

# Datasheet: MCA1974ST

Description:	MOUSE ANTI HUMAN ESTROGEN RECEPTOR BETA 1
Specificity:	ESTROGEN RECEPTOR BETA 1
Format:	Con S/N
Product Type:	Monoclonal Antibody
Clone:	PPG5/10
Isotype:	lgG2a
Quantity:	0.1 ml

## **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	information. For general protocol recommendations, please visit <u>www.bio-</u> rad-antibodies.com/protocols.					
rad-antibodies.com/proto						
	Yes	No	Not Determined	Suggested Dilution		
	-					
Immunohistology - Paraffin (1)	•			1/5 - 1/50		
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 <u>(See Carpino <i>et al.</i>)</u> or sodium citrate buffer pH 6.0 are						
recommended for this p	ourpose.					
Human						
Cynomolgus monkey, Rh <b>N.B.</b> Antibody reactivity a reactivity is derived from	esus Mo and worki testing w	nkey, Turt ng conditi rithin our la	le, Goose ons may vary between aboratories, peer-revie	species. Cross wed publications or		
	derived from testing withi communications from the information. For general prad-antibodies.com/proto Flow Cytometry Immunohistology - Frozen Immunohistology - Paraffin (1) ELISA Immunoprecipitation Western Blotting Immunofluorescence Where this antibody has necessarily exclude its us a guide only. It is recomm system using appropriate (1)This product require paraffin sections. 0.05M glycine/EDTA pH recommended for this p Human Reacts with: Primate, Ne Cynomolgus monkey, Rh N.B. Antibody reactivity a reactivity is derived from	derived from testing within our lab communications from the originate information. For general protocols.         rad-antibodies.com/protocols.         Flow Cytometry         Immunohistology - Frozen         Immunohistology - Paraffin         (1)         ELISA         Immunofluorescence         Where this antibody has not been necessarily exclude its use in such a guide only. It is recommended th system using appropriate negative         (1)This product requires antigen paraffin sections.         0.05M glycine/EDTA pH8 see (Su recommended for this purpose.         Human         Reacts with: Primate, New World Cynomolgus monkey, Rhesus Mo         N.B. Antibody reactivity and workit reactivity is derived from testing w	derived from testing within our laboratories, communications from the originators. Please information. For general protocol recommer rad-antibodies.com/protocols.         Yes       No         Flow Cytometry       Immunohistology - Frozen         Immunohistology - Paraffin (1)       Immunoprecipitation         ELISA       Immunofluorescence         Where this antibody has not been tested for necessarily exclude its use in such procedu a guide only. It is recommended that the use system using appropriate negative/positive of (1)This product requires antigen retrieval paraffin sections.         0.05M glycine/EDTA pH8 see (See Carpin recommended for this purpose.         Human         Reacts with: Primate, New World primate, L Cynomolgus monkey, Rhesus Monkey, Turt N.B. Antibody reactivity and working conditi reactivity is derived from testing within our laboratories.	derived from testing within our laboratories, peer-reviewed publical communications from the originators. Please refer to references in information. For general protocol recommendations, please visit we rad-antibodies.com/protocols.           Yes         No         Not Determined           Flow Cytometry         •         •         •           Immunohistology - Frozen         •         •         •           Immunohistology - Paraffin         •         •         •           (1)         •         •         •         •           Immunoprecipitation         •         •         •         •           Western Blotting         •         •         •         •           Immunofluorescence         •         •         •         •           Where this antibody has not been tested for use in a particular tech necessarily exclude its use in such procedures. Suggested workin a guide only. It is recommended that the user titrates the antibody system using appropriate negative/positive controls.         •           (1)This product requires antigen retrieval using heat treatmen paraffin sections.         •         •           0.05M glycine/EDTA pH8 see (See Carpino et al.) or sodium ci recommended for this purpose.         •         •		

	further information.
Product Form	Concentrated Tissue Culture Supernatant - liquid
Preservative Stabilisers	0.1% Sodium Azide
Immunogen	Synthetic peptide sequence CSPAEDSKSKEGSQNPQSQ from the C-terminal region of the human estrogen receptor beta 1 isoform.
External Database Links	UniProt: <u>Q92731</u> Related reagents Entrez Gene: <u>2100</u> ESR2 <u>Related reagents</u>
Synonyms	ESTRB, NR3A2
RRID	AB_324626
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
Specificity	<b>Mouse anti Human estrogen receptor beta 1, clone PPG5/10</b> 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 ( <u>Saunders <i>et al.</i></u> , 2002) and <u>Nelson <i>et al.</i></u> , 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 ( <u>Shaaban <i>et al.</i>, 2008</u> ), ovary, uterus, oviduct, testis, prostate, bladder and male reproductive ducts.
Histology Positive Control Tissue	Ovary
References	<ol> <li>Moore, J.T. <i>et al.</i> (1998) Cloning and characterization of human estrogen receptor beta isoforms. <u>Biochem Biophys Res Commun. 247 (1): 75-8.</u></li> <li>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</li> </ol>

Gleason score. Hum Pathol. 33 (6): 646-51.

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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	
Health And Safety Information	rial Safety Datasheet documentation #10336 available at: 6: <u>https://www.bio-rad-antibodies.com/uploads/MSDS/10336.pdf</u>	
Regulatory	For research purposes only	

### **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)	<u>Alk. Phos., DyLight®488, DyLight®550,</u>				
	DyLight®650, DyLight®680, DyLight®800,				
	FITC, HRP				
Goat Anti Mouse IgG (STAR70)	<u>FITC</u>				
Rabbit Anti Mouse IgG (STAR9)	<u>FITC</u>				
Goat Anti Mouse IgG IgA IgM (STAR87) <u>Alk. Phos.</u> , <u>HRP</u>					
Rabbit Anti Mouse IgG (STAR13)	HRP				
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