

**PI3KC2B Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP8011a****Specification**

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**PI3KC2B Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [O00750](#)**PI3KC2B Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 5287**Other Names**

Phosphatidylinositol 4-phosphate 3-kinase C2 domain-containing subunit beta, PI3K-C2-beta, PtdIns-3-kinase C2 subunit beta, C2-PI3K, Phosphoinositide 3-kinase-C2-beta, PIK3C2B

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP8011a](/product/products/AP8011a) was selected from the N-term region of human PI3KC2B. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**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.

**PI3KC2B Antibody (N-term) Blocking Peptide - Protein Information****Name** PIK3C2B**Function**

Phosphorylates PtdIns and PtdIns4P with a preference for PtdIns (PubMed: [10805725](http://www.uniprot.org/citations/10805725), PubMed: [9830063](http://www.uniprot.org/citations/9830063), PubMed: [11533253](http://www.uniprot.org/citations/11533253)). Does not phosphorylate PtdIns(4,5)P2 (PubMed: [9830063](http://www.uniprot.org/citations/9830063)). May be involved in EGF and PDGF signaling cascades (PubMed: [10805725](http://www.uniprot.org/citations/10805725)).

**Cellular Location**

Microsome. Cell membrane. Cytoplasm, cytosol Nucleus. Endoplasmic reticulum. Note=Found mostly in the microsome, but also in the plasma membrane and cytosol. Nuclear in testis

**Tissue Location**

Expressed in columnar and transitional epithelia, mononuclear cells, and ganglion cells (at protein level). Widely expressed, with highest levels in thymus and placenta and lowest in peripheral blood, skeletal muscle and kidney

**PI3KC2B Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**PI3KC2B Antibody (N-term) Blocking Peptide - Images****PI3KC2B Antibody (N-term) Blocking Peptide - Background**

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the  $\gamma$  phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains.

**PI3KC2B Antibody (N-term) Blocking Peptide - References**

Arcaro, A., et al., J. Biol. Chem. 273(49):33082-33090 (1998). Brown, R.A., et al., Biochem. Biophys. Res. Commun. 233(2):537-544 (1997).