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PI4K2A Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16933b

Product Information

Application	WB, E
Primary Accession	Q9BTU6
Other Accession	Q99M64, Q6PE18, NP_060895.1
Reactivity	Human, Rat, Mouse
Predicted	Zebrafish, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36306
Calculated MW	54022
Antigen Region	387-415

Additional Information

Gene ID	55361
Other Names	Phosphatidylinositol 4-kinase type 2-alpha, Phosphatidylinositol 4-kinase type II-alpha, PI4K2A
Target/Specificity	This PI4K2A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 387-415 amino acids from the C-terminal region of human PI4K2A.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PI4K2A Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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 phosphatidylinositol 4- 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

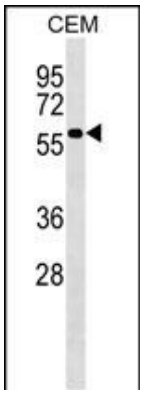
Background

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]).

References

Li, J., et al. Oncogene 29(17):2550-2559(2010)
Qin, Y., et al. J. Biol. Chem. 284(34):22544-22548(2009)
Salazar, G., et al. J. Biol. Chem. 284(3):1790-1802(2009)
Craige, B., et al. Mol. Biol. Cell 19(4):1415-1426(2008)
Olsen, J.V., et al. Cell 127(3):635-648(2006)

Images



PI4K2A Antibody (C-term) (Cat. #AP16933b) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the PI4K2A antibody detected the PI4K2A protein (arrow).