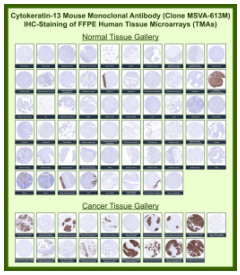
Suprabasal squamous keratin Antibody / KRT13 / Cytokeratin 13 [clone MSVA-613M] (V5930)

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/KRT13 antibody is available for research use only.



Immunohistochemistry analysis of Suprabasal squamous keratin / Cytokeratin 13 antibody (clone MSVA-613M) in human tissues. Formalin-fixed, paraffin-embedded (FFPE) human tissue microarrays containing a broad panel of normal and cancer tissues were stained with Cytokeratin 13 mouse monoclonal antibody (clone MSVA-613M). In normal tissues, brown chromogenic signal is observed predominantly in suprabasal squamous epithelial cells, including esophageal squamous epithelium, tonsillar surface epithelium, ectocervix, and urothelium, while most non-squamous tissues show little to no staining. In cancer tissues, strong cytoplasmic brown staining is observed in squamous cell carcinomas, whereas non-squamous malignancies such as adenocarcinomas and mesothelioma are largely negative. Staining patterns are consistent with known Cytokeratin 13 / KRT13 expression profiles reported in publicly available expression datasets.

Description

Suprabasal squamous keratin Antibody recognizes Cytokeratin 13, also known as Keratin 13 (KRT13), a type I intermediate filament protein that is selectively expressed in the suprabasal layers of non-keratinizing stratified squamous

epithelia. Cytokeratin 13 is a cytoplasmic structural protein that forms heteropolymeric intermediate filaments with type II keratins, providing mechanical stability and maintaining epithelial integrity during squamous differentiation. Suprabasal squamous keratin Antibody is widely used as a marker of suprabasal epithelial maturation and is commonly referred to in the literature as Cytokeratin 13 antibody or Keratin 13 antibody.

Cytokeratin 13 expression is characteristic of differentiated squamous epithelial cells and is prominently observed in mucosal tissues such as oral epithelium, esophagus, cervix, vagina, and urothelium. In these tissues, KRT13 expression is minimal or absent in the basal proliferative compartment and increases as cells undergo terminal differentiation and migrate toward suprabasal layers. This expression pattern makes Suprabasal squamous keratin Antibody particularly useful for distinguishing differentiated squamous epithelium from basal keratinocyte populations that express keratins such as Keratin 5 and Keratin 14.

Altered Cytokeratin 13 expression has been associated with pathological changes in squamous epithelia. Reduced or aberrant KRT13 expression is frequently reported in epithelial dysplasia and squamous cell carcinoma, especially in lesions arising from oral and cervical mucosa. As a result, Cytokeratin 13 antibody staining patterns are commonly evaluated in research studies investigating squamous lineage commitment, epithelial differentiation status, and malignant transformation.

At the cellular level, Cytokeratin 13 contributes to the organization of the intermediate filament cytoskeleton, supporting epithelial cell shape and resistance to mechanical stress. Its differentiation-dependent expression makes Suprabasal squamous keratin Antibody a useful tool for studying epithelial stratification and squamous maturation. The Suprabasal squamous keratin Antibody (clone MSVA-613M) is designed to detect Cytokeratin 13 expression in research applications where assessment of suprabasal squamous differentiation is required.

Application Notes

1. Optimal dilution of the Suprabasal squamous keratin/KRT13 antibody 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.