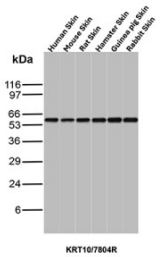
Cytokeratin 10 Antibody KRT10/7804R / CK10 Rabbit Monoclonal Antibody [clone KRT10/7804R] (V4491)

Catalog No.	Formulation	Size
V4491-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4491-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4491SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

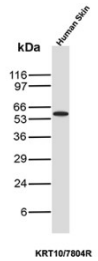
Recombinant RABBIT MONOCLONAL

Bulk quote request

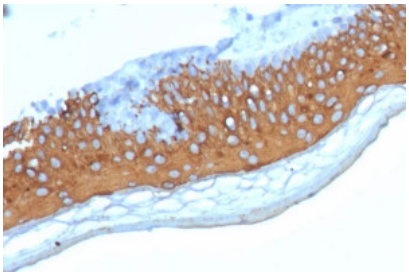
Species Reactivity	Human, Mouse, Rat Hamster, Rabbit, Guinea pig
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	KRT10/7804R
Purity	Protein A/G affinity
UniProt	P13645
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT (Human) Western blot: 2-4ug/ml (Human/Mouse/Rat/Hamster/Rabbit/Guinea pig)
Limitations	This Cytokeratin 10 Antibody KRT10/7804R is available for research use only.



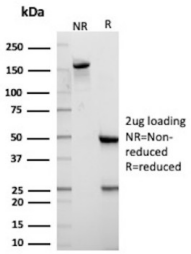
Cytokeratin 10 Antibody KRT10/7804R by WB in Skin Tissue Lysates from Multiple Species. Western blot analysis of skin tissue lysates from different species using Cytokeratin 10 Antibody KRT10/7804R. A prominent immunoreactive band is observed at approximately 60 kDa across the tested samples, consistent with the expected molecular weight of KRT10. The CK10 Rabbit Monoclonal Antibody produces a similar banding pattern across the lanes, supporting its reported cross-species reactivity. The results demonstrate detection of keratin 10 in skin tissue lysates from multiple mammalian species.



Cytokeratin 10 Antibody KRT10/7804R by WB in Skin Tissue Lysate. Western blot analysis of skin tissue lysate using Cytokeratin 10 Antibody KRT10/7804R. A prominent immunoreactive band is detected at approximately 60 kDa, consistent with the expected molecular weight of cytokeratin 10. The CK10 Rabbit Monoclonal Antibody demonstrates detection of endogenous KRT10 in skin tissue, where this intermediate filament protein is expressed predominantly in differentiated suprabasal keratinocytes.



Cytokeratin 10 Antibody KRT10/7804R by IHC in Human Skin. Immunohistochemistry of FFPE human skin tissue using Cytokeratin 10 Antibody KRT10/7804R at 2 ug/ml. Strong brown cytoplasmic staining is observed throughout the suprabasal epidermal layers, while the basal cell layer exhibits comparatively weak staining. The CK10 Rabbit Monoclonal Antibody highlights differentiated keratinocytes, consistent with the normal distribution of KRT10 in stratified squamous epithelium. 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.



Cytokeratin 10 Antibody KRT10/7804R by SDS-PAGE. SDS-PAGE analysis of purified Cytokeratin 10 Antibody KRT10/7804R 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 150 kDa, consistent with intact IgG. Under reducing conditions, distinct bands are observed at approximately 50 kDa and 25 kDa, corresponding to the immunoglobulin heavy and light chains, respectively. The CK10 Rabbit Monoclonal Antibody demonstrates the expected electrophoretic profile of a purified rabbit IgG preparation.

Description

Cytokeratin 10 Antibody KRT10/7804R recognizes keratin 10 (KRT10), a type I intermediate filament protein primarily expressed in differentiated keratinocytes of stratified squamous epithelia. KRT10 is encoded by the KRT10 gene on chromosome 17 and plays an important role in maintaining epidermal structure and mechanical stability. Its expression begins as basal keratinocytes leave the proliferative compartment and enter the suprabasal layers, making it a widely used marker of terminal keratinocyte differentiation. In normal epidermis, KRT10 is strongly associated with the spinous and granular layers, whereas basal keratinocytes predominantly express keratins 5 and 14.

Keratin 10 forms intermediate filament networks through association with keratin 1, its principal type II keratin partner. Together, KRT1 and KRT10 contribute to the cytoskeletal framework that protects differentiating epidermal cells against mechanical stress. Their expression accompanies the transition from proliferative basal keratinocytes to cells undergoing terminal differentiation and cornification. Changes in KRT10 expression can reflect altered epidermal maturation, hyperproliferation, or disruption of normal keratinocyte differentiation. Consequently, CK10 is frequently studied alongside markers such as KRT14, KRT1, involucrin, and filaggrin to characterize epidermal development and differentiation.

KRT10 is particularly relevant to research involving inflammatory skin diseases, inherited keratin disorders, and epithelial tumor biology. Reduced or altered KRT10 expression may accompany hyperproliferative conditions such as psoriasis and certain squamous cell carcinomas. Pathogenic variants in KRT10 are associated with epidermolytic ichthyosis, a genetic skin disorder characterized by epidermal fragility, blistering, and subsequent hyperkeratosis. KRT10 expression is also investigated in tissue engineering and skin regeneration studies, where it serves as an indicator of keratinocyte maturation and epidermal stratification.

NSJ Bioreagents offers recombinant rabbit monoclonal clone KRT10/7804R for investigating keratin 10 expression in epithelial tissues. The antibody is supported by experimental data from multiple tissue samples and protein microarray analysis. Its broad reported species reactivity makes it useful for comparative studies of epidermal differentiation and skin

biology. The CK10 Rabbit Monoclonal Antibody provides a reagent for examining changes in keratinocyte maturation, cytoskeletal organization, and epithelial pathology. A Cytokeratin 10 Antibody such as KRT10/7804R supports research into normal epidermal development and diseases involving abnormal keratin expression.

Explore our Cytokeratin 10 Antibodies for investigating suprabasal keratinocyte differentiation, epidermal development, skin disorders, and KRT10 expression in epithelial tissues.

Application Notes

Optimal dilution of the Cytokeratin 10 Antibody KRT10/7804R should be determined by the researcher.

Immunogen

A recombinant human fragment (within amino acids 500-600) of human protein was used as the immunogen for the Cytokeratin 10 Antibody KRT10/7804R.

Storage

Aliquot the Cytokeratin 10 Antibody KRT10/7804R and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Keratin 10 antibody, CK10 antibody, KRT10 antibody, Cytokeratin-10 antibody, Type I Cytoskeletal Keratin 10 antibody, Keratin 10 antibody

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