P3C2A Polyclonal Antibody

Catalog No	YP-Ab-06705
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;ELISA
Gene Name	PIK3C2A
Protein Name	Phosphatidylinositol 4-phosphate 3-kinase C2 domain-containing subunit alpha (PI3K-C2-alpha) (PtdIns-3-kinase C2 subunit alpha) (EC 2.7.1.154) (Phosphoinositide 3-kinase-C2-alpha)
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	P3C2A Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	185kD
Cell Pathway	Cell membrane . Cytoplasmic vesicle, clathrin-coated vesicle . Nucleus . Cytoplasm . Golgi apparatus, trans-Golgi network . Inserts preferentially into membranes containing PtdIns(4,5)P2 (PubMed:17038310). Associated with RNA-containing structures (PubMed:11606566). .
Tissue Specificity	Expressed in columnar and transitional epithelia, mononuclear cells, smooth muscle cells, and endothelial cells lining capillaries and small venules (at protein level). Ubiquitously expressed, with highest levels in heart, placenta and ovary, and lowest levels in the kidney. Detected at low levels in islets of Langerhans from type 2 diabetes mellitus individuals.
Function	catalytic activity:ATP + 1-phosphatidyl-1D-myo-inositol 4-phosphate = ADP + 1-phosphatidyl-1D-myo-inositol 3,4-bisphosphate.,cofactor:Calcium or magnesium. Manganese cannot be used.,enzyme regulation:Activated by insulin (By similarity). Only slightly inhibited by wortmannin and LY294002. Activated by clathrin.,function:Phosphorylates PtdIns, PtdIns4P and PtdIns(4,5)P2. May play a role in clathrin-coated endocytic vesicle formation and EGF signaling cascade. May be involved in mitosis and UV-induced damage response. May be a downstream effector in insulin signaling cascade.,PTM:Phosphorylated upon insulin stimulation; which may lead to enzyme activation (By similarity).

	Phosphorylated on Ser-259 during mitosis and upon UV irradiation; which does not change enzymatic activity but leads to proteasomal degradation. Ser-259 phosphorylation may be mediated by CDC2 or JNK, depending on the phy
Background	The protein encoded by this gene belongs to the phosphoinositide 3-kinase (PI3K) family. PI3-kinases play roles in signaling pathways involved in cell proliferation, oncogenic transformation, cell survival, cell migration, and intracellular protein trafficking. This protein contains a lipid kinase catalytic domain as well as a C-terminal C2 domain, a characteristic of class II PI3-kinases. C2 domains act as calcium-dependent phospholipid binding motifs that mediate translocation of proteins to membranes, and may also mediate protein-protein interactions. The PI3-kinase activity of this protein is not sensitive to nanomolar levels of the inhibitor wortmanin. This protein was shown to be able to be activated by insulin and may be involved in integrin-dependent signaling. [provided by RefSeq, Jul 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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