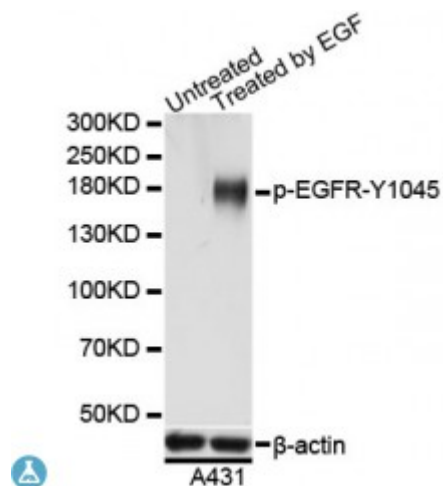


Anti-Phospho-EGFR-(Y1045) Antibody



Description

The protein encoded by this gene is a transmembrane glycoprotein that is a member of the protein kinase superfamily. This protein is a receptor for members of the epidermal growth factor family. EGFR is a cell surface protein that binds to epidermal growth factor. Binding of the protein to a ligand induces receptor dimerization and tyrosine autophosphorylation and leads to cell proliferation. Mutations in this gene are associated with lung cancer.

Model	STJ117917
Host	Rabbit
Reactivity	Human
Applications	WB
Immunogen	A phospho specific peptide corresponding to residues surrounding Y1045 of human EGFR
Gene ID	1956
Gene Symbol	EGFR
Dilution range	WB 1:500 - 1:2000
Tissue Specificity	Ubiquitously expressed, Isoform 2 is also expressed in ovarian cancers
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Epidermal growth factor receptor
Molecular Weight	134.277 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:3236OMIM:131550Reactome:R-HSA-1227986
Alternative Names	Epidermal growth factor receptor
Function	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, amphiregulin, 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, Plays a role in enhancing learning and memory performance ,
Cellular Localization	Cell membrane
Post-translational Modifications	Phosphorylation at Ser-695 is partial and occurs only if Thr-693 is phosphorylated, Phosphorylation at Thr-678 and Thr-693 by PRKD1 inhibits EGF-induced MAPK8/JNK1 activation, Dephosphorylation by PTPRJ prevents endocytosis and stabilizes the receptor at the plasma membrane, Autophosphorylation at Tyr-1197 is stimulated by methylation at Arg-1199 and enhances interaction with PTPN6, Autophosphorylation at Tyr-1092 and/or Tyr-1110 recruits STAT3, Dephosphorylated by PTPN1 and PTPN2,