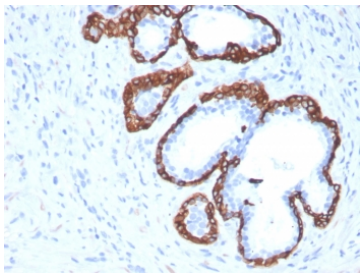
Cytokeratin 5 Antibody KRT5/3594 / CK5 Monoclonal Antibody [clone KRT5/3594] (V7568)

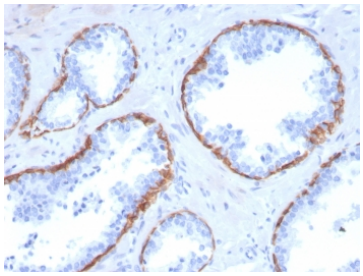
Catalog No.	Formulation	Size
V7568-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7568-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7568SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7568IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

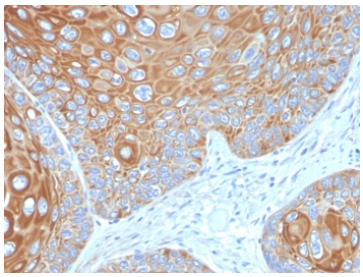
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	KRT5/3594
Purity	Protein G affinity chromatography
UniProt	P13647
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Cytokeratin 5 Antibody KRT5/3594 / CK5 Monoclonal Antibody is available for research use only.



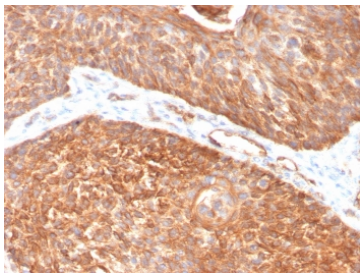
Cytokeratin 5 Antibody KRT5/3594 by IHC in Human Prostate Carcinoma. Immunohistochemistry of FFPE human prostate carcinoma tissue using Cytokeratin 5 Antibody KRT5/3594. Strong brown DAB staining is observed predominantly along the epithelial lining of glandular structures, with relatively little staining in the surrounding stromal tissue. The CK5 Monoclonal Antibody highlights epithelial cell populations surrounding glandular lumens, consistent with the association of KRT5 with basal epithelial differentiation. Nuclei are counterstained blue with hematoxylin. Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM citrate buffer, pH 6, for 10-20 minutes.



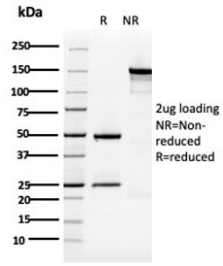
Cytokeratin 5 Antibody KRT5/3594 by IHC in Human Prostate Carcinoma, Second View. Immunohistochemistry of FFPE human prostate carcinoma tissue using Cytokeratin 5 Antibody KRT5/3594. Brown DAB staining is concentrated along the peripheral epithelial layers of multiple glandular structures, while the central luminal regions and surrounding stromal tissue exhibit comparatively little staining. The CK5 Monoclonal Antibody produces a predominantly cytoplasmic staining pattern within the epithelial compartment. Nuclei are counterstained blue with hematoxylin. Heat-induced epitope retrieval was performed using 10 mM citrate buffer, pH 6, for 10-20 minutes.



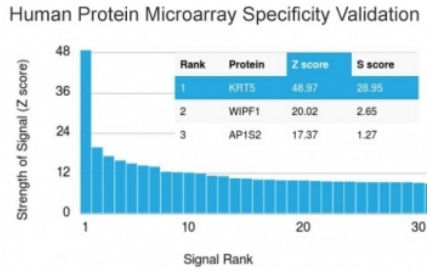
Cytokeratin 5 Antibody KRT5/3594 by IHC in Human Cervical Carcinoma. Immunohistochemistry of FFPE human cervical carcinoma tissue using Cytokeratin 5 Antibody KRT5/3594. Strong brown DAB staining is observed throughout the cytoplasm of numerous tumor cells exhibiting squamous morphology. The staining highlights epithelial tumor nests and individual carcinoma cells, while adjacent connective tissue shows considerably weaker staining. The CK5 Monoclonal Antibody demonstrates the association of KRT5 expression with squamous epithelial differentiation. Nuclei are counterstained blue with hematoxylin. Heat-induced epitope retrieval was performed using 10 mM citrate buffer, pH 6, for 10-20 minutes.



