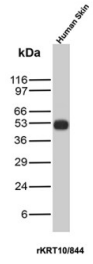
KRT10 Antibody rKRT10/844 / Recombinant Keratin 10 Antibody [clone rKRT10/844] (V3603)

Catalog No.	Formulation	Size
V3603-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3603-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3603SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3603IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

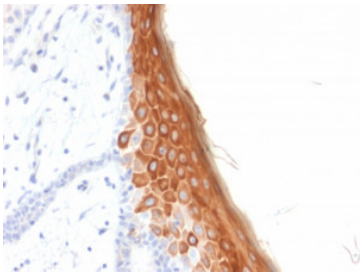
Recombinant MOUSE MONOCLONAL

Bulk quote request

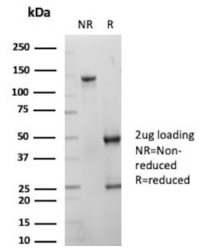
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rKRT10/844
Purity	Protein G affinity chromatography
UniProt	P13645
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Western blot: 2-4ug/ml
Limitations	This KRT10 Antibody rKRT10/844 / Recombinant Keratin 10 Antibody is available for research use only.



KRT10 Antibody rKRT10/844 by WB in Human Skin. Western blot analysis of human skin tissue lysate using KRT10 Antibody rKRT10/844. A prominent immunoreactive band is detected at approximately 56-60 kDa, consistent with the predicted molecular weight of cytokeratin 10 (56.5 kDa). The single sample lane shows a well-defined band with minimal additional immunoreactivity. The Recombinant Keratin 10 Antibody demonstrates detection of endogenous KRT10 in human skin tissue, where this intermediate filament protein is expressed predominantly in differentiated suprabasal keratinocytes.



KRT10 Antibody rKRT10/844 by IHC in Human Skin. Immunohistochemistry of FFPE human skin tissue using KRT10 Antibody rKRT10/844. Strong brown cytoplasmic staining is observed in the suprabasal epidermal layers, with comparatively little staining in the basal keratinocytes and underlying dermis. The Recombinant Keratin 10 Antibody highlights differentiated epidermal cells, consistent with the expected distribution of KRT10 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.



KRT10 Antibody rKRT10/844 by SDS-PAGE. SDS-PAGE analysis of purified KRT10 Antibody rKRT10/844 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 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 Recombinant Keratin 10 Antibody demonstrates the expected electrophoretic profile of a purified mouse monoclonal antibody preparation.

Description

KRT10 Antibody rKRT10/844 recognizes keratin 10, a type I intermediate filament protein encoded by the KRT10 gene on chromosome 17. This protein is a major component of the cytoskeleton in differentiating keratinocytes of stratified squamous epithelia. In normal epidermis, KRT10 expression begins as keratinocytes leave the proliferative basal layer and enter the suprabasal compartment. Its distribution is therefore closely associated with terminal epidermal differentiation. Keratin 10 is widely investigated as a marker of keratinocyte maturation, epidermal stratification, and the development of mechanically resilient epithelial tissues.

Keratin 10 associates with keratin 1, a type II intermediate filament protein, to form the filament networks characteristic of differentiated epidermal cells. These structures provide mechanical support and contribute to the maintenance of epidermal integrity. During normal skin development, basal keratinocytes primarily express keratins 5 and 14, whereas differentiation is accompanied by increased expression of keratins 1 and 10. This transition reflects coordinated changes in gene expression as keratinocytes mature and move toward the skin surface. KRT10 is frequently examined alongside involucrin, loricrin, and filaggrin to assess epidermal differentiation and barrier development.

Altered KRT10 expression is associated with several dermatological conditions and changes in epithelial cell behavior. In psoriasis, accelerated keratinocyte turnover and abnormal differentiation can disrupt the normal distribution of keratin 10. Mutations in KRT10 cause certain forms of epidermolytic ichthyosis, an inherited disorder characterized by epidermal fragility, blistering, and hyperkeratosis. Keratin 10 is also investigated in squamous cell carcinomas and other epithelial lesions, where its expression may reflect the differentiation status of tumor cells. These associations make KRT10 relevant to research involving epidermal pathology, epithelial remodeling, and keratinocyte responses to disease.

NSJ Bioreagents offers recombinant monoclonal clone rKRT10/844 for investigating keratin 10 expression in epithelial tissues. Recombinant antibody production provides a defined antibody sequence and supports manufacturing consistency. The Recombinant Keratin 10 Antibody offers an additional clone option for studying epidermal differentiation and keratin-associated disorders. A KRT10 Antibody such as rKRT10/844 supports investigations of keratinocyte maturation, intermediate filament organization, and changes in epithelial protein expression associated with normal development and disease.

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 KRT10 Antibody rKRT10/844 / Recombinant Keratin 10 Antibody 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

Recombinant human Cytokeratin 10 protein was used as the immunogen for the KRT10 Antibody rKRT10/844.

Storage

Store the KRT10 Antibody rKRT10/844 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

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

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