

Phospho-ErbB2(Y1112) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5151

Specification

Phospho-ErbB2(Y1112) Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
lsotype
Antigen Source

WB,E <u>P04626</u> Human Rabbit Polyclonal H=138 KDa Rabbit IgG HUMAN

Phospho-ErbB2(Y1112) Antibody - Additional Information

Gene ID 2064

Antigen Region 1100-1118

Other Names

Receptor tyrosine-protein kinase erbB-2 [Precursor]; p185erbB2; C-erbB-2; NEU proto-oncogene; Tyrosine kinase-type cell surface receptor HER2; MLN 19; ERBB2; HER2; NEU; NGL;

Dilution WB~~1:500

Target/Specificity

This ErbB2 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Y1112 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 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(Y1112) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-ErbB2(Y1112) 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

Cell membrane; Single-pass type I membrane protein. Cell projection, ruffle membrane; Single-pass type I membrane protein. Note=Internalized from the cell membrane in response to EGF stimulation. [Isoform 2]: Cytoplasm. Nucleus.

Tissue Location

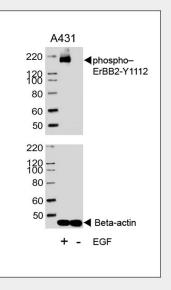
Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

Phospho-ErbB2(Y1112) Antibody - Protocols

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

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

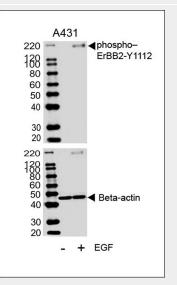
Phospho-ErbB2(Y1112) Antibody - Images



Western blot analysis of extracts from A431 cells, untreated or treated with EGF, 100ng/ml, using



phospho-ErBB2 Antibody (Y1112)(upper) or Beta-actin (lower).



Western blot analysis of lysates from A431 cell line, untreated or treated with EGF, using phospho-ErBB2-Y1112(Cat. #AW5151)(upper) or Beta-actin (lower).

Phospho-ErbB2(Y1112) Antibody - Background

ErbB2 is 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. Amplification and/or overexpression of this gene has been reported in numerous cancers, including breast and ovarian tumors.

Phospho-ErbB2(Y1112) Antibody - References

Stephens, P., et al., Nature 431(7008):525-526 (2004). Wang, S.C., et al., Cancer Cell 6(3):251-261 (2004). Menendez, J.A., et al., Proc. Natl. Acad. Sci. U.S.A. 101(29):10715-10720 (2004). M, et al., Anticancer Res. 24(4):2219-2224 (2004). Contreras, D.N., et al., Clin. Appl. Thromb. Hemost. 10(3):271-276 (2004).