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

PI 4 Kinase type 2 beta antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP8033a

Specification

PI 4 Kinase type 2 beta antibody (N-term) Blocking peptide - Product Information

Primary Accession	Q8TCG2
Other Accession	NP_060793

PI 4 Kinase type 2 beta antibody (N-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 AP8033a was selected from the N-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 (N-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, PubMed:12324459). This contribution may be especially significant in plasma membrane, endosomal and Golgi compartments (PubMed:11923287, PubMed: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:<a href="http://www.uniprot.org/citations/11923287"

target="_blank">11923287, PubMed:12324459). 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 (N-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 (N-term) Blocking peptide - Images

PI 4 Kinase type 2 beta antibody (N-term) Blocking peptide - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g 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 (N-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).