

# Mouse ESTROGEN RECEPTOR ALPHA Monoclonal Antibody | anti-ESR1 antibody

MOUSE ANTI HUMAN ESTROGEN RECEPTOR ALPHA

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| CATALOG #<br><b>AAA49614</b> | HOST<br><b>Mouse</b> | APPLICATIONS<br><b>Immunohistochemistry, Immunohistochemistry</b> |
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## PRODUCT SYNONYMS

ESTROGEN RECEPTOR ALPHA; Monoclonal Antibody; MOUSE ANTI HUMAN ESTROGEN RECEPTOR ALPHA; anti-ESR1 antibody

## PRODUCT SPECIFICATIONS

|                                                |                                                                                                                                                                                                                                                                                                                                                                |
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| Host                                           | Mouse                                                                                                                                                                                                                                                                                                                                                          |
| Clonality                                      | Monoclonal                                                                                                                                                                                                                                                                                                                                                     |
| Isotype                                        | IgG1                                                                                                                                                                                                                                                                                                                                                           |
| Clone Number                                   | 6F11                                                                                                                                                                                                                                                                                                                                                           |
| Form/Format                                    | Tissue Culture Supernatant - liquid                                                                                                                                                                                                                                                                                                                            |
| Sequence Length                                | 595                                                                                                                                                                                                                                                                                                                                                            |
| Applicable Applications for anti-ESR1 antibody | IHC (Immunohistochemistry), IHC (Immunohistochemistry)                                                                                                                                                                                                                                                                                                         |
| Perservative Stabilisers                       | 0.09% Sodium Azide                                                                                                                                                                                                                                                                                                                                             |
| Immunogen                                      | Recombinant human estrogen receptor (alpha form)<br>Histology Positive Control Tissue                                                                                                                                                                                                                                                                          |
| Target Species                                 | Human                                                                                                                                                                                                                                                                                                                                                          |
| Preparation and Storage                        | Store at 4 degree C or at -20 degree C if preferred. This product should be stored undiluted. Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.<br>Shelf Life: 18 months from date of despatch. |

## IMAGES



### Application Data

Formalin fixed, paraffin embedded human breast cancer biopsy stained with Mouse anti Human estrogen receptor alpha antibody followed by HRP polymer detection and DAB substrate development following heat mediated antigen retrieval using citrate buffer at pH 6.2 (high power)



### Application Data

Western blot analysis of MCF-7 human breast adenocarcinoma whole cell lysate probed with Mouse anti Human estrogen receptor alpha antibody followed by HRP conjugated Goat anti Mouse IgG, visualized by chemiluminescence



#### Application Data

Formalin fixed, paraffin embedded human breast cancer biopsy stained with Mouse anti Human estrogen receptor alpha antibody followed by HRP polymer detection and DAB substrate development following heat mediated antigen retrieval using citrate buffer at pH 6.2 (low power)

### ADDITIONAL INFORMATION

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| Related Product Information for anti-ESR1 antibody | Mouse anti Human estrogen alpha antibody, clone 6F11 recognizes the human estrogen receptor alpha chain (ERalpha), also known as the estradiol receptor or nuclear receptor subfamily 3 group A member 1. ERalpha is a ~65kDa steroid hormone receptor containing an N-terminal AF-1, ligand independent transactivation domain, a DNA binding domain and a C-terminal ligand binding domain which overlaps with an AF-2 domain. ERalpha binds to DNA as a homodimer (Klinge 2001) and can also form heterodimers with Estrogen receptor beta (ERbeta). The detection of estrogen (ER) and progesterone (PR) receptors using immunohistochemical staining of formalin fixed, paraffin embedded (FFPE) tissue, has gradually replaced ligand binding assays, to become the most common method for the determination of the ER/PR status of breast tumors (Yaziji et al. 2008). Approximately 75% to 80% of breast tumors have estrogen and/or progesterone receptors, and the presence of these receptors helps determine both the patients prognosis and the effectiveness of hormonal therapy (Bhargava et al. 2012). Mouse anti human estrogen alpha antibody, clone 6F11 has been used successfully for identification of ERalpha on breast cancer cell lysates using Western blotting and for the immunohistochemical detection of ERalpha in breast cancer tissues (Ambrose et al. 2011). |
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### NCBI AND UNIPROT INFORMATION

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|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 62821794                                                                                                                                                                                                 |
| NCBI GeneID                      | 2099                                                                                                                                                                                                     |
| NCBI Accession #                 | NP_000116.2                                                                                                                                                                                              |
| NCBI GenBank Nucleotide #        | NM_000125.3                                                                                                                                                                                              |
| UniProt Accession #              | P03372; Q13511; Q14276; Q5T5H7; Q6MZQ9; Q9NU51; Q9UDZ7; Q9UIS7                                                                                                                                           |
| Molecular Weight                 | 35,547 Da                                                                                                                                                                                                |
| NCBI Official Full Name          | estrogen receptor isoform 1                                                                                                                                                                              |
| NCBI Official Synonym Full Names | estrogen receptor 1                                                                                                                                                                                      |
| NCBI Official Symbol             | ESR1                                                                                                                                                                                                     |
| NCBI Official Synonym Symbols    | ER; ESR; Era; ESRA; ESTRR; NR3A1                                                                                                                                                                         |
| NCBI Protein Information         | estrogen receptor; ER-alpha; estradiol receptor; estrogen nuclear receptor alpha; estrogen receptor alpha E1-E2-1-2; estrogen receptor alpha E1-N2-E2-1-2; nuclear receptor subfamily 3 group A member 1 |
| UniProt Protein Name             | Estrogen receptor                                                                                                                                                                                        |
| UniProt Gene Name                | <b>ESR1</b>                                                                                                                                                                                              |
| UniProt Synonym Gene Names       | ESR; NR3A1; ER                                                                                                                                                                                           |
| UniProt Entry Name               | ESR1_HUMAN                                                                                                                                                                                               |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.