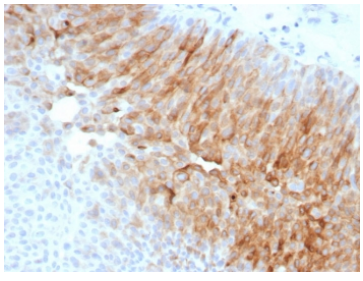
Uroplakin 1A Antibody Recombinant Rabbit MAb / UPK1A [clone UPK1A/8704R] (V4630)

Catalog No.	Formulation	Size
V4630-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4630-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4630SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	UPK1A/8704R
Purity	Protein A/G affinity
UniProt	O00322
Localization	Cell Surface
Applications	ELISA (Order BSA-free format for coating) Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Uroplakin 1A antibody is available for research use only.



Immunohistochemistry of Uroplakin 1A antibody in human bladder carcinoma. Formalin-fixed, paraffin-embedded human bladder carcinoma tissue was stained with recombinant rabbit monoclonal Uroplakin 1A antibody (clone UPK1A/8704R) following heat-induced epitope retrieval by boiling in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes and cooling prior to testing. HRP-DAB brown chromogenic signal highlights strong membranous staining in tumor cells, consistent with the apical membrane localization of Uroplakin 1A in urothelial differentiation, while surrounding stromal and non-urothelial cells remain largely negative.

Description

Uroplakin 1A antibody recognizes Uroplakin 1A, a transmembrane protein encoded by the UPK1A gene and a key structural component of the urothelial apical membrane. Uroplakin 1A Antibody Recombinant Rabbit MAb (clone UPK1A/8704R) is developed for research applications focused on detecting this differentiation-associated protein in urothelial tissues. Uroplakin 1A is localized to the apical plasma membrane of umbrella cells lining the urinary bladder and other parts of the urinary tract, where it contributes to formation of specialized urothelial plaques that support barrier integrity.

Uroplakin 1A antibody, also referred to as UPK1A antibody and UPIa antibody in the literature, targets a member of the uroplakin family that forms heterodimeric complexes with other uroplakin proteins. Uroplakin 1A contains multiple transmembrane domains and extracellular loops that participate in assembly of asymmetric unit membrane plaques. These plaques provide mechanical strength and create a highly impermeable surface, protecting underlying tissues from urine toxicity and osmotic stress.

UPK1A expression is highly restricted to differentiated urothelial umbrella cells in the bladder, ureter, and renal pelvis. Its expression is associated with terminal urothelial differentiation and maintenance of epithelial polarity. Because of this tissue-specific distribution, Uroplakin 1A is widely studied as a marker of urothelial lineage and differentiation status.

In oncology research, UPK1A expression is commonly evaluated in urothelial carcinoma and in the differential diagnosis of metastatic tumors of unknown primary origin. Membranous staining of Uroplakin 1A can support identification of urothelial differentiation in carcinoma specimens, while most non-urothelial epithelial tumors are negative. This selective expression profile makes Uroplakin 1A antibody useful for studies of bladder cancer biology and tumor classification in tissue-based analyses.

The recombinant rabbit monoclonal clone UPK1A/8704R provides specific recognition of Uroplakin 1A for research use, enabling visualization of urothelial differentiation patterns and investigation of urinary tract epithelial biology at NSJ Bioreagents.

Application Notes

Optimal dilution of the Uroplakin 1A antibody recombinant rabbit mAb should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 100-200) from the human protein was used as the immunogen for the Uroplakin 1A antibody recombinant rabbit mAb.

Storage

Aliquot the Uroplakin 1A antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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