

Phospho-ERBB2(Y877) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5274

Specification

Phospho-ERBB2(Y877) Antibody - Product Information

Application WB, DB,E Primary Accession P04626

Other Accession P06494, P70424, NP 001005862.1

Reactivity
Host
Clonality
Calculated MW
Isotype
Antigen Source
Human
Rabbit
Polyclonal
H=138 KDa
Rabbit Ig
HUMAN

Phospho-ERBB2(Y877) Antibody - Additional Information

Gene ID 2064

Antigen Region 860-883

Other Names

ERBB2; HER2; MLN19; NEU; NGL; Receptor tyrosine-protein kinase erbB-2; Metastatic lymph node gene 19 protein; Proto-oncogene Neu; Proto-oncogene c-ErbB-2; Tyrosine kinase-type cell surface receptor HER2; p185erbB2; CD antigen=CD340; Flags: Precursor

Dilution

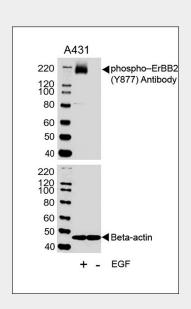
WB~~1:1000 DB~~1:500

Target/Specificity

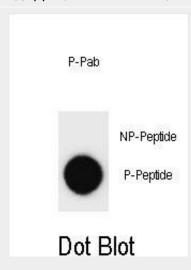
This ERBB2 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Y877 of human ERBB2.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity



Western blot analysis of lysates from A431 cell line,untreated or treated with EGF,using phospho-ErBB2(Y877) Antibody(Cat. #AW5274)(upper) or Beta-actin (lower).



Dot blot analysis of Phospho-ERBB2-Y877 Antibody Phospho-specific Pab (Cat. #AW5274) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.

Phospho-ERBB2(Y877) Antibody -



purification.

Storage

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

Precautions

Phospho-ERBB2(Y877) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-ERBB2(Y877) Antibody - Protein Information

Name ERBB2

Synonyms HER2, MLN19, NEU, NGL

Function

Protein tyrosine kinase that is part of several cell surface receptor complexes, but that apparently needs a coreceptor for ligand binding. Essential component of a neuregulin-receptor complex, although neuregulins do not interact with it alone. GP30 is a potential ligand for this receptor. Regulates outgrowth and stabilization of peripheral microtubules (MTs). Upon ERBB2 activation, the MEMO1-RHOA-DIAPH1 signaling pathway elicits the phosphorylation and thus the inhibition of GSK3B at cell membrane. This prevents the phosphorylation of APC and CLASP2, allowing its association with the cell membrane. In turn, membrane-bound APC allows the localization of MACF1 to the cell membrane, which is required for microtubule capture and stabilization.

Cellular Location

[Isoform 1]: Cell membrane; Single-pass type I membrane protein Early endosome. Cytoplasm, perinuclear region. Nucleus. Note=Translocation to the nucleus requires endocytosis, probably endosomal sorting and is mediated by importin beta-1/KPNB1. Also detected in VPS35-positive endosome-to-TGN retrograde vesicles (PubMed:31138794). [Isoform 3]: Cytoplasm. Nucleus.

Tissue Location

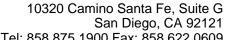
Expressed in a variety of tumor tissues including primary breast tumors and tumors

Background

This gene encodes a member of the epidermal growth factor (EGF) receptor family of receptor tyrosine kinases. This protein has no ligand binding domain of its own and therefore cannot bind growth factors. However, it does bind tightly to other ligand-bound EGF receptor family members to form a heterodimer, stabilizing ligand binding and enhancing kinase-mediated activation of downstream signalling pathways, such as those involving mitogen-activated protein kinase and phosphatidylinositol-3 kinase. Allelic variations at amino acid positions 654 and 655 of isoform a (positions 624 and 625 of isoform b) have been reported, with the most common allele, Ile654/Ile655, shown here. Amplification and/or overexpression of this gene has been reported in numerous cancers, including breast and ovarian tumors. Alternative splicing results in several additional transcript variants, some encoding different isoforms and others that have not been fully characterized.

Phospho-ERBB2(Y877) Antibody - References

Geradts, J., et al. Cancer Invest. 28(9):969-977(2010)
Zaoui, K., et al. Proc. Natl. Acad. Sci. U.S.A. 107(43):18517-18522(2010)
Oliveras, G., et al. Ann. N. Y. Acad. Sci. 1210, 86-92 (2010):
Han, J.S., et al. Anticancer Res. 30(9):3407-3412(2010)
Stackievicz, R., et al. Isr. Med. Assoc. J. 12(5):290-295(2010)



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from small bowel, esophagus, kidney and mouth.

Phospho-ERBB2(Y877) Antibody -**Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture