

## Mouse Erbb2 Antibody (P1236)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21259a

### **Specification**

## Mouse Erbb2 Antibody (P1236) - Product Information

Application WB,E
Primary Accession P70424

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 138579

## Mouse Erbb2 Antibody (P1236) - Additional Information

### **Gene ID 13866**

#### **Other Names**

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

# **Target/Specificity**

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

#### **Dilution**

WB~~1:2000

#### **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**

Mouse Erbb2 Antibody (P1236) is for research use only and not for use in diagnostic or therapeutic procedures.

### Mouse Erbb2 Antibody (P1236) - Protein Information

### Name Erbb2

Synonyms Kiaa3023, Neu

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 (By similarity).

### **Cellular Location**

Cell membrane {ECO:0000250|UniProtKB:P04626}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P04626} Cell projection, ruffle membrane {ECO:0000250|UniProtKB:P04626}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P04626} Early endosome {ECO:0000250|UniProtKB:P04626}. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:P04626}. Nucleus {ECO:0000250|UniProtKB:P04626}. Note=Translocation to the nucleus requires endocytosis, probably endosomal sorting and is mediated by importin beta-1/KPNB1. Also detected in endosome-to-TGN retrograde vesicles. Internalized from the cell membrane in response to EGF stimulation. {ECO:0000250|UniProtKB:P04626}

### **Tissue Location**

Expressed predominantly in uterine epithelial cells. In the muscle, expression localizes to the synaptic sites of muscle fibers

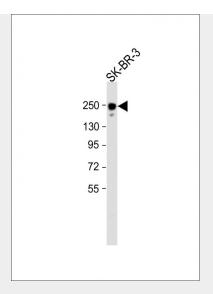
### Mouse Erbb2 Antibody (P1236) - Protocols

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

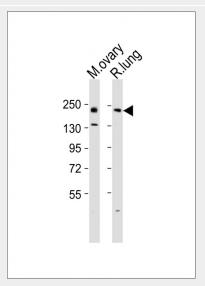
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Mouse Erbb2 Antibody (P1236) - Images





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.



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.

## Mouse 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).

# Mouse 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).