# Anti-EGFR Antibody

## ER1512-6

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| **Product Type:** | Rabbit polyclonal IgG, primary antibodies |
| **Species reactivity:** | Human, Mouse |
| **Applications:** | WB, IF-Cell, IHC-P, FC |
| **Molecular Wt:** | Predicted band size: 134 kDa |

**Description:** Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling cascades to convert extracellular cues into appropriate cellular responses. Known ligands include EGF, TGFA/TGF-alpha, amphiregulin, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding EGF. Ligand binding triggers receptor homo- and/or heterodimerization and autophosphorylation on key cytoplasmic residues. The phosphorylated receptor recruits adapter proteins like GRB2 which in turn activates complex downstream signaling cascades. Activates at least 4 major downstream signaling cascades including the RAS-RAF-MEK-ERK, PI3 kinase-AKT, PLCgamma-PKC and STATs modules. May also activate the NF-kappa-B signaling cascad.

**Immunogen:** Synthetic peptide within human EGFR aa 914-1036.

**Positive control:** HepG2, Hela, SW480, LOVO, human liver tissue, human kidney tissue, human placenta tissue, A431.

**Subcellular location:** Plasma membrane, Nucleus, Endosome, Endoplasmic reticulum.

**Database links:** SwissProt: P00533 Human | Q01279 Mouse

**Recommended Dilutions:**

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| **WB** | 1:500-2,000 |
| **IF-Cell** | 1:50-1:200 |
| **IHC-P** | 1:50-1:200 |
| **FC** | 1:50-1:100 |

**Storage Buffer:** 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:** Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

**Purity:** Immunogen affinity purified.

Applications:WB=Western blot  IHC-P=Immunohistochemistry (paraffin)  IF-Cell=Immunofluorescence (Cell)  IF-Tissue=Immunofluorescence (Tissue)  FC=Flow cytometry  IP=Immunoprecipitation
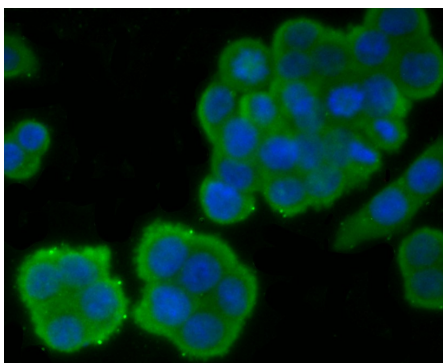
## Images
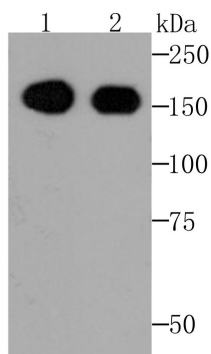


**Fig1:** Western blot analysis of EGFR on HepG2 (1) and Hela (2) cell lysates using anti-EGFR antibody at 1/1,000 dilution.
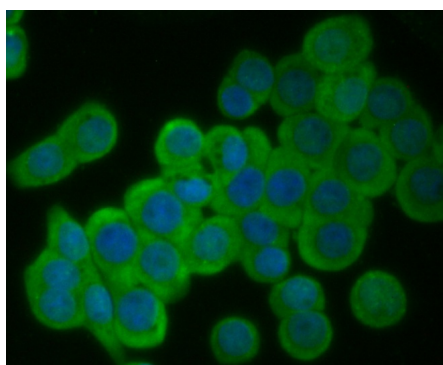


**Fig2:** ICC staining EGFR in LOVO cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



**Fig3:** ICC staining EGFR in SW480 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
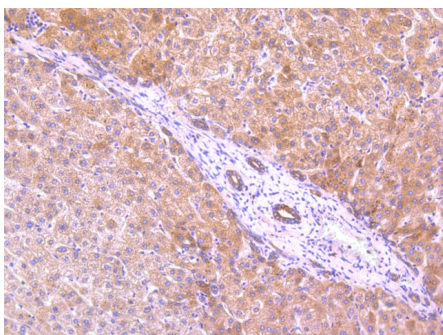


**Fig4:** Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-EGFR antibody. Counter stained with hematoxylin.
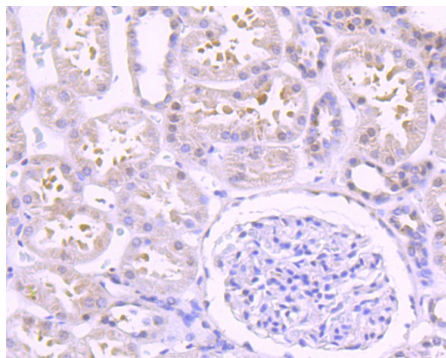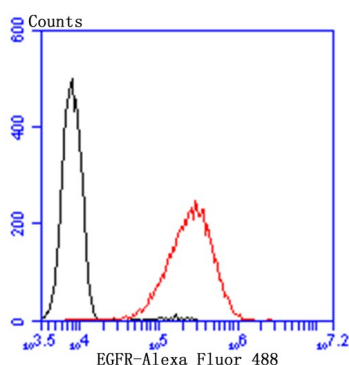
**Fig5:** Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-EGFR antibody. Counter stained with hematoxylin.
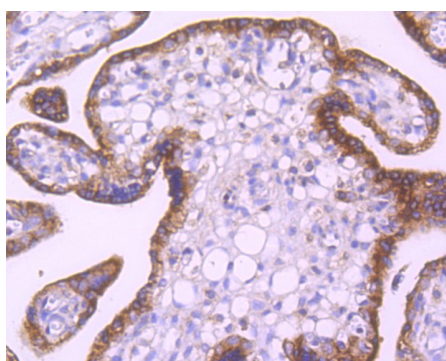


**Fig6:** Immunohistochemical analysis of paraffin-embedded human placenta tissue using anti-EGFR antibody. Counter stained with hematoxylin.



**Fig7:** Flow cytometric analysis of A431 cells with EGFR antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti-rabbit IgG was used as the secondary antibody.

**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

## Background References

1. Lupberger J. et al. EGFR and EphA2 are host factors for hepatitis C virus entry and possible targets for antiviral therapy. Nat. Med. 17:589-595 (2011).

2. Groenestege W.M.T. et al. Impaired basolateral sorting of pro-EGF causes isolated recessive renal hypomagnesemia. J. Clin. Invest. 117:2260-2267 (2007).