

# Anti-EGFR (pY869) Antibody

Rabbit polyclonal antibody to EGFR (pY869)

Catalog # AP61451

## Product Information

Application	WB, IF
Primary Accession	<a href="#">P00533</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	134277

## Additional Information

Gene ID	1956
Other Names	ERBB; ERBB1; HER1; Epidermal growth factor receptor; Proto-oncogene c-ErbB-1; Receptor tyrosine-protein kinase erbB-1
Target/Specificity	Recognizes endogenous levels of EGFR with a site at pY869 protein.
Dilution	WB~~WB (1/500 - 1/1000), IF/IC (1/50 - 1/200) IF~~WB (1/500 - 1/1000), IF/IC (1/50 - 1/200)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

## Protein Information

Name	EGFR ( <a href="#">HGNC:3236</a> )
Synonyms	ERBB, ERBB1, HER1
Function	Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling cascades to convert extracellular cues into appropriate cellular responses (PubMed: <a href="#">10805725</a> , PubMed: <a href="#">27153536</a> , PubMed: <a href="#">2790960</a> , PubMed: <a href="#">35538033</a> ). Known ligands include EGF, TGFA/TGF- alpha, AREG, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding EGF (PubMed: <a href="#">12297049</a> , PubMed: <a href="#">15611079</a> , PubMed: <a href="#">17909029</a> , PubMed: <a href="#">20837704</a> , PubMed: <a href="#">27153536</a> , PubMed: <a href="#">2790960</a> , PubMed: <a href="#">7679104</a> , PubMed: <a href="#">8144591</a> , PubMed: <a href="#">9419975</a> ). Ligand binding triggers receptor homo- and/or heterodimerization and autophosphorylation on key cytoplasmic residues. The phosphorylated receptor recruits adapter proteins like GRB2 which in turn activates complex downstream signaling cascades. Activates at least 4 major downstream signaling cascades including the RAS-RAF-MEK-ERK,

PI3 kinase-AKT, PLCgamma-PKC and STATs modules (PubMed:[27153536](#)). May also activate the NF-kappa-B signaling cascade (PubMed:[11116146](#)). Also directly phosphorylates other proteins like RGS16, activating its GTPase activity and probably coupling the EGF receptor signaling to the G protein-coupled receptor signaling (PubMed:[11602604](#)). Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin (PubMed:[11483589](#)). Positively regulates cell migration via interaction with CCDC88A/GIV which retains EGFR at the cell membrane following ligand stimulation, promoting EGFR signaling which triggers cell migration (PubMed:[20462955](#)). Plays a role in enhancing learning and memory performance (By similarity). Plays a role in mammalian pain signaling (long-lasting hypersensitivity) (By similarity).

## Cellular Location

Cell membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass type I membrane protein Golgi apparatus membrane; Single-pass type I membrane protein. Nucleus membrane; Single-pass type I membrane protein. Endosome. Endosome membrane. Nucleus. Note=In response to EGF, translocated from the cell membrane to the nucleus via Golgi and ER (PubMed:17909029, PubMed:20674546). Endocytosed upon activation by ligand (PubMed:17182860, PubMed:17909029, PubMed:27153536, PubMed:2790960). Colocalized with GPER1 in the nucleus of estrogen agonist-induced cancer-associated fibroblasts (CAF) (PubMed:20551055)

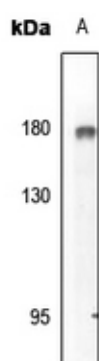
## Tissue Location

Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.

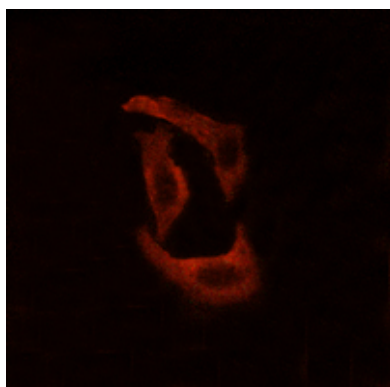
## Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human EGFR with a site at pY869. The exact sequence is proprietary.

## Images



Western blot analysis of EGFR (pY869) expression in HeLa (A) whole cell lysates.



Immunofluorescent analysis of EGFR (pY869) staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a Alexa Fluor 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

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