Datasheet: MCA1799T

**Description:** MOUSE ANTI HUMAN ESTROGEN RECEPTOR ALPHA

**Specificity:** ESTROGEN RECEPTOR ALPHA

**Format:** S/N

**Product Type:** Monoclonal Antibody

**Clone:** 6F11

**Isotype:** IgG1

**Quantity:** 0.1 ml

**RRID** AB_2102069

**Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

<table>
<thead>
<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunohistology - Frozen (1)</td>
<td></td>
<td></td>
<td></td>
<td>1/40 - 1/60</td>
</tr>
<tr>
<td>Immunohistology - Paraffin (2)</td>
<td></td>
<td></td>
<td></td>
<td>1/40 - 1/80</td>
</tr>
</tbody>
</table>

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1) *The use of Zamboni’s fixative is recommended for best results*

(2) *This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.*

**Target Species** Human

**Product Form** Tissue Culture Supernatant - liquid

**Preservative Stabilisers** 0.09% Sodium Azide

**Immunogen** Recombinant human estrogen receptor (alpha form).

**External Database Links**

<table>
<thead>
<tr>
<th>UniProt:</th>
<th>Related reagents</th>
</tr>
</thead>
<tbody>
<tr>
<td>P03372</td>
<td></td>
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</tbody>
</table>

**Entrez Gene:**

<table>
<thead>
<tr>
<th>Gene ID</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>2099</td>
<td>ESR1</td>
</tr>
</tbody>
</table>

**Synonyms** ESR, NR3A1
Spleen cells from immunised mice were fused with cells of the mouse p3-NS1-Ag4-1 myeloma cell line.

**Specificity**

Mouse anti Human estrogen alpha antibody, clone 6F11 recognizes the human estrogen receptor alpha chain (ERα), also known as the estradiol receptor or nuclear receptor subfamily 3 group A member 1. ERα is a ~65 kDa 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. ERα binds to DNA as a homodimer (Klinge 2001) and can also form heterodimers with Estrogen receptor beta.

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 ERα on breast cancer cell lysates using Western blotting and for the immunohistochemical detection of ERα in breast cancer tissues (Ambroise et al. 2011).

<table>
<thead>
<tr>
<th>Histology Positive Control Tissue</th>
<th>Breast carcinoma</th>
</tr>
</thead>
</table>

**References**


**Storage**

Store at +4°C or at -20°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.

**Guarantee**

Guaranteed until date of expiry. Please see product label.

**Health And Safety Information**

Material Safety Datasheet documentation #10055 available at:

**Regulatory**

For research purposes only

**Related Products**
Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...)  
Rabbit Anti Mouse IgG (STAR77...)  
Rabbit Anti Mouse IgG (STAR12...)  
Rabbit Anti Mouse IgG (STAR8...)  
Rabbit Anti Mouse IgG (STAR13...)  
Goat Anti Mouse IgG (STAR76...)  
Goat Anti Mouse IgG (STAR70...)  
Goat Anti Mouse IgG (STAR76...)  
Rabbit Anti Mouse IgG (STAR9...)  
Goat Anti Mouse IgG (H/L) (STAR117...)  

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)