

# **Anti-DSDNA** [121-3]

Catalog No.	Description		
AM934-5M	6 ml of Ready-to-Use Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system		
AM934-10M	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		
MU934-UC	1 ml of Concentrated Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system		
MU934-5UC	0.5 ml of Concentrated Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system		
AX934-YCD	Ready-to-Use Antibody in Barcode labeled vial for use on the Xmatrx <sup>®</sup> Elite/Ultra Staining System, 160tests		
AX934-50D	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
121-3	Mouse	IgG3

#### **Intended Use**

For Research Use. This antibody is designed for the specific localization of DSDNA in formalin-fixed, paraffin-embedded (FFPE) tissue sections. Evaluation must be performed by a qualified pathologist.

# **Summary and Explanation**

This monoclonal antibody recognizes subcellular organelles or compartments of human cells. This MAb recognizes the double stranded DNA in human cells and may be useful in identification of these organelles in cells, tissues, and biochemical preparations. It stains the nuclei in cell or tissue preparations and can be used as a nuclear marker in human cells. This MAb produces a homogeneous staining pattern in the nucleus of normal and malignant cells. Protective proteins surround these single-stranded DNA. Double stranded (ds) DNA markers are useful tools in biology research and aid in the study of DNA behavior and characteristics.

# **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 DSDNA 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	Prostate cancer tissue as available with Biogenex FB- 934M* & FG-934M*	
Recommended Dilution for Concentrated Antibody	1:50-100 in HK156	
Recommended Pretreatment (Manual/i6000)**	EZ-AR1 (HK521-XAK)/EZ- AR1 Elegance (HK546-XAK)	
Recommended Pretreatment (Xmatrx)	EZ-AR1 Elegance (HX031- YCD)	
Antibody Incubation (Manual/i6000)	30 Min at RT	
Antibody Incubation (Xmatrx)	30 Min at 25°C	
Detection System for Manual, Xmatrx & i6000 systems***	Use BioGenex Two-Step <b>OR</b> One-Step Super Sensitive <sup>™</sup> Polymer-HRP IHC Detection System/DAB; see p. 2 for more information	

\*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.

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Two-Step HRP Kit	One-Step HRP Kit	Link and Label Kit
QD440-XAKE (1000 Test) QD430-XAKE (1000 Test)	QD630-XAKE (1000 Test)	QP300-XAKE (1000 Test)
QD420-YIKE (500 Test) QD400-60KE (60 Test)	QD620-XAKE (500 Test)	QP900-9LE (500 Test)
QD550-YCDE (200 Test)	QD610-YADE (200 Test)	N/A
QD410-YAXE (200 Test)	QD610-YAXE (200 Test)	N/A
	HRP Kit  QD440-XAKE (1000 Test)  QD430-XAKE (1000 Test)  QD420-YIKE (500 Test)  QD400-60KE (60 Test)  QD550-YCDE (200 Test)  QD410-YAXE	HRP Kit  QD440-XAKE (1000 Test)  QD430-XAKE (1000 Test)  QD420-YIKE (500 Test)  QD400-60KE (60 Test)  QD550-YCDE (200 Test)  QD410-YAXE  QD610-YADE (200 Test)  QD610-YAXE

#### **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.

# **Quality 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 1-800-421-4149orsupport@biogenex.com or your local distributor to report unusual staining.

# **Expected Results**

This antibody stains cell membrane 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 pseudoperoxidase 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**

- Epstein, A.L. and Clevenger, C.V., Identification of nuclear antigens in human cells by immunofluorescence, immunoelectron microscopy, and immuno-biochemical methods using monoclonal antibodies. In Progress on nonhistone protein research, Vol. 1, Isaac Bekhor, ed., 1985, CRC Press, Boca Raton, FL, pp 117-137.
- Brendan M. Giles and Susan A. Boackle. Linking complement and anti-dsDNA antibodies in the pathogenesis of systemic lupus erythematosus. Immuno Res, 2013 Mar; 55: 10-21
- Cao Q1, Xu W, Wen Z, Xu L, Li K, Chu Y, Xiong S. An anti-double-stranded DNA monoclonal antibody induced by tumor cell-derived DNA inhibits the growth of tumor in vitro and in vivo via triggering apoptosis. DNA Cell Biol. 2008 Feb;27(2):91-100.

2°C 8°C	Temperature Limitation	LOT	Batch Code
$\boxtimes$	Use By Date	i	Consult Instructions for Use
NON STERILE	Non-Sterile	•••	Manufacturer

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