

# Datasheet: MCA1784F

Description:	RAT ANTI HUMAN EGF RECEPTOR:FITC
Specificity:	EGF R
Other names:	EPIDERMAL GROWTH FACTOR RECEPTOR
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	ICR10
Isotype:	lgG2a
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry				1/10

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species	Human			
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid			
Max Ex/Em	Fluorophore	Excitation Max (nm) 490	Emission Max (nr	m)
Preparation		by ion exchange chro		
Buffer Solution	Phosphate buffered s	aline		
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum	Albumin		
Approx. Protein Concentrations	IgG concentration 0.1	mg/ml		
Immunogen	Extracellular domain	of human EGF-recepto	or from head and r	neck carcinoma.

### External Database Links

UniProt:

P00533 Related reagents

**Entrez Gene:** 

1956 EGFR Related reagents

#### **Synonyms**

ERBB1

#### **RRID**

AB\_324284

#### **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.

High level expression of EGFR is often associated with advanced disease and poor prognosis.

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<sup>-9</sup> M.

#### **Flow Cytometry**

Use 10ul of the suggested working dilution to label 10<sup>6</sup> 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 <u>Cancer Res. 70:</u> 2030-40.
- 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. <u>Cell Biophys.</u> 22 (1-3): 129-46.
- 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. <u>Br J Cancer.</u> 106 (5): 883-8.
- 4. Grinberg, O. *et al.* (2013) Antibody modified Bovine Serum Albumin microspheres for targeted delivery of anticancer agent Gemcitabine <u>Polymers for Advanced Technologies</u>. <u>24 (3): 294-299.</u>
- 5. Gilcrease, M.Z. *et al.* (2009) Alpha6beta4 integrin crosslinking induces EGFR clustering and promotes EGF-mediated Rho activation in breast cancer. <u>J Exp Clin Cancer Res. 28: 67.</u>
- 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.
- 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.
- 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 sensitivity to pan HER blockers. Br J Cancer. 113 (7): 1010-9.

#### 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. This product is photosensitive and should be protected from light.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf</a>
Regulatory	For research purposes only

# **Related Products**

## **Recommended Negative Controls**

RAT IgG2a NEGATIVE CONTROL:FITC (MCA6005F)

### **Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M385810:210513'

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