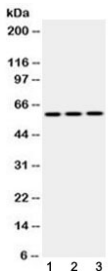
Cytokeratin 14 Rabbit Polyclonal Antibody / KRT14 Antibody (R32606)

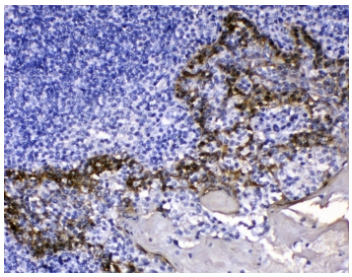
Catalog No.	Formulation	Size
R32606	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

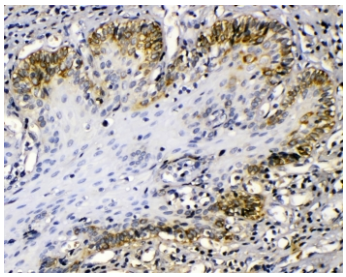
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P02533
Localization	Cytoplasmic, nuclear
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 1-2ug/ml Flow cytometry: 1-3ug/10^6 cells
Limitations	This Cytokeratin 14 Rabbit Polyclonal Antibody / KRT14 Antibody is available for research use only.



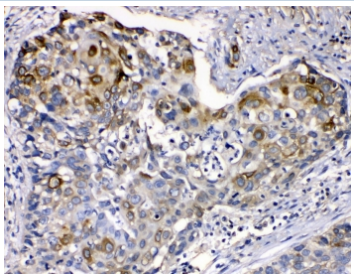
Cytokeratin 14 Rabbit Polyclonal Antibody by WB in Rat Brain, Mouse NIH3T3, and Human HepG2 Lysates. Western blot analysis using Cytokeratin 14 Rabbit Polyclonal Antibody at 0.5 ug/ml. Lane 1 contains rat brain tissue lysate, lane 2 contains mouse NIH3T3 cell lysate, and lane 3 contains human HepG2 cell lysate. A prominent immunoreactive band is detected in all three lanes at approximately 53 kDa, consistent with the predicted molecular weight of KRT14. The bands migrate at comparable positions across the three samples, with relatively uniform signal intensity. The blot shows minimal background staining and no additional prominent bands in the displayed molecular weight range. These results demonstrate detection of a protein migrating at the expected molecular weight of cytokeratin 14 in rat, mouse, and human lysates.



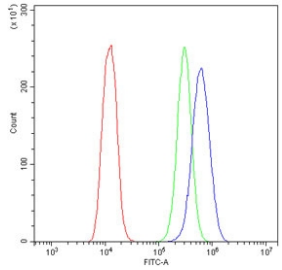
Cytokeratin 14 Rabbit Polyclonal Antibody by IHC in Human Tonsil. Immunohistochemistry of FFPE human tonsil tissue using Cytokeratin 14 Rabbit Polyclonal Antibody at 1 ug/ml. Brown cytoplasmic staining is concentrated in the stratified squamous epithelial compartment, contrasting with the predominantly unstained lymphoid tissue. The antibody highlights epithelial structures with variable staining intensity, consistent with the distribution of keratin 14 in basal epithelial populations. Nuclei are counterstained blue with hematoxylin. Heat-induced epitope retrieval was performed by steaming tissue sections in citrate buffer at pH 6 for 20 minutes.



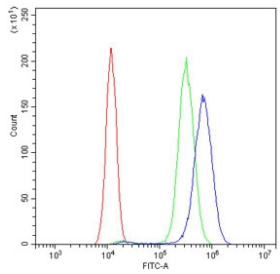
Cytokeratin 14 Rabbit Polyclonal Antibody by IHC in Human Esophageal Squamous Carcinoma. Immunohistochemistry of FFPE human esophageal squamous carcinoma tissue using Cytokeratin 14 Rabbit Polyclonal Antibody at 1 ug/ml. Brown cytoplasmic staining is observed in malignant squamous epithelial cells, with variable staining intensity across the tumor. Positive cells form irregular epithelial structures surrounded by comparatively weakly stained stromal tissue. The KRT14 Antibody highlights cytokeratin expression within the carcinoma, while nuclei are counterstained blue with hematoxylin. Heat-induced epitope retrieval was performed using citrate buffer at pH 6 for 20 minutes.



Cytokeratin 14 Rabbit Polyclonal Antibody by IHC in Human Esophageal Squamous Carcinoma. Immunohistochemistry of FFPE human esophageal squamous carcinoma tissue using Cytokeratin 14 Rabbit Polyclonal Antibody at 1 ug/ml. Brown cytoplasmic immunoreactivity is distributed throughout clusters of malignant squamous epithelial cells, with stronger staining in portions of the tumor and weaker staining in adjacent areas. The KRT14 Antibody demonstrates a heterogeneous epithelial staining pattern, highlighting differences in cytokeratin expression within the carcinoma. Nuclei are counterstained blue with hematoxylin. Heat-induced epitope retrieval was performed by steaming sections in citrate buffer at pH 6 for 20 minutes.



