Datasheet: MCA1974GA

BATCH NUMBER 180606

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

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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry		▪		
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting		▪		
Immunofluorescence	▪			

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	0.09% Sodium Azide
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

References

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2. Torlakovic, E. *et al.* (2002) Prostate carcinoma expression of estrogen receptor-beta as detected by PPG5/10 antibody has positive association with primary Gleason grade and Gleason score. Hum Pathol. 33 (6): 646-51.
3. Saunders, P.T. *et al.* (2002) Expression of oestrogen receptor beta (ERbeta1) protein in human breast cancer biopsies. Br J Cancer. 86 (2): 250-6.
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Further Reading

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2. Andersson, S. *et al.* (2017) Insufficient antibody validation challenges oestrogen receptor beta research. Nat Commun. 8: 15840.

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

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10040 available at:
https://www.bio-rad-antibodies.com/SDS/MCA1974GA
10040

Regulatory

For research purposes only

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
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP

North & South America
Tel: +1 800 265 7376
Fax: +1 919 878 3751
Email: antibody_sales_us@bio-rad.com

Worldwide
Tel: +44 (0)1865 852 700
Fax: +44 (0)1865 852 739
Email: antibody_sales_uk@bio-rad.com

Europe
Tel: +49 (0) 89 8090 95 21
Fax: +49 (0) 89 8090 95 50
Email: antibody_sales_de@bio-rad.com

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'M366037:200529'

Printed on 29 Oct 2024