

## Summary

Production Name	EGFR (phospho Ser1070) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ELISA
Reactivity	Human, Mouse, Rat

### Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

### Immunogen

Gene Name	EGFR
Alternative Names	EGFR; ERBB; ERBB1; HER1; Epidermal growth factor receptor; Proto-oncogene c-ErbB-1;
	Receptor tyrosine-protein kinase erbB-1
Gene ID	1956.0
SwissProt ID	P00533.The antiserum was produced against synthesized peptide derived from human
	EGFR around the phosphorylation site of Ser1070. AA range:1041-1090

# Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000
Molecular Weight	175kD



#### Background

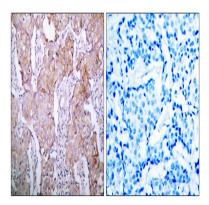
The protein encoded by this gene is a transmembrane glycoprotein that is a member of the protein kinase superfamily. This protein is a receptor for members of the epidermal growth factor family. EGFR is a cell surface protein that binds to epidermal growth factor. Binding of the protein to a ligand induces receptor dimerization and tyrosine autophosphorylation and leads to cell proliferation. Mutations in this gene are associated with lung cancer. [provided by RefSeq, Jun 2016], catalytic activity: ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate., disease: Defects in EGFR are associated with lung cancer [MIM:211980]., function: Isoform 2/truncated isoform may act as an antagonist., function: Receptor for EGF, but also for other members of the EGF family, as TGF-alpha, amphiregulin, betacellulin, heparin-binding EGF-like growth factor, GP30 and vaccinia virus growth factor. Is involved in the control of cell growth and differentiation. Phosphorylates MUC1 in breast cancer cells and increases the interaction of MUC1 with C-SRC and CTNNB1/beta-catenin, miscellaneous: Binding of EGF to the receptor leads to dimerization, internalization of the EGFreceptor complex, induction of the tyrosine kinase activity, stimulation of cell DNA synthesis, and cell proliferation.,online information:EGFR entry,PTM:Monoubiquitinated and polyubiquitinated upon EGF stimulation; which does not affect tyrosine kinase activity or signaling capacity but may play a role in lysosomal targeting. Polyubiguitin linkage is mainly through 'Lys-63', but linkage through 'Lys-48', 'Lys-11' and 'Lys-29' also occur., PTM: Phosphorylation of Ser-695 is partial and occurs only if Thr-693 is phosphorylated., similarity: Belongs to the protein kinase superfamily. Tyr protein kinase family, similarity: Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily., similarity: Contains 1 protein kinase domain., subunit: Binds RIPK1. CBL interacts with the autophosphorylated Cterminal tail of the EGF receptor. Part of a complex with ERBB2 and either PIK3C2A or PIK3C2B. The autophosphorylated form interacts with PIK3C2B, maybe indirectly. Interacts with PELP1. Binds MUC1.,tissue specificity:Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.,

#### **Research Area**

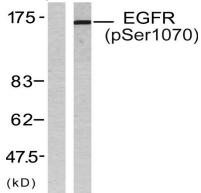
MAPK\_ERK\_Growth;MAPK\_G\_Protein;ErbB\_HER;Calcium;Cytokine-cytokine receptor interaction;Endocytosis;Dorso-ventral axis formation;Focal adhesion;Adherens\_Junction;Gap junction;Regulates Actin and Cytoskeleton;GnRH;Epithelial cell signaling in Helicobacter pylori infection;Pathways in cancer;Colorectal cancer;Pancreatic cancer;Endometrial cancer;Glioma;Prostate cancer;Melanoma;Bladder cancer;Non-small cell lung cancer;

## Image Data





Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using EGFR (Phospho-Ser1070) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from SK-OV3 cells treated with EGF, using EGFR (Phospho-Ser1070) Antibody. The lane on the left is blocked with the phospho peptide.

#### Note

For research use only.