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Mouse Erbb2 Blocking Peptide (P1142)

Synthetic peptide
Catalog # BP20907a

Specification

Mouse Erbb2 Blocking Peptide (P1142) - Product Information

Primary Accession P70424

Mouse Erbb2 Blocking Peptide (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
The synthetic peptide sequence is selected from aa 1142-1156 of HUMAN Erbb2

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 Blocking Peptide (P1142) - Protein Information

Name Erbb2

Synonyms Kiaa3023, Neu

Function
Protein tyrosine kinase that is part of several cell surface receptor complexes, but

Mouse Erbb2 Blocking Peptide (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 Blocking Peptide (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).

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Cellular Location
Cell 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. {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 Blocking Peptide (P1142) - Protocols

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

- Blocking Peptides