

Anti-Annexin A1

Catalog No.	Description
AM982-5M	6 ml of Ready-to-Use Antibody for use with BioGenex Super Sensitive™ Detection Systems OR equivalent detection system
AM982-10M	10 ml of Ready-to-Use Antibody in a barcode labeled vial for use with BioGenex Super Sensitive™ Detection Systems and i6000™ Automated Staining Systems
MU982-UC	1 ml of Concentrated Antibody for use with BioGenex Super Sensitive™ Detection Systems OR equivalent detection system
MU982-5UC	0.5 ml of Concentrated Antibody for use with BioGenex Super Sensitive™ Detection Systems OR equivalent detection system
AX982-YCD	Ready-to-Use Antibody in Barcode labeled vial for use on the Xmatrx® Elite Staining System, 160 tests
AX982-50D	Ready-to-Use Antibody in Barcode labeled vial for use on the Xmatrx® Elite Staining System, 50 tests
AX982-4M	Ready-to-Use Antibody in Barcode labeled vial for use on the NanoVIP® Staining System, 50 tests

Clone	Species	Ig Class
ANXA1/1671	Mouse	IgG2

Intended Use

For In vitro diagnostic Use only. This antibody is designed for the specific localization of human Annexin A1 in formalin-fixed, paraffin-embedded (FFPE) tissue sections. Evaluation must be performed by a qualified pathologist.

Summary and Explanation

Annexin A1, also known as lipocortin I, is a protein that is encoded by the ANXA1 gene in humans. Annexin A1 belongs to the annexin family of Ca²⁺-dependent phospholipid-binding proteins with phospholipase A2 inhibitory activity. In resting conditions, human and mouse immune cells such as neutrophils, monocytes, and macrophages contain high levels of annexin A1 in their cytoplasm. Annexin plays important roles in the innate immune response as an effector of glucocorticoid-mediated responses and regulator of the inflammatory process and has anti-inflammatory activity among its many functions. Annexin A1 also plays a significant role in cancer immunology because it aids in migration and metastasis of tumors. For instance ANXA1's association with NEMO and RIP1 activates NF-κB which in turn promotes breast cancer migration and reduces breast cancer proliferation through a negative feedback. Furthermore, Increased expression of annexin A1 is correlated with K-ras mutation in colorectal cancer.

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 to human Annexin A1 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	Spleen tissue as available with Biogenex FB-982M* & FG-982M*
Recommended Dilution for Concentrated Antibody	1:50-100 in HK156
Recommended Pretreatment (Manual/i6000)**	EZ-AR2 (HK522-XAK)
Recommended Pretreatment (Xmatrx & Nano VIP)	EZ-AR2 Elegance (HX032-YCD & HX046-08XN)
Antibody Incubation (Manual/i6000)	30-60 Min at RT
Antibody Incubation (Xmatrx & Nano VIP)	30-60 Min at 25°C
Detection System for Manual, Xmatrx, Nano VIP & i6000 systems***	Use BioGenex Two-Step OR One-Step Super Sensitive™ Polymer-HRP IHC Detection System/DAB; see p. 2 for more information

Category	Antibodies	Revision No.	G
Document No.	932-982M-EN	Release Date	17-Jun-2024

*FB: positive control micro chamber slides, FG: positive control microscopic slides. Xmatrx & Nano VIP requires micro chamber slides.

**Pretreatment times will vary based on individual microwave power.

***For automation systems (Xmatrx-Elite, Nano VIP & i6000 Diagnostics), refer to the factory protocols provided with the instrument.

Detection System	Two-Step HRP Kit	One-Step HRP Kit	Link and Label Kit
Manual	QD440-XAKEN (1000 Test)	QD630-XAKEN (1000 Test)	QP300-XAKE (1000 Test)
	QD430-XAKEN (1000 Test)		
	QD420-YIKEN (500 Test)	QD620-XAKEN (500 Test)	QP900-9LE (500 Test)
	QD400-60KEN (60 Test)		
Xmatrx - Automation	QD550-YCDEN (200 Test)	QD610-YADEN (200 Test)	N/A
NanoVIP- Automation	QD551-YCDEN (100 Test)	QD611-YADEN (100 Test)	N/A
i6000 - Automation	QD410-YAXEN (200 Test)	QD610-YAXEN (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.

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

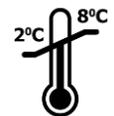
This antibody stains cytoplasm in positive cells in formalin-fixed, paraffin embedded tissue sections. An example image of a tissue section stained with this antibody can be found on the product page on the BioGenex website. Interpretation of the staining result is solely the responsibility of the user. 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

- Gavins FN and Hickey MJ. "Annexin A1 and the regulation of innate and adaptive immunity". Front Immunol. 2012 Nov 27;3:354.
- Bist, P et al. "Annexin-1 interacts with NEMO and RIP1 to constitutively activate IKK complex and NF-κB: implication in breast cancer metastasis". Oncogene. 2011 Jul 14;30(28):3174-85.

	Temperature Limitation		In Vitro Diagnostic Medical Device
	Use By Date		Batch Code
	Non-Sterile		Consult Instructions for Use
	Representative in the European Community		Manufacturer

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Category	Antibodies	Revision No.	G
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