

EGFR Ab

Cat.#: AF0436
Size: 100ul,200ul

Concn.: 1mg/ml
Source: Rabbit

Mol.Wt.: 135,170kDa
Clonality: Polyclonal

Application: WB 1:500-1:2000, IF/ICC 1:100-1:500

Reactivity: Human, Mouse, Rat

Purification: The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Specificity: EGFR Ab detects endogenous levels of EGFR.

Immunogen: A synthesized peptide derived from human EGFR.

Uniprot: P00533

Description: EGFR is a receptor tyrosine kinase. Receptor for epidermal growth factor (EGF) and related growth factors including TGF- α , 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- γ (PLC- γ), activating PLC- γ -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.

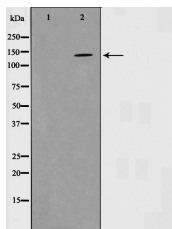
Subcellular Location: Secreted and Cell membrane. Endoplasmic reticulum membrane. Golgi apparatus membrane. Nucleus membrane. Endosome. Endosome membrane. Nucleus. In response to

EGF, translocated from the cell membrane to the nucleus via Golgi and ER. Endocytosed upon activation by ligand. Colocalized with GPER1 in the nucleus of estrogen agonist-induced cancer-associated fibroblasts (CAF).

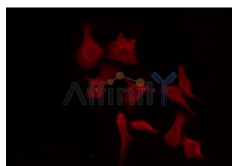
Tissue Specificity: Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.

Similarity: Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily.

Storage Condition and Buffer: Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt.



Western blot analysis on SK-OV3 cell lysates using EGFR Ab.The lane on the left was treated with the antigen-specific peptide.



AF0436 staining SK-OV3 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. The primary Ab was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary Ab.

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween@20 at 4°C with gentle shaking, overnight.

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