










Key Antibodies For  
**Bladder Cancer**



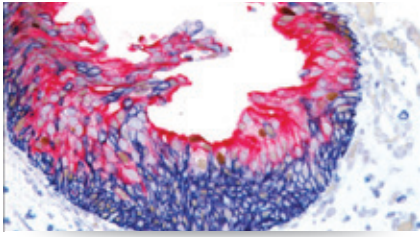
Bladder cancers are the fifth highest diagnosed cancer in the United States, with about 4.6% of new cancer cases classified as bladder cancer, contributing approx. 2.8% of cancer deaths yearly. As of 2013, there were approximately 587,500 people living with bladder cancer in the United States. Those diagnosed with bladder cancer have a 5 year survival rate of 77.5%. Over the last 10 years, rates for new bladder cancer cases have been falling on average 0.8% each year. Biocare Medical is proud to offer key bladder cancer antibodies that may aid in the identification of their respective proteins by IHC in FFPE tissues.

SEER Cancer Statistics Factsheets: Bladder Cancer, National Cancer Institute. Bethesda, MD <http://seer.cancer.gov/statfacts/html/urinb.html>

**Key Antibodies for Bladder Cancer**

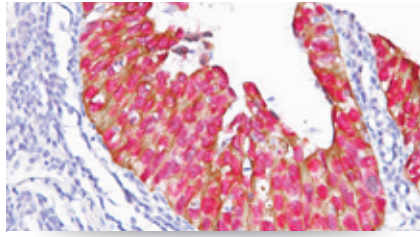
Product Name	Source	Clone	Catalog Number
URO-3™ Triple Stain		BC8 + EP9 + Ks20.8	PM 370TS
Uro-2™ (CK20 + p53)		Ks20.8 + EP9	API 3001DS
Uroplakin II + Uroplakin III		BC21 + BC17	API 3094
GATA-3		L50-823	CM 405; PM 405; OAI 405
Uroplakin II		BC21	ACI 3051; API 3051; AVI 3051; OAI 3051
β-Catenin		14	CM 406; PM 406
Smoothelin		R4A	CM 372; PM 372
ERCC1		4F9	ACI 3147
CDH17 (M)		1H3	ACI 3111; API 3111; AVI 3111

# Key Antibodies for Bladder



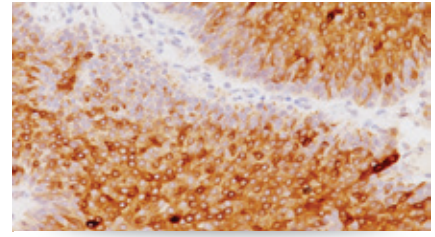
## URO-3™ Triple Stain

URO-3 Triple Stain (CD44 + p53 + CK20) may aid in differentiating urothelial reactive atypia from carcinoma *in situ* (CIS) in bladder. For reactive atypia, CD44 shows increased reactivity in all layers of the urothelium. In CIS, diffuse reactivity for CK20 and p53 is observed throughout the urothelium.



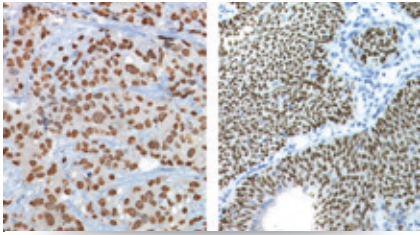
## URO-2™ (CK20 + p53)

In normal urothelium, the superficial umbrella cell layer shows reactivity for CK20 only; whereas, p53 nuclear staining is absent to focal. In cases of carcinoma *in situ*, diffuse nuclear reactivity for p53 is throughout the urothelium and diffuse, strong cytoplasmic reactivity is observed for CK20.



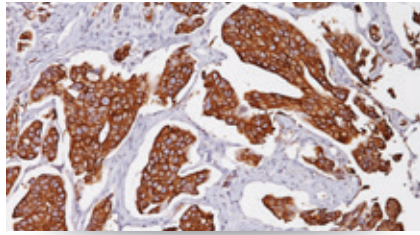
## Uroplakin II + Uroplakin III

Uroplakin II and Uroplakin III are highly specific antibodies that may be useful in identifying tumors of urothelial origin. It is a specific and sensitive antibody cocktail for urothelial carcinoma and in discriminating bladder cancer from renal and prostate carcinomas.



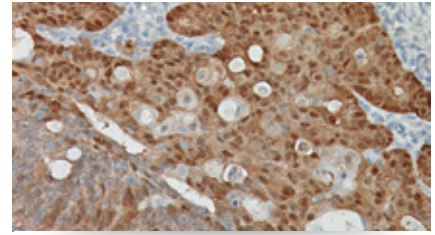
## GATA-3

GATA-3 (GATA binding protein 3) is a member of the GATA family of transcription factors. GATA-3 has been shown to be a novel marker for bladder cancer. In one study, GATA-3 stained 67% of 308 urothelial carcinomas but no prostate or renal carcinomas.



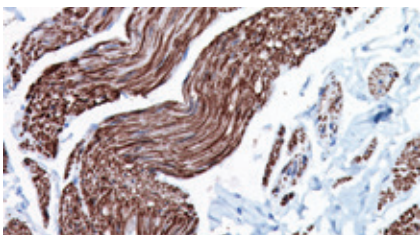
## Uroplakin II

Uroplakin II [BC21] is a highly specific antibody that may be useful in identifying tumor of urothelial origin. Uroplakin II mRNA is highly specific and is expressed in both bladder cancer tissues and peripheral blood of patients with primary and metastatic urothelial carcinoma of the bladder.



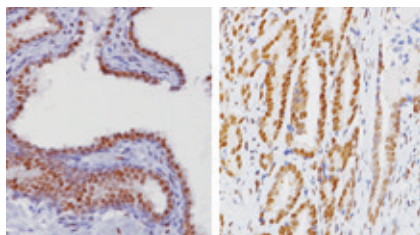
## β-Catenin

The β-catenin reactivity pattern may distinguish between bladder vs. colorectal adenocarcinomas. Nuclear and cytoplasmic staining is seen in primary colorectal adenocarcinomas. Membranous and cytoplasmic staining was observed in primary bladder adenocarcinomas and urothelial carcinomas with glandular differentiation.



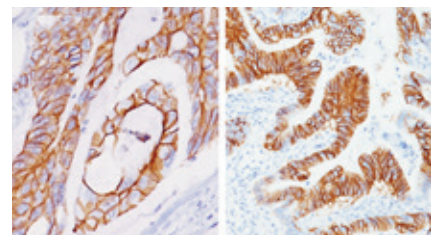
## Smoothelin

Smoothelin is exclusively expressed in fully differentiated (contractile) smooth muscle cells (SMC). This antibody has been reported to be a useful tool in monitoring SMC cell differentiation; and may aid in the distinction of terminally differentiated smooth muscle cells and the staging of bladder carcinoma.



## ERCC1

Excision repair cross-complementation group 1 (ERCC1) expression may have prognostic value in bladder urothelial carcinomas, as patients with ERCC1 positive tumors may have better disease-free survival. Clone 4F9 (unlike clone 8F10) does not show cross-reaction with PCYT1A, an unrelated nuclear membrane protein.



## CDH17 (M)

CDH17 has been shown to be a useful marker for distinguishing between primary urinary bladder adenocarcinoma and urothelial carcinoma with glandular differentiation. It does not distinguish primary urinary bladder adenocarcinoma from colorectal adenocarcinoma secondarily involving the bladder.

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