

### Erbb2 Antibody (P1236)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21259a

## **Specification**

## Erbb2 Antibody (P1236) - Product Information

Application WB,E
Primary Accession P04626
Other Accession P70424, P06494
Reactivity Human, Mouse, Rat

Host Rabbit Clonality polyclonal Isotype Rabbit IgG

# Erbb2 Antibody (P1236) - Additional Information

#### **Gene ID 2064**

#### **Other Names**

Receptor tyrosine-protein kinase erbB-2, Proto-oncogene Neu, Proto-oncogene c-ErbB-2, p185erbB2, CD340, Erbb2, Kiaa3023, Neu

# **Target/Specificity**

This Erbb2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1236-1268 amino acids from human Erbb2.

#### **Dilution**

WB~~1:2000

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 (P1236) is for research use only and not for use in diagnostic or therapeutic procedures.

## Erbb2 Antibody (P1236) - 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**

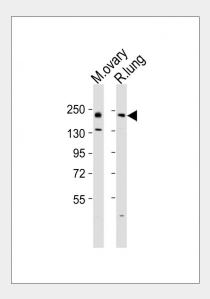
Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

#### Erbb2 Antibody (P1236) - 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

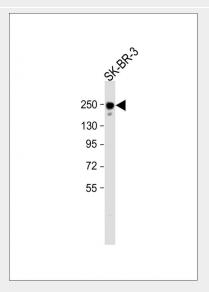
## Erbb2 Antibody (P1236) - Images



All lanes : Anti-Erbb2 Antibody (P1236) at 1:2000 dilution Lane 1: mouse ovary lysates Lane 2: rat lung lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 139 kDa Blocking/Dilution buffer:



## 5% NFDM/TBST.



Anti-Erbb2 Antibody (P1236) at 1:2000 dilution + SK-BR-3 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 139 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# Erbb2 Antibody (P1236) - 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 (By similarity).

# Erbb2 Antibody (P1236) - References

Okazaki N.,et al.DNA Res. 10:167-180(2003). Lim J.,et al.Endocrinology 138:1328-1337(1997). Moscoso L.M.,et al.Dev. Biol. 172:158-169(1995). Muthuswamy S.K.,et al.Oncogene 11:271-279(1995). Jaulin-Bastard F.,et al.J. Biol. Chem. 276:15256-15263(2001).