# Datasheet: MCA1784PE

## BATCH NUMBER 156702

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| **Description:** | RAT ANTI HUMAN EGF RECEPTOR:RPE |
| **Specificity:** | EGF R |
| **Other names:** | EPIDERMAL GROWTH FACTOR RECEPTOR |
| **Format:** | RPE |
| **Product Type:** | Monoclonal Antibody |
| **Clone:** | ICR10 |
| **Isotype:** | IgG2a |
| **Quantity:** | 100 TESTS |

## 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 | ▪ | | | Neat |

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 systems using appropriate negative/positive controls.

**Target Species**

Human

**Product Form**

Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

**Reconstitution**

Reconstitute with 1.0 ml distilled water

**Max Ex/Em**

| Fluorophore | Excitation Max (nm) | Emission Max (nm) |
|---|---|---|
| RPE 488nm laser | 496 | 578 |

**Preparation**

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

**Buffer Solution**

Phosphate buffered saline

**Preservative Stabilisers**

0.09% Sodium Azide
1% Bovine Serum Albumin

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| | 5% Sucrose |
| **Immunogen** | Extracellular domain of human EGF-receptor from head and neck carcinoma. |
| **External Database Links** | **UniProt:**<br>P00533 Related reagents<br><br>**Entrez Gene:**<br>1956 EGFR Related reagents |
| **Synonyms** | ERBB1 |
| **RRID** | AB_324662 |
| **Specificity** | **Rat anti Human EGF Receptor antibody, clone ICR10** recognizes the human epidermal growth factor receptor (EGF-R), which is over expressed in a high proportion of breast cancer cells and in a range of other carcinomas.<br><br>High level expression of EGFR is often associated with advanced disease and poor prognosis.<br><br>Rat anti Human EGF Receptor antibody, clone ICR10 binds to epitope B from EGFR (Lottaz *et al.* 2010 and Modjtahedi *et al.* 1993) and has an affinity of 6.7 x $10^{-9}$ M. |
| **Flow Cytometry** | Use 10ul of the suggested working dilution to label $10^6$ cells in 100ul. |
| **References** | 1. Lottaz,C. *et al.* (2010) Transcriptional Profiles of CD133+ and CD133- Glioblastoma-Derived Cancer Stem Cell Lines Suggest Different Cells of Origin Cancer Res. 70: 2030-40.<br>2. Modjtahedi, H. *et al.* (1993) Antitumor activity of combinations of antibodies directed against different epitopes on the extracellular domain of the human EGF receptor. Cell Biophys. 22 (1-3): 129-46.<br>3. Modjtahedi, H. *et al.* (2012) Immunohistochemical discrimination of wild-type EGFR from EGFRvIII in fixed tumour specimens using anti-EGFR mAbs ICR9 and ICR10. Br J Cancer. 106 (5): 883-8.<br>4. Grinberg, O. *et al.* (2013) Antibody modified Bovine Serum Albumin microspheres for targeted delivery of anticancer agent Gemcitabine Polymers for Advanced Technologies. 24 (3): 294-299.<br>5. Gilcrease, M.Z. *et al.* (2009) Alpha6beta4 integrin crosslinking induces EGFR clustering and promotes EGF-mediated Rho activation in breast cancer. J Exp Clin Cancer Res. 28: 67.<br>6. Tilburgs, T. *et al.* (2015) Human HLA-G+ extravillous trophoblasts: Immune-activating cells that interact with decidual leukocytes. Proc Natl Acad Sci U S A. 112 (23): 7219-24.<br>7. Tilburgs, T. *et al.* (2015) The HLA-G cycle provides for both NK tolerance and immunity at the maternal-fetal interface. Proc Natl Acad Sci U S A. 112 (43): 13312-7.<br>8. Khelwatty, S.A. *et al.* (2015) Acquired resistance to anti-EGFR mAb ICR62 in cancer cells is accompanied by an increased EGFR expression, HER-2/HER-3 signalling and |

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| | sensitivity to pan HER blockers. Br J Cancer. 113 (7): 1010-9. |
| **Storage** | Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.<br><br>DO NOT FREEZE.<br><br>This product should be stored undiluted. This product is photosensitive and should be protected from light. 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 #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA1784PE<br>20487 |
| **Regulatory** | For research purposes only |

## Related Products

### Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:RPE (MCA6005PE)

### Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)


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| **North & South America** | Tel: +1 800 265 7376<br>Fax: +1 919 878 3751<br>Email: antibody_sales_us@bio-rad.com | **Worldwide** | Tel: +44 (0)1865 852 700<br>Fax: +44 (0)1865 852 739<br>Email: antibody_sales_uk@bio-rad.com | **Europe** | Tel: +49 (0) 89 8090 95 21<br>Fax: +49 (0) 89 8090 95 50<br>Email: antibody_sales_de@bio-rad.com |


To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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