

Cytokeratin 17 Antibody Clone E3 / Keratin 17 Antibody (KRT17) [clone E3] (V2176)

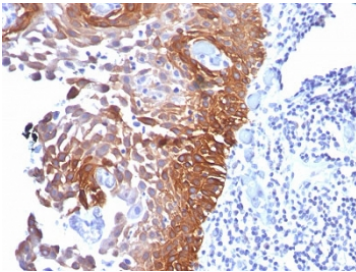
Catalog No.	Formulation	Size
V2176-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2176-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2176SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2176IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml



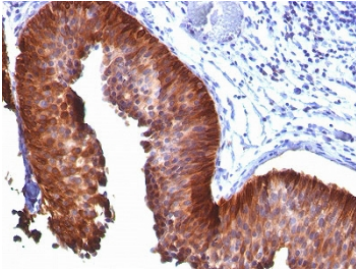
Citations (10)

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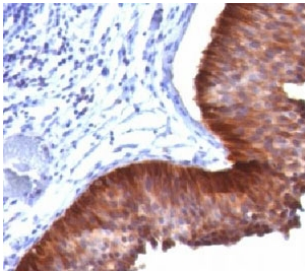
Species Reactivity	Human, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	E3
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	3872
Localization	Cytoplasmic
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Cytokeratin 17 antibody is available for research use only.



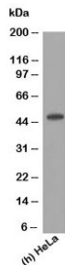
Cytokeratin 17 Antibody Clone E3 immunohistochemistry analysis of human cervical carcinoma tissue. Immunohistochemistry of FFPE human cervical carcinoma demonstrates strong HRP-DAB brown cytoplasmic and membranous staining in tumor epithelial cells using Cytokeratin 17 Antibody Clone E3. The staining highlights malignant epithelial cells consistent with the known expression of Cytokeratin 17 (CK17 / KRT17), an epithelial intermediate filament protein frequently detected in stratified epithelial tissues and epithelial tumors. Adjacent stromal and inflammatory cells are largely negative, supporting epithelial cell specificity of the staining pattern. Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM Tris buffer (pH 9) containing 1 mM EDTA for 10-20 minutes followed by cooling at room temperature prior to antibody incubation.



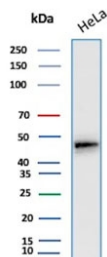
IHC staining of FFPE human bladder carcinoma with Cytokeratin 17 antibody (clone E3).



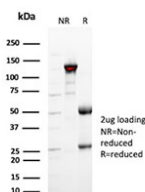
Cytokeratin 17 Antibody Clone E3 immunohistochemistry analysis of human bladder carcinoma tissue. Immunohistochemistry of FFPE human bladder carcinoma demonstrates strong HRP-DAB brown cytoplasmic staining in malignant epithelial cells using Cytokeratin 17 Antibody Clone E3. The staining highlights tumor epithelial cells consistent with the known expression pattern of Cytokeratin 17 (CK17 / KRT17), an epithelial intermediate filament protein commonly detected in stratified epithelial tissues and epithelial-derived tumors. Adjacent stromal cells show minimal staining, supporting epithelial cell-associated expression of CK17 in bladder carcinoma.



Western blot testing of human samples using Cytokeratin 17 antibody (clone E3).



Cytokeratin 17 Antibody Clone E3 western blot analysis of human HeLa cell lysate. Western blot detection using Cytokeratin 17 Antibody Clone E3 demonstrates a clear immunoreactive band in human HeLa cell lysate. Lane 1: human HeLa cell lysate. A band is detected at approximately 48 kDa, consistent with the predicted molecular weight of Cytokeratin 17 (CK17 / KRT17), an epithelial intermediate filament protein that contributes to the structural cytoskeleton of epithelial cells.



SDS-PAGE analysis of purified, BSA-free Cytokeratin 17 antibody (clone E3) as confirmation of integrity and purity.

Description

Cytokeratin 17 (KRT17), also known as Keratin 17 or CK17, is a type I intermediate filament protein encoded by the KRT17 gene and expressed in epithelial tissues. Cytokeratin 17 contributes to the structural cytoskeleton of epithelial cells where keratin filaments provide mechanical stability and maintain cellular architecture. Cytokeratin 17 is particularly enriched in basal epithelial compartments and epithelial appendages, and its expression pattern has made it an important marker for epithelial differentiation studies. Cytokeratin 17 Antibody Clone E3 recognizes the KRT17 protein and has become a widely used reagent in epithelial biology research.

Clone E3 represents one of the most extensively used monoclonal antibodies for detection of Cytokeratin 17. The long research history of Clone E3 has made it a familiar reagent in laboratories investigating epithelial cytoskeletal organization and keratin expression patterns. Because Cytokeratin 17 is a well-established epithelial marker, the reliability and reproducibility associated with Clone E3 have contributed to its frequent appearance in published studies examining epithelial tissues and tumors.

Keratin intermediate filaments are assembled from type I and type II keratin proteins that polymerize into stable filament networks throughout the cytoplasm. These filaments provide tensile strength and maintain epithelial cell structure while supporting intracellular organization. Cytokeratin 17 participates in these networks and contributes to the resilience of epithelial cells exposed to mechanical stress. As a member of the keratin intermediate filament family, KRT17 functions as part of the structural framework that supports epithelial tissue architecture.

Expression of Cytokeratin 17 is frequently observed in basal epithelial layers of stratified epithelia as well as in specialized epithelial structures such as hair follicles and glandular epithelia. Cytokeratin 17 expression can also be detected in epithelial cells undergoing proliferation or regeneration. Because keratin expression varies among epithelial cell types, cytokeratin profiling has become an important approach for studying epithelial differentiation and tissue lineage relationships.

Cytokeratin 17 has also been widely investigated in cancer research, where keratin expression patterns can reflect epithelial lineage and tumor differentiation. Detection of CK17 protein is commonly used in studies evaluating epithelial tumor biology and cytoskeletal remodeling in malignant cells. The consistent performance of Clone E3 across numerous research settings has contributed to its widespread adoption for Cytokeratin 17 detection in epithelial tumor studies.

Cytokeratin 17 Antibody Clone E3 is a mouse monoclonal antibody designed to detect KRT17 protein in research samples. Detection of Cytokeratin 17 using Clone E3 supports studies focused on epithelial cytoskeletal organization, epithelial differentiation, and keratin expression patterns in normal and tumor tissues.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the antibody to be titrated up or down for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA 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

The cytoskeletal fraction of rat colon epithelium was used as the immunogen for this Cytokeratin 17 antibody.

Storage

Store the Cytokeratin 17 antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).

Alternate Names

CK17 antibody, Keratin 17 antibody, KRT17 antibody, Cytokeratin-17 antibody

References (2)