

## ERBB2 / HER2 Antibody (aa1243-1255)

Rabbit Polyclonal Antibody Catalog # ALS12148

## **Specification**

# ERBB2 / HER2 Antibody (aa1243-1255) - Product Information

Application IHC Primary Accession P04626

Reactivity Human, Mouse, Rat, Hamster, Monkey, Pig,

Horse, Dog Rabbit Polyclonal 138kDa KDa

Host Clonality Calculated MW

# ERBB2 / HER2 Antibody (aa1243-1255) - 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

Recognizes c-erbB-2 (185kD), but not c-erbB-1(EGF-R), c-erbB-3 or c-erbB-4.

### **Reconstitution & Storage**

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

#### **Precautions**

ERBB2 / HER2 Antibody (aa1243-1255) is for research use only and not for use in diagnostic or therapeutic procedures.

# ERBB2 / HER2 Antibody (aa1243-1255) - 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.

Volume

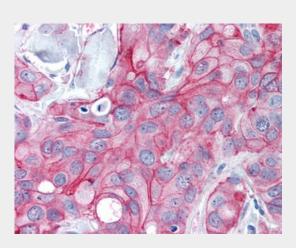
50 μl

# ERBB2 / HER2 Antibody (aa1243-1255) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# ERBB2 / HER2 Antibody (aa1243-1255) - Images



Anti-ERBB2 / HER2 antibody IHC of human breast, carcinoma.

## ERBB2 / HER2 Antibody (aa1243-1255) - 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.

## ERBB2 / HER2 Antibody (aa1243-1255) - References





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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).