abcam

Product datasheet

Anti-EGFR (phospho Y1068) antibody ab92960

1 Image

Overview		
Product name	Anti-EGFR (phospho Y1068) antibody	
Description	Rabbit polyclonal to EGFR (phospho Y1068)	
Host species	Rabbit	
Tested applications	Suitable for: WB	
Species reactivity	Reacts with: Human	
	Predicted to work with: Mouse, Rat	
Immunogen	Synthetic peptide corresponding to Human EGFR aa 1050-1150 conjugated to keyhole limpet haemocyanin. (Peptide available as <u>ab104697</u>)	
Positive control	This antibody gave a positive signal in A431 EGF treated whole cell lysates.	
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.	
	If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As	

Properties	
Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or - 80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS
	Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
Purity	Immunogen affinity purified

lsotype

Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab92960 in the following tested applications.

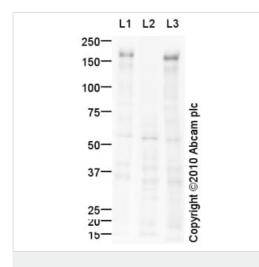
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 μ g/ml. Detects a band of approximately 175 kDa (predicted molecular weight: 134 kDa).

Target

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.
Tissue specificity	Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.
Involvement in disease	Lung cancer Inflammatory skin and bowel disease, neonatal, 2
Sequence similarities	Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily. Contains 1 protein kinase domain.
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. Monoubiquitinated and polyubiquitinated upon EGF stimulation; which does not affect tyrosine kinase activity or signaling capacity but may play a role in lysosomal targeting. Polyubiquitin linkage is mainly through 'Lys-63', but linkage through 'Lys-48', 'Lys-11' and 'Lys-29' also occurs. Deubiquitination by OTUD7B prevents degradation. Ubiquitinated by RNF115 and RNF126. Methylated. Methylation at Arg-1199 by PRMT5 stimulates phosphorylation at Tyr-1197.
Cellular localization	Secreted and Cell membrane. Endoplasmic reticulum membrane. Golgi apparatus membrane. Nucleus membrane. Endosome. Endosome membrane. Nucleus. In response to EGF, translocated from the cell membrane to the nucleus via Golgi and ER. Endocytosed upon

Images



Western blot - Anti-EGFR (phospho Y1068) antibody (ab92960)

All lanes : Anti-EGFR (phospho Y1068) antibody (ab92960) at 1 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Whole cell Lysate-TNFa Stimulates Whole Cell Lysate (<u>ab94364</u>) Lane 2 : HeLa (Human epithelial carcinoma cell line) Whole cell Lysate-TNFa Stimulates Whole Cell Lysate (<u>ab94364</u>) with Immunizing peptide at 1 µg/ml Lane 3 : HeLa (Human epithelial carcinoma cell line) Whole cell

Lysate-TNFa Stimulates Whole Cell Lysate ($\underline{ab94364}$) with Non-modified peptide at 1 $\mu\text{g/ml}$

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 134 kDaObserved band size: 175 kDaAdditional bands at: 57 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 8 minutes

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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