

**Phospho-ERBB3(Y1289) Antibody Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP3708a****Specification**

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**Phospho-ERBB3(Y1289) Antibody Blocking peptide - Product Information**Primary Accession [P21860](#)**Phospho-ERBB3(Y1289) Antibody Blocking peptide - Additional Information****Gene ID** 2065**Other Names**

Receptor tyrosine-protein kinase erbB-3, Proto-oncogene-like protein c-ErbB-3, Tyrosine kinase-type cell surface receptor HER3, ERBB3, HER3

**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-ERBB3(Y1289) Antibody Blocking peptide - Protein Information****Name** ERBB3**Synonyms** HER3**Function**

Tyrosine-protein kinase that plays an essential role as cell surface receptor for neuregulins. Binds to neuregulin-1 (NRG1) and is activated by it; ligand-binding increases phosphorylation on tyrosine residues and promotes its association with the p85 subunit of phosphatidylinositol 3-kinase (PubMed:<a href="http://www.uniprot.org/citations/20682778" target="\_blank">20682778</a>). May also be activated by CSPG5 (PubMed:<a href="http://www.uniprot.org/citations/15358134" target="\_blank">15358134</a>). Involved in the regulation of myeloid cell differentiation (PubMed:<a href="http://www.uniprot.org/citations/27416908" target="\_blank">27416908</a>).

**Cellular Location**

[Isoform 1]: Cell membrane; Single-pass type I membrane protein

**Tissue Location**

Epithelial tissues and brain.

## **Phospho-ERBB3(Y1289) Antibody Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

## **Phospho-ERBB3(Y1289) Antibody Blocking peptide - Images**

## **Phospho-ERBB3(Y1289) Antibody Blocking peptide - Background**

This gene encodes a member of the epidermal growth factor receptor (EGFR) family of receptor tyrosine kinases. This membrane-bound protein has a neuregulin binding domain but not an active kinase domain. It therefore can bind this ligand but not convey the signal into the cell through protein phosphorylation. However, it does form heterodimers with other EGF receptor family members which do have kinase activity. Heterodimerization leads to the activation of pathways which lead to cell proliferation or differentiation. Amplification of this gene and/or overexpression of its protein have been reported in numerous cancers, including prostate, bladder, and breast tumors. Alternate transcriptional splice variants encoding different isoforms have been characterized. One isoform lacks the intermembrane region and is secreted outside the cell. This form acts to modulate the activity of the membrane-bound form.

## **Phospho-ERBB3(Y1289) Antibody Blocking peptide - References**

Huang, X., et al. Cancer Res. 70(3):1204-1214(2010)Pierce, B.L., et al. Hum. Hered. 69(3):193-201(2010)Li, D., et al. World J. Biol. Psychiatry 10 (4 PT 2), 595-598 (2009) Carr, E.J., et al. BMC Med. Genet. 10, 121 (2009) Zhang, Y., et al. BMC Cell Biol. 10, 78 (2009)