## **Anti-EGFR Antibody**

## R1608-3



**Product Type:** Rabbit polyclonal IgG, primary antibodies

Species reactivity: Human, Mouse, Rat

Applications: WB, IF-Cell, IHC-P, FC

Molecular Wt: Predicted band size: 134 kDa

Description: The EGF receptor family comprises several related receptor tyrosine kinases that are

frequently overexpressed in a variety of carcinomas. Members of this receptor family include EGFR (HER1), Neu (ErbB-2, HER2), ErbB-3 (HER3) and ErbB-4 (HER4), which form either homodimers or heterodimers upon ligand binding. Exons in the EGFR gene product are frequently either deleted or duplicated to produce deletion mutants (DM) or tandem duplication mutants (TDM), respectively, which are detected at various molecular weights. EGFR binds several ligands, including epidermal growth factor (EGF), transforming growth factor  $\alpha$  (TGF $\alpha$ ), Amphiregulin and heparin binding-EGF (HB-EGF). Ligand binding promotes the internalization of EGFR via Clathrin-coated pits and its subsequent degradation in response to its intrinsic tyrosine kinase. EGFR is involved in organ morphogenesis and maintenance and repair of tissues, but upregulation of EGFR is associated with tumor progression. The oncogenic effects of EGFR include initiation of DNA synthesis, enhanced cell growth, invasion and metastasis. Abrogation of EGFR results in cell cycle arrest, apoptosis or dedifferentiation of cancer cells, suggesting that EGFR may be an effective

therapeutic target.

**Immunogen:** Recombinant protein within human EGFR aa 944-1120.

Positive control: A431, HepG2, PANC-1, human lung tissue, human breast cancer tissue, human placenta

tissue, mouse lung tissue.

**Subcellular location:** Secreted and Cell membrane. Endosome membrane. Nucleus.

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

Recommended Dilutions:

WB 1:500-1:2000 IF-Cell 1:50-1:200 IHC-P 1:50-1:200 FC 1:50-1:200

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:** Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Technical: 0086-571-89986345

Service mail:support@huabio.cn



## Images

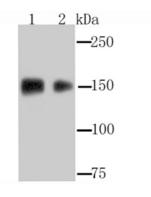
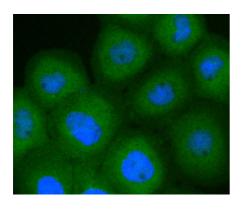
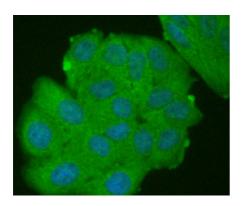


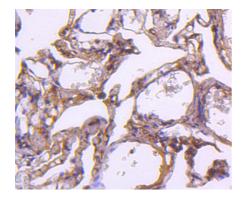
Fig1: Western blot analysis of EGFR on A431 (1) and HepG2 (2) cell lysate using anti-EGFR antibody at 1/1,000 dilution.



**Fig2:** ICC staining EGFR in A431 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 HepG2 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 lung tissue using anti-EGFR antibody. Counter stained with hematoxylin.

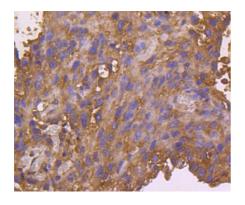


Fig5: Immunohistochemical analysis of paraffin-embedded human breast cancer tissue using anti-EGFR antibody. Counter stained with hematoxylin.

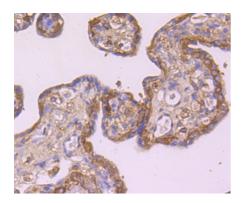


Fig6: Immunohistochemical analysis of paraffin-embedded human placenta tissue using anti-EGFR antibody. Counter stained with hematoxylin.

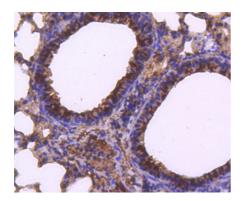
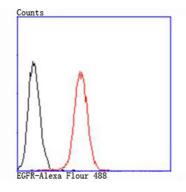


Fig7: Immunohistochemical analysis of paraffin-embedded mouse lung tissue using anti-EGFR antibody. Counter stained with hematoxylin.



**Fig8:** Flow cytometric analysis of PANC-1 cells with EGFR antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black).

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

## **Background References**

- 1. Hofmann K et al. A novel alkyne cholesterol to trace cellular cholesterol metabolism and localization. J Lipid Res 55:583-91 (2014).
- 2. Chen CC et al. The matricellular protein CCN1 suppresses hepatocarcinogenesis by inhibiting compensatory proliferation. Oncogene 35:1314-23 (2016).