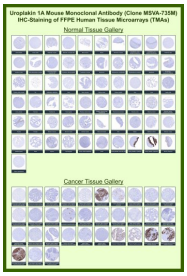
UPK1A Antibody for IHC / Uroplakin 1A [clone MSVA-735M] (V6062)

Catalog No.	Formulation	Size
V6062-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6062-20UG	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 IgG2b, kappa
Clone Name	MSVA-735M
Purity	Protein A affinity
UniProt	O00322
Localization	Membrane
Applications	Immunohistochemistry (FFPE): 1:100-1:200
Limitations	This UPK1A/Uroplakin 1A antibody is available for research use only.



UPK1A Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of Uroplakin 1A UPK1A in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant mouse monoclonal UPK1A antibody clone MSVA-735M. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates strong membranous localization in normal urothelium of the urinary bladder, while most non-urothelial tissues show minimal to absent staining. Within tumor tissue microarrays, selective membranous positivity is observed in urothelial carcinoma, whereas the majority of non-urothelial malignancies remain largely negative. Evaluation across large TMA panels enables direct comparison of UPK1A expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported UPK1A expression profiles in the Human Protein Atlas, supporting its use as a urothelial differentiation marker.

Description

UPK1A antibody recognizes Uroplakin 1A, a transmembrane protein encoded by the UPK1A gene and a key structural

component of the apical surface of urothelial umbrella cells. UPK1A Antibody for IHC (clone MSVA-735M) is a mouse monoclonal antibody developed for immunohistochemical detection of this differentiation-associated membrane protein in formalin-fixed, paraffin-embedded tissues. Uroplakin 1A localizes predominantly to the apical plasma membrane of bladder, ureter, and renal pelvis umbrella cells, where it contributes to formation of specialized urothelial plaques that maintain epithelial barrier integrity and polarity.

UPK1A antibody, also referred to as Uroplakin 1A antibody and UPIa antibody in the literature, targets a member of the uroplakin family of integral membrane proteins. Uroplakin 1A contains multiple transmembrane domains and extracellular loops that participate in heterodimer formation with Uroplakin 2. These heterodimers assemble into asymmetric unit membrane plaques that provide mechanical stability and reduce permeability of the urothelial surface to urine and solutes. This highly specialized membrane architecture protects underlying tissues from osmotic stress and toxic urinary metabolites.

UPK1A expression is tightly restricted to terminally differentiated urothelial umbrella cells and is closely associated with epithelial maturation and maintenance of apical membrane specialization. Because of this tissue-specific expression pattern, Uroplakin 1A is widely used as a marker of urothelial lineage in normal tissue biology and tumor classification research. Distinct membranous staining in umbrella cells supports evaluation of urothelial differentiation status in IHC-based studies.

In oncology research, UPK1A expression is frequently assessed in urothelial carcinoma and in the differential diagnosis of metastatic carcinomas of unknown primary origin. Detection of Uroplakin 1A supports urothelial differentiation, whereas most non-urothelial epithelial tumors lack expression. This selective distribution profile makes UPK1A antibody for IHC a valuable tool for studies of bladder cancer biology and epithelial lineage determination.

The mouse monoclonal clone MSVA-735M enables visualization of Uroplakin 1A expression patterns in normal and neoplastic urothelial tissues for research use 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 UPK1A 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 114-173) of human Uroplakin 1A (UPK1A) protein (exact sequence is proprietary) was used as the immunogen for the UPK1A Antibody for IHC.

Storage

UPK1A/Uroplakin 1A antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

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