

## Anti-Cytokeratin 18 [DC-10]

Catalog No.	Description		
AM143-5M	6 ml of Ready-to-Use Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system		
AM143-10M	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		
MU143-UC	1 ml of Concentrated Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system		
MU143-5UC	0.5 ml of Concentrated Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system		
AX143-YCD	Ready-to-Use Antibody in Barcode labeled vial for use on the Xmatrx® Elite Staining System, 160 tests		
AX143-50D	Ready-to-Use Antibody in Barcode labeled vial for use on the Xmatrx <sup>®</sup> Elite Staining System, 50 tests		
AX143-4M	Ready-to-Use Antibody in Barcode labeled vial for use on the NanoVIP® Staining System, 50 tests		

Clone	Species	Ig Class
DC-10	Mouse	IgG1

#### **Intended Use**

**For In Vitro Diagnostic Use.** This antibody is designed for the specific localization of Cytokeratin 18 in formalin-fixed, paraffin-embedded (FFPE) tissue sections. Evaluation must be performed by a qualified pathologist.

#### **Summary and Explanation**

Cytokeratins 8 (52 kD) and 18 (45 kD) comprise a cytokeratin pair as markers for simple epithelia. The monoclonal antibodies specific for Cytokeratin 18 stain all carcinomas derived from simple epithelia but do not stain well-differentiated squamous cell carcinoma. It is useful to use monoclonal antibodies to Cytokeratins 8 and 18 in combination with other monoclonal cytokeratin antibodies when studying cytokeratin expression patterns.

#### **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 Cytokeratin 18 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.

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Parameter	BioGenex		
1 ar ameter	Recommendations		
Control Tissue	BREAST CARCINOMA tissue as available with Biogenex FB- 143M* & FG-143M*		
Recommended Dilution for Concentrated Antibody	1:30-50 in HK156		
Recommended Pretreatment (Manual/i6000)**	EZ-AR2 (HK522-XAK)		
Recommended	EZ-AR2 Elegance		
Pretreatment (Xmatrx &	(HX032-YCD & HX046-		
NanoVIP)	08XN)		
Antibody Incubation (Manual/i6000)	30-60 Min at RT		
Antibody Incubation (Xmatrx & NanoVIP)	30-60 Min at 25°C		
	Use BioGenex Two-Step <b>OR</b>		
Detection System for	One-Step Super Sensitive <sup>TM</sup>		
Manual, Xmatrx, NanoVIP	Polymer-HRP IHC Detection		
& i6000 systems***	System/DAB; see p. 2 for more		
	information		

<sup>\*</sup>FB: positive control micro chamber slides, FG: positive control microscopic slides. Xmatrx & NanoVIP require micro chamber slides.

<sup>\*\*</sup>Pretreatment times will vary based on individual microwave power.

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\*\*\*For automation systems (Xmatrx-Elite, NanoVIP & 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-XAKEN (1000 Test) QD430-XAKEN (1000 Test)	QD630-XAKEN (1000 Test)	QP300- XAKE (1000 Test)
Manual	QD420-YIKEN (500 Test) QD400-60KEN (60 Test)	QD620-XAKEN (500 Test)	QP900- 9LE (500 Test)
Xmatrx -	QD550-YCDEN	QD610-YADEN	N/A
Automation	(200 Test)	(200 Test)	
NanoVIP- Automation	QD551-YCDEN (100 Test)	QD611-YADEN (100 Test)	N/A
i6000 -	QD410-YAXEN	QD610-YAXEN	N/A
Automation	(200 Test)	(200 Test)	

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.

#### **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 1-800-421-4149 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**

- 1. Sun T-T, et al. In: Intermediate Filaments, Wang, E., et al., eds., New York, The New York Academy of Sciences, 307-329, 1985.
- Moll R, et al. Cell 31:11-24, 1982.
- Corson JM. Pathol Annu 21(Part 2):47-81, 1986.

2°C   8°C	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	3	Manufacturer

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