Datasheet: MCA1974

Description: MOUSE ANTI HUMAN ESTROGEN RECEPTOR BETA 1
Specificity: ESTROGEN RECEPTOR BETA 1
Format: S/N
Product Type: Monoclonal Antibody
Clone: PPG5/10
Isotype: IgG2a
Quantity: 2 ml

Product Details

Applications

<table>
<thead>
<tr>
<th>Applications</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</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunohistology - Paraffin (1)</td>
<td></td>
<td>*</td>
<td></td>
<td>Neat - 1/20</td>
</tr>
<tr>
<td>ELISA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunoprecipitation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Blotting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunofluorescence</td>
<td></td>
<td></td>
<td></td>
<td></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) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. 0.05M glycine/EDTA pH 8 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

Tissue Culture Supernatant - liquid

Preservative Stabilisers

0.1% Sodium Azide (NaN$_3$)

Immunogen

Synthetic peptide sequence CSPAEDSKSKEGSQNPQSQ from the C-terminal region of the human estrogen receptor beta 1 isoform.
Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.

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.

### 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. Storage in frost-free freezers is not recommended. This product should be stored undiluted. 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 (STAR76...) RPE
Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP
Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®549, DyLight®649, DyLight®680, DyLight®800, FITC, HRP
Rabbit Anti Mouse IgG (STAR9...) FITC
Goat Anti Mouse IgG (STAR77...) HRP
Rabbit Anti Mouse IgG (STAR12...) RPE
Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP
Rabbit Anti Mouse IgG (STAR8...) DyLight®800
Goat Anti Mouse IgG (STAR70...) FITC
Human Anti Mouse IgG2a (HCA037...) FITC, HRP
Rabbit Anti Mouse IgG (STAR13...) HRP

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL (MCA929)