

Anti-EGFR (Tyr-1101), Phosphospecific Antibody
Catalog # AN1771**Specification****Anti-EGFR (Tyr-1101), Phosphospecific Antibody - Product Information**

Application	WB
Primary Accession	P00533
Reactivity	Bovine
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Calculated MW	134277

Anti-EGFR (Tyr-1101), Phosphospecific Antibody - Additional Information

Gene ID 1956

Other Names

EGF, Epidermal, ErbB

Target/Specificity

The epidermal growth factor receptor (EGFR) is a transmembrane glycoprotein with an extracellular ligand-binding domain and a cytoplasmic domain with intrinsic tyrosine kinase activity. The cytoplasmic domain has a C-terminal region with multiple autophosphorylation sites (Tyr-992, 1068, 1086, 1148, and 1173). These sites are important for downstream signaling and rapid internalization. In addition, EGFR activation leads to c-Src mediated phosphorylation of Tyr-845 and Tyr-1101. The former site is required for mitogenic responses to EGFR activation, while the latter may be an SH2 binding site. Phosphorylation of EGFR on serine and threonine residues is thought to represent a mechanism for regulation of receptor kinase activity and internalization. These sites include a PKC site (Thr-654), CAMKII sites (Ser-1046, 1047, 1057, and 1142), and constitutively phosphorylated sites (Ser-967 and Ser-1002). Thus, the regulation of EGFR activity involves a complex series of phosphorylation events at multiple sites throughout the intracellular portion of the receptor.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-EGFR (Tyr-1101), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

