

## Monoclonal Antibody to EGF Receptor (EGFR) - FITC

<b>Alternate names:</b>	EGF Receptor, Epidermal growth factor receptor, Proto-oncogene c-ErbB-1, Receptor tyrosine-protein kinase erbB-1, c-ErbB-1, erbB-1
<b>Catalog No.:</b>	SM1334F
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	0.1 mg/ml
<b>Background:</b>	<p>EGF Receptor (EGFR) and erbB2, erbB3, and ErbB4 are members of subclass I of receptor tyrosine kinases.</p> <p>EGFR/erbB receptors are activated upon binding of EGF and EGF-related growth factors such as TGF alpha, beta-cellulin, Hb-EGF, HRG, or NRG. Binding of these ligands leads to receptor homo- and heterodimerization followed by autophosphorylation and activation of downstream signal transduction pathways (MAPK, PI3K/PKB, and STAT). In addition, EGFR becomes fully activated after phosphorylation of Y845 by src family kinases. Phosphorylation of Y1045 leads to association with cbl and subsequent receptor degradation. Phosphorylation of S1047 by CamKinase II leads to attenuation of kinase activity; phosphorylation of T654 (by PKC) and T669 (by MAPK, p38) interferes with receptor endocytosis/recycling.</p>
<b>Uniprot ID:</b>	<a href="#">P00533</a>
<b>NCBI:</b>	<a href="#">NP_005219.2</a>
<b>GeneID:</b>	<a href="#">1956</a>
<b>Host / Isotype:</b>	Rat / IgG2a
<b>Clone:</b>	ICR10
<b>Immunogen:</b>	Extracellular domain of human EGF-receptor from head and neck carcinoma
<b>Format:</b>	<p><b>State:</b> Liquid purified IgG fraction.</p> <p><b>Purification:</b> Ion Exchange Chromatography.</p> <p><b>Buffer System:</b> PBS, pH 7.4 containing 0.09% Sodium Azide as preservative and 1% BSA as stabilizer.</p> <p><b>Label:</b> FITC – Fluorescein Isothiocyanate Isomer 1</p>
<b>Applications:</b>	<p><b>Flow Cytometry:</b> Use 10 µl of 1/10 diluted antibody to label 10e6 cells in 100 µl. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.</p>

**For research and in vitro use only. Not for diagnostic or therapeutic work.**

Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

Antibody Hotline - Technical Questions - Antibody Location Service  
Free Call: 0800-2274746 (Germany only) - [www.acris-antibodies.com](http://www.acris-antibodies.com)

**Specificity:** This antibody recognises the 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.

The antibody binds to epitope B from EGFR (1,2).

**Species:** Human.

Other species not tested.

**Affinity Constant:**  $6.7 \times 10^{-9}$  M

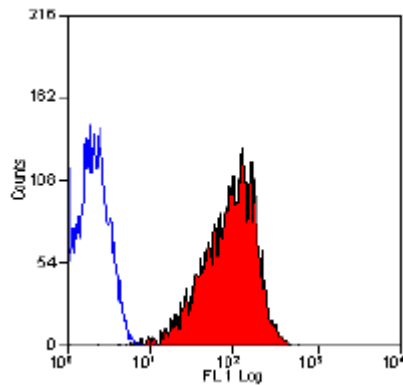
**Storage:** Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

**General References:** 1. Modjtahedi, H. and Dean, C.J. (1994) The receptor for EGF and its ligands: Expression, prognostic value and target for therapy in cancer. *Int. J. Oncol.* 4: 277-296.  
2. Modjtahedi, H. et al. (1993) Antitumour 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.

**Pictures:**



Staining of A431 cells with Rat Anti Human EGF Receptor-FITC (SM1334F).

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