

Rabbit Anti-Uroplakin III [EPR14420]: RM0403, RM0403RTU7

Intended Use: For Research Use Only

Description: Uroplakins (UPs) are a family of transmembrane proteins (UPs Ia, Ib, II and III) that are specific differentiation products of urothelial cells. In non-neoplastic mammalian urothelium, UPs are expressed in the luminal surface plasmalemma of superficial (umbrella) cells, forming complexes of 16-nm crystalline particles. Uroplakin III is expressed in urothelial carcinomas, whereas many non-urothelial carcinomas were UPIII-negative. Recent studies have shown that UP expression might reflect the malignant potential of urothelial cancer cells as well as being cytodifferential markers of urothelial cells. UPIII expression was strongly associated with lower tumor grades that lack of UPIII expression in urothelial tumors of the upper urinary tract was associated with much higher rates of metastases, and that 5-year specific survival was much worse for UPIII negative tumors (54%) than for UPIII positive tumors (100%). Apparently UPIII expression is a better indicator of the malignant potential of the tumor than the grade of the tumor.

Specifications

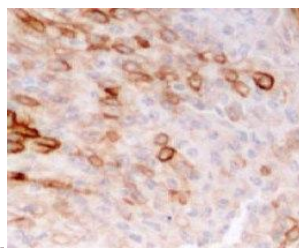
Clone: EPR14420 equivalent to EP321
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human
 Localization: Cytoplasm and membrane
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C.
 Applications: IHC, Flow Cyt.
 Package:

Description	Catalog No.	Size
Uroplakin III Concentrated	RM0403	1 ml
Uroplakin III Prediluted	RM0403RTU7	7 ml

IHC Procedure*

Positive Control Tissue: Bladder, urothelial carcinoma
 Concentrated Dilution: 100-500
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human bladder carcinoma stained with anti-Uroplakin III using DAB

References:

1. Uroplakin II Outperforms Uroplakin III in Diagnostically Challenging Settings. Smith SC, et al. Histopathology. Jan2, 2014.
2. Evaluation of Tamm-Horsfall protein and uroplakin III for forensic identification of urine. Akutsu T, et al. J Forensic Sci. May;55(3):742-6, 2010.
3. Uroplakin III-delta4 messenger RNA as a promising marker to identify nonulcerative interstitial cystitis. Zeng Y, et al. J Urol. Oct;178(4 Pt 1):1322-7, 2007.
4. Loss of uroplakin III expression is associated with a poor prognosis in patients with urothelial carcinoma of the upper urinary tract. Ohtsuka Y, et al. BJU Int. Jun;97(6):1322-6, 2006.