

## Phospho-EGFR (Thr693) Polyclonal Antibody

Catalog No. E-AB-20858

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

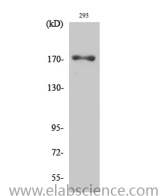
### Description

<b>Reactivity</b>	Human, Mouse, Rat
<b>Immunogen</b>	Synthesized peptide derived from human EGFR around the phosphorylation site of T693.
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Purification</b>	Affinity purification
<b>Buffer</b>	PBS with 0.02% sodium azide, 0.5% protective protein and 50% glycerol, pH7.4

### Applications Recommended Dilution

<b>WB</b>	1:500-1:2000
<b>IHC</b>	1:100-1:300
<b>IF</b>	1:200-1:1000
<b>ELISA</b>	1:40000

### Data



Western Blot analysis of 293 cells with Phospho-EGFR  
(Thr693) Polyclonal Antibody.  
**Observed Mw:180,134kDa**  
**Calculated Mw:134kDa**

### Preparation & Storage

**Storage** Store at -20°C. Avoid freeze / thaw cycles.

### 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

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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. Isoform 2 may act as an antagonist of EGF action.