

# Anti- UPIIIa [C-6]

Catalog No.	Description		
AMB38-5M	6 ml of Ready-to-Use Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system		
AMB38-10M	10 ml of Ready-to-Use Antibody in a barcode labeled vial for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems and i6000 <sup>TM</sup> Automated Staining Systems		
MUB38-UC	1 ml of Concentrated Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system		
MUB38-5UC	0.5 ml of Concentrated Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system		
AXB38-YCD	Ready-to-Use Antibody in Barcode labeled vial for use on the Xmatrx® Elite/Ultra Staining System, 160 tests		
AXB38-50D	Ready-to-Use Antibody in Barcode labeled vial for use on the Xmatrx <sup>®</sup> Elite/Ultra Staining System, 50 tests		

Clone	Species	Ig Class
C-6	Mouse	IgG2a

#### **Intended Use**

For In Vitro Diagnostic Use. This antibody is designed for the specific localization of UPIIIa in formalin-fixed, paraffinembedded (FFPE) tissue sections. Evaluation must be performed by a qualified pathologist.

# **Summary and Explanation**

Uroplakins IIIa (UPIIIa) belongs to a family of transmembrane proteins Uroplakins that are specific differentiation products of urothelial cells. It is a component of the asymmetric unit membrane (AUM) and is a highly specialized bio-membrane made by terminally differentiated urothelial cells. It plays a major role in AUM-cytoskeleton interaction in terminally differentiated urothelial cells. UPIIIa contributes to the formation of urothelial glycocalyx, which may play an important role in preventing bacterial adherence through FimH bacterial protein binding leading to bladder infection. It is present in the urothelial surface membrane of human renal pelvis, ureter, bladder and urethra. UPIIIa is specific for tumors of urothelial origin and, used in combination with other markers in the diagnosis of primary and metastatic tumors. Loss of Uroplakin IIIa expression in bladder cancers has been associated with higher grade, muscle-invasive cancer and lymphovascular invasion. Uroplakin III may be used in a panel of antibodies including GATA3, p63 and S100P.

# **Storage and Handling**

Store at 2-8°C. Fresh dilutions, if required, should be prepared prior to use and are stable and steady for up to one day at room temperature (20-26°C). Diluted antibody preparations can be refrigerated or frozen for extended shelf life.

#### **Principles of the Procedure**

Antigen detection by immunohistochemistry (IHC) is a two-step process wherein the primary antibody binds to the antigen of interest and that binding is detected by a chromogen. The primary antibody may be used in IHC using manual techniques or BioGenex Automated Staining System. Positive and negative controls should always be run simultaneously with all patient specimens.

#### **Reagents Provided**

Mouse Monoclonal Antibody UPIIIa is affinity purified and diluted in PBS, pH 7.2, containing 1% BSA and 0.09% sodium azide.

## **Dilution of Primary Antibody**

BioGenex Ready-to-Use antibodies have been optimized for use with the recommended BioGenex Detection System and should not require further dilution.

BioGenex concentrated antibodies must be diluted in accordance with the recommended protocol when used with the recommended BioGenex Detection System.

#### **Recommended Protocol**

Refer to the following table for conditions specifically recommended for this antibody. Refer to the BioGenex website for guidance on specific staining protocols or other requirements.

Parameter	BioGenex Recommendations	
Control Tissue	Bladder tissue as available with Biogenex FB-B38M* & FG-B38M*	
Recommended Dilution for Concentrated Antibody	1:50-100 in HK941	
Recommended Pretreatment (Manual/i6000)**	EZ-AR2 (HK522-XAK)	
Recommended Pretreatment (Xmatrx)	EZ-AR2 Elegance (HX032-YCD)	
Antibody Incubation (Manual/i6000)	30-60 Min at RT	
Antibody Incubation (Xmatrx)	30-60 Min at RT	
Detection System for Manual, Xmatrx & i6000 systems***	Use BioGenex Two-Step <b>OR</b> One-Step Super Sensitive <sup>TM</sup> Polymer-HRP IHC Detection System/DAB; see p. 2 for more information	

Category	Antibodies	Revision No.	С
Document No.	932-B38M-EN	Release Date	11-Jan-2022

\*FB: positive control micro chamber slides, FG: positive control microscopic slides. Xmatrx requires micro chamber slides. \*\*Pretreatment times will vary based on individual microwave power. \*\*\*For automation systems (Xmatrx-Elite, Xmatrx-Ultra &

i6000 Diagnostics), refer to the factory protocols provided with the instrument.

