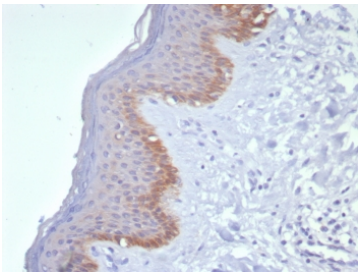
Cytokeratin 15 Antibody / KRT15 [clone KRT15/8312R] (V4501)

Catalog No.	Formulation	Size
V4501-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4501-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4501SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

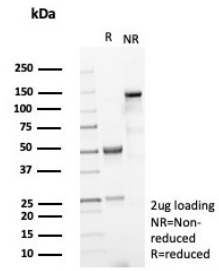
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	KRT15/8312R
Purity	Protein A affinity
UniProt	P19012
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Cytokeratin 15 antibody is available for research use only.



Immunohistochemistry analysis of Cytokeratin 15 / KRT15 antibody (clone KRT15/8312R) in human skin tissue. Formalin-fixed, paraffin-embedded human skin tissue was stained using Cytokeratin 15 antibody (clone KRT15/8312R). Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0, followed by cooling prior to antibody incubation. Brown chromogenic signal is observed predominantly in basal keratinocytes along the epidermal basal layer, with cytoplasmic staining outlining the basal cell compartment, while suprabasal keratinocytes and underlying dermal tissue show little to no staining. This staining pattern is consistent with basal cell-associated expression of Cytokeratin 15 in stratified squamous epithelium.



SDS-PAGE analysis of purified, BSA-free Cytokeratin 15 antibody (clone KRT15/8312R) as confirmation of integrity and purity.

Description

Cytokeratin 15 Antibody recognizes Cytokeratin 15, also known as Keratin 15 (KRT15), a type I intermediate filament protein that is characteristically expressed in basal epithelial cells and epithelial progenitor cell compartments within stratified squamous epithelia. Cytokeratin 15 is a cytoplasmic structural protein that contributes to the intermediate filament cytoskeleton, supporting epithelial cell integrity, mechanical resilience, and tissue organization. Cytokeratin 15 Antibody is commonly used in research and pathology settings and is frequently referred to in the literature as CK15 antibody or Keratin 15 antibody.

Cytokeratin 15 expression is most prominently observed in basal keratinocytes of the epidermis and in specialized epithelial niches associated with tissue maintenance and regeneration. In skin, CK15 is enriched in basal epithelial cells and hair follicle-associated compartments, reflecting its association with epithelial stem and progenitor cell populations. In stratified squamous epithelia, KRT15 expression is typically restricted to basal layers and is reduced as cells undergo terminal differentiation and migrate toward suprabasal compartments expressing keratins such as Cytokeratin 10 or Cytokeratin 13. This restricted expression pattern makes Cytokeratin 15 Antibody useful for distinguishing basal and progenitor-associated epithelial cells from more differentiated squamous cell populations.

Altered Cytokeratin 15 expression has been reported in a variety of pathological contexts. Changes in CK15 distribution or intensity have been observed in epithelial hyperplasia, dysplasia, and squamous cell carcinoma, where disruption of basal cell compartments and differentiation programs is a defining feature of disease progression. As a result, Cytokeratin 15 antibody staining patterns are frequently evaluated in research studies focused on epithelial stem cell biology, basal cell dynamics, and squamous lineage differentiation.

At the cellular level, Cytokeratin 15 contributes to the organization of the intermediate filament network and supports basal epithelial cell architecture. Its association with basal and progenitor cell compartments makes Cytokeratin 15 Antibody a valuable tool for studies of epithelial stratification, tissue homeostasis, and regeneration. The Cytokeratin 15 Antibody (clone KRT15/8312R) is designed to detect Cytokeratin 15 expression in research applications where identification of basal epithelial or progenitor cell populations is required.

Application Notes

Optimal dilution of the Cytokeratin 15 antibody should be determined by the researcher.

Immunogen

Recombinant human full-length KRT15 protein was used as the immunogen for the Cytokeratin 15 antibody.

Storage

Aliquot the Cytokeratin 15 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.