

# Anti-FTL [FTL/1389]

Catalog No.	Description		
AM935-5M	6 ml of Ready-to-Use Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system		
AM935-10M	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		
MU935-UC	1 ml of Concentrated Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system		
MU935-5UC	0.5 ml of Concentrated Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system		
AX935-YCD	Ready-to-Use Antibody in Barcode labeled		
AX935-50D	Ready-to-Use Antibody in Barcode labeled vial for use on the Xmatrx <sup>®</sup> Elite/Ultra Staining System, 50 tests		

Clone	Species	Ig Class
FTL/1389	Mouse	IgG1

## **Intended Use**

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

#### **Summary and Explanation**

Ferritin is the major intracellular iron storage protein A major function of ferritin is the storage of iron in a soluble and nontoxic state. Mammalian ferritins consist of 24 subunits made up of 2 types of polypeptide chains. Ferritin heavy chains catalyze the first step in iron storage, the oxidation of Fe (II), whereas ferritin light chains promote the nucleation of ferrihydrite, enabling storage of Fe (III). Light chain ferritin is involved in cataracts by at least two mechanisms, hereditary hyperferritinemia cataract syndrome, in which light chain ferritin is overexpressed in serum and tissues, and oxidative stress, an important factor in the development of ageing-related cataracts.

# **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 FTL 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	Brain and kidney tissue as available with Biogenex FB- 935M* & FG-935M*	
Recommended Dilution for Concentrated Antibody	1:50-100 in HK941	
Recommended Pretreatment (Manual/i6000)**	EZ-AR1 (HK521-XAK)/EZ- AR1 Elegance (HK546-XAK)	
Recommended Pretreatment (Xmatrx)	EZ-AR1 Elegance (HX031- YCD)	
Antibody Incubation (Manual/i6000)	30 Min at RT	
Antibody Incubation (Xmatrx)	30 Min at RT	
Detection System for Manual, Xmatrx & i6000 systems***	Use BioGenex Two-Step <b>OR</b> One-Step Super Sensitive <sup>TM</sup> Polymer-HRP IHC Detection System/DAB; see p. 2 for more information	

\*FB: positive control barrier slides, FG: positive control nonbarrier slides. Xmatrx requires barrier 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.

Category	Antibodies	Revision No.	С
Document No.	932-935M	Release Date	07-Sep-2021



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 cell membrane 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. Y. Kaneko, T. Kitamoto, J. Tateishi, K. Yamaguchi. Ferritin immunohistochemistry as a marker for microglia. Acta Neuropathologica. 1989, Volume 79; 129-136.

2°C	Temperature Limitation	LOT	Batch Code
	Use By Date	i	Consult Instructions for Use
NON STERILE	Non-Sterile		Manufacturer

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