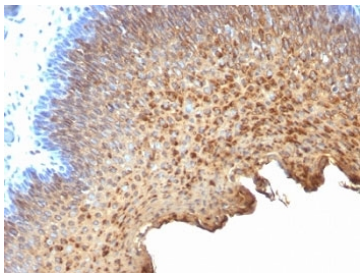
Keratin 10/13 Antibody SPM262 / Cytokeratin 10/13 Monoclonal Antibody [clone SPM262] (V3054)

Catalog No.	Formulation	Size
V3054-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3054-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3054SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3054IHC-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 (3)

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	SPM262
Purity	Protein G affinity chromatography
UniProt	P13645, P13646
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Keratin 10/13 Antibody SPM262 / Cytokeratin 10/13 Monoclonal Antibody is available for research use only.



Keratin 10/13 Antibody SPM262 by IHC in Human Tonsil. Immunohistochemistry of FFPE human tonsil tissue using Keratin 10/13 Antibody SPM262. Brown cytoplasmic staining is observed throughout the stratified squamous epithelium, with prominent immunoreactivity in the differentiated suprabasal epithelial cells. The Cytokeratin 10/13 Monoclonal Antibody highlights the epithelial compartment, with variable staining intensity among individual cells. Nuclei are counterstained blue with hematoxylin. The staining pattern is consistent with CK13 expression in nonkeratinized stratified squamous epithelium. Heat-induced epitope retrieval was performed using 10 mM Tris with 1 mM EDTA, pH 9, for 10-20 minutes, followed by cooling at room temperature for 20 minutes.

Description

Keratin 10/13 Antibody SPM262 recognizes cytokeratins 10 and 13, two type I intermediate filament proteins associated with the differentiation and structural organization of stratified squamous epithelia. Although these proteins belong to the same keratin family, their expression patterns differ according to epithelial specialization. Keratin 10 (KRT10) is primarily expressed in suprabasal keratinocytes of keratinized epidermis, whereas keratin 13 (KRT13) is characteristic of differentiated cells in nonkeratinized stratified squamous epithelia. These differences make CK10 and CK13 useful markers for investigating epithelial identity, maturation, and tissue-specific patterns of keratin expression.

Keratin 10 forms intermediate filament networks with keratin 1, contributing to the mechanical stability of differentiated epidermal keratinocytes. Its expression begins as cells leave the proliferative basal layer and enter the suprabasal compartment. Keratin 13, in contrast, typically associates with keratin 4 and is expressed in tissues such as the oral mucosa, esophagus, and portions of the female reproductive tract. The KRT4/KRT13 filament network helps maintain the structural integrity of nonkeratinized squamous epithelia. Examining these distinct keratin pairs provides insight into epithelial differentiation and the adaptations that allow tissues to withstand different mechanical and environmental conditions.

Changes in KRT10 and KRT13 expression are associated with inherited keratin disorders, inflammatory conditions, and epithelial neoplasia. Pathogenic variants in KRT10 cause epidermolytic ichthyosis, a disorder characterized by epidermal fragility and hyperkeratosis. Mutations in KRT13 are associated with white sponge nevus, a benign inherited condition affecting mucosal epithelia. Altered KRT13 expression has also been reported in squamous epithelial lesions and carcinomas, where changes in keratin expression may accompany abnormal differentiation. These associations make CK10 and CK13 relevant to research involving epithelial pathology, tissue remodeling, and differentiation-associated protein expression.

NSJ Bioreagents offers mouse monoclonal clone SPM262 for investigating cytokeratin expression in epithelial tissues. The antibody is reported to recognize CK10 and CK13 in Western blot analysis, while its recognition in formalin-fixed, paraffin-embedded tissue sections is associated with CK13 rather than CK10. This application-dependent distinction is important when interpreting staining results. The Cytokeratin 10/13 Monoclonal Antibody provides an additional clone option for investigating epithelial differentiation and keratin expression. A Keratin 10/13 Antibody such as SPM262 supports research into stratified epithelial biology and diseases involving altered cytokeratin expression.

Explore our Cytokeratin 10/13 Antibody DE-K13, an established monoclonal antibody supported by Western blot, immunohistochemistry, and immunofluorescence data, for investigating epithelial differentiation and CK10/CK13 expression.

Application Notes

Optimal dilution of the Keratin 10/13 Antibody SPM262 / Cytokeratin 10/13 Monoclonal Antibody should be determined by the researcher.

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 min.
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

A cytoskeletal preparation extracted from human ectocervical epithelium was used as the immunogen for the Keratin 10/13 Antibody SPM262.

Storage

Store the Keratin 10/13 Antibody SPM262 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Cytokeratin 10/13 antibody, CK10/13 antibody, CK10 CK13 antibody, KRT10/KRT13 antibody, Cytokeratin 10 and 13 antibody, Keratin 10 and 13 antibody, Type I Cytoskeletal Keratin 10/13 antibody

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