

Anti-PI4K Beta (RABBIT) Antibody

PI4K Beta Antibody Catalog # ASR5734

### Specification

### Anti-PI4K Beta (RABBIT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Human Human Polyclonal WB, IHC, E, I, LCI Anti-PI4K beta antibody has been tested by ELISA, IHC, and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~91.4kDa corresponding to the appropriate cell lysate or extract.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Anti-PI4K beta affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of human PI4K beta protein.
Stabilizer	40% (v/v) Glycerol

## Anti-PI4K Beta (RABBIT) Antibody - Additional Information

Gene ID 5298

#### Purity

Anti-PI4K beta was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with bat, rat, primate, mouse, and human based on 100% sequence homology. Cross-reactivity with PI4K beta from other sources has not been determined.

#### Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Precautions Note** 

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-PI4K Beta (RABBIT) Antibody - 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:<a href="http://www.uniprot.org/citations/10559940" target="\_blank">10559940</a>, PubMed:<a href="http://www.uniprot.org/citations/10559940" target="\_blank">10559940</a>, PubMed:<a href="http://www.uniprot.org/citations/11277933" target="\_blank">1277933</a>, PubMed:<a href="http://www.uniprot.org/citations/12749687" target="\_blank">12749687</a>, PubMed:<a href="http://www.uniprot.org/citations/12749687" target="\_blank">12749687</a>, PubMed:<a href="http://www.uniprot.org/citations/12749687" target="\_blank">9405935</a>, PubMed:<a href="http://www.uniprot.org/citations/9405935" target="\_blank">9405935</a>). 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

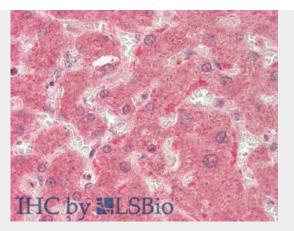
## Anti-PI4K Beta (RABBIT) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-PI4K Beta (RABBIT) Antibody - Images





Immunohistochemistry of Rabbit anti-PIK4CB / PI4KB antibody. Tissue: Liver. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: PIK4CB / PI4KB antibody at 5  $\mu$ g/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: PIK4CB / PI4KB as precipitated red signal with hematoxylin purple nuclear counterstain.

## Anti-PI4K Beta (RABBIT) Antibody - Background

Phosphatidylinositol 4-kinase beta contributes to the overall PI4-kinase activity of the cell. It contributes to the production of PIP and may regulate Golgi membrane trafficking and reorganization. A member of PI3/PI4-kinase family, PI4KII alpha is widely expressed with the highest amount of expression in the heart, skeletal muscle, pancreas, testis and ovary. Anti-PI4K beta antibody is ideal for investigators interested in Kinase and Phosphatase Antibodies.