Datasheet: MCA1784

Description:	RAT ANTI HUMAN EGF RECEPTOR
Specificity:	EGF R
Other names:	EPIDERMAL GROWTH FACTOR RECEPTOR
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	ICR10
Isotype:	IgG2a
Quantity:	0.2 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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin	▪			
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting		▪		
Immunofluorescence	▪			

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.

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 Stabilisers	0.09% sodium azide (NaN_3)

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Extracellular domain of human EGF-receptor from head and neck carcinoma.
External Database Links	**UniProt:** P00533 Related reagents **Entrez Gene:** 1956 EGFR Related reagents
Synonyms	ERBB1
RRID	AB_322787
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^{-9} M.
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells in 100µl
Histology Positive Control Tissue	Human breast carcinoma
References	1. 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. 2. 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. 3. 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. 4. 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. 5. 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. 6. 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.
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. 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.

Further Reading	1. Modjtahedi, H. & Dean, C. (1994) The receptor for EGF and its ligands - expression, prognostic value and target for therapy in cancer (review). Int J Oncol. 4 (2): 277-96.
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	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1784 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR73...)	RPE
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550, DyLight®650, DyLight®800
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos., Biotin
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC

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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M411514:221103'

Printed on 18 Jan 2024