

## Datasheet: MCA1799T

**BATCH NUMBER 166501**

<b>Description:</b>	MOUSE ANTI HUMAN ESTROGEN RECEPTOR ALPHA
<b>Specificity:</b>	ESTROGEN RECEPTOR ALPHA
<b>Format:</b>	S/N
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	6F11
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 ml

## Product Details

### 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).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen (1)	▪			1/40 - 1/60
Immunohistology - Paraffin (2)	▪			1/40 - 1/80

Where this product 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 product 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.**

<b>Target Species</b>	Human
<b>Product Form</b>	Tissue Culture Supernatant - liquid
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Immunogen</b>	Recombinant human estrogen receptor (alpha form).
<b>External Database Links</b>	<b>UniProt:</b>

**Entrez Gene:**

[2099](#)   ESR1   [Related reagents](#)

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**Synonyms**      ESR, NR3A1

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**RRID**            AB\_2102069

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**Fusion Partners**      Spleen cells from immunized mice were fused with cells of the mouse p3-NS1-Ag4-1 myeloma cell line.

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**Specificity**            **Mouse anti Human estrogen alpha antibody, clone 6F11** recognizes the human estrogen receptor alpha chain (ER $\alpha$ ), also known as the estradiol receptor or nuclear receptor subfamily 3 group A member 1. ER $\alpha$  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. ER $\alpha$  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 ER $\alpha$  on breast cancer cell lysates using Western blotting and for the immunohistochemical detection of ER $\alpha$  in breast cancer tissues ([Ambroise et al. 2011](#)).

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**Histology Positive Control Tissue**      Human breast carcinoma

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- References**
1. Bevitt, D.J. *et al.* (1997) New monoclonal antibodies to oestrogen and progesterone receptors effective for paraffin section immunohistochemistry. [J Pathol. 183 \(2\): 228-32.](#)
  2. Jongen, V. *et al.* (2009) Expression of estrogen receptor-alpha and -beta and progesterone receptor-A and -B in a large cohort of patients with endometrioid endometrial cancer. [Gynecol Oncol. 112: 537-42.](#)
  3. Ambroise, M. *et al.* (2011) Immunohistochemical profile of breast cancer patients at a tertiary care hospital in South India. [Asian Pac J Cancer Prev. 12: 625-9.](#)
  4. Krishnaswamy, U. *et al.* (2013) Correlation of Her-2 neu over-expression with clinico pathological features of carcinoma breast [Apollo Medicine. 10 \(4\): 313-7.](#)
  5. Droog, M. *et al.* (2017) Estrogen receptor  $\alpha$  yields treatment-specific enhancers between morphologically similar endometrial tumors. [Proc Natl Acad Sci U S A. 114 \(8\): E1316-E1325.](#)

**Storage** This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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**Guarantee** Guaranteed until date of expiry. Please see product label.

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**Health And Safety Information** Material Safety Datasheet documentation #10055 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1799T10055>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)  
'M418602:230427'

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