

### **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

### **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



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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**

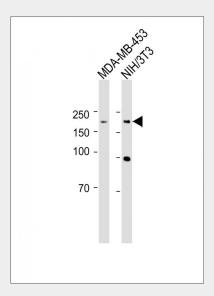
Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

# **HER2 Antibody - Protocols**

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

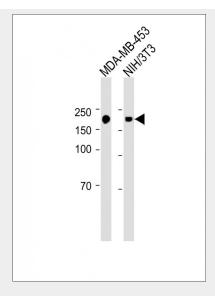
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### **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 µg 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.





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 µg 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.

# **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.

## **HER2 Antibody - References**

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).