

**Anti-Human/Mouse/Rat Phospho-EGFR (Ser695) Polyclonal Antibody**

**Polyclonal Antibody**

**Cat.NO.: PA01695**

3th Edition

**Description:** 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. Isoform 2 may act as an antagonist of EGF action.

**Antigen:** Synthesized peptide derived from human EGFR around the phosphorylation site of S695.

**Form:**

**How to use:** 1.0 ml distilled water will be added to the product

**Stability:** Lyophilized product, 5 years at 2 – 8°C; Solution, 2 years at –20°C

**Dilution:** PBS (pH7.4) containing 1% BSA

**Application:** This antibody can be used for western blotting in concentration of 1?5?g/ml.

**Specificity:** Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.