

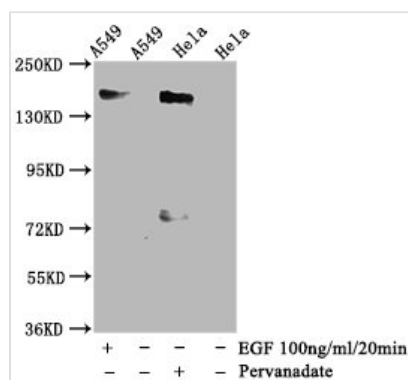


Phospho-EGFR (Y1092) Recombinant Monoclonal Antibody

Product Code	CSB-RA007479A1092phHU
Abbreviation	Epidermal growth factor receptor
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P00533
Immunogen	A synthesized peptide derived from Human Phospho-EGFR (Y1092)
Species Reactivity	Human
Tested Applications	ELISA, WB; Recommended dilution: WB:1:500-1:5000
Relevance	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 (By similarity).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	Epidermal growth factor receptor, Proto-oncogene c-ErbB-1, Receptor tyrosine-protein kinase erbB-1, EGFR, ERBB, ERBB1, HER1
Immunogen Species	Homo sapiens (Human)
Research Area	Signal Transduction
Gene Names	EGFR
Clone No.	3H9



Image



Western Blot

Positive WB detected in A549 whole cell lysate, HeLa whole cell lysate (treated with Pervanadate or EGF)

All lanes Phospho-EGFR antibody at 1.35μg/ml

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 170 KDa

Observed band size: 170 KDa

Description

The production of the phospho-EGFR (Y1092) recombinant monoclonal antibody involves the application of protein technology and DNA recombinant techniques. The process begins by immunizing animals with a synthesized peptide derived from human phospho-EGFR (Y1092), followed by the isolation of B cells. Positive B cells are then selected and undergo single clone identification. The light and heavy chains of the phospho-EGFR (Y1092) antibody are amplified through PCR and inserted into a plasmid vector to create a recombinant vector. This recombinant vector is transfected into host cells for antibody expression. The phospho-EGFR (Y1092) recombinant monoclonal antibody is purified from the cell culture supernatant using affinity chromatography. It serves as a valuable tool for the detection of human phospho-EGFR (Y1092) protein in ELISA and WB applications.