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Uroplakin Ia Rabbit pAb

Catalog # AP97219

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	O00322
Other Accession	O00322
Reactivity	Human
Predicted	Rat, Pig, Mouse, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28879
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Uroplakin Ia
Epitope Specificity	101-200/258
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the tetraspanin (TM4SF) family.
SUBUNIT	Homodimer; disulfide-linked. Interacts with uroplakin-2 (UPK2).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The asymmetric unit membrane (AUM) forms numerous plaques, which cover the apical surface of the urothelium. These plaques are thought to strengthen the urothelium and reduce the risk of rupturing during ladder distention. They are composed of four major integral membrane proteins called uroplakins (UP). The uroplakin family comprises UPIa, UPIb, UPII, and UPIII. Family members are conserved among several species, including human, mouse, rat, rabbit, dog, pig and sheep. UPIa and UPIb form tightly packed structures with UPII and UPIII, respectively. This pairing is required for normal urothelial plaque formation and is regulated by proteolytic processing of the uroplakin proteins. Uroplakins are expressed in normal urothelium and are used as specific markers of urothelial differentiation. They are also expressed in a majority of transitional cell carcinomas of the bladder (TCCs), which make the uroplakins a useful marker for detecting bladder cancer metastasis and for staging and monitoring chemotherapeutic response.

Additional Information

Gene ID	11045
Other Names	TSPAN21; UP1A; UPIA; UPKA; UPK1A_HUMAN; UPK1A; Tetraspanin-21 (Tspan-21); Uroplakin Ia (UPIa | UPKa); Q3KNU5_HUMAN; Q3KNU6_HUMAN; uroplakin 1A
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	UPK1A
Synonyms	TSPAN21
Function	Component of the asymmetric unit membrane (AUM); a highly specialized biomembrane elaborated by terminally differentiated urothelial cells. May play an important role in normal bladder epithelial physiology, possibly in regulating membrane permeability of superficial umbrella cells or in stabilizing the apical membrane through AUM/cytoskeletal interactions (By similarity).
Cellular Location	Membrane; Multi-pass membrane protein.
Tissue Location	High expression restricted to ureteric urothelium (most superficial cells); low expression in prostate. Expression in normal urothelial cells is lost in culture. Some expression in tumor cell lines derived from urothelial malignancies

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.