

## Anti-phospho-EGFR (Thr693)

Rabbit Polyclonal Antibody

**Catalog # E10-65CR**

Lot # J1178-5

### Cited Applications

WB

*Suggested Dilutions:*

WB: 1:500-1:1000

*Ideal working dilutions for each application should be empirically determined by the investigator.*

### Specificity

Recognizes the EGFR protein phosphorylated at threonine 693

### Cross Reactivity

Human, Mouse and Rat

### Host/Isotype/Clone#

Rabbit, IgG

### Immunogen

Synthetic phospho-peptide corresponding to amino acid residues surrounding Thr693

### Formulation

PBS (pH 7.4) 150mM NaCl, 0.02% sodium azide and 50% glycerol.

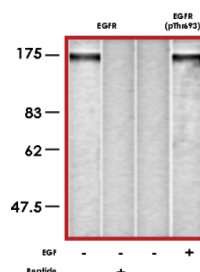
### Scientific Background

The epidermal growth factor receptor (EGFR) is a transmembrane tyrosine kinase. Known ligands of EGFR include EGF, TGFA/TGF-alpha, amphiregulin, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding EGF. Ligand binding induces receptor homo- and hetero-dimerization and tyrosine autophosphorylation, which triggers downstream signaling events. The consequences of EGFR signaling include cell proliferation, differentiation, motility, and cell survival (1). Activation of EGFR triggers mitogenic signaling in gastrointestinal mucosa and EGFR upregulated in colon cancers and most neoplasms (2). EGFR stimulation also activates the ERK-signaling pathway in normal gastric epithelial and colon cancer cell lines. In contrast, selective inhibition of EGFR significantly reduces ERK2 activation, c-fos mRNA expression and cell proliferation. Mutations in EGFR are also implicated in specific forms of lung cancer.

### References

1. Wang K, et al: Epidermal growth factor receptor-deficient mice have delayed primary endochondral ossification because of defective osteoclast recruitment. *J. Biol. Chem.* 279: 53848-53856, 2004.
2. Kobayashi S, et al: EGFR mutation and resistance of non-small-cell lung cancer to gefitinib. *New Eng. J. Med.* 352: 786-792, 2005.

### Sample Data



Western blot analysis of extracts from A431 cells untreated or treated with EGF (200ng/ml, 5min), using EGFR antibody (lanes 1 and 2) and anti-phospho-EGFR (Thr693) antibody (lanes 3 and 4).

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Purification

Affinity chromatography

Stability

1yr at -20°C from date of shipment

Storage & Shipping

Store product at -20°C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: [orders@signalchem.com](mailto:orders@signalchem.com)  
[www.signalchem.com](http://www.signalchem.com)

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