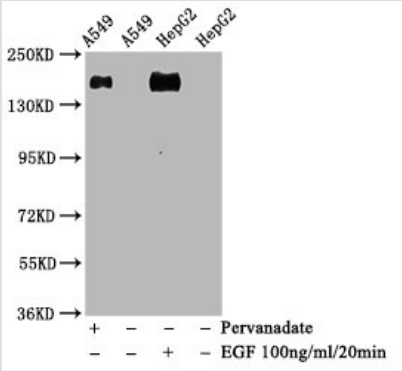
Phospho-EGFR (Y1068) Recombinant Monoclonal Antibody

Product Code	CSB-RA007479A1068phHU
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 (Y1068)
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.	1B8

Image



Western Blot
Positive WB detected in A549 whole cell lysate, HepG2 whole cell lysate(treated with EGF or Pervanadate)
All lanes Phospho-EGFR antibody at 1.28μg/ml
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 175 KDa
Observed band size: 175 KDa

Description

The phospho-EGFR (Y1068) recombinant monoclonal antibody is yielded through the implementation of protein technology and DNA recombinant techniques. Initially, animals are immunized with a synthesized peptide derived from human phospho-EGFR (Y1068). Next, B cells are obtained from the mice. Through a screening process, positive B cells are selected and undergo single clone identification. The light and heavy chains of the phospho-EGFR (Y1068) antibody are then amplified via PCR and inserted into a plasmid vector, creating a recombinant vector, which is transfected into host cells for the expression of the antibody. Subsequently, the phospho-EGFR (Y1068) recombinant monoclonal antibody is purified from the cell culture supernatant using affinity chromatography. It is recommended for use in ELISA and WB for the detection of human EGFR phosphorylated at Y1068 residue.