

Phospho-ERBB2(Y1139) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5159

Product Information

Application WB Primary Accession P04626

Other Accession NP_001005862.1

Reactivity
Predicted
Rat
Host
Clonality
Polyclonal
Calculated MW
Isotype
Rabbit IgG
Antigen Source
HUMAN

Additional Information

Gene ID 2064

Antigen Region 1114-1146

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~~1:4000

Target/Specificity This ERBB2 Antibody is generated from rabbits immunized with a KLH

conjugated synthetic phosphopeptide corresponding to amino acid residues

surrounding Y1139 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(Y1139) Antibody is for research use only and not for use in

diagnostic or therapeutic procedures.

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.

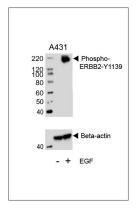
Background

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.

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)

Images



Western blot analysis of lysate from A431 cell line, using Phospho-ERBB2-Y1139 Antibody(Cat. #AW5159). AW5159 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysate at 20ug.

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