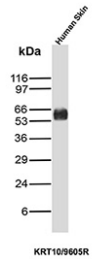
Suprabasal Keratin Antibody / Cytokeratin 10 [clone KRT10/9605R] (V5929)

Catalog No.	Formulation	Size
V5929-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5929-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V5929SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

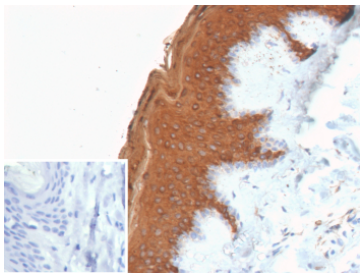
Recombinant RABBIT MONOCLONAL

Bulk quote request

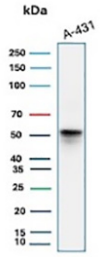
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	KRT10/9605R
UniProt	P13645
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This Suprabasal Keratin/Cytokeratin 10 antibody is available for research use only.



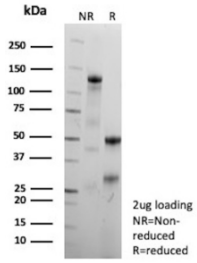
Western blot analysis of human skin tissue lysate using Suprabasal Keratin/Cytokeratin 10 antibody (clone KRT10/9605R). Predicted molecular weight ~59 kDa.



Immunohistochemistry analysis of Suprabasal keratin / Cytokeratin 10 antibody (clone KRT10/9605R) in human skin. Formalin-fixed, paraffin-embedded human skin tissue shows strong cytoplasmic brown chromogenic staining in suprabasal keratinocytes within stratified squamous epithelium, consistent with Cytokeratin 10 expression in differentiated epidermal layers. Heat-induced epitope retrieval was performed using 10mM Tris with 1mM EDTA, pH 9.0, for 45 minutes at 95oC followed by cooling at room temperature for 20 minutes. Inset shows a PBS-only negative control processed without primary antibody, demonstrating minimal non-specific background staining.



Western blot analysis of human A431 cell lysate using Suprabasal Keratin/Cytokeratin 10 antibody (clone KRT10/9605R). Predicted molecular weight ~59 kDa.



SDS-PAGE analysis of purified Suprabasal Keratin/Cytokeratin 10 antibody (clone KRT10/9605R). Confirmation of Purity and Integrity of Antibody.

Description

Suprabasal keratin antibody targets Cytokeratin 10, a differentiation-associated type I intermediate filament protein encoded by the KRT10 gene and widely recognized as a hallmark marker of suprabasal keratinocyte maturation. Cytokeratin 10, also referred to as Keratin 10 or CK10 in the literature, is selectively induced as epidermal keratinocytes withdraw from the basal proliferative compartment and initiate terminal differentiation. At the cellular level, Cytokeratin 10 localizes to the cytoplasm, where it pairs predominantly with Keratin 1 to assemble robust intermediate filament networks that support epidermal structure and barrier formation.

Cytokeratin 10 expression is tightly restricted to suprabasal layers of stratified squamous epithelia, including the epidermis and related epithelial surfaces. This sharply defined distribution distinguishes suprabasal keratinocytes from basal progenitor cells, which instead express basal keratins such as Keratin 5 and Keratin 14. Because of this clear compartmentalization, a suprabasal keratin antibody provides valuable insight into epithelial differentiation status and stratification integrity. Detection of Cytokeratin 10 is therefore widely used in studies examining epidermal maturation, keratinocyte lineage commitment, and tissue architecture in normal and diseased states.

In epithelial disease research, altered Cytokeratin 10 expression is frequently associated with disrupted differentiation programs. Reduced or absent CK10 expression is observed in hyperproliferative skin disorders, inflammatory dermatoses, and poorly differentiated squamous lesions, reflecting loss of terminal differentiation. In contrast, retained Cytokeratin 10 expression is often seen in well-differentiated squamous epithelia and selected squamous cell carcinomas, where it marks differentiated tumor cell populations. These expression patterns make suprabasal keratin antibody reagents useful for investigating squamous differentiation and epithelial remodeling.

At the molecular level, Cytokeratin 10 belongs to the acidic type I keratin family and contains conserved alpha-helical domains required for filament assembly and cytoskeletal stability. Its expression is regulated by calcium-dependent signaling and differentiation-associated transcriptional pathways. Clone KRT10/9605R is designed to recognize

Cytokeratin 10 and supports research applications focused on epidermal biology, squamous differentiation, and suprabasal epithelial identity.

Application Notes

1. Optimal dilution of the Suprabasal Keratin/Cytokeratin 10 antibody should be determined by the researcher.

2. This Suprabasal Keratin/Cytokeratin 10 antibody is recombinantly produced by expression in CHO cells.

Immunogen

Recombinant human fragment (around amino acids 300-500) of human KRT10 protein (exact sequence is proprietary) was used as the immunogen for the Suprabasal Keratin/Cytokeratin 10 antibody.

Storage

Suprabasal Keratin/Cytokeratin 10 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.