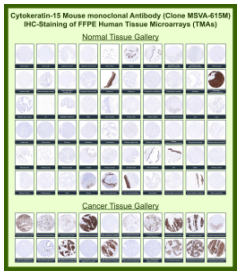
KRT15 Antibody for IHC / Keratin 15 Immunohistochemistry Antibody - Basal Progenitor Marker [clone MSVA-615M] (V5933)

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 Antibody for IHC / Keratin 15 Immunohistochemistry Antibody is available for research use only.



KRT15 Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of Keratin 15 KRT15 in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant mouse monoclonal KRT15 antibody clone MSVA-615M. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates cytoplasmic localization restricted to basal epithelial cell populations, including epidermal basal keratinocytes, basal layers of tonsillar and esophageal squamous epithelium, prostate basal cells, and urothelial basal compartments, while suprabasal epithelial layers and most non-epithelial tissues show minimal to no signal. Within tumor tissue microarrays, strong staining is observed in squamous cell carcinomas, with limited reactivity in non-squamous malignancies, supporting its role as a basal and progenitor-associated epithelial marker. Evaluation across large TMA panels enables direct comparison of KRT15 expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported KRT15 expression profiles in publicly available datasets including the Human Protein Atlas.

Description

Keratin 15 (KRT15) is a type I intermediate filament protein expressed in basal epithelial cells, where it is associated with epithelial stem and progenitor cell populations and contributes to tissue maintenance and regeneration. KRT15 Antibody for IHC is widely used to detect Keratin 15 expression in formalin-fixed, paraffin-embedded tissues, enabling detailed evaluation of basal progenitor compartments, epithelial hierarchy, and regenerative potential. KRT15 antibody, also referred to as Keratin 15 antibody or CK15 antibody, is recognized as a marker of basal and progenitor epithelial cells in stratified tissues.

KRT15 expression is typically localized to basal layers of stratified epithelia, including skin, hair follicles, and selected mucosal tissues, where it marks cell populations with self-renewal capacity and long-term proliferative potential. In contrast to broader basal markers such as Cytokeratin 14, which labels the full basal compartment, KRT15 is often enriched in more specialized progenitor niches, including the hair follicle bulge region and regenerative epithelial zones. This more restricted distribution makes KRT15 particularly valuable for identifying progenitor-associated epithelial subsets and studying epithelial maintenance and repair.

This KRT15 Antibody for IHC incorporates clone MSVA-615M, a monoclonal antibody evaluated using tissue microarray (TMA) analysis across a wide panel of normal and cancer tissues. TMA data demonstrate consistent cytoplasmic staining in basal and progenitor epithelial compartments across multiple tissue types, with strong signal in stratified epithelia and minimal background in stromal and non-epithelial tissues. The use of large-scale TMA panels enables standardized comparison of KRT15 expression across diverse tissues and disease states, supporting reproducible interpretation of staining patterns in both normal and pathological contexts.

In immunohistochemistry, Keratin 15 antibody staining appears as cytoplasmic HRP-DAB brown signal localized to basal epithelial layers and progenitor-enriched regions, with clear separation from more differentiated suprabasal cells. TMA-based cancer analysis further demonstrates variable but frequently strong expression in squamous cell carcinomas and tumors with basal-like characteristics, where staining highlights progenitor-like tumor cell populations. In contrast, many non-squamous malignancies, including adenocarcinomas and mesenchymal tumors, show limited or absent staining, supporting its utility in identifying basal-like differentiation states and epithelial lineage.

The detection of KRT15 is particularly informative in studies of epithelial regeneration, stem cell biology, and disease progression, as expansion or redistribution of KRT15-positive cells is associated with tissue repair, dysplasia, and tumor development. Alterations in staining intensity and spatial distribution can provide insight into changes in epithelial hierarchy and the balance between progenitor and differentiated cell populations.

Overall, Keratin 15 antibody reagents provide reliable and specific detection of KRT15 in basal progenitor epithelial cells, supporting immunohistochemical analysis of epithelial structure, stem and progenitor compartments, and disease-associated alterations in stratified epithelial tissues, with strong validation across tissue microarray datasets.
,br>This antibody is part of a broader KRT15 antibody collection designed to support basal progenitor cell analysis and epithelial differentiation studies across multiple research applications.

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 KRT15 Antibody for IHC / Keratin 15 Immunohistochemistry Antibody - Basal Progenitor Marker 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.

Alternate Names

KRT15 antibody, Keratin 15 IHC antibody, CK15 antibody, Basal progenitor epithelial marker antibody