# **Anti-EGFR Antibody**

## 0407-21



Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Monkey
Applications:	WB, IF-Cell, IHC-P
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.
lmmunogen:	Synthetic peptide within mouse EGFR aa 11-60 / 1,210.
Positive control:	A431 cell lysates, A172, rat stomach tissue, human stomach cancer tissue.
Subcellular location:	Plasma membrane, Nucleus, Endosome, Endoplasmic reticulum.
Database links:	SwissProt: P00533 Human   Q01279 Mouse Entrez Gene: 24329 Rat
Recommended Dilutions: WB IF-Cell IHC-P	1:500-1:1,000 1:50-1:200
	1:50-1:200
Storage Buffer:	1*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.
Storage Instruction:	Shipped at 4 $^\circ\!{\rm C}$ . Store at +4 $^\circ\!{\rm C}$ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20 $^\circ\!{\rm C}$ long term.
Purity:	Immunogen affinity purified.

## Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

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

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#### Images

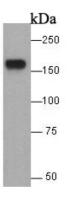


Fig1: Western blot analysis of EGFR on A431 cell lysate. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody was used at a 1:500 dilution in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature.

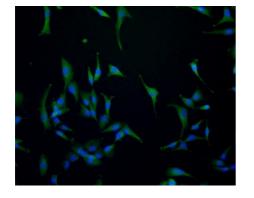
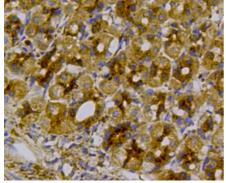


Fig2: ICC staining EGFR in A172 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the antibody (0407-21) at a dilution of 1:100 for 1 hour at room temperature, washed with PBS. Alexa Fluorc<sup>™</sup> 488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/100 dilution. The nuclear counter stain is DAPI (blue).



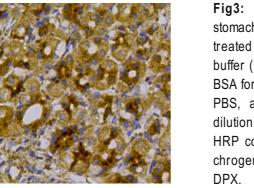


Fig3: Immunohistochemical analysis of paraffin-embedded rat stomach tissue using anti-EGFR antibody. The section was pretreated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the antibody (0407-21) at 1/200 dilution, for 30 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chrogen. Counter stained with hematoxylin and mounted with

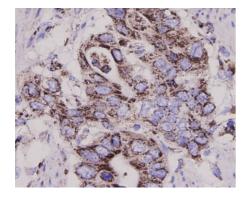


Fig4: Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue using anti-EGFR antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the antibody (0407-21) at 1/200 dilution, for 30 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chrogen. Counter stained with hematoxylin and mounted with DPX.

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

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