Anti-Human Glycophorin A + B [E3]

Catalog No.	Description
AM889-5M	6 ml of Ready-to-Use Antibody for use with BioGenex Super Sensitive™ Detection Systems OR equivalent detection system
AM889-10M	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
MU889-UC	1 ml of Concentrated Antibody for use with BioGenex Super Sensitive™ Detection Systems OR equivalent detection system
MU889-5UC	0.5 ml of Concentrated Antibody for use with BioGenex Super Sensitive™ Detection Systems OR equivalent detection system
AX889-YCD	Ready-to-Use Antibody in Barcode labeled vial for use on the Xmatrx® Elite/Ultra Staining System, 160 tests
AX889-50D	Ready-to-Use Antibody in Barcode labeled vial for use on the Xmatrx® Elite/Ultra Staining System, 50 tests

Clone	Species	Ig Class
E3	Mouse	IgG

Intended Use

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

Summary and Explanation

Glycophorins A, B and C are sialoglycoproteins of the human erythrocyte membrane, which bear the antigenic determinants for the MN, Ss, and Gerbic blood groups, respectively. Glycophorins span the membrane once and present their amino-terminal end to the extracellular surface of the human erythrocyte. Glycophorin A + B antibody recognizes N-terminal, homologous portion of glycophorins A (GPA) and B (GPB), (strongly to GPA, and weakly to GPB). The antibody is useful in eythroid cell development studies, because HIR2 antigen is expressed on early erythroblasts, late erythroblasts, erythroblasts, mature erythrocytes and the cell of erythroid cell lines K562 and HEL, but not on all other cell (mature erythrocytes are characteristically CD235a positive and CD45 and CD71 negative).

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 Glycophorin A + B 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	PLACENTA as available with Biogenex FB-889M* & FG-889M*
Recommended Dilution for Concentrated Antibody	**1:50-100 in HK156**
Recommended Pretreatment (Manual/i6000)**	EZ-AR2 (HK522-XAK)
Recommended Pretreatment (Xmatrx)	EZ-AR2 Elegance (HX032-YCD)
Antibody Incubation (Manual/i6000)	60 Min at RT
Antibody Incubation (Xmatrx)	60 Min at 25°C
Detection System for Manual, Xmatrx & i6000 systems***	Use BioGenex Two-Step **OR** One-Step Super Sensitive™ Polymer-HRP IHC Detection System/DAB; see p. 2 for more information

*FB: positive control barrier slides, FG: positive control non-barrier slides. Xmatrx requires barrier slides.
**Pretreatment times will vary based on individual microwave power.

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***For automation systems (Xmatrx-Elite, Xmatrx-Ultra & 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-XAKE (1000 Test)	QD630-XAKE (1000 Test)	QP300-XAKE (1000 Test)
	QD430-XAKE (1000 Test)		
	QD420-YIKE (500 Test)	QD620-XAKE (500 Test)	QP900-9LE (500 Test)
	QD400-60KE (60 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 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

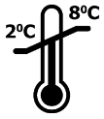
This antibody stains membrane in positive cells in formalin-fixed, paraffin embedded tissue sections. An example image of a tissue section stained with this antibody can be found on the product page on the BioGenex website. Interpretation of the staining result is solely the responsibility of the user.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

1. Soderblom EJ et al. “Proteomic analysis of ERK1/2-mediated human sickle red blood cell membrane protein phosphorylation”. Clin Proteomics 10:1 (2013). WB, IP ; Human
2. Cleghorn TE "A memorandum on the Miltenberger blood groups". Vox Sang. 11 (2): 219–22
3. Zhang X et al. “Terminal differentiation and loss of tumorigenicity of human cancers via pluripotency-based reprogramming”. Oncogene : (2012)
4. Blumenfeld OO, et al: "The chimpanzee M blood-group antigen is a variant of the human M-N glycoproteins". Biochem. Genet. 21 (3-4): 333–48
5. Thorogate R et al. A novel fluorescence-based method in forensic science for the detection of blood in situ. Forensic Sci Int Genet 2:363-71 (2008). ICC/IF ; Human

	Temperature Limitation		Batch Code
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