

# Mouse Erbb2 Antibody (P1236)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21259a

## **Product Information**

Application WB, E Primary Accession P70424

**Reactivity** Human, Rat, Mouse

HostRabbitClonalitypolyclonalIsotypeRabbit IgGClone NamesRB50280Calculated MW138579

# **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 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 (P1236) is for research use only and not for use in

diagnostic or therapeutic procedures.

# **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

# **Background**

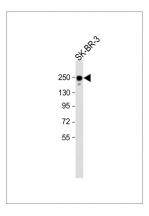
Protein tyrosine kinase that is part of several cell surface receptor complexes, but that apparently needs a coreceptor for ligand binding. Essential component of a neuregulin-receptor complex, although neuregulins do not interact with it alone. GP30 is a potential ligand for this receptor. Regulates 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).

### 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).

# **Images**

Anti-Erbb2 Antibody (P1236) at 1:2000 dilution + 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: 139 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.