Datasheet: MCA1974ST

Product Details

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.

### Applications

<table>
<thead>
<tr>
<th>Suggested Dilution</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
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<tr>
<td>Immunohistology - Frozen</td>
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<td></td>
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<tr>
<td>Immunohistology - Paraffin (1)</td>
<td>Yes</td>
<td></td>
<td>1/5 - 1/50</td>
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<td>ELISA</td>
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<tr>
<td>Immunoprecipitation</td>
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<tr>
<td>Western Blotting</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Immunofluorescence</td>
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</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) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. 0.05M glycine/EDTA pH8 see (See Carpino et al.) or sodium citrate buffer pH 6.0 are recommended for this purpose.

### Target Species

Human

### Species Cross Reactivity

Reacts with: Primate, New World primate, Llama, Rat, Marmoset, Pig, Sheep, Cynomolgus monkey, Rhesus Monkey, Turtle, Goose

N.B. Antibody reactivity and working conditions may vary between species.

### Product Form

Concentrated Tissue Culture Supernatant - liquid

### Preservative Stabilisers

0.1% Sodium Azide

### Immunogen

Synthetic peptide sequence CSPAESKSKEGSSQPQSQ from the C-terminal region of the human estrogen receptor beta 1 isoform.
Fusion Partners

Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.

Specificity

Mouse anti Human estrogen receptor beta 1, clone PPG5/10 recognizes the estrogen receptor beta 1 (ERB1), one of several isoforms of estrogen receptor (ER) which can be used in conjunction with progesterone receptor (PR) and HER2/neu (CD340), to help determine both prognosis and the effectiveness of hormonal therapy, in breast cancer patients. Prognosis and survival rate varies greatly depending on cancer type, stage and treatment.

Mouse anti Human estrogen receptor beta 1, clone PPG5/10 is increasingly being utilized in the immunohistochemical staining of formal fixed paraffin embedded tissue, in preference to ligand binding assays, for the detection of ER/PR. ER/PR is present in approximately 75% to 80% of breast tumors, and breast cancer cells with these receptors depend on the hormones estrogen and/or progesterone to grow (Saunders, P. et al., 2002 and Nelson, A.W. et al., 2017).

Mouse anti Human estrogen receptor beta 1, clone PPG5/10 can be used to demonstrate the nuclear presence of ERB1 within cells of the breast (Shaaban, A.M. et al., 2008), ovary, uterus, oviduct, testis, prostate, bladder and male reproductive ducts.

BE ADVISED: Publications (Nelson, A.W. et al., 2017 and Andersson, S. et al., 2017) have queried the validity of clone PPG5/10. Please refer to the references section of this product's web page or datasheet for further information.

Histology Positive Control Tissue

Ovary

References

8. Juengel, J. L. et al. (2006) Oestrogen receptor alpha and beta, androgen receptor and...
progesterone receptor mRNA and protein localisation within the developing ovary and in small growing follicles of sheep. Reproduction. 131: 81-92.

**Further Reading**


**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.

**Shelf Life**
18 months from date of despatch.

**Health And Safety Information**
Material Safety Datasheet documentation #10336 available at:

**Regulatory**
For research purposes only

**Related Products**

**Recommended Secondary Antibodies**
- Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP
- Goat Anti Mouse IgG (STAR77...) HRP
- Rabbit Anti Mouse IgG (STAR12...) RPE
- Rabbit Anti Mouse IgG (STAR8...) DyLight®800
- Rabbit Anti Mouse IgG (STAR13...) 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®549, DyLight®649, DyLight®680, DyLight®800, FITC, HRP
- Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP
- Rabbit Anti Mouse IgG (STAR9...) FITC
- Human Anti Mouse IgG2a (HCA037...) FITC, HRP