

Datasheet: MCA4676T

BATCH NUMBER 171026

Description:	MOUSE ANTI HUMAN ESTROGEN RECEPTOR BETA 5
Specificity:	ESTROGEN RECEPTOR BETA 5
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	5/25
Isotype:	IgG1
Quantity:	25 µg

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	▪			

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. Sodium citrate buffer pH 6.0 is recommended for this purpose.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.1% Sodium Azide (NaN ₃)

Stabilisers

Approx. Protein Concentrations IgG concentration 1.0mg/ml

Immunogen Tuberculin conjugated synthetic peptide LLSHVRHARYAP derived from the C-terminus of human ERB5.

External Database Links

UniProt:

[Q92731](#) [Related reagents](#)

Entrez Gene:

[2100](#) ESR2 [Related reagents](#)

Synonyms ESTRB, NR3A2

RRID AB_1604962

Specificity

Mouse anti human estrogen receptor beta 5, clone 5/25 recognizes human estrogen receptor beta 5 (ERB5), a splice variant of the nuclear receptor hormone ERbeta (ESR2), shown to exist in at least five isoforms (ERB1-ERB5) ([Moore et al. 1998](#)). Although only the ERB1 variant appears fully functional, the remaining isoforms have been shown to form heterodimers with ERB1, thereby enhancing transcription ([Shaaban et al. 2008](#)).

Immunohistochemical studies have revealed a ubiquitous expression of ERB5 in normal colorectal tissue, and to be present in all primary colorectal carcinomas studied ([Wong, N. et al. 2005](#)).

The detection of estrogen (ER) and progesterone (PR) receptors using immunohistochemical staining of formal fixed paraffin embedded (FFPE) tissue, has gradually replaced ligand binding assays (LBA), to become the most common method for the determination of the ER/PR status of breast tumors. Approximately 75% to 80% of breast tumors have estrogen and/or progesterone receptors, and the presence of these receptors helps determine both the patient's prognosis and the effectiveness of hormonal therapy transcription ([Shaaban et al. 2008](#), [Collins et al. 2009](#)).

Histology Positive Control Tissue

Normal colon or colon carcinoma

References

1. Wong, N.A. *et al.* (2005) ERbeta isoform expression in colorectal carcinoma: an in vivo and in vitro study of clinicopathological and molecular correlates. [J Pathol. 207 \(1\): 53-60.](#)
2. Shaaban, A.M. *et al.* (2008) Nuclear and cytoplasmic expression of ERbeta1, ERbeta2, and ERbeta5 identifies distinct prognostic outcome for breast cancer patients. [Clin Cancer Res. 14 \(16\): 5228-35.](#)
3. Collins, F. *et al.* (2009) Expression of oestrogen receptors, ERalpha, ERbeta, and ERbeta variants, in endometrial cancers and evidence that prostaglandin F may play a role in regulating expression of ERalpha. [BMC Cancer. 9: 330.](#)
4. Ciucci, A. *et al.* (2014) Gender effect in experimental models of human

medulloblastoma: does the estrogen receptor β signaling play a role? [PLoS One. 9 \(7\): e101623.](#)

5. Zannoni, G.F. *et al.* (2016) Sexual dimorphism in medulloblastoma features. [Histopathology. 68 \(4\): 541-8.](#)

6. Li, S.Y. *et al.* (2015) Cytoplasm estrogen receptor β 5 as an improved prognostic factor in thymoma and thymic carcinoma progression. [Oncol Lett. 10 \(4\): 2341-6.](#)

7. Ciucci, A. *et al.* (2018) Estrogen receptor β : Potential target for therapy in adult granulosa cell tumors? [Gynecol Oncol. 150 \(1\): 158-65.](#)

8. Bai, Y. *et al.* (2018) Oestrogen receptor β 5 and epidermal growth factor receptor synergistically promote lung cancer progression. [Autoimmunity. 51 \(4\): 157-165.](#)

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.
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/MCA4676T 10040
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

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'M367864:200529'

Printed on 25 Mar 2023

