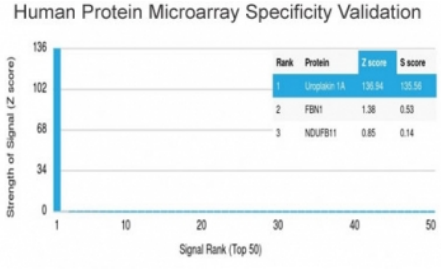
Uroplakin 1A Antibody Protein Microarray Validated / UPK1A [clone UPK1A/2924] (V8983)

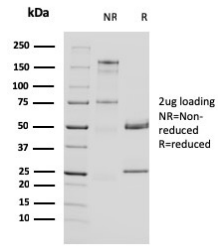
Catalog No.	Formulation	Size
V8983-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V8983-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V8983SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	UPK1A/2924
Purity	Protein A/G affinity
UniProt	O00322
Localization	Cell Surface
Applications	ELISA (order BSA-free Format For Coating) :
Limitations	This Uroplakin 1A antibody is available for research use only.



HuProt protein microarray specificity analysis of Uroplakin 1A antibody (clone UPK1A/2924). The antibody was screened against a HuProt microarray containing more than 19,000 full-length human proteins. Signal intensity is expressed as a Z-score, representing the number of standard deviations above the mean signal generated across the array when the antibody, together with a fluorescently labeled anti-IgG secondary antibody, binds to a given protein. Proteins are ranked in descending order by Z-score, and the S-score reflects the difference in Z-scores between the top-ranked protein and the next highest signal, providing a quantitative measure of relative target specificity. Clone UPK1A/2924 demonstrates a markedly elevated Z-score for Uroplakin 1A with strong S-score separation from other proteins, supporting highly specific recognition of UPK1A on the array.



SDS-PAGE analysis of purified, BSA-free Uroplakin 1A antibody (clone UPK1A/2924) as confirmation of integrity and purity.

Description

Uroplakin 1A antibody recognizes Uroplakin 1A, a urothelial differentiation-associated membrane protein encoded by the UPK1A gene. Uroplakin 1A Antibody Protein Microarray Validated (clone UPK1A/2924) is a mouse monoclonal antibody developed for research applications requiring highly specific detection of this apical membrane component in urothelial tissues. Uroplakin 1A localizes predominantly to the apical plasma membrane of umbrella cells lining the urinary bladder, ureter, and renal pelvis, where it contributes to formation of specialized urothelial plaques that maintain barrier integrity and epithelial polarity.

Uroplakin 1A antibody, also referred to as UPK1A 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 structural role is essential for protecting underlying tissues from osmotic stress and toxic metabolites.

UPK1A expression is highly restricted to differentiated urothelial umbrella cells and is closely associated with terminal epithelial differentiation. Because of this tissue-specific expression pattern, Uroplakin 1A is widely studied as a marker of urothelial lineage in both normal tissue biology and tumor classification research. Membranous staining patterns are particularly informative in immunohistochemical evaluation of bladder and upper urinary tract tissues.

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

Protein microarray validation of clone UPK1A/2924 supports its specificity for UPK1A across large-scale human protein panels, providing confidence in target recognition for tissue-based and proteomic research applications at NSJ Bioreagents.

Application Notes

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

Immunogen

A portion of amino acids 114-173 was used as the immunogen for the Uroplakin 1A antibody.

Storage

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