratified epithelia, the K8/K18 pair provides a useful system for studying simple epithelial differentiation and intermediate filament organization. A Keratin 8/18 Antibody can therefore support investigation of epithelial identity, tissue organization and changes in cytoskeletal composition.

Keratin 8 and keratin 18 are also widely studied in cancer biology because their expression is retained in many epithelial-derived malignancies. K8/K18 expression can be investigated in carcinomas originating from tissues such as breast, lung, liver, gastrointestinal tract and other glandular epithelia. Changes in expression or organization of these intermediate filaments may accompany altered differentiation, cellular stress and tumor progression, making the K8/K18 system relevant to studies of carcinoma phenotype and epithelial tumor biology.

In addition to their structural functions, K8 and K18 undergo dynamic regulation through post-translational modification and reorganization of the intermediate filament network. These changes can occur in response to cellular injury, mechanical stress, apoptosis and altered signaling. Studying the K8/K18 pair can therefore provide insight into both the structural and regulatory functions of keratins in normal and disease-associated epithelial cells.

NSJ Bioreagents offers recombinant rabbit monoclonal Keratin 8/18 Antibody clone KRT8.18/4997R for investigating K8/K18 expression and epithelial intermediate filament biology. A Simple Epithelial Keratin Antibody can support research into epithelial differentiation, cytoskeletal organization, cellular stress and carcinoma-associated changes in keratin expression.

Researchers studying the K8/K18 intermediate filament system can explore our Cytokeratin 8/18 Antibody page for additional reagents targeting these widely expressed epithelial keratins.

Application Notes

Optimal dilution of the Keratin 8/18 Antibody / Simple Epithelial Keratin Antibody should be determined by the researcher.

1. Immunohistochemical staining with this MAb is indistinguishable from that obtained with monoclonal antibody 5D3.

Immunogen

Recombinant full-length human protein was used as the immunogen for the recombinant Keratin 8/18 antibody.

Storage

Aliquot the recombinant Keratin 8/18 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Keratin 8/18 antibody, Simple Epithelial Keratin antibody, Cytokeratin 8/18 antibody, CK8/18 antibody, CK8 CK18 antibody, KRT8/KRT18 antibody, Keratin 8 antibody, Keratin 18 antibody, Cytokeratin 8 antibody, Cytokeratin 18 antibody

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