

**Phospho-rat ERBB2(T1168) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP3860a****Specification**

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**Phospho-rat ERBB2(T1168) Blocking Peptide - Product Information**Primary Accession [P06494](#)**Phospho-rat ERBB2(T1168) Blocking Peptide - Additional Information****Other Names**

Receptor tyrosine-protein kinase erbB-2, Epidermal growth factor receptor-related protein, Proto-oncogene Neu, Proto-oncogene c-ErbB-2, p185erbB2, p185neu, CD340, Erbb2, Neu

**Target/Specificity**

The synthetic peptide sequence is selected from aa 1161-1174 of RAT 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.

**Phospho-rat ERBB2(T1168) Blocking Peptide - Protein Information****Name** Erbb2**Synonyms** 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). Interacts (preferentially with the tyrosine phosphorylated form) with CPNE3; this interaction occurs at the cell membrane and is increased in a growth factor heregulin-dependent manner (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}

### **Phospho-rat ERBB2(T1168) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **Phospho-rat ERBB2(T1168) Blocking Peptide - Images**

### **Phospho-rat ERBB2(T1168) 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).