

PIK4CB Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP6948c

Specification

PIK4CB Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>Q9UBF8</u>

PIK4CB Antibody (Center) Blocking Peptide - Additional Information

Gene ID 5298

Other Names

Phosphatidylinositol 4-kinase beta, PI4K-beta, PI4Kbeta, PtdIns 4-kinase beta, NPIK, PI4K92, PI4KB, PIK4CB

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP6948c was selected from the Center region of human PIK4CB. 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.

PIK4CB Antibody (Center) Blocking Peptide - Protein Information

Name PI4KB (<u>HGNC:8984</u>)

Synonyms PIK4CB

Function

Phosphorylates phosphatidylinositol (PI) in the first committed step in the production of the second messenger inositol- 1,4,5,-trisphosphate (PIP). May regulate Golgi disintegration/reorganization during mitosis, possibly via its phosphorylation. Involved in Golgi-to-plasma membrane trafficking (By similarity) (PubMed:10559940, PubMed:10559940, PubMed:1277933, PubMed:12749687, PubMed:9405935, PubMed:9405935, PubMed:9405935, PubMed:9405935, PubMed:9405935, PubMed:9405935). May play an important role in the inner ear development.



Cellular Location

Endomembrane system. Mitochondrion outer membrane; Peripheral membrane protein. Rough endoplasmic reticulum membrane; Peripheral membrane protein. Golgi apparatus. Golgi apparatus membrane. Cytoplasm, perinuclear region. Note=Found in the outer membrane of mitochondria and membranes of the rough endoplasmic reticulum. Recruited to the Golgi complex by the small GTPase ARF to stimulate the synthesis of phosphatidylinositol 4,5- bisphosphate (PIP2) on the Golgi complex. Recruited to the Golgi apparatus membrane by ACBD3 (PubMed:24672044, PubMed:27009356, PubMed:28289207). GGA2 is also involved in the recruitment (PubMed:28289207).

Tissue Location

Widely expressed with highest levels in heart, skeletal muscle, pancreas, testis and ovary. Weakly expressed in liver (PubMed:9020160, PubMed:9405935, PubMed:9405938). Expressed in the innear ear in the epithelium of the spinal organ of corti

PIK4CB Antibody (Center) Blocking Peptide - Protocols

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

Blocking Peptides

PIK4CB Antibody (Center) Blocking Peptide - Images

PIK4CB Antibody (Center) Blocking Peptide - Background

PIK4CB phosphorylates phosphatidylinositol (PI) in the first committed step in the production of the second messenger inositol-1,4,5,-trisphosphate (PIP). It may regulate Golgi disintegration/reorganization during mitosis, possibly via its phosphorylation.

PIK4CB Antibody (Center) Blocking Peptide - References

Jeganathan, S., et.al., Mol. Cell. Biol. 28 (14), 4549-4561 (2008) Pizarro-Cerda, J., et.al., Cell. Microbiol. 9 (10), 2381-2390 (2007)