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Anti-EGFR (Ser-967), Phosphospecific Antibody

Catalog # AN1770

Product Information

Application	WB, ICC
Primary Accession	P00533
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	134277

Additional Information

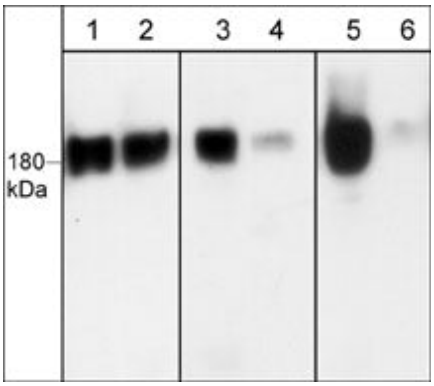
Gene ID	1956
Other Names	EGF, Epidermal, ErbB
Target/Specificity	The epidermal growth factor receptor (EGFR) is a transmembrane glycoprotein with an extracellular ligand-binding domain and a cytoplasmic domain with intrinsic tyrosine kinase activity. The cytoplasmic domain has a C-terminal region with 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 (Ser-967), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

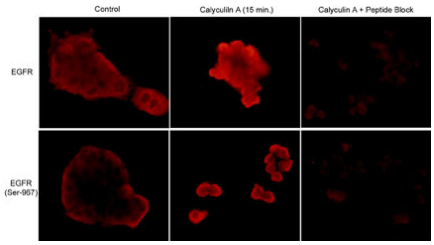
The epidermal growth factor receptor (EGFR) is a transmembrane glycoprotein with an extracellular ligand-binding domain and a cytoplasmic domain with intrinsic tyrosine kinase activity. The cytoplasmic domain has a C-terminal region with multiple autophosphorylation sites (Tyr-992, 1068, 1086, 1148, 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 treated with Calyculin A (100 nM) for 30 min. Blot lanes were untreated (lanes 1, 3, & 5) or treated with lambda phosphatase (lanes 2, 4, & 6) then were probed with anti-EGFR (a.a. 961-972) (lanes 1 & 2), anti-EGFR (Ser-967) (lanes 3 & 4), and anti-EGFR (Ser-1142) (lanes 5 & 6).



Immunocytochemical labeling in A431 cells untreated or treated with Calyculin A (50 nM) for 15 min. Cells were labeled with anti-EGFR (a.a. 961-972) or anti-EGFR (Ser-967) antibodies. The specificity of labeling was demonstrated for each antibody by blocking the signals with their respective blocking peptides, EGFR (a.a. 961-972) (EX1875) and phospho-EGFR (Ser-967) (EX1915).

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