

## **Product datasheet for TA347595**

## **EGFR Rabbit Polyclonal Antibody**

## **Product data:**

**Product Type:** Primary Antibodies

Applications: WE

**Reactivity:** WB: 1:500-1:2000 Human, Mouse, Rat

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

Immunogen: The immunogen for anti-EGFR Antibody: A synthesized peptide derived from human EGFR

Formulation: Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50%

glycerol. Store at -20?. Stable for 12 months from date of receipt

**Concentration:** lot specific

Purification: Immunogen affinity purified

**Conjugation:** Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Predicted Protein Size:** 135,170 kDa

**Gene Name:** epidermal growth factor receptor

Database Link: NP 958439

Entrez Gene 13649 MouseEntrez Gene 24329 RatEntrez Gene 1956 Human

P00533



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Background:

EGFR is a receptor tyrosine kinase. Receptor for epidermal growth factor (EGF) and related growth factors including TGF-alpha, amphiregulin, betacellulin, heparin-binding EGF-like growth factor, GP30 and vaccinia virus growth factor. Is involved in the control of cell growth and differentiation. . A single-pass transmembrane tyrosine kinase. Ligand binding to this receptor results in receptor dimerization, autophosphorylation (in trans), activation of various downstream signaling molecules and lysosomal degradation. Can be phosphorylated and activated by Src. Activated EGFR binds the SH2 domain of phospholipase C-gamma (PLCgamma), activating PLC-gamma-mediated downstream signaling. Phosphorylated EGFR binds Cbl, leading to its ubiquitination and degradation. Grb2 and SHC bind to phospho-EGFR and are involved in the activation of MAP kinase signaling pathways. Phosphorylation on Ser and Thr residues is thought to represent a mechanism for attenuation of EGFR kinase activity. Overexpressed in breast, head and neck cancers, correlating with poor survival. Activating somatic mutations seen in lung cancer, corresponding to minority of patients with strong response to EGFR inhibitor Iressa (gefitinib). Mutations and amplification also seen in glioblastoma, and upregulation seen in colon cancer and neoplasms. In xenografts, inhibitors synergized with cytotoxic drugs in inhibition of many tumor types. Inhibitors: Iressa/ZD1839, Erbitux, Tarceva, and lapatinib. Four alternatively spliced isoforms have been described.

Synonyms: ERBB; ERBB1; HER1; mENA; NISBD2; PIG61

**Note:** EGFR Antibody detects endogenous levels of EGFR

**Protein Families:** Adult stem cells, Cancer stem cells, Druggable Genome, ES Cell Differentiation/IPS, Protein

Kinase, Secreted Protein, Stem cell relevant signaling - JAK/STAT signaling pathway,

Transmembrane

**Protein Pathways:** Adherens junction, Bladder cancer, Calcium signaling pathway, Colorectal cancer, Cytokine-

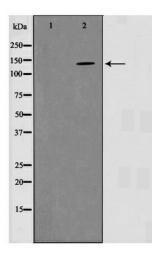
cytokine receptor interaction, Dorso-ventral axis formation, Endocytosis, Endometrial cancer,

Epithelial cell signaling in Helicobacter pylori infection, ErbB signaling pathway, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, MAPK signaling pathway, Melanoma, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Prostate

cancer, Regulation of actin cytoskeleton



## **Product images:**



Western blot analysis on SK-OV3 cell lysate using EGFR Antibody