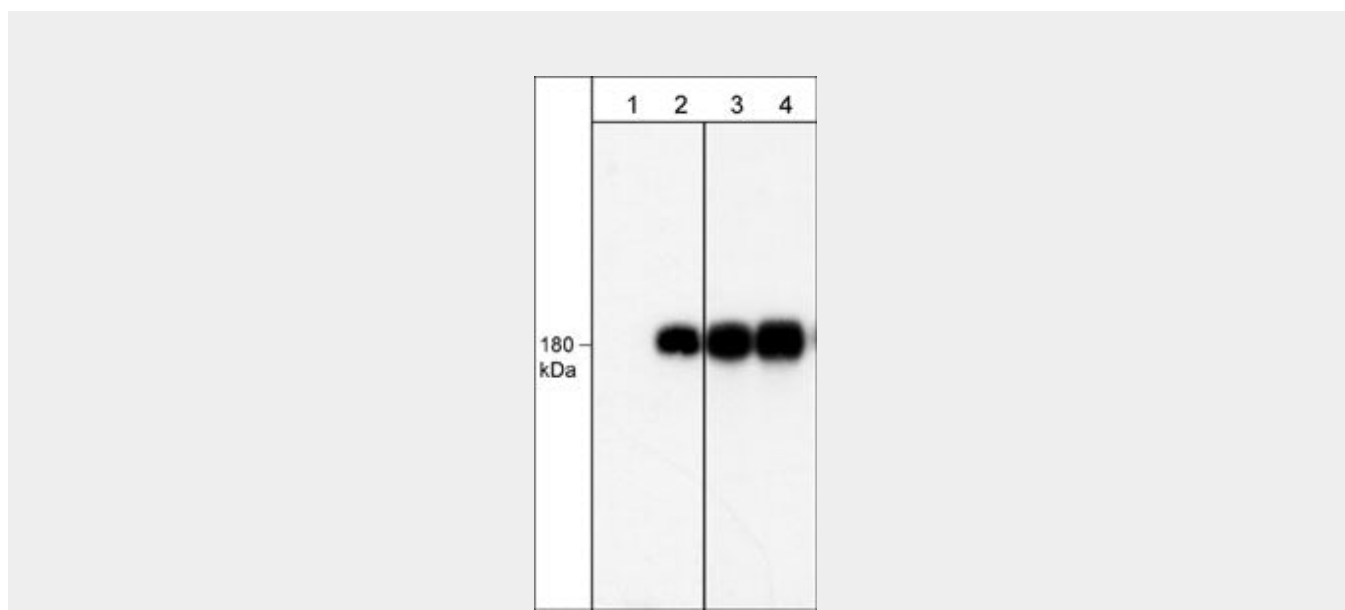
Blue Ice

Anti-EGFR (Tyr-1101), Phosphospecific Antibody - Protocols

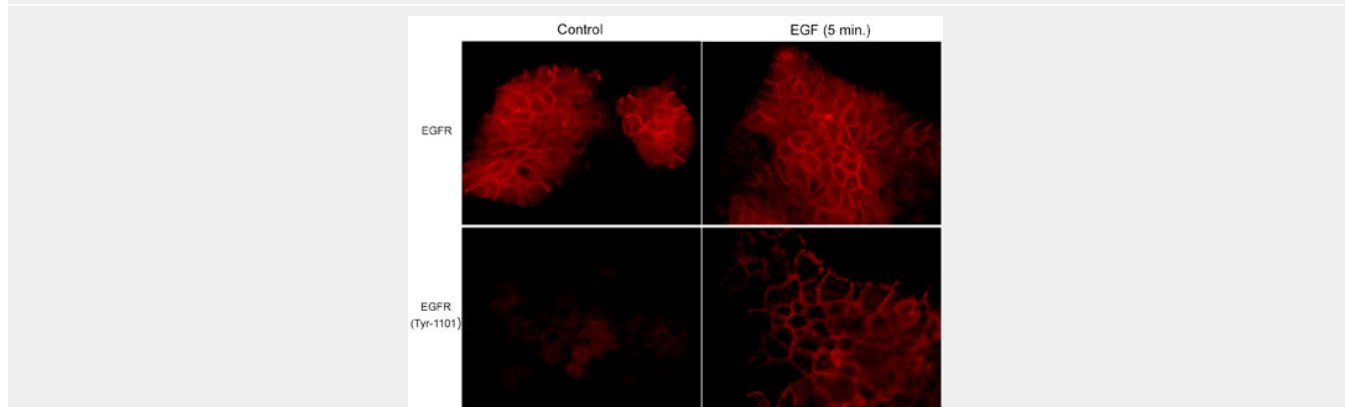
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-EGFR (Tyr-1101), Phosphospecific Antibody - Images



Western blot image of human A431 cells untreated (lanes 1 & 3) or treated with EGF (100 ng/ml) for 5 min. The blot was probed with anti-EGFR (Tyr-1101) monoclonal antibody (lanes 1 & 2) or anti-EGFR (Cytoplasmic) monoclonal antibody (lanes 3 & 4).



Immunocytochemical labeling in A431 cells untreated or treated with EGF (100 ng/ml) for 5 min. The cells were labeled with mouse monoclonals anti-EGFR (EM1661) and anti-EGFR (Tyr-1101) (EM1991).

Anti-EGFR (Tyr-1101), Phosphospecific Antibody - Background

The epidermal growth factor receptor (EGFR) is a transmembrane glycoprotein with an extracellular ligand-binding domain and a cytoplasmic domain with intrinsic tyrosine kinase activity. The cytoplasmic domain has a C-terminal region with multiple autophosphorylation sites (Tyr-992, 1068, 1086, 1148, and 1173). These sites are important for downstream signaling and rapid internalization. In addition, EGFR activation leads to c-Src mediated phosphorylation of Tyr-845 and

Tyr-1101. The former site is required for mitogenic responses to EGFR activation, while the latter may be an SH2 binding site. Phosphorylation of EGFR on serine and threonine residues is thought to represent a mechanism for regulation of receptor kinase activity and internalization. These sites include a PKC site (Thr-654), CAMKII sites (Ser-1046, 1047, 1057, and 1142), and constitutively phosphorylated sites (Ser-967 and Ser-1002). Thus, the regulation of EGFR activity involves a complex series of phosphorylation events at multiple sites throughout the intracellular portion of the receptor.