



# P4K2A Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-05915
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse
<b>Applications</b>	WB;ELISA
<b>Gene Name</b>	PI4K2A
<b>Protein Name</b>	Phosphatidylinositol 4-kinase type 2-alpha (EC 2.7.1.67) (Phosphatidylinositol 4-kinase type II-alpha)
<b>Immunogen</b>	Synthesized peptide derived from human protein . at AA range: 50-130
<b>Specificity</b>	P4K2A Polyclonal Antibody detects endogenous levels of protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-2000 ELISA 1:5000-20000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	
<b>Observed Band</b>	52kD
<b>Cell Pathway</b>	Golgi apparatus, trans-Golgi network membrane ; Lipid-anchor . Membrane raft . Cell projection, dendrite . Cell junction, synapse, presynaptic cell membrane . Cell junction, synapse, synaptosome . Mitochondrion . Endosome . Cytoplasmic vesicle . Membrane ; Lipid-anchor . Cell membrane . Perikaryon . Cell projection, neuron projection . 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. .
<b>Tissue Specificity</b>	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.
<b>Function</b>	catalytic activity:ATP + 1-phosphatidyl-1D-myo-inositol = ADP + 1-phosphatidyl-1D-myo-inositol 4-phosphate.,function:Together with PI4K2B and the type III PI4Ks (PIK4CA and PIK4CB) it contributes to the overall PI4-kinase activity of the cell. 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). Contributes to the production of InsP3 in stimulated cells.,similarity:Belongs to the PI3/PI4-kinase family. Type II PI4K subfamily.,similarity:Contains 1 PI3K/PI4K



domain.,subcellular location:Found in subdomains of the plasma membrane termed non-caveolar membrane rafts.,tissue specificity:Widely expressed. Highest expression is observed in kidney, brain, heart, skeletal muscle, and placenta and lowest expression is observed

**Background**

Phosphatidylinositolpolyphosphates (PtdInsPs) are centrally involved in many biologic processes, ranging from cell growth and organization of the actin cytoskeleton to endo- and exocytosis. PI4KII phosphorylates PtdIns at the D-4 position, an essential step in the biosynthesis of PtdInsPs (Barylko et al., 2001 [PubMed 11244087]).[supplied by OMIM, Mar 2008],

**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images