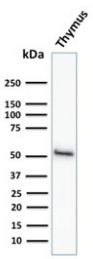
Keratin 15 Antibody KRT15/2958 / Cytokeratin 15 Monoclonal Antibody [clone KRT15/2958] (V7920)

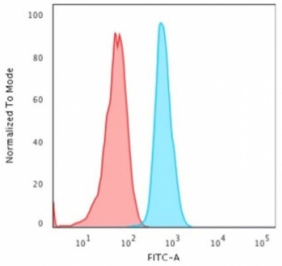
Catalog No.	Formulation	Size
V7920-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7920-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7920SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

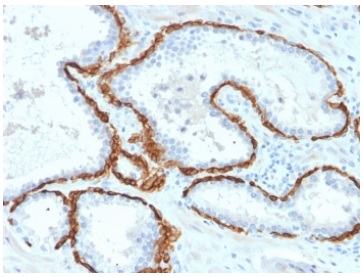
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	KRT15/2958
Purity	Protein G affinity chromatography
UniProt	P19012
Localization	Cytoplasmic
Applications	Flow cytometry: 1-2ug/million cells Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This Keratin 15 Antibody KRT15/2958 / Cytokeratin 15 Monoclonal Antibody is available for research use only.



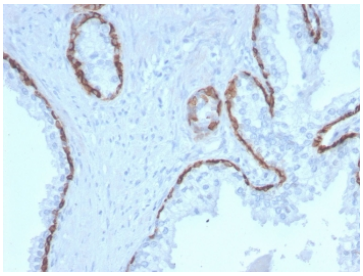
Keratin 15 Antibody KRT15/2958 by WB in human thymus tissue. Western blot analysis of human thymus tissue lysate using the Cytokeratin 15 Monoclonal Antibody. A prominent immunoreactive band is detected at approximately 50 kDa, consistent with the predicted molecular weight of human Keratin 15. The band is well defined, with minimal background signal and no additional prominent bands visible across the molecular weight range shown. KRT15 is a type I intermediate filament protein associated with basal epithelial cells and specialized epithelial compartments. The observed migration supports detection of a protein corresponding to the expected molecular weight of human Cytokeratin 15.



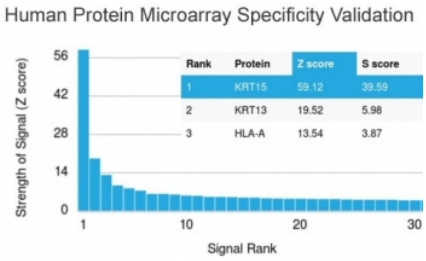
Keratin 15 Antibody KRT15/2958 by FACS in human HeLa cells. Flow cytometry analysis of paraformaldehyde-fixed HeLa human cervical carcinoma cells using the Cytokeratin 15 Monoclonal Antibody. The cyan histogram represents antibody staining, while the red histogram represents the isotype control. A pronounced rightward fluorescence shift is observed in the antibody-stained population, with relatively little overlap between the two distributions. This separation demonstrates increased antibody-associated fluorescence compared with the control, supporting detection of intracellular KRT15 in the examined cell population. The distinct fluorescence profiles indicate recognition of the target under the experimental conditions.



Keratin 15 Antibody KRT15/2958 by IHC in human prostate carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human prostate carcinoma tissue using the Cytokeratin 15 Monoclonal Antibody. Strong brown cytoplasmic staining is concentrated within epithelial cells lining irregularly shaped glandular structures, with particularly prominent labeling along the glandular boundaries. The surrounding stromal tissue exhibits comparatively limited immunoreactivity, while hematoxylin counterstaining highlights nuclei in blue. The staining distribution demonstrates KRT15 expression in selected epithelial compartments of the examined tissue. Heat-induced epitope retrieval was performed using 10 mM Tris with 1 mM EDTA, pH 9, for 10-20 minutes.



