

## **ERBB2 Antibody (Center S998)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19104c

## **Specification**

# ERBB2 Antibody (Center S998) - Product Information

Application WB,E
Primary Accession P04626

Other Accession NP 001005862.1

Reactivity
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Human
Rabbit
Rabbit
Rabbit
Polyclonal
Rabbit IgG
Rabbit IgG
976-1005

## ERBB2 Antibody (Center S998) - 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 peptide between 976-1005 amino acids from the Central region of human ERBB2.

### **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**

ERBB2 Antibody (Center S998) is for research use only and not for use in diagnostic or therapeutic procedures.

## **ERBB2 Antibody (Center S998) - 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**

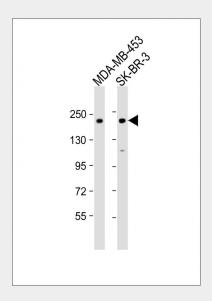
Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

## ERBB2 Antibody (Center S998) - Protocols

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

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

## ERBB2 Antibody (Center S998) - Images



All lanes: Anti-ERBB2 Antibody (S998) at 1:1000 dilution Lane 1: MDA-MB-453 whole cell lysate



Lane 2: SK-BR-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 138 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

## ERBB2 Antibody (Center S998) - 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.

# **ERBB2 Antibody (Center S998) - 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)