

**PI 4 Kinase type 2 beta antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP8033b****Specification**

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**PI 4 Kinase type 2 beta antibody (C-term) Blocking peptide - Product Information**Primary Accession  
Other Accession[O8TCG2](#)  
[NP\\_060793](#)**PI 4 Kinase type 2 beta antibody (C-term) Blocking peptide - Additional Information****Gene ID** 55300**Other Names**

Phosphatidylinositol 4-kinase type 2-beta, Phosphatidylinositol 4-kinase type II-beta, PI4KII-BETA, PI4K2B

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP8033b](/product/products/AP8033b) was selected from the C-term region of human PI4K II beta . 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.

**PI 4 Kinase type 2 beta antibody (C-term) Blocking peptide - Protein Information****Name** PI4K2B**Function**

Together with PI4K2A and the type III PI4Ks (PIK4CA and PIK4CB) it contributes to the overall PI4-kinase activity of the cell (PubMed:[11923287](http://www.uniprot.org/citations/11923287), PubMed:[12324459](http://www.uniprot.org/citations/12324459)). This contribution may be especially significant in plasma membrane, endosomal and Golgi compartments (PubMed:[11923287](http://www.uniprot.org/citations/11923287), PubMed:[12324459](http://www.uniprot.org/citations/12324459)). The phosphorylation of phosphatidylinositol (PI) to PI4P is the first committed step in the generation of phosphatidylinositol 4,5-bisphosphate (PIP2), a precursor of the second messenger inositol 1,4,5-trisphosphate (InsP3) (PubMed:[11923287](http://www.uniprot.org/citations/11923287))

target="\_blank">11923287</a>, PubMed:<a href="http://www.uniprot.org/citations/12324459" target="\_blank">12324459</a>). Contributes to the production of InsP3 in stimulated cells and is likely to be involved in the regulation of vesicular trafficking.

**Cellular Location**

Cytoplasm, cytosol. Golgi apparatus membrane; Peripheral membrane protein. Endoplasmic reticulum membrane. Cell membrane. Early endosome membrane. Note=Mainly cytosolic, association with membranes of the Golgi, endoplasmic and plasma membrane is stimulated by active RAC1 (PubMed:12324459). Association with early endosomes has not been confirmed (PubMed:11923287, PubMed:12324459).

**Tissue Location**

Widely expressed..

**PI 4 Kinase type 2 beta antibody (C-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**PI 4 Kinase type 2 beta antibody (C-term) Blocking peptide - Images****PI 4 Kinase type 2 beta antibody (C-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.

**PI 4 Kinase type 2 beta antibody (C-term) Blocking peptide - References**

Wei, Y.J., et al., J. Biol. Chem. 277(48):46586-46593 (2002). Mora, S., et al., J. Biol. Chem. 277(30):27494-27500 (2002). Balla, A., et al., J. Biol. Chem. 277(22):20041-20050 (2002).