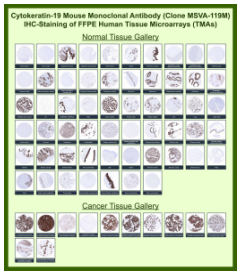
Simple epithelial keratin Antibody / Cytokeratin 19 [clone MSVA-119M] (V5935)

Catalog No.	Formulation	Size
V5935-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5935-20UG	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-119M
UniProt	P08727
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1:100-1:200
Limitations	This recombinant Simple epithelial keratin/Cytokeratin 19 antibody is available for research use only.



Immunohistochemistry analysis of Simple epithelial keratin / Cytokeratin 19 antibody (clone MSVA-119M) in human tissues. Formalin-fixed, paraffin-embedded human tissue microarrays containing a broad range of normal and cancer tissues were stained using Simple epithelial keratin / Cytokeratin 19 mouse monoclonal antibody (clone MSVA-119M). In normal tissues, brown chromogenic signal is observed predominantly in simple and glandular epithelial cells, including gastrointestinal mucosa, pancreatic ducts, bile ducts, renal tubular epithelium, bronchial epithelium, endometrial glands, prostatic glandular epithelium, and urothelium, while stratified squamous epithelia show limited staining and mesenchymal tissues show little to no signal. In cancer tissues, strong cytoplasmic brown staining is observed in carcinomas with glandular or ductal differentiation, whereas non-epithelial malignancies are largely negative. The observed staining distribution reflects epithelial-associated expression of Cytokeratin 19 in human tissues.

Description

Simple epithelial keratin Antibody recognizes Cytokeratin 19, also known as Keratin 19 (KRT19), a type I intermediate filament protein that is characteristically expressed in simple epithelial cells and glandular epithelial compartments across a wide range of human tissues. Cytokeratin 19 is the smallest member of the type I keratin family and lacks the C-terminal tail domain found in most other keratins, a structural feature that contributes to its distinctive filament organization and cellular distribution. Simple epithelial keratin Antibody is widely used in research and pathology settings and is commonly referred to in the literature as Cytokeratin 19 antibody or CK19 antibody.

Cytokeratin 19 expression is a defining feature of simple and ductal epithelia lining internal organs, including gastrointestinal mucosa, pancreatic ducts, bile ducts, renal tubules, bronchial epithelium, mammary epithelium, and prostatic glands. In contrast to basal keratins such as Cytokeratin 14 or Cytokeratin 15, KRT19 expression is typically localized to luminal or ductal epithelial cells rather than basal cell layers. This expression pattern makes Simple epithelial keratin Antibody particularly useful for identifying epithelial cells of glandular or ductal origin and for distinguishing epithelial structures from surrounding stromal or mesenchymal tissue components.

Alterations in Cytokeratin 19 expression have been reported in a variety of pathological contexts. Changes in CK19 expression patterns are frequently observed in epithelial-derived malignancies, including carcinomas of the colon, pancreas, breast, lung, thyroid, and prostate. As a result, Cytokeratin 19 antibody staining patterns are commonly evaluated in research studies focused on epithelial differentiation, ductal lineage identification, and carcinoma biology, particularly in tumors exhibiting glandular architecture.

At the cellular level, Cytokeratin 19 contributes to the organization of the intermediate filament cytoskeleton and supports epithelial cell integrity and structural adaptability. Its broad distribution across simple epithelial tissues makes Simple epithelial keratin Antibody a valuable tool for studies of epithelial lineage tracing, tissue architecture, and epithelial biology. The Simple epithelial keratin Antibody (clone MSVA-119M) is designed to detect Cytokeratin 19 expression in research applications where assessment of epithelial and ductal cell populations is required.

Application Notes

1. Optimal dilution of the Simple epithelial keratin/Cytokeratin 19 antibody should be determined by the researcher.

2. This Simple epithelial keratin/Cytokeratin 19 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

Recombinant full-length human KRT19 protein was used as the immunogen for the recombinant Simple epithelial keratin/Cytokeratin 19 antibody.

Storage

Recombinant KRT19/Keratin 19 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.