

# Anti-Human Progesterone receptor (PR) [EP2]

Catalog No.	Description		
AN711-5M	6 ml of Ready-to-Use Antibody for use with BioGenex Super Sensitive TM Detection Systems OR equivalent detection system		
AN711-10M	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		
NU711-UC	1 ml of Concentrated Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system		
NU711-5UC	0.5 ml of Concentrated Antibody for use with BioGenex Super Sensitive <sup>TM</sup> Detection Systems OR equivalent detection system		
AY711-YCD	Ready-to-Use Antibody in Barcode labeled vial for use on the Xmatrx <sup>®</sup> Elite Staining System, 160 tests		
AY711-50D	Ready-to-Use Antibody in Barcode labeled vial for use on the Xmatrx <sup>®</sup> Elite Staining System, 50 tests		

Clone	Species	Ig Class
EP2	Rabbit	IgG

#### **Intended Use**

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

# **Summary and Explanation**

The human progesterone receptor (PR), is a ligand-activated transcription factor and is a member of the steroid receptor family. PR exists in human as two isoforms; PR-A (94 kDa) which lacks the first 164 amino acids of PR-B and PR-B(114 kDa). While the two forms of PR have similar DNA and Ligand binding affinities they have opposite transcriptional activities PR-B functions as an activator of progesterone-responsive genes, while PR-A functions as a strong transdominant repressor of PR-B. This anti-PR recognizes both PR-A and B. It labels epithelial cells of breast, ovary and endometrium.

#### **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**

Rabbit Monoclonal Antibody Human Progesterone receptor (PR) 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- 711N* & FG-711N*	
Recommended Dilution for Concentrated Antibody	1:50-100 in HK941	
Recommended Pretreatment (Manual/i6000)**	EZ-AR2 (HK522-XAK)	
Recommended Pretreatment (Xmatrx)	EZ-AR2 Elegance (HX032-YCD & HX046- 08XN)	
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 <b>OR</b> One-Step Super Sensitive <sup>TM</sup> Polymer-HRP IHC Detection System/DAB; see p. 2 for more information	

<sup>\*</sup>FB: positive control micro chamber slides, FG: positive control microscopic slides. Xmatrx requires micro chamber slides.

<sup>\*\*\*</sup>For automation systems (Xmatrx-Elite & i6000 Diagnostics), refer to the factory protocols provided with the instrument.

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<sup>\*\*</sup>Pretreatment times will vary based on individual microwave power.



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)
Manuai	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)	
i6000 -	QD410-YAXEN	QD610-YAXEN	N/A
Automation	(200 Test)	(200 Test)	
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 <a href="mailto:support@biogenex.com">support@biogenex.com</a> or your local distributor to report unusual staining.

#### **Expected Results**

This antibody stains nucleus 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**

- Mirashi M, Atger M, d'Auriol L, Loosfelt H, Meriel C, Fridlansky F, Guiochon-Mantel A, Galibert F, Milgrom E (March 1987), "Complete amino acid sequence of the human progesterone receptor deduced from cloned cDNA", Biochem.Biophys.Res.Commum. 143(2): 740-8,doi: 10.1016/0006-291X(87)91416-1, PMID 3551956.
- Law ML, Kao FT, Wei Q, Hartz JA, Greene GL, Zarucki-Schulz T, COnneely OM, Jones C, Puck TT, O'Malley BW(May 1987). "The progesterone gene maps to human chromosome band 11q13, the site of the mammary oncogene int-2", Proc. National academy science USA, 84(9): 2877-81, doi: 10,1073/pnas.84.9.2877, PMC 304763, PMID 3472240.
- 3. Ensemble.org, Gene: ESr1 (ENSG00000091831).
- 4. Gadhkar-Sable S, Shah C,Rosario G, Sachdeva G, Puri C(2005)," Progesterone receptors: various forms and functions in reproductive tissues". Front. Biosci. 10. 2118-30, doi:10.2741/1685, PMID 15970482.

2°C 8°C	Temperature Limitation	IVD	In Vitro Diagnostic Medical Device
$\boxtimes$	Use By Date	LOT	Batch Code
NON	Non-Sterile	[]i	Consult Instructions for Use
EC REP	Representative in the European Community		Manufacturer

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