

Product datasheet for SM1334F

OriGene Technologies, Inc.

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EGFR Rat Monoclonal Antibody [Clone ID: ICR10]

Product data:

Product Type: Primary Antibodies

Clone Name: ICR10
Applications: FC

Recommended Dilution: Flow Cytometry: Use 10 μl of antibody to label 10e6 cells in 100 μl (1/10 dilution).

Reactivity: Human

Host: Rat IgG2a

Clonality: Monoclonal

Immunogen: Extracellular domain of human EGF-receptor from head and neck carcinoma

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).

Formulation: PBS, pH 7.4 containing 0.09% Sodium Azide as preservative and 1% BSA as stabilizer.

Label: FITC

State: Liquid purified IgG fraction.

Label: Fluorescein Isothiocyanate Isomer 1

Concentration: lot specific

Purification: Ion Exchange Chromatography.

Conjugation: FITC

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.

Stability: Shelf life: one year from despatch.

Gene Name: epidermal growth factor receptor

Database Link: Entrez Gene 1956 Human

P00533





Background:

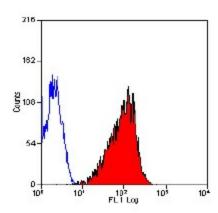
EGF Receptor (EGFR) and erbB2, erbB3, and ErbB4 are members of subclass I of receptor tyrosine kinases.

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.

Synonyms:

Epidermal growth factor receptor, EGF Receptor, erbB-1, c-ErbB-1

Product images:



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