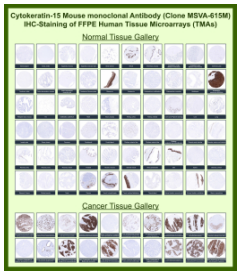
KRT15 Antibody / Keratin 15 / Cytokeratin 15 [clone MSVA-615M] (V5933)

Catalog No.	Formulation	Size
V5933-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5933-20UG	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 IgG2b, kappa
Clone Name	MSVA-615M
UniProt	P19012
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1:50-1:100
Limitations	This KRT15/Keratin 15 antibody is available for research use only.



Immunohistochemistry analysis of KRT15 / Keratin 15 antibody (clone MSVA-615M) in human tissues. Formalin-fixed, paraffin-embedded human tissue microarrays containing a wide range of normal and cancer tissues were stained using KRT15 / Keratin 15 mouse monoclonal antibody (clone MSVA-615M). In normal tissues, brown chromogenic signal is observed in basal epithelial cell populations, including basal keratinocytes of the epidermis, basal cells within tonsillar and esophageal squamous epithelium, basal epithelial cells of prostate glands, and basal cells of urothelium, while suprabasal epithelial layers and most non-epithelial tissues show little to no staining. In cancer tissues, strong cytoplasmic brown staining is observed in squamous cell carcinomas, whereas non-squamous malignancies are largely negative. The observed staining distribution reflects basal cell-associated expression of Keratin 15 in stratified epithelial tissues.

Description

KRT15 Antibody recognizes Keratin 15, also known as Cytokeratin 15 (KRT15), a type I intermediate filament protein that is characteristically expressed in basal epithelial cells and progenitor-associated compartments of stratified squamous epithelia. Keratin 15 is a cytoplasmic structural protein that contributes to the intermediate filament cytoskeleton,

supporting epithelial cell integrity, mechanical resilience, and tissue organization. KRT15 Antibody is commonly used in research and pathology contexts and is frequently referred to in the literature as Cytokeratin 15 antibody or CK15 antibody.

Keratin 15 expression is most prominent in basal keratinocytes of the epidermis and in specialized epithelial niches involved in tissue maintenance and regeneration. In skin, CK15 is enriched in basal epithelial cells and hair follicle-associated compartments, reflecting its association with epithelial stem and progenitor cell populations. In stratified squamous epithelia, KRT15 expression is typically restricted to the basal layer and decreases as cells undergo terminal differentiation and migrate toward suprabasal compartments expressing keratins such as Cytokeratin 10 or Cytokeratin 13. This restricted basal expression pattern makes KRT15 Antibody useful for distinguishing basal and progenitor-associated epithelial cells from more differentiated squamous populations.

Alterations in Keratin 15 expression have been reported in a variety of pathological contexts. Changes in CK15 distribution or intensity have been observed in epithelial hyperplasia, dysplasia, and squamous cell carcinoma, where disruption of basal cell compartments and differentiation programs is a defining feature of disease progression. Consequently, Cytokeratin 15 antibody staining patterns are frequently evaluated in research studies focused on epithelial stem cell biology, basal cell dynamics, and squamous lineage differentiation.

At the cellular level, Keratin 15 contributes to the organization of the intermediate filament network and supports basal epithelial cell architecture. Its association with basal and progenitor cell compartments makes KRT15 Antibody a valuable tool for studies of epithelial stratification, tissue homeostasis, and regeneration. The KRT15 Antibody (clone MSVA-615M) is designed to detect Keratin 15 expression in research applications where identification of basal epithelial or progenitor cell populations is required.

Application Notes

1. Optimal dilution of the KRT15/Keratin 15 antibody should be determined by the researcher.

2. This KRT15/Keratin 15 antibody is recombinantly produced by expression in human HEK293 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

Recombinant full-length human KRT15 protein was used as the immunogen for the KRT15/Keratin 15 antibody.

Storage

KRT15/Keratin 15 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.