

Product datasheet for TA384141

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EGFR Rabbit Monoclonal Antibody [Clone ID: R09-715]

Product data:

Product Type: Primary Antibodies

Clone Name: R09-7I5
Applications: IF, WB

Recommended Dilution: WB: 1/1000

ICC/IF: 1/50

Reactivity: Human
Host: Rabbit
Isotype: IgG

Clonality: Monoclonal

Immunogen: A synthetic peptide of human EGFR

Formulation: 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA

Concentration: lot specific

Purification: Affinity Purified
Conjugation: Unconjugated

Storage: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Stability: 1 year

Predicted Protein Size: Calculated MW: 134 kDa; Observed MW: 175 kDa

Gene Name: epidermal growth factor receptor

Database Link: Entrez Gene 1956 Human

P00533



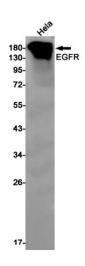


Background:

Swiss-Prot Acc.P00533.Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling cascades to convert extracellular cues into appropriate cellular responses (PubMed:2790960, PubMed:10805725, PubMed:27153536). Known ligands include EGF, TGFA/TGF-alpha, AREG, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding EGF (PubMed:2790960, PubMed:7679104, PubMed:8144591, PubMed:9419975, PubMed:15611079, PubMed:12297049, PubMed:27153536, PubMed:20837704). 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 (PubMed:27153536). May also activate the NF-kappa-B signaling cascade (PubMed:11116146). 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 (PubMed:11602604). Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin (PubMed:11483589). Plays a role in enhancing learning and memory performance.

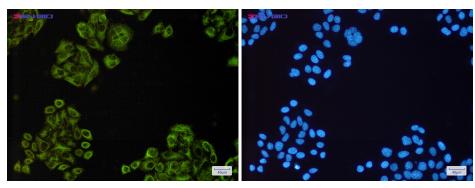
Synonyms: ERBB; ERBB1; HER1; mENA; PIG61

Product images:



Western blot detection of EGFR in Hela cell lysates using EGFR Rabbit mAb(1:1000 diluted). Predicted band size:134kDa. Observed band size:175kDa.





Immunocytochemistry of EGFR(green) in Hela cells using EGFR Rabbit mAb at dilution 1/50, and DAPI(blue)