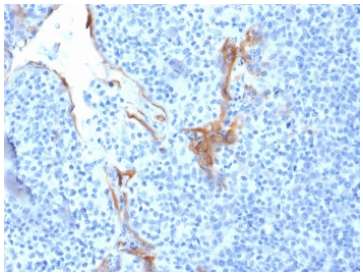
Cytokeratin 16 Antibody LL025 / CK16 Monoclonal Antibody [clone LL025] (V7921)

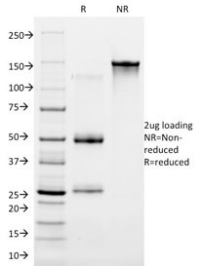
Catalog No.	Formulation	Size
V7921-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7921-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7921SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	LL025
Purity	Protein G affinity chromatography
UniProt	P08779
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This Cytokeratin 16 Antibody LL025 / CK16 Monoclonal Antibody is available for research use only.



Cytokeratin 16 Antibody LL025 by IHC in human tonsil. Immunohistochemistry of formalin-fixed, paraffin-embedded human tonsil tissue using Cytokeratin 16 Antibody clone LL025. Brown immunoreactivity is concentrated within epithelial structures, highlighting the cytoplasm of cells associated with the stratified squamous epithelial compartment. The surrounding lymphoid tissue exhibits comparatively little staining, producing a clear distinction between epithelial and nonepithelial regions. Hematoxylin counterstaining reveals nuclei in blue. The CK16 Monoclonal Antibody was applied following heat-induced epitope retrieval by boiling tissue sections in 10 mM Tris containing 1 mM EDTA, pH 9, for 20 minutes, followed by cooling before staining.



Cytokeratin 16 Antibody LL025 purity by SDS-PAGE. SDS-PAGE analysis of purified, BSA-free Cytokeratin 16 Antibody clone LL025 under reduced (R) and non-reduced (NR) conditions. The reduced sample displays prominent bands migrating at approximately 50 kDa and 25 kDa, corresponding to immunoglobulin heavy and light chains. The non-reduced sample exhibits a prominent band near 150 kDa, consistent with intact immunoglobulin. Molecular weight standards are included for reference. This analysis evaluates the integrity and purity of the CK16 Monoclonal Antibody preparation rather than detection of endogenous cytokeratin 16 protein.

Description

Cytokeratin 16 Antibody LL025 / CK16 Monoclonal Antibody recognizes keratin 16, a type I intermediate filament protein encoded by the KRT16 gene. Cytokeratin 16 is expressed in selected stratified squamous epithelia, where it contributes to the organization and mechanical stability of epithelial cells. Its expression is particularly associated with specialized epithelial compartments and tissues undergoing increased proliferation or remodeling. Changes in KRT16 expression provide information about epithelial differentiation and the response of keratinocytes to physiological and pathological stimuli.

In normal tissues, KRT16 is found in specific regions of stratified squamous epithelium, including specialized epithelial structures exposed to mechanical stress. It is also expressed in selected glandular epithelial populations, including sweat ducts. Keratin 16 frequently forms intermediate filament networks with keratin 6, supporting cytoskeletal organization during epithelial activation. Its distribution differs from that of keratins associated primarily with terminal differentiation, making it useful for examining distinct epithelial phenotypes.

In surgical pathology, Cytokeratin 16 expression has been investigated in squamous cell carcinomas, particularly tumors arising in the head and neck. Alterations in keratin expression accompany changes in epithelial differentiation and may help characterize the phenotype of neoplastic cells. However, KRT16 is not specific for malignancy, and its presence must be interpreted alongside histological features and additional epithelial markers. Reactive epithelial hyperplasia and inflammatory conditions can also produce increased KRT16 expression.

Keratin 16 is additionally associated with epidermal activation during wound healing and inflammatory skin disease. In psoriasis, its expression expands within affected epidermis as keratinocytes adopt an altered differentiation program. Mutations in KRT16 are also responsible for certain forms of pachyonychia congenita, demonstrating the importance of this protein in maintaining epithelial integrity under mechanical stress.

NSJ Bioreagents provides Cytokeratin 16 Antibody LL025 for immunohistochemical investigation of human tissues. This mouse monoclonal antibody recognizes a C-terminal region of KRT16 and supports studies examining epithelial differentiation and pathological changes in keratin expression. The CK16 Monoclonal Antibody is relevant to research involving squamous epithelial tumors, dermatological disorders, and the organization of specialized epithelial tissues.

Explore our Keratin 16 Antibody KRT16/2043R for additional research into KRT16 expression, epithelial differentiation, and keratinocyte responses to tissue injury and inflammation.

Application Notes

Optimal dilution of the Cytokeratin 16 Antibody LL025 / CK16 Monoclonal Antibody should be determined by the researcher.

Immunogen

An amino acid sequence from the C-terminal region of the protein was used as the immunogen for this Cytokeratin 16 antibody.

Storage

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

Alternate Names

Keratin 16 antibody, KRT16 antibody, CK16 antibody, Keratin-16 antibody, Cytokeratin-16 antibody, K16 antibody, Cytokeratin 16 Monoclonal antibody

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