Mouse anti-Uroplakin III
Cat. No.: AIB-30180 (0.5 ml Concentrate);

Instructions for use

Intended use
This antibody is designed for the specific localisation of Uroplakin III in formalin-fixed, paraffin-embedded tissue sections**.** It is also suitable for Western Blotting but not for frozen tissue sections.
Anti-Uroplakin III antibody is intended for research use only.

Specifications

Specificity:	Uroplakin III
Immunogen:	Asymmetric unit membrane (AUM-) preparation from bovine bladder
Clone:	AU1
Isotype:	Mouse IgG1
Species reactivity:	Human +, rat +, pig +, cow +, others not tested

Summary and Description
Uroplakins Ia, Ib, II and III are structural proteins of terminal differentiated urothelial cells. In normal urothelia they are expressed in the luminal cytoplasmic membrane of umbrella cells.
The antibody of clone AU1 reacts specifically with Uroplakin III. In formalin-fixed paraffin sections Uroplakin III can be detected in 50 – 60 % of primary urothelial carcinomas und metastatic carcinomas of urothelial origin. Uroplakin III is known as specific urothelial differentiation marker in the context of metastatic carcinomas of unknown origin. Benign Brenner tumours, but not transitional cell carcinomas of the ovary, are the only exceptions from urothelial expression of Uroplakin III described so far.
The immunohistochemical detection of Uroplakin III often results in irregular allotted signals, sometimes only with focal positivity. Additionally, cytoplasmic staining of varying intensity may occur besides the membrane staining.

Reagent provided
Protein A-purified cell culture supernatant in buffer with carrier protein and preservative for stabilisation in the following formats:

Concentrate: 0.5 ml (Cat. No. AIB-30180)

Dilution of primary antibody
Dilution of Nordic BioSites' concentrated antibody depends on the detection system used. The final working dilution must always be determined by the user. The elaboration of staining protocol should be done by an experienced specialist. For Nordic BioSites' recommendations see chapter 'Staining procedure'.

Storage and handling
The antibody should be stored at 2-8°C without further dilution.
Dilutions of the concentrated antibody should be done with a suitable antibody dilution buffer (e.g. BCB-20005/-20006) from Nordic BioSite). The diluted antibody should be stored at 2-8°C after use. Stability of this working solution depends on various parameters and has to be confirmed by appropriate controls. The antibody provided is suitable for use until the expiry date indicated on the label, if stored at 2-8°C. Do not use product after the expiry date. Positive and negative controls should be run simultaneously with all specimens. If unexpected staining is observed which cannot be explained by variations in laboratory procedures and a problem with the antibody is suspected, contact Nordic BioSites' technical support.

Precautions
Use through qualified personnel only.
Wear protective clothing to avoid contact of reagents and specimens with eye, skin and mucous membranes. If reagents or specimens come in contact with sensitive area, wash with large amounts of water.
Microbial contamination of the reagent must be avoided, since otherwise non-specific staining may occur.
Sodium azide (NaN_3), used for stabilisation, is not considered hazardous material in the concentration used. Reaction of sodium azide with lead or copper in drainage pipes can result in the formation of highly explosive metallic

azides.Sodium azide should be discarded in a large volume of running water to avoid formation of deposits. Material safety data sheets (MSDS) are available upon request.

Staining procedure
Refer to the following table for conditions specifically recommended for this antibody. Also refer to detection system data sheets for guidance on specific staining protocols or other requirements.

Parameters	Nordic BioSites recommendations
*Pre-treatment	Heat Induced Epitope Retrieval in Citrate Buffer pH 6.0 (BCB-20015/-20016) or enzymatic pre-treatment
*Control tissue	Urothelia
*Working dilution	1:25-1:50 (for concentrates)
*Incubation time	60 minutes

Quality control
The recommended positive control tissue for this antibody is urothelia. We recommend carrying out a positive and a negative control with every staining run. Please refer to the instructions of the detection system for guidance on general quality control procedures.

Troubleshooting
If you observe unusual staining or other deviations from the expected results please read these instructions carefully, refer to the instructions of the detection system for relevant information.

Expected results
This antibody stains positive in the luminal cell membrane of Uroplakin III-expressing urothelial cells in formalin-fixed, paraffin-embedded tissue sections. Additionally, a cytoplasmic staining of varying intensity may occur. Interpretation of the staining results is solely the responsibility of the user. Any experimental result should be confirmed by a medically established diagnostic procedure.

Limitations of the Procedure
Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining, for example variations in fixation and embedding or the inherent nature of the tissue can cause inconsistent results (Nadji and Morales, 1983). Endogenous peroxidase, alkaline phosphatase or biotin may cause non-specific staining depending on the detection system used. Tissues containing Hepatitis B Surface Antigen (HBsAg) may give false positive results with HRP (horse radish peroxidase) detection systems (Omata *et al*, 1980). Inadequate counterstaining and mounting can influence the interpretation of the results. Nordic BioSite warrants that the product will meet all requirements described from its shipping date until the expiry date is reached, if the product is stored and utilised as recommended. No additional guarantees can be given. Under no circumstances shall Nordic BioSite be liable for any damages arising out of the use of the reagent provided.

Performance characteristics
Nordic BioSite has conducted studies to evaluate the performance of the antibody for use with a standard detection system. The product has been found to be sensitive and specific to the antigen of interest with minimal or no cross-reactivity.

Bibliography

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Explanations of the symbols on the product label:

REF	Catalog Number Bestellnummer Reference du catalogue	LOT	Batch Code Chargenbezeichnung Code du lot	Manufacturer Nordic BioSite AB Propellervägen 4A S-183 62 Täby Sweden Tel: +46 (0)8 5444 33 40 Fax: +46 (0)8 756 94 90 info@nordicbiosite.com www.nordicbiosite.com
	Use By Verwendbar bis Utiliser jusque	IVD	In Vitro Diagnostic Medical Device In vitro Diagnostikum Dispositif médical de diagnostic in vitro	
	Consult Instructions for use Gebrauchsanweisung beachten Consulter les instructions d'utilisation		Temperature Limitation Lagerungstemperatur Limites de température	