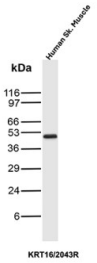
Keratin 16 Antibody KRT16/2043R / CK16 Antibody [clone KRT16/2043R] (V3625)

Catalog No.	Formulation	Size
V3625-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3625-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3625SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3625IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

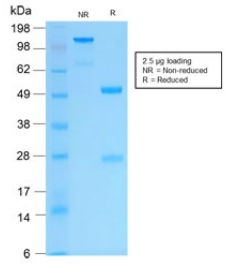
Recombinant RABBIT MONOCLONAL

Bulk quote request

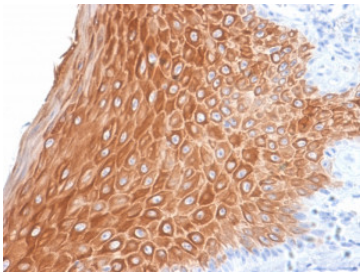
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	KRT16/2043R
Purity	Protein A affinity chromatography
UniProt	P08779
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Western blot: 2-4ug/ml
Limitations	This Keratin 16 Antibody KRT16/2043R / CK16 Antibody is available for research use only.



Keratin 16 Antibody KRT16/2043R by WB in human skeletal muscle. Western blot analysis of human skeletal muscle tissue lysate using Keratin 16 Antibody clone KRT16/2043R. The blot contains a single sample lane alongside molecular weight markers. A prominent immunoreactive band is visible near 48-50 kDa, consistent with the predicted molecular weight of human KRT16, approximately 51 kDa. The detected band migrates within the anticipated molecular weight range for this type I intermediate filament protein. The CK16 Antibody recognizes a protein near the expected molecular weight under the tested conditions. However, skeletal muscle is not a characteristic KRT16-expressing tissue, so the identity of the detected band has not been independently established.



Keratin 16 Antibody KRT16/2043R purity by SDS-PAGE. SDS-PAGE analysis of purified, BSA-free Keratin 16 Antibody clone KRT16/2043R under non-reduced (NR) and reduced (R) conditions. The non-reduced sample exhibits a prominent band near 150 kDa, consistent with intact immunoglobulin. Under reduced conditions, distinct bands migrate at approximately 50 kDa and 25 kDa, corresponding to immunoglobulin heavy and light chains. Molecular weight standards are included for reference. This analysis evaluates the electrophoretic characteristics and purity of the CK16 Antibody preparation rather than the detection of endogenous keratin 16.



Keratin 16 Antibody KRT16/2043R by IHC in human skin. Immunohistochemistry of formalin-fixed, paraffin-embedded human skin tissue using Keratin 16 Antibody clone KRT16/2043R. Brown cytoplasmic immunoreactivity is visible throughout a multilayered epithelial region, highlighting the cytoplasm of numerous keratinocytes. The distribution is consistent with the cytoplasmic localization of keratin 16 in stratified epithelial cells. Hematoxylin counterstaining reveals nuclei in blue, providing contrast with the positively stained epithelium. The CK16 Antibody was applied following heat-induced epitope retrieval in 10 mM citrate buffer, pH 6, for 10-20 minutes, followed by cooling at room temperature for 20 minutes.

Description

Keratin 16 Antibody KRT16/2043R / CK16 Antibody recognizes keratin 16, a type I intermediate filament protein encoded by the KRT16 gene. Keratin 16 is expressed in selected stratified epithelia and becomes strongly induced during epidermal injury, inflammation, and hyperproliferation. Unlike keratins associated primarily with terminal differentiation, KRT16 is closely linked to keratinocyte activation and the remodeling of epithelial tissues under stress. Its expression is particularly prominent in palmoplantar epidermis, hair follicles, and other specialized epithelial compartments.

During cutaneous wound healing, keratinocytes near the wound margin undergo coordinated changes in proliferation, migration, and cytoskeletal organization. KRT16 expression increases as these cells adopt an activated phenotype that supports re-epithelialization. Together with keratin 6 and keratin 17, KRT16 forms part of a stress-associated keratin expression program. These proteins contribute to the mechanical properties of keratinocytes while participating in cellular responses to inflammatory and regenerative signals.

Keratin 16 is also an important marker of epidermal hyperproliferation in inflammatory skin disorders. In psoriasis, KRT16 expression expands beyond its usual restricted distribution and becomes prominent within affected epidermis. This altered pattern reflects keratinocyte activation and abnormal differentiation associated with chronic inflammation. Similar changes can occur in other inflammatory dermatoses and during epidermal repair, making KRT16 expression informative but not disease-specific.

Inherited mutations in KRT16 cause forms of pachyonychia congenita, a disorder characterized by painful palmoplantar keratoderma and variable nail abnormalities. These mutations disrupt intermediate filament organization and compromise the ability of epithelial cells to withstand mechanical stress. The resulting cellular fragility and altered stress responses

illustrate the importance of KRT16 in maintaining epithelial integrity, particularly in tissues exposed to repeated friction and pressure.

NSJ Bioreagents provides Keratin 16 Antibody KRT16/2043R for investigating the distribution of this stress-responsive epithelial protein in human tissues. The CK16 Antibody supports research into epidermal differentiation, inflammatory skin disease, wound repair, and keratin-associated disorders. Examining KRT16 alongside other epithelial markers can help distinguish constitutive keratin expression from the altered differentiation programs that accompany tissue injury and disease.

Explore our Cytokeratin 16 Antibody collection for additional research tools targeting epithelial intermediate filament proteins involved in tissue differentiation, epidermal repair, and skin disease.

Application Notes

Optimal dilution of the Keratin 16 Antibody KRT16/2043R / CK16 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

A C-terminal region peptide was used as the immunogen for the recombinant Keratin 16 antibody.

Storage

Store the recombinant Keratin 16 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Cytokeratin 16 antibody, KRT16 antibody, CK16 antibody, Keratin-16 antibody, Cytokeratin-16 antibody, Keratin 16 Rabbit Monoclonal antibody

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