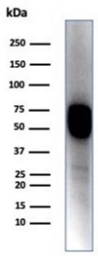
KRT14 Antibody KRT14/4128 / Cytokeratin 14 Monoclonal Antibody [clone KRT14/4128] (V4032)

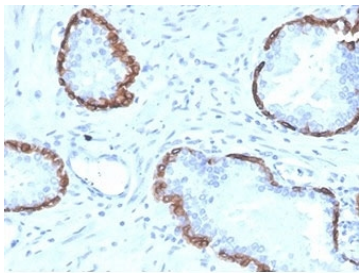
Catalog No.	Formulation	Size
V4032-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4032-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4032SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

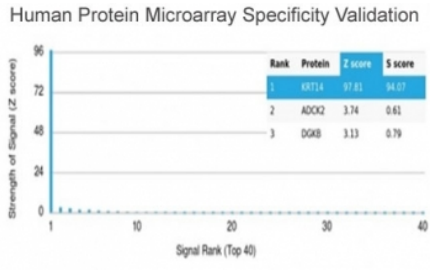
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	KRT14/4128
Purity	Protein A/G affinity
UniProt	P02533
Localization	Cytoplasm
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This KRT14 Antibody KRT14/4128 / Cytokeratin 14 Monoclonal Antibody is available for research use only.



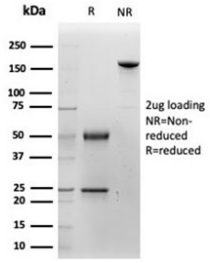
KRT14 Antibody KRT14/4128 by WB in Human A431 Cells. Western blot analysis of human A431 epidermoid carcinoma cell lysate using KRT14 Antibody KRT14/4128. A prominent immunoreactive band is observed at approximately 53 kDa, consistent with the predicted molecular weight of cytokeratin 14. The band is relatively broad, with the strongest signal concentrated near the expected molecular weight. The Cytokeratin 14 Monoclonal Antibody demonstrates recognition of a protein migrating at the expected size of KRT14 in A431 cell lysate.



KRT14 Antibody KRT14/4128 by IHC in Human Prostate. Immunohistochemistry of FFPE human prostate tissue using KRT14 Antibody KRT14/4128. Brown cytoplasmic staining is concentrated in the basal epithelial cells surrounding prostatic glands, while the luminal epithelial compartments exhibit comparatively weak or absent staining. The Cytokeratin 14 Monoclonal Antibody highlights the basal cell distribution of KRT14, consistent with its expression in basal epithelial populations. Nuclei are counterstained blue with hematoxylin. Heat-induced epitope retrieval was performed using 10 mM Tris with 1 mM EDTA, pH 9, for 20 minutes, followed by cooling before staining.



KRT14 Antibody KRT14/4128 by Protein Microarray Analysis. HuProt protein microarray analysis of KRT14 Antibody KRT14/4128 against more than 19,000 full-length human proteins. The graph displays a dominant binding signal for KRT14, separated from the remaining proteins represented on the array. The Cytokeratin 14 Monoclonal Antibody demonstrates preferential recognition of its intended target under the tested microarray conditions. The Z-score represents the strength of the antibody-binding signal relative to the array background, while the S-score reflects the separation between the intended target and the next-highest ranked protein.



KRT14 Antibody KRT14/4128 by SDS-PAGE. SDS-PAGE analysis of purified, BSA-free KRT14 Antibody KRT14/4128 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 near 150 kDa, consistent with intact immunoglobulin. Under reducing conditions, bands are observed near 50 kDa and 25 kDa, corresponding to the immunoglobulin heavy and light chains, respectively. The Cytokeratin 14 Monoclonal Antibody demonstrates the expected electrophoretic profile of a purified mouse monoclonal antibody preparation.

Description

KRT14 Antibody KRT14/4128 recognizes keratin 14 (KRT14), a type I intermediate filament protein expressed predominantly in the basal layers of stratified squamous epithelia. Encoded by the KRT14 gene on chromosome 17, cytokeratin 14 is an important structural component of epithelial cells in the epidermis, oral mucosa, esophagus, and other stratified tissues. Its expression is particularly prominent in proliferating basal keratinocytes, where it contributes to cytoskeletal organization and resistance to mechanical stress. CK14 is widely used as a marker of basal epithelial differentiation and is frequently examined in studies of skin biology, epithelial development, and tissue regeneration.

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 filament networks that connect with desmosomes and hemidesmosomes, helping epithelial cells withstand mechanical forces. As keratinocytes differentiate and migrate toward the epithelial surface, KRT14 expression generally decreases while differentiation-associated keratins become more prominent. Keratins 1 and 10 characterize keratinizing epidermal differentiation, whereas keratins 4 and 13 are associated with nonkeratinized mucosal epithelia. Examining these expression patterns helps researchers distinguish basal and suprabasal epithelial compartments.

Pathogenic variants in KRT14 are associated with epidermolysis bullosa simplex, an inherited skin disorder characterized by mechanical fragility and blister formation. Cytokeratin 14 is also investigated in epithelial malignancies, including squamous cell carcinomas and certain breast cancers. Its expression may help characterize basal-like differentiation and distinguish tumor populations with different epithelial phenotypes. In breast cancer research, KRT14 is frequently examined alongside KRT5 and other basal markers to investigate tumor heterogeneity, invasive behavior, and cellular plasticity. Its diagnostic and biological significance depends on tissue context and the accompanying marker profile.

NSJ Bioreagents offers mouse monoclonal clone KRT14/4128, developed against a human KRT14 protein region spanning amino acids 350-472. The antibody recognizes human cytokeratin 14 and is supported by western blotting,

immunohistochemistry, and HuProt protein microarray validation. The Cytokeratin 14 Monoclonal Antibody provides a reagent for investigating basal epithelial cells, intermediate filament organization, and changes in keratin expression associated with disease. A KRT14 Antibody such as KRT14/4128 supports research into epithelial differentiation, skin integrity, and tumor biology.

Explore our Cytokeratin 14 Antibodies for investigating basal epithelial differentiation, intermediate filament organization, skin biology, and KRT14 expression in normal and malignant tissues.

Application Notes

Optimal dilution of the KRT14 Antibody KRT14/4128 / Cytokeratin 14 Monoclonal Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 350-472 was used as the immunogen for the KRT14 Antibody KRT14/4128.

Storage

Aliquot the KRT14 Antibody KRT14/4128 and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

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

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