

EGFR (Phospho-Tyr1016) Antibody

Catalog No: #12013

Package Size: #12013-1 50ul #12013-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

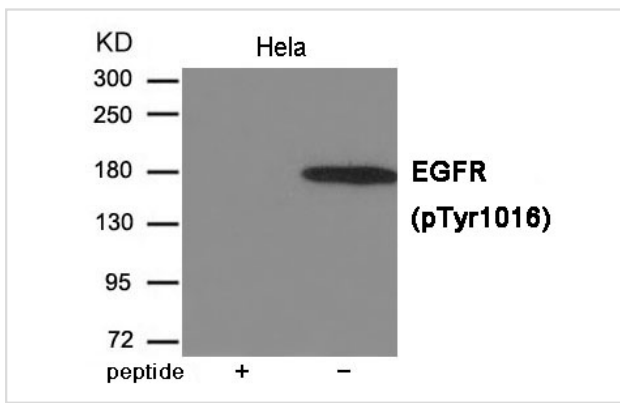
Product Name	EGFR (Phospho-Tyr1016) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of EGFR only when phosphorylated at Tyrosine 1016.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of Tyrosine 1016 (D-E-Y(p)-L-I) derived from Human EGFR.
Target Name	EGFR
Modification	Phospho
Other Names	ERBB, HER1, mENA, ERBB1, PIG61
Accession No.	Swiss-Prot#: P00533; NCBI Gene#: 1956; NCBI Protein#: NP_005219.2
Uniprot	P00533
GeneID	1956;
SDS-PAGE MW	175kd
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C/1 year

Application Details

Predicted MW: 175kd

Western blotting: 1:500~1:1000

Images



Western blot analysis of extracts from HeLa cells using EGFR (Phospho-Tyr1016) Antibody #12013. The lane on the left is treated with the antigen-specific peptide.

Background

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.

Note: This product is for in vitro research use only