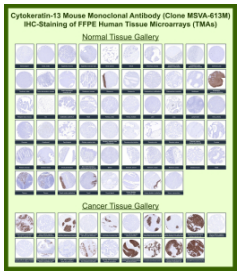
Cytokeratin 13 Antibody for IHC / KRT13 Immunohistochemistry Antibody - Suprabasal Squamous Marker [clone MSVA-613M] (V5930)

Catalog No.	Formulation	Size
V5930-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5930-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant MOUSE MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	MSVA-613M
UniProt	P13646
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1:100-1:200
Limitations	This Suprabasal Squamous Keratin/Cytokeratin 13 Antibody for IHC antibody is available for research use only.



Cytokeratin 13 Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of Keratin 13 KRT13, also known as Cytokeratin 13, in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant mouse monoclonal Cytokeratin 13 antibody clone MSVA-613M. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates selective cytoplasmic localization in suprabasal squamous epithelial cells, including esophageal squamous epithelium, tonsillar surface epithelium, ectocervix, and urothelium, while most non-squamous tissues show minimal to no signal. Within tumor tissue microarrays, strong and consistent staining is observed in squamous cell carcinomas, with little to no staining in non-squamous malignancies such as adenocarcinomas and mesothelioma. Evaluation across large TMA panels enables direct comparison of KRT13 expression across diverse tissue types under standardized conditions. The observed staining patterns support its role as a suprabasal squamous epithelial marker and align with reported KRT13 expression profiles in publicly available datasets.

Description

Cytokeratin 13 (KRT13) is a type I intermediate filament protein expressed predominantly in the suprabasal layers of stratified squamous epithelium, where it contributes to structural integrity and epithelial differentiation. Cytokeratin 13 Antibody for IHC is widely used to detect KRT13 expression in formalin-fixed, paraffin-embedded tissues, supporting analysis of squamous epithelial organization and differentiation. Cytokeratin 13 antibody, also known as KRT13 antibody or CK13 antibody, is a well-established marker of non-keratinizing squamous epithelium and suprabasal cell layers.

KRT13 is characteristically co-expressed with keratin 4 in stratified epithelia such as the esophagus, oral mucosa, cervix, and other non-keratinizing squamous tissues. Its expression is largely restricted to suprabasal epithelial cells and is absent in basal proliferative layers, providing a clear distinction between differentiated and progenitor cell compartments. This layer-specific distribution makes Cytokeratin 13 a valuable marker for assessing epithelial maturation, tissue stratification, and cellular organization within squamous epithelia.

This Cytokeratin 13 Antibody for IHC incorporates clone MSVA-613M, a monoclonal antibody extensively evaluated using tissue microarray (TMA) analysis across a broad panel of normal and cancer tissues. TMA data demonstrate consistent cytoplasmic staining in suprabasal squamous epithelial cells with minimal background in non-squamous tissues, supporting high specificity for KRT13-expressing cell populations. This large-scale tissue validation enables reliable comparison of expression patterns across diverse tissue types within a standardized experimental framework.

In immunohistochemistry, Cytokeratin 13 antibody staining appears as strong cytoplasmic HRP-DAB brown signal in suprabasal epithelial layers, with clear sparing of basal cells and most non-epithelial tissues. TMA-based cancer panels further demonstrate that KRT13 expression is retained in many squamous cell carcinomas, where staining highlights differentiated tumor cell populations, while non-squamous tumors such as adenocarcinomas and mesenchymal tissues typically remain negative. This differential expression pattern provides valuable contrast for identifying squamous lineage and assessing tumor differentiation status.

The detection of KRT13 is particularly informative in studies of epithelial differentiation and disease progression, as alterations in its expression pattern have been associated with dysplasia, loss of differentiation, and carcinoma development in squamous tissues. Changes in suprabasal staining intensity or distribution can therefore provide insight into epithelial remodeling and pathological transformation.

Overall, Cytokeratin 13 antibody reagents provide reliable and specific detection of KRT13 in suprabasal squamous epithelium, supporting immunohistochemical analysis of epithelial differentiation, tissue architecture, and disease-associated alterations in stratified epithelial tissues, with strong validation across TMA datasets.

This antibody is part of a broader Cytokeratin 13 antibody collection supporting epithelial differentiation and squamous tissue analysis.

This antibody is also part of a broader collection of IHC antibodies validated by tissue microarray analysis, supporting consistent staining across normal and cancer tissues.

Application Notes

1. Optimal dilution of the Cytokeratin 13 Antibody for IHC / KRT13 Immunohistochemistry Antibody - Suprabasal Squamous Marker should be determined by the researcher.

2. This Suprabasal squamous keratin/KRT13 antibody is recombinantly produced by expression in CHO cells.

3. Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121oC in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37oC for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions.

Immunogen

Esophageal keratins of rabbit origin were used as the immunogen for the Suprabasal Squamous Keratin/KRT13 antibody.

Storage

Suprabasal squamous keratin/KRT13 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

KRT13 antibody, Cytokeratin 13 IHC antibody, CK13 antibody, Squamous epithelial marker antibody

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