Anti-EGFR Antibody

R1511-18

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Cell, IHC-P
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 α (TGFα), 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: Synthetic peptide within human EGFR aa 1107-1180.

Positive control: Hela, HUVEC, A431, human tonsil tissue, human lung cancer tissue, human liver tissue, human kidney tissue, 2 liver tissue, 2 kidney tissue.

Subcellular location: Secreted and Cell membrane. Endoplasmic reticulum membrane.

Database links: SwissProt: P00533 Human

Recommended Dilutions:

WB	1:500-1:1000
IF-Cell	1:50-1:200
IHC-P	1:50-1:200

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 40% 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.

Images

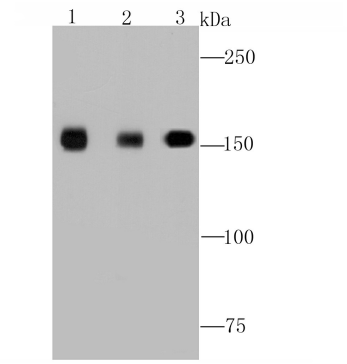

Fig1: Western blot analysis of EGFR on different cell lysate using anti-EGFR antibody at 1/1,000 dilution.
Positive control:
Lane 1: Hela
Lane 2: HUVEC
Lane 3: A431

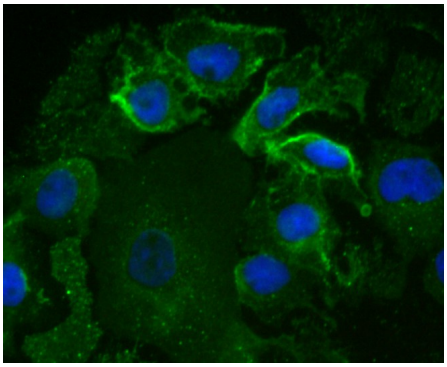

Fig2: ICC staining EGFR in A431 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

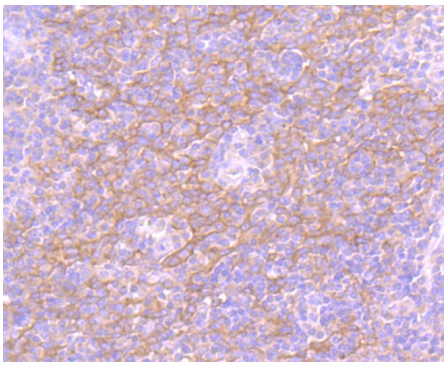

Fig3: Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-EGFR antibody. Counter stained with hematoxylin.

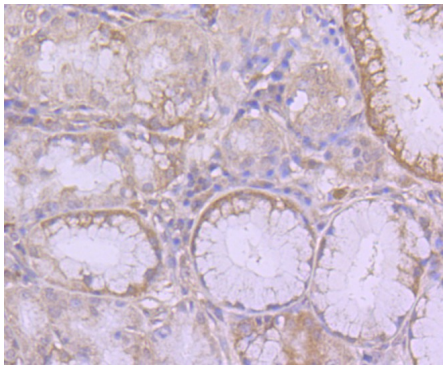

Fig4: Immunohistochemical analysis of paraffin-embedded human lung cancer tissue using anti-EGFR antibody. Counter stained with hematoxylin.

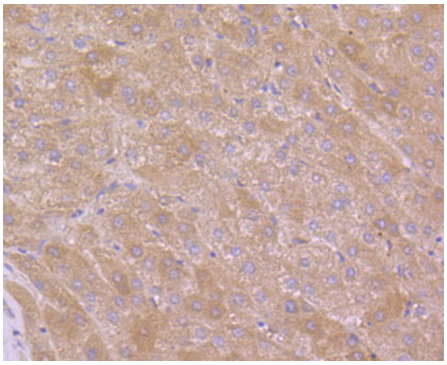

Fig5: Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-EGFR antibody. Counter stained with hematoxylin.

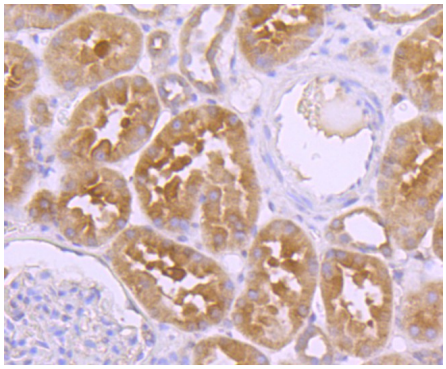

Fig6: Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-EGFR antibody. Counter stained with hematoxylin.

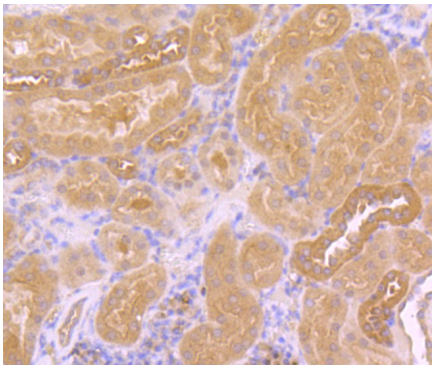

Fig7: Immunohistochemical analysis of paraffin-embedded 2 kidney tissue using anti-EGFR antibody. Counter stained with hematoxylin.

Background References

1. Chen CC et al. The matricellular protein CCN1 suppresses hepatocarcinogenesis by inhibiting compensatory proliferation. Oncogene 35:1314-23 (2016).
2. Wang G et al. Simvastatin induces cell cycle arrest and inhibits proliferation of bladder cancer cells via PPARγ signalling pathway. Sci Rep 6:35783 (2016).