Cytokeratin 14 Rabbit Polyclonal Antibody by FACS in Human U-2 OS Cells. Flow cytometry analysis of human U-2 OS osteosarcoma cells using Cytokeratin 14 Rabbit Polyclonal Antibody at 1 ug per 10^6 cells. The blue histogram representing antibody staining shows a rightward fluorescence shift relative to the green isotype control histogram and the red unstained cell population. The antibody-treated cells exhibit increased fluorescence intensity, with partial overlap between the antibody and isotype control distributions. The KRT14 Antibody demonstrates immunoreactivity in U-2 OS cells under the tested conditions. Cells were blocked with goat serum before staining.



Cytokeratin 14 Rabbit Polyclonal Antibody by FACS in Human SiHa Cells. Flow cytometry analysis of human SiHa cervical carcinoma cells using Cytokeratin 14 Rabbit Polyclonal Antibody at 1 ug per 10^6 cells. The blue antibody-stained population exhibits a rightward fluorescence shift relative to the green isotype control and red unstained cell populations. The histogram demonstrates increased fluorescence intensity in antibody-treated cells, with partial overlap between the antibody and isotype control distributions. The KRT14 Antibody demonstrates immunoreactivity in SiHa cells under the tested conditions. Cells were blocked with goat serum before staining.

Description

Cytokeratin 14 Rabbit Polyclonal Antibody recognizes keratin 14 (KRT14), a type I intermediate filament protein expressed predominantly in basal epithelial cells of stratified squamous tissues. Encoded by the KRT14 gene on chromosome 17, this protein is abundant in basal keratinocytes of the epidermis, oral mucosa, esophagus, and other epithelial surfaces. KRT14 is also expressed in basal and myoepithelial cells of certain glandular tissues. Its distribution

makes it an important marker for identifying basal epithelial populations, investigating tissue organization, and examining changes in epithelial differentiation during development, regeneration, and disease.

Keratin 14 forms heterodimers with keratin 5, a type II intermediate filament protein, creating the principal keratin pair of basal keratinocytes. These proteins assemble into intermediate filament networks that provide mechanical stability and connect to desmosomes and hemidesmosomes through associated proteins. Their organization helps epithelial cells withstand physical stress and maintain tissue integrity. As keratinocytes differentiate and migrate into suprabasal compartments, KRT14 expression generally decreases while differentiation-associated keratins become more prominent. Keratins 1 and 10 characterize keratinizing epidermis, whereas keratins 4 and 13 are associated with nonkeratinized mucosal epithelia.

Pathogenic variants in KRT14 are associated with epidermolysis bullosa simplex, an inherited disorder characterized by skin fragility and blister formation following mechanical trauma. Cytokeratin 14 is also investigated in squamous cell carcinomas, basal-like breast cancers, and other epithelial malignancies. Its expression can help characterize basal differentiation and identify changes in epithelial phenotype associated with tumor progression. Researchers frequently examine KRT14 alongside KRT5, TP63, and other epithelial markers to investigate cellular heterogeneity, tissue remodeling, and the organization of basal cell populations. Its biological significance depends on tissue context and the accompanying marker profile.

NSJ Bioreagents offers an antigen affinity-purified rabbit polyclonal antibody generated against amino acids 446-472 of human KRT14. The antibody is validated for western blotting, immunohistochemistry, and flow cytometry, with reported reactivity in human, mouse, and rat samples. Its C-terminal peptide immunogen distinguishes this reagent from monoclonal antibodies developed against larger recombinant KRT14 fragments. The KRT14 Antibody provides an additional host species option for investigating basal epithelial differentiation and intermediate filament organization. A Cytokeratin 14 Rabbit Polyclonal Antibody supports research into epithelial integrity, inherited keratin disorders, and tumor-associated changes in cellular differentiation.

Explore our KRT14 Antibody KRT14/4128 for investigating cytokeratin 14 expression, basal epithelial differentiation, and intermediate filament organization in normal and diseased tissues.

Application Notes

Optimal dilution of the Cytokeratin 14 Rabbit Polyclonal Antibody / KRT14 Antibody should be determined by the researcher.

Immunogen

Amino acids 446-472 (RQIRTKVMDVHDGKVVSTHEQVLRTKN-human) were used as the immunogen for the Cytokeratin 14 Rabbit Polyclonal Antibody.

Storage

After reconstitution, the Cytokeratin 14 Rabbit Polyclonal Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

CK14 antibody, Keratin 14 antibody, KRT14 antibody, Cytokeratin-14 antibody, Keratin-14 antibody, Type I Cytoskeletal Keratin 14 antibody

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