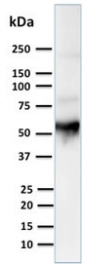
Cytokeratin 10 Antibody LH2 / KRT10 Monoclonal Antibody [clone LH2] (V2174)

Catalog No.	Formulation	Size
V2174-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2174-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2174SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2174IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

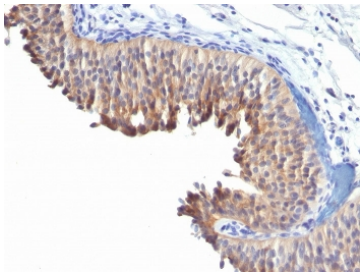
Citations (10)

Bulk quote request

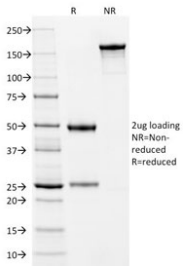
Species Reactivity	Human, Mouse
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	LH2
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	3858
Localization	Cytoplasmic
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 0.5-1ug/ml for 30 min at RT
Limitations	This Cytokeratin 10 Antibody LH2 / KRT10 Monoclonal Antibody is available for research use only.



Cytokeratin 10 Antibody LH2 by WB in Human Thymus. Western blot analysis of human thymus lysate using Cytokeratin 10 Antibody LH2. A prominent immunoreactive band is detected at approximately 59-60 kDa, consistent with the predicted molecular weight of KRT10 (~59 kDa). The single sample lane shows a relatively well-defined band with little additional immunoreactivity. The KRT10 Monoclonal Antibody demonstrates detection of a protein migrating at the expected molecular weight of cytokeratin 10 in human thymus lysate.



Cytokeratin 10 Antibody LH2 by IHC in Human Bladder Carcinoma. Immunohistochemistry of FFPE human bladder carcinoma tissue using Cytokeratin 10 Antibody LH2. Strong brown cytoplasmic staining is observed in the epithelial tumor cells lining irregular tissue structures, with variable staining intensity across the tumor. The KRT10 Monoclonal Antibody highlights the epithelial tumor compartment, while adjacent stromal regions exhibit comparatively weak staining. Nuclei are counterstained blue with hematoxylin. Heat-induced epitope retrieval was performed using 10 mM Tris with 1 mM EDTA, pH 9, for 20 minutes, followed by cooling before staining.



Cytokeratin 10 Antibody LH2 by SDS-PAGE. SDS-PAGE analysis of purified, BSA-free Cytokeratin 10 Antibody LH2 under reducing (R) and non-reducing (NR) conditions, with 2 ug of antibody loaded per lane. The reducing lane shows distinct bands migrating at approximately 50 kDa and 25 kDa, corresponding to the immunoglobulin heavy and light chains, respectively. The non-reducing lane exhibits a prominent band at approximately 150 kDa, consistent with intact IgG. The KRT10 Monoclonal Antibody demonstrates the expected electrophoretic profile of a purified mouse monoclonal antibody preparation.

Description

Cytokeratin 10 Antibody LH2 recognizes keratin 10 (KRT10), a type I intermediate filament protein expressed primarily in differentiating keratinocytes of stratified squamous epithelia. Encoded by the KRT10 gene on chromosome 17, this protein contributes to the structural organization and mechanical stability of the epidermis. KRT10 expression begins when keratinocytes leave the proliferative basal compartment and enter the suprabasal layers, making it an established marker of epidermal differentiation. In normal skin, its distribution is concentrated in the spinous and granular layers, reflecting the progressive maturation of keratinocytes toward terminal differentiation.

Keratin 10 forms intermediate filament networks with keratin 1, its principal type II keratin partner. These cytoskeletal structures help differentiated epidermal cells withstand mechanical stress and maintain tissue integrity. During normal epidermal development, basal keratinocytes predominantly express keratins 5 and 14, whereas suprabasal differentiation is accompanied by increased expression of keratins 1 and 10. This coordinated transition provides a useful framework for investigating keratinocyte maturation and epithelial stratification. Researchers frequently evaluate CK10 alongside involucrin, loricrin, and filaggrin to characterize epidermal development, barrier formation, and changes in differentiation-associated protein expression.

Alterations in KRT10 expression are associated with inflammatory skin disorders, inherited keratin diseases, and epithelial neoplasia. In psoriasis, accelerated epidermal turnover and abnormal keratinocyte differentiation can disrupt the normal expression pattern of keratin 10. Pathogenic variants in KRT10 cause epidermolytic ichthyosis, an inherited disorder characterized by epidermal fragility, blistering, and hyperkeratosis. Keratin 10 is also investigated in squamous cell carcinomas, where its expression may reflect the differentiation status of tumor cells. These associations make KRT10 relevant to studies of epidermal pathology, tissue remodeling, and epithelial tumor biology.

NSJ Bioreagents offers mouse monoclonal clone LH2 for investigating keratin 10 expression in epithelial tissues. This established clone has been used in published research examining keratin expression and epidermal differentiation. The

KRT10 Monoclonal Antibody provides an additional reagent for studying changes in keratinocyte maturation, epithelial organization, and differentiation-associated protein expression. A Cytokeratin 10 Antibody such as LH2 supports research into normal epidermal development, keratin-associated disorders, and diseases involving altered epithelial differentiation.

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

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the Cytokeratin 10 Antibody LH2 / KRT10 Monoclonal Antibody to be titered up or down for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 1mM EDTA, pH 8-9, for 10-20 min followed by cooling at RT for 20 minutes.
2. 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

Skin extract from a human psoriasis patient was used as the immunogen for Cytokeratin 10 Antibody LH2.

Storage

Store the Cytokeratin 10 Antibody LH2 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

BCIE, BIE, EHK, Keratin Type I Cytoskeletal 10, KRT10, Cytokeratin 10 antibodyKeratin 10 antibody, CK10 antibody, KRT10 antibody, Cytokeratin-10 antibody, Keratin-10 antibody, Type I Cytoskeletal Keratin 10 antibody

References (2)

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