



P3C2B Polyclonal Antibody

Catalog No	YP-Ab-06706
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;ELISA
Gene Name	PIK3C2B
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	P3C2B 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	C2 PI3K;C2-PI3K;EC:2.7.1.137;Phosphatidylinositol 4-phosphate 3-kinase C2 domain-containing subunit beta;Phosphoinositide 3-kinase-C2-beta;P3C2B;PIK3C2B;Phosphatidylinositol 4-phosphate 3-kinase C2 domain-containing subunit beta (PI3K-C2-beta) (PtdIns-3-kinase C2 subunit beta) (EC 2.7.1.154) (C2-PI3K) (Phosphoinositide 3-kinase-C2-beta)
Observed Band	160-185 kDa
Calculated Molecular Weight	1634 aa, 185 kDa
Cell Pathway	Microsome . Cell membrane . Cytoplasm, cytosol . Nucleus . Endoplasmic reticulum . Found mostly in the microsome, but also in the plasma membrane and cytosol. Nuclear in testis.
Tissue Specificity	Expressed in columnar and transitional epithelia, mononuclear cells, and ganglion cells (at protein level). Widely expressed, with highest levels in thymus and placenta and lowest in peripheral blood, skeletal muscle and kidney.
Function	catalytic activity:ATP + 1-phosphatidyl-1D-myo-inositol 4-phosphate = ADP + 1-phosphatidyl-1D-myo-inositol 3,4-bisphosphate.,caution:It is uncertain whether Met-1 or Met-26 is the initiator.,cofactor:Calcium, magnesium, or manganese., enzyme regulation:Activated by GRB2.,function:Phosphorylates PtdIns and PtdIns4P with a preference for PtdIns. Does not phosphorylate PtdIns(4,5)P2.

May be involved in EGF and PDGF signaling cascades.,similarity:Belongs to the PI3/PI4-kinase family.,similarity:Contains 1 C2 domain.,similarity:Contains 1 PI3K/PI4K domain.,similarity:Contains 1 PX (phox homology) domain., subcellular location:Found mostly in the microsome, but also in the plasma membrane and cytosol. Nuclear in testis.,subunit:Part of a complex with ERBB2 and EGFR. Part of a complex with phosphorylated EGFR and GRB2. Interacts with phosphorylated EGFR and PDGFR, maybe indirectly. Interacts with

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 sensitive to low nanomolar levels of the inhibitor wortmanin. The C2 domain of this protein was shown to bind phospholipids but not Ca^{2+} , which suggests that this enzyme may function in a calcium-independent manner. [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.

Products Images