Uroplakin III
Concentrated and Prediluted Monoclonal Antibody

Catalog Number: ACI 3023 A, C
Description: 0.1, 1.0 ml, concentrated
Dilution: 1:100-1:200
Diluent: Van Gogh Yellow

Intended Use:
For In Vitro Diagnostic Use

Uroplakin III is intended for laboratory use in the qualitative identification of Uroplakin III protein by immunohistochemistry (IHC) in formalin-fixed paraffin-embedded (FFPE) human tissues. The clinical interpretation of any staining or its absence should be complemented by morphological studies using proper controls and should be evaluated within the context of the patient's clinical history and other diagnostic tests by a qualified pathologist.

Summary and Explanation:
Uroplakin III is a 47 kDa glycoprotein present in the urothelial surface membrane of human renal pelvis, ureter, bladder and urethra. Uroplakin III clone BC17 is a newly developed clone, which has demonstrated a higher sensitivity (33/59, 56%), compared with clone AU1 (19/58, 32%) on urothelial transitional cell carcinomas, in-house studies. With the exception of bladder, BC17 staining was negative in all normal and neoplastic tissues including breast, lung, colon, prostate, kidney, ovarian, liver and pancreatic cancers; therefore, clone BC17 is highly specific to uroepithelial tumors and may be useful in the discrimination of bladder, renal and prostate cancers. Conversely, loss of Uroplakin III expression in bladder cancers has been associated with higher grade, muscle-invasive cancer and lymphovascular invasion. This new Uroplakin III mouse monoclonal is far superior to clone AU1 and may be used in a panel of antibodies including GATA3, p63 and S100P. PATENT PENDING.

Principle of Procedure:
Antigen detection in tissues and cells is a multi-step immunohistochemical process. The initial step binds the primary antibody to its specific epitope. After labeling the antigen with a primary antibody, a secondary antibody is added to bind to the primary antibody. An enzyme label is then added to bind to the secondary antibody; this detection of the bound antibody is evidenced by a colorimetric reaction.

Source: Mouse monoclonal

Species Reactivity: Humans, others not tested
Clone: BC17
Isotype: IgG1

Total Protein Concentration: ~10 mg/ml. Call for lot specific Ig concentration

Epitope/Antigen: Uroplakin III
Cellular Localization: Membrane and cytoplasmic

Positive Tissue Control: Bladder cancer

Known Applications:
Immunohistochemistry (formalin-fixed paraffin-embedded tissues).

Supplied As: Buffer with protein carrier and preservative

Storage and Stability:
Store at 2°C to 8°C. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

Protocol Recommendations:

Peroxide Block: Block for 5 minutes with Biocare's Peroxidazed 1.

Pretreatment: Perform heat retrieval using Biocare's Reveal Decloaker. Refer to the Reveal Decloaker product datasheet for specific instructions.

PATENT PENDING.

Technical Note:
This antibody has been standardized with Biocare's MACH 4 detection system. It can also be used on an automated staining system and with other Biocare polymer detection kits. Use TBS buffer for washing steps.

Limitations:
The optimum antibody dilution and protocols for a specific application can vary. These include, but are not limited to: fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of Biocare products. Ultimately, it is the responsibility of the investigator to determine optimal conditions. The clinical interpretation of any positive or negative staining should be evaluated within the context of clinical presentation, morphology and other histopathological criteria by a qualified pathologist. The clinical interpretation of any positive or negative staining should be complemented by morphological studies using proper positive and negative internal and external controls as well as other diagnostic tests.

Quality Control:
Refer to CLSI Quality Standards for Design and Implementation of Immunohistochemistry Assays; Approved Guideline-Second edition (E/1A28-A2) CLSI Wayne, PA USA (www.clsi.org). 2011

Precautions:
1. This antibody contains less than 0.1% sodium azide. Concentrations less than 0.1% are not reportable hazardous materials according to U.S. 29 CFR 1910.1200, OSHA Hazard communication and EC Directive 91/155/EC. Sodium azide (NaN₃) used as a preservative is toxic if ingested. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing. (Center for Disease Control, 1976, National Institute of Occupational Safety and Health, 1976)
2. Specimens, before and after fixation, and all materials exposed to them should be handled as if capable of transmitting infection and disposed of with proper precautions.
3. Never pipette reagents by mouth and avoid contacting the skin and mucous membranes with reagents and specimens. If reagents or specimens come in contact with sensitive areas, wash with copious amounts of water.
4. Microbial contamination of reagents may result in an increase in nonspecific staining.
5. Do not use reagent after the expiration date printed on the vial.
6. The MSDS is available upon request and is located at http://biocare.net/support/msds/.
References:

Troubleshooting:
Follow the antibody specific protocol recommendations according to data sheet provided. If atypical results occur, contact Biocare’s Technical Support at 1-800-542-2002.