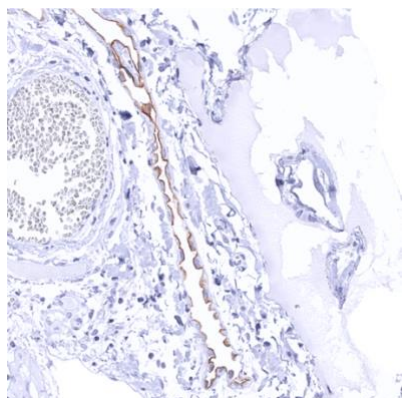


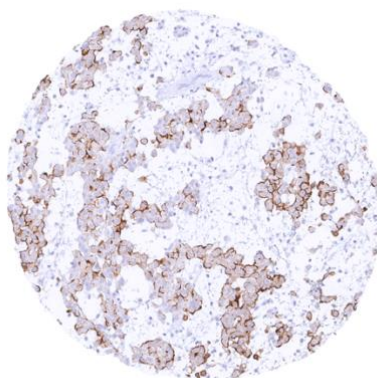
## Anti- Uroplakin3B Antibody MSVA-736M / Mouse monoclonal

Human SwissProt	Q9BT76
Human Gene Symbol	UPK3B
Synonyms	FLJ32198, MGC10902, p35, UPIIIb
Specificity	Uroplakin 3B
Immunogen	Recombinant human UPK3B fragment
Isotype	Mouse / IgG
Species Reactivity	Human
Localization	Intracellular, Membraneous.

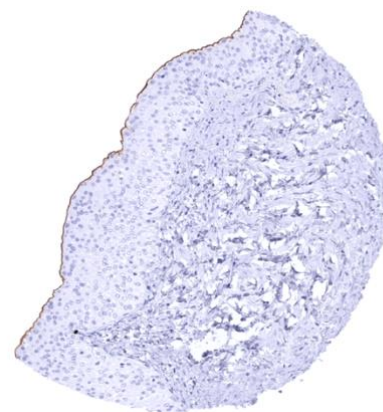
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available without BSA.
Positive Control	Urinary bladder: A moderate to strong membranous Upk3a immunostaining should be seen in umbrella cells of the normal urothelium (the staining is usually limited to apical surface membrane of umbrella cells).
Negative Control	Colon: Upk3a immunostaining should be absent in all cells of the colon mucosa.



Distinct Upk3b immunostaining of apical membranes of peritoneal mesothelial cells.



Epithelioid mesothelioma with membranous Upk3b staining of variable intensity in most tumor cells.



Urothelium with distinct Upk3b immunostaining of the apical membranes of umbrella cells.

### Biology

The Uroplakin 3B (Upk3b) protein is coded by the UPK3b gene located at 7q1.23. Upk3b is one out of 5 known uroplakin (Upk) protein particles that cooperatively form apical asymmetrical unit membrane (AUM) plaques which play an important role in the stabilization and strengthening of epithelial cells that line the bladder. These AUM plaques enable the inner bladder membrane to stretch and prevent urothelial cells from rupturing during bladder distension. Upks are assembled in the endoplasmic reticulum (ER), where they heterodimerize prior to escaping the ER. Upk3b heterodimerizes with Upk1b. Upk heterodimers subsequently form tetramers which then combine as concentric hexameric rings that are packaged into vesicles and trafficked to the cell surface. AUMs and Upk proteins may have a role in mediating membrane permeability and signal transduction events that are involved in the regulation of cell development, activation, growth, and motility. In normal tissues, Upk3b staining is seen in the luminal membranes of umbrella cells of the urothelium, mesothelial cells, and of amnion cells. Among cancers, Upk3b expression is most commonly seen in urothelial carcinomas and in ovarian cancers (according to TCGA). Rarely, it can also be found in other tumors.

### Potential Research Applications

- The prevalence and clinical significance of Upk3b expression in cancer is unknown.
- The potential diagnostic utility of Upk3b immunostaining needs to be further evaluated.

