P4K2A Monoclonal Antibody

Catalog No	BYmab-05915
Isotype	IgG
Reactivity	Human;Rat;Mouse
Applications	WB
Gene Name	PI4K2A
Protein Name	Phosphatidylinositol 4-kinase type 2-alpha (EC 2.7.1.67) (Phosphatidylinositol 4-kinase type II-alpha)
Immunogen	Synthesized peptide derived from human protein . at AA range: 50-130
Specificity	P4K2A Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	52kD
Cell Pathway	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. .
Tissue Specificity	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.
Function	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.

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