10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# Phospho-ERBB2(S1107) Antibody Blocking peptide

**Synthetic peptide**
**Catalog # BP3781b**

## Specification

### Phospho-ERBB2(S1107) Antibody Blocking peptide - Product Information

Primary Accession P04626

### Phospho-ERBB2(S1107) Antibody 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.

### Phospho-ERBB2(S1107) Antibody 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 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**
Cell membrane; Single-pass type I membrane protein. Cell projection, ruffle membrane; Single-pass type I membrane protein. Note=Internalized from the cell membrane in response to EGF stimulation. [Isoform 2]: Cytoplasm. Nucleus.

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

## Phospho-ERBB2(S1107) Antibody Blocking peptide - Protocols

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

- Blocking Peptides

## Phospho-ERBB2(S1107) Antibody Blocking peptide - Images

## Phospho-ERBB2(S1107) Antibody 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.

## Phospho-ERBB2(S1107) Antibody 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)