

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

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)	▪			Neat - 1/20
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting		▪		
Immunofluorescence	▪			

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

further information.

Product Form	Tissue Culture Supernatant - liquid
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Preservative Stabilisers	0.1% Sodium Azide (NaN ₃)
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Immunogen	Synthetic peptide sequence CSPAESKSKSEGSQNPQSQ from the C-terminal region of the human estrogen receptor beta 1 isoform.
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External Database Links	UniProt: Q92731 Related reagents Entrez Gene: 2100 ESR2 Related reagents
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Synonyms	ESTRB, NR3A2
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RRID	AB_323380
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Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
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Specificity	<p>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.</p> <p>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 <i>et al.</i>, 2002 and Nelson <i>et al.</i>, 2017).</p> <p>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 <i>et al.</i>, 2008), ovary, uterus, oviduct, testis, prostate, bladder and male reproductive ducts.</p>
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Histology Positive Control Tissue	Ovary
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References	<ol style="list-style-type: none">1. Moore, J.T. <i>et al.</i> (1998) Cloning and characterization of human estrogen receptor beta isoforms. Biochem Biophys Res Commun. 247 (1): 75-8.2. Torlakovic, E. <i>et al.</i> (2002) Prostate carcinoma expression of estrogen receptor-beta as detected by PPG5/10 antibody has positive association with primary Gleason grade and
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Further Reading

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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
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Health And Safety Information	Material Safety Datasheet documentation #10336 available at: 10336: https://www.bio-rad-antibodies.com/uploads/MSDS/10336.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight@800
Goat Anti Mouse IgG (STAR76...)	RPE
Human Anti Mouse IgG2a (HCA037...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
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 (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

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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