

Anti-EGFR (Tyr-1101), Phosphospecific Antibody

Catalog # AN1771

Product Information

Application WB, ICC
Primary Accession P00533
Host Mouse

Clonality Mouse Monoclonal

IsotypeIgG1Clone NamesM199Calculated MW134277

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.

Dilution WB~~1:1000 ICC~~N/A

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.

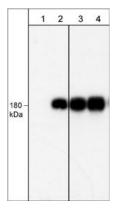
Shipping Blue Ice

Background

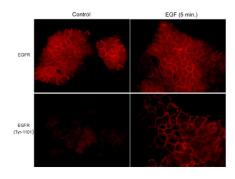
The epidermal growth factor receptor (EGFR) is a transmembrane glycoprotein with an extracellular ligand-binding domain and a cytoplasmic domain with intrinsic tyrosine kinase activity. The cytoplasmic

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.

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) (AN1771).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.