### Protocol Suggestions

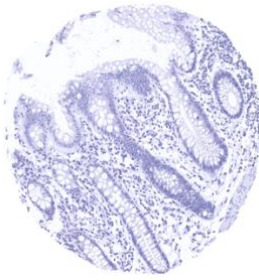
**Dilution: 1:150. pH 7,8 is optimal.** Freshly cut sections should be used (more than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

### Limitations

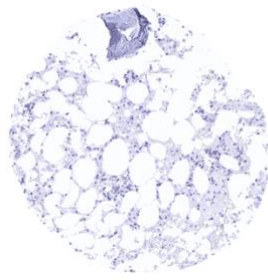
This antibody is available for **research use only** and is not approved for use in diagnostics.

### Warranty

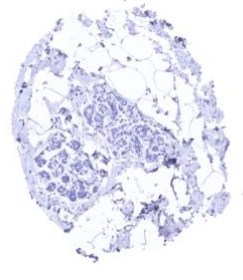
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



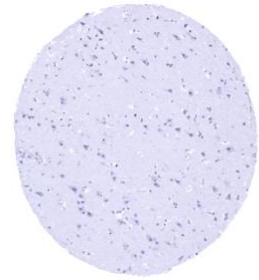
Appendix, mucosa



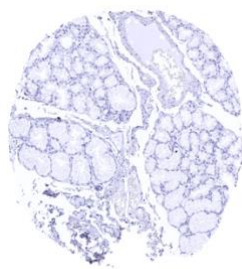
Bone marrow



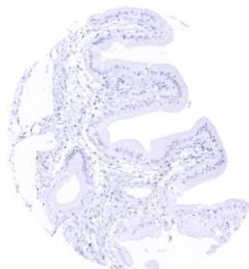
Breast



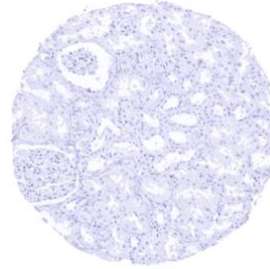
Cerebrum, grey matter



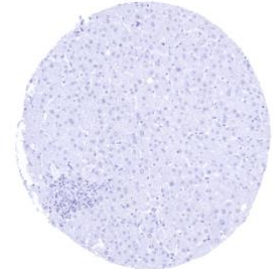
Duodenum, Brunner gland



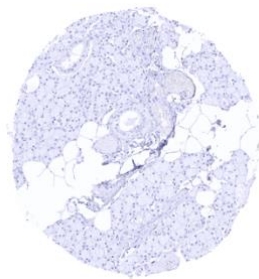
Gallbladder, epithelium



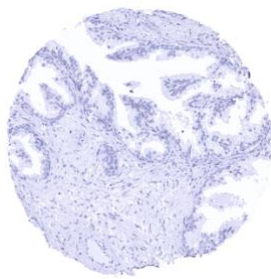
Kidney, cortex



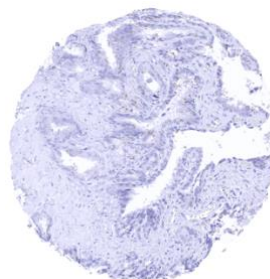
Liver



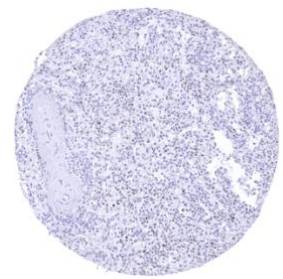
Parotid gland



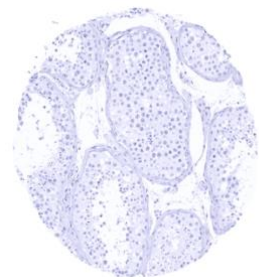
Prostate



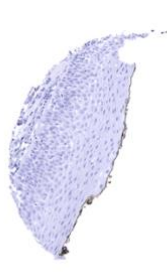
Seminal vesicle



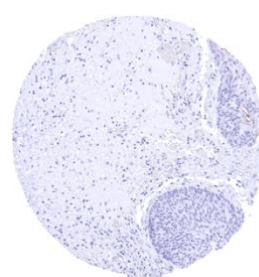
Spleen



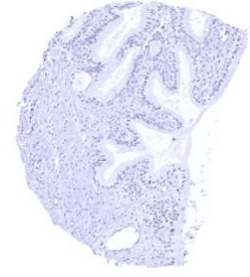
Testis



Tonsil, surface epithelium – Note-  
Surface is inked (no staining)



Urinary bladder, urothelium –  
Distinct Upk3b immunostaining of  
apical membranes of umbrella cells



Uterus, endocervix