



## Phospho-EGFR-Y998 Polyclonal Antibody

E9P002

**Catalog Number:** E9P0024**Amount:** 100ul

**Background:** The epidermal growth factor (EGF) receptor is a transmembrane tyrosine kinase that belongs to the HER/ErbB protein family. Ligand binding results in receptor dimerization, autophosphorylation, activation of downstream signaling, internalization, and lysosomal degradation (1,2). Phosphorylation of EGF receptor (EGFR) at Tyr845 in the kinase domain is implicated in stabilizing the activation loop, maintaining the active state enzyme, and providing a binding surface for substrate proteins (3,4). c-Src is involved in phosphorylation of EGFR at Tyr845 (5). The SH2 domain of PLC $\gamma$  binds at phospho-Tyr992, resulting in activation of PLC $\gamma$ -mediated downstream signaling (6). Phosphorylation of EGFR at Tyr1045 creates a major docking site for the adaptor protein c-Cbl, leading to receptor ubiquitination and degradation following EGFR activation (7,8). The GRB2 adaptor protein binds activated EGFR at phospho-Tyr1068 (9). A pair of phosphorylated EGFR residues (Tyr1148 and Tyr1173) provide a docking site for the Shc scaffold protein, with both sites involved in MAP kinase signaling activation (2). Phosphorylation of EGFR at specific serine and threonine residues attenuates EGFR kinase activity. EGFR carboxy-terminal residues Ser1046 and Ser1047 are phosphorylated by CaM kinase II; mutation of either of these serines results in upregulated EGFR tyrosine autophosphorylation (10).

**Species:** Rabbit**Isotype:** IgG

**Storage/Stability:** Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Synonyms:** ERBB; HER1; mENA; ERBB1; PIG61; EGFR;

**Immunogen:** A phospho specific peptide corresponding to residues surrounding Y998 of human EGFR

**Purification:** Affinity purification

**Reactivity:** H

**Applications:** WB

**Molecular Weight:**

**Swiss-Prot No.:** P00533

**Gene ID:** 1956

**References:** 1. Hackel, P.O. et al. (1999) CurrOpin Cell Biol 11, 184-9. 2. Zwick, E. et al. (1999) Trends PharmacolSci 20, 408-12. 3. Cooper, J.A. and Howell, B. (1993) Cell 73, 1051-4. 4. Hubbard, S.R. et al. (1994) Nature 372, 746-54. 5. Biscardi, J.S. et al. (1999) J BiolChem 274, 8335-43. 6. Emlet, D.R. et al. (1997) J BiolChem 272, 4079-86. 7. Levkowitz, G. et al. (1999) Mol Cell 4, 1029-40. 8. Ettenberg, S.A. et al. (1999) Oncogene 18, 1855-66. 9. Rojas, M. et al. (1996) J BiolChem 271, 27456-61. 10. Feinmesser, R.L. et al. (1999) J BiolChem 274, 16168-73.

WB 1:500 - 1:2000

