

Anti-phospho-EGFR (Tyr1092)

Rabbit Polyclonal Antibody

Catalog # E10-65DR

Lot # J1178-6

Cited Applications

WB, IHC

Suggested Dilutions:

WB: 1:500-1:1000 IHC: 1:50-1:100

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

Specificity

Recognizes the EGFR protein phosphorylated at tyrosine 1092

Cross Reactivity

Human, Mouse and Rat

Host/Isotype/Clone#

Rabbit, IgG

Immunogen

Synthetic phospho-peptide corresponding to amino acid residues surrounding Tyr1092

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- α , 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.

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Purification

Affinity chromatography

Stability

1 yr 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

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