Keratin 15 Antibody KRT15/2958 by IHC in human prostate carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human prostate carcinoma tissue using the Cytokeratin 15 Monoclonal Antibody. Brown immunoreactivity is visible primarily along the epithelial lining of scattered glandular structures, with a more restricted and discontinuous staining pattern than in the preceding image. Large areas of surrounding tissue exhibit little detectable staining, while hematoxylin counterstaining highlights nuclei and stromal architecture in blue. The distribution illustrates heterogeneous KRT15 immunoreactivity among epithelial structures within the examined section. Heat-induced epitope retrieval was performed using 10 mM Tris with 1 mM EDTA, pH 9, for 10-20 minutes.



Keratin 15 Antibody KRT15/2958 by protein microarray analysis. Protein microarray specificity assessment of the Cytokeratin 15 Monoclonal Antibody using a HuProt array containing more than 19,000 full-length human proteins. KRT15 produces the highest-ranking signal, with a Z-score of approximately 51.2, followed by substantially weaker interactions with KRT13 and HLA-A. The pronounced separation between KRT15 and the remaining proteins supports preferential recognition of the intended target under the assay conditions. Z-scores represent signal strength relative to the array mean, while S-scores describe differences between ranked signals. These findings support the designation Protein Microarray Validated.

Description

Keratin 15 Antibody KRT15/2958 / Cytokeratin 15 Monoclonal Antibody recognizes KRT15, a type I acidic intermediate filament protein expressed in selected basal epithelial populations. Keratin 15 contributes to the cytoskeletal framework that supports epithelial cell architecture, mechanical stability, and tissue organization. Its expression is associated with relatively undifferentiated keratinocytes and specialized epithelial compartments that participate in tissue maintenance and renewal.

Intermediate filaments provide structural resilience to epithelial cells exposed to mechanical stress. Keratin 15 participates in this network through interactions with compatible type II keratins, forming filament assemblies that help maintain cellular integrity. Unlike the keratins characteristic of terminally differentiated epithelial layers, KRT15 is preferentially associated with basal compartments. Keratin 15 Antibody is therefore relevant to investigations of epithelial stratification

and the molecular changes accompanying keratinocyte maturation.

During epidermal differentiation, basal keratinocytes undergo coordinated changes in keratin expression as they migrate toward suprabasal layers. Differentiation-associated proteins such as keratin 1 and keratin 10 become more prominent, while expression of certain basal-associated keratins declines. KRT15 expression can also change during keratinocyte activation and tissue repair, reflecting alterations in epithelial differentiation programs. These relationships make KRT15 useful for examining the balance between epithelial maintenance, proliferation, and differentiation.

Beyond normal epidermal organization, keratin 15 expression has been investigated in epithelial hyperplasia, dysplasia, and cutaneous malignancies. Changes in its distribution may accompany disturbances in basal cell organization and epithelial lineage differentiation. Immunohistochemical evaluation of KRT15 alongside other keratin markers can help characterize these alterations, although expression patterns vary with tissue context and should not be interpreted independently of morphology or complementary markers.

NSJ Bioreagents provides Keratin 15 Antibody KRT15/2958 for research involving human epithelial tissues and cultured cells. This mouse monoclonal antibody has supporting Western blot, immunohistochemistry, flow cytometry, and protein microarray data. The Cytokeratin 15 Monoclonal Antibody supports investigations of basal epithelial organization, intermediate filament expression, and changes in keratinocyte differentiation associated with tissue remodeling and disease.

Explore our Cytokeratin 15 Antibody KRT15/2957 for additional research into KRT15 expression, epithelial differentiation, and hair follicle biology.

Application Notes

Optimal dilution of the Keratin 15 Antibody KRT15/2958 / Cytokeratin 15 Monoclonal Antibody should be determined by the researcher.

Immunogen

Recombinant human KRT15 protein was used as the immunogen for the CK15 antibody.

Storage

Store the Keratin 15 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Cytokeratin 15 antibody, CK15 antibody, KRT15 antibody, Cytokeratin-15 antibody, Keratin-15 antibody, K15 antibody

Copyright © NSJ Bioreagents. All rights reserved.