

Phospho-ErbB2(Y1222) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3902a

Specification

Phospho-ErbB2(Y1222) Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Isotype
Calculated MW

WB,E
P04626
Human
Rabbit
Polyclonal
Rabbit Ig
137910

Phospho-ErbB2(Y1222) Antibody - Additional Information

Gene ID 2064

Other Names

Receptor tyrosine-protein kinase erbB-2, Metastatic lymph node gene 19 protein, MLN 19, Proto-oncogene Neu, Proto-oncogene c-ErbB-2, Tyrosine kinase-type cell surface receptor HER2, p185erbB2, CD340, ERBB2, HER2, MLN19, NEU, NGL

Target/Specificity

This ERBB2 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Y1222 of human ERBB2.

Dilution

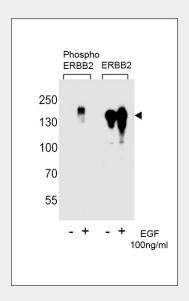
WB~~1:5000

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.

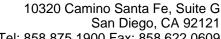


Western blot analysis of extracts from A431 cells,untreated or treated with EGF,100ng/ml□using phospho ErbB2-Y1222 (left) or ErbB2 antibody(right)

Phospho-ErbB2(Y1222) Antibody - Background

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.

In the nucleus is involved in transcriptional regulation. Associates with the 5'-TCAAATTC-3'





Tel: 858.875.1900 Fax: 858.622.0609

Precautions

Phospho-ErbB2(Y1222) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-ErbB2(Y1222) 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

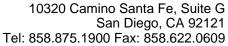
Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

Phospho-ErbB2(Y1222) Antibody -**Protocols**

sequence in the PTGS2/COX-2 promoter and activates its transcription. Implicated in transcriptional activation of CDKN1A; the function involves STAT3 and SRC. Involved in the transcription of rRNA genes by RNA Pol I and enhances protein synthesis and cell growth.

Phospho-ErbB2(Y1222) Antibody -References

Ehsani A., et al. Genomics 15:426-429(1993). Yamamoto T., et al. Nature 319:230-234(1986). Coussens L., et al. Science 230:1132-1139(1985). Wakamatsu A., et al. Submitted (OCT-2007) to the EMBL/GenBank/DDBJ databases. Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.





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>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture