

Anti-Cytokeratin [CAM 5.2]

Catalog No.	Description		
AMB50-5M6 ml of Ready-to-Use Antibody for use wiBioGenex Super Sensitive TM DetectionSystems OR equivalent detection system			
AMB50-10M	10 ml of Ready-to-Use Antibody in a barcode labeled vial for use with BioGenex Super Sensitive TM Detection Systems and i6000 TM Automated Staining Systems		
MUB50-UC	1 ml of Concentrated Antibody for use with BioGenex Super Sensitive TM Detection Systems OR equivalent detection system		
MUB50-5UC	0.5 ml of Concentrated Antibody for use with BioGenex Super Sensitive TM Detection Systems OR equivalent detection system		
AXB50-YCD Ready-to-Use Antibody in Barcode lab vial for use on the Xmatrx [®] Elite/Ultra Staining System, 160 tests			
AXB50-50DReady-to-Use Antibody in Barcode labe vial for use on the Xmatrx [®] Elite/Ultra Staining System, 50 tests			

Clone	Species	Ig Class
CAM 5.2	Mouse	IgG2a/k

Intended Use

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

Summary and Explanation

Cytokeratins are polypeptide chains that constituent major part of epithelial cell cytoskeleton. Cytokeratin (CAM 5.2) expression is seen in majority of epithelial tumors, including lung, liver, Breast Carcinoma, Gastro-Intestinal tract, breast, genitourinary system, female reproductive organs and some endocrine organs. It might not react with some squamous cell carcinomas. This antibody can be successfully used as a clinically reliable marker for neoplasms of epithelial origin and for distinguishing carcinomas from malignant tumors of nonepithelial origin such as lymphomas, melanomas, and sarcomas.

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 (<u>IHC</u>) is a two-step process wherein the primary antibody binds to the antigen of interest and that binding is detected by a chromogen. The <u>primary</u> <u>antibody</u> 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 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	Breast Carcinoma tissue as available with Biogenex FB- B50M* & FG-B50M*	
Recommended Dilution for Concentrated Antibody	1:10-25 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 25°C	
Detection System for Manual, Xmatrx & i6000 systems***	Use BioGenex Two-Step OR One-Step Super Sensitive TM 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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CE _{En}	nergo Europe, Prinsessegracht 2	20, 2514AP The Hagu	e, The Netherlands
EC REP	0 1 0		

Detection	Two-Step	One-Step	Link and
System	HRP Kit	HRP Kit	Label Kit
	QD440-XAKE (1000 Test) QD430-XAKE (1000 Test)	QD630-XAKE (1000 Test)	QP300-XAKE (1000 Test)
Manual	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 <u>www.biogenex.com</u> .			

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 <u>support@biogenex.com</u> or your local distributor to report unusual staining.

Expected Results

This antibody stains cytoplasm in positive cells in formalin-fixed, 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 medically-established 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

- Ordóñez NG. Broad-spectrum immunohistochemical epithelial markers: a review. Hum Pathol. 2013; 44:1195-215.
- Pan CC, et al. Differential immunoprofiles of hepatocellular carcinoma, renal cell carcinoma, and adrenocortical carcinoma: a systemic immunohistochemical survey using tissue array technique. Appl Immunohistochem Mol Morphol. 2005; 13:347-52.
- Sinard JH. Immunohistochemical distinction of ocular sebaceous carcinoma from basal cell and squamous cell carcinoma. Arch Ophthalmol. 1999; 117:776–83.
- Cosgrove MM, et al. Keratin intermediate filament expression in astrocytic neoplasms: analysis by immunocytochemistry, western blot, and northern hybridization. Mod Pathol. 1993; 6:342-7.



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