

## mouse ERBB2 Antibody (Center S999) Blocking Peptide Synthetic peptide Catalog # BP19039c

# Specification

# mouse ERBB2 Antibody (Center S999) Blocking Peptide - Product Information

Primary Accession

# <u>P70424</u>

# mouse ERBB2 Antibody (Center S999) Blocking Peptide - 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

#### Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# mouse ERBB2 Antibody (Center S999) Blocking Peptide - 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 (Center S999) Blocking Peptide - Protocols

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

Blocking Peptides

# mouse ERBB2 Antibody (Center S999) Blocking Peptide - Images

# mouse ERBB2 Antibody (Center S999) Blocking Peptide - Background

Essential component of a neuregulin-receptor complex, although neuregulins do not interact with it alone. GP30 is a potential ligand for this receptor. Binds to the 5'-TCAAATTC-3' sequence in the MT-CO2 promoter and activates its transcription (By similarity).

# mouse ERBB2 Antibody (Center S999) Blocking Peptide - References

Cabodi, S., et al. FASEB J. 24(10):3796-3808(2010)Johnson, E., et al. J. Biol. Chem. 285(38):29491-29501(2010)Huck, L., et al. Proc. Natl. Acad. Sci. U.S.A. 107(35):15559-15564(2010)Chuang, T.D., et al. J. Biol. Chem. 285(31):23598-23606(2010)Simeone, L., et al. J. Neurosci. 30(19):6620-6634(2010)