Datasheet: MCA1974GA

Product Details

Description: MOUSE ANTI HUMAN ESTROGEN RECEPTOR BETA 1

Specificity: ESTROGEN RECEPTOR BETA 1

Format: Purified

Product Type: Monoclonal Antibody

Clone: PPG5/10

Isotype: IgG2a

Quantity: 0.1 mg

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>
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<tr>
<th>Applications</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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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) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections;

0.05M glycine/EDTA pH 8.0 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. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.
Product Form | Purified IgG - liquid
Buffer Solution | Phosphate buffered saline
Preservative Stabilisers | <0.1% sodium azide (NaN₃)
Approx. Protein Concentrations | IgG concentration 1.0 mg/ml
Immunogen | Synthetic peptide sequence CSPAEDSKSKEGSQNPQSQ from the C-terminal region of the human estrogen receptor beta 1 isoform.

External Database Links
 UniProt: Q92731 Related reagents
 Entrez Gene: 2100 ESR2 Related reagents

Synonyms | ESTRB, NR3A2

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 et al., 2002 and Nelson 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 et al., 2008), ovary, uterus, oviduct, testis, prostate, bladder and male reproductive ducts.

Histology Positive Control Tissue | Ovary or breast carcinoma


19. Mafuvadze, B. et al. (2011) Apigenin Prevents Development of Medroxyprogesterone Acetate-Accelerated 7,12-Dimethylbenz(a)anthracene-Induced Mammary Tumors in
37. Bedir, Ö. et al. (2022) Plane of nutrition and FSH-induced superovulation affect the expression of steroid hormone receptors and growth factors in caruncular tissue of non-pregnant sheep. Domest Anim Endocrinol. 78: 106683.
Further Reading


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.

Guarantee

12 months from date of despatch

Health And Safety Information


Regulatory

For research purposes only

Related Products

**Recommended Secondary Antibodies**

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

**Recommended Negative Controls**

*MOUSE IgG2a NEGATIVE CONTROL (MCA929)*