

## Basic Information

Product Name	Anti-EGFR Antibody	
Gene Name	EGFR	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human EGFR recombinant protein (Position: N36-N497).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	175 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Immunofluorescence (IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

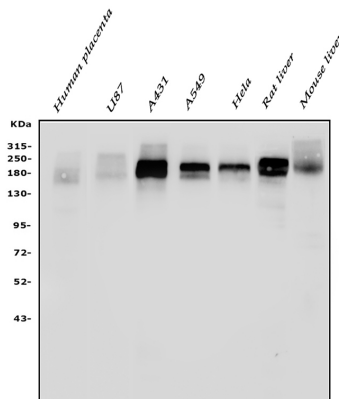
## Background Information

The epidermal growth factor receptor (EGFR; ErbB-1; HER1 in humans) is the cell-surface receptor for members of the epidermal growth factor family (EGF-family) of extracellular protein ligands. It is a member of the ErbB family of receptors, a subfamily of four closely related receptor tyrosine kinases: EGFR (ErbB-1), HER2/c-neu (ErbB-2), Her 3 (ErbB-3) and Her 4 (ErbB-4). EGFR exists on the cell surface and is activated by binding of its specific ligands, including epidermal growth factor and transforming growth factor  $\alpha$  (TGF $\alpha$ ). EGFR and its ligands are cell signaling molecules involved in diverse cellular functions, including cell proliferation, differentiation, motility, and survival, and in tissue development. Mutations that lead to EGFR overexpression (known as upregulation) or overactivity have been associated with a number of cancers, including lung cancer and glioblastoma multiforme. In this latter case a more or less specific mutation of EGFR, called EGFRvIII is often observed.

## Reference

Anti-EGFR Antibody被引用在7文献中。

## Selected Validation Data



Western blot analysis of EGFR using anti-EGFR antibody (A00023-4). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,

Lane 2: human U87 whole cell lysates,

Lane 3: human A431 whole cell lysates,

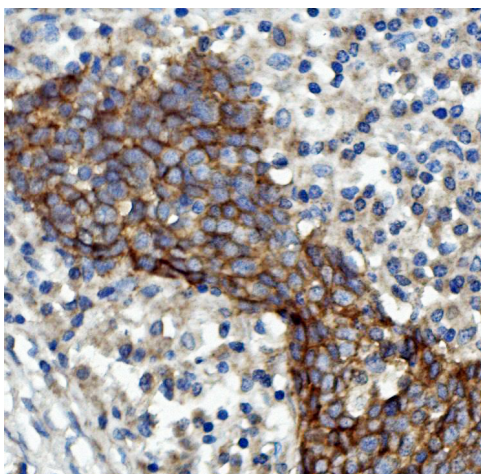
Lane 4: human A549 whole cell lysates,

Lane 5: human HELA whole cell lysates,

Lane 6: Rat liver tissue lysates,

Lane 7: Mouse liver tissue lysates.

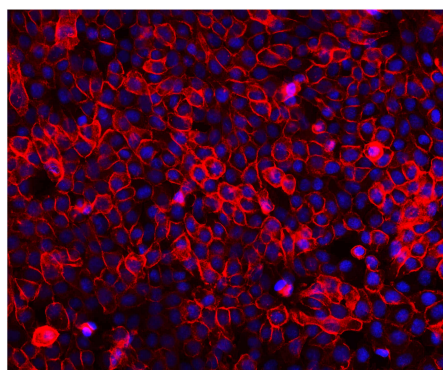
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-EGFR antigen affinity purified polyclonal antibody (A00023-4) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for EGFR at approximately 175 kDa. The expected band size for EGFR is at 134 kDa.



IHC analysis of EGFR using anti-EGFR antibody (A00023-4).

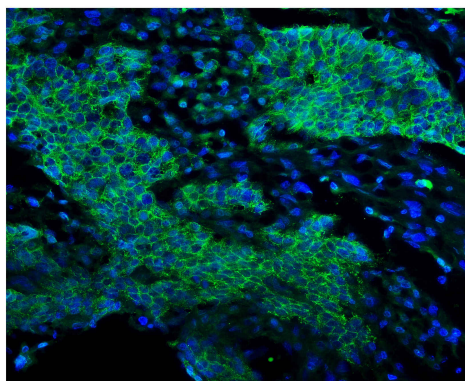
EGFR was detected in a paraffin-embedded section of human lung cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody.

The tissue section was incubated with rabbit anti-EGFR Antibody (A00023-4) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.

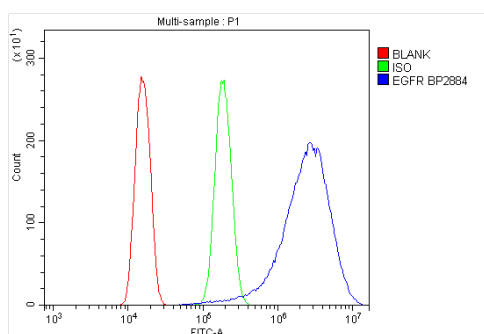


IF analysis of EGFR using anti-EGFR antibody (A00023-4).

EGFR was detected in an immunocytochemical section of A431 cells. The section was incubated with rabbit anti-EGFR Antibody (A00023-4) at a dilution of 1:100. Dylight550-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1135) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



IF analysis using anti-EGFR antibody (A00023-4) . detected in paraffin-embedded section of human lung cancer® tissue. The tissue section were stained using the Dylight488 conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog # BA1127) and counterstained with DAPI (blue).



Flow Cytometry analysis of A431 cells using anti-EGFR antibody (A00023-4).

Overlay histogram showing A431 cells stained with A00023-4 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-EGFR Antibody (A00023-4) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.