



ERBB2 Antibody (C-term Y1112/S1113) Blocking Peptide

Synthetic peptide Catalog # BP18892b

Specification

ERBB2 Antibody (C-term Y1112/S1113) Blocking Peptide - Product Information

Primary Accession P04626

ERBB2 Antibody (C-term Y1112/S1113) Blocking Peptide - Additional Information

Gene ID 2064

Other Names

Receptor tyrosine-protein kinase erbB-2, Metastatic lymph node gene 19 protein, MLN 19, Proto-oncogene Neu, Proto-oncogene c-ErbB-2, Tyrosine kinase-type cell surface receptor HER2, p185erbB2, CD340, ERBB2, HER2, MLN19, NEU, NGL

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.

ERBB2 Antibody (C-term Y1112/S1113) Blocking Peptide - Protein Information

Name ERBB2

Synonyms HER2, MLN19, NEU, NGL

Function

Protein tyrosine kinase that is part of several cell surface receptor complexes, but that apparently needs a coreceptor for

ERBB2 Antibody (C-term Y1112/S1113) Blocking Peptide - Background

This gene encodes a member of the epidermal growth factor(EGF) receptor family of receptor tyrosine kinases. This proteinhas no ligand binding domain of its own and therefore cannot bindgrowth factors. However, it does bind tightly to other ligand-boundEGF receptor family members to form a heterodimer, stabilizingligand binding and enhancing kinase-mediated activation ofdownstream signalling pathways, such as those involvingmitogen-activated protein kinase and phosphatidylinositol-3 kinase. Allelic variations at amino acid positions 654 and 655 of isoform a(positions 624 and 625 of isoform b) have been reported, with themost common allele, Ile654/Ile655, shown here. Amplification and/oroverexpression of this gene has been reported in numerous cancers, including breast and ovarian tumors. Alternative splicing resultsin several additional transcript variants, some encoding differentisoforms and others that have not been fully characterized.

ERBB2 Antibody (C-term Y1112/S1113) Blocking Peptide - References

Geradts, J., et al. Cancer Invest. 28(9):969-977(2010)Zaoui, K., et al. Proc. Natl. Acad. Sci. U.S.A. 107(43):18517-18522(2010)Oliveras, G., et al. Ann. N. Y. Acad. Sci. 1210, 86-92 (2010) :Han, J.S., et al. Anticancer Res. 30(9):3407-3412(2010)Stackievicz, R., et al. Isr. Med. Assoc. J. 12(5):290-295(2010)



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.

Cellular Location

[Isoform 1]: Cell membrane; Single-pass type I membrane protein Early endosome. Cytoplasm, perinuclear region. Nucleus. Note=Translocation to the nucleus requires endocytosis, probably endosomal sorting and is mediated by importin beta-1/KPNB1. Also detected in VPS35-positive endosome-to-TGN retrograde vesicles (PubMed:31138794). [Isoform 3]: Cytoplasm. Nucleus.

Tissue Location

Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

ERBB2 Antibody (C-term Y1112/S1113) Blocking Peptide - Protocols

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

• Blocking Peptides