

HER2 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22460a

Specification

HER2 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB,E P04626 Human, Mouse Rabbit polyclonal Rabbit Ig 137910

HER2 Antibody - Additional Information

Gene ID 2064

Other Names

Receptor tyrosine-protein kinase erbB-2, 2.7.10.1, 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 HER2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between amino acids from the human region of human HER2.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

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

HER2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

HER2 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.

HER2 Antibody - Protocols

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

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

HER2 Antibody - Images



All lanes: Anti-HER2 Antibody at 1:1000 dilution Lane 1: MDA-MB-453 whole cell lysate Lane 2: NIH/3T3 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 185 KDa



Blocking/Dilution buffer: 5% NFDM/TBST.



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HER2 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.

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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. Tal M., et al.Mol. Cell. Biol. 7:2597-2601(1987).