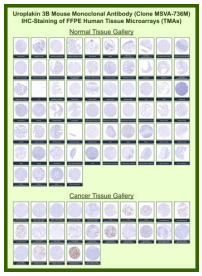
UPK3B Antibody for IHC / UPIII beta [clone MSVA-736M] (V6060)

Catalog No.	Formulation	Size
V6060-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6060-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	MSVA-736M
Purity	Protein G affinity
UniProt	Q9BT76
Localization	Cell surface
Applications	Immunohistochemistry (FFPE) : 1:100-1:200
Limitations	This UPK3B/Uroplakin 3B antibody is available for research use only.



UPK3B Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of Uroplakin 3B UPK3B, also known as UPIII beta, in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant mouse monoclonal UPK3B antibody clone MSVA-736M. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates distinct membranous localization in mesothelial cell populations, including strong staining in mesothelium and mesothelioma samples, while most non-mesothelial tissues remain largely negative. Within tumor tissue microarrays, this selective staining pattern supports its use as a marker of mesothelial differentiation and enables clear distinction from non-mesothelial malignancies. Evaluation across large TMA panels enables direct comparison of UPK3B expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported UPK3B expression profiles in publicly available datasets including the Human Protein Atlas, supporting its specificity for mesothelial lineage studies.

Description

UPK3B antibody recognizes Uroplakin 3B, a membrane-associated protein encoded by the UPK3B gene and commonly referred to as Uroplakin III beta or UPIII beta. UPK3B Antibody for IHC is developed for immunohistochemical detection of this epithelial differentiation marker in formalin-fixed, paraffin-embedded tissue specimens. Uroplakin 3B localizes predominantly to the plasma membrane of specialized epithelial cells, where it contributes to apical membrane structure and barrier integrity.

UPK3B antibody, also known as Uroplakin III beta antibody, UPIII beta antibody, and Uroplakin IIIb antibody in the literature, targets a member of the uroplakin family involved in formation of asymmetric unit membrane plaques. Although Uroplakin 3A is classically associated with terminally differentiated urothelial umbrella cells, Uroplakin 3B demonstrates a broader expression profile, particularly in mesothelial cells lining the pleura, peritoneum, and pericardium. In these tissues, UPIII beta typically exhibits distinct membranous staining reflecting its cell surface localization.

Structurally, Uroplakin 3B is a single-pass transmembrane glycoprotein containing an extracellular domain, a transmembrane segment, and a short cytoplasmic tail. It forms heterodimeric complexes with other uroplakin family members and participates in stabilization of specialized apical membrane domains. Its membranous distribution supports maintenance of epithelial surface architecture and barrier function in differentiated tissues.

UPK3B expression has been documented in normal mesothelium and in mesothelioma, as well as in certain ovarian and Mullerian-derived tumors. Because of this lineage association, Uroplakin III beta antibody is frequently used in research examining mesothelial differentiation and epithelial tumor classification. Distinct membranous staining patterns are particularly informative when evaluating tissue architecture and distinguishing mesothelial from non-mesothelial neoplasms in IHC-based studies.

The mouse monoclonal clone MSVA-736M targets Uroplakin 3B for immunohistochemical research applications. Visualization of crisp membranous staining supports investigation of mesothelial biology, epithelial differentiation status, and tumor origin in tissue-based analyses at NSJ Bioreagents.

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 UPK3B antibody for IHC should be determined by the researcher.

2. 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

A recombinant fragment (around amino acids 100-300) of human Uroplakin 3B (UPK3B) protein (exact sequence is proprietary) was used as the immunogen for the UPK3B antibody for IHC.

Storage

UPK3B/Uroplakin 3B antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.