

Product name:	EGFR (phospho Thr678) Rabbit Polyclonal Antibody
Cat number:	ABN04588
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human EGFR around the phosphorylation site of Thr678. AA range:651-700
Reactivity:	Human,Mouse,Rat,Monkey
Applications:	WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:20000-1:40000
Molecular Weight:	175kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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 EGF-receptor 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. Polyubiquitin 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 C-terminal 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.,