

BACKGROUND

The epidermal growth factor receptor (EGFR) is a transmembrane glycoprotein that constitutes one of four members of the erbB family of tyrosine kinase receptors.¹ Upon activation by at least five genetically distinct ligands (including EGF, transforming growth factor- α (TGF α) and heparin-binding EGF (HB-EGF), the intrinsic kinase is activated and EGFR tyrosyl-phosphorylates itself and numerous intermediary effector molecules, including closely-related c-erbB receptor family members. This initiates myriad signaling pathways. The integrated biological responses to EGFR signaling are pleiotropic including mitogenesis or apoptosis, enhanced cell motility, protein secretion, and differentiation or dedifferentiation.² Although present in normal cells, EGFR is overexpressed in a variety of tumor cell lines and has been associated with poor prognosis and decreased survival. EGFR activation also plays a role in resistance to chemotherapy and radiation treatment in tumor cells.³ Thus, EGFR and its downstream signaling molecules are targets for therapeutic interventions in cancer and many other clinical pathogenesis.⁴

References:

1. Burgess AW: Growth Factors, 26:263-274, 2008.
2. Normanno N et al.: Gene 366:2-16, 2006.
3. Hopper-Borge EA et al.: Expert Opin Ther Targets. 13:339-362, 2009.
4. Sharma PS et al.: Curr Pharm Des. 15:758-776, 2009.

TECHNICAL INFORMATION

Source:

Anti-Phospho-EGFR (Tyr1173) Antibody is a rabbit polyclonal antibody raised against an epitope surrounding and including Tyr1173 of human EGFR sequence.

Specificity and Sensitivity:

This affinity purified antibody detects endogenous phospho-human, mouse and rat EGFR proteins.

Storage Buffer: PBS and 30% glycerol

Storage:

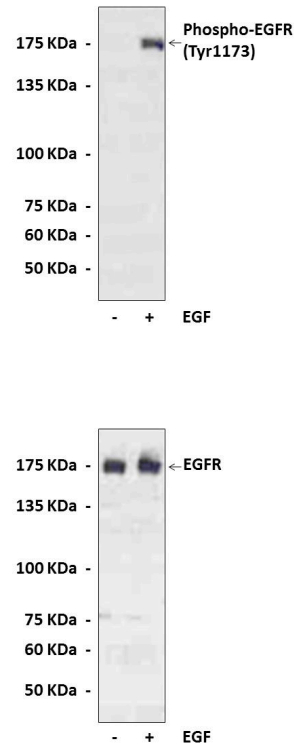
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

Application:	*Dilution:
WB	1:1000
IP	n/d
IHC (Paraffin)	n/d
ICC	n/d
FACS	n/d

**Optimal dilutions must be determined by end user.*

QUALITY CONTROL DATA



HeLa cells were stimulated with EGF and subjected to Western Blot analysis using Anti-Phospho-EGFR (Tyr1173) rabbit polyclonal antibody (**Top**), and Anti-EGFR (**Bottom**).

