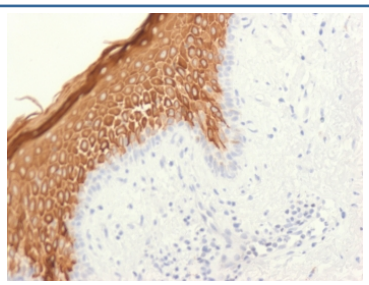
CK10 Antibody KRT10/1948R / Recombinant Cytokeratin 10 Antibody [clone KRT10/1948R] (V3632)

Catalog No.	Formulation	Size
V3632-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3632-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3632SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3632IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

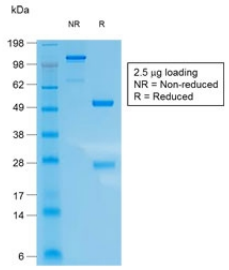
Recombinant RABBIT MONOCLONAL

Bulk quote request

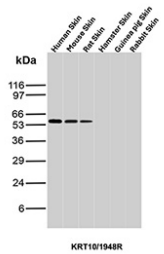
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	KRT10/1948R
Purity	Protein A affinity chromatography
UniProt	P13645
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Western blot: 2-4ug/ml
Limitations	This CK10 Antibody KRT10/1948R is available for research use only.



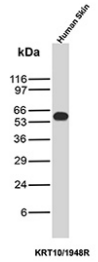
CK10 Antibody KRT10/1948R by IHC in Human Skin. Immunohistochemistry of FFPE human skin tissue using CK10 Antibody KRT10/1948R. Strong brown cytoplasmic staining is observed in the suprabasal keratinocytes of the epidermis, particularly within the spinous and granular layers, while the basal cell layer is comparatively negative. The Recombinant Cytokeratin 10 Antibody highlights the distribution of differentiated keratinocytes in stratified squamous epithelium. Nuclei are counterstained blue with hematoxylin. Heat-induced epitope retrieval was performed using 10 mM citrate buffer, pH 6, for 10-20 minutes, followed by cooling at room temperature for 20 minutes.



CK10 Antibody KRT10/1948R by SDS-PAGE. SDS-PAGE analysis of purified, BSA-free CK10 Antibody KRT10/1948R under non-reducing (NR) and reducing (R) conditions, with 2.5 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, bands are observed at approximately 50 kDa and 25 kDa, corresponding to the immunoglobulin heavy and light chains, respectively. The Recombinant Cytokeratin 10 Antibody demonstrates the expected electrophoretic profile of a purified rabbit monoclonal antibody preparation.



CK10 Antibody KRT10/1948R by WB in Skin Tissue Lysates from Multiple Species. Western blot analysis of skin tissue lysates using CK10 Antibody KRT10/1948R. Six lanes contain human, mouse, rat, hamster, guinea pig, and rabbit skin lysates, respectively. A prominent immunoreactive band is detected at approximately 56-60 kDa in lanes 1-3, corresponding to human, mouse, and rat samples. No distinct band is observed in lanes 4-6, containing hamster, guinea pig, and rabbit samples. The observed molecular weight is consistent with the expected size of KRT10. The Recombinant Cytokeratin 10 Antibody demonstrates detection of endogenous keratin 10 in human and rodent skin tissues under the tested conditions.



CK10 Antibody KRT10/1948R by WB in Human Skin. Western blot analysis of human skin tissue lysate using CK10 Antibody KRT10/1948R. A prominent immunoreactive band is detected at approximately 56-60 kDa, consistent with the expected molecular weight of cytokeratin 10. The Recombinant Cytokeratin 10 Antibody demonstrates detection of endogenous KRT10 in human skin, where this intermediate filament protein is predominantly expressed in differentiated suprabasal keratinocytes. The relatively clean banding pattern supports recognition of the expected target protein under the tested conditions.

Description

CK10 Antibody KRT10/1948R recognizes cytokeratin 10, a type I intermediate filament protein encoded by the KRT10 gene on chromosome 17. Keratin 10 is predominantly expressed in differentiating keratinocytes of stratified squamous epithelia, particularly within the suprabasal layers of the epidermis. Its expression begins as keratinocytes withdraw from the cell cycle and transition from the proliferative basal compartment toward terminal differentiation. This characteristic distribution makes CK10 an established marker of epidermal maturation and a useful protein for investigating the organization and development of stratified epithelial tissues.

Keratin 10 forms intermediate filament networks with keratin 1, its principal type II keratin partner. These filament structures contribute to epidermal mechanical stability and help differentiating keratinocytes withstand physical stress. In normal skin, basal keratinocytes predominantly express keratins 5 and 14, while suprabasal differentiation is accompanied by increased expression of keratins 1 and 10. This coordinated change in keratin expression reflects the progressive maturation of epidermal cells. Researchers frequently examine CK10 alongside involucrin, loricrin, filaggrin, and other differentiation markers to evaluate epidermal development, barrier formation, and keratinocyte responses to environmental stimuli.

Altered KRT10 expression is associated with several dermatological conditions. In psoriasis and other hyperproliferative disorders, normal keratinocyte differentiation can be disrupted, resulting in changes in the distribution or abundance of suprabasal keratins. Pathogenic variants in KRT10 cause forms of epidermolytic ichthyosis, an inherited disorder characterized by epidermal fragility, blistering, and hyperkeratosis. Keratin 10 is also investigated in squamous epithelial tumors, where changes in its expression may reflect the degree of cellular differentiation. These associations make KRT10 relevant to research involving epidermal pathology, tissue repair, and epithelial tumor biology.

NSJ Bioreagents offers recombinant rabbit monoclonal clone KRT10/1948R for studying cytokeratin 10 expression in

epithelial tissues. Recombinant monoclonal antibody production provides a defined antibody sequence and supports consistency between manufacturing batches. The Recombinant Cytokeratin 10 Antibody can be used to investigate the distribution of differentiated keratinocytes and changes in epidermal protein expression. A CK10 Antibody such as KRT10/1948R provides a useful tool for research into epidermal differentiation, keratin-associated disorders, and epithelial tissue organization.

Explore our Cytokeratin 10 Antibody KRT10/7804R, supported by Western blot and human skin immunohistochemistry data, for investigating epidermal differentiation and KRT10 expression.

Application Notes

Optimal dilution of the CK10 Antibody KRT10/1948R 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 cytoskeletal preparation extracted from human ectocervical epithelium was used as the immunogen for the CK10 Antibody KRT10/1948R.

Storage

Store the CK10 Antibody KRT10/1948R at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Cytokeratin 10 antibody, Keratin 10 antibody, KRT10 antibody, Type I Cytoskeletal Keratin 10 antibody, Cytokeratin-10 antibody, Keratin-10 antibody

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