Detection	Two-Step	One-Step	Link and
System	HRP Kit	HRP Kit	Label Kit
Manual	QD440-XAKE (1000 Test) QD430-XAKE (1000 Test)	QD630-XAKE (1000 Test)	QP300-XAKE (1000 Test)
Manuai	QD420-YIKE (500 Test) QD400-60KE (60 Test)	QD620-XAKE (500 Test)	QP900-9LE (500 Test)
Xmatrx - Automation	QD550-YCDE (200 Test)	QD610-YADE (200 Test)	N/A
i6000 - Automation	QD410-YAXE (200 Test)	QD610-YAXE (200 Test)	N/A
For more information, visit www.biogenex.com.			

#### **Precautions**

This product contains sodium azide at concentrations of less than 0.1%. Sodium azide is not classified as a hazardous chemical at the product concentrations, but proper handling protocols should be observed. For more information, a Safety Data Sheet (SDS) for sodium azide is available upon request. Dispose of unused reagents according to Local, State and Federal Regulations. Wear suitable Personal Protective Equipment, do not pipette reagents by mouth, and avoid contact of reagents and specimens with skin and mucous membranes. If reagents or specimens come in contact with sensitive area, wash with copious amounts of water.

# **Ouality Control**

Refer to BioGenex detection system documents for guidance on general quality control procedures.

#### **Troubleshooting**

Refer to the troubleshooting section in the documentation for BioGenex Detection Systems (or equivalent detection systems) for remedial actions on detection system related issues, or contact BioGenex Technical Support Department at 1-800-421-4149 or support@biogenex.com or your local distributor to report unusual staining.

#### **Expected Results**

This antibody stains cytoplasm in positive cells in formalinfixed, paraffin embedded tissue sections, an example image of a tissue section stained with this antibody can be found on the product page on the biogenex website. interpretation of the staining result is solely the responsibility of the user. experimental results should be confirmed by a medicallyestablished diagnostic product or procedure.

# **Limitations of the Procedure**

Improper tissue handling and processing prior to immunostaining can lead to inconsistent results. Variations in embedding and fixation or the nature of the tissue may lead to variations in results. Endogenous peroxidase activity or pseudo peroxidase activity in erythrocytes and tissue biotin may result in non-specific staining based on the detection system employed. Tissues containing Hepatitis B Surface Antigen (HBsAg) may give false positive with horseradish peroxidase systems. Improper counterstaining and mounting may compromise the interpretation of results.

### **Bibliography**

- Lin, J.H., et al. 1994. Precursor sequence, processing, and urotheliumspecific expression of a major 15 kDa protein subunit of asymmetric unit membrane. J. Biol. Chem. 269: 1775-1784.
- Wu, X.R., et al. 1994. Mammalian uroplakins. A group of conserved urothelial differentiation-related membrane proteins. J. Biol. Chem. 269: 13716-13724.
- Wu, X.R., et al. 1995. Selective interactions of UPIa and UPIb, two members of the transmembrane 4 superfamily, with distinct single transmembranedomained proteins in differentiated urothelial cells. J. Biol. Chem. 270: 29752-29759.

2°€ 8°€	Temperature Limitation	IVD	In Vitro Diagnostic Medical Device
$\boxtimes$	Use By Date	LOT	Batch Code
NON STERILE	Non-Sterile	[]i	Consult Instructions for Use
EC REP	Representative in the European Community		Manufacturer

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Category	Antibodies	Revision No.	C
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