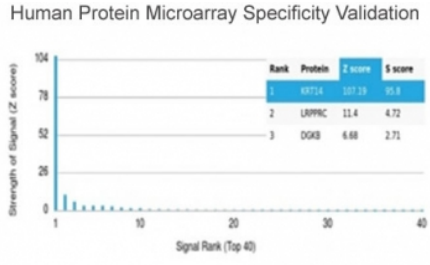
Keratin 14 Antibody KRT14/4127 / CK14 Monoclonal Antibody [clone KRT14/4127] (V4062)

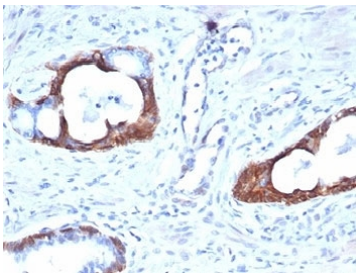
Catalog No.	Formulation	Size
V4062-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4062-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4062SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

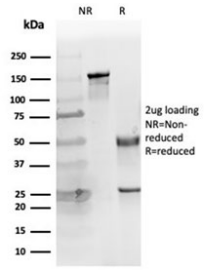
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	KRT14/4127
Purity	Protein A/G affinity
UniProt	P02533
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This Keratin 14 Antibody KRT14/4127 / CK14 Monoclonal Antibody is available for research use only.



Keratin 14 Antibody KRT14/4127 by Protein Microarray Analysis. HuProt protein microarray analysis of Keratin 14 Antibody KRT14/4127 against more than 19,000 full-length human proteins. The graph shows a dominant antibody-binding signal separated from the remaining proteins, supporting preferential target recognition under the tested conditions. The CK14 Monoclonal Antibody demonstrates a strong primary signal in this protein microarray assay. Z-scores represent binding signal intensity relative to the array background, while the S-score measures the separation between the two highest-ranked protein signals.



Keratin 14 Antibody KRT14/4127 by IHC in Human Prostate Carcinoma. Immunohistochemistry of FFPE human prostate carcinoma tissue using Keratin 14 Antibody KRT14/4127. Strong brown cytoplasmic staining is concentrated in epithelial cells surrounding glandular structures, while adjacent stromal tissue shows comparatively little immunoreactivity. The CK14 Monoclonal Antibody highlights a predominantly basal epithelial staining pattern, consistent with the characteristic distribution of cytokeratin 14. 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.



Keratin 14 Antibody KRT14/4127 by SDS-PAGE. SDS-PAGE analysis of purified, BSA-free Keratin 14 Antibody KRT14/4127 under non-reducing (NR) and reducing (R) conditions, with 2 ug of antibody loaded per lane. The non-reducing lane shows a prominent band migrating at approximately 130-150 kDa, consistent with intact immunoglobulin. Under reducing conditions, a prominent band is visible near 25 kDa, corresponding to the immunoglobulin light chain. The CK14 Monoclonal Antibody demonstrates the principal electrophoretic features of a purified mouse monoclonal antibody preparation.

Description

Keratin 14 Antibody KRT14/4127 recognizes keratin 14 (KRT14), a type I intermediate filament protein encoded by the KRT14 gene on chromosome 17. Cytokeratin 14 is predominantly expressed in basal keratinocytes of stratified squamous epithelia, including the epidermis, oral mucosa, and esophagus. It is also present in basal and myoepithelial cell populations of certain glandular tissues. Its distribution reflects the specialized structural requirements of epithelial cells that maintain contact with the basement membrane and contribute to tissue renewal. CK14 is therefore widely investigated as a marker of basal epithelial differentiation, epithelial progenitor populations, and changes in tissue organization associated with disease.

Keratin 14 forms heterodimers with keratin 5, a type II intermediate filament protein, creating the principal keratin pair of basal epithelial cells. These heterodimers assemble into cytoskeletal networks that connect to desmosomes and hemidesmosomes, helping cells resist mechanical stress. As keratinocytes differentiate and move into suprabasal compartments, expression of KRT14 generally decreases while differentiation-associated keratins become more prominent. In keratinizing epidermis, keratins 1 and 10 are characteristic of suprabasal differentiation, whereas keratins 4 and 13 are associated with nonkeratinized mucosal epithelia. These expression patterns help distinguish epithelial compartments and characterize cellular maturation.

Pathogenic variants in KRT14 are associated with epidermolysis bullosa simplex, an inherited disorder characterized by skin fragility and blister formation following mechanical trauma. The protein is also studied in squamous cell carcinomas and basal-like epithelial malignancies. In breast cancer research, KRT14 expression is frequently evaluated alongside KRT5 and other basal markers to investigate tumor differentiation, cellular heterogeneity, and invasive behavior. Expression patterns may vary between tumor types and within individual lesions, making interpretation dependent on tissue context and complementary markers. Research involving KRT14 contributes to understanding epithelial maintenance, wound repair, inherited keratin disorders, and tumor-associated changes in cell phenotype.

NSJ Bioreagents offers mouse monoclonal clone KRT14/4127 for investigating human keratin 14 expression. The antibody was developed against a recombinant human KRT14 protein fragment and provides an additional clone option for studying basal epithelial populations. Its monoclonal format supports consistent recognition of the targeted antigen in validated experimental applications. The CK14 Monoclonal Antibody complements other keratin-specific reagents used to characterize epithelial differentiation and intermediate filament organization. A Keratin 14 Antibody such as KRT14/4127 supports investigations of skin biology, basal cell differentiation, and epithelial pathology.

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 Keratin 14 Antibody KRT14/4127 / CK14 Monoclonal Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 351-472 from the human KRT14 protein was used as the immunogen for the Keratin 14 Antibody KRT14/4127.

Storage

Aliquot the Keratin 14 Antibody KRT14/4127 and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

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

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