

# Anti-PI4KII Alpha (RABBIT) Antibody

PI4KII Alpha Antibody Catalog # ASR5735

## Specification

# Anti-PI4KII Alpha (RABBIT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Human Human Polyclonal WB, IHC, E, I, LCI Anti-PI4KII alpha antibody has been tested by ELISA, and western blot and is useful for Immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~54kDa 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-PI4KII alpha affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide at the N-terminal of human P4K2A protein.
Stabilizer	50% (v/v) Glycerol

## Anti-PI4KII Alpha (RABBIT) Antibody - Additional Information

Gene ID 55361

### Purity

Anti-PI4KII alpha was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with human, mouse, and rat based on 100% sequence homology. Cross-reactivity with PI4KII alpha 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-PI4KII Alpha (RABBIT) Antibody - Protein Information



## Name PI4K2A

### Function

Membrane-bound phosphatidylinositol-4 kinase (PI4-kinase) that catalyzes the phosphorylation of phosphatidylinositol (PI) to phosphatidylinositol 4-phosphate (PI4P), a lipid that plays important roles in endocytosis, Golgi function, protein sorting and membrane trafficking and is required for prolonged survival of neurons. Besides, phosphorylation of phosphatidylinositol (PI) to phosphate (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).

### **Cellular Location**

Golgi apparatus, trans-Golgi network membrane; Lipid-anchor. Membrane raft. Cell projection, dendrite {ECO:0000250|UniProtKB:Q2TBE6}. Presynaptic cell membrane {ECO:0000250|UniProtKB:Q2TBE6}. Synapse, synaptosome {ECO:0000250|UniProtKB:Q2TBE6}. Mitochondrion {ECO:0000250|UniProtKB:Q2TBE6}. Endosome. Endosome membrane. Cytoplasmic vesicle. Membrane; Lipid-anchor. Cell membrane. Perikaryon {ECO:0000250|UniProtKB:Q2TBE6}. Cell projection, neuron projection {ECO:0000250|UniProtKB:Q2TBE6}. Note=Found in subdomains of the plasma membrane termed non-caveolar membrane rafts. Transported from neuronal cell body to neuron projections and neurite tips in a BLOC-1- and AP-3- complexes-dependent manner. {ECO:0000250|UniProtKB:Q2TBE6}

#### **Tissue Location**

Widely expressed. Highest expression is observed in kidney, brain, heart, skeletal muscle, and placenta and lowest expression is observed in colon, thymus, and small intestine

## Anti-PI4KII Alpha (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
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# Anti-PI4KII Alpha (RABBIT) Antibody - Images

# Anti-PI4KII Alpha (RABBIT) Antibody - Background

PI4KII alpha contributes to the overall PI4-kinase activity of the cell. It contributes to the production of InsP3 in stimulated cells. A member of PI3/PI4-kinase family, PI4KII alpha is widely expressed with the highest amount of expression in the kidney, brain, heart, skeletal muscle, and placenta. It is associated with the BLOC-1 and AP-3 complexes. Anti-PI4KII alpha antibody is ideal for investigators interested in Kinase and Phosphatase Antibodies.