Datasheet: MCA1784A647

Description:	RAT ANTI HUMAN EGF RECEPTOR:Alexa Fluor® 647
Specificity:	EGF R
Other names:	EPIDERMAL GROWTH FACTOR RECEPTOR
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	ICR10
Isotype:	IgG2a
Quantity:	100 TESTS/1ml

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 - 1/10

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 conjugated to Alexa Fluor ® 647 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®647	650	665

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)
1% Bovine Serum Albumin

Approx. Protein Concentrations

IgG concentration 0.05 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
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
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. This product is photosensitive and should be protected from light.
Guarantee	12 months from date of despatch
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchased product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1784A647 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 (MCA6005A647)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

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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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