

# **Anti- CPA1** [CPA1/2712]

Catalog No.	Description
AMC55-5M	6 ml of Ready-to-Use Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system
AMC55-10M	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
MUC55-UC	1 ml of Concentrated Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system
MUC55-5UC	0.5 ml of Concentrated Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system
AXC55-YCD	Ready-to-Use Antibody in Barcode labeled vial for use on the Xmatrx <sup>®</sup> Elite Staining System, 160 tests
AXC55-50D	Ready-to-Use Antibody in Barcode labeled vial for use on the Xmatrx <sup>®</sup> Elite Staining System, 50 tests
AXC55-4M	Ready-to-Use Antibody in Barcode labeled vial for use on the NanoVIP® Staining System, 50 tests

Clone	Species	Ig Class
CPA1/2712	Mouse	IgG2c, Kappa

#### **Intended Use**

For In Vitro Diagnostic Use. This antibody is designed for the specific localization of CPA1 in formalin-fixed, paraffinembedded (FFPE) tissue sections. Evaluation must be performed by a qualified pathologist.

## **Summary and Explanation**

Carboxypeptidase A1/ CPA1 is a 419 amino acid zinc metalloenzymes belongs to the peptidase M14 family. It is a secreted monomeric protein involved in zymogen inhibition and functioning to block enzyme activation pathways. It is highly expressed in pancreatic tissue and functions as a pancreatic exopeptidase. CPA1 plays a key role in protein digestion and degradation by using zinc as a cofactor to catalyze the release of C-terminal amino acids from a variety of proteins. Abnormal levels of CPA1are observed in pancreatic cancer, suggesting a possible role in either tumor progression or tumor suppression events.

#### **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 Emergo Europe, Prinsessegracht 20, 2514AP The Hague, The Netherlands

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 CPA1 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	Pancreas tissue as available with Biogenex FB-C55M* & FG-C55M*	
Recommended Dilution for Concentrated Antibody	1:50-100 in HK941	
Recommended Pretreatment (Manual/i6000)**	EZ-AR2 (HK522-XAK)	
Recommended Pretreatment (Xmatrx & NanoVIP)	EZ-AR2 Elegance (HX032-YCD & HX046- 08XN)	
Antibody Incubation (Manual/i6000)	30-60 Min at RT	
Antibody Incubation (Xmatrx & NanoVIP)	30-60 Min at 25°C	
Detection System for Manual, Xmatrx, NanoVIP & 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	

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\*FB: positive control micro chamber slides, FG: positive control microscopic slides. Xmatrx & NanoVIP requires micro chamber slides.

\*\*Pretreatment times will vary based on individual microwave power. \*\*\*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-	QD551-YCDEN	QD611-YADEN	N/A
Automation	(100 Test)	(100 Test)	
i6000 -	QD410-YAXEN	QD610-YAXEN	N/A
Automation	(200 Test)	(200 Test)	

## **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.

For more information, visit www.biogenex.com.

# **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/secreted 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 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. Stewart, E.A., et al. 1990. Human carboxypeptidase A identifies a BgIII RFLP and maps to 7q31-qter. Am. J. Hum. Genet. 46: 795-800

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		Manufacturer

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