

## Mouse Erbb2 Antibody (P1142)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20907a

### **Specification**

## Mouse Erbb2 Antibody (P1142) - Product Information

Application WB,E
Primary Accession P70424
Reactivity Mouse
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 138579

## Mouse Erbb2 Antibody (P1142) - 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 1142-1176 amino acids from the human region of Mouse Erbb2.

#### **Dilution**

WB~~1:500

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**

Mouse Erbb2 Antibody (P1142) is for research use only and not for use in diagnostic or therapeutic procedures.

## Mouse Erbb2 Antibody (P1142) - 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

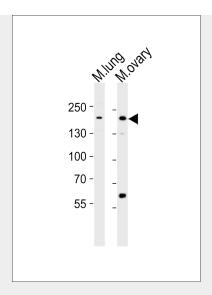
## Mouse Erbb2 Antibody (P1142) - Protocols

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

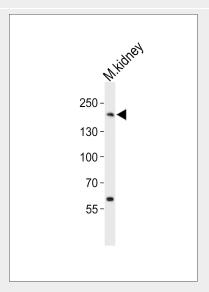
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Mouse Erbb2 Antibody (P1142) - Images





Western blot analysis of lysates from mouse lung, mouse ovary tissue lysate (from left to right), using Erbb2 Antibody (P1142)(Cat. #AP20907a). AP20907a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.



Western blot analysis of lysate from mouse kidney tissue lysate, using Erbb2 Antibody (P1142)(Cat. #AP20907a). AP20907a was diluted at 1:500. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

## Mouse Erbb2 Antibody (P1142) - 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 (P1142) - 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).