Cytokeratin 5 Antibody KRT5/3594 by IHC in Human Pancreas. Immunohistochemistry of FFPE human pancreatic tissue using Cytokeratin 5 Antibody KRT5/3594. Widespread brown DAB staining is observed in the cytoplasm of numerous cells throughout the tissue, with variable staining intensity and relatively little staining in intervening connective tissue. The CK5 Monoclonal Antibody demonstrates immunoreactivity in this pancreatic specimen, although the extensive staining should not be interpreted as evidence of the normal physiological distribution of KRT5 without additional validation. Nuclei are counterstained blue with hematoxylin. Heat-induced epitope retrieval was performed using 10 mM citrate buffer, pH 6, for 10-20 minutes.



Cytokeratin 5 Antibody KRT5/3594 by SDS-PAGE. SDS-PAGE analysis of purified, BSA-free Cytokeratin 5 Antibody KRT5/3594 under reducing (R) and non-reducing (NR) conditions, with 2 ug of antibody loaded per lane. The non-reducing lane shows a prominent band migrating at approximately 150 kDa, consistent with intact IgG. Under reducing conditions, distinct bands are observed at approximately 50 kDa and 25 kDa, corresponding to the expected immunoglobulin heavy and light chains, respectively. The electrophoretic profile is consistent with the expected composition of a purified mouse monoclonal antibody preparation.



Cytokeratin 5 Antibody KRT5/3594 by Protein Microarray. Protein microarray specificity analysis of Cytokeratin 5 Antibody KRT5/3594 using a HuProt human protein microarray containing more than 19,000 full-length proteins. KRT5 is identified as the highest-ranking target, with a strong binding signal substantially exceeding those of most other proteins on the array. The graph displays ranked protein signals and associated Z-score and S-score measurements. The CK5 Monoclonal Antibody demonstrates preferential recognition of KRT5 under the microarray assay conditions, supporting its target specificity.

Description

Cytokeratin 5 Antibody KRT5/3594 recognizes keratin 5 (KRT5), a type II intermediate filament protein expressed predominantly in basal epithelial cells of stratified and pseudostratified epithelia. Also known as CK5 or cytokeratin 5, this approximately 58 kDa protein is encoded by the KRT5 gene on chromosome 12. KRT5 contributes to the mechanical stability of epithelial tissues by forming cytoplasmic intermediate filament networks that protect cells against physical

stress. Its expression is characteristic of basal keratinocytes in the epidermis and basal epithelial populations in tissues such as the prostate, mammary gland, and respiratory tract.

KRT5 typically forms heterodimers with keratin 14 (KRT14), a type I intermediate filament protein expressed in similar basal epithelial compartments. These heterodimers assemble into higher-order filament networks that maintain cellular architecture and support epithelial integrity. During epidermal differentiation, basal keratinocytes expressing KRT5 and KRT14 transition toward suprabasal cells that predominantly express KRT1 and KRT10. This coordinated change in keratin expression makes KRT5 a useful marker for investigating epithelial differentiation, basal cell identity, and tissue regeneration.

Cytokeratin 5 is widely investigated in cancer research because its expression helps characterize squamous differentiation and basal-like tumor phenotypes. KRT5 is commonly expressed in squamous cell carcinomas, including tumors of the lung, head, neck, and cervix. It is frequently evaluated alongside KRT6 and p63 to distinguish squamous carcinomas from other epithelial malignancies. In breast cancer research, KRT5 expression is associated with certain basal-like tumors, although basal-like molecular classification requires additional markers and cannot be established by KRT5 staining alone.

Mutations in KRT5 are associated with epidermolysis bullosa simplex, an inherited blistering disorder caused by impaired keratin filament stability. KRT5 is also investigated in epithelial wound repair, stem cell biology, and tissue remodeling. NSJ Bioreagents offers mouse monoclonal clone KRT5/3594, developed against a recombinant human KRT5 fragment within amino acids 316-590. The antibody is supported by immunohistochemistry and protein microarray validation. A Cytokeratin 5 Antibody provides a useful reagent for investigating basal epithelial differentiation, keratin filament organization, and epithelial tumor biology.

Explore our Cytokeratin 5 Antibodies for investigating basal epithelial differentiation, keratin filament organization, and KRT5 expression in squamous cell carcinomas.

Application Notes

Optimal dilution of the Cytokeratin 5 Antibody KRT5/3594 / CK5 Monoclonal Antibody should be determined by the researcher.
1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

A recombinant human Cytokeratin 5 protein fragment within amino acids 316-590 was used as the immunogen for the Cytokeratin 5 Antibody KRT5/3594.

Storage

Store the Cytokeratin 5 Antibody KRT5/3594 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Keratin 5 antibody, KRT5 antibody, CK5 antibody, Cytokeratin-5 antibody, Keratin Type II Cytoskeletal 5 antibody, Basal Cell Keratin antibody, Epidermal Keratin 5 antibody

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