

## Anti-EGFR Antibody (7X976)

## Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	7X976
Purification:	Affinity-chromatography

## Applications

Verified Activity:	<p>1. Western Blot</p> <ul style="list-style-type: none"><li>-Positive WB detected in: L02 whole cell lysate, Hela whole cell lysate, PC-3 whole cell lysate, A549 whole cell lysate</li><li>-All lanes: EGFR antibody at 1:2000</li><li>-Secondary: Goat polyclonal to rabbit IgG at 1/50000 dilution</li><li>-Predicted band size: 135, 45, 78, 70 kDa</li><li>-Observed band size: 165 kDa</li></ul> <p>2. IHC image of TMAH-00378 diluted at 1:100 and staining in paraffin-embedded human placenta tissue performed on a Leica Bond<sup>TM</sup> system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.</p> <p>3. Immunofluorescence staining of A549 Cells with TMAH-00378 at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).</p> <p>4. Overlay histogram showing Jurkat cells stained with TMAH-00378 (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then incubated in 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1µg/1*10<sup>6</sup> cells) for 1 h at 4°C. The secondary antibody used was FITC-conjugated goat anti-rabbit IgG (H+L) at 1/200 dilution for 30min at 4°C. Control antibody (green line) was Rabbit IgG (1µg/1*10<sup>6</sup> cells) used under the same conditions. Acquisition of &gt;10,000 events was performed.</p>
Application:	ELISA,FCM,IF,IHC,WB
Recommended	WB:1:500-1:5000; IHC:1:50-1:200; IF:1:20-1:200; FCM:1:20-1:200.

## Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

### Antigen Details

Immunogen: A synthetic peptide: Human EGFR(ErbB 1)  
Antigen Species: Human  
Gene ID: 1956  
Uniprot ID: P00533  
Synonyms: EGFR;LEGFR;PIG61;ERBB1;HER1;ErbB;NISBD2;EC 2.7.10.1;EC 2.7.10;mENA  
Biology Area: Cancer, Signal transduction

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### Research Background

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, AREG, 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 cascade. Also directly phosphorylates other proteins like RGS16, activating its GTPase activity and probably coupling the EGF receptor signaling to the G protein-coupled receptor signaling. Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin. Positively regulates cell migration via interaction with CCDC88A/GIV which retains EGFR at the cell membrane following ligand stimulation, promoting EGFR signaling which triggers cell migration. Plays a role in enhancing learning and memory performance. Isoform 2 may act as an antagonist of EGF action. (Microbial infection) Acts as a receptor for hepatitis C virus (HCV) in hepatocytes and facilitates its cell entry. Mediates HCV entry by promoting the formation of the CD81-CLDN1 receptor complexes that are essential for HCV entry and by enhancing membrane fusion of cells expressing HCV envelope glycoproteins.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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