



Estrogen Receptor (ER [1D5])

Concentrated and Prediluted Monoclonal Antibody

Control Number: 903-054-091506

ISO
9001:2000
CERTIFIED

Catalog Number:	CM 054 A, B, C	PM 054 AA, H
Description:	0.1, 0.5, 1.0 ml, concentrated	6.0, 25 ml, prediluted
Dilution:	1:100-1:200	Ready-to-use
Diluent:	Van Gogh Yellow	N/A

Analyte Specific Reagent Note:

The Estrogen Receptor [1D5] antibody has been quality controlled by IHC using BIOCARE's 4 plus Detection System with antigen retrieval. However, it is the responsibility of the laboratory or end-user to develop their own protocol and label appropriate disclaimer.

Limitations and Warranty:

There are no warranties, expressed or implied, which extend beyond this description. BIOCARE is not liable for property damage, personal injury, or economic loss caused by this product.

References:

1. Paech K, et al. Differential ligand activation of estrogen receptors ERalpha and ERbeta at AP1 sites. *Science* 97. Sept 5;277 (5331):1508-1510.
2. Center for Disease Control Manual. Guide: Safety Management, NO. CDC-22, Atlanta, GA. April 30, 1976 "Decontamination of Laboratory Sink Drains to Remove Azide Salts."
3. National Committee for Clinical Laboratory Standards(NCCLS). Protection of laboratory workers from infectious diseases transmitted by blood and tissue; proposed guideline. Villanova, PA 1991;7(9). Order code M29-P.

Intended Use:

Analyte Specific Reagent. Analytical and performance characteristics have not been established.

Summary & Explanation:

The estrogen receptor (ER) is a 66-kDa protein that mediates the actions of estrogens in estrogen-responsive tissues. It is a member of a large superfamily of nuclear-hormone receptors that function as ligand-activated transcription factors. The ER gene consists of more than 140kb of genomic DNA divided into 8 exons. These translate into a protein with six functionally discrete domains, labeled A through F. ER [1D5] reacts with the amino-terminal domain in the A/B region of ER-alpha. This clone has been established to work in formalin-fixed, paraffin-embedded tissues and has been published in numerous breast cancer research studies. Staining patterns observed include: ER+ and PR+, ER+ and PR-, ER- and PR+, and ER- and PR-.

Clone: 1D5**Isotype:** IgG₁/kappa**Known Applications:**

Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

Supplied As:

Buffer with protein carrier and preservative.

Storage and Stability:

Store at 2°C to 8°C. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.





Estrogen Receptor (ER [1D5])

Concentrated and Prediluted Monoclonal Antibody

Control Number: 902-054-091506

Catalog Number:	CM 054 A, B, C	PM 054 AA, H
Description:	0.1, 0.5, 1.0 ml, concentrated	6.0, 25 ml, prediluted
Dilution:	1:100-1:200	Ready-to-use
Diluent:	Van Gogh Yellow	N/A

Chromogen:
Incubate for 5 minutes at RT when using BIOCARE's DAB. - OR - Incubate for 10 minutes at RT when using BIOCARE's Vulcan Fast Red.

Intended Use:
For Research Use Only

Summary and Explanation:
The estrogen receptor (ER) is a 66-kDa protein that mediates the actions of estrogens in estrogen-responsive tissues. It is a member of a large superfamily of nuclear-hormone receptors that function as ligand-activated transcription factors. The ER gene consists of more than 140kb of genomic DNA divided into 8 exons. These translate into a protein with six functionally discrete domains, labeled A through F. ER [1D5] reacts with the amino-terminal domain in the A/B region of ER-alpha. This clone has been established to work in formalin-fixed, paraffin-embedded tissues and has been published in numerous breast cancer research studies. Staining patterns observed include: ER+ and PR+, ER+ and PR-, ER- and PR+, and ER- and PR-.

Source: Mouse monoclonal

Species Reactivity: Human; others not tested.

Clone: 1D5

Isotype: IgG₁/kappa

Total Protein Concentration: ~10 mg/ml. Call for lot specific Ig Concentration.

Epitope/Antigen: ER protein

Cellular Localization: Nuclear

Positive Control: Breast carcinoma

Normal Tissue: Normal breast

Abnormal Tissue: Breast Carcinoma

Known Applications:
Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

Supplied As: Buffer with protein carrier and preservative.

Storage and Stability:
Store at 2°C to 8°C. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

Protocol Recommendations

Peroxide Block:
If using an HRP system, block for 5 minutes with BIOCARE's PEROXIDAZED 1.

Pretreatment Solution (recommended): Reveal

Pretreatment Protocol:
Heat Retrieval Method:
Retrieve sections under pressure using BIOCARE's Decloaking Chamber, followed by a wash in distilled water. Alternatively, steam tissue sections for 45-60 minutes. Allow solution to cool for 20 minutes then wash in distilled water.

Protein Block:
Incubate for 10-15 minutes at RT with BIOCARE's Background Sniper.

Primary Antibody: Incubate for 30 minutes at RT.

Link: Incubate for 10 minutes at RT with a link

Label: Incubate for 10 minutes at RT with a label.

Technical Note:
This antibody has been standardized with BIOCARE's 4 plus detection system. It can also be used on an automated staining system and with other BIOCARE polymer detection kits. Use TBS buffer for washing steps.

Performance Characteristics:
The optimum antibody dilution and protocols for a specific application can vary. These include, but are not limited to: fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of BIOCARE products. Ultimately, it is the responsibility of the investigator to determine optimal conditions. These products are tools that can be used for interpretation of morphological findings in conjunction with other diagnostic tests and pertinent clinical data by a qualified pathologist.

Quality Control:
Refer to NCCLS Quality Assurance for Immunocytochemistry approved guidelines, December 1999 MM4-A Vol.19 No.26 for more information about Tissue Controls.

Precautions:
This antibody contains less than 0.1% sodium azide. Concentrations less than 0.1% are not reportable hazardous materials according to U.S. 29 CFR 1910.1200, OSHA Hazard communication and EC Directive 91/155/EC. Sodium azide (NaN₃) used as a preservative is toxic if ingested. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing. (Center for disease control, 1976, National Institute of Occupational Safety and Health, 1976)

Specimens, before and after fixation and all materials exposed to them, should be handled as if capable of transmitting infection and disposed of with proper precautions. Never pipette reagents by mouth and avoid contacting the skin and mucous membranes with reagents and specimens. If reagents or specimens come in contact with sensitive areas, wash with copious amounts of water. Microbial contamination of reagents may result in an increase in nonspecific staining. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change. The MSDS is available upon request.

Troubleshooting:
Follow the antibody specific protocol recommendations according to data sheet provided. If atypical results occur, contact BIOCARE's Technical Support at 1-800-542-2002.

Limitations and Warranty:
There are no warranties, expressed or implied, which extend beyond this description. BIOCARE is not liable for property damage, personal injury, or economic loss caused by this product.

References:

1. Paech K, et al. Differential ligand activation of estrogen receptors ERalpha and ERbeta at AP1 sites. Science 97. Sept 5;277(5331):1508-1510.
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