

Recombinant EGFR/HER1/ErbB1 Monoclonal Antibody

catalog number: AN300008P

Note: Centrifuge before opening to ensure complete recovery of vial contents.

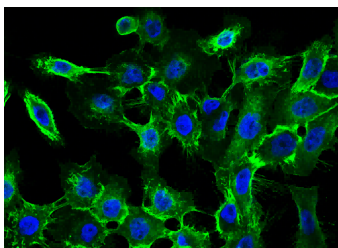
Description

Reactivity	Human
Immunogen	Recombinant Human EGFR Protein
Host	Rabbit
Isotype	IgG
Clone	2B11
Purification	Protein A
Buffer	0.2 µm filtered solution in PBS

Applications Recommended Dilution

ICC/IF	1:100-1:500
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Data



Immunofluorescence staining of Human EGFR in A431 cells.

Cells were fixed with 4% PFA, permeabilized with 0.3%

Triton X-100 in PBS, blocked with 10% serum, and

incubated with rabbit anti-Human EGFR Monoclonal

Antibody (1:300) at 4°C overnight. Then cells were stained

with the Alexa Fluor® 488-conjugated Goat Anti-rabbit IgG
secondary antibody (green) and counterstained with DAPI for

nuclear staining (blue).

Preparation & Storage

Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
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Shipping	Ice bag
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Background

For Research Use Only

The epidermal growth factor receptor (EGFR) subfamily of receptor tyrosine kinases comprises four members: EGFR (also known as HER1, ErbB1 or ErbB), ErbB2 (Neu, HER2), ErbB3 (HER3), and ErbB4 (HER4). All family members are type I transmembrane glycoproteins that have an extracellular domain which contains two cysteine-rich domains separated by a spacer region that is involved in ligand binding, and a cytoplasmic domain which has a membrane-proximal tyrosine kinase domain and a C-terminal tail with multiple tyrosine autophosphorylation sites. The human EGFR gene encodes a 1210 amino acid (aa) residue precursor with a 24 aa putative signal peptide, a 621 aa extracellular domain, a 23 aa transmembrane domain, and a 542 aa cytoplasmic domain. EGFR has been shown to bind a subset of the EGF family ligands, including EGF, amphiregulin, TGF- α , betacellulin, epiregulin, heparin-binding EGF and neuregulin-2 α in the absence of a co-receptor. Ligand binding induces EGFR homodimerization as well as heterodimerization with ErbB2, resulting in kinase activation, tyrosine phosphorylation and cell signaling. EGFR can also be recruited to form heterodimers with the ligand-activated ErbB3 or ErbB4. EGFR signaling has been shown to regulate multiple biological functions including cell proliferation, differentiation, motility and apoptosis. In addition, EGFR signaling has also been shown to play a role in carcinogenesis.