



# ErbB-4 (phospho Tyr1284) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-13054
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	ERBB4
<b>Protein Name</b>	Receptor tyrosine-protein kinase erbB-4
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human HER4 around the phosphorylation site of Tyr1284. AA range:1250-1299
<b>Specificity</b>	Phospho-ErbB-4 (Y1284) Polyclonal Antibody detects endogenous levels of ErbB-4 protein only when phosphorylated at Y1284.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	ERBB4; HER4; Receptor tyrosine-protein kinase erbB-4; Proto-oncogene-like protein c-ErbB-4; Tyrosine kinase-type cell surface receptor HER4; p180erbB4
<b>Observed Band</b>	180kD
<b>Cell Pathway</b>	Cell membrane ; Single-pass type I membrane protein . In response to NRG1 treatment, the activated receptor is internalized.; [ERBB4 intracellular domain]: Nucleus . Mitochondrion . Following proteolytical processing E4ICD (E4ICD1 or E4ICD2 generated from the respective isoforms) is translocated to the nucleus. Significantly more E4ICD2 than E4ICD1 is found in the nucleus. E4ICD2 colocalizes with YAP1 in the nucleus.
<b>Tissue Specificity</b>	Expressed at highest levels in brain, heart, kidney, in addition to skeletal muscle, parathyroid, cerebellum, pituitary, spleen, testis and breast. Lower levels in thymus, lung, salivary gland, and pancreas. Isoform JM-A CYT-1 and isoform JM-B CYT-1 are expressed in cerebellum, but only the isoform JM-B is expressed in the heart.
<b>Function</b>	catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.;domain:The WW-binding motifs mediate interaction with WWOX.;function:Specifically binds and is activated by neuregulins, NRG-2, NRG-3, heparin-binding EGF-like growth factor, betacellulin and NTAK. Interaction with these factors induces cell differentiation. Not activated by EGF,



TGF-A, and amphiregulin.,PTM:Isoform JM-A is processed but not isoform JM-B. So, they respectively represent cleavable and non-cleavable forms of the receptor.,PTM:Ligand-binding increases phosphorylation on tyrosine residues.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Homodimer or heterodimer with each of the other ERBB receptors (Potential). Interacts with PDZ domains of DLG2, DLG3, DLG4 and the syntrophin SN

## Background

This gene is a member of the Tyr protein kinase family and the epidermal growth factor receptor subfamily. It encodes a single-pass type I membrane protein with multiple cysteine rich domains, a transmembrane domain, a tyrosine kinase domain, a phosphatidylinositol-3 kinase binding site and a PDZ domain binding motif. The protein binds to and is activated by neuregulins and other factors and induces a variety of cellular responses including mitogenesis and differentiation. Multiple proteolytic events allow for the release of a cytoplasmic fragment and an extracellular fragment. Mutations in this gene have been associated with cancer. Alternatively spliced variants which encode different protein isoforms have been described; however, not all variants have been fully characterized. [provided by RefSeq, Jul 2008],

## matters needing attention

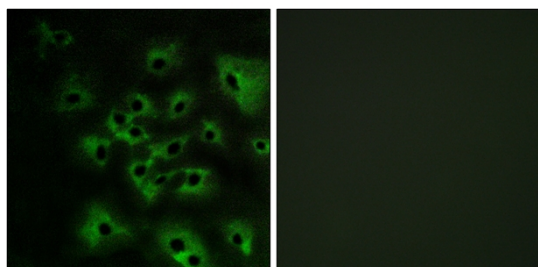
Avoid repeated freezing and thawing!

## Usage suggestions

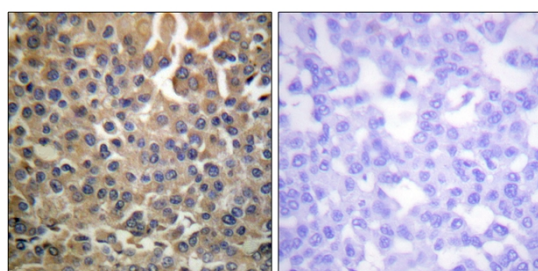
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



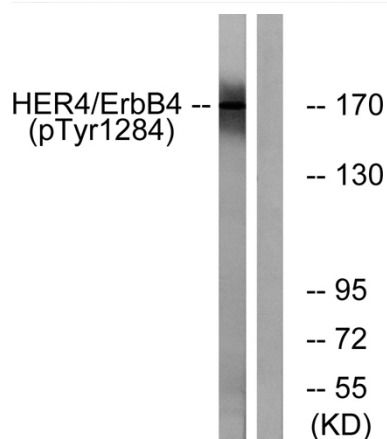
## Products Images



Immunofluorescence analysis of HeLa cells treated with EGF 200nM 5', using HER4 (Phospho-Tyr1284) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using HER4 (Phospho-Tyr1284) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HUVEC cells treated with EGF 200ng/ml 30', using HER4 (Phospho-Tyr1284) Antibody. The lane on the right is blocked with the phospho peptide.